



# MAINTENANCE MANUAL

## Aerolneas Argentinas

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POWER PLANT - DESCRIPTION AND OPERATION

1. General

- A. The 737 airplane is powered by two JT8D turbofan engines mounted beneath the wings. Each engine is secured at three points to fittings which are designed to take thrust and side loads and allow for thermal expansion (Fig. 1). Access to the engine exterior components is provided by hinged removable side cowl panels, access doors within these panels, and removable fairing panels.
- B. The major accessories fitted to each engine include a constant speed drive unit, a pneumatic starter and N1 and N2 tachometer generators. An ac generator is mounted on the constant speed drive unit. A hydraulic pump is installed on each engine. Fire detection and fire extinguishing systems are provided in each engine area (Fig. 2, Fig. 3, Fig. 4).
- C. The engine starting system provides a means of rotating the N2 compressor to establish a flow of air through the engine. Rotation of the N2 compressor also drives the engine fuel pump and fuel control, which meter fuel under pressure to the combustion chambers. An ignition system provides a high voltage discharge for igniting the air/fuel mixture. Each engine is fitted with a self-contained oil system to provide cooling and lubrication of engine gears and bearings. Transmitting devices, installed on each engine, actuate lights and indicators in the control cabin to provide indications of engine performance.
- D. Air is bled from the low pressure and high pressure compressors and the fan discharge duct to operate various air plane systems. A thrust reverser, attached to the exhaust section of each engine, provides a means of retarding the forward speed of the airplane after touchdown.
- E. A single compartment drain tank may be mounted on the bottom of the left cowl panel which previously collected fuel drained from the pressurizing and dump (P&D) valve (P&D valve drain port now plugged). The P&D valve drain system may be either disconnected and capped, or removed. Additionally on these engines, the drain tank and mast are not required and may be removed from the left cowl panel. On all engines, drainage from the oil tank scupper, and fluid leakage from the seals and drive pads of the engine accessories is collected and drained through a mast in the bottom of the left cowl panel. Fluids from the strut area are drained through tubing to a drain hole in the thrust reverser fairing.

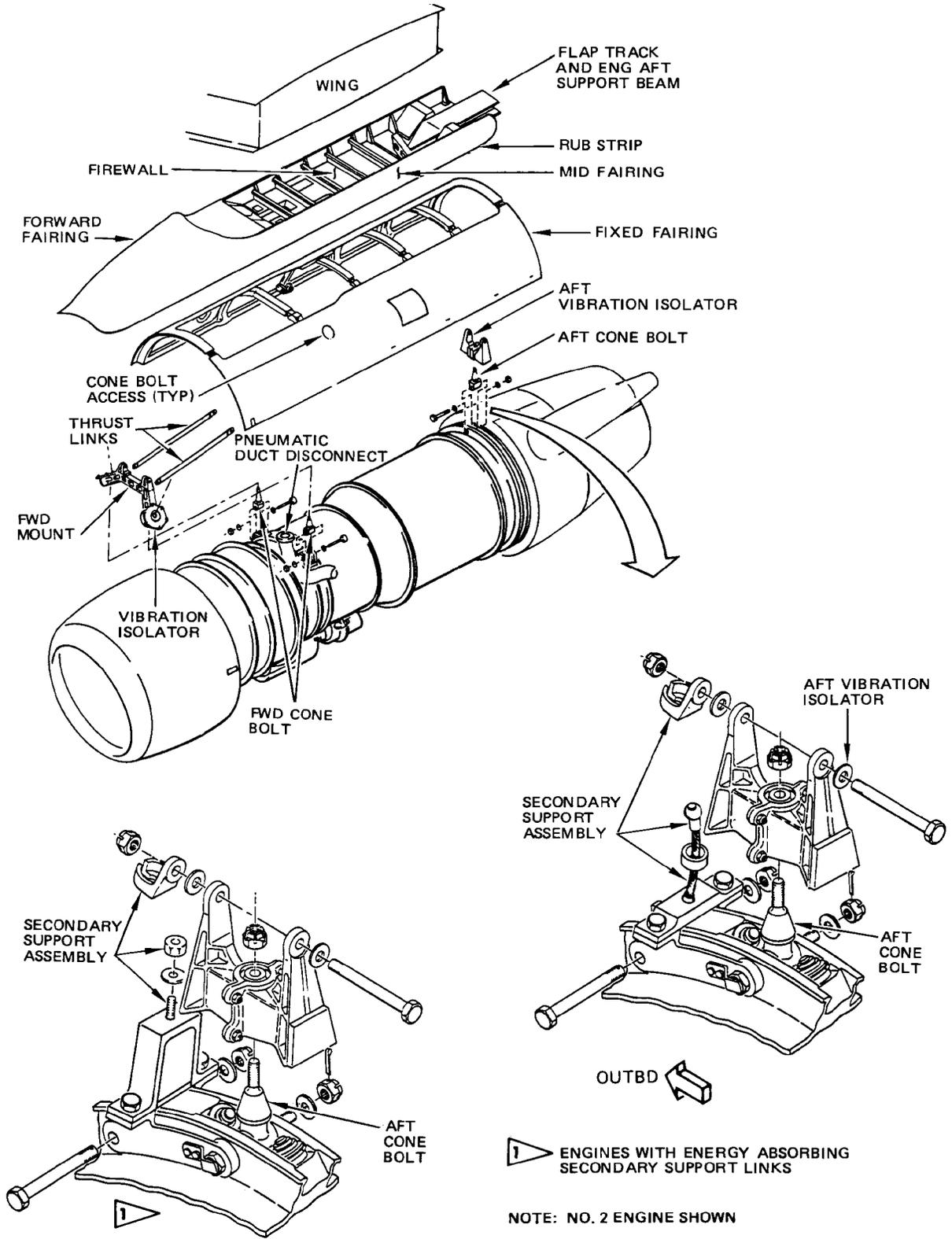
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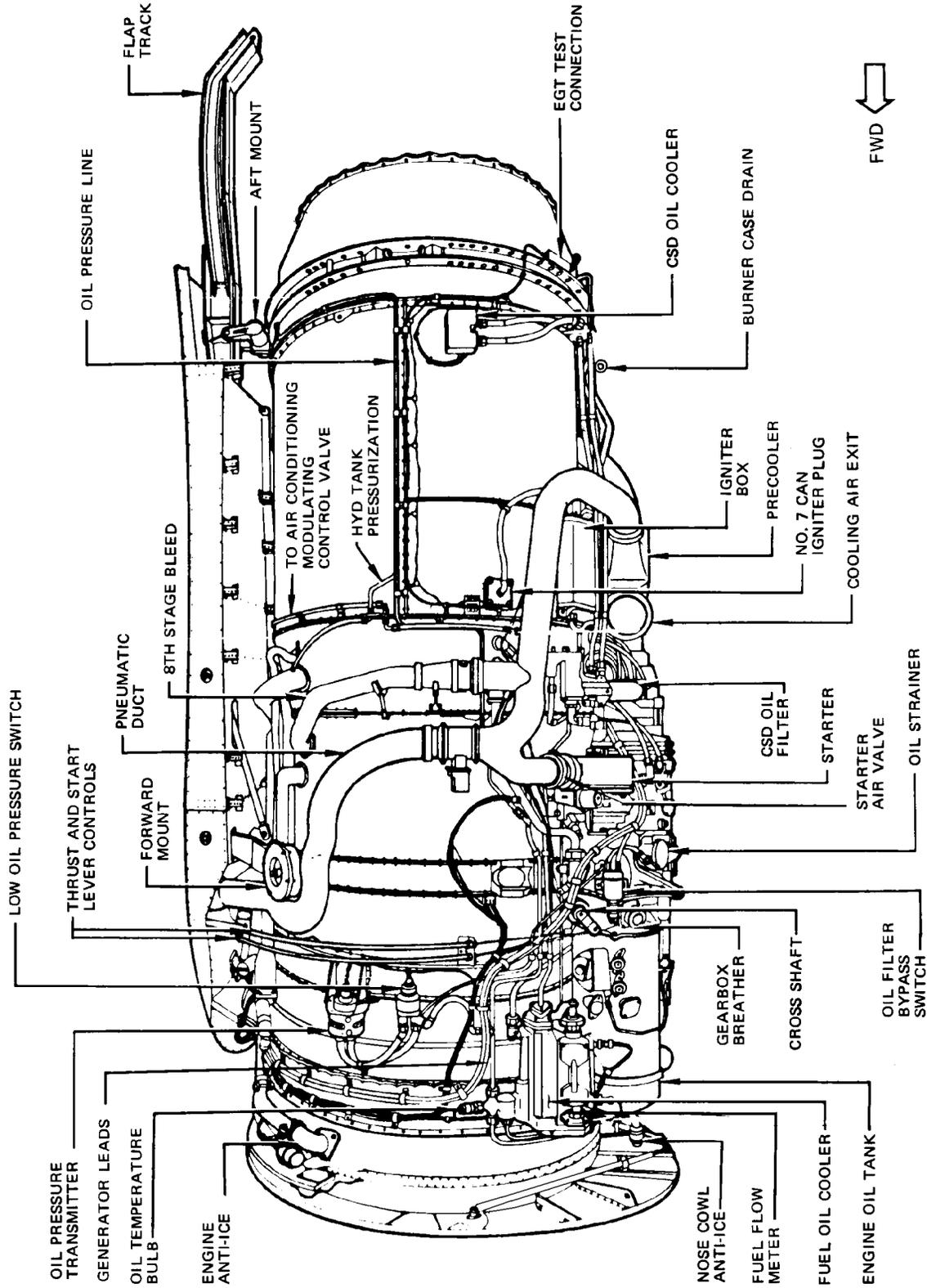


Power Plant Attachment Points  
 Figure 1

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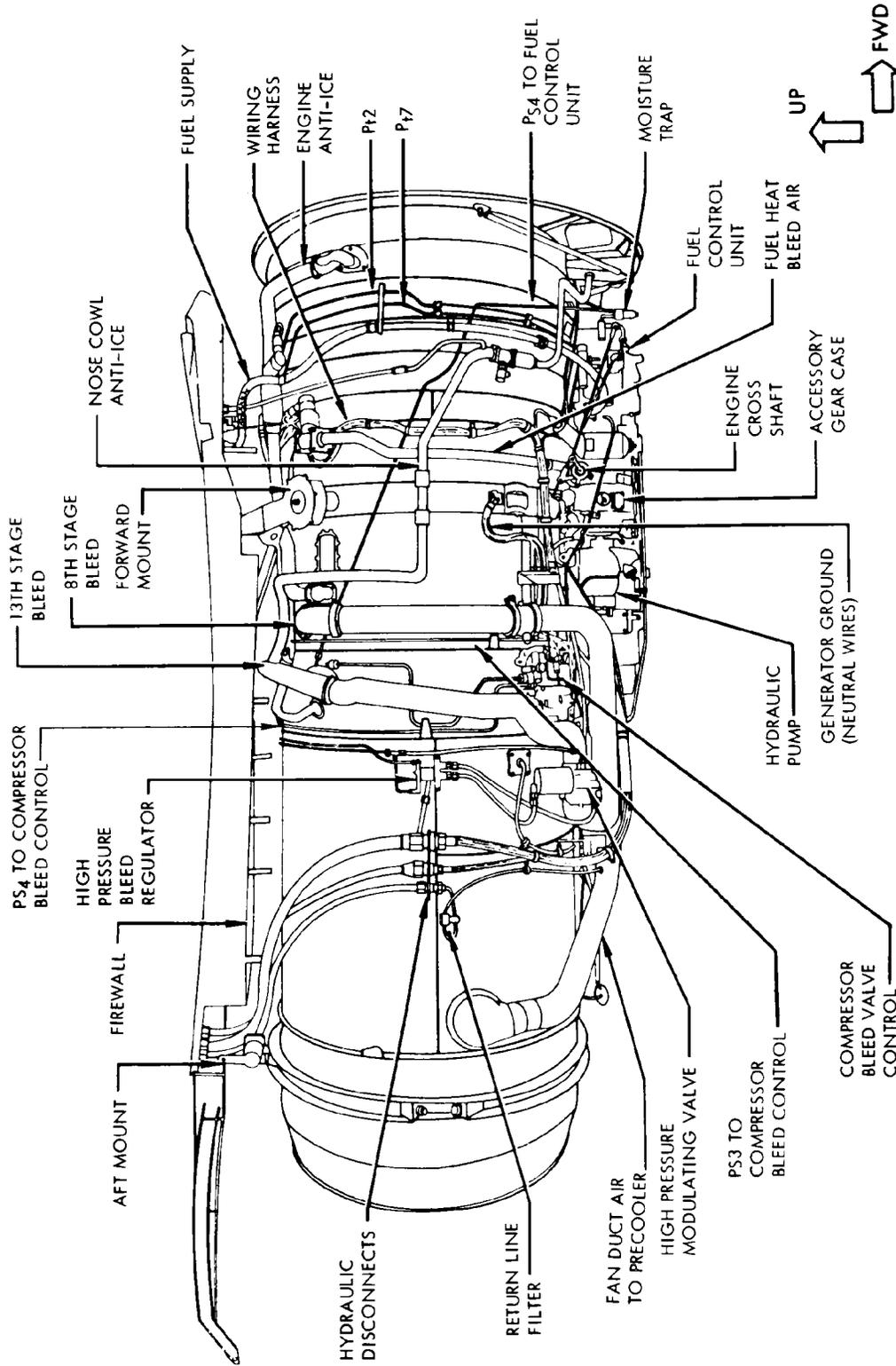
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Power Plant - Left Side View  
 Figure 2

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Power Plant - Right Side View  
 Figure 3

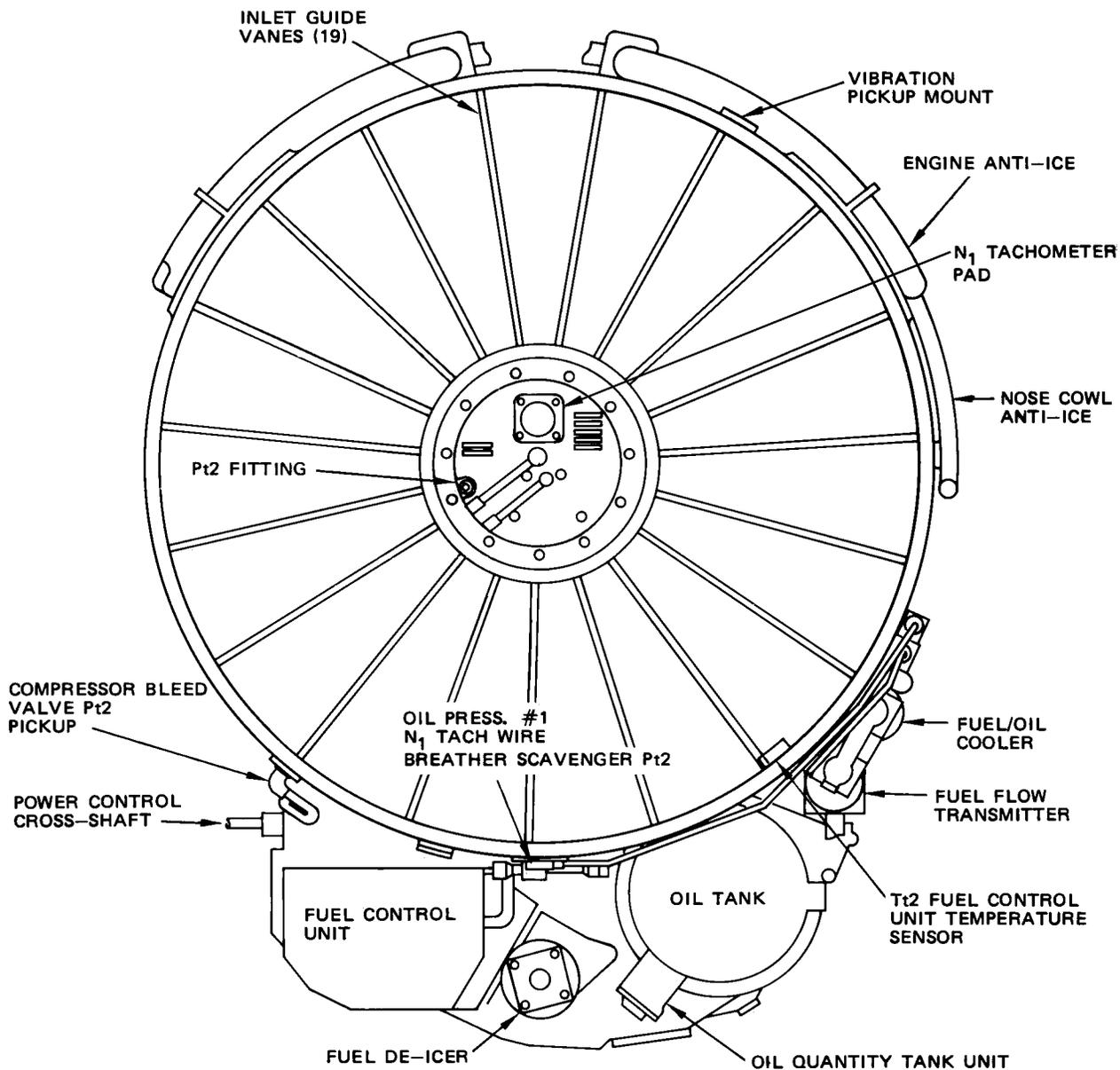
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Power Plant - Front View  
 Figure 4

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## MAINTENANCE MANUAL

### POWER PLANT (JT8D) – TROUBLESHOOTING

#### 1. General

A. This procedure is to be used on power plants reported for vibration.

#### 2. Check Vibrating Engine Related Components

A. Check the following for vibrating engine:

- (1) QAD ring on CSD for looseness (AMM 24-11-11/401).
- (2) Cowling for transmission of vibration to airplane structure.
- (3) Tightness of engine mounts (AMM 71-21-11/401) and (AMM 71-22-11/401).
- (4) Inlet cowl for looseness or damage.
- (5) Thrust reverser doors for operation or damage.
- (6) Mounting of hydraulic pump for looseness (AMM 29-11-31/401).
- (7) Fuel control unit for looseness (AMM 73-21-1/401) and (AMM 73-21-2/401).
- (8) Contact of start lever on control stand bumper seal.
- (9) Thrust reverser levers on aisle stand for looseness.
- (10) Aisle stand for proper clearance between the thrust levers and the nylon strips, rework as required to obtain .000 to .005 total clearance, throughout lever travel.

B. If none of the above components are cause of vibration,

- (1) Install cork tape over the floor beams and/or add doublers and stiffeners on loose floor panels in the cockpit.
- (2) Inspect and repair engine per P&WA Maintenance Manual if engine reported vibration level is above limits.

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POWER PLANT (JT8D) – REMOVAL/INSTALLATION

1. General

- A. The 737 airplane is equipped with integral engine change provisions, which are designed to permit rapid engine changes. These provisions include engine change hoist support fittings in the wing, low level accessibility, and a power plant with simple disconnects.
- B. The engines will be removed or installed by using a hoist incorporating a load indicating system which provides a visible readout.
- C. Many of the engine change disconnects are readily accessible from the ground. Others, such as firewall disconnects and access to the cone bolt nuts, will require the use of a 6-foot stepladder or low workstand.
- D. The power plant weighs approximately 5000 pounds with handling beams. The hoisting equipment shall be capable of supporting this weight and, because of the considerable weight involved, caution shall be used at all times when handling the engine to prevent injury to personnel, damage to equipment, and engine/airframe damage during engine removal, and installation.
- E. Before a power plant is removed or installed, check all openings and disconnected hose and tubing. During removal, all openings, tube ends, and electrical connectors shall be capped as soon as possible after disconnection. During installation, caps should be left in place until the connections are to be made. Use external caps on all openings. Do not use internal plugs.
- F. Engine compartment cleanliness is important because the intensive mass airflow tends to draw foreign objects into the engine. Thoroughly clean and check area after completion of any work. Keep the inlet area free of dirt, oil, and grease and remove all unused parts such as nuts, washers, and pieces of lockwire.
- G. The service life of flexible metal hose assemblies will be extended if the following procedures are used.
  - (1) Do not twist or kink the hose during installation.
  - (2) Use two wrenches when attaching swivel nuts to mating fittings.
  - (3) When one end of the hose is disconnected to permit engine change, do not twist the hose out of the way, distort it during handling, use it as a handhold, or otherwise mistreat it.

2. Equipment and Materials

- A. Engine Support Beams – Boeing F72714 or F72988 (two required)
- B. Load Indicating System Boeing F80219-45, -46, -47, -48, -68 and -69 consists of three loadcell assemblies and three hoist assemblies. The loadcell assemblies are identified as INBD FWD, INBD AFT and OUTBD
- C. Engine Cone Bolt Thread Protector – Boeing F70266-305 (one set required)
- D. Engine Aft Cone Bolt Nut Adapter – Boeing F80257 or F80254
- E. Engine Transportation Dolly – P/N 428 with adapters P/N 1843 (Ground Support Engineering, Miami, Florida), or P/N STC 90448-1 (Spec Tool Co., Pico Rivera, Ca 90660)

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- F. Engine Inlet Cover - Boeing F72717
- G. Engine Exhaust Cover - Boeing F80093
- H. Container for drained fuel - 5-gallon capacity minimum

### 3. Consummable Materials

- A. Antiseize Compound - Ease-Off 990

### 4. Prepare for the Removal

- A. Ground airplane to an approved grounding lug.
- B. Connect electrical power to airplane.
- C. Position ground power switch to ON and battery switch to ON.
- D. Push button on bottom of fire switch handle to override locking solenoid and pull fire switch (aft electronic panel) for power plant being removed.

### E. Open these circuit breakers:

- (1) P6-2 circuit breaker panel
  - (a) ENG EPR WARN
  - (b) ENG START VALVES
  - (c) FIRE PROTECTION DETECTION
  - (d) ENGINE IGNITION
  - (e) HYD SYSTEM ENG SHUTOFF VALVE
  - (f) OIL QTY
  - (g) THRUST REVERSER
  - (h) LT & RT FIRE EXTINGUISHER BOTTLES
  - (i) OIL TEMP & PRESS
  - (j) ENG EPR & LG WARNING
- (2) P6-3 circuit breaker panel
  - (a) FUEL FLOW XMITTER MOTORS
  - (b) FUEL SYSTEM INDICATOR
  - (c) FUEL SYSTEM SHUTOFF VALVE
- (3) P6-4 circuit breaker panel
  - (a) CONTROL GENERATOR
  - (b) GENERATOR DRIVE OIL (TEMP & LO PRESS)

- F. Place thrust levers in fully retarded position and start levers in CUTOFF.

- G. Depressurize hydraulic system A (AMM 29-11-0/201).

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H. Remove electrical power (AMM 24-22-0/201).

**WARNING:** KEEP ELECTRICAL POWER OFF DURING DISCONNECTION OR CONNECTION OF FUEL, HYDRAULIC, AND ELECTRICAL LINES. THIS WILL PREVENT INJURY TO PERSONNEL THAT COULD RESULT FROM ACCIDENTAL APPLICATION OF PRESSURIZED FLUIDS, ENERGIZING OF ELECTRICAL CIRCUITS OR FIRE.

I. Check all three hoist attach fittings and related wing support structure for evidence of loose fasteners, nicks, cracks, gauges, chipped finish and/or signs of visible damage.

5. Remove Power Plant

**WARNING:** ENGINE WEIGHS APPROXIMATELY 5000 POUNDS WITH BEAMS. MAKE CERTAIN ENGINE SUPPORT ASSEMBLY IS ADJUSTED TO GIVE EVEN FORE AND AFT SUPPORT TO ENGINE. UNEVEN SUPPORT CAN CAUSE ENGINE TO SHIFT RESULTING IN INJURY TO PERSONNEL AND/OR DAMAGE TO ENGINE AND AIRPLANE STRUCTURE.

- A. Remove engine side removable cowl panels (AMM 71-11-11/401).
- B. Remove forward, mid, and aft access panels on both sides of the midfairing. Remove the cone bolt access door on each side of the fixed fairing.
- C. Remove fixed fairing (AMM 71-11-21/401).
- D. Drain engine fuel supply line by opening drain port below the fuel filter. Provide 5-gallon container for drained fuel. Loosen fuel supply line at disconnect point to hasten draining. Close drain port after draining and lockwire (Fig. 401).

**NOTE:** Cap all openings, tube ends, and electrical connectors as soon as possible after disconnection. Use external caps only.

- E. Following draining, uncouple fuel supply flex hose (11) at the disconnect bracket on the engine (Fig. 402).
- F. Disconnect the pneumatic duct from the flanged coupling on the horizontal firewall (4).
- G. Disconnect electrical connectors (1) at the forward end of the firewall, and electrical connectors (13) on the forward horizontal firewall (Fig. 402).
- H. Disconnect engine pressure ratio sensing lines (2) and the high pressure sensing line (9) at their disconnect brackets.
- I. On No. 1 engine, disconnect water pressurizing line (10) at disconnect bracket.
- J. Uncouple the hydraulic supply, pressure, and return lines (7) at their disconnect bracket.

**CAUTION:** CLEAN HYDRAULIC FLUID FROM EQUIPMENT IMMEDIATELY. IT IS POSSIBLE THAT A SMALL QUANTITY OF HYDRAULIC FLUID WILL COME OUT OF THE LINES. HYDRAULIC FLUID CAN CAUSE DAMAGE TO EQUIPMENT.

K. Disconnect hydraulic reservoir pneumatic pressurizing line (5) at disconnect bracket.

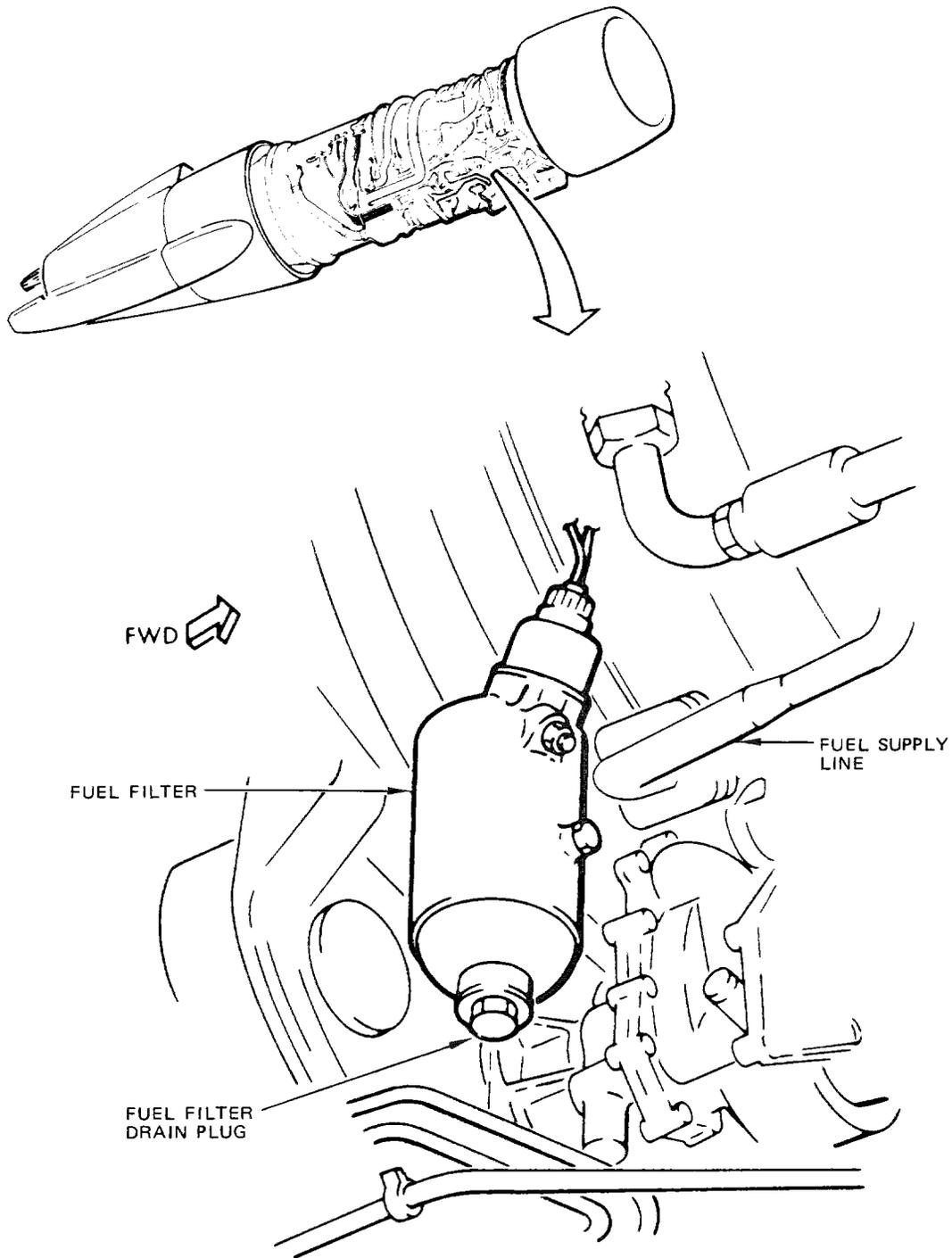
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Fuel Line Draining  
 Figure 401

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- L. Disconnect the engine bonding lead(s) at the grounding lug (3) near the forward end of the firewall.
- M. Disconnect the aft strut drain line (6), at the disconnect bracket. If required for other maintenance, provide electrical power (AMM 24-22-0/201).
- N. Disconnect the engine start and thrust control push-pull cables (8) at engine cross-shaft (Fig. 403).
- O. Remove the two locknuts and washers securing the engine controls support brackets at approximately the 8 o'clock position on the engine. Pull the two support brackets away from fixed bracket.
- P. Remove locknut, washer, and bolt attaching engine start push-pull cable support clamp to bracket on engine flange at the 9 o'clock position on the engine.
- Q. Remove top spacer block at approximately 10 o'clock position on engine, swing cables free, and secure to strut using engine control linkage hook.

**NOTE:** Possible interference between the push-pull cables and the engine during removal and installation of the power plant will be minimized if the cables are swung up and secured to airplane structure.

- R. With thrust reverser in forward thrust position, uncouple thrust reverser push-pull cable at quick-disconnect (Fig. 404).
- S. Attach engine support beams to engine.
- T. Install engine removal/installation hoist equipment (Fig. 405). Perform the following:
  - (1) Remove access panels covering the three engine hoist receptacles.
  - (2) On engine hoist receptacles with spring torsion feature, manually insert loadcell assembly into their respective engine hoist receptacles, push upward, and allow indicating systems to rotate by spring torsion 60 degrees clockwise to lock position, and pull down to make sure seating (Fig. 405). Repeat for each loadcell assembly being installed.
  - (3) On engine hoist receptacles without spring torsion feature, manually insert loadcell assembly into their respective engine hoist receptacles, push upward, turn indicating systems 60 degrees, and pull down to make sure seating (Fig. 405). Repeat for each loadcell assembly being installed.

**WARNING:** TO PREVENT INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT DUE TO A LOADCELL ASSEMBLY SLIPPING OUT OF ENGINE HOIST RECEPTACLE, MANUALLY MAKE SURE THAT EACH IS IN LOCKED POSITION. WHEN CORRECTLY INSTALLED, THE LOADCELL ASSEMBLY WILL NOT ROTATE WITHOUT BEING PUSHED UPWARD INTO RECEPTACLE.

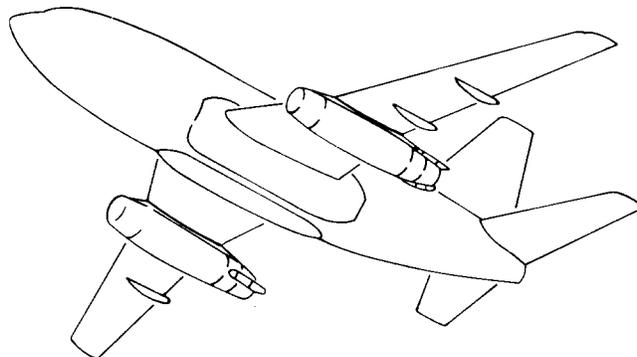
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| LINE SIZE | TORQUE VALUE POUND-FEET |
|-----------|-------------------------|
| -6        | 20-25                   |
| -8        | 20-25                   |
| -16       | 35-45                   |

1. ELECTRICAL CONNECTORS (4)

2. ENGINE PRESSURE RATIO SENSING LINES

3. GROUNDING LUG

4. PNEUMATIC DUCT CONNECTION

13. ELECTRICAL CONNECTOR

REF. 12. DELETED

11. FUEL SUPPLY LINE

9. HIGH PRESSURE SENSING LINE

10. WATER PRESSURIZING LINE (ENGINE NO. 1 ONLY)

8. ENGINE START AND THRUST CONTROL PUSH-PULL CABLES

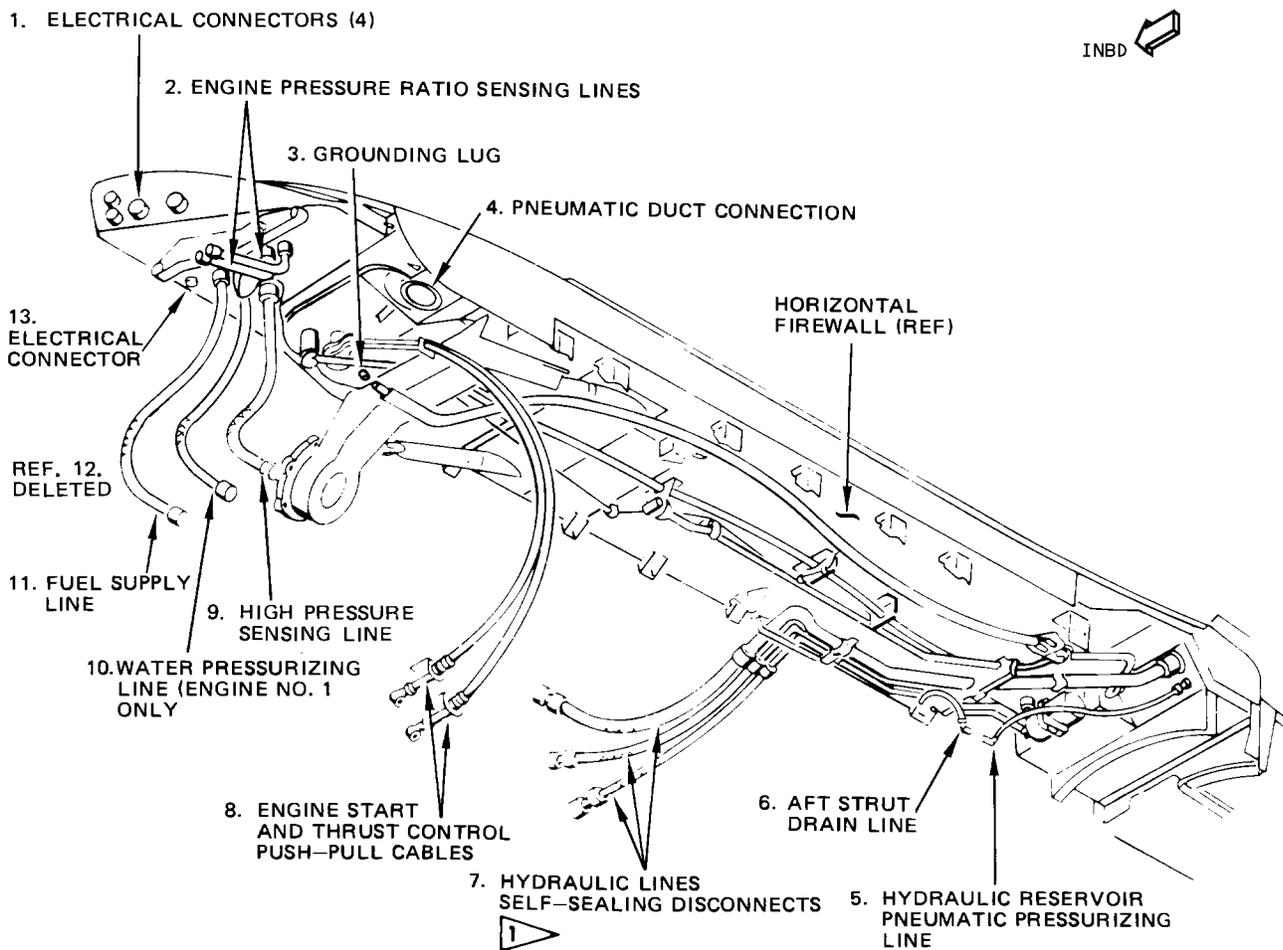
7. HYDRAULIC LINES SELF-SEALING DISCONNECTS

6. AFT STRUT DRAIN LINE

5. HYDRAULIC RESERVOIR PNEUMATIC PRESSURIZING LINE

FWD 

INBD 



Engine Plumbing and Electrical Disconnects  
 Figure 402

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## MAINTENANCE MANUAL

- (4) Make sure that inboard forward, inboard aft and outboard loadcell assemblies are in their proper locations.
- (5) Install F80219-( ) hoist assemblies to their respective loadcell assemblies by inserting the ball lockpins.
- (6) On system, with painted engine hoist receptacle (SB 57-1117), and tooling (F80219-47, -48 and -69) with lock collar and painted alignment stripe, perform the following:
  - (a) Using hand pressure only, insert loadcell assembly into receptacle and allow loadcell assembly to rotate by spring torsion 60 degrees clockwise, so that paint stripes on receptacle align with paint stripes on loadcell assembly (view 1). Pull down into locked position and install lock collar (view 2) to disallow upward motion of loadcell assembly and subsequent possible disengagement.

**WARNING:** TO PREVENT INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT DUE TO LOADCELL ASSEMBLY DISENGAGEMENT, MAKE SURE THAT LOADCELL ASSEMBLY IS IN LOCKED POSITION. WHEN CORRECTLY INSTALLED IN THE LOCKED POSITION, THE FOLLOWING CONDITIONS APPLY:

THE INDEX MARKS ON THE RECEPTACLE WILL LINE UP WITH THOSE ON THE LOAD CELL ASSEMBLY.

THE LOCK COLLAR WILL PREVENT THE LOAD CELL ASSEMBLY FROM BEING PUSHED UPWARD INTO THE RECEPTACLE.

THE LOAD CELL ASSEMBLY WILL NOT ROTATE.

**WARNING:** MANUALLY INSTALL LOADCELL ASSEMBLY INTO ENGINE RECEPTACLE. ON ENGINE HOIST RECEPTACLE WITH SPRING TORSION FEATURE, USE OF HAND OR POWER TOOLS COULD APPLY AN EXCESSIVE FORCE IN AN UPWARD OR ROTATING MANNER WHICH WOULD DAMAGE THE ROLL PIN STOPS OR TORSION SPRING IN THE ENGINE HOIST RECEPTACLE. DAMAGED ENGINE HOIST RECEPTACLE WOULD PREVENT PROPER SEATING OF LOADCELL ASSEMBLY.

**WARNING:** DO NOT PUSH UPWARDS TO CHECK IF LOADCELL ASSEMBLY IS SEATED. UNSEATING MAY OCCUR.

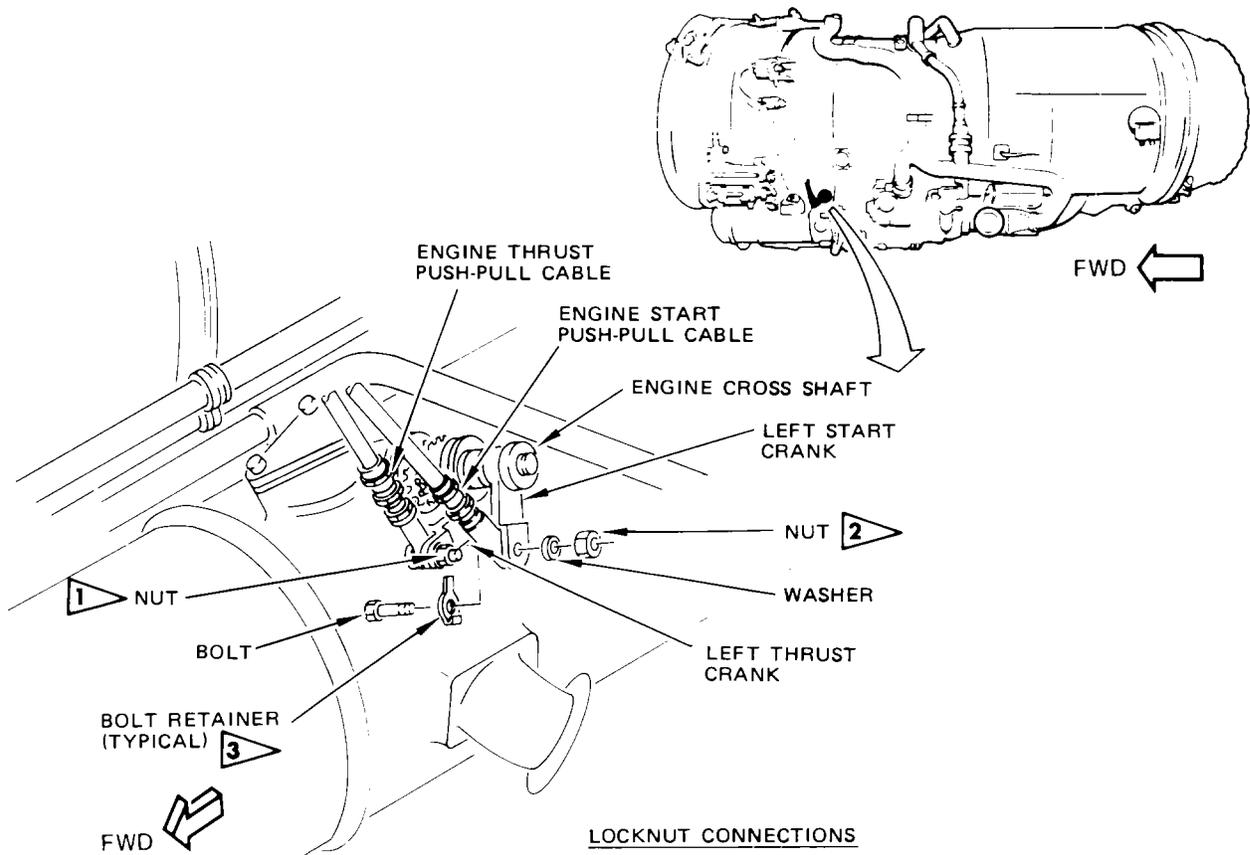
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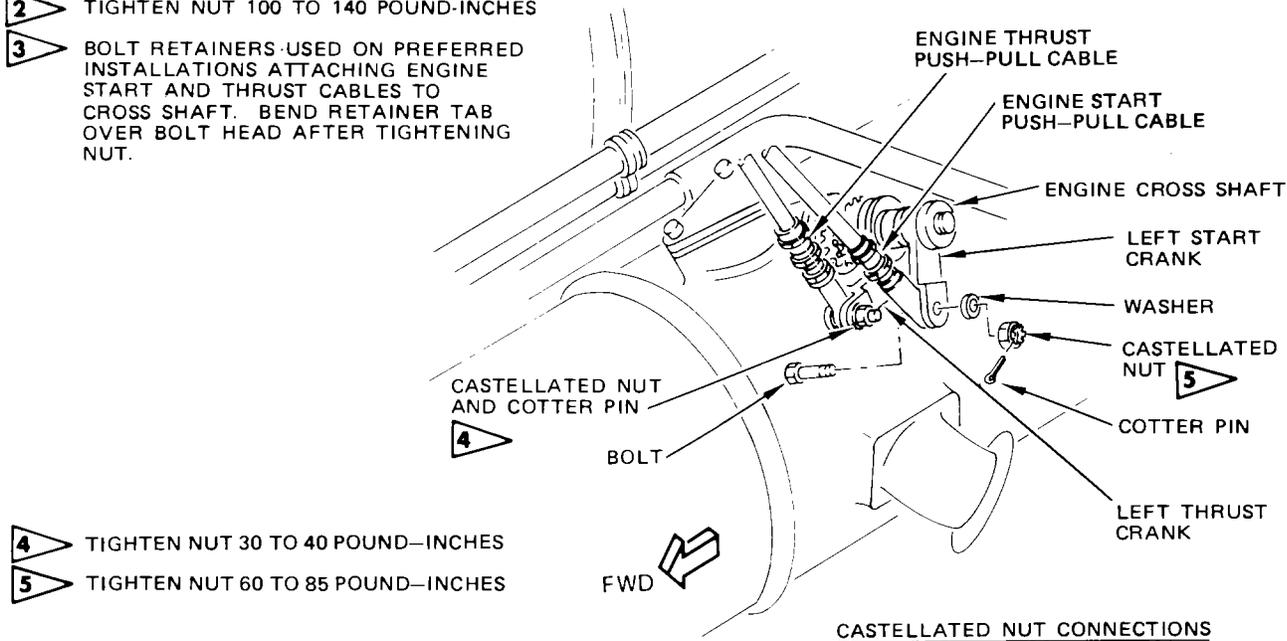
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- 1** TIGHTEN NUT 50 TO 70 POUND-INCHES
- 2** TIGHTEN NUT 100 TO 140 POUND-INCHES
- 3** BOLT RETAINERS USED ON PREFERRED INSTALLATIONS ATTACHING ENGINE START AND THRUST CABLES TO CROSS SHAFT. BEND RETAINER TAB OVER BOLT HEAD AFTER TIGHTENING NUT.

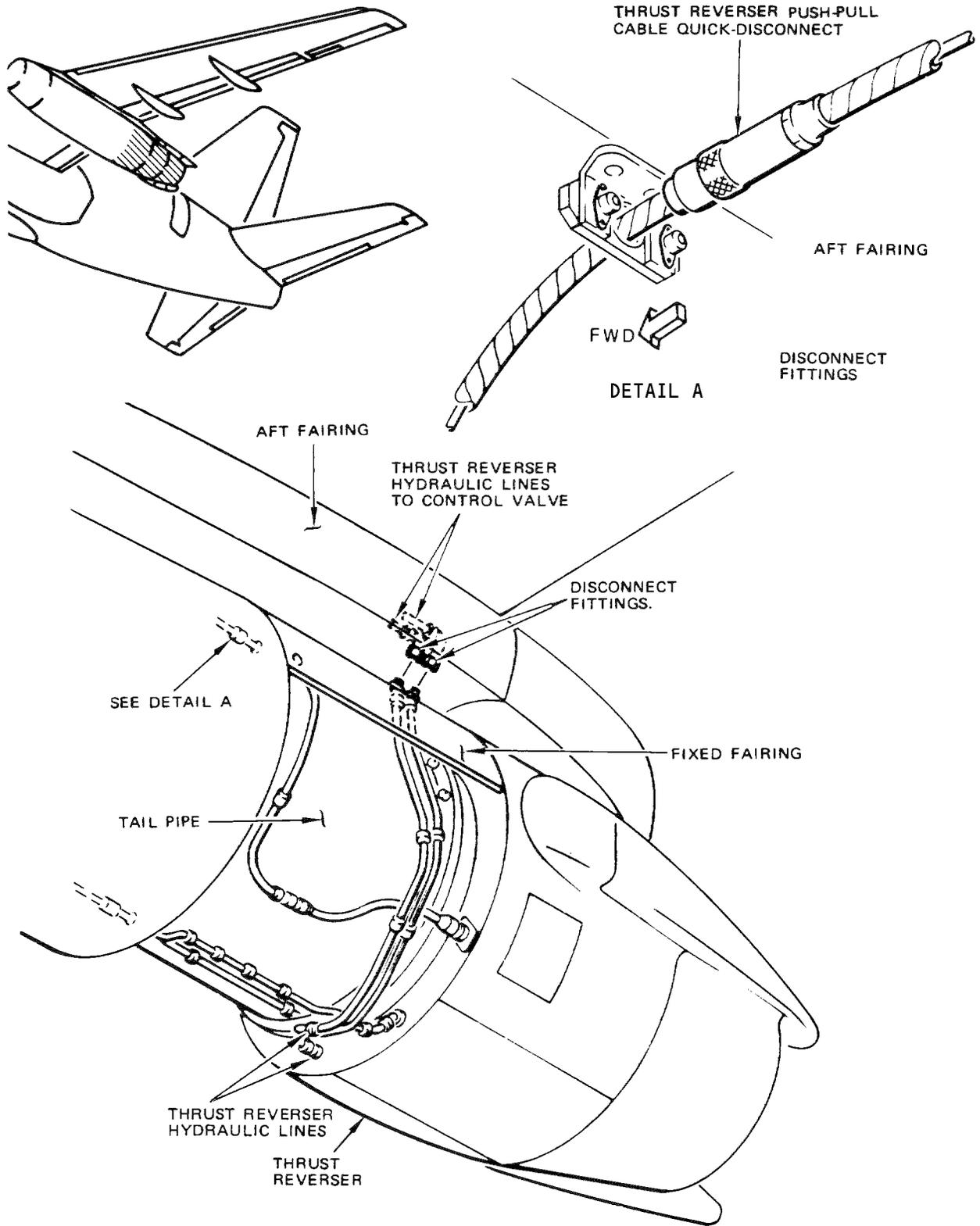


- 4** TIGHTEN NUT 30 TO 40 POUND-INCHES
- 5** TIGHTEN NUT 60 TO 85 POUND-INCHES

Engine Control Cable Disconnects  
 Figure 403

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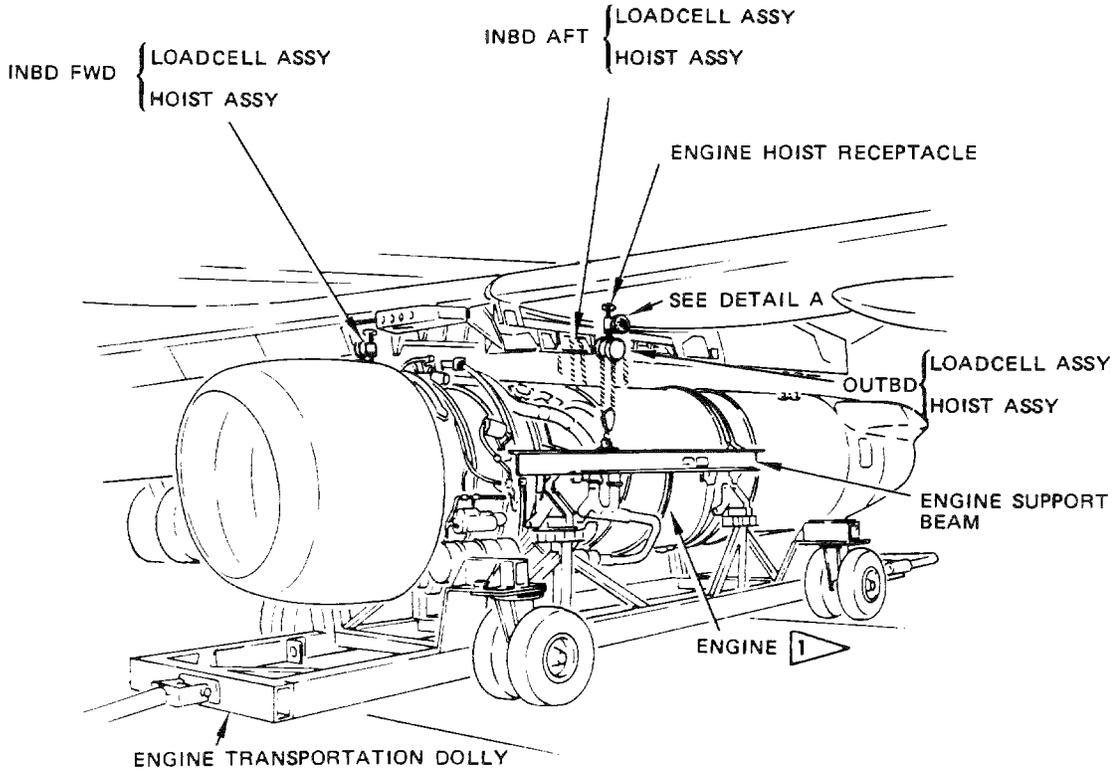
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Thrust Reverser Disconnects  
 Figure 404

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**1** ENGINE BUILD-UP UNIT (EBU) MAY BE REMOVED OR INSTALLED IN THE FOLLOWING CONFIGURATIONS:

- A. EBU INCLUDING NOSE COWL AND THRUST REVERSER
- B. EBU LESS THRUST REVERSER OR THRUST REVERSER AND TAIL PIPE.
- C. EBU LESS NOSE COWL, THRUST REVERSER, AND/OR TAILPIPE.
- D. EBU LESS NOSE COWL.

**CAUTION:** DO NOT APPLY ADDITIONAL LOAD TO AFT END OF ENGINE. FORWARD INBOARD HOIST MAY NOT BE LOADED CAUSING ENGINE RISE AND DAMAGE.

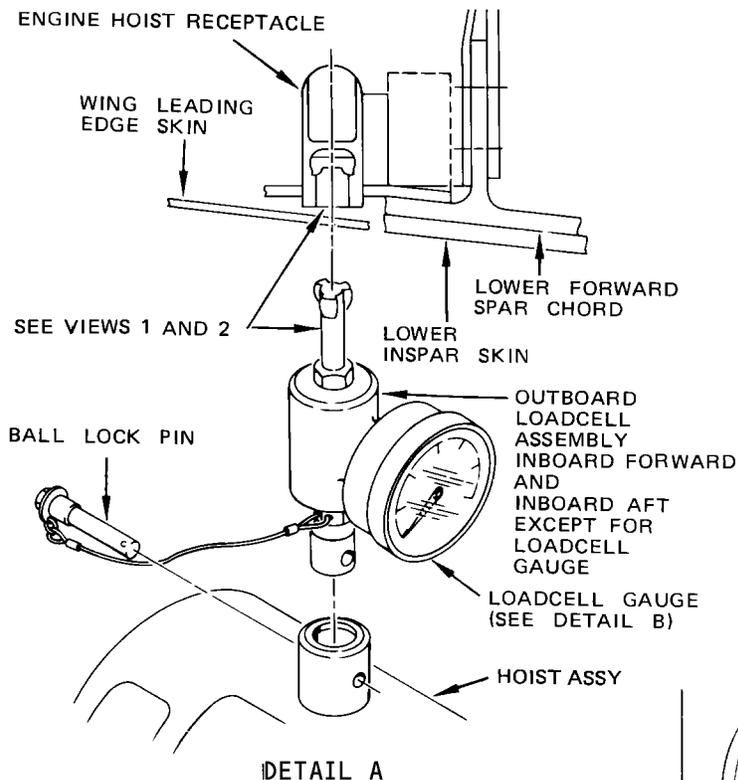
Engine Hoisting Equipment  
 Figure 405 (Sheet 1)

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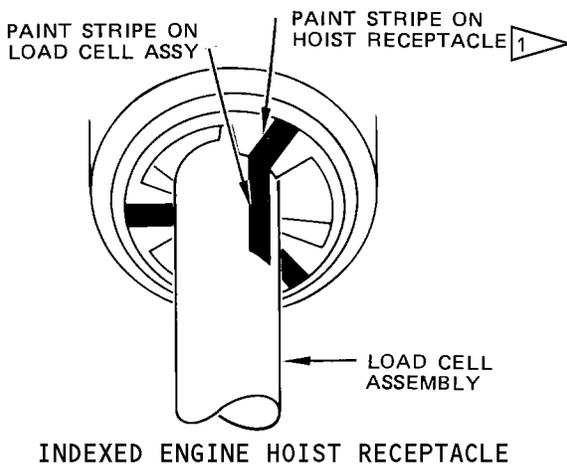
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**MAINTENANCE MANUAL**

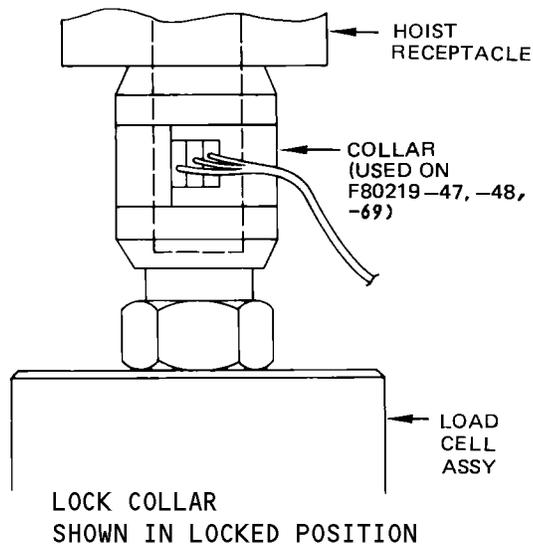


**DETAIL A**



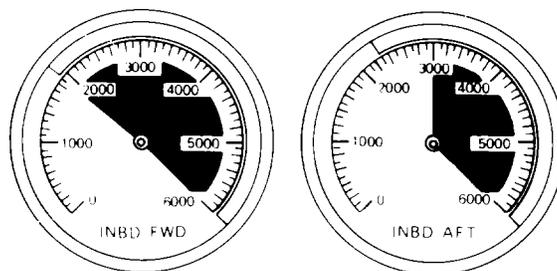
**INDEXED ENGINE HOIST RECEPTACLE**

**VIEW 1**



**LOCK COLLAR SHOWN IN LOCKED POSITION**

**VIEW 2**



**WARNING:** ENGINE WEIGHS APPROXIMATELY 5000 POUNDS WITH BEAMS. CHECK THAT FOLLOWING LOAD LIMITS ARE NOT EXCEEDED DURING ENGINE INSTALLATION:

|                 |             |
|-----------------|-------------|
| INBOARD FORWARD | 1000 POUNDS |
| INBOARD AFT     | 3000 POUNDS |
| OUTBOARD        | 3000 POUNDS |

EXCEEDING THE LIMITS MAY IMPOSE UNDUE STRESS ON AIRFRAMES, ENGINE, AND HOISTING EQUIPMENT. THIS TYPE OF CONDITION COULD RESULT IN DAMAGE TO EQUIPMENT AND/OR AIRFRAME AND SERIOUS INJURY TO PERSONNEL.

**DETAIL B**

**1** AIRPLANES WITH PAINTED ENGINE HOIST RECEPTACLE (SB 57-1117) AND TOOLING (F80219-47, -48, -69) WITH LOCK COLLAR AND PAINTED ALIGNMENT STRIPE.

**2** ALL EXCEPT **1**

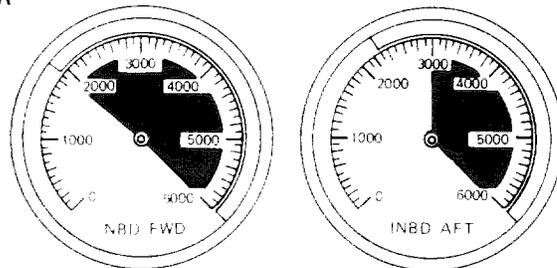
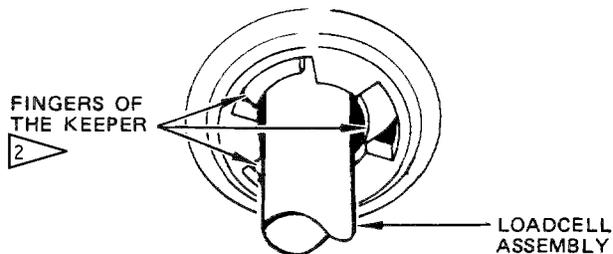
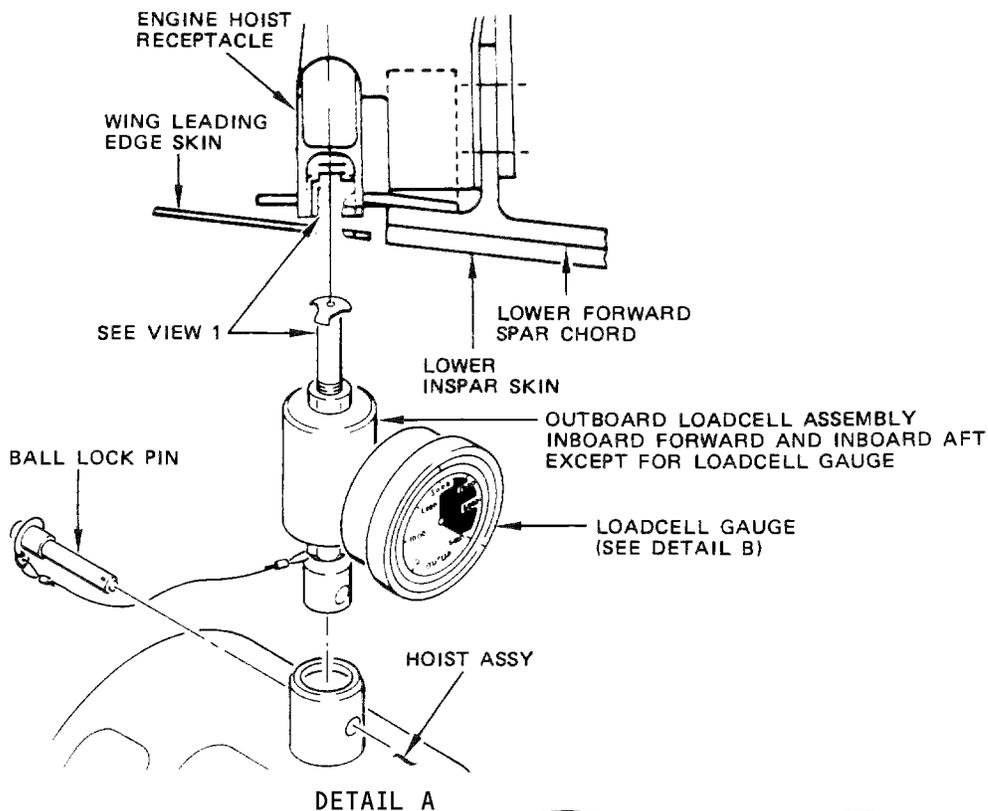
**Engine Hoisting Equipment  
Figure 405 (Sheet 2)**

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| EFFECTIVITY | ALL |
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**MAINTENANCE MANUAL**



**WARNING:** MANUALLY INSTALL LOADCELL ASSEMBLY INTO ENGINE HOIST RECEPTACLE. ON ENGINE HOIST RECEPTACLE WITH SPRING TORSION FEATURE, USE OF HAND OR POWER TOOLS COULD APPLY AN EXCESSIVE FORCE IN AN UPWARD OR ROTATING MANNER WHICH WOULD DAMAGE THE ROLL PIN STOPS OR TORSION SPRING IN THE ENGINE HOIST RECEPTACLE. DAMAGED ENGINE HOIST RECEPTACLE WOULD PREVENT PROPER SEATING OF LOADCELL ASSEMBLY.

DO NOT PUSH UPWARDS TO CHECK IF LOADCELL ASSEMBLY IS SEATED. UNSEATING MAY OCCUR.

**WARNING:** ENGINE WEIGHS APPROXIMATELY 5000 POUNDS WITH BEAMS. CHECK THAT FOLLOWING LOAD LIMITS ARE NOT EXCEEDED DURING ENGINE INSTALLATION:

|                 |             |
|-----------------|-------------|
| INBOARD FORWARD | 1000 POUNDS |
| INBOARD AFT     | 3000 POUNDS |
| OUTBOARD        | 3000 POUNDS |

EXCEEDING THE LIMITS MAY IMPOSE UNDUE STRESS ON AIRFRAMES, ENGINE, AND HOISTING EQUIPMENT. THIS TYPE OF CONDITION COULD RESULT IN DAMAGE TO EQUIPMENT AND/OR AIRFRAME AND SERIOUS INJURY TO PERSONNEL.

VIEW 1

DETAIL B

Engine Hoisting Equipment  
Figure 405 (Sheet 3)

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- U. Attach hoist assemblies to engine support beams. Adjust hoists to leave approximately 1/2 inch slack.
- V. Position engine transportation dolly under engine.

**WARNING:** DO THE STEPS BELOW IN SEQUENCE, STEP BY STEP. IF YOU DO NOT DO THESE STEPS CORRECTLY, UNDUE LOADS COULD RESULT IN DAMAGE TO THE ENGINE, EQUIPMENT, OR AIRFRAME. INJURIES TO PERSONNEL CAN OCCUR. WHEN USING THE LOAD INDICATING SYSTEM HOIST EQUIPMENT DO NOT EXCEED THE FOLLOWING LOAD LIMITS:

INBOARD FORWARD 1000 POUNDS

INBOARD AFT 3000 POUNDS

OUTBOARD 3000 POUNDS

**CAUTION:** DO THE STEPS BELOW IN SEQUENCE, STEP BY STEP. DO NOT RAISE OR LOWER INBOARD AFT CHAIN FALL WHEN THE FORWARD CONE BOLTS ARE SEATED AND AT THE SAME TIME, THE FORWARD CHAIN FALLS ARE LOADED.

- W. Attach hoist assemblies to engine support beams. Adjust hoists to leave approximately 1/2 inch slack.
- X. Clean exposed threads on cone bolts, then raise inboard aft chain fall to support its portion of the engine weight.
- Y. Raise outboard chain fall to support its portion of the engine weight.
- Z. Raise inboard forward chain fall to support its portion of the engine weight.
- AA. Remove link assembly and cone bolt nuts:
  - (1) NON-ENERGY ABSORBING CABLE SECONDARY SUPPORT LINKS;  
Remove the link cable and keeper from the cable retainer (AMM 71-21-11/401).
  - (2) ENERGY ABSORBING SECONDARY SUPPORT LINKS WITHOUT CRUSHABLE SPACER;  
Remove the nut, washer (if any) and crushable spacer from the retainer of the secondary support link (AMM 71-21-11/401).
  - (3) ENERGY ABSORBING SECONDARY SUPPORT LINKS WITHOUT CRUSHABLE SPACER;  
Remove the nut, washer assembly and chamfered washer from the retainer of the secondary support link (AMM 71-21-11/401).

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- (4) For energy absorbing secondary support links, remove nut and crushable spacer from link.
- (5) NON-ENERGY ABSORBING CABLE SECONDARY SUPPORT LINKS;  
Remove the link cable and keeper from the cable retainer (AMM 71-21-11/401).
- (6) ENERGY ABSORBING SECONDARY SUPPORT LINKS WITHOUT CRUSHABLE SPACER;  
Remove the nut, washer (if any) and crushable spacer from the retainer of the secondary support link (AMM 71-21-11/401).
- (7) ENERGY ABSORBING SECONDARY SUPPORT LINKS WITHOUT CRUSHABLE SPACER;  
Remove the nut, washer assembly and chamfered washer from the retainer of the secondary support link (AMM 71-21-11/401).
- (8) Remove the cone bolt nut and washers.
- (9) Install cone bolt thread protectors (F70266-304) at all three cone bolts.

AB. Remove thrust reverser deflector door fairing (AMM 78-32-112/401).

**CAUTION:** DAMAGE TO AFT FAIRING SEAL CAN OCCUR IF ENGINE IS LOWERED PRIOR TO REMOVING THRUST REVERSER DEFLECTOR DOOR FAIRING.

- AC. Carefully lower outboard chain fall until outboard cone bolt has dropped approximately 1/4 inch from full-seated position.
- AD. Carefully lower inboard forward chain fall until inboard cone bolt has dropped approximately 1/4 inch from full-seated position.
- AE. Carefully lower inboard aft chain fall until aft cone bolt has dropped approximately 1/4 inch from full-seated position.

**CAUTION:** EXCEEDING THE ABOVE DIMENSIONS WHILE LOWERING ENGINE COULD RESULT IN DAMAGE TO LINES AND/OR FITTINGS.

AF. Disconnect thrust reverser hydraulic lines at fittings located at 6 o'clock position and drain residual hydraulic fluid. Reconnect and tighten hydraulic lines after draining. Disconnect thrust reverser hydraulic lines at disconnect fittings (Fig. 404).

**NOTE:** Removal of aft access panel 5140L or 5240R may facilitate in the disconnection or connection of thrust reverser hydraulic lines at disconnect fittings.

AG. Lower engine and secure to transportation dolly.

### 6. Prepare to Install Power Plant

- A. Make sure that airplane is still in configuration necessary for engine installation, including:
  - (1) Airplane - Grounded to approved grounding lug
  - (2) Ground Power Switch - OFF
  - (3) Battery Switch - OFF
  - (4) Applicable Fire Switch - Pulled
  - (5) FUEL FLOW Circuit Breakers - Pulled
  - (6) Ground Electrical Power Receptacle - Tagged to prevent use
  - (7) Hydraulic system A - Depressurized (AMM 29-11-0/201)

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- (8) Forward Airstairs - Retracted (AMM 52-61-100/201)
  - (9) Check forward and aft engine mounts (AMM 54-41-0/601), loadcell assemblies or hoist attach fittings and related wing support structure for evidence of loose fasteners, nicks, cracks, gouges, chipped finish and/or signs of visible damage.
  - (10) Inspect the cone bolts, isolators, thrust links and aft mount secondary support assembly (AMM 71-20-0/601).
- B. If nickel-alloy 718 bolt with related nut and cotter pin is not installed, install new nut for inboard forward engine mount (AMM 54-41-11/401).
- C. Check cone bolt nuts at forward and aft engine mounts for correct locking torque when nuts are installed.

**CAUTION:** CONE BOLT NUTS WITH LOCKING TORQUE OF 90-200 POUND-INCHES ARE REQUIRED. THREADS MUST BE LUBRICATED WITH EASE-OFF 990 WHEN CHECKING TORQUE.

- D. Make sure conical surface of each cone bolt and mating vibration isolator is clean. Install thread protectors on cone bolts.

### 7. Install Power Plant (Fig. 405)

- A. Mount engine support beams (F72714 or F72988) on engine forward and aft mount rings.
- B. Install hoist equipment.

**WARNING:** TO PREVENT INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT DUE TO A LOAD CELL ASSEMBLY OR HOIST SLIPPING OUT, MAKE SURE THAT LOADCELL ASSEMBLY OR HOIST IS IN THE LOCKED POSITION IN ENGINE HOIST RECEPTACLE.

- C. Position engine transportation dolly with engine to be installed beneath engine mounts and attach hoist assemblies to engine support beams.
- D. If using the Load Limiting System, adjust the load limiters on the hoists as follows:
- (1) Inboard forward - 1000 pounds
  - (2) Outboard forward - 3000 pounds
  - (3) Inboard aft - 3000 pounds
- E. Raise engine out of engine transportation dolly. Rotate outboard side upward so that engine horizontal centerline is at an angle of about 6 degrees with respect to ground.

**WARNING:** ENGINE WEIGHS APPROXIMATELY 5000 POUNDS WITH BEAMS. ENSURE THAT ENGINE SUPPORT ASSEMBLY IS ADJUSTED TO GIVE EVEN FORE AND AFT SUPPORT TO ENGINE. UNEVEN SUPPORT CAN CAUSE ENGINE TO SHIFT RESULTING IN INJURY TO PERSONNEL OR DAMAGE TO ENGINE AND/OR DAMAGE TO AIRFRAME.

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F. Hoist engine as follows:

- (1) Operate chain hoists and slowly raise forward and aft end of engine evenly. Raise engine until outboard, inboard forward, and inboard aft mount cone bolts are approximately 1/4 inch from being seated without compressing engine firewall seals. Make measurement at aft mount cone bolt.
- (2) Connect thrust reverser hydraulic lines (Fig. 404).

**NOTE:** Removal of aft access panel 5140L or 5240R may facilitate in the disconnection or connection of thrust reverser hydraulic lines at disconnect fittings.

- (3) Slowly raise forward end of engine until forward cone bolts protrude through cone bolt fittings far enough to allow nuts to be fully threaded.

**WARNING:** ENGINE WEIGHS APPROXIMATELY 5000 POUNDS WITH BEAMS. CHECK THAT FOLLOWING LOAD LIMITS ARE NOT EXCEEDED DURING ENGINE INSTALLATION:

INBOARD FORWARD 1000 POUNDS

INBOARD AFT 3000 POUNDS

OUTBOARD 3000 POUNDS

**WARNING:** EXCEEDING THE LIMITS MAY IMPOSE UNDUE STRESS ON AIRFRAMES, ENGINE, AND HOISTING EQUIPMENT. THIS TYPE OF CONDITION COULD RESULT IN DAMAGE TO EQUIPMENT AND/OR AIRFRAME AND SERIOUS INJURY TO PERSONNEL. IF LIMITS ARE INADVERTENTLY EXCEEDED, CHECK FORWARD AND AFT ENGINE MOUNTS INCLUDING LOADCELL ASSEMBLIES OR HOIST RINGS ATTACH FITTINGS AND RELATED WING SUPPORT STRUCTURE FOR EVIDENCE OF LOOSE FASTENERS, NICKS, CRACKS, GOUGES, CHIPPED FINISH AND/OR SIGNS OF VISIBLE DAMAGE.

- (4) Remove thread protectors from forward cone bolts and apply light coat of Ease-Off 990 to threads and both sides of washers. Application of Ease-Off 990 will not change torque applied to cone bolt nuts.
- (5) Install washers and fully thread nuts on forward cone bolts.

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- (6) Carefully slack off on forward hoist chains.

**WARNING:** FAILURE TO SLACK OFF FORWARD HOISTS PRIOR TO RAISING AFT END OF ENGINE MAY IMPOSE UNDUE STRESS ON AIRFRAME, ENGINE AND HOISTING EQUIPMENT. THIS TYPE OF CONDITION COULD RESULT IN DAMAGE TO EQUIPMENT OR AIRFRAME AND POSSIBLE INJURY TO PERSONNEL. IF THIS CONDITION OCCURS, CHECK FORWARD AND AFT ENGINE MOUNTS INCLUDING HOIST RINGS ATTACH FITTINGS AND RELATED WING SUPPORT STRUCTURE FOR EVIDENCE OF LOOSE FASTENERS, NICKS, CRACKS, GOUGES, CHIPPED FINISH AND/OR SIGNS OF VISIBLE DAMAGE.

- (7) Raise aft end of engine until aft cone bolt protrudes through cone bolt fitting far enough to allow nut to be fully threaded.
- (8) Remove thread protector from aft cone bolt and apply light coat of Ease-Off 990 to threads and both sides of washer.
- (9) Install washer and fully thread nut on aft cone bolt. Install nut utilizing the aft cone bolt nut adapter fitting from the inboard side.
- G. With all chain hoists relaxed, tighten cone bolt nuts as follows:
- (1) Tighten nuts to a torque range of 500 to 600 pound-inches in the following sequence: forward outboard, forward inboard, and aft.
- (2) Using the sequence specified, tighten nuts to a torque range of 800 to 900 pound-inches.
- (3) Using the sequence specified, tighten nuts to a torque range of 1000 to 1100 pound-inches.
- (4) Back off each cone bolt nut 1/8 turn.
- (5) Tighten nuts in increments of 200 pound-inches to a torque range of 1000 to 1100 pound-inches, using the sequence specified.

**CAUTION:** IMPROPER TIGHTENING OF CONE BOLTS MAY CAUSE BREAKAGE. REFER TO AMM 20-50-11 FOR PROPER USE OF TORQUE WRENCH ADAPTERS.

- H. Install the link assembly.
- (1) NON-ENERGY ABSORBING CABLE SECONDARY SUPPORT LINKS;  
Install the link cable assembly and keeper cable retainer (AMM 71-21-11/401).
- (2) ENERGY ABSORBING SECONDARY SUPPORT LINKS WITH CRUSHABLE SPACER;  
Install the link crushable spacer and nut (AMM 71-20-0/601).
- (a) Tighten the nut until it touches the spacer (do not torque over 65 pound-inches) (AMM 71-21-11/401).

**CAUTION:** IMPROPER TIGHTENING OF LINK NUT MAY CAUSE DAMAGE TO ENERGY ABSORBING HONEYCOMB MATERIAL AND/OR CRUSHABLE SPACER. REFER TO AMM 20-50-11 FOR PROPER USE OF TORQUE WRENCH ADAPTERS.

- 1) A minimum of two threads must be above nut when bolt is tightened.

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- (b) If unable to obtain two exposed threads on bolt when installing nut, delete as required. Delete washers as follows:
  - 1) Remove plain washers (if any) from under head of bolt.
  - 2) Remove countersunk washer from under head of bolt.
  - 3) Remove plain washer from under nut.
  - 4) Remove only those washers required to expose two full bolt threads while maintaining 0.06 inch minimum clearance at top end of bolt.
- (3) ENERGY ABSORBING SECONDARY SUPPORT LINKS WITHOUT CRUSHABLE SPACER; Install the link, chamfered washer, washer assembly and nut in the retainer (AMM 71-21-11/401).
  - (a) Tighten the nut until the link cannot be turned by hand, then tighten another half turn.
  - (b) Make sure the washer assembly under the link head is engaged in the countersunk hole.
- I. Slack off the chain hoists and remove ball lockpins and remove hoist assembly.
- J. Remove the engine support beams and the transportation dolly.
- K. Remove lock collar (if installed), then remove loadcell assemblies by pushing upward and rotating 60 degrees to disengage from engine hoist receptacles.

**NOTE:** Loadcell assemblies must be rotated counterclockwise for removal from receptacles with torsion springs. For removal from other receptacles, rotation may be in either direction.

- L. Install access panels.
- M. Couple the thrust reverser push-pull cable at quick-disconnect as follows (Fig. 406):
  - (1) Join cable ends together.
  - (2) Manually close jaws of coupling assembly over mating flange on connector terminal on aft conduit. Notch at aft end of both jaws must engage circular flange on terminal.

**NOTE:** End of forward conduit can be moved fore and aft in bulkhead fitting as necessary to make this connection.

- (3) While holding jaws in place with one hand, release outer sleeve of disconnect from forward holding position with other hand.

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(4) Push outer sleeve fully aft to secure connection.

**CAUTION:** MAKE SURE THAT THE GAP BETWEEN AFT END OF OUTER SLEEVE AND AFT CONNECTOR TERMINAL IS LESS THAN 1/16 INCH. A LARGER GAP COULD INDICATE THAT THE COUPLING ASSEMBLY JAWS ARE NOT ENGAGED WITH THE CONNECTOR TERMINAL FLANGE.

- N. Connect hydraulic reservoir pneumatic pressurizing line (5, Fig. 402) at disconnect bracket.
- O. Connect aft strut drain line (6) at disconnect bracket.
- P. Position the engine control cables in the grooves of the lower spacer block at approximately the 10 o'clock position on the engine. The start control cable should be forward of the thrust control cable. Install the top spacer block and secure with washers and locknuts.
- Q. Position the two-engine control support brackets on the two bolts of the fixed bracket at approximately the 8 o'clock position on the engine. The engine thrust control bracket should be on top of the engine start control bracket. Install the washers and locknuts.
- R. Connect engine start push-pull cable support clamp to bracket at 9 o'clock position on engine flange using bolt, washer, and locknut.
- S. Install idle rigging pins at fuel control thrust crank and at thrust drum in strut. Make sure that start lever on control stand is in cutoff detent and install rigging pin through start crank extension at engine cross-shaft.
- T. Connect the engine start and thrust control push-pull cables (8) at the engine cross-shaft. If adjustment is required, refer to AMM 76-11-0/501. Attach push-pull cables with bolts, bolt retainers (preferred installation), washers, and locknuts. Tighten locknuts to torques given in Fig. 403. Remove rigging pins installed in step R.
- U. Connect the pneumatic duct to the flanged coupling on the horizontal firewall (Fig. 402).
- V. Connect the engine pressure ratio sensing lines (2) at their disconnect bracket. The Pt2 line connects to the left. Connect the high pressure sensing line (9) at the disconnect bracket.
- W. Connect the engine bonding lead(s) to the grounding lug (3) near the forward end of the firewall.

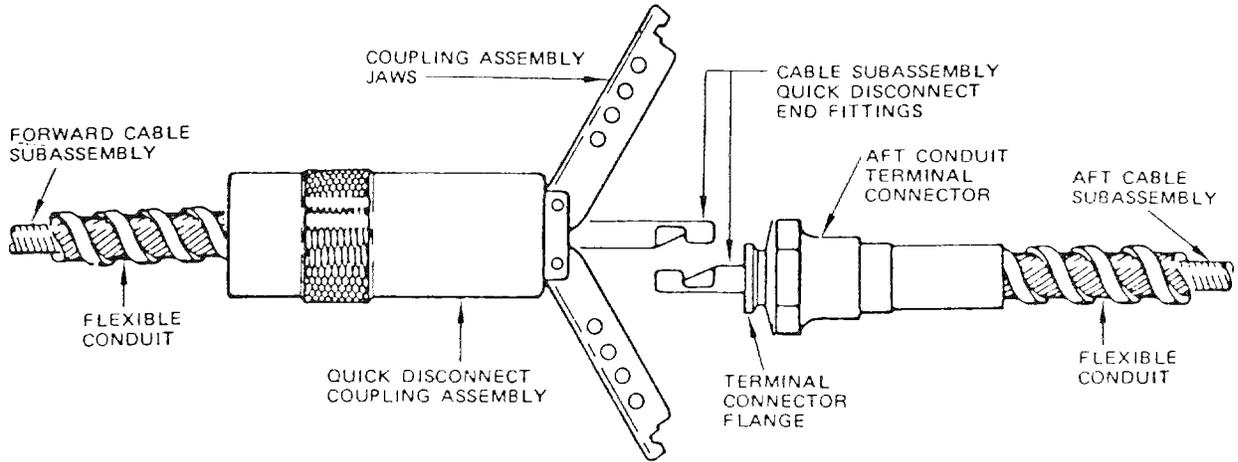
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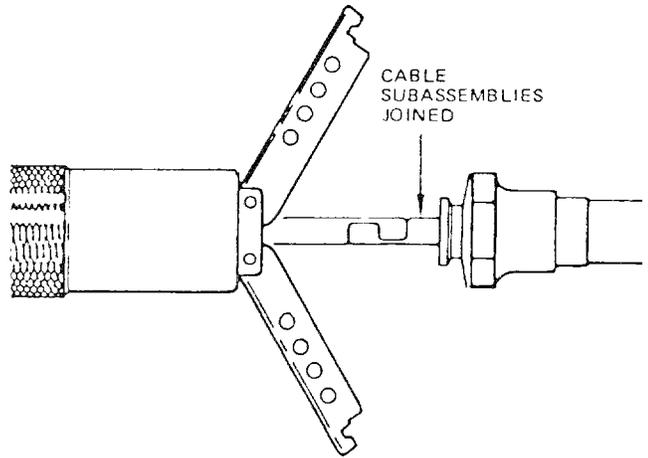
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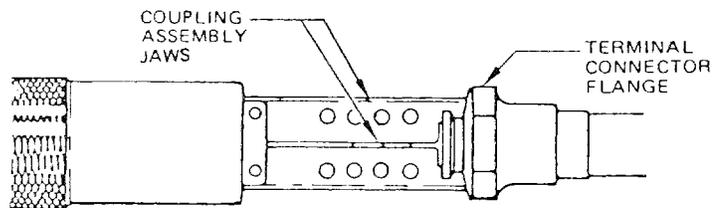
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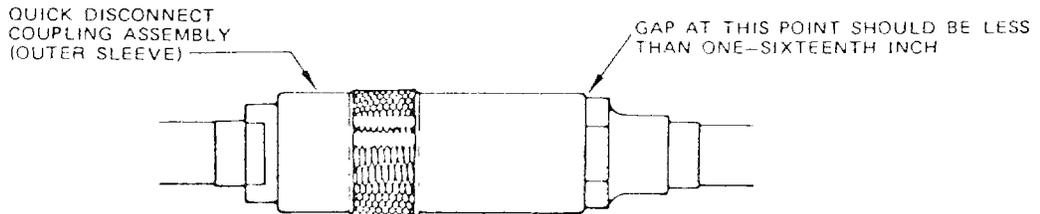
STEP 1. PREPARE TO JOIN CABLE SUBASSEMBLY END FITTINGS



STEP 2. JOIN CABLE SUBASSEMBLIES AT END FITTINGS



STEP 3. CLOSE COUPLING ASSEMBLY JAWS OVER AFT CONDUIT TERMINAL CONNECTOR FLANGE



STEP 4. RELEASE QUICK DISCONNECT COUPLING ASSEMBLY OUTER SLEEVE AND PUSH SLEEVE FULLY AFT TO SECURE CONNECTION

**Thrust Reverser Push-Pull Quick-Disconnect Connection**  
**Figure 406**

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- X. Connect and lockwire the electrical connectors (1) at the forward end of the firewall. Connect and lockwire the electrical connectors (13) on the forward horizontal firewall (Fig. 402).
- Y. Connect fuel supply flex hose (11) at the disconnect bracket on the engine.
- Z. On No. 1 engine connect water pressurizing line (10) at disconnect bracket.

**CAUTION:** CROSS-CONNECTION OF HIGH PRESSURE SENSING LINE (9) AND WATER PRESSURIZING LINE MAY RESULT IN INABILITY OF PACK VALVE TO CLOSE, WITH CONTROL SWITCH OR OVERHEAT SWITCH ACTUATION, WHENEVER THE PNEUMATIC SYSTEM IS PRESSURIZED.

- AA. Perform close visual check of all cleaned surfaces of lower aft flange of forward engine mount support fitting, with special attention to edge radii on both sides of each thrust link lug (AMM 54-41-0/601).
- AB. Connect the hydraulic supply, pressure, and return lines (7) at their quick-disconnect bracket. Tighten hex head couplings to value shown in Fig. 402.

**CAUTION:** MAKE SURE TOP SECTIONS OF HYDRAULIC HOSES HAVE CLEARANCE WITH OUTER FAN DUCT TO PREVENT CHAFING DAMAGE.

- AC. Install fixed fairing (AMM 71-11-21/401).
- AD. Install thrust reverser deflector door fairing (AMM Chapter 78).

### 8. Restore Airplane to Normal Configuration

**CAUTION:** TOOLS, LOOSE MATERIAL, AND DEBRIS IN STRUT CAVITIES MAY BLOCK DRAINS RESULTING IN POSSIBLE FUEL ACCUMULATION AND STRUT FIRE.

- A. Check that tools and loose material are removed and strut cavities are free of debris before installing access doors/panels.
- B. Install forward, mid, and aft access panels on both sides of mid-fairing. Install cone bolt access door on each side of fixed fairing.
- C. Install engine-to-wing forward fairing (AMM 54-51-11/401).

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- D. Check adjustment of oil quantity indicating system (AMM 79-31-01/501).
- E. Check servicing of engine oil tank, CSD, starter, and CSD wet pad spline cavity (AMM 12-13-11/201, 12-13-21/201, and 12-13-41/201).
- F. Check engine start and thrust control rigging (AMM 76-11-11/401).
- G. Return engine fire switch to down and locked position.
- H. If no other maintenance is being performed, remove tag from ground power receptacle and connect external electrical power.
- I. Position ground power switch and battery switch to ON.
- J. Close the following circuit breakers:
  - (1) P6-2 circuit breaker panel
    - (a) ENG EPR WARN
    - (b) ENG START VALVES
    - (c) FIRE PROTECTION DETECTION
    - (d) ENGINE IGNITION
    - (e) HYD SYSTEM ENG SHUTOFF VALVE
    - (f) OIL QTY
    - (g) THRUST REVERSER
    - (h) LT & RT FIRE EXTINGUISHER BOTTLES
    - (i) OIL TEMP & PRESS
    - (j) ENG EPR & LG WARNING
  - (2) P6-3 circuit breaker panel
    - (a) FUEL FLOW XMITTER MOTORS
    - (b) FUEL SYSTEM INDICATOR
    - (c) FUEL SYSTEM SHUTOFF VALVE
  - (3) P6-4 circuit breaker panel
    - (a) CONTROL GENERATOR
    - (b) GENERATOR DRIVE OIL (TEMP & LO PRESS)
- K. Turn on fuel pumps for applicable engine.

**NOTE:** If you must use the fuel boost pumps in the center tank, you must have a maintenance person or observer in the flight compartment to continuously monitor the LOW PRESSURE lights. Turn the applicable fuel boost pump to the OFF position if the LOW PRESSURE light for the center tank stays on.

- L. Place appropriate engine start lever to IDLE. Check fuel system for leaks.

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- M. Place engine start lever to CUTOFF after fuel leak check is complied with.
- N. Test engine in accordance with Power Plant Repair Reference Table (AMM 71-00-00/501).
- O. If no further engine maintenance is necessary, install side removable cowl panels (AMM 71-11-11/401).
- P. Check cowl frames and air duct clearance with modeling clay to ensure approximately 0.125 inch (3.175 mm) minimum clearance.
  - (1) Readjust air ducts if clearance is not adequate, recheck for air leaks if any relocation of ducts was necessary on next engine run.

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POWER PLANT (JT8D) - ADJUSTMENT/TEST

1. Power Plant Test

A. General

- (1) This section provides the necessary information to accomplish the tests required following repair or replacement of engine and airplane system components. Information is also provided for minimum ground check runs required to functionally test and troubleshoot airplane systems and components.
- (2) Because the extent of repair and replacement will vary with each engine, the type of test required to ensure that satisfactory maintenance has been performed will vary also. To minimize ground running and to conserve fuel, this section provides ground test procedures which are related to the extent of repair or replacement. Prior to testing an engine after repair or replacement, see the Repair Reference Table (Fig. 501), to determine the test required.
- (3) A pretrimmed engine is an engine that has been trimmed and acceleration/deceleration checked on a test stand in accordance with following:
  - (a) Trim and check runs were accomplished with following items installed:
    - 1) Flight inlet (nose cowl) or bellmouth without screen.
    - 2) Flight exhaust system or reference tailpipe.
    - 3) All quick-engine-change (QEC) accessories (Ref Boeing 737 Overhaul Manual, 71-03-01, Power Pack Assembly (Engine Buildup Section)).
  - (b) Trim targets and acceleration/deceleration check requirements were as specified in AMM 71-09-200, Power Plant (JT8D) - Trim Procedure.

B. Equipment and Materials

- (1) Airplane Interphone Equipment
- (2) Jetcal Analyzer, or equivalent (Howell Instruments, Inc., Ft. Worth, Texas)

C. Prepare for Power Plant Test

- (1) When cleaning engines prior to tests, following precautions must be taken:
  - (a) Protect all prepacked bearings, such as cross-shaft or control rod linkage bearings.

**CAUTION:** IF FUEL LINES ARE TO BE DISCONNECTED, PREPACKED BEARINGS IN THE AREA MUST BE PROTECTED FROM ANY LOST FUEL.

- (b) Protect pressure ratio bleed control.

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- (c) Protect silicone rubber shock mounts on oil tank and oil tank strap. Wash down area as soon as possible after washing with cleaning solution.
- (2) Connect interphone equipment at engine to be tested.
- (3) Remove engine cowl panels.
- (4) Refer to AMM 71-09-100, Power Plant (JT8D)-Operating Procedure, for engine start procedures.

**CAUTION:** BEFORE OPERATING ENGINE, CHECK THAT ENGINE INLET, EXHAUST, AND RUNUP AREA ARE FREE OF SAND, GRAVEL, LOOSE OBJECTS, OR EQUIPMENT THAT COULD BE DRAWN INTO THE ENGINE INLET OR THROWN AFT BY THE EXHAUST BLAST.

### D. Fuel and Oil Leakage Limits

- (1) Fuel and oil leaks found after engine shutdown coming from connections and/or fittings, or gearbox housing parting flange oil leaks shall be repaired and the engine further tested using the following as a guide:
  - (a) For oil leaks, run engine for 5 minutes at takeoff.
  - (b) For fuel leaks, run engine for 5 minutes at takeoff. Shut down engine. Maintain fuel boost pressure to main fuel pump inlet.

**NOTE:** If gearbox housing parting flange nuts are re-torqued do not exceed the recommended torque as pulled studs will result from excessive torque. Torque the eight nuts at the top (straight flange) part of the gearbox parting flange.

- 1) PRE-SB 6097;  
Torque the eight nuts 150-170 lb-in.
  - 2) POST-SB 6097;  
Torque six nuts and two bolts 150-170 lb-in. Torque the remaining nuts to standard torque 85-95 lb-in.
- (2) An optional method of locating fuel and oil leaks may be performed as follows:
    - (a) Clean suspected leak area using acetone or other suitable cleaning fluid.
    - (b) Thoroughly dry suspected leak area.
    - (c) Dust area with ZP-4 dry developer.
    - (d) Run engine for a short time.
    - (e) Shut down engine and then inspect for leak.

**NOTE:** White developer turns gray upon contact with oil, fuel, hydraulic fluid or other hydrocarbons.

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| Units Replaced or Required  | Testing and/or Minimum Thrust Required for Ground Check Run   |
|---|---|
| Accessory Drive<br>Anti-Icing Valve   | Test A *[1]<br>Observe Valve Position Indicator on Body of Valve While Actuating System from Cockpit, with Engine Not Running |
| Bearing, No. 6  | Test H and Breather Test Ref 79-21-0  |
| No. 1 or No. 6 Bearing Oil Scavenge Pump  | Test A *[1] or monitoring   |
| Bleed Valves (Anti-Surge)   | Test E  |
| Combustion Chambers   | Test B  |
| Combustion Chamber Outlet Ducts (Inner and Outer)   | Test F  |
| Compressor Inlet Section No. 1 Bearing and Seal, Inlet Case, Disk Spacer, Individual Fan Blades, 1st- and 2nd-Stage Fan Blades, 1st- and 2nd-Stage Stators, Fan Cases | Test B, H   |
| 1st- and 2nd-Stage Disk and Blade Assembly  | Test H and Ref 79-21-0 MP *[7]  |
| FILTERS   | Test C  |
| Fuel Pump Filter  |   |
| P&D Valve Strainer  |   |
| Fuel Control Filter   |   |
| Fuel Control  | Test D, G   |
| Fuel Deicing Heater   | Test C  |
| Fuel Deicing Shutoff Valve Actuator   | Observe Valve Position Indicator on Body of Valve While Actuating System from Cockpit, with Engine Not Running                |
| Fuel Flow Transmitter   | Test C  |
| Fuel Manifold Assembly  | Test B, G   |
| Fuel Nozzles  | Test B, G   |

Repair Reference Table  
Figure 501 (Sheet 1)

|             |     |
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| Units Replaced or Required         | Testing and/or Minimum Thrust Required for Ground Check Run  |
|------------------------------------|--|
| Fuel Pump (Same Fuel Control)      | Test B, G *[3]   |
| Fuel Pump (Different Fuel Control) | Test D, G  |
| Fuel P&D Valve                     | Test C *[4]  |
| Fuel Pressure Differential Switch  | Test A   |
| Fuel-Oil Cooler                    | Test C   |
| ■ Fuel-Oil Cooler Bypass Valve     | Test C   |
| Gearbox, Main Accessory Drive      | Test B   |
| Ignition Components                | Aural Check  |
| Instrumentation                    | Test B   |
| Pt7 Probes and Tubing              |  |
| EGT Probes and Harness             |  |
| ■ Oil Pump                         | Test C   |
| ■ Oil Strainer/Filter              | Test C   |
| ■ Oil Pressure Regulating Valve    | Test C *[2]  |
| Oil Tank                           | Test A *[1]  |
| Pressure Ratio Bleed Control       | Test E   |
| Start Valve                        | Check that starter cutout (N2 RPM) is normal on first engine start. On start valve with open indication light, check that light is also extinguished |
| Tubing                             |  |
| Fuel (Low Pressure)                | Test A   |
| Fuel (High Pressure)               | Test C   |
| Oil                                | Test A *[1]  |
| Anti-Surge Bleed Valve             | Test E   |
| Turbine Nozzle (Vaness)            | Test B   |

Repair Reference Table  
Figure 501 (Sheet 2)

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| Units Replaced or Repaired   | Testing and/or Minimum Thrust Required for Ground Check Run   |
|--|---|
| <u>Power Plant</u><br><br>Pretrimmed Engine [par. 1.A.(3)]<br>Untrimmed Engine   | Test F *[6]<br>Test D *[6]  |
| <u>Airplane System Components</u><br><br>Constant Speed Drive (CSD)<br><br>Engine-Drive Hydraulic Pump   | Motor engine<br><br>Motor engine  |
| <u>Airplane System/Component Test</u><br><br>Auto Pack Trim System<br><br>Air Conditioning Selector Valve<br><br>Air Conditioning Pressure Control<br><br>Air Conditioning Cooling Packs<br><br>Electrical Power System<br><br>Constant Speed Drive<br><br>AC Power Generation<br><br>Wing Thermal Anti-Icing System<br><br>Engine Cowl and Inlet Duct Anti-Icing System<br><br>Bleed Air Precooler System<br><br>High Pressure Modulating and Shutoff Valve<br><br>Air Cleaner System<br><br>Thrust Reverser System | Engine power as required, not to exceed test B maximum<br><br>Test A *[5]<br><br>Test A *[5]<br><br>Engine power as required<br><br>Test A<br><br>Test A<br><br>Test A<br><br>Engine power as required, not to exceed test C maximum<br><br>Engine power as required, not to exceed test C maximum<br><br>Engine power as required, not to exceed test C maximum<br><br>Engine power as required *[5]<br><br>Engine power as required *[5]<br><br>Engine power as required *[5] |

Repair Reference Table  
Figure 501 (Sheet 3)

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| <u>Units Replaced or Repaired</u>          | <u>Testing and/or<br/>Minimum Thrust Required<br/>for Ground Check Run</u> |
|--|--|
| <u>Airplane System Trouble Shooting</u>    |  |
| Air Conditioning System                    | Test A *[1]  |
| Auto Pack Trip System                      | Engine power as required   |
| AC Generation                              | Test A   |
| Hydraulic System A                         | Motor engine   |
| High Pressure Bleed Control System         | Engine power as required, not to exceed test B maximum                     |
| High Pressure Modulating and Shutoff Valve | Engine power as required, not to exceed test B maximum *[1]                |

- \*[1] 100°F (38°C) minimum oil temperature recommended.
- \*[2] When engine oil pressure is required, adjust main oil pressure to 43 - 46 psig at Idle.  
100°F (38°C) minimum oil temperature is recommended while adjusting oil pressure.
- \*[3] After replacing fuel pump and performing engine test run, retorque fuel pump quick-disconnect nut per Section 72-60, Inspection/Check, Reference 1102.
- \*[4] During and after this test, carefully inspect for fuel leakage at fuel manifold inlet tube to P&D valve tube end fittings. No leakage is permitted. Fuel leakage at P&D valve overboard drain must not exceed 300cc per hour measured during engine run only.
- \*[5] Refer to applicable chapter for alternate test without engine running.
- \*[6] Rig check thrust and start levers.
- \*[7] See PWA 72-30 for a 24 hour fly back time limit permitted before you do the breather pressure test.

Repair Reference Table  
Figure 501 (Sheet 4)

|             |     |
|-------------|-----|
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- (3) Fuel or oil leakage from overboard drains, accessory drive seal drains, or No. 6 bearing sump is acceptable provided leakage is within the following limits:

| Location  | Fluid | Allowable Leakage   |
|---|-------|---|
| Gearbox Starter Drive Overboard Drain                                     | Oil   | 10 cc/hr  |
| Gearbox Hydraulic Pump Drive Overboard Drain                              | Oil   | 10 cc/hr  |
| No. 4 Bearing Drain Tube (Engine Incorporating Carbon No. 4 Bearing Seal) | Oil   | Oil leakage from drain tube at idle power is normal.                  |
| Fuel Pump Drive Overboard Drain   | Oil   | 10 cc/hr  |
| Fuel Pump Drain   | Fuel  | 60 cc/hr (Engine Running and/or Shut Down)                            |
| Fuel Control Drain  | Fuel  | None  |
| P&D Valve Drain   | Fuel  | 470 cc one time upon engine shutdown.                                 |
|   |       | 60 cc maximum after engine shutdown.                                  |
|   |       | 360 cc/hr maximum during engine running.                              |
|   |       | Engine incorporating plugged P&D valve drain per SB 3757: no leakage. |

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| Location                          | Fluid | Allowable Leakage  |
|-----------------------------------|-------|--|
| Combustion Chamber Drain          | Fuel  | No leakage with engine running.  |
|                                   |       | 90 cc maximum one time upon engine shutdown.   |
|                                   |       | 60 cc/hr maximum after engine shutdown (engine incorporating plugged P&D valve drain per SB 3757). |
| Exhaust Case - No. 6 Bearing Sump | Oil   | Oil wetness not resulting in oil puddling within 20 minutes after engine shutdown.                 |

- (4) If leakage is found outside of the above limits the problem shall be repaired and the engine further tested using the following as a guide:
- (a) For overboard drain leakage, run engine for 5 minutes at Max. Continuous and 5 minutes at Takeoff.
  - (b) For accessory drive seal leakage and parting surface leakage, run engine for 10 minutes at Max. Continuous and 5 minutes at Takeoff.

E. Test A - Ground Check at Idle

- (1) Start engine.
- (2) Allow engine to run at IDLE for minimum of 2 minutes for oil temperature to reach 100°F (38°C).
- (3) Shut down engine.
- (4) Inspect engine tubing, connections, and components for evidence of fuel and/or oil leaks. Refer to par. 1.D. for leakage limits. Perform corrective action as required.

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- F. Test B - Ground Check at Maximum Cruise
- (1) Determine part power trim target Pt7 and EPR for existing ambient temperature and true local barometric pressure using applicable trim table section (AMM 71-09-200, Trim Procedure).
  - (2) Start engine.
  - (3) Advance thrust lever to part power trim target determined in step (1) above and maintain for minimum of 3 minutes. Make sure that engine-operating limits are not exceeded.
  - (4) Check functional operation of repaired or replaced component and associated parts. Make sure that no air, fuel, or oil leaks are present.
  - (5) If check of anti-ice system is required, place anti-ice switch to ON position. Proper operation of system will be indicated by an immediate drop of 0.02 to 0.04 EPR.
  - (6) Place anti-ice switch to OFF position. Check for recovery of part power EPR.
  - (7) Retard thrust lever to IDLE and allow engine to cool for 5 minutes.
  - (8) Shut down engine.
  - (9) Inspect engine for evidence of fuel and/or oil leaks. Refer to par. 1.D. for leakage limits. Perform corrective action as required.
- G. Test C - Ground Check at 3000 lb/hr Fuel Flow
- (1) Start engine.
  - (2) Advance thrust lever as required to attain 3000 lb/hr fuel flow. Maintain for minimum of 2 minutes.
  - (3) Observe instrumentation and system components for proper operation.
  - (4) Retard thrust lever to IDLE and allow engine to cool for 5 minutes.
  - (5) Shut down engine.
  - (6) Inspect engine for evidence of fuel and/or oil leaks. Refer to par. 1.D. for leakage limits. Perform corrective action as required.
- H. Test D - Trim Check
- (1) Perform engine trim procedure (AMM 71-09-200, Power Plant - Trim Procedure).
- I. Test E - Ground Check for Bleed System Operation
- (1) Start engine.

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- (2) Operate engine at idle rpm and check compressor bleed valve for proper operation (AMM 71-09-100, Compressor Antisurge Bleed Valves Schedule).
- (3) Shut down engine.
- (4) Inspect engine for evidence of fuel and/or oil leaks. Refer to par. 1.D. for leakage limits. Perform corrective action as required.

### J. Test F - Ground Check for Pretrimmed Engine

- (1) Determine idle N2, part power trim EPR, and takeoff EPR for existing ambient temperature and true local barometric pressure using applicable trim table section (AMM 71-09-200, Trim Procedure).
- (2) Start engine.
- (3) Allow engine to run at idle as required for oil temperature to reach 100°F (38°C).
  - (a) During warmup at idle, check engine tubing, connections, and components for evidence of fuel and/or oil leaks. Perform corrective action as required.
- (4) Advance thrust lever to part power trim target determined in step (1) and maintain for minimum of 15 seconds. Make sure that engine operating parameters are normal.
- (5) Advance thrust lever to no bleed takeoff EPR target setting determined in step (1).

**CAUTION:** THERE IS NO THRUST LEVER STOP AT TAKEOFF POWER RATING. DURING ENGINE OPERATION AT TAKEOFF RATING, EXHAUST GAS TEMPERATURE, N1 AND N2 RPM MUST BE CLOSELY MONITORED TO ENSURE THAT OPERATING LIMITATIONS ARE NOT EXCEEDED. MONITOR "GEN DRIVE OIL IN TEMP" INDICATOR. OIL TEMP SHOULD NOT EXCEED 125°C.

- (6) When engine has stabilized at takeoff power (minimum of 30 seconds at takeoff), record complete set of engine instrument readings.
- (7) Retard thrust lever to idle position and check for proper idle N2 as determined in step (1).
- (8) Check reverse thrust detent (AMM 78-32-01/501).
- (9) Allow engine to cool at idle for 5 minutes. Shut down engine.
- (10) Check engine for evidence of fuel and/or oil leaks. Refer to par. 1.D. for leakage limits. Perform corrective action as required.

### K. Test G - Acceleration Check

**NOTE:** After completion of a satisfactory trim run, the engine shall be checked at takeoff setting to ensure that takeoff thrust is available and to check for adequate cushion between takeoff and full throttle thrust lever position. Normally takeoff thrust is obtained at part throttle, however, the amount of throttle required will change with ambient temperature.

- (1) Operate engine at idle rpm for 3 minutes.

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- (2) Advance thrust lever to takeoff EPR target setting.

**CAUTION:** THERE IS NO THRUST LEVER STOP AT TAKEOFF RATING. DURING ENGINE OPERATION AT TAKEOFF RATING, EXHAUST GAS TEMPERATURE, N1 AND N2 RPM MUST BE CLOSELY MONITORED TO ENSURE THAT OPERATING LIMITATIONS ARE NOT EXCEEDED.

**NOTE:** If takeoff EPR is not attainable, recheck the target and check for satisfactory throttle rigging. If all of the engine parameters appear high when compared with another engine, recheck the target and check the Pt7 system for leaks. If all appears normal, perform engine trim procedure.

- (3) When engine has stabilized at takeoff setting (minimum of 30 seconds at takeoff), mark position of forward edge of thrust lever on control stand using grease pencil, tape, or other temporary marking method.
- (4) Retard thrust lever to idle position. Calculate 95% of takeoff N2.
- (5) After approximately 70 seconds at idle, advance thrust lever in 1 second or less from idle to takeoff mark on control stand determined in step (3) above.

**NOTE:** If engine has been operated at takeoff power for longer than 3 minutes, operate engine at idle for 3 to 5 minutes prior to performing engine acceleration time check.

- (6) Record engine acceleration time; time elapsed from initial advancement of thrust lever until engine has reached 95% of takeoff N2 rpm determined in step (4). Approximate acceleration time at sea level is between 5 and 6 seconds with engine bleed air off.

**NOTE:** Maximum acceleration time is subject to pressure altitude. Acceleration time stated above may be increased by 0.30 seconds for each 1000 feet increase in pressure altitude above sea level.

- (7) Stabilize at takeoff setting for 2 to 3 seconds, and decelerate engine to idle by retarding the thrust lever to idle in 1 second or less. Make sure that engine decelerates smoothly and stabilizes at idle rpm. Any flameout is cause of rejection of the fuel control.

**NOTE:** If fuel control is replaced, refer to AMM 71-00/501, Power Plant for testing to be accomplished prior to continuing operational procedures.

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- (8) If acceleration time exceeds 6.0 seconds at sea level, repeat above steps (5) thru (8) until three satisfactory accelerations and decelerations have been completed.
- (9) Normal acceleration time is 5 to 6 seconds at sea level. If average time for engines receiving three acceleration checks exceeds 6.0 seconds, it should be reported as an engine discrepancy and corrected before next takeoff.

**NOTE:** Maximum acceleration time is subject to pressure altitude. Acceleration time stated above may be increased by 0.30 seconds for each 1000 feet increase in pressure altitude above sea level.

### L. Test H - Vibration Check (Fig. 503)

- (1) Install one vibration sensor on the inlet and one on the rear case of the engine.
- (2) Connect the sensors to the vibration recording system which includes a 40-Hz filter.
- (3) Determine takeoff EPR (AMM 71-00-30, Trim Procedure).
- (4) Start the engine (AMM 71-00/201).
- (5) Operate the engine at idle until the oil temperature is a minimum of 100°F (38°C).
- (6) Slowly increase the speed in 2-3 minutes from idle to takeoff EPR.
- (7) Monitor the vibration sensors during the speed increase.
- (8) Record the maximum inlet and rear case sensor amplitudes and the N1 and N2 values for these amplitudes during the speed increase.
- (9) Operate the engine for 30 seconds at takeoff EPR.
- (10) Slowly decrease the speed in 2-3 minutes from takeoff to idle.
- (11) Monitor the vibration sensors during the speed decrease.
- (12) Record the maximum inlet and rear case sensor amplitudes and the N1 and N2 values for these amplitudes during the speed decrease.
- (13) If vibration limits in Fig. 502 are exceeded during transients, steady-state vibration must be recorded at approximately the speed which produced peak vibration to determine if vibration is acceptable to the limits of Fig. 502.

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**NOTE:** Peak vibration is understood to be the highest moderately steady meter reading after the engine has stabilized for 30 seconds and should not include momentary flickering of indicators. All over-limit vibration conditions must be wave analyzed to establish which engine rotor is causing the vibration. The above vibration procedure shall be followed for all vibration surveys (manual or automatic).

- (14) Operate the engine at idle for 5 minutes.
- (15) Stop the engine.
- (16) The maximum vibration values recorded must not be more than the limits that follow:

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| SENSOR LOCATION                             | SINGLE AMPLITUDE        | DOUBLE AMPLITUDE       |
|---|-------------------------|------------------------|
| INLET SECTION                               |                         |                        |
| BOTH NO. 1 AND<br>NO. 6 - NON-OIL<br>DAMPED | 0.0025 INCH<br>(2.5 mm) | 0.005 INCH<br>(5.0 mm) |
| BOTH NO. 1 AND<br>NO. 6 - OIL<br>DAMPED     | 0.002 INCH<br>(2.0 mm)  | 0.004 INCH<br>(4.0 mm) |
| REAR SECTION                                |                         |                        |
|   | 0.0015 INCH<br>(1.5 mm) | 0.003 INCH<br>(3.0 mm) |

**REPAIRED ACCEPTANCE LIMITS REFERENCE VIBRATION LEVELS**

**NOTE:** THESE LIMITS ARE CORRECT ONLY WHEN THE VIBRATION SENSORS ARE ATTACHED AT THE LOCATIONS SHOWN IN FIG. 503 AND ONLY WHEN THE LOW FREQUENCY FILTER (40 HZ) IS IN THE VIBRATION MONITOR CIRCUIT.

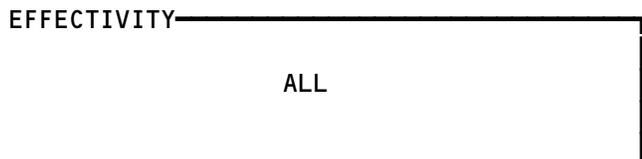
| SENSOR LOCATION                              | SINGLE AMPLITUDE        | DOUBLE AMPLITUDE       |
|--|-------------------------|------------------------|
| INLET SECTION                                |                         |                        |
| BOTH NO. 1 AND<br>NO. 6 - NON-OIL<br>DAMPED  | 0.0035 INCH<br>(3.5 mm) | 0.007 INCH<br>(7.0 mm) |
| BOTH NO. 1 AND<br>NO. 6 - OIL<br>DAMPED *[1] | 0.0025 INCH<br>(2.5 mm) | 0.005 INCH<br>(5.0 mm) |
| REAR SECTION                                 |                         |                        |
|  | 0.0020 INCH<br>(2.0 mm) | 0.004 INCH<br>(4.0 mm) |

**REPAIRED ACCEPTANCE PEAK VIBRATION LIMITS IN THE 46.5 TO 58.2% N1 RANGE**

**NOTE:** THESE LIMITS ARE CORRECT ONLY WHEN THE VIBRATION SENSORS ARE ATTACHED AT THE LOCATIONS SHOWN IN FIG. 503 AND ONLY WHEN THE LOW FREQUENCY FILTER (40 HZ) IS IN THE VIBRATION MONITOR CIRCUIT.

\*[1] IDLE TO 58.2% N1.

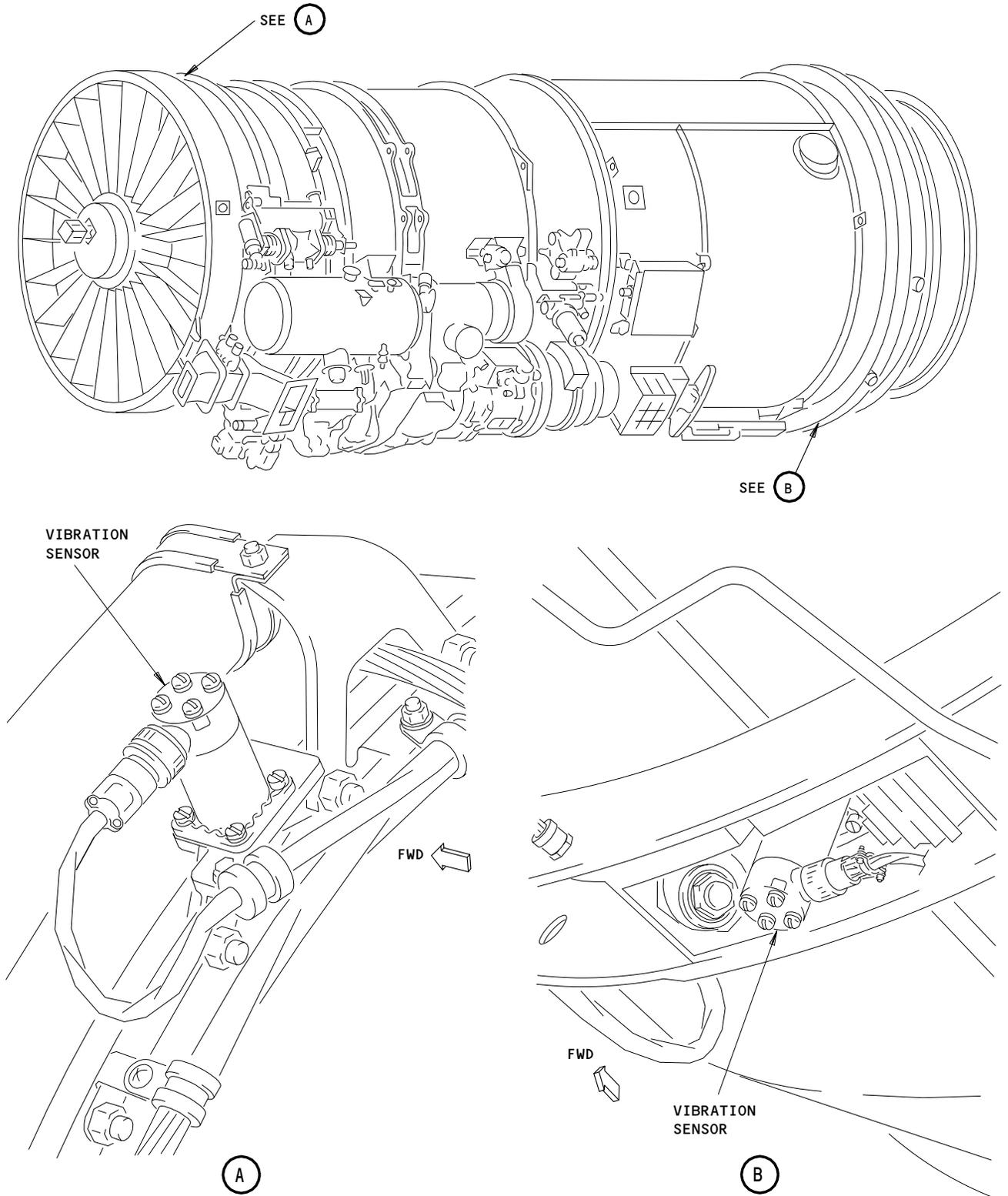
Repaired Acceptance Peak Vibration Limits  
Figure 502



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Vibration Sensors Installation  
 Figure 503

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POWER PLANT (JT8D) – INSPECTION/CHECK

1. Power Plant (JT8D) – Check

A. General

- (1) Examination of the power plant is required to assure that the engine, including its components and accessories, is in good physical condition and proper working order. Proper checking of the wing mounted engines on the 737 is facilitated by the easy access to the low engines.
- (2) Engine compartment cleanliness is important because the intensive mass airflow tends to draw foreign objects into the engine. Thoroughly clean and check area after completion of any work. Keep the inlet area free of dirt, oil, and grease and remove all unused parts such as nuts, washers, and pieces of lockwire. In order to prevent corrosion in the compressor stages and damage to the second stage fan disc and blades, it is recommended that the engine inlet and tailpipe be suitably covered whenever the engine is left inoperative for more than six hours. When there is freezing precipitation or sufficient wind to rotate the engine, it is particularly important to cover the engine immediately.
- (3) The check provided in this section is essentially a visual examination which can be accomplished by one man at the power plant. Its purpose is to check the power plant physical condition.

B. Check Power Plant

**WARNING:** TO PREVENT POSSIBLE SERIOUS INJURY TO PERSONNEL, ENSURE THAT THE THRUST REVERSER SYSTEM IS DEACTIVATED PRIOR TO PERFORMING THE FOLLOWING CHECKS. ENSURE THAT THE APPLICABLE SYSTEM CONNECTIONS, VALVES, AND SWITCHES ARE APPROPRIATELY TAGGED TO PREVENT SYSTEM OPERATION. REFER TO EXHAUST, CHAPTER 78.

**NOTE:** Checking some of the power plant components will be facilitated by shutting down the engine in the reverse thrust configuration.

- (1) Check engine cowling as follows:
  - (a) Check cowl panel skin, covers, doublers, and frames at duct outlets for cracks and loose fasteners. Check access doors for cracks, loose fasteners, and loose hinges.
  - (b) Check vent ports, breather openings, drain holes and exhaust ports are free of obstructions.
  - (c) Check nose cowl, nose dome, and secondary air inlet doors for cracks, loose rivets and dents or gaps.
  - (d) Check cowl panel support rods for correct functioning of hinge bolts, stowage clips and safety pins.
  - (e) Check fuel drain and breather seals for cuts and wear.

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- (f) Check cowl panel hinge fittings, latches and U-bolts for wear, cracks, corrosion, and loose fasteners. Check cowl panel skin at frame and longeron attachments for cracks, loose fasteners and broken spot-welds.
- (g) Check latches for cracks, bent links and pins, ease of latching and positive engagement. If latches require adjustment, refer to 71-11-11 A/T.
- (h) Check gearbox oil breather duct on inside of cowl for possible damage. Check spring retainer for freedom of movement and breather duct seal for proper seating.
- (i) Visually check if the aft end of engine and thrust reverser fairing has dropped producing a noticeable mismatch with aft strut fairing, thus exposing a painted red stripe on aft end of aft strut fairing. On airplanes with aft engine indicator markings check to see if aft mount indicator pointer is within "ok" zone on the thrust reverser fairing. If mismatch is detected, check aft mount for possible cone bolt failure.

NOTE: To check thrust reverser fairing mismatch with aft strut fairing, ensure that the thrust reverser is stowed and locked.

- (2) Check power plant oil levels as follows:
  - (a) Check engine oil tank level within 30 minutes after engine shutdown by checking the dipstick attached to the self-locking filler cap or the max/min sight gages (when fitted).
  - (b) Check the constant speed drive oil level at the sight gage on the CSD. The operating range is within the applicable white band, depending upon whether the engine is in the left or right position.
  - (c) Check that oil level in the CSD wet pad spline cavity is not overfilled by removing the pressure seal fitting cap on the engine gearcase and allowing oil to flow from the standpipe indicator inside the cavity. When oil stops flowing, the spline cavity is filled to the proper level. For servicing the engine oil tank, the constant speed drive, or the CSD wet pad spline cavity, refer to Chapter 12, Servicing.
- (3) Check engine oil system as follows:
  - (a) Check fuel/oil cooler, oil pressure transmitter, low oil pressure switch and oil filter bypass switch for leaks, loose mounting bolts and loose oil line connections. Check mounting brackets for cracks and hoses for chafing.
  - (b) Check oil tank for evidence of leakage, loose or cracked mount strap, and security of tank fittings and drain valve. Check filler cap for positive locking, deteriorated seals or a broken chain.

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- (c) Check engine external oil lines for signs of leaks and security of connections and clamps.
- (d) Check gearcase breather for security and obstructions.
- (4) Check compressor section as follows:
  - (a) Using a strong light, mirror, magnifying glass, and the latest available nondestructive inspection methods, inspect inlet case, inlet guide vanes, front bearing support, and all visible compressor blades for nicks, dents, cracks, corrosion, and foreign object damage.

**NOTE:** If compressor or fan blades are damaged, refer to Engine, Chapter 72, for allowable limits and remedial action.

- (b) Check that inlet pressure probe (Pt2) in nose dome, and inlet pressure and temperature probes in casing are not loose, dented, or blocked.
- (5) Check the following exhaust section components:
  - (a) Check exhaust cone, nozzle and struts for visible evidence of cracks, dents, and buckling.
  - (b) Check fourth stage turbine blades and trailing edge of nozzle guide vanes for warpage, cracks, nicks and erosion.
  - (c) Check turbine exhaust area for local burnt spots and cracks.
  - (d) Check rear fan case for burnt spots and/or scoring caused by blade rub or foreign object damage.
  - (e) Look in engine aft end and check tailpipe interior for evidence of metalizing from blade and stator interference.
  - (f) Check exhaust section for oil accumulation.
- (6) Check thrust reverser as follows: (See figure 601)

**WARNING:** TO PREVENT POSSIBLE INJURY TO PERSONNEL, ENSURE THAT THE THRUST REVERSER SYSTEM IS DEACTIVATED AND APPROPRIATELY TAGGED BEFORE EXAMINING THRUST REVERSER COMPONENTS. REFER TO EXHAUST, CHAPTER 78

- (a) Check the thrust reverser frame for cracks, dents and distortion.
- (b) Check deflector door linkage and attaching fittings for cracks, distortion and security of installation.
- (c) Check deflector door inner and outer panel skins for cracks, dents, punctures or missing pieces. Check for separation of inner and outer skins from flanges on edges of panels. Check for loose or missing rivets.
- (d) Check aft fairing and actuator housing for cracks.
- (e) Check tailpipe for cracks, dents, distortions and hot spots.

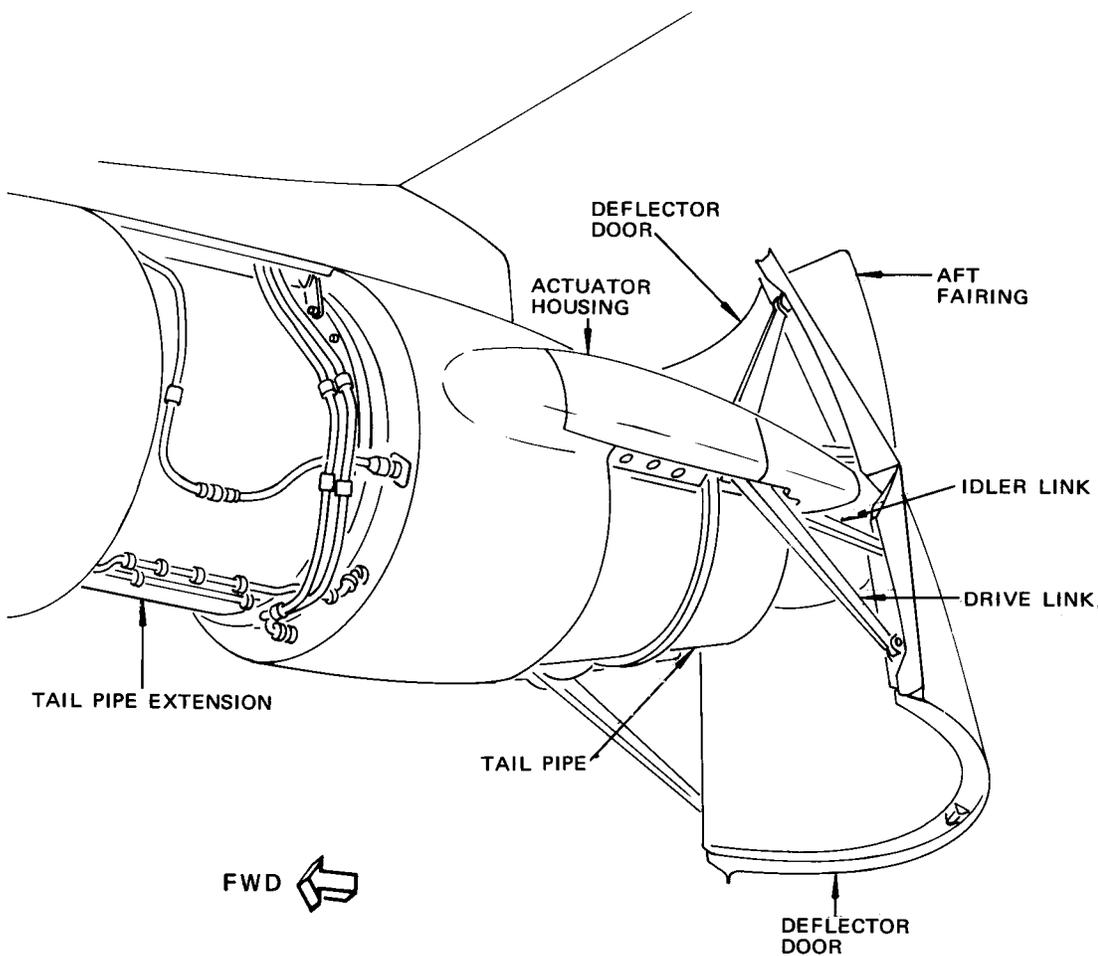
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Thrust Reverser Details  
 Figure 601

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- (f) Check locking mechanism for cracks and security of installation. Check latch for wear.
  - (g) Check tailpipe extension for cracks, dents and distortions. Check for loose or missing attaching bolts. Check bonded brackets for security of mounting.
  - (h) Check hydraulic lines and actuators for leaks.
  - (i) If cracks or other damage are found in any thrust reverser components., refer to Exhaust, Chapter 78, for allowable limits and remedial action.
- (7) Check the following exhaust indicating systems. Access to thermocouple probes is gained through the engine tailpipe.
- (a) Check exhaust gas temperature harness and lead for evidence of physical damage to stainless steel braid, glass fiber sleeving, and terminals. Check for rupture or severe fraying, and for loose conductor strands at any terminal.
  - (b) Check EGT thermocouple probes for nicks, cracks, bending or evidence of heat erosion. Check probes for looseness.
  - (c) Check probe exhaust and inlet port openings for carbon buildup. If necessary, remove carbon with a straight piece of steel wire.
  - (d) Check exhaust pressure probes and manifold, without dismantling, to ensure that all connections are tight and free from leaks. Check that all lines and tubing are secure and that probes are in good condition.
- (8) Check engine pneumatic components as follows:
- (a) Check engine and nose cowl anti-ice valve fittings for broken or missing lockwire, anti-ice ducting for loose or broken clamps, and duct joints for loose bolts.
  - (b) Check pneumatic ducts for loose clamps; clamps and mounting bolts for broken or missing lockwire and ducts and flexible couplings for cracks or abrasions.
  - (c) Check that all pneumatic support brackets are secure and free from cracks.
  - (d) Check pressure ratio bleed control for security of mounting and security of associated lines and fittings.
- (9) Check pneumatic starter as follows:
- (a) Examine starter exhaust duct for fine metal particles. If metal particles are found, this is an indication of turbine wheel blade tip failure. Replace starter. Refer to Chapter 80, Starting.
  - (b) Examine starter housing at lubricating oil fill, drain plugs, seams, and joints for oil leakage.

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- (10) Check ignition components as follows:
- (a) Check exciter units for security of mounting, loss of hermetic seal, and loose connections.
- WARNING:** BECAUSE OF DANGEROUSLY HIGH VOLTAGE IN THE IGNITION SYSTEM, THE IGNITION SWITCH MUST BE IN THE OFF POSITION AND THE SYSTEM INOPERATIVE FOR A MINIMUM OF 6 MINUTES BEFORE WORKING ON IGNITION SYSTEM COMPONENTS. AS ADDITIONAL PROTECTION, AFTER DETACHING IGNITER PLUG COUPLING NUTS, TOUCH CONNECTOR CONTACT TO IGNITER PLUG BODY SHIELD. THIS IS TO ENSURE COMPLETE DISSIPATION OF ENERGY.
- (b) Check ignition harnesses and wiring for chafed insulation and crushed or frayed shielding. Check support brackets for security and coupling nuts for worn or stripped threads.
  - (c) Check igniter plugs for cracked insulators and loose leads.
- (11) Check fuel system as follows:
- (a) Check the fuel control, fuel filter, fuel heater, fuel/oil cooler, fuel pump, and all connections to these components for signs of leakage. Check mounting clamps for loose check nuts and broken or missing lockwire.
  - (b) Check the pressurizing and dump valve for loose mounting bolts. Check valve connections for leaks.
  - (c) If installed, check fluid drain tank in left cowl panel for security and cracks or leaks. Check drain tank connections for security.
- NOTE:** Drain tank may not be installed on cowl panels used on engines with plugged P&D valve drain ports.
- (d) Check all fuel tubing and flex lines for loose or broken clamps, loose or leaking connections, dents, nicks, chafing, and evidence of static leakage.
  - (e) Check the fuel flow transmitter for leakage or loose mounting bolts. Check the electrical connectors for tight connections and for loose or broken lockwire.
- (12) Check engine controls as follows:
- (a) Check control cables for wear, fraying or kinking.
  - (b) Check engine cross-shaft and cranks for misalignment or binding.
  - (c) Check for loose or frozen rod end bearings.
- (13) Check the following miscellaneous items:
- (a) Check hydraulic tubing in the nacelle area for discoloration which indicates overheating of hydraulic fluid.

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- (b) Check engine-driven hydraulic pump for security of mounting and freedom from leakage. Check all hydraulic lines for security, for loose or leaking connections, and for chafing.
- (c) Check electrical wiring for chafing, broken insulation and loose connectors. Check wiring bundles for loose or broken support clamps.
- (d) Check all engine overboard exhaust, breather, and drain lines for cowl mating seal damage, cuts and wear.
- (e) Check engine mount fittings for cracks or damage. Check cone bolts for security, cracks, corrosion and that mount bolts are properly cotter keyed.

NOTE: Any crack shall be cause for component replacement.

NOTE: If there was an engine failure or an accident which included the engine or nacelle, refer to AMM 5-51-61/201, Engine Seizure/Engine Surge/Uncontained Failures.

- (f) Check visible strut firewall for cracks or holes. None are allowed.
- (g) Check engine casing flanges for cracks or loose bolts.
- (h) Check fire detectors for unbroken seal, correct temperature rating, security of mounting and of electrical leads, and wiring for chafing and condition.

### 2. Engine Windmilling

- A. Inspect all engines which have windmilled as a result of shutdown in flight.
- B. If there has been a continuous positive indication of oil pressure (10 psi or higher) following shutdown, the engine may be continued in service after a satisfactory inspection of the main oil strainer and chip detectors (if installed) following servicing of the engine and a ground run-up.

NOTE: Ground run-up cycle consists of five minutes at idle and normal shutdown. Chip detectors are optional equipment. If they are installed on the engine, inspection of them is part of the windmilling check procedure.

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- C. An engine windmilling for 30 minutes or less, with less than 10 psi oil pressure after shutdown, may be continued in service after satisfactory inspection of main oil strainer and chip detectors, servicing, and ground run-up.

**NOTE:** Due to gage error, oil pressure readings of less than 10 psi should be regarded as zero oil pressure.

- D. If an engine windmills for more than 30 minutes, but less than 60 minutes, with more than 10 psi of continuous oil pressure after shutdown, can be continued in service after satisfactory examination of the main oil filter or strainer and chip detectors (if installed), servicing of the engine and ground run-up. In addition, use a Spectrometric Oil Analysis Program (SOAP) requesting concentration of Iron (Fe), Vanadium (V) and Molybdenum (Mo) as indicators of main shaft bearing distress. Refer to the JT8D Oil Monitoring Guide (Part Number 821432), Section "G" for more information on SOAP. Do the main oil filter, chip detectors (if installed) and SOAP examination after first flight, at 15 hours, at 50 hours and at 100 hours. Do any corrective action required.
- (1) Repeat oil filter and chip detector check after first flight, 15, 50, and 100 hours. At each check, draw oil sample for test of iron content, starting with post windmill inspection.
- E. If an engine has windmilled for more than 60 minutes with more than 10 psi of continuous oil pressure after engine shutdown or engines that windmilled for any length of time with 10 psi or less oil pressure after shutdown, the operator must disassemble it for and Oil System Components examination. Particular attention must be given to No. 2, 3, 4, and 5 bearings.

**NOTE:** Operating conditions prior to and after interruption and windmilling should be accurately recorded to determine classification of windmills. Bearing cages must not show excessive wear. No ball and roller skidding or loss of hardness and shape due to overheating is permitted. Satisfactory bearings may be continued in service.

**CAUTION:** ANY POWER ON OPERATION AT OR ABOVE IDLE WITH OIL PRESSURE OF 10 PSI OR LESS SHALL REQUIRE THAT THE ENGINE BE SENT TO OVERHAUL FOR BEARING INSPECTION.

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- F. If oil supply was shut off or interrupted for more than 10 seconds at speeds in excess of windmilling or before engine decelerated to windmilling speed following engine shutdown, record conditions of operation and send the engine to overhaul for bearing inspection. Particular attention must be given to bearings No. 2, 3, 4, and 5.

NOTE: Interrupted oil flow is less than 10 psi oil pressure.

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### POWER PLANT (JT8D) – CLEANING/PAINTING

#### 1. Engine Cleaning

##### A. General

- (1) Intensive mass airflow of the engine tends to cause build up of contaminants on the blades and vanes of both compressors and turbines with consequent deterioration of engine performance, i.e., high power stalls, increases in N1, N2, EGT and fuel flow. Internal cleaning of the engine is recommended on a regular basis to remove contaminants. This cleaning is accomplished by motoring the engine with the starter and spraying water or optional detergent wash solution into the engine. You must clean the engine if the engine had a fire and fire-extinguishing agents were used.
- (2) The frequency of cleaning or the desirability of using the optional procedures listed should be determined by each individual operator, since environmental conditions vary widely among operators.
- (3) Four cleaning procedures, which vary somewhat in complexity, are presented. These are:
  - (a) Engine Water Wash Procedure outlined in par. D. This procedure is intended as a routine preventive maintenance procedure and when performed as a regular and periodic program will serve to prevent contaminant build up and retard turbine sulfidation.
  - (b) Turbine Water Wash Procedure outlined in par. E. This is an alternate procedure to par. D used primarily to retard turbine sulfidation.
  - (c) Engine Detergent Wash Procedure outlined in par. F. This method is optional to the water wash method of par. D and is intended to remove more extensive contaminant build up.
  - (d) Engine Gaspath Cleaning After Use of Fire Extinguishing Agents outlined in par. G.

##### B. Equipment and Materials

- (1) Rig – Water Wash P&WA 33382 (Fig. 701) (Optional)
- (2) Probe – Water Wash P&WA 33594 (Fig. 703)
- (3) Water tank – approximately 250-U.S. gallon capacity, equipped with pump or a potable water source – 35- to 100-psi discharge pressure, with associated hose and nozzle with flow capacity of approximately 80 to 100 gal/min
- (4) Detergent
  - (a) B&B 3100  
B&B Tritech Inc., 875 W 20th St., Hialeah, FL. 33010
  - (b) Ardrox 6343, Ardrox 6345, Ardrox/Leeder 352-L, or Turboclean 2 Brent Europe Ltd., Denbigh Road, Bletchley, Milton Keynes, United Kingdom MK1 1PB or Brent America Inc., 16961 Knott Ave, La Mirada, CA. 90638

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- (c) Cee-Bee R-674  
Cee-Bee Chemical Div., 9520 E Cee Bee Dr., Downey, CA. 90241
  - (d) Penair M-5704, or Penetone 19A  
Penetone Corp., 74 Hudson, Tenafly, NJ. 07670; Zok 27, Zok  
Inc., 8226 Kerr St., Houston, TX. 77029
  - (e) Turco 5884 or Turco 6783-3  
Turco Products Inc., Westminster, CA. 90745
- (5) Preservative Oil - MIL-L-6081, Grade 1010
  - (6) Solvent - Ethyl Alcohol (Denatured), AMS 3002 or O-A-396 (used  
during freezing conditions) (Ref. 20-30-31) (Fig. 702)
  - (7) Solvent - Methyl Alcohol, AMS 3004 or O-M-232 (used during freezing  
conditions) (Ref. 20-30-31) (Fig. 702)
- C. Performance Check Procedure
- Operators may desire to obtain data, which reflects the performance improvement resulting from engine cleaning and/or establish an experience level on which to base future cleaning schedules. For such operators, it is recommended that the following performance check procedure be accomplished both prior to and after engine cleaning.
- (1) Conduct engine performance check at 1.4 EPR, data plate EPR (1.65) and 1.8 EPR. At each point, operate engine for 5 minutes, then record N1, EGT, N2 and fuel flow. For this check, engine air bleed and electrical load extraction must be zero.

**NOTE:** During icing conditions, thermal anti-icing may be used between checkpoints.  
Data comparison from performance checks together with engine service history records may be used to determine the specific performance improvement.

D. Clean Engine - Water Wash Procedure

**NOTE:** A water wash is less harsh on the engine. Water washing is recommended unless the operator's operating environment is such that detergent is required to achieve adequate cleaning. Non-corrosive detergents (such as ZOK 27) should be considered first, before using a more corrosive type of detergent.

- (1) Conduct performance check (paragraph C) if desired.
- (2) Shut down engine and allow at least 30 minutes to elapse before washing engine.
  - (a) Disconnect and cap generator cooling inlet (aft) supply duct.
  - (b) For center engine only, remove lower access panel on center engine inlet duct.
  - (c) Open side cowl panel.
  - (d) Disconnect Pt2, Ps3, and Ps4 lines to pressurize ratio bleed control at engine.

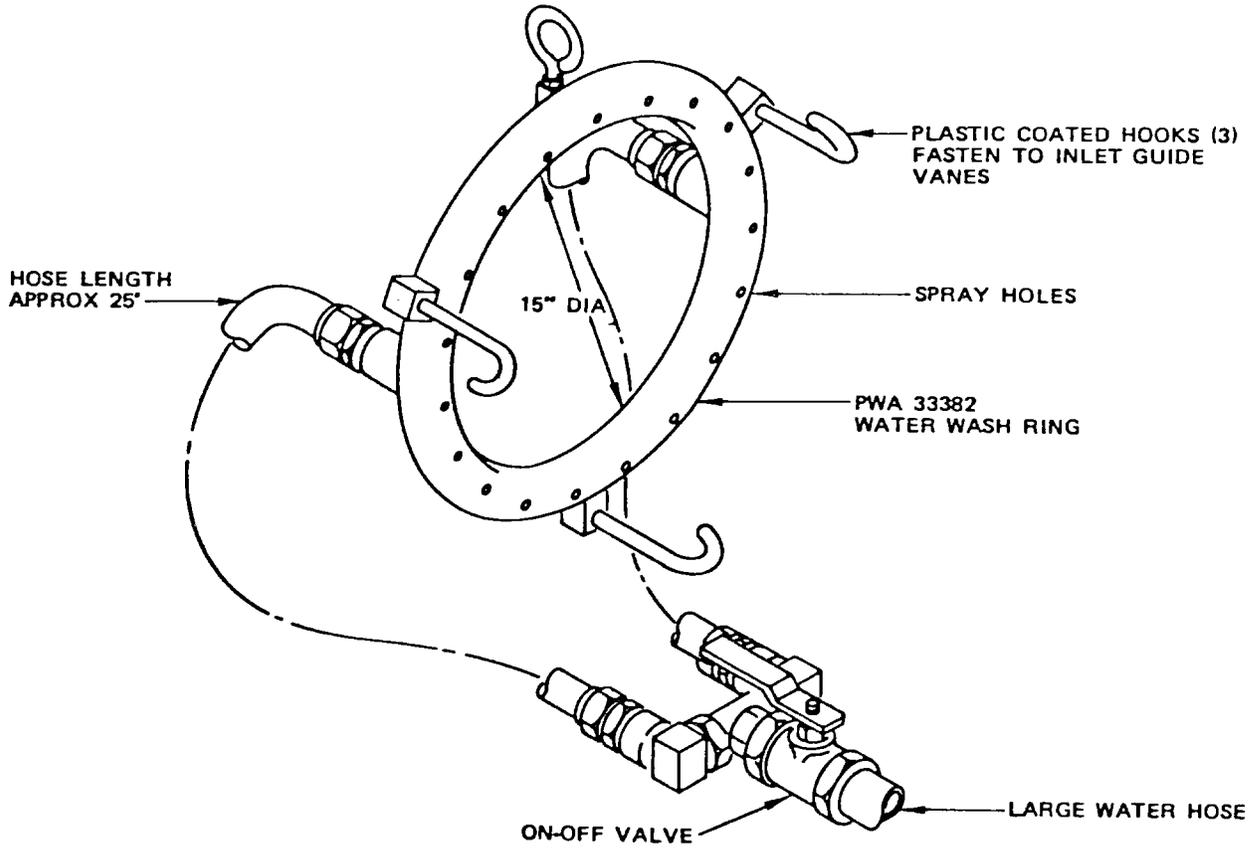
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Compressor Water Wash Rig (Typical)  
 Figure 701

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- (e) Disconnect Pt2 and Pt7 lines to engine pressure ratio transmitter at low point on engine.
- (f) Disconnect Pb sense line to fuel control unit at engine.
- (g) Disconnect CSD pressurization line at 6th-stage bleed duct.
- (h) Disconnect thrust reverser and hydraulic reservoir pressurization line at engine.
- (i) Disconnect and cap generator cooling inlet (aft) supply duct.
- (j) Disconnect engine ignition leads and deactivate circuit breaker.

**NOTE:** It is not necessary to cap off fittings at disconnected lines providing these fittings have been offset to prevent water entering the line or valve.

- (k) Check for proper silicone oil level in the fuel control burner pressure (Pb) bellows (Ref. P&WA 73-21-1, Removal/Installation).
- (3) Deactivate ignition circuit breaker for engine being washed.
- (4) Check that start lever is in CUTOFF position.
- (5) Check that all anti-ice and fuel heater valves are in CLOSED position, except engine bleed valve.
- (6) Provide a handheld hose and nozzle, or attach water wash rig (P&WA 33382) to inlet guide vanes and connect supply hose (Fig. 701). If engine is to be cleaned during freezing temperature conditions, add sufficient alcohol to the wash water to ensure no ice forms that could cause damage to the engine. See Fig. 702 for recommended minimum water-alcohol mixtures. However, a mixture of up to 50% alcohol may be used.

**WARNING:** IF HOSE IS HANDHELD, OPERATOR MUST STAY AT LEAST 3 FEET FROM ENGINE INLET AT APPROXIMATELY WAIST-HIGH LEVEL OR BELOW.

**CAUTION:** SPRAYING WATER INTO GAS PATH BEFORE ENGINE HAS COOLED, CAN RESULT IN DAMAGE TO ENGINE PARTS DUE TO EXTREME THERMAL CYCLING.

- (7) Check that N2 rotation is completely stopped. Engage starter and allow engine to reach full starter rpm.

**NOTE:** Do not exceed starter limitations.

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- (8) Spray clean tap water or water/alcohol mixture into the engine inlet for approximately 30 seconds while motoring the engine with the starter. Approximately 40 to 50 gallons of water may be discharged in the 30-second interval.

**NOTE:** Engine N2 speed will drop when water is first applied.

If hose is handheld, aim nozzle at the base of the blades on the right-hand side of the nose bullet facing aft.

- (9) Shut off water or water/alcohol, release starter and let engine stop. Allow engine to drain for 5 minutes to eliminate excess water.

**NOTE:** Observe starter limitations.

- (10) Repeat steps (7) thru (9) as required, based on operator's experience.
- (11) Remove water wash rig and inspect inlet guide vanes.
- (12) Remove cap and connect generator cooling inlet (aft) supply duct.
- (13) Reactivate ignition circuit breaker.
- (14) Check fuel control PB sense line water trap for moisture
- (15) Conduct after wash functional check of engines and systems as follows:
- (a) Select engine driven generator OFF and ensure No. 1 or No. 2 generator manual trip lights on annunciator panel M238 illuminate.
  - (b) Start engine and run at idle for 5 minutes.
  - (c) Select engine driven generator ON BUS, and check output.
  - (d) Exercise anti-ice system valves.

**CAUTION:** DO NOT EXCEED GROUND STATIC EGT OPERATIONAL LIMITS WHEN USING ANTI-ICING AIR SYSTEM.

**NOTE:** Under very cold and windy weather conditions, even if water/alcohol mixture is used, there is a high probability of ice formation in the engine in less than 4 hours if an engine run-up is not made following wash to purge/evaporate residual water.

- (e) Exercise air conditioning system valves and run air conditioning system in full cold mode to allow all undrained water to exit through water separator.
- (f) If desired, carry out performance check.

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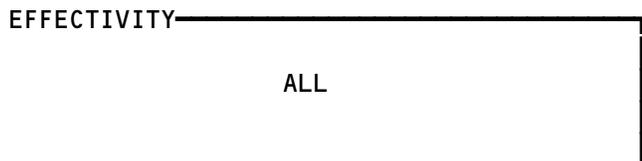
| Percent Alcohol By Volume | Outside Air Temperature |
|---------------------------|-------------------------|
| 3                         | 40°F (4.4°C)            |
| 6                         | 38°F (3.3°C)            |
| 9                         | 36°F (2.2°C)            |
| 14                        | 33°F (0.6°C)            |
| 17                        | 31°F (-0.6°C)           |
| 20                        | 28°F (-2.2°C)           |
| 22                        | 26°F (-3.3°C)           |
| 23                        | 25°F (-3.9°C)           |
| 27                        | 20°F (-6.6°C)           |
| 32                        | 15°F (-9.4°C)           |
| 36                        | 10°F (-12.2°C)          |
| 39                        | 5°F (-15°C)             |
| 43                        | 0°F (-17.8°C)           |

Minimum Required Ethyl or Isopropyl Alcohol to Water Mixture  
 Table 1

| Percent Alcohol By Volume | Outside Air Temperature |
|---------------------------|-------------------------|
| 5                         | 40°F (4.4°C)            |
| 10                        | 33°F (0.6°C)            |
| 15                        | 27°F (-2.8°C)           |
| 20                        | 22°F (-5.6°C)           |
| 22                        | 20°F (-6.6°C)           |
| 26                        | 15°F (-9.4°C)           |
| 29                        | 10°F (-12.2°C)          |
| 32                        | 5°F (-15°C)             |
| 36                        | 0°F (-17.8°C)           |

Minimum Required Methyl Alcohol to Water Mixture  
 Table 2

Minimum Alcohol-Water Mixtures  
 Figure 702



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- (16) Shut down engine and recheck fuel control PB sense line water trap for condensation.
  - (17) Open applicable air conditioning equipment bay door, remove drain cap from duct pressure transmitter sensing line (Ref 36-21-11, R/I) and drain out any water. Reinstall cap and close bay door.
- E. Clean Engine – Turbine Water Wash Procedure (optional)

**NOTE:** The following optional water wash procedure may be utilized as required to retard turbine sulfidation attack.

- (1) Shut down engine and allow at least 30 minutes to elapse before washing engine.
- (2) Deactivate ignition circuit breaker for engine being washed.
- (3) Check that start lever is in CUTOFF position.
- (4) Check that all anti-ice and fuel heater valves are in CLOSED position, except engine bleed valve.
- (5) Disconnect both igniter plug leads and remove packing holders from igniter plug bosses. Unscrew and remove igniter plugs (Ref 74-21-21).
- (6) Insert PWA 33594 Water Wash Probe (Fig. 703) in each igniter probe boss and extend each probe into No. 4 or 7 combustion chamber as follows:
  - (a) Slide rubber stopper toward connector end of probe to allow full insertion of probe into combustion section.
  - (b) Insert probe into right or left side fan duct igniter plug boss, through combustion chamber outer case boss, and into combustion chamber (No. 4 or 7 chamber, as applicable).
  - (c) Move probe inward carefully, until tip of probe is felt to contact inner surface of combustion chamber. Withdraw probe approximately 1/4 inch so that probe tip does not contact combustion chamber wall (Fig. 703).
  - (d) Slide rubber stopper down tube of probe until stopper can be firmly inserted in igniter plug boss at fan duct. Ensure that probe is still correctly positioned, with black mark on outer end of probe tube facing rearward.

**NOTE:** Once stopper is correctly positioned, probe can be used on left or right side of any JT8D engine without further adjustment, but it is recommended that position of probe be frequently checked as directed.

- (e) Insert second probe in igniter plug boss on other side of engine and adjust position in same manner as for first probe.

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- (f) Connect water hose to each of probe hose connections and connect hose to source of clean, drinking-quality water capable of at least 40-psi pressure. If engine is to be cleaned during freezing temperature conditions, add sufficient alcohol to the wash water to ensure no ice forms that could cause damage to the engine. See Fig. 702 for recommended minimum water-alcohol mixtures. However, a mixture of up to 50% alcohol may be used.

**CAUTION:** SPRAYING WATER INTO GAS PATH BEFORE ENGINE HAS COOLED, CAN RESULT IN DAMAGE TO ENGINE PARTS DUE TO EXTREME THERMAL CYCLING.

- (7) Make certain there is no N2 rotation. Engage starter and allow engine to reach full starter rpm. Do not exceed starter duty cycle.
- (8) Inject water into combustion section of engine through probes, at 40- to 45-psi pressure, for 30 seconds.
- (9) Turn water off and release starter.
- (10) Allow engine to drain for approximately 5 minutes.
- (11) Repeat steps (7) thru (10) two more times.
- (12) Remove probes and reinstall igniter plugs, packing holders, and igniter plug leads (Ref 74-21-21).
- (13) Check fuel control PB sense line water trap for moisture.
- (14) If engine is to remain inoperative for a period of 4 hours or more after washing, start engine and run at idle for 5 minutes.

**NOTE:** Under very cold and windy weather conditions, even if water/alcohol mixture is used, there is a high probability of ice formation in the engine in less than 4 hours if an engine run-up is not made following wash to purge/evaporate residual water.

- (15) Shut down engine and recheck fuel control PB sense line water trap for condensation.

### F. Clean Engine - Detergent Wash Procedure (Optional)

**CAUTION:** THE DETERGENT IS HIGHLY CORROSIVE TO ACOUSTICAL LININGS AND ALUMINUM STRUCTURAL SURFACES. ANY DETERGENT SPLASHED SURFACE MUST BE RINSED WITH WATER IMMEDIATELY TO PREVENT CORROSION DAMAGE.

**NOTE:** For the detergent wash method, the engine must be prepared for internal gas path cleaning by blocking or disconnecting ports and bleed lines to prevent detergent wash solution from entering certain compartments.

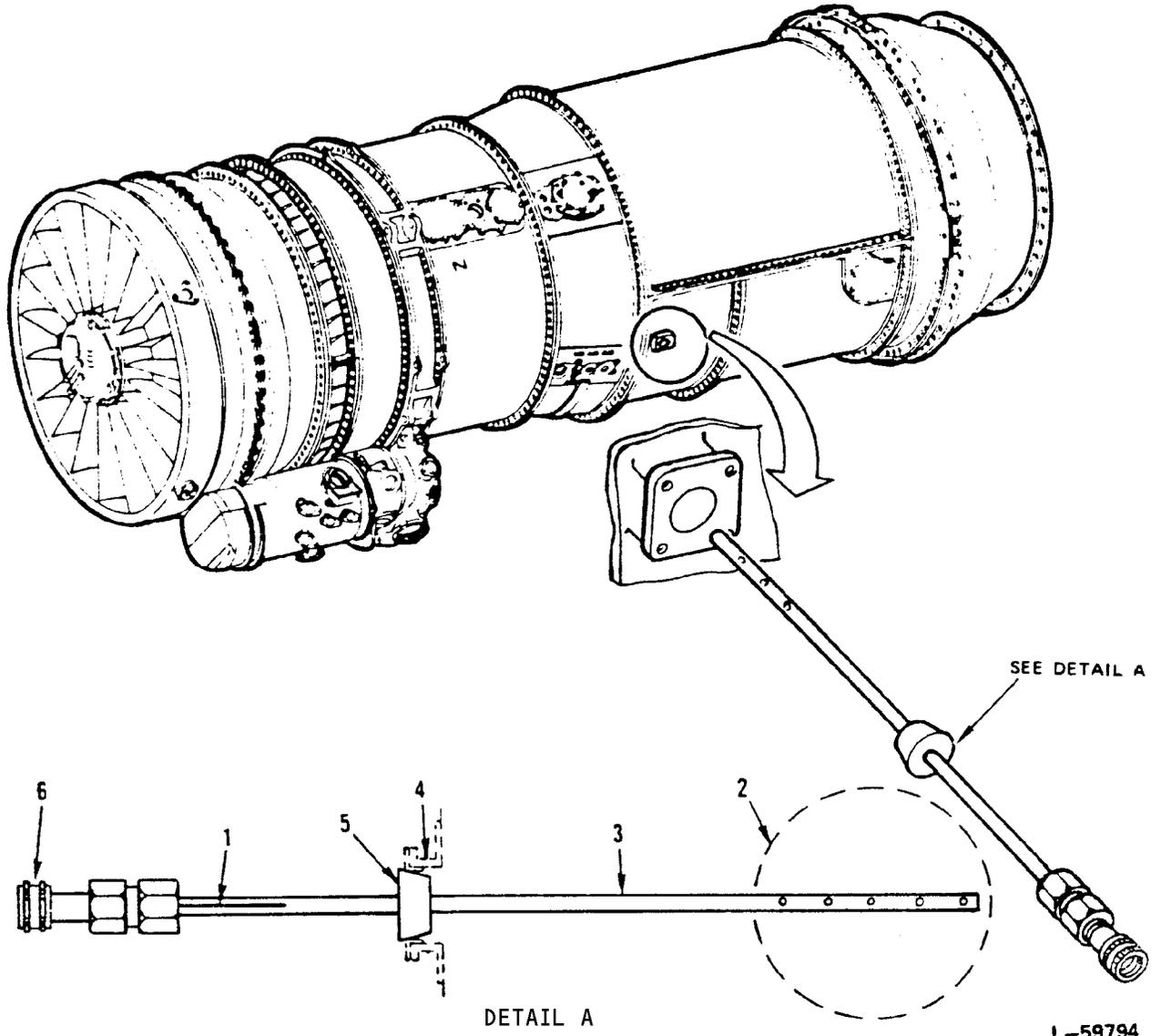
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1. BLACK SCRIBED LINE (FACING TO REAR OF ENGINE)
2. COMBUSTION CHAMBER (REFERENCE)
3. WATER WASH PROBE TUBE
4. IGNITER PLUG BOSS ON FAN DUCT
5. RUBBER STOPPER
6. HOSE CONNECTOR

Turbine Section Water Wash Probe Installation  
 Figure 703

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## MAINTENANCE MANUAL

- (1) Conduct engine performance check, if desired.
- (2) Shut down engine and allow at least 30 minutes to elapse before spraying compressor.
- (3) During the cooling period, the following preparation tasks can be accomplished:
  - (a) Open side cowl panel.

**NOTE:** If Zok 27 detergent is used, the nose cowl and nose dome do not have to be removed because Zok 27 is non-corrosive.

- (b) Remove engine nose cowl (AMM 71-11-31) and nose dome (AMM 71-11-51).
- (c) Disconnect Pt2, Ps3, and Ps4 lines to pressure ratio bleed control at engine.
- (d) Disconnect Pt2 and Pt7 lines to engine pressure ratio transmitter at low point on engine.
- (e) Disconnect PB sense line to fuel control unit at engine.
- (f) If installed, disconnect CSD pressurization line at 6th-stage bleed duct.
- (g) Disconnect thrust reverser and hydraulic reservoir pressurization line at engine.
- (h) Disconnect and cap generator cooling inlet (aft) supply duct.
- (i) Disconnect engine ignition leads and deactivate circuit breaker.

**NOTE:** It is not necessary to cap off fittings at disconnected lines providing these fittings have been offset to prevent water entering the line or valve.

- (j) Check for proper silicone oil level in the fuel control burner pressure (Pb) bellows (Ref. P&WA 73-21-1, Removal/Installation).
- (4) Prepare 20 gallons of detergent solution composed of 20 percent detergent (4 gallons) and 80 percent water of drinking purity.
  - (5) Check that start lever is in CUTOFF position.
  - (6) Check that all anti-ice and fuel heater valves are in CLOSED position, except engine bleed valve.

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- (7) Provide a handheld hose and nozzle, or attach water wash rig (P&WA 33382) to inlet guide vanes and connect supply hose (Fig. 701). If engine is to be cleaned during freezing temperature conditions, add sufficient alcohol to the wash water to ensure no ice forms that could cause damage to the engine. See Fig. 702 for recommended minimum water-alcohol mixtures. However, a mixture of up to 50% alcohol may be used.

**WARNING:** IF HOSE IS HANDHELD, OPERATOR MUST STAY AT LEAST 3 FEET FROM ENGINE INLET AT APPROXIMATELY WAIST-HIGH LEVEL OR BELOW.

**CAUTION:** SPRAYING WATER INTO GAS PATH BEFORE ENGINE HAS COOLED CAN RESULT IN DAMAGE TO ENGINE PARTS DUE TO THERMAL SHOCK.

- (8) Introduce 10 psig external air pressure at No. 4 and 5 bearing breather boss to provide breather pressurization. Cap fitting at gearbox.
- (9) Check that N2 rotation is completely stopped. Motor engine with starter at approximately 2500 N2 RPM.
- (10) Discharge approximately 5 gallons of detergent solution into engine and release starter.

**CAUTION:** THE DETERGENT IS HIGHLY CORROSIVE TO ACOUSTICAL LININGS AND ALUMINUM STRUCTURAL SURFACES. ANY DETERGENT SPLASHED SURFACE MUST BE RINSED WITH WATER IMMEDIATELY TO PREVENT CORROSION DAMAGE.

**NOTE:** - Engine N2 speed will drop when water is first applied.  
- If hose is handheld, aim nozzle at the base of the blades on the right-hand side of the nose bullet facing aft.

- (11) Wait 20 minutes.
- (12) Repeat steps (9) thru (11) three more times.
- (13) To rinse all detergent solution from the engine, spray clean tap water or water/alcohol mixture into the engine inlet for approximately 30 seconds while motoring the engine with the starter. Approximately 40 to 50 gallons of water may be discharged in the 30-second interval.

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**NOTE:** - Engine N2 speed will drop when water is first applied.  
- If hose is handheld, aim nozzle at the base of the blades on the right-hand side of the nose bullet facing aft.

- (14) Shut off water or water/alcohol, release starter and let engine stop. Allow engine to drain for 5 minutes to eliminate excess water.

**NOTE:** Observe starter limitations.

- (15) Repeat steps (14) and (15) as required to ensure adequate detergent rinse of engine.
- (16) Remove water wash rig and inspect inlet guide vanes.
- (17) Reconnect lines, reinstall panels, nose cowl, nose dome and reactivate circuit breakers which were removed and/or in step (3).
- (18) After engine has been allowed to cool, drain oil from oil tank and gearbox. Before replacing drain plugs, check that N2 rotation is completely stopped and then engage starter and motor engine for 30 seconds. Allow residual oil to drain.
- (19) Refill oil system (Ref 79-00).
- (20) Check fuel control PB sense line water trap for moisture.
- (21) Conduct engine performance check if desired. If performance check is not desired, and if engine is to remain inoperative for a period of 4 hours or more after washing, start engine and run at idle for 5 minutes. Exercise anti-ice and air conditioning system valves. Run air conditioning system in full cold mode so that all undrained water will go through water separator.

**CAUTION:** DO NOT EXCEED GROUND STATIC EGT OPERATIONAL LIMITS WHEN USING ANTI-ICING AIR SYSTEM.

**NOTE:** Under very cold and windy weather conditions, even if water/alcohol mixture is used, there is a high probability of ice formation in the engine in less than 4 hours if an engine run-up is not accomplished following wash to purge/evaporate residual water.

- (22) Shut down engine and check fuel control PB sense line water trap for condensation.

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### G. Engine Gaspeth Cleaning After the Use of Fire Extinguisher Agents.

- (1) You must clean the engine if fire extinguisher agents are used in the engine. Dry powder fire extinguisher agents are corrosive to the engine. The dry powder agents can damage the hot section parts because engine temperatures make the dry powder agents more corrosive.
- (2) There are two procedures to remove the dry powder fire extinguisher agents. The first procedure is used to clean an engine that must be removed from the airplane. The second procedure is used to clean an engine that must continue-in-service.
- (3) Clean the engine that must be removed from the airplane.

**NOTE:** This procedure is used when the engine will be removed from the aircraft for disassembly and cleaning under maintenance shop conditions.

- (a) If no damage will occur if you motor the engine, do these steps before you remove the engine.
  - 1) Motor the engine with the starter to decrease the exhaust gas temperature and to blow dry powder agents from the engine (AMM 71-09-100/201).

**NOTE:** Observe the starter motor time limitations.

- (b) When you have removed as much dry powder agent as possible, spray preservative oil (MIL-L-6081) into the engine while motoring the engine.

**NOTE:** This will neutralize the agents that remain in the engine.

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- (c) Fully clean the engine in the maintenance shop to remove preservative oil and dry powder agents that remain.

**CAUTION:** WHEN DRY POWDER FIRE EXTINGUISHER AGENTS ARE INTRODUCED INTO THE ENGINE GASPETH, THE AGENTS MAY CAUSE SEVERE CORROSION DAMAGE TO THE COMPRESSOR, HOT SECTION AND TURBINE AREA PARTS. THEY MAY CONTAMINATE THE OIL SYSTEM. IT IS IMPORTANT TO NEUTRALIZE THE DRY POWDER AGENTS AND REMOVE THEM FROM THE ENGINE PARTS.

**CAUTION:** IF YOU CANNOT MOTOR THE ENGINE, THE ENGINE SHOULD BE REMOVED AS SOON AS POSSIBLE AND CLEANED IN A MAINTENANCE SHOP TO REMOVE THE DRY POWDER AGENTS.

**CAUTION:** DO NOT WASH THE ENGINE WITH WATER. THE DRY POWDER AGENTS ARE NOT WATER SOLUBLE AND WILL BOND TO THE ENGINE PARTS.

- (4) Clean the engine that must remain in service.

**NOTE:** This procedure is used when the engine must continue in service.

- (a) Motor the engine with the starter to decrease the exhaust gas temperature and to blow the dry powder agents from the engine (AMM 71-09-100/201).
- (b) **NOTE:** Observe the starter motor time limitations.

**CAUTION:** REMOVE THE ENGINE FOR MAINTENANCE SHOP DISASSEMBLY AND CLEANING AS SOON AS POSSIBLE TO STOP CORROSIVE EFFECTS. MOTORING WILL NOT PROVIDE COMPLETE CLEANING. YOU MAY FIND SOME DAMAGED PARTS WHEN THE ENGINE IS LATER DISASSEMBLED OR INSPECTED. CORROSION AND BLOCKAGE OF ENGINE COOLING AIR PASSAGES CAN HAPPEN IF THE ENGINE OPERATES A LONG TIME BEFORE IT IS CLEANED.

DO NOT WASH THE ENGINE WITH WATER. THE DRY POWDER AGENTS ARE NOT WATER SOLUBLE AND WILL BOND TO THE ENGINE PARTS.

- (c) Use a borescope to internally examine the engine. Look for dry powder agents that remain in the engine gaspath.

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- (d) Motor the engine, blow with compressed air, or clean the engine with a brush to remove from the engine the dry powder agents that remain.
  - (e) Drain and service the oil system (AMM 79-00/301).
  - (f) Run the engine long enough to see that the engine operates correctly.
  - (g) Examine the oil after the engine has been run to make sure there is no oil contamination.
  - (h) You can now operate the engine, but you must inspect the engine with a borescope after six hours of operation.
  - (i) Remove the engine for maintenance shop disassembly and cleaning as soon as possible, or when the borescope inspection or an oil analysis indicates contamination or corrosion damage.
- H. External Engine Cleaning after the use of Fire extinguisher Agents
- (1) Put covers on all openings to the interior of the engine.
  - (2) Prepare a cleaning solution. (P & W 70-00/201)
  - (3) Spray the cleaning solution on the engine and let the solution stay on the engine for 10 to 20 minutes.
  - (4) Flush the outside of the engine fully with warm or hot water.
  - (5) Remove the covers from the engine openings.

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POWER PLANT - MAINTENANCE PRACTICES (PRESERVATION AND DEPRESERVATION)

NOTE: For Preservation and Depreservation of the engine, refer to PW JT8D Maintenance Manual 72-00.

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POWER PLANT (JT8D) – OPERATING PROCEDURE

1. General

- A. The operating procedures included in this section provide all instructions necessary for the various power plant operations, and are sequenced for a newly installed engine.

**CAUTION:** WHEN A NEWLY INSTALLED ENGINE IS TO BE OPERATED, ALL PROCEDURES SHOULD BE PERFORMED IN THE ORDER GIVEN.

- B. Some of the following procedures are also applicable to power plants that were previously installed. When previously installed power plants are to be operated, procedures which are designated for new engines should be omitted. The motor engine procedure may be performed alone provided the procedures covering ground safety precautions and preparation for engine operation are performed first.
- C. Engine compartment cleanliness is important because the intensive mass air flow tends to draw foreign objects into the engine. Thoroughly clean and check area after completion of any work. Keep the inlet area free of dirt, oil, and grease and remove all unused parts such as nuts, washers, and pieces of lockwire. Immediately cover all apertures resulting from the disconnection of parts. Use external caps on all openings, not internal plugs. In order to prevent corrosion in the compressor stages and damage to the fan disc and blades, it is recommended that the engine inlet or tailpipe be suitably covered whenever the engine is left inoperative for more than 6 hours. When there is freezing precipitation or sufficient wind to rotate the engine, it is particularly important to cover the engine immediately.
- D. Substantial reductions in foreign object damage (FOD) to jet engines can result from keeping airport areas free from debris. Such damage reductions improve operating economy and enhance flight safety. Hangar ramp areas, runup pads, and terminal gate positions are locations where aircraft maintenance is performed and frequency of aircraft operations is high. It is particularly important, therefore, to keep these areas cleaned of nuts, bolts, washers, lockwire, etc.

2. Engine Ground Safety Precautions

A. General

- (1) The operating characteristics of jet engine powered aircraft require care to prevent injury to persons and damage to property. Not only must one avoid the engine intake ducts, but also the exhaust nozzle, where hot, high velocity exhaust gases are discharged. Listed below are some of the general safety items which shall be supplemented according to the needs of the job, to prevent accidents.

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B. Air Intake (Fig. 201)

**WARNING:** BECAUSE OF EXTREME DANGER NEAR THE ENGINE INLET, SIDES OF THE INLET, AND ENGINE EXHAUST, PERSONNEL SHALL AVOID THESE AREAS DURING ALL POWER PLANT GROUND OPERATION. ON ENGINE NACELLES THAT HAVE HAZARD AREA MARKINGS, THE INLET HAZARD AREAS ARE HIGHLIGHTED BY A RED WARNING STRIPE, NO ENTRY PLACARD, ABOVE IDLE HAZARD AREA PLACARD, AND WARNING PLACARD. WHENEVER PERSONNEL ARE POSITIONED AT THE SIDES OF THE ENGINE, PARTICULAR ATTENTION AND AWARENESS MUST BE PLACED ON THE HAZARD AREAS LOCATED FIVE FEET AFT OF THE NOSE COWL INLET PLANE. THIS HAZARD AREA EXTENDS COMPLETELY AROUND THE OUTER DIAMETER AND FORWARD END OF THE POWER PLANT.

**CAUTION:** PERSONNEL SHALL EXERCISE CARE TO ENSURE THAT HELMET, HEADSET, HATS, GLASSES, WIPE-RAGS, AND ARTICLES OF CLOTHING ARE STRAPPED SECURELY IN POSITION OR REMOVED BEFORE WORKING AROUND THE ENGINE. NO EFFORT SHALL BE MADE TO RETRIEVE EQUIPMENT DROPPED NEAR THE ENGINE INTAKE BUT THE THRUST LEVER SHALL BE RETURNED TO THE FULLY RETARDED POSITION AND THE START LEVER IMMEDIATELY MOVED TO CUTOFF POSITION.

**CAUTION:** PERSONNEL DANGER AREAS SHALL RECEIVE SPECIAL CONSIDERATION WHEN POSITIONING PERSONNEL, EQUIPMENT, VEHICLES, OR OTHER AIRCRAFT IN PROXIMITY OF OPERATING ENGINE.

**CAUTION:** BEFORE OPERATING ENGINE, CHECK THAT ENGINE INLET, UPPER SURFACE OF WING AND FUSELAGE, AND RUNUP AREAS ARE FREE OF SAND, GRAVEL, LOOSE OBJECTS, OR EQUIPMENT THAT COULD BE DRAWN INTO THE ENGINE INLET OR THROWN AFT BY THE EXHAUST BLAST.

**CAUTION:** CLEAR AREA SURROUNDING ENGINE OF ALL SNOW AND ICE. EXTENSIVE DAMAGE TO COMPRESSOR BLADES CAN BE CAUSED BY THE ENTRANCE INTO THE ENGINE OF RELATIVELY SMALL PIECES OF ICE.

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C. Exhaust Characteristics (Fig. 201)

(1) Velocity

(a) At high engine speeds the exhaust may pick up and blow loose dirt, sizeable stones, sand and debris a distance of several hundred feet. Therefore, due caution must be used in parking the aircraft for runup to avoid injury to persons or damage to property or other aircraft. A blast fence is suggested if the engines are going to be run up for trim and power adjustment in an area where there is not sufficient space available for dissipation of the exhaust blast.

(2) Temperature

(a) High temperature will be found up to several hundred feet from the exhaust nozzle depending on wind conditions. Closer to the engine the exhaust temperature is high enough to deteriorate bituminous pavement, therefore concrete aprons are suggested for runup areas. Occasionally when a jet engine is started, excess fuel that has accumulated in the tailpipe ignites and long flames are blown out of the exhaust nozzle. The possibility of this hazard must be watched and all flammable materials kept in the clear.

(3) Toxicity

(a) Tests have indicated that the carbon monoxide content is low but other gases are present which have a disagreeable odor and are irritating in effect. Exposure will usually cause watering or a burning sensation of the eyes. Less noticeable but important is the respiratory irritation, which may be caused. For both these reasons exposure must be avoided, particularly in confined spaces or pockets where the concentration may build up.

D. Engine Ignition

**WARNING:** THE JT8D ENGINE IGNITION SYSTEM IS CHARACTERISTICALLY HIGH IN ENERGY. THE NATURE OF THE SYSTEM IS SUCH AS TO RENDER IT A HAZARDOUS, POSSIBLY FATAL, SOURCE OF ELECTRICAL SHOCK UNLESS THE NECESSARY PRECAUTIONS ARE EXERCISED. DO NOT TOUCH IGNITER PLUGS WHEN THE IGNITION IS ON. DO NOT TEST THE IGNITION SYSTEM WHEN PERSONNEL MAY BE IN CONTACT WITH IGNITER PLUGS OR WHEN FLAMMABLE MATERIALS ARE NEARBY. SPECIAL PRECAUTIONS MUST BE OBSERVED BY ALL WHO HANDLE RADIOACTIVE SPARK-GAPS USED IN BENDIX-SCINTILLA IGNITION SYSTEMS. SEE CHAPTER 74, IGNITION.

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E. Engine Noise

- (1) Jet engines typically produce noise capable of causing temporary, as well as permanent, loss of hearing. Even short exposures to extreme noise may result in damage to the ears and all personnel must use some means of protection. Noise can affect the ear mechanism in such a way as to cause unsteadiness or inability to walk or stand without reeling. Therefore, the use of cup type ear protection is recommended. If engines are to be serviced from aero-stands or platforms these shall be equipped with protective railings to prevent falls.

F. Engine Cool Down

- (1) After engine operation, care must be taken to make sure that the tailpipe has cooled before any work is performed in that area. All other parts usually may be worked on without danger of burn.

G. Fuel and Lubricating Oils

- (1) All fuel and lubricating oils tend to dry the skin. Precautions should be taken to avoid contact with these fluids as much as possible.

3. Engine Operation Preparations

A. General

- (1) This preparation procedure describes those actions required before the engine is motored or started. These preparations include general precautions such as clearing the engine operating area of personnel and foreign objects. These precautions must be observed before every engine operation to prevent injury to personnel or damage to equipment.
- (2) If the engine had a fire and fire extinguishing agents were used, do the procedure "Power Plant Cleaning" (AMM 71-00/701).
- (3) During cold weather, additional preparations may be necessary (AMM 71-09-111, Cold Weather Operating Procedures).
- (4) Each engine starter used for starting and motoring is supplied with low-pressure air through a crossfeed manifold from an operating engine, a ground service cart low-pressure air source, or the airplane auxiliary power unit.

B. Equipment and Materials

- (1) Safety Lanyard, Personnel - F80239
- (2) Guard-Inlet, Engine Run-up - C12001 (use is optional)
- (3) Ground Service Electrical Power Unit (90 KVA output required)
- (4) Ground Low Pressure Air Supply Unit - Steward Davis Model 502

**NOTE:** If auxiliary power unit is used to start engines, items (4) and (5) are not required.

- (5) Interphone Service Equipment

C. Prepare for Engine Operation

- (1) Remove engine inlet and exhaust covers.

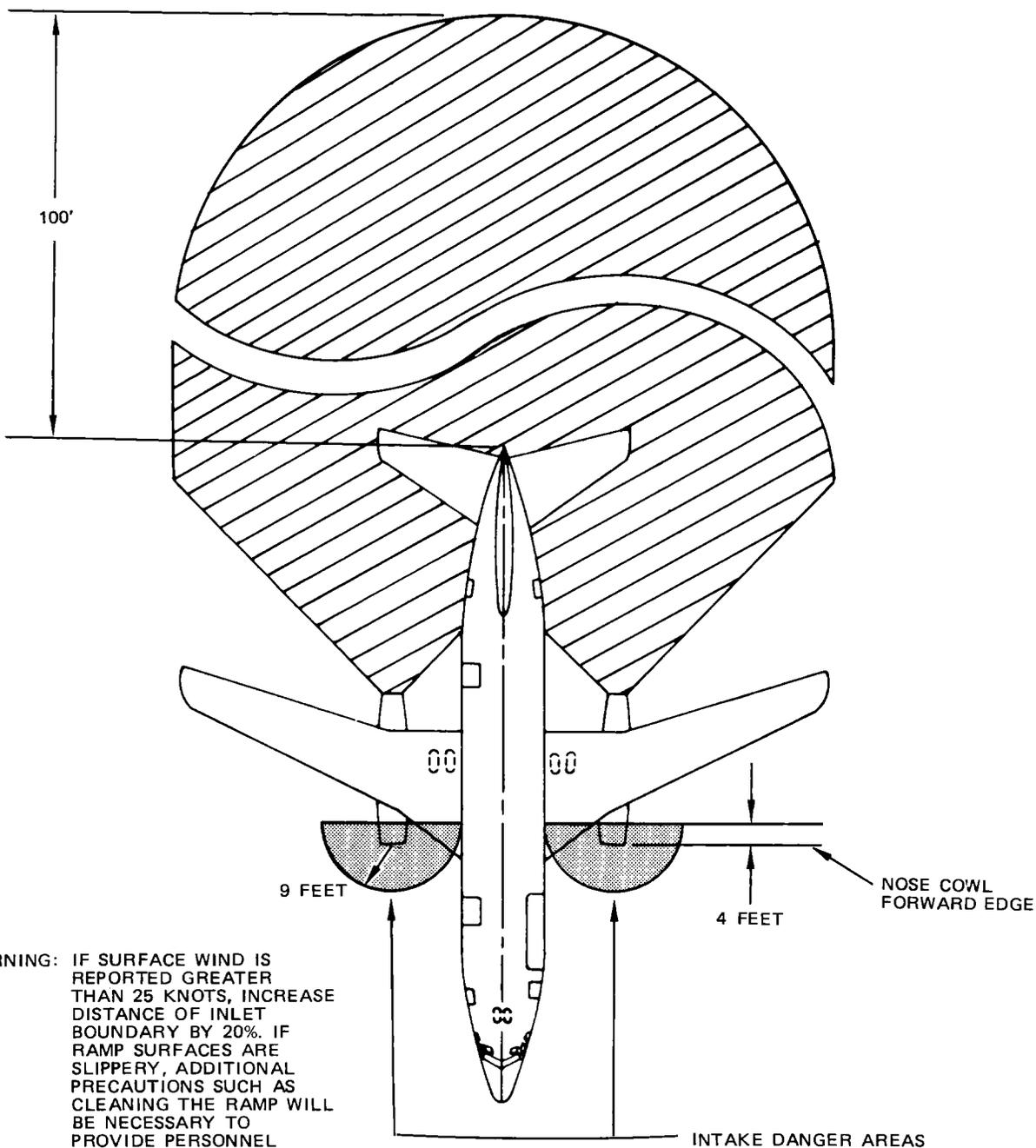
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**WARNING:** IF SURFACE WIND IS REPORTED GREATER THAN 25 KNOTS, INCREASE DISTANCE OF INLET BOUNDARY BY 20%. IF RAMP SURFACES ARE SLIPPERY, ADDITIONAL PRECAUTIONS SUCH AS CLEANING THE RAMP WILL BE NECESSARY TO PROVIDE PERSONNEL SAFETY.

GROUND PERSONNEL MUST STAND CLEAR OF THESE HAZARD ZONES AND MAINTAIN COMMUNICATION WITH FLIGHT COMPARTMENT PERSONNEL DURING ENGINE RUNNING.

FORWARD IDLE THRUST

JT8D Turbofan Engine Hazard Areas  
 Figure 201 (Sheet 1)

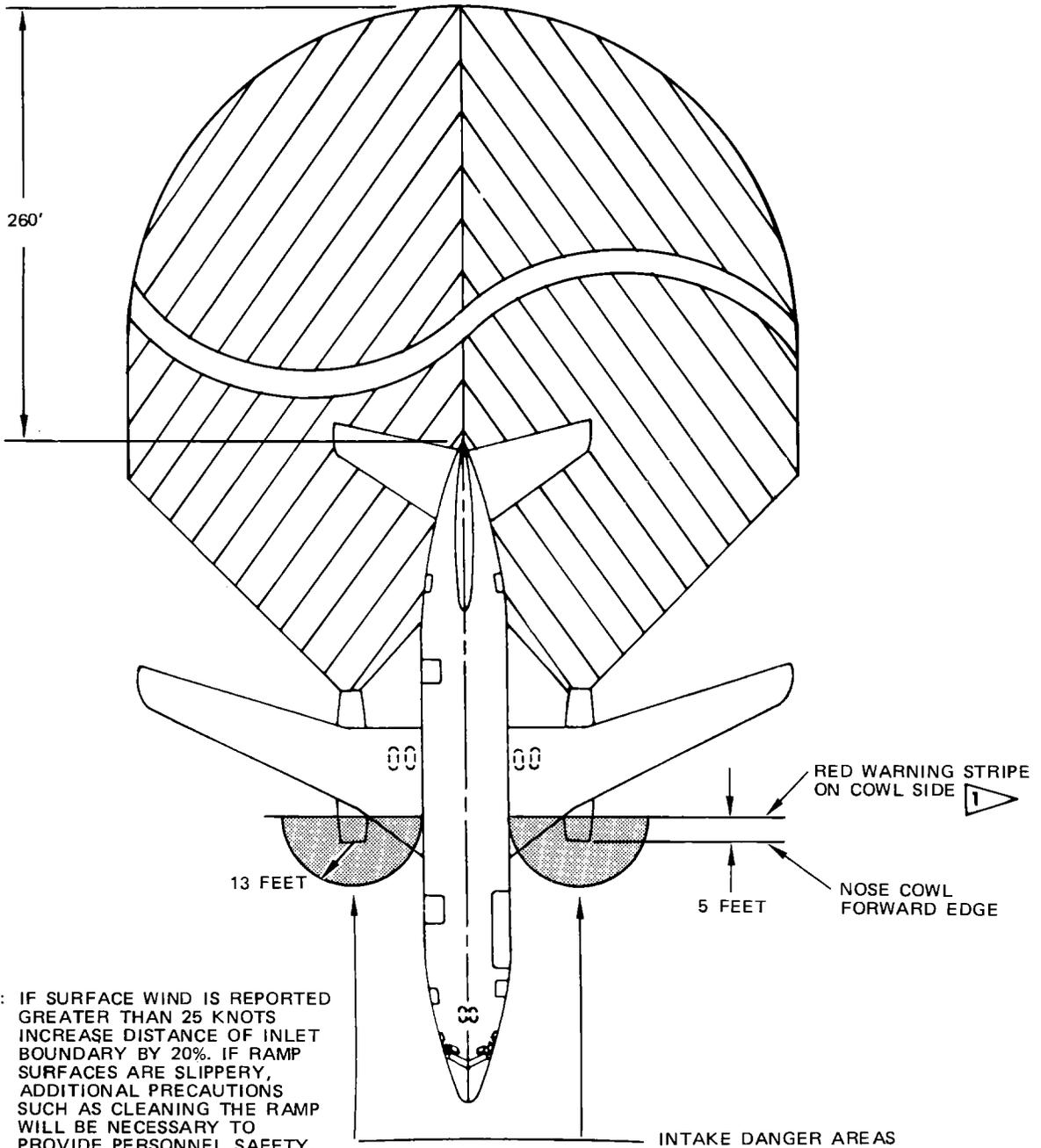
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**WARNING:** IF SURFACE WIND IS REPORTED GREATER THAN 25 KNOTS INCREASE DISTANCE OF INLET BOUNDARY BY 20%. IF RAMP SURFACES ARE SLIPPERY, ADDITIONAL PRECAUTIONS SUCH AS CLEANING THE RAMP WILL BE NECESSARY TO PROVIDE PERSONNEL SAFETY.

GROUND PERSONNEL MUST STAND CLEAR OF THESE HAZARD ZONES AND MAINTAIN COMMUNICATION WITH FLIGHT COMPARTMENT PERSONNEL DURING ENGINE RUNNING.

**FORWARD BREAKAWAY THRUST (BOTH ENGINES OPERATING)**  
**JT8D Turbofan Engine Hazard Areas**  
**Figure 201 (Sheet 2)**

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- (2) Check nose cowl, engine inlet, exhaust duct and area around airplane for presence of foreign objects.

**NOTE:** Conscientious use of engine inlet and exhaust covers will minimize the possibility of foreign object damage to engines.

- (3) Before operating newly installed engine, remove all storage plugs, vent and drain caps, airtight moisture barriers, and humidity indicators from engine.
- (4) Check that fuel tanks are serviced and for water in tank sumps.

**CAUTION:** TO AVOID OVERHEATING AIRPLANE HYDRAULIC SYSTEMS, MAKE SURE THAT SUFFICIENT FUEL QUANTITY IS MAINTAINED TO COVER HYDRAULIC FLUID HEAT EXCHANGERS. THIS REQUIRES A MINIMUM OF APPROXIMATELY 1675 POUNDS (762 KGS) OF FUEL EACH IN TANK NO. 1 AND IN TANK NO. 2.

- (5) Check engine oil tank and airplane hydraulic reservoirs for adequate servicing (Chapter 12, Servicing).

**NOTE:** For consistent results, the oil tank should be serviced within 2 hours after engine shutdown.

- (6) Move battery switch to ON (forward overhead panel).
- (7) Start APU (AMM 49-11-0/201), or connect external electrical power and low-pressure air supply line to airplane (Fig. 204).
- (8) On the forward overhead panel, move ground power switch to ON, if ground power is selected.
- (9) Turn ac meter switch to GND PWR or APU GEN as selected (forward overhead panel).
- (10) Place thrust levers in fully retarded position and start levers in CUTOFF position (Fig. 205).
- (11) Check the following items:
  - (a) Fire switch fully down and locked (control stand).
  - (b) Hydraulic lines are connected at engine (if new engine installed or work performed on hydraulic system).
- (12) Check that main landing gear wheels are chocked and all landing gear downlocks are installed.
- (13) Place parking brake in ON position.

**CAUTION:** TO MINIMIZE THE POSSIBILITY OF AIRPLANE SKIDDING DURING HIGH POWER OPERATION, THE FOLLOWING ADDITIONAL MINIMUM GROSS WEIGHT AND GROUND/TIRE SURFACE REQUIREMENTS MUST BE MET. FAILURE TO MEET THESE ADDITIONAL REQUIREMENTS COULD RESULT IN AIRPLANE SKIDDING WITH SUBSEQUENT AIRPLANE DAMAGE.

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(14) If one or both engines are to be operated at high power, the following requirements are recommended to minimize airplane skidding.

(a) Make sure ramp and tires are free from contaminants.

NOTE: A damp ramp surface is acceptable. No standing water, frost, ice, oil, grease, sand, or other contaminants are permitted.

(b) Make sure airplane satisfies minimum gross weight requirements as follows:

| Thrust Condition  | Minimum Gross Weight |
|---|----------------------|
| One engine operating at takeoff thrust with opposite engine thrust at 0 to 1.2 EPR                  | 79,000 pounds        |
| Both engines operating at 80% maximum takeoff thrust (See Chart A for EPR at 80% of takeoff thrust) | 63,000 pounds        |
| Both engines operating at 100% maximum takeoff thrust   | 79,000 pounds        |

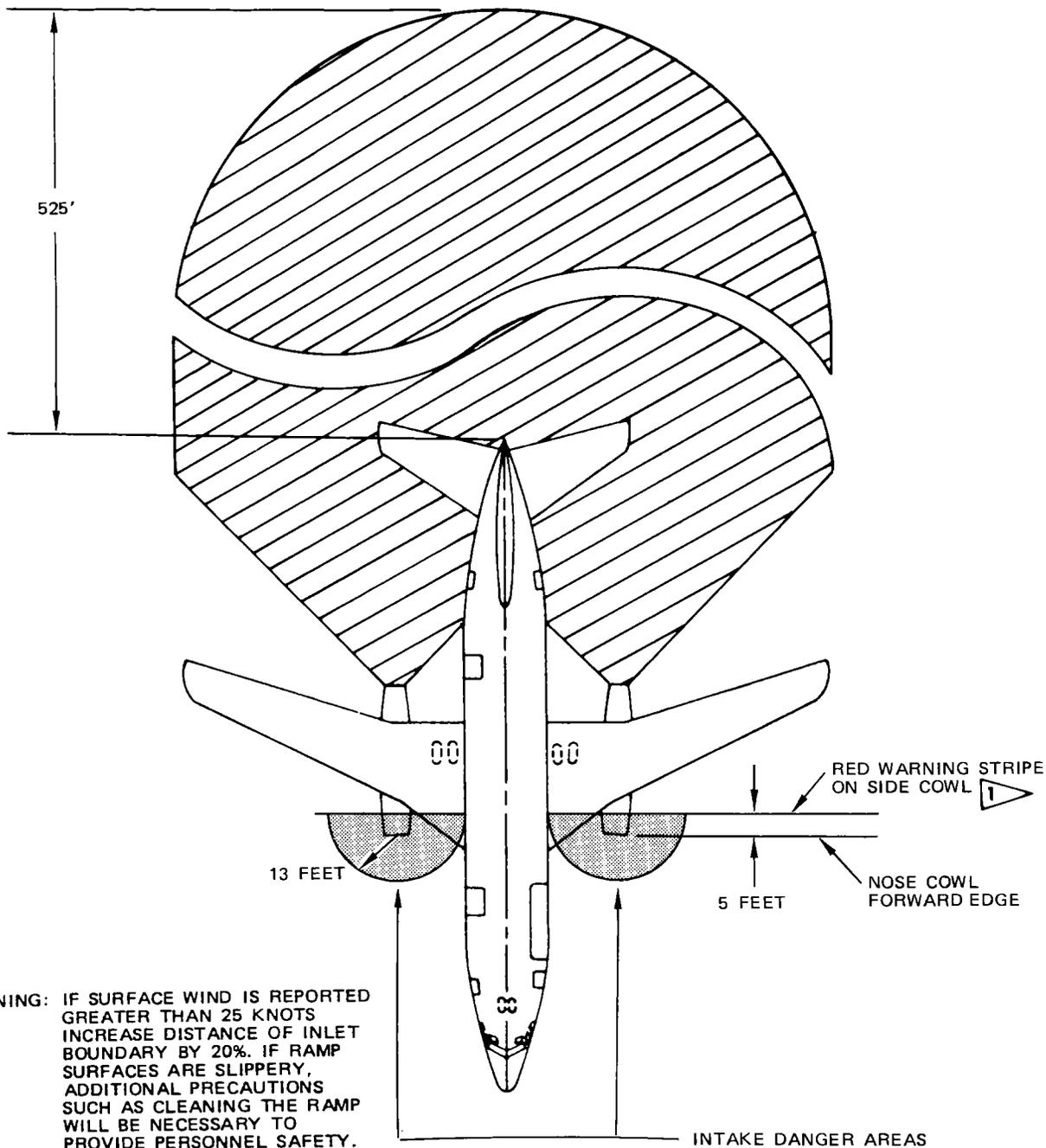
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**WARNING:** IF SURFACE WIND IS REPORTED GREATER THAN 25 KNOTS INCREASE DISTANCE OF INLET BOUNDARY BY 20%. IF RAMP SURFACES ARE SLIPPERY, ADDITIONAL PRECAUTIONS SUCH AS CLEANING THE RAMP WILL BE NECESSARY TO PROVIDE PERSONNEL SAFETY.

GROUND PERSONNEL MUST STAND CLEAR OF THESE HAZARD ZONES AND MAINTAIN COMMUNICATION WITH FLIGHT COMPARTMENT PERSONNEL DURING ENGINE RUNNING.

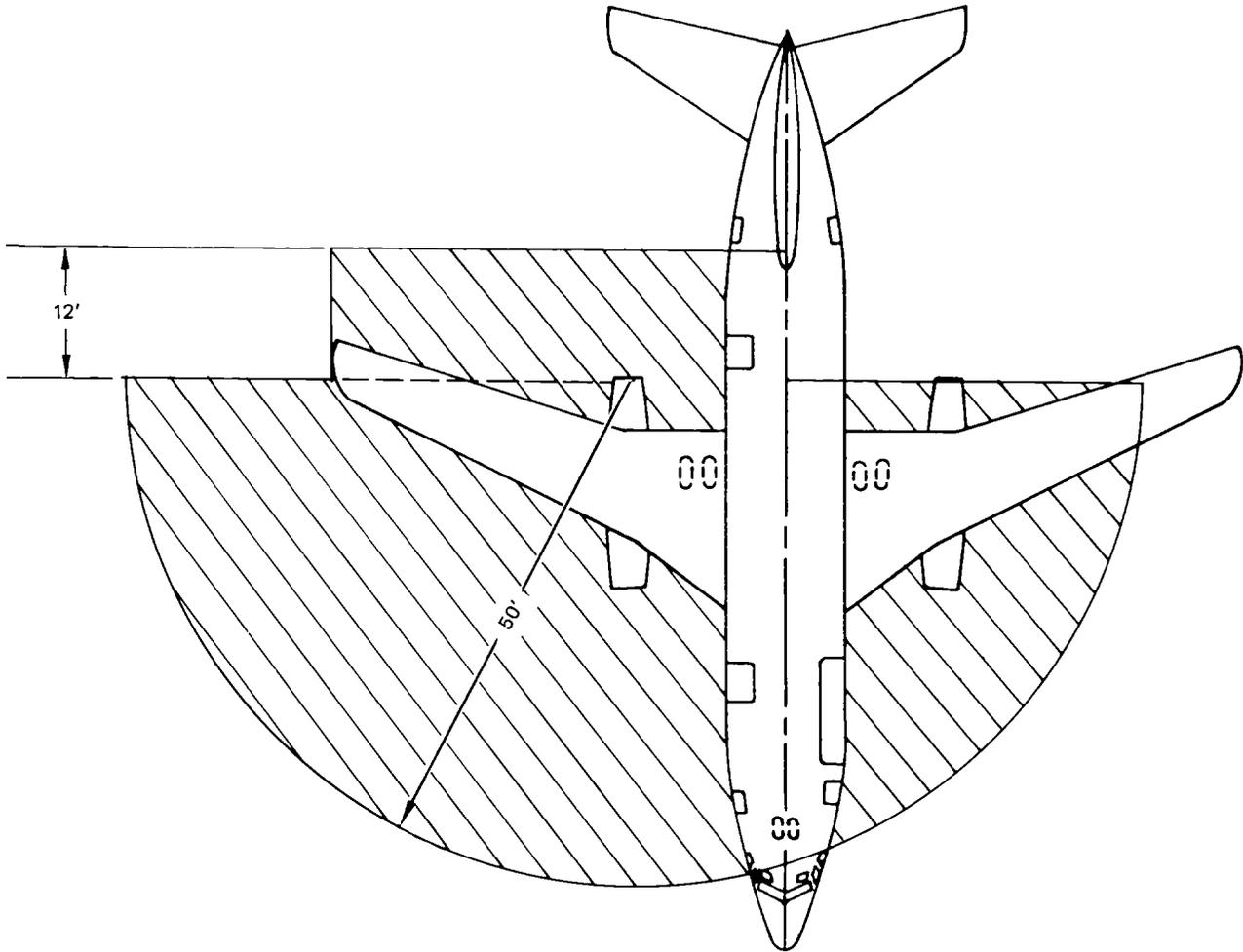
 REFER TO SHEET 6 FOR EFFECTIVITY

TAKE-OFF THRUST (BOTH ENGINES OPERATING)

JT8D Turbofan Engine Hazard Areas  
 Figure 201 (Sheet 3)

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REVERSER OPERATION AT IDLE THRUST

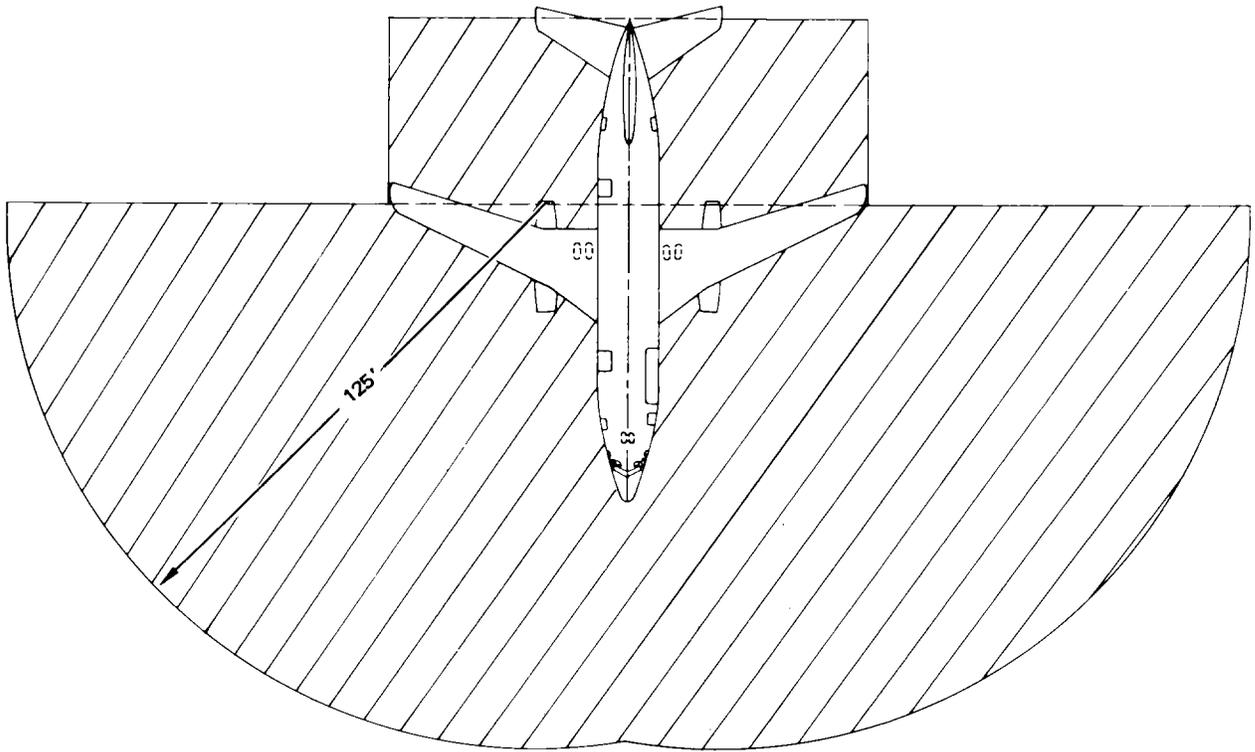
NOTE: RIGHT ENGINE SHOWN. LEFT ENGINE HAZARD ZONE SIMILARLY LOCATED WITH RESPECT TO THE LEFT ENGINE. FOR BOTH ENGINES RUNNING, HAZARD ZONE IS COMBINED PERIMETER OF BOTH SINGLE-ENGINE HAZARD ZONES.

JT8D Turbofan Engine Hazard Areas  
 Figure 201 (Sheet 4)

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REVERSER OPERATION AT BREAKAWAY THRUST (BOTH ENGINES OPERATING)

JT8D Turbofan Engine Hazard Areas  
 Figure 201 (Sheet 5)

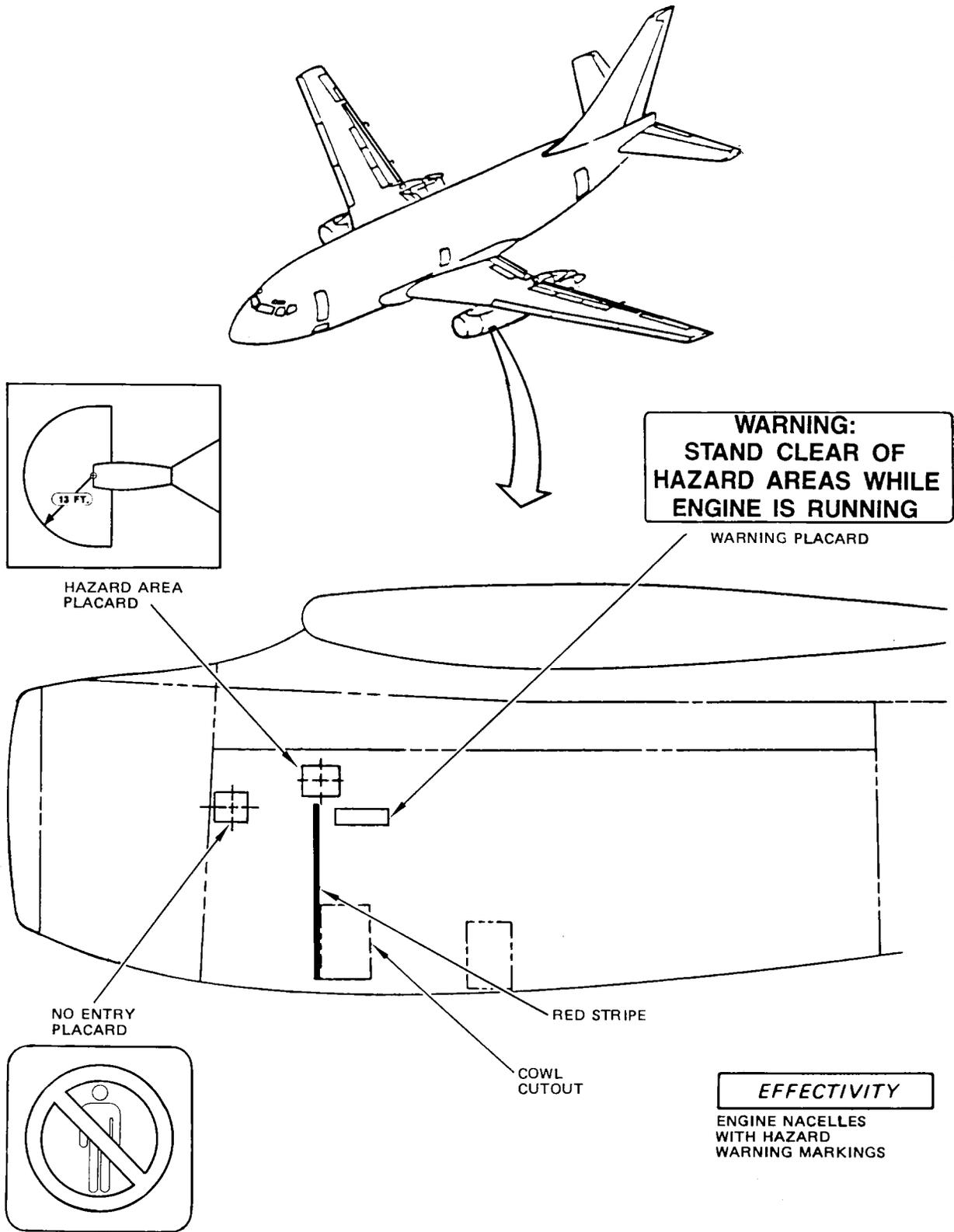
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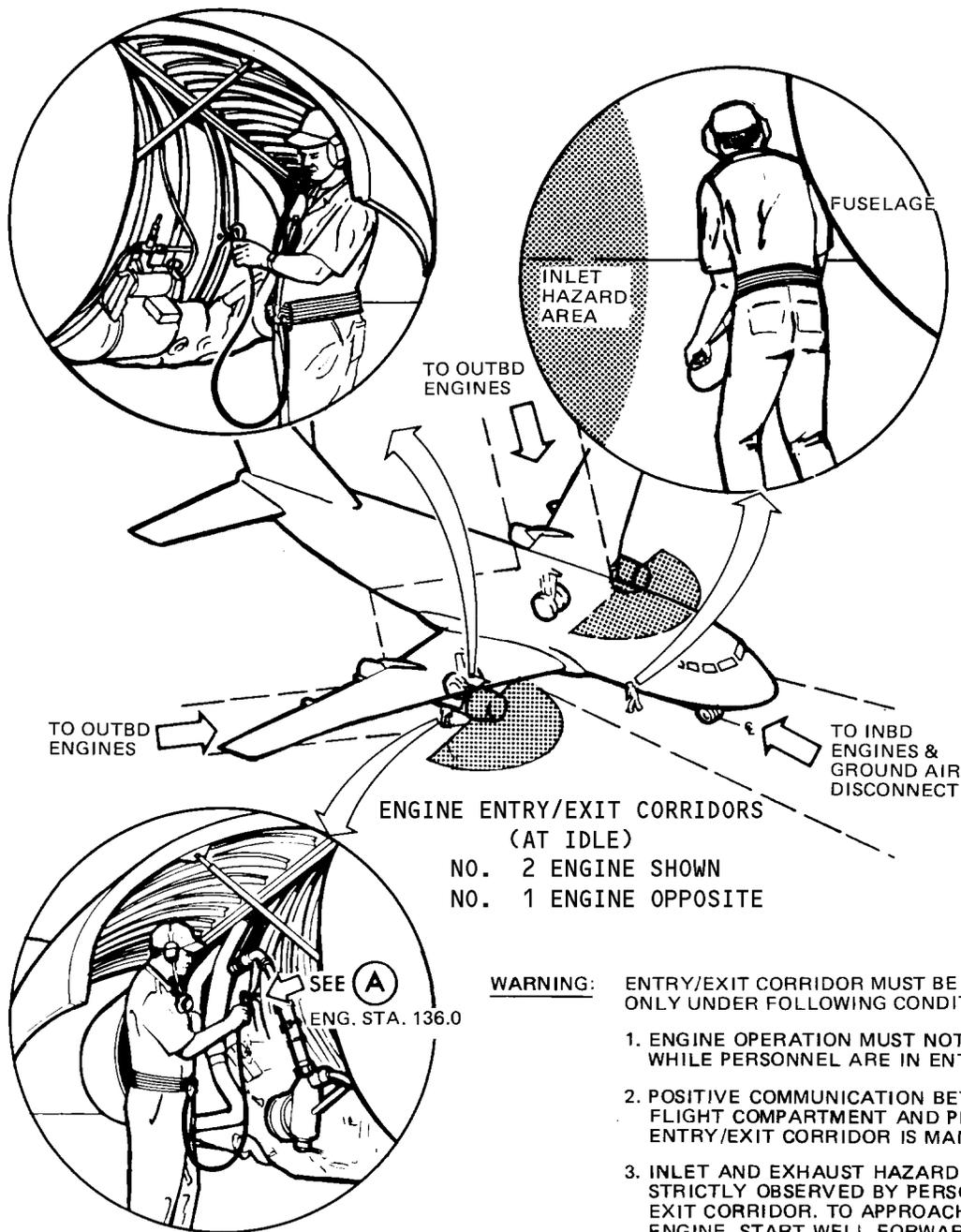
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JT8D Turbofan Engine Hazard Areas  
 Figure 201 (Sheet 6)

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**WARNING:** ENTRY/EXIT CORRIDOR MUST BE USED ONLY UNDER FOLLOWING CONDITIONS:

1. ENGINE OPERATION MUST NOT EXCEED LOW IDLE RPM WHILE PERSONNEL ARE IN ENTRY/EXIT CORRIDOR.
2. POSITIVE COMMUNICATION BETWEEN PERSONNEL IN FLIGHT COMPARTMENT AND PERSONNEL USING ENTRY/EXIT CORRIDOR IS MANDATORY.
3. INLET AND EXHAUST HAZARD AREAS MUST BE STRICTLY OBSERVED BY PERSONNEL IN ENTRY/EXIT CORRIDOR. TO APPROACH INBOARD SIDE OF ENGINE, START WELL FORWARD OF INLET HAZARD ZONE. WALK AFT WITH RIGHT SHOULDER NEXT TO FUSELAGE, CROSS OVER TOWARD ENGINE AT A POINT JUST FORWARD OF LANDING GEAR.
4. USE OF SAFETY LANYARD IS RECOMMENDED (SEE SHEET 2).

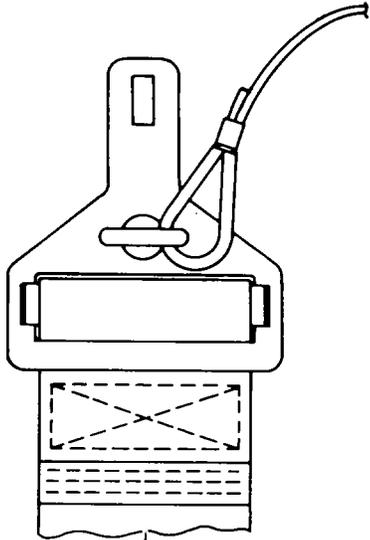
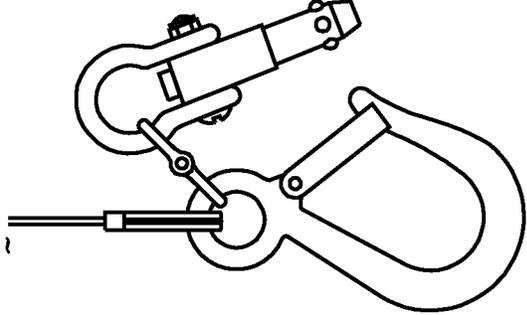
IF SURFACE WIND IS REPORTED GREATER THAN 25 KNOTS, INCREASE DISTANCE OF INLET BOUNDARY BY 20%. IF RAMP SURFACES ARE SLIPPERY, ADDITIONAL PRECAUTIONS SUCH AS CLEANING THE RAMP WILL BE NECESSARY TO PROVIDE PERSONNEL SAFETY.

Engine Entry/Exit Corridors & Personnel Safety Lanyard Installation  
 Figure 202 (Sheet 1)

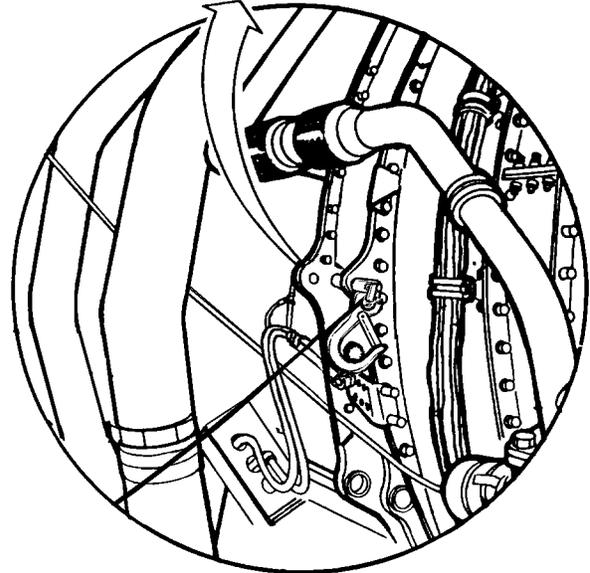
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FWD ENG HANDLING MOUNT  
 (RIGHT SIDE OF ENGINE)  
 (LEFT SIDE OF ENGINE)



F80239  
 SAFETY  
 LANYARD  
 ASSY



INSTALL BALL LOCK PIN  
 THROUGH LOWER FWD ENGINE  
 HANDLING MOUNT ON BOTH  
 SIDES OF ENGINE

(A)

Engine Entry/Exit Corridors & Personnel Safety Lanyard Installation  
 Figure 202 (Sheet 2)

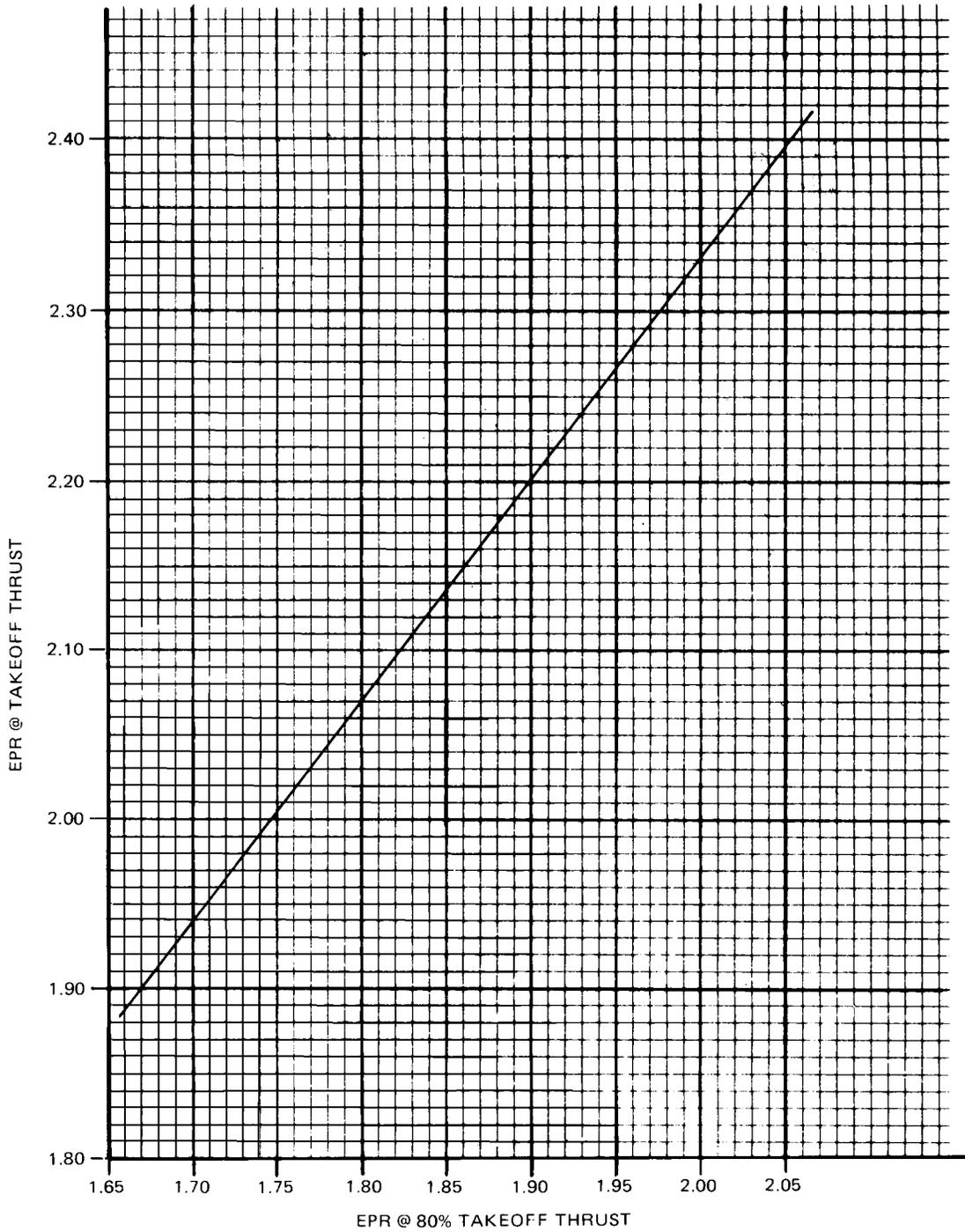
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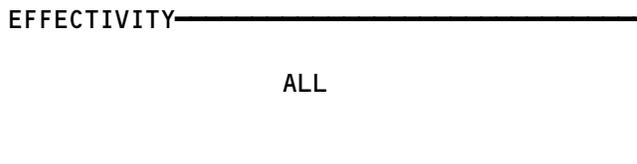
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EPA TAKEOFF THRUST CHART  
 Figure 203



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- (15) Review Fig. 201 and Fig. 202 for identification of engine hazard areas, entry and exit corridors, and personnel safety lanyard assembly (F80239) attach points. Awareness of hazard areas and proper entry/exit corridors is essential whenever maintenance tasks are performed around or near an operating engine. Use of both personnel safety lanyard and engine run-up inlet guard (C12001) are recommended, but not mandatory.

**WARNING:** USE EXTREME CARE WHEN OPENING OR CLOSING THE ENGINE SIDE COWLS WHILE THE ENGINE IS OPERATING. THE FORWARD COWL HOLD-OPEN RODS AND FORWARD COWL LATCHES ARE IN THE IDLE POWER INLET HAZARD ZONE. THE OPERATOR SHOULD STAY AS FAR AFT OF THE INLET AS WILL ALLOW OPERATION OF THE FORWARD HOLD-OPEN RODS AND LATCHES. THE ENGINE MUST BE AT GROUND IDLE.

**WARNING:** IF ENGINE SIDE COWLS HAVE NOT BEEN REMOVED FOR PERFORMING ENGINE TRIM, LEAK CHECKS, OR OTHER MAINTENANCE TASKS REQUIRING ENGINE OPERATION, DO NOT ENTER OR EXIT FROM FORWARD END OF SIDE COWLS. ENTERING OR EXITING FROM FORWARD END OF SIDE COWL WILL PLACE PERSONNEL IN ENGINE INLET HAZARD AREA, AND MAY CAUSE POSSIBLE PERSONNEL INJURY.

**WARNING:** DO NOT CONNECT SAFETY LANYARD ASSEMBLY TO ANY TUBING, WIRE HARNESS, ETC. DAMAGE TO ENGINE OR INJURY TO PERSONNEL MAY OCCUR.

- (16) On engine run, removal of side cowl panels is recommended (AMM 71-11-11). If side cowl panels are not removed, check that cowl hold-open rods are in place and locked by safety pins.

**WARNING:** DO NOT OPERATE ENGINE IN REVERSE THRUST MODE WITH ENGINE SIDE COWLS INSTALLED AND OPEN. DAMAGE TO ENGINE OR INJURY TO PERSONNEL MAY OCCUR.

**CAUTION:** DURING FREEZING CONDITIONS CHECK FOR ICE IN ENGINE INLET AND EXHAUST AREAS. TURN COMPRESSOR BY HAND AND CHECK FOR FREE ROTATION. IF ICE IS PRESENT, PREHEAT ENGINE WITH AIR HEATER UNTIL COMPRESSOR ROTATES FREELY.

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4. New Engine Ignition Check

A. General

- (1) Before introducing fuel to a newly installed engine, check ignition system operation.

**NOTE:** An operating igniter plug produces an easily heard sparking noise.

B. Check Engine Ignition

- (1) Perform engine operation preparations in par. 3.
- (2) Pull (open) START VALVES circuit breaker on P6 panel.
- (3) With start lever in CUTOFF, rotate engine start switch (forward overhead panel) to FLT. Make sure that igniters are not operating (Fig. 204).

**WARNING:** THE CURRENTS INVOLVED IN THE IGNITION SYSTEM CAN BE FATAL. DO NOT TOUCH IGNITER PLUGS WHILE THE IGNITION SYSTEM IS OPERATING.

**WARNING:** HIGH VOLTAGES WILL BE ENCOUNTERED WHILE FIRING IGNITERS. STAND CLEAR OF TAILPIPE; THERE MAY BE SUFFICIENT AMOUNT OF FUEL VAPOR PRESENT IN THE ENGINE TO CONSTITUTE AN EXPLOSIVE MIXTURE.

- (4) With engine start switch still in FLT position, move start lever to IDLE detent. Make sure that igniter sparking sound is heard.
- (5) With start lever in IDLE, rotate engine start switch to low IGN position. Make sure that igniter sparking sound is heard.
- (6) Return engine start switch to OFF position.
- (7) Push (close) START VALVES circuit breaker.
- (8) Move start lever to CUTOFF.

**NOTE:** Above procedure is a general check only. For a detailed ignition system test, refer to Chapter 74, Ignition System.

5. Motor Engine Procedure

A. General

- (1) An engine motoring run is required after an unsatisfactory start to clear the engine of trapped fuel and vapors. A motoring run may also be accomplished to bleed and depreserve the engine fuel control and to prime the constant speed drive unit.

B. Motor Engine

- (1) Perform Engine Operation Preparations in par. 3.
- (2) Check that engine start switch is positioned to OFF.

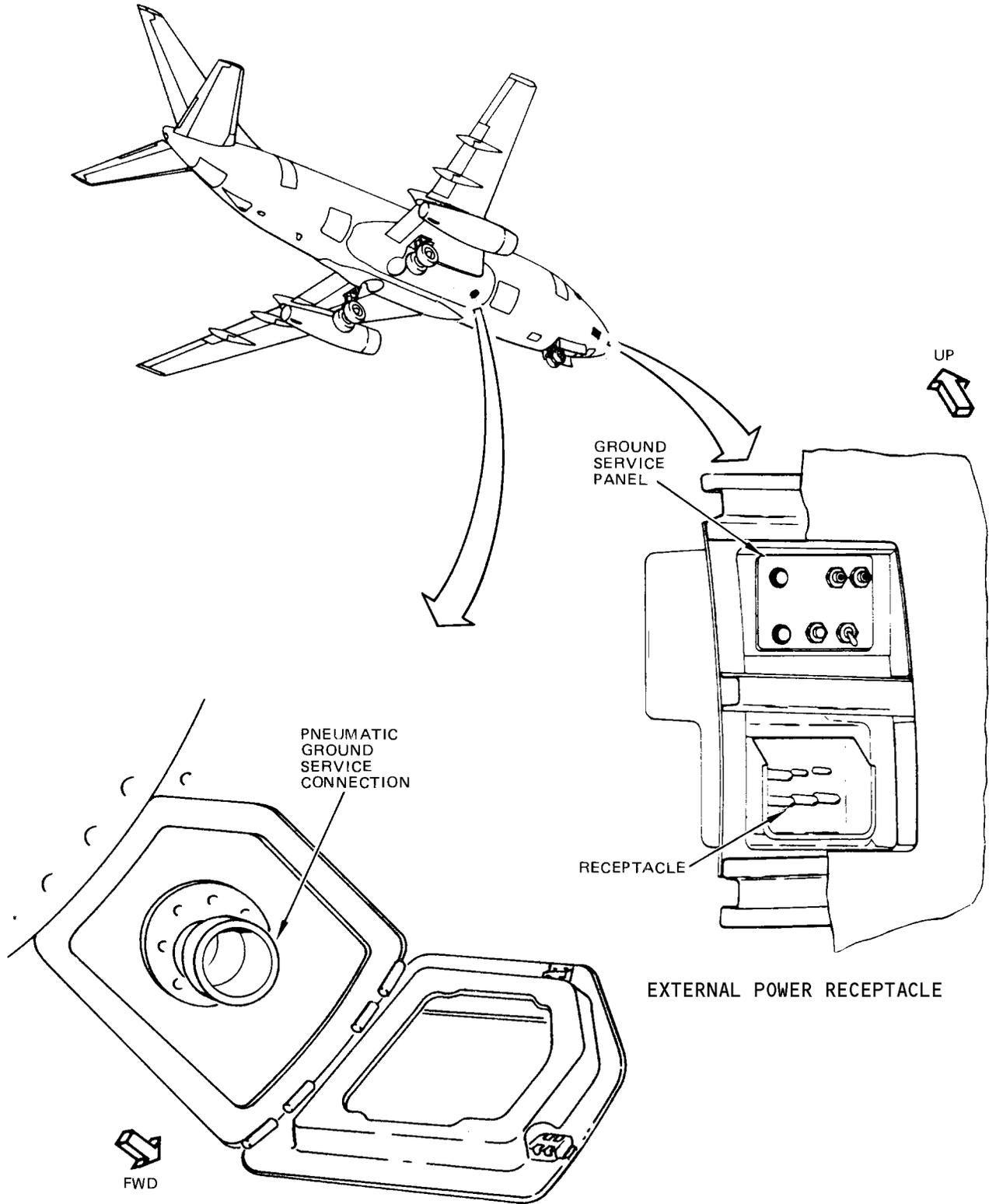
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External Pneumatic and Electrical Connections  
 Figure 204

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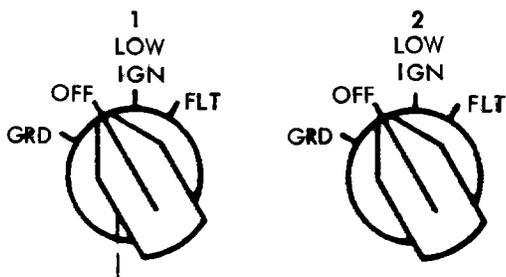
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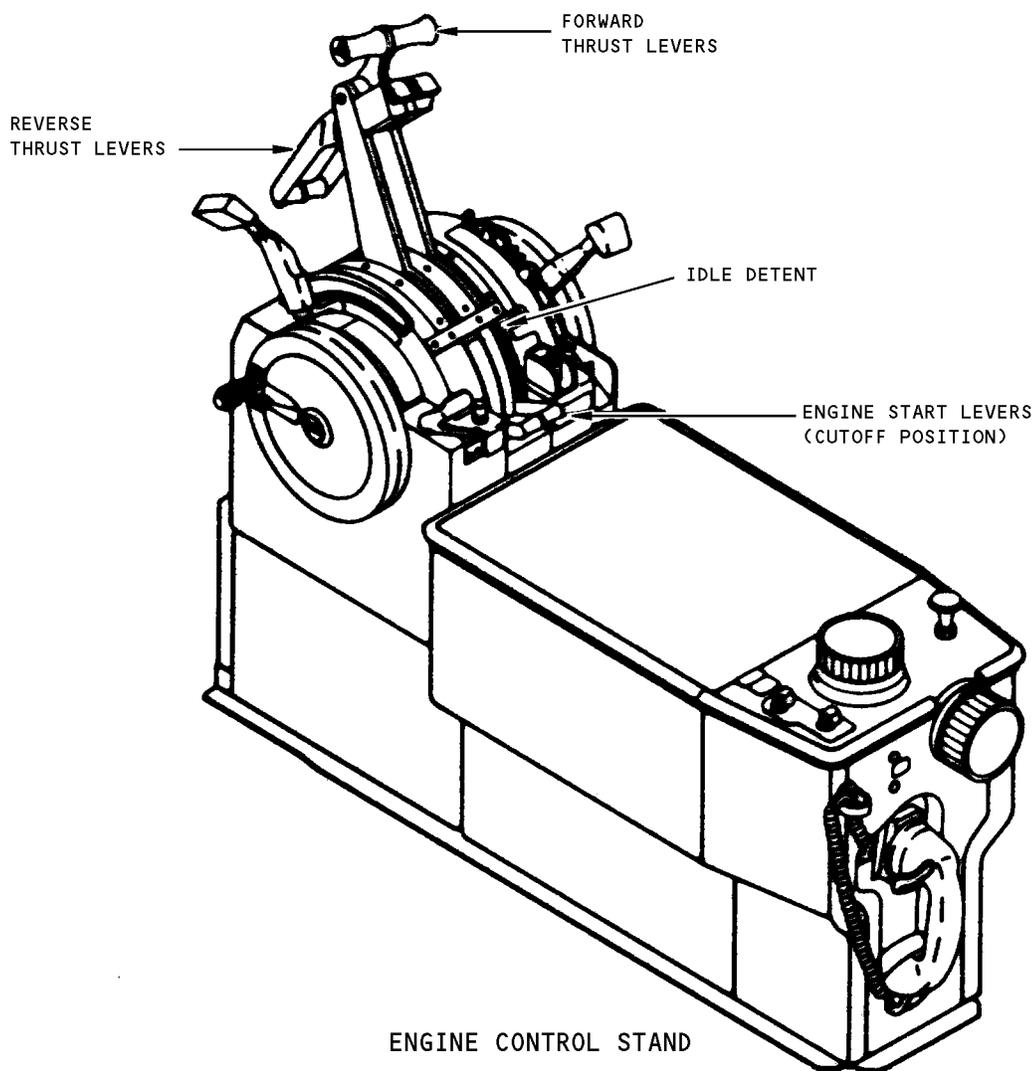
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ENGINE START



ENGINE START SWITCH PANEL



ENGINE CONTROL STAND

Engine Control Stand and Start Switch Panel  
 Figure 205

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- (3) Move engine start switch to GRD position and observe N2 rpm increase.

**NOTE:** Starter duty cycle for motoring engine is 2 minutes on and 5 minutes off.

**CAUTION:** IF THIS SWITCH IS RETURNED TO OFF PRIOR TO END OF MOTORING RUN, IT MUST NOT BE ENGAGED UNTIL 30 SECONDS AFTER ENGINE AND STARTER HAVE STOPPED ROTATING.

**CAUTION:** DO NOT EXCEED STARTER DUTY CYCLE OR DAMAGE TO STARTER MAY RESULT.

- (4) Check N1 and N2 tachometer indicators for correct direction of rotation.
- (5) Check engine oil pressure indicator, on center panel, for indication of oil pressure. Toward end of motoring run, LOW OIL PRESSURE warning light will go out as engine oil pressure reaches 35–38 psi.
- (6) Discontinue motoring by returning engine start switch to OFF.

**NOTE:** Clearing the engine of trapped fuel and vapors requires about 20 seconds of motoring.

### 6. New Engine Fuel Control Bleeding and Depreserving

#### A. General

- (1) Bleeding and depreservation of the engine fuel system is necessary prior to operation of a newly installed engine or fuel control to purge air and inhibiting oil from the fuel control.
- (2) It is not necessary to bleed and depreserve the engine fuel system after changing an engine fuel pump, fuel flowmeter, fuel heater, or after removal and subsequent installation of an engine fuel strainer. During the next engine run it will be necessary to purge air from the engine fuel system by exercising the throttle four or five times between idle and 90% N2 rpm, or until normal engine operation and throttle response is obtained.

#### B. Equipment and Materials

- (1) WA-12386 adapter or adapter plate fitted with a No. 16 Aeroquip fitting and length of hose for draining fluid from the fuel pressurizing and dump valve filter pad
- (2) 6-gallon container (minimum)

#### C. Prepare Fuel Control for Bleeding and Depreserving

- (1) Remove engine left removable cowl panel (AMM/71-11-11).
- (2) Perform Engine Operation Preparations in par. 3.

#### D. Bleed and Depreserve Fuel Control

- (1) On the forward overhead panel, position aft fuel pump switch, for the tank numbered the same as the engine being bled, to ON and check that its low pressure light goes out.

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- (2) Position forward fuel pump switch, for tank numbered the same as the engine being bled, to ON and check that its low pressure light goes out.

**NOTE:** If you must use the fuel boost pumps in the center tank, you must have a maintenance person or observer in the flight compartment to continuously monitor the LOW PRESSURE lights. Turn the applicable fuel boost pump to the OFF position if the LOW PRESSURE light for the center tank stays on.

- (3) Check the following items:
  - (a) FUEL light on annunciator panel at pilot's glare shield is out.
  - (b) FUEL VALVE CLOSED light on forward overhead panel is out if engine fuel shutoff valve is open.

**NOTE:** AR LV-JT0; EF N977MP AND ON; FL N73401 AND N7341F; Engine fuel shutoff valve will be closed and FUEL VALVE CLOSED light will be dim whenever start lever is at CUTOFF. Valve will open and light will go out when start lever is advanced to IDLE.

- (c) Applicable engine bleed air valve switch is on (forward overhead panel).
- (4) To prevent an inadvertent start during fuel control depreservation, pull (open) Engine Start Ignition circuit breakers and Low Energy Ignition circuit breakers (total of four), on P6 panel.
- (5) Check engine-driven fuel pump inlet pad for leaks.
- (6) Position a 6-gallon capacity container beneath the fuel pressurizing and dump valve.
- (7) Remove the fuel filter and cover from the square pad on the rear side of the fuel pressurizing and dump valve (P&D valve).

**CAUTION:** USE CARE TO PREVENT FILTER DAMAGE DURING REMOVAL AND INSTALLATION.

- (8) Install PWA-12386 adapter, or equivalent, on P&D valve pad and connect a suitable length of hose to the adapter outlet fitting to drain fuel to the 6-gallon (minimum) container (Fig. 206).

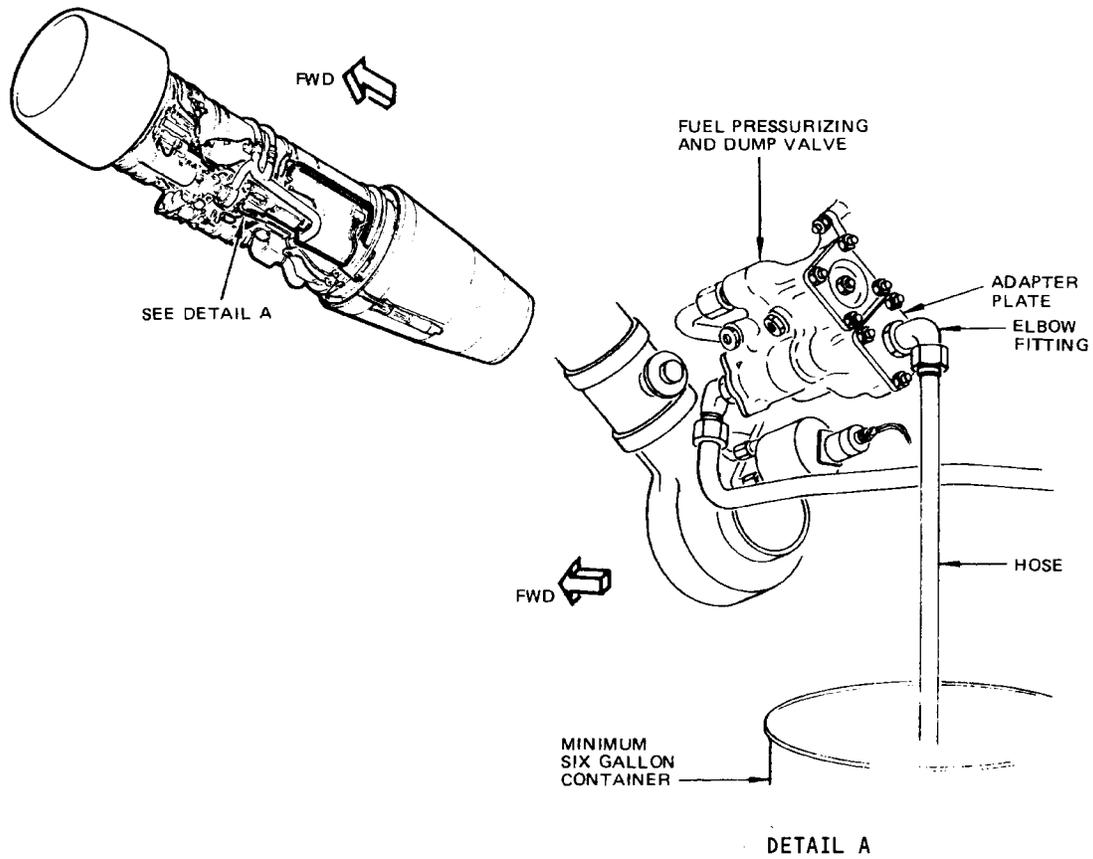
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Engine Fuel System Depreservation Connection  
 Figure 206

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- (9) Move engine start switch to GRD position and motor engine to approximately 20–25% N2. Advance start lever to IDLE and pass at least 2 gallons of fuel overboard through P&D valve drain hose. Observe starter duty cycle for motoring engine.

**CAUTION:** IF THIS SWITCH IS RETURNED TO OFF PRIOR TO END OF MOTORING RUN, IT MUST NOT BE ENGAGED UNTIL 30 SECONDS AFTER ENGINE AND STARTER HAVE STOPPED ROTATING.

**NOTE:** Cycling the thrust lever between idle and maximum thrust position while motoring the engine will assist purging air from the fuel control.

- (10) Discontinue motoring by retarding thrust lever to minimum thrust position, returning engine start switch to OFF and start lever to CUTOFF.
- (11) Turn off applicable forward and aft fuel pump switches.
- (12) Remove adapter from P&D valve filter pad and reinstall fuel filter and cover using a new O-ring.

### 7. Engine Prestart Procedure

- A. Prepare check sheet to record engine data during start and ground running operation.
- B. Check position of following switches on forward overhead panel:
- (1) Ground Power Switch – ON, if ground power is being used
  - (2) AC Meter Switch – GND POWER or APU GEN depending on power source
  - (3) Battery Switch – ON
  - (4) Engine Bleed Air Switches – ON
  - (5) Left and Right Pack Switches – OFF
  - (6) Fuel Pumps – OFF
  - (7) Fuel Heat Switches – OFF
  - (8) Hydraulic System A Engine Pump for Appropriate Engine – ON
  - (9) Hydraulic System B Electric Pumps – OFF
  - (10) Wing and Engine Inlet Anti-Ice Switches – OFF
- C. Push (close) Engine Start Ignition circuit breakers, Fuel Flow circuit breaker, and Low Energy Ignition circuit breakers (total of five) on P6 panel.

### 8. Engine Starting and Operating Limitations

**CAUTION:** GROUND RUNNING OF THE ENGINE AT TAKEOFF POWER SHALL BE RESTRICTED TO 5 MINUTES. THIS WILL PREVENT CERTAIN ENGINE COMPONENTS FROM EXCEEDING THEIR TEMPERATURE LIMITATION.

- A. In addition to monitoring engine starting and operating limitations, it is also necessary to monitor ignition system and air turbine starter limitations. Refer to Chapter 74, Ignition for ignition system limitations. The pneumatic starter duty cycle limitations are as follows:
- (1) For normal starting, the duty cycle is 30 seconds (maximum) on and 60 seconds off.

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- (2) For a slow starting engine, the duty cycle can be extended to a maximum at 60 seconds on, at speeds up to starter cutout speed (35 to 40% N2 rpm), and 60 seconds off. The extended duty cycle can be repeated once and then a 5-minute cooling period must be observed between extended duty cycle starts.
- (3) For motoring the engine, the duty cycle is 2 minutes on and 5 minutes off.
- (4) The starter re-engagement limits are as follows:
  - (a) Starter re-engagement is recommended at 0% N2 rpm.
  - (b) Starter re-engagement is not permitted above 20% N2 rpm.

**CAUTION:** IF YOU ENGAGE THE STARTER BEFORE THE ENGINE HAS COME TO A COMPLETE STOP, YOU CAN CAUSE DAMAGE TO THE STARTER OR GEARBOX.

**NOTE:** If it is possible, let the engine come to a complete stop before you re-engage the starter.

- (c) Starter engagement to clear a fire or after an EGT exceedance condition should be done only after N2 speed is zero.
- B. Recommended engine operating conditions and limitations are outlined in Fig. 207. The ratings listed in Fig. 207 are defined below and are obtained by positioning the thrust lever to a predetermined EPR.
- (1) TAKE-OFF
    - (a) This is the maximum thrust that can be used without overboosting the engine and is limited to a 5-minute time period. This rating is to be used for take-off only.
  - (2) MAX CONTINUOUS OR NORMAL RATED
    - (a) This rating is the maximum thrust which may be used continuously and is also the maximum thrust approved for normal climb.
  - (3) MAX CRUISE
    - (a) This is the maximum thrust approved for cruising.
  - (4) IDLE
    - (a) This is not a thrust rating, but a thrust lever position suitable for minimum thrust operation on the ground or in flight. It is obtained by fully retarding the thrust lever.
- C. The maximum allowable compressor rotor speeds are 100.1% (8600 rpm) for the N1 rotor and 100% (12,250 rpm) for the N2 rotor. Engines which are oversped to speeds between 8600 to 8980 (104.5% N1) or 12,250 to 12,550 (102.4 N2) must be given a thorough visual inspection, the rotors checked for free rotation and the cause of overspeed determined and corrected prior to continuing the engine in service. Engines which are oversped above 8980 (104.5% N1) or 12,550 (102.4% N2) must be sent to overhaul for complete inspection.

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- D. Conditions of overtemperature may be anticipated by excessively rapid increase in fuel flow, high pressure compressor rpm and/or temperature. When an overtemperature condition is anticipated or has occurred, the engine should be shut down in accordance with the caution steps outlined in the Start Engine procedure, step A.(8). The engine should not be restarted until the cause of the overtemperature is corrected and inspection shows that both compressors will rotate normally.
- E. Several momentarily high overtemperatures have as profound an effect on the expected service life of an engine as a single prolonged overtemperature of lesser degree. The higher the overtemperature, the less the time interval before serious engine damage occurs and, therefore, the more extensive the inspection required. Conversely, the lower the overtemperature the more time before serious damage occurs and the less stringent the inspection required.
- F. The overtemperature limits (Fig. 207) present the inspection procedures to be followed after an engine has been subjected to an overtemperature condition.
- G. Oil Consumption
- (1) For all engines without No. 4 bearing carbon seal oil consumption must not exceed 2 quarts or 0.50 gallon per hour.
  - (2) For all engines with No. 4 bearing carbon seal (incorporated in original build or by P&WA SB 5250), oil consumption must not exceed 1 quart or 0.25 gallon per hour.
  - (3) Engines which exceed these limits shall be investigated.

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| Operating Condition | Time Limit (Minutes) | Max Observed Exhaust Gas Temp (EGT) °C | Oil Press PSIG Normal *[1] | Maximum Oil Temperature °C *[2] |
|---------------------|----------------------|--|----------------------------|---------------------------------|
| Takeoff             | 5                    | 580 *[5]<br>590 *[6]                   | 40-55                      | 120                             |
| Max Continuous      | Continuous           | 540 *[5]<br>545 *[6]                   | 40-55                      | 120                             |
| Max Cruise          | Continuous           | 520 *[5]<br>525 *[6]                   | 40-55                      | 120                             |
| Idle                | Continuous           | 420 *[3]<br>480 *[3]                   | 40 Min                     | 120                             |
| Starting            | Momentary            | 350 *[4]<br>420 *[4]                   |                            |                                 |
| Acceleration        | *[7]                 | 580 *[5]<br>590 *[6]                   | 40-55                      | 120                             |

\*[1] Normal oil pressure is 40 to 55 psi. At idle and above, oil pressures between 35 and 40 psi are undesirable. The cause of the low oil pressure indication should be investigated and the fault corrected immediately. Oil pressures below 35 psi are unsafe and the engine should be shut down immediately.

\*[2] If engine oil temperature exceeds maximum steady state temperature limit of 248°F (120°C) for not more than 15 minutes, the engine may be continued in service only after cause of temperature has been determined and corrected. If oil-in temperature exceeds maximum steady state temperature limit of 248°F (120°C) for more than 15 minutes but does not exceed 315°F (157°C), engine oil shall be drained, all external oil screen elements shall be inspected for foreign matter, and corrective action taken for cause of overtemperature.

**NOTE:** After throttle reduction at end of cruise and start of descent, it is permissible for oil temperature to exceed 248°F (120°C) for not more than 15 minutes, provided it does not exceed 315°F (157°C), with no determination of cause or maintenance action.

\*[3] When airbleed or power extraction is being used, 480°C applies. When no airbleed or power extraction is used, 420°C applies. This is a reference temperature which, if exceeded, would indicate an abnormal engine operating condition. Further operation of an engine exhibiting this condition should be at the discretion of the operator.

Engine Starting and Operating Limitations  
 Figure 207 (Sheet 1)

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\*[4] Maximum EGT during starting is either 350°C at ambient temperatures of 59°F and below or 420°C at ambient temperatures above 59°F. Each temperature is limited to a momentary time period during starting. If either limit is exceeded, the engine should be shut down and inspected in accordance with the instructions in Chapter 72, Engine.

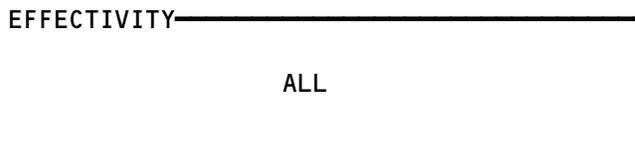
NOTE: Momentary is considered a period not to exceed 15 seconds.

\*[5] Effective for JT8D-9 engines only.

\*[6] Effective for JT8D-9A engines only.

\*[7] Acceleration limit is intended only to allow for transitory EGT indications. Stabilized EGT must be at or below Operating Limit for applicable Operation Condition within two minutes of advancing throttle.

Engine Starting and Operating Limitations  
Figure 207 (Sheet 2)



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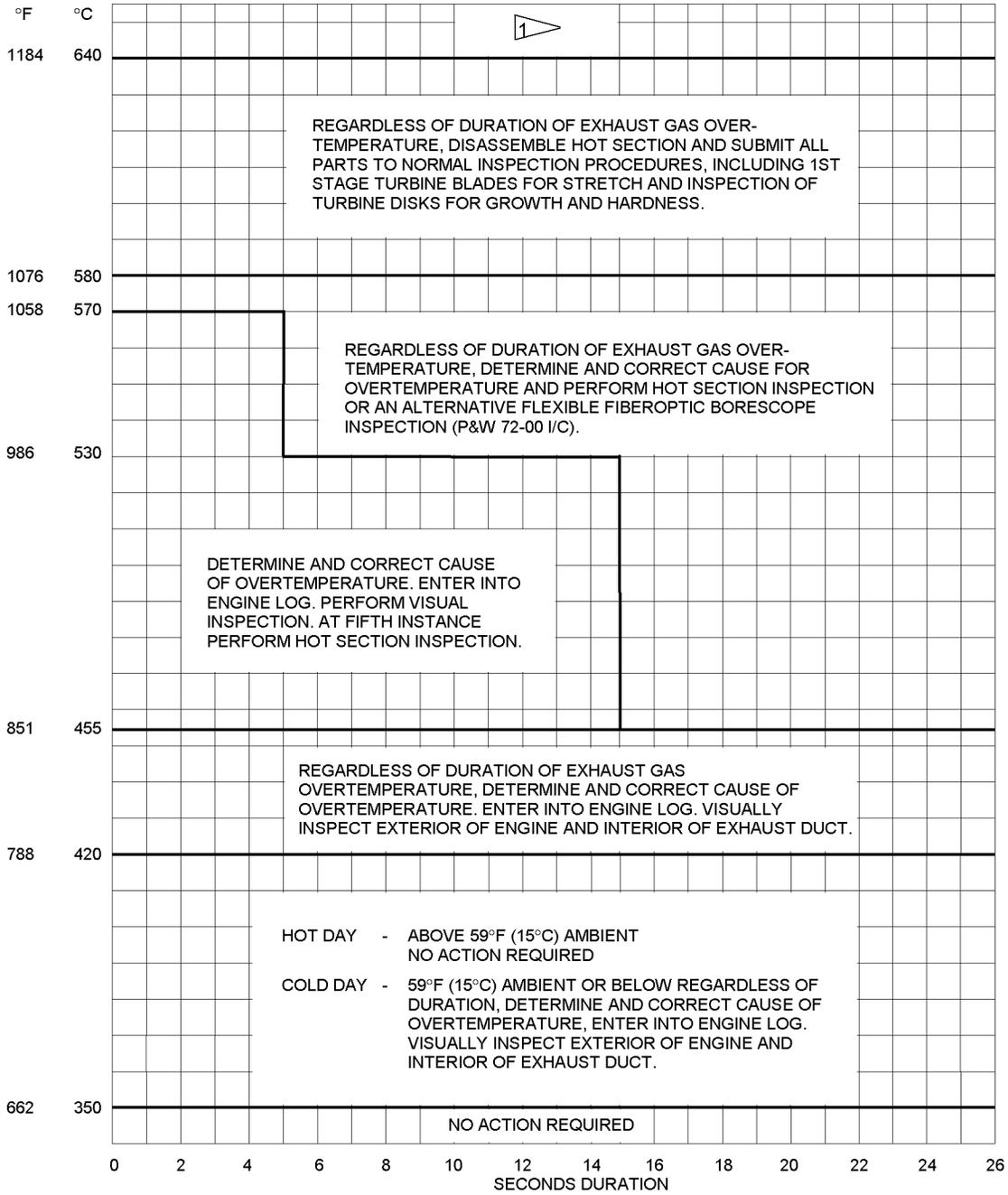
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**JT8D-9 STARTING OVERTEMPERATURE LIMITS AND INSPECTION PROCEDURES**



**1** FOR EXHAUST GAS TEMPERATURE IN EXCESS OF 1184°F (640°C) REGARDLESS OF DURATION INSPECT PER P&W 72-00 A/T.

**Engine Starting and Operating Limitations  
Figure 207 (Sheet 3)**

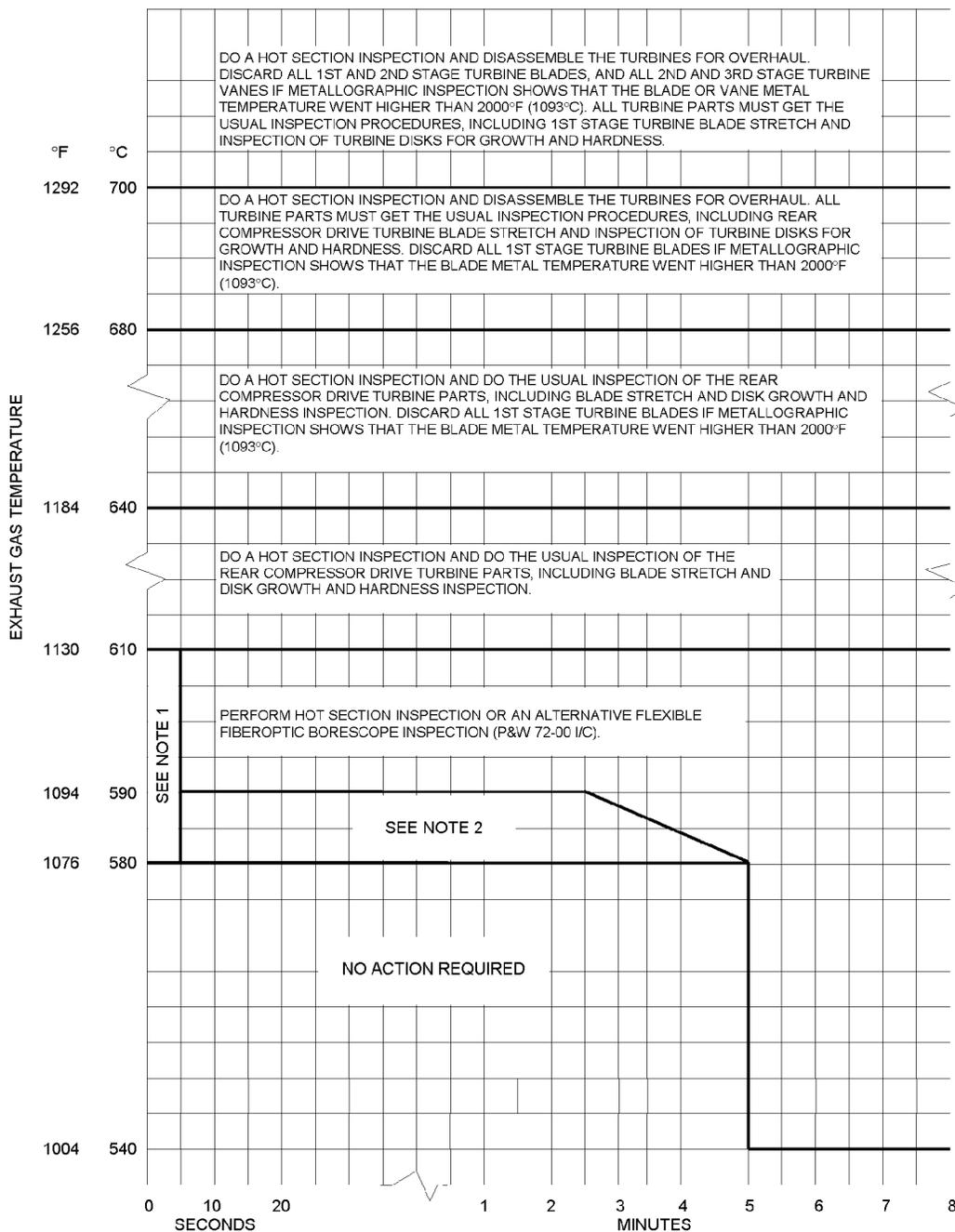
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**MAINTENANCE MANUAL**

**JT8D-9 OVERTEMPERATURE  
LIMITS AND INSPECTION PROCEDURES (EXCEPT STARTING)**



**NOTE 1:** FOR EXHAUST GAS TEMPERATURES BETWEEN 1076 - 1130°F (580 - 610°C), WITH A DURATION OF 5 SECONDS OR LESS, DETERMINE AND CORRECT CAUSE OF OVERTEMPERATURE. VISUALLY CHECK EXHAUST DUCT, AND REAR OF LOW TURBINE FOR BURNING, DISTORTION, METAL PARTICLES OR EVIDENCE OF UPSTREAM BLADE AND/OR VANE DAMAGE. INSPECT ENGINE INLET FOR EVIDENCE OF BLADE OR VANE DAMAGE.

**NOTE 2:** FOR EXHAUST GAS TEMPERATURES BETWEEN 1076 - 1094°F (580 - 590°C), WITH A DURATION LONGER THAN 5 SECONDS, DETERMINE AND CORRECT CAUSE OF OVERTEMPERATURE AFTER FIRST OCCURRENCE. ENTER INTO ENGINE LOG. AFTER SECOND OCCURRENCE, PERFORM HOT SECTION INSPECTION WITHIN THE NEXT 40 HOURS OF ENGINE OPERATION OR BY TENTH OCCURRENCE, WHICHEVER OCCURS FIRST. DETERMINE AND CORRECT CAUSE OF OVERTEMPERATURE. VISUALLY CHECK EXHAUST DUCT, AND REAR OF LOW TURBINE FOR BURNING, DISTORTION, METAL PARTICLES OR EVIDENCE OF UPSTREAM BLADE AND/OR VANE DAMAGE. INSPECT ENGINE INLET FOR EVIDENCE OF BLADE OR VANE DAMAGE.

**Engine Starting and Operating Limitations  
Figure 207 (Sheet 4)**

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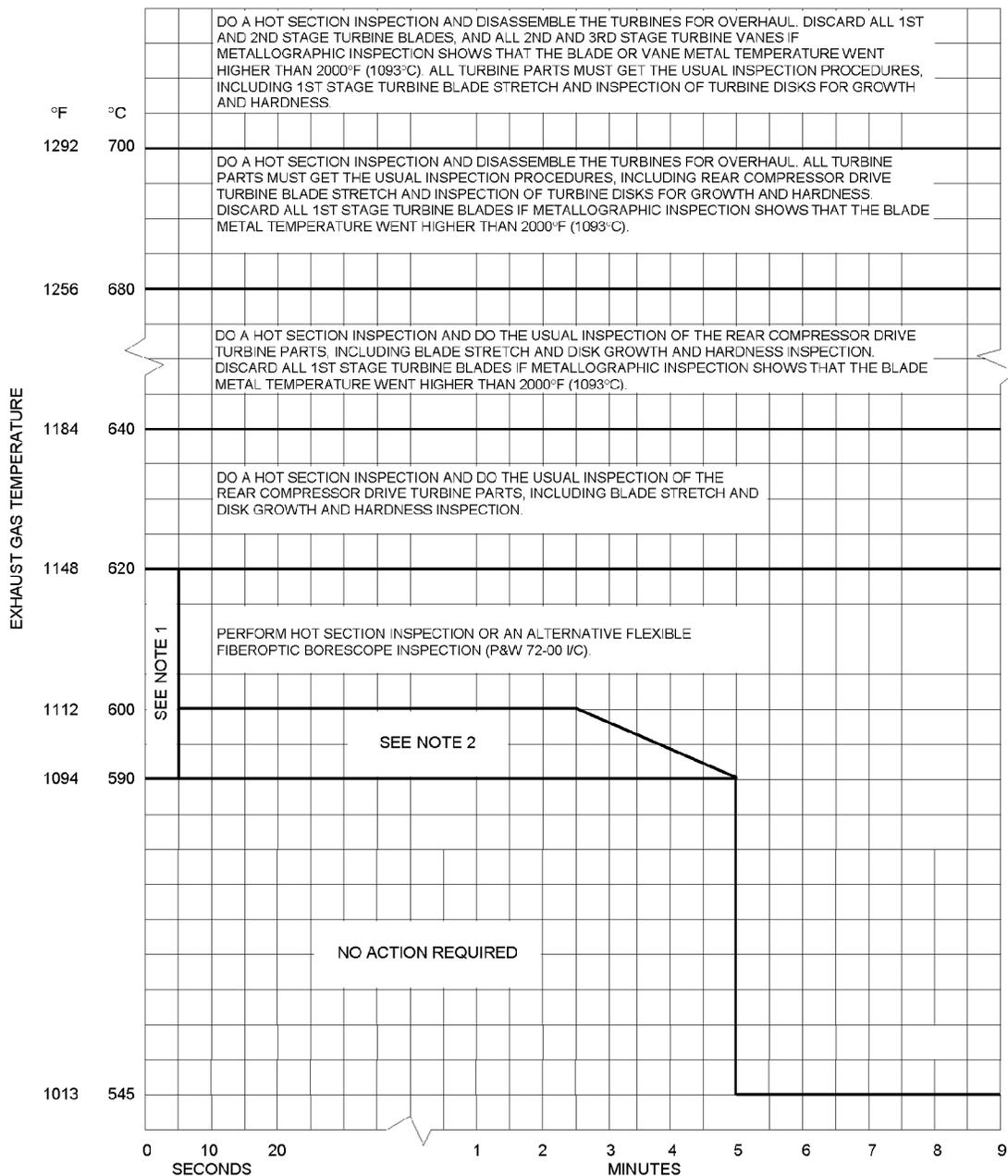
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**JT8D-9A OVERTEMPERATURE  
LIMITS AND INSPECTION PROCEDURES (EXCEPT STARTING)**



**NOTE 1:** FOR EXHAUST GAS TEMPERATURES BETWEEN 1094 - 1148°F (590 - 620°C), WITH A DURATION OF 5 SECONDS OR LESS, DETERMINE AND CORRECT CAUSE OF OVERTEMPERATURE. VISUALLY CHECK EXHAUST DUCT, AND REAR OF LOW TURBINE FOR BURNING, DISTORTION, METAL PARTICLES OR SIGNS OF UPSTREAM BLADE AND/OR VANE DAMAGE. INSPECT ENGINE INLET FOR EVIDENCE OF BLADE OR VANE DAMAGE.

**NOTE 2:** FOR EXHAUST GAS TEMPERATURES BETWEEN 1094 - 1112°F (590 - 600°C), WITH A DURATION LONGER THAN 5 SECONDS, DETERMINE AND CORRECT CAUSE OF OVERTEMPERATURE AFTER FIRST OCCURRENCE. ENTER INTO ENGINE LOG. AFTER SECOND OCCURRENCE, DO A HOT SECTION INSPECTION OR AN ALTERNATIVE FLEXIBLE FIBEROPTIC BORESCOPE INSPECTION IN THE NEXT 40 HOURS OF ENGINE OPERATION OR BY TENTH OCCURRENCE, WHICHEVER OCCURS FIRST. DETERMINE AND CORRECT CAUSE OF OVERTEMPERATURE. VISUALLY CHECK EXHAUST DUCT, AND REAR OF LOW TURBINE FOR BURNING, DISTORTION, METAL PARTICLES OR EVIDENCE OF UPSTREAM BLADE AND/OR VANE DAMAGE. INSPECT ENGINE INLET FOR EVIDENCE OF BLADE OR VANE DAMAGE.

**Engine Starting and Operating Limitations  
Figure 207 (Sheet 6)**

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9. Engine Start Procedure

A. Start Engine (Ground Low Pressure or APU Air Source)

**CAUTION:** DURING FREEZING CONDITIONS CHECK FOR ICE IN ENGINE INLET AND EXHAUST. TURN COMPRESSOR BY HAND AND CHECK FOR FREE ROTATION. IF ICE IS PRESENT, PREHEAT ENGINE WITH AIR HEATER UNTIL COMPRESSOR ROTOR TURNS FREELY.

- (1) Perform Engine Operation Preparations in par. 3 and Engine Prestart Procedure in par. 7.
- (2) Position fuel pump switches for applicable tank to ON. Make sure that low fuel pressure lights go out.

**NOTE:** If you must use the fuel boost pumps in the center tank, you must have a maintenance person or observer in the flight compartment to continuously monitor the LOW PRESSURE lights. Turn the applicable fuel boost pump to the OFF position if the LOW PRESSURE light for the center tank stays on.

- (3) Position hydraulic system B electrical pump 1 switch to ON. Check that low pressure light goes out.
- (4) Position hydraulic ground interconnect switch to OPEN.
- (5) Position bleed air isolation valve switch to OPEN.
- (6) Position applicable engine bleed air switch to ON. Check that pneumatic manifold pressure is greater than 30 psig.

**NOTE:** If APU is to be used for pneumatic source during engine start, position APU bleed air switch to ON. Check that dual bleed light on P5 panel comes on.

- (7) Move engine start switch to GRD position and release.

**NOTE:** The engine start switch is held in the GRD position by a holding solenoid. When starter cutout speed is reached, the holding solenoid is de-energized and the start switch automatically returns to OFF position.

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- (8) When N2 rpm reaches 15% (minimum) and N1 rotation is observed, move engine start lever to IDLE detent.

**NOTE:** To give improved hot section life, it is recommended that movement of the start lever out of the CUTOFF position be delayed until the engine has reached 20% N2 rpm, when possible. Make sure adequate duct pressure is available.

- (9) Monitor engine instruments during start to prevent damage to the engine.

**CAUTION:** WHENEVER, (1) THE ENGINE FAILS TO LIGHT WITHIN 20 SECONDS, (2) AN INDICATION OF N1 RPM IS NOT EVIDENT BY 20% N2 RPM, (3) A STARTING FUEL FLOW OF 1,100 LB/HR (500 KG/HR) OR MORE, OR (4) THE EGT IS CLIMBING RAPIDLY THROUGH 400°C DURING A START, RETURN THE START LEVER TO CUTOFF. CONTINUE TO MOTOR THE ENGINE FOR 10 TO 15 SECONDS TO REMOVE FUEL AND VAPOR OR EVIDENCE OF FIRE FROM WITHIN THE ENGINE, OR UNTIL EGT BECOMES NORMAL. AFTER SATISFACTORY CLEARING OF THE ENGINE, OVERRIDE THE ENGINE START SWITCH SOLENOID AND RETURN THE SWITCH TO OFF. IF STARTER IS DISENGAGED, DO NOT RE-ENGAGE STARTER WHILE REAR COMPRESSOR ROTOR IS ROTATING, IN ORDER TO EXTEND STARTER LIFE AND REDUCE CHANCE OF FAILURE OF STARTER SHEAR SECTION OR ENGINE DRIVESHAFT. AFTER ENGINE ROTATION CEASES, AND BEFORE ANOTHER START ATTEMPT, DETERMINE AND RECTIFY CAUSE OF THE UNSATISFACTORY START.

**NOTE:** The engine should light up within 20 seconds after start lever is moved to the IDLE detent. N2 rpm and EGT should be monitored immediately after light up to ascertain that engine accelerates normally and that EGT does not exceed limits specified in Engine Starting and Operating Limitations (Fig. 207).

**NOTE:** Following the above procedure during a developing hot start can usually prevent exceeding the temperature limits.

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- (10) Check for starter cutout at 40% N2 rpm by observing a rise in pneumatic duct pressure and an audible starter solenoid valve actuation. On airplanes with start valve open light, check that light extinguishes. Check that start switch returns to OFF automatically at starter cutout. If using APU for starting, place APU bleed air switch or applicable engine bleed air switch in OFF position and check that dual bleed light goes out.

**CAUTION:** IF START VALVE LIGHT REMAINS ILLUMINATED, SHUT ENGINE DOWN IMMEDIATELY. CONTINUED ENGINE OPERATION WITH START VALVE LIGHT ILLUMINATED MAY RESULT IN DAMAGE DUE TO STARTER DISINTEGRATION. DO NOT EXCEED THE RECOMMENDED STARTER DUTY CYCLE.

- (11) If N2 has exceeded 40% and starter cutout has not occurred, manually return start switch to OFF and check for starter cutout by observing a rise in pneumatic duct pressure.
- (12) If pneumatic duct pressure does not indicate starter cutout even after manual switching, shut down engine, depressurize pneumatic duct, and correct malfunction before attempting restart.

**CAUTION:** IF FUEL IS SHUT OFF BY INADVERTENT MOVEMENT OF THE START LEVER, DO NOT MOVE THE START LEVER IN AN ATTEMPT TO CONTINUE THE START. RETURN START LEVER TO CUTOFF AND THEN RETURN START SWITCH TO OFF. WAIT 30 SECONDS AFTER ENGINE HAS STOPPED ROTATING AND THEN MOTOR ENGINE FOR 20 SECONDS WITH THE START LEVER IN CUTOFF TO CLEAR ENGINE OF TRAPPED FUEL AND VAPORS. IF STARTER IS DISENGAGED, DO NOT RE-ENGAGE STARTER WHILE REAR COMPRESSOR ROTOR IS ROTATING, IN ORDER TO EXTEND STARTER LIFE AND REDUCE CHANCE OF FAILURE OF STARTER SHEAR SECTION OR ENGINE DRIVE SHAFT. OBSERVE STARTER LIMITATIONS. IF ENGINE START WAS ABORTED DUE TO HUNG START, CHECK POSITION OF TURBOFAN VALVE (AMM 21-52-0) AND AIR CLEANER PURGE VALVE (AMM 21-12-0). VALVES MUST BE IN CLOSED POSITION BEFORE ATTEMPTING ANOTHER START.

**NOTE:** Starter cutout causes a sudden recovery of pneumatic duct pressure.

**NOTE:** Never permit the engine to take longer than 30 seconds to accelerate from light off to idle rpm. In the event of such a hung start discontinue the starting attempt and investigate.

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- (13) Check that engine accelerates normally to idle rpm and that oil pressure warning light and CSD low pressure light go out.

**NOTE:** For JT8D engines incorporating the 15 or 40 micron main oil filter: Illumination of the differential oil pressure warning light may be caused by contaminant material in the filter, by cold, viscous oil, or by a combination of the two. In general, when oil temperature is above 25°C (77°F) at idle, illumination of the warning light indicates the presence of contaminants alone and the filter should be serviced immediately. If oil temperature is 25°C or below, the warning light may remain on after start, but should go out as the oil warms. Normally the oil will warm sufficiently within 5 minutes to extinguish the warning light.

- (14) Allow engine to stabilize at idle rpm. For a standard day at sea level, check instrument readings as follows:
- (a) EPR: approximately 1.06
  - (b) EGT: 300 to 340°C (480°C maximum) (Fig. 207)
  - (c) N2 rpm: approximately 57% N2 (Fig. 208)
  - (d) Fuel flow: approximately 1100 to 1300 pounds (500 to 590 kg ) per hour
  - (e) Oil pressure: 44 to 46 psi (55 psi maximum)
  - (f) Oil temperature: 40 to 60°C (120°C maximum)

**NOTE:** The instrument readings shown above are considered to be normal readings for the JT8D engine. See Fig. 207 for engine operating limits.

- (15) If noticeable drop in engine oil quantity occurs after starting engine, operate engine at IDLE for approximately 1 minute, then immediately shut down engine and perform an oil level check within 30 minutes of shutdown.

**CAUTION:** UP TO TWO GALLONS OF OIL MAY BE IN THE ENGINE SCAVENGE SECTIONS. TO ASSURE AN ACCURATE OIL LEVEL CHECK, OIL MUST NOT BE ADDED TO THE TANK UNTIL THE SCAVENGE SECTIONS ARE CLEARED. IF THE ABOVE PROCEDURE IS NOT FOLLOWED, EXCESS OIL ADDED MAY BUILD UP SUFFICIENT INTERNAL PRESSURE TO RUPTURE THE TANK DURING ENGINE OPERATION.

- (16) If no longer required, shut down APU or remove electrical power and pneumatic supply from airplane.

**WARNING:** OBSERVE ENGINE HAZARD AREAS DESCRIBED IN FIG. 201 WHEN WORKING WITH EXTERNAL ELECTRICAL OR PNEUMATIC SUPPLIES AT THE AIRPLANE DURING ENGINE OPERATION.

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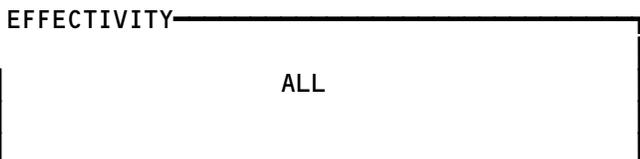
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| TEMP<br>°F | IDLE<br>% N2 |
|------------|--------------|------------|--------------|------------|--------------|------------|--------------|
| -60        | 56.4         | -10        | 54.0         | 40         | 56.4         | 90         | 58.5         |
| -55        | 56.2         | -5         | 54.1         | 45         | 56.6         | 95         | 58.7         |
| -50        | 55.9         | 0          | 54.2         | 50         | 56.8         | 100        | 59.0         |
| -45        | 55.6         | +5         | 54.5         | 55         | 57.0         | 105        | 59.2         |
| -40        | 55.3         | 10         | 54.8         | 60         | 57.2         | 110        | 59.4         |
| -35        | 55.0         | 15         | 55.1         | 65         | 57.5         | 115        | 59.6         |
| -30        | 54.6         | 20         | 55.4         | 70         | 57.7         | 120        | 59.8         |
| -25        | 54.3         | 25         | 55.7         | 75         | 57.9         |            |              |
| -20        | 54.1         | 30         | 55.9         | 80         | 58.1         |            |              |
| -15        | 54.0         | 35         | 56.1         | 85         | 58.3         |            |              |

ENGINE CONDITIONS:      1) AIR CONDITIONING AND ANTI-ICING OFF  
    2) AC GENERATOR OFF  
 SETTING TOLERANCE:      +2.0/-1.0% N2

Idle Rpm Values  
 Figure 208



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**B. Start Engine (Pneumatic - Cross-Start)**

**CAUTION:** DURING FREEZING CONDITIONS CHECK FOR ICE IN ENGINE INLET AND EXHAUST. TURN ENGINE COMPRESSOR BY HAND AND CHECK FOR FREE ROTATION. IF ICE IS PRESENT, PREHEAT ENGINE WITH AIR HEATER UNTIL COMPRESSOR ROTOR TURNS FREELY.

**CAUTION:** IF THE AIRPLANE IS PARKED ON ICE OR SNOW, A LOW PRESSURE GROUND CART OR THE AIRPLANE APU IS RECOMMENDED FOR ENGINE STARTING SINCE ASYMMETRIC THRUST DURING CROSS-STARTS MAY CAUSE THE AIRPLANE TO SWING AROUND. ICE CHOCKS AND A HIGH AIRPLANE GROSS WEIGHT WILL TEND TO MINIMIZE THIS CONDITION.

- (1) Perform Engine Operation Preparations in par. 3 and Engine Prestart Procedure in par. 7.
- (2) Operate started engine at idle.
- (3) Check position of switches on forward overhead panel as follows:
  - (a) Fuel Pumps for Engine to be Started - ON.

**NOTE:** If you must use the fuel boost pumps in the center tank, you must have a maintenance person or observer in the flight compartment to continuously monitor the LOW PRESSURE lights. Turn the applicable fuel boost pump to the OFF position if the LOW PRESSURE light for the center tank stays on.

- (b) Engine Bleed Air Switches - ON.
- (c) Bleed Air Isolation Valve Switch - OPEN.
- (d) Hydraulic System B Electric Pump 1 - ON.
- (e) Hydraulic System A Pump (operating engine) - ON.
- (f) Hydraulic Ground Interconnect - CLOSE.

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- (4) Increase power on operating engine to 80–85% N2. Check that dual pressure gage, on forward overhead panel reads approximately 30 psig (minimum) to 48 psig (maximum). Do not exceed 85% N2.

**CAUTION:** INSUFFICIENT AIR PRESSURE TO THE PNEUMATIC STARTER MAY PRODUCE INADEQUATE STARTER TORQUE AND RESULT IN HOT, HUNG, OR TORCHING STARTS. WHEN AIRBLEED FROM AN OPERATING ENGINE IS USED TO OPERATE THE STARTER, CAUTION IS NECESSARY TO MAKE SURE THAT THE OPERATING ENGINE IS TURNING OVER FAST ENOUGH TO PROVIDE AN ADEQUATE SUPPLY OF PRESSURIZED AIR TO THE ENGINE BEING STARTED. IN THE EVENT OF TORCHING, HIGHER THAN NORMAL EXHAUST GAS TEMPERATURE, PROLONGED ENGINE ACCELERATION TIME, OR OTHER ABNORMALITIES, DISCONTINUE THE START AND INVESTIGATE.

**NOTE:** If an abnormally high N2 (87% to 90%) is required, investigate for an open or leaking duct or open valve. If an abnormally low N2 (70% to 75% or less) is required to attain 30 psig, it is possible that 13th rather than 8th stage air is being used for cross-starting; investigate for a malfunctioning modulation valve.

- (5) Continue start procedure per par. A.(7) thru (13).  
(6) Retard thrust lever to IDLE on engine used for cross-start after engine started attains idle rpm or, if desired, retard thrust lever to IDLE anytime after engine being started attains starter cutout speed (35% to 40% N2).

### 10. New Engine Operating Procedure

- A. Check thrust reverser operation (AMM 78–32–01/501).

**WARNING:** DO NOT OPERATE ENGINE IN REVERSE THRUST MODE WITH ENGINE SIDE COWLS INSTALLED AND OPEN. DAMAGE TO ENGINE OR INJURY TO PERSONNEL MAY OCCUR.

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B. Operate New Engine

- (1) Operate engine at idle rpm for 5 minutes or until rpm stabilizes.
- (2) Adjust engine oil pressure (par. 11).
- (3) With engine at idle, check engine bleed ducts and all joints for leaks or other defects. Diffused leakage is permitted at a joint, however, jet blasts are not allowable. There shall be no evidence of defective ball joints or connections.
- (4) Purge air from engine fuel control by accelerating engine four or five times between idle and 90% N2 rpm or until fuel flow indication and throttle response is normal and return thrust lever to idle.
- (5) Slowly accelerate engine and record N1 speed at which antisurge bleed valves close. Bleed closing is indicated by a sudden increase in EPR.
- (6) Slowly decelerate engine from a stabilized point just above bleed valve closing and record N1 speed at which antisurge bleed valves open. Bleed valve opening is indicated by a sudden decrease in EPR.

NOTE: Engine prior to P&WA SB 5425 bleed configuration will indicate EPR increment of approximately 0.05 at constant power lever position during antisurge bleed actuation. Engine incorporating P&WA SB 5425 bleed configuration will indicate smaller EPR shift of approximately 0.02.

- (7) Check bleed valve opening and closing per Antisurge Bleed Chart (Fig. 209).
- (8) Increase power to 85% N2 rpm. Position engine inlet anti-ice switch to ON and observe EPR decrease. EPR should decrease approximately 0.05 unit. After 15 to 20 seconds, position inlet anti-ice switch to OFF.
- (9) With power still at 85% N2, check fuel system as follows:
  - (a) Operate engine from its own tank for 25 to 30 seconds, with both fuel pumps OFF, crossfeed valve closed, center tank fuel pumps OFF (fuel warning light on glare shield annunciator panel will come on).
  - (b) Monitor engine fuel flow at center panel. A deterioration in fuel flow is cause for suspecting a partially clogged fuel line and should be investigated.

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- (c) Turn on fuel pumps. For additional fuel system checks, refer to Chapter 28, Fuel.

**NOTE:** If you must use the fuel boost pumps in the center tank, you must have a maintenance person or observer in the flight compartment to continuously monitor the LOW PRESSURE lights. Turn the applicable fuel boost pump to the OFF position if the LOW PRESSURE light for the center tank stays on.

- (10) Retard thrust lever to idle position. Check that antisurge bleed valves open as scheduled in Fig. 209.
- (11) Check fuel deicing system operation as follows:
- (a) Move fuel heat switch on forward overhead panel to ON position.
  - (b) Observe a drop in engine N2 rpm as the valves open.
  - (c) After approximately 60 seconds, the valve should automatically close. Observe that N2 rpm returns to its original value. For additional fuel deicing system checks, refer to Chapter 73, Engine Fuel Heating (Deicing) System.
- (12) Observe the generator drive oil temperature gage on the forward overhead panel for a small rise in temperature.
- (13) Turn on the generator of the applicable engine and position the AC meter switch to this generator. Observe that the generator is producing 115 volts and 400 cps.
- (14) Turn off and on the applicable system A hydraulic pump switch and observe that system A depressurizes and repressurizes on the hydraulic system pressure gage on the first officer's panel.

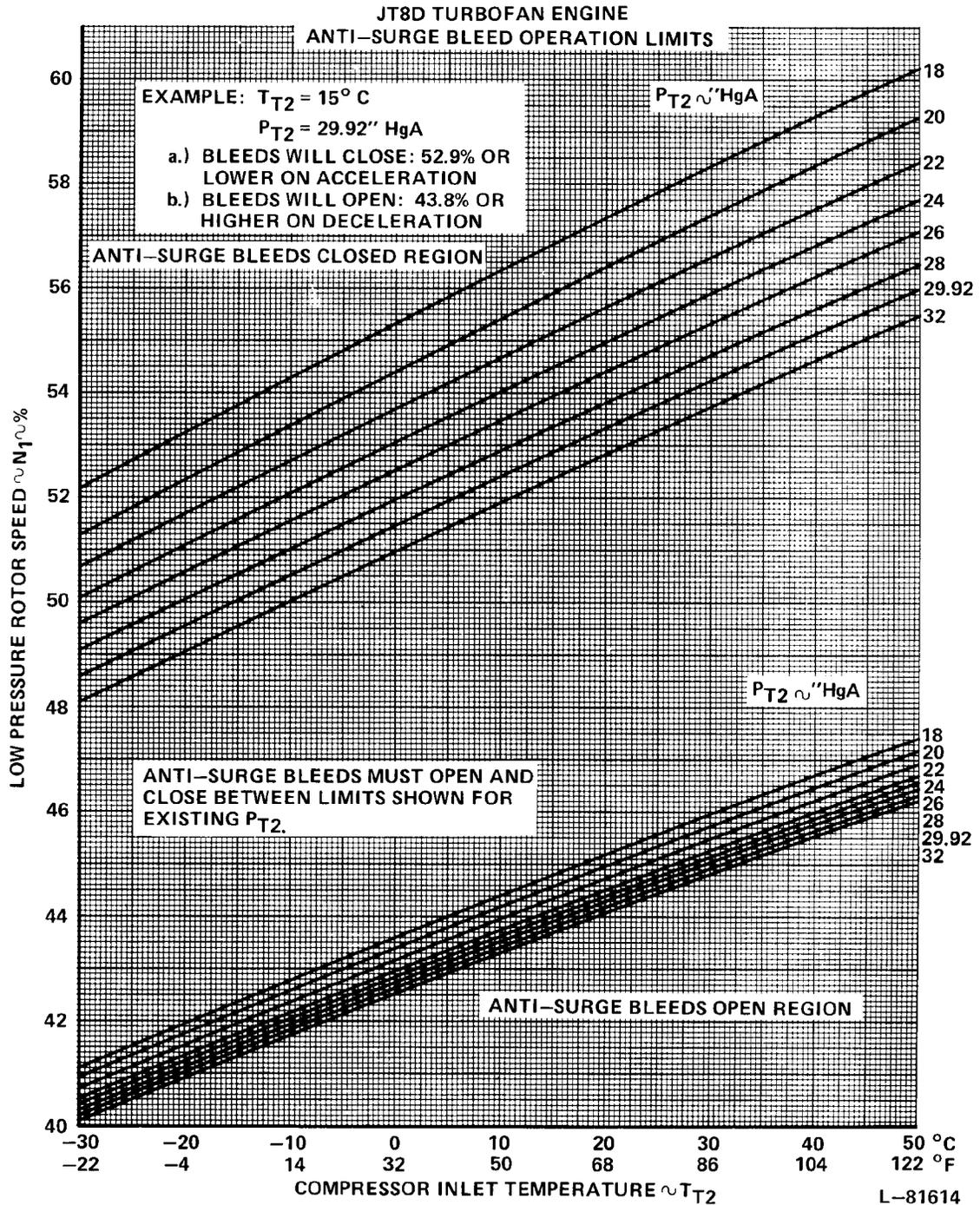
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Compressor Anti-Surge Bleed Valve Schedule  
 Figure 209

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11. Engine Oil Pressure Adjustment

A. Equipment and Materials

- (1) 7/16-inch deep socket with external flats for engine oil pressure adjustment (Boeing tool SE72-6001,)
- (2) Oil Pressure Relief Valve Installation Tool - 1-1/2-inch wrench

B. Adjust Engine Oil Pressure

- (1) On engines with ambient vented oil pressure transmitter system, if oil pressure adjustment is required because of high oil pressure indication, check oil breather pressure prior to adjusting engine oil pressure (AMM 79-21-0).
- (2) Operate engine at idle rpm for 5 minutes or until engine stabilizes.
- (3) Remove plug and packing from oil pressure relief valve, located on left side of accessory drive gearbox housing, while holding the hex fitting on the valve housing with 1-1/2-inch wrench (Fig. 210).

**CAUTION:** IF THE VALVE HOUSING IS REMOVED, OIL WILL DRAIN FROM THE TANK AND PRESSURE RELIEF VALVE PARTS WILL BE RELEASED AND WILL FALL TO THE GROUND.

- (4) Carefully loosen the adjusting screw locknut.
- (5) While the oil pressure indicator on the center panel is monitored, turn the adjusting screw with a screwdriver to obtain an oil pressure of 44 to 46 psig at idle rpm.

**NOTE:** Turn the adjusting screw clockwise to increase oil pressure and counterclockwise to decrease pressure. One full turn changes pressure by approximately 2 psig.

- (6) Tighten the locknut and recheck the oil pressure indicator.

**NOTE:** For consistent readings, hold the adjusting screw with a screwdriver while tightening the locknut. Tightening of the locknut will be facilitated if a deep socket with external flats is used (Boeing tool SE72-6001, or equivalent). The adjusting screw may then be held with a screwdriver while the deep socket is turned with a wrench.

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- (7) Install the plug on the oil pressure relief valve using a new packing.
- (8) Shut down engine if no further adjustments are intended.

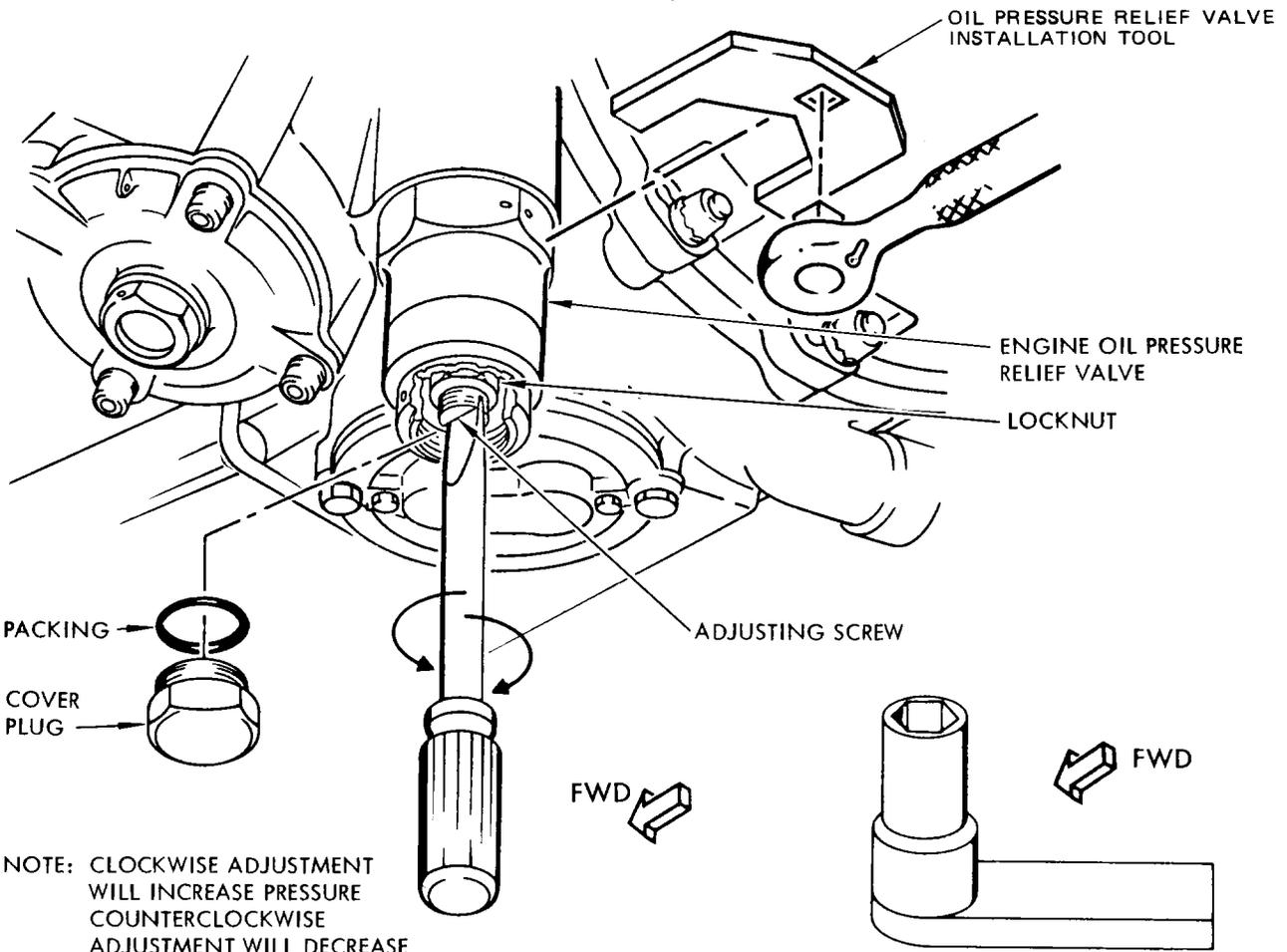
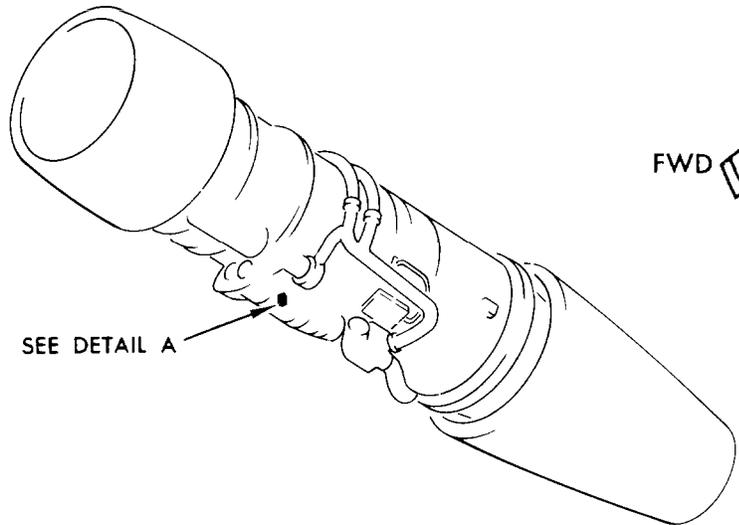
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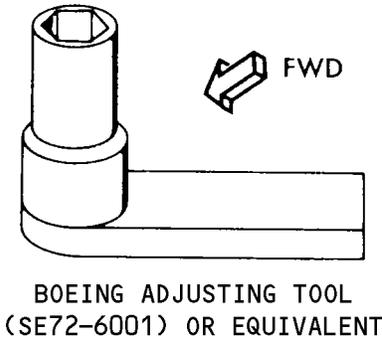
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NOTE: CLOCKWISE ADJUSTMENT  
 WILL INCREASE PRESSURE  
 COUNTERCLOCKWISE  
 ADJUSTMENT WILL DECREASE  
 PRESSURE

DETAIL A



BOEING ADJUSTING TOOL  
 (SE72-6001) OR EQUIVALENT

Engine Oil Pressure Adjustment  
 Figure 210

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## 12. Engine Shutdown Procedure

### A. General

- (1) If the engine has been operated above 85% N2 rpm for more than 1 minute during the 5 minutes prior to shutdown, engine must be operated at idle rpm for an additional 5 minutes to make sure uniform cooling of engine parts.
- (2) The emergency engine shutdown procedure should only be used when abnormal conditions arise or to prevent damage to the engine. If an emergency shutdown is required when the engine is operating at high power settings, both compressor rotors should be checked for freedom of rotation when the engine has cooled.
- (3) To prevent reverse windmilling, guard against possible foreign object damage, and prevent engine icing due to rain and snow entering the engine, it is highly recommended that suitable inlet and exhaust covers be installed as soon as practical after engine shutdown.

### B. Engine Shutdown

- (1) Normal engine shutdown.
  - (a) Allow engine to stabilize at idle rpm for 5 minutes.
  - (b) Move start lever to CUTOFF position and check that engine decelerates freely. Listen for any unusual rubbing or scraping noises on rundown.
  - (c) Verify that both No. 1 and 2 engine LOW OIL PRESSURE lights are on.

**WARNING:** IF THE ENGINE LOW OIL PRESSURE LIGHT IS OFF, THE THRUST REVERSER FOR THE ENGINE CAN BE DEPLOYED WITHOUT THE ENGINE RUNNING.

- (d) Position fuel pump switches to OFF after the engine stops rotating.
    - (e) When engine has cooled, install inlet and exhaust plugs.
  - (2) Internal engine or tailpipe fire during shutdown.
    - (a) Fully retard engine thrust lever and move start lever to CUTOFF in rapid succession.

**CAUTION:** DO NOT PLACE ENGINE START LEVER IN CUTOFF POSITION WITH ENGINE OPERATING IN THE HIGH RPM RANGE WITHOUT FIRST RETURNING THRUST LEVER TO FULLY RETARDED POSITION. INTERNAL DAMAGE TO THE FUEL CONTROL AND TURBINE WHEEL SEIZURE MAY OCCUR.

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- (b) If an engine internal fire exists on shutdown, the starter may be engaged and the engine motored until fire is out.

**CAUTION:** ENGAGING THE STARTER WHILE THE ENGINE IS ROTATING IS NOT RECOMMENDED. ENGAGEMENT OF THE STARTER WHILE THE ENGINE IS ROTATING CAN SHEAR THE STARTER SHAFT, DAMAGE THE STARTER, OR SHORTEN THE SERVICE LIFE OF THE ENGINE ACCESSORY DRIVE GEAR TRAIN. IF YOU ENGAGE THE STARTER WHILE THE ENGINE IS ROTATING, INSPECT THE STARTER FOR SHEARED SHAFT OR OTHER DAMAGE BEFORE USING THE STARTER AGAIN.

**CAUTION:** DO NOT USE FIRE EXTINGUISHING AGENTS ON INTERNAL ENGINE OR TAILPIPE FIRE UNLESS MOTORING FAILS TO BRING FIRE UNDER CONTROL. HOT SECTION OF ENGINE CAN WITHSTAND VERY HIGH TEMPERATURE. NORMALLY, IF AN INTERNAL OR TAILPIPE FIRE IS PERMITTED TO BURN UNTIL ENGINE CAN BE MOTORED, ENGINE WILL EXPERIENCE FAR LESS DAMAGE THAN THAT WHICH WOULD BE CAUSED BY SPRAYING A CORROSIVE OR CHILLING AGENT INTO EXHAUST DUCT.

**CAUTION:** IF EXTERNAL FIRE EXTINGUISHING AGENTS HAVE BEEN DISCHARGED INTO POWER PLANT, POWER PLANT MUST BE INSPECTED AND CLEANED (P&WA MAINTENANCE MANUAL 72-00).

- (c) After fire is cleared, complete shutdown.
- (3) Emergency Engine Shutdown (Engine Fire Warning)
- (a) Fully retard engine thrust lever and move start lever to CUTOFF in rapid succession.

**CAUTION:** DO NOT PLACE ENGINE START LEVER IN CUTOFF POSITION WITH ENGINE OPERATING IN THE HIGH RPM RANGE WITHOUT FIRST RETURNING THRUST LEVER TO FULLY RETARDED POSITION. INTERNAL DAMAGE TO THE FUEL CONTROL AND TURBINE WHEEL SEIZURE MAY OCCUR.

- (b) Position fuel pump switches to OFF after the engine stops rotating.
- (c) If a fire warning occurs on shutdown, pull applicable fire switch on fire protection system module on aft electronic panel. If fire warning continues, and engine is cowled, actuate fire extinguisher agent by rotating fire switch handle.

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13. New Engine Post Run Procedure

- A. Perform Post Run
- (1) Return all switches to normal engine off positions.
  - (2) Check for static oil leakage through No. 6 bearing carbon seals for a 20-minute period immediately following engine shutdown. Oil leakage appearing as an oily wetness but not puddling during this 20-minute period is acceptable. Oil puddling which occurs before the expiration of 20 minutes is unacceptable and engine must be disassembled as necessary to determine cause and then repaired.
  - (3) After initial engine run perform the following:
    - (a) Visually check all fuel, oil, air and hydraulic connections for security and leakage.
    - (b) Remove, clean if necessary, and install the fuel pump inlet filter, fuel control coarse and fine filters, and the fuel pressurizing and dump valve filter.
    - (c) Remove, clean if necessary, and install the engine oil filter and CSD oil filter elements.
  - (4) Service engine oil tank within 30 minutes of engine shutdown (AMM 12-13-11/201).

14. Return Airplane to Normal Configuration

- A. Shutdown APU (AMM 49-11-0/201)
- B. Ground power switch to OFF, if ground power no longer required
- C. Open Engine Start Ignition circuit breakers, Fuel Flow circuit breaker, and Low Energy Ignition circuit breakers (total of five) on P6 panel.
- D. If no longer required:
  - (1) Remove external pneumatic power, if connected.
  - (2) Remove external electrical power, if connected.
- E. Install cowl panels.

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POWER PLANT - COLD OPERATING PROCEDURES

1. General

- A. During cold weather operation, needless damage to the engine can be prevented by the use of a few simple precautions. Ice formation in the engine inlet is one of the principal hazards during cold weather engine operation. Blowing snow can be turned into ice by entering a cooling engine, melting, and refreezing. The resulting ice formation can plate out on the compressor rotor blades setting up a potential unbalance and may even lock the rotor blades to the compressor case. Engine inlet icing can also occur on an operating engine because of the large airflows and suction at the engine inlet. This is particularly hazardous when operating at TAKE-OFF power under static conditions on the ground. Suction action reduces air pressure with a subsequent reduction in air temperature. This, in addition to evaporative cooling, causes ice to form when water droplets impinge upon the inlet guide vanes and nose dome.
- B. To prevent snow or rain from blowing into engines, inlet covers should be fitted as soon as practical after engine operation. Exhaust covers should be fitted as soon as engine cool down permits.
- C. Unlike the reciprocating engine, the jet engine generally does not require preheating and starts can be made normally during cold weather operation. Prolonged cold soaks, however, can cause abnormal starting characteristics, erratic engine pressure ratio indications and restricted fuel flow. These conditions sometimes will require preheating of the engine.

2. Equipment and Materials

- A. MIL-H-4607 - Heater, type H-1, or equivalent
- B. Generator Set, Power Unit - M32A60A - FSN 611-225-7663

NOTE: Power unit is primarily for engine starting but is also extremely effective for snow and ice removal.

- C. Engine Inlet Cover - Boeing F72717, or equivalent.
- D. Engine Exhaust Cover - Boeing F80093, or equivalent.

NOTE: Items C and D are flyaway equipment with each airplane.

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### 3. Prepare for Cold Weather Starts

- A. Before starting an engine, check engine compressor for free rotation by rotating NL rotor by hand in a counterclockwise direction (viewed from the front). If rotor cannot be turned, install inlet cover and attach a suitable hot air duct from a ground heater. Apply heat until compressor rotor rotates freely.
- B. Check compressor discharge pressure sensing line moisture trap and all sumps, strainers and filters in the fuel and oil systems for the presence of water or ice. As long as fuel will flow freely from the drain cocks in the tank sumps and strainers, it can be surmised that the system is free of ice. Refer to Chapter 12, Fuel Servicing.

### 4. Cold Weather Starts

- A. Start engine following procedure given in 71-09-100, Power Plant Operating Procedures.

**CAUTION:** WHEN STARTING AN ENGINE WHICH HAS BEEN EXPOSED TO LOW TEMPERATURES OVERNIGHT, CAREFULLY OBSERVE FUEL AND OIL PRESSURES. ANY INDICATION BELOW THE NORMAL OPERATING LIMITS IS CAUSE FOR IMMEDIATE ENGINE SHUTDOWN. INSPECT ENGINE SYSTEMS FOR ICE. IF ICE IS PRESENT, SYSTEM SHOULD BE FREED OF ICE BEFORE ANOTHER START IS ATTEMPTED. IF THE AIRPLANE IS PARKED ON ICE OR PACKED SNOW, A LOW PRESSURE GROUND CART OR THE AUXILIARY POWER UNIT SHOULD BE USED FOR ENGINE STARTING SINCE ASYMMETRIC THRUST DURING CROSS-STARTS MAY CAUSE THE AIRPLANE TO SWING AROUND. ICE CHOCKS AND A HIGH GROSS WEIGHT WILL MINIMIZE THIS TENDENCY.

- B. If start is hot or engine hangs up and refuses to accelerate to IDLE, shut engine down and apply heat to fuel control for ten to twenty minutes.

**NOTE:** If the compressor discharge pressure sensing line moisture trap, on the engine fuel control, is not drained periodically, moisture may collect in the burner pressure sensing bellows. Freezing of this moisture will restrict fuel flow to a fixed quantity. A low fuel flow will result in a hung start while a high fuel flow will cause a hot start.

**CAUTION:** APPLICATION OF HEAT TO FUEL CONTROL SHOULD BE CONTROLLED SINCE EXCESSIVE HEAT MAY DISTORT INTERNAL PARTS OF FUEL CONTROL AND AFFECT FUEL SCHEDULING OF UNIT.

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- C. If no rotation of the N2 compressor is observed, check for seizure of the starter air control valve due to freezing of condensed moisture. The valve may be freed by local application of heat.
- D. When a successful start has been completed on an engine that has cold soaked for a prolonged period at temperatures below -30°F, allow the engine to idle for two minutes before advancing the thrust lever. This procedure is not absolutely necessary, however, it will allow the engine oil to warm up and ensure adequate lubrication of the engine bearings.

**CAUTION:** IF THERE IS NO INDICATION OF OIL PRESSURE WITHIN 30 SECONDS OF ENGINE OPERATION OR IF PRESSURE DROPS TO ZERO AFTER A FEW MINUTES OF GROUND RUNNING, SHUT DOWN THE ENGINE AND INVESTIGATE.

- E. It is generally not necessary to preheat the hydraulic pumps, CSD, fuel/oil cooler, or oil tank. However, cold oil in the CSD will make the generator slow to develop steady power. Generator frequency should be allowed to stabilize before applying heavy electrical loads. One minute of operation is usually sufficient to warm up the CSD.
- F. During engine operation in cold weather, ice buildup on the engine inlet guide vanes, nose dome, and nose cowl will be indicated by a large variation in the engine pressure ratio (EPR) indication. This variation is due to ice formation on the Pt2 probe on the engine nose dome and if the icing is severe may also be caused by a distortion of the airflow to the engine inlet. An increase in EGT will become noticeable only in the final stages of inlet icing. When icing conditions are suspected and a large variation in EPR is observed, or the engine begins to surge, reduce power and turn on the thermal anti-icing system. Restore power only after it is reasonably certain that all ice has been eliminated.

**CAUTION:** FAILURE TO REDUCE POWER BEFORE ATTEMPTING TO REMOVE ICE, BY USE OF THE NACELLE ANTI-ICING SYSTEM, MAY RESULT IN ENGINE DAMAGE DUE TO LARGE PIECES OF ICE ENTERING THE ENGINE.

**NOTE:** If a high EPR indication persists on an engine only at altitude but disappears during engine operation on the ground, check the Pt2 plumbing for leaks.

- G. When engine operation is completed, shut down engine per 71-09-100, Power Plant Operating Procedures.
- H. Install inlet and exhaust covers when engine has cooled sufficiently.

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### POWER PLANT (JT8D) – TRIM PROCEDURE

#### 1. General

- A. The power plant trim procedure provided here is applicable to all 737 airplanes, and when used with the appropriate set of trim tables, permits proper trimming of any 737 engine configuration. Refer to AMM 71-09-210 for general instructions for use of engine trim data and a trim table locator tabulation.
- B. When trimming engines, care must be used to make sure that the correct set of trim tables is being used. The engine model to be trimmed should be determined from the engine nameplate.
- C. Power plant trimming is required to adjust idle rpm, check thrust lever cushion and minimize thrust lever stagger. Before a newly installed power plant can be adjusted, it is necessary to depreserve, start, and functionally check the power plant to ensure normal operation (AMM 71-09-100, Power Plant Operating Procedure). For detailed information on power plant components, indicating systems, and controls refer to the appropriate chapter.

**WARNING:** ALL PERSONNEL MUST AVOID DANGER AREAS IN FRONT AND REAR OF POWER PLANT DURING GROUND RUNNING OPERATIONS.

**CAUTION:** BEFORE OPERATING A POWER PLANT, CHECK ENGINE INLET AND AREA IN PROXIMITY OF ENGINE INLET FOR LOOSE OBJECTS AND EQUIPMENT WHICH MAY BE DRAWN INTO ENGINE.

GROUND RUNNING MUST BE KEPT TO A MINIMUM AND PROLONGED RUNNING AT MAXIMUM OPERATING LIMITATIONS AVOIDED. REFER TO "ENGINE STARTING AND OPERATING LIMITATIONS" IN AMM 71-09-100. ENGINE LIFE IS ADVERSELY AFFECTED BY HIGH AND RAPID CHANGES OF ENGINE INTERNAL TEMPERATURES.

- D. Engine trimming is performed at part power setting and is a necessary requirement on newly installed engines or following a change of fuel control unit. Periodic trim adjustments may also be necessary during the life of the engine, to restore normal "cushion" between takeoff and full thrust lever position. Since the fuel control is fuel density sensitive, some change will occur in engine trim when switching from one fuel to another. An engine trimmed with Jet B (JP-4) fuel will be "overtrimmed" when operated with Jet A (kerosene) while a Jet A trimmed engine will be "undertrimmed" when operated with Jet B fuel. The amount of throttle cushion available is sufficient to absorb such changes and permit use of either fuel without having to retrim the engines. However, an engine trimmed with Jet A (high density fuel) will have a slightly lower idle N2 RPM when operated with Jet B (low density fuel), and an engine trimmed with Jet B will have a slightly higher idle N2 RPM when operated with Jet A. To eliminate these effects, it is preferable to trim with the same fuel that will be used in service.

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E. Engine trim is affected by wind velocity and direction. Trim adjustment loses its effectiveness as the angle of wind direction increases toward 90 degrees from the engine inlet. Engines that are trimmed in a crosswind will be "over trimmed" when checked in a no wind condition while engines checked in a head wind will be in an under trimmed condition. Tailwind conditions (beyond 90 degrees) tend to direct engine exhaust gases forward to the engine inlet. Since target values of turbine discharge pressure (Pt7) are corrected for ambient air temperature, exhaust gases ingested by the engine will produce an inaccurate trim adjustment (Fig. 201). Relative wind velocity may be disregarded providing the velocity is under 10 mph and a blast fence is employed. Otherwise, the airplane should be headed into the wind. Engines should not be trimmed when wind velocity exceeds 25 mph or when icing conditions prevail. Engine icing may occur with the following conditions:

- (1) Icing conditions exist when the OAT on the ground and for takeoff, or TAT inflight is 10°C or below, and visible moisture in any form is present (such as clouds, fog with visibility of 1 mile or less, rain, snow, sleet and ice crystals).
- (2) Icing conditions also exist when the OAT on the ground and for takeoff is 10°C or below when operating on ramps, taxiways, or runways where surface snow, ice, standing water, or slush may be ingested by the engines or freeze on engines, nacelles or engine sensor probes.

**NOTE:** Engines should not be trimmed when weather conditions require the nacelle anti-ice system to be on. The trim tables are based on a no airbleed condition. If the engines must be trimmed when icy conditions exist, the nacelle anti-ice system must be kept on during all engine operation except for the last 30 seconds of each trim period.

F. A check sheet should be prepared to record engine operation data during the trim run. See Fig. 202 for sample check sheet layout. Ambient temperature and true barometric pressure as well as targets for idle rpm, trim Pt7 and takeoff EPR should be recorded before commencing the engine trim run. The idle, trim and takeoff target values are determined from the trim tables. Refer to AMM 71-09-210, Fig. 202, for the trim table locator tabulation. The EPR (Pt7/Pt2) reading which corresponds to the trim target Pt7 value should also be noted to provide a check between the control cabin EPR indicator and the engine Pt7 test indicator.

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- G. Trimming the engine is accomplished by adjusting the IDLE and MIL (Maximum) trim screws, on the forward end of the fuel control, with the part power trim stop in the activated position to limit throttle cross-shaft angle (Fig. 204). The engine thrust level is slightly below MAX CRUISE rating when the MIL trim screw is properly adjusted.
- H. After a satisfactory trim run has been accomplished, it is necessary to run the engine at takeoff power to make sure that the TAKEOFF rating and throttle "cushion" are obtainable. It is also necessary to check the reverse thrust detent and to perform an engine acceleration/deceleration check to demonstrate satisfactory dynamic response.
- I. Control cabin engine instruments may be used to trim an engine when trim equipment is not available and the control cabin instruments are known to be accurate. However, a complete trim run must be accomplished as soon as the calibrated trim instrumentation becomes available. Refer to trim table sections for part power trim target EPR for existing ambient temperature and true local barometric pressure. Trim sequence outlined should be used omitting reference to trim equipment and adjusting MIL trim screw to EPR target rather than Pt7 target.
- J. For engine deterioration ground check procedures previously mentioned in this section refer to P&WA JT8D Maintenance Manual Section 72-00.

### 2. Equipment and Materials

- A. Pt7 Pressure Engine Trim Gage - F72973-10, 0 to 70 in. Hg, Absolute  $\pm 0.1$  in. Hg readability,  $\pm 0.1$  Hg accuracy
- B. Remote Tachometer - F70303, calibrated in percentage (with current calibration chart) and adapter harness with three-position selector switch to enable test tachometer indicator and control cabin indicator to be used simultaneously

**NOTE:** The adapter harness plug must mate with the Amphenol test receptacle located on the right sidewall forward of panel P6 behind the first officer's seat. The tachometer indicator and selector switch are best mounted in a suitable shock resistant box which may be manufactured locally. If a direct reading test tachometer indicator is used, the actual rpm reading should be converted to percent rpm. The JT8D engine N2 tachometer gear ratio is 0.343:1.

- C. Thermometer for reading ambient air temperature at the airplane (-40 to +120°F)
- D. Ground Low Pressure Air Source - Boeing Model 502 (not required if airplane auxiliary power unit is used)
- E. Ground Service Electrical Power Cart - 90 KVA output required (not required if airplane auxiliary power unit is used)
- F. Interphone Service Equipment
- G. Portable Trim Kit - Comp Air Inc., Burlingame, California

### 3. Prepare to Trim Engine

- A. Remove engine cowl panels.
- B. Check and clean up area, engine, and engine mounted accessories.
- C. Make sure that engine start and thrust control systems are rigged as described in AMM Chapter 76, Engine Controls.

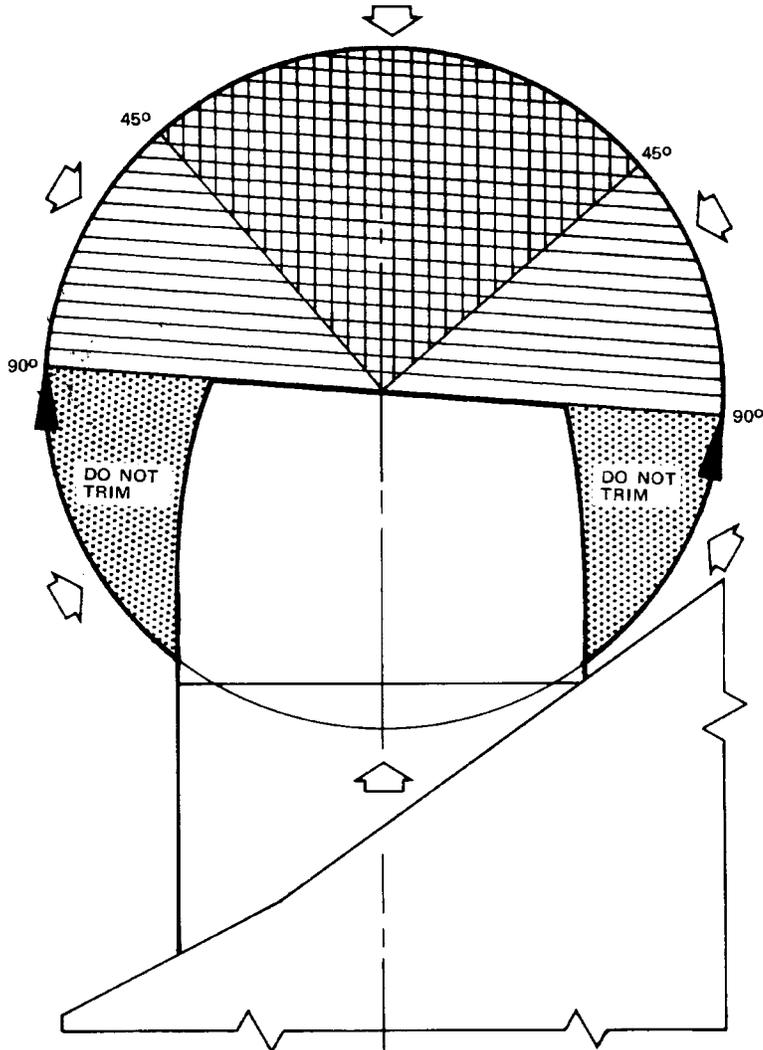
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-  PREFERRED
-  ACCEPTABLE
-  UNACCEPTABLE
-  WIND DIRECTION

NOTE:  
 TYPICAL FOR ALL ENGINES.

TO ACHIEVE CONSISTENTLY GOOD TRIM RESULTS, THE AIRPLANE SHOULD BE HEADED INTO THE WIND AND TRIMMED WHEN WIND VELOCITY (STEADY OR GUSTS) IS NOT MORE THAN 25 MPH.

WHEN WIND VELOCITY IS LESS THAN 10 MPH, WIND DIRECTION MAY BE DISREGARDED IF A BLAST FENCE IS USED DURING ENGINE TRIM.

TRIMS ARE NOT RECOMMENDED WHEN WIND VELOCITY EXCEEDS 25 MPH OR WHEN ICING CONDITIONS PREVAIL.

Wind Direction and Velocity Limits  
 Figure 201

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| MODEL  |               | FLIGHT TIME  |          | TAIL NO. |                 |               |                           | FUEL                         |         |  |      |                                   | DATE    |                    |                     |                              |      |    |         |           |
|--|---------------|--------------|----------|----------|-----------------|---------------|---------------------------|------------------------------|---------|--|------|-----------------------------------|---------|--------------------|---------------------|------------------------------|------|----|---------|-----------|
| ENG POS  | ENGINE S/N    | DATA PLATE   |          | ENGINE   |                 | APU           |                           | EXT.                         |         | INLET  |      | TURB                              |         | START SWITCH SOL.  | FUEL VALVE LT. F/S  | CROSS START                  | DISC | PR | TEMP IN | TEMP RISE |
|  |               | RPM          | %        | HI       | LO              | HI            | LO                        | L                            | R       | HI   | LO   | HI                                | LO      |                    |                     |                              |      |    |         |           |
| 1  |               |              |          |          |                 |               |                           |                              |         |  |      |                                   |         |                    |                     |                              |      |    |         |           |
| 2  |               |              |          |          |                 |               | W/W                       |                              | APU     |  |      |                                   |         |                    |                     |                              |      |    |         |           |
| GENERATOR  |               | FUEL HEATERS |          |          | ANTI-ICE        |               | FUEL SYSTEM               |                              |         | AIR CONDITIONING                                 |      |                                   |         | THRUST REVERSER    |                     |                              |      |    |         |           |
| ENG POS  | VOLT AC       | FREQ CPS     | ICE LITE | IN TRANS | ΔN <sub>2</sub> | TIMER         | WING O'HT %N <sub>2</sub> | COWL EPR@ 85%                | SUCTION | PUMP LITES XFD-V                                 | PACK | MOD AND 35°V PRECOOLER O'HT ISO-V |         | PRESSUR-IZE SYSTEM | MIN %N <sub>1</sub> | INTLK %N <sub>1</sub>        | OPER |    |         |           |
| 1  |               |              |          |          |                 |               |                           |                              |         |  | L    |                                   |         |                    |                     |                              |      |    |         |           |
| 2  |               |              |          |          |                 |               |                           |                              |         |  | R    |                                   |         |                    |                     |                              |      |    |         |           |
| HYDRAULIC SYSTEM A--LTS <input type="checkbox"/> |               |              |          |          |                 |               |                           |                              |         | HYDRAULIC SYSTEM B--LTS <input type="checkbox"/> |      |                                   |         |                    |                     |                              |      |    |         |           |
| ENG 1  | SYSTEM BRAKES |              |          |          | ENG 2           | SYSTEM BRAKES |                           | QTY <input type="checkbox"/> | ELECT 1 | SYSTEM BRAKES                                    |      |                                   | ELECT 2 | SYSTEM BRAKES      |                     | QTY <input type="checkbox"/> |      |    |         |           |

TRIM PROCEDURE: NO BLEED, NO LOAD:

1. ACTIVATE PART POWER TRIM STOPS. START, AND IDLE 5 MINUTES.
2. CHECK FOR OFF: FUEL HEATER  ANTI-ICING  BLEED AIR  GENERATOR
3. SET IDLE. ADVANCE THRUST LEVER TO PART POWER TRIM STOP.
4. IMMEDIATELY SET MIL TRIM SCREW TO PART POWER Pt7 TARGET.
5. RETARD THRUST LEVER TO IDLE AND SET IDLE AGAIN.
6. ADVANCE THRUST LEVER TO PART POWER STOP FOR 1 MINUTE.
7. AFTER 30 SECONDS, ADJUST MIL TRIM SCREW TO PART POWER Pt7 TARGET +0.5/-0.0 IN. HG.

| ENG POS | PP TRIM | IDLE |       | SBV--%N <sub>1</sub> |      | Pt7   |      | EPR   |   | N1 % | EGT °C | N2 % | WF/HR | OIL |  |
|---------|---------|------|-------|----------------------|------|-------|------|-------|---|------|--------|------|-------|-----|--|
|         |         | TARG | CLOSE | OPEN                 | TARG | FINAL | TARG | FINAL | % | °C   | %      |      | T     | PR  |  |
| 1       |         |      |       |                      |      |       |      |       |   |      |        |      |       |     |  |
| 2       |         |      |       |                      |      |       |      |       |   |      |        |      |       |     |  |

| ENG POS | WEATHER |     | WIND        |  | N <sub>2</sub> |      |       | ACCELS TO |         | %N <sub>2</sub> |
|---------|---------|-----|-------------|--|----------------|------|-------|-----------|---------|-----------------|
|         | TAM     | PAM | KTS/O'CLOCK |  | PILOT          | TRIM | TRUE* | IDLE      | SECONDS |                 |
| 1       |         |     |             |  |                |      |       |           |         |                 |
| 2       |         |     |             |  |                |      |       |           |         |                 |

8. BACK TO IDLE. DEACTIVATE PART POWER TRIM STOP. ADVANCE THRUST LEVER TO TAKEOFF EPR AND PERFORM TAKEOFF CHECK. CHECK ENGINE ACCELERATION AND DECELERATION.

| ENG POS | TAKE-OFF | EPR  |       | N1 % RPM | N2 % RPM | WF/HR | OIL |    | EGT °C | UNUSED THRUST TRAVEL, INCHES | APU |     |
|---------|----------|------|-------|----------|----------|-------|-----|----|--------|------------------------------|-----|-----|
|         |          | TARG | FINAL | % RPM    | % RPM    |       | T   | PR | °C     |                              | OPR | GEN |
| 1       |          |      |       |          |          |       |     |    |        |                              | XST | A/C |
| 2       |          |      |       |          |          |       |     |    |        |                              |     |     |

9. AT COMPLETION OF ENGINE CHECKS, REDUCE TO IDLE FOR 5 MINUTES, THEN SHUT DOWN.
10. DETERMINE UNUSED THRUST LEVER TRAVEL.

\* TRIM KIT READING WITH CALIBRATION CORRECTION APPLIED.

Engine Trim Check  
Figure 202

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D. Connect adapter hose to manifold pressure gage and to Pt7 test fitting.

**NOTE:** Each engine has a test fitting on the lower forward right side of the engine just aft of the fuel control unit (Fig. 205).

- E. Open ENGINES TRIM & VIB CONT circuit breaker on circuit breaker panel P6.
- F. Connect plug of master tachometer adapter cable to test receptacle on the right sidewall forward of panel P6 (Fig. 205). Connect portable trim kit.
- G. Close ENGINES TRIM & VIB CONT circuit breaker on circuit breaker panel P6.
- H. Find and record the local barometric pressure (LBP) and outside ambient temperature (OAT).

**CAUTION:** DO NOT APPLY BAROMETRIC PRESSURE CORRECTED TO SEA LEVEL, NORMALLY REPORTED BY THE CONTROL TOWER. AN INCORRECT PRESSURE CAN GIVE YOU AN INCORRECT TARGET SELECTION.

- (1) Find the local barometric pressure (LBP):
  - (a) Set the altimeter to the field elevation.
  - (b) Read the altimeter setting barometric pressure (inch Hg); Make a record.
  - (c) Use the graph "Altimeter Setting Conversion to Local Barometric Pressure" to find the LBP (Fig. 203).
    - 1) From the altimeter setting barometric pressure on the bottom of the graph, go up until that value crosses the field elevation to read the local barometric pressure (LBP). Make a record.

**CAUTION:** DO NOT USE THE AIRPLANE TOTAL AIR TEMPERATURE INDICATOR TO OBTAIN THE OUTSIDE AMBIENT TEMPERATURE. AN INCORRECT TEMPERATURE CAN GIVE YOU AN INCORRECT TARGET SELECTION. DO NOT USE A MERCURY THERMOMETER IN THE AIRPLANE. IF THE THERMOMETER BREAKS, THE MERCURY CAN CAUSE DAMAGE TO THE AIRPLANE STRUCTURE.

**NOTE:** To do a check of the LBP, dial the airplane altimeter to "0" feet and read the LBP from the setting window.

**NOTE:** An equation for the calculation of the LBP is also given:  $LBP = [Altimeter\ Setting - 29.92] + SLBP$   
Altimeter Setting (inch Hg) SLBP = Standard Local Barometric Pressure (inch Hg)

- (2) Find the outside ambient temperature (OAT).
  - (a) Use a thermometer to find the OAT in the shade of the airplane. Make a record.

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- I. Using trim table sections, determine and record the following targets for the existing ambient temperature and true local barometric pressure:
- (1) Idle target - % N2 rpm
  - (2) Part power trim target - Pt7 and EPR
  - (3) Takeoff power target - EPR

**NOTE:** If trim table has a staggered line, targets appearing to the right of the line will require use of the part power trim stop in the cold weather (C) position during trim procedure. Targets appearing to the left, or on a table without a staggered line, will require use of the part power trim stop in the standard (S) position.

- J. Activate part power trim stop at engine fuel control (Fig. 204) according to following:
- (1) If trim table for targets determined in step H. does not have a staggered line, make sure that trim stop spacer is installed in standard position with the S visible (facing outward).
  - (2) If trim table for targets determined in step H. has staggered line, make sure that trim stop spacer is installed in C or S position according to table footnotes.

**CAUTION:** THE IMPORTANCE OF USING THE CORRECT PART POWER TRIM STOP DURING ENGINE TRIM RUNS CANNOT BE OVEREMPHASIZED. INABILITY TO REACH TAKEOFF EPR OR EXCESSIVE THROTTLE STAGGER WITH SENSITIVITY AND EXCESSIVE OVERBOOST CAPABILITY WILL RESULT FROM THE USE OF THE INCORRECT PART POWER TRIM STOP. THE TRIM STOP SPACER SHOULD NEVER BE REMOVED FROM THE FUEL CONTROL UNLESS A COLD WEATHER TRIM IS NECESSARY. ALWAYS STOW TRIM STOP IN THE STANDARD POSITION WITH THE S VISIBLE.

- K. Start auxiliary power unit or connect external electrical power and ground low pressure air supply to airplane.
- L. Start engine (AMM 71-09-100).

**CAUTION:** OBSERVE NORMAL ENGINE OPERATING LIMITATIONS WHEN TRIMMING ENGINES. ON THE INITIAL TRIM RUN OF A NEWLY INSTALLED ENGINE, PROMPT THRUST LEVER MOVEMENT MAY BE REQUIRED TO PREVENT OVERSPEEDING OR OVERBOOSTING THE ENGINE IF THE "MIL" TRIM SCREW IS MALADJUSTED OR IF THERE IS A LEAK IN THE Pt7 SYSTEM.

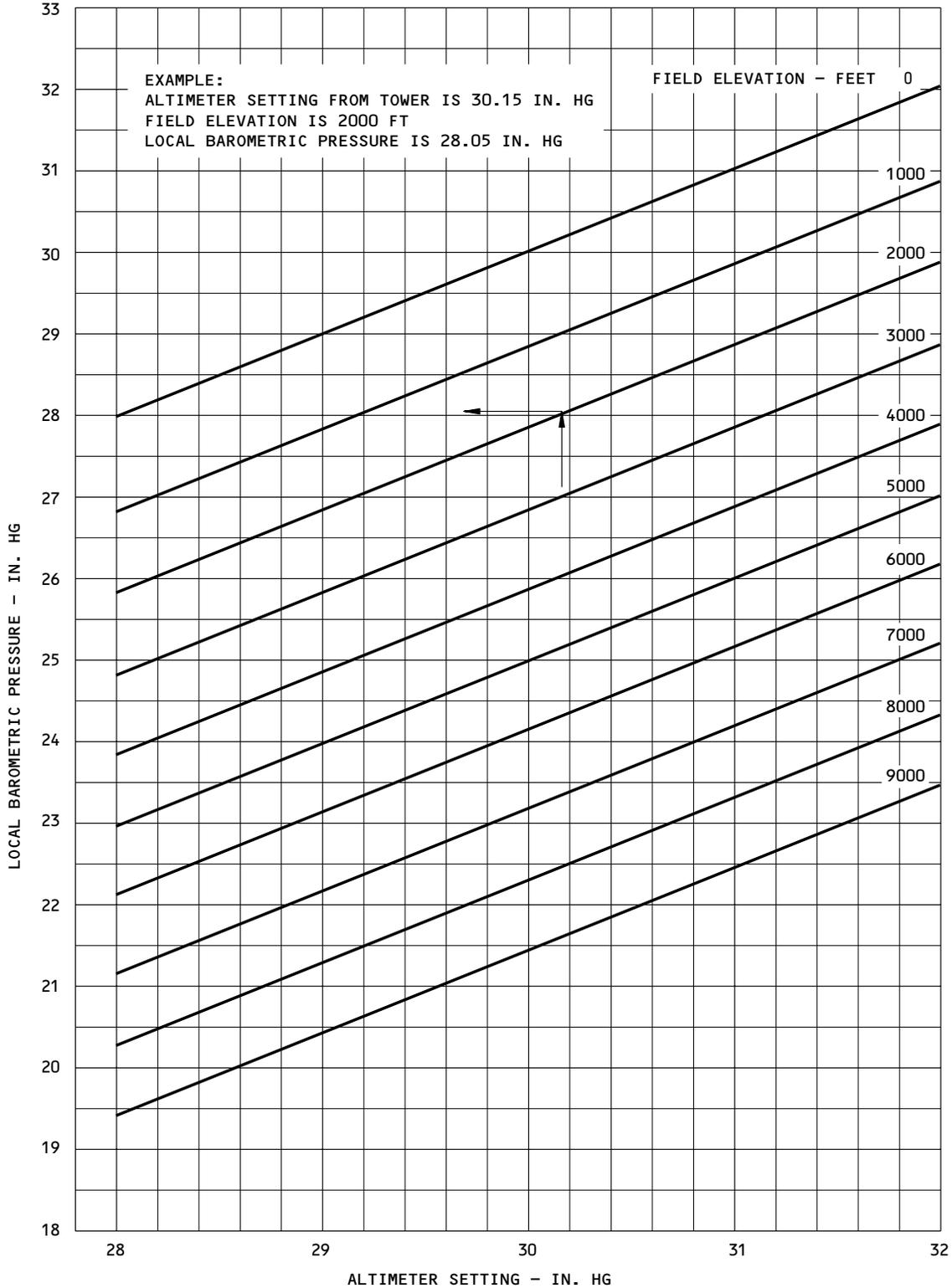
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Altimeter Setting Conversion to Local Barometric Pressure  
 Figure 203

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- M. Allow 5 minutes for engine to stabilize at idle setting. Observe that engine instrument indications are within normal operating ranges.
- N. Shut down APU (if operating) or turn off external pneumatic supply.

4. Trim Engine

**NOTE:** Fuel heater, generator, air conditioning packs, anti-icing, and low pressure air bleeds must be turned off during engine trimming. The engine part power trim curves are based on NO LOAD - NO AIR BLEED, and Ground Static Conditions. Generator cooling air bleed is negligible as are the no load power requirements of the system A hydraulic pump and the constant speed drive. For proper engine trim, engine oil temperature must be within the green band for all ambient conditions. Monitor engine vibration indicators for inlet and turbine positions during engine speed changes to make sure AVM system is operating.

- A. Adjust IDLE trim screw to obtain idle speed determined in par. 3.H.(1). Idle setting tolerance is +2.0/-1.0% N2 rpm.

**CAUTION:** EXCEEDING THE MAXIMUM TORQUE LIMIT ON TRIM SCREWS MAY DAMAGE THE FUEL CONTROL UNIT.

**NOTE:** To provide good engine acceleration and satisfactory electrical load carrying capability, engine idle should be adjusted to the upper limit of the % N2 setting tolerance. Engine idle trim adjustment must be accomplished with a calibrated precision tachometer indicator.

Turn IDLE and MIL trim screws clockwise to decrease rpm and counterclockwise to increase rpm. Make all final adjustments in the increase rpm direction. Do not exceed maximum torque value of 7 inch-pounds when adjusting trim screws.

- B. Advance thrust lever until contact is made with part power trim stop. Check for satisfactory surge bleed valve closure as the thrust lever is advanced from idle (Fig. 206). Surge bleed valve closure is indicated by a sudden jump in N1 (approximately 8%) and EPR (0.06).

**CAUTION:** DO NOT USE EXCESSIVE FORCE WHEN ADVANCING THRUST LEVER AGAINST PART POWER TRIM STOP AS DAMAGE TO THE TRIM STOP MAY OCCUR.

- C. Immediately adjust MIL trim screw to trim target Pt7.
- D. Retard thrust lever to idle and readjust idle setting, if required.
- E. Advance thrust lever until contact is made with part power trim stop and remain for 1 minute.

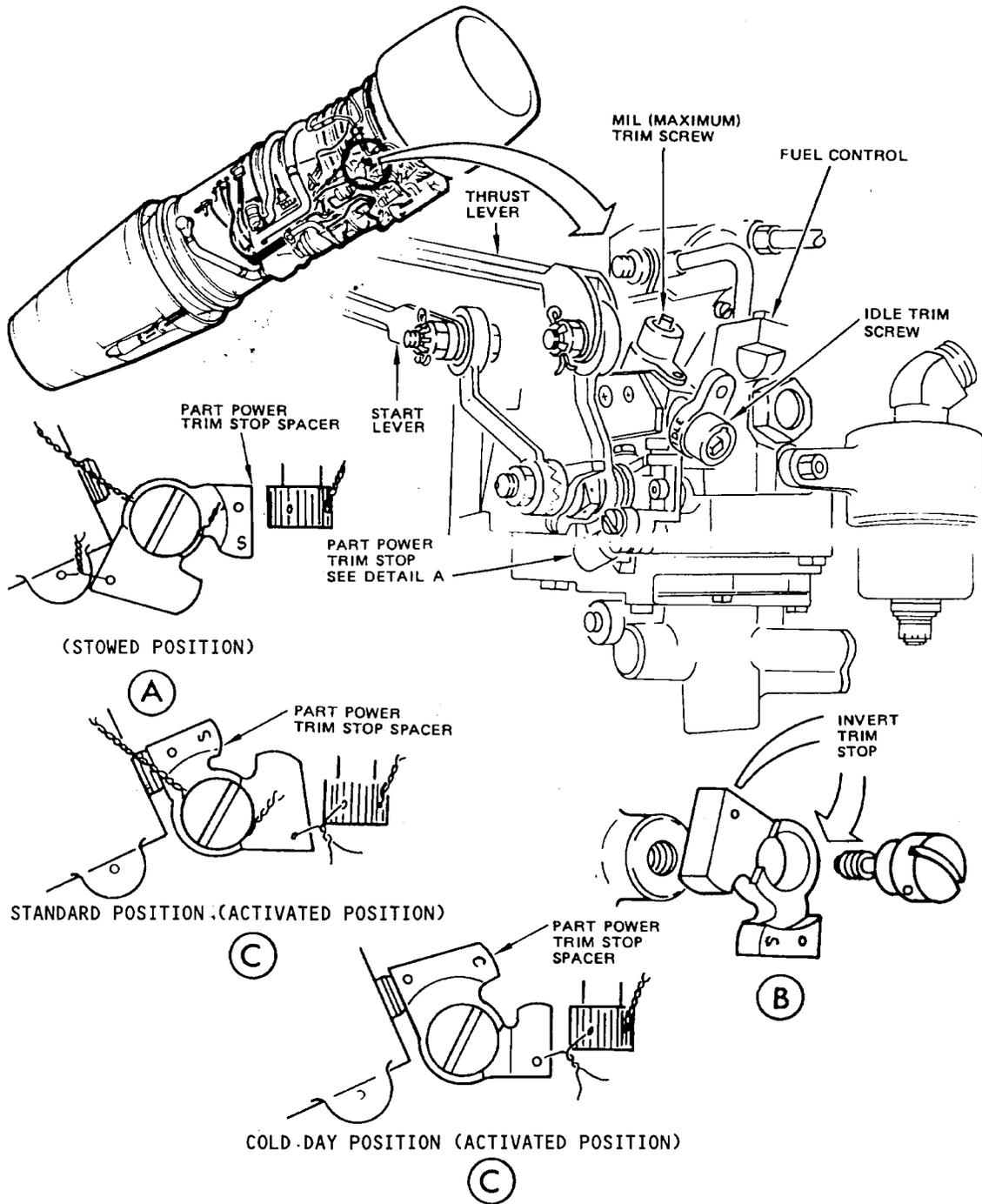
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POWER PLANT (JT8D) - TRIM PROCEDURE  
 Figure 204

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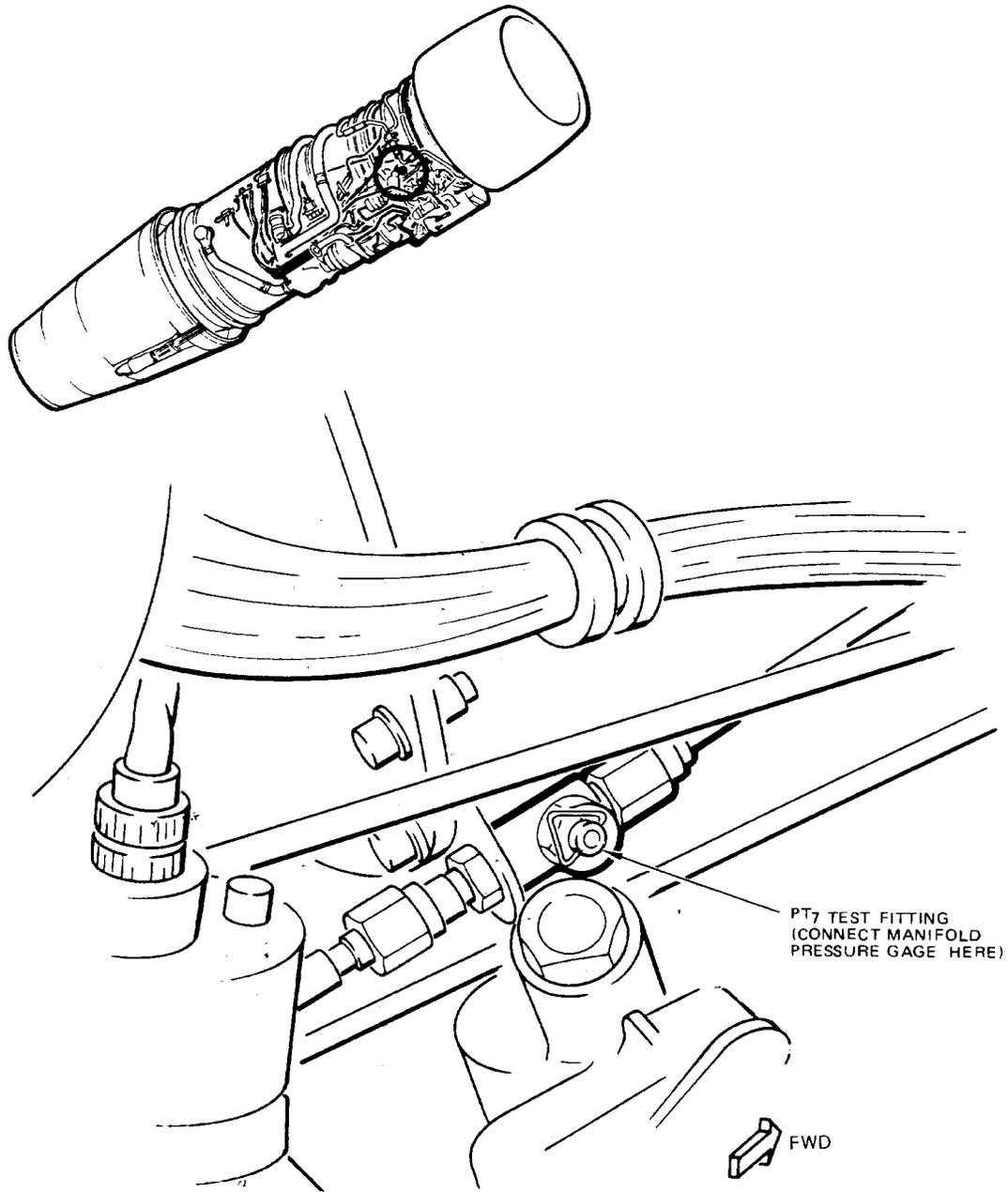
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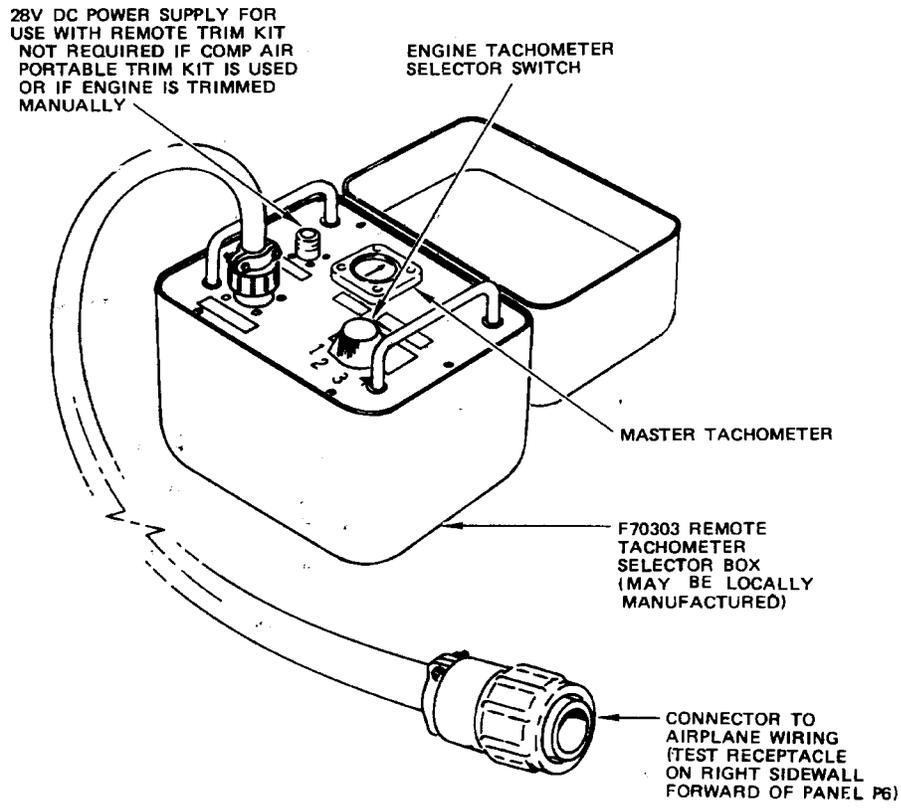
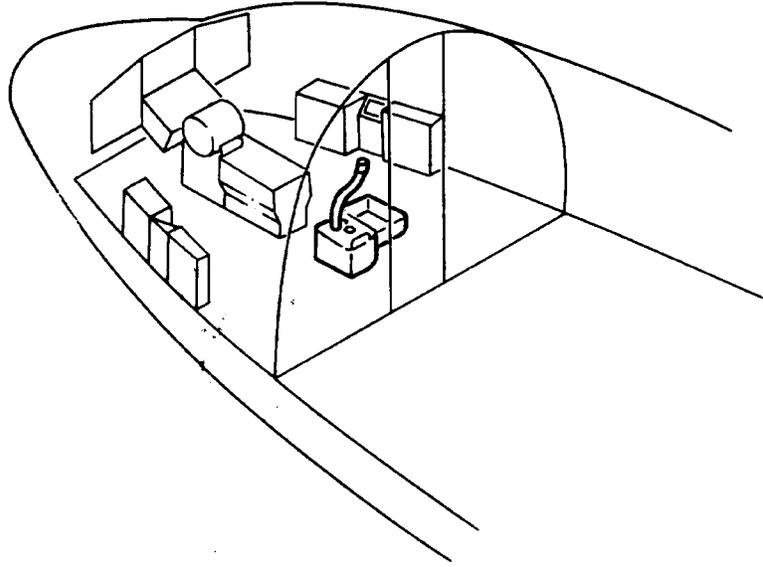
Engine Trim Instrumentation Connections  
 Figure 205 (Sheet 1)

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|-------------|-----|
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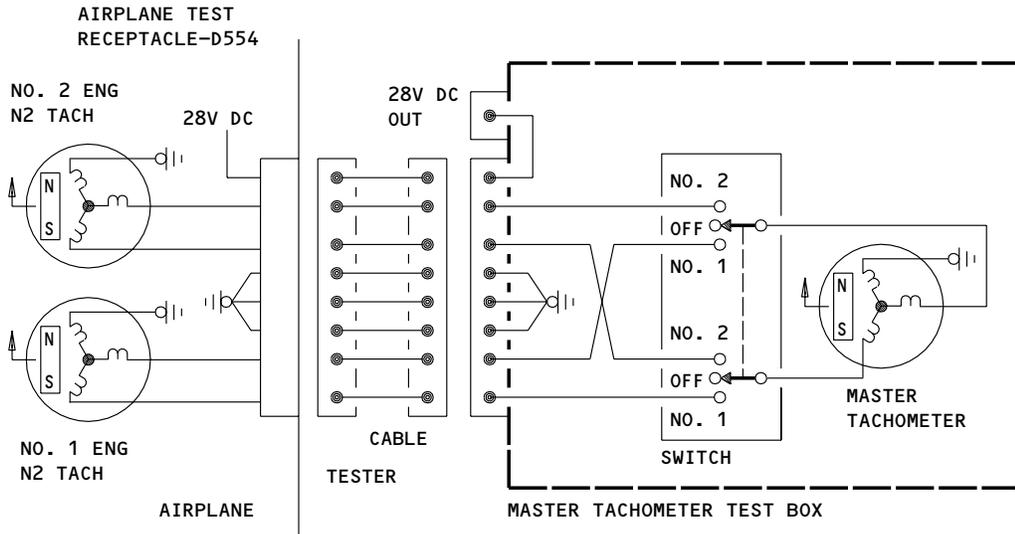


Engine Trim Instrumentation Connections  
 Figure 205 (Sheet 2)

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**ELECTRICAL SCHEMATIC**

**Engine Trim Instrumentation Connections  
 Figure 205 (Sheet 3)**

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- F. During the last 30 seconds, adjust the MIL trim screw to trim target Pt7 (+0.5/-0.0 inch Hg ABS) and take complete set of engine instrument readings (except vibration readings).
- G. Retard the thrust lever to idle, if idle RPM is not satisfactory after a 5-minute stabilization period, adjust the idle trim screw and repeat the trim procedure.

**NOTE:** Turning engine thermal anti-icing on and then off will speed achieving a stabilized idle. This technique can be used to appreciably shorten engine trim runs.

**NOTE:** Idle adjustment of as much as 0.5% N2 (8 "clicks") is permitted after final setting of part power trim without a recheck of part power trim provided final adjustment is made in the increase rpm direction.

- H. Compare the following instrument readings recorded during the trim operation.

**NOTE:** Any Pt7 leakage is a very serious matter since inadvertent engine overboosting can result and false throttle stagger can be created. If a large enough leak is present, engine operating limitations can be exceeded before attaining takeoff EPR. If Pt7 leakage is suspected, conduct leak check of Pt7 system (AMM Chapter 77, Engine Pressure Ratio Indicating System).

- (1) Compare part power trim EPR recorded at the engine instrument panel with target EPR determined in par. 3.H. The difference should not be greater than  $\pm 0.02$  units. If difference is greater, check EPR system for leaks and faulty indicator or transmitter.
  - (2) The N2 tachometer indicator, on the engine instrument panel, should read within  $\pm 0.5$  percent rpm of the precision tachometer indicator. If not within this tolerance, the N2 tachometer indicator should be changed and a check run with the new indicator.
- I. Check reverse thrust detent (AMM 78-32-01/501).

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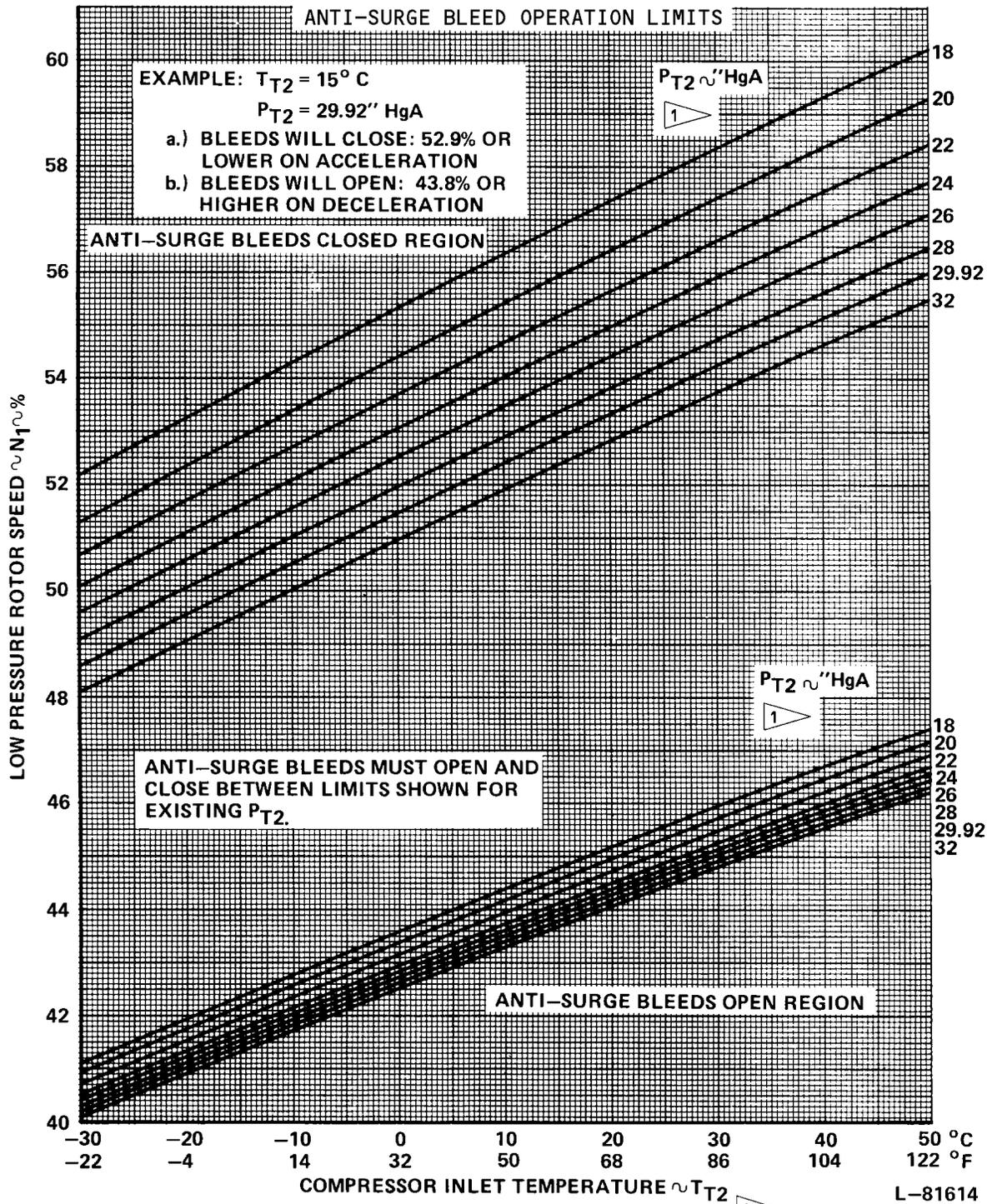
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**JT8D TURBOFAN ENGINE**



1 DURING ENGINE TRIMMING,  $P_{T2}$  AND  $T_{T2}$  ARE THE SAME AS THE AMBIENT PRESSURE AND TEMPERATURE

Compressor Anti-Surge Bleed Valves Schedule  
Figure 206

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- J. Check takeoff thrust setting, and engine acceleration and deceleration. Engine bleed air off.

**NOTE:** After completion of a satisfactory trim run, the engine shall be checked at takeoff setting to make sure that takeoff thrust is available and to check for cushion between takeoff and full throttle thrust lever position. Normally takeoff thrust is obtained at part throttle, however, the amount of throttle required will change with ambient temperature.

- (1) Operate engine at idle rpm for 3 minutes.
- (2) Advance thrust lever to takeoff EPR target setting.

**CAUTION:** THERE IS NO THRUST LEVER STOP AT TAKEOFF RATING. DURING ENGINE OPERATION AT TAKEOFF RATING, EXHAUST GAS TEMPERATURE, N1 AND N2 RPM MUST BE CLOSELY MONITORED TO MAKE SURE THAT OPERATING LIMITATIONS ARE NOT EXCEEDED.

**NOTE:** If takeoff EPR is not attainable, recheck the target and check for satisfactory throttle rigging. If all of the engine parameters appear high when compared with another engine, recheck the target and check the Pt7 system for leaks. If all appears normal, repeat the engine trim procedure.

- (3) When engine has stabilized at takeoff setting (minimum of 30 seconds at takeoff) record full set of engine instrument readings (except vibration). Record EGT last.
- (4) Mark position of forward edge of thrust lever on control stand using grease pencil, tape, or other temporary marking method.
- (5) Retard thrust lever to idle position. Calculate 95% of takeoff N2.
- (6) After approximately 70 seconds at idle, advance thrust lever in 1 second or less from idle to takeoff mark on control stand determined in step (4) above.

**NOTE:** If engine has been operated at takeoff power for longer than 3 minutes, operate engine at idle for 3 to 5 minutes prior to performing engine acceleration time check.

- (7) Record engine acceleration time. Time elapsed from initial advancement of thrust lever until engine has reached 95% of takeoff N2 rpm determined in step (5) above. Approximate acceleration time at sea level is between 5 and 6 seconds with engine bleed air off.

**NOTE:** Maximum acceleration time is subject to pressure altitude. Acceleration time stated above may be increased by 0.30 second for each 1000 feet increase in pressure altitude above sea level.

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- (8) Stabilize at takeoff setting for 2 to 3 seconds, and decelerate engine to idle by retarding the thrust lever to idle in 1 second or less. Make sure that engine decelerates smoothly and stabilizes at idle rpm. Any flameout is cause of rejection of the fuel control.

**NOTE:** If fuel control is replaced, refer to AMM 71-00/501, Power Plant for testing to be accomplished prior to continuing operational procedures.

- (9) If acceleration time exceeds 6.0 seconds at sea level, repeat above steps (6) thru (8) until three satisfactory accelerations and decelerations have been completed.
- (10) Normal acceleration time is 5 to 6 seconds at sea level. If average time for engines receiving three acceleration checks exceeds 6.0 seconds, it should be reported as an engine discrepancy and corrected before next takeoff.

**NOTE:** Maximum acceleration time is subject to pressure altitude. Acceleration time stated above may be increased by 0.30 second for each 1000 feet increase in pressure altitude above sea level.

- K. Check flight idle detent speed. Engine bleed air off (JT8D-9 engines with flight idle detent).
- (1) Using Fig. 207 and existing ambient temperature, determine minimum flight idle speed.
  - (2) Advance thrust lever to approximately 80% N2 then retard lever to engage flight idle detent.
  - (3) Allow engine to stabilize for 1 minute and note N2 rpm. If flight idle speed is less than minimum required, check idle trim setting and reverse thrust detent adjustment (AMM 78-32-01/501).
  - (4) Retard thrust lever to idle.
- L. Idle engine for 5 minutes and then shut down.
- M. Remove trim equipment from engine and cap Pt7 test fitting.
- N. Seal IDLE and MIL speed trimmers with approved sealing wax.
- O. Remove, clean, and re-install engine fuel and oil filter screens and elements. Change applicable screens and elements if necessary.
- P. Check engine and engine-mounted accessories for fuel, oil, pneumatic, and hydraulic leaks.
5. Restore Airplane to Normal Configuration
- A. Install engine cowl panels (AMM 71-11-11/401).
  - B. Open ENGINES TRIM & VIB CONT circuit breaker on panel P6.

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- C. Disconnect plug of master tachometer adapter cable from test receptacle on the right sidewall forward of panel P6.
- D. Close engines TRIM & VIB CONT circuit breaker on panel P6.

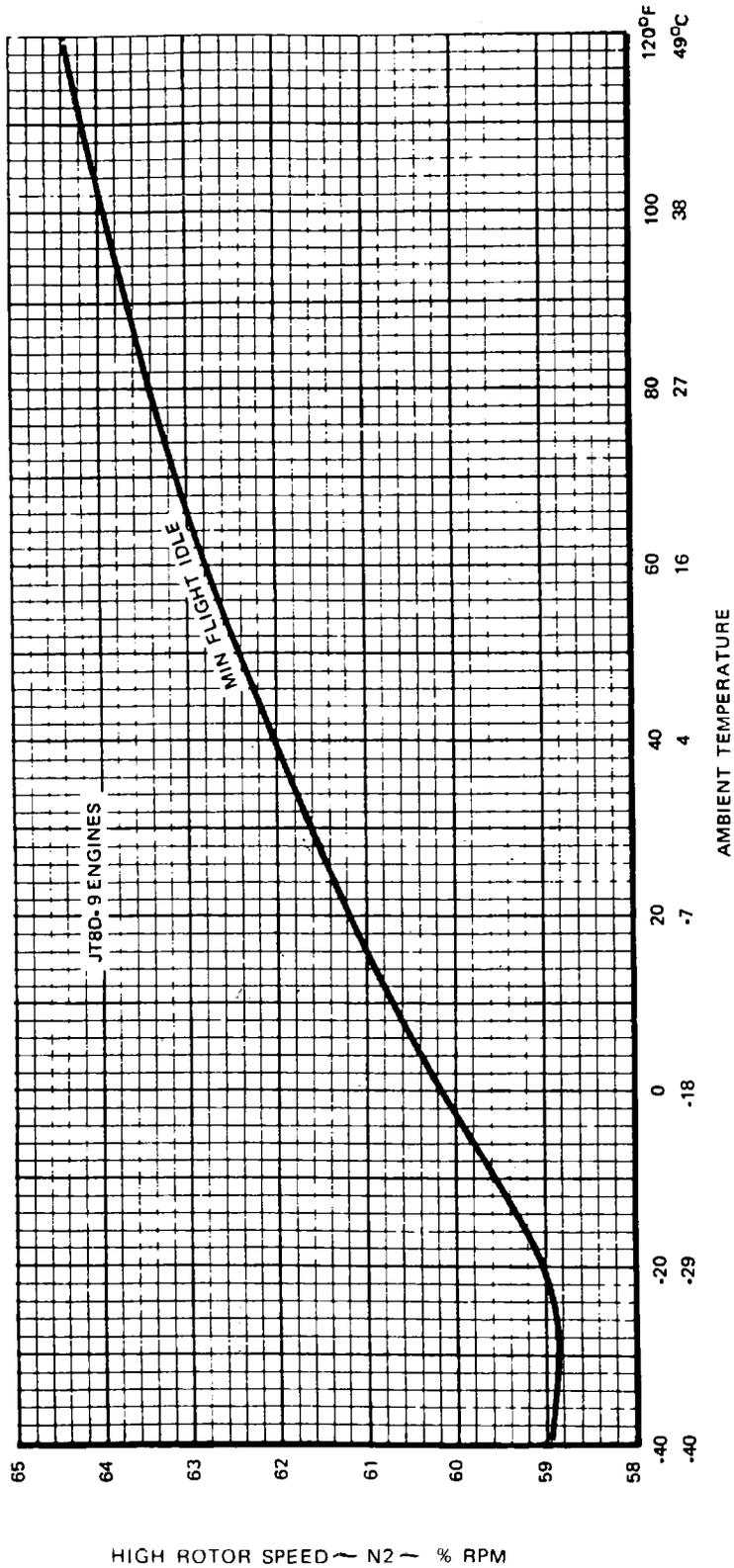
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HIGH ROTOR SPEED ~ N2 ~ % RPM  
 Flight Idle Detent Minimum Speed  
 Figure 207

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POWER PLANT (JT8D) TRIM DATA – MAINTENANCE PRACTICES

1. General

- A. This section contains general instructions for use of power plant trim data to determine the target values needed for engine trimming and includes a trim table locator tabulation to enable fast location of the proper trim data for specific trim situations.
- B. The target values needed for engine trimming are identified and defined as follows:

| TARGET VALUE | DEFINITION  |
|--------------|---|
| IDLE % N2    | Percent N2 rpm target to which IDLE trim screw is adjusted.   |
| TO EPR       | EPR target to which engine is operated, after part power trim operation, to check availability of TAKEOFF power and amount of throttle cushion.   |
| PP EPR       | EPR reference for personnel in control cabin. This value gives an indication of the accuracy of the airplanes EPR indicating system. This value must not be used for engine trim unless precision trim instrumentation is not available and airplane instruments are known to be accurate. If control cabin instruments are used for engine trim, a complete trim run must be accomplished as soon as calibrated trim instruments become available. |
| PP PT7       | PT7 target to which MIL trim screw is adjusted during part power trim operation.  |

C. The trim table locator tabulation is shown on Fig. 202.

2. Power Plant Trim Data Usage

**NOTE:** For the example problem (Fig. 201) the ambient temperature, barometric pressure, and engine data plate rpm are assumed and the applicable portion of a typical trim table page is shown. The proper trim table page for specific situations may be located using Fig. 202.

- A. Determine trim table section and page on which data for ambient temperature and barometric pressure are located (Fig. 202).
- B. Using appropriate page, determine following target values corresponding to ambient temperature and/or barometric pressure.
  - (1) IDLE % N2 (1)
  - (2) TO EPR (2)
  - (3) PP EPR (3)

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(4) PP PT7 (4)

**CAUTION:** PAY PARTICULAR ATTENTION TO ANY FOOTNOTES CONCERNING USE OF PART POWER TRIM STOP.

**NOTE:** If ambient temperature or barometric pressure is found to fall between values given in trim table, correct data can be obtained by interpolation.

**NOTE:** Data plate information is included in the Trim Tables as reference material only.

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**EXAMPLE PROBLEM**

**ASSUME:**

Ambient temperature: 46°F

Barometric pressure: 31.2 in. hg.

**ENGINE TRIM - DETERMINE TARGET VALUES:**

1. IDLE % N2 is 56.6%
2. TO EPR is 1.94
3. PP EPR is 1.87
4. PP PT7 is 58.3

**ENGINE DETERIORATION CHECK - DETERMINE DATA PLATE CORRECTION**

| BAROMETER INS. MERCURY |                               |                    |                            | 30.5                 | 30.6                 | 30.7                 | 30.8                       | 30.9                 | 31.0                 | 31.1                 | 31.2                 |
|------------------------|-------------------------------|--------------------|----------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|
| OAT<br>°F              | DATA<br>PLATE<br>CORR.<br>%N2 | IDLE<br>RPM<br>%N2 | DATA<br>PLATE<br>PT7       | 50.3                 | 50.5                 | 50.7                 | 50.8                       | 51.0                 | 51.1                 | 51.3                 | 51.5                 |
|                        |                               |                    |                            | 38                   | -1.83                | 55.3                 | PP PT7<br>PP EPR<br>TO EPR | 58.1<br>1.91<br>1.96 | 58.3<br>1.91<br>1.96 | 58.5<br>1.91<br>1.96 | 58.7<br>1.91<br>1.95 |
| 40                     | -1.55                         | 56.4               | PP PT7<br>PP EPR<br>TO EPR | 57.9<br>1.90<br>1.96 | 58.0<br>1.90<br>1.96 | 58.2<br>1.90<br>1.96 | 58.4<br>1.90<br>1.95       | 58.6<br>1.90<br>1.95 | 58.8<br>1.90<br>1.95 | 59.0<br>1.90<br>1.94 | 59.2<br>1.90<br>1.94 |
| 42                     | -1.48                         | 56.5               | PP PT7<br>PP EPR<br>TO EPR | 57.6<br>1.89<br>1.96 | 57.8<br>1.89<br>1.96 | 57.9<br>1.89<br>1.96 | 58.1<br>1.89<br>1.95       | 58.3<br>1.89<br>1.95 | 58.5<br>1.89<br>1.95 | 58.7<br>1.89<br>1.94 | 58.9<br>1.89<br>1.94 |
| 44                     | -1.30                         | 56.5               | PP PT7<br>PP EPR<br>TO EPR | 57.3<br>1.88<br>1.96 | 57.5<br>1.88<br>1.96 | 57.7<br>1.88<br>1.96 | 57.8<br>1.88<br>1.95       | 58.0<br>1.88<br>1.95 | 58.2<br>1.88<br>1.95 | 58.4<br>1.88<br>1.94 | 58.6<br>1.88<br>1.94 |
| 46                     | -1.13                         | 56.6               | PP PT7<br>PP EPR<br>TO EPR | 57.0<br>1.87<br>1.96 | 57.2<br>1.87<br>1.96 | 57.4<br>1.87<br>1.96 | 57.6<br>1.87<br>1.95       | 57.7<br>1.87<br>1.95 | 57.9<br>1.87<br>1.95 | 58.1<br>1.87<br>1.94 | 58.3<br>1.87<br>1.94 |

Typical Trim Data Usage  
 Figure 201

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**BAROMETRIC PRESSURE INCHES OF MERCURY ABSOLUTE**

|               |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
|---------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|               | 20.9 TO 22.4                     | 22.5 TO 24.0                     | 24.1 TO 25.6                     | 25.7 TO 27.2                     | 27.3 TO 28.8                     | 28.9 TO 30.4                     | 30.5 TO 32.0                     |
|               | SECTION<br>71-09-221<br>PAGE 202 | SECTION<br>71-09-222<br>PAGE 202 | SECTION<br>71-09-223<br>PAGE 202 | SECTION<br>71-09-224<br>PAGE 202 | SECTION<br>71-09-225<br>PAGE 202 | SECTION<br>71-09-226<br>PAGE 202 | SECTION<br>71-09-227<br>PAGE 202 |
| -38 TO<br>-26 |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
| -24 TO<br>-12 | 203                              | 203                              | 203                              | 203                              | 203                              | 203                              | 203                              |
| -10 TO<br>2   | 204                              | 204                              | 204                              | 204                              | 204                              | 204                              | 204                              |
| 4 TO 16       | 205                              | 205                              | 205                              | 205                              | 205                              | 205                              | 205                              |
| 18 TO<br>30   | 206                              | 206                              | 206                              | 206                              | 206                              | 206                              | 206                              |
| 32 TO<br>44   | 207                              | 207                              | 207                              | 207                              | 207                              | 207                              | 207                              |
| 46 TO<br>58   | 208                              | 208                              | 208                              | 208                              | 208                              | 208                              | 208                              |
| 60 TO<br>72   | 209                              | 209                              | 209                              | 209                              | 209                              | 209                              | 209                              |
| 74 TO<br>86   | 210                              | 210                              | 210                              | 210                              | 210                              | 210                              | 210                              |
| 88 TO<br>100  | 211                              | 211                              | 211                              | 211                              | 211                              | 211                              | 211                              |
| 102 TO<br>114 | 212                              | 212                              | 212                              | 212                              | 212                              | 212                              | 212                              |
| 116 TO<br>120 | 213                              | 213                              | 213                              | 213                              | 213                              | 213                              | 213                              |

AMBIENT TEMPERATURE - F°

Trim Table Locator Tabulation  
Figure 202

**71-09-210**

EFFECTIVITY  
JT8D-9 ENGINES

07.1

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Aug 01/07

D54662



MAINTENANCE MANUAL

TRIM TABLES - (JT8D-9)

BAROMETRIC PRESSURE 20.9 TO 22.4 INCHES OF MERCURY ABSOLUTE

NOTE: For general instructions for use of engine trim data and a trim table locator tabulation, refer to 71-09-210.

This trim data also applies to JT8D-9A.

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221

01

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Aug 01/05

| OAT OF (OC) | BAROMETER INS. MERCURY |      | DATA PLATE CORR. %N2 | IDLE RPM %N2               | DATA PLATE PIT       | 20.9                 | 21.C                 | 21.1                 | 21.2                 | 21.3                 | 21.4                 | 21.5                 | 21.6                 | 21.7                 | 21.8                 | 21.9                 | 22.0                 | 22.1                 | 22.2                 | 22.3                 | 22.4                 |
|-------------|------------------------|------|----------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | 20.9                   | 21.C |                      |                            |                      | 21.1                 | 21.2                 | 21.3                 | 21.4                 | 21.5                 | 21.6                 | 21.7                 | 21.8                 | 21.9                 | 22.0                 | 22.1                 | 22.2                 | 22.3                 | 22.4                 |                      |                      |
| -38 (-39)   | -8.68                  | 55.2 | 47.6<br>2.28<br>2.34 | PP PT7<br>PP EPR<br>TO EPR | 48.0<br>2.28<br>2.34 | 48.3<br>2.28<br>2.34 | 48.5<br>2.28<br>2.34 | 48.7<br>2.28<br>2.34 | 49.0<br>2.28<br>2.34 | 49.2<br>2.28<br>2.34 | 49.4<br>2.28<br>2.34 | 49.6<br>2.28<br>2.34 | 49.9<br>2.28<br>2.34 | 50.1<br>2.28<br>2.34 | 50.3<br>2.28<br>2.34 | 50.5<br>2.28<br>2.34 | 50.8<br>2.28<br>2.34 | 51.0<br>2.28<br>2.34 | 50.8<br>2.28<br>2.34 | 50.5<br>2.28<br>2.34 | 36.8<br>36.6<br>37.0 |
| -36 (-38)   | -8.49                  | 55.0 | 47.4<br>2.27<br>2.34 | PP PT7<br>PP EPR<br>TO EPR | 47.9<br>2.27<br>2.34 | 48.3<br>2.27<br>2.34 | 48.5<br>2.27<br>2.34 | 48.6<br>2.27<br>2.34 | 48.8<br>2.27<br>2.34 | 49.0<br>2.27<br>2.34 | 49.2<br>2.27<br>2.34 | 49.5<br>2.27<br>2.34 | 49.7<br>2.27<br>2.34 | 49.9<br>2.27<br>2.34 | 50.1<br>2.27<br>2.34 | 50.4<br>2.27<br>2.34 | 50.6<br>2.27<br>2.34 | 50.8<br>2.27<br>2.34 | 50.6<br>2.27<br>2.34 | 50.4<br>2.27<br>2.34 | 36.8<br>36.6<br>37.0 |
| -34 (-37)   | -8.31                  | 54.5 | 47.3<br>2.26<br>2.33 | PP PT7<br>PP EPR<br>TO EPR | 47.7<br>2.26<br>2.33 | 48.2<br>2.26<br>2.33 | 48.4<br>2.26<br>2.33 | 48.6<br>2.26<br>2.33 | 48.8<br>2.26<br>2.33 | 49.1<br>2.26<br>2.33 | 49.3<br>2.26<br>2.33 | 49.5<br>2.26<br>2.33 | 49.7<br>2.26<br>2.33 | 49.9<br>2.26<br>2.33 | 50.1<br>2.26<br>2.33 | 50.4<br>2.26<br>2.33 | 50.6<br>2.26<br>2.33 | 50.8<br>2.26<br>2.33 | 50.6<br>2.26<br>2.33 | 50.4<br>2.26<br>2.33 | 36.8<br>36.6<br>37.0 |
| -32 (-36)   | -8.13                  | 54.7 | 47.1<br>2.25<br>2.33 | PP PT7<br>PP EPR<br>TO EPR | 47.5<br>2.25<br>2.33 | 48.0<br>2.25<br>2.33 | 48.2<br>2.25<br>2.33 | 48.4<br>2.25<br>2.33 | 48.7<br>2.25<br>2.33 | 48.9<br>2.25<br>2.33 | 49.1<br>2.25<br>2.33 | 49.3<br>2.25<br>2.33 | 49.6<br>2.25<br>2.33 | 49.8<br>2.25<br>2.33 | 50.0<br>2.25<br>2.33 | 50.2<br>2.25<br>2.33 | 50.5<br>2.25<br>2.33 | 50.8<br>2.25<br>2.33 | 50.6<br>2.25<br>2.33 | 50.4<br>2.25<br>2.33 | 36.8<br>36.6<br>37.0 |
| -30 (-34)   | -7.94                  | 54.6 | 46.9<br>2.25<br>2.32 | PP PT7<br>PP EPR<br>TO EPR | 47.4<br>2.25<br>2.32 | 47.8<br>2.25<br>2.32 | 48.0<br>2.25<br>2.32 | 48.3<br>2.25<br>2.32 | 48.5<br>2.25<br>2.32 | 48.7<br>2.25<br>2.32 | 48.9<br>2.25<br>2.32 | 49.1<br>2.25<br>2.32 | 49.3<br>2.25<br>2.32 | 49.6<br>2.25<br>2.32 | 49.8<br>2.25<br>2.32 | 50.0<br>2.25<br>2.32 | 50.2<br>2.25<br>2.32 | 50.5<br>2.25<br>2.32 | 50.3<br>2.25<br>2.32 | 50.1<br>2.25<br>2.32 | 36.8<br>36.6<br>37.0 |
| -28 (-33)   | -7.76                  | 54.5 | 46.7<br>2.24<br>2.32 | PP PT7<br>PP EPR<br>TO EPR | 47.2<br>2.24<br>2.32 | 47.6<br>2.24<br>2.32 | 48.0<br>2.24<br>2.32 | 48.3<br>2.24<br>2.32 | 48.5<br>2.24<br>2.32 | 48.7<br>2.24<br>2.32 | 48.9<br>2.24<br>2.32 | 49.1<br>2.24<br>2.32 | 49.3<br>2.24<br>2.32 | 49.6<br>2.24<br>2.32 | 49.8<br>2.24<br>2.32 | 50.0<br>2.24<br>2.32 | 50.2<br>2.24<br>2.32 | 50.5<br>2.24<br>2.32 | 50.3<br>2.24<br>2.32 | 50.1<br>2.24<br>2.32 | 36.8<br>36.6<br>37.0 |
| -26 (-32)   | -7.58                  | 54.4 | 46.6<br>2.23<br>2.31 | PP PT7<br>PP EPR<br>TO EPR | 47.0<br>2.23<br>2.31 | 47.5<br>2.23<br>2.31 | 47.7<br>2.23<br>2.31 | 47.9<br>2.23<br>2.31 | 48.1<br>2.23<br>2.31 | 48.3<br>2.23<br>2.31 | 48.5<br>2.23<br>2.31 | 48.7<br>2.23<br>2.31 | 48.8<br>2.23<br>2.31 | 49.0<br>2.23<br>2.31 | 49.3<br>2.23<br>2.31 | 49.5<br>2.23<br>2.31 | 49.7<br>2.23<br>2.31 | 49.9<br>2.23<br>2.31 | 49.7<br>2.23<br>2.31 | 49.5<br>2.23<br>2.31 | 36.8<br>36.6<br>37.0 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 1)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221

D54701



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |              |                            |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
|-------------|------------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | DATA PLATE CORR. %N2   | IDLE RPM %N2 | DATA PLATE PT7             | 20.9                 | 21.0                 | 21.1                 | 21.2                 | 21.3                 | 21.4                 | 21.5                 | 21.6                 | 21.7                 | 21.8                 | 21.9                 | 22.0                 | 22.1                 | 22.2                 | 22.3                 | 22.4                 |
| -24 (-31)   | -7.40                  | 54.3         | PP PT7<br>PP EPR<br>TO EPR | 46.4<br>2.22<br>2.31 | 46.6<br>2.22<br>2.31 | 46.9<br>2.22<br>2.31 | 47.1<br>2.22<br>2.31 | 47.3<br>2.22<br>2.31 | 47.5<br>2.22<br>2.31 | 47.7<br>2.22<br>2.31 | 48.0<br>2.22<br>2.31 | 48.2<br>2.22<br>2.31 | 48.4<br>2.22<br>2.31 | 48.6<br>2.22<br>2.31 | 48.8<br>2.22<br>2.31 | 49.1<br>2.22<br>2.31 | 49.3<br>2.22<br>2.31 | 49.5<br>2.22<br>2.31 | 49.7<br>2.22<br>2.31 |
| -22 (-30)   | -7.21                  | 54.2         | PP PT7<br>PP EPR<br>TO EPR | 46.2<br>2.21<br>2.30 | 46.5<br>2.21<br>2.30 | 46.7<br>2.21<br>2.30 | 46.9<br>2.21<br>2.30 | 47.1<br>2.21<br>2.30 | 47.3<br>2.21<br>2.30 | 47.6<br>2.21<br>2.30 | 47.8<br>2.21<br>2.30 | 48.0<br>2.21<br>2.30 | 48.2<br>2.21<br>2.30 | 48.4<br>2.21<br>2.30 | 48.7<br>2.21<br>2.30 | 48.9<br>2.21<br>2.30 | 49.1<br>2.21<br>2.30 | 49.3<br>2.21<br>2.30 | 49.6<br>2.21<br>2.30 |
| -20 (-29)   | -7.03                  | 54.1         | PP PT7<br>PP EPR<br>TO EPR | 46.1<br>2.20<br>2.30 | 46.3<br>2.20<br>2.30 | 46.5<br>2.20<br>2.30 | 46.7<br>2.20<br>2.30 | 46.9<br>2.20<br>2.30 | 47.2<br>2.20<br>2.30 | 47.4<br>2.20<br>2.30 | 47.6<br>2.20<br>2.30 | 47.8<br>2.20<br>2.30 | 48.0<br>2.20<br>2.30 | 48.3<br>2.20<br>2.30 | 48.5<br>2.20<br>2.30 | 48.7<br>2.20<br>2.30 | 48.9<br>2.20<br>2.30 | 49.1<br>2.20<br>2.30 | 49.4<br>2.20<br>2.30 |
| -18 (-28)   | -6.85                  | 54.1         | PP PT7<br>PP EPR<br>TO EPR | 45.9<br>2.20<br>2.29 | 46.1<br>2.20<br>2.29 | 46.3<br>2.20<br>2.29 | 46.5<br>2.20<br>2.29 | 46.8<br>2.20<br>2.29 | 47.0<br>2.20<br>2.29 | 47.2<br>2.20<br>2.29 | 47.4<br>2.20<br>2.29 | 47.6<br>2.20<br>2.29 | 47.9<br>2.20<br>2.29 | 48.1<br>2.20<br>2.29 | 48.3<br>2.20<br>2.29 | 48.5<br>2.20<br>2.29 | 48.7<br>2.20<br>2.29 | 49.0<br>2.20<br>2.29 | 49.2<br>2.20<br>2.29 |
| -16 (-27)   | -6.66                  | 54.0         | PP PT7<br>PP EPR<br>TO EPR | 45.7<br>2.19<br>2.28 | 45.9<br>2.19<br>2.28 | 46.1<br>2.19<br>2.28 | 46.4<br>2.19<br>2.28 | 46.6<br>2.19<br>2.28 | 46.8<br>2.19<br>2.28 | 47.0<br>2.19<br>2.28 | 47.2<br>2.19<br>2.28 | 47.5<br>2.19<br>2.28 | 47.7<br>2.19<br>2.28 | 47.9<br>2.19<br>2.28 | 48.1<br>2.19<br>2.28 | 48.3<br>2.19<br>2.28 | 48.6<br>2.19<br>2.28 | 48.8<br>2.19<br>2.28 | 49.0<br>2.19<br>2.28 |
| -14 (-26)   | -6.48                  | 54.0         | PP PT7<br>PP EPR<br>TO EPR | 45.5<br>2.18<br>2.28 | 45.8<br>2.18<br>2.28 | 46.0<br>2.18<br>2.28 | 46.2<br>2.18<br>2.28 | 46.4<br>2.18<br>2.28 | 46.6<br>2.18<br>2.28 | 46.8<br>2.18<br>2.28 | 47.1<br>2.18<br>2.28 | 47.3<br>2.18<br>2.28 | 47.5<br>2.18<br>2.28 | 47.7<br>2.18<br>2.28 | 47.9<br>2.18<br>2.28 | 48.2<br>2.18<br>2.28 | 48.4<br>2.18<br>2.28 | 48.6<br>2.18<br>2.28 | 48.8<br>2.18<br>2.28 |
| -12 (-24)   | -6.30                  | 54.0         | PP PT7<br>PP EPR<br>TO EPR | 45.4<br>2.17<br>2.27 | 45.6<br>2.17<br>2.27 | 45.8<br>2.17<br>2.27 | 46.0<br>2.17<br>2.27 | 46.2<br>2.17<br>2.27 | 46.4<br>2.17<br>2.27 | 46.7<br>2.17<br>2.27 | 46.9<br>2.17<br>2.27 | 47.1<br>2.17<br>2.27 | 47.3<br>2.17<br>2.27 | 47.5<br>2.17<br>2.27 | 47.7<br>2.17<br>2.27 | 48.0<br>2.17<br>2.27 | 48.2<br>2.17<br>2.27 | 48.4<br>2.17<br>2.27 | 48.6<br>2.17<br>2.27 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 2)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221



MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |              | DATA PLATE CORR. %N2 | IDLE PPM %N2               | DATA PLATE PT7 | 20.9 | 21.C | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 |
|-------------|------------------------|--------------|----------------------|----------------------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | 20.9                   | 21.C         |                      |                            |                | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 |      |      |
| -10 (-23)   | 45.2<br>2.16           | 45.4<br>2.16 | 54.0                 | PP PT7<br>PP EPR<br>TO EPR | 34.5           | 34.6 | 34.8 | 35.0 | 35.1 | 35.3 | 35.5 | 35.6 | 35.8 | 36.0 | 36.1 | 36.3 | 36.5 | 36.6 | 36.8 | 37.0 |      |
| -8 (-22)    | 45.0<br>2.15           | 45.4<br>2.15 | 54.0                 | PP PT7<br>PP EPR<br>TO EPR | 45.0           | 45.2 | 45.4 | 45.6 | 45.9 | 46.1 | 46.3 | 46.5 | 46.7 | 46.9 | 47.1 | 47.3 | 47.6 | 47.8 | 48.0 | 48.2 | 48.4 |
| -6 (-21)    | 44.8<br>2.14           | 45.0<br>2.14 | 54.1                 | PP PT7<br>PP EPR<br>TO EPR | 44.8           | 45.0 | 45.2 | 45.5 | 45.7 | 45.9 | 46.1 | 46.3 | 46.5 | 46.7 | 47.0 | 47.2 | 47.4 | 47.6 | 47.8 | 48.0 | 48.2 |
| -4 (-20)    | 44.6<br>2.14           | 44.8<br>2.14 | 54.1                 | PP PT7<br>PP EPR<br>TO EPR | 44.6           | 44.8 | 45.1 | 45.3 | 45.5 | 45.7 | 45.9 | 46.1 | 46.3 | 46.6 | 46.8 | 47.0 | 47.2 | 47.4 | 47.6 | 47.8 | 48.0 |
| -2 (-19)    | 44.5<br>2.13           | 44.7<br>2.13 | 54.2                 | PP PT7<br>PP EPR<br>TO EPR | 44.5           | 44.7 | 44.9 | 45.1 | 45.3 | 45.5 | 45.7 | 45.9 | 46.2 | 46.4 | 46.6 | 46.8 | 47.0 | 47.2 | 47.4 | 47.6 | 47.8 |
| 0 (-18)     | 44.3<br>2.12           | 44.5<br>2.12 | 54.2                 | PP PT7<br>PP EPR<br>TO EPR | 44.3           | 44.5 | 44.7 | 44.9 | 45.1 | 45.3 | 45.5 | 45.7 | 45.9 | 46.2 | 46.4 | 46.6 | 46.8 | 47.0 | 47.2 | 47.4 | 47.6 |
| 2 (-17)     | 44.1<br>2.11           | 44.3<br>2.11 | 54.4                 | PP PT7<br>PP EPR<br>TO EPR | 44.1           | 44.3 | 44.5 | 44.7 | 44.9 | 45.1 | 45.3 | 45.5 | 45.7 | 45.8 | 46.0 | 46.2 | 46.4 | 46.6 | 46.8 | 47.0 | 47.3 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 3)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221

| OAT OF (°C) | BAROMETER INS. MERCURY |      |      | DATA PLATE CORR. %N2 | ICLLE PPM %N2 | DATA PLATE PT7 | MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
|-------------|------------------------|------|------|----------------------|---------------|----------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|
|             | 20.9                   | 21.C | 21.1 |                      |               |                | 21.2    | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 |  |  |  |
| 4 (-16)     | 34.5                   | 34.6 | 34.8 | 35.0                 | 35.1          | 35.3           | 35.5    | 35.6 | 35.8 | 36.C | 36.1 | 36.3 | 36.5 | 36.6 | 36.8 | 37.0 |      |      |      |  |  |  |
|             | 43.9                   | 44.1 | 44.3 | 44.5                 | 44.8          | 45.0           | 45.2    | 45.4 | 45.6 | 45.8 | 46.0 | 46.2 | 46.4 | 46.6 | 46.9 | 47.1 |      |      |      |  |  |  |
|             | 2.10                   | 2.10 | 2.10 | 2.10                 | 2.10          | 2.10           | 2.10    | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |      |      |      |  |  |  |
|             | 2.23                   | 2.23 | 2.23 | 2.23                 | 2.23          | 2.23           | 2.23    | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 |      |      |      |  |  |  |
| 6 (-14)     | 43.7                   | 43.9 | 44.2 | 44.4                 | 44.6          | 44.8           | 45.0    | 45.2 | 45.4 | 45.6 | 45.8 | 46.0 | 46.3 | 46.5 | 46.7 | 46.9 |      |      |      |  |  |  |
|             | 2.09                   | 2.09 | 2.09 | 2.09                 | 2.09          | 2.09           | 2.09    | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 |      |      |      |  |  |  |
|             | 2.22                   | 2.22 | 2.22 | 2.22                 | 2.22          | 2.22           | 2.22    | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 |      |      |      |  |  |  |
| 8 (-13)     | 43.6                   | 43.8 | 44.0 | 44.2                 | 44.4          | 44.6           | 44.8    | 45.0 | 45.2 | 45.4 | 45.6 | 45.9 | 46.1 | 46.3 | 46.5 | 46.7 |      |      |      |  |  |  |
|             | 2.08                   | 2.08 | 2.08 | 2.08                 | 2.08          | 2.08           | 2.08    | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 |      |      |      |  |  |  |
|             | 2.21                   | 2.21 | 2.21 | 2.21                 | 2.21          | 2.21           | 2.21    | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 |      |      |      |  |  |  |
| 10 (-12)    | 43.4                   | 43.6 | 43.8 | 44.0                 | 44.2          | 44.4           | 44.6    | 44.8 | 45.0 | 45.3 | 45.5 | 45.7 | 45.9 | 46.1 | 46.3 | 46.5 |      |      |      |  |  |  |
|             | 2.08                   | 2.08 | 2.08 | 2.08                 | 2.08          | 2.08           | 2.08    | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 |      |      |      |  |  |  |
|             | 2.21                   | 2.21 | 2.21 | 2.21                 | 2.21          | 2.21           | 2.21    | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 |      |      |      |  |  |  |
| 12 (-11)    | 43.2                   | 43.4 | 43.6 | 43.8                 | 44.0          | 44.2           | 44.4    | 44.6 | 44.9 | 45.1 | 45.3 | 45.5 | 45.7 | 45.9 | 46.1 | 46.3 |      |      |      |  |  |  |
|             | 2.07                   | 2.07 | 2.07 | 2.07                 | 2.07          | 2.07           | 2.07    | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 |      |      |      |  |  |  |
|             | 2.20                   | 2.20 | 2.20 | 2.20                 | 2.20          | 2.20           | 2.20    | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 |      |      |      |  |  |  |
| 14 (-10)    | 43.0                   | 43.2 | 43.4 | 43.6                 | 43.8          | 44.0           | 44.2    | 44.5 | 44.7 | 44.9 | 45.1 | 45.3 | 45.5 | 45.7 | 45.9 | 46.1 |      |      |      |  |  |  |
|             | 2.06                   | 2.06 | 2.06 | 2.06                 | 2.06          | 2.06           | 2.06    | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 |      |      |      |  |  |  |
|             | 2.19                   | 2.19 | 2.19 | 2.19                 | 2.19          | 2.19           | 2.19    | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 |      |      |      |  |  |  |
| 16 (-9)     | 42.8                   | 43.0 | 43.2 | 43.4                 | 43.6          | 43.8           | 44.1    | 44.3 | 44.5 | 44.7 | 44.9 | 45.1 | 45.3 | 45.5 | 45.7 | 45.9 |      |      |      |  |  |  |
|             | 2.05                   | 2.05 | 2.05 | 2.05                 | 2.05          | 2.05           | 2.05    | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 |      |      |      |  |  |  |
|             | 2.19                   | 2.19 | 2.19 | 2.19                 | 2.19          | 2.19           | 2.19    | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 |      |      |      |  |  |  |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 4)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221



| OAT OF (°C) | BARMETER INS. MERCURY |      |      | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | DATA PLATE PT7 | 20.9 | 21.0 | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 |
|-------------|-----------------------|------|------|----------------------|--------------|----------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | 20.9                  | 21.0 | 21.1 |                      |              |                |                | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 |      |      |      |
| 32<br>( 0 ) |                       |      |      | 34.5                 |              |                |                | 34.6 | 34.8 | 35.0 | 35.1 | 35.3 | 35.5 | 35.6 | 35.8 | 36.0 | 36.1 | 36.3 | 36.5 | 36.6 | 36.8 |      |      |
|             |                       |      |      | 41.3                 |              |                |                | 41.5 | 41.7 | 41.9 | 42.1 | 42.3 | 42.5 | 42.7 | 42.9 | 43.1 | 43.3 | 43.5 | 43.7 | 43.9 | 44.1 | 44.3 |      |
|             |                       |      |      | 1.98                 | 1.98         | 1.98           | 1.98           | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 |
| 34<br>( 1 ) |                       |      |      | 2.13                 |              |                |                | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 |      |
|             |                       |      |      | 41.1                 |              |                |                | 41.3 | 41.5 | 41.7 | 41.9 | 42.1 | 42.3 | 42.5 | 42.7 | 42.9 | 43.1 | 43.3 | 43.5 | 43.6 | 43.8 | 44.0 |      |
|             |                       |      |      | 1.97                 | 1.97         | 1.97           | 1.97           | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 |
| 36<br>( 2 ) |                       |      |      | 2.13                 |              |                |                | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 |      |
|             |                       |      |      | 40.9                 |              |                |                | 41.1 | 41.3 | 41.5 | 41.7 | 41.9 | 42.1 | 42.3 | 42.5 | 42.7 | 42.9 | 43.0 | 43.2 | 43.4 | 43.6 | 43.8 |      |
|             |                       |      |      | 1.96                 | 1.96         | 1.96           | 1.96           | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 |
| 38<br>( 3 ) |                       |      |      | 2.12                 |              |                |                | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 |      |
|             |                       |      |      | 40.7                 |              |                |                | 40.9 | 41.1 | 41.3 | 41.5 | 41.7 | 41.9 | 42.1 | 42.3 | 42.5 | 42.6 | 42.8 | 43.0 | 43.2 | 43.4 | 43.6 |      |
|             |                       |      |      | 1.95                 | 1.95         | 1.95           | 1.95           | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 |
| 40<br>( 4 ) |                       |      |      | 2.11                 |              |                |                | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 |      |
|             |                       |      |      | 40.5                 |              |                |                | 40.7 | 40.9 | 41.1 | 41.3 | 41.5 | 41.7 | 41.9 | 42.1 | 42.2 | 42.4 | 42.6 | 42.8 | 43.0 | 43.2 | 43.4 |      |
|             |                       |      |      | 1.94                 | 1.94         | 1.94           | 1.94           | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 |
| 42<br>( 6 ) |                       |      |      | 2.10                 |              |                |                | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |      |
|             |                       |      |      | 40.3                 |              |                |                | 40.5 | 40.7 | 40.9 | 41.1 | 41.3 | 41.5 | 41.7 | 41.8 | 42.0 | 42.2 | 42.4 | 42.6 | 42.8 | 43.0 | 43.2 |      |
|             |                       |      |      | 1.93                 | 1.93         | 1.93           | 1.93           | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 |
| 44<br>( 7 ) |                       |      |      | 2.09                 |              |                |                | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 |      |
|             |                       |      |      | 40.1                 |              |                |                | 40.3 | 40.5 | 40.7 | 40.9 | 41.1 | 41.3 | 41.5 | 41.6 | 41.8 | 42.0 | 42.2 | 42.4 | 42.6 | 42.8 | 43.0 |      |
|             |                       |      |      | 1.92                 | 1.92         | 1.92           | 1.92           | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 |

APPLICABLE TO PMA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 6)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221



MAINTENANCE MANUAL

| BAROMETER INS. MERCURY |                      | 20.9  | 21.C | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 |
|------------------------|----------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| OAT OF (°C)            | DATA PLATE CORR. %N2 | 34.5  | 34.6 | 34.8 | 35.0 | 35.1 | 35.3 | 35.5 | 35.6 | 35.8 | 36.C | 36.1 | 36.3 | 36.5 | 36.6 | 36.8 | 37.0 |
|                        | IDLE RPM %N2         |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 46 ( 9 )               | DATA PLATE CORR. %N2 | -1.12 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                        | PP PT7               | 35.9  | 40.1 | 40.3 | 40.5 | 40.7 | 40.9 | 41.0 | 41.2 | 41.4 | 41.6 | 41.8 | 42.0 | 42.2 | 42.4 | 42.6 | 42.8 |
|                        | PP EPR               | 1.91  | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 |
| 48 ( 9 )               | DATA PLATE CORR. %N2 |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                        | PP PT7               | 39.7  | 39.5 | 40.1 | 40.3 | 40.5 | 40.7 | 40.8 | 41.0 | 41.2 | 41.4 | 41.6 | 41.8 | 42.0 | 42.2 | 42.4 | 42.6 |
|                        | PP EPR               | 1.90  | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 |
| 50 ( 10 )              | DATA PLATE CORR. %N2 |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                        | PP PT7               | 35.5  | 35.7 | 39.9 | 40.1 | 40.3 | 40.4 | 40.6 | 40.8 | 41.0 | 41.2 | 41.4 | 41.6 | 41.8 | 42.0 | 42.1 | 42.3 |
|                        | PP EPR               | 1.89  | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 |
| 52 ( 11 )              | DATA PLATE CORR. %N2 |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                        | PP PT7               | 39.3  | 39.5 | 39.7 | 39.9 | 40.1 | 40.2 | 40.4 | 40.6 | 40.8 | 41.0 | 41.2 | 41.4 | 41.6 | 41.7 | 41.9 | 42.1 |
|                        | PP EPR               | 1.88  | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.89 |
| 54 ( 12 )              | DATA PLATE CORR. %N2 |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                        | PP PT7               | 39.1  | 39.3 | 39.5 | 39.7 | 39.8 | 39.8 | 40.0 | 40.2 | 40.4 | 40.6 | 41.0 | 41.2 | 41.3 | 41.5 | 41.7 | 41.9 |
|                        | PP EPR               | 1.87  | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 |
| 56 ( 13 )              | DATA PLATE CORR. %N2 |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                        | PP PT7               | 38.9  | 39.1 | 39.3 | 39.5 | 39.6 | 39.8 | 40.0 | 40.2 | 40.4 | 40.6 | 40.8 | 40.9 | 41.1 | 41.3 | 41.5 | 41.7 |
|                        | PP EPR               | 1.86  | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 |
| 58 ( 14 )              | DATA PLATE CORR. %N2 |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                        | PP PT7               | 38.7  | 38.9 | 39.1 | 39.3 | 39.4 | 39.6 | 39.8 | 40.0 | 40.2 | 40.4 | 40.6 | 40.7 | 40.9 | 41.1 | 41.3 | 41.5 |
|                        | PP EPR               | 1.85  | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 7)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221

D54713



MAINTENANCE MANUAL

| BAROMETER INS. MERCURY |                      | 20.9                 | 21.0           | 21.1         | 21.2           | 21.3   | 21.4   | 21.5   | 21.6   | 21.7   | 21.8   | 21.9   | 22.0   | 22.1   | 22.2   | 22.3   | 22.4 |        |  |        |  |
|------------------------|----------------------|----------------------|----------------|--------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|--------|--|--------|--|
| OAT OF (°C)            | DATA PLATE CORR. %N2 | DATA PLATE PT7       |                | IDLE PPM %N2 | DATA PLATE PT7 |        | PP PT7 | PP EPR |        | TO EPR | PP PT7 |        | PP EPR |        | TO EPR | PP PT7 |      | PP EPR |  | TO EPR |  |
|                        |                      | DATA PLATE CORR. %N2 | DATA PLATE PT7 |              | PP EPR         | TO EPR |        | PP EPR | TO EPR |        | PP EPR | TO EPR | PP EPR | TO EPR |        |        |      |        |  |        |  |
| 60 ( 16)               | + .08                | 34.5                 | 34.6           | 34.8         | 35.0           | 35.1   | 35.3   | 35.5   | 35.6   | 35.8   | 36.0   | 36.1   | 36.3   | 36.5   | 36.6   | 36.8   | 37.0 |        |  |        |  |
|                        |                      | 38.5                 | 38.7           | 38.9         | 39.1           | 39.2   | 39.4   | 39.6   | 39.8   | 40.0   | 40.2   | 40.3   | 40.5   | 40.7   | 40.9   | 41.1   | 41.3 |        |  |        |  |
|                        |                      | 1.84                 | 1.84           | 1.84         | 1.84           | 1.84   | 1.84   | 1.84   | 1.84   | 1.84   | 1.84   | 1.84   | 1.84   | 1.84   | 1.84   | 1.84   | 1.84 |        |  |        |  |
|                        |                      | 2.04                 | 2.04           | 2.04         | 2.04           | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04 |        |  |        |  |
| 62 ( 17)               | + .25                | 38.3                 | 38.5           | 38.7         | 38.8           | 39.0   | 39.2   | 39.4   | 39.6   | 39.8   | 39.9   | 40.1   | 40.3   | 40.5   | 40.7   | 40.9   | 41.0 |        |  |        |  |
|                        |                      | 1.83                 | 1.83           | 1.83         | 1.83           | 1.83   | 1.83   | 1.83   | 1.83   | 1.83   | 1.83   | 1.83   | 1.83   | 1.83   | 1.83   | 1.83   | 1.83 |        |  |        |  |
|                        |                      | 2.04                 | 2.04           | 2.04         | 2.04           | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04 |        |  |        |  |
| 64 ( 18)               | + .42                | 38.1                 | 38.3           | 38.4         | 38.6           | 38.8   | 39.0   | 39.2   | 39.4   | 39.5   | 39.7   | 39.9   | 40.1   | 40.3   | 40.4   | 40.6   | 40.8 |        |  |        |  |
|                        |                      | 1.82                 | 1.82           | 1.82         | 1.82           | 1.82   | 1.82   | 1.82   | 1.82   | 1.82   | 1.82   | 1.82   | 1.82   | 1.82   | 1.82   | 1.82   | 1.82 |        |  |        |  |
|                        |                      | 2.04                 | 2.04           | 2.04         | 2.04           | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04 |        |  |        |  |
| 66 ( 19)               | + .59                | 37.9                 | 38.1           | 38.2         | 38.4           | 38.6   | 38.8   | 39.0   | 39.1   | 39.3   | 39.5   | 39.7   | 39.9   | 40.0   | 40.2   | 40.4   | 40.6 |        |  |        |  |
|                        |                      | 1.81                 | 1.81           | 1.81         | 1.81           | 1.81   | 1.81   | 1.81   | 1.81   | 1.81   | 1.81   | 1.81   | 1.81   | 1.81   | 1.81   | 1.81   | 1.81 |        |  |        |  |
|                        |                      | 2.04                 | 2.04           | 2.04         | 2.04           | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04 |        |  |        |  |
| 68 ( 20)               | + .76                | 37.7                 | 37.8           | 38.0         | 38.2           | 38.4   | 38.6   | 38.7   | 38.9   | 39.1   | 39.3   | 39.5   | 39.6   | 39.8   | 40.0   | 40.2   | 40.4 |        |  |        |  |
|                        |                      | 1.80                 | 1.80           | 1.80         | 1.80           | 1.80   | 1.80   | 1.80   | 1.80   | 1.80   | 1.80   | 1.80   | 1.80   | 1.80   | 1.80   | 1.80   | 1.80 |        |  |        |  |
|                        |                      | 2.04                 | 2.04           | 2.04         | 2.04           | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04 |        |  |        |  |
| 70 ( 21)               | + .93                | 37.5                 | 37.6           | 37.9         | 38.0           | 38.2   | 38.3   | 38.5   | 38.7   | 38.9   | 39.1   | 39.2   | 39.4   | 39.6   | 39.8   | 40.0   | 40.1 |        |  |        |  |
|                        |                      | 1.79                 | 1.79           | 1.79         | 1.79           | 1.79   | 1.79   | 1.79   | 1.79   | 1.79   | 1.79   | 1.79   | 1.79   | 1.79   | 1.79   | 1.79   | 1.79 |        |  |        |  |
|                        |                      | 2.04                 | 2.04           | 2.04         | 2.04           | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04 |        |  |        |  |
| 72 ( 22)               | +1.10                | 37.2                 | 37.4           | 37.6         | 37.8           | 37.9   | 38.1   | 38.3   | 38.5   | 38.7   | 38.8   | 39.0   | 39.2   | 39.4   | 39.6   | 39.7   | 39.9 |        |  |        |  |
|                        |                      | 1.78                 | 1.78           | 1.78         | 1.78           | 1.78   | 1.78   | 1.78   | 1.78   | 1.78   | 1.78   | 1.78   | 1.78   | 1.78   | 1.78   | 1.78   | 1.78 |        |  |        |  |
|                        |                      | 2.04                 | 2.04           | 2.04         | 2.04           | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04   | 2.04 |        |  |        |  |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 8)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221



| BAROMETER INS. MERCURY |                      | 20.9 | 21.0 | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 |
|------------------------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| OAT OF (OC)            | DATA PLATE CORR. %N2 | 34.5 | 34.6 | 34.8 | 35.0 | 35.1 | 35.3 | 35.5 | 35.6 | 35.8 | 36.0 | 36.1 | 36.3 | 36.5 | 36.6 | 36.8 | 37.0 |
|                        | IDLE RPM %N2         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 88 ( 31)               | DATA PLATE CORR. %N2 | 35.5 | 35.7 | 35.8 | 36.0 | 36.2 | 36.3 | 36.5 | 36.7 | 36.9 | 37.0 | 37.2 | 37.4 | 37.5 | 37.7 | 37.9 | 38.0 |
|                        | PP PT7               | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 |
| 90 ( 32)               | DATA PLATE CORR. %N2 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 |
|                        | PP PT7               | 35.3 | 35.4 | 35.6 | 35.8 | 36.0 | 36.1 | 36.3 | 36.5 | 36.6 | 36.8 | 37.0 | 37.1 | 37.3 | 37.5 | 37.6 | 37.8 |
| 92 ( 33)               | DATA PLATE CORR. %N2 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 |
|                        | PP EPR               | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 |
| 94 ( 34)               | DATA PLATE CORR. %N2 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 |
|                        | TO EPR               | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| 96 ( 36)               | DATA PLATE CORR. %N2 | 34.9 | 35.0 | 35.2 | 35.4 | 35.5 | 35.7 | 35.9 | 36.0 | 36.2 | 36.4 | 36.5 | 36.7 | 36.9 | 37.0 | 37.2 | 37.4 |
|                        | PP PT7               | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 |
| 98 ( 37)               | DATA PLATE CORR. %N2 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 |
|                        | TO EPR               | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 |
| 100 ( 38)              | DATA PLATE CORR. %N2 | 34.7 | 34.8 | 35.0 | 35.2 | 35.3 | 35.5 | 35.7 | 35.8 | 36.0 | 36.2 | 36.3 | 36.5 | 36.7 | 36.8 | 37.0 | 37.2 |
|                        | PP EPR               | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 |
|                        | DATA PLATE CORR. %N2 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 |
|                        | TO EPR               | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 10)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |        |                            | DATA PLATE CORR. %N2 | IDLE RPM %N2         | DATA PLATE PT7       | 20.9                 | 21.C                 | 21.1                 | 21.2                 | 21.3                 | 21.4                 | 21.5                 | 21.6                 | 21.7                 | 21.8                 | 21.9                 | 22.0                 | 22.1                 | 22.2                 | 22.3                 | 22.4                 |
|-------------|------------------------|--------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | PP PT7                 | PP EPR | TO EPR                     |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 102 ( 35)   | +3.60                  | 59.1   | PP PT7<br>PP EPR<br>TO EPR | 34.1<br>1.63<br>1.94 | 34.3<br>1.63<br>1.94 | 34.4<br>1.63<br>1.94 | 34.6<br>1.63<br>1.94 | 34.8<br>1.63<br>1.94 | 35.0<br>1.63<br>1.94 | 35.1<br>1.63<br>1.94 | 35.3<br>1.63<br>1.94 | 35.5<br>1.63<br>1.94 | 35.6<br>1.63<br>1.94 | 35.8<br>1.63<br>1.94 | 36.0<br>1.63<br>1.94 | 36.1<br>1.63<br>1.94 | 36.3<br>1.63<br>1.94 | 36.5<br>1.63<br>1.94 | 36.6<br>1.63<br>1.94 | 36.8<br>1.63<br>1.94 | 37.0<br>1.63<br>1.94 |                      |
| 104 ( 40)   | +3.77                  | 59.2   | PP PT7<br>PP EPR<br>TO EPR | 33.9<br>1.62<br>1.93 | 34.1<br>1.62<br>1.93 | 34.2<br>1.62<br>1.93 | 34.4<br>1.62<br>1.93 | 34.5<br>1.62<br>1.93 | 34.7<br>1.62<br>1.93 | 34.9<br>1.62<br>1.93 | 35.0<br>1.62<br>1.93 | 35.2<br>1.62<br>1.93 | 35.4<br>1.62<br>1.93 | 35.6<br>1.62<br>1.93 | 35.7<br>1.62<br>1.93 | 35.9<br>1.62<br>1.93 | 36.0<br>1.62<br>1.93 | 36.2<br>1.62<br>1.93 | 36.3<br>1.62<br>1.93 | 36.4<br>1.62<br>1.93 | 36.5<br>1.62<br>1.93 | 36.6<br>1.62<br>1.93 |
| 106 ( 41)   | +3.93                  | 59.2   | PP PT7<br>PP EPR<br>TO EPR | 33.7<br>1.61<br>1.92 | 33.9<br>1.61<br>1.92 | 34.0<br>1.61<br>1.92 | 34.2<br>1.61<br>1.92 | 34.4<br>1.61<br>1.92 | 34.5<br>1.61<br>1.92 | 34.7<br>1.61<br>1.92 | 34.8<br>1.61<br>1.92 | 35.0<br>1.61<br>1.92 | 35.2<br>1.61<br>1.92 | 35.4<br>1.61<br>1.92 | 35.5<br>1.61<br>1.92 | 35.7<br>1.61<br>1.92 | 35.8<br>1.61<br>1.92 | 36.0<br>1.61<br>1.92 | 36.1<br>1.61<br>1.92 | 36.2<br>1.61<br>1.92 | 36.3<br>1.61<br>1.92 | 36.4<br>1.61<br>1.92 |
| 108 ( 42)   | +4.09                  | 59.3   | PP PT7<br>PP EPR<br>TO EPR | 33.5<br>1.60<br>1.91 | 33.7<br>1.60<br>1.91 | 33.8<br>1.60<br>1.91 | 34.0<br>1.60<br>1.91 | 34.2<br>1.60<br>1.91 | 34.3<br>1.60<br>1.91 | 34.5<br>1.60<br>1.91 | 34.6<br>1.60<br>1.91 | 34.8<br>1.60<br>1.91 | 35.0<br>1.60<br>1.91 | 35.2<br>1.60<br>1.91 | 35.3<br>1.60<br>1.91 | 35.5<br>1.60<br>1.91 | 35.6<br>1.60<br>1.91 | 35.8<br>1.60<br>1.91 | 35.9<br>1.60<br>1.91 | 36.0<br>1.60<br>1.91 | 36.1<br>1.60<br>1.91 | 36.2<br>1.60<br>1.91 |
| 110 ( 43)   | +4.25                  | 59.4   | PP PT7<br>PP EPR<br>TO EPR | 33.3<br>1.59<br>1.90 | 33.5<br>1.59<br>1.90 | 33.7<br>1.59<br>1.90 | 33.8<br>1.59<br>1.90 | 34.0<br>1.59<br>1.90 | 34.1<br>1.59<br>1.90 | 34.3<br>1.59<br>1.90 | 34.5<br>1.59<br>1.90 | 34.6<br>1.59<br>1.90 | 34.8<br>1.59<br>1.90 | 35.0<br>1.59<br>1.90 | 35.1<br>1.59<br>1.90 | 35.2<br>1.59<br>1.90 | 35.4<br>1.59<br>1.90 | 35.5<br>1.59<br>1.90 | 35.6<br>1.59<br>1.90 | 35.7<br>1.59<br>1.90 | 35.8<br>1.59<br>1.90 | 35.9<br>1.59<br>1.90 |
| 112 ( 44)   | +4.42                  | 59.5   | PP PT7<br>PP EPR<br>TO EPR | 33.2<br>1.59<br>1.89 | 33.3<br>1.59<br>1.89 | 33.5<br>1.59<br>1.89 | 33.6<br>1.59<br>1.89 | 33.8<br>1.59<br>1.89 | 34.0<br>1.59<br>1.89 | 34.1<br>1.59<br>1.89 | 34.3<br>1.59<br>1.89 | 34.4<br>1.59<br>1.89 | 34.6<br>1.59<br>1.89 | 34.8<br>1.59<br>1.89 | 34.9<br>1.59<br>1.89 | 35.1<br>1.59<br>1.89 | 35.2<br>1.59<br>1.89 | 35.4<br>1.59<br>1.89 | 35.5<br>1.59<br>1.89 | 35.6<br>1.59<br>1.89 | 35.7<br>1.59<br>1.89 | 35.8<br>1.59<br>1.89 |
| 114 ( 46)   | +4.58                  | 59.6   | PP PT7<br>PP EPR<br>TO EPR | 33.0<br>1.58<br>1.88 | 33.2<br>1.58<br>1.88 | 33.3<br>1.58<br>1.88 | 33.5<br>1.58<br>1.88 | 33.6<br>1.58<br>1.88 | 33.8<br>1.58<br>1.88 | 34.0<br>1.58<br>1.88 | 34.1<br>1.58<br>1.88 | 34.3<br>1.58<br>1.88 | 34.4<br>1.58<br>1.88 | 34.6<br>1.58<br>1.88 | 34.7<br>1.58<br>1.88 | 34.9<br>1.58<br>1.88 | 35.1<br>1.58<br>1.88 | 35.2<br>1.58<br>1.88 | 35.4<br>1.58<br>1.88 | 35.5<br>1.58<br>1.88 | 35.6<br>1.58<br>1.88 | 35.7<br>1.58<br>1.88 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 11)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221

**MAINTENANCE MANUAL**

| BAROMETER<br>OAT<br>OF<br>(OC) | INS. MERCURY |      |                      | DATA<br>PLATE<br>CORR.<br>%N2 | IDLE<br>RPM<br>%N2   | DATA<br>PLATE<br>PT7 | 20.9                 | 21.0                 | 21.1                 | 21.2                 | 21.3                 | 21.4                 | 21.5                 | 21.6                 | 21.7                 | 21.8                 | 21.9                 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 |
|--------------------------------|--------------|------|----------------------|-------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------|------|------|------|------|
|                                | 34.5         | 34.6 | 34.8                 |                               |                      |                      | 35.0                 | 35.1                 | 35.3                 | 35.5                 | 35.6                 | 35.8                 | 36.0                 | 36.1                 | 36.3                 | 36.5                 | 36.6                 | 36.8 | 37.0 |      |      |      |
| 116<br>( 47)                   | +4.74        | 55.6 | 32.8<br>1.57<br>1.87 | 33.1<br>1.57<br>1.87          | 33.3<br>1.57<br>1.87 | 33.5<br>1.57<br>1.87 | 33.6<br>1.57<br>1.87 | 33.8<br>1.57<br>1.87 | 33.9<br>1.57<br>1.87 | 34.1<br>1.57<br>1.87 | 34.2<br>1.57<br>1.87 | 34.4<br>1.57<br>1.87 | 34.6<br>1.57<br>1.87 | 34.7<br>1.57<br>1.87 | 34.9<br>1.57<br>1.87 | 35.0<br>1.57<br>1.87 | 35.2<br>1.57<br>1.87 | 36.5 | 36.6 | 36.8 | 37.0 |      |
| 118<br>( 48)                   | +4.91        | 59.7 | 32.7<br>1.56<br>1.86 | 33.0<br>1.56<br>1.86          | 33.3<br>1.56<br>1.86 | 33.4<br>1.56<br>1.86 | 33.6<br>1.56<br>1.86 | 33.8<br>1.56<br>1.86 | 33.8<br>1.56<br>1.86 | 33.9<br>1.56<br>1.86 | 34.1<br>1.56<br>1.86 | 34.2<br>1.56<br>1.86 | 34.4<br>1.56<br>1.86 | 34.5<br>1.56<br>1.86 | 34.7<br>1.56<br>1.86 | 34.9<br>1.56<br>1.86 | 35.0<br>1.56<br>1.86 | 36.5 | 36.6 | 36.8 | 37.0 |      |
| 120<br>( 49)                   | +5.07        | 55.8 | 32.5<br>1.55<br>1.85 | 32.8<br>1.55<br>1.85          | 33.1<br>1.55<br>1.85 | 33.3<br>1.55<br>1.85 | 33.4<br>1.55<br>1.85 | 33.6<br>1.55<br>1.85 | 33.6<br>1.55<br>1.85 | 33.7<br>1.55<br>1.85 | 33.9<br>1.55<br>1.85 | 34.1<br>1.55<br>1.85 | 34.2<br>1.55<br>1.85 | 34.4<br>1.55<br>1.85 | 34.5<br>1.55<br>1.85 | 34.7<br>1.55<br>1.85 | 35.0<br>1.55<br>1.85 | 36.5 | 36.6 | 36.8 | 37.0 |      |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 12)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-221



MAINTENANCE MANUAL

TRIM TABLES - (JT8D-9)

BAROMETRIC PRESSURE 22.5 TO 24.0 INCHES OF MERCURY ABSOLUTE

NOTE: For general instructions for use of engine trim data and a trim table locator tabulation, refer to 71-09-210.

This trim data also applies to JT8D-9A.

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

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MAINTENANCE MANUAL

| BAROMETER   |                       | INS. MERCURY  |                            | 22.5                 | 22.6                 | 22.7                 | 22.8                 | 22.9                 | 23.0                 | 23.1                 | 23.2                 | 23.3                 | 23.4                 | 23.5                 | 23.6                 | 23.7                 | 23.8                 | 23.9                 | 24.0                 |
|-------------|-----------------------|---------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| OAT OF (°C) | DATA PLATE CORR. % N2 | IDLE RPM % N2 | DATA PLATE PT7             | 27.1                 | 37.3                 | 37.5                 | 37.6                 | 37.8                 | 37.9                 | 38.1                 | 38.3                 | 38.4                 | 38.6                 | 38.8                 | 38.9                 | 39.1                 | 39.3                 | 39.4                 | 39.6                 |
| -38 (-39)   | -8.68                 | 55.2          | PP PT7<br>PP EPR<br>TO EPR | 51.2<br>2.28<br>2.34 | 51.5<br>2.28<br>2.34 | 51.7<br>2.29<br>2.34 | 51.9<br>2.28<br>2.34 | 52.1<br>2.28<br>2.34 | 52.4<br>2.28<br>2.34 | 52.6<br>2.28<br>2.34 | 52.8<br>2.28<br>2.34 | 53.1<br>2.28<br>2.34 | 53.3<br>2.28<br>2.34 | 53.5<br>2.28<br>2.34 | 53.7<br>2.28<br>2.34 | 54.0<br>2.28<br>2.34 | 54.2<br>2.28<br>2.34 | 54.4<br>2.28<br>2.34 | 54.6<br>2.28<br>2.34 |
| -36 (-38)   | -8.49                 | 55.0          | PP PT7<br>PP EPR<br>TO EPR | 51.1<br>2.27<br>2.34 | 51.3<br>2.27<br>2.34 | 51.5<br>2.27<br>2.34 | 51.7<br>2.27<br>2.34 | 52.0<br>2.27<br>2.34 | 52.2<br>2.27<br>2.34 | 52.4<br>2.27<br>2.34 | 52.6<br>2.27<br>2.34 | 52.9<br>2.27<br>2.34 | 53.1<br>2.27<br>2.34 | 53.3<br>2.27<br>2.34 | 53.5<br>2.27<br>2.34 | 53.8<br>2.27<br>2.34 | 54.0<br>2.27<br>2.34 | 54.2<br>2.27<br>2.34 | 54.5<br>2.27<br>2.34 |
| -34 (-37)   | -8.31                 | 54.9          | PP PT7<br>PP EPR<br>TO EPR | 50.9<br>2.26<br>2.33 | 51.1<br>2.26<br>2.33 | 51.3<br>2.26<br>2.33 | 51.6<br>2.26<br>2.33 | 51.8<br>2.26<br>2.33 | 52.0<br>2.26<br>2.33 | 52.2<br>2.26<br>2.33 | 52.5<br>2.26<br>2.33 | 52.7<br>2.26<br>2.33 | 52.9<br>2.26<br>2.33 | 53.1<br>2.26<br>2.33 | 53.4<br>2.26<br>2.33 | 53.6<br>2.26<br>2.33 | 53.8<br>2.26<br>2.33 | 54.0<br>2.26<br>2.33 | 54.3<br>2.26<br>2.33 |
| -32 (-36)   | -8.13                 | 54.7          | PP PT7<br>PP EPR<br>TO EPR | 50.7<br>2.25<br>2.33 | 50.9<br>2.25<br>2.33 | 51.1<br>2.25<br>2.33 | 51.4<br>2.25<br>2.33 | 51.6<br>2.25<br>2.33 | 51.8<br>2.25<br>2.33 | 52.0<br>2.25<br>2.33 | 52.3<br>2.25<br>2.33 | 52.5<br>2.25<br>2.33 | 52.7<br>2.25<br>2.33 | 52.9<br>2.25<br>2.33 | 53.2<br>2.25<br>2.33 | 53.4<br>2.25<br>2.33 | 53.6<br>2.25<br>2.33 | 53.8<br>2.25<br>2.33 | 54.1<br>2.25<br>2.33 |
| -30 (-34)   | -7.94                 | 54.6          | PP PT7<br>PP EPR<br>TO EPR | 50.5<br>2.25<br>2.32 | 50.7<br>2.25<br>2.32 | 51.0<br>2.25<br>2.32 | 51.2<br>2.25<br>2.32 | 51.4<br>2.25<br>2.32 | 51.6<br>2.25<br>2.32 | 51.9<br>2.25<br>2.32 | 52.1<br>2.25<br>2.32 | 52.3<br>2.25<br>2.32 | 52.5<br>2.25<br>2.32 | 52.8<br>2.25<br>2.32 | 53.0<br>2.25<br>2.32 | 53.2<br>2.25<br>2.32 | 53.4<br>2.25<br>2.32 | 53.7<br>2.25<br>2.32 | 53.9<br>2.25<br>2.32 |
| -28 (-33)   | -7.76                 | 54.5          | PP PT7<br>PP EPR<br>TO EPR | 50.3<br>2.24<br>2.32 | 50.6<br>2.24<br>2.32 | 50.8<br>2.24<br>2.32 | 51.0<br>2.24<br>2.32 | 51.2<br>2.24<br>2.32 | 51.4<br>2.24<br>2.32 | 51.7<br>2.24<br>2.32 | 51.9<br>2.24<br>2.32 | 52.1<br>2.24<br>2.32 | 52.3<br>2.24<br>2.32 | 52.6<br>2.24<br>2.32 | 52.8<br>2.24<br>2.32 | 53.0<br>2.24<br>2.32 | 53.2<br>2.24<br>2.32 | 53.5<br>2.24<br>2.32 | 53.7<br>2.24<br>2.32 |
| -26 (-32)   | -7.58                 | 54.4          | PP PT7<br>PP EPR<br>TO EPR | 50.1<br>2.23<br>2.31 | 50.4<br>2.23<br>2.31 | 50.6<br>2.23<br>2.31 | 50.8<br>2.23<br>2.31 | 51.0<br>2.23<br>2.31 | 51.3<br>2.23<br>2.31 | 51.5<br>2.23<br>2.31 | 51.7<br>2.23<br>2.31 | 51.9<br>2.23<br>2.31 | 52.1<br>2.23<br>2.31 | 52.4<br>2.23<br>2.31 | 52.6<br>2.23<br>2.31 | 52.8<br>2.23<br>2.31 | 53.0<br>2.23<br>2.31 | 53.3<br>2.23<br>2.31 | 53.5<br>2.23<br>2.31 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 1)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

D54722

71-09-222



MAINTENANCE MANUAL

| BAROMETER INS. MERCURY |                      | MERCURY      |                            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|------------------------|----------------------|--------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| OAT OF (OC)            | DATA PLATE CORR. %N2 | IDLE FPM %N2 | DATA PLATE PT7             | 22.5 | 22.6 | 22.7 | 22.8 | 22.9 | 23.0 | 23.1 | 23.2 | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 24.0 |      |  |
| -24 (-31)              | -7.40                | 54.3         | PP PT7<br>PP EPR<br>TO EPR | 37.1 | 37.3 | 37.5 | 37.6 | 37.8 | 37.9 | 38.1 | 38.3 | 38.4 | 38.6 | 38.8 | 38.9 | 39.1 | 39.3 | 39.4 | 39.6 |      |  |
| -22 (-30)              | -7.21                | 54.2         | PP PT7<br>PP EPR<br>TO EPR | 49.8 | 50.0 | 50.2 | 50.4 | 50.7 | 50.9 | 51.1 | 51.3 | 51.5 | 51.7 | 52.0 | 52.2 | 52.4 | 52.6 | 52.8 | 53.1 | 53.3 |  |
| -20 (-29)              | -7.03                | 54.1         | PP PT7<br>PP EPR<br>TO EPR | 49.6 | 49.8 | 50.0 | 50.3 | 50.5 | 50.7 | 50.9 | 51.1 | 51.4 | 51.6 | 51.8 | 52.0 | 52.2 | 52.5 | 52.7 | 52.9 | 53.1 |  |
| -19 (-28)              | -6.85                | 54.1         | PP PT7<br>PP EPR<br>TO EPR | 45.4 | 45.6 | 49.8 | 50.1 | 50.3 | 50.5 | 50.7 | 50.9 | 51.2 | 51.4 | 51.6 | 51.8 | 52.0 | 52.2 | 52.3 | 52.5 | 52.7 |  |
| -16 (-27)              | -6.66                | 54.0         | PP PT7<br>PP EPR<br>TO EPR | 45.2 | 49.4 | 49.6 | 49.9 | 50.1 | 50.3 | 50.5 | 50.7 | 51.0 | 51.2 | 51.4 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 |  |
| -14 (-26)              | -6.48                | 54.0         | PP PT7<br>PP EPR<br>TO EPR | 49.0 | 45.2 | 49.5 | 49.7 | 49.9 | 50.1 | 50.3 | 50.5 | 50.8 | 51.0 | 51.2 | 51.4 | 51.6 | 51.9 | 52.1 | 52.3 | 52.5 |  |
| -12 (-24)              | -6.30                | 54.0         | PP PT7<br>PP EPR<br>TO EPR | 48.8 | 49.1 | 49.3 | 49.5 | 49.7 | 49.9 | 50.1 | 50.4 | 50.6 | 50.8 | 51.0 | 51.2 | 51.4 | 51.6 | 51.9 | 52.1 | 52.3 |  |
|                        |                      |              |                            | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 |  |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 2)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-222







MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |        | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | 22.5                 | 22.6                 | 22.7                 | 22.8                 | 22.9                 | 23.0                 | 23.1                 | 23.2                 | 23.3                 | 23.4                 | 23.5                 | 23.6                 | 23.7                 | 23.8                 | 23.9                 | 24.0                 |
|-------------|------------------------|--------|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | PP PT7                 | TO EPR |                      |              |                            |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 18 (-8)     | 37.1                   | 37.3   | 46.1                 | 55.3         | PP PT7<br>PP EPR<br>TO EPR | 45.9<br>2.04<br>2.18 | 46.3<br>2.04<br>2.18 | 46.3<br>2.04<br>2.18 | 46.3<br>2.04<br>2.18 | 46.7<br>2.04<br>2.18 | 46.9<br>2.04<br>2.18 | 47.1<br>2.04<br>2.18 | 47.3<br>2.04<br>2.18 | 47.5<br>2.04<br>2.18 | 47.7<br>2.04<br>2.18 | 47.9<br>2.04<br>2.18 | 48.1<br>2.04<br>2.18 | 48.3<br>2.04<br>2.18 | 48.6<br>2.04<br>2.18 | 48.8<br>2.04<br>2.18 | 49.0<br>2.04<br>2.18 |
| 20 (-7)     | 37.1                   | 37.3   | 46.1                 | 55.4         | PP PT7<br>PP EPR<br>TO EPR | 45.7<br>2.03<br>2.17 | 46.3<br>2.03<br>2.17 | 46.3<br>2.03<br>2.17 | 46.3<br>2.03<br>2.17 | 46.7<br>2.03<br>2.17 | 46.9<br>2.03<br>2.17 | 47.1<br>2.03<br>2.17 | 47.3<br>2.03<br>2.17 | 47.5<br>2.03<br>2.17 | 47.7<br>2.03<br>2.17 | 47.9<br>2.03<br>2.17 | 48.1<br>2.03<br>2.17 | 48.3<br>2.03<br>2.17 | 48.6<br>2.03<br>2.17 | 48.8<br>2.03<br>2.17 | 49.0<br>2.03<br>2.17 |
| 22 (-6)     | 37.1                   | 37.3   | 46.1                 | 55.5         | PP PT7<br>PP EPR<br>TO EPR | 45.5<br>2.02<br>2.17 | 46.1<br>2.02<br>2.17 | 46.1<br>2.02<br>2.17 | 46.1<br>2.02<br>2.17 | 46.5<br>2.02<br>2.17 | 46.5<br>2.02<br>2.17 | 46.7<br>2.02<br>2.17 | 46.9<br>2.02<br>2.17 | 47.1<br>2.02<br>2.17 | 47.3<br>2.02<br>2.17 | 47.5<br>2.02<br>2.17 | 47.7<br>2.02<br>2.17 | 47.9<br>2.02<br>2.17 | 48.1<br>2.02<br>2.17 | 48.3<br>2.02<br>2.17 | 48.5<br>2.02<br>2.17 |
| 24 (-4)     | 37.1                   | 37.3   | 46.1                 | 55.6         | PP PT7<br>PP EPR<br>TO EPR | 45.3<br>2.01<br>2.16 | 45.9<br>2.01<br>2.16 | 45.9<br>2.01<br>2.16 | 45.9<br>2.01<br>2.16 | 46.1<br>2.01<br>2.16 | 46.3<br>2.01<br>2.16 | 46.5<br>2.01<br>2.16 | 46.7<br>2.01<br>2.16 | 46.9<br>2.01<br>2.16 | 47.1<br>2.01<br>2.16 | 47.3<br>2.01<br>2.16 | 47.5<br>2.01<br>2.16 | 47.7<br>2.01<br>2.16 | 47.9<br>2.01<br>2.16 | 48.1<br>2.01<br>2.16 | 48.3<br>2.01<br>2.16 |
| 26 (-3)     | 37.1                   | 37.3   | 46.1                 | 55.7         | PP PT7<br>PP EPR<br>TO EPR | 45.1<br>2.00<br>2.15 | 45.7<br>2.00<br>2.15 | 45.7<br>2.00<br>2.15 | 45.7<br>2.00<br>2.15 | 45.9<br>2.00<br>2.15 | 46.1<br>2.00<br>2.15 | 46.3<br>2.00<br>2.15 | 46.5<br>2.00<br>2.15 | 46.7<br>2.00<br>2.15 | 46.9<br>2.00<br>2.15 | 47.1<br>2.00<br>2.15 | 47.3<br>2.00<br>2.15 | 47.5<br>2.00<br>2.15 | 47.7<br>2.00<br>2.15 | 47.9<br>2.00<br>2.15 | 48.1<br>2.00<br>2.15 |
| 28 (-2)     | 37.1                   | 37.3   | 46.1                 | 55.8         | PP PT7<br>PP EPR<br>TO EPR | 44.9<br>1.99<br>2.15 | 45.5<br>1.99<br>2.15 | 45.5<br>1.99<br>2.15 | 45.5<br>1.99<br>2.15 | 45.7<br>1.99<br>2.15 | 45.9<br>1.99<br>2.15 | 46.1<br>1.99<br>2.15 | 46.3<br>1.99<br>2.15 | 46.5<br>1.99<br>2.15 | 46.7<br>1.99<br>2.15 | 46.9<br>1.99<br>2.15 | 47.1<br>1.99<br>2.15 | 47.3<br>1.99<br>2.15 | 47.5<br>1.99<br>2.15 | 47.7<br>1.99<br>2.15 | 47.9<br>1.99<br>2.15 |
| 30 (-1)     | 37.1                   | 37.3   | 46.1                 | 55.9         | PP PT7<br>PP EPR<br>TO EPR | 44.7<br>1.98<br>2.14 | 45.3<br>1.98<br>2.14 | 45.3<br>1.98<br>2.14 | 45.3<br>1.98<br>2.14 | 45.5<br>1.98<br>2.14 | 45.7<br>1.98<br>2.14 | 46.1<br>1.98<br>2.14 | 46.3<br>1.98<br>2.14 | 46.5<br>1.98<br>2.14 | 46.7<br>1.98<br>2.14 | 46.9<br>1.98<br>2.14 | 47.1<br>1.98<br>2.14 | 47.3<br>1.98<br>2.14 | 47.5<br>1.98<br>2.14 | 47.7<br>1.98<br>2.14 | 47.9<br>1.98<br>2.14 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 5)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

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| BAROMETER   |                      | INS. MERCURY |                            | 22.5                 | 22.6                 | 22.7                 | 22.8                 | 22.9                 | 23.0                 | 23.1                 | 23.2                 | 23.3                 | 23.4                 | 23.5                 | 23.6                 | 23.7                 | 23.8                 | 23.9                 | 24.0                 |
|-------------|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| OAT OF (°C) | DATA PLATE CORR. %N2 | IDLE PPM %N2 | DATA PLATE PT7             | 37.1                 | 37.3                 | 37.5                 | 37.6                 | 37.8                 | 37.9                 | 38.1                 | 38.3                 | 38.4                 | 38.6                 | 38.8                 | 38.9                 | 39.1                 | 39.3                 | 39.4                 | 39.6                 |
| 32 ( 0 )    | -2.34                | 56.0         | PP PT7<br>PP EPR<br>TO EPR | 44.5<br>1.98<br>2.13 | 44.6<br>1.98<br>2.13 | 44.8<br>1.98<br>2.13 | 45.0<br>1.98<br>2.13 | 45.2<br>1.98<br>2.13 | 45.4<br>1.98<br>2.13 | 45.6<br>1.98<br>2.13 | 45.8<br>1.98<br>2.13 | 46.0<br>1.98<br>2.13 | 46.2<br>1.98<br>2.13 | 46.4<br>1.98<br>2.13 | 46.6<br>1.98<br>2.13 | 46.8<br>1.98<br>2.13 | 47.0<br>1.98<br>2.13 | 47.2<br>1.98<br>2.13 | 47.4<br>1.98<br>2.13 |
| 34 ( 1 )    | -2.16                | 56.1         | PP PT7<br>PP EPR<br>TO EPR | 44.2<br>1.97<br>2.13 | 44.4<br>1.97<br>2.13 | 44.6<br>1.97<br>2.13 | 44.8<br>1.97<br>2.13 | 45.0<br>1.97<br>2.13 | 45.2<br>1.97<br>2.13 | 45.4<br>1.97<br>2.13 | 45.6<br>1.97<br>2.13 | 45.8<br>1.97<br>2.13 | 46.0<br>1.97<br>2.13 | 46.2<br>1.97<br>2.13 | 46.4<br>1.97<br>2.13 | 46.6<br>1.97<br>2.13 | 46.8<br>1.97<br>2.13 | 47.0<br>1.97<br>2.13 | 47.2<br>1.97<br>2.13 |
| 36 ( 2 )    | -1.99                | 56.2         | PP PT7<br>PP EPR<br>TO EPR | 44.0<br>1.96<br>2.12 | 44.2<br>1.96<br>2.12 | 44.4<br>1.96<br>2.12 | 44.6<br>1.96<br>2.12 | 44.8<br>1.96<br>2.12 | 45.0<br>1.96<br>2.12 | 45.2<br>1.96<br>2.12 | 45.4<br>1.96<br>2.12 | 45.6<br>1.96<br>2.12 | 45.8<br>1.96<br>2.12 | 46.0<br>1.96<br>2.12 | 46.2<br>1.96<br>2.12 | 46.4<br>1.96<br>2.12 | 46.6<br>1.96<br>2.12 | 46.8<br>1.96<br>2.12 | 47.0<br>1.96<br>2.12 |
| 38 ( 3 )    | -1.81                | 56.3         | PP PT7<br>PP EPR<br>TO EPR | 43.8<br>1.95<br>2.11 | 44.0<br>1.95<br>2.11 | 44.2<br>1.95<br>2.11 | 44.4<br>1.95<br>2.11 | 44.6<br>1.95<br>2.11 | 44.8<br>1.95<br>2.11 | 45.0<br>1.95<br>2.11 | 45.2<br>1.95<br>2.11 | 45.4<br>1.95<br>2.11 | 45.6<br>1.95<br>2.11 | 45.8<br>1.95<br>2.11 | 46.0<br>1.95<br>2.11 | 46.2<br>1.95<br>2.11 | 46.4<br>1.95<br>2.11 | 46.6<br>1.95<br>2.11 | 46.8<br>1.95<br>2.11 |
| 40 ( 4 )    | -1.63                | 56.4         | PP PT7<br>PP EPR<br>TO EPR | 43.6<br>1.94<br>2.11 | 43.8<br>1.94<br>2.11 | 44.0<br>1.94<br>2.11 | 44.2<br>1.94<br>2.11 | 44.4<br>1.94<br>2.11 | 44.6<br>1.94<br>2.11 | 44.8<br>1.94<br>2.11 | 45.0<br>1.94<br>2.11 | 45.2<br>1.94<br>2.11 | 45.4<br>1.94<br>2.11 | 45.6<br>1.94<br>2.11 | 45.8<br>1.94<br>2.11 | 46.0<br>1.94<br>2.11 | 46.2<br>1.94<br>2.11 | 46.4<br>1.94<br>2.11 | 46.6<br>1.94<br>2.11 |
| 42 ( 6 )    | -1.46                | 56.5         | PP PT7<br>PP EPR<br>TO EPR | 43.4<br>1.93<br>2.10 | 43.6<br>1.93<br>2.10 | 43.8<br>1.93<br>2.10 | 44.0<br>1.93<br>2.10 | 44.2<br>1.93<br>2.10 | 44.4<br>1.93<br>2.10 | 44.6<br>1.93<br>2.10 | 44.8<br>1.93<br>2.10 | 45.0<br>1.93<br>2.10 | 45.2<br>1.93<br>2.10 | 45.4<br>1.93<br>2.10 | 45.6<br>1.93<br>2.10 | 45.8<br>1.93<br>2.10 | 46.0<br>1.93<br>2.10 | 46.2<br>1.93<br>2.10 | 46.4<br>1.93<br>2.10 |
| 44 ( 7 )    | -1.29                | 56.5         | PP PT7<br>PP EPR<br>TO EPR | 43.2<br>1.92<br>2.09 | 43.4<br>1.92<br>2.09 | 43.6<br>1.92<br>2.09 | 43.7<br>1.92<br>2.09 | 43.9<br>1.92<br>2.09 | 44.1<br>1.92<br>2.09 | 44.3<br>1.92<br>2.09 | 44.5<br>1.92<br>2.09 | 44.7<br>1.92<br>2.09 | 44.9<br>1.92<br>2.09 | 45.1<br>1.92<br>2.09 | 45.3<br>1.92<br>2.09 | 45.5<br>1.92<br>2.09 | 45.7<br>1.92<br>2.09 | 45.9<br>1.92<br>2.09 | 46.1<br>1.92<br>2.09 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 6)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

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MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |        |        | DATA PLATE CORR. %N2 | IDLE RPM %N2         | DATA PLATE PT7       | DATA PT7             | 22.5                 | 22.6                 | 22.7                 | 22.8                 | 22.9                 | 23.0                 | 23.1                 | 23.2                 | 23.3                 | 23.4                 | 23.5                 | 23.6                 | 23.7                 | 23.8                 | 23.9                 | 24.0                 |
|-------------|------------------------|--------|--------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | PP PT7                 | PP EPR | TO EPR |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 46 ( 8)     | -1.12                  | 56.6   |        | 43.0<br>1.91<br>2.09 | 43.3<br>1.91<br>2.09 | 43.7<br>1.91<br>2.09 | 43.9<br>1.91<br>2.09 | 44.1<br>1.91<br>2.09 | 44.3<br>1.91<br>2.09 | 44.5<br>1.91<br>2.09 | 44.7<br>1.91<br>2.09 | 44.9<br>1.91<br>2.09 | 45.1<br>1.91<br>2.09 | 45.3<br>1.91<br>2.09 | 45.5<br>1.91<br>2.09 | 45.7<br>1.91<br>2.09 | 45.9<br>1.91<br>2.09 | 46.1<br>1.91<br>2.09 | 46.3<br>1.91<br>2.09 | 46.5<br>1.91<br>2.09 | 46.7<br>1.91<br>2.09 | 46.9<br>1.91<br>2.09 | 47.1<br>1.91<br>2.09 |
| 48 ( 9)     | -.94                   | 56.7   |        | 42.7<br>1.90<br>2.08 | 43.1<br>1.90<br>2.08 | 43.5<br>1.90<br>2.08 | 43.9<br>1.90<br>2.08 | 44.3<br>1.90<br>2.08 | 44.7<br>1.90<br>2.08 | 45.1<br>1.90<br>2.08 | 45.5<br>1.90<br>2.08 | 45.9<br>1.90<br>2.08 | 46.3<br>1.90<br>2.08 | 46.7<br>1.90<br>2.08 | 47.1<br>1.90<br>2.08 | 47.5<br>1.90<br>2.08 | 47.9<br>1.90<br>2.08 | 48.3<br>1.90<br>2.08 | 48.7<br>1.90<br>2.08 | 49.1<br>1.90<br>2.08 | 49.5<br>1.90<br>2.08 | 49.9<br>1.90<br>2.08 | 50.3<br>1.90<br>2.08 |
| 50 ( 1C)    | -.77                   | 56.8   |        | 42.5<br>1.89<br>2.07 | 42.9<br>1.89<br>2.07 | 43.3<br>1.89<br>2.07 | 43.7<br>1.89<br>2.07 | 44.1<br>1.89<br>2.07 | 44.5<br>1.89<br>2.07 | 44.9<br>1.89<br>2.07 | 45.3<br>1.89<br>2.07 | 45.7<br>1.89<br>2.07 | 46.1<br>1.89<br>2.07 | 46.5<br>1.89<br>2.07 | 46.9<br>1.89<br>2.07 | 47.3<br>1.89<br>2.07 | 47.7<br>1.89<br>2.07 | 48.1<br>1.89<br>2.07 | 48.5<br>1.89<br>2.07 | 48.9<br>1.89<br>2.07 | 49.3<br>1.89<br>2.07 | 49.7<br>1.89<br>2.07 | 50.1<br>1.89<br>2.07 |
| 52 ( 11)    | -.60                   | 56.9   |        | 42.3<br>1.88<br>2.06 | 42.7<br>1.88<br>2.06 | 43.1<br>1.88<br>2.06 | 43.5<br>1.88<br>2.06 | 43.9<br>1.88<br>2.06 | 44.3<br>1.88<br>2.06 | 44.7<br>1.88<br>2.06 | 45.1<br>1.88<br>2.06 | 45.5<br>1.88<br>2.06 | 45.9<br>1.88<br>2.06 | 46.3<br>1.88<br>2.06 | 46.7<br>1.88<br>2.06 | 47.1<br>1.88<br>2.06 | 47.5<br>1.88<br>2.06 | 47.9<br>1.88<br>2.06 | 48.3<br>1.88<br>2.06 | 48.7<br>1.88<br>2.06 | 49.1<br>1.88<br>2.06 | 49.5<br>1.88<br>2.06 | 49.9<br>1.88<br>2.06 |
| 54 ( 12)    | -.43                   | 57.0   |        | 42.1<br>1.87<br>2.06 | 42.5<br>1.87<br>2.06 | 42.9<br>1.87<br>2.06 | 43.3<br>1.87<br>2.06 | 43.7<br>1.87<br>2.06 | 44.1<br>1.87<br>2.06 | 44.5<br>1.87<br>2.06 | 44.9<br>1.87<br>2.06 | 45.3<br>1.87<br>2.06 | 45.7<br>1.87<br>2.06 | 46.1<br>1.87<br>2.06 | 46.5<br>1.87<br>2.06 | 46.9<br>1.87<br>2.06 | 47.3<br>1.87<br>2.06 | 47.7<br>1.87<br>2.06 | 48.1<br>1.87<br>2.06 | 48.5<br>1.87<br>2.06 | 48.9<br>1.87<br>2.06 | 49.3<br>1.87<br>2.06 | 49.7<br>1.87<br>2.06 |
| 56 ( 13)    | -.26                   | 57.1   |        | 41.9<br>1.86<br>2.05 | 42.3<br>1.86<br>2.05 | 42.7<br>1.86<br>2.05 | 43.1<br>1.86<br>2.05 | 43.5<br>1.86<br>2.05 | 43.9<br>1.86<br>2.05 | 44.3<br>1.86<br>2.05 | 44.7<br>1.86<br>2.05 | 45.1<br>1.86<br>2.05 | 45.5<br>1.86<br>2.05 | 45.9<br>1.86<br>2.05 | 46.3<br>1.86<br>2.05 | 46.7<br>1.86<br>2.05 | 47.1<br>1.86<br>2.05 | 47.5<br>1.86<br>2.05 | 47.9<br>1.86<br>2.05 | 48.3<br>1.86<br>2.05 | 48.7<br>1.86<br>2.05 | 49.1<br>1.86<br>2.05 | 49.5<br>1.86<br>2.05 |
| 58 ( 14)    | -.09                   | 57.2   |        | 41.7<br>1.85<br>2.04 | 42.1<br>1.85<br>2.04 | 42.5<br>1.85<br>2.04 | 42.9<br>1.85<br>2.04 | 43.3<br>1.85<br>2.04 | 43.7<br>1.85<br>2.04 | 44.1<br>1.85<br>2.04 | 44.5<br>1.85<br>2.04 | 44.9<br>1.85<br>2.04 | 45.3<br>1.85<br>2.04 | 45.7<br>1.85<br>2.04 | 46.1<br>1.85<br>2.04 | 46.5<br>1.85<br>2.04 | 46.9<br>1.85<br>2.04 | 47.3<br>1.85<br>2.04 | 47.7<br>1.85<br>2.04 | 48.1<br>1.85<br>2.04 | 48.5<br>1.85<br>2.04 | 48.9<br>1.85<br>2.04 | 49.3<br>1.85<br>2.04 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 7)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

D54735

71-09-222



MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |       | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 22.5         | 22.6         | 22.7         | 22.8         | 22.9         | 23.0         | 23.1         | 23.2         | 23.3         | 23.4         | 23.5         | 23.6         | 23.7         | 23.8         | 23.9         | 24.0         |
|-------------|------------------------|-------|----------------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|             | 60 ( 16)               | + .08 |                      |              |                | 57.2         | 41.4<br>1.84 | 41.6<br>1.94 | 41.8<br>1.84 | 42.0<br>1.94 | 42.2<br>1.84 | 42.4<br>1.84 | 42.6<br>1.84 | 42.7<br>1.84 | 42.9<br>1.84 | 43.1<br>1.84 | 43.3<br>1.84 | 43.5<br>1.84 | 43.7<br>1.84 | 43.8<br>1.84 | 44.0<br>1.84 |
| 62 ( 17)    | + .25                  | 57.3  | 41.2<br>1.83         | 41.6<br>1.83 | 41.8<br>1.83   | 42.0<br>1.83 | 42.1<br>1.83 | 42.3<br>1.83 | 42.5<br>1.83 | 42.7<br>1.83 | 42.9<br>1.83 | 43.1<br>1.83 | 43.3<br>1.83 | 43.5<br>1.83 | 43.7<br>1.83 | 43.8<br>1.83 | 44.0<br>1.83 | 44.2<br>1.83 | 44.4<br>1.83 | 44.6<br>1.83 | 44.8<br>1.83 |
| 64 ( 18)    | + .42                  | 57.4  | 41.0<br>1.82         | 41.4<br>1.92 | 41.5<br>1.82   | 41.7<br>1.82 | 41.9<br>1.82 | 42.1<br>1.82 | 42.3<br>1.82 | 42.5<br>1.82 | 42.7<br>1.82 | 42.9<br>1.82 | 43.1<br>1.82 | 43.3<br>1.82 | 43.5<br>1.82 | 43.7<br>1.82 | 43.8<br>1.82 | 44.0<br>1.82 | 44.2<br>1.82 | 44.4<br>1.82 | 44.6<br>1.82 |
| 66 ( 19)    | + .59                  | 57.5  | 40.8<br>1.81         | 41.1<br>1.81 | 41.3<br>1.81   | 41.5<br>1.81 | 41.7<br>1.81 | 41.9<br>1.81 | 42.1<br>1.81 | 42.2<br>1.81 | 42.4<br>1.81 | 42.6<br>1.81 | 42.8<br>1.81 | 43.0<br>1.81 | 43.2<br>1.81 | 43.4<br>1.81 | 43.6<br>1.81 | 43.8<br>1.81 | 44.0<br>1.81 | 44.2<br>1.81 | 44.4<br>1.81 |
| 68 ( 20)    | + .76                  | 57.6  | 40.5<br>1.80         | 40.7<br>1.80 | 40.9<br>1.80   | 41.1<br>1.80 | 41.3<br>1.80 | 41.5<br>1.80 | 41.7<br>1.80 | 41.8<br>1.80 | 42.0<br>1.80 | 42.2<br>1.80 | 42.4<br>1.80 | 42.6<br>1.80 | 42.8<br>1.80 | 43.0<br>1.80 | 43.2<br>1.80 | 43.4<br>1.80 | 43.6<br>1.80 | 43.8<br>1.80 | 44.0<br>1.80 |
| 70 ( 21)    | + .93                  | 57.7  | 40.3<br>1.79         | 40.5<br>1.79 | 40.7<br>1.79   | 40.9<br>1.79 | 41.1<br>1.79 | 41.3<br>1.79 | 41.5<br>1.79 | 41.6<br>1.79 | 41.8<br>1.79 | 42.0<br>1.79 | 42.2<br>1.79 | 42.4<br>1.79 | 42.6<br>1.79 | 42.8<br>1.79 | 43.0<br>1.79 | 43.2<br>1.79 | 43.4<br>1.79 | 43.6<br>1.79 | 43.8<br>1.79 |
| 72 ( 22)    | +1.10                  | 57.8  | 40.1<br>1.78         | 40.3<br>1.78 | 40.4<br>1.78   | 40.6<br>1.78 | 40.8<br>1.78 | 41.0<br>1.78 | 41.2<br>1.78 | 41.3<br>1.78 | 41.5<br>1.78 | 41.7<br>1.78 | 41.9<br>1.78 | 42.1<br>1.78 | 42.3<br>1.78 | 42.5<br>1.78 | 42.7<br>1.78 | 42.9<br>1.78 | 43.1<br>1.78 | 43.3<br>1.78 | 43.5<br>1.78 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 8)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-222



MAINTENANCE MANUAL

| OAT OF (OC) | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |  |
|-------------|----------------------|--------------|----------------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|
|             |                      |              |                            | 22.5         | 22.6 | 22.7 | 22.8 | 22.9 | 23.0 | 23.1 | 23.2 | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 24.0 |  |  |  |  |
| 74 ( 23)    | +1.26                | 57.9         | PP PT7<br>PP FPR<br>TO EPR | 37.1         | 37.3 | 37.5 | 37.6 | 37.8 | 37.9 | 38.1 | 38.3 | 38.4 | 38.6 | 38.8 | 38.9 | 39.1 | 39.3 | 39.4 | 42.5 |  |  |  |  |
| 76 ( 24)    | +1.43                | 58.0         | PP PT7<br>PP EPR<br>TO EPR | 35.6         | 35.8 | 40.0 | 40.1 | 40.3 | 40.5 | 40.7 | 40.9 | 41.0 | 41.2 | 41.4 | 41.6 | 41.8 | 42.0 | 42.2 | 42.3 |  |  |  |  |
| 78 ( 26)    | +1.60                | 58.0         | PP PT7<br>PP EPR<br>TO EPR | 39.4         | 39.6 | 39.7 | 39.9 | 40.1 | 40.3 | 40.4 | 40.6 | 40.8 | 41.0 | 41.1 | 41.3 | 41.5 | 41.7 | 41.8 | 42.0 |  |  |  |  |
| 80 ( 27)    | +1.77                | 58.1         | PP PT7<br>PP EPR<br>TO EPR | 39.1         | 39.3 | 39.5 | 39.7 | 39.8 | 40.0 | 40.2 | 40.4 | 40.5 | 40.7 | 40.9 | 41.1 | 41.2 | 41.4 | 41.6 | 41.8 |  |  |  |  |
| 82 ( 28)    | +1.94                | 58.2         | PP PT7<br>PP EPR<br>TO EPR | 38.9         | 39.1 | 39.3 | 39.4 | 39.6 | 39.8 | 40.0 | 40.1 | 40.3 | 40.5 | 40.6 | 40.8 | 41.0 | 41.2 | 41.3 | 41.5 |  |  |  |  |
| 84 ( 29)    | +2.10                | 58.3         | PP PT7<br>PP EPR<br>TO EPR | 38.7         | 38.9 | 39.0 | 39.2 | 39.4 | 39.5 | 39.7 | 39.9 | 40.1 | 40.2 | 40.4 | 40.6 | 40.7 | 40.9 | 41.1 | 41.3 |  |  |  |  |
| 86 ( 30)    | +2.27                | 58.4         | PP PT7<br>PP EPR<br>TO EPR | 38.4         | 38.6 | 38.8 | 39.0 | 39.1 | 39.3 | 39.5 | 39.6 | 39.8 | 40.0 | 40.2 | 40.3 | 40.5 | 40.7 | 40.8 | 41.0 |  |  |  |  |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 9)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-222



MAINTENANCE MANUAL

| OAT OF (OC)  | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | BAROMETER INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|----------------------|--------------|----------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|              |                      |              |                | 22.5                   | 22.6 | 22.7 | 22.8 | 22.9 | 23.0 | 23.1 | 23.2 | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 24.0 |      |
| 88<br>( 31)  | +2.44                | 58.5         | PP PT7         | 38.2                   | 38.4 | 38.6 | 38.7 | 38.9 | 39.1 | 39.2 | 39.4 | 39.6 | 39.7 | 39.9 | 40.1 | 40.3 | 40.4 | 40.6 | 40.8 |      |
|              |                      |              | PP EPR         | 1.70                   | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 |
|              |                      |              | TO EPR         | 2.02                   | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 |
| 90<br>( 32)  | +2.61                | 58.5         | PP PT7         | 38.0                   | 38.1 | 38.3 | 38.5 | 38.7 | 38.8 | 39.0 | 39.2 | 39.3 | 39.5 | 39.7 | 39.8 | 40.0 | 40.2 | 40.3 | 40.5 |      |
|              |                      |              | PP EPR         | 1.69                   | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 |
|              |                      |              | TO EPR         | 2.01                   | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 |
| 92<br>( 33)  | +2.77                | 58.6         | PP PT7         | 37.8                   | 37.9 | 38.1 | 38.3 | 38.4 | 38.6 | 38.8 | 38.9 | 39.1 | 39.3 | 39.4 | 39.6 | 39.8 | 39.9 | 40.1 | 40.3 |      |
|              |                      |              | PP EPR         | 1.68                   | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 |
|              |                      |              | TO EPR         | 2.00                   | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| 94<br>( 34)  | +2.94                | 58.7         | PP PT7         | 37.5                   | 37.7 | 37.9 | 38.0 | 38.2 | 38.4 | 38.5 | 38.7 | 38.9 | 39.0 | 39.2 | 39.4 | 39.6 | 39.7 | 39.9 | 40.1 |      |
|              |                      |              | PP EPR         | 1.67                   | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 |
|              |                      |              | TO EPR         | 1.99                   | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 |
| 96<br>( 36)  | +3.11                | 58.8         | PP PT7         | 37.3                   | 37.5 | 37.7 | 37.8 | 38.0 | 38.2 | 38.3 | 38.5 | 38.7 | 38.8 | 39.0 | 39.2 | 39.3 | 39.5 | 39.7 | 39.8 |      |
|              |                      |              | PP EPR         | 1.66                   | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 |
|              |                      |              | TO EPR         | 1.98                   | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 |
| 98<br>( 37)  | +3.27                | 58.9         | PP PT7         | 37.1                   | 37.3 | 37.4 | 37.6 | 37.8 | 37.9 | 38.1 | 38.3 | 38.4 | 38.6 | 38.8 | 38.9 | 39.1 | 39.3 | 39.4 | 39.6 |      |
|              |                      |              | PP EPR         | 1.65                   | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 |
|              |                      |              | TO EPR         | 1.96                   | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 |
| 100<br>( 38) | +3.44                | 59.0         | PP PT7         | 36.9                   | 37.1 | 37.2 | 37.4 | 37.6 | 37.7 | 37.9 | 38.0 | 38.2 | 38.4 | 38.5 | 38.7 | 38.9 | 39.0 | 39.2 | 39.4 |      |
|              |                      |              | PP EPR         | 1.64                   | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 |
|              |                      |              | TO EPR         | 1.95                   | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 |

APPLICABLE TO PMA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 10)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-222



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |              |        | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 22.5   | 22.6   | 22.7   | 22.8   | 22.9   | 23.0   | 23.1   | 23.2   | 23.3   | 23.4   | 23.5   | 23.6   | 23.7   | 23.8   | 23.9   | 24.0   |        |        |        |        |
|-------------|------------------------|--------------|--------|----------------------|--------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | PP PT7                 | PP EPR       | TO EPR |                      |              |                | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR |
| 102 ( 39)   | 36.7<br>1.63           | 36.9<br>1.63 | 1.94   | 37.1                 | 37.0         | 37.2           | 37.3   | 37.5   | 37.7   | 37.8   | 37.9   | 38.1   | 38.3   | 38.4   | 38.6   | 38.8   | 38.9   | 38.9   | 39.1   | 39.3   | 39.4   | 39.6   | 39.8   | 39.9   | 40.1   |        |
| 104 ( 40)   | 36.5<br>1.62           | 36.7<br>1.62 | 1.93   | 36.8                 | 37.0         | 37.2           | 37.3   | 37.5   | 37.7   | 37.8   | 37.9   | 38.1   | 38.3   | 38.4   | 38.6   | 38.8   | 38.9   | 38.9   | 39.1   | 39.3   | 39.4   | 39.6   | 39.8   | 39.9   | 40.1   |        |
| 106 ( 41)   | 36.3<br>1.61           | 36.5<br>1.61 | 1.92   | 36.6                 | 36.8         | 37.0           | 37.1   | 37.3   | 37.5   | 37.6   | 37.7   | 37.9   | 38.1   | 38.2   | 38.4   | 38.6   | 38.7   | 38.7   | 38.9   | 39.1   | 39.2   | 39.4   | 39.6   | 39.8   | 39.9   | 40.1   |
| 108 ( 42)   | 36.1<br>1.60           | 36.3<br>1.60 | 1.91   | 36.4                 | 36.6         | 36.8           | 36.9   | 37.1   | 37.3   | 37.4   | 37.5   | 37.7   | 37.9   | 38.0   | 38.2   | 38.4   | 38.5   | 38.5   | 38.7   | 38.9   | 39.0   | 39.2   | 39.4   | 39.6   | 39.7   | 40.0   |
| 110 ( 43)   | 35.9<br>1.59           | 36.0<br>1.59 | 1.89   | 36.2                 | 36.4         | 36.6           | 36.7   | 36.9   | 37.1   | 37.2   | 37.3   | 37.5   | 37.7   | 37.8   | 38.0   | 38.2   | 38.3   | 38.3   | 38.5   | 38.7   | 38.8   | 39.0   | 39.2   | 39.4   | 39.6   | 40.0   |
| 112 ( 44)   | 35.7<br>1.59           | 35.9<br>1.59 | 1.89   | 36.0                 | 36.2         | 36.4           | 36.5   | 36.7   | 36.9   | 37.0   | 37.1   | 37.3   | 37.5   | 37.6   | 37.8   | 38.0   | 38.1   | 38.1   | 38.3   | 38.5   | 38.6   | 38.8   | 39.0   | 39.2   | 39.6   | 40.0   |
| 114 ( 46)   | 35.5<br>1.58           | 35.7<br>1.58 | 1.88   | 35.8                 | 36.0         | 36.2           | 36.3   | 36.5   | 36.7   | 36.8   | 36.9   | 37.1   | 37.3   | 37.4   | 37.6   | 37.8   | 37.9   | 37.9   | 38.1   | 38.3   | 38.4   | 38.6   | 38.8   | 39.0   | 39.4   | 40.0   |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 11)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-222

D54742



MAINTENANCE MANUAL

| OAT OF (°C) | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | BAROMETER INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
|-------------|----------------------|--------------|----------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|
|             |                      |              |                            | 22.5                   | 22.6 | 22.7 | 22.8 | 22.9 | 23.0 | 23.1 | 23.2 | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 24.0 |  |  |  |
| 116 ( 47)   | +4.74                | 55.6         | PP PT7<br>PP EPR<br>TC EPR | 37.1                   | 37.3 | 37.5 | 37.6 | 37.8 | 37.9 | 38.1 | 38.3 | 38.4 | 38.6 | 38.8 | 38.9 | 39.1 | 39.3 | 39.4 | 39.6 |  |  |  |
| 118 ( 48)   | +4.91                | 59.7         | PP PT7<br>PP EPR<br>TC EPR | 35.2                   | 35.3 | 35.5 | 35.6 | 35.8 | 35.9 | 36.1 | 36.3 | 36.4 | 36.6 | 36.7 | 36.9 | 37.0 | 37.2 | 37.4 | 37.5 |  |  |  |
| 120 ( 49)   | +5.07                | 59.8         | PP PT7<br>PP EPR<br>TC EPR | 35.0                   | 35.1 | 35.3 | 35.5 | 35.6 | 35.8 | 35.9 | 36.1 | 36.2 | 36.4 | 36.5 | 36.7 | 36.9 | 37.0 | 37.2 | 37.3 |  |  |  |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 12)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-222

**BOEING**  
**737**   
MAINTENANCE MANUAL

TRIM TABLES - (JT8D-9)

BAROMETRIC PRESSURE 24.1 TO 25.6 INCHES OF MERCURY ABSOLUTE

NOTE: For general instructions for use of engine trim data and a trim table locator tabulation, refer to 71-09-210.

This trim data also applies to JT8D-9A.

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

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| OAT OF (OC) | BAROMETFP | INS. MERCURY |      | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 24.1 |      |      |      |      |      |      |      |      |      |      |      |
|-------------|-----------|--------------|------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |           | PP           | TO   |                      |              |                | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 25.0 | 25.1 | 25.2 | 25.3 |
| -24 (-31)   |           | 35.8         |      | 40.1                 | 40.3         | 40.4           | 40.6 | 40.8 | 40.9 | 41.1 | 41.2 | 41.4 | 41.6 | 41.7 | 41.9 | 42.1 | 42.2 |      |
|             |           | 53.5         | 53.7 | 54.0                 | 54.2         | 54.4           | 54.6 | 54.8 | 55.1 | 55.3 | 55.5 | 55.7 | 56.0 | 56.2 | 56.4 | 56.6 | 56.8 |      |
|             |           | 2.22         | 2.22 | 2.22                 | 2.22         | 2.22           | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 | 2.22 |      |
|             |           | 2.31         | 2.31 | 2.31                 | 2.31         | 2.31           | 2.31 | 2.31 | 2.31 | 2.31 | 2.31 | 2.30 | 2.29 | 2.29 | 2.28 | 2.27 | 2.27 |      |
|             |           | 53.3         | 53.5 | 53.8                 | 54.0         | 54.2           | 54.4 | 54.6 | 54.9 | 55.1 | 55.3 | 55.5 | 55.7 | 56.0 | 56.2 | 56.4 | 56.6 |      |
|             |           | 2.21         | 2.21 | 2.21                 | 2.21         | 2.21           | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 | 2.21 |      |
|             |           | 2.30         | 2.30 | 2.30                 | 2.30         | 2.30           | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.29 | 2.29 | 2.28 | 2.27 | 2.27 |      |
|             |           | 53.1         | 53.3 | 53.6                 | 53.8         | 54.0           | 54.2 | 54.4 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.8 | 56.0 | 56.2 | 56.4 |      |
|             |           | 2.20         | 2.20 | 2.20                 | 2.20         | 2.20           | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 |      |
|             |           | 2.30         | 2.30 | 2.30                 | 2.30         | 2.30           | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.29 | 2.29 | 2.28 | 2.27 | 2.27 |      |
|             |           | 52.9         | 53.1 | 53.4                 | 53.6         | 53.8           | 54.0 | 54.2 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.8 | 56.0 | 56.2 |      |
|             |           | 2.20         | 2.20 | 2.20                 | 2.20         | 2.20           | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 |      |
|             |           | 2.29         | 2.29 | 2.29                 | 2.29         | 2.29           | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.28 | 2.27 | 2.27 |      |
|             |           | 52.7         | 52.9 | 53.1                 | 53.4         | 53.6           | 53.8 | 54.0 | 54.2 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.6 | 55.8 | 56.0 |      |
|             |           | 2.19         | 2.19 | 2.19                 | 2.19         | 2.19           | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 |      |
|             |           | 2.28         | 2.28 | 2.28                 | 2.28         | 2.28           | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.27 | 2.27 |      |
|             |           | 52.5         | 52.7 | 52.9                 | 53.2         | 53.4           | 53.6 | 53.8 | 54.0 | 54.3 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.6 | 55.8 |      |
|             |           | 2.18         | 2.18 | 2.18                 | 2.18         | 2.18           | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 |      |
|             |           | 2.28         | 2.28 | 2.28                 | 2.28         | 2.28           | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.28 | 2.27 | 2.27 |      |
|             |           | 52.3         | 52.5 | 52.7                 | 53.0         | 53.2           | 53.4 | 53.6 | 53.8 | 54.0 | 54.3 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.6 |      |
|             |           | 2.17         | 2.17 | 2.17                 | 2.17         | 2.17           | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 |      |
|             |           | 2.27         | 2.27 | 2.27                 | 2.27         | 2.27           | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 |      |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 2)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-223



MAINTENANCE MANUAL

| OAT OF (OC) | BARCMEATER INS. MERCURY |      |                            | DATA PLATE CORR. %N2 | IDLE RPM %N2         | DATA PLATE PT7       | 24.1                 | 24.2                 | 24.3                 | 24.4                 | 24.5                 | 24.6                 | 24.7                 | 24.8                 | 24.9                 | 25.0                 | 25.1                 | 25.2                 | 25.3                 | 25.4                 | 25.5                 | 25.6                 |
|-------------|-------------------------|------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | 24.1                    | 24.2 | 24.3                       |                      |                      |                      | 24.4                 | 24.5                 | 24.6                 | 24.7                 | 24.8                 | 24.9                 | 25.0                 | 25.1                 | 25.2                 | 25.3                 | 25.4                 | 25.5                 | 25.6                 |                      |                      |                      |
| -10 (-23)   | -6.12                   | 54.0 | PP PT7<br>PP EPR<br>TO EPR | 52.1<br>2.16<br>2.27 | 52.3<br>2.16<br>2.27 | 52.5<br>2.16<br>2.27 | 52.8<br>2.16<br>2.27 | 53.0<br>2.16<br>2.27 | 53.2<br>2.16<br>2.27 | 53.4<br>2.16<br>2.27 | 53.6<br>2.16<br>2.27 | 53.8<br>2.16<br>2.27 | 54.0<br>2.16<br>2.27 | 54.3<br>2.16<br>2.27 | 54.5<br>2.16<br>2.27 | 54.7<br>2.16<br>2.27 | 54.9<br>2.16<br>2.27 | 55.1<br>2.16<br>2.27 | 55.3<br>2.16<br>2.27 | 55.5<br>2.16<br>2.27 | 55.7<br>2.16<br>2.27 | 55.9<br>2.16<br>2.27 |
| -8 (-22)    | -5.93                   | 54.0 | PP PT7<br>PP EPR<br>TO EPR | 51.9<br>2.15<br>2.26 | 52.1<br>2.15<br>2.26 | 52.3<br>2.15<br>2.26 | 52.5<br>2.15<br>2.26 | 52.8<br>2.15<br>2.26 | 53.0<br>2.15<br>2.26 | 53.2<br>2.15<br>2.26 | 53.4<br>2.15<br>2.26 | 53.6<br>2.15<br>2.26 | 53.8<br>2.15<br>2.26 | 54.0<br>2.15<br>2.26 | 54.3<br>2.15<br>2.26 | 54.5<br>2.15<br>2.26 | 54.7<br>2.15<br>2.26 | 54.9<br>2.15<br>2.26 | 55.1<br>2.15<br>2.26 | 55.3<br>2.15<br>2.26 | 55.5<br>2.15<br>2.26 | 55.7<br>2.15<br>2.26 |
| -6 (-21)    | -5.75                   | 54.1 | PP PT7<br>PP EPR<br>TO EPR | 51.7<br>2.14<br>2.26 | 51.9<br>2.14<br>2.26 | 52.1<br>2.14<br>2.26 | 52.3<br>2.14<br>2.26 | 52.5<br>2.14<br>2.26 | 52.8<br>2.14<br>2.26 | 53.0<br>2.14<br>2.26 | 53.2<br>2.14<br>2.26 | 53.4<br>2.14<br>2.26 | 53.6<br>2.14<br>2.26 | 53.8<br>2.14<br>2.26 | 54.0<br>2.14<br>2.26 | 54.3<br>2.14<br>2.26 | 54.5<br>2.14<br>2.26 | 54.7<br>2.14<br>2.26 | 54.9<br>2.14<br>2.26 | 55.1<br>2.14<br>2.26 | 55.3<br>2.14<br>2.26 | 55.5<br>2.14<br>2.26 |
| -4 (-20)    | -5.57                   | 54.1 | PP PT7<br>PP EPR<br>TO EPR | 51.5<br>2.14<br>2.25 | 51.7<br>2.14<br>2.25 | 51.9<br>2.14<br>2.25 | 52.1<br>2.14<br>2.25 | 52.3<br>2.14<br>2.25 | 52.5<br>2.14<br>2.25 | 52.7<br>2.14<br>2.25 | 52.9<br>2.14<br>2.25 | 53.1<br>2.14<br>2.25 | 53.3<br>2.14<br>2.25 | 53.5<br>2.14<br>2.25 | 53.7<br>2.14<br>2.25 | 53.9<br>2.14<br>2.25 | 54.1<br>2.14<br>2.25 | 54.3<br>2.14<br>2.25 | 54.5<br>2.14<br>2.25 | 54.7<br>2.14<br>2.25 | 54.9<br>2.14<br>2.25 | 55.1<br>2.14<br>2.25 |
| -2 (-19)    | -5.38                   | 54.2 | PP PT7<br>PP EPR<br>TO EPR | 51.3<br>2.13<br>2.25 | 51.5<br>2.13<br>2.25 | 51.7<br>2.13<br>2.25 | 51.9<br>2.13<br>2.25 | 52.1<br>2.13<br>2.25 | 52.3<br>2.13<br>2.25 | 52.5<br>2.13<br>2.25 | 52.7<br>2.13<br>2.25 | 52.9<br>2.13<br>2.25 | 53.1<br>2.13<br>2.25 | 53.3<br>2.13<br>2.25 | 53.5<br>2.13<br>2.25 | 53.7<br>2.13<br>2.25 | 53.9<br>2.13<br>2.25 | 54.1<br>2.13<br>2.25 | 54.3<br>2.13<br>2.25 | 54.5<br>2.13<br>2.25 | 54.7<br>2.13<br>2.25 | 54.9<br>2.13<br>2.25 |
| 0 (-18)     | -5.20                   | 54.2 | PP PT7<br>PP EPR<br>TO EPR | 51.1<br>2.12<br>2.24 | 51.3<br>2.12<br>2.24 | 51.5<br>2.12<br>2.24 | 51.7<br>2.12<br>2.24 | 51.9<br>2.12<br>2.24 | 52.1<br>2.12<br>2.24 | 52.3<br>2.12<br>2.24 | 52.5<br>2.12<br>2.24 | 52.7<br>2.12<br>2.24 | 52.9<br>2.12<br>2.24 | 53.1<br>2.12<br>2.24 | 53.3<br>2.12<br>2.24 | 53.5<br>2.12<br>2.24 | 53.7<br>2.12<br>2.24 | 53.9<br>2.12<br>2.24 | 54.1<br>2.12<br>2.24 | 54.3<br>2.12<br>2.24 | 54.5<br>2.12<br>2.24 | 54.7<br>2.12<br>2.24 |
| 2 (-17)     | -5.02                   | 54.4 | PP PT7<br>PP EPR<br>TO EPR | 50.9<br>2.11<br>2.23 | 51.1<br>2.11<br>2.23 | 51.3<br>2.11<br>2.23 | 51.5<br>2.11<br>2.23 | 51.7<br>2.11<br>2.23 | 51.9<br>2.11<br>2.23 | 52.1<br>2.11<br>2.23 | 52.3<br>2.11<br>2.23 | 52.5<br>2.11<br>2.23 | 52.7<br>2.11<br>2.23 | 52.9<br>2.11<br>2.23 | 53.1<br>2.11<br>2.23 | 53.3<br>2.11<br>2.23 | 53.5<br>2.11<br>2.23 | 53.7<br>2.11<br>2.23 | 53.9<br>2.11<br>2.23 | 54.1<br>2.11<br>2.23 | 54.3<br>2.11<br>2.23 | 54.5<br>2.11<br>2.23 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 3)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-223

D54749



MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |              | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 24.1         | 24.2         | 24.3         | 24.4         | 24.5         | 24.6         | 24.7         | 24.8         | 24.9         | 25.0         | 25.1         | 25.2         | 25.3         | 25.4         | 25.5         | 25.6         |              |              |
|-------------|------------------------|--------------|----------------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|             | 24.1                   | 24.2         |                      |              |                | 24.3         | 24.4         | 24.5         | 24.6         | 24.7         | 24.8         | 24.9         | 25.0         | 25.1         | 25.2         | 25.3         | 25.4         | 25.5         | 25.6         |              |              |              |              |
| 4 (-16)     | 35.8                   | 50.8<br>2.10 | 51.1<br>2.10         | 51.3<br>2.10 | 51.5<br>2.10   | 51.7<br>2.10 | 51.9<br>2.10 | 40.1         | 40.3         | 40.4         | 40.6         | 40.8         | 40.9         | 41.1         | 41.2         | 41.4         | 41.6         | 41.7         | 41.9         | 42.1         | 42.2         | 42.2         |              |
| 6 (-14)     | 50.4<br>2.09           | 50.6<br>2.09 | 50.9<br>2.09         | 51.1<br>2.09 | 51.3<br>2.09   | 51.5<br>2.09 | 51.7<br>2.09 | 51.9<br>2.09 | 52.1<br>2.09 | 52.3<br>2.09 | 52.5<br>2.09 | 52.7<br>2.09 | 52.9<br>2.09 | 53.1<br>2.09 | 53.3<br>2.09 | 53.5<br>2.09 | 53.7<br>2.09 | 53.9<br>2.09 | 54.1<br>2.09 | 54.3<br>2.09 | 54.5<br>2.09 | 54.7<br>2.09 |              |
| 8 (-13)     | 50.2<br>2.08           | 50.4<br>2.08 | 50.7<br>2.08         | 50.9<br>2.08 | 51.1<br>2.08   | 51.3<br>2.08 | 51.5<br>2.08 | 51.7<br>2.08 | 51.9<br>2.08 | 52.1<br>2.08 | 52.3<br>2.08 | 52.5<br>2.08 | 52.7<br>2.08 | 52.9<br>2.08 | 53.1<br>2.08 | 53.3<br>2.08 | 53.5<br>2.08 | 53.7<br>2.08 | 53.9<br>2.08 | 54.1<br>2.08 | 54.3<br>2.08 | 54.5<br>2.08 |              |
| 10 (-12)    | 50.0<br>2.08           | 50.2<br>2.08 | 50.4<br>2.08         | 50.7<br>2.08 | 50.9<br>2.08   | 51.1<br>2.08 | 51.3<br>2.08 | 51.5<br>2.08 | 51.7<br>2.08 | 51.9<br>2.08 | 52.1<br>2.08 | 52.3<br>2.08 | 52.5<br>2.08 | 52.7<br>2.08 | 52.9<br>2.08 | 53.1<br>2.08 | 53.3<br>2.08 | 53.5<br>2.08 | 53.7<br>2.08 | 53.9<br>2.08 | 54.1<br>2.08 | 54.3<br>2.08 | 54.5<br>2.08 |
| 12 (-11)    | 49.8<br>2.07           | 50.0<br>2.07 | 50.2<br>2.07         | 50.4<br>2.07 | 50.6<br>2.07   | 50.8<br>2.07 | 51.0<br>2.07 | 51.2<br>2.07 | 51.4<br>2.07 | 51.6<br>2.07 | 51.8<br>2.07 | 52.0<br>2.07 | 52.2<br>2.07 | 52.4<br>2.07 | 52.6<br>2.07 | 52.8<br>2.07 | 53.0<br>2.07 | 53.2<br>2.07 | 53.4<br>2.07 | 53.6<br>2.07 | 53.8<br>2.07 | 54.0<br>2.07 | 54.2<br>2.07 |
| 14 (-10)    | 49.6<br>2.06           | 49.8<br>2.06 | 50.0<br>2.06         | 50.2<br>2.06 | 50.4<br>2.06   | 50.6<br>2.06 | 50.8<br>2.06 | 51.0<br>2.06 | 51.2<br>2.06 | 51.4<br>2.06 | 51.6<br>2.06 | 51.8<br>2.06 | 52.0<br>2.06 | 52.2<br>2.06 | 52.4<br>2.06 | 52.6<br>2.06 | 52.8<br>2.06 | 53.0<br>2.06 | 53.2<br>2.06 | 53.4<br>2.06 | 53.6<br>2.06 | 53.8<br>2.06 | 54.0<br>2.06 |
| 16 (-9)     | 49.4<br>2.05           | 49.6<br>2.05 | 49.8<br>2.05         | 50.0<br>2.05 | 50.2<br>2.05   | 50.4<br>2.05 | 50.6<br>2.05 | 50.8<br>2.05 | 51.0<br>2.05 | 51.2<br>2.05 | 51.4<br>2.05 | 51.6<br>2.05 | 51.8<br>2.05 | 52.0<br>2.05 | 52.2<br>2.05 | 52.4<br>2.05 | 52.6<br>2.05 | 52.8<br>2.05 | 53.0<br>2.05 | 53.2<br>2.05 | 53.4<br>2.05 | 53.6<br>2.05 | 53.8<br>2.05 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 4)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-223



MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |        |        | DATA PLATE CORR. %N2 | IDLE PPM %N2 | DATA PLATE PT7 | 24.1 | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 |      |
|-------------|------------------------|--------|--------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | PP PT7                 | PP EPR | TO EPR |                      |              |                | 24.1 | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 |      |
| 18 (-8)     | -3.59                  | 55.3   |        | 35.8                 | 49.2         | 49.4           | 49.6 | 40.1 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 50.6 | 50.8 | 51.0 | 51.2 | 51.4 | 41.6 | 41.7 | 41.9 | 42.1 | 42.2 |
| 20 (-7)     | -3.41                  | 55.4   |        | 48.9                 | 49.2         | 49.4           | 49.6 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 50.6 | 50.8 | 51.0 | 51.2 | 51.4 | 51.6 | 51.8 | 51.9 | 52.0 | 52.0 | 52.2 |
| 22 (-6)     | -3.23                  | 55.5   |        | 48.7                 | 48.9         | 49.1           | 49.3 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 50.6 | 50.8 | 51.0 | 51.2 | 51.4 | 51.6 | 51.8 | 51.9 | 52.0 | 52.0 | 52.2 |
| 24 (-4)     | -3.05                  | 55.6   |        | 48.5                 | 48.7         | 48.9           | 49.1 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 50.6 | 50.8 | 51.0 | 51.2 | 51.4 | 51.6 | 51.8 | 51.9 | 52.0 | 52.0 | 52.2 |
| 26 (-3)     | -2.88                  | 55.7   |        | 48.3                 | 48.5         | 48.7           | 48.9 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 50.6 | 50.8 | 51.0 | 51.2 | 51.4 | 51.6 | 51.8 | 51.9 | 52.0 | 52.0 | 52.2 |
| 28 (-2)     | -2.70                  | 55.8   |        | 48.1                 | 48.3         | 48.5           | 48.7 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 50.6 | 50.8 | 51.0 | 51.2 | 51.4 | 51.6 | 51.8 | 51.9 | 52.0 | 52.0 | 52.2 |
| 30 (-1)     | -2.52                  | 55.9   |        | 47.8                 | 48.0         | 48.2           | 48.4 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 50.6 | 50.8 | 51.0 | 51.2 | 51.4 | 51.6 | 51.8 | 51.9 | 52.0 | 52.0 | 52.2 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 5)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-223

| OAT OF (OC) | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | BARMETER INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|----------------------|--------------|----------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |                      |              |                | 24.1                  | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 |
| 32<br>( 0 ) | -2.34                | 56.0         | PP PT7         | 47.6                  | 47.8 | 48.0 | 48.2 | 48.4 | 48.6 | 48.8 | 49.0 | 49.2 | 49.4 | 49.6 | 49.8 | 50.0 | 50.2 | 50.4 |      |
|             |                      |              | PP EPR         | 1.98                  | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 |
|             |                      |              | TO EPR         | 2.13                  | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 |
| 34<br>( 1 ) | -2.16                | 56.1         | PP PT7         | 47.4                  | 47.6 | 47.8 | 48.0 | 48.2 | 48.4 | 48.6 | 48.8 | 49.0 | 49.2 | 49.4 | 49.5 | 49.7 | 49.9 | 50.1 |      |
|             |                      |              | PP EPR         | 1.97                  | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 |
|             |                      |              | TO EPR         | 2.13                  | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 |
| 36<br>( 2 ) | -1.99                | 56.2         | PP PT7         | 47.2                  | 47.4 | 47.6 | 47.7 | 47.9 | 48.1 | 48.3 | 48.5 | 48.7 | 48.9 | 49.1 | 49.3 | 49.5 | 49.7 | 49.9 |      |
|             |                      |              | PP EPR         | 1.96                  | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 |
|             |                      |              | TO EPR         | 2.12                  | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 |
| 38<br>( 3 ) | -1.81                | 56.3         | PP PT7         | 46.9                  | 47.1 | 47.3 | 47.5 | 47.7 | 47.9 | 48.1 | 48.3 | 48.5 | 48.7 | 48.9 | 49.1 | 49.3 | 49.5 | 49.7 |      |
|             |                      |              | PP EPR         | 1.95                  | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 |
|             |                      |              | TO EPR         | 2.11                  | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 |
| 40<br>( 4 ) | -1.63                | 56.4         | PP PT7         | 46.7                  | 46.9 | 47.1 | 47.3 | 47.5 | 47.7 | 47.9 | 48.1 | 48.3 | 48.4 | 48.6 | 48.8 | 49.0 | 49.2 | 49.4 |      |
|             |                      |              | PP EPR         | 1.94                  | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 |
|             |                      |              | TO EPR         | 2.11                  | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 |
| 42<br>( 6 ) | -1.46                | 56.5         | PP PT7         | 46.5                  | 46.7 | 46.9 | 47.1 | 47.2 | 47.4 | 47.6 | 47.8 | 48.0 | 48.2 | 48.4 | 48.6 | 48.8 | 49.0 | 49.2 |      |
|             |                      |              | PP EPR         | 1.93                  | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 |
|             |                      |              | TO EPR         | 2.10                  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 44<br>( 7 ) | -1.29                | 56.5         | PP PT7         | 46.2                  | 46.4 | 46.6 | 46.8 | 47.0 | 47.2 | 47.4 | 47.6 | 47.8 | 48.0 | 48.2 | 48.4 | 48.5 | 48.7 | 48.9 |      |
|             |                      |              | PP EPR         | 1.92                  | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 |
|             |                      |              | TO EPR         | 2.09                  | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 6)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

**71-09-223**



| OAT OF (°C) | DATA PLATE CORR. %N2 | IDLE PPM %N2 | DATA PLATE PT7 | INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|----------------------|--------------|----------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |                      |              |                | 24.1         | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 |      |
| 60<br>( 16) | + .08                | 57.2         | DATA           | 39.8         | 39.9 | 40.1 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 41.1 | 41.2 | 41.4 | 41.6 | 41.7 | 41.9 | 42.1 | 42.2 |      |
|             |                      |              | PP PT7         | 44.4         | 44.6 | 44.8 | 44.9 | 45.1 | 45.3 | 45.5 | 45.7 | 45.9 | 46.0 | 46.2 | 46.4 | 46.6 | 46.8 | 47.0 | 47.2 |      |
|             |                      |              | PP EPR         | 1.84         | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 |
| 62<br>( 17) | + .25                | 57.3         | DATA           | 44.2         | 44.3 | 44.5 | 44.7 | 44.9 | 45.1 | 45.3 | 45.4 | 45.6 | 45.8 | 46.0 | 46.2 | 46.3 | 46.5 | 46.7 | 46.9 |      |
|             |                      |              | PP PT7         | 1.83         | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 |
|             |                      |              | PP EPR         | 1.83         | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 |
| 64<br>( 18) | + .42                | 57.4         | DATA           | 43.9         | 44.1 | 44.3 | 44.5 | 44.6 | 44.8 | 45.0 | 45.2 | 45.4 | 45.5 | 45.7 | 45.9 | 46.1 | 46.3 | 46.5 | 46.6 |      |
|             |                      |              | PP PT7         | 1.82         | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 |
|             |                      |              | PP EPR         | 1.82         | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 |
| 66<br>( 19) | + .59                | 57.5         | DATA           | 43.7         | 43.9 | 44.0 | 44.2 | 44.4 | 44.6 | 44.8 | 44.9 | 45.1 | 45.3 | 45.5 | 45.7 | 45.8 | 46.0 | 46.2 | 46.4 |      |
|             |                      |              | PP PT7         | 1.81         | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 |
|             |                      |              | PP EPR         | 1.81         | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 |
| 68<br>( 20) | + .76                | 57.6         | DATA           | 43.4         | 43.6 | 43.8 | 44.0 | 44.1 | 44.3 | 44.5 | 44.7 | 44.9 | 45.0 | 45.2 | 45.4 | 45.6 | 45.8 | 46.0 | 46.1 |      |
|             |                      |              | PP PT7         | 1.80         | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 |
|             |                      |              | PP EPR         | 1.80         | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 |
| 70<br>( 21) | + .93                | 57.7         | DATA           | 43.2         | 43.4 | 43.5 | 43.7 | 43.9 | 44.1 | 44.3 | 44.4 | 44.6 | 44.8 | 45.0 | 45.2 | 45.3 | 45.5 | 45.7 | 45.9 |      |
|             |                      |              | PP PT7         | 1.79         | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 |
|             |                      |              | PP EPR         | 1.79         | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 |
| 72<br>( 22) | + 1.10               | 57.8         | DATA           | 42.9         | 43.1 | 43.3 | 43.5 | 43.6 | 43.8 | 44.0 | 44.2 | 44.4 | 44.5 | 44.7 | 44.9 | 45.1 | 45.3 | 45.4 | 45.6 |      |
|             |                      |              | PP PT7         | 1.78         | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 |
|             |                      |              | PP EPR         | 1.78         | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 |
|             |                      |              | TD EPR         | 2.04         | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 |      |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 8)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-223



MAINTENANCE MANUAL

| BAPCMETER   |                      | INS. MERCURY |                            | 24.1                 | 24.2                 | 24.3                 | 24.4                 | 24.5                 | 24.6                 | 24.7                 | 24.8                 | 24.9                 | 25.0                 | 25.1                 | 25.2                 | 25.3                 | 25.4                 | 25.5                 | 25.6                 |
|-------------|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| OAT OF (°C) | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | 35.8                 | 35.9                 | 40.1                 | 40.3                 | 40.4                 | 40.6                 | 40.8                 | 40.9                 | 41.1                 | 41.2                 | 41.4                 | 41.6                 | 41.7                 | 41.9                 | 42.1                 | 42.2                 |
| 74 ( 23 )   | +1.26                | 57.9         | PP PT7<br>PP EPR<br>TO EPR | 42.7<br>1.77<br>2.04 | 42.9<br>1.77<br>2.04 | 43.0<br>1.77<br>2.04 | 43.2<br>1.77<br>2.04 | 43.4<br>1.77<br>2.04 | 43.6<br>1.77<br>2.04 | 43.7<br>1.77<br>2.04 | 43.9<br>1.77<br>2.04 | 44.1<br>1.77<br>2.04 | 44.3<br>1.77<br>2.04 | 44.5<br>1.77<br>2.04 | 44.6<br>1.77<br>2.04 | 44.8<br>1.77<br>2.04 | 45.0<br>1.77<br>2.04 | 45.2<br>1.77<br>2.04 | 45.3<br>1.77<br>2.04 |
| 76 ( 24 )   | +1.43                | 58.0         | PP PT7<br>PP EPR<br>TO EPR | 42.4<br>1.76<br>2.04 | 42.6<br>1.76<br>2.04 | 42.8<br>1.76<br>2.04 | 43.0<br>1.76<br>2.04 | 43.1<br>1.76<br>2.04 | 43.3<br>1.76<br>2.04 | 43.5<br>1.76<br>2.04 | 43.7<br>1.76<br>2.04 | 43.8<br>1.76<br>2.04 | 44.0<br>1.76<br>2.04 | 44.2<br>1.76<br>2.04 | 44.4<br>1.76<br>2.04 | 44.5<br>1.76<br>2.04 | 44.7<br>1.76<br>2.04 | 44.9<br>1.76<br>2.04 | 45.1<br>1.76<br>2.04 |
| 78 ( 26 )   | +1.60                | 58.0         | PP PT7<br>PP EPR<br>TO EPR | 42.2<br>1.75<br>2.04 | 42.4<br>1.75<br>2.04 | 42.5<br>1.75<br>2.04 | 42.7<br>1.75<br>2.04 | 42.9<br>1.75<br>2.04 | 43.1<br>1.75<br>2.04 | 43.2<br>1.75<br>2.04 | 43.4<br>1.75<br>2.04 | 43.6<br>1.75<br>2.04 | 43.8<br>1.75<br>2.04 | 43.9<br>1.75<br>2.04 | 44.1<br>1.75<br>2.04 | 44.3<br>1.75<br>2.04 | 44.5<br>1.75<br>2.04 | 44.6<br>1.75<br>2.04 | 44.8<br>1.75<br>2.04 |
| 80 ( 27 )   | +1.77                | 58.1         | PP PT7<br>PP EPR<br>TO EPR | 41.9<br>1.74<br>2.04 | 42.1<br>1.74<br>2.04 | 42.3<br>1.74<br>2.04 | 42.5<br>1.74<br>2.04 | 42.6<br>1.74<br>2.04 | 42.8<br>1.74<br>2.04 | 43.0<br>1.74<br>2.04 | 43.2<br>1.74<br>2.04 | 43.3<br>1.74<br>2.04 | 43.5<br>1.74<br>2.04 | 43.7<br>1.74<br>2.04 | 43.8<br>1.74<br>2.04 | 44.0<br>1.74<br>2.04 | 44.2<br>1.74<br>2.04 | 44.4<br>1.74<br>2.04 | 44.5<br>1.74<br>2.04 |
| 82 ( 28 )   | +1.94                | 58.2         | PP PT7<br>PP EPR<br>TO EPR | 41.7<br>1.73<br>2.04 | 41.9<br>1.73<br>2.04 | 42.0<br>1.73<br>2.04 | 42.2<br>1.73<br>2.04 | 42.4<br>1.73<br>2.04 | 42.5<br>1.73<br>2.04 | 42.7<br>1.73<br>2.04 | 42.9<br>1.73<br>2.04 | 43.1<br>1.73<br>2.04 | 43.2<br>1.73<br>2.04 | 43.4<br>1.73<br>2.04 | 43.6<br>1.73<br>2.04 | 43.8<br>1.73<br>2.04 | 43.9<br>1.73<br>2.04 | 44.1<br>1.73<br>2.04 | 44.3<br>1.73<br>2.04 |
| 84 ( 29 )   | +2.10                | 58.3         | PP PT7<br>PP EPR<br>TO EPR | 41.4<br>1.72<br>2.04 | 41.6<br>1.72<br>2.04 | 41.8<br>1.72<br>2.04 | 41.9<br>1.72<br>2.04 | 42.1<br>1.72<br>2.04 | 42.3<br>1.72<br>2.04 | 42.5<br>1.72<br>2.04 | 42.6<br>1.72<br>2.04 | 42.8<br>1.72<br>2.04 | 43.0<br>1.72<br>2.04 | 43.2<br>1.72<br>2.04 | 43.3<br>1.72<br>2.04 | 43.5<br>1.72<br>2.04 | 43.7<br>1.72<br>2.04 | 43.8<br>1.72<br>2.04 | 44.0<br>1.72<br>2.04 |
| 86 ( 30 )   | +2.27                | 58.4         | PP PT7<br>PP EPR<br>TO EPR | 41.2<br>1.71<br>2.03 | 41.4<br>1.71<br>2.03 | 41.5<br>1.71<br>2.03 | 41.7<br>1.71<br>2.03 | 41.9<br>1.71<br>2.03 | 42.0<br>1.71<br>2.03 | 42.2<br>1.71<br>2.03 | 42.4<br>1.71<br>2.03 | 42.5<br>1.71<br>2.03 | 42.7<br>1.71<br>2.03 | 42.9<br>1.71<br>2.03 | 43.1<br>1.71<br>2.03 | 43.2<br>1.71<br>2.03 | 43.4<br>1.71<br>2.03 | 43.6<br>1.71<br>2.03 | 43.7<br>1.71<br>2.03 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 9)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-223



MAINTENANCE MANUAL

| OAT OF (9C) | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | BAROMETER INS. MERCURY |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
|-------------|----------------------|--------------|----------------------------|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             |                      |              |                            | 24.1                   | 24.2                 | 24.3                 | 24.4                 | 24.5                 | 24.6                 | 24.7                 | 24.8                 | 24.9                 | 25.0                 | 25.1                 | 25.2                 | 25.3                 | 25.4                 | 25.5                 | 25.6                 |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 88 ( 31)    | +2.44                | 58.5         | PP PT7<br>PP EPR<br>TO EPR | 35.8                   | 41.1<br>41.3<br>2.02 | 40.1<br>1.70<br>2.02 | 40.3<br>1.70<br>2.02 | 40.4<br>1.70<br>2.02 | 40.6<br>1.70<br>2.02 | 40.8<br>1.70<br>2.02 | 40.9<br>1.70<br>2.02 | 41.1<br>1.70<br>2.02 | 41.2<br>1.70<br>2.02 | 41.4<br>1.70<br>2.02 | 41.6<br>1.70<br>2.02 | 41.7<br>1.70<br>2.02 | 41.9<br>1.70<br>2.02 | 42.1<br>1.70<br>2.02 | 42.2<br>1.70<br>2.02 | 42.3<br>1.70<br>2.02 | 42.5<br>1.70<br>2.02 | 42.6<br>1.70<br>2.02 | 42.7<br>1.70<br>2.02 | 42.8<br>1.70<br>2.02 | 42.9<br>1.70<br>2.02 | 43.0<br>1.70<br>2.02 | 43.1<br>1.70<br>2.02 | 43.3<br>1.70<br>2.02 | 43.5<br>1.70<br>2.02 |                      |                      |                      |                      |                      |                      |
| 90 ( 32)    | +2.61                | 58.5         | PP PT7<br>PP EPR<br>TO EPR | 40.7                   | 40.8<br>1.69<br>2.01 | 41.0<br>1.69<br>2.01 | 41.2<br>1.69<br>2.01 | 41.4<br>1.69<br>2.01 | 41.5<br>1.69<br>2.01 | 41.7<br>1.69<br>2.01 | 41.9<br>1.69<br>2.01 | 42.0<br>1.69<br>2.01 | 42.2<br>1.69<br>2.01 | 42.4<br>1.69<br>2.01 | 42.5<br>1.69<br>2.01 | 42.7<br>1.69<br>2.01 | 42.9<br>1.69<br>2.01 | 43.0<br>1.69<br>2.01 | 43.2<br>1.69<br>2.01 | 43.3<br>1.69<br>2.01 | 43.5<br>1.69<br>2.01 | 43.6<br>1.69<br>2.01 | 43.7<br>1.69<br>2.01 | 43.8<br>1.69<br>2.01 | 43.9<br>1.69<br>2.01 | 44.0<br>1.69<br>2.01 | 44.1<br>1.69<br>2.01 | 44.2<br>1.69<br>2.01 | 44.3<br>1.69<br>2.01 | 44.4<br>1.69<br>2.01 | 44.5<br>1.69<br>2.01 |                      |                      |                      |                      |
| 92 ( 33)    | +2.77                | 58.6         | PP PT7<br>PP EPR<br>TO EPR | 40.4                   | 40.6<br>1.68<br>2.00 | 40.8<br>1.68<br>2.00 | 41.0<br>1.68<br>2.00 | 41.1<br>1.68<br>2.00 | 41.3<br>1.68<br>2.00 | 41.5<br>1.68<br>2.00 | 41.6<br>1.68<br>2.00 | 41.8<br>1.68<br>2.00 | 41.9<br>1.68<br>2.00 | 42.1<br>1.68<br>2.00 | 42.3<br>1.68<br>2.00 | 42.5<br>1.68<br>2.00 | 42.6<br>1.68<br>2.00 | 42.8<br>1.68<br>2.00 | 43.0<br>1.68<br>2.00 | 43.1<br>1.68<br>2.00 | 43.3<br>1.68<br>2.00 | 43.5<br>1.68<br>2.00 | 43.6<br>1.68<br>2.00 | 43.7<br>1.68<br>2.00 | 43.8<br>1.68<br>2.00 | 43.9<br>1.68<br>2.00 | 44.0<br>1.68<br>2.00 | 44.1<br>1.68<br>2.00 | 44.2<br>1.68<br>2.00 | 44.3<br>1.68<br>2.00 | 44.4<br>1.68<br>2.00 | 44.5<br>1.68<br>2.00 |                      |                      |                      |
| 94 ( 34)    | +2.94                | 58.7         | PP PT7<br>PP EPR<br>TO EPR | 40.2                   | 40.4<br>1.67<br>1.99 | 40.6<br>1.67<br>1.99 | 40.7<br>1.67<br>1.99 | 40.9<br>1.67<br>1.99 | 41.1<br>1.67<br>1.99 | 41.2<br>1.67<br>1.99 | 41.4<br>1.67<br>1.99 | 41.6<br>1.67<br>1.99 | 41.7<br>1.67<br>1.99 | 41.9<br>1.67<br>1.99 | 42.1<br>1.67<br>1.99 | 42.2<br>1.67<br>1.99 | 42.4<br>1.67<br>1.99 | 42.5<br>1.67<br>1.99 | 42.7<br>1.67<br>1.99 | 42.8<br>1.67<br>1.99 | 43.0<br>1.67<br>1.99 | 43.1<br>1.67<br>1.99 | 43.2<br>1.67<br>1.99 | 43.3<br>1.67<br>1.99 | 43.4<br>1.67<br>1.99 | 43.5<br>1.67<br>1.99 | 43.6<br>1.67<br>1.99 | 43.7<br>1.67<br>1.99 | 43.8<br>1.67<br>1.99 | 43.9<br>1.67<br>1.99 | 44.0<br>1.67<br>1.99 | 44.1<br>1.67<br>1.99 | 44.2<br>1.67<br>1.99 |                      |                      |
| 96 ( 36)    | +3.11                | 58.8         | PP PT7<br>PP EPR<br>TO EPR | 40.0                   | 40.2<br>1.66<br>1.98 | 40.3<br>1.66<br>1.98 | 40.5<br>1.66<br>1.98 | 40.7<br>1.66<br>1.98 | 40.8<br>1.66<br>1.98 | 41.0<br>1.66<br>1.98 | 41.1<br>1.66<br>1.98 | 41.3<br>1.66<br>1.98 | 41.4<br>1.66<br>1.98 | 41.6<br>1.66<br>1.98 | 41.8<br>1.66<br>1.98 | 42.0<br>1.66<br>1.98 | 42.1<br>1.66<br>1.98 | 42.3<br>1.66<br>1.98 | 42.5<br>1.66<br>1.98 | 42.6<br>1.66<br>1.98 | 42.8<br>1.66<br>1.98 | 43.0<br>1.66<br>1.98 | 43.1<br>1.66<br>1.98 | 43.2<br>1.66<br>1.98 | 43.3<br>1.66<br>1.98 | 43.4<br>1.66<br>1.98 | 43.5<br>1.66<br>1.98 | 43.6<br>1.66<br>1.98 | 43.7<br>1.66<br>1.98 | 43.8<br>1.66<br>1.98 | 43.9<br>1.66<br>1.98 | 44.0<br>1.66<br>1.98 | 44.1<br>1.66<br>1.98 | 44.2<br>1.66<br>1.98 |                      |
| 98 ( 37)    | +3.27                | 58.9         | PP PT7<br>PP EPR<br>TO EPR | 39.8                   | 39.9<br>1.65<br>1.96 | 40.1<br>1.65<br>1.96 | 40.3<br>1.65<br>1.96 | 40.4<br>1.65<br>1.96 | 40.6<br>1.65<br>1.96 | 40.7<br>1.65<br>1.96 | 40.9<br>1.65<br>1.96 | 41.1<br>1.65<br>1.96 | 41.2<br>1.65<br>1.96 | 41.4<br>1.65<br>1.96 | 41.6<br>1.65<br>1.96 | 41.7<br>1.65<br>1.96 | 41.9<br>1.65<br>1.96 | 42.0<br>1.65<br>1.96 | 42.2<br>1.65<br>1.96 | 42.3<br>1.65<br>1.96 | 42.5<br>1.65<br>1.96 | 42.6<br>1.65<br>1.96 | 42.7<br>1.65<br>1.96 | 42.8<br>1.65<br>1.96 | 42.9<br>1.65<br>1.96 | 43.0<br>1.65<br>1.96 | 43.1<br>1.65<br>1.96 | 43.2<br>1.65<br>1.96 | 43.3<br>1.65<br>1.96 | 43.4<br>1.65<br>1.96 | 43.5<br>1.65<br>1.96 | 43.6<br>1.65<br>1.96 | 43.7<br>1.65<br>1.96 | 43.8<br>1.65<br>1.96 |                      |
| 100 ( 38)   | +3.44                | 59.0         | PP PT7<br>PP EPR<br>TO EPR | 39.5                   | 39.7<br>1.64<br>1.95 | 39.9<br>1.64<br>1.95 | 40.0<br>1.64<br>1.95 | 40.2<br>1.64<br>1.95 | 40.3<br>1.64<br>1.95 | 40.5<br>1.64<br>1.95 | 40.7<br>1.64<br>1.95 | 40.8<br>1.64<br>1.95 | 41.0<br>1.64<br>1.95 | 41.1<br>1.64<br>1.95 | 41.3<br>1.64<br>1.95 | 41.5<br>1.64<br>1.95 | 41.6<br>1.64<br>1.95 | 41.8<br>1.64<br>1.95 | 42.0<br>1.64<br>1.95 | 42.1<br>1.64<br>1.95 | 42.3<br>1.64<br>1.95 | 42.5<br>1.64<br>1.95 | 42.6<br>1.64<br>1.95 | 42.7<br>1.64<br>1.95 | 42.8<br>1.64<br>1.95 | 42.9<br>1.64<br>1.95 | 43.0<br>1.64<br>1.95 | 43.1<br>1.64<br>1.95 | 43.2<br>1.64<br>1.95 | 43.3<br>1.64<br>1.95 | 43.4<br>1.64<br>1.95 | 43.5<br>1.64<br>1.95 | 43.6<br>1.64<br>1.95 | 43.7<br>1.64<br>1.95 | 43.8<br>1.64<br>1.95 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 10)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-223

| BAROMETER INS. MERCURY |                      |              |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|------------------------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| OAT OF (°C)            | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 24.1 | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 |      |      |  |
| 102<br>( 39)           | +3.60                | 59.1         | PP PT7         | 35.8 | 35.5 | 40.1 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 41.1 | 41.2 | 41.4 | 41.6 | 41.7 | 41.9 | 42.1 | 42.2 |      |      |  |
|                        |                      |              | PP EPR         | 35.3 | 39.5 | 39.6 | 39.8 | 40.0 | 40.1 | 40.3 | 40.4 | 40.6 | 40.8 | 40.9 | 41.1 | 41.3 | 41.4 | 41.6 | 41.8 | 41.8 |      |  |
|                        |                      |              | TO EPR         | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 |  |
| 104<br>( 40)           | +3.77                | 59.2         | PP PT7         | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 | 1.94 |      |      |  |
|                        |                      |              | PP EPR         | 39.1 | 39.3 | 39.4 | 39.6 | 39.7 | 39.9 | 40.1 | 40.2 | 40.4 | 40.5 | 40.7 | 40.9 | 41.0 | 41.2 | 41.4 | 41.5 | 41.5 |      |  |
|                        |                      |              | TO EPR         | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 |  |
| 106<br>( 41)           | +3.93                | 59.2         | PP PT7         | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 |      |  |
|                        |                      |              | PP EPR         | 38.9 | 39.0 | 39.2 | 39.4 | 39.5 | 39.7 | 39.8 | 40.0 | 40.2 | 40.3 | 40.5 | 40.6 | 40.8 | 41.0 | 41.2 | 41.4 | 41.3 | 41.3 |  |
|                        |                      |              | TO EPR         | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 | 1.61 |  |
| 108<br>( 42)           | +4.09                | 59.3         | PP PT7         | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 |      |  |
|                        |                      |              | PP EPR         | 38.7 | 38.8 | 39.0 | 39.1 | 39.3 | 39.5 | 39.6 | 39.8 | 39.9 | 40.1 | 40.3 | 40.4 | 40.6 | 40.7 | 40.9 | 41.1 | 41.1 | 41.1 |  |
|                        |                      |              | TO EPR         | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 |  |
| 110<br>( 43)           | +4.25                | 59.4         | PP PT7         | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 |      |  |
|                        |                      |              | PP EPR         | 38.4 | 38.6 | 38.8 | 38.9 | 39.1 | 39.2 | 39.4 | 39.6 | 39.7 | 39.9 | 40.0 | 40.2 | 40.4 | 40.5 | 40.7 | 40.9 | 40.9 | 40.8 |  |
|                        |                      |              | TO EPR         | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 |  |
| 112<br>( 44)           | +4.42                | 59.5         | PP PT7         | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 |      |  |
|                        |                      |              | PP EPR         | 38.2 | 38.4 | 38.6 | 38.7 | 38.9 | 39.0 | 39.2 | 39.4 | 39.5 | 39.7 | 39.9 | 40.0 | 40.2 | 40.4 | 40.5 | 40.7 | 40.6 | 40.6 |  |
|                        |                      |              | TO EPR         | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 | 1.59 |  |
| 114<br>( 46)           | +4.58                | 59.6         | PP PT7         | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 |      |  |
|                        |                      |              | PP EPR         | 38.1 | 38.2 | 38.4 | 38.5 | 38.7 | 38.8 | 39.0 | 39.2 | 39.3 | 39.5 | 39.7 | 39.8 | 39.9 | 40.1 | 40.3 | 40.4 | 40.4 | 40.4 |  |
|                        |                      |              | TO EPR         | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 |  |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 11)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

**71-09-223**

| OAT OF (OC) | DATA PLATE CORR. %N2 | IDLE PPM %N2 | MERCURY                    |                      | 24.1                 | 24.2                 | 24.3                 | 24.4                 | 24.5                 | 24.6                 | 24.7                 | 24.8                 | 24.9                 | 25.0                 | 25.1                 | 25.2                 | 25.3                 | 25.4                 | 25.5                 | 25.6 |
|-------------|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------|
|             |                      |              | DATA PLATE PT7             | DATA PLATE PT7       | 35.8                 | 35.9                 | 40.1                 | 40.3                 | 40.4                 | 40.6                 | 40.8                 | 40.9                 | 41.1                 | 41.2                 | 41.4                 | 41.6                 | 41.7                 | 41.9                 | 42.1                 | 42.2 |
| 116 ( 47)   | +4.74                | 55.6         | PP PT7<br>PP EPR<br>TO EPR | 37.9<br>1.57<br>1.87 | 38.0<br>1.57<br>1.87 | 38.2<br>1.57<br>1.87 | 38.3<br>1.57<br>1.87 | 38.5<br>1.57<br>1.87 | 38.6<br>1.57<br>1.87 | 38.8<br>1.57<br>1.87 | 39.0<br>1.57<br>1.87 | 39.1<br>1.57<br>1.87 | 39.3<br>1.57<br>1.87 | 39.4<br>1.57<br>1.87 | 39.6<br>1.57<br>1.87 | 39.7<br>1.57<br>1.87 | 39.9<br>1.57<br>1.87 | 40.1<br>1.57<br>1.87 | 40.2<br>1.57<br>1.87 |      |
| 118 ( 48)   | +4.91                | 59.7         | PP PT7<br>PP EPR<br>TO EPR | 37.7<br>1.56<br>1.86 | 37.8<br>1.56<br>1.86 | 38.0<br>1.56<br>1.86 | 38.1<br>1.56<br>1.86 | 38.3<br>1.56<br>1.86 | 38.4<br>1.56<br>1.86 | 38.6<br>1.56<br>1.86 | 38.8<br>1.56<br>1.86 | 38.9<br>1.56<br>1.86 | 39.1<br>1.56<br>1.86 | 39.2<br>1.56<br>1.86 | 39.4<br>1.56<br>1.86 | 39.5<br>1.56<br>1.86 | 39.7<br>1.56<br>1.86 | 39.9<br>1.56<br>1.86 | 40.0<br>1.56<br>1.86 |      |
| 120 ( 49)   | +5.07                | 59.8         | PP PT7<br>PP EPR<br>TC EPR | 37.5<br>1.55<br>1.85 | 37.6<br>1.55<br>1.85 | 37.8<br>1.55<br>1.85 | 37.9<br>1.55<br>1.85 | 38.1<br>1.55<br>1.85 | 38.3<br>1.55<br>1.85 | 38.4<br>1.55<br>1.85 | 38.6<br>1.55<br>1.85 | 38.7<br>1.55<br>1.85 | 38.9<br>1.55<br>1.85 | 39.0<br>1.55<br>1.85 | 39.2<br>1.55<br>1.85 | 39.3<br>1.55<br>1.85 | 39.5<br>1.55<br>1.85 | 39.7<br>1.55<br>1.85 | 39.8<br>1.55<br>1.85 |      |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 12)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

71-09-223



MAINTENANCE MANUAL

TRIM TABLES - (JT8D-9)

BAROMETRIC PRESSURE 25.7 TO 27.2 INCHES OF MERCURY ABSOLUTE

NOTE: For general instructions for use of engine trim data and a trim table locator tabulation, refer to 71-09-210.

This trim data also applies to JT8D-9A.

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224

01

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| OAT OF (°C) | BARGMETER INS. MERCURY |                | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 25.7 | 25.8 | 25.9 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 27.0 | 27.1 | 27.2 |
|-------------|------------------------|----------------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | DATA PLATE CORR. %N2   | DATA PLATE PT7 |                      |              |                | 25.7 | 25.8 | 25.9 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 27.0 | 27.1 | 27.2 |
| -38 (-35)   | -8.68                  | 53.7           | 53.9                 | 54.1         | 54.3           | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.8 | 56.0 | 56.2 | 56.4 | 56.6 | 56.8 | 56.9 | 57.1 | 57.2 | 57.3 |
|             |                        | 2.09           | 2.09                 | 2.09         | 2.09           | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 |
|             |                        | *              | *                    | *            | *              | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
|             |                        | 2.26           | 2.25                 | 2.25         | 2.24           | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 | 2.18 | 2.19 | 2.19 | 2.18 | 2.18 |
| -36 (-38)   | -8.49                  | 53.4           | 53.6                 | 53.9         | 54.1           | 54.3 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.7 | 55.9 | 56.1 | 56.4 | 56.6 | 56.9 | 57.1 | 57.2 | 57.3 |
|             |                        | 2.08           | 2.08                 | 2.06         | 2.08           | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 |
|             |                        | *              | *                    | *            | *              | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
|             |                        | 2.26           | 2.25                 | 2.25         | 2.24           | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 | 2.18 | 2.19 | 2.19 | 2.18 | 2.18 |
| -34 (-37)   | -8.31                  | 53.2           | 53.4                 | 53.6         | 53.8           | 54.0 | 54.2 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.7 | 55.9 | 56.1 | 56.3 | 56.9 | 57.1 | 57.2 | 57.3 |
|             |                        | 2.07           | 2.07                 | 2.07         | 2.07           | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 |
|             |                        | *              | *                    | *            | *              | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
|             |                        | 2.26           | 2.25                 | 2.25         | 2.24           | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 | 2.18 | 2.19 | 2.19 | 2.18 | 2.18 |
| -32 (-36)   | -8.13                  | 57.9           | 58.1                 | 58.4         | 58.6           | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 59.9 | 60.1 | 60.2 | 60.4 | 60.6 | 60.8 | 60.9 | 61.1 | 61.2 | 61.3 |
|             |                        | 2.25           | 2.25                 | 2.25         | 2.25           | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 |
|             |                        | *              | *                    | *            | *              | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
|             |                        | 2.26           | 2.25                 | 2.25         | 2.24           | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 | 2.18 | 2.19 | 2.19 | 2.18 | 2.18 |
| -30 (-34)   | -7.94                  | 57.7           | 57.9                 | 58.1         | 58.4           | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 60.0 | 60.2 | 60.4 | 60.6 | 60.8 | 60.9 | 61.1 | 61.2 | 61.3 |
|             |                        | 2.25           | 2.25                 | 2.25         | 2.25           | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 | 2.25 |
|             |                        | *              | *                    | *            | *              | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
|             |                        | 2.26           | 2.25                 | 2.25         | 2.24           | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 | 2.18 | 2.19 | 2.19 | 2.18 | 2.18 |
| -28 (-33)   | -7.76                  | 57.5           | 57.7                 | 57.9         | 58.2           | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 60.0 | 60.2 | 60.4 | 60.6 | 60.7 | 60.9 | 61.0 | 61.1 |
|             |                        | 2.24           | 2.24                 | 2.24         | 2.24           | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 | 2.24 |
|             |                        | *              | *                    | *            | *              | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
|             |                        | 2.26           | 2.25                 | 2.25         | 2.24           | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 | 2.18 | 2.19 | 2.19 | 2.18 | 2.18 |
| -26 (-32)   | -7.58                  | 57.3           | 57.5                 | 57.7         | 57.9           | 58.2 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 60.0 | 60.2 | 60.4 | 60.5 | 60.7 | 60.8 | 60.9 |
|             |                        | 2.23           | 2.23                 | 2.23         | 2.23           | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 | 2.23 |
|             |                        | *              | *                    | *            | *              | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
|             |                        | 2.26           | 2.25                 | 2.25         | 2.24           | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 | 2.18 | 2.19 | 2.19 | 2.18 | 2.18 |

\* USE COLD WEATHER PART POWER TRIM STOP  
FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP  
- LEFT OF STAGGERED LINE USE "S" STOP

Trim Table Locator Tabulation  
Figure 201 (Sheet 1)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224

D54767

| OAT OF (°C) | BARMETER INS. MERCURY |                |              | IDLE RPM %N2 | MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|-----------------------|----------------|--------------|--------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | DATA PLATE CORR. %N2  | DATA PLATE PT7 | DATA PT7     |              | 25.7    | 25.8 | 25.9 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 27.0 | 27.1 |
| -24 (-31)   | -7.40                 | 54.3           | 57.1<br>2.22 | 57.5<br>2.22 | 42.4    | 42.6 | 42.7 | 42.9 | 43.1 | 43.2 | 43.4 | 43.6 | 43.7 | 43.9 | 44.1 | 44.2 | 44.4 | 44.5 | 44.9 |
| -22 (-30)   | -7.21                 | 54.2           | 56.9<br>2.21 | 57.3<br>2.21 | 2.26    | 2.25 | 2.25 | 2.24 | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 |
| -20 (-29)   | -7.03                 | 54.1           | 56.6<br>2.20 | 57.1<br>2.20 | 2.26    | 2.25 | 2.25 | 2.24 | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 |
| -18 (-28)   | -6.85                 | 54.1           | 56.4<br>2.20 | 56.9<br>2.20 | 2.26    | 2.25 | 2.25 | 2.24 | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 |
| -16 (-27)   | -6.66                 | 54.0           | 56.2<br>2.19 | 56.6<br>2.19 | 2.26    | 2.25 | 2.25 | 2.24 | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 |
| -14 (-26)   | -6.48                 | 54.0           | 56.0<br>2.18 | 56.4<br>2.18 | 2.26    | 2.25 | 2.25 | 2.24 | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 |
| -12 (-24)   | -6.30                 | 54.0           | 55.8<br>2.17 | 56.0<br>2.17 | 2.26    | 2.25 | 2.25 | 2.24 | 2.24 | 2.23 | 2.22 | 2.22 | 2.21 | 2.21 | 2.20 | 2.20 | 2.19 | 2.19 | 2.18 |

\* USE COLD WEATHER PART POWER TRIM STOP  
 FOP TARGETS TO -RIGHT CF STAGGERED LINE USE "C" STOP  
 - LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 2)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224

| OAT OF (°C) | BAROMETER INS. MERCURY |              |                            |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |
|-------------|------------------------|--------------|----------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|             | DATA PLATE CORR. %N2   | IDLE FPM %N2 | DATA PLATE PT7             |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |                                      |
| -10 (-23)   | -6.12                  | 54.0         | PP PT7<br>PP FPR<br>TC EPR | 25.7<br>42.4<br>55.6<br>2.16<br>2.26 | 25.8<br>42.6<br>55.8<br>2.16<br>2.25 | 25.9<br>42.7<br>56.0<br>2.16<br>2.25 | 26.0<br>42.9<br>56.2<br>2.16<br>2.24 | 26.1<br>43.1<br>56.4<br>2.16<br>2.24 | 26.2<br>43.2<br>56.6<br>2.16<br>2.23 | 26.3<br>43.4<br>56.9<br>2.16<br>2.22 | 26.4<br>43.6<br>57.1<br>2.16<br>2.22 | 26.5<br>43.7<br>57.3<br>2.16<br>2.21 | 26.6<br>43.9<br>57.5<br>2.16<br>2.21 | 26.7<br>44.1<br>57.7<br>2.16<br>2.20 | 26.8<br>44.2<br>57.9<br>2.16<br>2.20 | 26.9<br>44.4<br>58.2<br>2.16<br>2.19 | 27.0<br>44.5<br>58.4<br>2.16<br>2.19 | 27.1<br>44.7<br>58.6<br>2.16<br>2.18 | 27.2<br>44.9<br>58.8<br>2.16<br>2.18 |
| -8 (-22)    | -5.93                  | 54.0         | PP PT7<br>PP EPR<br>TO EPR | 25.7<br>42.4<br>55.6<br>2.16<br>2.26 | 25.8<br>42.6<br>55.8<br>2.16<br>2.25 | 25.9<br>42.7<br>56.0<br>2.16<br>2.25 | 26.0<br>42.9<br>56.2<br>2.16<br>2.24 | 26.1<br>43.1<br>56.4<br>2.16<br>2.24 | 26.2<br>43.2<br>56.6<br>2.16<br>2.23 | 26.3<br>43.4<br>56.9<br>2.16<br>2.22 | 26.4<br>43.6<br>57.1<br>2.16<br>2.22 | 26.5<br>43.7<br>57.3<br>2.16<br>2.21 | 26.6<br>43.9<br>57.5<br>2.16<br>2.21 | 26.7<br>44.1<br>57.7<br>2.16<br>2.20 | 26.8<br>44.2<br>57.9<br>2.16<br>2.20 | 26.9<br>44.4<br>58.2<br>2.16<br>2.19 | 27.0<br>44.5<br>58.4<br>2.16<br>2.19 | 27.1<br>44.7<br>58.6<br>2.16<br>2.18 | 27.2<br>44.9<br>58.8<br>2.16<br>2.18 |
| -6 (-21)    | -5.75                  | 54.1         | PP PT7<br>PP EPR<br>TO EPR | 25.7<br>42.4<br>55.6<br>2.16<br>2.26 | 25.8<br>42.6<br>55.8<br>2.16<br>2.25 | 25.9<br>42.7<br>56.0<br>2.16<br>2.25 | 26.0<br>42.9<br>56.2<br>2.16<br>2.24 | 26.1<br>43.1<br>56.4<br>2.16<br>2.24 | 26.2<br>43.2<br>56.6<br>2.16<br>2.23 | 26.3<br>43.4<br>56.9<br>2.16<br>2.22 | 26.4<br>43.6<br>57.1<br>2.16<br>2.22 | 26.5<br>43.7<br>57.3<br>2.16<br>2.21 | 26.6<br>43.9<br>57.5<br>2.16<br>2.21 | 26.7<br>44.1<br>57.7<br>2.16<br>2.20 | 26.8<br>44.2<br>57.9<br>2.16<br>2.20 | 26.9<br>44.4<br>58.2<br>2.16<br>2.19 | 27.0<br>44.5<br>58.4<br>2.16<br>2.19 | 27.1<br>44.7<br>58.6<br>2.16<br>2.18 | 27.2<br>44.9<br>58.8<br>2.16<br>2.18 |
| -4 (-20)    | -5.57                  | 54.1         | PP PT7<br>PP EPR<br>TO EPR | 25.7<br>42.4<br>55.6<br>2.16<br>2.26 | 25.8<br>42.6<br>55.8<br>2.16<br>2.25 | 25.9<br>42.7<br>56.0<br>2.16<br>2.25 | 26.0<br>42.9<br>56.2<br>2.16<br>2.24 | 26.1<br>43.1<br>56.4<br>2.16<br>2.24 | 26.2<br>43.2<br>56.6<br>2.16<br>2.23 | 26.3<br>43.4<br>56.9<br>2.16<br>2.22 | 26.4<br>43.6<br>57.1<br>2.16<br>2.22 | 26.5<br>43.7<br>57.3<br>2.16<br>2.21 | 26.6<br>43.9<br>57.5<br>2.16<br>2.21 | 26.7<br>44.1<br>57.7<br>2.16<br>2.20 | 26.8<br>44.2<br>57.9<br>2.16<br>2.20 | 26.9<br>44.4<br>58.2<br>2.16<br>2.19 | 27.0<br>44.5<br>58.4<br>2.16<br>2.19 | 27.1<br>44.7<br>58.6<br>2.16<br>2.18 | 27.2<br>44.9<br>58.8<br>2.16<br>2.18 |
| -2 (-19)    | -5.38                  | 54.2         | PP PT7<br>PP EPR<br>TO EPR | 25.7<br>42.4<br>55.6<br>2.16<br>2.26 | 25.8<br>42.6<br>55.8<br>2.16<br>2.25 | 25.9<br>42.7<br>56.0<br>2.16<br>2.25 | 26.0<br>42.9<br>56.2<br>2.16<br>2.24 | 26.1<br>43.1<br>56.4<br>2.16<br>2.24 | 26.2<br>43.2<br>56.6<br>2.16<br>2.23 | 26.3<br>43.4<br>56.9<br>2.16<br>2.22 | 26.4<br>43.6<br>57.1<br>2.16<br>2.22 | 26.5<br>43.7<br>57.3<br>2.16<br>2.21 | 26.6<br>43.9<br>57.5<br>2.16<br>2.21 | 26.7<br>44.1<br>57.7<br>2.16<br>2.20 | 26.8<br>44.2<br>57.9<br>2.16<br>2.20 | 26.9<br>44.4<br>58.2<br>2.16<br>2.19 | 27.0<br>44.5<br>58.4<br>2.16<br>2.19 | 27.1<br>44.7<br>58.6<br>2.16<br>2.18 | 27.2<br>44.9<br>58.8<br>2.16<br>2.18 |
| 0 (-18)     | -5.20                  | 54.2         | PP PT7<br>PP EPR<br>TO EPR | 25.7<br>42.4<br>55.6<br>2.16<br>2.26 | 25.8<br>42.6<br>55.8<br>2.16<br>2.25 | 25.9<br>42.7<br>56.0<br>2.16<br>2.25 | 26.0<br>42.9<br>56.2<br>2.16<br>2.24 | 26.1<br>43.1<br>56.4<br>2.16<br>2.24 | 26.2<br>43.2<br>56.6<br>2.16<br>2.23 | 26.3<br>43.4<br>56.9<br>2.16<br>2.22 | 26.4<br>43.6<br>57.1<br>2.16<br>2.22 | 26.5<br>43.7<br>57.3<br>2.16<br>2.21 | 26.6<br>43.9<br>57.5<br>2.16<br>2.21 | 26.7<br>44.1<br>57.7<br>2.16<br>2.20 | 26.8<br>44.2<br>57.9<br>2.16<br>2.20 | 26.9<br>44.4<br>58.2<br>2.16<br>2.19 | 27.0<br>44.5<br>58.4<br>2.16<br>2.19 | 27.1<br>44.7<br>58.6<br>2.16<br>2.18 | 27.2<br>44.9<br>58.8<br>2.16<br>2.18 |
| 2 (-17)     | -5.02                  | 54.4         | PP PT7<br>PP EPR<br>TO EPR | 25.7<br>42.4<br>55.6<br>2.16<br>2.26 | 25.8<br>42.6<br>55.8<br>2.16<br>2.25 | 25.9<br>42.7<br>56.0<br>2.16<br>2.25 | 26.0<br>42.9<br>56.2<br>2.16<br>2.24 | 26.1<br>43.1<br>56.4<br>2.16<br>2.24 | 26.2<br>43.2<br>56.6<br>2.16<br>2.23 | 26.3<br>43.4<br>56.9<br>2.16<br>2.22 | 26.4<br>43.6<br>57.1<br>2.16<br>2.22 | 26.5<br>43.7<br>57.3<br>2.16<br>2.21 | 26.6<br>43.9<br>57.5<br>2.16<br>2.21 | 26.7<br>44.1<br>57.7<br>2.16<br>2.20 | 26.8<br>44.2<br>57.9<br>2.16<br>2.20 | 26.9<br>44.4<br>58.2<br>2.16<br>2.19 | 27.0<br>44.5<br>58.4<br>2.16<br>2.19 | 27.1<br>44.7<br>58.6<br>2.16<br>2.18 | 27.2<br>44.9<br>58.8<br>2.16<br>2.18 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 3)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224



MAINTENANCE MANUAL

| OAT OF (°C) | DATA PLATE CORR. %N2 | IDLE PPM %N2 | DATA PLATE PT7             | BAROMETER INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|----------------------|--------------|----------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |                      |              |                            | 25.7                   | 25.8 | 25.9 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 27.0 | 27.1 | 27.2 |
| 4 (-16)     | -4.84                | 54.5         | PP PT7<br>PP EPR<br>TO EPR | 42.4                   | 42.6 | 42.7 | 42.9 | 43.1 | 43.2 | 43.4 | 43.6 | 43.7 | 43.9 | 44.1 | 44.2 | 44.4 | 44.5 | 44.7 | 44.9 |
| 6 (-14)     | -4.66                | 54.6         | PP PT7<br>PP EPR<br>TO EPR | 53.8                   | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 | 55.5 | 55.7 | 55.9 | 56.1 | 56.3 | 56.5 | 56.7 | 56.9 |
| 8 (-13)     | -4.48                | 54.7         | PP PT7<br>PP EPR<br>TO EPR | 53.6                   | 53.8 | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 | 55.4 | 55.7 | 55.9 | 56.1 | 56.3 | 56.5 | 56.7 |
| 10 (-12)    | -4.30                | 54.8         | PP PT7<br>PP EPR<br>TO EPR | 53.4                   | 53.6 | 53.8 | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 | 55.4 | 55.6 | 55.8 | 56.1 | 56.3 | 56.5 |
| 12 (-11)    | -4.13                | 55.0         | PP PT7<br>PP EPR<br>TO EPR | 53.1                   | 53.2 | 53.5 | 53.7 | 53.9 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 | 55.4 | 55.6 | 55.8 | 56.0 | 56.2 |
| 14 (-10)    | -3.95                | 55.1         | PP PT7<br>PP EPR<br>TO EPR | 52.9                   | 53.1 | 53.3 | 53.5 | 53.7 | 53.9 | 54.1 | 54.3 | 54.5 | 54.7 | 54.9 | 55.2 | 55.4 | 55.6 | 55.8 | 56.0 |
| 16 (-9)     | -3.77                | 55.2         | PP PT7<br>PP EPR<br>TO EPR | 52.7                   | 52.9 | 53.1 | 53.3 | 53.5 | 53.7 | 53.9 | 54.1 | 54.3 | 54.5 | 54.7 | 54.9 | 55.2 | 55.4 | 55.6 | 55.8 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 4)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224



MAINTENANCE MANUAL

| BAROMETR INS. MERCURY |                  | DATA             |                  | IDLE     |                  | DATA             |                  | 25.7 | 25.8 | 25.9 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 27.0 | 27.1 | 27.2 |
|-----------------------|------------------|------------------|------------------|----------|------------------|------------------|------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| OAT OF (°C)           | PLATE CORR. % N2 | PLATE CORR. % N2 | PLATE CORR. % N2 | RPM % N2 | PLATE CORR. % N2 | PLATE CORR. % N2 | PLATE CORR. % N2 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 18 (-8)               | -3.59            |                  |                  | 55.3     |                  |                  |                  | 42.4 | 42.6 | 42.7 | 42.9 | 43.1 | 43.2 | 43.4 | 43.6 | 43.7 | 43.9 | 44.1 | 44.2 | 44.4 | 44.5 | 44.7 | 44.9 |
|                       |                  |                  |                  |          | PP PT7           |                  |                  | 52.4 | 52.6 | 52.8 | 53.0 | 53.2 | 53.4 | 53.7 | 53.9 | 54.1 | 54.3 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 |
|                       |                  |                  |                  |          | PP EPR           |                  |                  | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 |
|                       |                  |                  |                  |          | TO EPR           |                  |                  | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 | 2.18 |
| 20 (-7)               | -3.41            |                  |                  | 55.4     |                  |                  |                  | 52.2 | 52.4 | 52.6 | 52.8 | 53.0 | 53.2 | 53.4 | 53.6 | 53.8 | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 |
|                       |                  |                  |                  |          | PP PT7           |                  |                  | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 | 2.03 |
|                       |                  |                  |                  |          | PP EPR           |                  |                  | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 |
|                       |                  |                  |                  |          | TO EPR           |                  |                  | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 |
| 22 (-6)               | -3.23            |                  |                  | 55.5     |                  |                  |                  | 52.0 | 52.2 | 52.4 | 52.6 | 52.8 | 53.0 | 53.2 | 53.4 | 53.6 | 53.8 | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 |
|                       |                  |                  |                  |          | PP PT7           |                  |                  | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 | 2.02 |
|                       |                  |                  |                  |          | PP EPR           |                  |                  | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 |
|                       |                  |                  |                  |          | TO EPR           |                  |                  | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 | 2.17 |
| 24 (-4)               | -3.05            |                  |                  | 55.6     |                  |                  |                  | 51.7 | 51.9 | 52.1 | 52.3 | 52.5 | 52.7 | 52.9 | 53.1 | 53.3 | 53.5 | 53.7 | 53.9 | 54.1 | 54.3 | 54.5 | 54.7 |
|                       |                  |                  |                  |          | PP PT7           |                  |                  | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 |
|                       |                  |                  |                  |          | PP EPR           |                  |                  | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 |
|                       |                  |                  |                  |          | TO EPR           |                  |                  | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 |
| 26 (-3)               | -2.88            |                  |                  | 55.7     |                  |                  |                  | 51.5 | 51.7 | 51.9 | 52.1 | 52.3 | 52.5 | 52.7 | 52.9 | 53.1 | 53.3 | 53.5 | 53.7 | 53.9 | 54.1 | 54.3 | 54.5 |
|                       |                  |                  |                  |          | PP PT7           |                  |                  | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
|                       |                  |                  |                  |          | PP EPR           |                  |                  | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 |
|                       |                  |                  |                  |          | TO EPR           |                  |                  | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 |
| 28 (-2)               | -2.70            |                  |                  | 55.8     |                  |                  |                  | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.2 | 52.4 | 52.6 | 52.8 | 53.0 | 53.2 | 53.4 | 53.6 | 53.8 | 54.0 | 54.2 |
|                       |                  |                  |                  |          | PP PT7           |                  |                  | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 |
|                       |                  |                  |                  |          | PP EPR           |                  |                  | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 |
|                       |                  |                  |                  |          | TO EPR           |                  |                  | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 | 2.15 |
| 30 (-1)               | -2.52            |                  |                  | 55.9     |                  |                  |                  | 51.0 | 51.2 | 51.4 | 51.6 | 51.8 | 52.0 | 52.2 | 52.4 | 52.6 | 52.8 | 53.0 | 53.2 | 53.4 | 53.6 | 53.8 | 54.0 |
|                       |                  |                  |                  |          | PP PT7           |                  |                  | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 |
|                       |                  |                  |                  |          | PP EPR           |                  |                  | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 |
|                       |                  |                  |                  |          | TO EPR           |                  |                  | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 5)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |              |              | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 25.7         | 25.8         | 25.9         | 26.0         | 26.1         | 26.2         | 26.3         | 26.4         | 26.5         | 26.6         | 26.7         | 26.8         | 26.9         | 27.0         | 27.1         | 27.2         |              |
|-------------|------------------------|--------------|--------------|----------------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|             | PP PT7                 | PP FPR       | TO EPR       |                      |              |                |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| 32 ( 0 )    | 50.8<br>1.98           | 51.0<br>1.98 | 51.2<br>1.98 | 51.4<br>1.98         | 51.6<br>1.98 | 51.8<br>1.98   | 52.0<br>1.98 | 52.2<br>1.98 | 52.4<br>1.98 | 52.6<br>1.98 | 52.8<br>1.98 | 53.0<br>1.98 | 53.2<br>1.98 | 53.4<br>1.98 | 53.6<br>1.98 | 53.8<br>1.98 | 54.0<br>1.98 | 54.2<br>1.98 | 54.4<br>1.98 | 54.6<br>1.98 | 54.8<br>1.98 | 55.0<br>1.98 | 55.2<br>1.98 |
| 34 ( 1 )    | 50.5<br>1.97           | 50.7<br>1.97 | 50.9<br>1.97 | 51.1<br>1.97         | 51.3<br>1.97 | 51.5<br>1.97   | 51.7<br>1.97 | 51.9<br>1.97 | 52.1<br>1.97 | 52.3<br>1.97 | 52.5<br>1.97 | 52.7<br>1.97 | 52.9<br>1.97 | 53.1<br>1.97 | 53.3<br>1.97 | 53.5<br>1.97 | 53.7<br>1.97 | 53.9<br>1.97 | 54.1<br>1.97 | 54.3<br>1.97 | 54.5<br>1.97 | 54.7<br>1.97 | 54.9<br>1.97 |
| 36 ( 2 )    | 50.3<br>1.96           | 50.5<br>1.96 | 50.7<br>1.96 | 50.9<br>1.96         | 51.1<br>1.96 | 51.3<br>1.96   | 51.5<br>1.96 | 51.7<br>1.96 | 51.9<br>1.96 | 52.1<br>1.96 | 52.3<br>1.96 | 52.5<br>1.96 | 52.7<br>1.96 | 52.9<br>1.96 | 53.1<br>1.96 | 53.3<br>1.96 | 53.5<br>1.96 | 53.7<br>1.96 | 53.9<br>1.96 | 54.1<br>1.96 | 54.3<br>1.96 | 54.5<br>1.96 | 54.7<br>1.96 |
| 38 ( 3 )    | 50.0<br>1.95           | 50.2<br>1.95 | 50.4<br>1.95 | 50.6<br>1.95         | 50.8<br>1.95 | 51.0<br>1.95   | 51.2<br>1.95 | 51.4<br>1.95 | 51.6<br>1.95 | 51.8<br>1.95 | 52.0<br>1.95 | 52.2<br>1.95 | 52.4<br>1.95 | 52.6<br>1.95 | 52.8<br>1.95 | 53.0<br>1.95 | 53.2<br>1.95 | 53.4<br>1.95 | 53.6<br>1.95 | 53.8<br>1.95 | 54.0<br>1.95 | 54.2<br>1.95 | 54.4<br>1.95 |
| 40 ( 4 )    | 49.8<br>1.94           | 50.0<br>1.94 | 50.2<br>1.94 | 50.4<br>1.94         | 50.6<br>1.94 | 50.8<br>1.94   | 51.0<br>1.94 | 51.2<br>1.94 | 51.4<br>1.94 | 51.6<br>1.94 | 51.8<br>1.94 | 52.0<br>1.94 | 52.2<br>1.94 | 52.4<br>1.94 | 52.6<br>1.94 | 52.8<br>1.94 | 53.0<br>1.94 | 53.2<br>1.94 | 53.4<br>1.94 | 53.6<br>1.94 | 53.8<br>1.94 | 54.0<br>1.94 | 54.2<br>1.94 |
| 42 ( 6 )    | 49.6<br>1.93           | 49.8<br>1.93 | 50.0<br>1.93 | 50.2<br>1.93         | 50.4<br>1.93 | 50.6<br>1.93   | 50.8<br>1.93 | 51.0<br>1.93 | 51.2<br>1.93 | 51.4<br>1.93 | 51.6<br>1.93 | 51.8<br>1.93 | 52.0<br>1.93 | 52.2<br>1.93 | 52.4<br>1.93 | 52.6<br>1.93 | 52.8<br>1.93 | 53.0<br>1.93 | 53.2<br>1.93 | 53.4<br>1.93 | 53.6<br>1.93 | 53.8<br>1.93 | 54.0<br>1.93 |
| 44 ( 7 )    | 49.3<br>1.92           | 49.5<br>1.92 | 49.7<br>1.92 | 49.9<br>1.92         | 50.1<br>1.92 | 50.3<br>1.92   | 50.5<br>1.92 | 50.7<br>1.92 | 50.9<br>1.92 | 51.1<br>1.92 | 51.3<br>1.92 | 51.5<br>1.92 | 51.7<br>1.92 | 51.9<br>1.92 | 52.1<br>1.92 | 52.3<br>1.92 | 52.5<br>1.92 | 52.7<br>1.92 | 52.9<br>1.92 | 53.1<br>1.92 | 53.3<br>1.92 | 53.5<br>1.92 | 53.7<br>1.92 |

APPLICABLE TO PMA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 6)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |                      |                      | DATA PLATE CORP. %N2 | IDLE RPM %N2 | DATA PLATE PT7       | 25.7                 | 25.8                 | 25.9                 | 26.0                 | 26.1                 | 26.2                 | 26.3                 | 26.4                 | 26.5                 | 26.6                 | 26.7                 | 26.8                 | 26.9                 | 27.0                 | 27.1                 | 27.2                 |                      |                      |
|-------------|------------------------|----------------------|----------------------|----------------------|--------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | PP PT7                 | PP EPR               | TO EPR               |                      |              |                      | PP PT7               | PP EPR               | TO EPR               | PP PT7               | PP EPR               | TO EPR               | PP PT7               | PP EPR               | TO EPR               | PP PT7               | PP EPR               | TO EPR               | PP PT7               | PP EPR               | TO EPR               | PP PT7               | PP EPR               | TO EPR               |
| 46 ( 8)     | 45.1<br>1.91<br>2.09   | 49.3<br>1.91<br>2.09 | 49.4<br>1.91<br>2.09 | -1.12                | 56.6         | DATA<br>PLATE<br>PT7 | 42.4                 | 42.6                 | 42.7                 | 42.9                 | 43.1                 | 43.2                 | 43.4                 | 43.6                 | 43.7                 | 43.9                 | 44.1                 | 44.2                 | 44.4                 | 44.5                 | 44.7                 | 44.9                 |                      |                      |
| 48 ( 9)     | 48.8<br>1.90<br>2.08   | 49.0<br>1.90<br>2.08 | 49.2<br>1.90<br>2.08 | -.94                 | 56.7         |                      | 48.8<br>1.90<br>2.08 | 49.0<br>1.90<br>2.08 | 49.2<br>1.90<br>2.08 | 49.4<br>1.90<br>2.08 | 49.6<br>1.90<br>2.08 | 49.8<br>1.90<br>2.08 | 50.0<br>1.90<br>2.08 | 50.2<br>1.91<br>2.09 | 50.3<br>1.90<br>2.08 | 50.5<br>1.90<br>2.08 | 50.7<br>1.90<br>2.08 | 50.9<br>1.90<br>2.08 | 51.1<br>1.90<br>2.08 | 51.3<br>1.90<br>2.08 | 51.5<br>1.90<br>2.08 | 51.7<br>1.90<br>2.08 | 51.9<br>1.91<br>2.09 | 52.1<br>1.91<br>2.09 |
| 50 ( 10)    | 48.6<br>1.89<br>2.07   | 48.8<br>1.89<br>2.07 | 49.0<br>1.89<br>2.07 | -.77                 | 56.8         |                      | 48.6<br>1.89<br>2.07 | 48.8<br>1.89<br>2.07 | 49.0<br>1.89<br>2.07 | 49.1<br>1.89<br>2.07 | 49.3<br>1.89<br>2.07 | 49.5<br>1.89<br>2.07 | 49.7<br>1.89<br>2.07 | 49.9<br>1.89<br>2.07 | 50.1<br>1.89<br>2.07 | 50.3<br>1.89<br>2.07 | 50.5<br>1.89<br>2.07 | 50.7<br>1.89<br>2.07 | 50.8<br>1.89<br>2.07 | 51.0<br>1.89<br>2.07 | 51.2<br>1.89<br>2.07 | 51.4<br>1.89<br>2.07 | 51.6<br>1.89<br>2.07 | 51.8<br>1.89<br>2.07 |
| 52 ( 11)    | 48.3<br>1.88<br>2.06   | 48.5<br>1.88<br>2.06 | 48.7<br>1.88<br>2.06 | -.60                 | 56.9         |                      | 48.3<br>1.88<br>2.06 | 48.5<br>1.88<br>2.06 | 48.7<br>1.88<br>2.06 | 48.9<br>1.88<br>2.06 | 49.1<br>1.88<br>2.06 | 49.3<br>1.88<br>2.06 | 49.5<br>1.88<br>2.06 | 49.6<br>1.88<br>2.06 | 49.8<br>1.88<br>2.06 | 50.0<br>1.88<br>2.06 | 50.2<br>1.88<br>2.06 | 50.4<br>1.88<br>2.06 | 50.6<br>1.88<br>2.06 | 50.8<br>1.88<br>2.06 | 51.0<br>1.88<br>2.06 | 51.2<br>1.88<br>2.06 | 51.4<br>1.88<br>2.06 | 51.6<br>1.88<br>2.06 |
| 54 ( 12)    | 48.1<br>1.87<br>2.06   | 48.3<br>1.87<br>2.06 | 48.5<br>1.87<br>2.06 | -.43                 | 57.0         |                      | 48.1<br>1.87<br>2.06 | 48.3<br>1.87<br>2.06 | 48.5<br>1.87<br>2.06 | 48.6<br>1.87<br>2.06 | 48.8<br>1.87<br>2.06 | 49.0<br>1.87<br>2.06 | 49.2<br>1.87<br>2.06 | 49.4<br>1.87<br>2.06 | 49.6<br>1.87<br>2.06 | 49.8<br>1.87<br>2.06 | 50.0<br>1.87<br>2.06 | 50.1<br>1.87<br>2.06 | 50.3<br>1.87<br>2.06 | 50.5<br>1.87<br>2.06 | 50.7<br>1.87<br>2.06 | 50.9<br>1.87<br>2.06 | 51.1<br>1.87<br>2.06 | 51.3<br>1.87<br>2.06 |
| 56 ( 13)    | 47.8<br>1.86<br>2.05   | 48.0<br>1.86<br>2.05 | 48.2<br>1.86<br>2.05 | -.26                 | 57.1         |                      | 47.8<br>1.86<br>2.05 | 48.0<br>1.86<br>2.05 | 48.2<br>1.86<br>2.05 | 48.4<br>1.86<br>2.05 | 48.6<br>1.86<br>2.05 | 48.8<br>1.86<br>2.05 | 48.9<br>1.86<br>2.05 | 49.1<br>1.86<br>2.05 | 49.3<br>1.86<br>2.05 | 49.5<br>1.86<br>2.05 | 49.7<br>1.86<br>2.05 | 49.9<br>1.86<br>2.05 | 50.1<br>1.86<br>2.05 | 50.3<br>1.86<br>2.05 | 50.4<br>1.86<br>2.05 | 50.6<br>1.86<br>2.05 | 50.8<br>1.86<br>2.05 | 51.0<br>1.86<br>2.05 |
| 58 ( 14)    | 47.6<br>1.85<br>2.04   | 47.8<br>1.85<br>2.04 | 48.0<br>1.85<br>2.04 | -.09                 | 57.2         |                      | 47.6<br>1.85<br>2.04 | 47.8<br>1.85<br>2.04 | 48.0<br>1.85<br>2.04 | 48.1<br>1.85<br>2.04 | 48.3<br>1.85<br>2.04 | 48.5<br>1.85<br>2.04 | 48.7<br>1.85<br>2.04 | 48.9<br>1.85<br>2.04 | 49.1<br>1.85<br>2.04 | 49.3<br>1.85<br>2.04 | 49.4<br>1.85<br>2.04 | 49.6<br>1.85<br>2.04 | 49.8<br>1.85<br>2.04 | 50.0<br>1.85<br>2.04 | 50.2<br>1.85<br>2.04 | 50.4<br>1.85<br>2.04 | 50.6<br>1.85<br>2.04 | 50.8<br>1.85<br>2.04 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 7)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

D54779

71-09-224



MAINTENANCE MANUAL

| BAROMETER INS. MERCURY |                      | 25.7           | 25.8         | 25.9           | 26.0   | 26.1   | 26.2   | 26.3   | 26.4   | 26.5   | 26.6   | 26.7   | 26.8   | 26.9   | 27.0   | 27.1   | 27.2   |        |        |  |
|------------------------|----------------------|----------------|--------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| OAT OF (°C)            | DATA PLATE CORR. %N2 | DATA PLATE PT7 | IDLE PPM %N2 | DATA PLATE PT7 | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR |  |
|                        | 60<br>( 16)          | + .08          | 42.4         | 42.6           | 42.7   | 42.9   | 43.1   | 43.2   | 43.4   | 43.6   | 43.7   | 43.9   | 44.1   | 44.2   | 44.4   | 44.5   | 44.7   | 44.9   |        |  |
| 62<br>( 17)            | + .25                | 47.1           | 47.3         | 47.4           | 47.6   | 47.8   | 48.0   | 48.2   | 48.4   | 48.5   | 48.7   | 48.9   | 49.1   | 49.3   | 49.5   | 49.6   | 49.8   |        |        |  |
| 64<br>( 18)            | + .42                | 46.8           | 47.0         | 47.2           | 47.4   | 47.6   | 47.7   | 47.9   | 48.1   | 48.3   | 48.5   | 48.6   | 48.8   | 49.0   | 49.2   | 49.4   | 49.6   |        |        |  |
| 66<br>( 19)            | + .59                | 46.6           | 46.7         | 46.9           | 47.1   | 47.3   | 47.5   | 47.7   | 47.8   | 48.0   | 48.2   | 48.4   | 48.6   | 48.8   | 49.0   | 49.2   | 49.4   |        |        |  |
| 68<br>( 20)            | + .76                | 46.3           | 46.5         | 46.7           | 46.9   | 47.1   | 47.2   | 47.4   | 47.6   | 47.8   | 47.9   | 48.1   | 48.3   | 48.5   | 48.7   | 48.9   | 49.1   |        |        |  |
| 70<br>( 21)            | + .93                | 46.1           | 46.2         | 46.4           | 46.6   | 46.8   | 47.0   | 47.1   | 47.3   | 47.5   | 47.7   | 47.8   | 48.0   | 48.2   | 48.4   | 48.6   | 48.7   |        |        |  |
| 72<br>( 22)            | +1.10                | 45.8           | 46.0         | 46.2           | 46.4   | 46.6   | 46.7   | 46.9   | 47.0   | 47.2   | 47.4   | 47.6   | 47.7   | 47.9   | 48.1   | 48.3   | 48.5   |        |        |  |

APPLICABLE TO PMA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 8)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |        |              | DATA PLATE CORR. %N2 | IDLE PPM %N2 | DATA PLATE PT7 | 25.7         | 25.8         | 25.9         | 26.0         | 26.1         | 26.2         | 26.3         | 26.4         | 26.5         | 26.6         | 26.7         | 26.8         | 26.9         | 27.0         | 27.1         | 27.2         |              |
|-------------|------------------------|--------|--------------|----------------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|             | PP PT7                 | PP EPR | TO EPR       |                      |              |                |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| 74 ( 23)    | +1.26                  | 57.9   | 42.4         | 45.5<br>1.77         | 45.9<br>1.77 | 42.7<br>1.77   | 42.9<br>1.77 | 43.1<br>1.77 | 43.2<br>1.77 | 43.4<br>1.77 | 43.6<br>1.77 | 43.7<br>1.77 | 43.9         | 44.1         | 44.2         | 44.4         | 44.5         | 44.7         | 44.8<br>1.77 | 44.9<br>1.77 | 45.0<br>1.77 | 45.1<br>1.77 | 45.2<br>1.77 |
| 76 ( 24)    | +1.43                  | 58.0   | 45.3<br>1.76 | 45.4<br>1.76         | 45.6<br>1.76 | 45.8<br>1.76   | 46.0<br>1.76 | 46.2<br>1.76 | 46.3<br>1.76 | 46.4<br>1.76 | 46.5<br>1.76 | 46.6<br>1.76 | 46.7<br>1.76 | 46.8<br>1.76 | 46.9<br>1.76 | 47.0<br>1.76 | 47.1<br>1.76 | 47.2<br>1.76 | 47.3<br>1.76 | 47.4<br>1.76 | 47.5<br>1.76 | 47.6<br>1.76 | 47.7<br>1.76 |
| 78 ( 26)    | +1.60                  | 58.0   | 45.0<br>1.75 | 45.2<br>1.75         | 45.3<br>1.75 | 45.5<br>1.75   | 45.7<br>1.75 | 46.0<br>1.75 | 46.1<br>1.75 | 46.2<br>1.75 | 46.3<br>1.75 | 46.4<br>1.75 | 46.5<br>1.75 | 46.6<br>1.75 | 46.7<br>1.75 | 46.8<br>1.75 | 46.9<br>1.75 | 47.0<br>1.75 | 47.1<br>1.75 | 47.2<br>1.75 | 47.3<br>1.75 | 47.4<br>1.75 | 47.5<br>1.75 |
| 80 ( 27)    | +1.77                  | 58.1   | 44.7<br>1.74 | 44.9<br>1.74         | 45.1<br>1.74 | 45.2<br>1.74   | 45.4<br>1.74 | 45.7<br>1.74 | 45.8<br>1.74 | 45.9<br>1.74 | 46.0<br>1.74 | 46.1<br>1.74 | 46.2<br>1.74 | 46.3<br>1.74 | 46.4<br>1.74 | 46.5<br>1.74 | 46.6<br>1.74 | 46.7<br>1.74 | 46.8<br>1.74 | 46.9<br>1.74 | 47.0<br>1.74 | 47.1<br>1.74 | 47.2<br>1.74 |
| 82 ( 28)    | +1.94                  | 58.2   | 44.5<br>1.73 | 44.6<br>1.73         | 44.8<br>1.73 | 45.0<br>1.73   | 45.1<br>1.73 | 45.3<br>1.73 | 45.4<br>1.73 | 45.5<br>1.73 | 45.6<br>1.73 | 45.7<br>1.73 | 45.8<br>1.73 | 45.9<br>1.73 | 46.0<br>1.73 | 46.1<br>1.73 | 46.2<br>1.73 | 46.3<br>1.73 | 46.4<br>1.73 | 46.5<br>1.73 | 46.6<br>1.73 | 46.7<br>1.73 | 46.8<br>1.73 |
| 84 ( 29)    | +2.10                  | 58.3   | 44.2<br>1.72 | 44.4<br>1.72         | 44.5<br>1.72 | 44.7<br>1.72   | 44.9<br>1.72 | 45.1<br>1.72 | 45.2<br>1.72 | 45.3<br>1.72 | 45.4<br>1.72 | 45.5<br>1.72 | 45.6<br>1.72 | 45.7<br>1.72 | 45.8<br>1.72 | 45.9<br>1.72 | 46.0<br>1.72 | 46.1<br>1.72 | 46.2<br>1.72 | 46.3<br>1.72 | 46.4<br>1.72 | 46.5<br>1.72 | 46.6<br>1.72 |
| 86 ( 30)    | +2.27                  | 58.4   | 43.9<br>1.71 | 44.1<br>1.71         | 44.3<br>1.71 | 44.4<br>1.71   | 44.6<br>1.71 | 44.9<br>1.71 | 44.9<br>1.71 | 45.0<br>1.71 | 45.1<br>1.71 | 45.2<br>1.71 | 45.3<br>1.71 | 45.4<br>1.71 | 45.5<br>1.71 | 45.6<br>1.71 | 45.7<br>1.71 | 45.8<br>1.71 | 45.9<br>1.71 | 46.0<br>1.71 | 46.1<br>1.71 | 46.2<br>1.71 | 46.3<br>1.71 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 9)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-224

D54783



MAINTENANCE MANUAL

| BAROMETER<br>OAT<br>OF<br>(OC) | INS. MERCURY |           |           | DATA<br>PLATE<br>CORR.<br>%N2 | IDLE<br>RPM<br>%N2 | DATA<br>PLATE<br>PT7 | MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
|--------------------------------|--------------|-----------|-----------|-------------------------------|--------------------|----------------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|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|                                | PP<br>PT7    | PP<br>EPR | TO<br>EPR |                               |                    |                      | 25.7    | 25.8 | 25.9 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 27.0 | 27.1 | 27.2 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| 88<br>( 31)                    | 42.4         | 42.6      | 42.7      | 42.9                          | 43.1               | 43.2                 | 43.4    | 43.6 | 43.7 | 43.9 | 44.1 | 44.2 | 44.4 | 44.5 | 44.7 | 44.8 | 45.0 | 45.2 | 45.3 | 45.5 | 45.7 | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 47.0 | 47.1 | 47.2 | 47.3 | 47.4 | 47.5 | 47.6 | 47.7 | 47.8 | 47.9 | 48.0 | 48.1 | 48.2 | 48.3 | 48.4 | 48.5 | 48.6 | 48.7 | 48.8 | 48.9 | 49.0 | 49.1 | 49.2 | 49.3 | 49.4 | 49.5 | 49.6 | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 | 50.2 | 50.3 | 50.4 | 50.5 | 50.6 | 50.7 | 50.8 | 50.9 | 51.0 | 51.1 | 51.2 | 51.3 | 51.4 | 51.5 | 51.6 | 51.7 | 51.8 | 51.9 | 52.0 | 52.1 | 52.2 | 52.3 | 52.4 | 52.5 | 52.6 | 52.7 | 52.8 | 52.9 | 53.0 | 53.1 | 53.2 | 53.3 | 53.4 | 53.5 | 53.6 | 53.7 | 53.8 | 53.9 | 54.0 | 54.1 | 54.2 | 54.3 | 54.4 | 54.5 | 54.6 | 54.7 | 54.8 | 54.9 | 55.0 | 55.1 | 55.2 | 55.3 | 55.4 | 55.5 | 55.6 | 55.7 | 55.8 | 55.9 | 56.0 | 56.1 | 56.2 | 56.3 | 56.4 | 56.5 | 56.6 | 56.7 | 56.8 | 56.9 | 57.0 | 57.1 | 57.2 | 57.3 | 57.4 | 57.5 | 57.6 | 57.7 | 57.8 | 57.9 | 58.0 | 58.1 | 58.2 | 58.3 | 58.4 | 58.5 | 58.6 | 58.7 | 58.8 | 58.9 | 59.0 | 59.1 | 59.2 | 59.3 | 59.4 | 59.5 | 59.6 | 59.7 | 59.8 | 59.9 | 60.0 | 60.1 | 60.2 | 60.3 | 60.4 | 60.5 | 60.6 | 60.7 | 60.8 | 60.9 | 61.0 | 61.1 | 61.2 | 61.3 | 61.4 | 61.5 | 61.6 | 61.7 | 61.8 | 61.9 | 62.0 | 62.1 | 62.2 | 62.3 | 62.4 | 62.5 | 62.6 | 62.7 | 62.8 | 62.9 | 63.0 | 63.1 | 63.2 | 63.3 | 63.4 | 63.5 | 63.6 | 63.7 | 63.8 | 63.9 | 64.0 | 64.1 | 64.2 | 64.3 | 64.4 | 64.5 | 64.6 | 64.7 | 64.8 | 64.9 | 65.0 | 65.1 | 65.2 | 65.3 | 65.4 | 65.5 | 65.6 | 65.7 | 65.8 | 65.9 | 66.0 | 66.1 | 66.2 | 66.3 | 66.4 | 66.5 | 66.6 | 66.7 | 66.8 | 66.9 | 67.0 | 67.1 | 67.2 | 67.3 | 67.4 | 67.5 | 67.6 | 67.7 | 67.8 | 67.9 | 68.0 | 68.1 | 68.2 | 68.3 | 68.4 | 68.5 | 68.6 | 68.7 | 68.8 | 68.9 | 69.0 | 69.1 | 69.2 | 69.3 | 69.4 | 69.5 | 69.6 | 69.7 | 69.8 | 69.9 | 70.0 | 70.1 | 70.2 | 70.3 | 70.4 | 70.5 | 70.6 | 70.7 | 70.8 | 70.9 | 71.0 | 71.1 | 71.2 | 71.3 | 71.4 | 71.5 | 71.6 | 71.7 | 71.8 | 71.9 | 72.0 | 72.1 | 72.2 | 72.3 | 72.4 | 72.5 | 72.6 | 72.7 | 72.8 | 72.9 | 73.0 | 73.1 | 73.2 | 73.3 | 73.4 | 73.5 | 73.6 | 73.7 | 73.8 | 73.9 | 74.0 | 74.1 | 74.2 | 74.3 | 74.4 | 74.5 | 74.6 | 74.7 | 74.8 | 74.9 | 75.0 | 75.1 | 75.2 | 75.3 | 75.4 | 75.5 | 75.6 | 75.7 | 75.8 | 75.9 | 76.0 | 76.1 | 76.2 | 76.3 | 76.4 | 76.5 | 76.6 | 76.7 | 76.8 | 76.9 | 77.0 | 77.1 | 77.2 | 77.3 | 77.4 | 77.5 | 77.6 | 77.7 | 77.8 | 77.9 | 78.0 | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.6 | 78.7 | 78.8 | 78.9 | 79.0 | 79.1 | 79.2 | 79.3 | 79.4 | 79.5 | 79.6 | 79.7 | 79.8 | 79.9 | 80.0 | 80.1 | 80.2 | 80.3 | 80.4 | 80.5 | 80.6 | 80.7 | 80.8 | 80.9 | 81.0 | 81.1 | 81.2 | 81.3 | 81.4 | 81.5 | 81.6 | 81.7 | 81.8 | 81.9 | 82.0 | 82.1 | 82.2 | 82.3 | 82.4 | 82.5 | 82.6 | 82.7 | 82.8 | 82.9 | 83.0 | 83.1 | 83.2 | 83.3 | 83.4 | 83.5 | 83.6 | 83.7 | 83.8 | 83.9 | 84.0 | 84.1 | 84.2 | 84.3 | 84.4 | 84.5 | 84.6 | 84.7 | 84.8 | 84.9 | 85.0 | 85.1 | 85.2 | 85.3 | 85.4 | 85.5 | 85.6 | 85.7 | 85.8 | 85.9 | 86.0 | 86.1 | 86.2 | 86.3 | 86.4 | 86.5 | 86.6 | 86.7 | 86.8 | 86.9 | 87.0 | 87.1 | 87.2 | 87.3 | 87.4 | 87.5 | 87.6 | 87.7 | 87.8 | 87.9 | 88.0 | 88.1 | 88.2 | 88.3 | 88.4 | 88.5 | 88.6 | 88.7 | 88.8 | 88.9 | 89.0 | 89.1 | 89.2 | 89.3 | 89.4 | 89.5 | 89.6 | 89.7 | 89.8 | 89.9 | 90.0 | 90.1 | 90.2 | 90.3 | 90.4 | 90.5 | 90.6 | 90.7 | 90.8 | 90.9 | 91.0 | 91.1 | 91.2 | 91.3 | 91.4 | 91.5 | 91.6 | 91.7 | 91.8 | 91.9 | 92.0 | 92.1 | 92.2 | 92.3 | 92.4 | 92.5 | 92.6 | 92.7 | 92.8 | 92.9 | 93.0 | 93.1 | 93.2 | 93.3 | 93.4 | 93.5 | 93.6 | 93.7 | 93.8 | 93.9 | 94.0 | 94.1 | 94.2 | 94.3 | 94.4 | 94.5 | 94.6 | 94.7 | 94.8 | 94.9 | 95.0 | 95.1 | 95.2 | 95.3 | 95.4 | 95.5 | 95.6 | 95.7 | 95.8 | 95.9 | 96.0 | 96.1 | 96.2 | 96.3 | 96.4 | 96.5 | 96.6 | 96.7 | 96.8 | 96.9 | 97.0 | 97.1 | 97.2 | 97.3 | 97.4 | 97.5 | 97.6 | 97.7 | 97.8 | 97.9 | 98.0 | 98.1 | 98.2 | 98.3 | 98.4 | 98.5 | 98.6 | 98.7 | 98.8 | 98.9 | 99.0 | 99.1 | 99.2 | 99.3 | 99.4 | 99.5 | 99.6 | 99.7 | 99.8 | 99.9 | 100.0 | 100.1 | 100.2 | 100.3 | 100.4 | 100.5 | 100.6 | 100.7 | 100.8 | 100.9 | 101.0 | 101.1 | 101.2 | 101.3 | 101.4 | 101.5 | 101.6 | 101.7 | 101.8 | 101.9 | 102.0 | 102.1 | 102.2 | 102.3 | 102.4 | 102.5 | 102.6 | 102.7 | 102.8 | 102.9 | 103.0 | 103.1 | 103.2 | 103.3 | 103.4 | 103.5 | 103.6 | 103.7 | 103.8 | 103.9 | 104.0 | 104.1 | 104.2 | 104.3 | 104.4 | 104.5 | 104.6 | 104.7 | 104.8 | 104.9 | 105.0 | 105.1 | 105.2 | 105.3 | 105.4 | 105.5 | 105.6 | 105.7 | 105.8 | 105.9 | 106.0 | 106.1 | 106.2 | 106.3 | 106.4 | 106.5 | 106.6 | 106.7 | 106.8 | 106.9 | 107.0 | 107.1 | 107.2 | 107.3 | 107.4 | 107.5 | 107.6 | 107.7 | 107.8 | 107.9 | 108.0 | 108.1 | 108.2 | 108.3 | 108.4 | 108.5 | 108.6 | 108.7 | 108.8 | 108.9 | 109.0 | 109.1 | 109.2 | 109.3 | 109.4 | 109.5 | 109.6 | 109.7 | 109.8 | 109.9 | 110.0 | 110.1 | 110.2 | 110.3 | 110.4 | 110.5 | 110.6 | 110.7 | 110.8 | 110.9 | 111.0 | 111.1 | 111.2 | 111.3 | 111.4 | 111.5 | 111.6 | 111.7 | 111.8 | 111.9 | 112.0 | 112.1 | 112.2 | 112.3 | 112.4 | 112.5 | 112.6 | 112.7 | 112.8 | 112.9 | 113.0 | 113.1 | 113.2 | 113.3 | 113.4 | 113.5 | 113.6 | 113.7 | 113.8 | 113.9 | 114.0 | 114.1 | 114.2 | 114.3 | 114.4 | 114.5 | 114.6 | 114.7 | 114.8 | 114.9 | 115.0 | 115.1 | 115.2 | 115.3 | 115.4 | 115.5 | 115.6 | 115.7 | 115.8 | 115.9 | 116.0 | 116.1 | 116.2 | 116.3 | 116.4 | 116.5 | 116.6 | 116.7 | 116.8 | 116.9 | 117.0 | 117.1 | 117.2 | 117.3 | 117.4 | 117.5 | 117.6 | 117.7 | 117.8 | 117.9 | 118.0 | 118.1 | 118.2 | 118.3 | 118.4 | 118.5 | 118.6 | 118.7 | 118.8 | 118.9 | 119.0 | 119.1 | 119.2 | 119.3 | 119.4 | 119.5 | 119.6 | 119.7 | 119.8 | 119.9 | 120.0 | 120.1 | 120.2 | 120.3 | 120.4 | 120.5 | 120.6 | 120.7 | 120.8 | 120.9 | 121.0 | 121.1 | 121.2 | 121.3 | 121.4 | 121.5 | 121.6 | 121.7 | 121.8 | 121.9 | 122.0 | 122.1 | 122.2 | 122.3 | 122.4 | 122.5 | 122.6 | 122.7 | 122.8 | 122.9 | 123.0 | 123.1 | 123.2 | 123.3 | 123.4 | 123.5 | 123.6 | 123.7 | 123.8 | 123.9 | 124.0 | 124.1 | 124.2 | 124.3 | 124.4 | 124.5 | 124.6 | 124.7 | 124.8 | 124.9 | 125.0 | 125.1 | 125.2 | 125.3 | 125.4 | 125.5 | 125.6 | 125.7 | 125.8 | 125.9 | 126.0 | 126.1 | 126.2 | 126.3 | 126.4 | 126.5 | 126.6 | 126.7 | 126.8 | 126.9 | 127.0 | 127.1 | 127.2 | 127.3 | 127.4 | 127.5 | 127.6 | 127.7 | 127.8 | 127.9 | 128.0 | 128.1 | 128.2 | 128.3 | 128.4 | 128.5 | 128.6 | 128.7 | 128.8 | 128.9 | 129.0 | 129.1 | 129.2 | 129.3 | 129.4 | 129.5 | 129.6 | 129.7 | 129.8 | 129.9 | 130.0 | 130.1 | 130.2 | 130.3 | 130.4 | 130.5 | 130.6 | 130.7 | 130.8 | 130.9 | 131.0 | 131.1 | 131.2 | 131.3 | 131.4 | 131.5 | 131.6 | 131.7 | 131.8 | 131.9 | 132.0 | 132.1 | 132.2 | 132.3 | 132.4 | 132.5 | 132.6 | 132.7 | 132.8 | 132.9 | 133.0 | 133.1 | 133.2 | 133.3 | 133.4 | 133.5 | 133.6 | 133.7 | 133.8 | 133.9 | 134.0 | 134.1 | 134.2 | 134.3 | 134.4 | 134.5 | 134.6 | 134.7 | 134.8 | 134.9 | 135.0 | 135.1 | 135.2 | 135.3 | 135.4 | 135.5 | 135.6 | 135.7 | 135.8 | 135.9 | 136.0 | 136.1 | 136.2 | 136.3 | 136.4 | 136.5 | 136.6 | 136.7 | 136.8 | 136.9 | 137.0 | 137.1 | 137.2 | 137.3 | 137.4 | 137.5 | 137.6 | 137.7 | 137.8 | 137.9 | 138.0 | 138.1 | 138.2 | 138.3 | 138.4 | 138.5 | 138.6 | 138.7 | 138.8 | 138.9 | 139.0 | 139.1 | 139.2 | 139.3 | 139.4 | 139.5 | 139.6 | 139.7 | 139.8 | 139.9 | 140.0 | 140.1 | 140.2 | 140.3 | 140.4 | 140.5 | 140.6 | 140.7 | 140.8 | 140.9 | 141.0 | 141.1 | 141.2 | 141.3 | 141.4 | 141.5 | 141.6 | 141.7 | 141.8 | 141.9 | 142.0 | 142.1 | 142.2 | 142.3 | 142.4 | 142.5 | 142.6 | 142.7 | 142.8 | 142.9 | 143.0 | 143.1 | 143.2 | 143.3 | 143.4 | 143.5 | 143.6 | 143.7 | 143.8 | 143.9 | 144.0 | 144.1 | 144.2 | 144.3 | 144.4 | 144.5 | 144.6 | 144.7 | 144.8 | 144.9 | 145.0 | 145.1 | 145.2 | 145.3 | 145.4 | 145.5 | 145.6 | 145.7 | 145.8 | 145.9 | 146.0 | 146.1 | 146.2 | 146.3 | 146.4 | 146.5 | 146.6 | 146.7 | 146.8 | 146.9 | 147.0 | 147.1 | 147.2 | 147.3 | 147.4 | 147.5 | 147.6 | 147.7 | 147.8 | 147.9 | 148.0 | 148.1 | 148.2 | 148.3 | 148.4 | 148.5 | 148.6 | 148.7 | 148.8 | 148.9 | 149.0 | 149.1 | 149.2 | 149.3 | 149.4 | 149.5 | 149.6 | 149.7 | 149.8 | 149.9 | 150.0 | 150.1 | 150.2 | 150.3 | 150.4 | 150.5 | 150.6 | 150.7 | 150.8 | 150.9 | 151.0 | 151.1 | 151.2 | 151.3 | 151.4 | 151.5 | 151.6 | 151.7 | 151.8 | 151.9 | 152.0 | 152.1 | 152.2 | 152.3 | 152.4 | 152.5 | 152.6 | 152.7 | 152.8 | 152.9 | 153.0 | 153.1 | 153.2 | 153.3 | 153.4 | 153.5 | 153.6 | 153.7 | 153.8 | 153.9 | 154.0 | 154.1 | 154.2 | 154.3 | 154.4 | 154.5 | 154.6 | 154.7 | 154.8 | 154.9 | 155.0 | 155.1 | 155.2 | 155.3 | 155.4 | 155.5 | 155.6 | 155.7 | 155.8 | 155.9 | 156.0 | 156.1 | 156.2 | 156.3 | 156.4 | 156.5 | 156.6 | 156.7 | 156.8 | 156.9 | 157.0 | 157.1 | 157.2 | 157.3 | 157.4 | 157.5 | 1 |



MAINTENANCE MANUAL

| OAT OF (OC) | BARGMETER INS. MERCURY |        |                      | DATA PLATE CORR. %N2 | IDLE RPM %N2         | DATA PLATE PT7       | 25.7                 | 25.8                 | 25.9                 | 26.0                 | 26.1                 | 26.2                 | 26.3                 | 26.4                 | 26.5                 | 26.6                 | 26.7                 | 26.8                 | 26.9                 | 27.0                 | 27.1                 | 27.2                 |                      |
|-------------|------------------------|--------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | PP PT7                 | PP EPR | TO EPR               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 102 ( 39)   | +3.60                  | 59.1   | 41.9<br>1.63<br>1.94 | 42.1<br>1.63<br>1.94 | 42.2<br>1.63<br>1.94 | 42.3<br>1.63<br>1.94 | 42.4<br>1.63<br>1.94 | 42.5<br>1.63<br>1.94 | 42.6<br>1.63<br>1.94 | 42.7<br>1.63<br>1.94 | 42.8<br>1.63<br>1.94 | 42.9<br>1.63<br>1.94 | 43.0<br>1.63<br>1.94 | 43.1<br>1.63<br>1.94 | 43.2<br>1.63<br>1.94 | 43.3<br>1.63<br>1.94 | 43.4<br>1.63<br>1.94 | 43.5<br>1.63<br>1.94 | 43.6<br>1.63<br>1.94 | 43.7<br>1.63<br>1.94 | 43.8<br>1.63<br>1.94 | 43.9<br>1.63<br>1.94 | 44.0<br>1.63<br>1.94 |
| 104 ( 40)   | +3.77                  | 59.2   | 41.7<br>1.62<br>1.93 | 41.8<br>1.62<br>1.93 | 41.9<br>1.62<br>1.93 | 42.0<br>1.62<br>1.93 | 42.1<br>1.62<br>1.93 | 42.2<br>1.62<br>1.93 | 42.3<br>1.62<br>1.93 | 42.4<br>1.62<br>1.93 | 42.5<br>1.62<br>1.93 | 42.6<br>1.62<br>1.93 | 42.7<br>1.62<br>1.93 | 42.8<br>1.62<br>1.93 | 42.9<br>1.62<br>1.93 | 43.0<br>1.62<br>1.93 | 43.1<br>1.62<br>1.93 | 43.2<br>1.62<br>1.93 | 43.3<br>1.62<br>1.93 | 43.4<br>1.62<br>1.93 | 43.5<br>1.62<br>1.93 | 43.6<br>1.62<br>1.93 | 43.7<br>1.62<br>1.93 |
| 106 ( 41)   | +3.93                  | 59.2   | 41.5<br>1.61<br>1.92 | 41.6<br>1.61<br>1.92 | 41.7<br>1.61<br>1.92 | 41.8<br>1.61<br>1.92 | 41.9<br>1.61<br>1.92 | 42.0<br>1.61<br>1.92 | 42.1<br>1.61<br>1.92 | 42.2<br>1.61<br>1.92 | 42.3<br>1.61<br>1.92 | 42.4<br>1.61<br>1.92 | 42.5<br>1.61<br>1.92 | 42.6<br>1.61<br>1.92 | 42.7<br>1.61<br>1.92 | 42.8<br>1.61<br>1.92 | 42.9<br>1.61<br>1.92 | 43.0<br>1.61<br>1.92 | 43.1<br>1.61<br>1.92 | 43.2<br>1.61<br>1.92 | 43.3<br>1.61<br>1.92 | 43.4<br>1.61<br>1.92 | 43.5<br>1.61<br>1.92 |
| 108 ( 42)   | +4.09                  | 59.3   | 41.2<br>1.60<br>1.91 | 41.3<br>1.60<br>1.91 | 41.4<br>1.60<br>1.91 | 41.5<br>1.60<br>1.91 | 41.6<br>1.60<br>1.91 | 41.7<br>1.60<br>1.91 | 41.8<br>1.60<br>1.91 | 41.9<br>1.60<br>1.91 | 42.0<br>1.60<br>1.91 | 42.1<br>1.60<br>1.91 | 42.2<br>1.60<br>1.91 | 42.3<br>1.60<br>1.91 | 42.4<br>1.60<br>1.91 | 42.5<br>1.60<br>1.91 | 42.6<br>1.60<br>1.91 | 42.7<br>1.60<br>1.91 | 42.8<br>1.60<br>1.91 | 42.9<br>1.60<br>1.91 | 43.0<br>1.60<br>1.91 | 43.1<br>1.60<br>1.91 | 43.2<br>1.60<br>1.91 |
| 110 ( 43)   | +4.25                  | 59.4   | 41.0<br>1.59<br>1.90 | 41.1<br>1.59<br>1.90 | 41.2<br>1.59<br>1.90 | 41.3<br>1.59<br>1.90 | 41.4<br>1.59<br>1.90 | 41.5<br>1.59<br>1.90 | 41.6<br>1.59<br>1.90 | 41.7<br>1.59<br>1.90 | 41.8<br>1.59<br>1.90 | 41.9<br>1.59<br>1.90 | 42.0<br>1.59<br>1.90 | 42.1<br>1.59<br>1.90 | 42.2<br>1.59<br>1.90 | 42.3<br>1.59<br>1.90 | 42.4<br>1.59<br>1.90 | 42.5<br>1.59<br>1.90 | 42.6<br>1.59<br>1.90 | 42.7<br>1.59<br>1.90 | 42.8<br>1.59<br>1.90 | 42.9<br>1.59<br>1.90 | 43.0<br>1.59<br>1.90 |
| 112 ( 44)   | +4.42                  | 59.5   | 40.8<br>1.59<br>1.89 | 40.9<br>1.59<br>1.89 | 41.0<br>1.59<br>1.89 | 41.1<br>1.59<br>1.89 | 41.2<br>1.59<br>1.89 | 41.3<br>1.59<br>1.89 | 41.4<br>1.59<br>1.89 | 41.5<br>1.59<br>1.89 | 41.6<br>1.59<br>1.89 | 41.7<br>1.59<br>1.89 | 41.8<br>1.59<br>1.89 | 41.9<br>1.59<br>1.89 | 42.0<br>1.59<br>1.89 | 42.1<br>1.59<br>1.89 | 42.2<br>1.59<br>1.89 | 42.3<br>1.59<br>1.89 | 42.4<br>1.59<br>1.89 | 42.5<br>1.59<br>1.89 | 42.6<br>1.59<br>1.89 | 42.7<br>1.59<br>1.89 | 42.8<br>1.59<br>1.89 |
| 114 ( 46)   | +4.58                  | 59.6   | 40.6<br>1.58<br>1.88 | 40.7<br>1.58<br>1.88 | 40.8<br>1.58<br>1.88 | 40.9<br>1.58<br>1.88 | 41.0<br>1.58<br>1.88 | 41.1<br>1.58<br>1.88 | 41.2<br>1.58<br>1.88 | 41.3<br>1.58<br>1.88 | 41.4<br>1.58<br>1.88 | 41.5<br>1.58<br>1.88 | 41.6<br>1.58<br>1.88 | 41.7<br>1.58<br>1.88 | 41.8<br>1.58<br>1.88 | 41.9<br>1.58<br>1.88 | 42.0<br>1.58<br>1.88 | 42.1<br>1.58<br>1.88 | 42.2<br>1.58<br>1.88 | 42.3<br>1.58<br>1.88 | 42.4<br>1.58<br>1.88 | 42.5<br>1.58<br>1.88 | 42.6<br>1.58<br>1.88 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 11)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

D54786

71-09-224

| OAT OF (OC) | BAROMETER INS. MERCURY |        |                      | DATA PLATE CORR. %N2 | IDLE RPM %N2         | DATA PLATE PT7       | 25.7                 | 25.8                 | 25.9                 | 26.0                 | 26.1                 | 26.2                 | 26.3                 | 26.4                 | 26.5                 | 26.6                 | 26.7                 | 26.8                 | 26.9 | 27.0 | 27.1 | 27.2 |      |      |
|-------------|------------------------|--------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------|------|------|------|------|------|
|             | PP PT7                 | PP EPR | TO EPR               |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |      |      |      |      |      |      |
| 116 ( 47)   | +4.74                  | 55.6   | 40.4<br>1.57<br>1.87 | 40.5<br>1.57<br>1.87 | 40.7<br>1.57<br>1.87 | 40.8<br>1.57<br>1.87 | 41.0<br>1.57<br>1.87 | 41.2<br>1.57<br>1.87 | 41.3<br>1.57<br>1.87 | 41.5<br>1.57<br>1.87 | 41.6<br>1.57<br>1.87 | 41.8<br>1.57<br>1.87 | 41.9<br>1.57<br>1.87 | 42.1<br>1.57<br>1.87 | 42.3<br>1.57<br>1.87 | 42.4<br>1.57<br>1.87 | 42.6<br>1.57<br>1.87 | 42.7<br>1.57<br>1.87 | 44.1 | 44.2 | 44.4 | 44.5 | 44.7 | 44.9 |
| 118 ( 48)   | +4.91                  | 59.7   | 40.2<br>1.56<br>1.86 | 40.3<br>1.56<br>1.86 | 40.5<br>1.56<br>1.86 | 40.6<br>1.56<br>1.86 | 40.8<br>1.56<br>1.86 | 41.0<br>1.56<br>1.86 | 41.1<br>1.56<br>1.86 | 41.3<br>1.56<br>1.86 | 41.4<br>1.56<br>1.86 | 41.6<br>1.56<br>1.86 | 41.7<br>1.56<br>1.86 | 41.9<br>1.56<br>1.86 | 42.0<br>1.56<br>1.86 | 42.2<br>1.56<br>1.86 | 42.4<br>1.56<br>1.86 | 42.5<br>1.56<br>1.86 | 44.1 | 44.2 | 44.4 | 44.5 | 44.7 | 44.9 |
| 120 ( 49)   | +5.07                  | 59.8   | 40.0<br>1.55<br>1.85 | 40.1<br>1.55<br>1.85 | 40.3<br>1.55<br>1.85 | 40.4<br>1.55<br>1.85 | 40.6<br>1.55<br>1.85 | 40.7<br>1.55<br>1.85 | 40.9<br>1.55<br>1.85 | 41.1<br>1.55<br>1.85 | 41.2<br>1.55<br>1.85 | 41.4<br>1.55<br>1.85 | 41.5<br>1.55<br>1.85 | 41.7<br>1.55<br>1.85 | 41.8<br>1.55<br>1.85 | 42.0<br>1.55<br>1.85 | 42.1<br>1.55<br>1.85 | 42.3<br>1.55<br>1.85 | 44.1 | 44.2 | 44.4 | 44.5 | 44.7 | 44.9 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 12)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

71-09-224

**BOEING**  
**737**   
MAINTENANCE MANUAL

TRIM TABLES - (JT8D-9)

BAROMETRIC PRESSURE 27.3 TO 28.8 INCHES OF MERCURY ABSOLUTE

NOTE: For general instructions for use of engine trim data and a trim table locator tabulation, refer to 71-09-210.

This trim data also applies to JT8D-9A.

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225

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MAINTENANCE MANUAL

| BAROMETER INS. MERCURY |                      | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 |
|------------------------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| OAT OF (°C)            | DATA PLATE CORR. %N2 | 45.0 | 45.2 | 45.4 | 45.5 | 45.7 | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 47.0 | 47.2 | 47.4 | 47.5 |
|                        | IDLE RPM %N2         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| -38 (-39)              | PP PT7               | 57.0 | 57.2 | 57.4 | 57.6 | 57.8 | 58.1 | 58.3 | 58.5 | 56.7 | 58.9 | 59.1 | 59.3 | 59.5 | 59.7 | 59.9 | 60.1 |
|                        | PP EPR               | 2.09 | 2.05 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 |
|                        | TO EPR               | 2.17 | 2.16 | 2.16 | 2.15 | 2.15 | 2.14 | 2.14 | 2.13 | 2.13 | 2.13 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
| -36 (-38)              | PP PT7               | 56.8 | 57.0 | 57.2 | 57.4 | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.8 | 59.1 | 59.3 | 59.5 | 59.7 | 59.9 |
|                        | PP EPR               | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 |
|                        | TO EPR               | 2.17 | 2.16 | 2.16 | 2.15 | 2.15 | 2.14 | 2.14 | 2.13 | 2.13 | 2.13 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
| -34 (-37)              | PP PT7               | 56.5 | 56.7 | 56.9 | 57.1 | 57.4 | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 |
|                        | PP EPR               | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 |
|                        | TO EPR               | 2.17 | 2.16 | 2.16 | 2.15 | 2.15 | 2.14 | 2.14 | 2.13 | 2.13 | 2.13 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
| -32 (-36)              | PP PT7               | 56.3 | 56.5 | 56.7 | 56.9 | 57.1 | 57.3 | 57.5 | 57.7 | 57.9 | 58.1 | 58.3 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 |
|                        | PP EPR               | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 |
|                        | TO EPR               | 2.17 | 2.16 | 2.16 | 2.15 | 2.15 | 2.14 | 2.14 | 2.13 | 2.13 | 2.13 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
| -30 (-34)              | PP PT7               | 56.0 | 56.2 | 56.5 | 56.7 | 56.9 | 57.1 | 57.3 | 57.5 | 57.7 | 57.9 | 58.1 | 58.3 | 58.5 | 58.7 | 58.9 | 59.1 |
|                        | PP EPR               | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 |
|                        | TO EPR               | 2.17 | 2.16 | 2.16 | 2.15 | 2.15 | 2.14 | 2.14 | 2.13 | 2.13 | 2.13 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
| -28 (-33)              | PP PT7               | 55.8 | 56.0 | 56.2 | 56.4 | 56.6 | 56.8 | 57.0 | 57.2 | 57.4 | 57.6 | 57.9 | 58.1 | 58.3 | 58.5 | 58.7 | 58.9 |
|                        | PP EPR               | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 |
|                        | TO EPR               | 2.17 | 2.16 | 2.16 | 2.15 | 2.15 | 2.14 | 2.14 | 2.13 | 2.13 | 2.13 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
| -26 (-32)              | PP PT7               | 55.6 | 55.8 | 56.0 | 56.2 | 56.4 | 56.6 | 56.8 | 57.0 | 57.2 | 57.4 | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 |
|                        | PP EPR               | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 |
|                        | TO EPR               | 2.17 | 2.16 | 2.16 | 2.15 | 2.15 | 2.14 | 2.14 | 2.13 | 2.13 | 2.13 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |

\* USE COLD WEATHER PART POWER TRIM STOP FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP - LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation Figure 201 (Sheet 1)

EFFECTIVITY JT8D-9, JT8D-9A ENGINES

71-09-225

D54788

| OAT OF (°C) | BAROMETER INS. MERCURY |                |        | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 27.3   | 27.4   | 27.5   | 27.6   | 27.7   | 27.8   | 27.9   | 28.0   | 28.1   | 28.2   | 28.3   | 28.4   | 28.5   | 28.6   | 28.7   | 28.8   |        |        |
|-------------|------------------------|----------------|--------|----------------------|--------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | DATA PLATE CORR. %N2   | DATA PLATE PT7 | PP PT7 |                      |              |                | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 |
| -24 (-31)   | -7.40                  | 54.3           | 55.3   | 55.7                 | 55.9         | 56.1           | 45.0   | 45.2   | 45.4   | 45.5   | 45.7   | 45.9   | 46.0   | 46.2   | 46.4   | 46.5   | 46.7   | 46.9   | 47.0   | 47.2   | 47.4   | 47.5   |        |        |
| -22 (-30)   | -7.21                  | 54.2           | 55.1   | 55.5                 | 55.7         | 55.9           | 55.3   | 55.5   | 55.7   | 55.9   | 56.1   | 56.3   | 56.5   | 56.7   | 56.9   | 57.2   | 57.4   | 57.6   | 57.8   | 58.0   | 58.2   | 58.4   | 58.4   | 58.4   |
| -20 (-29)   | -7.03                  | 54.1           | 54.8   | 55.0                 | 55.2         | 55.4           | 54.0   | 54.2   | 54.4   | 54.5   | 54.7   | 54.9   | 55.1   | 55.3   | 55.5   | 55.7   | 55.9   | 56.1   | 56.3   | 56.5   | 56.7   | 56.9   | 57.1   | 57.3   |
| -18 (-28)   | -6.85                  | 54.0           | 54.6   | 54.8                 | 55.0         | 55.2           | 54.8   | 55.0   | 55.2   | 55.4   | 55.6   | 55.8   | 56.0   | 56.2   | 56.4   | 56.6   | 56.8   | 57.0   | 57.2   | 57.4   | 57.6   | 57.8   | 58.0   | 58.2   |
| -16 (-27)   | -6.66                  | 54.0           | 54.3   | 54.5                 | 54.7         | 54.9           | 54.3   | 54.5   | 54.7   | 54.9   | 55.1   | 55.3   | 55.5   | 55.7   | 55.9   | 56.1   | 56.3   | 56.5   | 56.7   | 56.9   | 57.1   | 57.3   | 57.5   | 57.7   |
| -14 (-26)   | -6.48                  | 54.0           | 54.1   | 54.3                 | 54.5         | 54.7           | 54.1   | 54.3   | 54.5   | 54.7   | 54.9   | 55.1   | 55.3   | 55.5   | 55.7   | 55.9   | 56.1   | 56.3   | 56.5   | 56.7   | 56.9   | 57.1   | 57.3   | 57.5   |
| -12 (-24)   | -6.30                  | 54.0           | 53.8   | 54.0                 | 54.2         | 54.4           | 53.8   | 54.0   | 54.2   | 54.4   | 54.6   | 54.8   | 55.0   | 55.2   | 55.4   | 55.6   | 55.8   | 56.0   | 56.2   | 56.4   | 56.6   | 56.8   | 57.0   | 57.2   |

\* USE COLD WEATHER PART POWER TRIM STOP FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP  
 - LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 2)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225

| BARMETER OAT OF (°C) | INS. MERCURY         |              |                            | TRIM STOP            |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |  |  |  |  |  |  |  |  |  |  |  |  |                                       |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|---------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
|                      | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | 27.3                 | 27.4                 | 27.5                 | 27.6                 | 27.7                 | 27.8                 | 27.9                 | 28.0                 | 28.1                 | 28.2                 | 28.3                 | 28.4                 | 28.5                 | 28.6                 | 28.7                 | 28.8                 | FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP |  |  |  |  |  |  |  |  |  |  |  | - LEFT OF STAGGERED LINE USE "S" STOP |  |  |  |  |  |  |  |  |  |  |  |  |
| -10 (-23)            | -6.12                | 54.0         | DATA PT7                   | 45.0                 | 45.2                 | 45.4                 | 45.5                 | 45.7                 | 45.9                 | 46.0                 | 46.2                 | 46.4                 | 46.5                 | 46.7                 | 46.9                 | 47.0                 | 47.2                 | 47.4                 | 47.5                 |  |  |  |  |  |  |  |  |  |  |  |  |                                       |  |  |  |  |  |  |  |  |  |  |  |  |
| -8 (-22)             | -5.93                | 54.0         | PP PT7<br>PP EPR<br>TO EPR | 55.0<br>2.16<br>2.17 | 59.2<br>2.15<br>2.16 | 54.0<br>1.96<br>2.15 | 54.2<br>1.96<br>2.15 | 54.3<br>1.96<br>2.15 | 54.5<br>1.96<br>2.14 | 54.7<br>1.96<br>2.14 | 54.9<br>1.96<br>2.13 | 55.1<br>1.96<br>2.13 | 55.3<br>1.96<br>2.12 | 55.5<br>1.96<br>2.12 | 55.7<br>1.96<br>2.11 | 55.9<br>1.96<br>2.11 | 56.1<br>1.96<br>2.10 | 56.3<br>1.96<br>2.10 | 56.5<br>1.96<br>2.09 |  |  |  |  |  |  |  |  |  |  |  |  |                                       |  |  |  |  |  |  |  |  |  |  |  |  |
| -6 (-21)             | -5.75                | 54.1         | PP PT7<br>PP EPR<br>TO EPR | 58.5<br>2.14<br>2.17 | 58.8<br>2.15<br>2.16 | 59.0<br>2.14<br>2.16 | 59.2<br>2.14<br>2.15 | 59.4<br>2.14<br>2.15 | 54.1<br>1.95<br>2.14 | 54.2<br>1.94<br>2.14 | 54.4<br>1.95<br>2.14 | 54.6<br>1.95<br>2.13 | 54.8<br>1.95<br>2.13 | 55.0<br>1.95<br>2.12 | 55.2<br>1.95<br>2.12 | 55.4<br>1.95<br>2.11 | 55.6<br>1.95<br>2.11 | 55.8<br>1.95<br>2.10 | 56.0<br>1.95<br>2.10 | 56.2<br>1.95<br>2.09                                 |  |  |  |  |  |  |  |  |  |  |  |                                       |  |  |  |  |  |  |  |  |  |  |  |  |
| -4 (-20)             | -5.57                | 54.1         | PP PT7<br>PP EPR<br>TO EPR | 58.3<br>2.14<br>2.17 | 58.5<br>2.14<br>2.16 | 58.7<br>2.14<br>2.16 | 58.9<br>2.14<br>2.15 | 59.2<br>2.14<br>2.15 | 59.4<br>2.14<br>2.14 | 59.6<br>2.14<br>2.14 | 54.1<br>1.93<br>2.13 | 54.3<br>1.93<br>2.13 | 54.4<br>1.93<br>2.12 | 54.6<br>1.93<br>2.12 | 54.8<br>1.93<br>2.11 | 55.0<br>1.93<br>2.11 | 55.2<br>1.93<br>2.10 | 55.4<br>1.93<br>2.10 | 55.6<br>1.93<br>2.09 | 55.8<br>1.93<br>2.09                                 |  |  |  |  |  |  |  |  |  |  |  |                                       |  |  |  |  |  |  |  |  |  |  |  |  |
| -2 (-19)             | -5.38                | 54.2         | PP PT7<br>PP EPR<br>TO EPR | 58.1<br>2.13<br>2.17 | 58.3<br>2.13<br>2.16 | 58.5<br>2.13<br>2.16 | 58.7<br>2.13<br>2.15 | 58.9<br>2.13<br>2.15 | 59.1<br>2.13<br>2.14 | 59.3<br>2.13<br>2.14 | 59.6<br>2.13<br>2.13 | 59.8<br>2.13<br>2.13 | 54.2<br>1.92<br>2.12 | 54.3<br>1.92<br>2.12 | 54.5<br>1.92<br>2.11 | 54.7<br>1.92<br>2.11 | 54.9<br>1.92<br>2.10 | 55.1<br>1.92<br>2.10 | 55.3<br>1.92<br>2.09 | 55.5<br>1.92<br>2.09                                 |  |  |  |  |  |  |  |  |  |  |  |                                       |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 (-18)              | -5.20                | 54.2         | PP PT7<br>PP EPR<br>TO EPR | 57.8<br>2.12<br>2.17 | 58.0<br>2.12<br>2.16 | 58.2<br>2.12<br>2.16 | 58.5<br>2.12<br>2.15 | 58.7<br>2.12<br>2.15 | 58.9<br>2.12<br>2.14 | 59.1<br>2.12<br>2.14 | 59.3<br>2.12<br>2.13 | 59.5<br>2.12<br>2.13 | 59.7<br>2.12<br>2.12 | 54.1<br>1.91<br>2.11 | 54.2<br>1.91<br>2.11 | 54.4<br>1.91<br>2.10 | 54.6<br>1.91<br>2.10 | 54.8<br>1.91<br>2.09 | 55.0<br>1.91<br>2.09 | 55.2<br>1.91<br>2.09                                 |  |  |  |  |  |  |  |  |  |  |  |                                       |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 (-17)              | -5.02                | 54.4         | PP PT7<br>PP EPR<br>TO EPR | 57.6<br>2.11<br>2.17 | 57.8<br>2.11<br>2.16 | 58.0<br>2.11<br>2.16 | 58.2<br>2.11<br>2.15 | 58.4<br>2.11<br>2.15 | 58.6<br>2.11<br>2.14 | 58.9<br>2.11<br>2.14 | 59.1<br>2.11<br>2.13 | 59.3<br>2.11<br>2.13 | 59.5<br>2.11<br>2.12 | 59.7<br>2.11<br>2.11 | 59.9<br>2.11<br>2.11 | 54.1<br>1.90<br>2.10 | 54.3<br>1.90<br>2.10 | 54.5<br>1.90<br>2.09 | 54.7<br>1.90<br>2.09 | 54.9<br>1.90<br>2.09                                 |  |  |  |  |  |  |  |  |  |  |  |                                       |  |  |  |  |  |  |  |  |  |  |  |  |

Trim Table Locator Tabulation  
Figure 201 (Sheet 3)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225

D54792

| OAT OF (°C) | BAROMETER INS. MERCURY |                | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 |
|-------------|------------------------|----------------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | DATA PLATE CORR. %N2   | DATA PLATE PT7 |                      |              |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4 (-16)     | -4.84                  | 57.4           | 45.2                 | 54.5         | PT7            | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.3 | 59.5 | 59.7 | 59.9 | 60.1 | 54.2 | 47.5 |
| 6 (-14)     | -4.66                  | 57.1           | 45.4                 | 54.5         | PP EPR         | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 1.89 | *    |
| 8 (-13)     | -4.48                  | 56.9           | 45.5                 | 54.5         | TO EPR         | 2.17 | 2.16 | 2.15 | 2.14 | 2.13 | 2.12 | 2.11 | 2.10 | 2.09 | 2.08 | 2.07 | 2.06 | 2.05 | 2.04 | 2.03 | 2.02 |
| 10 (-12)    | -4.30                  | 56.7           | 45.6                 | 54.5         | PP PT7         | 57.3 | 57.6 | 57.9 | 58.2 | 58.5 | 58.8 | 59.1 | 59.4 | 59.7 | 59.9 | 60.1 | 60.3 | 60.5 | 60.7 | 60.9 | 61.1 |
| 12 (-11)    | -4.13                  | 56.4           | 45.7                 | 54.5         | PP EPR         | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 | 2.08 |
| 14 (-10)    | -3.95                  | 56.2           | 45.8                 | 54.5         | TO EPR         | 2.17 | 2.16 | 2.15 | 2.14 | 2.13 | 2.12 | 2.11 | 2.10 | 2.09 | 2.08 | 2.07 | 2.06 | 2.05 | 2.04 | 2.03 | 2.02 |
| 16 (-9)     | -3.77                  | 55.9           | 45.9                 | 54.5         | PP PT7         | 56.8 | 57.1 | 57.4 | 57.7 | 58.0 | 58.3 | 58.6 | 58.9 | 59.2 | 59.5 | 59.8 | 60.1 | 60.4 | 60.7 | 61.0 | 61.3 |
|             |                        | 2.05           | 46.0                 | 54.5         | PP EPR         | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 |
|             |                        | 2.17           | 46.1                 | 54.5         | TO EPR         | 2.17 | 2.16 | 2.15 | 2.14 | 2.13 | 2.12 | 2.11 | 2.10 | 2.09 | 2.08 | 2.07 | 2.06 | 2.05 | 2.04 | 2.03 | 2.02 |

\* USE COLD WEATHER PART POWER TRIM STOP  
FOP TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP  
- LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 4)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225

D54794

| OAT OF (°C) | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT.7 | 27.3                       | 27.4                       | 27.5                       | 27.6                       | 27.7                       | 27.8                       | 27.9                       | 28.0                       | 28.1                       | 28.2                       | 28.3                       | 28.4                       | 28.5                       | 28.6                       | 28.7                       | 28.8                       |
|-------------|----------------------|--------------|-----------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|             |                      |              |                 | PP PT7<br>PP EPR<br>TO EPR |
| 18 (-8)     | -3.59                | 55.3         | 45.C            | 55.7<br>2.04<br>2.17       | 55.9<br>2.04<br>2.16       | 56.1<br>2.04<br>2.16       | 56.3<br>2.04<br>2.15       | 56.5<br>2.04<br>2.15       | 56.7<br>2.04<br>2.14       | 56.9<br>2.04<br>2.14       | 57.1<br>2.04<br>2.13       | 57.3<br>2.04<br>2.13       | 57.5<br>2.04<br>2.12       | 57.7<br>2.04<br>2.12       | 57.9<br>2.04<br>2.11       | 58.1<br>2.04<br>2.11       | 58.3<br>2.04<br>2.10       | 58.5<br>2.04<br>2.10       | 58.8<br>2.04<br>2.09       |
| 20 (-7)     | -3.41                | 55.4         | 45.C            | 55.4<br>2.03<br>2.17       | 55.6<br>2.03<br>2.16       | 55.9<br>2.03<br>2.16       | 56.1<br>2.03<br>2.15       | 56.3<br>2.03<br>2.15       | 56.5<br>2.03<br>2.14       | 56.7<br>2.03<br>2.14       | 56.9<br>2.03<br>2.13       | 57.1<br>2.03<br>2.13       | 57.3<br>2.03<br>2.12       | 57.5<br>2.03<br>2.12       | 57.7<br>2.03<br>2.11       | 57.9<br>2.03<br>2.11       | 58.1<br>2.03<br>2.10       | 58.3<br>2.03<br>2.10       | 58.5<br>2.03<br>2.09       |
| 22 (-6)     | -3.23                | 55.5         | 45.C            | 55.2<br>2.02<br>2.17       | 55.4<br>2.02<br>2.16       | 55.6<br>2.02<br>2.16       | 55.8<br>2.02<br>2.15       | 56.0<br>2.02<br>2.15       | 56.2<br>2.02<br>2.14       | 56.4<br>2.02<br>2.14       | 56.6<br>2.02<br>2.13       | 56.8<br>2.02<br>2.13       | 57.0<br>2.02<br>2.12       | 57.2<br>2.02<br>2.12       | 57.4<br>2.02<br>2.11       | 57.6<br>2.02<br>2.11       | 57.8<br>2.02<br>2.10       | 58.0<br>2.02<br>2.10       | 58.2<br>2.02<br>2.09       |
| 24 (-4)     | -3.05                | 55.6         | 45.C            | 54.9<br>2.01<br>2.16       | 55.1<br>2.01<br>2.16       | 55.3<br>2.01<br>2.16       | 55.5<br>2.01<br>2.15       | 55.7<br>2.01<br>2.15       | 56.0<br>2.01<br>2.14       | 56.2<br>2.01<br>2.14       | 56.4<br>2.01<br>2.13       | 56.6<br>2.01<br>2.13       | 56.8<br>2.01<br>2.12       | 57.0<br>2.01<br>2.12       | 57.2<br>2.01<br>2.11       | 57.4<br>2.01<br>2.11       | 57.6<br>2.01<br>2.10       | 57.8<br>2.01<br>2.10       | 58.0<br>2.01<br>2.09       |
| 26 (-3)     | -2.88                | 55.7         | 45.C            | 54.7<br>2.00<br>2.15       | 54.9<br>2.00<br>2.15       | 55.1<br>2.00<br>2.15       | 55.3<br>2.00<br>2.15       | 55.5<br>2.00<br>2.15       | 55.7<br>2.00<br>2.14       | 55.9<br>2.00<br>2.14       | 56.1<br>2.00<br>2.13       | 56.3<br>2.00<br>2.13       | 56.5<br>2.00<br>2.12       | 56.7<br>2.00<br>2.12       | 56.9<br>2.00<br>2.11       | 57.1<br>2.00<br>2.11       | 57.3<br>2.00<br>2.10       | 57.5<br>2.00<br>2.10       | 57.7<br>2.00<br>2.09       |
| 28 (-2)     | -2.70                | 55.8         | 45.C            | 54.4<br>1.99<br>2.15       | 54.6<br>1.99<br>2.15       | 54.8<br>1.99<br>2.15       | 55.0<br>1.99<br>2.15       | 55.2<br>1.99<br>2.15       | 55.4<br>1.99<br>2.14       | 55.6<br>1.99<br>2.14       | 55.8<br>1.99<br>2.13       | 56.0<br>1.99<br>2.13       | 56.2<br>1.99<br>2.12       | 56.4<br>1.99<br>2.12       | 56.6<br>1.99<br>2.11       | 56.8<br>1.99<br>2.11       | 57.0<br>1.99<br>2.10       | 57.2<br>1.99<br>2.10       | 57.4<br>1.99<br>2.09       |
| 30 (-1)     | -2.52                | 55.9         | 45.C            | 54.2<br>1.98<br>2.14       | 54.4<br>1.98<br>2.14       | 54.6<br>1.98<br>2.14       | 54.8<br>1.98<br>2.14       | 55.0<br>1.98<br>2.14       | 55.2<br>1.98<br>2.14       | 55.4<br>1.98<br>2.14       | 55.6<br>1.98<br>2.13       | 55.8<br>1.98<br>2.13       | 56.0<br>1.98<br>2.12       | 56.2<br>1.98<br>2.12       | 56.4<br>1.98<br>2.11       | 56.6<br>1.98<br>2.11       | 56.8<br>1.98<br>2.10       | 57.0<br>1.98<br>2.10       | 57.2<br>1.98<br>2.09       |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 5)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225

| OAT OF (OC) | DATA PLATE CORR. % N2 | IDLE RPM % N2 | BAROMETER INS. MERCURY |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|-----------------------|---------------|------------------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |                       |               | DATA PLATE PT7         | DATA PLATE PT7 | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 |
| 32<br>( 0 ) | -2.34                 | 56.0          | PP PT7                 | 53.9           | 54.1 | 54.3 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.7 | 55.9 | 56.1 | 56.3 | 56.5 | 56.7 | 56.9 |
|             |                       |               | PP EPR                 | 1.98           | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 | 1.98 |
| 34<br>( 1 ) | -2.16                 | 56.1          | TO EPR                 | 2.13           | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.12 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
|             |                       |               | PP PT7                 | 53.7           | 54.1 | 54.3 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.7 | 55.9 | 56.1 | 56.3 | 56.5 | 56.7 | 56.9 |
| 36<br>( 2 ) | -1.99                 | 56.2          | PP EPR                 | 1.97           | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 |
|             |                       |               | TO EPR                 | 2.13           | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.13 | 2.12 | 2.12 | 2.11 | 2.11 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
| 38<br>( 3 ) | -1.81                 | 56.3          | PP PT7                 | 53.4           | 53.6 | 53.8 | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 | 55.4 | 55.6 | 55.8 | 56.0 | 56.2 | 56.4 |
|             |                       |               | PP EPR                 | 1.96           | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 |
| 40<br>( 4 ) | -1.63                 | 56.4          | TO EPR                 | 2.12           | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 | 2.11 | 2.11 | 2.10 | 2.10 | 2.09 |
|             |                       |               | PP PT7                 | 53.2           | 53.4 | 53.6 | 53.7 | 53.9 | 54.1 | 54.3 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.7 | 55.9 | 56.1 |
| 42<br>( 6 ) | -1.46                 | 56.5          | PP EPR                 | 1.95           | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 |
|             |                       |               | TO EPR                 | 2.11           | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.11 | 2.10 | 2.10 |
| 44<br>( 7 ) | -1.29                 | 56.5          | PP PT7                 | 52.6           | 52.8 | 53.0 | 53.2 | 53.4 | 53.6 | 53.8 | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 | 55.4 | 55.6 |
|             |                       |               | PP EPR                 | 1.93           | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 |
|             |                       |               | TO EPR                 | 2.10           | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.09 |
|             |                       |               | PP PT7                 | 52.4           | 52.6 | 52.8 | 53.0 | 53.2 | 53.4 | 53.6 | 53.8 | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 | 55.4 |
|             |                       |               | PP EPR                 | 1.92           | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 |
|             |                       |               | TO EPR                 | 2.09           | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 | 2.09 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 6)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

**71-09-225**



MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |        | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 27.3   | 27.4   | 27.5   | 27.6   | 27.7   | 27.8   | 27.9   | 28.0   | 28.1   | 28.2   | 28.3   | 28.4   | 28.5   | 28.6   | 28.7   | 28.8   |
|-------------|------------------------|--------|----------------------|--------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | PP PT7                 | PP EPR |                      |              |                | TJ EPR | PP PT7 | PP EPR | TJ EPR | PP PT7 | PP EPR | TJ EPR | PP PT7 | PP EPR | TJ EPR | PP PT7 | PP EPR | TJ EPR | PP PT7 | PP EPR | TJ EPR |
| 46 ( 8 )    | -1.12                  | 56.6   |                      |              | 45.0           | 52.3   | 52.5   | 52.7   | 52.9   | 53.1   | 53.3   | 53.5   | 53.6   | 53.8   | 54.0   | 54.2   | 54.4   | 54.6   | 54.8   | 55.0   |        |
| 48 ( 9 )    | -.94                   | 56.7   |                      |              | 51.9           | 52.0   | 52.2   | 52.4   | 52.6   | 52.8   | 53.0   | 53.2   | 53.4   | 53.6   | 53.8   | 54.0   | 54.2   | 54.4   | 54.6   | 54.8   | 55.0   |
| 50 ( 10 )   | -.77                   | 56.8   |                      |              | 1.90           | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   |
| 52 ( 11 )   | -.60                   | 56.9   |                      |              | 2.08           | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   |
| 54 ( 12 )   | -.43                   | 57.0   |                      |              | 51.6           | 51.8   | 52.0   | 52.2   | 52.4   | 52.5   | 52.7   | 52.9   | 53.1   | 53.3   | 53.5   | 53.7   | 53.9   | 54.1   | 54.2   | 54.4   | 54.4   |
| 56 ( 13 )   | -.26                   | 57.1   |                      |              | 1.89           | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   |
| 58 ( 14 )   | -.09                   | 57.2   |                      |              | 2.07           | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   | 2.07   |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 7)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225



MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |                            | DATA PLATE CORR. %N2 | IDLE RPM %N2         | DATA PLATE PT7       | 27.3                 | 27.4                 | 27.5                 | 27.6                 | 27.7                 | 27.8                 | 27.9                 | 28.0                 | 28.1                 | 28.2                 | 28.3                 | 28.4                 | 28.5                 | 28.6                 | 28.7                 | 28.8                 |
|-------------|------------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | DATA PLATE CORR. %N2   | DATA PLATE PT7             |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 60 ( 16)    | + .08                  | PP PT7<br>PP EPR<br>TO EPR | 50.3<br>1.84<br>2.04 | 50.7<br>1.84<br>2.04 | 51.0<br>1.84<br>2.04 | 45.0                 | 45.2                 | 45.4                 | 45.5                 | 45.7                 | 45.9                 | 46.0                 | 46.2                 | 46.4                 | 46.5                 | 46.7                 | 46.9                 | 47.0                 | 47.2                 | 47.4                 | 47.5                 |
| 62 ( 17)    | + .25                  | PP PT7<br>PP EPR<br>TO EPR | 50.0<br>1.83<br>2.04 | 50.4<br>1.83<br>2.04 | 50.6<br>1.83<br>2.04 | 50.7<br>1.83<br>2.04 | 50.9<br>1.83<br>2.04 | 51.1<br>1.83<br>2.04 | 51.3<br>1.83<br>2.04 | 51.5<br>1.83<br>2.04 | 51.7<br>1.83<br>2.04 | 51.8<br>1.83<br>2.04 | 51.9<br>1.83<br>2.04 | 52.0<br>1.83<br>2.04 | 52.1<br>1.84<br>2.04 | 52.3<br>1.84<br>2.04 | 52.5<br>1.84<br>2.04 | 52.7<br>1.84<br>2.04 | 52.9<br>1.84<br>2.04 | 53.0<br>1.84<br>2.04 | 53.0<br>1.84<br>2.04 |
| 64 ( 18)    | + .42                  | PP PT7<br>PP EPR<br>TO EPR | 49.7<br>1.82<br>2.04 | 50.1<br>1.82<br>2.04 | 50.3<br>1.82<br>2.04 | 49.7<br>1.82<br>2.04 | 49.9<br>1.82<br>2.04 | 50.1<br>1.82<br>2.04 | 50.3<br>1.82<br>2.04 | 50.5<br>1.82<br>2.04 | 50.7<br>1.82<br>2.04 | 50.8<br>1.82<br>2.04 | 51.0<br>1.82<br>2.04 | 51.2<br>1.82<br>2.04 | 51.4<br>1.82<br>2.04 | 51.6<br>1.82<br>2.04 | 51.7<br>1.82<br>2.04 | 51.9<br>1.82<br>2.04 | 52.1<br>1.82<br>2.04 | 52.3<br>1.82<br>2.04 | 52.5<br>1.82<br>2.04 |
| 66 ( 19)    | + .59                  | PP PT7<br>PP EPR<br>TO EPR | 49.5<br>1.81<br>2.04 | 49.8<br>1.81<br>2.04 | 50.0<br>1.81<br>2.04 | 49.5<br>1.81<br>2.04 | 49.6<br>1.81<br>2.04 | 49.8<br>1.81<br>2.04 | 50.0<br>1.81<br>2.04 | 50.2<br>1.81<br>2.04 | 50.4<br>1.81<br>2.04 | 50.6<br>1.81<br>2.04 | 50.7<br>1.81<br>2.04 | 50.9<br>1.81<br>2.04 | 51.1<br>1.81<br>2.04 | 51.3<br>1.81<br>2.04 | 51.5<br>1.81<br>2.04 | 51.6<br>1.81<br>2.04 | 51.8<br>1.81<br>2.04 | 52.0<br>1.81<br>2.04 | 52.2<br>1.81<br>2.04 |
| 68 ( 20)    | + .76                  | PP PT7<br>PP EPR<br>TO EPR | 49.2<br>1.80<br>2.04 | 49.4<br>1.80<br>2.04 | 49.6<br>1.80<br>2.04 | 49.2<br>1.80<br>2.04 | 49.4<br>1.80<br>2.04 | 49.6<br>1.80<br>2.04 | 49.7<br>1.80<br>2.04 | 49.9<br>1.80<br>2.04 | 50.1<br>1.80<br>2.04 | 50.3<br>1.80<br>2.04 | 50.5<br>1.80<br>2.04 | 50.6<br>1.80<br>2.04 | 50.8<br>1.80<br>2.04 | 51.0<br>1.80<br>2.04 | 51.2<br>1.80<br>2.04 | 51.4<br>1.80<br>2.04 | 51.5<br>1.80<br>2.04 | 51.7<br>1.80<br>2.04 | 51.9<br>1.80<br>2.04 |
| 70 ( 21)    | + .93                  | PP PT7<br>PP EPR<br>TO EPR | 48.9<br>1.79<br>2.04 | 49.1<br>1.79<br>2.04 | 49.3<br>1.79<br>2.04 | 48.9<br>1.79<br>2.04 | 49.1<br>1.79<br>2.04 | 49.3<br>1.79<br>2.04 | 49.5<br>1.79<br>2.04 | 49.6<br>1.79<br>2.04 | 49.8<br>1.79<br>2.04 | 50.0<br>1.79<br>2.04 | 50.2<br>1.79<br>2.04 | 50.4<br>1.79<br>2.04 | 50.5<br>1.79<br>2.04 | 50.7<br>1.79<br>2.04 | 50.9<br>1.79<br>2.04 | 51.1<br>1.79<br>2.04 | 51.3<br>1.79<br>2.04 | 51.4<br>1.79<br>2.04 | 51.6<br>1.79<br>2.04 |
| 72 ( 22)    | +1.10                  | PP PT7<br>PP EPR<br>TO EPR | 48.6<br>1.78<br>2.04 | 48.8<br>1.78<br>2.04 | 49.0<br>1.78<br>2.04 | 48.6<br>1.78<br>2.04 | 48.8<br>1.78<br>2.04 | 49.0<br>1.78<br>2.04 | 49.2<br>1.78<br>2.04 | 49.4<br>1.78<br>2.04 | 49.5<br>1.78<br>2.04 | 49.7<br>1.78<br>2.04 | 49.9<br>1.78<br>2.04 | 50.1<br>1.78<br>2.04 | 50.2<br>1.78<br>2.04 | 50.4<br>1.78<br>2.04 | 50.6<br>1.78<br>2.04 | 50.8<br>1.78<br>2.04 | 51.0<br>1.78<br>2.04 | 51.1<br>1.78<br>2.04 | 51.3<br>1.78<br>2.04 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 8)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |        |        | DATA PLATE CORR. %N2 | IDLE PPM %N2 | DATA PLATE PT7 | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 |      |
|-------------|------------------------|--------|--------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | PP PT7                 | PP EPR | TO EPR |                      |              |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 74 ( 23 )   | +1.26                  | 57.9   | 45.0   | 48.5                 | 48.7         | 49.1           | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 49.3 | 49.5 | 49.7 | 49.8 | 49.9 | 50.3 | 50.5 | 50.7 | 50.8 | 51.0 |
| 76 ( 24 )   | +1.43                  | 58.0   | 48.1   | 48.2                 | 48.4         | 48.8           | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 49.3 | 49.5 | 49.7 | 49.8 | 49.9 | 50.3 | 50.5 | 50.7 | 50.8 | 51.0 |
| 78 ( 26 )   | +1.60                  | 58.0   | 47.8   | 48.0                 | 48.1         | 48.5           | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 49.3 | 49.5 | 49.7 | 49.8 | 49.9 | 50.3 | 50.5 | 50.7 | 50.8 | 51.0 |
| 80 ( 27 )   | +1.77                  | 58.1   | 47.5   | 47.7                 | 47.8         | 48.2           | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 49.3 | 49.5 | 49.7 | 49.8 | 49.9 | 50.3 | 50.5 | 50.7 | 50.8 | 51.0 |
| 82 ( 28 )   | +1.94                  | 58.2   | 47.2   | 47.4                 | 47.6         | 47.9           | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 49.3 | 49.5 | 49.7 | 49.8 | 49.9 | 50.3 | 50.5 | 50.7 | 50.8 | 51.0 |
| 84 ( 29 )   | +2.10                  | 58.3   | 46.9   | 47.1                 | 47.3         | 47.6           | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 49.3 | 49.5 | 49.7 | 49.8 | 49.9 | 50.3 | 50.5 | 50.7 | 50.8 | 51.0 |
| 86 ( 30 )   | +2.27                  | 58.4   | 46.7   | 46.8                 | 47.0         | 47.3           | 45.9 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 49.3 | 49.5 | 49.7 | 49.8 | 49.9 | 50.3 | 50.5 | 50.7 | 50.8 | 51.0 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 9)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225

| OAT OF (°C) | BAROMETR INS. MERCURY |              |              | DATA PLATE CORR. %N2 | IOL RPM %N2  | DATA PLATE PT7 | 27.3         | 27.4         | 27.5         | 27.6         | 27.7         | 27.8         | 27.9         | 28.0         | 28.1         | 28.2         | 28.3         | 28.4         | 28.5         | 28.6         | 28.7         | 28.8         |
|-------------|-----------------------|--------------|--------------|----------------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|             | 45.C                  | 45.2         | 45.4         |                      |              |                | 45.5         | 45.7         | 45.9         | 46.0         | 46.2         | 46.4         | 46.5         | 46.7         | 46.8         | 47.1         | 47.3         | 47.4         | 47.6         | 47.8         | 47.9         | 48.1         |
| 88 ( 31)    | 46.4<br>1.70          | 46.5<br>1.70 | 46.7<br>1.70 | 46.9<br>1.70         | 47.0<br>1.70 | 47.2<br>1.70   | 47.4<br>1.70 | 47.6<br>1.70 | 47.7<br>1.70 | 47.9<br>1.70 | 48.1<br>1.70 | 48.2<br>1.70 | 48.4<br>1.70 | 48.6<br>1.70 | 48.7<br>1.70 | 48.9<br>1.70 | 49.1<br>1.70 | 49.2<br>1.70 | 49.4<br>1.70 | 49.5<br>1.70 | 49.7<br>1.70 | 49.8<br>1.70 |
| 90 ( 32)    | 46.1<br>1.69          | 46.3<br>1.69 | 46.4<br>1.69 | 46.6<br>1.69         | 46.8<br>1.69 | 46.9<br>1.69   | 47.1<br>1.69 | 47.3<br>1.69 | 47.4<br>1.69 | 47.6<br>1.69 | 47.8<br>1.69 | 48.1<br>1.69 | 48.3<br>1.69 | 48.4<br>1.69 | 48.6<br>1.69 | 48.8<br>1.69 | 49.1<br>1.69 | 49.2<br>1.69 | 49.4<br>1.69 | 49.5<br>1.69 | 49.7<br>1.69 | 49.8<br>1.69 |
| 92 ( 33)    | 45.8<br>1.68          | 46.0<br>1.68 | 46.2<br>1.68 | 46.3<br>1.68         | 46.5<br>1.68 | 46.7<br>1.68   | 46.8<br>1.68 | 47.0<br>1.68 | 47.2<br>1.68 | 47.4<br>1.68 | 47.5<br>1.68 | 47.7<br>1.68 | 48.0<br>1.68 | 48.1<br>1.68 | 48.3<br>1.68 | 48.5<br>1.68 | 48.8<br>1.68 | 48.9<br>1.68 | 49.1<br>1.68 | 49.2<br>1.68 | 49.4<br>1.68 | 49.5<br>1.68 |
| 94 ( 34)    | 45.6<br>1.67          | 45.7<br>1.67 | 45.9<br>1.67 | 46.1<br>1.67         | 46.2<br>1.67 | 46.4<br>1.67   | 46.6<br>1.67 | 46.7<br>1.67 | 46.9<br>1.67 | 47.1<br>1.67 | 47.2<br>1.67 | 47.4<br>1.67 | 47.6<br>1.67 | 47.7<br>1.67 | 47.9<br>1.67 | 48.1<br>1.67 | 48.3<br>1.67 | 48.5<br>1.67 | 48.6<br>1.67 | 48.8<br>1.67 | 48.9<br>1.67 | 49.1<br>1.67 |
| 96 ( 36)    | 45.3<br>1.66          | 45.5<br>1.66 | 45.6<br>1.66 | 45.8<br>1.66         | 46.0<br>1.66 | 46.1<br>1.66   | 46.3<br>1.66 | 46.5<br>1.66 | 46.6<br>1.66 | 46.8<br>1.66 | 47.0<br>1.66 | 47.1<br>1.66 | 47.3<br>1.66 | 47.5<br>1.66 | 47.6<br>1.66 | 47.8<br>1.66 | 48.1<br>1.66 | 48.2<br>1.66 | 48.4<br>1.66 | 48.5<br>1.66 | 48.7<br>1.66 | 48.8<br>1.66 |
| 98 ( 37)    | 45.0<br>1.65          | 45.2<br>1.65 | 45.4<br>1.65 | 45.5<br>1.65         | 45.7<br>1.65 | 45.9<br>1.65   | 46.0<br>1.65 | 46.2<br>1.65 | 46.4<br>1.65 | 46.5<br>1.65 | 46.7<br>1.65 | 46.8<br>1.65 | 47.1<br>1.65 | 47.2<br>1.65 | 47.4<br>1.65 | 47.6<br>1.65 | 47.8<br>1.65 | 47.9<br>1.65 | 48.1<br>1.65 | 48.2<br>1.65 | 48.4<br>1.65 | 48.5<br>1.65 |
| 100 ( 38)   | 44.8<br>1.64          | 44.9<br>1.64 | 45.1<br>1.64 | 45.3<br>1.64         | 45.4<br>1.64 | 45.6<br>1.64   | 45.8<br>1.64 | 45.9<br>1.64 | 46.1<br>1.64 | 46.2<br>1.64 | 46.4<br>1.64 | 46.5<br>1.64 | 46.7<br>1.64 | 46.8<br>1.64 | 47.0<br>1.64 | 47.1<br>1.64 | 47.3<br>1.64 | 47.4<br>1.64 | 47.6<br>1.64 | 47.7<br>1.64 | 47.9<br>1.64 | 48.0<br>1.64 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 10)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225



MAINTENANCE MANUAL

| OAT OF (OC) | DATA PLATE CORR. %N2 | IDLE PPM %N2 | DATA PLATE PT7             | BAROMETER INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|----------------------|--------------|----------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |                      |              |                            | 27.3                   | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 |      |
| 102 ( 39)   | +3.60                | 59.1         | PP PT7<br>PP EPR<br>TO EPR | 45.0                   | 45.2 | 45.4 | 45.5 | 45.7 | 45.8 | 46.0 | 46.2 | 46.4 | 46.5 | 46.7 | 46.9 | 47.0 | 47.2 | 47.4 | 47.5 |      |
| 104 ( 40)   | +3.77                | 59.2         | PP PT7<br>PP EPR<br>TO EPR | 44.3                   | 44.4 | 44.6 | 44.9 | 45.1 | 45.3 | 45.4 | 45.6 | 45.7 | 45.9 | 46.0 | 46.2 | 46.3 | 46.5 | 46.6 | 46.8 | 47.0 |
| 106 ( 41)   | +3.93                | 59.2         | PP PT7<br>PP EPR<br>TO EPR | 44.0                   | 44.2 | 44.4 | 44.7 | 44.8 | 45.0 | 45.2 | 45.3 | 45.5 | 45.6 | 45.8 | 46.0 | 46.1 | 46.2 | 46.3 | 46.6 | 46.7 |
| 108 ( 42)   | +4.09                | 59.3         | PP PT7<br>PP EPR<br>TO EPR | 43.8                   | 43.9 | 44.1 | 44.4 | 44.6 | 44.8 | 44.9 | 45.1 | 45.2 | 45.4 | 45.6 | 45.7 | 45.9 | 46.0 | 46.1 | 46.3 | 46.5 |
| 110 ( 43)   | +4.25                | 59.4         | PP PT7<br>PP EPR<br>TO EPR | 43.5                   | 43.7 | 43.9 | 44.2 | 44.3 | 44.5 | 44.7 | 44.8 | 45.0 | 45.1 | 45.3 | 45.5 | 45.6 | 45.7 | 45.8 | 45.9 | 46.2 |
| 112 ( 44)   | +4.42                | 59.5         | PP PT7<br>PP EPR<br>TO EPR | 43.3                   | 43.5 | 43.6 | 43.8 | 44.0 | 44.3 | 44.4 | 44.6 | 44.8 | 44.9 | 45.1 | 45.2 | 45.4 | 45.5 | 45.7 | 45.8 | 46.2 |
| 114 ( 46)   | +4.58                | 59.6         | PP PT7<br>PP EPR<br>TO EPR | 43.1                   | 43.3 | 43.4 | 43.6 | 43.7 | 44.1 | 44.2 | 44.4 | 44.5 | 44.7 | 44.8 | 45.0 | 45.1 | 45.2 | 45.3 | 45.5 | 46.2 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 11)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-225

| BAROMETER<br>OAT<br>OF<br>(°C) | INS. MERCURY                  |                    |                            | 27.3                 | 27.4                 | 27.5                 | 27.6                 | 27.7                 | 27.8                 | 27.9                 | 28.0                 | 28.1                 | 28.2                 | 28.3                 | 28.4                 | 28.5                 | 28.6                 | 28.7                 | 28.8                 |
|--------------------------------|-------------------------------|--------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                                | DATA<br>PLATE<br>CORR.<br>%N2 | IDLE<br>RPM<br>%N2 | DATA<br>PLATE<br>PT7       |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 116<br>( 47)                   | +4.74                         | 59.6               | PP PT7<br>PP EPR<br>TD EPR | 42.9<br>1.57<br>1.87 | 43.0<br>1.57<br>1.87 | 43.2<br>1.57<br>1.87 | 43.4<br>1.57<br>1.87 | 43.5<br>1.57<br>1.87 | 43.7<br>1.57<br>1.87 | 43.8<br>1.57<br>1.87 | 44.0<br>1.57<br>1.87 | 44.1<br>1.57<br>1.87 | 44.3<br>1.57<br>1.87 | 44.5<br>1.57<br>1.87 | 44.6<br>1.57<br>1.87 | 44.8<br>1.57<br>1.87 | 44.9<br>1.57<br>1.87 | 45.1<br>1.57<br>1.87 | 45.2<br>1.57<br>1.97 |
| 118<br>( 48)                   | +4.91                         | 59.7               | PP PT7<br>PP EPR<br>TC EPR | 42.7<br>1.56<br>1.86 | 42.8<br>1.56<br>1.86 | 43.0<br>1.56<br>1.86 | 43.1<br>1.56<br>1.86 | 43.3<br>1.56<br>1.86 | 43.5<br>1.56<br>1.86 | 43.6<br>1.56<br>1.86 | 43.8<br>1.56<br>1.86 | 43.9<br>1.56<br>1.86 | 44.1<br>1.56<br>1.86 | 44.2<br>1.56<br>1.86 | 44.4<br>1.56<br>1.86 | 44.5<br>1.56<br>1.86 | 44.7<br>1.56<br>1.86 | 44.9<br>1.56<br>1.86 | 45.0<br>1.56<br>1.86 |
| 120<br>( 49)                   | +5.07                         | 59.8               | PP PT7<br>PP EPR<br>TC EPR | 42.5<br>1.55<br>1.85 | 42.6<br>1.55<br>1.85 | 42.8<br>1.55<br>1.95 | 42.9<br>1.55<br>1.85 | 43.1<br>1.55<br>1.85 | 43.2<br>1.55<br>1.85 | 43.4<br>1.55<br>1.85 | 43.5<br>1.55<br>1.85 | 43.7<br>1.55<br>1.85 | 43.9<br>1.55<br>1.85 | 44.0<br>1.55<br>1.85 | 44.2<br>1.55<br>1.85 | 44.3<br>1.55<br>1.85 | 44.5<br>1.55<br>1.85 | 44.6<br>1.55<br>1.85 | 44.8<br>1.55<br>1.85 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 12)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

71-09-225



MAINTENANCE MANUAL

TRIM TABLES - (JT8D-9)

BAROMETRIC PRESSURE 28.9 TO 30.4 INCHES OF MERCURY ABSOLUTE

NOTE: For general instructions for use of engine trim data and a trim table locator tabulation, refer to 71-09-210.

This trim data also applies to JT8D-9A.

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-226

01

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| OAT OF (°C) | BAROMETER INS. MERCURY |        |        | DATA PLATE CORR. %N2 | IDLF RPM %N2 | DATA PLATE PT7 | 28.9   | 29.0   | 29.1   | 29.2   | 29.3   | 29.4   | 29.5   | 29.6   | 29.7   | 29.8   | 29.9   | 30.0   | 30.1   | 30.2   | 30.3   | 30.4   |        |        |        |
|-------------|------------------------|--------|--------|----------------------|--------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | PP PT7                 | PP EPR | TO EPR |                      |              |                | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 | PP EPR | TO EPR | PP PT7 |
| -38 (-39)   | -8.68                  | 55.2   | 47.7   | 2.09                 | 2.08         | 2.08           | 47.8   | 48.0   | 48.2   | 48.3   | 48.5   | 48.7   | 48.8   | 49.0   | 49.2   | 49.3   | 49.5   | 49.7   | 49.8   | 50.0   | 50.2   |        |        |        |        |
| -36 (-38)   | -8.49                  | 55.0   | 60.1   | 2.08                 | 2.08         | 2.08           | 60.3   | 60.3   | 60.5   | 60.5   | 60.6   | 60.6   | 60.6   | 60.8   | 60.9   | 60.9   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   |
| -34 (-37)   | -8.31                  | 54.9   | 55.8   | 2.07                 | 2.07         | 2.07           | 55.8   | 60.3   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   | 60.5   |
| -32 (-36)   | -8.13                  | 54.7   | 59.6   | 2.06                 | 2.06         | 2.06           | 59.6   | 60.0   | 60.2   | 60.4   | 60.6   | 60.6   | 60.6   | 60.8   | 60.9   | 60.9   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   |
| -30 (-34)   | -7.94                  | 54.6   | 59.3   | 2.05                 | 2.05         | 2.05           | 59.3   | 59.7   | 59.9   | 60.2   | 60.4   | 60.6   | 60.6   | 60.8   | 60.9   | 60.9   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   |
| -28 (-33)   | -7.76                  | 54.5   | 59.1   | 2.04                 | 2.04         | 2.04           | 59.1   | 59.5   | 59.7   | 60.0   | 60.2   | 60.4   | 60.4   | 60.6   | 60.7   | 60.7   | 60.9   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   |
| -26 (-32)   | -7.58                  | 54.4   | 58.8   | 2.04                 | 2.04         | 2.04           | 58.8   | 59.2   | 59.4   | 59.6   | 59.6   | 59.8   | 59.8   | 60.0   | 60.2   | 60.5   | 60.7   | 60.9   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   | 61.1   |

\* USE COLD WEATHER PART POWER TRIM STOP  
FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP  
- LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 1)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-226

D54809



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |              | 28.9           |                | 29.0           |                | 29.1           |                | 29.2           |                | 29.3           |                | 29.4           |                | 29.5           |                | 29.6           |                | 29.7           |                | 29.8           |                | 29.9           |                | 30.0           |                | 30.1           |                | 30.2           |                | 30.3           |                | 30.4 |  |
|-------------|------------------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|--|
|             | DATA PLATE CORR. %N2   | IDLE PPM %N2 | DATA PLATE PT7 |      |  |
| -24 (-31)   | -7.40                  | 54.3         | 47.7           | 58.6           | 58.8           | 47.8           | 59.0           | 59.0           | 59.2           | 59.4           | 48.3           | 59.4           | 59.6           | 48.5           | 59.8           | 48.7           | 60.0           | 60.2           | 60.4           | 49.0           | 60.4           | 49.2           | 60.6           | 60.6           | 49.3           | 60.8           | 61.0           | 49.7           | 61.2           | 49.8           | 61.2           | 50.0           | 50.2 |  |
| -22 (-30)   | -7.21                  | 54.2         | 2.02           | 58.3           | 58.5           | 2.02           | 58.7           | 58.9           | 2.02           | 59.1           | 2.02           | 59.3           | 2.02           | 48.3           | 59.5           | 48.7           | 59.7           | 59.9           | 60.1           | 60.3           | 49.2           | 60.5           | 60.5           | 49.3           | 60.7           | 60.9           | 61.1           | 49.5           | 61.3           | 49.8           | 61.3           | 50.0           |      |  |
| -20 (-29)   | -7.03                  | 54.1         | 2.01           | 58.1           | 58.3           | 2.01           | 58.5           | 58.7           | 2.01           | 58.9           | 2.01           | 59.1           | 2.01           | 48.3           | 59.3           | 48.5           | 59.5           | 59.7           | 60.1           | 60.3           | 49.2           | 60.5           | 60.5           | 49.3           | 60.7           | 60.9           | 61.1           | 49.5           | 61.3           | 49.8           | 61.3           | 50.0           |      |  |
| -18 (-28)   | -6.85                  | 54.1         | 2.00           | 57.8           | 58.0           | 2.00           | 58.2           | 58.4           | 2.00           | 58.6           | 2.00           | 58.8           | 2.00           | 48.3           | 59.0           | 48.7           | 59.2           | 59.4           | 59.6           | 59.8           | 49.2           | 60.0           | 60.0           | 49.3           | 60.2           | 60.4           | 60.6           | 49.5           | 60.8           | 49.8           | 60.6           | 60.8           |      |  |
| -16 (-27)   | -6.66                  | 54.0         | 2.09           | 57.5           | 57.7           | 2.09           | 57.9           | 58.1           | 2.09           | 58.3           | 2.09           | 58.5           | 2.09           | 48.3           | 58.7           | 48.5           | 58.9           | 59.1           | 59.3           | 59.5           | 49.2           | 60.0           | 60.0           | 49.3           | 60.2           | 60.4           | 60.6           | 49.5           | 60.8           | 49.8           | 60.6           | 60.8           |      |  |
| -14 (-26)   | -6.48                  | 54.0         | 2.09           | 57.2           | 57.4           | 2.09           | 57.6           | 57.8           | 2.09           | 58.0           | 2.09           | 58.2           | 2.09           | 48.3           | 58.4           | 48.5           | 58.6           | 58.8           | 59.0           | 59.2           | 49.2           | 60.0           | 60.0           | 49.3           | 60.2           | 60.4           | 60.6           | 49.5           | 60.8           | 49.8           | 60.6           | 60.8           |      |  |
| -12 (-24)   | -6.30                  | 54.0         | 2.09           | 57.0           | 57.2           | 2.09           | 57.4           | 57.6           | 2.09           | 57.8           | 2.09           | 58.0           | 2.09           | 48.3           | 58.2           | 48.5           | 58.4           | 58.6           | 58.8           | 59.0           | 59.2           | 49.2           | 60.0           | 60.0           | 49.3           | 60.2           | 60.4           | 60.6           | 49.5           | 60.8           | 49.8           | 60.6           | 60.8 |  |

\* USE COLD WEATHER PART POWER TRIM STOP  
 FOP TARGETS TO -PIGHT OF STAGGERED LINE USE "C" STOP  
 - LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 2)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

71-09-226

D54811



MAINTENANCE MANUAL

| BAROMETER INS. MERCURY |                      | 28.9           | 29.0 | 29.1           | 29.2 | 29.3           | 29.4 | 29.5           | 29.6 | 29.7           | 29.8 | 29.9           | 30.0 | 30.1           | 30.2 | 30.3           | 30.4 |
|------------------------|----------------------|----------------|------|----------------|------|----------------|------|----------------|------|----------------|------|----------------|------|----------------|------|----------------|------|
| OAT OF (°C)            | DATA PLATE CORR. %N2 | DATA PLATE PT7 |      |
|                        |                      | PP             | EPR  |
| -10 (-23)              | -6.12                | 56.7           | 1.96 | 57.1           | 1.96 | 57.5           | 1.96 | 57.9           | 1.96 | 58.3           | 1.96 | 58.7           | 1.96 | 59.1           | 1.96 | 59.4           | 1.96 |
|                        |                      | 2.09           | 2.08 | 2.08           | 2.07 | 2.07           | 2.06 | 2.06           | 2.05 | 2.05           | 2.05 | 2.04           | 2.04 | 2.03           | 2.03 | 2.02           | 2.02 |
| -8 (-22)               | -5.93                | 56.4           | 1.95 | 56.8           | 1.95 | 57.2           | 1.95 | 57.6           | 1.95 | 58.0           | 1.95 | 58.4           | 1.95 | 58.8           | 1.95 | 59.1           | 1.95 |
|                        |                      | 2.09           | 2.08 | 2.08           | 2.07 | 2.07           | 2.06 | 2.06           | 2.05 | 2.05           | 2.05 | 2.04           | 2.04 | 2.03           | 2.03 | 2.02           | 2.02 |
| -6 (-21)               | -5.75                | 56.1           | 1.94 | 56.5           | 1.94 | 56.9           | 1.94 | 57.3           | 1.94 | 57.7           | 1.94 | 58.0           | 1.94 | 58.4           | 1.94 | 58.8           | 1.94 |
|                        |                      | 2.09           | 2.08 | 2.08           | 2.07 | 2.07           | 2.06 | 2.06           | 2.05 | 2.05           | 2.05 | 2.04           | 2.04 | 2.03           | 2.03 | 2.02           | 2.02 |
| -4 (-20)               | -5.57                | 55.8           | 1.93 | 56.2           | 1.93 | 56.6           | 1.93 | 57.0           | 1.93 | 57.4           | 1.93 | 57.7           | 1.93 | 58.1           | 1.93 | 58.5           | 1.93 |
|                        |                      | 2.09           | 2.08 | 2.08           | 2.07 | 2.07           | 2.06 | 2.06           | 2.05 | 2.05           | 2.05 | 2.04           | 2.04 | 2.03           | 2.03 | 2.02           | 2.02 |
| -2 (-19)               | -5.38                | 55.5           | 1.92 | 55.9           | 1.92 | 56.3           | 1.92 | 56.7           | 1.92 | 57.1           | 1.92 | 57.4           | 1.92 | 57.8           | 1.92 | 58.2           | 1.92 |
|                        |                      | 2.09           | 2.08 | 2.08           | 2.07 | 2.07           | 2.06 | 2.06           | 2.05 | 2.05           | 2.05 | 2.04           | 2.04 | 2.03           | 2.03 | 2.02           | 2.02 |
| 0 (-18)                | -5.20                | 55.2           | 1.91 | 55.6           | 1.91 | 56.0           | 1.91 | 56.4           | 1.91 | 56.8           | 1.91 | 57.1           | 1.91 | 57.5           | 1.91 | 57.9           | 1.91 |
|                        |                      | 2.09           | 2.08 | 2.08           | 2.07 | 2.07           | 2.06 | 2.06           | 2.05 | 2.05           | 2.05 | 2.04           | 2.04 | 2.03           | 2.03 | 2.02           | 2.02 |
| 2 (-17)                | -5.02                | 54.9           | 1.90 | 55.3           | 1.90 | 55.7           | 1.90 | 56.1           | 1.90 | 56.5           | 1.90 | 56.8           | 1.90 | 57.2           | 1.90 | 57.6           | 1.90 |
|                        |                      | 2.09           | 2.08 | 2.08           | 2.07 | 2.07           | 2.06 | 2.06           | 2.05 | 2.05           | 2.05 | 2.04           | 2.04 | 2.03           | 2.03 | 2.02           | 2.02 |

\* USE COLD WEATHER PART POWER TRIM STOP FOP TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP - LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation Figure 201 (Sheet 3)

EFFECTIVITY JT8D-9, JT8D-9A ENGINES

71-09-226

D54813



MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |                |                      | IDLE RPM %N2 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | 28.9           | 29.C                 | 29.1           | 29.2                 | 29.3           | 29.4                 | 29.5           | 29.6                 | 29.7           | 29.8                 | 29.9           | 30.0                 | 30.1           | 30.2                 | 30.3           | 30.4                 |                |
|-------------|------------------------|----------------|----------------------|--------------|----------------------|----------------|----------------|----------------------|----------------|----------------------|----------------|----------------------|----------------|----------------------|----------------|----------------------|----------------|----------------------|----------------|----------------------|----------------|----------------------|----------------|
|             | DATA PLATE CORR. %N2   | DATA PLATE PT7 | DATA PLATE CORR. %N2 |              |                      |                | DATA PLATE PT7 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | DATA PLATE CORR. %N2 | DATA PLATE PT7 |
| 4 (-16)     | -4.84                  | 54.5           | 47.8                 | 48.0         | 48.2                 | 48.3           | 48.5           | 48.7                 | 48.8           | 49.0                 | 49.2           | 49.3                 | 49.5           | 49.7                 | 49.8           | 49.8                 | 49.8           | 49.8                 | 49.8           | 49.8                 | 50.0           | 50.2                 |                |
| 6 (-14)     | -4.66                  | 54.6           | 54.5                 | 54.7         | 54.9                 | 55.0           | 55.2           | 55.4                 | 55.6           | 55.8                 | 56.0           | 56.2                 | 56.4           | 56.6                 | 56.7           | 56.9                 | 57.1           | 57.2                 | 57.2           | 57.2                 | 57.2           | 57.4                 |                |
| 8 (-13)     | -4.48                  | 54.7           | 54.2                 | 54.4         | 54.6                 | 54.7           | 54.9           | 55.1                 | 55.3           | 55.5                 | 55.7           | 55.9                 | 56.1           | 56.2                 | 56.4           | 56.6                 | 56.7           | 56.9                 | 56.9           | 56.9                 | 57.1           | 57.1                 |                |
| 10 (-12)    | -4.30                  | 54.8           | 60.2                 | 60.4         | 60.4                 | 60.6           | 60.6           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 |                |
| 12 (-11)    | -4.13                  | 55.0           | 59.7                 | 59.9         | 60.1                 | 60.3           | 60.5           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 |                |
| 14 (-10)    | -3.95                  | 55.1           | 59.5                 | 59.7         | 59.9                 | 60.1           | 60.3           | 60.5                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 | 60.7           | 60.7                 |                |
| 16 (-9)     | -3.77                  | 55.2           | 59.2                 | 59.4         | 59.6                 | 59.8           | 60.0           | 60.2                 | 60.4           | 60.4                 | 60.4           | 60.4                 | 60.4           | 60.4                 | 60.4           | 60.4                 | 60.4           | 60.4                 | 60.4           | 60.4                 | 60.4           | 60.4                 |                |

\* USE COLD WEATHER PART POWER TRIM STOP FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP  
 - LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 4)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

71-09-226

D54815

| OAT OF (OC) | BAROMETER INS. MERCURY |       | IDLE RPM %N2 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | 28.9 | 25.C | 29.1 | 29.2 | 25.3 | 25.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 |
|-------------|------------------------|-------|--------------|----------------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | 28.9                   | 25.C  |              |                      |                | 29.1 | 29.2 | 25.3 | 25.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 |      |      |
| 18 (-8)     | 55.3                   | -3.59 | 59.2         | 59.4                 | 47.7           | 47.8 | 48.0 | 48.2 | 48.3 | 48.5 | 48.7 | 48.8 | 49.0 | 49.2 | 49.3 | 49.5 | 49.7 | 49.8 | 50.0 | 50.2 |      |
| 20 (-7)     | 55.4                   | -3.41 | 58.9         | 59.1                 | 58.7           | 58.9 | 59.1 | 59.3 | 59.5 | 59.7 | 59.9 | 60.1 | 60.3 | 60.5 | 60.7 | 60.9 | 61.1 | 61.3 | 61.5 | 61.7 | 61.9 |
| 22 (-6)     | 55.5                   | -3.23 | 58.6         | 58.8                 | 58.4           | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 60.0 | 60.2 | 60.4 | 60.6 | 60.8 | 61.0 | 61.2 | 61.4 | 61.6 |
| 24 (-4)     | 55.6                   | -3.05 | 58.4         | 58.6                 | 58.2           | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 60.0 | 60.2 | 60.4 | 60.6 | 60.8 | 61.0 | 61.2 | 61.4 |
| 26 (-3)     | 55.7                   | -2.88 | 58.1         | 58.3                 | 57.9           | 58.1 | 58.3 | 58.5 | 58.7 | 58.9 | 59.1 | 59.3 | 59.5 | 59.7 | 59.9 | 60.1 | 60.3 | 60.5 | 60.7 | 60.9 | 61.1 |
| 28 (-2)     | 55.8                   | -2.70 | 57.8         | 58.0                 | 57.6           | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 60.0 | 60.2 | 60.4 | 60.6 | 60.8 |
| 30 (-1)     | 55.9                   | -2.52 | 57.6         | 57.8                 | 57.4           | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 60.0 | 60.2 | 60.4 | 60.6 |

\* USE COLD WEATHER PART POWER TRIM STOP FOR TARGETS TO - RIGHT OF STAGGERED LINE USE "C" STOP  
 - LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 5)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-226

D54817

| OAT OF (OC) | BAROMETER INS. MERCURY |              |              | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 28.9         | 29.0         | 29.1         | 29.2         | 29.3         | 29.4         | 29.5         | 29.6         | 29.7         | 29.8         | 29.9 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 |  |
|-------------|------------------------|--------------|--------------|----------------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------|------|------|------|------|------|--|
|             | PP PT7                 | PP EPR       | TO EPR       |                      |              |                | 28.9         | 29.0         | 29.1         | 29.2         | 29.3         | 29.4         | 29.5         | 29.6         | 29.7         | 29.8         | 29.9 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 |  |
| 32 ( 0)     | 57.1<br>1.98           | 57.3<br>1.98 | 57.5<br>1.98 | 57.7<br>1.98         | 57.9<br>1.98 | 58.1<br>1.98   | 58.3<br>1.98 | 58.5<br>1.98 | 58.7<br>1.98 | 58.9<br>1.98 | 59.1<br>1.98 | 59.3<br>1.98 | 59.5<br>1.98 | 59.7<br>1.98 | 59.9<br>1.98 | 60.1<br>1.98 |      |      |      |      |      |      |  |
| 34 ( 1)     | 56.8<br>1.97           | 57.0<br>1.97 | 57.2<br>1.97 | 57.4<br>1.97         | 57.6<br>1.97 | 57.8<br>1.97   | 58.0<br>1.97 | 58.2<br>1.97 | 58.4<br>1.97 | 58.6<br>1.97 | 58.8<br>1.97 | 59.0<br>1.97 | 59.2<br>1.97 | 59.4<br>1.97 | 59.6<br>1.97 | 59.8<br>1.97 |      |      |      |      |      |      |  |
| 36 ( 2)     | 56.6<br>1.96           | 56.8<br>1.96 | 57.0<br>1.96 | 57.2<br>1.96         | 57.4<br>1.96 | 57.6<br>1.96   | 57.8<br>1.96 | 58.0<br>1.96 | 58.2<br>1.96 | 58.4<br>1.96 | 58.6<br>1.96 | 58.8<br>1.96 | 59.0<br>1.96 | 59.2<br>1.96 | 59.4<br>1.96 | 59.6<br>1.96 |      |      |      |      |      |      |  |
| 38 ( 3)     | 56.3<br>1.95           | 56.5<br>1.95 | 56.7<br>1.95 | 56.9<br>1.95         | 57.1<br>1.95 | 57.3<br>1.95   | 57.5<br>1.95 | 57.7<br>1.95 | 57.9<br>1.95 | 58.1<br>1.95 | 58.3<br>1.95 | 58.5<br>1.95 | 58.7<br>1.95 | 58.9<br>1.95 | 59.1<br>1.95 | 59.3<br>1.95 |      |      |      |      |      |      |  |
| 40 ( 4)     | 56.0<br>1.94           | 56.2<br>1.94 | 56.4<br>1.94 | 56.6<br>1.94         | 56.8<br>1.94 | 57.0<br>1.94   | 57.2<br>1.94 | 57.4<br>1.94 | 57.6<br>1.94 | 57.8<br>1.94 | 58.0<br>1.94 | 58.2<br>1.94 | 58.4<br>1.94 | 58.6<br>1.94 | 58.8<br>1.94 | 59.0<br>1.94 |      |      |      |      |      |      |  |
| 42 ( 6)     | 55.7<br>1.93           | 55.9<br>1.93 | 56.1<br>1.93 | 56.3<br>1.93         | 56.5<br>1.93 | 56.7<br>1.93   | 56.9<br>1.93 | 57.1<br>1.93 | 57.3<br>1.93 | 57.5<br>1.93 | 57.7<br>1.93 | 57.9<br>1.93 | 58.1<br>1.93 | 58.3<br>1.93 | 58.5<br>1.93 | 58.7<br>1.93 |      |      |      |      |      |      |  |
| 44 ( 7)     | 55.5<br>1.92           | 55.7<br>1.92 | 55.9<br>1.92 | 56.1<br>1.92         | 56.3<br>1.92 | 56.5<br>1.92   | 56.7<br>1.92 | 56.9<br>1.92 | 57.1<br>1.92 | 57.3<br>1.92 | 57.5<br>1.92 | 57.7<br>1.92 | 57.9<br>1.92 | 58.1<br>1.92 | 58.3<br>1.92 | 58.5<br>1.92 |      |      |      |      |      |      |  |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 6)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

**71-09-226**



MAINTENANCE MANUAL

| OAT OF (OC) | DATA PLATE CORR. %N2 | IDLE FPM %N2 | DATA PLATE PT7 | BARMETER INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|----------------------|--------------|----------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |                      |              |                | 28.9                  | 29.0 | 29.1 | 29.2 | 29.3 | 29.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 |      |
| 46<br>( 8)  | -1.12                | 56.6         | PP PT7         | 47.7                  | 47.8 | 48.0 | 48.2 | 48.3 | 48.5 | 48.7 | 48.8 | 49.0 | 49.2 | 49.3 | 49.5 | 49.7 | 49.8 | 50.0 | 50.2 |      |
|             |                      |              | PP EPR         | 55.2                  | 55.4 | 55.6 | 55.7 | 55.9 | 56.1 | 56.3 | 56.5 | 56.7 | 56.9 | 57.1 | 57.3 | 57.5 | 57.7 | 57.8 | 58.0 |      |
|             |                      |              | TO EPR         | 1.91                  | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 |
| 48<br>( 9)  | -.94                 | 56.7         | PP PT7         | 2.09                  | 2.08 | 2.08 | 2.07 | 2.07 | 2.06 | 2.06 | 2.05 | 2.05 | 2.05 | 2.04 | 2.04 | 2.03 | 2.03 | 2.02 | 2.02 |      |
|             |                      |              | PP EPR         | 55.2                  | 55.1 | 55.3 | 55.5 | 55.7 | 55.8 | 56.0 | 56.2 | 56.4 | 56.6 | 56.8 | 57.0 | 57.2 | 57.4 | 57.6 | 57.7 |      |
|             |                      |              | TO EPR         | 1.90                  | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 |
| 50<br>( 10) | -.77                 | 56.8         | PP PT7         | 2.08                  | 2.08 | 2.08 | 2.07 | 2.07 | 2.06 | 2.06 | 2.05 | 2.05 | 2.05 | 2.04 | 2.04 | 2.03 | 2.03 | 2.02 | 2.02 |      |
|             |                      |              | PP EPR         | 54.6                  | 54.8 | 55.0 | 55.2 | 55.4 | 55.6 | 55.8 | 55.9 | 56.1 | 56.2 | 56.5 | 56.7 | 56.9 | 57.1 | 57.3 | 57.5 |      |
|             |                      |              | TO EPR         | 1.89                  | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 |
| 52<br>( 11) | -.60                 | 56.9         | PP PT7         | 2.07                  | 2.07 | 2.07 | 2.06 | 2.06 | 2.06 | 2.06 | 2.05 | 2.05 | 2.05 | 2.04 | 2.04 | 2.03 | 2.03 | 2.02 | 2.02 |      |
|             |                      |              | PP EPR         | 54.3                  | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.7 | 55.8 | 56.0 | 56.2 | 56.4 | 56.6 | 56.8 | 57.0 | 57.2 |      |
|             |                      |              | TO EPR         | 1.88                  | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.89 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 |
| 54<br>( 12) | -.43                 | 57.0         | PP PT7         | 2.06                  | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.06 | 2.05 | 2.05 | 2.05 | 2.04 | 2.04 | 2.03 | 2.03 | 2.02 | 2.02 |      |
|             |                      |              | PP EPR         | 54.1                  | 54.3 | 54.4 | 54.6 | 54.8 | 55.0 | 55.2 | 55.4 | 55.6 | 55.7 | 55.9 | 56.1 | 56.3 | 56.5 | 56.7 | 56.9 |      |
|             |                      |              | TO EPR         | 1.87                  | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 |
| 56<br>( 13) | -.26                 | 57.1         | PP PT7         | 2.06                  | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.04 | 2.04 | 2.03 | 2.03 | 2.02 | 2.02 |      |
|             |                      |              | PP EPR         | 53.8                  | 54.0 | 54.2 | 54.3 | 54.5 | 54.7 | 54.9 | 55.1 | 55.3 | 55.5 | 55.6 | 55.8 | 56.0 | 56.2 | 56.4 | 56.6 |      |
|             |                      |              | TO EPR         | 1.86                  | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 |
| 58<br>( 14) | -.09                 | 57.2         | PP PT7         | 2.05                  | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.05 | 2.04 | 2.04 | 2.03 | 2.03 | 2.02 | 2.02 | 2.02 |      |
|             |                      |              | PP EPR         | 53.5                  | 53.7 | 53.9 | 54.1 | 54.3 | 54.4 | 54.6 | 54.8 | 54.8 | 55.0 | 55.2 | 55.4 | 55.5 | 55.7 | 55.9 | 56.1 | 56.3 |
|             |                      |              | TO EPR         | 1.85                  | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 7)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

D54821

71-09-226

| OAT OF (OC) | BARMETER INS. MERCURY |      |                            | DATA PLATE CORR. %N2 | IDLE FPM %N2         | DATA PLATE PT7       | 28.9 | 29.0 | 29.1 | 29.2 | 29.3 | 29.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 |      |
|-------------|-----------------------|------|----------------------------|----------------------|----------------------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | 28.9                  | 29.0 | 29.1                       |                      |                      |                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 60 ( 16)    | + .08                 | 57.2 | PP PT7<br>PP EPR<br>TO EPR | 53.2<br>1.84<br>2.04 | 53.4<br>1.84<br>2.04 | 53.6<br>1.84<br>2.04 | 47.7 | 47.8 | 48.0 | 48.2 | 48.3 | 48.5 | 48.7 | 48.8 | 49.0 | 49.2 | 49.3 | 49.5 | 49.7 | 49.8 | 50.0 | 50.2 |      |
| 62 ( 17)    | + .25                 | 57.3 | PP PT7<br>PP EPR<br>TO EPR | 52.9<br>1.83<br>2.04 | 53.1<br>1.83<br>2.04 | 53.3<br>1.83<br>2.04 | 52.9 | 53.1 | 53.3 | 53.5 | 53.7 | 53.9 | 54.0 | 54.2 | 54.4 | 54.6 | 54.8 | 55.0 | 55.1 | 55.2 | 55.3 | 55.5 | 55.7 |
| 64 ( 18)    | + .42                 | 57.4 | PP PT7<br>PP EPR<br>TO EPR | 52.7<br>1.82<br>2.04 | 52.8<br>1.82<br>2.04 | 53.0<br>1.82<br>2.04 | 52.7 | 52.8 | 53.0 | 53.2 | 53.4 | 53.6 | 53.7 | 53.9 | 54.1 | 54.3 | 54.5 | 54.7 | 54.8 | 54.9 | 55.0 | 55.2 | 55.4 |
| 66 ( 19)    | + .59                 | 57.5 | PP PT7<br>PP EPR<br>TO EPR | 52.4<br>1.81<br>2.04 | 52.5<br>1.81<br>2.04 | 52.7<br>1.81<br>2.04 | 52.4 | 52.5 | 52.7 | 52.9 | 53.1 | 53.3 | 53.5 | 53.6 | 53.8 | 54.0 | 54.2 | 54.4 | 54.5 | 54.7 | 54.9 | 55.1 | 55.1 |
| 68 ( 20)    | + .76                 | 57.6 | PP PT7<br>PP EPR<br>TO EPR | 52.1<br>1.80<br>2.04 | 52.3<br>1.80<br>2.04 | 52.4<br>1.80<br>2.04 | 52.1 | 52.3 | 52.4 | 52.6 | 52.8 | 53.0 | 53.2 | 53.3 | 53.5 | 53.7 | 53.9 | 54.1 | 54.2 | 54.4 | 54.6 | 54.8 | 54.8 |
| 70 ( 21)    | + .93                 | 57.7 | PP PT7<br>PP EPR<br>TO EPR | 51.8<br>1.79<br>2.04 | 52.0<br>1.79<br>2.04 | 52.1<br>1.79<br>2.04 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.7 | 52.9 | 53.0 | 53.2 | 53.4 | 53.6 | 53.8 | 54.0 | 54.1 | 54.3 | 54.5 | 54.5 |
| 72 ( 22)    | +1.10                 | 57.8 | PP PT7<br>PP EPR<br>TO EPR | 51.5<br>1.78<br>2.04 | 51.7<br>1.78<br>2.04 | 51.8<br>1.78<br>2.04 | 51.5 | 51.7 | 51.8 | 52.0 | 52.2 | 52.4 | 52.6 | 52.7 | 52.9 | 53.1 | 53.3 | 53.4 | 53.6 | 53.8 | 54.0 | 54.2 | 54.2 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 8)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

**71-09-226**



MAINTENANCE MANUAL

| OAT OF (OC) | BARCMETER            |              | INS. MERCURY               |                      | 28.9                 | 29.C                 | 29.1                 | 29.2                 | 29.3                 | 29.4                 | 29.5                 | 29.6                 | 29.7                 | 29.8                 | 29.9                 | 30.0                 | 30.1                 | 30.2                 | 30.3                 | 30.4                 |                      |
|-------------|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | DATA PLATE PT7       |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 74 ( 23)    | +1.26                | 57.9         | PP PT7<br>PP EPR<br>TO EPR | 51.2<br>1.77<br>2.04 | 51.4<br>1.77<br>2.04 | 51.5<br>1.77<br>2.04 | 48.2<br>1.77<br>2.04 | 48.3<br>1.77<br>2.04 | 48.5<br>1.77<br>2.04 | 49.7<br>1.77<br>2.04 | 49.8<br>1.77<br>2.04 | 49.9<br>1.77<br>2.04 | 50.0<br>1.77<br>2.04 | 50.1<br>1.77<br>2.04 | 50.2<br>1.77<br>2.04 | 50.3<br>1.77<br>2.04 | 50.4<br>1.77<br>2.04 | 50.5<br>1.77<br>2.04 | 50.6<br>1.77<br>2.04 | 50.7<br>1.77<br>2.04 |                      |
| 76 ( 24)    | +1.43                | 58.0         | PP PT7<br>PP EPR<br>TO EPR | 50.9<br>1.76<br>2.04 | 51.1<br>1.76<br>2.04 | 51.2<br>1.76<br>2.04 | 51.4<br>1.76<br>2.04 | 51.6<br>1.76<br>2.04 | 51.8<br>1.76<br>2.04 | 52.0<br>1.76<br>2.04 | 52.1<br>1.76<br>2.04 | 52.2<br>1.76<br>2.04 | 52.3<br>1.76<br>2.04 | 52.4<br>1.76<br>2.04 | 52.5<br>1.76<br>2.04 | 52.6<br>1.76<br>2.04 | 52.7<br>1.76<br>2.04 | 52.8<br>1.76<br>2.04 | 52.9<br>1.76<br>2.04 | 53.0<br>1.76<br>2.04 | 53.1<br>1.76<br>2.04 |
| 78 ( 26)    | +1.60                | 58.0         | PP PT7<br>PP EPR<br>TO EPR | 50.8<br>1.75<br>2.04 | 51.1<br>1.75<br>2.04 | 50.9<br>1.75<br>2.04 | 51.1<br>1.75<br>2.04 | 51.3<br>1.75<br>2.04 | 51.5<br>1.75<br>2.04 | 51.6<br>1.75<br>2.04 | 51.7<br>1.75<br>2.04 | 51.8<br>1.75<br>2.04 | 51.9<br>1.75<br>2.04 | 52.0<br>1.75<br>2.04 | 52.1<br>1.75<br>2.04 | 52.2<br>1.75<br>2.04 | 52.3<br>1.75<br>2.04 | 52.4<br>1.75<br>2.04 | 52.5<br>1.75<br>2.04 | 52.6<br>1.75<br>2.04 | 52.7<br>1.75<br>2.04 |
| 80 ( 27)    | +1.77                | 58.1         | PP PT7<br>PP EPR<br>TO EPR | 50.3<br>1.74<br>2.04 | 50.5<br>1.74<br>2.04 | 50.6<br>1.74<br>2.04 | 50.8<br>1.74<br>2.04 | 51.0<br>1.74<br>2.04 | 51.2<br>1.74<br>2.04 | 51.3<br>1.74<br>2.04 | 51.4<br>1.74<br>2.04 | 51.5<br>1.74<br>2.04 | 51.6<br>1.74<br>2.04 | 51.7<br>1.74<br>2.04 | 51.8<br>1.74<br>2.04 | 51.9<br>1.74<br>2.04 | 52.0<br>1.74<br>2.04 | 52.1<br>1.74<br>2.04 | 52.2<br>1.74<br>2.04 | 52.3<br>1.74<br>2.04 | 52.4<br>1.74<br>2.04 |
| 82 ( 28)    | +1.94                | 58.2         | PP PT7<br>PP EPR<br>TO EPR | 50.0<br>1.73<br>2.04 | 50.2<br>1.73<br>2.04 | 50.3<br>1.73<br>2.04 | 50.5<br>1.73<br>2.04 | 50.7<br>1.73<br>2.04 | 50.9<br>1.73<br>2.04 | 51.0<br>1.73<br>2.04 | 51.1<br>1.73<br>2.04 | 51.2<br>1.73<br>2.04 | 51.3<br>1.73<br>2.04 | 51.4<br>1.73<br>2.04 | 51.5<br>1.73<br>2.04 | 51.6<br>1.73<br>2.04 | 51.7<br>1.73<br>2.04 | 51.8<br>1.73<br>2.04 | 51.9<br>1.73<br>2.04 | 52.0<br>1.73<br>2.04 | 52.1<br>1.73<br>2.04 |
| 84 ( 29)    | +2.10                | 58.3         | PP PT7<br>PP EPR<br>TO EPR | 49.7<br>1.72<br>2.04 | 49.9<br>1.72<br>2.04 | 50.0<br>1.72<br>2.04 | 50.2<br>1.72<br>2.04 | 50.4<br>1.72<br>2.04 | 50.5<br>1.72<br>2.04 | 50.6<br>1.72<br>2.04 | 50.7<br>1.72<br>2.04 | 50.8<br>1.72<br>2.04 | 50.9<br>1.72<br>2.04 | 51.0<br>1.72<br>2.04 | 51.1<br>1.72<br>2.04 | 51.2<br>1.72<br>2.04 | 51.3<br>1.72<br>2.04 | 51.4<br>1.72<br>2.04 | 51.5<br>1.72<br>2.04 | 51.6<br>1.72<br>2.04 | 51.7<br>1.72<br>2.04 |
| 86 ( 30)    | +2.27                | 58.4         | PP PT7<br>PP EPR<br>TO EPR | 49.4<br>1.71<br>2.03 | 49.6<br>1.71<br>2.03 | 49.7<br>1.71<br>2.03 | 49.9<br>1.71<br>2.03 | 50.1<br>1.71<br>2.03 | 50.2<br>1.71<br>2.03 | 50.3<br>1.71<br>2.03 | 50.4<br>1.71<br>2.03 | 50.5<br>1.71<br>2.03 | 50.6<br>1.71<br>2.03 | 50.7<br>1.71<br>2.03 | 50.8<br>1.71<br>2.03 | 50.9<br>1.71<br>2.03 | 51.0<br>1.71<br>2.03 | 51.1<br>1.71<br>2.03 | 51.2<br>1.71<br>2.03 | 51.3<br>1.71<br>2.03 | 51.4<br>1.71<br>2.03 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 9)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

D54826

71-09-226



MAINTENANCE MANUAL

| OAT OF (OC)  | BARCMETER INS. MERCURY |              |              | DATA PLATE CORR. %N2 | IDLIF PPM %N2 | DATA PLATE PT7 | 28.9         | 29.0         | 29.1 | 29.2 | 29.3 | 29.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 |      |      |
|--------------|------------------------|--------------|--------------|----------------------|---------------|----------------|--------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|              | 88<br>( 31)            | +2.44        | 45.1<br>1.70 |                      |               |                | 49.3<br>1.70 | 49.4<br>1.70 | 48.0 | 48.2 | 48.3 | 48.5 | 48.7 | 48.8 | 49.0 | 49.2 | 49.3 | 49.5 | 49.6 | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 |
| 90<br>( 32)  | +2.61                  | 48.8<br>1.69 | 49.0<br>1.69 | 49.1<br>1.69         | 48.3          | 48.5           | 48.6         | 48.8         | 48.9 | 49.0 | 49.1 | 49.2 | 49.3 | 49.4 | 49.5 | 49.6 | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 | 50.2 | 50.3 | 50.4 |
| 92<br>( 33)  | +2.77                  | 48.5<br>1.68 | 48.7<br>1.68 | 48.8<br>1.68         | 48.0          | 48.2           | 48.3         | 48.5         | 48.6 | 48.7 | 48.8 | 48.9 | 49.0 | 49.1 | 49.2 | 49.3 | 49.4 | 49.5 | 49.6 | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 |
| 94<br>( 34)  | +2.94                  | 48.2<br>1.67 | 48.4<br>1.67 | 48.6<br>1.67         | 48.0          | 48.2           | 48.3         | 48.5         | 48.6 | 48.7 | 48.8 | 48.9 | 49.0 | 49.1 | 49.2 | 49.3 | 49.4 | 49.5 | 49.6 | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 |
| 96<br>( 36)  | +3.11                  | 48.0<br>1.66 | 48.1<br>1.66 | 48.3<br>1.66         | 48.0          | 48.2           | 48.3         | 48.5         | 48.6 | 48.7 | 48.8 | 48.9 | 49.0 | 49.1 | 49.2 | 49.3 | 49.4 | 49.5 | 49.6 | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 |
| 98<br>( 37)  | +3.27                  | 47.7<br>1.65 | 47.8<br>1.65 | 48.0<br>1.65         | 48.0          | 48.2           | 48.3         | 48.5         | 48.6 | 48.7 | 48.8 | 48.9 | 49.0 | 49.1 | 49.2 | 49.3 | 49.4 | 49.5 | 49.6 | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 |
| 100<br>( 38) | +3.44                  | 47.4<br>1.64 | 47.6<br>1.64 | 47.7<br>1.64         | 48.0          | 48.2           | 48.3         | 48.5         | 48.6 | 48.7 | 48.8 | 48.9 | 49.0 | 49.1 | 49.2 | 49.3 | 49.4 | 49.5 | 49.6 | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 10)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-226



MAINTENANCE MANUAL

| OAT OF (°C) | BAROMETER INS. MERCURY |        |        | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | 28.9                 | 29.0                 | 29.1                 | 29.2                 | 29.3                 | 29.4                 | 29.5                 | 29.6                 | 29.7                 | 29.8                 | 29.9                 | 30.0                 | 30.1                 | 30.2                 | 30.3                 | 30.4                 |
|-------------|------------------------|--------|--------|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|             | PP PT7                 | PP EPR | TO EPR |                      |              |                            |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| 102 ( 39)   | +3.60                  | 59.1   |        | 47.1<br>1.63<br>1.94 |              | DATA PLATE PT7             | 47.7                 | 47.8                 | 48.0                 | 48.2                 | 48.3                 | 48.5                 | 48.7                 | 48.8                 | 49.0                 | 49.2                 | 49.3                 | 49.5                 | 49.7                 | 49.8                 | 50.0                 | 50.2                 |
| 104 ( 40)   | +3.77                  | 59.2   |        | 47.1<br>1.63<br>1.94 |              | PP PT7<br>PP EPR<br>TO EPR | 46.9<br>1.62<br>1.93 | 47.0<br>1.62<br>1.93 | 47.2<br>1.62<br>1.93 | 47.4<br>1.62<br>1.93 | 47.5<br>1.62<br>1.93 | 47.7<br>1.62<br>1.93 | 47.8<br>1.62<br>1.93 | 48.0<br>1.62<br>1.93 | 48.2<br>1.62<br>1.93 | 48.3<br>1.62<br>1.93 | 48.4<br>1.62<br>1.93 | 48.5<br>1.62<br>1.93 | 48.6<br>1.62<br>1.93 | 48.7<br>1.62<br>1.93 | 48.8<br>1.62<br>1.93 | 48.9<br>1.62<br>1.93 |
| 106 ( 41)   | +3.93                  | 59.2   |        | 46.6<br>1.61<br>1.92 |              | PP PT7<br>PP EPR<br>TO EPR | 46.6<br>1.61<br>1.92 | 46.8<br>1.61<br>1.92 | 46.9<br>1.61<br>1.92 | 47.1<br>1.61<br>1.92 | 47.3<br>1.61<br>1.92 | 47.4<br>1.61<br>1.92 | 47.6<br>1.61<br>1.92 | 47.7<br>1.61<br>1.92 | 47.9<br>1.61<br>1.92 | 48.1<br>1.61<br>1.92 | 48.2<br>1.61<br>1.92 | 48.4<br>1.61<br>1.92 | 48.6<br>1.61<br>1.92 | 48.7<br>1.61<br>1.92 | 48.9<br>1.61<br>1.92 | 49.0<br>1.61<br>1.92 |
| 108 ( 42)   | +4.09                  | 59.3   |        | 46.4<br>1.60<br>1.91 |              | PP PT7<br>PP EPR<br>TO EPR | 46.4<br>1.60<br>1.91 | 46.5<br>1.60<br>1.91 | 46.7<br>1.60<br>1.91 | 46.8<br>1.60<br>1.91 | 47.0<br>1.60<br>1.91 | 47.2<br>1.60<br>1.91 | 47.3<br>1.60<br>1.91 | 47.5<br>1.60<br>1.91 | 47.6<br>1.60<br>1.91 | 47.8<br>1.60<br>1.91 | 48.0<br>1.60<br>1.91 | 48.1<br>1.60<br>1.91 | 48.3<br>1.60<br>1.91 | 48.4<br>1.60<br>1.91 | 48.6<br>1.60<br>1.91 | 48.8<br>1.60<br>1.91 |
| 110 ( 43)   | +4.25                  | 59.4   |        | 46.1<br>1.59<br>1.90 |              | PP PT7<br>PP EPR<br>TO EPR | 46.1<br>1.59<br>1.90 | 46.3<br>1.59<br>1.90 | 46.4<br>1.59<br>1.90 | 46.6<br>1.59<br>1.90 | 46.7<br>1.59<br>1.90 | 46.9<br>1.59<br>1.90 | 47.1<br>1.59<br>1.90 | 47.2<br>1.59<br>1.90 | 47.4<br>1.59<br>1.90 | 47.5<br>1.59<br>1.90 | 47.7<br>1.59<br>1.90 | 47.8<br>1.59<br>1.90 | 48.0<br>1.59<br>1.90 | 48.2<br>1.59<br>1.90 | 48.3<br>1.59<br>1.90 | 48.5<br>1.59<br>1.90 |
| 112 ( 44)   | +4.42                  | 59.5   |        | 45.9<br>1.59<br>1.89 |              | PP PT7<br>PP EPR<br>TO EPR | 45.9<br>1.59<br>1.89 | 46.0<br>1.59<br>1.89 | 46.2<br>1.59<br>1.89 | 46.3<br>1.59<br>1.89 | 46.5<br>1.59<br>1.89 | 46.7<br>1.59<br>1.89 | 46.8<br>1.59<br>1.89 | 47.0<br>1.59<br>1.89 | 47.1<br>1.59<br>1.89 | 47.3<br>1.59<br>1.89 | 47.5<br>1.59<br>1.89 | 47.6<br>1.59<br>1.89 | 47.8<br>1.59<br>1.89 | 47.9<br>1.59<br>1.89 | 48.1<br>1.59<br>1.89 | 48.2<br>1.59<br>1.89 |
| 114 ( 46)   | +4.58                  | 59.6   |        | 45.6<br>1.58<br>1.88 |              | PP PT7<br>PP EPR<br>TO EPR | 45.6<br>1.58<br>1.88 | 45.8<br>1.58<br>1.88 | 45.9<br>1.58<br>1.88 | 46.1<br>1.58<br>1.88 | 46.3<br>1.58<br>1.88 | 46.4<br>1.58<br>1.88 | 46.6<br>1.58<br>1.88 | 46.7<br>1.58<br>1.88 | 46.9<br>1.58<br>1.88 | 47.1<br>1.58<br>1.88 | 47.2<br>1.58<br>1.88 | 47.4<br>1.58<br>1.88 | 47.5<br>1.58<br>1.88 | 47.7<br>1.58<br>1.88 | 47.8<br>1.58<br>1.88 | 48.0<br>1.58<br>1.88 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 11)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

D54829

71-09-226

| BAROMETER<br>OAT<br>OF<br>(°C) | INS. MERCURY |              |              | DATA<br>PLATE<br>CORR.<br>%N2 | IDLE<br>RPM<br>%N2 | DATA<br>PLATE<br>PT7 | 28.9         | 29.0         | 29.1         | 29.2         | 29.3         | 29.4         | 29.5         | 29.6         | 29.7         | 29.8 | 29.9         | 30.0         | 30.1         | 30.2         | 30.3         | 30.4 |
|--------------------------------|--------------|--------------|--------------|-------------------------------|--------------------|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------|--------------|--------------|--------------|--------------|--------------|------|
|                                | 47.7         | 47.8         | 48.0         |                               |                    |                      | 48.2         | 48.3         | 48.5         | 48.7         | 48.8         | 49.0         | 49.2         | 49.3         | 49.5         | 49.7 | 49.8         | 50.0         | 50.2         |              |              |      |
| 116<br>( 47)                   | 45.4<br>1.57 | 45.6<br>1.57 | 45.7<br>1.57 | 45.9<br>1.57                  | 46.0<br>1.57       | 46.2<br>1.57         | 46.3<br>1.57 | 46.5<br>1.57 | 46.7<br>1.57 | 46.8<br>1.57 | 47.0<br>1.57 | 47.1<br>1.57 | 47.3<br>1.57 | 47.4<br>1.57 | 47.6<br>1.57 | 47.8 | 47.0<br>1.87 | 47.1<br>1.87 | 47.3<br>1.87 | 47.4<br>1.87 | 47.6<br>1.87 | 47.8 |
| 118<br>( 48)                   | 45.2<br>1.56 | 45.3<br>1.56 | 45.5<br>1.56 | 45.6<br>1.56                  | 45.8<br>1.56       | 46.0<br>1.56         | 46.1<br>1.56 | 46.3<br>1.56 | 46.4<br>1.56 | 46.6<br>1.56 | 46.7<br>1.56 | 46.9<br>1.56 | 47.0<br>1.56 | 47.2<br>1.56 | 47.4<br>1.56 | 47.5 | 46.0<br>1.86 | 46.1<br>1.86 | 46.3<br>1.86 | 46.4<br>1.86 | 46.6<br>1.86 | 47.5 |
| 120<br>( 49)                   | 44.9<br>1.55 | 45.1<br>1.55 | 45.3<br>1.55 | 45.4<br>1.55                  | 45.6<br>1.55       | 45.7<br>1.55         | 45.9<br>1.55 | 46.0<br>1.55 | 46.2<br>1.55 | 46.3<br>1.55 | 46.5<br>1.55 | 46.6<br>1.55 | 46.8<br>1.55 | 47.0<br>1.55 | 47.1<br>1.55 | 47.3 | 46.0<br>1.85 | 46.1<br>1.85 | 46.3<br>1.85 | 46.4<br>1.85 | 46.6<br>1.85 | 47.3 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 12)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

71-09-226



MAINTENANCE MANUAL

TRIM TABLES - (JT8D-9)

BAROMETRIC PRESSURE 30.5 TO 32.0 INCHES OF MERCURY ABSOLUTE

NOTE: For general instructions for use of engine trim data and a trim table locator tabulation, refer to 71-09-210.

This trim data also applies to JT8D-9A.

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227

01

Page 201  
Aug 01/05

| OAT OF (OC) | BAROMETER INS. MERCURY |      |                  | DATA PLATE CORR. %N2 | IDLE PPM %N2 | DATA PLATE PT7 | PP PT7<br>PP EPR<br>TO EPR | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 32.0 |
|-------------|------------------------|------|------------------|----------------------|--------------|----------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | 50.3                   | 50.5 | 50.7             |                      |              |                |                            | 50.8 | 51.0 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |      |      |      |
| -38 (-39)   | -8.68                  | 55.2 | PP PT7<br>PP EPR | 2.02                 | 2.01         | 2.01           | 2.00                       | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
| -36 (-38)   | -8.49                  | 55.0 | PP PT7<br>PP EPR | 2.02                 | 2.01         | 2.01           | 2.00                       | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
| -34 (-37)   | -8.31                  | 54.9 | PP PT7<br>PP EPR | 2.02                 | 2.01         | 2.01           | 2.00                       | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
| -22 (-36)   | -8.13                  | 54.7 | PP PT7<br>PP EPR | 2.02                 | 2.01         | 2.01           | 2.00                       | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
| -30 (-34)   | -7.94                  | 54.6 | PP PT7<br>PP EPR | 2.02                 | 2.01         | 2.01           | 2.00                       | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
| -28 (-33)   | -7.76                  | 54.5 | PP PT7<br>PP EPR | 2.02                 | 2.01         | 2.01           | 2.00                       | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
| -26 (-32)   | -7.58                  | 54.4 | PP PT7<br>PP EPR | 2.02                 | 2.01         | 2.01           | 2.00                       | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 1)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

71-09-227

D54831

| OAT OF (OC) | BARMETER INS. MERCURY |        |        | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 3C.5 | 30.6 | 30.7 | 30.8 | 30.9 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 32.0 |
|-------------|-----------------------|--------|--------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             | DATA PLATE CORR. %N2  | PP PT7 | PP EPR |                      |              |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| -24 (-31)   | -7.40                 | 54.3   | 50.3   | 50.5                 | 50.7         | 50.8           | 51.0 | 51.1 | 51.1 | 51.1 | 51.1 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |
| -22 (-30)   | -7.21                 | 54.2   | 50.3   | 50.5                 | 50.7         | 50.8           | 51.0 | 51.1 | 51.1 | 51.1 | 51.1 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |
| -20 (-29)   | -7.03                 | 54.1   | 50.3   | 50.5                 | 50.7         | 50.8           | 51.0 | 51.1 | 51.1 | 51.1 | 51.1 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |
| -18 (-28)   | -6.85                 | 54.1   | 50.3   | 50.5                 | 50.7         | 50.8           | 51.0 | 51.1 | 51.1 | 51.1 | 51.1 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |
| -16 (-27)   | -6.66                 | 54.0   | 50.3   | 50.5                 | 50.7         | 50.8           | 51.0 | 51.1 | 51.1 | 51.1 | 51.1 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |
| -14 (-26)   | -6.48                 | 54.0   | 50.3   | 50.5                 | 50.7         | 50.8           | 51.0 | 51.1 | 51.1 | 51.1 | 51.1 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |
| -12 (-24)   | -6.30                 | 54.0   | 50.3   | 50.5                 | 50.7         | 50.8           | 51.0 | 51.1 | 51.1 | 51.1 | 51.1 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |

\* USE COLD WEATHER PART POWER TRIM STOP FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP  
- LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 2)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227



| BARMETER          |                               | INS. MERCURY         |  | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 32.0 |
|-------------------|-------------------------------|----------------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| OAT<br>OF<br>(OC) | DATA<br>PLATE<br>CORP.<br>%N2 | DATA<br>PLATE<br>PT7 |  | 50.3 | 50.5 | 50.7 | 50.8 | 51.0 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |
|                   | IDLE<br>RPM<br>%N2            |                      |  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                   |                               |                      |  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4<br>(-16)        |                               |                      |  | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.8 | 58.9 | 59.1 | 59.3 | 59.5 | 59.7 | 59.9 | 60.1 | 60.3 | 60.5 |
|                   |                               |                      |  | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 |
|                   |                               |                      |  | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    |
| 6<br>(-14)        |                               |                      |  | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
|                   |                               |                      |  | 57.3 | 57.5 | 57.7 | 57.9 | 58.1 | 58.2 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.7 | 59.9 | 60.1 |
|                   |                               |                      |  | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 |
| 8<br>(-13)        |                               |                      |  | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
|                   |                               |                      |  | 57.0 | 57.2 | 57.4 | 57.5 | 57.7 | 57.9 | 58.1 | 58.3 | 58.5 | 58.7 | 58.9 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 |
|                   |                               |                      |  | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 |
| 10<br>(-12)       |                               |                      |  | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
|                   |                               |                      |  | 56.7 | 56.9 | 57.0 | 57.2 | 57.4 | 57.6 | 57.8 | 58.0 | 58.2 | 58.3 | 58.5 | 58.7 | 58.9 | 59.1 | 59.3 | 59.5 |
|                   |                               |                      |  | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 |
| 12<br>(-11)       |                               |                      |  | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
|                   |                               |                      |  | 56.4 | 56.5 | 56.7 | 56.9 | 57.1 | 57.3 | 57.5 | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.8 | 58.9 | 59.1 |
|                   |                               |                      |  | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 |
| 14<br>(-10)       |                               |                      |  | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
|                   |                               |                      |  | 56.0 | 56.2 | 56.4 | 56.6 | 56.8 | 57.0 | 57.1 | 57.3 | 57.5 | 57.7 | 57.9 | 58.1 | 58.2 | 58.4 | 58.6 | 58.8 |
|                   |                               |                      |  | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 |
| 16<br>(-9)        |                               |                      |  | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |
|                   |                               |                      |  | 55.7 | 55.9 | 56.1 | 56.3 | 56.4 | 56.6 | 56.8 | 57.0 | 57.2 | 57.4 | 57.5 | 57.7 | 57.9 | 58.1 | 58.3 | 58.5 |
|                   |                               |                      |  | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 |

\* USE COLD WEATHER PART POWER TRIM STOP  
FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP  
- LEFT OF STAGGERED LINE USE "S" STOP

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 4)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227

| BAROMETER OAT OF (OC) | INS. MERCURY         |                |                | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 32.0 |      |
|-----------------------|----------------------|----------------|----------------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       | DATA PLATE CORR. %N2 | DATA PLATE PT7 | DATA PLATE PT7 |                      |              |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 18 (-8)               | -3.59                | 55.3           | 55.4           | 55.4                 | 55.3         | 55.3           | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 |
| 20 (-7)               | -3.41                | 55.4           | 55.4           | 55.4                 | 55.4         | 55.4           | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 | 55.4 |
| 22 (-6)               | -3.23                | 55.5           | 55.5           | 55.5                 | 55.5         | 55.5           | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 |
| 24 (-4)               | -3.05                | 55.6           | 55.6           | 55.6                 | 55.6         | 55.6           | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 | 55.6 |
| 26 (-3)               | -2.88                | 55.7           | 55.7           | 55.7                 | 55.7         | 55.7           | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 | 55.7 |
| 28 (-2)               | -2.70                | 55.8           | 55.8           | 55.8                 | 55.8         | 55.8           | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 | 55.8 |
| 30 (-1)               | -2.52                | 55.9           | 55.9           | 55.9                 | 55.9         | 55.9           | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 | 55.9 |

\* USF COLD WEATHER PART POWER TRIM STOP  
FOR TARGETS TO -RIGHT OF STAGGERED LINE USE "C" STOP  
- LEFT OF STAGGERED LINE USE "S" STOP

Trim Table Locator Tabulation  
Figure 201 (Sheet 5)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227

D54839

| BAROMETER OAT OF (OC) | INS. MERCURY |      | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7             | 30.5                 | 30.6                 | 30.7                 | 30.8                 | 30.9                 | 31.0                 | 31.1                 | 31.2                 | 31.3                 | 31.4                 | 31.5                 | 31.6                 | 31.7                 | 31.8                 | 31.9                 | 32.0                 |
|-----------------------|--------------|------|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                       | 50.3         | 50.5 |                      |              |                            | 50.7                 | 50.8                 | 51.0                 | 51.1                 | 51.3                 | 51.5                 | 51.6                 | 51.8                 | 52.0                 | 52.1                 | 52.3                 | 52.5                 | 52.6                 | 52.8                 |                      |                      |
| 32 ( 0)               |              |      |                      | 56.0         | PP PT7<br>PP EPR<br>TO EPR | 60.3<br>1.98<br>2.02 | 60.5<br>1.98<br>2.01 | 60.7<br>1.98<br>2.01 | 60.8<br>1.98<br>2.00 | 61.0<br>1.98<br>2.00 | 61.2<br>1.98<br>2.00 | 61.4<br>1.98<br>1.99 | 61.6<br>1.98<br>1.99 | 61.8<br>1.98<br>1.98 | 62.0<br>1.98<br>1.98 | 55.1<br>*<br>1.98    | 55.3<br>*<br>1.97    | 55.4<br>*<br>1.97    | 55.6<br>*<br>1.96    | 55.8<br>*<br>1.96    | 56.0<br>*<br>1.95    |
| 34 ( 1)               |              |      |                      | 56.1         | PP PT7<br>PP EPR<br>TO EPR | 60.0<br>1.97<br>2.02 | 60.2<br>1.97<br>2.01 | 60.4<br>1.97<br>2.01 | 60.6<br>1.97<br>2.00 | 60.8<br>1.97<br>2.00 | 61.0<br>1.97<br>2.00 | 61.1<br>1.97<br>1.99 | 61.3<br>1.97<br>1.99 | 61.5<br>1.97<br>1.98 | 61.7<br>1.97<br>1.98 | 61.9<br>1.97<br>1.98 | 62.1<br>1.97<br>1.97 | 62.3<br>1.97<br>1.97 | 62.5<br>1.97<br>1.96 | 62.7<br>1.97<br>1.96 | 63.0<br>1.97<br>1.95 |
| 36 ( 2)               |              |      |                      | 56.2         | PP PT7<br>PP EPR<br>TO EPR | 59.7<br>1.96<br>2.02 | 59.9<br>1.96<br>2.01 | 60.1<br>1.96<br>2.01 | 60.3<br>1.96<br>2.00 | 60.5<br>1.96<br>2.00 | 60.7<br>1.96<br>2.00 | 60.9<br>1.96<br>1.99 | 61.1<br>1.96<br>1.99 | 61.3<br>1.96<br>1.98 | 61.5<br>1.96<br>1.98 | 61.7<br>1.96<br>1.98 | 61.9<br>1.96<br>1.97 | 62.1<br>1.96<br>1.97 | 62.3<br>1.96<br>1.96 | 62.5<br>1.96<br>1.96 | 62.7<br>1.96<br>1.95 |
| 38 ( 3)               |              |      |                      | 56.3         | PP PT7<br>PP EPR<br>TO EPR | 59.4<br>1.95<br>2.02 | 59.6<br>1.95<br>2.01 | 59.8<br>1.95<br>2.01 | 60.0<br>1.95<br>2.00 | 60.2<br>1.95<br>2.00 | 60.4<br>1.95<br>2.00 | 60.6<br>1.95<br>1.99 | 60.8<br>1.95<br>1.99 | 61.0<br>1.95<br>1.98 | 61.2<br>1.95<br>1.98 | 61.4<br>1.95<br>1.98 | 61.6<br>1.95<br>1.98 | 61.8<br>1.95<br>1.97 | 62.0<br>1.95<br>1.97 | 62.2<br>1.95<br>1.96 | 62.4<br>1.95<br>1.96 |
| 40 ( 4)               |              |      |                      | 56.4         | PP PT7<br>PP EPR<br>TO EPR | 59.1<br>1.94<br>2.02 | 59.3<br>1.94<br>2.01 | 59.5<br>1.94<br>2.01 | 59.7<br>1.94<br>2.00 | 59.9<br>1.94<br>2.00 | 60.1<br>1.94<br>2.00 | 60.3<br>1.94<br>1.99 | 60.5<br>1.94<br>1.99 | 60.7<br>1.94<br>1.98 | 60.9<br>1.94<br>1.98 | 61.1<br>1.94<br>1.98 | 61.3<br>1.94<br>1.98 | 61.5<br>1.94<br>1.97 | 61.7<br>1.94<br>1.97 | 61.9<br>1.94<br>1.96 | 62.1<br>1.94<br>1.96 |
| 42 ( 6)               |              |      |                      | 56.5         | PP PT7<br>PP EPR<br>TO EPR | 58.8<br>1.93<br>2.02 | 59.0<br>1.93<br>2.01 | 59.2<br>1.93<br>2.01 | 59.4<br>1.93<br>2.00 | 59.6<br>1.93<br>2.00 | 59.8<br>1.93<br>2.00 | 60.0<br>1.93<br>1.99 | 60.2<br>1.93<br>1.99 | 60.4<br>1.93<br>1.98 | 60.6<br>1.93<br>1.98 | 60.8<br>1.93<br>1.98 | 61.0<br>1.93<br>1.98 | 61.2<br>1.93<br>1.97 | 61.4<br>1.93<br>1.97 | 61.6<br>1.93<br>1.96 | 61.8<br>1.93<br>1.96 |
| 44 ( 7)               |              |      |                      | 56.5         | PP PT7<br>PP EPR<br>TO EPR | 58.5<br>1.92<br>2.02 | 58.7<br>1.92<br>2.01 | 58.9<br>1.92<br>2.01 | 59.1<br>1.92<br>2.00 | 59.3<br>1.92<br>2.00 | 59.5<br>1.92<br>2.00 | 59.7<br>1.92<br>1.99 | 59.9<br>1.92<br>1.99 | 60.1<br>1.92<br>1.98 | 60.3<br>1.92<br>1.98 | 60.5<br>1.92<br>1.98 | 60.7<br>1.92<br>1.98 | 60.9<br>1.92<br>1.97 | 61.1<br>1.92<br>1.97 | 61.3<br>1.92<br>1.96 | 61.5<br>1.92<br>1.96 |

\* USE COLD WEATHER PART POWER TRIM STOP FOR TARGETS TO - RIGHT OF STAGGERED LINE USE "C" STOP  
- LEFT OF STAGGERED LINE USE "S" STOP  
APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 6)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227

D54841

| OAT OF (OC)  | BAROMETER INS. MERCURY |              |                | 30.5 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |  |  |  |  |
|--------------|------------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
|              | DATA PLATE CORR. %N2   | IDLE RPM %N2 | DATA PLATE PT7 | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 32.0 |      |  |  |  |  |  |  |  |
| 46<br>( 8 )  | -1.12                  | 56.6         | PP PT7         | 58.4 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 59.9 | 60.1 | 60.2 | 60.5 | 60.7 | 60.9 | 61.1 |      |  |  |  |  |  |  |  |
|              |                        |              | PP EPR         | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 |  |  |  |  |  |  |  |
|              |                        |              | TO EPR         | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |      |      |      |  |  |  |  |  |  |  |
| 43<br>( 9 )  | -.94                   | 56.7         | PP PT7         | 58.1 | 58.3 | 58.5 | 58.7 | 58.9 | 59.1 | 59.3 | 59.5 | 59.6 | 59.6 | 59.8 | 60.0 | 60.2 | 60.4 | 60.6 | 60.8 |      |  |  |  |  |  |  |  |
|              |                        |              | PP EPR         | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 |  |  |  |  |  |  |  |
|              |                        |              | TC EPR         | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |      |      |      |  |  |  |  |  |  |  |
| 50<br>( 10 ) | -.77                   | 56.8         | PP PT7         | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.3 | 59.5 | 59.7 | 59.9 | 60.1 | 60.3 | 60.5 |      |  |  |  |  |  |  |  |
|              |                        |              | PP EPR         | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 |  |  |  |  |  |  |  |
|              |                        |              | TC EPR         | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |      |      |      |  |  |  |  |  |  |  |
| 52<br>( 11 ) | -.60                   | 56.9         | PP PT7         | 57.4 | 57.5 | 57.7 | 57.9 | 58.1 | 58.3 | 58.5 | 58.7 | 58.9 | 59.0 | 59.2 | 59.4 | 59.6 | 59.8 | 60.0 | 60.2 |      |  |  |  |  |  |  |  |
|              |                        |              | PP EPR         | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 |  |  |  |  |  |  |  |
|              |                        |              | TO EPR         | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |      |      |      |  |  |  |  |  |  |  |
| 54<br>( 12 ) | -.43                   | 57.0         | PP PT7         | 57.1 | 57.2 | 57.4 | 57.6 | 57.8 | 58.0 | 58.2 | 58.4 | 58.6 | 58.7 | 58.9 | 59.1 | 59.3 | 59.5 | 59.7 | 59.9 |      |  |  |  |  |  |  |  |
|              |                        |              | PP EPR         | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 | 1.87 |  |  |  |  |  |  |  |
|              |                        |              | TO EPR         | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |      |      |      |  |  |  |  |  |  |  |
| 56<br>( 13 ) | -.26                   | 57.1         | PP PT7         | 56.8 | 57.0 | 57.1 | 57.3 | 57.5 | 57.7 | 57.9 | 58.1 | 58.3 | 58.4 | 58.6 | 58.8 | 59.0 | 59.2 | 59.4 | 59.6 |      |  |  |  |  |  |  |  |
|              |                        |              | PP EPR         | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 | 1.86 |  |  |  |  |  |  |  |
|              |                        |              | TO EPR         | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |      |      |      |  |  |  |  |  |  |  |
| 58<br>( 14 ) | -.09                   | 57.2         | PP PT7         | 56.5 | 56.7 | 56.8 | 57.0 | 57.2 | 57.4 | 57.6 | 57.8 | 58.0 | 58.1 | 58.3 | 58.5 | 58.7 | 58.9 | 59.1 | 59.3 |      |  |  |  |  |  |  |  |
|              |                        |              | PP EPR         | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 |  |  |  |  |  |  |  |
|              |                        |              | TO EPR         | 2.02 | 2.01 | 2.01 | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.95 |      |      |      |  |  |  |  |  |  |  |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
 Figure 201 (Sheet 7)

EFFECTIVITY  
 JT8D-9, JT8D-9A ENGINES

**71-09-227**



MAINTENANCE MANUAL

| OAT OF (OC) | BAROMETER INS. MERCURY |              |              | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 30.5         | 30.6         | 30.7         | 30.8         | 30.9         | 31.0         | 31.1         | 31.2         | 31.3         | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 32.0 |      |
|-------------|------------------------|--------------|--------------|----------------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------|------|------|------|------|------|------|------|
|             | 50.3                   | 50.5         | 50.7         |                      |              |                | 50.8         | 51.0         | 51.1         | 51.3         | 51.5         | 51.6         | 51.8         | 52.0         | 52.1         | 52.3 | 52.5 | 52.6 | 52.8 |      |      |      |      |
| 60 ( 16)    | 56.2<br>1.84           | 56.4<br>1.84 | 56.5<br>1.84 | 56.7<br>1.84         | 56.9<br>1.84 | 57.1<br>1.84   | 57.3<br>1.84 | 57.5<br>1.84 | 57.7<br>1.84 | 57.8<br>1.84 | 58.0<br>1.84 | 58.2<br>1.84 | 58.4<br>1.84 | 58.6<br>1.84 | 58.8<br>1.84 | 59.9 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.95 |
| 62 ( 17)    | 55.9<br>1.83           | 56.1<br>1.83 | 56.2<br>1.83 | 56.4<br>1.83         | 56.6<br>1.83 | 56.8<br>1.83   | 57.0<br>1.83 | 57.2<br>1.83 | 57.3<br>1.83 | 57.5<br>1.83 | 57.7<br>1.83 | 57.9<br>1.83 | 58.1<br>1.83 | 58.3<br>1.83 | 58.4<br>1.83 | 59.6 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.95 |
| 64 ( 18)    | 55.6<br>1.82           | 55.8<br>1.82 | 55.9<br>1.82 | 56.1<br>1.82         | 56.3<br>1.82 | 56.5<br>1.82   | 56.7<br>1.82 | 56.8<br>1.82 | 57.0<br>1.82 | 57.2<br>1.82 | 57.4<br>1.82 | 57.6<br>1.82 | 57.8<br>1.82 | 57.9<br>1.82 | 58.1<br>1.82 | 58.3 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.95 |
| 66 ( 19)    | 55.3<br>1.81           | 55.4<br>1.81 | 55.6<br>1.81 | 55.8<br>1.81         | 56.0<br>1.81 | 56.2<br>1.81   | 56.4<br>1.81 | 56.5<br>1.81 | 56.7<br>1.81 | 56.8<br>1.81 | 56.9<br>1.81 | 57.1<br>1.81 | 57.3<br>1.81 | 57.4<br>1.81 | 57.6<br>1.81 | 58.0 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.95 |
| 68 ( 20)    | 55.0<br>1.80           | 55.1<br>1.80 | 55.3<br>1.80 | 55.5<br>1.80         | 55.7<br>1.80 | 55.9<br>1.80   | 56.0<br>1.80 | 56.2<br>1.80 | 56.4<br>1.80 | 56.6<br>1.80 | 56.8<br>1.80 | 56.9<br>1.80 | 57.1<br>1.80 | 57.3<br>1.80 | 57.5<br>1.80 | 57.7 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.95 |
| 70 ( 21)    | 54.7<br>1.79           | 54.8<br>1.79 | 55.0<br>1.79 | 55.2<br>1.79         | 55.4<br>1.79 | 55.6<br>1.79   | 55.7<br>1.79 | 55.9<br>1.79 | 56.1<br>1.79 | 56.3<br>1.79 | 56.4<br>1.79 | 56.6<br>1.79 | 56.8<br>1.79 | 57.0<br>1.79 | 57.2<br>1.79 | 57.3 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.95 |
| 72 ( 22)    | 54.3<br>1.78           | 54.5<br>1.78 | 54.7<br>1.78 | 54.9<br>1.78         | 55.1<br>1.78 | 55.2<br>1.78   | 55.4<br>1.78 | 55.6<br>1.78 | 55.8<br>1.78 | 55.9<br>1.78 | 56.1<br>1.78 | 56.3<br>1.78 | 56.5<br>1.78 | 56.7<br>1.78 | 56.8<br>1.78 | 57.0 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.95 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 8)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227



MAINTENANCE MANUAL

| OAT OF (°C) | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE CORR. %N2 | DATA PLATE PT7 | BARMETER INS. MERCURY |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|----------------------|--------------|----------------------|----------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |                      |              |                      |                | 20.5                  | 30.6 | 30.7 | 30.8 | 30.9 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 |
| 74 ( 23)    | +1.26                | 57.9         | 50.3                 | 54.0           | 50.5                  | 50.7 | 50.8 | 51.0 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 |
| 76 ( 24)    | +1.43                | 58.0         | 53.7                 | 54.2           | 54.1                  | 54.4 | 54.6 | 54.7 | 54.8 | 55.1 | 55.3 | 55.4 | 55.6 | 55.8 | 56.0 | 56.1 | 56.3 | 56.5 | 56.7 |
| 78 ( 26)    | +1.60                | 58.0         | 53.4                 | 53.6           | 53.7                  | 53.9 | 54.1 | 54.4 | 54.6 | 54.8 | 54.9 | 55.1 | 55.2 | 55.5 | 55.6 | 55.9 | 56.0 | 56.2 | 56.3 |
| 80 ( 27)    | +1.77                | 58.1         | 53.1                 | 53.2           | 53.4                  | 53.6 | 53.8 | 54.1 | 54.3 | 54.5 | 54.6 | 54.8 | 55.0 | 55.1 | 55.3 | 55.5 | 55.7 | 55.8 | 56.0 |
| 82 ( 28)    | +1.94                | 58.2         | 52.8                 | 52.9           | 53.1                  | 53.3 | 53.4 | 53.8 | 54.0 | 54.1 | 54.3 | 54.5 | 54.6 | 54.8 | 55.0 | 55.2 | 55.3 | 55.5 | 55.7 |
| 84 ( 29)    | +2.10                | 58.3         | 52.4                 | 52.6           | 52.8                  | 53.0 | 53.1 | 53.5 | 53.6 | 53.8 | 54.0 | 54.1 | 54.3 | 54.5 | 54.7 | 54.8 | 54.9 | 55.0 | 55.2 |
| 86 ( 30)    | +2.27                | 58.4         | 52.1                 | 52.3           | 52.5                  | 52.6 | 52.8 | 53.1 | 53.3 | 53.5 | 53.6 | 53.8 | 54.0 | 54.2 | 54.3 | 54.5 | 54.7 | 54.8 | 55.0 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 9)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227

| OAT OF (°C) | BAROMETER INS. MERCURY |                |        |        | DATA PLATE CORR. %N2 | IDLE RPM %N2 | DATA PLATE PT7 | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 32.0 |        |
|-------------|------------------------|----------------|--------|--------|----------------------|--------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
|             | DATA PLATE CORR. %N2   | DATA PLATE PT7 | PP PT7 | PP EPR |                      |              |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | TC EPR |
| 88 ( 31)    | +2.44                  |                | 58.5   | 50.3   | 50.5                 | 50.7         | 50.8           | 51.0 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.7 | 52.9 | 53.1 | 53.2 | 53.4 | 52.8   |
|             |                        |                |        | 51.8   | 52.0                 | 52.1         | 52.3           | 52.5 | 52.7 | 52.8 | 53.0 | 53.2 | 53.3 | 53.5 | 53.7 | 53.8 | 54.0 | 54.2 | 54.3 | 54.4 | 54.5 | 54.6 | 54.7 | 54.8   |
|             |                        |                |        | 1.70   | 1.70                 | 1.70         | 1.70           | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70   |
|             |                        |                |        | 2.01   | 2.00                 | 2.00         | 2.00           | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.95 | 1.95   |
| 90 ( 32)    | +2.61                  |                | 58.5   | 51.5   | 51.7                 | 51.8         | 52.0           | 52.2 | 52.3 | 52.5 | 52.7 | 52.8 | 53.0 | 53.2 | 53.3 | 53.5 | 53.7 | 53.8 | 54.0 | 54.1 | 54.2 | 54.3 | 54.4 | 54.5   |
|             |                        |                |        | 1.69   | 1.69                 | 1.69         | 1.69           | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69   |
|             |                        |                |        | 2.00   | 2.00                 | 2.00         | 2.00           | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.95 | 1.95   |
| 92 ( 33)    | +2.77                  |                | 58.6   | 51.2   | 51.4                 | 51.5         | 51.7           | 51.9 | 52.0 | 52.2 | 52.4 | 52.5 | 52.7 | 52.9 | 53.0 | 53.2 | 53.4 | 53.5 | 53.7 | 53.8 | 54.0 | 54.1 | 54.2 | 54.3   |
|             |                        |                |        | 1.68   | 1.68                 | 1.68         | 1.68           | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68 | 1.68   |
|             |                        |                |        | 2.00   | 2.00                 | 2.00         | 2.00           | 2.00 | 2.00 | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.95 | 1.95   |
| 94 ( 34)    | +2.94                  |                | 58.7   | 50.9   | 51.1                 | 51.2         | 51.4           | 51.6 | 51.7 | 51.9 | 52.1 | 52.2 | 52.4 | 52.6 | 52.7 | 52.9 | 53.1 | 53.2 | 53.4 | 53.5 | 53.7 | 53.8 | 54.0 | 52.8   |
|             |                        |                |        | 1.67   | 1.67                 | 1.67         | 1.67           | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67   |
|             |                        |                |        | 1.99   | 1.99                 | 1.99         | 1.99           | 1.99 | 1.99 | 1.98 | 1.98 | 1.98 | 1.98 | 1.97 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.95 | 1.95   |
| 96 ( 36)    | +3.11                  |                | 58.8   | 50.6   | 50.8                 | 50.9         | 51.1           | 51.3 | 51.4 | 51.6 | 51.8 | 51.9 | 52.1 | 52.3 | 52.4 | 52.6 | 52.8 | 52.9 | 53.1 | 53.2 | 53.4 | 53.5 | 53.7 | 52.8   |
|             |                        |                |        | 1.66   | 1.66                 | 1.66         | 1.66           | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66   |
|             |                        |                |        | 1.98   | 1.98                 | 1.98         | 1.98           | 1.98 | 1.98 | 1.97 | 1.97 | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.95 | 1.95   |
| 98 ( 37)    | +3.27                  |                | 58.9   | 50.3   | 50.5                 | 50.6         | 50.8           | 51.0 | 51.1 | 51.3 | 51.5 | 51.6 | 51.8 | 52.0 | 52.1 | 52.3 | 52.5 | 52.6 | 52.8 | 52.9 | 53.1 | 53.2 | 53.4 | 52.8   |
|             |                        |                |        | 1.65   | 1.65                 | 1.65         | 1.65           | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65   |
|             |                        |                |        | 1.96   | 1.96                 | 1.96         | 1.96           | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96 | 1.95 | 1.95   |
| 100 ( 38)   | +3.44                  |                | 58.0   | 50.0   | 50.2                 | 50.3         | 50.5           | 50.7 | 50.8 | 51.0 | 51.2 | 51.3 | 51.5 | 51.7 | 51.8 | 52.0 | 52.2 | 52.3 | 52.5 | 52.6 | 52.8 | 52.9 | 53.1 | 52.8   |
|             |                        |                |        | 1.64   | 1.64                 | 1.64         | 1.64           | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64 | 1.64   |
|             |                        |                |        | 1.95   | 1.95                 | 1.95         | 1.95           | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95   |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 10)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227





MAINTENANCE MANUAL

| BAROMETER<br>OAT<br>OF<br>(OC) | INS. MERCURY                  |           |              | DATA<br>PLATE<br>CORR.<br>%N2 | IDLE<br>RPM<br>%N2 | DATA<br>PLATE<br>PT7 | 30.5         | 30.6         | 30.7         | 30.8         | 30.9         | 31.0         | 31.1         | 31.2         | 31.3         | 31.4         | 31.5         | 31.6         | 31.7         | 31.8         | 31.9         | 32.0         |              |
|--------------------------------|-------------------------------|-----------|--------------|-------------------------------|--------------------|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                | DATA<br>PLATE<br>CORR.<br>%N2 | PP<br>PT7 | PP<br>EPR    |                               |                    |                      | TO<br>EPR    | PP<br>PT7    | PP<br>EPR    | TO<br>EPR    | PP<br>PT7    |
| 116<br>( 47)                   | +4.74                         | 59.6      | 47.9<br>1.57 | 48.1<br>1.57                  | 48.2<br>1.57       | 48.4<br>1.57         | 48.5<br>1.57 | 48.7<br>1.57 | 48.9<br>1.57 | 49.0<br>1.57 | 49.2<br>1.57 | 49.3<br>1.57 | 49.5<br>1.57 | 49.6<br>1.57 | 49.8<br>1.57 | 49.9<br>1.57 | 50.0<br>1.57 | 50.1<br>1.57 | 50.3<br>1.57 | 50.4<br>1.57 | 50.5<br>1.57 | 50.6<br>1.57 | 50.8<br>1.57 |
| 118<br>( 48)                   | +4.91                         | 59.7      | 47.7<br>1.56 | 48.0<br>1.56                  | 48.1<br>1.56       | 48.3<br>1.56         | 48.5<br>1.56 | 48.6<br>1.56 | 48.8<br>1.56 | 48.8<br>1.56 | 48.9<br>1.56 | 49.1<br>1.56 | 49.2<br>1.56 | 49.4<br>1.56 | 49.5<br>1.56 | 49.7<br>1.56 | 49.7<br>1.56 | 49.9<br>1.56 | 50.0<br>1.56 | 50.1<br>1.56 | 50.2<br>1.56 | 50.4<br>1.56 | 50.5<br>1.56 |
| 120<br>( 49)                   | +5.07                         | 59.8      | 47.4<br>1.55 | 47.7<br>1.55                  | 47.9<br>1.55       | 48.0<br>1.55         | 48.2<br>1.55 | 48.4<br>1.55 | 48.4<br>1.55 | 48.5<br>1.55 | 48.7<br>1.55 | 48.8<br>1.55 | 49.0<br>1.55 | 49.1<br>1.55 | 49.3<br>1.55 | 49.4<br>1.55 | 49.6<br>1.55 | 49.6<br>1.55 | 49.8<br>1.55 | 49.9<br>1.55 | 50.0<br>1.55 | 50.1<br>1.55 | 50.3<br>1.55 |

APPLICABLE TO PWA JT8D-9, -9A

Trim Table Locator Tabulation  
Figure 201 (Sheet 12)

EFFECTIVITY  
JT8D-9, JT8D-9A ENGINES

71-09-227

ENGINE COWLING - DESCRIPTION AND OPERATION

1. General

A. The engines are covered by cowl panels to provide a smooth airflow over the engines and to protect exterior engine components from damage. The cowl panels for each engine include a nose cowl, left and right hinged removable cowl panels and a fixed fairing (Fig. 1). A nose dome is also fitted to each engine. Titanium and steel fireshields are bonded to the inside of the outer skin in areas in which a fire may occur.

2. Engine Removable Cowl Panels

A. The engine left and right cowl panels fair with the engine nose cowl, with the fixed fairing attached to the engine, and with the thrust reverser fairing. Six hook latch fasteners attach the left and right cowl panels to the fixed fairing and serve as cowl hinges (Fig. 1). Two of these six latches on each cowl panel are safety latches which prevent an open cowl from being removed until the latches are depressed. The safety latches automatically trip into the locked position when the panels are closed. Hold open rods, installed in each panel, allow the panels to be propped in the open position. Safety pins are provided to lock the rods in either the open or stowed position. Six other hook latch fasteners join the left and right cowl panels together at the underside of the engine. A pin latch near the forward lower corner of the right cowl panel engages a fitting on the left cowl panel to provide a positive safety backup.

B. Port openings are provided in the cowl panels for the engine gear case breather, engine accessory draining, and exhausting engine accessory cooling air. Access doors are fitted on the left cowl for servicing the engine oil tank and the constant speed drive. Pressure relief doors are provided to relieve excessive pressure which could develop within the cowling during a fire or as a result of serious bleed air or pneumatic leakage.

C. An engine drain tank and overboard drain mast may be installed on the left cowl panel. The engines now have plugged pressurizing dump (P&D) valve drain ports. The P&D valve drain system may be either disconnected and capped, or removed. Additionally on these engines, the drain tank and mast are not required and may be removed from the left cowl panel. The side panels are interchangeable between nacelles, including the left panel, whether drain tanks and masts are installed or not.

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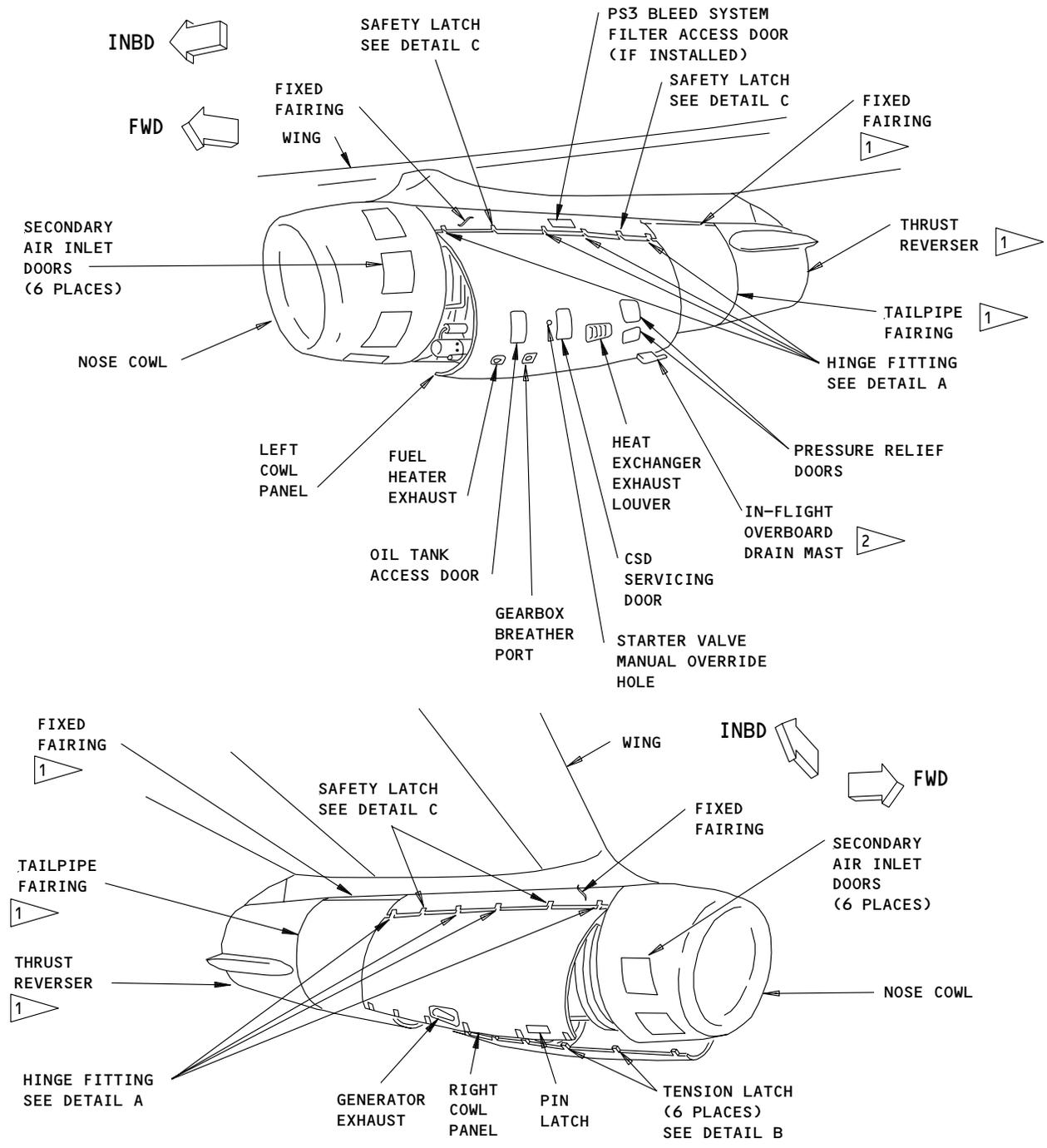
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**MAINTENANCE MANUAL**



- 1 REFER TO EXHAUST, CHAPTER 78
- 2 NOT REQUIRED ON ENGINES WITH PLUGGED P&D VALVE DRAIN PORTS

Engine Cowling  
Figure 1 (Sheet 1)

|             |     |
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3. Engine Nose Cowl

- A. The nose cowl is bolted to the forward flange of the engine inlet case. It is shaped to obtain a smooth airflow over the engine and to provide an optimum airflow to the engine compressor inlet (Fig. 2). Six secondary air inlet doors are arranged around the outer face of the nose cowl. These doors open, when inlet pressure is low, to provide additional airflow to the engine on the ground and in certain pitch attitudes. On some airplanes, water drain holes are provided for the doors located at the 4 and 8 o'clock positions.
- B. An anti-icing air inlet is located on the rear face of the nose cowl at approximately the 5 o'clock position. The nose cowl is anti-iced by engine bleed air (Ref Chapter 75, Air).

4. Engine Fixed Fairing

- A. A two-piece fixed fairing, attached to the engine, fairs with the left and right side cowl panels (Fig. 1). The fairing provides attach and hinge structure for the removable side cowl panels. Forward, mid, and aft fairings are attached to the wing and enclose the engine mounting installation. Design of the engine cowling and fairings allows for motion of the engines relative to the wing. On some left fixed fairings an access door is installed to facilitate servicing the PS3 bleed system filter without engine removal.

5. Engine Nose Cowl

- A. The nose cowl is bolted to the forward flange of the engine inlet case. It is shaped to obtain a smooth airflow over the engine and to provide an optimum airflow to the engine compressor inlet (Fig. 2). There are two kinds of nose cowl, early configuration and later configuration nose cowl. The early configuration nose cowl has six secondary air inlet doors arranged around the outer face of the nose cowl. These doors open, when inlet pressure is low, to provide additional airflow to the engine on the ground and in certain pitch attitudes. On some airplanes, water drain holes are provided for the doors located at the 4 and 8 o'clock positions. Later configuration nose cowls do not have secondary air inlet doors.
- B. An anti-icing air inlet is located on the rear face of the nose cowl at approximately the 5 o'clock position. The nose cowl is anti-iced by engine bleed air (Ref Chapter 75, Air).

6. Engine Fixed Fairing

- A. A two-piece fixed fairing, attached to the engine, fairs with the left and right side cowl panels (Fig. 1). The fairing provides attach and hinge structure for the removable side cowl panels. Forward, mid, and aft fairings are attached to the wing and enclose the engine mounting installation. Design of the engine cowling and fairings allows for motion of the engines relative to the wing. On some left fixed fairings, an access door is installed to facilitate servicing the PS3 bleed system filter without engine removal.

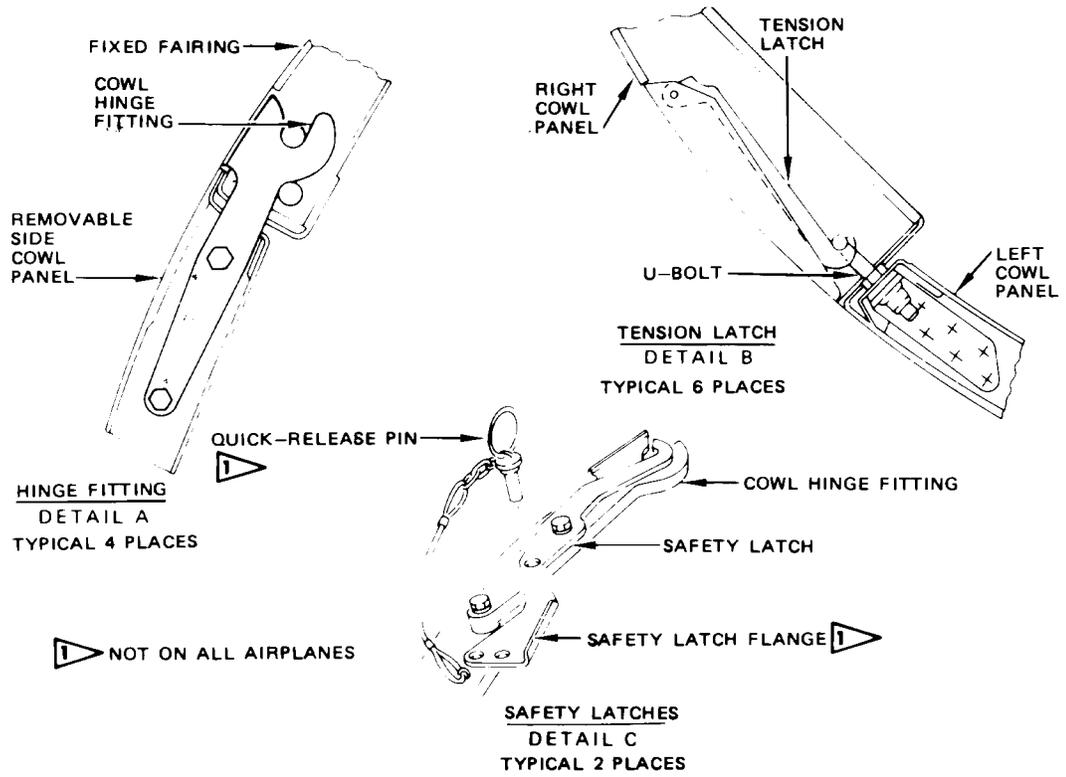
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Engine Cowling  
 Figure 1 (Sheet 2)

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**BOEING**  
**737**   
MAINTENANCE MANUAL

7. Nose Dome

- A. A nose dome is mounted on each engine to provide a smooth airflow over the front accessory drive housing (Fig. 2). There are two kinds of nose domes in use. The early configuration nose dome is shorter than the later configuration dome and is used only in conjunction with early configuration nose cowls. The later configuration nose dome is a longer drooping nose dome and is used only with the later configuration nose cowls. The nose dome covers the N1 tachometer generator. An inlet pressure sensing probe (Pt2) is mounted in the center of the nose dome. The nose dome is anti-iced by engine bleed air.

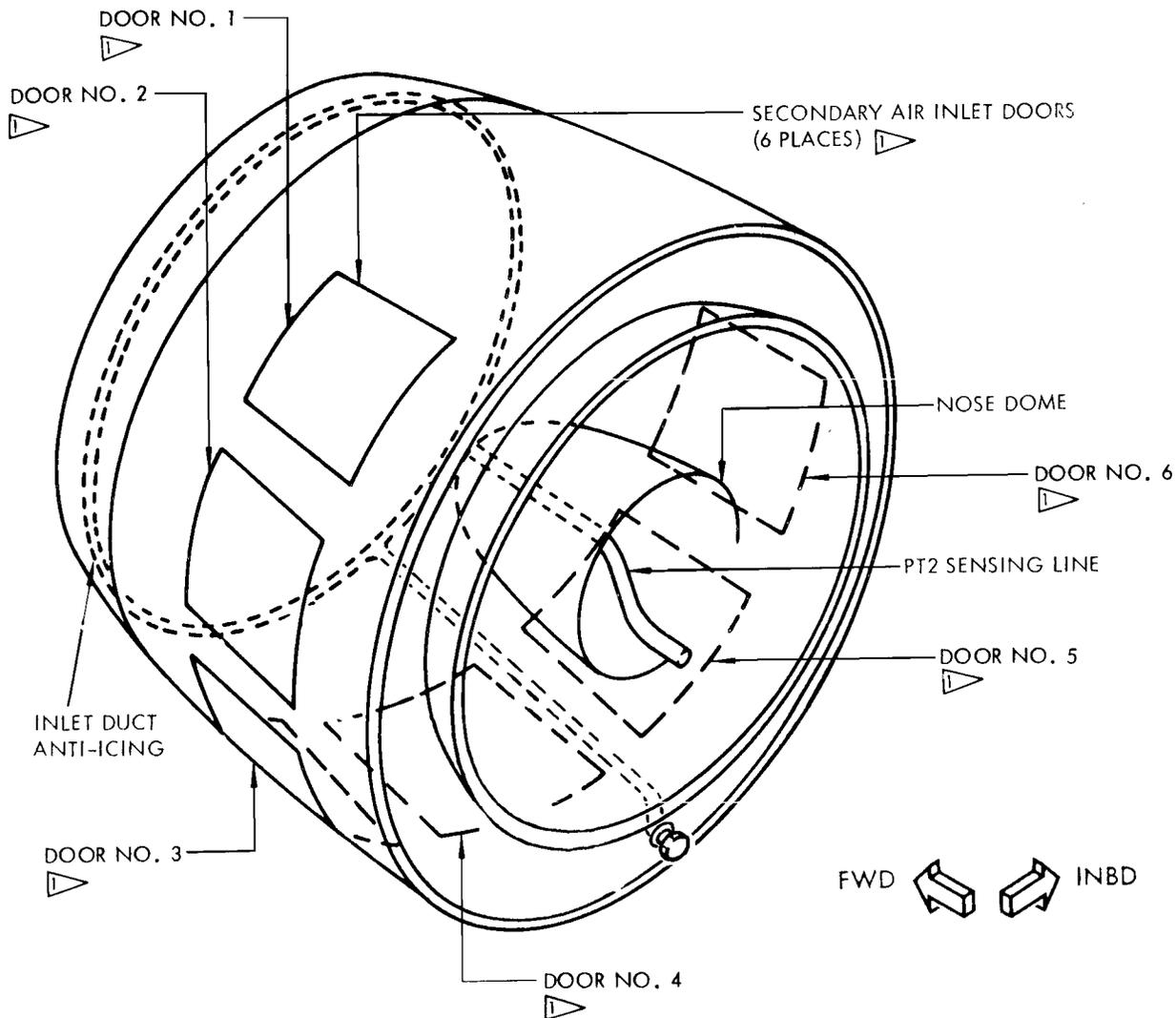
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 APPLICABLE ONLY TO EARLY CONFIGURATION NOSE COWLS, NOT INSTALLED ON LATER CONFIGURATION (FAT LIP) NOSE COWLS.

Engine Nose Cowl  
 Figure 2

|             |     |
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REMOVABLE COWL PANELS – REMOVAL/INSTALLATION

1. Remove Engine Side Removable Cowl Panels

- A. Open pin latch at forward lower corner of right side cowl panel.
- B. Release tension latches joining left and right removable cowl panels by inserting screwdriver into each latch slot and pulling screwdriver handle downwards (Details B and D, Fig. 401).
- C. Make sure ground test lock hook is not in locking position (down). Raise left cowl panel to open position, if applicable, remove quick-release safety pins from safety latches and depress two safety latches, and remove cowl from engine. Place cowl in suitable protective rack.

WARNING: LEFT COWL WEIGHS APPROXIMATELY 70 POUNDS.

- D. Raise right cowl panel to open position, if applicable, remove quick-release safety pins from safety latches and depress two safety latches, and remove cowl from engine. Place cowl in suitable protective rack.

WARNING: RIGHT COWL WEIGHS APPROXIMATELY 50 POUNDS.

CAUTION: ATTEMPTING TO OPEN LEFT COWL PANEL WITH GROUND TEST LOCK HOOK IN LOCKING POSITION CAN RESULT IN DAMAGE TO COWL PANEL.

2. Install Engine Side Removable Cowl Panels

CAUTION: ON ENGINES WITH OPERABLE P&D VALVE DRAIN SYSTEM, DO NOT INSTALL SIDE COWL WITH P&D VALVE DRAIN HOLE PLUGGED IN COWL. INSTALLATION OF PLUGGED COWL ON ENGINE WITH OPERABLE P&D VALVE DRAIN SYSTEM WILL RESULT IN FUEL COLLECTING IN THE COWL.

NOTE: Prior to closing left side cowl panel, depress spring retainer attached to gearbox oil breather duct on inside of cowl to ensure freedom of movement. Improper seating of the breather duct seal will result in accumulated oil precipitate in the lower cowl area due to seal leakage.

- A. Support cowl panel in fully open position and engage panel hinge hooks on fixed fairing hinge rollers (Fig. 401).
- B. Lower cowl panel into closed position.

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C. Install other side cowl panel.

NOTE: If applicable, install quick-release safety pins in left and right cowl panel safety latches.

D. Engage ground test lock hook (Ref Removable Cowl Panels, Adjustment/Test).

NOTE: The ground test lock hook may be in either the up (stowed) or down (locking) position when closing the cowling.

E. Check cowl frames and air duct clearance with modeling clay to ensure approximately 0.125 inch minimum clearance. Readjust air ducts if clearance is not adequate, recheck for air leaks if any relocation of ducts was necessary on next engine run.

F. With left and right cowl panels in closed position, close six tension latches (Fig. 401). If adjustment is required, refer to Removable Cowl Panels, Adjustment/Test.

CAUTION: DO NOT USE TOOLS TO FACILITATE CLOSING COWL PANEL LATCHES. USE HAND PRESSURE ONLY.

G. Close pin latch at lower forward corner of right cowl panel.

H. Check to make sure all latches are properly closed, that cowling fits with surrounding structure, that access doors operate properly, and that openings and drains are free of obstructions.

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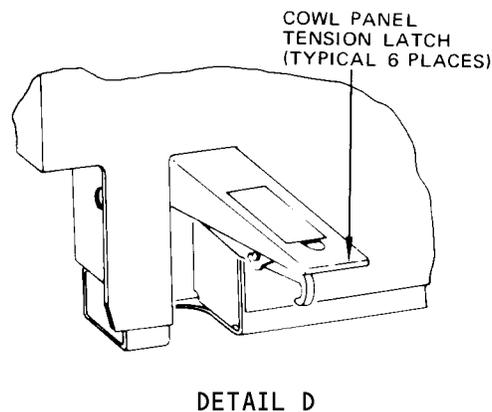
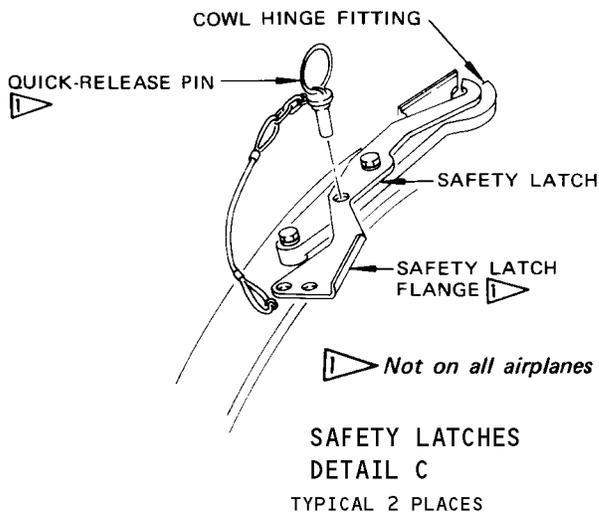
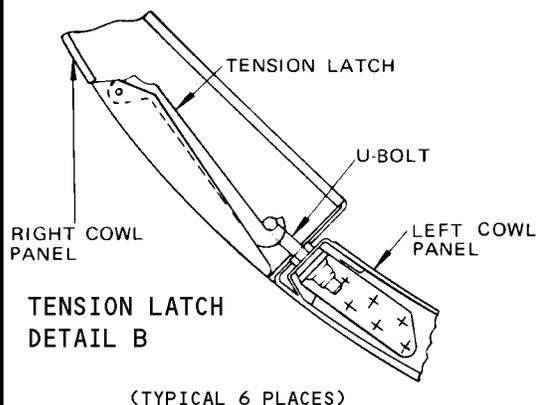
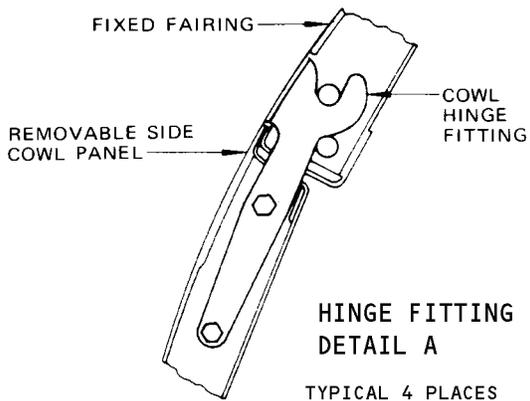
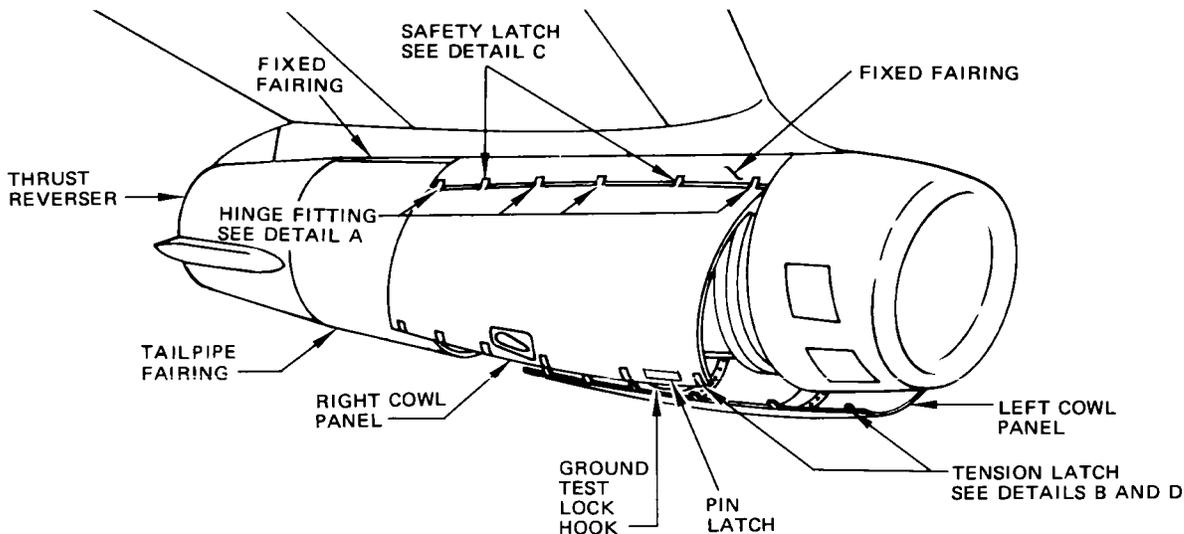
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**MAINTENANCE MANUAL**



Engine Cowl Installation  
Figure 401

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REMOVABLE COWL PANELS – ADJUSTMENT/TEST

1. Removable Cowl Panel Adjustment

A. General

- (1) Removable cowl panel adjustment is limited to the following:
  - (a) Cowl panel safety latches actuating force.
  - (b) Cowl panel tension latches closing force.
  - (c) Left cowl panel ground test lock hook for freedom from binding or slack.

B. Safety Latch Adjustment

- (1) Open left and right removable cowl panels. If installed, remove safety latch quick-release pins (Fig. 501).
- (2) Check force required to actuate each safety latch lever to unlatched position. Lever should actuate with an applied force of 9 ( $\pm 3$ ) pounds at handle end (near detent holes).
- (3) If actuating force is not within specified limit, vary number of washers under base of shear pin to obtain required force. Adding washers will increase force, removing washers will decrease force (Fig. 501).
- (4) Actuate safety latches to latched position. If applicable, install quick-release pins.
- (5) If no further maintenance is to be performed requiring removable cowl panels to be open, close left and right cowl panels.

C. Tension Latches Adjustment

- (1) If cowl panels are open, close and latch left and right removable cowl panels.
- (2) Open one latch and check force required to close latch. Latch should close with a force of 20 ( $\pm 5$ ) pounds applied to latch handle with adjacent latches closed.

**CAUTION:** DO NOT USE TOOLS WHEN CLOSING COWL PANEL LATCHES. USE HAND PRESSURE ONLY.

- (3) If closing force is not within specified limits, adjust U-bolt as follows:
  - (a) Loosen checknuts as necessary to provide adjustment clearance (Fig. 501).
  - (b) Equally adjust self-locking nuts (counterclockwise to lower closing force or clockwise to raise closing force) as required to obtain closing force within limits.
  - (c) Secure adjustment by tightening checknuts.
- (4) Repeat steps (2) through (3) for each cowl panel tension latch. Ensure adjacent latches are closed when checking closing force of each latch.
- (5) Make sure left and right removable cowl panels are closed and latched.

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### D. Ground Test Lock Hook Adjustment

- (1) Open left and right removable cowl panels.
- (2) If hook is in stowed position (up), disengage from hook retainer and manually pull left cowl panel closed using a force of 5 pounds maximum. Check that seal between engine and cowl panel drain tank is compressed sufficiently to prevent leakage and that the hook pivots under spring load into locking position (down) without binding or slack.
- (3) If hook does not function as specified, adjust wear clip position as necessary within range permitted by elongated mounting holes in clip. If locking position of hook interferes with closing of left cowl panel, adjust hook retainer position as necessary, within range permitted by elongated mounting hole in hook assembly, to eliminate interference (Fig. 501).
- (4) Close left and right removable cowl panels.

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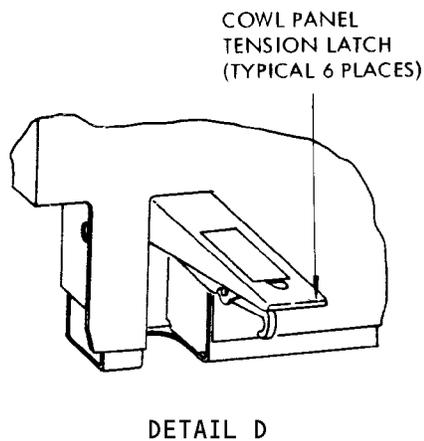
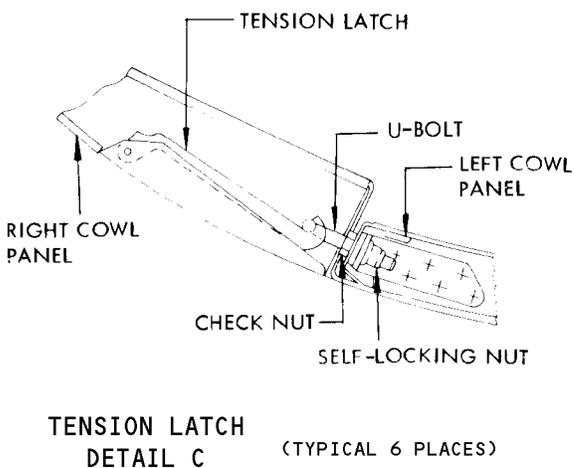
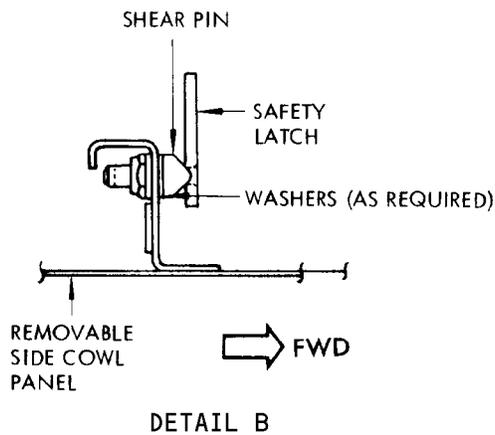
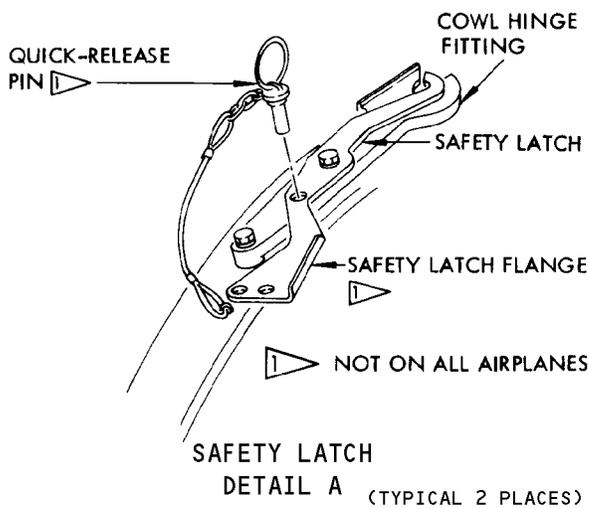
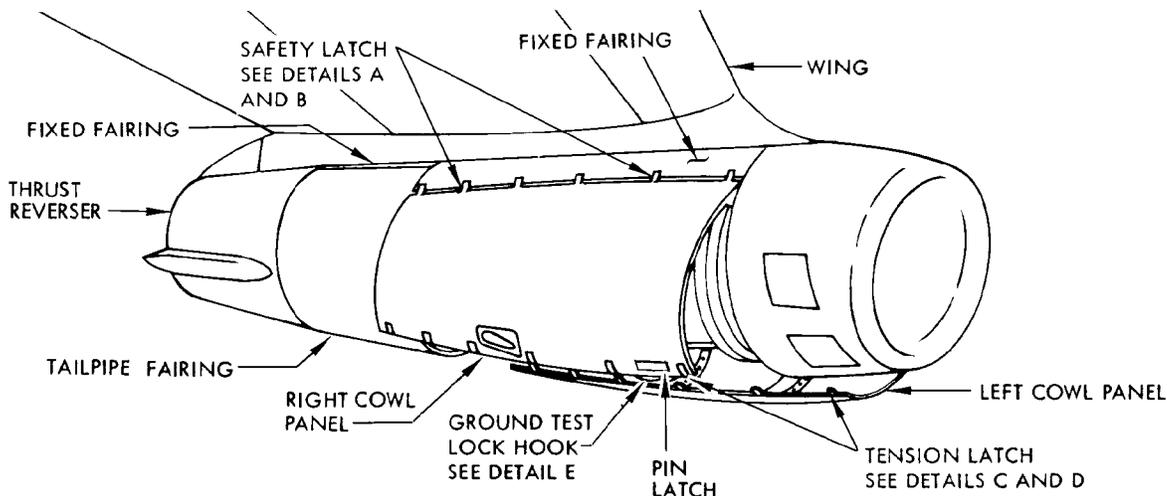
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Removable Cowl Panel Adjustment  
Figure 501

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## MAINTENANCE MANUAL

### REMOVABLE COWL PANELS – APPROVED REPAIRS

#### 1. General

A. Removable cowl panel repair instructions are limited to resealing of the engine drain tank, if installed. The drain tank is not required on cowl panels installed on engines with plugged pressurizing and dump (P&D) valve drain ports. Repair of the tank makes use of the same materials and techniques as for integral fuel tank repair. Refer to 28-11-0, Integral Fuel Tanks – Approved Repairs.

#### 2. Equipment and Materials

A. Sealant – BMS 5-45, class B-1/2

#### 3. Repair Engine Drain Tank

A. Remove left cowl panel.

B. Carefully drill out coverplate fasteners and remove coverplate.

C. Remove all exposed sealant and thoroughly clean all surfaces to be sealed.

D. Apply fillet seal around inside periphery of tank.

E. Apply fillet seal around drain mast on inside of tank.

F. Install coverplate with a faying surface seal between plate and tank.  
Install coverplate fasteners with sealant.

G. Install left cowl panel.

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## MAINTENANCE MANUAL

### FIXED FAIRING - REMOVAL/INSTALLATION

#### 1. General

A. The fixed fairing is a two-piece section of cowlings which fairs with the side removable cowl panels, the nose cowl, the thrust reverser fairing, and the strut midfairing. The fixed fairing's two parts are bolted together at six points. The assembly is then secured to the engine at six points.

#### 2. Prepare to Remove Fixed Fairing

- A. Remove side removable cowl panels.
- B. Remove engine-to-wing forward fairing (Ref 54-51-11/401).
- C. Remove the mid-fairing doors 5154, 5126 (left engine) or 5254, 5226 (right engine) (Ref 12-31-91/201).

#### 3. Remove Fixed Fairing

- A. Remove six bolts, washers, spacers, and locknuts which secure fixed fairing to engine support brackets (Details A, B, and C, Fig. 401).
- B. Disconnect drain hose from outboard half of fixed fairing.
- C. Remove six bolts and washers which secure left and right halves of fixed fairing together and remove fixed fairing (detail D).

**WARNING:** POSITION PERSONNEL ON EACH SIDE OF FIXED FAIRING TO SUPPORT AND REMOVE FAIRING HALVES WHEN ATTACHING BOLTS ARE REMOVED.

#### 4. Install Fixed Fairing

A. Position left and right halves of fixed fairing above engine. Install six bolts and washers finger tight to secure left and right halves of fixed fairings together (Detail D, Fig. 401).

**NOTE :** INSTALL ALL BOLTS FINGER TIGHT FIRST. IF THE TOP BOLTS ARE TIGHTENED FIRST, THE LOWER BOLTS WILL BE DIFFICULT TO ALIGN AND INSTALL.

- B. Position fixed fairings at six fixed fairing support brackets on engine. Check that hydraulic hose clearance exists between fan duct and fixed fairing.
- C. Install fasteners as indicated in Fig. 401 noting that bolt orientations and type of fasteners differ at each location. Tighten each locknut to torque of 50 to 70 pound-inches.

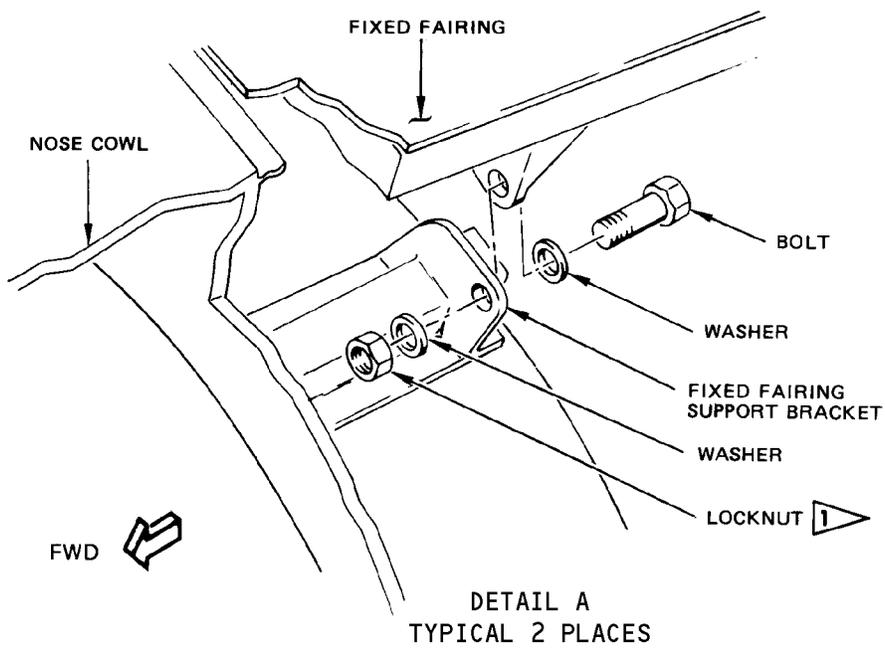
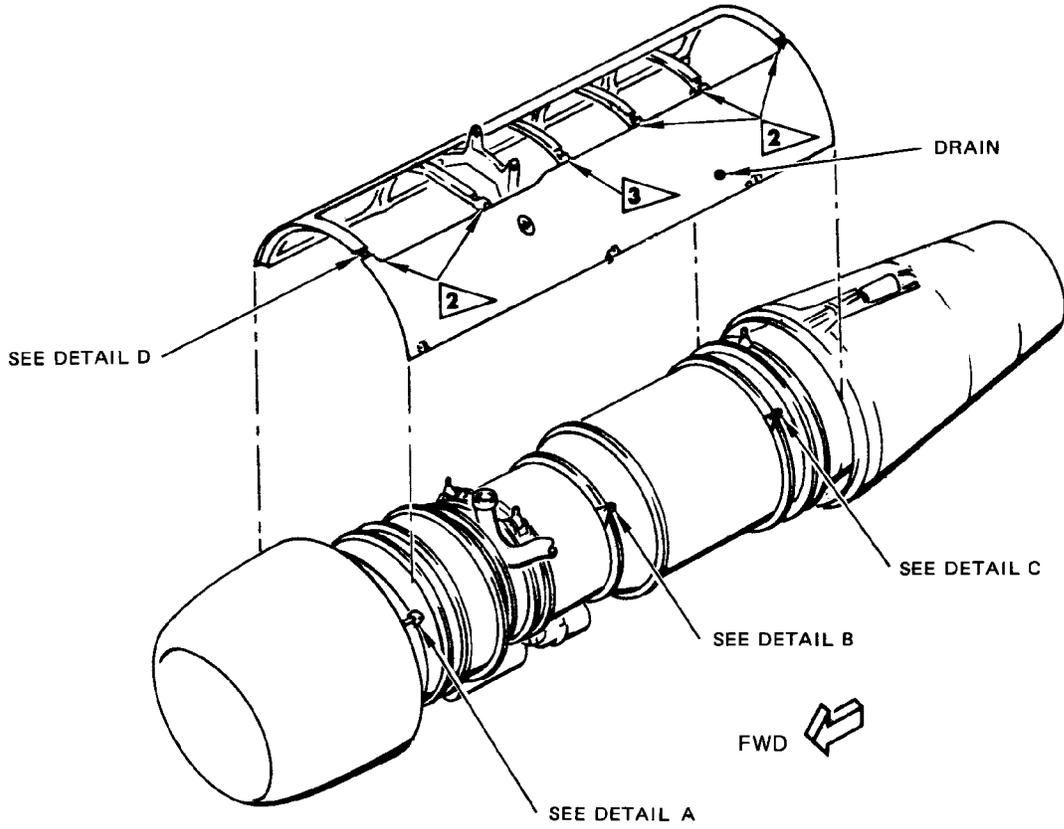
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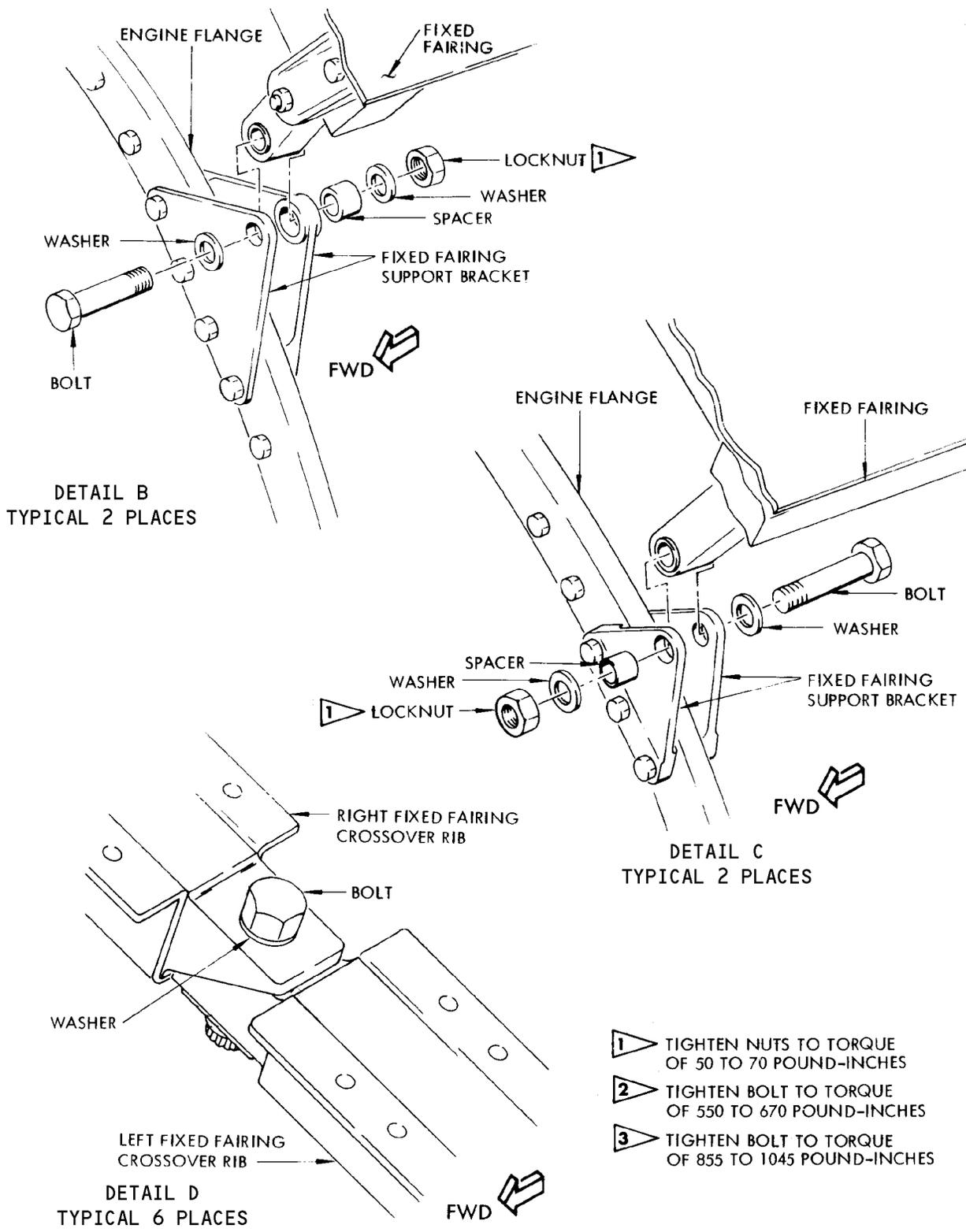


Fixed Fairing Installation  
 Figure 401 (Sheet 1)

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Fixed Fairing Installation  
 Figure 401 (Sheet 2)

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- D. Tighten upper six bolts that secure the left and right halves together. Tighten first, second, fourth, fifth, and sixth bolts to torque of 550 to 670 pound-inches. Tighten third bolt (first aft of forward engine mount) to torque of 855 to 1045 pound-inches.
  - E. Connect drain hose to outboard half of fixed fairing.
  - F. Make sure that separator block rub strip on engine control push-pull cables (approximately 7-1/2 inches below upper cable attachment brackets) is positioned to prevent direct contact between fixed fairing and push-pull cables.
5. Restore Airplane to Normal Configuration
- A. Install the mid-fairing doors 5154, 5126 (left engine) or 5254, 5226 (right engine) (AMM 12-31-91/201).
  - B. Install engine-to-wing forward fairing (AMM 54-51-11/401).
  - C. Install side removable cowl panels.

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ENGINE NOSE COWL - REMOVAL/INSTALLATION

1. Prepare Engine Nose Cowl for Removal
  - A. Remove left and right removable cowl panels (Ref 71-11-11).
  - B. Remove engine-to-wing forward fairing (Ref Chapter 54, Engine-to-Wing Forward Fairing).
  - C. Remove engine fixed fairing (Ref 71-11-21).
2. Remove Engine Nose Cowl (Fig. 401)
  - A. Disconnect nose cowl thermal anti-icing duct at 5 o'clock position near duct penetration into nose cowl by backing off coupling nut and removing connecting ring from joint. Retain connecting ring for reinstallation (Fig. 401).
  - B. On nose cowls with secondary air inlet doors, remove nose cowl as follows:
    - (1) Remove three attach bolts installed through round holes at installation guide (approximately 2, 7, and 10 o'clock) positions of nose cowl mounting flange.
    - (2) Loosen 20 attach bolts installed through keyhole slots in nose cowl mounting flange.

**NOTE:** These attach bolts do not have to be removed, but only require loosening to permit nose cowl removal.

    - (3) Manually support nose cowl and rotate counterclockwise (viewed from front) until large portions of keyhole slots are aligned with loosened bolts, then pull cowl forward to remove from engine. Make sure that nose cowl is clear of engine nose dome before lowering.

**WARNING:** NOSE COWL WEIGHS APPROXIMATELY 120 POUNDS.
  - C. On fat lip nose cowls, manually support nose cowl and remove 23 attach bolts and washers. Pull nose cowl forward to remove from engine. Make sure that nose cowl is clear of nose dome before lowering.

**WARNING:** NOSE COWL WEIGHS APPROXIMATELY 120 POUNDS.
3. Install Engine Nose Cowl (Fig. 401)
  - A. Check that locking torque value of Heli-coil screw-lock insert in engine flange is 6.5 to 60 pound-inches (Ref PW MM 70-00 Standard Practices). If torque value is not within the above limits replace bolt and/or Heli-coil screw-lock insert.

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## MAINTENANCE MANUAL

- B. On nose cowls with secondary air inlet doors, install nose cowl as follows:
- (1) Using care to clear engine nose dome, manually position nose cowl with large portions of keyhole slots installed over heads of 20 loosely installed attach bolts, then rotate cowl clockwise (viewed from front) to fully engage small portions of keyhole slots with attach bolts.

**WARNING:** NOSE COWL WEIGHS APPROXIMATELY 120 POUNDS.

- (2) Loosely install three attach bolts through round holes at installation guide (approximately 2, 7, and 10 o'clock) positions of nose cowl mounting flange.
  - (3) Tighten all attach bolts. Provide support for nose cowl as necessary during bolt tightening. Tighten bolts in near opposite pairs.
- C. On fat lip nose cowls, position nose cowl against engine flange and install 23 bolts and washers. Tighten bolts to near opposite pairs.

**WARNING:** NOSE COWL WEIGHS APPROXIMATELY 120 POUNDS.

- D. Connect nose cowl thermal anti-icing duct at 5 o'clock position near duct penetration into nose cowl by installing connecting ring in joint, and engaging and tightening coupling nut.

#### 4. Restore Airplane to Normal Configuration

- A. Install engine fixed fairing (AMM 71-11-21/401).
- B. Install engine-to-wing forward fairing (Ref Chapter 54).
- C. Install left and right removable cowl panels (AMM 71-11-11/401).

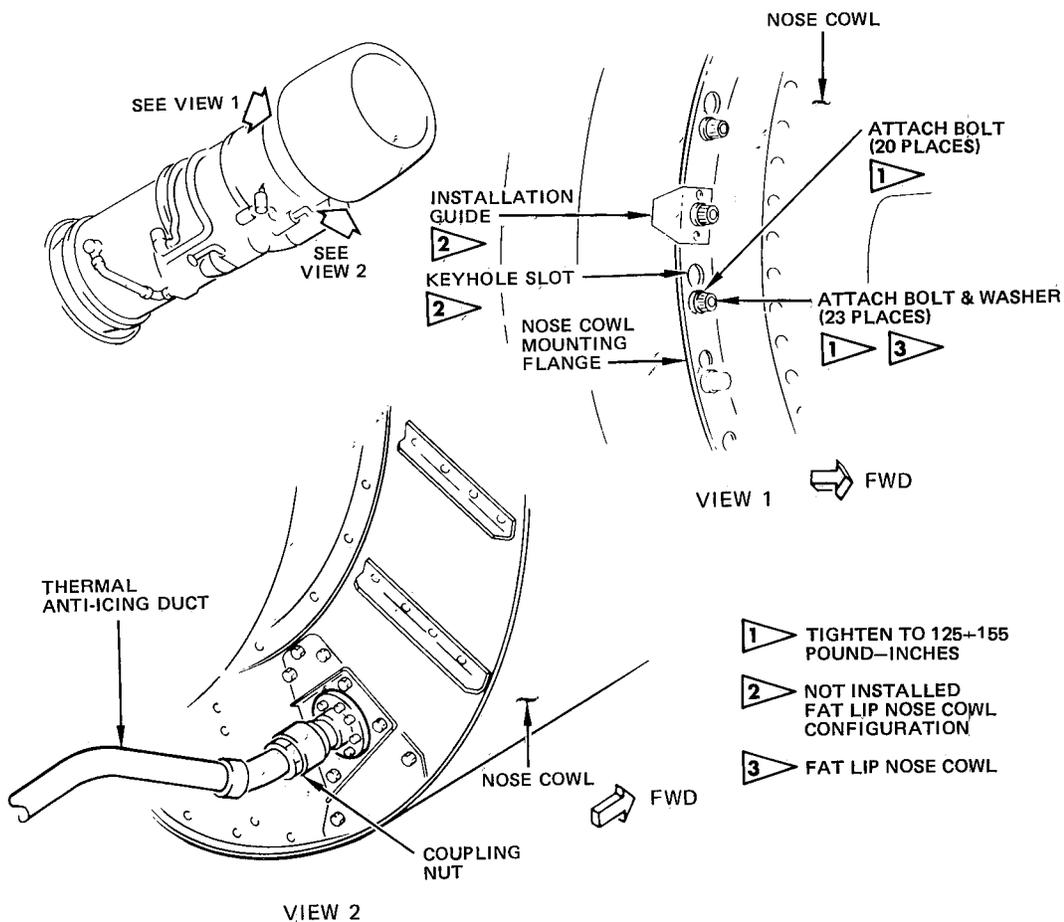
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Nose Cowl Installation  
 Figure 401

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ENGINE NOSE COWL - INSPECTION/CHECK

1. Engine Nose Cowl Inspection

A. General

- (1) On the engine nose cowls without the porous metal acoustical panels; for the approved damage limits and repairs refer to the SRM 54-30-1.
- (2) On the engine nose cowls with the porous metal acoustical panels; for the approved damage limits and repairs refer to the SRM 54-30-1, and/or the Rohr Repair Manual 54-30-01 (P/N 173-1200, 173-1203).

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ENGINE NOSE COWL - CLEANING/PAINTING

1. Engine Nose Cowl Cleaning

A. General

- (1) On acoustic nose cowls, intensive mass airflow of the engine tends to cause contaminant buildup on the nose cowl acoustical liners and can cause a degradation in acoustical performance. Cleaning of the nose cowl is accomplished to remove contaminants from the acoustical liners and improve acoustical performance.
- (2) Nose cowl cleaning is accomplished by spraying water into the engine inlet.
- (3) To prevent water from entering the engine, the engine inlet must be prepared for cleaning by blocking.

B. Equipment and Materials

- (1) Plug, Engine Inlet - Boeing F72783-1, -2, and -3
- (2) Water tank - approximately 250-U.S. gallon capacity, equipped with pump or a potable water source - 35 to 100 psi discharge pressure, with associated hose and nozzle with flow capacity of approximately 80 to 100 gal/min
- (3) Solvent - Ethyl Alcohol (Denatured), AMS 3002 (used during freezing conditions)
- (4) Solvent - Methyl Alcohol, AMS 3004 (used during freezing conditions)

C. Clean Engine Nose Cowl

- (1) Install engine inlet plug as follows:
  - (a) Insert F72783-1, -2, and -3 plug segments into engine inlet in that order (Fig. 701).
  - (b) Position curved end of each hook assembly around aft edge of the adjacent inlet guide vane. While holding hook T-handle securely, tighten each wingnut finger-tight.

**CAUTION:** EXCESSIVE TIGHTENING OF WINGNUTS WILL DAMAGE ENGINE INLET GUIDE VANES.

- (2) Cap PT2 probe in nose dome.
- (3) If nose cowl is to be cleaned during freezing temperature conditions, add sufficient alcohol to the wash water to ensure no ice forms that could cause damage to the engine. See Fig. 701 for recommended minimum water-alcohol mixtures. However, a mixture of up to 50% alcohol may be used.

**CAUTION:** ALKALINE CLEANERS AND ABRASIVES MUST NOT BE USED. DAMAGE TO ACOUSTIC LINER CAN RESULT.

- (4) Spray clean tap water or water/alcohol mixture on the acoustic liner for approximately 30 seconds. Approximately 40 to 50 gallons of water may be discharged in the 30-second interval.

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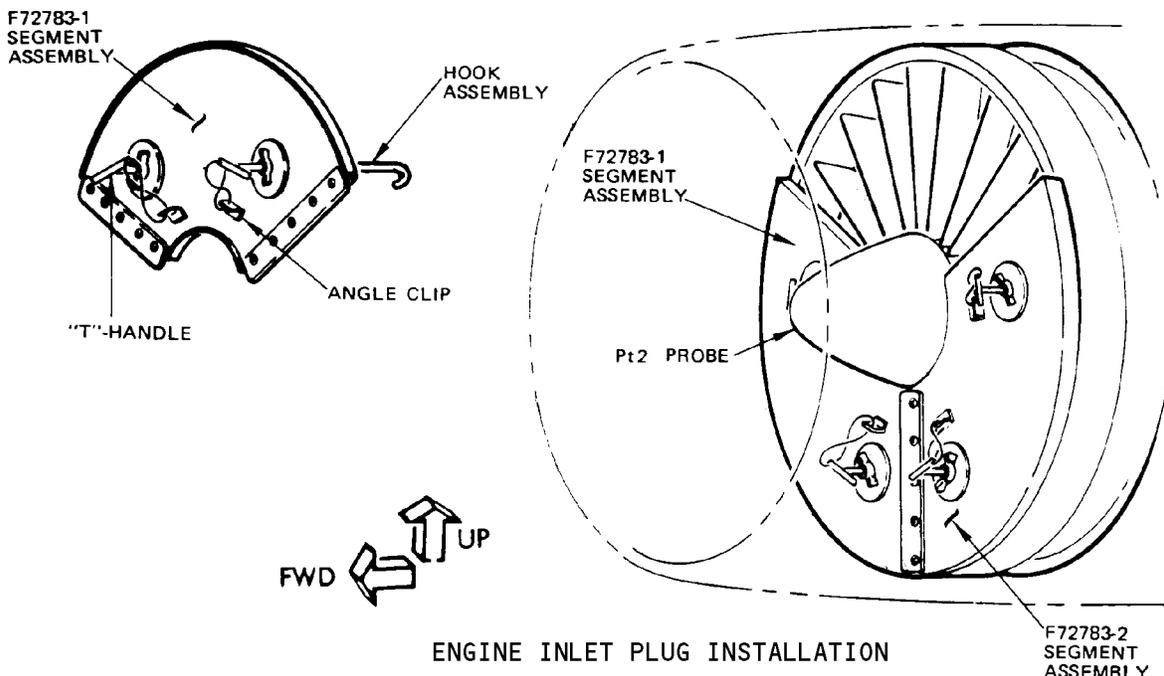
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**ENGINE INLET PLUG INSTALLATION**

Engine Nose Cowl Cleaning  
Figure 701

Percent Alcohol By Volume

Outside Air Temperatures (OAT)

|    |               |
|----|---------------|
| 3  | 40°F (4.4°C)  |
| 6  | 38°F (3.3°C)  |
| 9  | 36°F (2.2°C)  |
| 14 | 33°F (0.6°C)  |
| 17 | 31°F (-0.6°C) |
| 20 | 28°F (-2.2°C) |
| 22 | 26°F (-3.3°C) |
| 23 | 25°F (-3.9°C) |

Minimum Required Ethyl Alcohol-Water Mixtures  
Table 1

Percent Alcohol By Volume

Outside Air Temperature (OAT)

|    |               |
|----|---------------|
| 5  | 40°F (4.4°C)  |
| 10 | 33°F (0.6°C)  |
| 15 | 27°F (-2.8°C) |
| 20 | 22°F (-5.6°C) |

Minimum Required Methyl Alcohol-Water Mixtures  
Table 2

Minimum Alcohol-Water Mixtures  
Figure 701

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- (5) Repeat step (4) as many times as desired to obtain desired cleanliness.
- (6) Remove cap from PT2 probe.
- (7) Remove engine inlet plugs F72783 and inspect inlet guide vanes.

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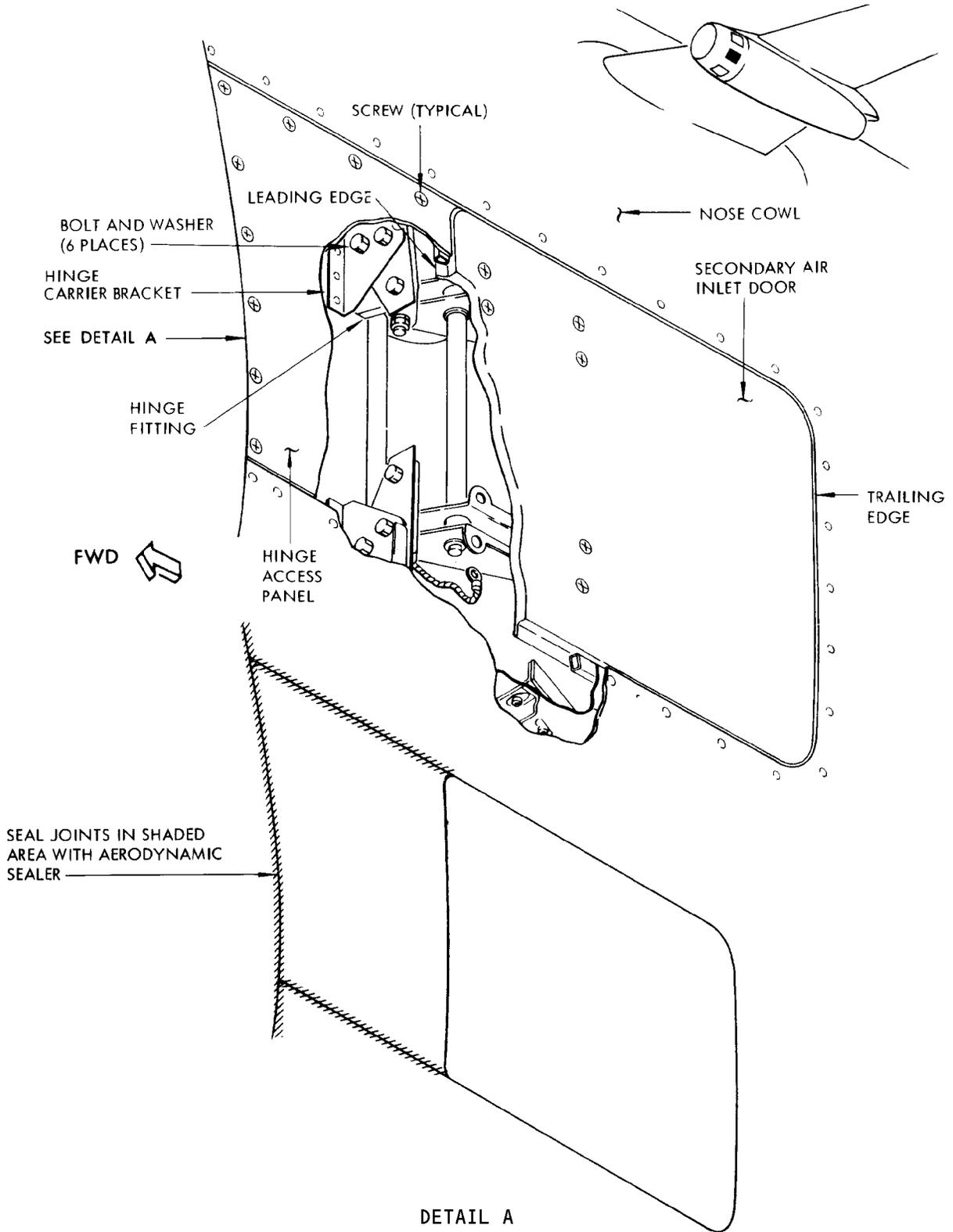
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SECONDARY AIR INLET DOORS – REMOVAL/INSTALLATION

1. Remove Secondary Air Inlet Doors
  - A. Remove screws attaching hinge access panel to nose cowl and remove access panel (Fig. 401).
  - B. Manually push door open and position wood block between leading edge of door and hinge fitting. Carefully allow door to close and trap wood block in position. Door should be blocked partially open.
  - C. Cut lockwire and remove six bolts and washers attaching hinge fittings to hinge carrier brackets.
  - D. Remove door through door opening. Facilitate removal by positioning door into secondary air inlet passage in nose cowl and rotating as necessary to obtain clearance.
2. Install Secondary Air Inlet Doors
  - A. Check that wood block is trapped between leading edge of door and hinge fitting. If not, use bench vise to hold hinge fitting, manually rotate door to simulate opening, position wood block, and carefully allow door to rotate and trap wood block.
  - B. With trailing edge first, insert door through door opening. Facilitate insertion by rotating door and positioning into secondary air inlet passage in nose cowl as necessary to obtain clearance (Fig. 401).
  - C. Position door to align mounting holes in hinge fittings and hinge carrier brackets.
  - D. With washer under each bolt head, install six bolts to secure hinge fittings to hinge carrier brackets. Tighten bolts and install lockwire.
  - E. Manually push door open and remove wood block trapped between leading edge of door and hinge fitting.
  - F. Place hinge access panel on nose cowl and install and tighten attaching screws.
  - G. Manually actuate door and check that door functions without binding through full travel and fully closes by spring force.
  - H. Seal joints between hinge access panel and nose cowl (Detail A) with Aerodynamic Sealer, BMS 5

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Engines with secondary air inlet door  
nose cowl.

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DETAIL A

Secondary Air Inlet Doors Installation  
 Figure 401

EFFECTIVITY  
 Engines with secondary air inlet door  
 nose cowl.

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ENGINE NOSE DOME - REMOVAL/INSTALLATION

1. General

- A. Engine nose domes are designed to provide proper airflow for optimum engine performance. Therefore, keeping the nose dome aerodynamically smooth is important to the maintenance of optimum engine performance. Before installing, examine outer surface of nose dome for damage. On nonacoustic nose domes, if dents exceed 2.00 inches in length, or surface waviness exceeds 0.06 inch, nose dome should be reworked before installation (Ref SRM 54-30-1). On acoustic nose domes, no damage is allowed to any area of aluminum honeycomb core (Ref Rohr Repair Manual 54-30-01).
- B. Because of the difficulty in reworking an engine nose dome to original smoothness, extreme care should be taken when handling the nose dome to avoid denting the exterior surface and to prevent damage to the Pt2 probe assembly.

NOTE: On airplanes with later configuration nose cowls and nose domes, the right and left nose domes are not interchangeable. Interchanging nose domes would result in an uneven airflow to the engine that could result in engine stalls.

2. Equipment and Materials

- A. Grease - MIL-G-4343

3. Remove Engine Nose Dome (Fig. 401)

- A. Loosen four captive self-locking installation nuts on nose dome until nuts are free from mounting studs on engine front accessory drive housing.
- B. Carefully slide nose dome forward, disconnecting nose dome Pt2 coupler from engine Pt2 fitting, and remove nose dome.

CAUTION: EXERCISE EXTREME CARE WHEN HANDLING ENGINE NOSE DOME TO AVOID DENTING THE EXTERIOR SURFACE AND TO PREVENT DAMAGE TO THE PT2 PROBE ASSEMBLY.

- C. Remove O-rings from Pt2 coupler and discard.

4. Install Engine Nose Dome (Fig. 401)

CAUTION: FALSE EPR READINGS MAY OCCUR, IF PT2 PROBE DOES NOT PROJECT BEYOND NOSE DOME, AND/OR IF NOSE DOME PROBE HOLE IS ELONGATED.

- A. Prior to installing an engine nose dome that is not new or overhauled check the following:
- (1) If Pt2 probe does not project 0.080 to 0.120 inch beyond nose dome, repair or replace.

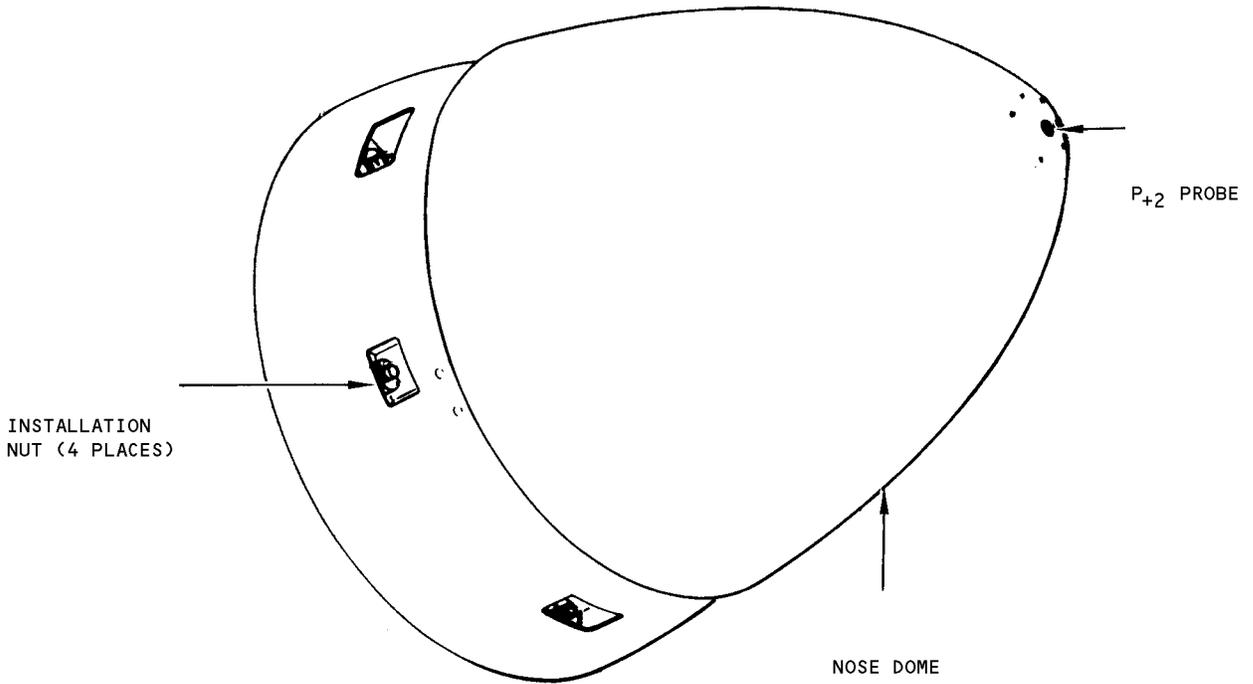
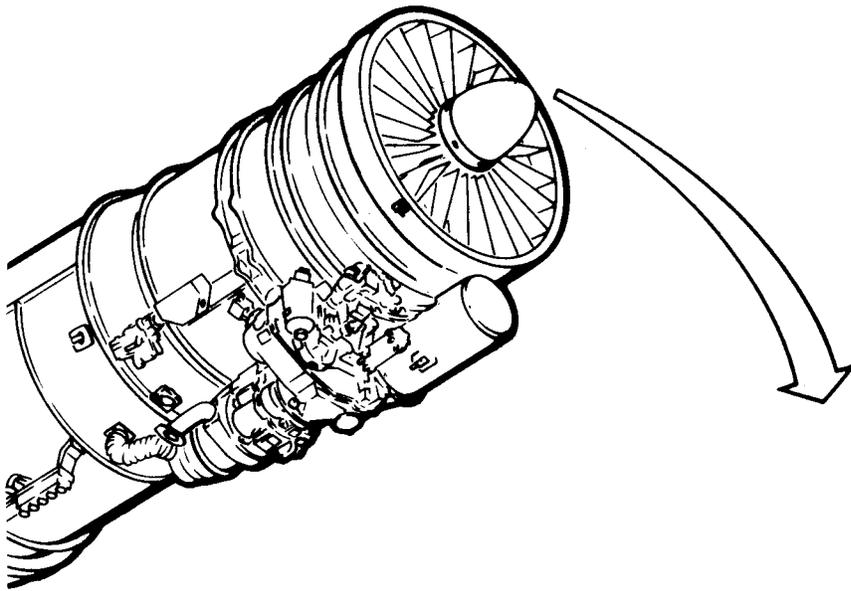
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Nose Dome Installation  
 Figure 401

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- (2) If nose dome probe hole is elongated more than 0.15 inch (elongated hole diameter of 0.42 inch or greater) or if Pt2 probe is abraded more than one half of tube wall thickness, repair or replace.
- (3) Check that Pt2 plenum vent hole inside of nose dome is clear.

**NOTE:** The vent hole may be checked visually by using a mirror or by plugging the forward or aft end of the Pt2 probe and applying shop air at 5 to 10 psi pressure maximum to opposite end and listen or feel for an air leak from vent hole.

- B. If interference brackets are installed on N1 tachometer generator, check that brackets are installed correctly before installation of nose dome (Fig. 402).
- C. Install new O-rings, lightly lubricated with appropriate grease, in Pt2 probe coupler.
- D. Lubricate O-ring at engine front accessory drive housing with grease.
- E. Position nose dome on engine front accessory drive housing taking care to align with mounting studs and Pt2 probe connection.

**NOTE:** Make sure that right nose dome is installed on right engine, and left nose dome on left engine.

- F. Tighten four captive, self-locking installation nuts, in diametrically opposite pairs, 100 to 140 pound-inches.

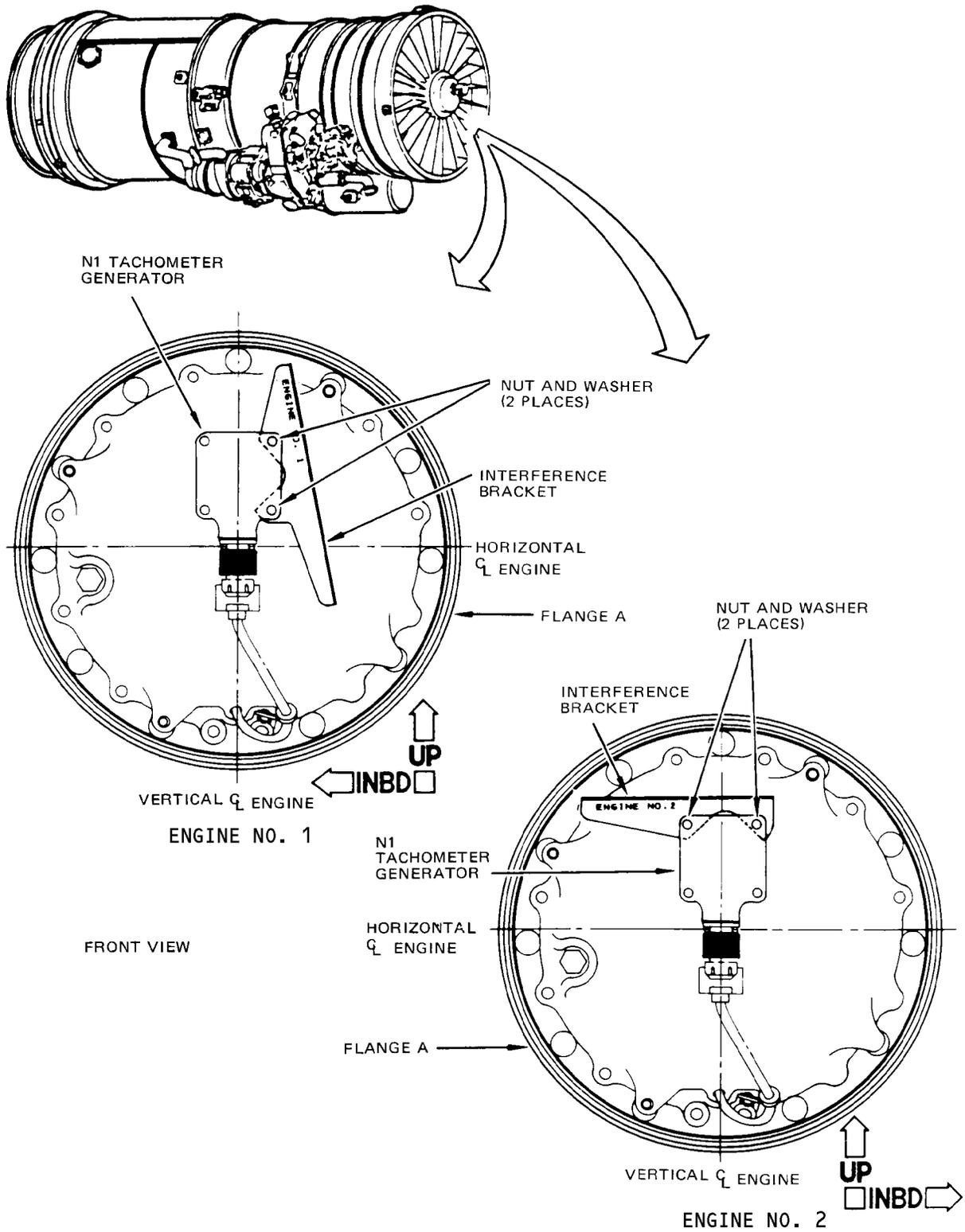
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Interference Bracket Installation  
 Figure 402

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ENGINE NOSE DOME – APPROVED REPAIRS

1. General

A. Possible damage can occur to the engine nose dome in the area of the installation nut access hole unless extreme care is taken. Repairs are limited on the nose dome due to aerodynamic requirements.

2. Repair Nose Dome

A. On non-acoustic nose dome (engine nose dome used with engine nose cowl having secondary air inlet doors), when surface damage is evident on the forward side of the installation nut access hole of the dome, repair as follows:

- (1) A maximum of 0.75 inch material from original size may be cut away to remove damaged area.
- (2) The original contour of the forward side of the access hole must be maintained.
- (3) All raw edges must be treated with Alodine.

B. On acoustic nose dome (engine nose dome used with fat lip nose cowl), refer to SRM 54-30-1 or Rohr Industries Repair Manual 54-30-01 for approved repair.

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MOUNTS - DESCRIPTION AND OPERATION

1. General

- A. The vibration isolator engine mounts support the JT8D power plants and isolate the airplane structure from adverse engine vibrations. Each power plant is supported by two forward vibration isolator mounts and a single aft vibration isolator mount. The two forward mounts are identical and may be used in any forward position on either engine. The aft mounts are also identical and may be used to support the aft end of either engine (Fig. 1).
- B. The forward vibration isolator engine mounts carry vertical, side, and axial (thrust) loads and allow for engine growth due to thermal expansion. The aft mounts take only vertical and side loads; however, they will also accommodate thermal expansion of the engine without applying axial loads to the engine flanges.
- C. The engine attach fittings are described in Chapter 54, Nacelles/Pylons.

2. Vibration Isolators

- A. The vibration isolators consist of a resilient material permanently enclosed in a metal case. As an engine vibrates the resilient material deforms slightly, thereby dampening the vibrations before they reach the airplane structure. If complete failure or loss of the resilient material occurs, the isolators will continue to support the engine.
- B. The engine forward vibration isolators are located in forward mount support fittings. A projection on each forward isolator mates with a hole in the fitting to provide positive orientation of the isolator. Vibration isolator cover plates retain the forward isolators in position. The aft vibration isolator is bolted to a fitting on the outboard flap track of the inboard flap.

3. Cone Bolts

- A. Three cone bolts are used to attach each JT8D engine to the vibration isolators. The two forward cone bolts are identical and may be used in any forward position to support either engine. The aft cone bolts are also identical and may be used in the aft position on either engine.

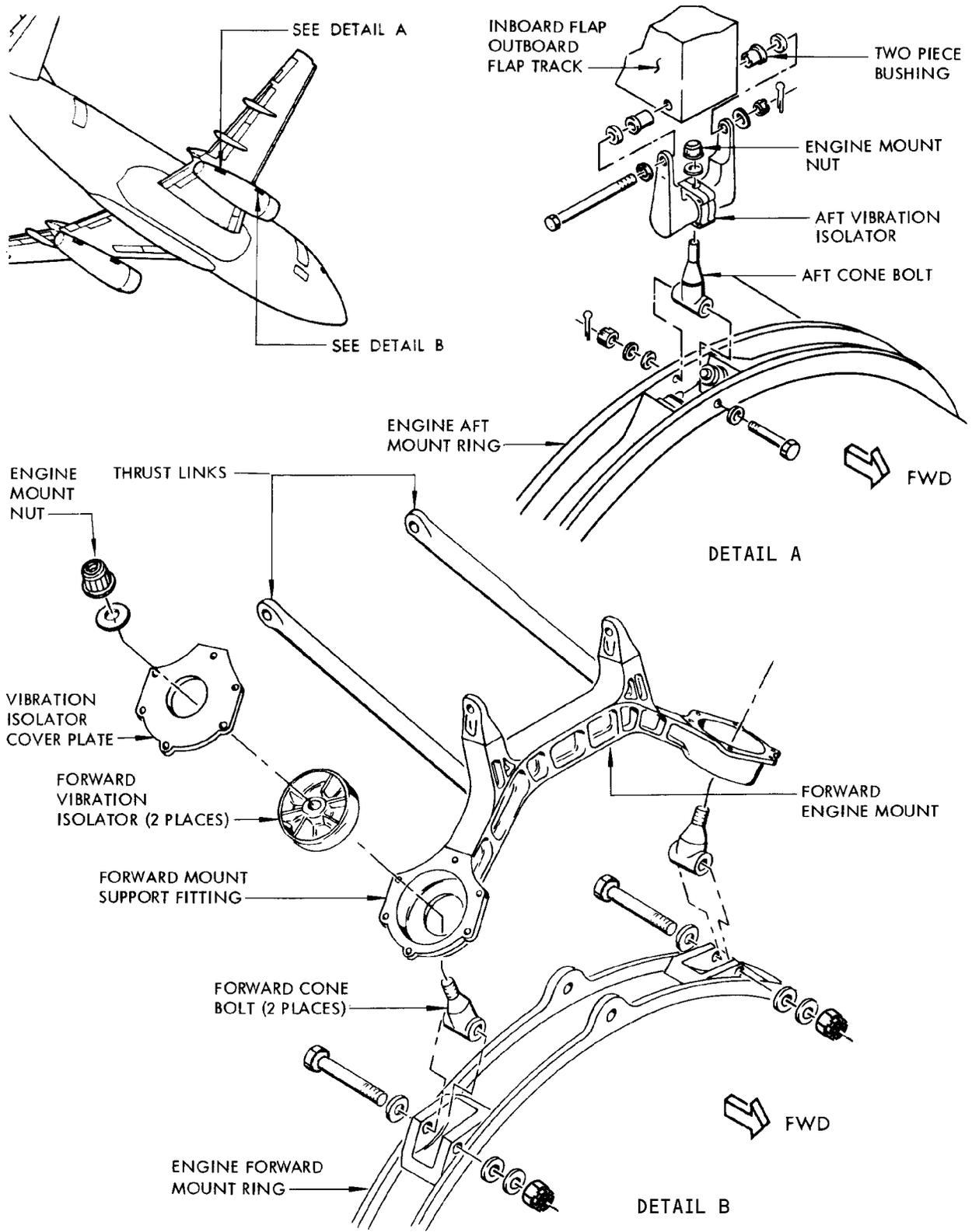
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Vibration Isolator Engine Mounts  
 Figure 1

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MOUNTS - INSPECTION/CHECK

1. General

A. Examination of the engine vibration isolators and cone bolts is performed when the engine is removed from the airplane.

B. Visually examine the cone bolts and vibration isolators.

(1) Examine the cone bolts and vibration isolators for these signs of damage:

- (a) Corrosion is not permitted.
- (b) Cracks are not permitted.
- (c) Nicks are not permitted.
- (d) Dents are not permitted.
- (e) Scratches are not permitted.
- (f) Fretting is not permitted.

NOTE: Fretting is where two adjacent metal pieces rub against one another.

(g) Pickup is not permitted.

NOTE: Pickup is where material is moved from one surface to another surface.

(h) High metal is not permitted.

NOTE: High metal is where metal causes damage as it is pushed above the adjacent surface.

(i) Bushing movement is not permitted.

(2) Do a visual inspection of the cone bolts and vibration isolators for worn areas.

(a) If wear is found on the cone bolts and vibration isolators, do the detailed inspections that follow.

2. Cone Bolt Detailed Inspection

A. Examine cone bolts for wear. Examine threaded parts for crossed or otherwise damaged threads. Give particular attention to internal radii, area where thread relief and conical surface intersect and threaded shank of bolt.

B. Magnetic-particle inspect per ASTM E 1444 or BAC 5424, Class B or alternatively perform ultrasonic inspection of the cone bolts per D6-37239, 737 Nondestructive Test Manual, Part 4, Section 71-20-01.

C. Cone bolt guidelines (Fig. 601).

(1) Up to 10 percent of first three threads may be reworked to allow engagement of nut. If exceeded, discard cone bolt.

(2) No rework is permitted on the fused section. If damaged, discard cone bolt.

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- (3) Rework critical areas if damaged areas do not exceed 0.200 inch diameter by 0.010 inch depth, or 0.400 inch length by 0.100 inch in width by 0.010 inch depth. The total area to be reworked must not exceed 10 percent of any surface or perimeter.
- (4) Rework non-critical areas if damaged area does not exceed 0.500 inch diameter by 0.020 inch depth, or 0.750 inch length by 0.200 inch width by 0.020 inch depth. The total area to be reworked must not exceed 15 percent of any surface or perimeter.

**NOTE:** Most of the non-critical areas are forged and it is not necessary to improve the surface finish.

- D. If wear, damage or flaws are within the acceptable repair and damage guidelines, they may be repaired (Barry Controls OHM 71-20-03). If wear, damage, or flaws are beyond acceptable repair and damage guidelines, discard cone bolt.

### 3. Vibration Isolator Component Visual Inspection

- A. Examine forward vibration isolator coverplates and thrust link fittings. (Detail B, Fig. 601). Examine bolt holes and connecting bolts.

- (1) Examine the components for these signs of damage:
  - (a) Corrosion is not permitted.
  - (b) Cracks are not permitted.
  - (c) Nicks are not permitted.
  - (d) Dents are not permitted.
  - (e) Scratches are not permitted.
  - (f) Fretting is not permitted.

**NOTE:** Fretting is where two adjacent metal pieces rub against one another.

- (g) Pickup is not permitted.

**NOTE:** Pickup is where material is moved from one surface to another surface.

- (h) High metal is not permitted.

**NOTE:** High metal is where metal causes damage as it is pushed above the adjacent surface.

- (i) Bushing movement is not permitted.

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(2) If damage is found in these components, please contact Boeing.

4. Examine Forward Vibration Isolators

- A. Examine all metal parts of forward vibration isolator (Detail A, Fig. 602) for evidence of cracks, wear or other damage. Check the conical hole in the isolator for galling, plating wear and gouging. Check screws for worn or crossed threads or damaged heads.
- B. Replace vibration isolator if alignment pin is missing, loose, or damaged.
- C. Examine the molded elastomer parts (Fig. 602):
  - (1) If any evidence of sponginess or swelling is found, replace vibration isolator.
  - (2) Examine for separations in the bond between elastomer and metal. If individual separations exceed 0.375 inch depth or 1.50 inches length or if total separations exceed 30 percent of bond line, replace vibration isolator.

**CAUTION:** USE EXTREME CARE WHEN CHECKING CONDITION OF BOND. AN ACCEPTABLE BOND CAN BE DAMAGED BY USE OF A SHARP PROBE.

**NOTE:** Any amount of molded urethane protective coating may be missing and is acceptable for continued service.

- (3) Do an examination of the bond between the elastomer and the ribbed cap.
  - (a) Use medium hand pressure and try to turn the ribbed cap.
  - (b) The bond is satisfactory if the ribbed cap does not turn.
  - (c) If the ribbed cap turns, repair the cap (Barry Controls OHM 71-20-03) or replace the isolator.
- (4) Examine elastomer surface for cuts, tears, or gouges. Eight damaged areas up to 0.50-inch diameter by 0.150-inch depth are allowed providing that no more than three are in any quarter of the mount and no bond damage per par. C.(2) is noted in that area.
- D. Using a micrometer, check overall free thickness (steel cap to rubber) at three points around isolator (Detail A, Fig. 602). If average of three readings is less than 2.220 inches, replace the isolator core assembly.

**NOTE:** Care must be taken not to depress the elastomer while taking dimensions with the micrometer.

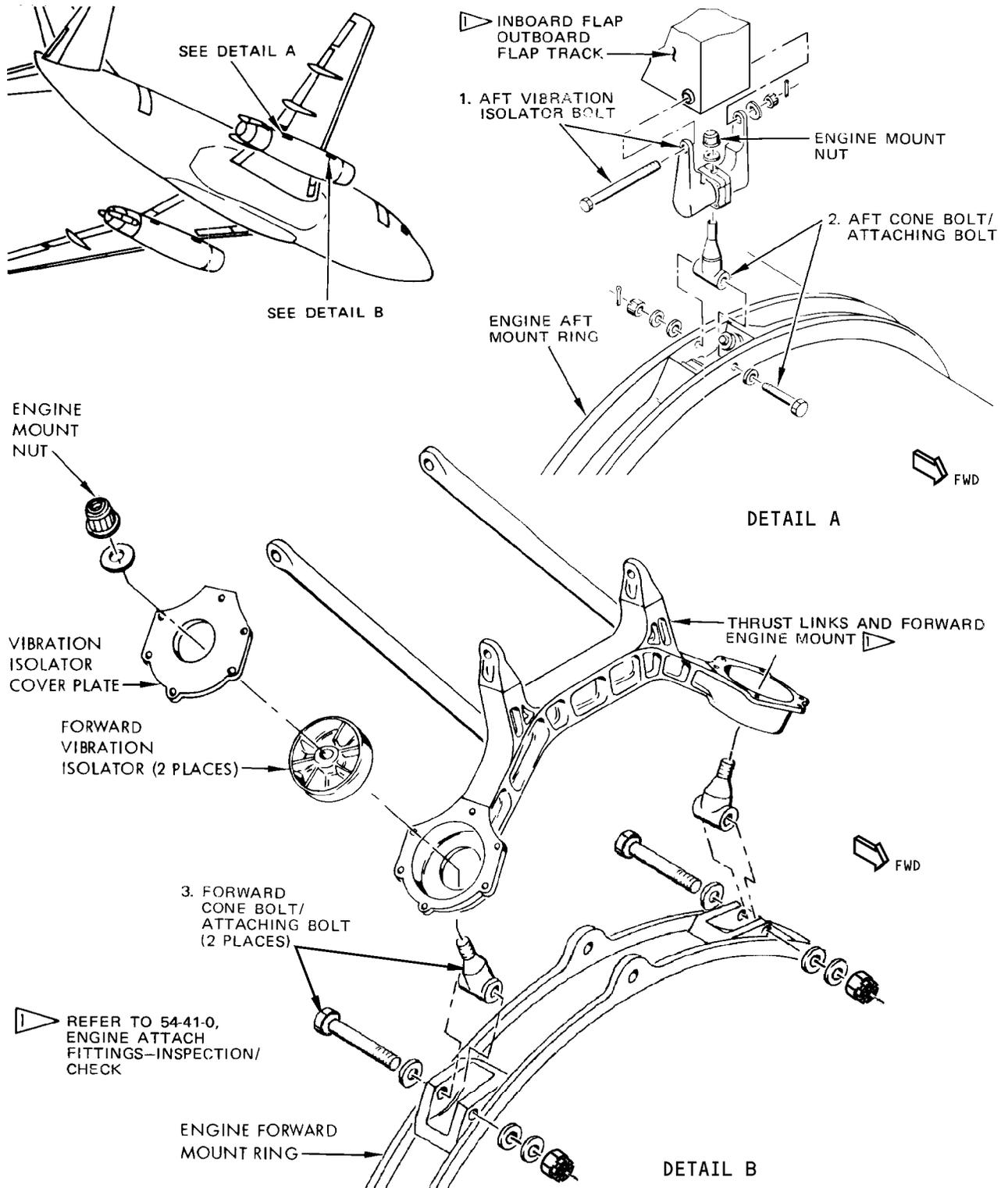
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Vibration Isolator Engine Mounts  
 Figure 601 (Sheet 1)

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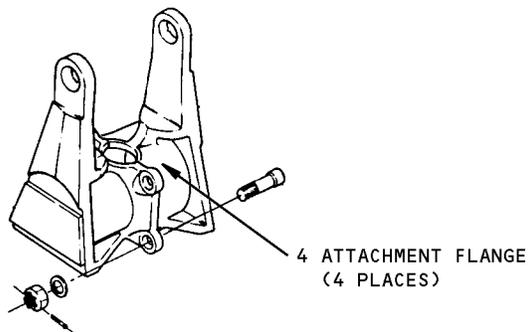
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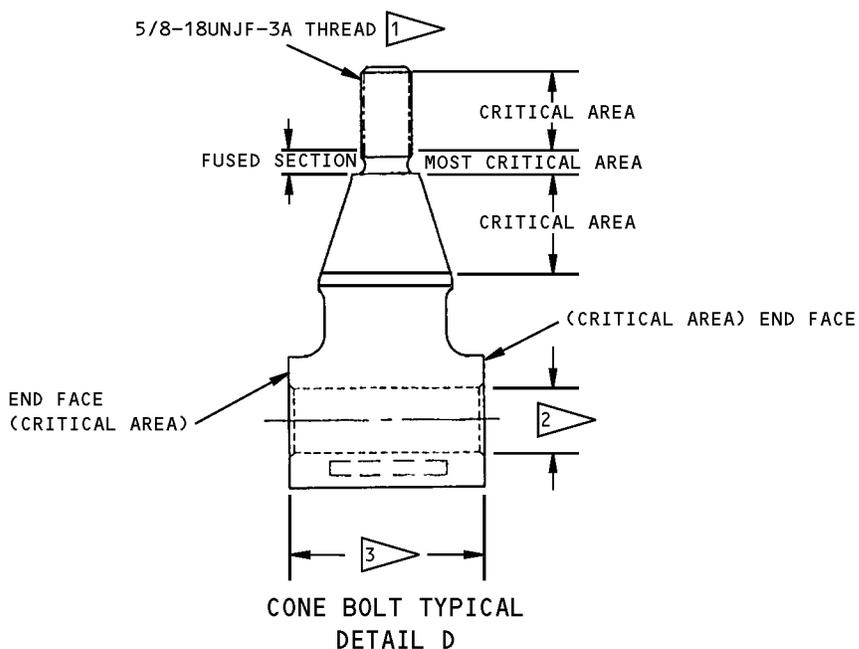
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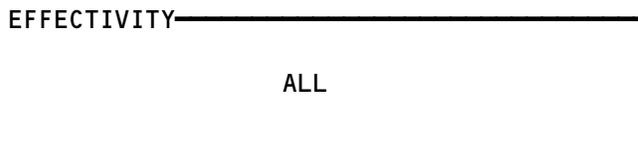
DETAIL C



CONE BOLT TYPICAL  
 DETAIL D

- 1 YOU CAN REPAIR A MAXIMUM OF 10 PERCENT OF THE FIRST THREE THREADS OF THE CONE BOLT TO LET THE NUT CORRECTLY ENGAGE. IF ANY THREAD AFTER THE FIRST THREE THREADS IS DAMAGED, REPLACE THE CONE BOLT. IF MORE THAN 10 PERCENT OF THE FIRST THREE THREADS ARE DAMAGED, REPLACE THE CONE BOLT.
- 2 FORWARD CONE BOLT INNER DIAMETER 0.7505-0.7495 AFT CONE BOLT INNER DIAMETER 0.5630-0.5620.
- 3 FORWARD CONE BOLT WIDTH 2.371-2.370. AFT CONE BOLT WIDTH 1.676-1.674.

Vibration Isolator Engine Mounts  
 Figure 601 (Sheet 2)



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| INDEX NO. | PART NAME                             | DIM. | DESIGN LIMITS |        | WEAR LIMITS   |                     | REPLACE WORN PART | REPAIR WORN PART | REPAIR INSTR.  |
|-----------|---------------------------------------|------|---------------|--------|---------------|---------------------|-------------------|------------------|--|
|           |                                       |      | DIAMETER      |        | MAX WEAR DIM. | MAX DIAM CLEAR-ANCE |                   |                  |  |
|           |                                       |      | MIN           | MAX    |               |                     |                   |                  |  |
| 1         | AFT VIBRATION ISOLATOR ATTACHMENT ARM | ID   | 0.5620        | 0.5630 | 0.5630        | 0.0054              |                   | X                | <br> |
|           | ISOLATOR BOLT                         | OD   | 0.5607        | 0.5616 | 0.5566        |                     | X                 |                  |  |
| 2         | AFT CONE BOLT/ ATTACHING BOLT         | ID   | 0.5620        | 0.5630 | 0.5630        | 0.0025              |                   | X                |   |
|           |                                       | OD   | 0.5605        | 0.5615 | 0.5566        |                     | X                 |                  |  |
| 3         | FWD CONE BOLT/ ATTACHING BOLT         | ID   | 0.7495        | 0.7505 | 0.7505        | 0.0025              |                   | X                |   |
|           |                                       | OD   | 0.7480        | 0.7490 | 0.7445        |                     | X                 |                  |  |
| 4         | ATTACHMENT FLANGE                     | ID   | 0.4510        | 0.4580 | 0.4600        | 0.0250              |                   | X                |   |
|           | ATTACHING BOLT                        | OD   | 0.4330        | 0.4390 | 0.4330        |                     | X                 |                  |  |

-  Replace existing bushing with AMS 4640 AL-NI-Bronze bushing with interference of 0.0002 min/0.0025 max. No oversize hole or plating buildup allowed.
-  Ream ID of bushing to design dimension after installation.
-  Repair per Barry Controls OHM 71-20-03.

Vibration Isolator Engine Mounts Wear and Rework  
Figure 601 (Sheet 3)

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E. See Fig. 601 for the forward vibration isolators dimensions of mating surfaces.

5. Examine Aft Vibration Isolators

- A. Examine the mating surfaces of the isolator housing assembly halves, the conical hole in the flexible core, and all bolt holes for galling, plating wear or gouging. Examine bolts for worn or crossed threads or damaged heads. If severe discrepancies are noted, the defective part should be replaced. Examine all metal parts for faults.
- B. Magnetic-particle inspect per ASTM E 1444 or BAC 5424, Class B.

**CAUTION:** DO NOT MAGNAFLUX ANY PART WHICH IS BONDED TO ELASTOMER.

C. Examine elastomer housing:

- (1) Inspect for scratches, nicks, burrs, chipped plating and corrosion. Repair damaged areas (Barry Controls OHM 71-21-03).
- (2) Examine housing flange holes for cracks and wear. Rework flanges holes (Fig. 601).

**NOTE:** The housing assembly halves are matched pairs. If a serious deficiency is found in one half, the other half must also be replaced.

- (3) Examine aft vibration isolator mounting bolt and bolt holes for cracks and wear. Rework boltholes (Fig. 601).

D. Examine elastomer core (Fig. 603):

- (1) Examine core metal:
- (a) Examine for scratches, nicks, burrs and corrosion. If damage does not exceed 0.50 inch diameter by 0.15 inch depth, repair damaged area (Barry Controls OHM 71-21-03).
- (2) Examine molded elastomer parts:

**CAUTION:** USE EXTREME CARE WHEN CHECKING CONDITION OF BOND. AN ACCEPTABLE BOND CAN BE DAMAGED BY USE OF A SHARP PROBE.

**NOTE:** Any amount of molded urethane protective coating may be missing and is acceptable for continued service.

- (a) Examine elastomer surface for cuts, tears, gouges or abrasions. Minor abrasion is acceptable. No cuts, tears or gouges allowed. Replace elastomer if cuts, tears, gouges or abrasions are observed.
- (b) Examine for sponginess or swelling. Replace elastomer core if any evidence of sponginess or swelling is observed.
- (c) Examine for permanent set. Place core assembly in aft housing. Push housing together using moderate hand pressure. Measure distance between housing halves at the parting surface. If the average distance is less than 0.150 inch, replace the core assembly.

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- (d) Examine bond between elastomer and ribbed cap by attempting to rotate cap using medium hand pressure.
  - 1) Core assembly is acceptable if ribbed cap does not rotate. If cap rotates, rebond cap to elastomer (Barry Controls 71-20-03).
- (e) Examine for separations in the bond between elastomer and metal. If separations are greater than 0.375 inch depth or 1.00 inch length, or if there are more than two separations on either end, replace the vibration isolator.

### 6. Examine Engine Aft Mount Secondary Support Assembly

A. Examine the crushable honeycomb energy absorber of the load limiter (Fig. 604).

- (1) Push softly on the honeycomb energy absorber on either side of the through bolt and check for movement. If the honeycomb energy absorber is not bonded at the top or bottom, replace the load limiter assembly.

**NOTE:** The honeycomb energy absorber is bonded to the end plate at the lower end and to the top of the housing at the upper end. The sides of the honeycomb energy absorber are not bonded to the sides of the housing. There is a small clearance on both sides of the housing.

B. Examine the self-locking nut of the load limiter through bolt.

- (1) If the nut is missing or loose, replace the nut. If the spacer is new or if the existing spacer is at least 0.67 inch thick, tighten the nut down on the crushable spacer. If the existing spacer is less than 0.67 inch thick, tighten the nut until two or three complete threads are above the nut. Make sure the self-locking torque of the nut is 12-60 pound-inches.

**NOTE:** The crushable spacer is not critical to the operation of the secondary support. The crushable spacer does not need to be replaced if the soft honeycomb core is crushed or split. The purpose of the spacer is to allow the engine to drop down slightly in case of a cone bolt fracture on the ground with the engine at zero or idle thrust. This puts the cone bolt indicator on the nacelle fairing out of the green band. The minimum thickness of the spacer is based on the minimum distance required at the secondary support to move the indicator out of the green band.

C. Examine the load limiter through bolt for grooves or wear patterns at the lower edge of the retainer.

- (1) Make sure that any wear grooves do not exceed the thread depth for the bolt. Minimum acceptable bolt diameter is 0.27 inch. If there is excessive wear, replace the bolt.

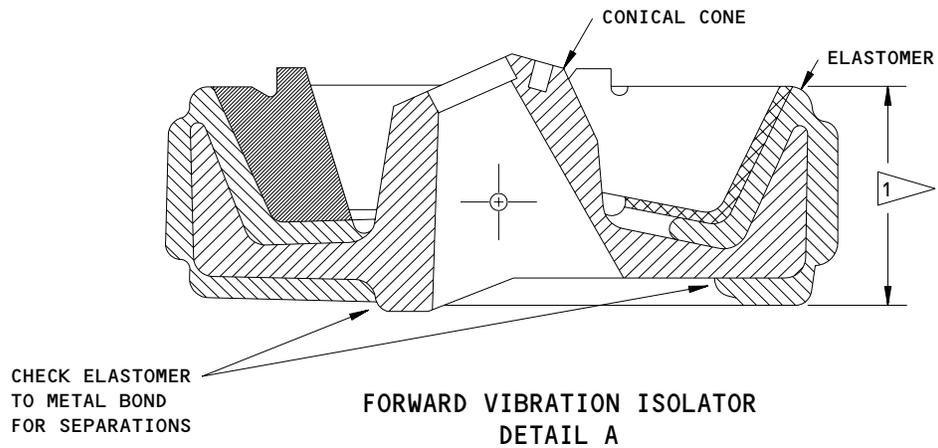
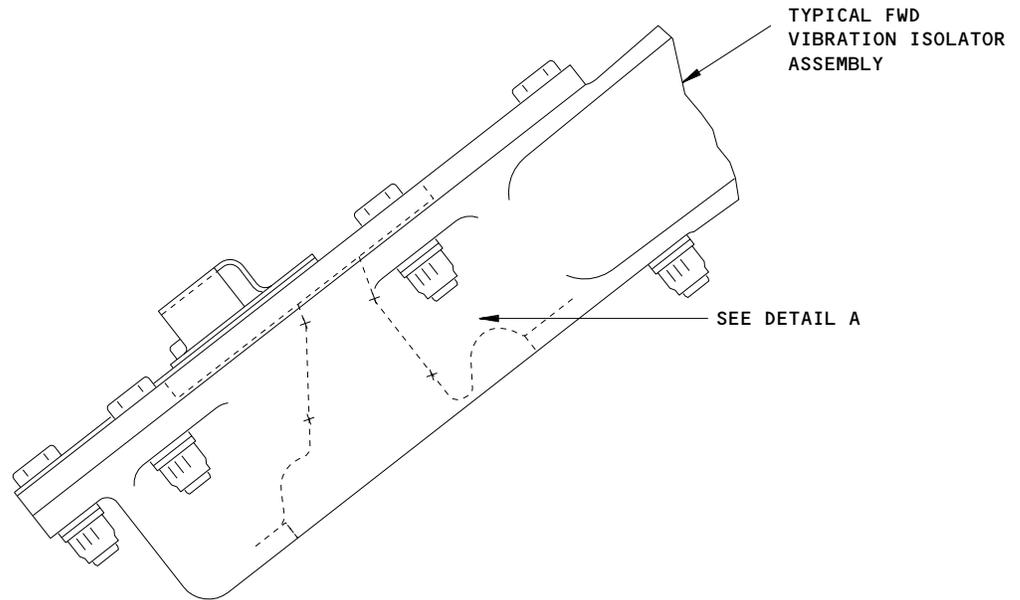
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**1** FREE THICKNESS MEASUREMENT AT THREE POINTS AROUND ISOLATOR.  
 IF AVERAGE OF THREE READINGS IS LESS THAN 2.220 INCHES, REPLACE  
 THE ISOLATOR.

Forward Vibration Isolator Assembly Dimensions  
 Figure 602

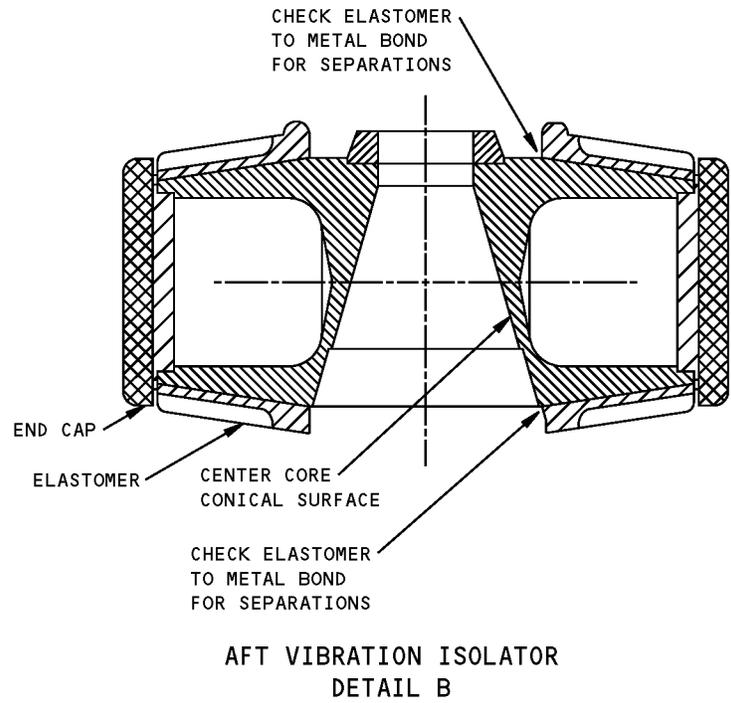
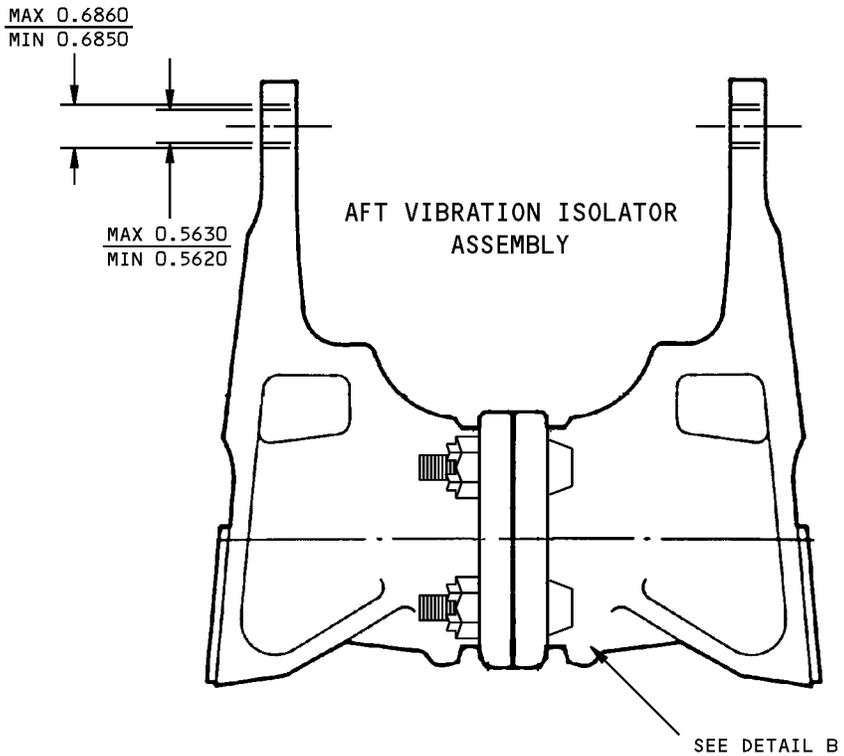
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Aft Vibration Isolator  
 Figure 603

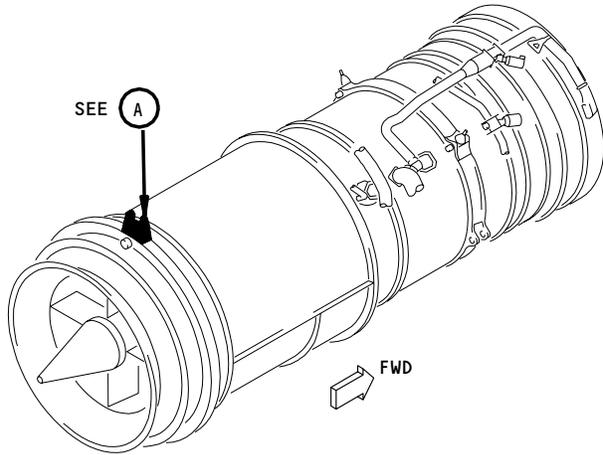
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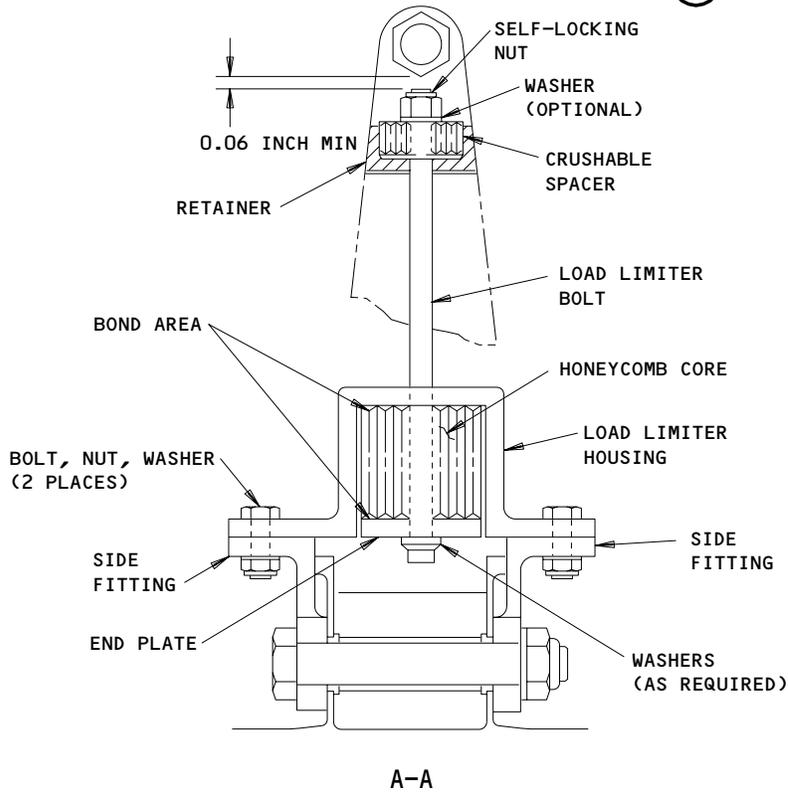
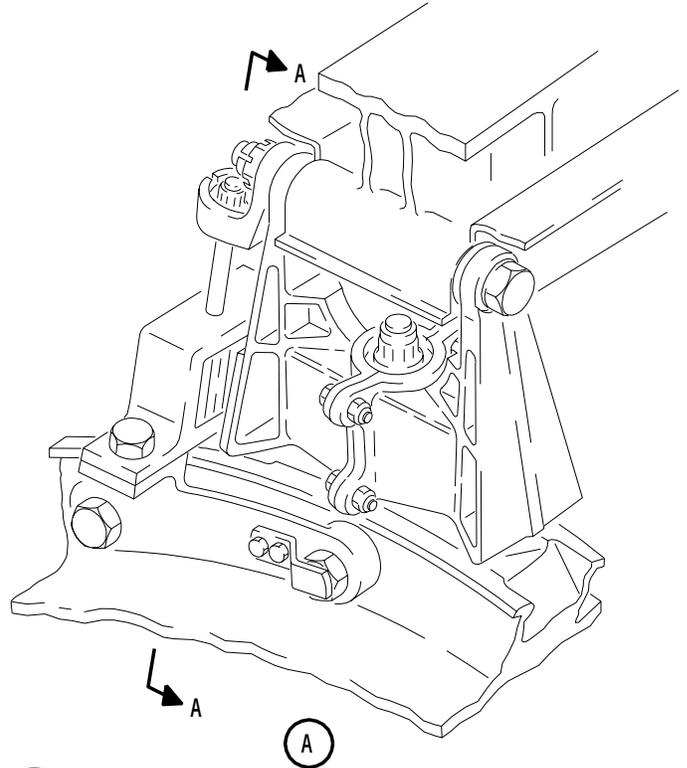
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LEFT ENGINE SHOWN



Energy Absorbing Secondary Support Assembly  
 Figure 604

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AFT VIBRATION ISOLATOR – REMOVAL/INSTALLATION

1. Equipment and Materials

- A. Grease – BMS 3-33 (Preferred)
- B. Grease – MIL-PRF-23827 (Supercedes MIL-G-23827) (Alternate)
- C. Shims, Corrosion Resistant Steel – BAC66-23590-1, -2, -3, -4, -5, -6; as required

2. Remove Aft Vibration Isolator (Fig. 401)

- A. Remove power plant (AMM 71-00/401).
- B. Remove isolator.
  - (1) AIRPLANES WITH NON-ENERGY ABSORBING SECONDARY SUPPORT;  
Remove cotter pin, nut, washers, cable retainer, shims (if installed), and bolt attaching aft vibration isolator to inboard flap outboard flap track, and remove isolator.
  - (2) AIRPLANES WITH ENERGY ABSORBING SECONDARY SUPPORT WITHOUT RETAINER BUSHING;  
Remove cotter pin, nut, washers, retainer, shims (if installed), and bolt attaching aft vibration isolator to inboard flap track outboard flap and remove isolator.
  - (3) AIRPLANES WITH ENERGY ABSORBING SECONDARY SUPPORT WITH RETAINER BUSHING;  
Remove the cotter pin, nut, washers, retainer and bushing, and bolt attaching aft vibration isolator to the inboard flap outboard flap track, and remove isolator.

3. Install Aft Vibration Isolator (Fig. 401)

- A. Before installing vibration isolator, check that overall dimension across flanges of flap track bushings is  $4.72 \pm 0.02$  inches. Adjust bushings (using a wrench on each bushing) as required (AMM 54-41-21/401).
- B. Coat aft vibration isolator mounting bolt and mating holes in isolator lugs and flap track with grease.
- C. Loosely install aft vibration isolator, with phenolic rubstrip inboard, on inboard flap outboard flap track using bolt (asbestos fiber [HEX] and [nomex paper or thermosetting sheet]) washers arranged as shown in Fig. 401.

**NOTE:** On airplanes with non-energy absorbing secondary supports or with energy absorbing secondary support without retainer bushing the rubstrip on the No. 1 engine can be installed facing inboard or outboard.

**NOTE:** The asbestos fiber (HEX) washer is manufactured thicker than the bushing head to arranged as shown in Fig. 401.

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## MAINTENANCE MANUAL

- D. Check for gap between nomex paper or thermosetting sheet washer or shims (if installed) and aft vibration isolator lug on both sides of installation. If a gap exist it shall be no greater than 0.002 inch maximum gap limitation. Make sure that isolator installation is as shown on Fig. 401.

**NOTE:** Polyimide coated nomex paper washers are supplied as three separate washers each 0.015 inch thick. Laminated thermosetting sheet washer is supplied as a single washer 0.045 inch thick. Regardless of material type, the total thickness is 0.045 inch. Make sure complete coverage of bushing head in the event of adverse tolerance stack up at installation. This washer may be trimmed back to facilitate installation, however, do not trim past a point flush with the top of the bushing heads. Any damaged asbestos fiber (HEX) washer should be replaced and cemented to firewall (AMM 54-41-21/401).

- E. AIRPLANES WITHOUT RETAINER BUSHING;  
Position shim(s) and retainer on the bolt.
- F. AIRPLANES WITH RETAINER BUSHING;  
Position washer, bushing and retainer on the bolt.
- G. Install flat washer and nut, and tighten the bolt to 250-300 pound-inches. Back the nut off to line up the next adjacent slot with hole in bolt.
- H. AIRPLANES WITHOUT RETAINER BUSHING;  
Adjust shim(s) to achieve a gap between 0.005 and 0.025 inch at the highest area on aft vibration isolator and retainer.
- I. Install a new cotter pin.
- J. Install the power plant (AMM 71-00/401).

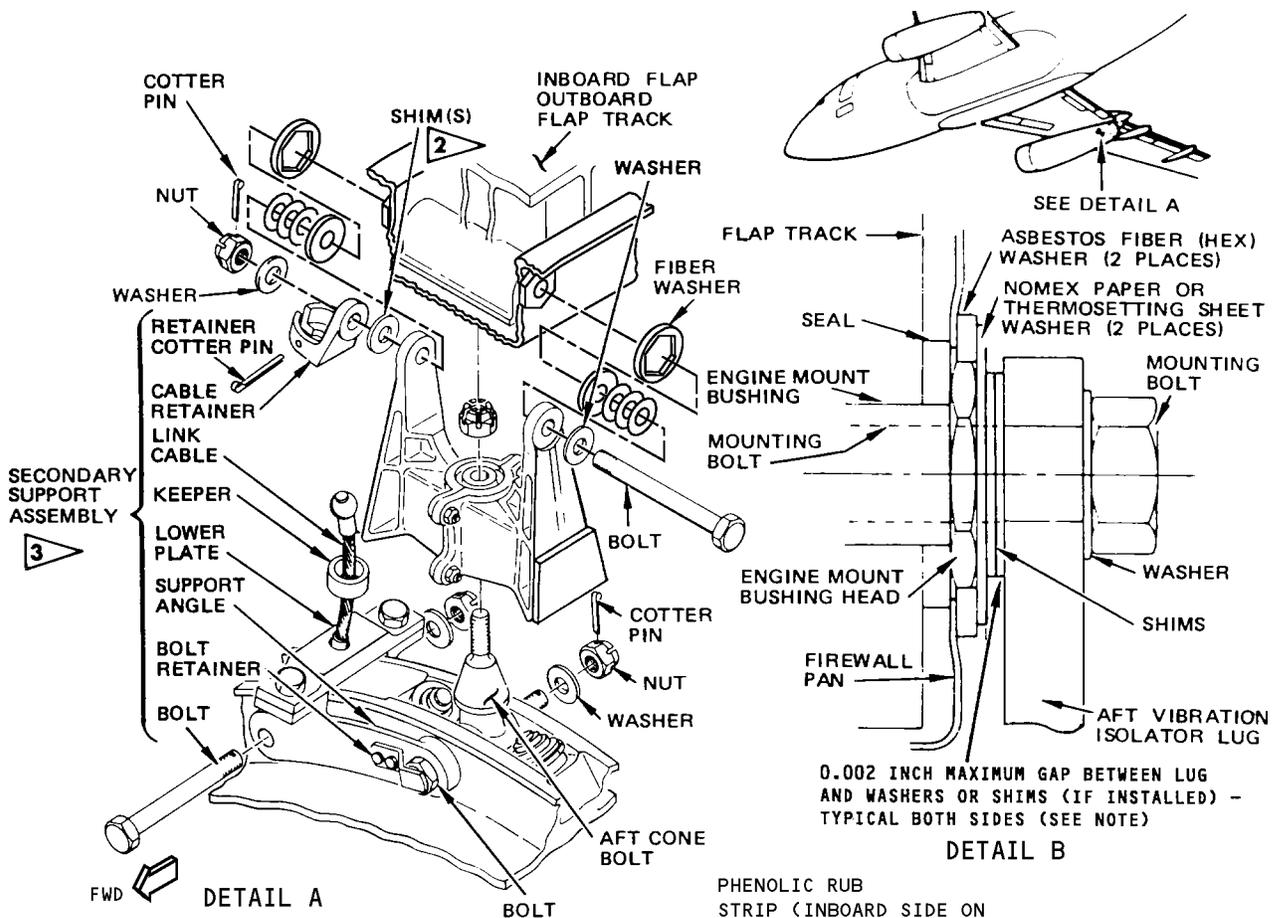
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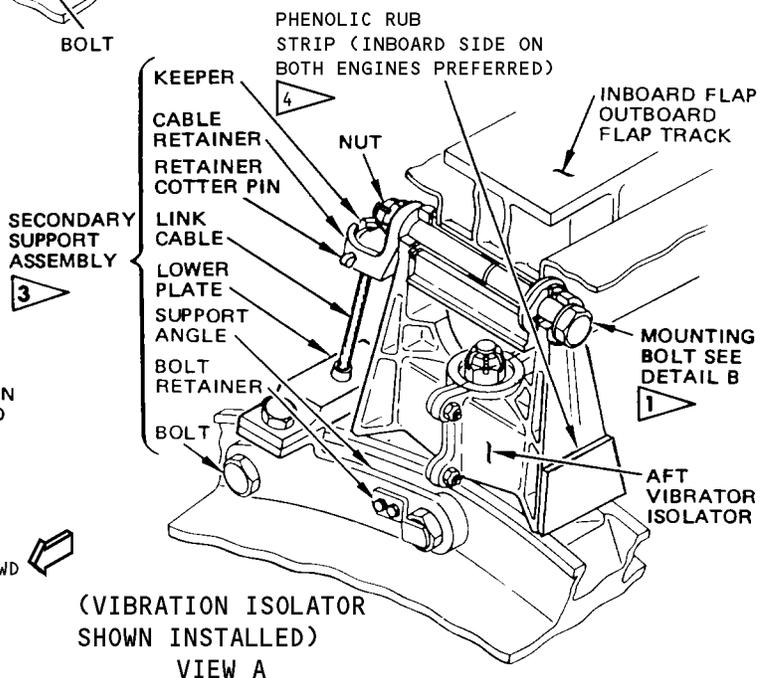
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NOTE: INSTALL SHIMS EQUALLY ON BOTH SIDES AS REQUIRED TO MEET SPECIFIED LIMIT

- 1 MOUNTING BOLT HEAD IS INSTALLED ON THE INBOARD SIDE OF THE ISOLATOR
- 2 ADJUST SHIM(S) TO ACHIEVE A GAP BETWEEN 0.005 AND 0.025 INCH AT THE HIGHEST AREA ON AFT VIBRATION ISOLATOR AND CABLE RETAINER
- 3 NO. 2 ENGINE SHOWN
- 4 ON THE NO. 1 ENGINE THE PHENOLIC RUB STRIP CAN BE INSTALLED FACING OUTBOARD

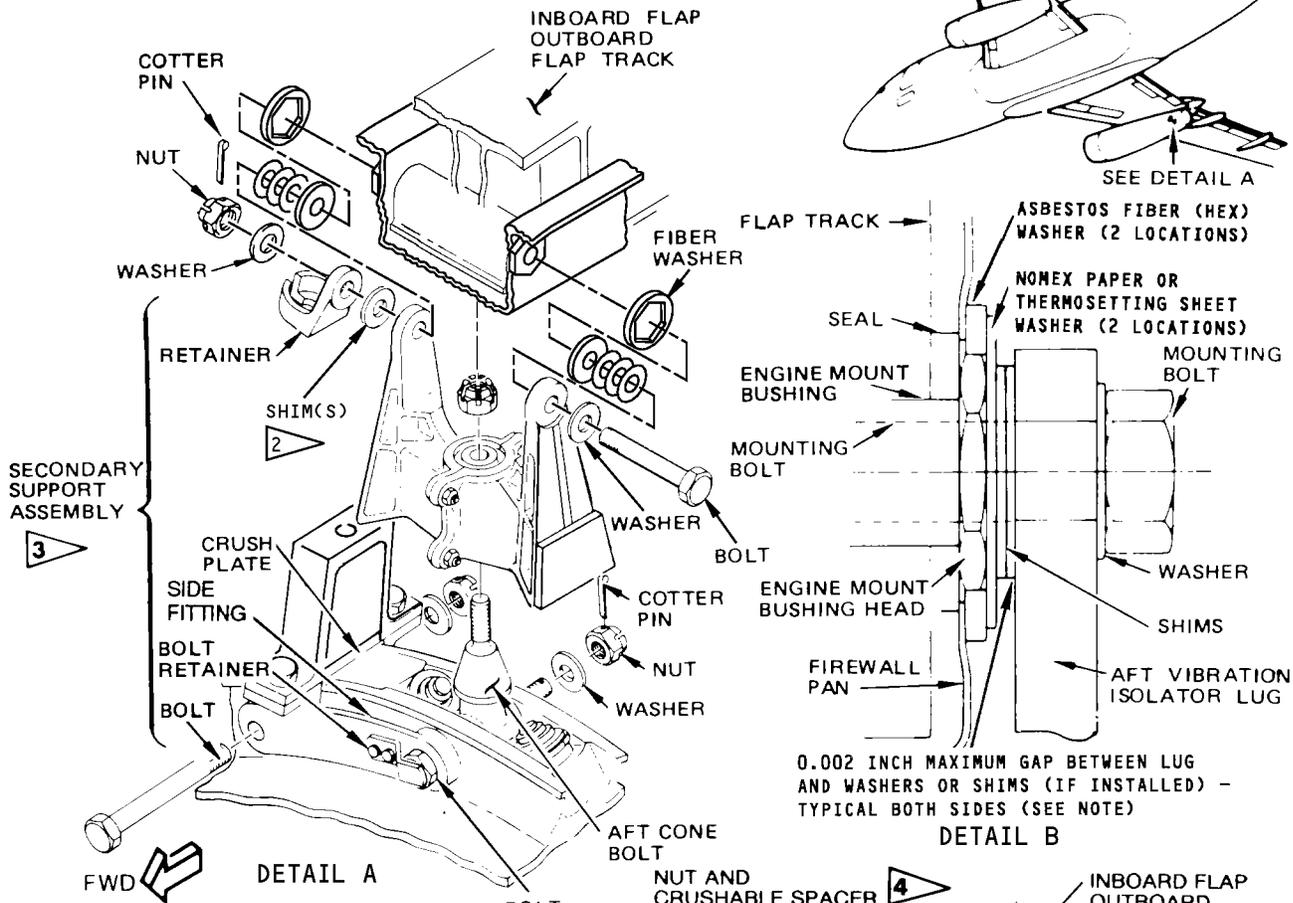


NON-ENERGY ABSORBING

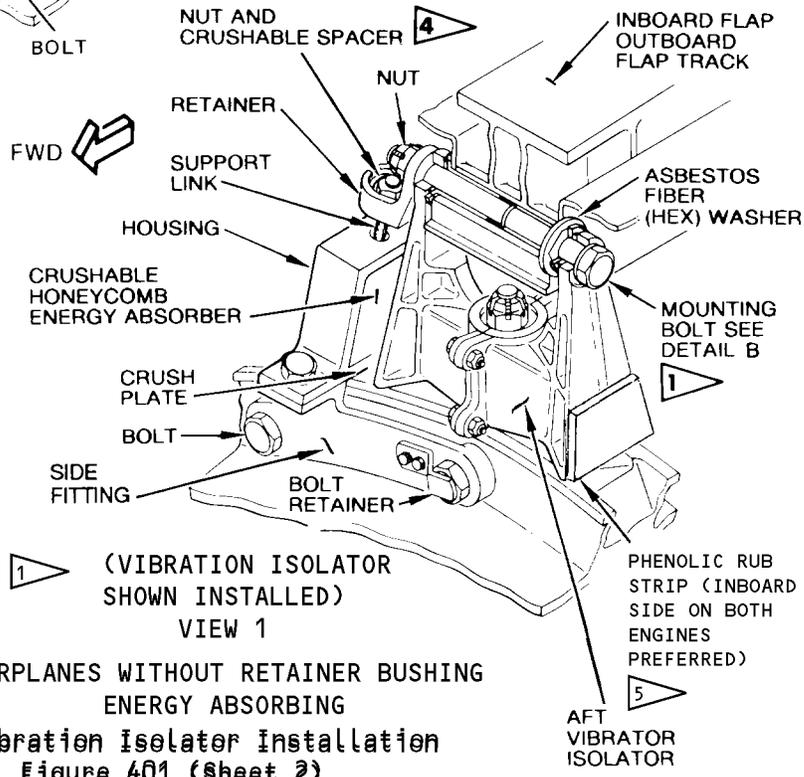
Aft Vibration Isolator Installation  
 Figure 401 (Sheet 1)

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- NOTE:** INSTALL SHIMS EQUALLY ON BOTH SIDES AS REQUIRED TO MEET SPECIFIED LIMIT
- 1 MOUNTING BOLT HEAD IS INSTALLED ON THE INBOARD SIDE OF THE ISOLATOR
  - 2 ADJUST SHIM(S) TO ACHIEVE A GAP BETWEEN 0.005 AND 0.025 INCH AT THE HIGHEST AREA ON AFT VIBRATION ISOLATOR AND CABLE RETAINER
  - 3 NO. 2 ENGINE SHOWN
  - 4 DETERMINE NUMBER OF WASHERS REQUIRED UNDER SUPPORT LINK BOLthead TO PROVIDE MINIMUM CLEARANCE OF 0.06 INCH BETWEEN BOLT END AND NUT SECURING RETAINER. A MINIMUM OF TWO THREADS MUST BE ABOVE NUT WHEN BOLT IS TIGHTENED.
  - 5 ON THE NO.1 ENGINE THE PHENOLIC RUB STRIP CAN BE INSTALLED FACING OUTBOARD

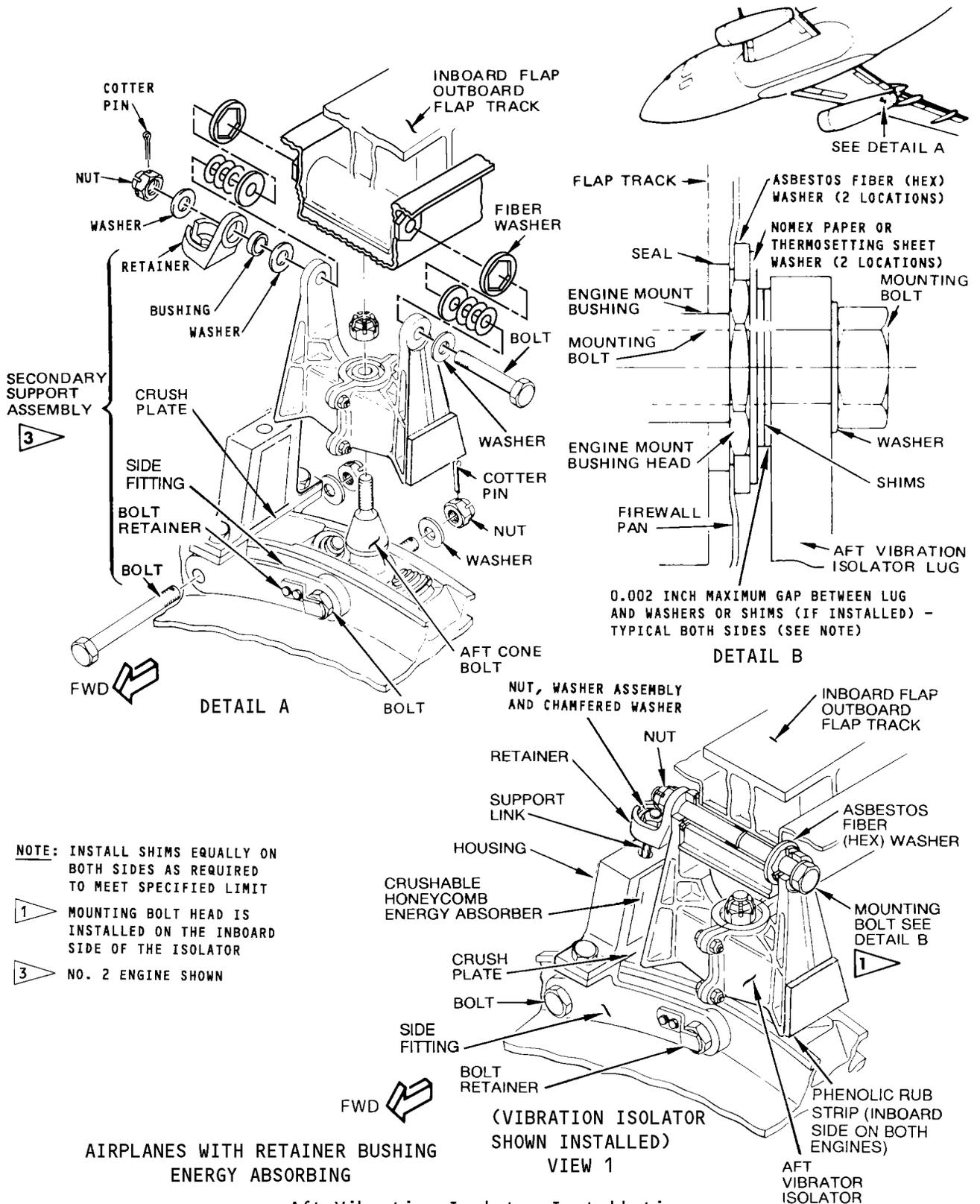


(VIBRATION ISOLATOR SHOWN INSTALLED)  
**VIEW 1**  
**AIRPLANES WITHOUT RETAINER BUSHING ENERGY ABSORBING**  
**Aft Vibration Isolator Installation**  
**Figure 401 (Sheet 2)**

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Aft Vibration Isolator Installation  
 Figure 401 (Sheet 3)

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AFT CONE BOLT - REMOVAL/INSTALLATION

1. General

- A. For aft engine mount with secondary support assembly; the removal/installation is identical, except for the position of the secondary support assembly. The secondary support assembly is positioned outboard of each engine.

2. Equipment and Materials

- A. Grease - BMS 3-33 (Preferred)  
B. Grease - MIL-PRF-23827 (Supercedes MIL-G-23827) (Alternate)

3. Remove Aft Cone Bolt (Fig. 401)

- A. Remove power plant (AMM 71-00-00/401).  
B. On aft engine mount without secondary support assembly, remove cotter pin, nut, washers, and bolt securing aft cone bolt between flanges of engine aft mount ring. Remove cone bolt.  
C. On aft engine mount with secondary support assembly, remove nut retainer, cotter pin, bolt retainer, nut, washers, and bolt securing aft cone bolt between flanges of engine aft mount ring. Remove cone bolt.

4. Install Aft Cone Bolt (Fig. 401)

- A. Make sure that cone bolt to be installed is approved for 737 use. The preferred aft cone bolt is BAC10-60517-50 (shot peened). Cone bolts BAC10-60157-44 (uncoated) and BAC10-60517-40 (coated) are also used. Cone bolt BAC10-60517-40 (coated) should be reworked to BAC10-60517-44 by removing Dri-Lube coating.

**CAUTION:** ONLY APPROVED CONE BOLTS HAVE THE CORRECT STRUCTURAL FUSE CHARACTERISTICS.

- B. Coat the shank of aft cone bolt attach bolts and mating holes with grease.  
C. Position cone bolt between flanges of engine aft mount ring.  
D. On aft engine mount without secondary support assembly, with light washer under attached bolthead, and bolthead forward, insert bolt through holes in engine aft mount ring and hole in cone bolt.  
(1) Install two washers and nut.  
(2) Tighten nut as required to allow 0.005-0.010 inch total end play between attach bolthead and engine mount flanges.  
(3) Install new cotter pin.  
E. On aft engine mount with secondary support assembly, perform the following:  
(1) For aft cone bolt assembly.  
(a) Insert bolt with bolthead forward through secondary support side fitting, holes in engine aft mount ring and hole in cone bolt.

**NOTE:** No washers are allowed under the head of the bolt.

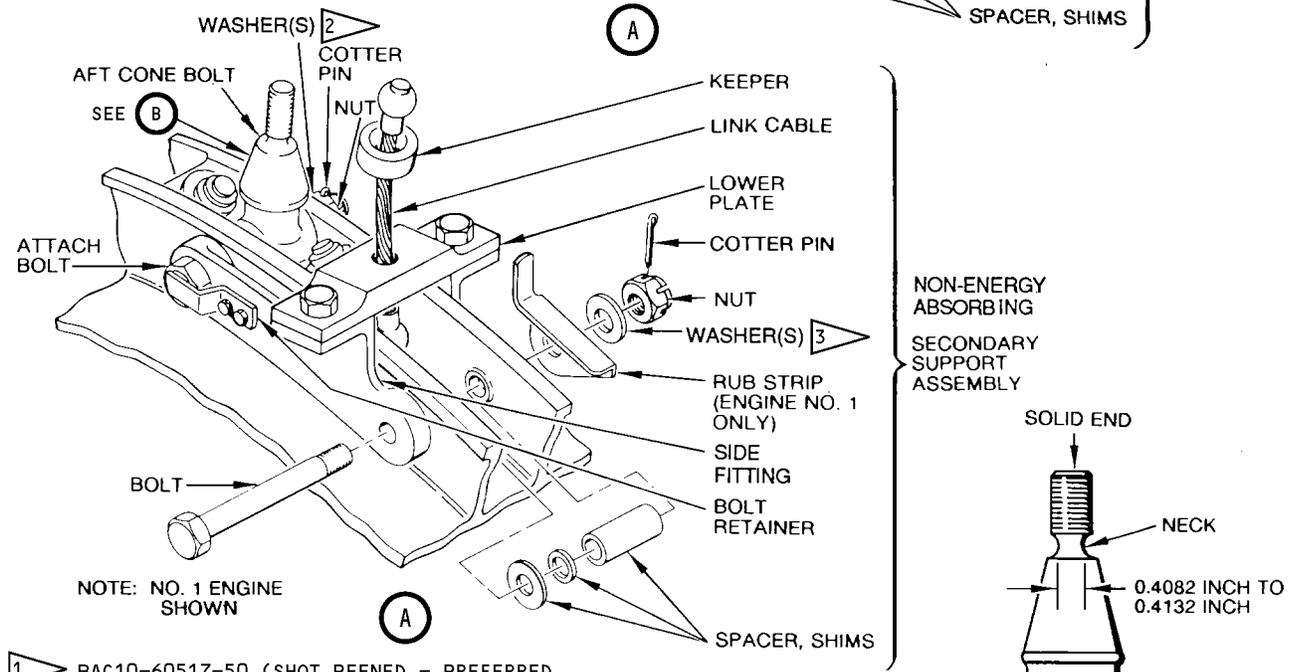
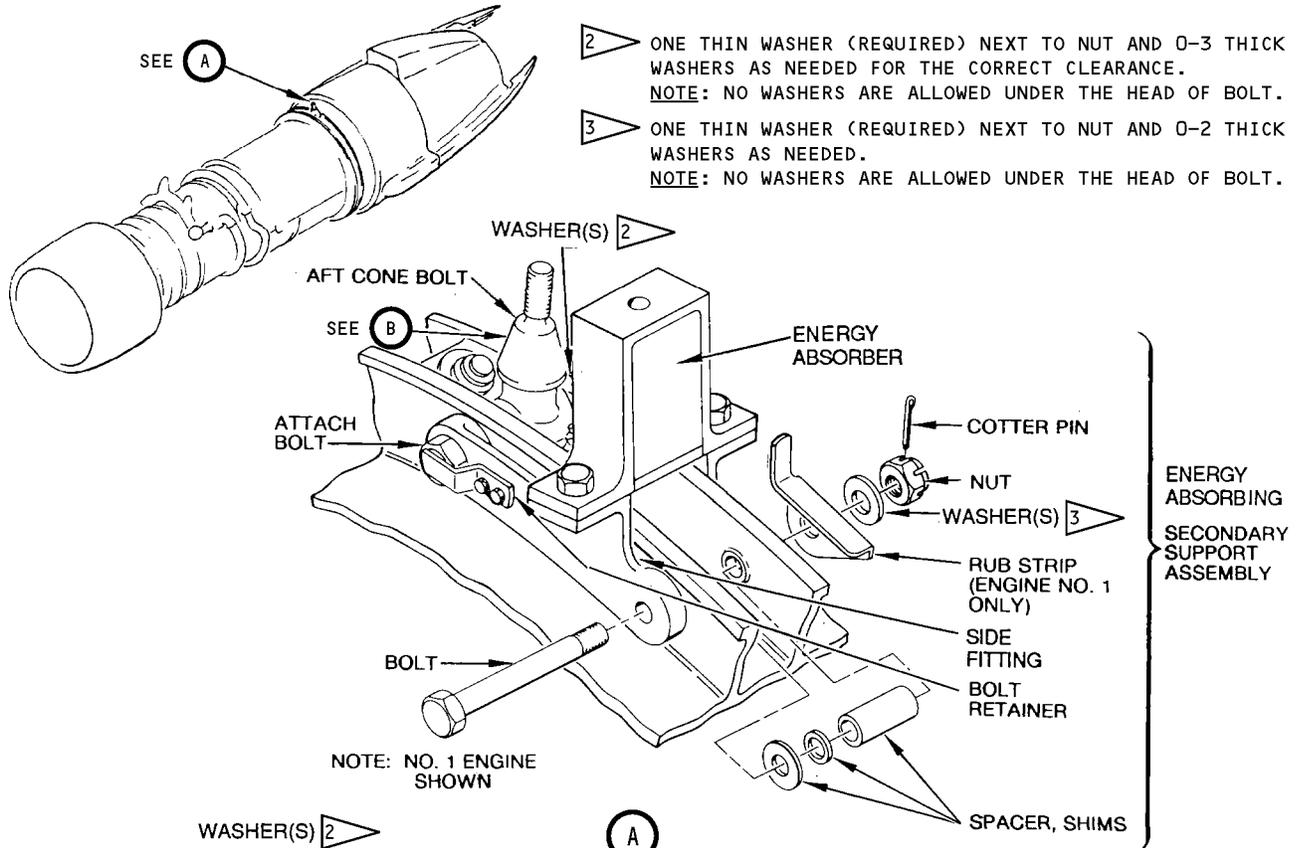
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- 1 BAC10-60517-50 (SHOT PEENED - PREFERRED)  
BAC10-60517-44 (UNCOATED)  
BAC10-60517-40 (DRI-LUBE COATED)  
REMOVE DRI-LUBE COATING AND CHANGE P/N TO BAC10-60517-44

Aft Cone Bolt Installation  
Figure 401

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- (b) Install from zero to three thicker washers as needed to obtain the correct clearance.
  - (c) Install the thinner washer (required) next to the nut and install the nut.
  - (d) Tighten nut as required to allow 0.005–0.010 inch total end play between attach bolthead and engine mount flanges.
  - (e) Install new cotter pin.
  - (f) Install bolt and nut retainers.
- (2) For secondary support assembly.
- (a) Insert bolt with bolthead forward through secondary support side fitting, holes in engine aft mount ring, spacers, adjust shims, to obtain 0.005 max gap between spacer and engine flanges, and (for engine No. 1 only) rubstrip.

NOTE: No washers are allowed under the head of the bolt.

- (b) Install from zero to two thicker washers as needed.
  - (c) Install the thinner washer (required) next to the nut and install the nut.
  - (d) Tighten nut to obtain 660–980 pound-inches.
  - (e) Install new cotter pin.
- F. Install power plant (Ref 71-00).

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FORWARD VIBRATION ISOLATORS - REMOVAL/INSTALLATION

1. Equipment and Materials
  - A. Grease - BMS 3-33 (Preferred)
  - B. Grease - MIL-PRF-23827 (Supercedes MIL-G-23827) (Alternate)
2. Remove Forward Vibration Isolators
  - A. Remove power plant (Ref 71-00, Power Plant (JT8D) - Removal/Installation).
  - B. Remove six nuts, washers, and bolts attaching vibration isolator cover plate and fixed fairing support bracket to forward engine mount support fitting (Fig. 401).
  - C. Remove fixed fairing support bracket and vibration isolator coverplate.
  - D. Remove vibration isolator.
3. Install Forward Vibration Isolators
  - A. Coat vibration isolator coverplate attach bolts, and mating holes in coverplate, fixed fairing support bracket, and forward engine mount support fitting with grease (Fig. 401).
  - B. Position vibration isolator in forward engine mount support fitting and rotate isolator until projection on isolator enters mating hole in fitting.
  - C. Position coverplate over vibration isolator with mounting holes aligned with mating holes in forward engine mount support fitting.
  - D. Position fixed fairing support bracket on cover plate and install six attach bolts, washers, and nuts as shown on Fig. 401. Tighten nuts to 130 to 180 pound-inches.
  - E. Install power plant (Ref 71-00, Power Plant (JT8D) - Removal/Installation).

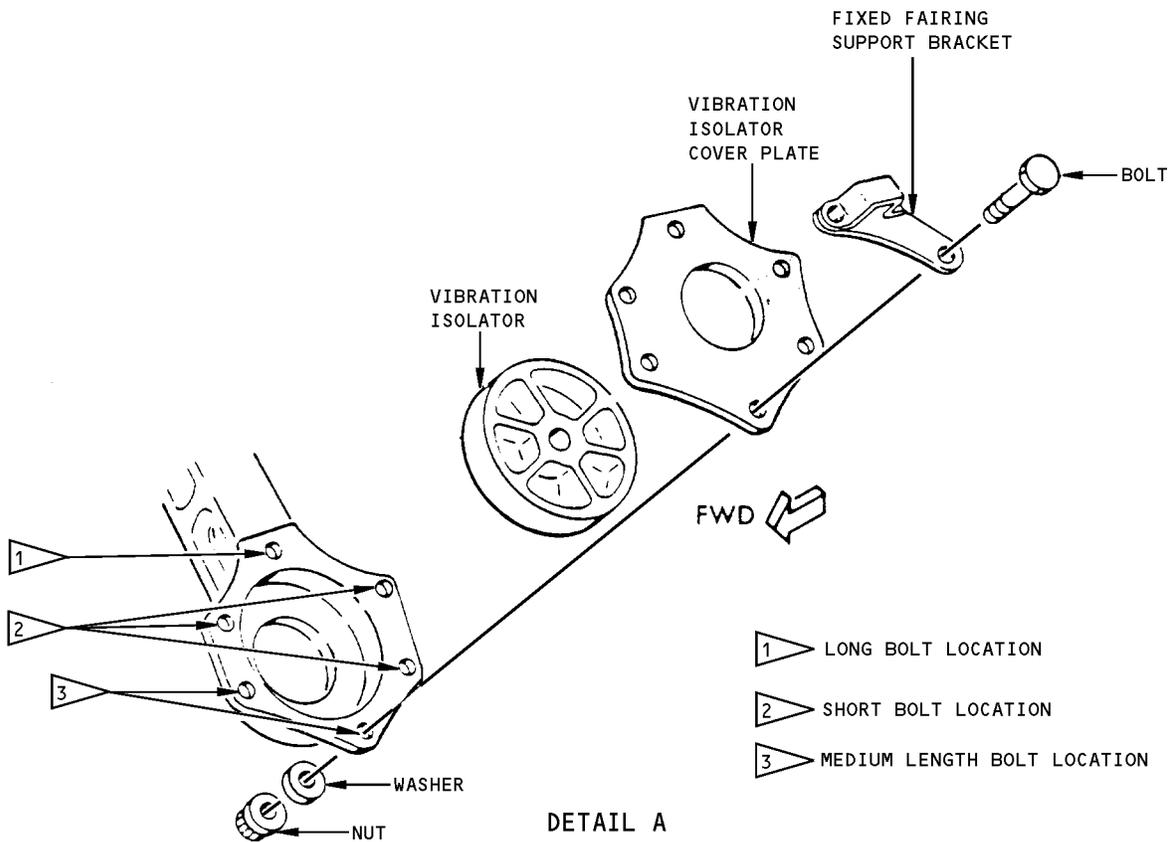
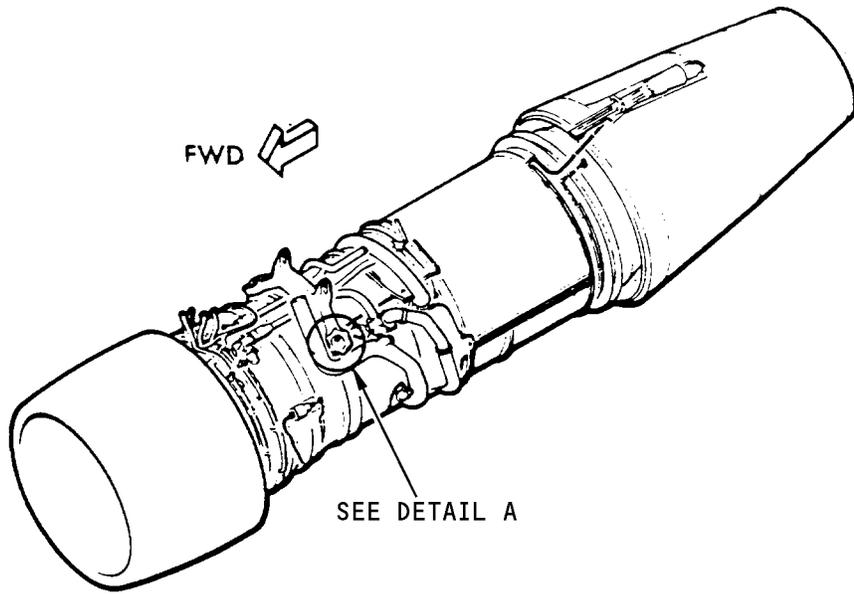
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Forward Vibration Isolators Installation  
 Figure 401

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FORWARD CONE BOLTS – REMOVAL/INSTALLATION

1. Equipment and Materials

- A. Grease – BMS 3-33 (Preferred)
- B. Grease – MIL-PRF-23827 (Supercedes MIL-G-23827) (Alternate)
- C. Spring scale

2. Remove Forward Cone Bolts (Fig. 401)

- A. Remove power plant (Ref 71-00, Power Plant (JT8D) – R/I).
- B. Remove nut, washers, bolt and countersunk washer securing cone bolt to engine forward mount ring. Remove cone bolt.

3. Install Forward Cone Bolts (Fig. 401)

- A. Ensure that cone bolt to be installed is approved for 737 use. The preferred forward cone bolt is BAC10-60517-49 (shot-peened). Cone bolts BAC10-60157-43 (uncoated) and BAC10-60157-39 (coated) are also used. Cone bolt BAC10-60517-39 (coated) should be reworked to BAC10-60517-43 by removing Dri-Lube coating.

**CAUTION:** ONLY APPROVED CONE BOLTS HAVE THE CORRECT STRUCTURAL FUSE CHARACTERISTICS.

- B. Check that cone bolt attach bolt has a chrome-plated shank.
- C. Coat cone bolt attach bolt and mating holes with grease.
- D. Install countersunk washer on attach bolt with countersunk face mating bolthead radius (facing underside of bolthead).
- E. Position cone bolt between flange lugs of engine forward mount ring.
- F. Insert attach bolt (with installed countersunk washer) through holes in flange lugs of engine mount ring and hole in cone bolt. Bolt may be installed with bolthead forward or aft.
- G. Loosely install two washers and nut on attach bolt.

**CAUTION:** MAKE SURE THE RUN-ON TORQUE FOR NUT IS A MINIMUM OF 50 LB-IN. A FAILURE TO MEET THIS REQUIREMENT COULD RESULT IN LOSS OF NUT DURING ENGINE OPERATION AND DAMAGE TO ADJACENT MOUNTING STRUCTURE.

- H. Using spring scale, determine that cone bolt rotates freely on attach bolt when a force of less than 10 pounds is applied at cone bolt threaded end.
- I. Check that end play of cone bolt between engine flange lugs does not exceed 0.005 inch total.

**CAUTION:** END PLAY IN EXCESS OF 0.005 INCH CAN RESULT IN OVERSTRESSING OF THE ENGINE FLANGES WHEN THE CONE BOLT ATTACH BOLT IS TIGHTENED TO FINAL TORQUE.

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## MAINTENANCE MANUAL

- J. Tighten nut on attach bolt until a force of 20 to 25 pounds applied at threaded end of cone bolt is required to rotate cone bolt about attach bolt. The resultant torque shall not exceed 1000 pound-inches.
- K. Install power plant (Ref 71-00, Power Plant (JT8D) - R/I).

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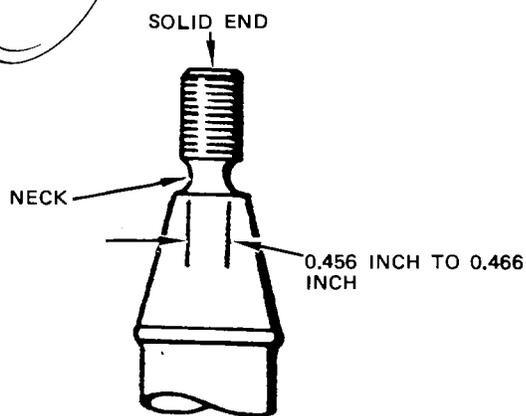
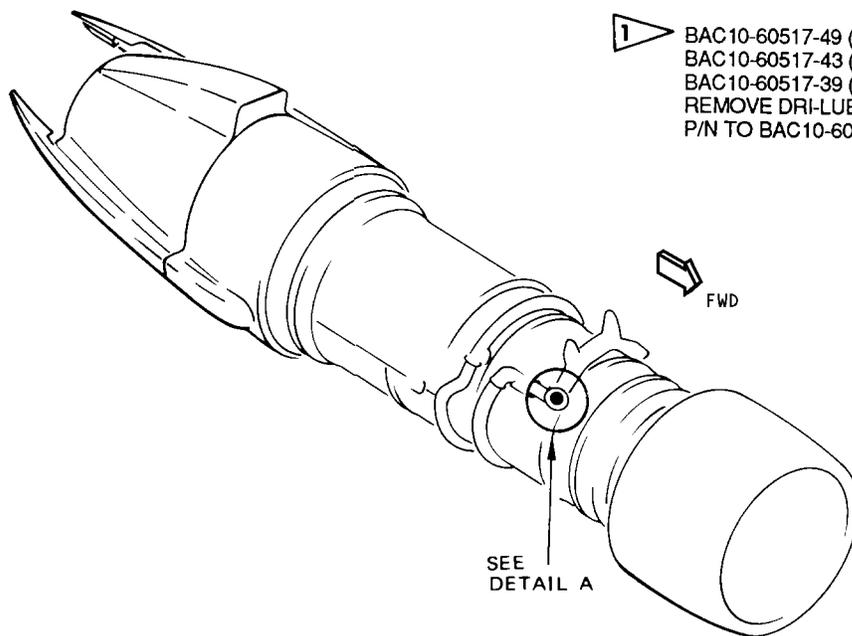
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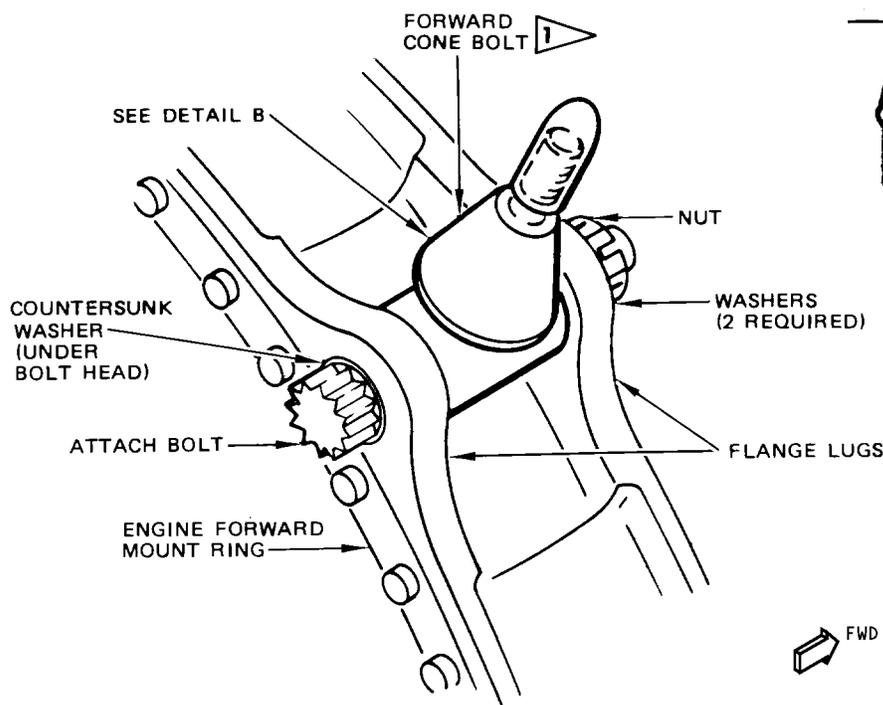


**MAINTENANCE MANUAL**

- 1 BAC10-60517-49 (SHOT PEENED) - PREFERRED
- BAC10-60517-43 (UNCOATED)
- BAC10-60517-39 (DRI-LUBE COATED)
- REMOVE DRI-LUBE COATING AND CHANGE P/N TO BAC10-60517-43.



DETAIL B



DETAIL A

Forward Cone Bolts Installation  
Figure 401

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