TO: ALL HOLDERS OF AUTOTHROTTLE ASSEMBLY COMPONENT MAINTENANCE MANUAL 22-32-22.

REVISION NO. 9 DATED SEP 01/94

HIGHLIGHTS

Pages which have been added or revised are outlined below together with the highlights of the revision. Remove and insert the affected pages as listed and enter Revision No. and date on the Record of Revision Sheet.

CHAPTER/SECTION AND PAGE NO.	DESCRIPTION OF CHANGE
501 REPAIR-GEN 601 REPAIR 6-1 601 REPAIR 8-1 601-602	Added repair instructions for cam 253T7509-1, -2.
REPAIR-GEN 601 REPAIR 7-1 601	Added repair 7-1 for Frame to the Repair Table of Contents.
1033,1046	Edited without technical change.

BOEING

COMPONENT
MAINTENANCE MANUAL

AUTOTHROTTLE ASSEMBLY

PART NUMBERS 253T7101-2,-4,-6,-8,-10, -12 THRU -14,-17, -18

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

292782

REVISION RECORD

- Retain this record in front of manual. On receipt of revision, insert revised pages in the manual, and enter revision number, date inserted and initial.

REVISION NUMBER	REVISION DATE	DATE FILED	BY	REVISION NUMBER	REVISION DATE	DATE FILED	BY

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
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TABLE OF CONTENTS

INTRODUCTION

The instructions in this manual provide the information necessary to perform maintenance functions ranging from simple checks and replacement to complete shop-type repair.

This manual is divided into separate sections:

1. Title Page
2. Record of Revisions
3. Temporary Revision & Service Bulletin Record
4. List of Effective Pages
5. Table of Contents
6. Introduction
7. Procedures & IPL Sections

Refer to the Table of Contents for the page location of applicable sections.

The beginning of the REPAIR section includes a list of the separate repairs, a list of applicable standard Boeing practices, and an explanation of the True Position Dimensioning symbols used.

An explanation of the use of the Illustrated Parts List is provided in the Introduction to that section.

All weights and measurements used in the manual are in English units, unless otherwise stated. When metric equivalents are given they will be in parentheses following the English units.

Design changes, optional parts, configuration differences and Service Bulletin modifications create alternate part numbers. These are identified in the Illustrated Parts List (IPL) by adding an alphabetical character to the basic item number. The resulting item number is called an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless otherwise indicated.

Verification:

Disassembly: MAY 10/90
Assembly: MAY 10/90

AUTOTHROTTLE ASSEMBLY

DESCRIPTION AND OPERATION

1. The autothrottle assembly consists of a gearbox/servo assembly, two resolver assemblies, a brake pack assembly, a switch pack assembly, and two interlock actuators.

   A. The gearbox/servo assembly consists of a servo motor and gearbox assembly. The servo motor drives the resolver assemblies and the brake pack assembly during thrust management system (TMS) operation. Refer to 22-32-31 for details of the gearbox assembly.

   B. The resolver provides an electrical input to the EPCC (Electronic Propulsion Control Computer) on the engine.

   C. The brake pack assembly provides feel friction for the thrust levers and allows the pilots to manually override the TMS. Refer to 22-32-43 for details of the brake pack assembly.

   D. The switch pack assembly monitors the thrust lever position. Refer to 22-32-38 for details of the switch pack assembly.

   E. The interlock actuators prevent inadvertent application of reverse thrust when the thrust levers are advanced. Also, they prevent inadvertent application of forward thrust when reverse thrust is applied.

2. The autothrottle assembly provides full range "FLY-BY-WIRE" thrust control during takeoff, climb, cruise, approach and landing either by manual input from the thrust levers or autothrottle input from the TMS. When the thrust levers are manually moved, the resolver sends an electrical signal to the EPCC on the engine to increase or decrease thrust. When the autothrottle is engaged, a thrust management computer compares the difference between the set speed and actual airplane speed and commands the servo motor to rotate clockwise or counterclockwise.

3. Leading Particulars (approximate)

   Width -- 11 inches
   Depth -- 20 inches
   Length -- 23 inches
   Weight -- 42 pounds

DISASSEMBLY

NOTE: Disassemble this component only as necessary to complete fault isolation, determine the serviceability of parts, perform required repairs, and restore the unit to serviceable conditon.

1. Parts Replacement

   NOTE: The following parts are recommended for replacement. Unless otherwise noted, actual replacement of parts may be based on in-service experience.

   A. Plug (425, IPL Fig. 1)

2. Disassembly (IPL Fig. 1)

   A. Remove screw (416), washer (418), and expander cone (419) for assemblies 253T7101-2, -4, -6 and -8.

   B. Remove bolts (220) and washers (225) for assemblies 253T7101-2, -4, -6 and -8. For assemblies 253T7101-10, -12, -13, -14, -17 and -18 remove bolts (220), washers (225) and nuts (227). Remove gearbox and servo assembly (230).

   C. Separate servomotor (250) from gearbox assembly (255) by removing nuts (245), washers (240) and bolts (235).

      NOTE: Refer to manufacturer's instructions for details of servomotor (250). Refer to CMM 22-32-31 for details of gearbox assembly (255).

   D. Remove nuts (85), washers (80) and screws (75). Remove microswitch pack assembly (70).

      NOTE: Refer to CMM 22-32-38 for details of microswitch pack assembly (70).

   E. Rotate one lever assembly (195), rod assembly (30), and brake pack assembly (435) so rod end bolts are not aligned. Remove nuts (20), washers (15), bushings (25), bolts (5, 10) and rod assemblies (30) from lever assemblies (195, 200) and brake pack assembly (435).

      NOTE: Refer to CMM 27-00-12 for details of rod assembly (35).

   F. Remove nuts (280), washers (270, 275), bushing (285) and bolts (260, 265). Remove lever assemblies (290).

      NOTE: Do not remove bearings (295) from lever assemblies (290) unless required for repair or replacement.

G. Remove resolver assemblies (305, 310).

(1) Remove nuts (330).

(2) Remove nuts (350), washers (345), and screws (335, 340). Slide washers (325), cranks (355) and bushings (360) off end of shafts (385).

(3) Remove bolts (365). Remove clamp assemblies (370).

NOTE: Do not remove inserts (375) from clamp assemblies (370) unless required for repair or replacement.

(4) Gently pull resolver (415) and shaft (385) from bracket assembly (390, 395). Separate resolver (415) from shaft (385).

NOTE: Do not remove bearings (400) from bracket assemblies (390, 395), or bracket assemblies (390, 395) from frames (595, 600) unless required for repair or replacement.

H. Removal of brake pack assembly (435) for top assemblies 253T7101-2, -4, -6 and -8.

(1) Remove bolts (432) and washers (433). Pull quill shaft assembly (420, 422) out of brake pack assembly (435) through hole in frame (595). Remove brake pack assembly (435) from between frames (595, 600).

NOTE: Refer to CMM 22-32-43 for details of brake pack assembly (435). Do not remove plugs (425) from quill shaft assembly (420) unless required for repair or replacement.

I. Removal of brake pack assembly (435) for top assemblies 253T7101-10, -12, -13, -14, -17 and -18.

(1) Remove nut (434U), washer (434M) and bolt (434).

(2) Remove brake assembly (670) by removing nut (665), nut (660), washer (635), spacer (640) and bolt (603). Remove collar (619), bolt (618) and spacer (645). Remove nut (660), washer (635), spacer (645), washer (628) and bolt (613). Remove (655) and washer (623).

(3) Slide brake assembly (670) off of shaft.

(4) Remove the brake pack assembly (435).

NOTE: Refer to CMM 22-32-43 for details of brake pack assembly (435).

J. Rotate stop crank assemblies (170, 175) so fasteners (35 thru 50) are accessible. Remove nuts (50), washers (45), and bolts (35, 40). Remove actuator (65).

NOTE: Refer to manufacturer for details of actuator (65).

K. Remove screws (117), washers (118), and shaft retainer (120). Remove nut (115) using adapter A32045-90. Slowly pull shaft assembly (125) through hole in frame assembly (585), stripping off spacers (140 thru 160), bearings (165), stop crank assemblies (170, 175), and lever assemblies (195, 200).

NOTE: Do not disassemble shaft assembly (125). If required, shaft assembly will be replaced as a unit. Do not remove bearings (180) from stop crank assemblies (170, 175) unless required for repair or replacement.

L. Remove nuts (100), washers (95), bolts (90) and switch cams (105, 110) from lever assemblies (195, 200).

NOTE: Do not remove bearings (205) from lever assemblies (195, 200) unless required for repair or replacement. Do not remove pointers (445, 450), bracket assemblies (455, 460, 515), fillers (582, 583), or inserts (590) from frames (595, 600) unless required for repair or replacement.

CLEANING

1. Clean all parts using standard industry practices and additional procedures in following steps.

2. Clean all teflon-sealed bearings (165, 180, 205, 400, IPL Fig. 1) per manufacturer's instructions.

CHECK

1. Check all parts for obvious defects in accordance with standard industry practices.

2. Magnetic particle check per 20-20-01 -- retainer (120, IPL FIg. 1), spacer (160), clamp (380), shafts (385, 430), bolt (608), nut (680), spacer (673).

3. Penetrant check per 20-20-02 -- cams (105, 110), shaft (125), cranks (185, 190, 355), levers (210, 215, 300), brackets (405, 410), cone expander (419), mounts (550, 555, 560, 565, 570), channel (575), frames (595, 600).

4. Examine the surface of the cam (105, 110) for wear from the bearings of the mircoswitch pack assembly (70). If there is damage to the cam, repair the cam as specified in Repair 8-1 and refer to the microswitch pack assembly CMM 22-32-38 for the instructions to examine and/or replace the bearings.

REPAIR - GENERAL

1. Content

A. Repair, refinish, and replacement procedures are included in separate sections as follows:

P/N	NAME	REPAIR
253T7506	LEVER	1-1
253T7511	BRACKET	2-1
253T7512	SHAFT	3-1
253T7519	CRANK	4-1
253U5109	LEVER	5-1
--	MISC PARTS REFINISH	6-1
254N1142	FRAME	7-1
253T7509	CAM-SWITCH	8-1

2. Standard Practices

A. Refer to the following standard practices, as applicable, for details of procedures in individual repairs:

20-30-02 Stripping of Protective Finishes
20-30-03 General Cleaning Procedure
20-41-01 Decoding Table for Boeing Finish Codes
20-41-02 Application of Chemical and Solvent Resistant Finishes
20-42-05 Bright Cadmium Plating
20-43-01 Chromic Acid Anodizing
20-50-03 Beaing Installation and Retention

3. Materials

NOTE: Equivalent substitutes may be used.

A. Primer -- BMS 10-11, type 1 (Ref 20-60-02)

B. Sealant -- BMS 5-95 (Ref 20-60-04)

4. Dimensioning Symbols

A. Standard True Position Dimensioning Symbols used in applicable repair procedures are shown in Fig. 601.

—	STRAIGHTNESS
▱	FLATNESS
⊥	PERPENDICULARITY (OR SQUARENESS)
//	PARALLELISM
○	ROUNDNESS
⌭	CYLINDRICITY
⌒	PROFILE OF A LINE
⌓	PROFILE OF A SURFACE
◎	CONCENTRICITY
⌯	SYMMETRY
∠	ANGULARITY
↗	RUNOUT
⌰	TOTAL RUNOUT
⌴	COUNTERBORE OR SPOTFACE
⌵	COUNTERSINK
⌖	THEORETICAL EXACT POSITION OF A FEATURE (TRUE POSITION)
∅	DIAMETER
S∅	SPHERICAL DIAMETER
R	RADIUS
SR	SPHERICAL RADIUS
()	REFERENCE
BASIC (BSC) OR [DIM]	A THEORETICALLY EXACT DIMENSION USED TO DESCRIBE SIZE, SHAPE OR LOCATION OF A FEATURE FROM WHICH PERMISSIBLE VARIATIONS ARE ESTABLISHED BY TOLERANCES ON OTHER DIMENSIONS OR NOTES.
[-A-]	DATUM
Ⓜ	MAXIMUM MATERIAL CONDITION (MMC)
Ⓛ	LEAST MATERIAL CONDITION (LMC)
Ⓢ	REGARDLESS OF FEATURE SIZE (RFS)
Ⓟ	PROJECTED TOLERANCE ZONE
FIM	FULL INDICATOR MOVEMENT

EXAMPLES

— 0.002	STRAIGHT WITHIN 0.002
⊥ B 0.002	PERPENDICULAR TO B WITHIN 0.002
// A 0.002	PARALLEL TO A WITHIN 0.002
○ 0.002	ROUND WITHIN 0.002
⌭ 0.010	CYLINDRICAL SURFACE MUST LIE BETWEEN TWO CONCENTRIC CYLINDERS, ONE OF WHICH HAS A RADIUS 0.010 INCH GREATER THAN THE OTHER
⌒ A 0.006	EACH LINE ELEMENT OF THE SURFACE AT ANY CROSS SECTION MUST LIE BETWEEN TWO PROFILE BOUNDARIES 0.006 INCH APART RELATIVE TO DATUM PLANE A
⌓ A 0.020	SURFACES MUST LIE WITHIN PARALLEL BOUNDARIES 0.02 INCH APART AND EQUALLY DISPOSED ABOUT TRUE PROFILE
◎ C ∅ 0.0005	CONCENTRIC TO C WITHIN 0.0005 DIAMETER
⌯ A 0.010	SYMMETRICAL WITH A WITHIN 0.010
∠ A 0.005	ANGULAR TOLERANCE 0.005 WITH A
⌖ B ∅ 0.002 Ⓢ	LOCATED AT TRUE POSITION WITHIN 0.002 DIA RELATIVE TO DATUM B, REGARDLESS OF FEATURE SIZE
⊥ A ∅ 0.010 Ⓜ 0.510 Ⓟ	AXIS IS TOTALLY WITHIN A CYLINDER OF 0.010-INCH DIAMETER, PERPENDICULAR TO, AND EXTENDING 0.510-INCH ABOVE, DATUM A, MAXIMUM MATERIAL CONDITION
2.000 OR 2.000 BSC	EXACT DIMENSION IS 2.000

(NOTE THAT ⌓ A 0.020 MAY ALSO APPEAR AS ⌓ 0.020 A)

True Position Dimensioning Symbols
Figure 601

292786

LEVER ASSEMBLY - REPAIR 1-1

253T7506-1, -2

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require restoration of original finish, refer to Refinish instructions.

1. Bearing Replacement (205, IPL Fig. 1)

   A. Remove bearing.

   B. Install and roller swage the new bearing per 20-50-03 using wet BMS 10-11, type 1 primer.

2. Refinish

   A. Lever (210, 215) -- Chromic acid anodize. Apply one layer of BMS 10-11, type 1 primer (F-18.13) all over, except omit primer from all bolt holes and bearing bores. Material: Al alloy.

BRACKET ASSEMBLY - REPAIR 2-1

253T7511-1, -2

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require restoration of original finish, refer to Refinish instructions.

1. Bearing Replacement (400, IPL Fig. 1)

   A. Remove bearing.

   B. Install and roller swage new bearing per 20-50-03 using wet BMS 5-95 sealant.

2. Refinish

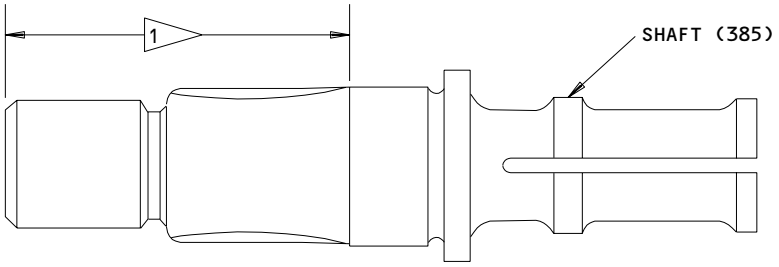
   A. Bracket (405, 410) -- Chromic acid anodize. Apply one layer of BMS 10-11, type 1 primer (F-18.13) all over, except omit primer from bolt holes and bearing bore. Material: Al alloy.

SHAFT - REPAIR 3-1

253T7512-3

1. Plating Repair

NOTE: Repair consists of stripping and restoration of original finish. Refer to Refinish instruction in Fig. 601 and to REPAIR-GEN for list of applicable standard practices.



REFINISH:

SHAFT (385) -- PASSIVATE (F-17.09).
CADMIUM PLATE PER 20-42-05, TYPE 2,
CLASS 3, (F-15.02) TO AREA SHOWN

MATERIAL: 15-5PH CRES
150-170 KSI

1 CADMIUM PLATE THIS SURFACE ONLY

253T7512-3

Shaft Refinish
Figure 601

STOP CRANK ASSEMBLY - REPAIR 4-1

253T7519-1, -2

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require restoration of original finish, refer to Refinish instructions.

1. Bearing Replacement (180, IPL Fig. 1)

   A. Remove bearing.

   B. Install and roller swage the new bearing per 20-50-03 using wet BMS 10-11, type 1 primer.

2. Refinish

   A. Crank (185, 190) -- Chromic acid anodize. Apply one layer of BMS 10-11, type 1 primer (F-18.13) all over, except omit primer from all bolt holes and bearing bores. Material: Al alloy.

LINK ASSEMBLY - REPAIR 5-1

253U5109-1

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require restoration of original finish, refer to Refinish instructions.

1. Bearing Replacement (295, IPL Fig. 1)

   A. Remove bearing.

   B. Install and roller swage bearing per 20-50-03 using wet BMS 5-95 sealant.

2. Refinish

   A. Link (300) -- Chromic acid anodize. Apply one layer of BMS 10-11, type 1 primer (F-18.13) all over, except omit primer from bearing bores. Material: Al alloy.

MISCELLANEOUS PARTS REFINISH - REPAIR 6-1

1. Repair of all parts listed in Fig. 601 consists of restoration of the original finish.

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1		
Retainer (120)	17-7PH CRES 180-200 ksi	Passivate (F-17.09).
Shaft assy (125)	Al alloy	Touch up exposed surfaces by chemically treating, then applying 1 layer of BMS 10-11, type 1 primer (F-18.07). Omit primer from threads.
Spacer (160)	15-5PH CRES 150-170 ksi	Cadmium plate per 20-42-05, type 2, class 2, and apply l layer of BMS 10-11, type 1 primer (F-16.01) all over.
Crank (355)	Al alloy	Chromic acid anodize. Apply 1 layer of BMS 10-11, type 1 primer (F-18.13) all over except omit primer from bolt holes and from splines.
Clamp (380)	15-5PH CRES 150-170 ksi	Passivate (F-17.09).
Shaft (430)	15-5PH CRES 180-200 ksi	Passivate (F-17.09).
Pointers (445,450)	Al alloy	Chromic acid anodize. Apply 1 layer of BMS 10-11, type 1 primer (F-18.13) all over, except omit primer from slot.

Refinish Details
Figure 601 (Sheet 1)

IPL FIG. & ITEM	MATERIAL	FINISH
Brackets (505,510), mounts (550,555,560, 565,570), channel (575)	Al alloy	Chromic acid or sulfuric acid anodize (F-17.05). Apply 1 layer of BMS 10-11, type 1 primer (F-20.02) all over, except omit primer from bolt holes.
Connector (500)	Al alloy	Chemically treat. Apply 1 layer of BMS 10-11, type 1 primer (F-18.06) all over.
Filler (582,583) Plate (253)	Al alloy	Chromic acid anodize and apply 1 layer of BMS 10-11, type 1 primer (F-18.13) all over.
Bolt (608)	15-5PH CRES	Cadmium plate and apply 1 coat of BMS 10-11, type 1 primer (F-16.01). No primer on threads on 0.3114-0.3104 inch diameter surface.
Spacer (673)	CRES	Prepare surface and passivate (F-17.09).

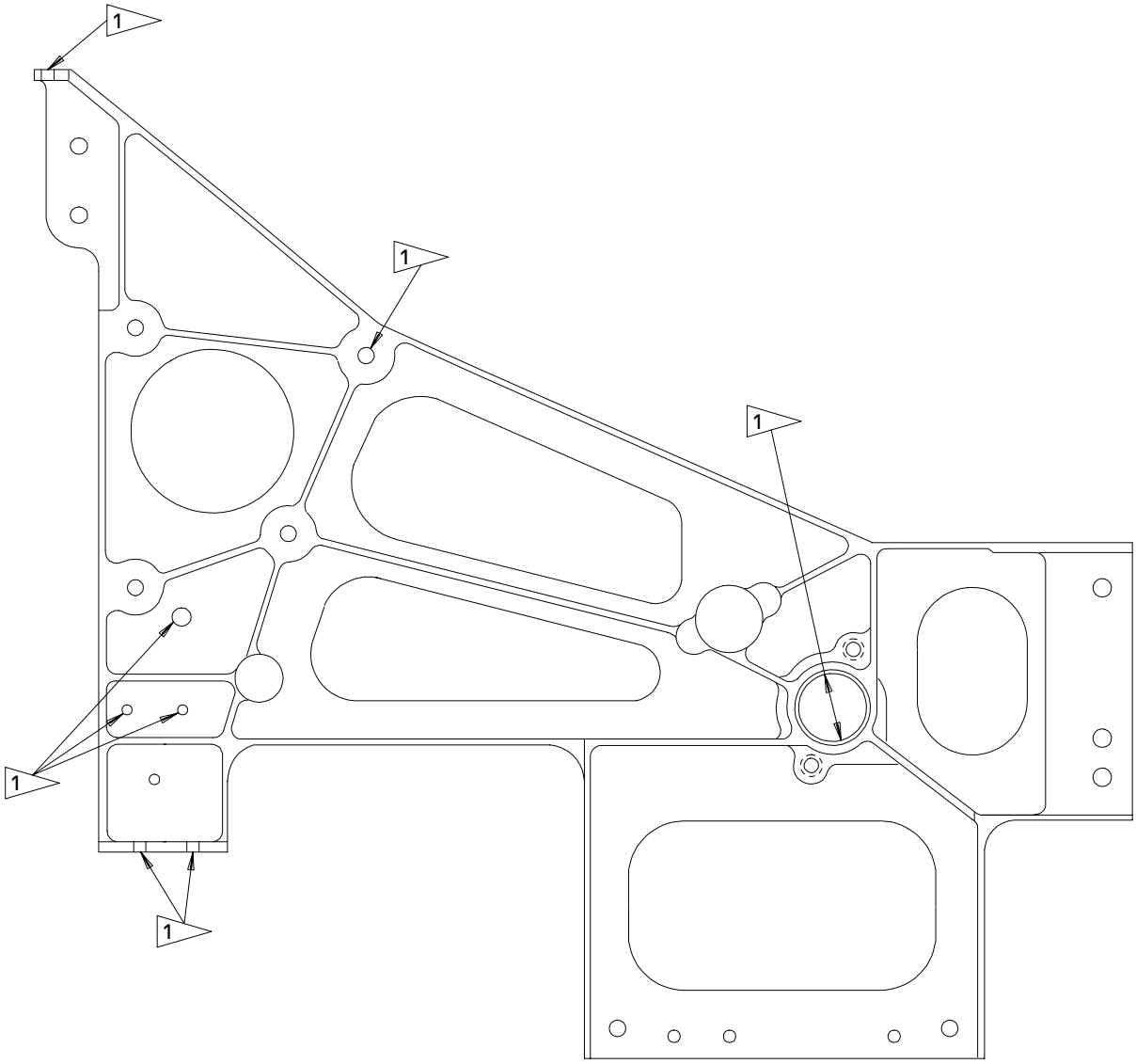
Refinish Details
Figure 601 (Sheet 2)

FRAME - REPAIR 7-1

254N1142-5, -6

1. Plating Repair

NOTE: Repair consists of stripping and restoration of original finish. Refer to Refinish instruction in Fig. 601 and to REPAIR-GENERAL for list of applicable standard practices.



REFINISH:

CHROMIC ACID ANODIZE, TYPE 1 AND
APPLY ONE COAT OF BMS 10-11, TYPE 1
PRIMER (F-18.13) UNLESS SHOWN DIFFERENTLY

1 NO PRIMER IN HOLE

254N1142-5,-6
Frame
Figure 601

B79133

CAM-SWITCH - REPAIR 8-1

253T7509-1, -2

NOTE: Refer to REPAIR-GEN for a list of applicable standard practices.

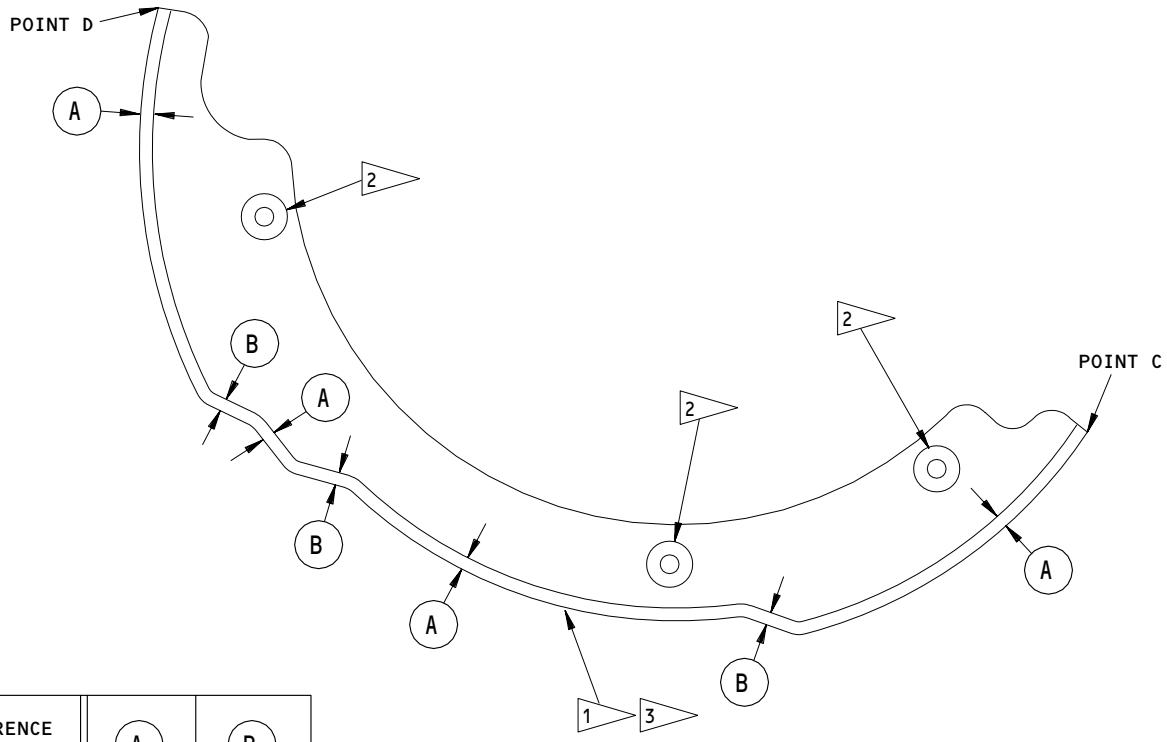
1. Cam repair (105, 110, IPL Fig. 1; Fig. 601)

   A. Locally blend out the scratches or grooves in the surface of the cam. Make sure that the depth of the damage is not more than the maximum permitted wear shown and keep the surface roughness at 125 AA or better.

      NOTE: Tell Boeing if the cam wear is more than 0.02 inches deep to find out if the cam can be repaired.

   B. Anodize (F-17.04) the repaired areas.

   C. Refinish the cam as shown.



REFERENCE LETTER	(A)	(B)
DESIGN THICKNESS	0.07 0.13	0.08 0.12
MAXIMUM PERMITTED WEAR 4	0.02	0.02

REFINISH

CHROMIC ACID ANODIZE TYPE 1 (F-17.04) AND APPLY TWO COATS OF BMS 10-11, TYPE 1 PRIMER (F-20.03) AS SPECIFIED IN SOPM 20-41-02 TO ALL CAM SURFACES BUT THOSE IDENTIFIED BY FLAGNOTES 1 AND 2.

1. DO NOT APPLY PRIMER ON THE CAM SURFACE FROM POINT C TO POINT D.
2. DO NOT APPLY PRIMER TO THE COUNTERSUNK HOLES.
3. LOCALLY BLEND OUT THE DAMAGED AREAS.
4. THE SURFACES OF THE CAM MUST NOT WEAR MORE THAN 0.02 INCHES. MEASURE THE ADJACENT AREAS THAT HAVE NOT BEEN BLENDED OUT BEFORE OR DAMAGED BY THE BEARINGS OF THE MICROSWITCH PACK ASSEMBLY TO IDENTIFY THE DEPTH OF THE DAMAGE.

REPAIR

REF 3 4

MATERIAL: ALUMINUM ALLOY

125 ALL MACHINED SURFACES

ALL DIMENSIONS ARE IN INCHES

253T7509-1,-2
Cam - Switch Repair
Figure 601

E41310

ASSEMBLY

1. Materials

NOTE: Equivalent substitutes may be used.

A. Grease -- BMS 3-24 (Ref 20-60-03)

B. Grease -- MIL-G-23827 (Ref 20-60-03)

2. Equipment

NOTE: Equivalent substitutes may be used.

A. Adapter -- A32045-90

3. Assembly (IPL Fig. 1)

CAUTION: HANDLE RESOLVER (415) WITH CARE. ASSEMBLE RESOLVER ASSEMBLY (305, 310) IN CLEAN AREA. RESOLVER (415) IS AN ELECTRICAL TRANSDUCER OF INSTRUMENT QUALITY.

A. Pre-assemble resolver assembly (305, 310).

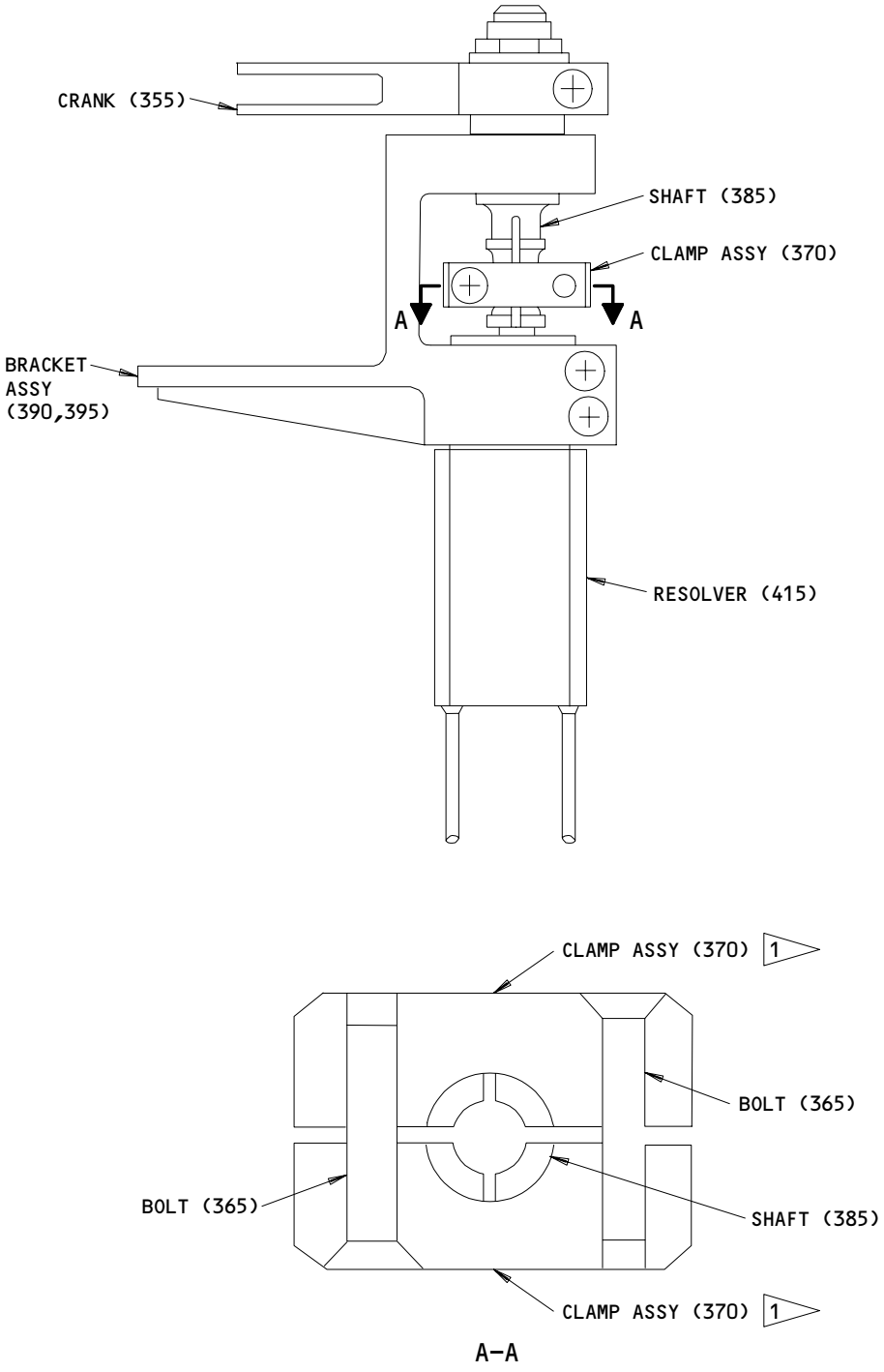
(1) Slide shaft (385) into position in bracket assembly (390, 395).

(2) Install bushing (360), crank (355), washer (325) and nut (330) on end of shaft (385). Tighten nut (330).

(3) Carefully position resolver (415) in shaft (385) and install clamps (370) using bolts (365). Position clamps (370) as shown (Fig. 701). Install fasteners (340 thru 350) to secure resolver (415).

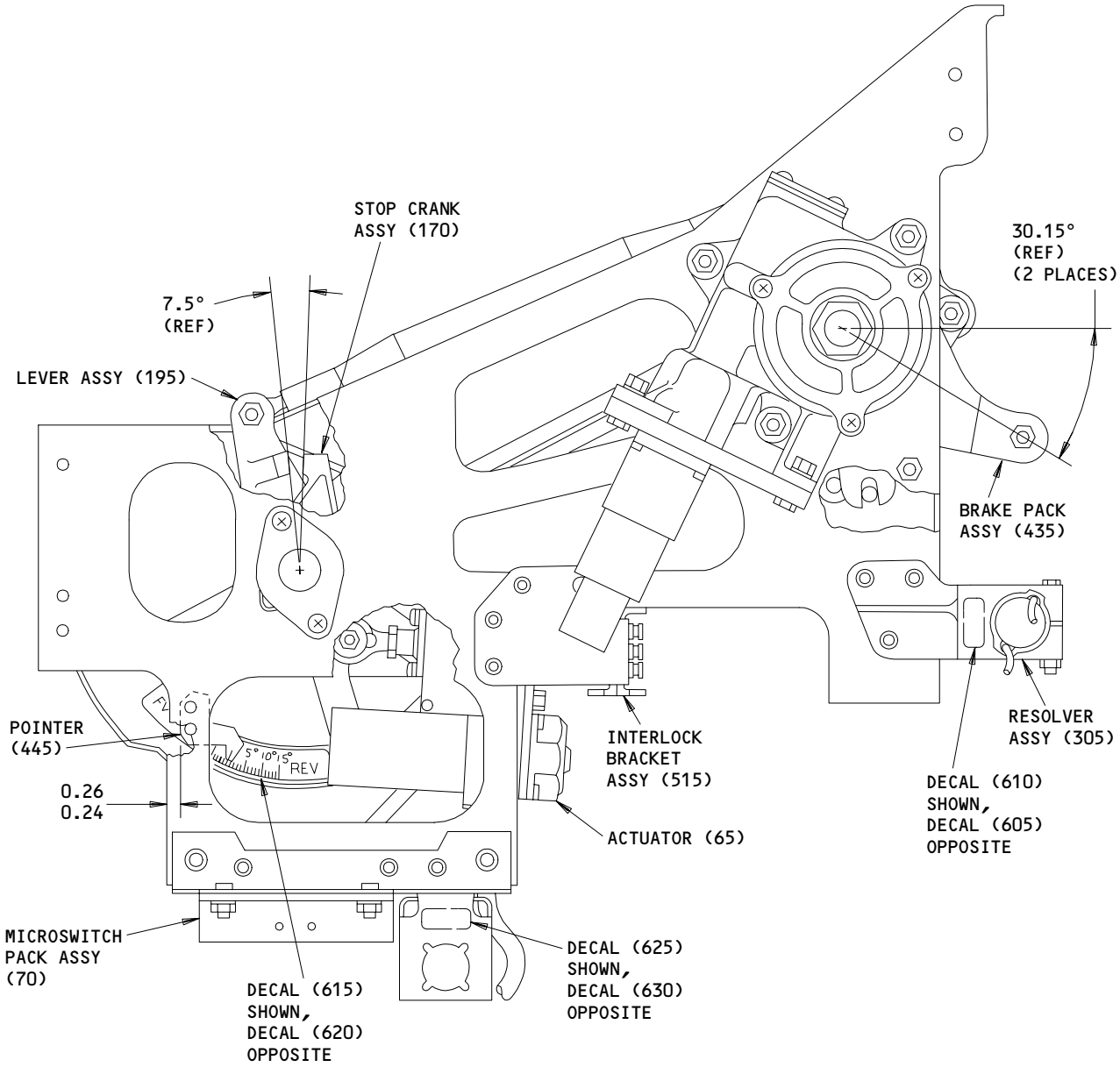
(4) Loosen nut (330) so it is finger tight only (crank will be positioned during installation and rigging in airplane. Secure crank (355) on shaft (385) using fasteners (335 thru 350).

B. Install pointers (445, 450) on frames (595, 600) using rivets (440). Verify that pointers are located as shown (Fig. 702).



1 ALIGN CLAMPS AS SHOWN (±10 DEGREES)
WITH RESPECT TO SLOTS IN SHAFT (385)

Resolver Clamp Orientation
Figure 701



ALL DIMENSIONS ARE IN INCHES

Autothrottle Assembly
and Travel Check
Figure 702

C. Install bracket assemblies (455, 460) on frames (595, 600).

D. Install resolver assemblies (305, 310) on frames (595, 600) using fasteners (315, 320).

E. Attach switch cams (105, 110) to lever assemblies (195, 200) using fasteners (90 thru 100).

F. Install shaft assembly (125) and associated components.

(1) Coat mating surfaces of shaft assembly (125) and spacers (140 thru 160) with MIL-G-23827 grease prior to assembly.

(2) Position frames (595, 600).

(3) Slide shaft assembly (125) through frame (595), spacers (140 thru 160), bearings (165), stop crank assemblies (170, 175), lever assemblies (195, 200) and frame (600). Install bearings per 20-50-03 using either MIL-G-23827 or BMS 3-24 grease.

(4) Install shaft retainer (120) using fasteners (117, 118).

(5) Install nut (115) on shaft assembly (125). Tighten nut (115) to 100-150 pound-inches above run-on torque using adapter A32045-90.

G. Attach link assemblies (290) to cranks (355) of resolver assemblies (305, 310).

H. Installation of brake pack assembly (435) for top assemblies 253T7101-2, -4, -6, and -8.

(1) Position brake pack assembly (435) between frames (595, 600). Install using bolts (432) and washers (433).

I. Installation of brake pack assembly (435) for top assemblies 253T7101-10, -12, -13, -14, -17 and -18.

(1) Position brake pack assembly (435) between frames (595, 600).

(2) Slide brake assembly (670) onto shaft and install using washer (623) and nut (655), bolt (613), washer (628), spacer (645), washer (635) and nut (660). Install spacer (645), bolt (618), and collar (619). Install bolt (603), spacer (640), washer (635), nut (660) and nut (665).

(3) Install bolt (434), washer (434M) and nut (434U).

J. Install link assemblies (290) between brake pack assembly (435) and cranks (355) of resolver assemblies (305, 310).

K. Rotate lever assembly (195) so as to offset lugs of lever assemblies (195, 200). Install rod assemblies (30) between lever assemblies (195, 200) and brake pack assembly (435) using fasteners (5 thru 20).

L. Install interlock bracket assembly (515).

(1) Mount bracket assembly (515) on frame (595) using fasteners (517 thru 530).

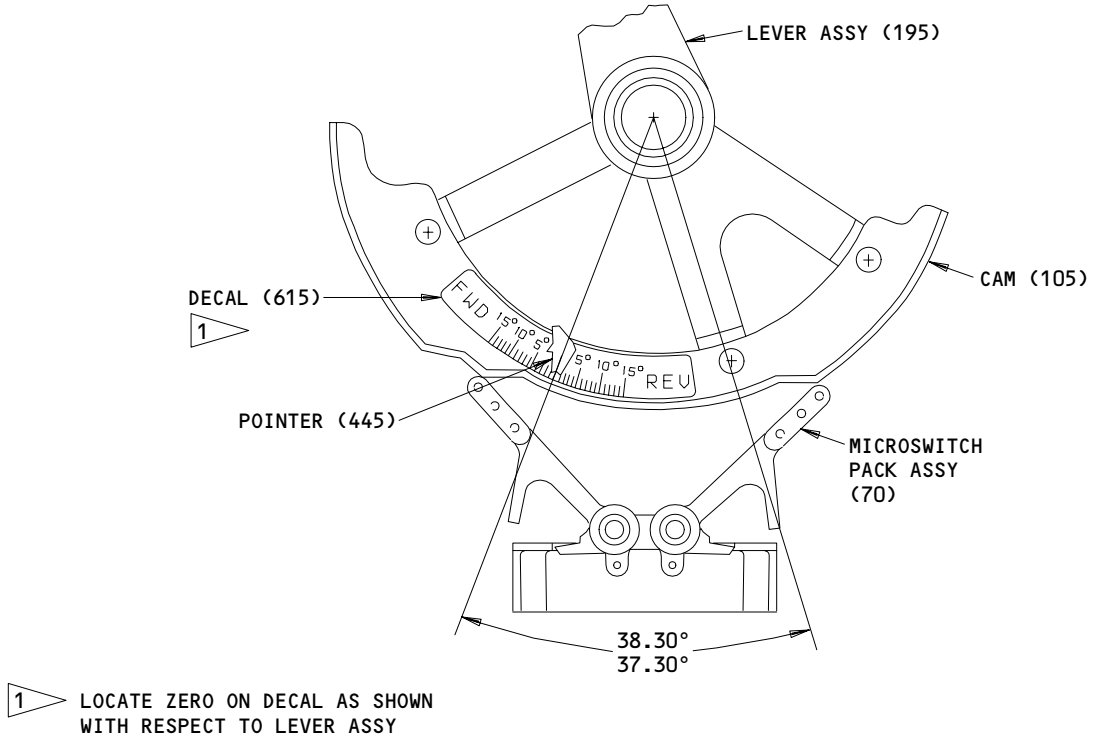
(2) Measure distance between bracket assembly (515) and frame (600) on right-hand side. Shim gap as required using shims (580).

M. Install interlock actuator (65) using fasteners (35 thru 50).

N. Install microswitch pack assembly (70) using fasteners (75 thru 85).

O. Install decals (605, 610, 625, 630) per 20-50-05 in approximate locations shown in IPL Fig. 1.

P. Position lever assemblies (195, 200) as shown (Fig. 702). Install decals (615, 620) to positions shown (Fig. 703). Bend pointers (445, 450) as required to match orientation shown.



Decal Location
Figure 703

292923

Q. Perform travel check.

(1) Disconnect the interlock actuators (65) from the stop crank assemblies (170, 175). Take care that actuators (65) do not fall on the microswitch pack assembly (70) during the travel check.

(2) Verify that the autothrottle rotates freely with no interference through the following minimum angles. Measure at the brake pack assembly (435) from the reference 30.15 degree position (Fig. 702).

Forward thrust: 53.6° CCW
Reverse thrust: 31.4° CW

NOTE: Do not allow the travel stops on the stop crank assemblies (170, 175) and lever assemblies (195, 200) to bang during this check.

"Clockwise" and "counterclockwise" refer to the left-hand side view shown (Fig. 702).

(3) Reconnect the actuators (65) to the stop crank assemblies (170, 175) using fasteners (35 thru 50).

R. Lubricate the quill shaft (429) as required and install fully against the brake assembly (435).

S. Assemble gearbox/servo assembly (230) by installing the servomotor (250) on the gearbox assembly (255) using fasteners (235 thru 250).

T. Mate the splines of the quill shaft assembly (420) with the splines of the gearbox/servo assembly (230). Secure the gearbox/servo assembly (230) to the frame (595) using fasteners (220, 225) for top assemblies 253T7101-2, -4, -6 and -8. For top assemblies 253T7101-10, -12, -13, -14, -17 and -18 use fasteners (220, 225 and 227).

CAUTION: DO NOT OVERTORQUE THE EXPANDER CONE ATTACH SCREW (416) IN GEARBOX END OF QUILL SHAFT (429). OVERTORQUING MAY RESULT IN DAMAGE TO THE GEARBOX (255).

U. Determine the run-on torque as follows:

(1) Thread the screw (416) by hand (without the expander cone (419)) into the gearbox end of the quill shaft (429). Stop when the screw starts to engage the self-locking insert (427).

(2) Tighten screw (416) 6 complete turns into the self-locking insert (427).

(3) Use a torque wrench to measure the torque of the screw (419). This is the "run-on" torque. Write and keep the runion torque value for use later.

(4) Remove the screw (41).

V. For top assemblies 253T7101-2, -4, -6 and -8, lubricate the expander cone (419) as required and loosely install in the gearbox end of the quill shaft (429). Tighten the screw (416) to 5-8 pound-inches above the run-on torque value.

W. Lubricate the second expander cone (419) as required and loosely install in the other end of the quill shaft (429). Install the second screw and tighten to 12-15 pound-inches.

4. Storage

A. Prepare and store assembly in accordance with standard industry practices.

FITS AND CLEARANCES

1. Tighten nut (115, IPL Fig. 1) to 100-150 pound-inches above the run-on torque using adapter A32045-90.

2. Tighten screw (416, IPL Fig. 1) on the gearbox end of the quill shaft to 5-8 pound-inches above the run-on torque. Tighten the screw on the opposite end of the quill shaft to 12-15 pound-inches.

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

NOTE: Equivalent substitutes may be used.

1. A32045-90 -- Adapter (replaces AJ253T7201-13)

ILLUSTRATED PARTS LIST

1. This section lists and illustrates replaceable or repairable component parts. The Illustrated Parts Catalog contains a complete explanation of the Boeing part numbering system.

2. Indentures show parts relationships as follows:

    Assembly
      Detail Parts for Assembly
      Subassembly
      Attaching Parts for Subassembly
        Detail Parts for Subassembly

    Detail Installation Parts (Included only if installation parts may be returned to shop as part of assembly)

3. One use code letter (A, B, C, etc.) is assigned in the EFF CODE column for each variation of top assembly. All listed parts are used on all top assemblies except when limitations are shown by use code letter opposite individual part entries.

4. Letter suffixes (alpha-variants) are added to item numbers for optional parts, Service Bulletin modification parts, configuration differences (Except left- and right-hand parts), product improvement parts, and parts added between two sequential item numbers. The alpha-variant is not shown on illustrations when appearance and location of all variants of the part is the same.

5. Service Bulletin modifications are shown by the notations PRE SB XXXX and POST SB XXXX.

    A. When a new top assembly part number is assigned by Service Bulletin, the notations appear at the top assembly level only. The configuration differences at detail part level are then shown by use code letter.

    B. When the top assembly part number is not changed by the Service Bulletin, the notations appear at the detail part level.

6. Parts Interchangeability

Optional (OPT)	The parts are optional to and interchangeable with other parts having the same item number.
Supersedes, Superseded By (SUPSDS, SUPSD BY)	The part supersedes and is not interchangeable with the original part.
Replaces, Replaced By (REPLS, REPLD BY)	The part replaces and is interchangeable with, or is an alternate to, the original part.

VENDORS

00462 LUCAS WESTERN INC ELECTRO SYSTEM DIV
610 NEPTUNE AVENUE
BREA, CALIFORNIA 92621

02758 NETWORKS ELECTRONIC CORP U S BEARING DIV
9750 DE SOTO AVENUE
CHATSWORTH, CALIFORNIA 91311-4409

05088 KEARFOTT GUIDANCE AND NAVIGATION CORP
ROUTE 70
BLACK MOUNTAIN, NORTH CAROLINA 28711

06710 LAMSON AND SESSIONS CO THE VALLEY-TODECO
12975 BRADLEY AVENUE
SYLMAR, CALIFORNIA 91342-3830

06725 AIR INDUSTRIES CORPORATION
12570 KNOTT STREET
GARDEN GROVE, CALIFORNIA 92641-3932

06950 SCREWCORP VSI AEROSPACE PRODUCTS DIV FAIRCHILD IND DIV
13001 EAST TEMPLE AVENUE PO BOX 730
CITY OF INDUSTRY, CALIFORNIA 91746-1417

08524 DEUTSCH FASTENER CORP SEE CODE V97928

09455 BFM TRANSPORT DYNAMICS CORP
3131 WEST SEGERSTROM AVENUE PO BOX 1953
SANTA ANA, CALIFORNIA 92702-1953

15653 MICRODOT INC AEROSPACE FASTENING SYS KAYNAR MFG DIV
800 SOUTH STATE COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92634-3001

15860 NEW HAMPSHIRE BALL BEARINGS, INCORPORATED ASTRO DIVISION
155 LEXINGTON AVENUE
LACONIA, NEW HAMPSHIRE 03246-2937

16746 SPECLINE INCORPORATED
11185 TUXFORD STREET
SUN VALLEY, CALIFORNIA 91352-2632

17943 FEDERAL MANUFACTURING CORPORATION
9825 DESOTO AVENUE
CHATSWORTH, CALIFORNIA 91311

VENDORS

21335 TORRINGTON CO FAFNIR BEARING DIV
59 FIELD STREET
TORRINGTON, CONNECTICUT 06790-4942

23294 AVALON MACHINE PRODUCTS INC
15337 ALLEN STREET
PARAMOUNT, CALIFORNIA 90723-4011

27624 PB FASTENERS DIV OF BRILES PAUL R
1700 WEST 132ND STREET
GARDENA, CALIFORNIA 90249

38443 MRC BEARINGS
402 CHANDLER STREET
JAMESTOWN, NEW YORK 14701-3802

43991 FAG BEARING INCORPORATED
118 HAMILTON AVENUE
STAMFORD, CONNECTICUT 06904

50294 NEW HAMPSHIRE BALL BEARINGS INC
9730 INDEPENDENCE AVENUE PO BOX 2515
CHATSWORTH, CALIFORNIA 91311-4323

51761 ASTRO INSTRUMENT CORP
450 GOLDSBY BLVD
DEERFIELD, FLORIDA 33442-3019

56644 AURORA BEARING CO
970 SOUTH LAKE STREET
AURORA, ILLINOIS 60506-5929

56878 SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV
HIGHLAND AVENUE
JENKINTOWN, PENNSYLVANIA 19046

VENDORS

70265 ALL POWER MANUFACTURING COMPANY
13141 MOLETTE STREET
SANTA FE SPRINGS, CALIFORNIA 90670-5523

72121 DATRON SYSTEMS INC EEMCO DIV
4585 ELECTRONICS PLACE
LOS ANGELES, CALIFORNIA 90039-1007

72962 ELASTIC STOP NUT A DIV OF HARTFORD INDUSTRIES INC
2330 VAUXHALL ROAD
UNION, NEW JERSEY 07083-5038

73134 HEIM DIV INCOM INTERNATIONAL INC
60 ROUND HILL ROAD PO BOX 430
FAIRFIELD, CONNECTICUT 06430-5114

73197 HI-SHEAR TECHNOLOGY CORP
2600 SKYPARK DRIVE
TORRANCE, CALIFORNIA 90509

80539 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
2701 SOUTH HARBOR BOULEVARD PO BOX 1259
SANTA ANA, CALIFORNIA 92702-1259

81376 SOUTHWEST PRODUCTS COMPANY
2240 BUENA VISTA STREET
IRVINDALE, CALIFORNIA 91706

85495 BRILES MFG CO SEE OMARK INDUSTRIES
PRECISION FASTENING SUB OF OMARK IND INC SEE DEUTSCH
FASTENER CORP V08524

88818 GUIDANCE AND NAVIGATION CORP
150 TOTOWA ROAD CN595
WAYNE, NEW JERSEY 07074-0595

92215 VOI-SHAN DIV OF VSI CORP SUB OF FAIRCHILD INDUSTRIAL INC
8463 HIGUERA STREET
CULVER CITY, CALIFORNIA 90230

VENDORS

93907 TEXTRON INC CAMCAR DIV
600 18TH AVENUE
ROCKFORD, ILLINOIS 61101

94892 MASTER MACHINE PRODUCTS CORPORATION
1551 SOUTH PRIMROSE AVE
MONROVIA, CALIFORNIA 91016-4542

97393 SHUR-LOK CORPORATION
2541 WHITE ROAD PO BOX 19584
IRVINE, CALIFORNIA 92713

97613 SARGENT INDUSTRIES KAHR BEARING DIVISION
3010 NORTH SAN FERNANDO ROAD
BURBANK, CALIFORNIA 91504-2524

97928 DEUTSCH FASTENER CORP
3969 PARAMONT BOULEVARD
LAKEWOOD, CALIFORNIA 90712-4193

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
ABG3V4		1	295	2
ABG5-5		1	650	1
AC2A		1	250A	1
		1	250C	1
AG5CR		1	650	1
AN960-10L		1	418	2
		1	418A	2
AN960C516L		1	623	1
AN960JD10L		1	118	2
		1	275	2
		1	302	
		1	345	3
		1	485	6
		1	80A	4
AN960JD10LL		1	80	
		1	95	6
		1	270	2
AN960JD416L		1	15	4
		1	45	4
		1	225	3
		1	433	4
		1	470	4
		1	635	3
		1	434M	1
AN960JD816		1	325	1
AN960PD416		1	240	3
AT3A		1	250	1
		1	250B	1
BACB10AS17		1	165	4
		1	180	1
		1	205	1
BACB10CN3		1	295	2
BACB10W3T		1	650	1
BACB28AK03-024		1	285	2
BACB28AK04-016		1	60A	2
BACB28AK04-028		1	25A	4
BACB28AK04-032		1	55A	2
BACB28AK04-16		1	60	
BACB28AK04-28		1	25	
BACB28AK04-32		1	55	
BACB28AK10-015		1	360	1
BACB30LU2-8		1	365	2
BACB30LU3-5		1	90	6
BACB30MY5K5		1	525	2
BACB30MY5K6		1	520	4
BACB30MY5K7		1	517	2
BACB30MY6K5		1	315	6

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACB30NF4-12		1	432	4
		1	434	1
BACB30NF4-16		1	5	2
		1	35	2
		1	220	3
BACB30NF4-17		1	10	2
BACB30NF4-9		1	40	2
BACB30NR4-24		1	603	1
BACB30NR4K16		1	434A	1
BACB30NR4K19		1	220A	3
BACB30NR4K21		1	613	1
BACB30NR4K9		1	235	3
BACB30NX5K6		1	540	4
BACB30NX5K8		1	535	6
BACB30NX6K4		1	480	6
BACB30NX8K4		1	465	4
BACB30VT8K21		1	618	1
BACC10DK6		1	304	
BACC30BL8		1	619	1
BACC30M5		1	530	8
BACC30M6		1	320	6
BACC30X5		1	545	10
BACC30X6		1	490	6
BACC30X8		1	475	4
BACN10JC14		1	665	1
BACN10JC8		1	330	1
BACR15BB4AD		1	440	4
BACR15BB5AD		1	495	2
BACW10P116S		1	628	1
BAC27TCT0193		1	605	1
BAC27TCT0194		1	610	1
BAC27TCT0404		1	615	1
BAC27TCT0405		1	620	1
BAC27TCT0406		1	625	1
BAC27TCT0407		1	630	1
BLN3-2230		1	295	2
BMN4122AD3-14		1	665	1
BMN4122AD3-8		1	330	1
		1	330	1
BMN4122A14		1	665	1
BMN4122A8		1	330	1
BNG3F113		1	295	2
BNP3E114T		1	650	1
BSSN5422		1	650	1
B30MY5K5		1	525	2
B30MY5K6		1	520	4
B30MY5K7		1	517	2

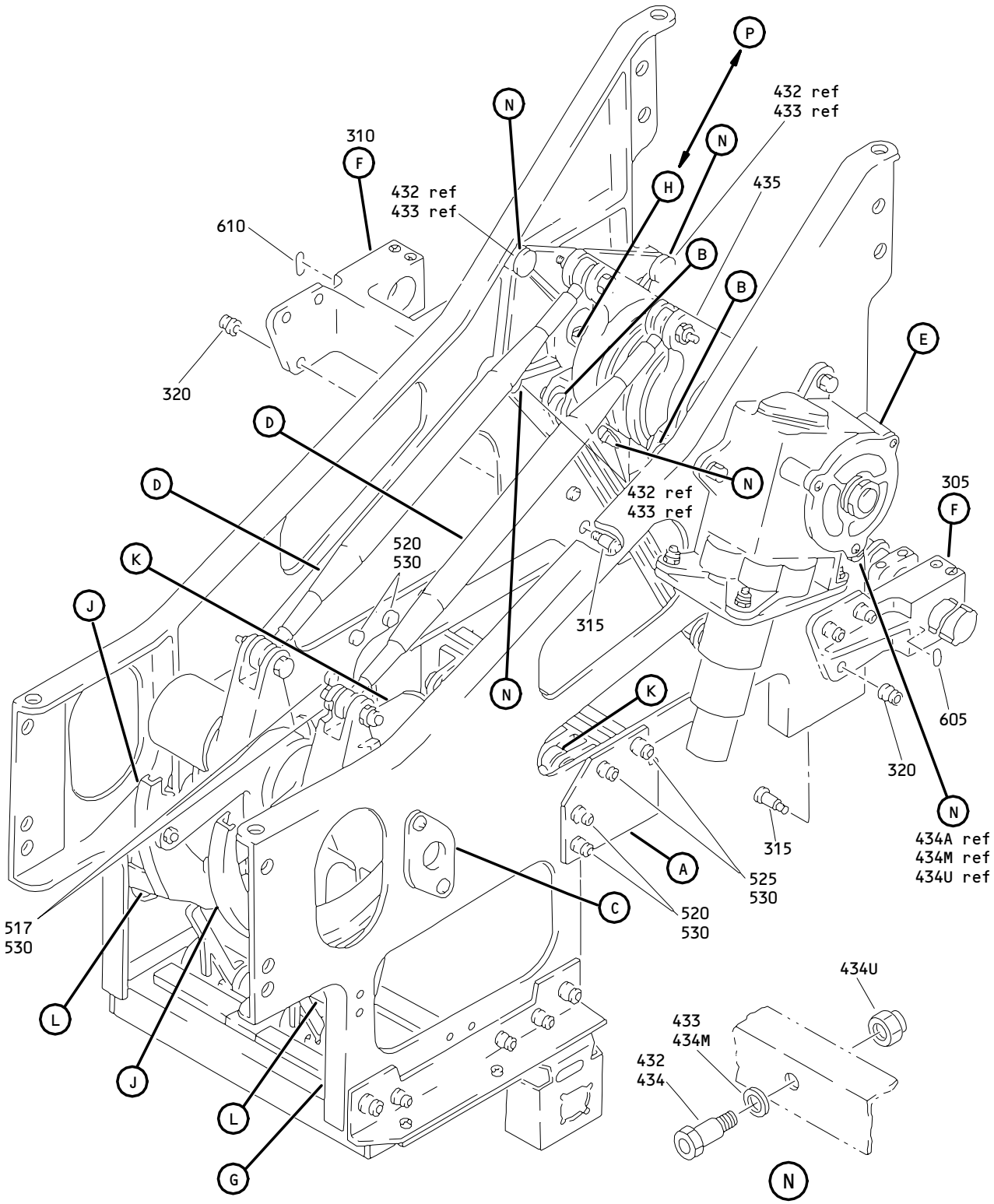
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
B30MY6K5		1	315	6
B5538WZZFS428		1	400	1
CU09625094		1	415A	1
CU09625105		1	415C	1
CU09625121		1	415D	1
HG3-140		1	295	2
HL10VAZ5-5		1	525	2
HL10VAZ5-6		1	520	4
HL10VAZ5-7		1	517	2
HL10VAZ6-5		1	315	6
HL1187-5		1	545	10
HL1187-6		1	490	6
HL1187-8		1	475	4
HL12-4		1	480	6
HL12-6		1	540	4
HL12-8		1	535	6
HL12VAZ5-6		1	540	4
HL12VAZ5-8		1	535	6
HL12VAZ6-4		1	480	6
HL12VAZ8-4		1	465	4
HL70-5		1	530	8
HL79-6		1	320	6
HL86PB5		1	545	10
		1	545	10
		1	545	10
HL87-5		1	545	10
		1	545	10
		1	545	10
HL87-6		1	490	6
		1	490	6
		1	490	6
HL87-8		1	475	4
		1	475	4
		1	475	4
HSBG5-115		1	650	1
H10-14BAC		1	665	1
H10-4BAC		1	245	
H10-8BAC		1	330	1
KSBG3-57		1	295	2
KSBG5CR		1	650	1
LLMB541		1	165	4
		1	180	1
		1	205	1
L8005K5		1	525	2
L8005K6		1	520	4
L8005K7		1	517	2
L8006K5		1	315	6

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
L802-5K6		1	540	4
L802-5K8		1	535	6
L802-6K4		1	480	6
L802-8K4		1	465	4
MB541-2TS		1	165	4
		1	180	1
		1	205	1
MB541DDFS428		1	165	4
		1	180	1
		1	205	1
MB541DDG20		1	165	4
		1	180	1
		1	205	1
MB541TT		1	165	4
		1	180	1
		1	205	1
MS20142L4		1	85	
MS21042-4		1	245B	3
MS21042L3		1	100	6
		1	280	4
		1	303	
		1	350	3
		1	85A	4
MS21042L4		1	20	4
		1	50	4
		1	227	3
		1	660	3
		1	245A	3
		1	434U	1
MS21042L5		1	655	1
MS21209C0820		1	375	1
MS21209F1-15P		1	590	2
MS21209F1-25		1	427	2
		1	427A	2
MT341E		1	165	4
		1	180	1
		1	205	1
NAS43HT4-35		1	645	2
NAS43HT4K25		1	640	1
NAS603-36P		1	416	2
		1	416A	2
NAS603-6P		1	117	2
NAS623-3-11		1	260	2
NAS623-3-16		1	335	1
NAS623-3-23		1	340	2
NAS623-3-4		1	75	4
		1	301	

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS623-3-8		1	265	2
NBG3A		1	295	2
NC3G1		1	295	2
NC5-2		1	650	1
NS5E		1	650	1
RMLH9074-14		1	665	1
RMLH9074-8		1	330	1
SL2778-2		1	115	1
S253T402-3		1	65	2
S253T402-4		1	65A	2
S253T409-1		1	250A	1
		1	250C	1
S253T409-3		1	250	1
		1	250B	1
S331T002-1		1	415	1
S331T002-13		1	415D	1
S331T002-4		1	415A	1
S331T002-7		1	415B	
		1	415C	1
015T1017-3		1	255C	1
015T1017-4		1	230F	1
03-503-05E016		1	650	1
03-503-0501		1	650	1
250N2004-1113		1	30	2
250T1017-7		1	70B	1
		1	70C	1
253T7101-10		1	1D	RF
253T7101-12		1	1E	RF
253T7101-13		1	1F	RF
253T7101-14		1	1G	RF
253T7101-17		1	1H	RF
253T7101-18		1	1J	RF
253T7101-2		1	1	RF
253T7101-4		1	1A	RF
253T7101-6		1	1B	RF
253T7101-8		1	1C	RF
253T7113-5		1	420	1
253T7113-6		1	430	1
253T7113-7		1	425	4
253T7114-1		1	255	1
253T7114-3		1	255A	1
		1	255B	1
		1	255D	1
253T7121-1		1	230A	1
		1	230B	1
		1	230D	1
253T7121-3		1	230	1

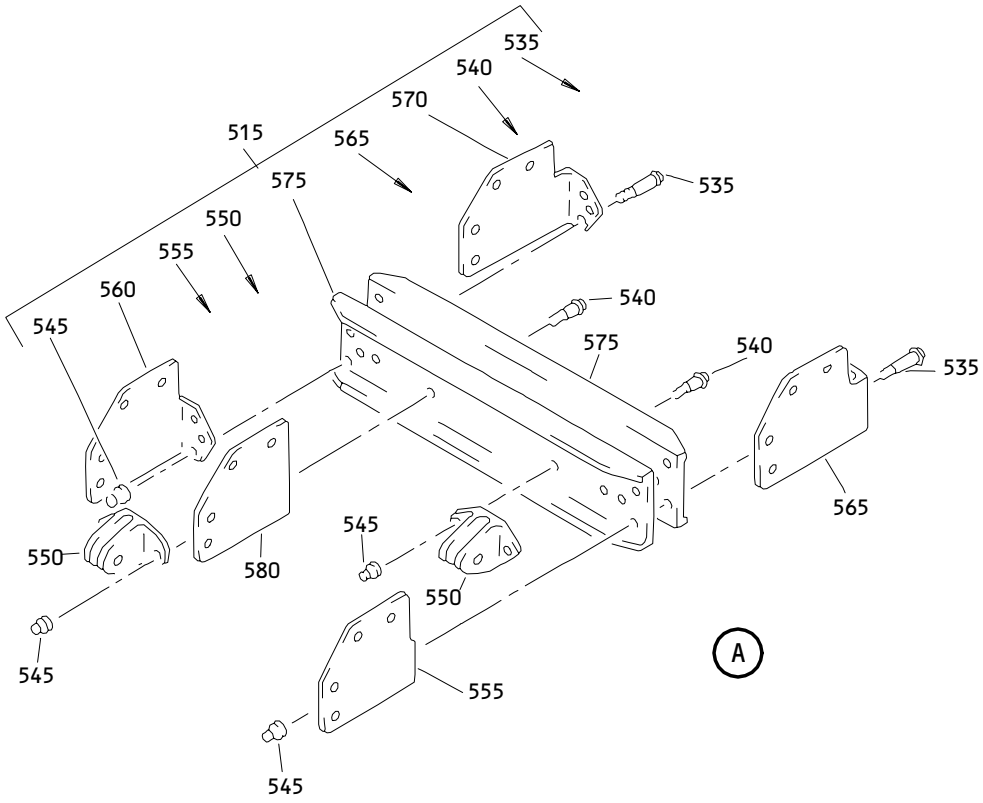
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
253T7121-4		1	230C	1
		1	230E	1
		1	230G	1
253T7123-1		1	420A	1
		1	422	1
253T7123-2		1	429	1
		1	429A	1
253T7124-1		1	419	2
		1	419A	2
253T7500-1		1	435	1
253T7500-2		1	435A	1
253T7500-3		1	435B	1
253T7500-4		1	435C	1
253T7505-2		1	160	1
253T7506-1		1	195	1
253T7506-2		1	200	1
253T7506-3		1	210	1
253T7506-4		1	215	1
253T7507-1		1	445	1
253T7507-2		1	450	1
253T7507-3		1	580	AR
253T7508-1		1	455	1
253T7508-2		1	460	1
253T7508-3		1	505	1
253T7508-4		1	510	1
253T7509-1		1	110	1
253T7509-2		1	105	1
253T7510-1		1	305	1
253T7510-2		1	310	1
253T7510-3		1	305A	1
253T7510-4		1	310A	1
253T7511-1		1	390	1
253T7511-2		1	395	1
253T7511-3		1	405	1
253T7511-4		1	410	1
253T7512-1		1	370	2
253T7512-2		1	380	1
253T7512-3		1	385	1
253T7513-1		1	355	1
253T7514-1		1	515	1
253T7514-10		1	583	1
253T7514-11		1	582A	1
		1	582B	1
		1	583A	1
		1	583B	1
253T7514-2		1	550	2
253T7514-3		1	575	2

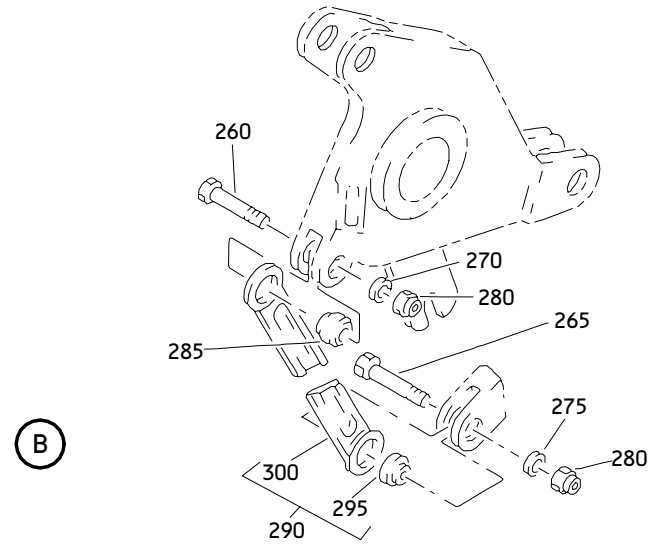
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
253T7514-4		1	555	1
253T7514-5		1	560	1
253T7514-6		1	565	1
253T7514-7		1	570	1
253T7514-9		1	582	1
253T7515-1		1	500	1
253T7519-1		1	170	1
253T7519-2		1	175	1
253T7519-3		1	185	1
253T7519-4		1	190	1
253T7529-1		1	673	1
253T7531-1		1	670	1
253T7531-2		1	670A	1
253T7534-1		1	608	1
253U5109-1		1	290	2
253U5109-2		1	300	1
254N1142-4		1	585	1
254N1142-5		1	595	1
254N1142-6		1	600	1
254N1147-1		1	125	1
254N1148-1		1	135	1
254N1149-1		1	130	1
254N1150-1		1	120	1
254N1151-1		1	145	4
254N1151-2		1	155	2
254N1151-4		1	140	1
254N1151-5		1	150	1
254N1185-14		1	70A	1
254N1185-5		1	70	1
48FT1414		1	665	1
48FT820		1	330	1
55768-3		1	295	2
66014-5		1	530	8
66014-6		1	320	6
684D100-7		1	65	2



Autothrottle Assembly
Figure 1 (Sheet 1)

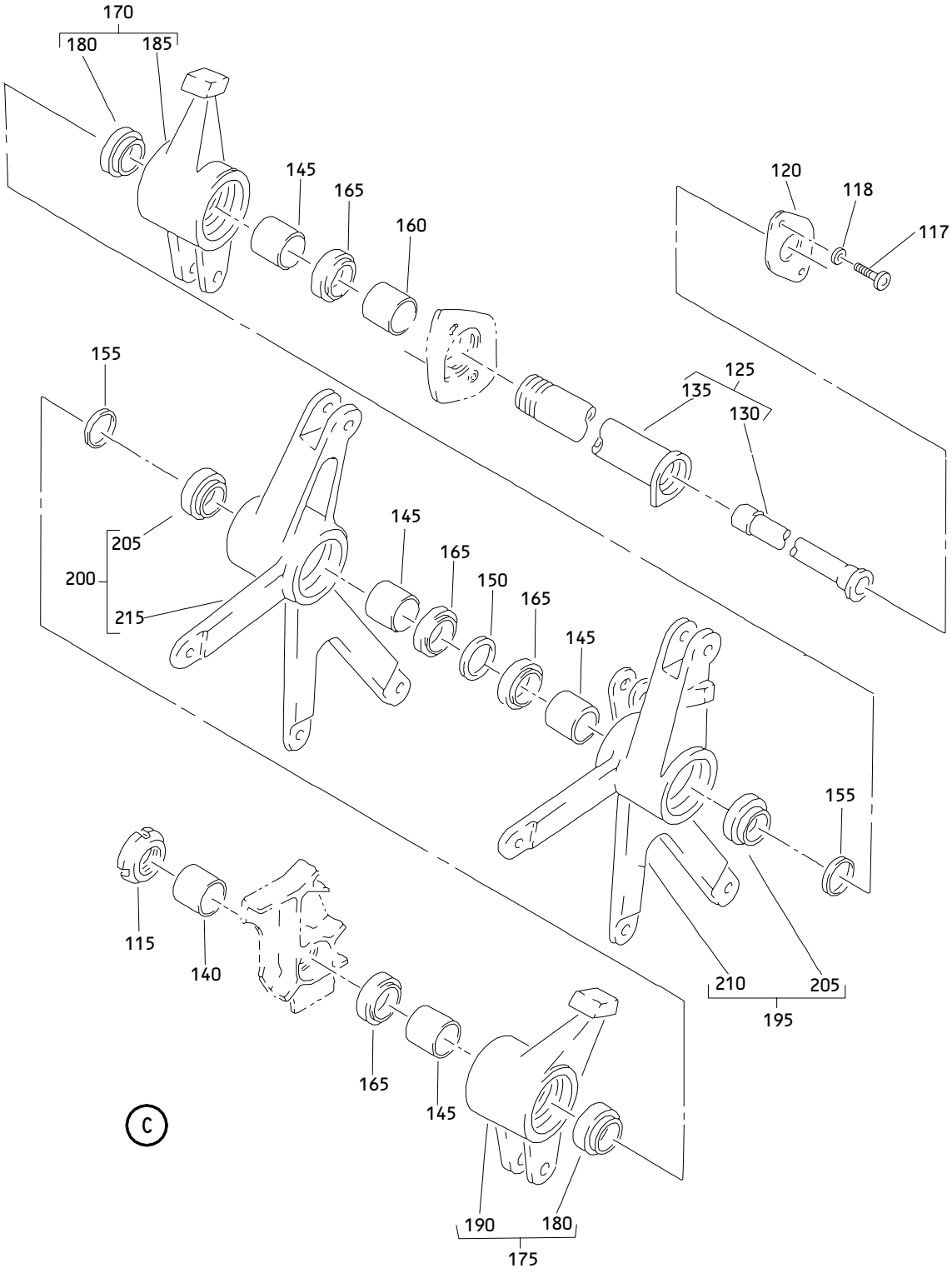
J00893



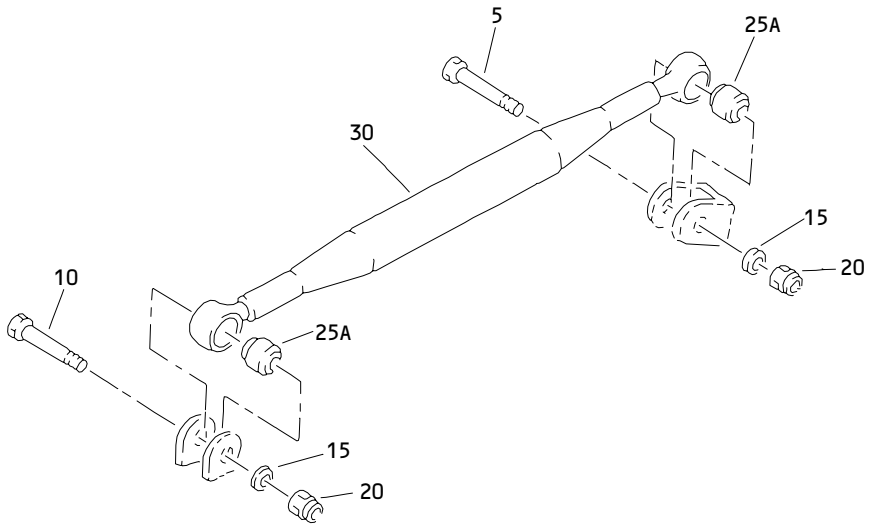


Autothrottle Assembly
Figure 1 (Sheet 2)

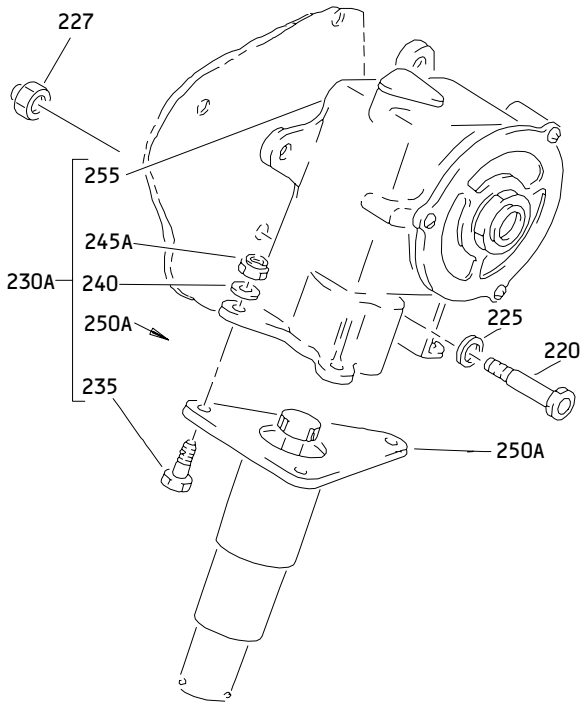
J00139



Autothrottle Assembly
Figure 1 (Sheet 3)



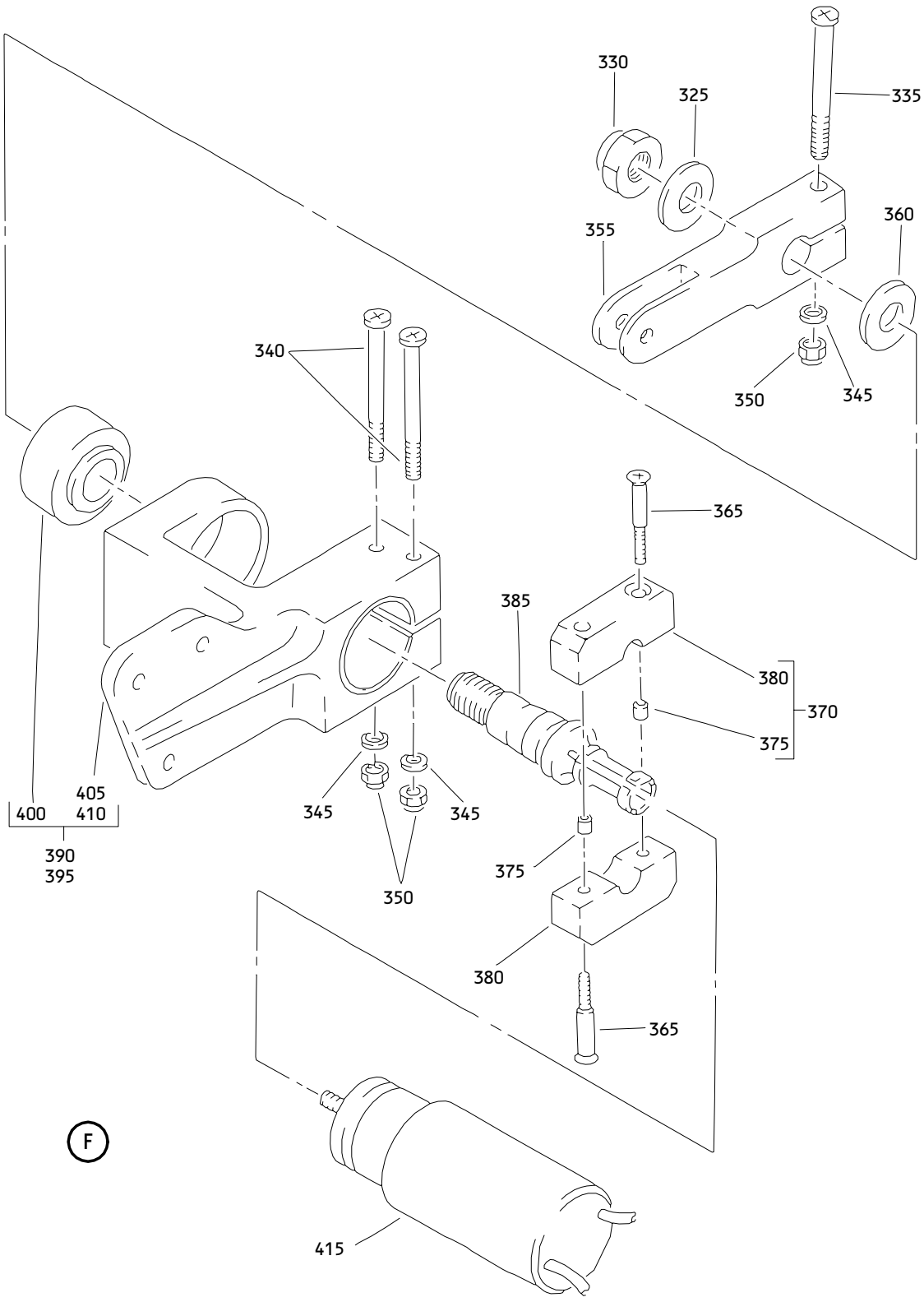
D



E

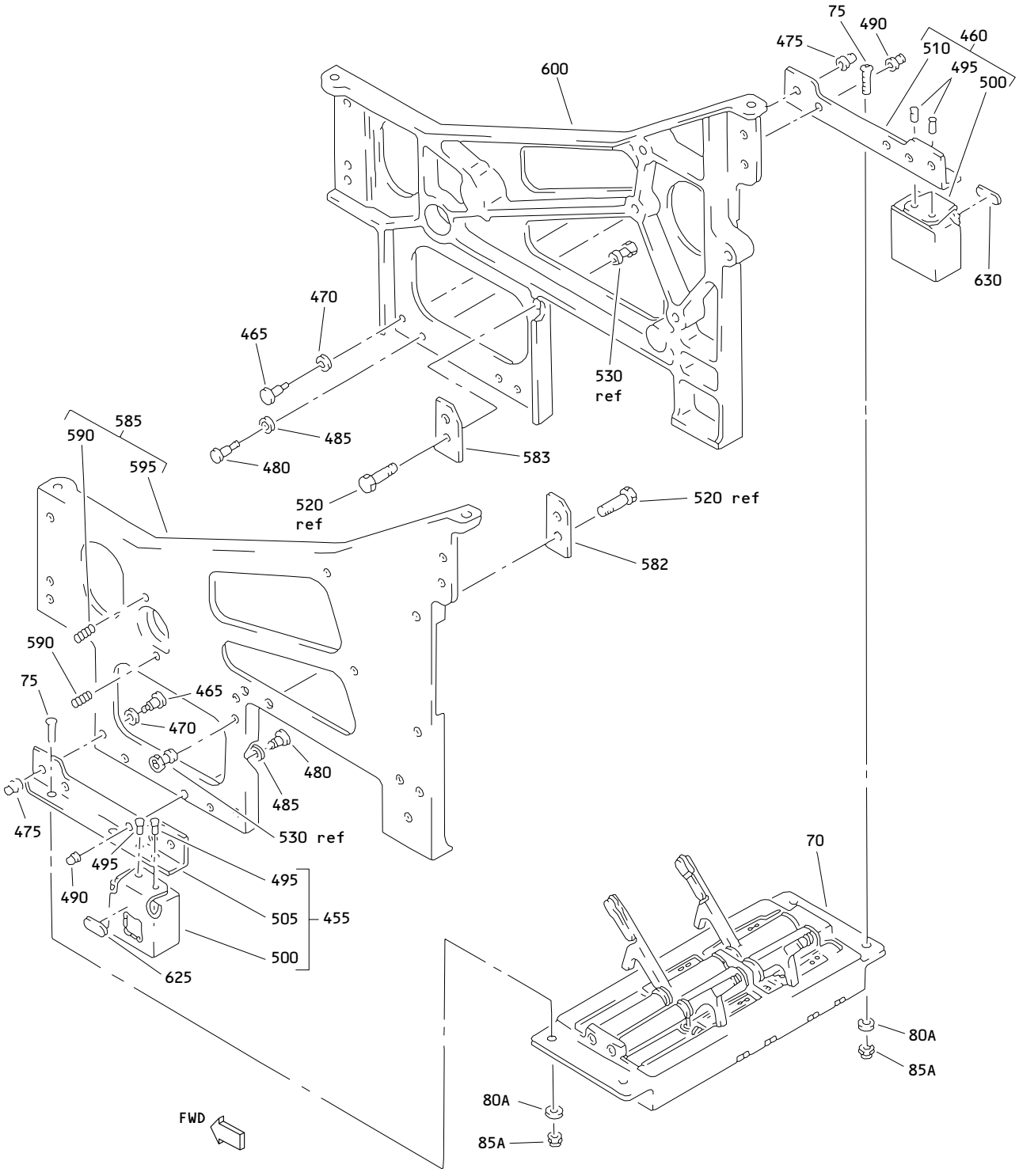
Autothrottle Assembly
Figure 1 (Sheet 4)

J00141



Autothrottle Assembly
Figure 1 (Sheet 5)

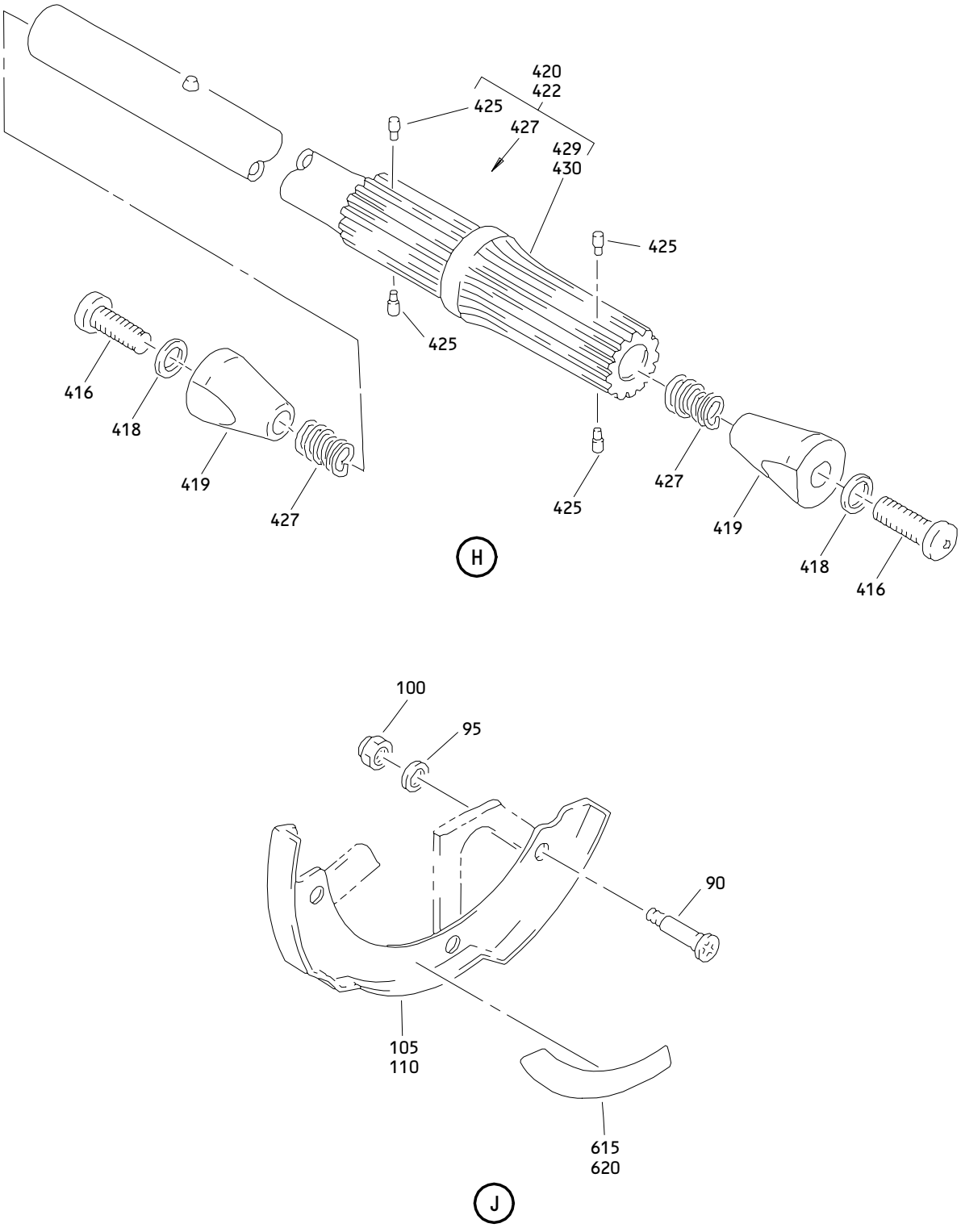
J00142



G

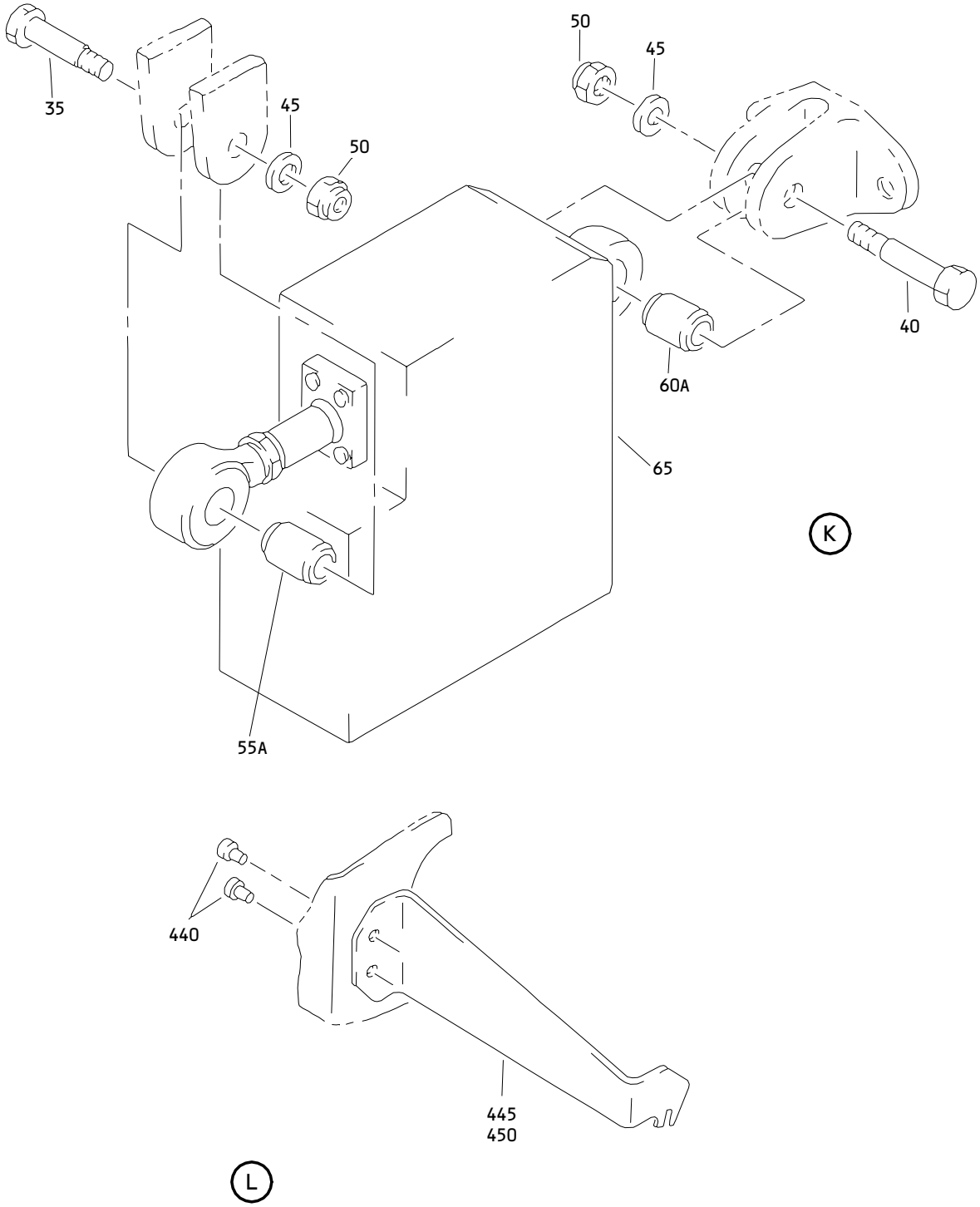
Autothrottle Assembly
Figure 1 (Sheet 6)

J00891



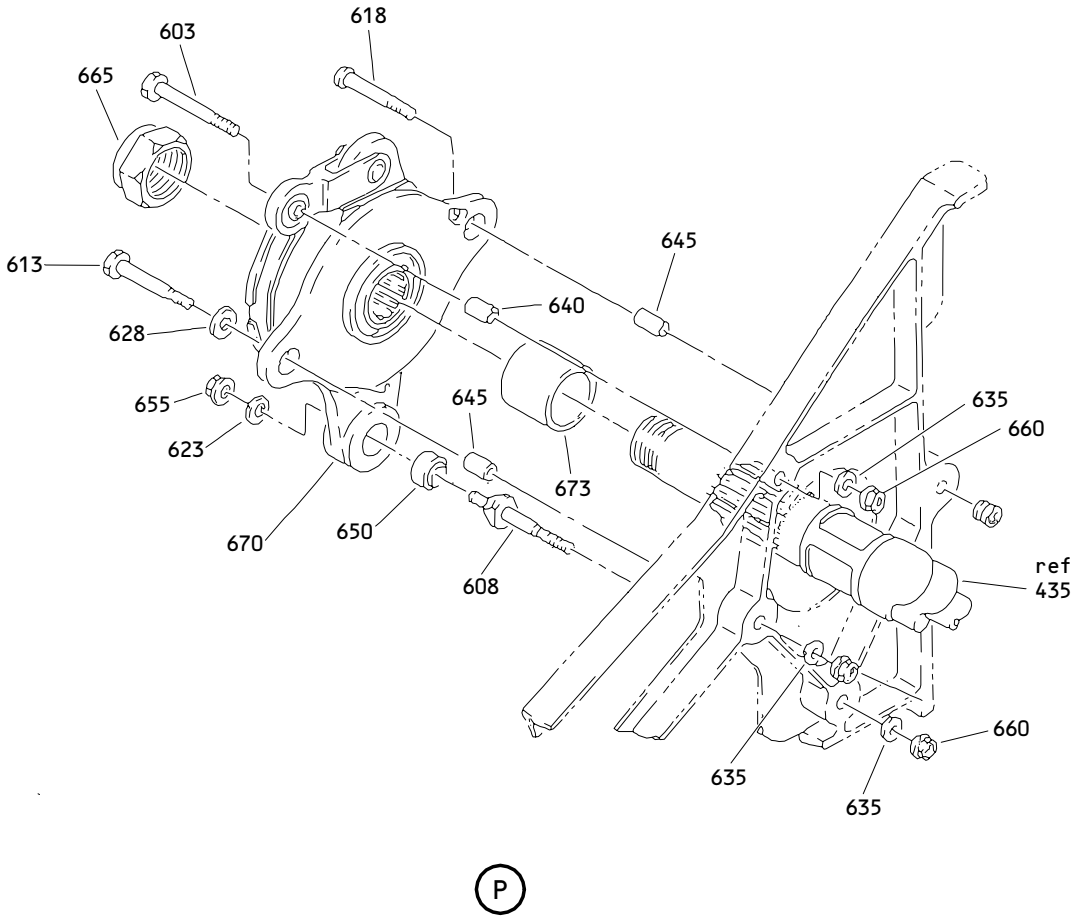
Autothrottle Assembly
Figure 1 (Sheet 7)

J00888



Autothrottle Assembly
Figure 1 (Sheet 8)

J00145



Autothrottle Assembly
Figure 1 (Sheet 9)

B78975

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	-1	253T7101-2		AUTOTHROTTLE ASSY	A	RF
	-1A	253T7101-4		AUTOTHROTTLE ASSY	B	RF
	1B	253T7101-6		AUTOTHROTTLE ASSY	C	RF
	-1C	253T7101-8		AUTOTHROTTLE ASSY	D	RF
R	-1D	253T7101-10		AUTOTHROTTLE ASSY	E	RF
R	-1E	253T7101-12		AUTOTHROTTLE ASSY	F	RF
R	-1F	253T7101-13		AUTOTHROTTLE ASSY	G	RF
R	-1G	253T7101-14		AUTOTHROTTLE ASSY	H	RF
R	-1H	253T7101-17		AUTOTHROTTLE ASSY	J	RF
R	-1J	253T7101-18		AUTOTHROTTLE ASSY	K	RF
	5	BACB30NF4-16		.BOLT- (V06710) (SPEC BACB30NF4-16) (OPT BACB30NF4-16 (V06725)) (OPT BACB30NF4-16 (V06950)) (OPT BACB30NF4-16 (V08524)) (OPT BACB30NF4-16 (V17943)) (OPT BACB30NF4-16 (V27624)) (OPT BACB30NF4-16 (V56878)) (OPT BACB30NF4-16 (V80539)) (OPT BACB30NF4-16 (V92215)) (OPT BACB30NF4-16 (V97928))		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
10	BACB30NF4-17		.BOLT- (V06710) (SPEC BACB30NF4-17) (OPT BACB30NF4-17 (V06725)) (OPT BACB30NF4-17 (V06950)) (OPT BACB30NF4-17 (V08524)) (OPT BACB30NF4-17 (V17943)) (OPT BACB30NF4-17 (V27624)) (OPT BACB30NF4-17 (V56878)) (OPT BACB30NF4-17 (V80539)) (OPT BACB30NF4-17 (V92215)) (OPT BACB30NF4-17 (V97928))		2
15	AN960JD416L		.WASHER		4
20	MS21042L4		.NUT		4
25	BACB28AK04-28		DELETED		
25A	BACB28AK04-028		.BUSHING- (V23294) (SPEC BACB28AK04-028) (OPT BACB28AK04-028 (V70265)) (OPT BACB28AK04-028 (V94892))		4
30	250N2004-1113		.ROD ASSY- (REF CMM 27-00-12)		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- 35	BACB30NF4-16		.BOLT- (V06710) (SPEC BACB30NF4-16) (OPT BACB30NF4-16 (V06725)) (OPT BACB30NF4-16 (V06950)) (OPT BACB30NF4-16 (V08524)) (OPT BACB30NF4-16 (V17943)) (OPT BACB30NF4-16 (V27624)) (OPT BACB30NF4-16 (V56878)) (OPT BACB30NF4-16 (V80539)) (OPT BACB30NF4-16 (V92215)) (OPT BACB30NF4-16 (V97928))		2
40	BACB30NF4-9		.BOLT- (V06710) (SPEC BACB30NF4-9) (OPT BACB30NF4-9 (V06725)) (OPT BACB30NF4-9 (V06950)) (OPT BACB30NF4-9 (V08524)) (OPT BACB30NF4-9 (V17943)) (OPT BACB30NF4-9 (V27624)) (OPT BACB30NF4-9 (V56878)) (OPT BACB30NF4-9 (V80539)) (OPT BACB30NF4-9 (V92215)) (OPT BACB30NF4-9 (V97928))		2
45	AN960JD416L		.WASHER		4
50	MS21042L4		.NUT		4
55	BACB28AK04-32		DELETED		

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	55A	BACB28AK04-032		.BUSHING- (V23294) (SPEC BACB28AK04-032) (OPT BACB28AK04-032 (V70265)) (OPT BACB28AK04-032 (V94892))		2
	60	BACB28AK04-16		DELETED		
	60A	BACB28AK04-016		.BUSHING- (V23294) (SPEC BACB28AK04-016) (OPT BACB28AK04-016 (V70265)) (OPT BACB28AK04-016 (V94892))		2
	65	684D100-7		.ACTUATOR- (V72121) (SPEC S253T402-3) (OPT ITEM 65A)		2
R	-65A	S253T402-4		.ACTUATOR- (OPT ITEM 65)		2
R	70	254N1185-5		.PACK ASSY-MICROSWITCH (REF CMM 22-32-38)	A-G	1
				(PRE SB 767-78-0059) (PRE SB 767-78-0062)	H,J,K	1
R	-70A	254N1185-14		.PACK ASSY-MICROSWITCH (REF CMM 22-32-38) ATTACHING PARTS	H,J,K	1
	-70B	250T1017-7		.PACK ASSY-MICROSWITCH (REF CMM 22-32-38) (POST SB 767-78-0059)	B,F	1
	-70C	250T1017-7		.PACK ASSY-MICROSWITCH (REF CMM 22-32-38) (POST SB 767-78-0062)	A, C-E,G	1
	75	NAS623-3-4		.SCREW		4
	80	AN960JD10LL		DELETED		
	80A	AN960JD10L		.WASHER		4
	85	MS20142L4		DELETED		
	85A	MS21042L3		.NUT -------*-------		4

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01- 90	BACB30LU3-5		.BOLT- (V06710) (SPEC BACB30LU3-5) (OPT BACB30LU3-5 (V06725)) (OPT BACB30LU3-5 (V06950)) (OPT BACB30LU3-5 (V17943)) (OPT BACB30LU3-5 (V27624)) (OPT BACB30LU3-5 (V56878)) (OPT BACB30LU3-5 (V80539)) (OPT BACB30LU3-5 (V85495)) (OPT BACB30LU3-5 (V92215)) (OPT BACB30LU3-5 (V97928))		6
	95	AN960JD10LL		.WASHER		6
	100	MS21042L3		.NUT		6
	105	253T7509-2		.CAM-SWITCH		1
	110	253T7509-1		.CAM-SWITCH		1
R	115	SL2778-2		.NUT-BRG (V97393)		1
	117	NAS603-6P		.SCREW		2
	118	AN960JD10L		.WASHER		2
	120	254N1150-1		.RETAINER-SHAFT		1
	125	254N1147-1		.SHAFT ASSY		1
	130	254N1149-1		..SHAFT-INNER		1
	135	254N1148-1		..SHAFT-OUTER		1
	140	254N1151-4		.SPACER		1
	145	254N1151-1		.SPACER		4
	150	254N1151-5		.SPACER		1
	155	254N1151-2		.SPACER		2
	160	253T7505-2		.SPACER		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
165	MB541DDG20		.BEARING- (V38443) (SPEC BACB10AS17) (OPT LLMB541 (V38443)) (OPT MB541-2TS (V43991)) (OPT MB541DDFS428 (V21335)) (OPT MB541TT (V43991)) (OPT MT341E (VK8455))		4
170	253T7519-1		.CRANK ASSY-STOP		1
175	253T7519-2		.CRANK ASSY-STOP		1
180	MB541DDG20		..BEARING- (V38443) (SPEC BACB10AS17) (OPT LLMB541 (V38443)) (OPT MB541-2TS (V43991)) (OPT MB541DDFS428 (V21335)) (OPT MB541TT (V43991)) (OPT MT341E (VK8455))		1
185	253T7519-3		..CRANK- (USED ON ITEM 170)		1
190	253T7519-4		..CRANK- (USED ON ITEM 175)		1
195	253T7506-1		.LEVER ASSY		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
200	253T7506-2		.LEVER ASSY		1
205	MB541DDG20		..BEARING- (V38443) (SPEC BACB10AS17) (OPT LLMB541 (V38443)) (OPT MB541-2TS (V43991)) (OPT MB541DDFS428 (V21335)) (OPT MB541TT (V43991)) (OPT MT341E (VK8455))		1
210	253T7506-3		..LEVER- (USED ON ITEM 195)		1
215	253T7506-4		..LEVER- (USED ON ITEM 200)		1
220	BACB30NF4-16		.BOLT- (V06710) (SPEC BACB30NF4-16) (OPT BACB30NF4-16 (V06725)) (OPT BACB30NF4-16 (V06950)) (OPT BACB30NF4-16 (V08524)) (OPT BACB30NF4-16 (V17943)) (OPT BACB30NF4-16 (V27624)) (OPT BACB30NF4-16 (V56878)) (OPT BACB30NF4-16 (V80539)) (OPT BACB30NF4-16 (V92215)) (OPT BACB30NF4-16 (V97928))	A-D	3

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R	01- -220A	BACB30NR4K19		.BOLT- (V06710) (SPEC BACB30NR4K19) (OPT BACB30NR4K19 (V06725)) (OPT BACB30NR4K19 (V06950)) (OPT BACB30NR4K19 (V08524)) (OPT BACB30NR4K19 (V27624)) (OPT BACB30NR4K19 (V56878)) (OPT BACB30NR4K19 (V73197)) (OPT BACB30NR4K19 (V80539)) (OPT BACB30NR4K19 (V92215)) (OPT BACB30NR4K19 (V93907)) (OPT BACB30NR4K19 (V97928))	E-H,J,K	3
	225	AN960JD416L		.WASHER		3
R	227	MS21042L4		.NUT	E-H,J,K	3
	-230	253T7121-3		.GEARBOX AND SERVO ASSY- (REPLD BY ITEM 230A) (253T7121-1 MAY REPLACE 253T7121-3)	A,B	1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-230A	253T7121-1		.GEARBOX AND SERVO ASSY- (REPLS ITEM 230) (253T7121-3 MAY REPLACE 253T7121-1) (253T7121-4 I/W 253T7121-1 EXCEPT FOR FADEC ENGINE POWERED 767 A/C WITH AN EXPANDER CONE TYPE AUTOTHROTTLE AY (253T7101-4,-8) WHERE ONLY 253T7121-4 SHOULD BE USED) (PRE SB 767-22-0081)	A,B	1
	-230B	253T7121-1		.GEARBOX AND SERVO ASSY- (253T7121-1 MAY REPLACE 253T7121-3) (PRE SB 767-22-0034) (PRE SB 767-22-0081)	C	1
	-230C	253T7121-4		.GEARBOX AND SERVO ASSY- (253T7121-4 I/W 253T7121-1 EXCEPT FOR FADEC ENGINE POWERED 767 A/C WITH AN EXPANDED CONE TYPE AUTOTHROTTLE AY (253T7101-4,-8) WHERE ONLY 253T7121-4 SHOULD BE USED)	B,D	1
R	-230D	253T7121-1		.GEARBOX AND SERVO ASSY	E-H,J,K	1
	-230E	253T7121-4		.GEARBOX AND SERVO ASSY (POST SB 767-22-0034)	C	1
	-230F	015T1017-4		.GEARBOX AND SERVO ASSY (POST SB 767-22-0081) (REPLACED BY ITEM 230G FOR SPARES PER SB 767-22-0081)	A,C	1
	-230G	253T7121-4		.GEARBOX AND SERVO ASSY (REPLACES ITEM 230F FOR SPARES PER SB 767-22-0081)	A,C	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-235	BACB30NR4K9		..BOLT- (V06710) (SPEC BACB30NR4K9) (OPT BACB30NR4K9 (V06725)) (OPT BACB30NR4K9 (V06950)) (OPT BACB30NR4K9 (V08524)) (OPT BACB30NR4K9 (V27624)) (OPT BACB30NR4K9 (V56878)) (OPT BACB30NR4K9 (V73197)) (OPT BACB30NR4K9 (V80539)) (OPT BACB30NR4K9 (V92215)) (OPT BACB30NR4K9 (V93907)) (OPT BACB30NR4K9 (V97928))		3
240	AN960PD416		..WASHER		3
245	H10-4BAC		DELETED		
245A	MS21042L4		DELETED		
245B	MS21042-4		..NUT		3
-250	AT3A		..MOTOR-SERVO (V51761) (SPEC S253T409-3) (USED ON ITEM 230)	A,C	1
250A	AC2A		..MOTOR-SERVO (V51761) (SPEC S253T409-1) (USED ON ITEM 230A)	A,C	1
-250B	AT3A		..MOTOR-SERVO (V51761) (SPEC S253T409-3)	B,D	1
-250C	AC2A		..MOTOR-SERVO (V51761) (SPEC S253T409-1)	B-H,J,K	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
255	253T7114-1		..GEAR BOX ASSY- (253T7114-3 MAY REPLACE 253T7114-1 FOR CF6-80C2 FADEC ENGINE POWERED 767 A/C ONLY) (REF CMM 22-32-31) (PRE SB 767-22-0034) (PRE SB 767-22-0081)	A,C, E-H,J ,K	1
-255A	253T7114-3		..GEAR BOX ASSY- (253T7114-3 MAY REPLACE 253T7114-1 FOR CF6-80C2 FADEC ENGINE POWERED 767 A/C ONLY) (REF CMM 22-32-31)	B,D	1
-255B	253T7114-3		..GEAR BOX ASSY- (POST SB 767-22-0034) (REF CMM 22-32-31)	C	1
-255C	015T1017-3		..GEAR BOX ASSY- (POST SB 767-22-0081) (REF CMM 22-32-31) (REPLACED BY ITEM 255D FOR SPARES PER SB 767-22-0081)	A,C	1
-255D	253T7114-3		DELETED		
-255E	253T7114-3		..GEAR BOX ASSY- (REPLACES ITEM 255C FOR SPARES PER SB 767-22-0081) (REF CMM 22-32-31)	A,C	1
260	NAS623-3-11		.SCREW		2
265	NAS623-3-8		.SCREW		2
270	AN960JD10LL		.WASHER		2
275	AN960JD10L		.WASHER		2
280	MS21042L3		.NUT		4
285	BACB28AK03-024		.BUSHING		2
290	253U5109-1		.LEVER ASSY		2

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01- 295	BNG3F113		..BEARING- (V16746) (SPEC BACB10CN3) (OPT BLN3-2230 (V81376)) (OPT HG3-140 (V02758)) (OPT KSBG3-57 (V97613)) (OPT 55768-3 (V09455)) (OPT NBG3A (V73134)) (OPT NC3G1 (V56644)) (OPT ABG3V4 (V50294))		2
	300	253U5109-2		..LEVER		1
	301	NAS623-3-4		DELETED		
	302	AN960JD10L		DELETED		
	303	MS21042L3		DELETED		
	304	BACC10DK6		DELETED		
	305	253T7510-1		.RESOLVER ASSY	A,C-E,G,J,K	1
	-305A	253T7510-3		.RESOLVER ASSY	B,F,H	1
	310	253T7510-2		.RESOLVER ASSY	A,C-E,G,J,K	1
R	-310A	253T7510-4		.RESOLVER ASSY	B,F,H	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
			ATTACHING PARTS		
315	HL10VAZ6-5		.BOLT-		6
			(V56878)		
			(SPEC BACB30MY6K5)		
			(OPT B30MY6K5		
			(V97928))		
			(OPT HL10VAZ6-5		
			(V73197))		
			(OPT HL10VAZ6-5		
			(V92215))		
			(OPT HL10VAZ6-5		
			(V97928))		
			(OPT L8006K5		
			(V06725))		
			(OPT HL10VAZ6-5		
			(V08524))		
320	HL79-6		.COLLAR-		6
			(V56878)		
			(SPEC BACC30M6)		
			(OPT HL79-6		
			(V73197))		
			(OPT HL79-6		
			(V92215))		
			(OPT 66014-6		
			(V56878))		
			-------*-------		
325	AN960JD816		..WASHER		1
330	H10-8BAC		..NUT-		1
			(V15653)		
			(SPEC BACN10JC8)		
			(OPT BMN4122A8		
			(V85495))		
			(OPT RMLH9074-8		
			(V72962))		
			(OPT 48FT820		
			(V56878))		
			(OPT BMN4122AD3-8		
			(V08524))		
			(OPT BMN4122AD3-8		
			(V97928))		
335	NAS623-3-16		..SCREW		1
340	NAS623-3-23		..BOLT		2
345	AN960JD10L		..WASHER		3
350	MS21042L3		..NUT		3
355	253T7513-1		..CRANK		1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	360	BACB28AK10-015		..BUSHING		1
	365	BACB30LU2-8		..BOLT		2
	370	253T7512-1		..CLAMP ASSY		2
	375	MS21209C0820		...INSERT		1
	380	253T7512-2		...CLAMP		1
	385	253T7512-3		..SHAFT		1
	390	253T7511-1		..BRACKET ASSY- (USED ON ITEMS 305, 305A)		1
	395	253T7511-2		..BRACKET ASSY- (USED ON ITEMS 310, 310A)		1
	400	B5538WZZFS428		...BEARING- (V21335)		1
	405	253T7511-3		...BRACKET- (USED ON ITEM 390)		1
	410	253T7511-4		...BRACKET- (USED ON ITEM 395)		1
	415	S331T002-1		..RESOLVER- (OPT ITEM 415A)	A,C-E ,G,J	1
	-415A	CU09625094		..RESOLVER- (V88818) (SPEC S331T002-4) (OPT ITEM 415)	A,C-E ,G,J	1
	-415B	S331T002-7		DELETED		
R	-415C	CU09625105		..RESOLVER- (V05088) (SPEC S331T002-7) (OPT ITEM 415D)	B,F,H ,K	1
R	-415D	CU09625121		..RESOLVER- (V05088) (SPEC S331T002-13) (OPT ITEM 415C)	B,F,H ,K	1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
416	NAS603-36P		.SCREW	B,D	2
-416A	NAS603-36P		.SCREW (POST SB 767-22-0034) (POST SB 767-22-0081)	A,C	2
418	AN960-10L		.WASHER	B,D	2
-418A	AN960-10LP		.WASHER (POST SB 767-22-0034) (POST SB 767-22-0081)	A,C	2
419	253T7124-1		.CONE-EXPANDER	B,D	2
-419A	253T7124-1		.CONE-EXPANDER (POST SB 767-22-0034) (POST SB 767-22-0081)	A,C	2
420	253T7113-5		.SHAFT ASSY-QUILL (PRE SB 767-22-0034) (PRE SB 767-22-0081)	A,C	1
-420A	253T7123-1		.SHAFT ASSY-QUILL (POST SB 767-22-0034) (POST SB 767-22-0081)	A,C	1
422	253T7123-1		.SHAFT ASSY-QUILL	B,D	1
425	253T7113-7		..PLUG (USED ON ITEM 420)	A,C	4
427	MS21209F1-25		..INSERT (USED ON ITEM 422)	B,D	2
-427A	MS21209F1-25		..INSERT (USED ON ITEM 420A)	A,C	2
429	253T7123-2		..SHAFT-QUILL (USED ON ITEM 422)	B,D	1
-429A	253T7123-2		..SHAFT-QUILL (USED ON ITEM 420A)	A,C	1
430	253T7113-6		..SHAFT (USED ON ITEM 420)	A,C	1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
R	432	BACB30NF4-12		.BOLT- (V06710) (SPEC BACB30NF4-12) (OPT BACB30NF4-12 (V06725)) (OPT BACB30NF4-12 (V06950)) (OPT BACB30NF4-12 (V08524)) (OPT BACB30NF4-12 (V17943)) (OPT BACB30NF4-12 (V27624)) (OPT BACB30NF4-12 (V56878)) (OPT BACB30NF4-12 (V80539)) (OPT BACB30NF4-12 (V92215)) (OPT BACB30NF4-12 (V97928))		4
R	433	AN960JD416L		.WASHER		4
R	434	BACB30NF4-12		.BOLT- (V06710) (SPEC BACB30NF4-12) (OPT BACB30NF4-12 (V06725)) (OPT BACB30NF4-12 (V06950)) (OPT BACB30NF4-12 (V08524)) (OPT BACB30NF4-12 (V17943)) (OPT BACB30NF4-12 (V27624)) (OPT BACB30NF4-12 (V56878)) (OPT BACB30NF4-12 (V80539)) (OPT BACB30NF4-12 (V92215)) (OPT BACB30NF4-12 (V97928))	A-D	1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
R	01- -434A	BACB30NR4K16		.BOLT- (V06710) (SPEC BACB30NR4K16) (OPT BACB30NR4K16 (V06725)) (OPT BACB30NR4K16 (V06950)) (OPT BACB30NR4K16 (V08524)) (OPT BACB30NR4K16 (V27624)) (OPT BACB30NR4K16 (V56878)) (OPT BACB30NR4K16 (V73197)) (OPT BACB30NR4K16 (V80539)) (OPT BACB30NR4K16 (V92215)) (OPT BACB30NR4K16 (V93907)) (OPT BACB30NR4K16 (V97928))	E-H,J,K	1
R	434M	AN960JD416L		.WASHER		1
R	434U	MS21042L4		.NUT	E-H,J,K	1
	435	253T7500-1		.PACK ASSY-BRAKE (REF CMM 22-32-43)	A	1
	-435A	253T7500-2		.PACK ASSY-BRAKE (REF CMM 22-32-43)	B-D	1
R	-435B	253T7500-3		.PACK ASSY-BRAKE (REF CMM 22-32-43)	E,F,J	1
R	-435C	253T7500-4		.PACK ASSY-BRAKE (REF CMM 22-32-43)	G,H,K	1
	440	BACR15BB4AD		.RIVET- (SIZE DETERMINE ON INST)		4
	445	253T7507-1		.POINTER		1
	450	253T7507-2		.POINTER		1
	455	253T7508-1		.BRACKET ASSY		1
	460	253T7508-2		.BRACKET ASSY		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
			ATTACHING PARTS		
465	HL12VAZ8-4		.BOLT-		4
			(V56878)		
			(SPEC BACB30NX8K4)		
			(OPT HL12VAZ8-4		
			(V73197))		
			(OPT HL12VAZ8-4		
			(V92215))		
			(OPT HL12VAZ8-4		
			(V97928))		
			(OPT L802-8K4		
			(V06725))		
			(OPT HL12VAZ8-4		
			(V08524))		
470	AN960JD416L		.WASHER		4
475	HL1187-8		.COLLAR-		4
			(V73197)		
			(SPEC BACC30X8)		
			(OPT HL87-8		
			(V73197))		
			(OPT HL87-8		
			(V92215))		
			(OPT HL1187-8		
			(V56878))		
			(OPT HL1187-8		
			(V92215))		
			(OPT HL87-8		
			(V56878))		
480	HL12VAZ6-4		.BOLT-		6
			(V56878)		
			(SPEC BACB30NX6K4)		
			(OPT HL12VAZ6-4		
			(V73197))		
			(OPT HL12VAZ6-4		
			(V92215))		
			(OPT HL12VAZ6-4		
			(V97928))		
			(OPT L802-6K4		
			(V06725))		
			(OPT HL12-4		
			(V06725))		
485	AN960JD10L		.WASHER		6

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
490	HL1187-6		.COLLAR-		6
			(V73197)		
			(SPEC BACC30X6)		
			(OPT HL87-6		
			(V73197))		
			(OPT HL87-6		
			(V92215))		
			(OPT HL1187-6		
			(V56878))		
			(OPT HL1187-6		
			(V92215))		
			(OPT HL87-6		
			(V56878))		
			-------*-------		
495	BACR15BB5AD		..RIVET-		2
			(SIZE DETERMINE ON INST)		
500	253T7515-1		..CONNECTOR		1
505	253T7508-3		..BRACKET-		1
			(USED ON ITEM 455)		
510	253T7508-4		..BRACKET-		1
			(USED ON ITEM 460)		
515	253T7514-1		.BRACKET ASSY-INTERLOCK		1
			ATTACHING PARTS		
517	HL10VAZ5-7		.BOLT-		2
			(V56878)		
			(SPEC BACB30MY5K7)		
			(OPT B30MY5K7		
			(V97928))		
			(OPT HL10VAZ5-7		
			(V73197))		
			(OPT HL10VAZ5-7		
			(V92215))		
			(OPT HL10VAZ5-7		
			(V97928))		
			(OPT L8005K7		
			(V06725))		
			(OPT HL10VAZ5-7		
			(V08524))		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- 520	HL10VAZ5-6		.BOLT- (V56878) (SPEC BACB30MY5K6) (OPT B30MY5K6 (V97928)) (OPT HL10VAZ5-6 (V73197)) (OPT HL10VAZ5-6 (V92215)) (OPT HL10VAZ5-6 (V97928)) (OPT L8005K6 (V06725)) (OPT HL10VAZ5-6 (V08524))		4
525	HL10VAZ5-5		.BOLT- (V56878) (SPEC BACB30MY5K5) (OPT B30MY5K5 (V97928)) (OPT HL10VAZ5-5 (V73197)) (OPT HL10VAZ5-5 (V92215)) (OPT HL10VAZ5-5 (V97928)) (OPT L8005K5 (V06725)) (OPT HL10VAZ5-5 (V08524))		2
530	HL70-5		.COLLAR- (V56878) (SPEC BACC30M5) (OPT HL70-5 (V73197)) (OPT HL70-5 (V92215)) (OPT 66014-5 (V56878)) -------*-------		8

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- 535	HL12VAZ5-8		..BOLT- (V56878) (SPEC BACB30NX5K8) (OPT HL12VAZ5-8 (V73197)) (OPT HL12VAZ5-8 (V92215)) (OPT HL12VAZ5-8 (V97928)) (OPT L802-5K8 (V06725)) (OPT HL12-8 (V06725))		6
540	HL12VAZ5-6		..BOLT- (V56878) (SPEC BACB30NX5K6) (OPT HL12VAZ5-6 (V73197)) (OPT HL12VAZ5-6 (V92215)) (OPT HL12VAZ5-6 (V97928)) (OPT L802-5K6 (V06725)) (OPT HL12-6 (V06725))		4
545	HL1187-5		..COLLAR- (V73197) (SPEC BACC30X5) (OPT HL87-5 (V73197)) (OPT HL87-5 (V92215)) (OPT HL86PB5 (V73197)) (OPT HL86PB5 (V56878)) (OPT HL86PB5 (V92215)) (OPT HL1187-5 (V56878)) (OPT HL1187-5 (V92215)) (OPT HL87-5 (V56878))		10

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
	550	253T7514-2		..MOUNT-ACTR		2
	555	253T7514-4		..MOUNT-INSIDE		1
	560	253T7514-5		..MOUNT-INSIDE		1
	565	253T7514-6		..MOUNT-OUTSIDE		1
	570	253T7514-7		..MOUNT-OUTSIDE		1
	575	253T7514-3		..CHANNEL		2
	580	253T7507-3		.SHIM		AR
	582	253T7514-9		.FILLER-RADIUS (OPT ITEM 582B)	A-D	1
R	-582A	253T7514-11		.FILLER-RADIUS	E-H,J,K	1
R	-582B	253T7514-11		.FILLER-RADIUS (OPT ITEM 582)	A-D	1
	583	253T7514-10		.FILLER-RADIUS (OPT ITEM 583B)	A-D	1
R	-583A	253T7514-11		.FILLER-RADIUS	E-H,J,K	1
R	-583B	253T7514-11		.FILLER-RADIUS (OPT ITEM 583)	A-D	1
	585	254N1142-4		.FRAME ASSY		1
	590	MS21209F1-15P		..INSERT		2
	595	254N1142-5		..FRAME		1
	600	254N1142-6		.FRAME		1
R	603	BACB30NR4-24		.BOLT	E-H,J,K	1
	605	BAC27TCT0193		.DECAL-TS0170		1
R	608	253T7534-1		.BOLT	E-H,J,K	1
	610	BAC27TCT0194		.DECAL-TS0171		1

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
R	613	BACB30NR4K21		.BOLT- (V06710) (SPEC BACB30NR4K21) (OPT BACB30NR4K21 (V06725)) (OPT BACB30NR4K21 (V06950)) (OPT BACB30NR4K21 (V08524)) (OPT BACB30NR4K21 (V27624)) (OPT BACB30NR4K21 (V56878)) (OPT BACB30NR4K21 (V73197)) (OPT BACB30NR4K21 (V80539)) (OPT BACB30NR4K21 (V92215)) (OPT BACB30NR4K21 (V93907)) (OPT BACB30NR4K21 (V97928))	E-H,J,K	1
	615	BAC27TCT0404		.DECAL		1
R	618	BACB30VT8K21		.BOLT	E-H,J,K	1
	619	BACC30BL8		.COLLAR	E-H,J,K	1
	620	BAC27TCT0405		.DECAL		1
R	623	AN960C516L		.WASHER	E-H,J,K	1
	625	BAC27TCT0406		.DECAL-D11830		1
R	628	BACW10P116S		.WASHER	E-H,J,K	1
	630	BAC27TCT0407		.DECAL-D11832		1
R	635	AN960JD416L		.WASHER	E-H,J,K	3
R	640	NAS43HT4K25		.SPACER	E-H,J,K	1
R	645	NAS43HT4-35		.SPACER	E-H,J,K	2

	FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
	01-					
R	650	BNP3E114T		.BEARING- (V16746) (SPEC BACB10W3T) (OPT AG5CR (V15860)) (OPT BSSN5422 (V81376)) (OPT HSBG5-115 (V02758)) (OPT KSBG5CR (V97613)) (OPT NS5E (V73134)) (OPT 03-503-0501 (V09455)) (OPT NC5-2 (V56644)) (OPT ABG5-5 (V50294)) (OPT 03-503-05E016 (V09455))	E-H,J,K	1
R	655	MS21042L5		.NUT	E-H,J,K	1
R	660	MS21042L4		.NUT	E-H,J,K	3
R	665	BMN4122AD3-14		.NUT- (V08524) (SPEC BACN10JC14) (OPT BMN4122A14 (V85495)) (OPT H10-14BAC (V15653)) (OPT RMLH9074-14 (V72962)) (OPT 48FT1414 (V56878)) (OPT BMN4122AD3-14 (V97928))	E-H,J,K	1
R	670	253T7531-1		.BRAKE ASSY (REF CMM 22-32-45)	E,F,J	1
R	-670A	253T7531-2		.BRAKE ASSY (REF CMM 22-32-45)	G,H,K	1
R	673	253T7529-1		.SPACER	E-H,J,K	1