

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF CONTROL STAND THRUST LEVER ASSEMBLY COMPONENT MAINTENANCE
MANUAL 76-11-22

REVISION NO. 3 DATED JUL 01/01

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

DESCRIPTION & OPERATION 1 Added technical clarification to the DESCRIPTION & OPERATION section.

101,104-105,
107-108,114
901

Changed callout of digital protractor from G76002-7 to G76002-15.

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HIGHLIGHTS

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CONTROL STAND THRUST LEVER ASSEMBLY

PART NUMBER 254T2000-1

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

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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.

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

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

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INTRODUCTION

The instructions that are specified in this manual give the data necessary to do the maintenance functions that range from simple maintenance checks and part replacement to complete shop-type repair procedures.

This manual is divided into separate sections:

- | | |
|--|------------------------------|
| 1. Title Page | 4. List of Effective Pages |
| 2. Record of Revisions | 5. Table of Contents |
| 3. Temporary Revision &
Service Bulletin Record | 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.

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INTRODUCTION

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CONTROL STAND THRUST LEVER ASSEMBLYDESCRIPTION AND OPERATION1. Description

- A. The Control Stand Thrust Lever Assembly is an electromechanical assembly that controls the direction and the amount of engine thrust.
- B. The thrust lever assembly is made up of a left-engine and a right-engine thrust lever assembly, which are both co-located on the control stand inside the flight deck.
- C. Each lever assembly is made from the basic parts that follow:
 - (1) A forward thrust select handle
 - (2) A reverse thrust select handle
 - (3) A number of internally mounted electric control switches
 - (4) A wire bundle assembly connector
- D. Each lever assembly is connected to the autothrottle brake assemblies through an output crank and a control rod assembly.

2. Operation

- A. During normal operation, forward thrust of the engine occurs when the thrust levers are moved to the forward position.
- B. Reverse thrust of the engine occurs when the thrust levers are moved to the aft position, which then operates the deployment of the thrust reverser and controls reverse thrust power.
- C. During forward thrust mode, the reverse thrust levers are mechanically locked in the stowed position in relation to the forward thrust lever, and cannot be moved.
- D. When the reverse thrust lever is deployed, the forward thrust lever cannot be moved independently because it is held in the idle position.

3. Leading Particulars (Approximate)

- A. Length -- 11.0 inches
- B. Width -- 5.0 inches
- C. Height -- 16.0 inches
- D. Weight -- 18.0 pounds

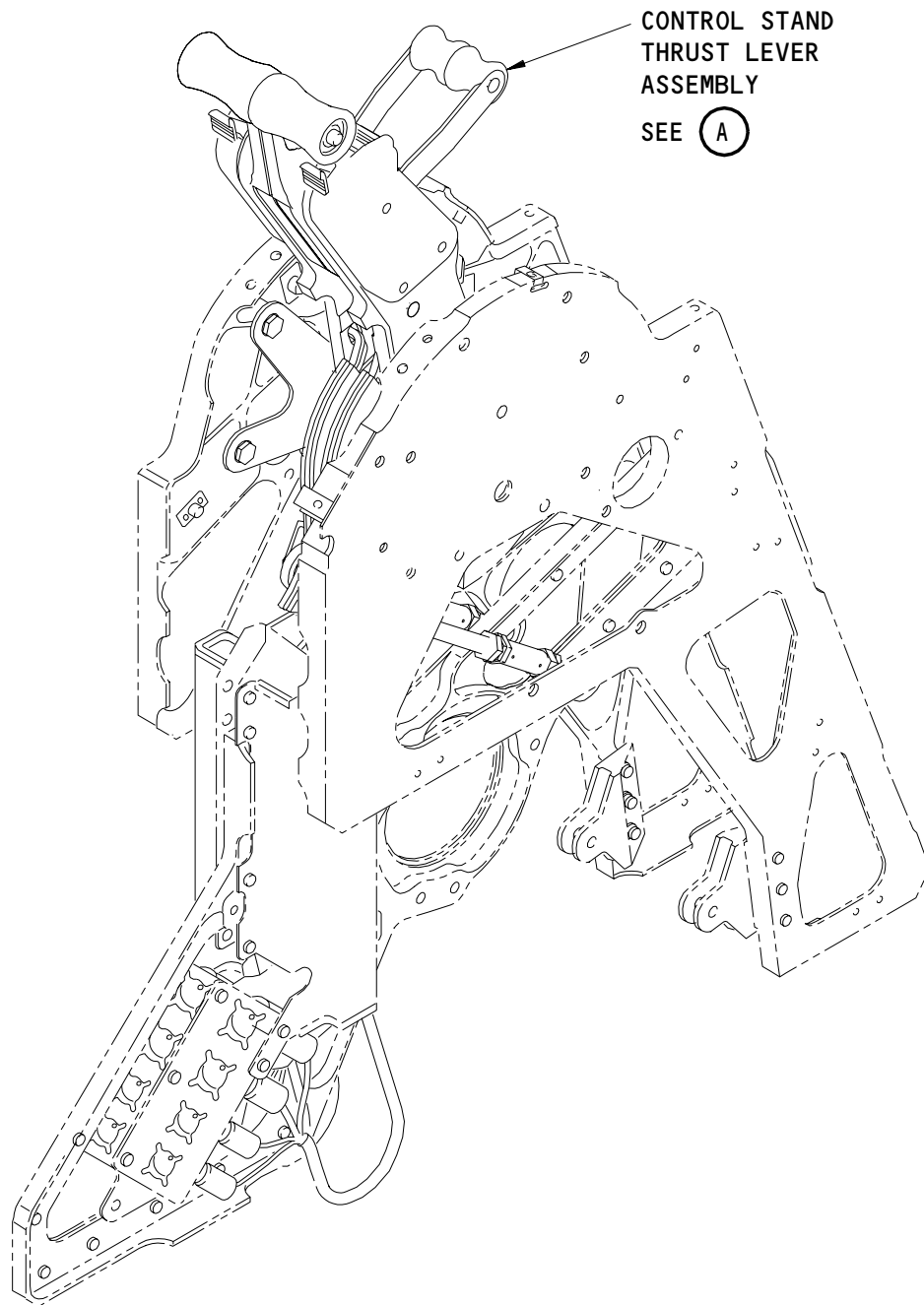
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Control Stand Thrust Lever Assembly
Figure 1 (Sheet 1)

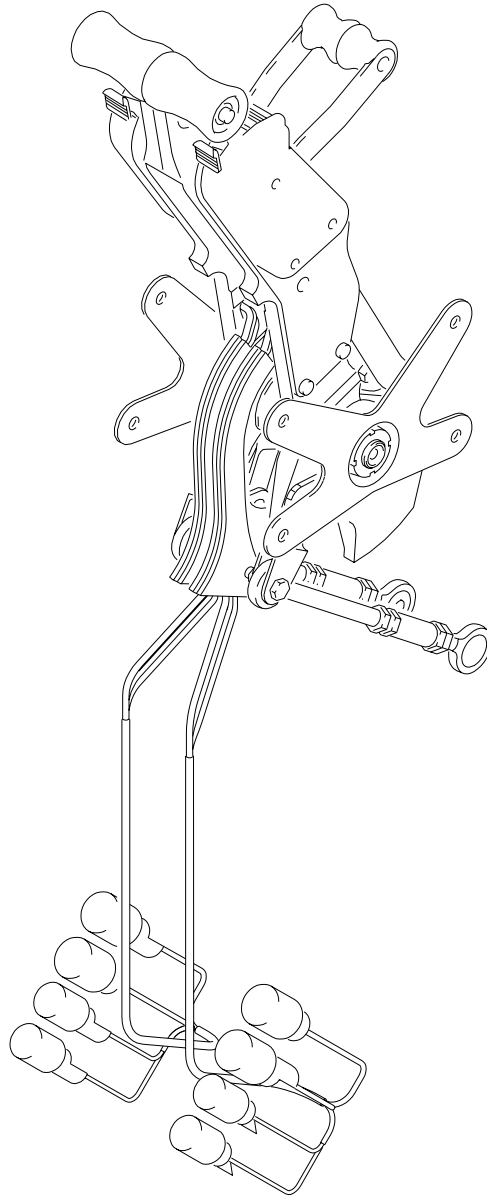
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A

Control Stand Thrust Lever Assembly
Figure 1 (Sheet 2)

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TESTING AND FAULT ISOLATION1. General

- A. This section has the necessary data to do a test of the Control Stand Thrust Lever Assembly (1A).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. See IPL Fig. 1 for item numbers.

2. Thrust Lever Assembly Functional Test

A. Standard Tools

- (1) Multimeter

B. Special Tools and Equipment

NOTE: Equivalent tool/equipment can be used.

- (1) G76002-15, Reverse Thrust Lever Protractor (supersedes G76002-7)

C. Procedure

- (1) Do a test of the left thrust lever assembly (240):

NOTE: Continuity test on the pins will show that the switch is OPEN (NO CONTINUITY) or that the switch is CLOSED (CONTINUITY).

- (a) Do a test in the stowed position.

- 1) Put the left reverse thrust lever assembly (545) in the stowed position. Make sure that the autothrottle disconnect switch (605) is in the free or untouched position.

- a) Make sure these circuit conditions occur (See Fig. 101 for schematic diagram).

- 1. Connector, D14030P -- Pins 1 and 2: Switch S5 (Closed)
- 2. Connector, D14030P -- Pins 2 and 3: Switch S5 (Open)
- 3. Connector, D14036P -- Pins 1 and 2: Switch S3 (Closed)

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4. Connector, D14036P -- Pins 3 and 4: Switch S3 (Open)
- 2) Substitute the steps that follow to do the test, if the D14030P connector does not agree with the circuit conditions given in 2.C.(1)(a)1)a) 1. and 2.
 - a) Make sure that the circuit conditions that follow occur and that the change in state happens between 9.5 and 12.5 degrees of lever travel from the stowed position. See Fig. 101 for schematic diagram.
 1. Connector, D14030P -- Pins 1 and 2: (Open)
 1. Connector, D14030P -- Pins 2 and 3: (Closed)
 - b) Move the adjusting nut assembly (305) and the jamnut (300) to put the leaf spring (355) in the necessary position to get the correct switch point.
 - 3) Replace the switch (605) if the D14036P connector does not agree with the circuit conditions as given in 2.C.(1)(a)1)a) 3. and 4.
 - 4) Do the steps that follow to test the trigger (430) shown in Fig. 101.
 - a) Push the trigger (430) all the way down until there is no space between the trigger and the stop. See Fig. 101.
 - b) Slowly release the trigger (430) until all four circuits given in 2.C.(1)(a) change from open to closed continuity.

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- c) Verify that the minimum gap is greater than 0.04 inch between the lower switch leg of the trigger (430) and the cover support post. See Fig. 101 for gap location.

NOTE: This gap must occur at the point where each switch changes from "open" (no continuity) to "closed" (continuity).

- (b) Do a test of the autothrottle disconnect switch (605).

- 1) Push the autothrottle disconnect switch (605) and hold it in this position.

- a) Make sure the following circuit conditions occur (See Fig. 101 for schematic diagram).

1. Connector, D14036P -- Pins 1 and 2: Switch S3 (Open)

2. Connector, D14036P -- Pins 3 and 4: Switch S3 (Closed)

- 2) Replace the switch (605) if the above conditions do not exist for the D14036P connector.

- (c) Do a test of the takeoff/go-around switches (290).

NOTE: During this test, if the switches (290) do not operate correctly, then loosen the switch mounting screws (275, 280) as necessary and adjust the position of the switches to achieve correct switch operation. If more adjustment is needed, then bend the arms of the switch actuators (295) a maximum of 0.06 inch.

- 1) Push the trigger (430) until a 0.07 inch space exists between the trigger and the stop at the location shown in Fig. 101.

- a) Make sure that the following circuit conditions occur (See Fig. 101 for schematic diagram).

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1. Connector, D14032P -- Pins 1 and 2: Switch S7 (Closed)
 2. Connector, D14034P -- Pins 1 and 2: Switch S9 (Closed)
 3. Connector, D14030P -- Pins 4 and 5: Switch S1 (Closed)
- 2) Push the trigger (430) until a 0.04 inch space exists between the trigger and the stop at the location shown in Fig. 101.
- a) Make sure that the following circuit conditions occur (See Fig. 101 for schematic diagram).
1. Connector, D14032P -- Pins 1 and 2: Switch S7 (Open)
 2. Connector, D14034P -- Pins 1 and 2: Switch S9 (Open)
 3. Connector, D14030P -- Pins 4 and 5: Switch S1 (Open)
- 3) If switch adjustments were made in step 2.C.(1)(c)2), repeat steps 2.C(1)(c)1) and 2.C.(1)(c)2).
- (d) Do a test of the reverse thrust lever assembly (545).
- 1) Attach the reverse thrust lever protractor G76002-15 to the reverse thrust lever (570) as shown in Fig. 102.
 - 2) Lift the reverse thrust lever (570) into the deploy position and hold it.
- a) Make sure that the following circuit conditions occur and that the change in state happens between 9.5 and 12.5 degrees of lever travel from the stowed position. (See Fig. 101 for schematic diagram).

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1. Connector, D14030P -- Pins 1 and 2: Switch S5 (Open)
 2. Connector, D14030P -- Pins 2 and 3: Switch S5 (Closed)
- 3) Move the adjusting nut (305A) and the jamnut (300) to put the leaf spring (350) in a position to get the correct switch point.
- 4) Remove the reverse thrust lever protractor G76002-15.
- (2) Do a test of the right thrust lever assembly (245):
- NOTE:** Continuity test on the pins will show that the switch is OPEN (NO CONTINUITY) or that the switch is CLOSED (CONTINUITY).
- (a) Do a test in the stowed position.
- 1) Put the right reverse thrust lever assembly (550) in the stowed position. Make sure that the autothrottle disconnect switch (605) is in the free or untouched position.
 - a) Make sure these circuit conditions occur (See Fig. 101 for schematic diagram).
 1. Connector, D14040P -- Pins 3 and 4: Switch S6 (Closed)
 2. Connector, D14040P -- Pins 4 and 5: Switch S6 (Open)
 3. Connector, D14038P -- Pins 1 and 2: Switch S4 (Closed)

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4. Connector, D14038P -- Pins 3 and 4: Switch S4 (Open)
 - 2) Move the adjustment nut (305A) and the jamnut (300) to put the leaf spring (355) in a position to achieve the conditions 2.C.(2)(a)1)a)1. and 2.C.(2)(a)2)1)a)2. above for the D14040P connector.
 - 3) Replace the switch (605) if conditions 2.C.(2)(a)1)a)3. and 2.C.(2)(a)1)a)4. do not exist for the D14038P connector.
- (b) Do a test of the autothrottle disconnect switch (605).
 - 1) Push the autothrottle disconnect switch (605) and hold it in this position.
 - a) Make sure the following circuit conditions occur (See Fig. 101 for schematic diagram).
 1. Connector, D14038P -- Pins 1 and 2: Switch S4 (Open)
 2. Connector, D14038P -- Pins 3 and 4: Switch S4 (Closed)
 - 2) Replace the switch (605) if the above conditions do not exist for the D14038P connector.
- (c) Do a test of the take-off/go-around switches (290).

NOTE: During this test, if the switches (290) do not operate correctly, then loosen the switch mounting screws (275, 280) as necessary and adjust the position of the switches to achieve correct switch operation. If more adjustment is needed, then bend the arms of the switch actuators (295) a maximum of 0.06 inch.

 - 1) Push the trigger (435) until a 0.07 inch space exists between the trigger and the stop at the location shown in Fig. 101.
 - a) Make sure that the following circuit conditions occur (See Fig. 101 for schematic diagram).

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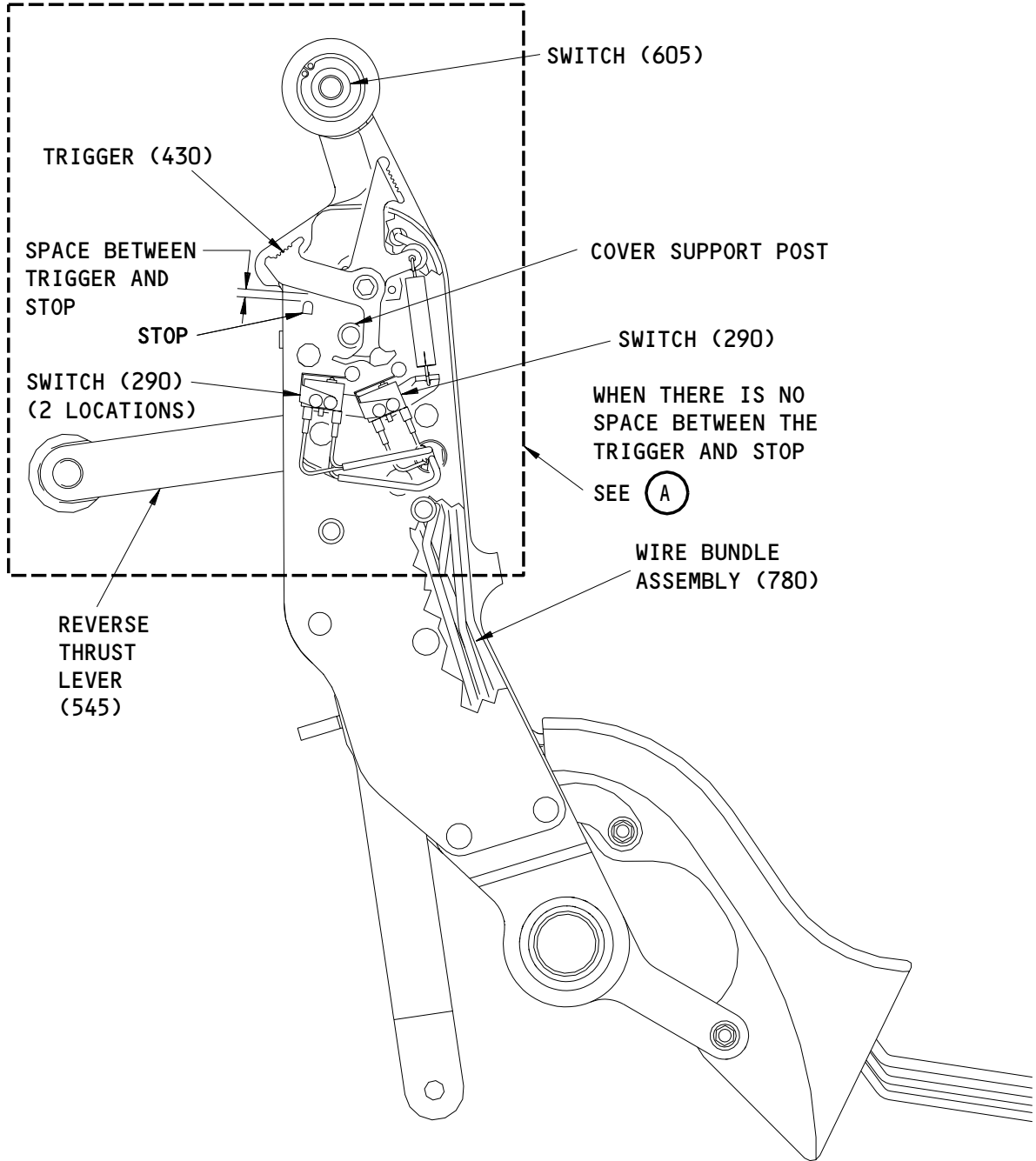
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1. Connector, D14042P -- Pins 1 and 2: Switch S2 (Closed)
 2. Connector, D14044P -- Pins 1 and 2: Switch S10 (Closed)
 3. Connector, D14040P -- Pins 1 and 2: Switch S8 (Closed)
 - 2) Push the trigger (435) until a 0.04 inch space exists between the trigger and the stop at the location shown in Fig. 101.
 - a) Make sure that the following circuit conditions occur (See Fig. 101 for schematic diagram).
 1. Connector, D14042P -- Pins 1 and 2: Switch S2 (Open)
 2. Connector, D14044P -- Pins 1 and 2: Switch S10 (Open)
 3. Connector, D14040P -- Pins 1 and 2: Switch S8 (Open)
 - 3) If switch adjustments were made in step 2.C.(2)(c)2), repeat steps 2.C(2)(c)1) and 2.C.(2)(c)2).
- (d) Do a test of the reverse thrust lever assembly (550).
 - 1) Attach the reverse thrust lever protractor G76002-15 to the reverse thrust lever (575) as shown in Fig. 102.
 - 2) Lift the reverse thrust lever (575) into the deploy position and hold it.
 - a) Make sure that the following circuit conditions occur and that the change in state happens between 9.5 and 12.5 degrees of lever travel from the stowed position. (See Fig. 101 for schematic diagram).

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1. Connector, D14040P -- Pins 3 and 4: Switch S6 (Open)
2. Connector, D14040P -- Pins 4 and 5: Switch S6 (Closed)
- 3) Move the adjusting nut (305A) and the jamnut (300) to put the leaf spring (355) in a position to get the correct switch point.
- 4) Remove the reverse thrust lever protractor G76002-15.

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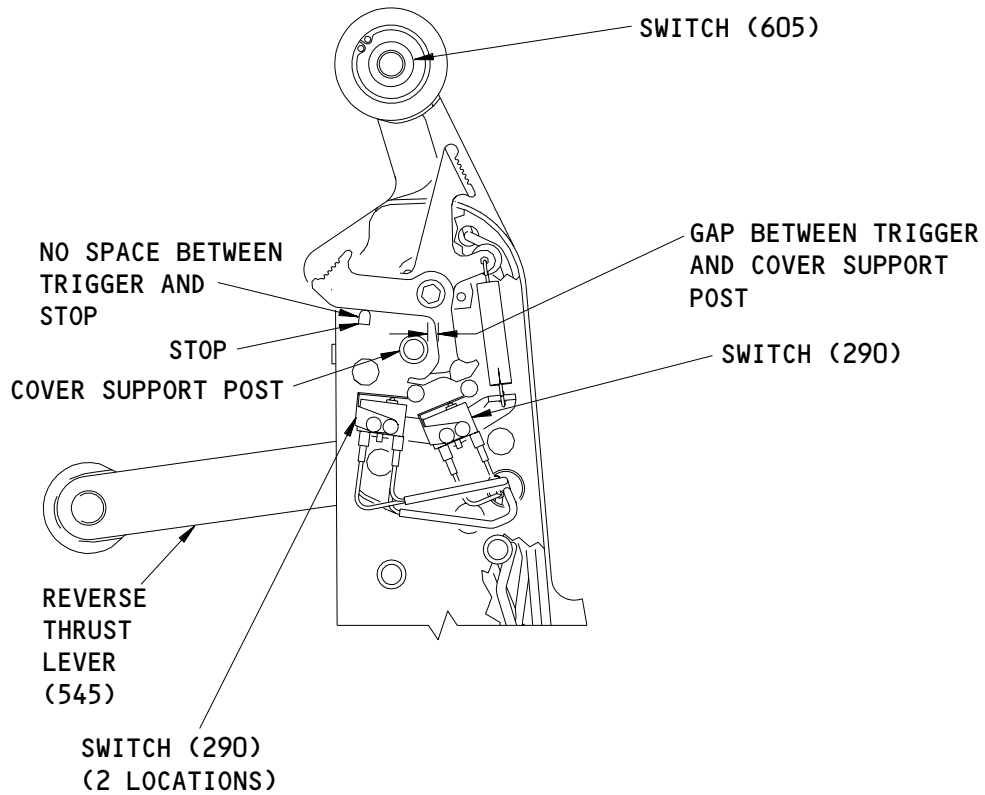


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Thrust Lever Assembly Testing and Fault Isolation
Figure 101 (Sheet 1)

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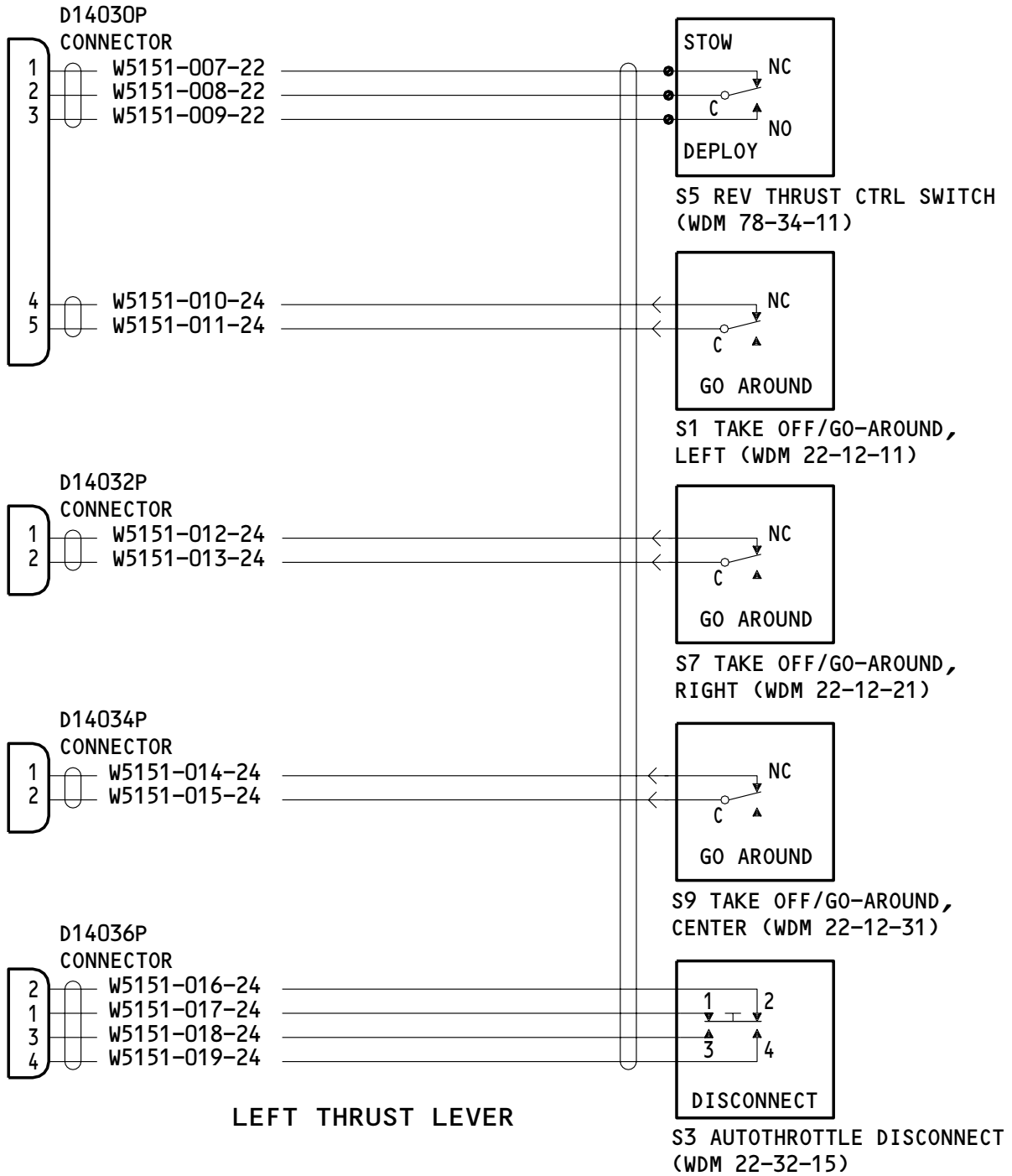


A

Thrust Lever Assembly Testing and Fault Isolation
Figure 101 (Sheet 2)

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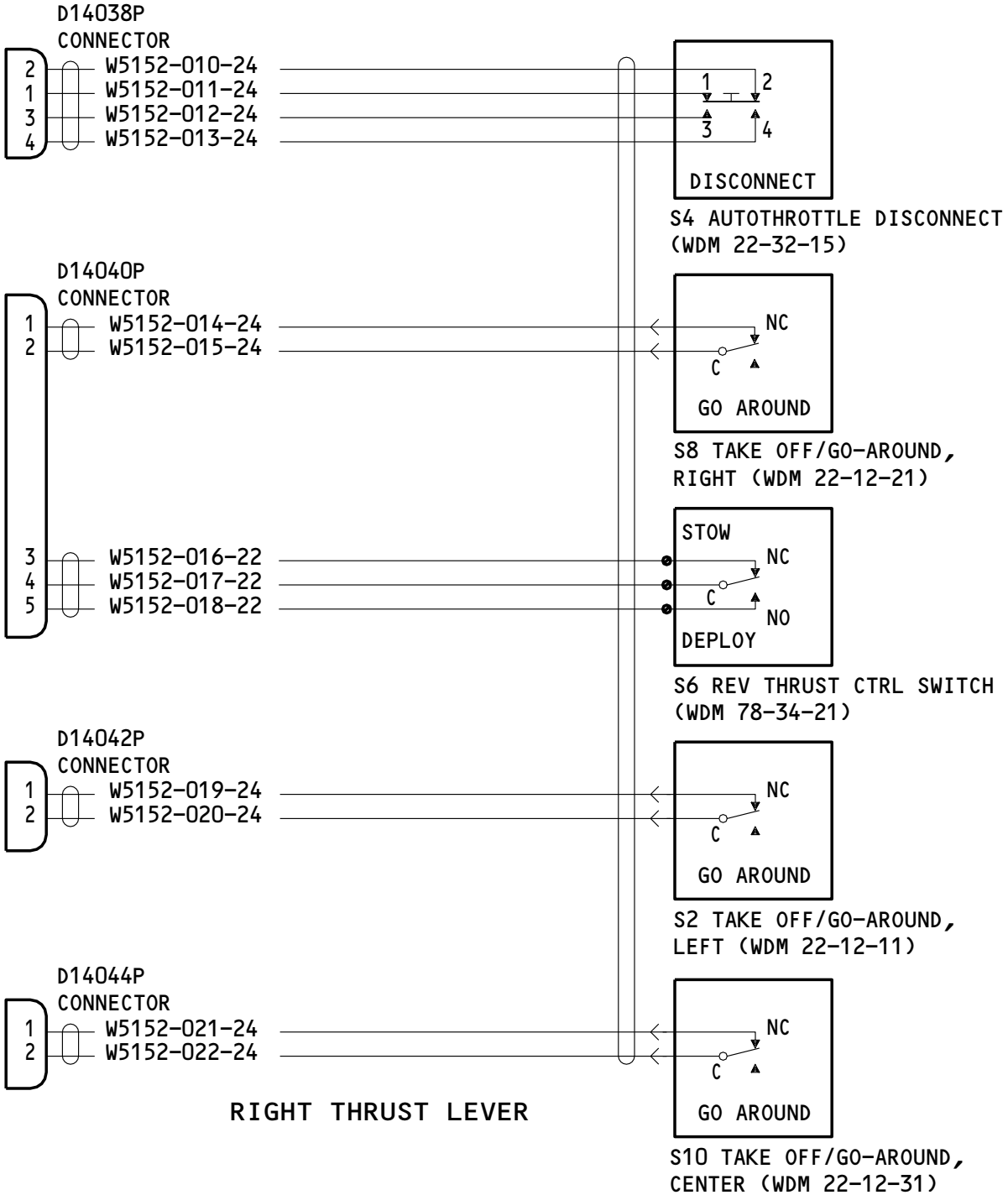
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Wire Bundle Assembly Layout and Schematics
Figure 101 (Sheet 3)

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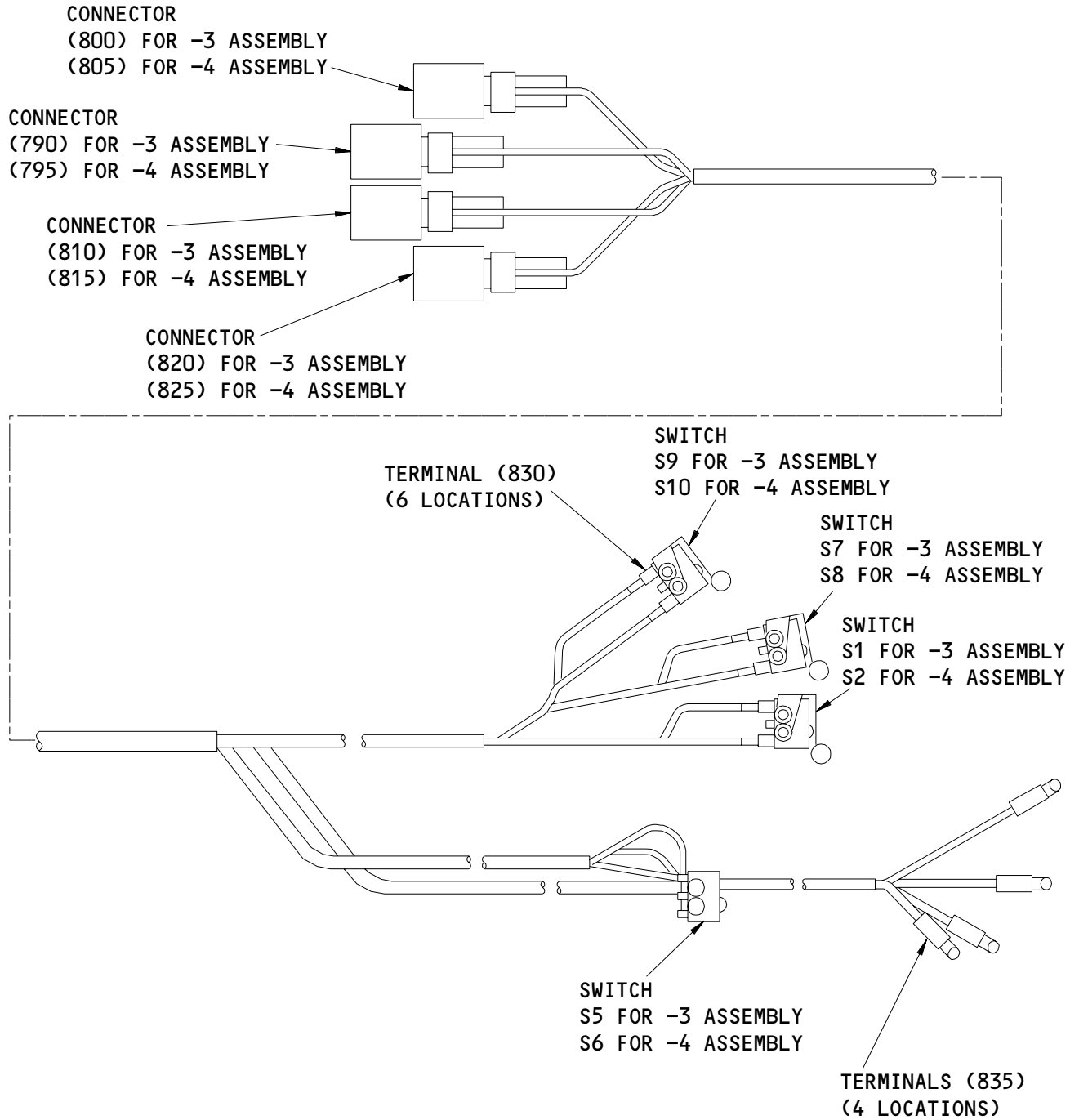


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Wire Bundle Assembly Layout and Schematics
 Figure 101 (Sheet 4)

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ITEM NUMBERS REFER TO IPL FIG. 1

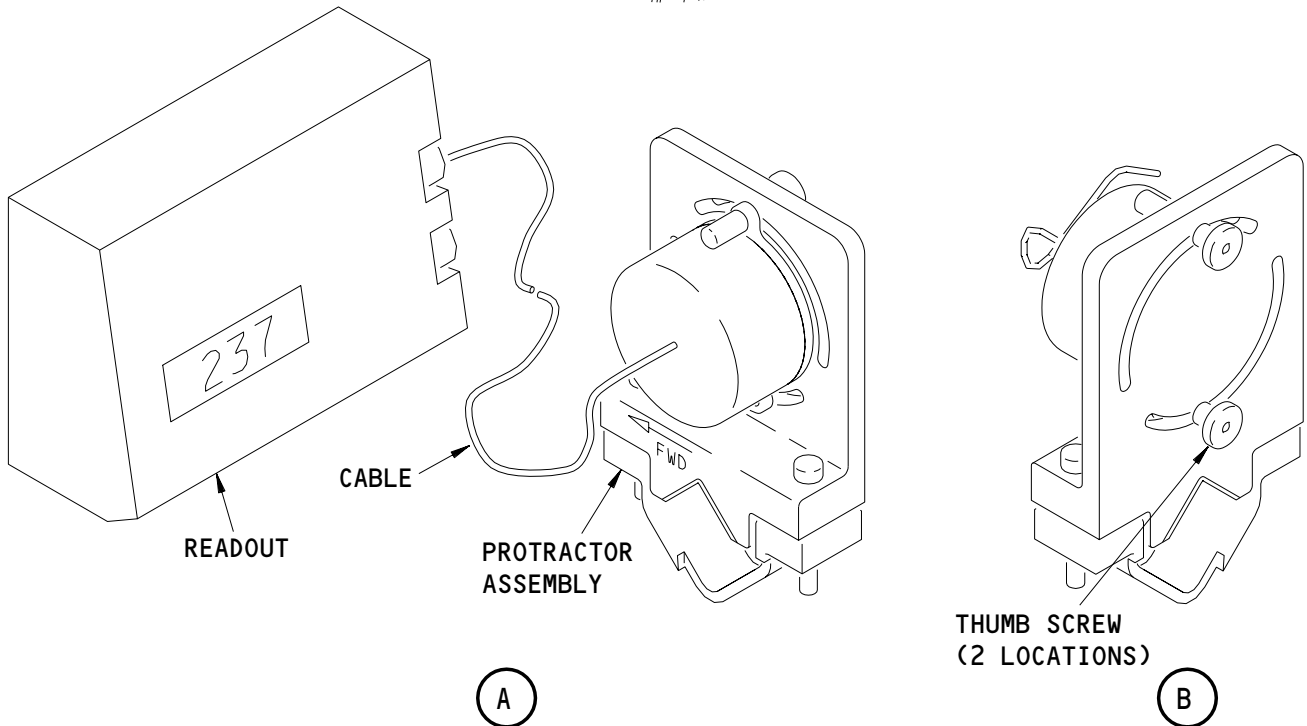
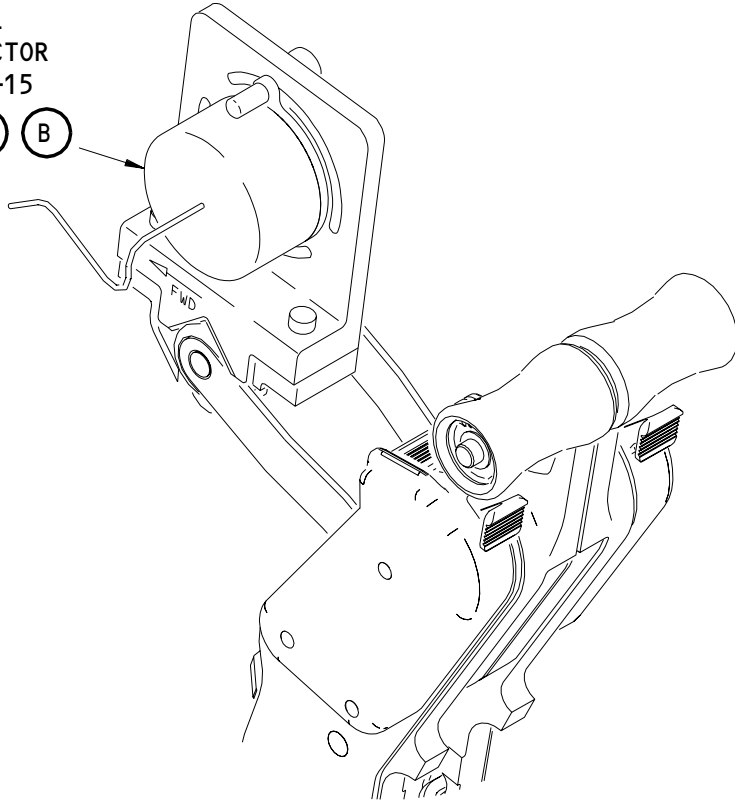
Wire Bundle Assembly Layout and Schematics
Figure 101 (Sheet 5)

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DIGITAL
PROTRACTOR
G76002-15

SEE (A) (B)



Thrust Reverser Lever Protractor Installation
Figure 102

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DISASSEMBLY1. General

- A. This procedure has the data necessary to disassemble the Control Stand Thrust Lever Assembly (IPL Fig. 1; 1A).
- B. Disassemble this component sufficiently to isolate the defects, do the necessary repairs, and put the component back to a serviceable condition.
- C. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- D. Use standard industry practices and the steps shown below to disassemble the Control Stand Thrust Lever Assembly.
- E. Refer to IPL Fig. 1 for item numbers.

2. Thrust Lever Disassembly

A. Procedure

- (1) Remove the bolts (5) and the washers (10), then remove the support assembly (15) from the thrust lever control stand.
- (2) Disassemble the pack assembly (30).
 - (a) Remove the push rod assemblies (50).
 - 1) Remove the nuts (45), the washers (40), and the bolts (35) from the crank assemblies (150, 155).
 - 2) Remove the push rod assemblies (50) from the crank assemblies (150, 155).
 - (b) Remove the support assembly (115) and the crank assembly (150, 155) from the lever assembly (240, 245).
 - 1) Remove the nut (100) and the washer (105) from the shaft assembly (225).
 - 2) Remove the support assembly (115), the spacer (110), and the shims (140).

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- 3) Remove the shaft assembly (225) with the spacers (130, 135), the shims (140), and the bearings (145), from the lever assemblies (240, 245) and the crank assemblies (150, 155).
 - 4) Remove the nuts (45), the washers (40), and the bolts (37) from the lever assembly (240, 245).
 - 5) Remove the crank assembly (150, 155) from the lever assembly (240, 245).
- (c) Disassemble the crank assembly (150, 155).
- 1) Remove the collars (175), the bolts (160, 165), the washers (170), and the bushings (180) from the crank assembly (150, 155).
 - 2) Remove the cam (215, 220) from the crank assembly (185, 190).
- (d) Disassemble the lever assembly (240, 245).
- 1) Remove the cover (255, 260).
 - a) Remove the screws (690), the screw (250), and the cover (255, 260).
 - 2) Remove the reverse thrust control (S5 or S6) switch (285) from the body assembly (695, 700).

NOTE: Do not remove the wires from the switch (285) or from the connectors unless repair or replacement of the switches is necessary.

Record the location of the switch (285) for use when it is assembled.

 - a) Remove the screws (280).
 - b) Remove the switch (285).
 - c) Remove the soldered wires from the switch (285).

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- 3) Remove the switch cover (265, 270) from the other side of the body assembly (695, 700).
 - a) Remove the screws (690) and the switch cover (265, 270).
- 4) Remove the take-off/go-around (S1, S7, S9 or S2, S8, S10) switches (290) and the switch actuators (295).
 - a) Remove the screws (275, 280).
 - b) Remove the switches (290) and the switch actuators (295).
 - c) Remove the wires from the switches (290).
- 5) Remove the autothrottle disconnect (S3 or S4) switch (605).

NOTE: Do not remove wires from the switches (605) or from the connectors unless repair or replacement of the switch is necessary.

- a) Remove the ring (590), retainer (595), and the packing (600).
- b) Remove the switch (605).
- c) Remove the screw (620) and the knob assembly (610, 615).

NOTE: If you only need to remove the switch (605), you do not need to do this step.

- 6) Remove the wire bundle assembly (780A, 785A).
 - a) Remove the screw (620) and the knob assembly (610, 615).
 - b) Remove the wires from the switches (290, 605).
 - c) Remove the soldered wires from the switch (285).
 - d) Remove the wire bundle assembly (780A, 785A) from the wire shield (625) and the body assembly (695, 700).
- 7) Disassemble the wire bundle assembly (780A, 785A).
 - a) Remove the wires from the connectors (790A thru 825).

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- b) Cut the one-piece sleeves to separate the individual wires.
- 8) Remove the feel spring support (330).
- a) Remove the nuts (300, 305), the spacer (307), the washer (312) and the spring (335).
 - b) Remove the screw (385), the washer (390) and the follower arm assemblies (375, 380).
 - c) Remove the cotter pin (320), the pin (325) and the feel spring support (330).
- 9) Remove the screws (340), the spacer (345) and the Leaf spring (350, 355).
- 10) Remove the cotter pin (360), the pin (365), and the latch (370).
- 11) Remove the spring (415), the bolt (420), the washer (425), and the trigger (430, 435).
- 12) Remove the side plate assembly (450, 455).
- a) Remove the screws (440, 445).
 - b) Remove the nuts (650, 665, 685), the washers (640, 645, 660, 680), and the bolts (630, 655, 675).
 - c) Remove the support (670) and the side plate assembly (450, 455).
- 13) Remove the bolt (510), the washers (515), the cam assembly (520, 525), and the reverse thrust lever assembly (545, 550).
- NOTE: Use an allen wrench to remove the bolt (510).
- 14) Remove the nuts (650), the washers (640), the spacer (645), the bolts (630, 635), and the wire shield (625).
- 15) Remove bolt (555), the knob (560) and the rivet (565) from the reverse thrust lever assembly (545, 550).

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CLEANING1. General

- A. This procedure has the data necessary to clean the Control Stand Thrust Lever Ass embly (IPL Fig. 1; 1A).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to IPL Fig. 1 for item numbers.

2. Thrust Lever Cleaning

A. Consumable Materials

NOTE: Equivalent material can be used.

- B. B00083 Sovent -- TT-N-95, Aliphatic naphtha (SOPM 20-60-01)
- C. B00130 Solvent -- TI-I-735, Isopropyl alcohol (SOPM 20-60-01)
- D. References

- (1) SOPM 20-11-03, Repair of Electrical Terminations
- (2) SOPM 20-12-01, Soldering of Electrical Connections
- (3) SOPM 20-30-03, General Cleaning
- (4) SOPM 20-60-01, Cleaning Materials

E. Procedure

- (1) Clean the plastic parts.

CAUTION: DO NOT USE CLEANING MATERIALS OTHER THAN SOAP AND WATER ON PLASTIC PARTS.

- (a) Clean the knobs (560, 610, 615) and the shield (625) with a mild soap and water solution.
 - (b) Dry the plastic parts with compressed air.
- (2) Clean the electrical parts.

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WARNING: MAKE SURE THAT ALL SOURCES OF FLASH OR FIRE ARE A SAFE DISTANCE AWAY FROM THE AREA WHERE THE COMBUSTIBLE MATERIALS AND THEIR VAPORS ARE USED.

CAUTION: DO NOT APPLY ABRASIVE CLEANING MATERIALS. MAKE SURE THAT THE SOLVENT BMS 3-2 OR OTHER CLEANING MATERIALS, EXCEPT NAPHTHA AND ALCOHOL, DO NOT TOUCH THE ELECTRICAL PARTS. MAKE SURE THE CLEANING FLUIDS DO NOT TOUCH THE RUBBER PARTS.

- (a) Use a mild air suction to remove dust and other foreign matter from the switches (285, 290, 605), and the wire bundle assembly (780, 785).
- (b) Clean the electrical connections.
 - 1) Clean the electrical contacts of the connectors (790 thru 825) with aliphatic naphtha or isopropyl alcohol.
 - 2) Dry the contacts with compressed air.
 - 3) Clean the soldered connections as specified by SOPM 20-12-01.
 - 4) Clean the terminal lugs and other bonded areas as specified by SOPM 20-11-03.
- (c) Clean the shielded bearings (20, 120, 195, 200) as shown in the manufacturers specifications.

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CLEANING

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CHECK1. General

- A. This procedure has the data necessary to find defects in the material of the specified parts.
- B. Refer to FITS AND CLEARANCES for the design dimension and wear limits.
- C. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- D. Refer to IPL Fig. 1 for item numbers.

2. Check

A. References

- (1) SOPM 20-20-01, Magnetic Particle Inspection
- (2) SOPM 20-20-02, Penetrant Methods of Inspection

B. Procedure

- (1) Use standard industry procedures to do a visual check of all the parts for defects. Do the penetrant or magnetic particle check if the visual check shows possible damage or if you suspect possible damage on the parts listed below:

(a) Do a magnetic particle check (SOPM 20-20-01) of these parts:

- 1) Barrel (65)
- 2) Spacer (110, 130, 135)
- 3) Crank (205, 210)
- 4) Inner shaft (230)
- 5) Outer shaft (235)
- 6) Pin (325, 395)
- 7) Support (380, 475, 725)
- 8) Leaf spring (350, 355)

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- 9) Latch (370)
 - 10) Roller (400)
 - 11) Trigger (430, 435)
 - 12) Cam (535, 540)
 - 13) Lever (570, 575)
 - 14) Link (580, 585)
 - 15) Stop plate (740)
- (b) Do a penetrant check (SOPM 20-20-02) of these parts:
- 1) Support (25, 125)
 - 2) End assembly (70, 85)
 - 3) Cam (215, 220)
 - 4) Nut (315)
 - 5) Arm (405, 410)
 - 6) Plate (500, 505)
 - 7) Anchor plate (730)
 - 8) Body (770, 775)
- (2) Do a check of the spring (335) as shown in Fig. 501.
- (a) Make sure that the spring measures approximately 1.35 inches in the free position.
 - (b) Make sure that the spring exerts 2.75 - 3.25 pounds of force when you compress it to 1.20 inches in length.
 - (c) Make sure that the spring exerts 10.0 - 11.0 pounds of force when you compress it to 0.825 inches in length.

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- (3) Do a check of the spring (415) as shown in Fig. 501.
 - (a) Make sure that the spring measures approximately 1.25 inches in the free position.
 - (b) Make sure that the spring increases in length 1.01–1.24 inches when you apply a force of 5.3 pounds.
- (4) Do a check of the leaf springs (350, 355) as shown in Fig 502.
 - (a) Make sure that the dimensions of the leaf spring are within the tolerances as shown in Fig. 502.

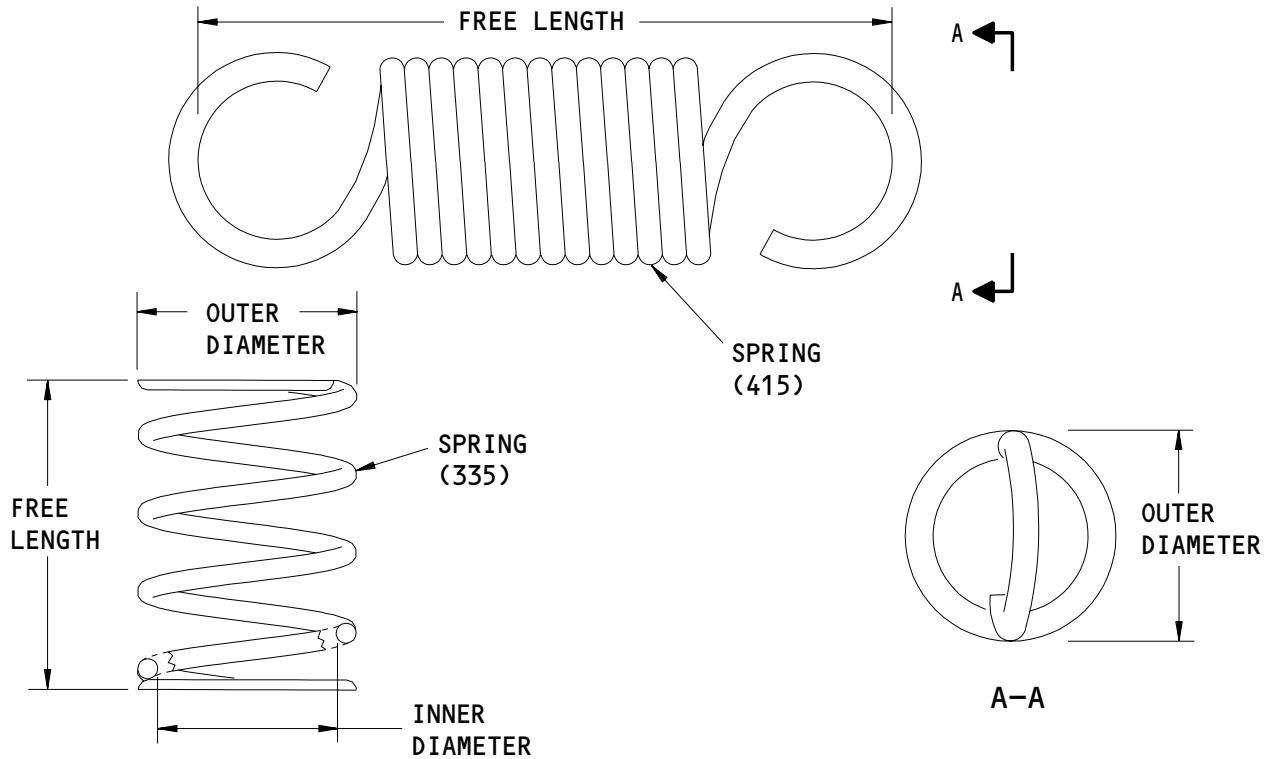
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CHECK

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ITEM # IPL FIG. 1	FREE LENGTH (APPROXIMATE)	ALLOWABLE LOAD LIMIT IN POUNDS	TEST LENGTH IN INCHES
335	1.35	10.0 TO 11.0 (MAXIMUM LOAD CHECK IN COMPRESSION)	0.825
	1.35	2.75 TO 3.25 (MINIMUM LOAD CHECK IN COMPRESSION)	1.20

ITEM # IPL FIG. 1	FREE LENGTH IN INCHES (APPROXIMATE)	MAXIMUM LOAD CHECK IN TENSION (POUNDS)	ALLOWABLE LIMIT ¹ (INCHES)
415	1.25	5.3	1.01 TO 1.24

¹ DISTANCE SPRING EXTENDED FROM FREE LENGTH WITH THE MAXIMUM LOAD APPLIED TO SPRING.

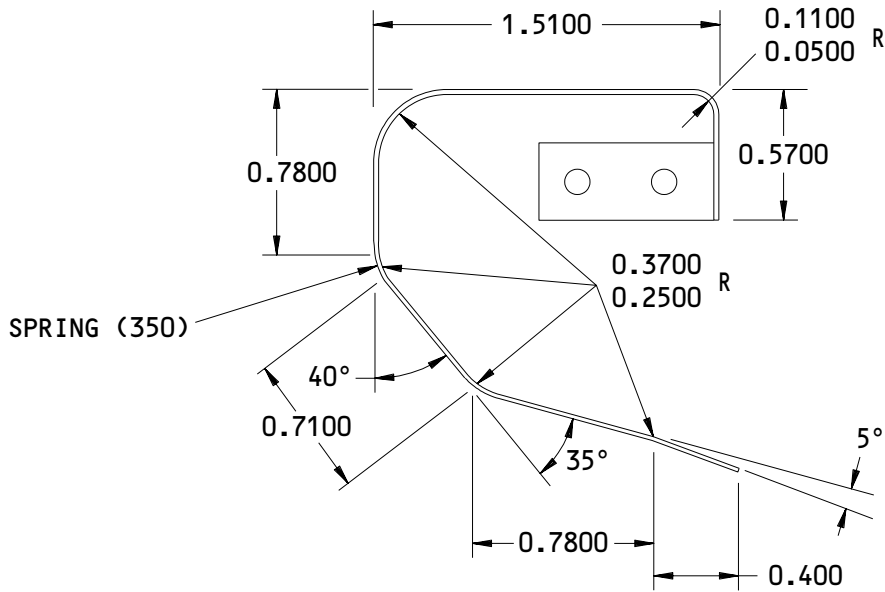
ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

Spring Check
 Figure 501

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254W2011-1 SHOWN
254W2011-2 OPPOSITE

ALL DIMENSIONS ARE IN INCHES

Spring Check
Figure 502

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REPAIR – GENERAL

1. General

- A. Instructions for repair, refinish, and replacement of the specified subassembly parts are included in each REPAIR when applicable:

<u>PART NUMBER</u>	<u>NAME</u>	<u>REPAIR</u>
---	REFINISH OF OTHER PARTS	1-1
253T5829	SUPPORT ASSEMBLY	2-1, 2-2
253U5822	ROD ASSEMBLY	3-1
253U5859	ROD END ASSEMBLY	3-2, 3-3
253U5860	ROD END ASSEMBLY	3-4, 3-5
254W2002	BODY ASSEMBLY	4-1, 4-2
254W2009	FOLLOWER ARM ASSEMBLY	5-1, 5-2
254W2013	SHAFT ASSEMBLY	6-1, 6-2
254W2016	SUPPORT ASSEMBLY	7-1, 7-2
254W2018	CRANK ASSEMBLY	8-1, 8-2

2. Dimensioning Symbols

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

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REPAIR-GENERAL

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

EXAMPLES

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

True Position Dimensioning Symbols
 Figure 601

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REPAIR-GENERAL

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REFINISH OF OTHER PARTS – REPAIR 1-11. General

- A. This procedure has the data necessary to refinish the parts which are not given in the specified repairs.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to IPL Fig. 1 for item numbers.

2. Refinish of Other Parts

A. General

- (1) Instructions for the repair of the parts listed in Table 601 are for repair of the initial finish.

B. Consumable Materials

NOTE: Equivalent material can be used.

- (1) C00259 Primer -- BMS 10-11, type 1 (SOPM 20-60-02)
- (2) C00802 Coating -- BAC5710, type 49 nylon (SOPM 20-60-02)
- (3) B00280 Cleaner -- Turco 5351 Paint Stripper (SOPM 20-60-01)
- (4) D00113 Lubricant -- BMS 3-8 Solid Film (SOPM 20-60-03)

C. References

- (1) SOPM 20-30-02, Stripping of Protective Finishes
- (2) SOPM 20-30-03, General Cleaning Procedures
- (3) SOPM 20-41-01, Decoding Table for Boeing Finish Codes
- (4) SOPM 20-60-01, Cleaning Materials
- (5) SOPM 20-60-02, Finishing Materials
- (6) SOPM 20-60-03, Lubricants

D. Procedure

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REPAIR 1-1

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IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u>		
Barrel (65)	Steel Hex Bar	Cadmium plate (F-15.02) all over.
Cover (255, 260)	321 CRES	Apply BMS 10-60, Type 2 flat enamel (F-14.9817-8924) to the part. Do not apply BMS 10-60, Type 2 flat enamel inside the areas of the holes or the countersinks.
Support (330)	15-5 CRES	Passivate (F-17.25) all over.
Latch (370)	17-4 CRES	Cadmium plate (F-15.06) all over.
Trigger (430, 435)	15-5 CRES	Abrasive clean as specified by SOPM 20-30-03, then apply BMS 10-110 (F-22.39-8924) to the surfaces noted in Fig. 601.
Support (475, 725)	15-5 CRES	Passivate (F-17.09), then apply thin dense chrome plate to the surfaces specified in Fig. 602. Apply the chrome plate as specified by SOPM 20-42-03, type 4, except no no specified thickness is required. Apply BMS 3-8, type 8 dry film lubricant to the threads in the hole as shown in Fig. 602.

Refinish Details
 Table 601 (Sheet 1)

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REPAIR 1-1

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IPL FIG. & ITEM	MATERIAL	FINISH
<u>Fig. 1</u> (cont'd)		
Plate (500, 505)	7075-T7351 Al alloy	Anodize (F-17.05) all over, then apply one layer of BMS 10-11, type 1 primer, except do not apply primer in holes or countersinks. Apply BMS 10-60, type 2 flat enamel (F-14.9817-8924) to the area shown in Fig. 603, except to not apply enamel in holes or countersinks.
Lever (570, 575)	15-5 CRES	Passivate (F-17.25) all over. Apply BMS 10-60, Type 2 flat enamel (F-14.9817-8924) to the area shown in Fig. 604. Do not apply BMS 10-60, Type 2 flat enamel inside the areas of the holes or the countersinks.
Link (580, 585)	15-5 CRES	Passivate (F-17.09) method 2 all over. Apply BMS 3-8 solid film lubricant as shown in Fig. 605.
Support (670)	2024-T3 Al alloy	Chemical treat (F-18.06) and apply one coat of BMS 10-11, type 1 primer.

Refinish Details
 Table 601 (Sheet 2)

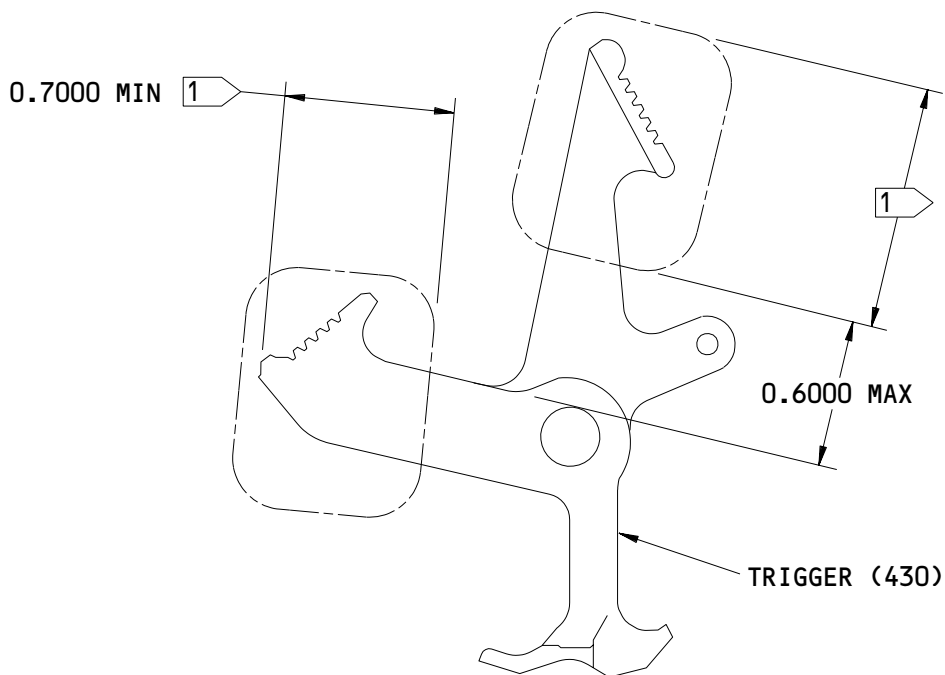
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REPAIR 1-1

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254T2011-1 SHOWN
254T2011-2 OPPOSITE

1 APPLY BMS 10-110 (F-22.39-8924)
TO THIS SURFACE

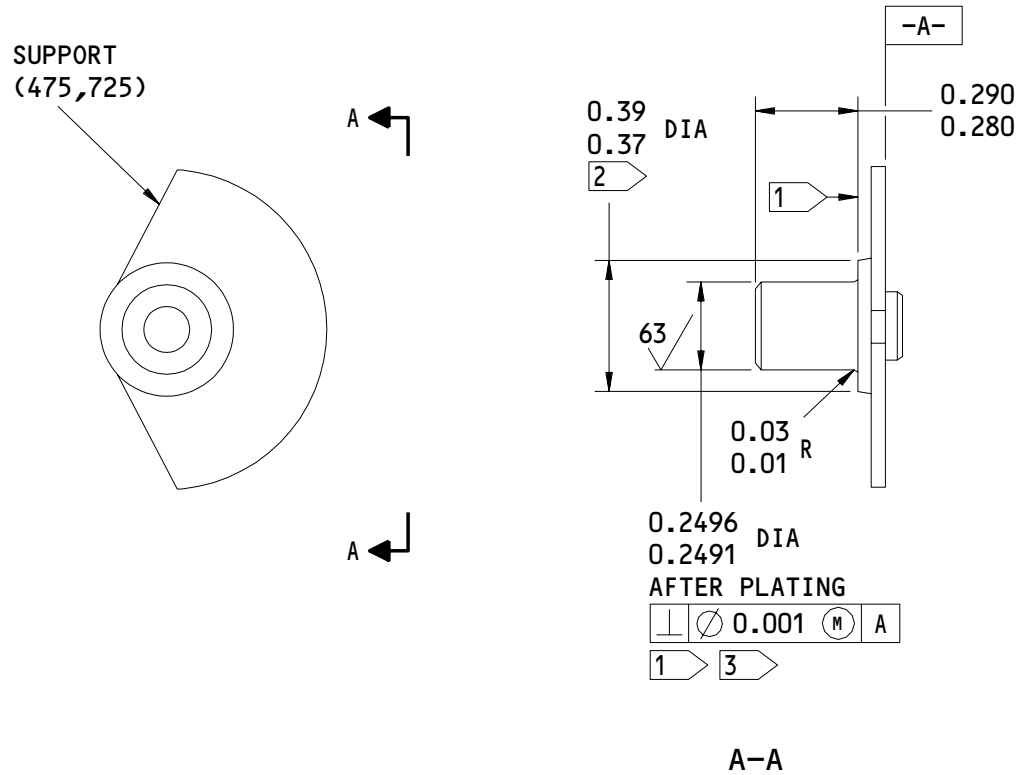
ITEM NUMBERS REFER TO IPL FIG. 1
ALL DIMENSIONS ARE IN INCHES

254T2011-1,-2
Trigger Refinish
Figure 601

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REPAIR 1-1
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- 1 CHROME PLATE THESE SURFACES.
- 2 DRY FILM OVERSPRAY ALLOWED.
- 3 DIAMETER MUST NOT EXCEED 0.2500 AFTER DRY FILM IS APPLIED.

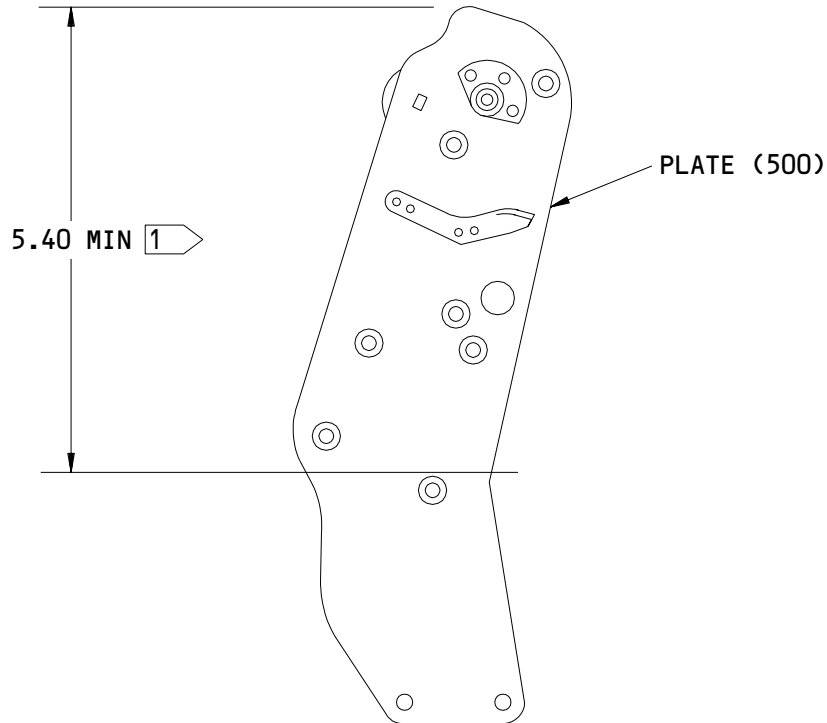
ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

253U5838-2
 Support Refinish
 Figure 602

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REPAIR 1-1
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254W2005-11SP SHOWN
254W2005-12SP OPPOSITE

1 APPLY ENAMEL (SRF-14.9817-8924)
TO THIS AREA.

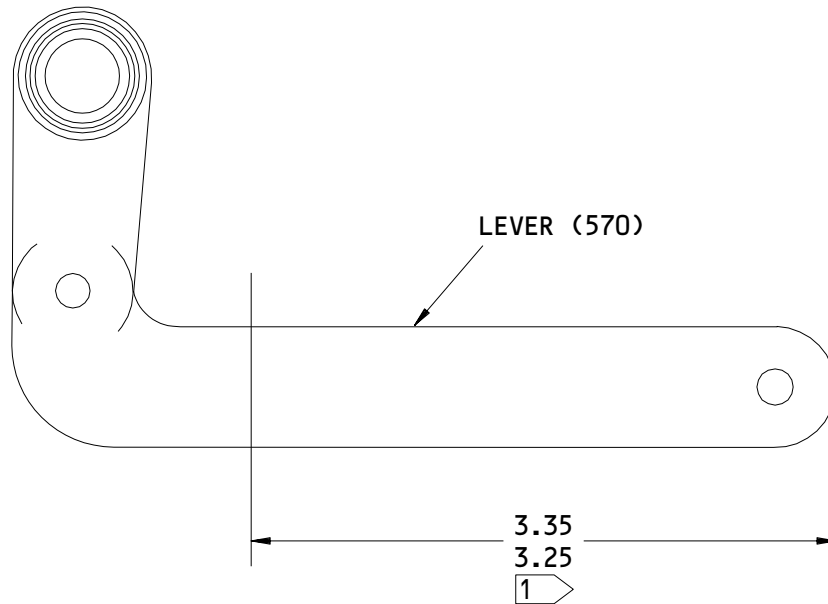
ITEM NUMBERS REFER TO IPL FIG. 1
ALL DIMENSIONS ARE IN INCHES

254W2005-11SP,-12SP
Plate Refinish
Figure 603

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REPAIR 1-1
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254W2015-1 SHOWN
254W2015-2 OPPOSITE

1 APPLY LACQUER (F-14.903-8924)
TO THIS AREA.

ITEM NUMBERS REFER TO IPL FIG. 1
ALL DIMENSIONS ARE IN INCHES

254W2015-1,-2
Lever Refinish
Figure 604

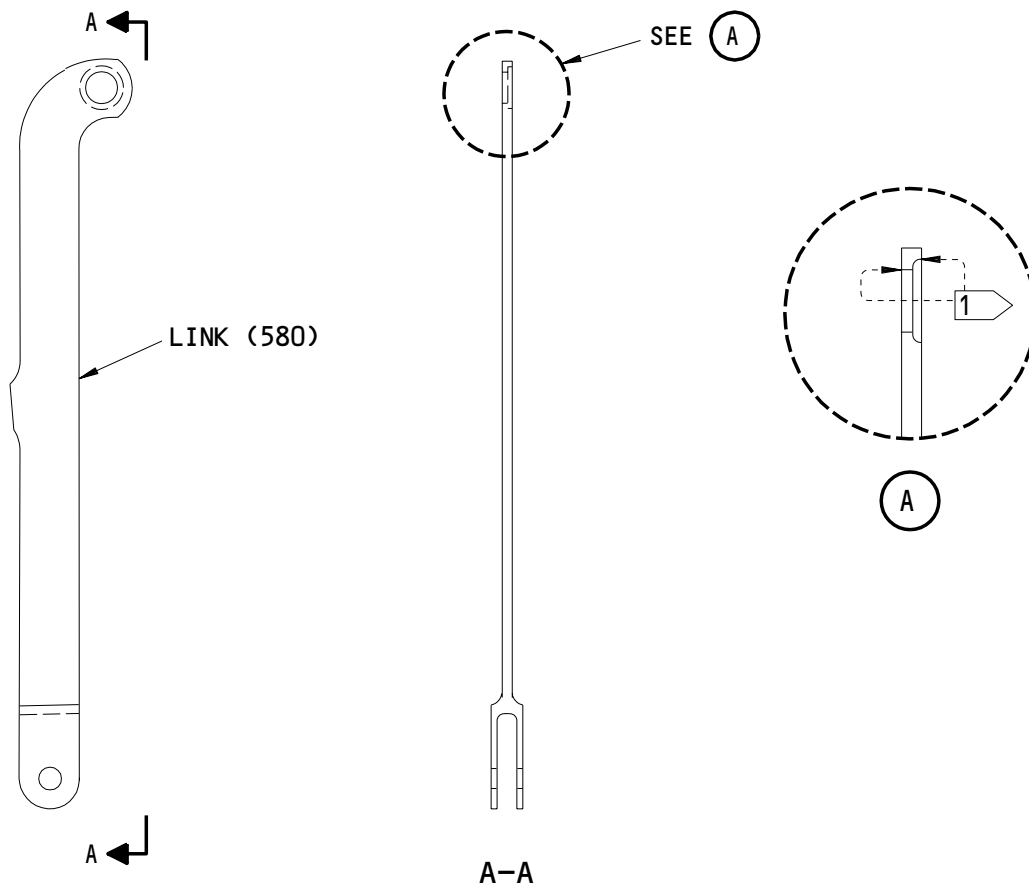
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REPAIR 1-1

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253U5818-1 SHOWN
 253U5818-2 OPPOSITE

1 APPLY BMS 3-8 SOLID FILM LUBRICANT
 (F-19.10) TO THIS SURFACE

ITEM NUMBERS REFER TO IPL FIG. 1

253U5818-1,-2
 Link Refinish
 Figure 605

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REPAIR 1-1
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SUPPORT ASSEMBLY – REPAIR 2-1

253T5829-1

1. General

- A. This procedure has the data necessary to repair and refinish the Support Assembly (115).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Bearing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) C00259 Primer -- BMS 10-11, type 1 (SOPM 20-60-02)

B. References

- (1) SOPM 20-41-01, Decoding Table for Boeing Finish Codes
- (2) SOPM 20-50-03, Bearing Removal, Installation and Retention
- (3) SOPM 20-60-02, Finishing Materials

C. Procedure

CAUTION: THE REPLACEMENT OF BEARING (120) MUST BE A ONE-TIME REPAIR PROCEDURE. IF THE BEARING IS REPLACED MORE THAN ONE TIME, THEN THE RETENTION OF THE BEARING IN THE HOUSING MAY NOT OCCUR SATISFACTORILY.

- (1) To the remove the worn or damaged bearing (120) from the support assembly (115), use standard industry practices to remove the bearing and do the steps that follow:

- (a) Do a visual inspection of the support assembly (115) to make sure that the assembly does not have any surface cracks.

NOTE: If the visual inspection shows surface cracks, then the support assembly (115) cannot be repaired and must be replaced.

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REPAIR 2-1

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(b) If support assembly (115) does not show any surface cracks, then use extreme caution to press out the worn or damaged bearing (120) from the support fitting (125).

NOTE: If the bearing cannot be removed without doing damage to the support fitting, then the support assembly (115) must be replaced.

(2) If necessary, repair and refinish the support fitting (125) as specified in Repair 2-2.

NOTE: Do not apply primer to the area of the support fitting (125) where the bearing is to be installed.

(3) Install the new bearing (120) into the support fitting (125).

(a) Use BMS 10-11, Type 1 chemical and solvent resistant finish to install the bearing (120).

(b) After the finish has dried, roller-swage the support fitting (125) over the bearing (120). Refer to SOPM 20-50-03.

NOTE: If you have replaced the bearing (120), then you must meet the specified test data for proof load of a roller-swaged housing. Refer to the proof load data given in SOPM 20-50-03 for 'Swaged Bearing Outer Race Requirements'.

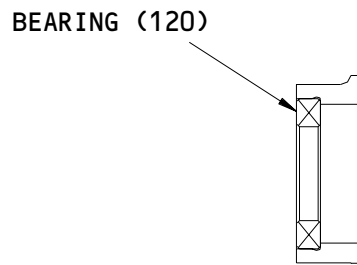
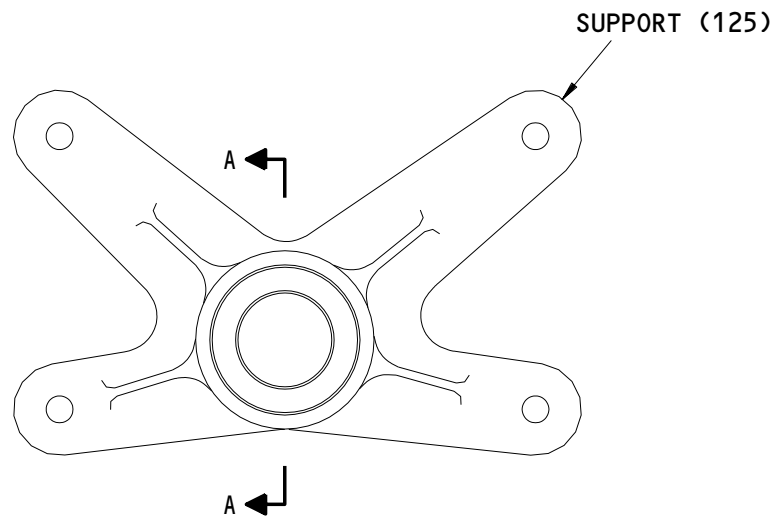
76-11-22

REPAIR 2-1

01.1

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ITEM NUMBERS REFER TO IPL FIG. 1

253T5829-1
Support Assembly Bearing Replacement
Figure 601

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REPAIR 2-1

01.101

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SUPPORT – REPAIR 2-2

253T5829-2

1. General

- A. This procedure has the data necessary to refinish the Support (125).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.
- E. General repair details:
 - (1) Material: 7075-T7351 Aluminum Alloy

| 2. Support Repair

| A. References

- | (1) BAC 5821, Hard Anodizing
- | (2) SOPM 20-41-01, Decoding Table for Boeing Finish Codes

| B. Procedure

- | (1) If you find wear or corrosion damage, then use standard industry practices to machine the bearing hole in the support fitting (125) to remove the damaged area.

NOTE: Use the repair limits given in Figure 601 to machine bearing hole in the support fitting (125).

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REPAIR 2-2

01.1

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- (2) Use standard industry practices to break all sharp edges as necessary.
- (3) Hard anodize (F-17.06) the machined surfaces only. If necessary, refer to BAC 5821, Class 1.

NOTE: After you hard anodize the surface, the maximum thickness permitted for the anodized layer is 0.004-inch.
- (4) After the surface has been hard anodized, finish machine the surface to the design dimensions given in Fig. 601.

3. Support Refinish

A. Consumable Materials

NOTE: If necessary you can use equivalent material.

- (1) C00259 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

- (1) SOPM 20-30-02, Stripping of Protective Finishes
- (2) SOPM 20-41-01, Decoding Table For Boeing Finish Codes
- (3) SOPM 20-60-02, Finishing Materials

C. Procedure

- (1) Chromic acid anodize all over the repaired part. Apply one layer of BMS 10-11, type 1 primer (F-18.13), except do not apply primer in the hole for the bearing as shown in Fig. 601.

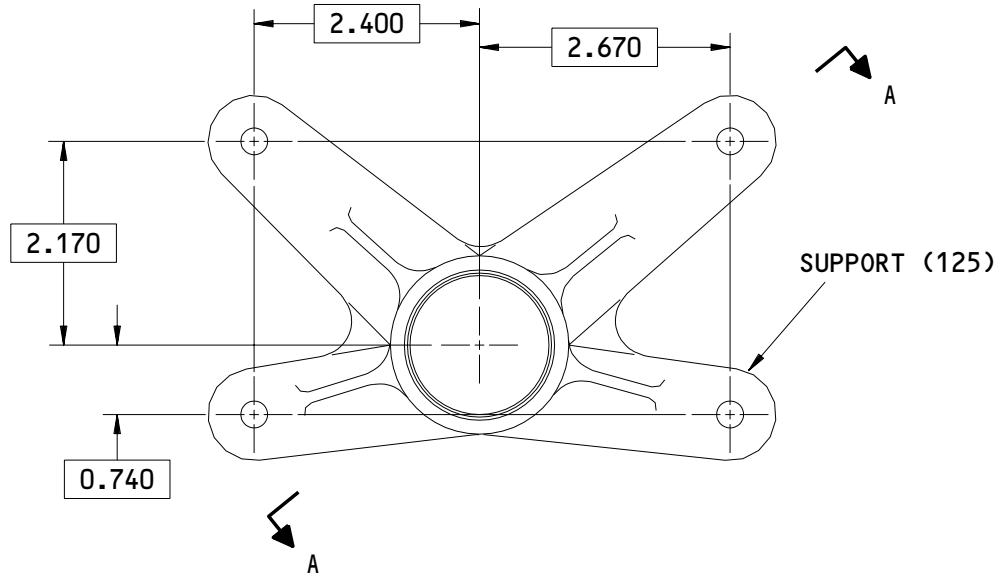
76-11-22

REPAIR 2-2

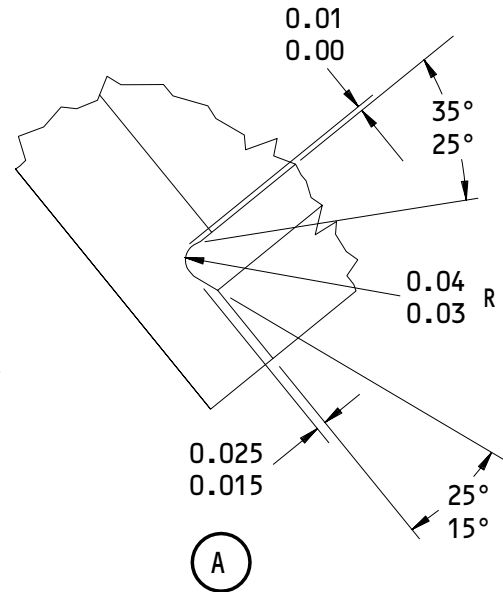
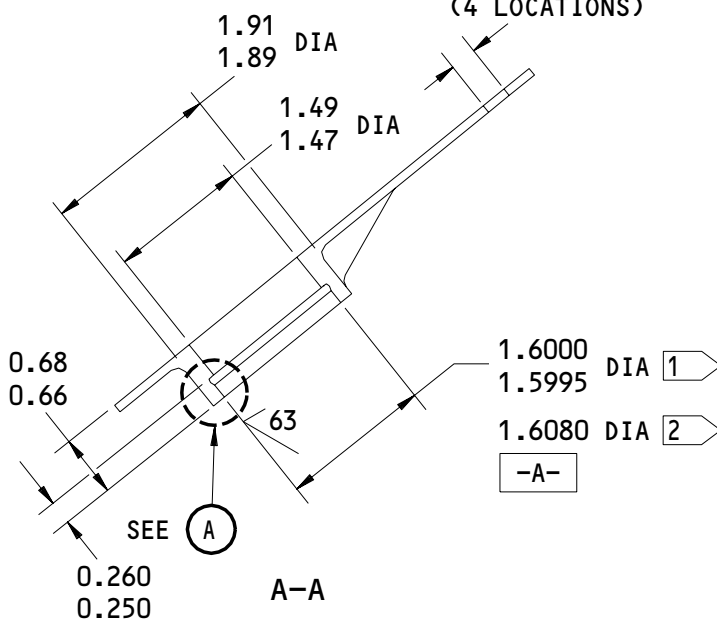
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0.291
 0.279 DIA
 ⊕ ∅ 0.010 M A M
 (4 LOCATIONS)



- 1 DO NOT APPLY PRIMER IN THIS AREA.
- 2 REPAIR LIMIT

ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

253T5829-2
 Support Repair and Refinish
 Figure 601

76-11-22

REPAIR 2-2
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ROD ASSEMBLY – REPAIR 3-1

253U5822-1

1. General

- A. This procedure has the data necessary to repair the Rod Assembly (50).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Rod End Assembly Replacement

A. Procedure

- (1) Remove the rod end assembly (70 and/or 85) and the jam nut (55 and/or 60) from the barrel (65).
- (2) Attach the new rod end assembly (70 and/or 85) and the jam nut (55 and/or 60) to the barrel (65).
- (3) Adjust the rod end assembly (70 and/or 85) so that the rod assembly (50) is the correct length and orientation as shown in Fig. 601.
- (4) Tighten the jam nuts (55 and/or 60).

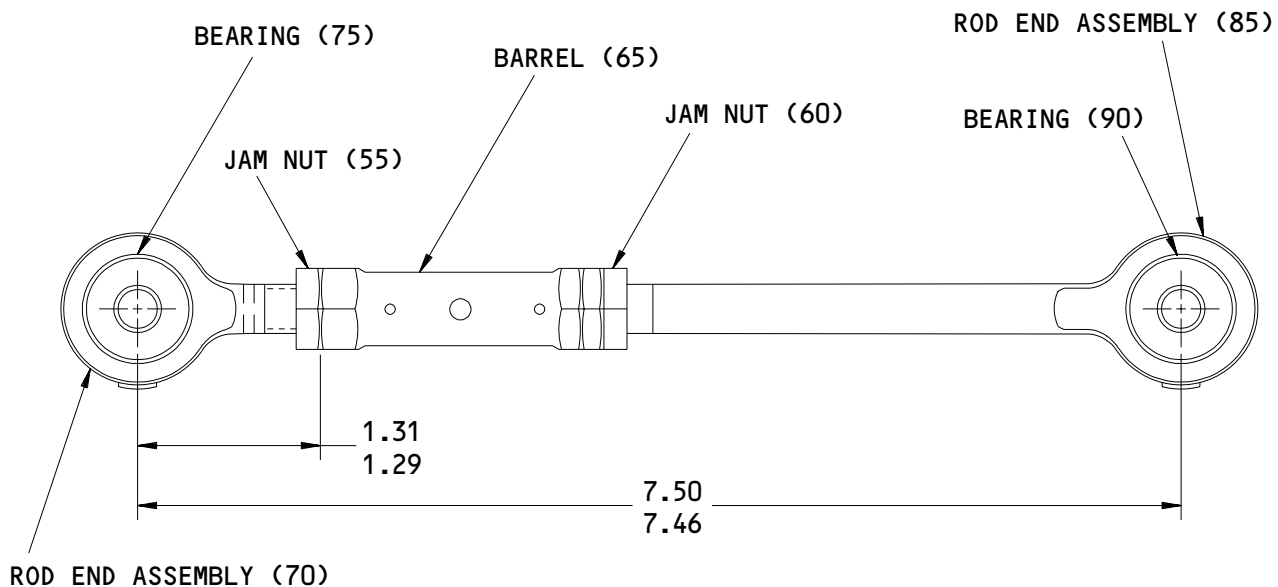
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REPAIR 3-1

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ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

253U5822-1
 Rod Assembly Rod End Bearing Replacement
 Figure 601

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REPAIR 3-1
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**BOEING**
COMPONENT
MAINTENANCE MANUALROD END ASSEMBLY – REPAIR 3-2

253U5859-1

1. General

- A. This procedure has the data necessary to repair the Rod End Assembly (70).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Bearing Replacement

A. Consumable Materials

NOTE: If necessary, you can use equivalent material.

- (1) C00259 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

- (1) SOPM 20-50-03, Bearing Removal, Installation, and Retention
- (2) SOPM 20-60-02, Finishing Materials

C. Procedure

CAUTION: THE REPLACEMENT OF BEARING (75) MUST BE A ONE-TIME REPAIR PROCEDURE. IF THE BEARING IS REPLACED MORE THAN ONE TIME, THEN THE RETENTION OF THE BEARING IN THE HOUSING MAY NOT OCCUR SATISFACTORILY.

- (1) To the remove the worn or damaged bearing (75) from the rod end assembly (70), use standard industry practices to remove the bearing and do the steps thatfollow:
 - (a) Do a visual inspection of the rod end assembly (70) to make sure that the assembly does not have any surface cracks.

NOTE: If the visual inspection shows surface cracks, then the rod end assembly (70) cannot be repaired and must be replaced.

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REPAIR 3-2

01.1

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- (b) If rod end assembly (70) does not show any surface cracks, then use extreme caution to press out the worn or damaged bearing (75) from the rod end (80).

NOTE: If the bearing cannot be removed without doing damage to the rod end, then the rod end assembly (70) must be replaced.

- (2) If necessary, repair and refinish the rod end (80) as specified in Repair 3-2.

NOTE: Do not apply primer to the area of the rod end (80) where the bearing is to be installed.

- (3) Install the new bearing (75) into the rod end (80).

- (4) Use BMS 10-11, Type 1 chemical and solvent resistant finish to install the bearing (75).

- (5) After the finish has dried, roller-swage the rod end (80) over the bearing (75). Refer to SOPM 20-50-03.

NOTE: If you have replaced the bearing (75), then you must meet the specified test data for proof load of a roller-swaged housing. Refer to the proof load data given in SOPM 20-50-03 for 'Swaged Bearing Outer Race Requirements'.

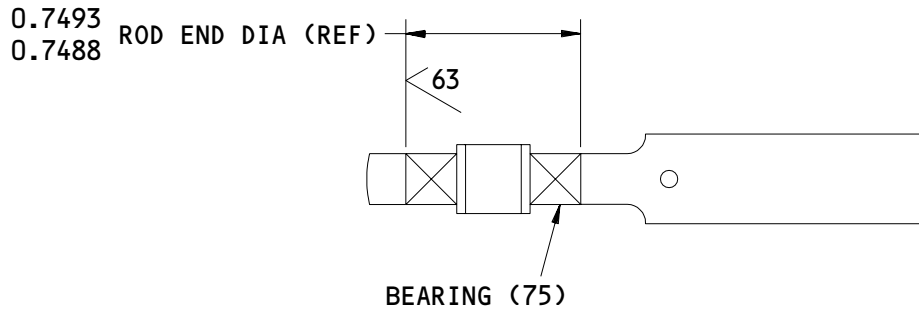
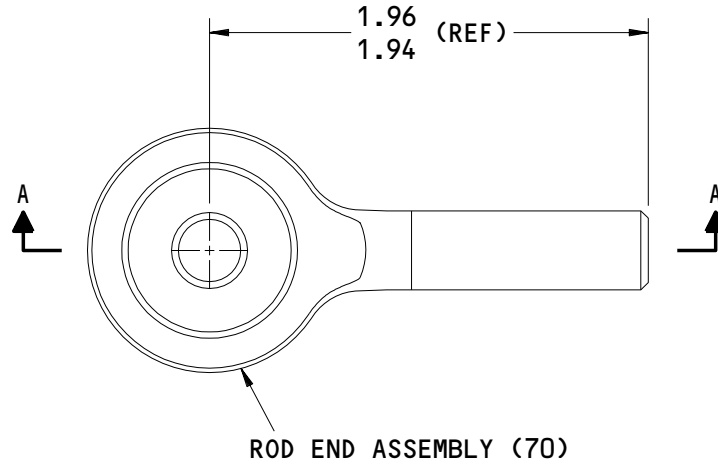
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REPAIR 3-2

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A-A

ITEM NUMBERS REFER TO IPL FIG. 1
ALL DIMENSIONS ARE IN INCHES

253U5859-1
Rod End Assembly Bearing Replacement
Figure 601

76-11-22

REPAIR 3-2

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ROD END - REPAIR 3-3

253U5859-2

1. General

- A. This procedure has the data necessary to refinish the Rod End (80).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR - GENERAL (76-11-22/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

(1) Grind the anodize area to the design dimension as shown in Fig. 601.

2. Rod End Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

(1) C00259 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

(1) SOPM 20-41-01, Decoding of Boeing Finish Codes

(2) SOPM 20-60-02, Finishing Materials

C. Procedure

(1) Anodize and apply one layer of BMS 10-11, type 1 primer (F-18.13) to the rod end (80), except do not apply primer in the hole for the bearing as shown in Fig. 601.

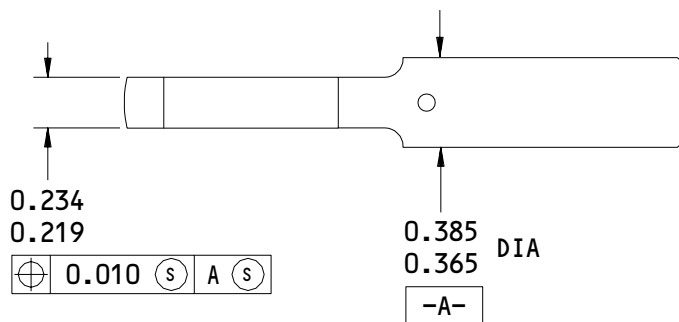
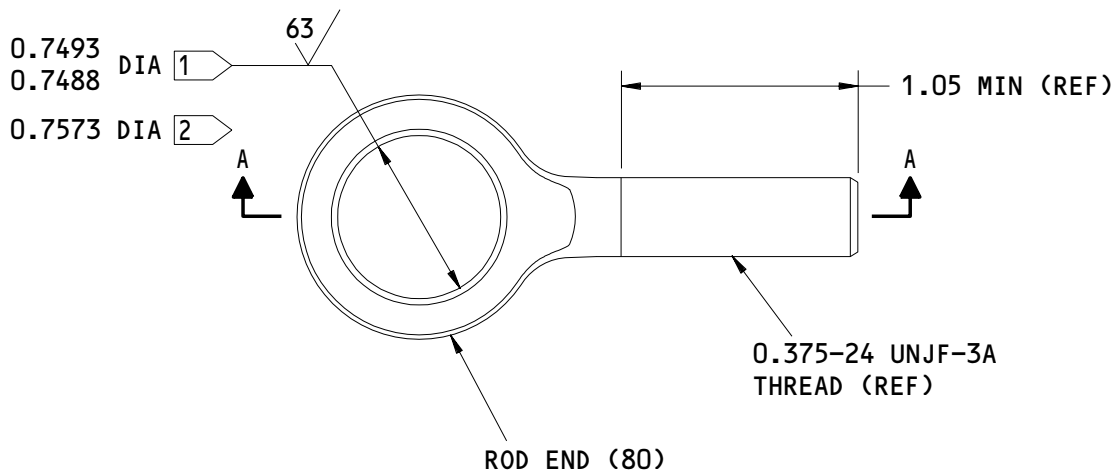
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REPAIR 3-3

01.1

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A-A

1 DO NOT APPLY BMS 10-11 PRIMER IN THIS AREA

2 REPAIR LIMIT

ITEM NUMBERS REFER TO IPL FIG. 1

253U5859-2
 Rod End Refinish
 Figure 601

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REPAIR 3-3

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BOEING
COMPONENT
MAINTENANCE MANUAL

ROD END ASSEMBLY – REPAIR 3-4

253U5860-1

1. General

- A. This procedure has the data necessary to repair the Rod End Assembly (85).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Bearing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) C00259 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

- (1) SOPM 20-50-03, Bearing Removal, Installation, and Retention
- (2) SOPM 20-60-02, Finishing Materials

C. Procedure

CAUTION: THE REPLACEMENT OF BEARING (90) MUST BE A ONE-TIME REPAIR PROCEDURE. IF THE BEARING IS REPLACED MORE THAN ONE TIME, THEN THE RETENTION OF THE BEARING IN THE HOUSING MAY NOT OCCUR SATISFACTORILY.

- (1) To the remove the worn or damaged bearing (90) from the rod end assembly (85), use standard industry practices to remove the bearing and do the steps thatfollow:

- (a) Do a visual inspection of the rod end assembly (85) to make sure that the asse mibly does not have any surface cracks.

NOTE: If the visual inspection shows surface cracks, then the rod end assembly (85) cannot be repaired and must be replaced.

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REPAIR 3-4

01.1

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- (b) If rod end assembly (85) does not show any surface cracks, then use extreme caution to press out the worn or damaged bearing (90) from the rod end (95).

NOTE: If the bearing cannot be removed without doing damage to the rod end, then the rod end assembly (85) must be replaced.

- (2) If necessary, repair and refinish the rod end (95) as specified in Repair 3-5.

NOTE: Do not apply primer to the area of the rod end (95) where the bearing is to be installed.

- (3) Install the new bearing (90) into the rod end (95).

- (a) Use BMS 10-11, Type 1 chemical and solvent resistant finish to install the bearing (90).

- (b) After the finish has dried, roller-swage the rod end (95) over the bearing (90). Refer to SOPM 20-50-03.

NOTE: If you have replaced the bearing (90), then you must meet the specified test data for proof load of a roller-swaged housing. Refer to the proof load data given in SOPM 20-50-03 for 'Swaged Bearing Outer Race Requirements'.

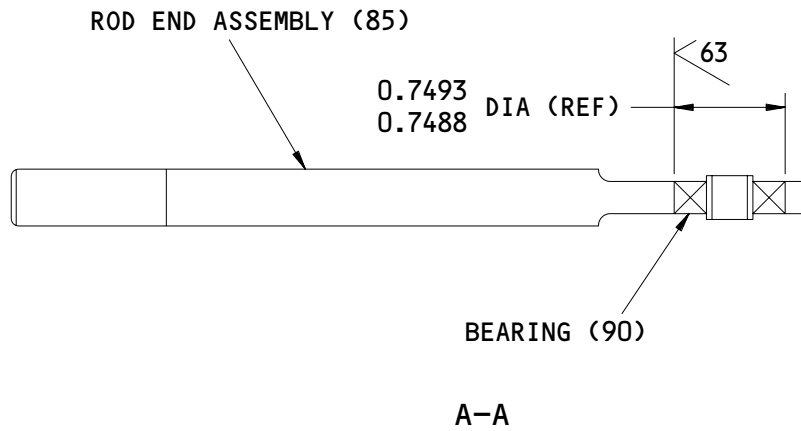
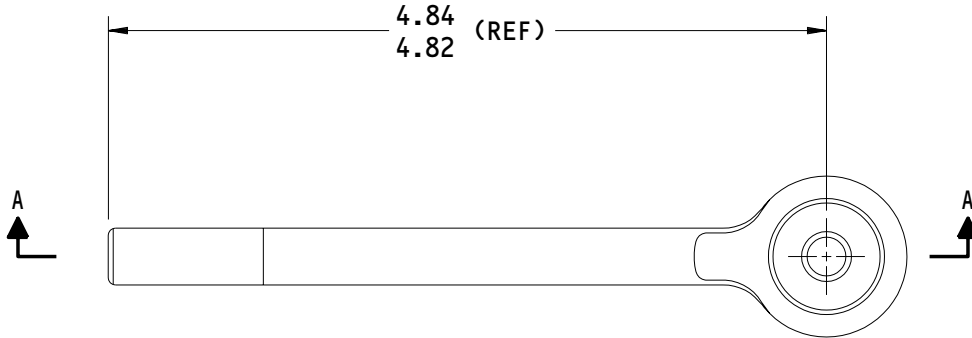
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REPAIR 3-4

01.1

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ITEM NUMBERS REFER TO IPL FIG. 1
ALL DIMENSIONS ARE IN INCHES

253U5860-1
Rod End Assembly Bearing Replacement
Figure 601

76-11-22

REPAIR 3-4
Page 603
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01.1

ROD END - REPAIR 3-5

253U5860-2

1. General

- A. This procedure has the data necessary to refinish the Rod End (95).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR - GENERAL (76-11-22/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Rod End Refinish

A. Consumable Materials

NOTE: If necessary, you can use an equivalent material.

- (1) C00259 Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. References

- (1) SOPM 20-41-01, Decoding of Boeing Finish Codes
- (2) SOPM 20-60-02, Finishing Materials

C. Procedure

- (1) Anodize and apply one layer of BMS 10-11, type 1 primer (F-18.13) to the rod end (95), except do not apply primer in the hole for the bearing as shown in Fig. 601.

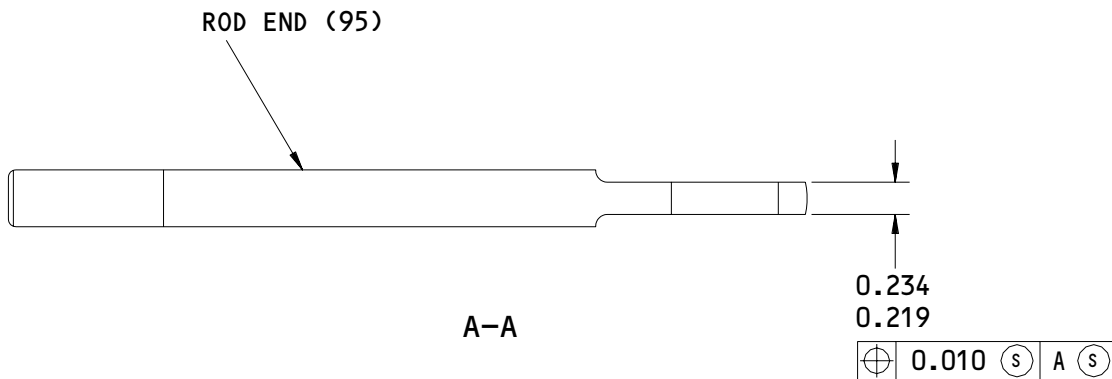
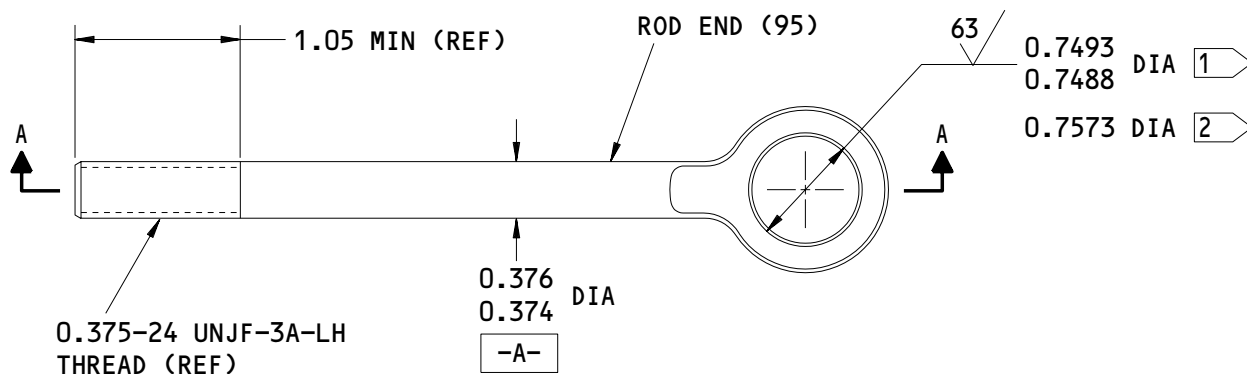
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REPAIR 3-5

01.1

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- 1 DO NOT APPLY PRIMER IN THIS AREA.
- 2 REPAIR LIMIT

ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

253U5860-2
 Rod End Refinish
 Figure 601

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REPAIR 3-5
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01.1

**BOEING**
COMPONENT
MAINTENANCE MANUALBODY ASSEMBLY – REPAIR 4-1

254W2002-11SP, -12SP

1. General

- A. This procedure has the data necessary to repair the Body Assembly (695, 700).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Bearing Replacement

A. Consumable Materials

NOTE: If necessary, you can use an equivalent material.

- (1) A00247 Sealant -- BMS 5-95 (SOPM 20-60-04)
- (2) D00015 Grease -- BMS 3-24 (SOPM 20-60-03)

B. References

- (1) SOPM 20-50-03, Bearing Removal, Installation, and Retention
- (2) SOPM 20-60-03, Lubricants
- (3) SOPM 20-60-04, Miscellaneous Materials

C. Procedure

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REPAIR 4-1

01.1

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CAUTION: THE REPLACEMENT OF BEARING (705, 745) MUST BE A ONE-TIME REPAIR PROCEDURE. IF THE BEARING IS REPLACED MORE THAN ONE TIME, THEN THE RETENTION OF THE BEARING IN THE HOUSING MAY NOT OCCUR SATISFACTORILY.

(1) To the remove the worn or damaged bearing (705, 745) from the body assembly (695, 700), use standard industry practices to remove the bearing and do the steps that follow:

(a) Do a visual inspection of the body assembly (695, 700) to make sure that the assembly does not have any surface cracks.

NOTE: If the visual inspection shows surface cracks, then the body assembly (695, 700) cannot be repaired and must be replaced.

(b) If body assembly (695, 700) does not show any surface cracks, then use extreme caution to press out the worn or damaged bearing (705, 745) from the body fitting (770, 775).

NOTE: If the bearing cannot be removed without doing damage to the body fitting, then the body assembly (695, 700) must be replaced.

(2) If necessary, repair and refinish the body fitting (770, 775) as specified in Repair 4-2.

NOTE: Do not apply primer to the area of the body fitting (770, 775) where the bearing is to be installed.

(3) Install the new bearing (705, 745) into the body fitting (770, 775).

(a) Use BMS 5-95 sealant to install the bearing (705).

NOTE: Only apply the BMS 5-95 sealant to the inside diameter of the hole where the bearing is to be installed.

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REPAIR 4-1

01.1

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COMPONENT
MAINTENANCE MANUAL

(b) Use BMS 3-24 grease to install the bearing (745).

NOTE: Only apply the BMS 3-24 grease to the inside diameter of the hole where the bearing is to be installed.

(c) Roller-swage the body fitting (770, 775) over the bearing (705, 745). Refer to SOPM 20-50-03.

NOTE: If you have replaced the bearing (705, 745), then you must meet the specified test data for proof load of a roller-swaged housing. Refer to the proof load data given in SOPM 20-50-03 for 'Swaged Bearing Outer Race Requirements'.

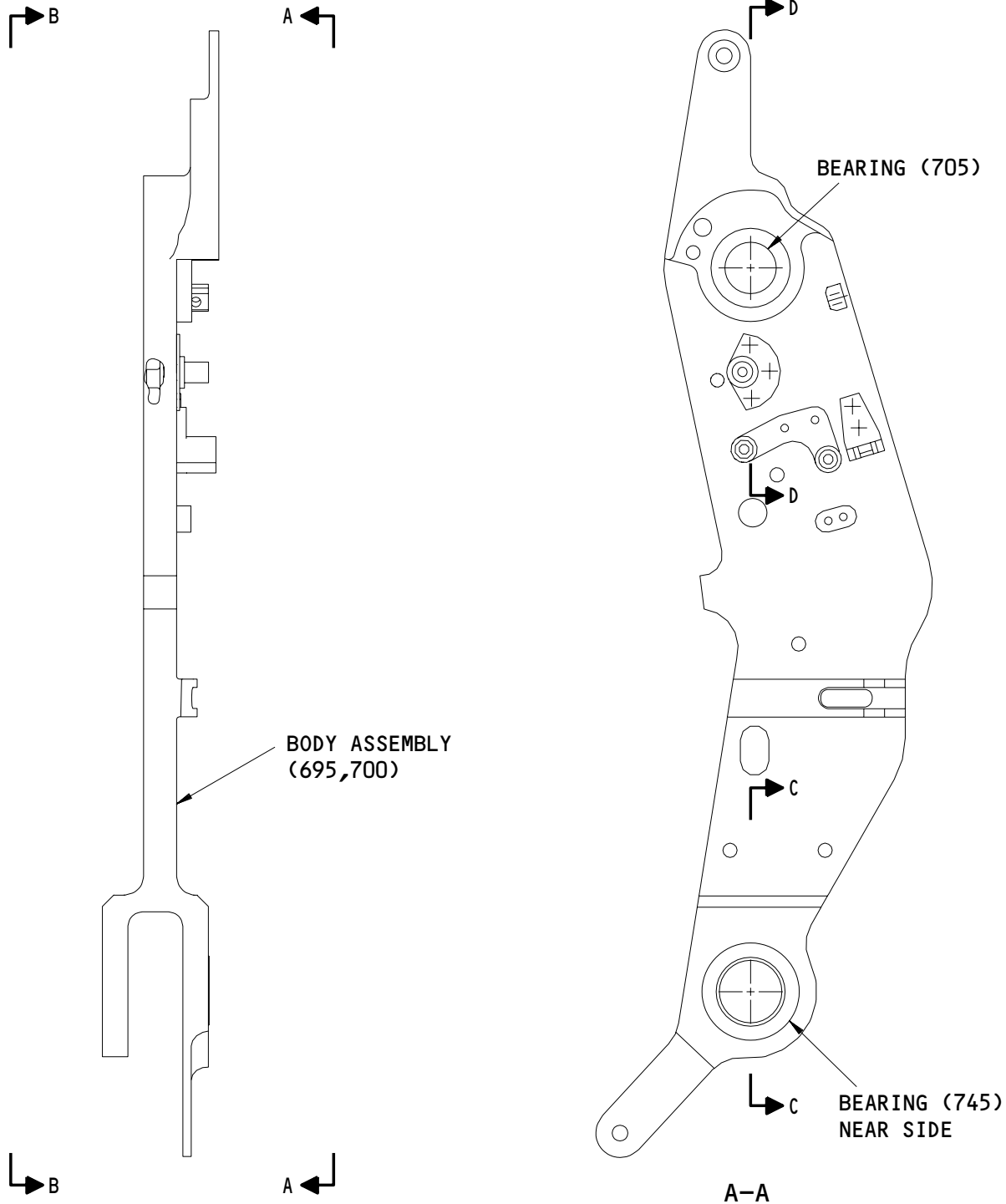
76-11-22

REPAIR 4-1

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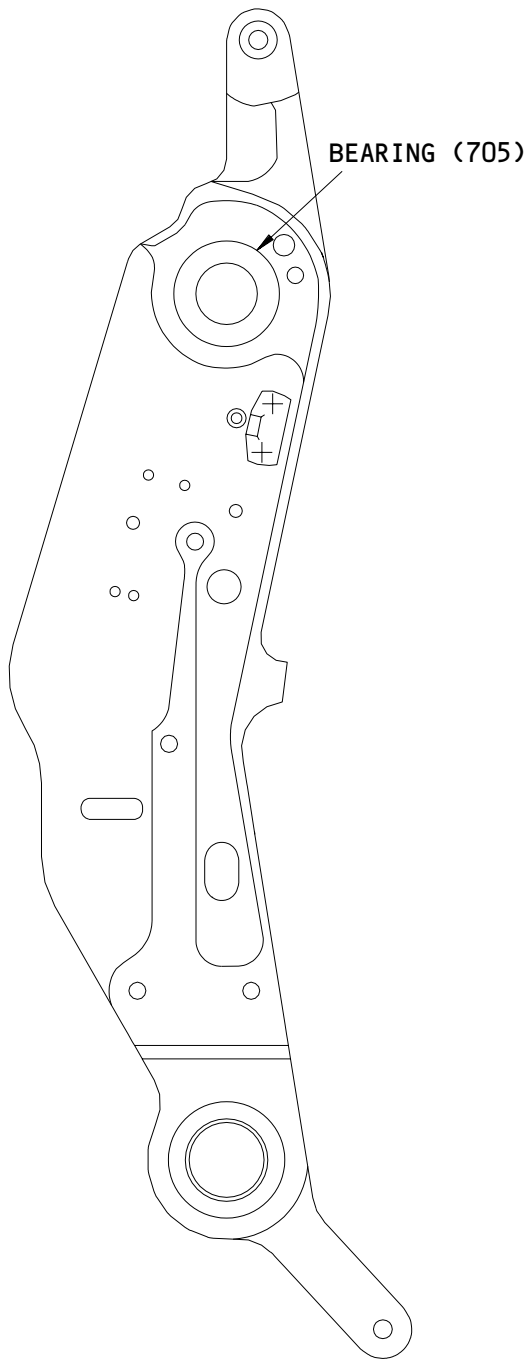
254W2002-11SP SHOWN
 254W2002-12SP OPPOSITE

254W2002-11SP,-12SP
 Body Assembly Bearing Replacement
 Figure 601 (Sheet 1)

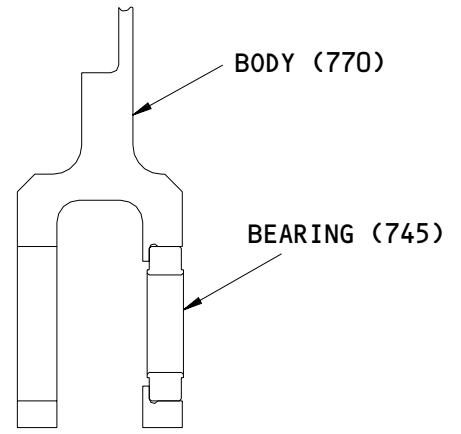
76-11-22

REPAIR 4-1
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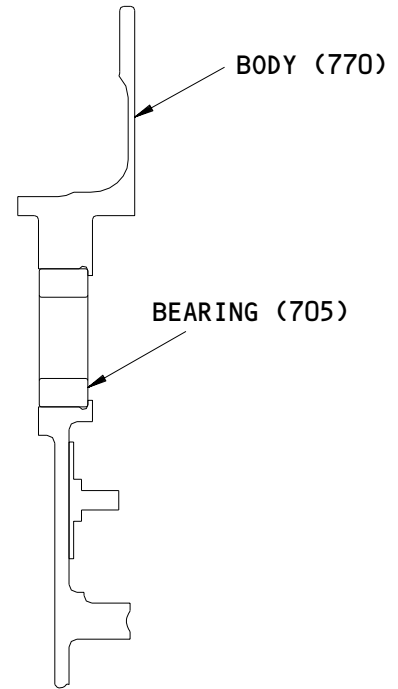
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B-B



C-C



D-D

ITEM NUMBERS REFER TO IPL FIG. 1

254W2002-11SP,-12SP
Body Assembly Bearing Replacement
Figure 601 (Sheet 2)

76-11-22

REPAIR 4-1

01.101

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BODY - REPAIR 4-2

254W2002-13SP, -14SP

1. General

- A. This procedure has the data necessary to refinish the Body (770, 775).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR - GENERAL (76-11-22/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. General Repair Details:
 - (1) Material: 7075-T7351 Al alloy
- E. Refer to IPL Fig. 1 for item numbers.

2. Body Refinish

A. Consumable Materials

NOTE: If necessary, you can use an equivalent material.

- (1) BMS 10-11, Type 1 Primer (SOPM 20-60-02)
- (2) C00033 Enamel -- BMS 10-60, type 2 (SOPM 20-60-02)

B. References

- (1) SOPM 20-41-01, Decoding of Boeing Finish Codes

76-11-22

REPAIR 4-2

01.1

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- (2) SOPM 20-44-01, Application of Special Purpose Coatings and Finishes
- (3) SOPM 20-60-02, Finishing Materials

C. Procedure

- (1) Anodize (F-17.31) all over, then apply one layer of BMS 10-11, type 1 primer (F-20.02), except do not apply primer in any of the holes, the bearing bores, or areas identified in Fig. 601.

NOTE: Apply BMS 10-60, type 2 flat enamel (SRF-14.9817) to the areas as shown in Fig. 601. Color is to match BAC 8924. Thickness is to be 6.0-10.0 MILS.

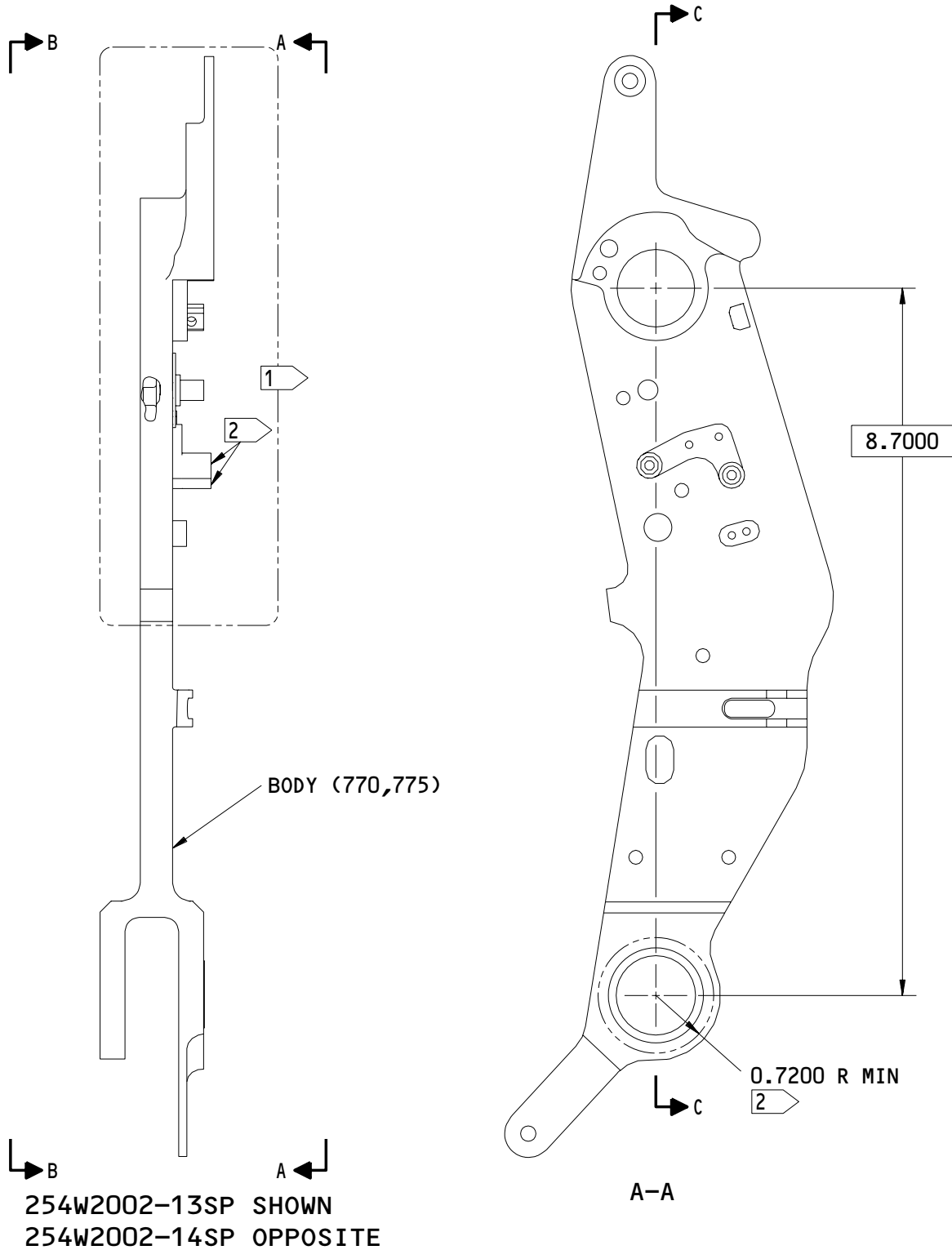
76-11-22

REPAIR 4-2

01.1

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254W2002-13SP,-14SP
Body Repair and Refinish
Figure 601 (Sheet 1)

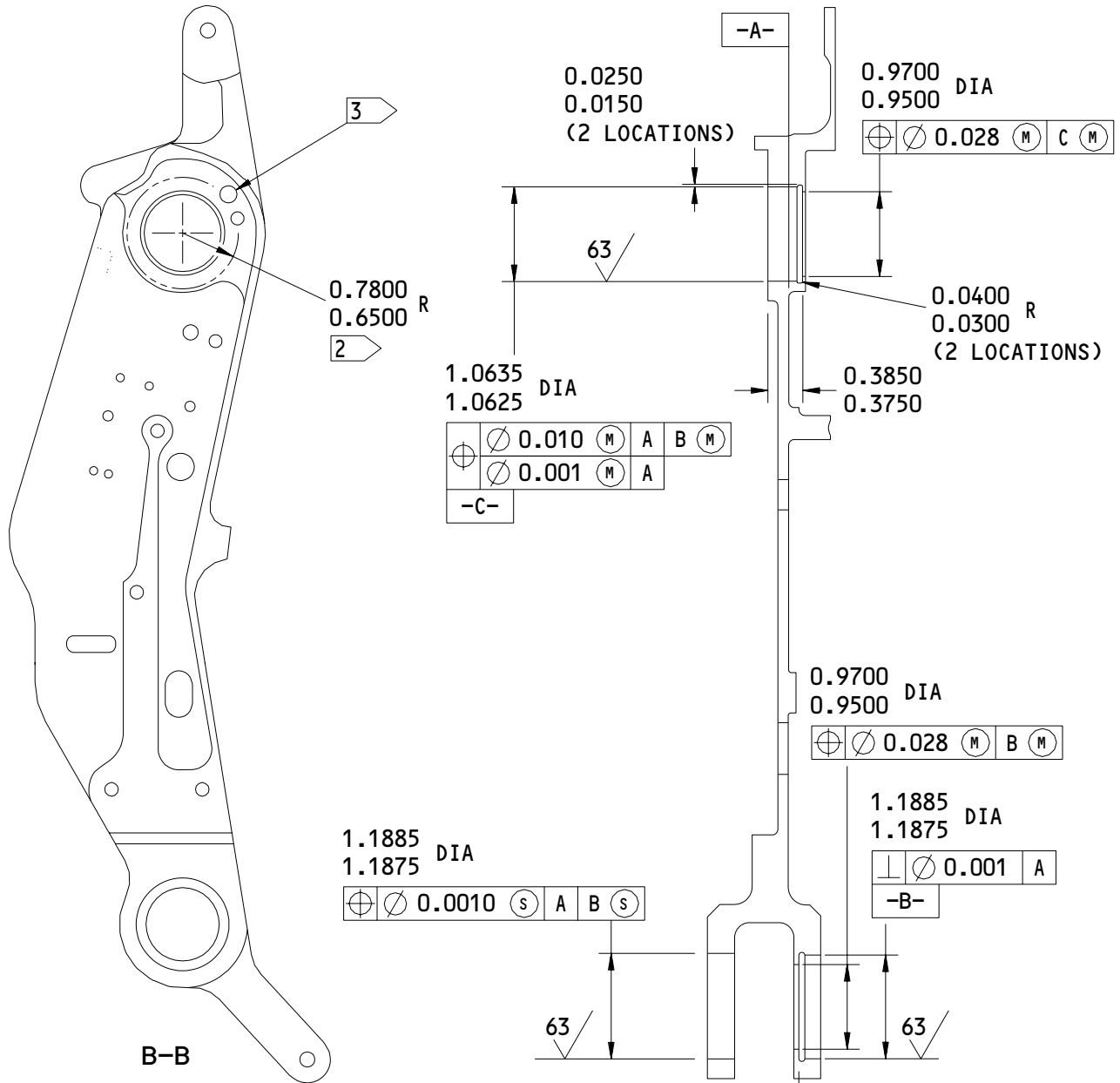
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REPAIR 4-2

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- 1 APPLY BMS 10-11, TYPE 2 FLAT ENAMEL (SRF-14.9817-8924) TO THIS AREA
- 2 DO NOT APPLY PRIMER OR DECORATIVE FINISH TO THIS AREA
- 3 IT IS OPTIONAL TO APPLY BMS 10-11, TYPE 2 FLAT ENAMEL (SRF-14.9817-8924) TO THIS HOLE

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY
 BREAK ALL SHARP EDGES
 ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

254W2002-13SP,-14SP
 Body Repair and Refinish
 Figure 601 (Sheet 2)

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REPAIR 4-2
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01.1



FOLLOWER ARM ASSEMBLY – REPAIR 5-1

254W2009-5, -6

1. General

- A. This procedure has the data necessary to repair the Follower Arm Assembly (375, 380).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Cam Roller Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) A00622 Lubricant -- Fel-Pro C5-A (SOPM 20-60-03)

B. References

- (1) SOPM 20-50-03, Bearing Removal, Installation, and Retention
- (2) SOPM 20-60-03, Lubricants

C. Procedure

- (1) Remove the cam roller (400) and the pin (395) from the arm (405, 410) as specified by SOPM 20-50-03.
- (2) Make sure that the new cam roller (400) fits freely in the slot of the arm (405, 410), then use the shrink fit method to install the pin (395) into the cam roller with C5-A lubricant as specified by SOPM 20-50-03.

NOTE: The pin (395) must be 0.010 to 0.015 inch above the arm (405, 410) as shown in Fig. 601. Make sure that the cam roller (400) rotates freely after installation.

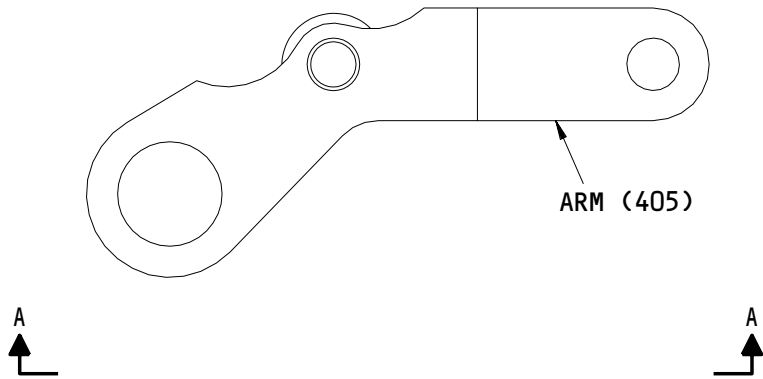
76-11-22

REPAIR 5-1

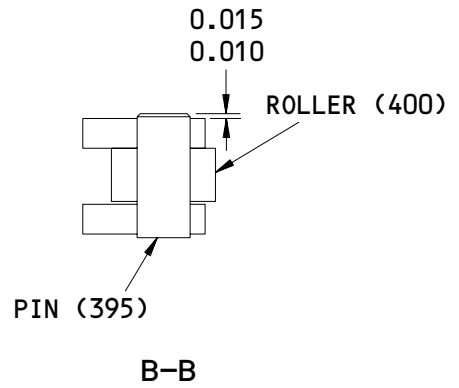
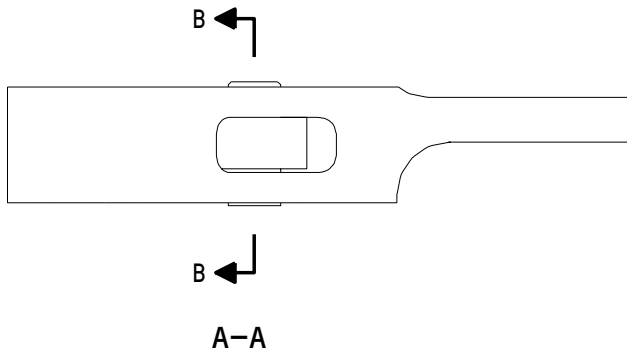
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254W2009-5 SHOWN
 254W2009-6 OPPOSITE



ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

254W2009-5,-6
 Follower Arm Assembly Roller Replacement
 Figure 601

76-11-22

REPAIR 5-1
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FOLLOWER ARM - REPAIR 5-2

254W2009-7, -8

1. General

- A. This procedure has the data necessary to refinish the Follower Arm (405, 410).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR - GENERAL (76-11-22/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. General Repair Details:
 - (1) Material: Copper-Beryllium bar
- E. Refer to IPL Fig. 1 for item numbers.

2. Follower Arm Refinish

- A. References
 - (1) SOPM 20-41-01, Decoding of Boeing Finish Codes
- B. Procedure
 - (1) No finish (F-25.01) is necessary.

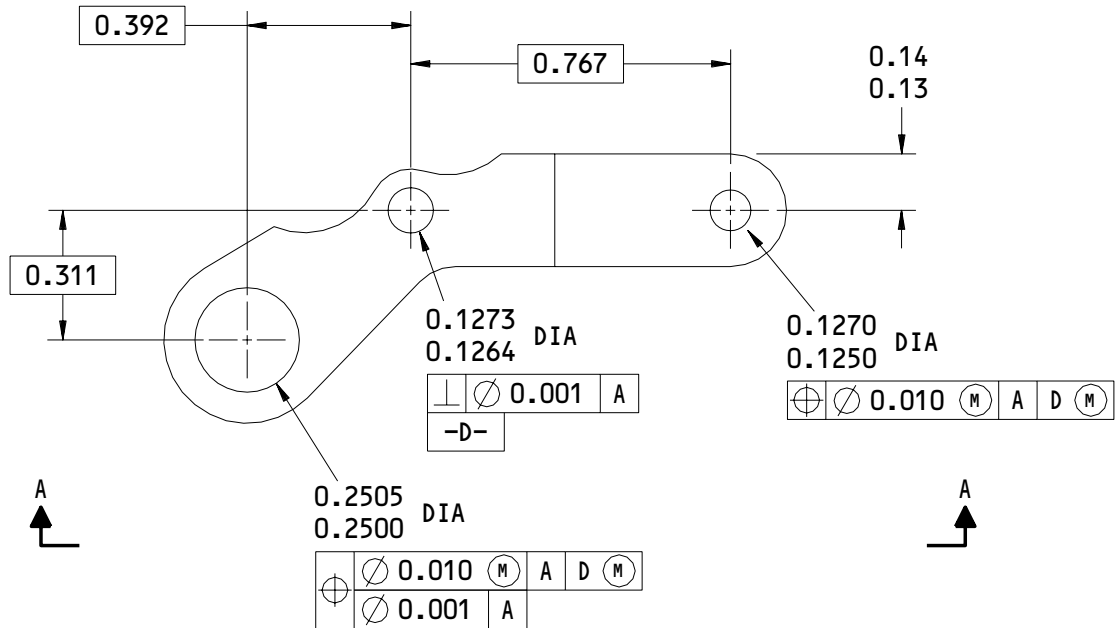
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REPAIR 5-2

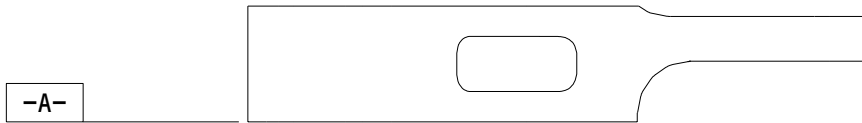
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254W2009-7 SHOWN
 254W2009-8 OPPOSITE



A-A

ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES
 BASIC DIMENSIONS ARE FOR REFERENCE
 ONLY

254W2009-7,-8
 Follower Arm Repair
 Figure 601

76-11-22

REPAIR 5-2

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SHAFT ASSEMBLY – REPAIR 6-1

254W2013-1

1. General

- A. This procedure has the data necessary to repair the Shaft Assembly (225).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Shaft Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) C00259 Primer -- BMS 10-11, type 1 (SOPM 20-60-02)

B. Special Tools and Equipment

NOTE: Equivalent tool can be used.

- (1) J76002-2, Spanner Wrench

C. References

- (1) SOPM 20-60-02, Finishing Materials

D. Procedure

- (1) Remove the inner shaft (230) from the outer shaft (235) with the use of the spanner wrench, part number J76002-2.
- (2) Apply BMS 10-11, type 1 primer to all the surfaces and threads as shown in Fig. 601, then install the inner shaft (230) into the outer shaft (235) and tighten to 80-100 pound-inches with the use of the spanner wrench, part number J76002-2.

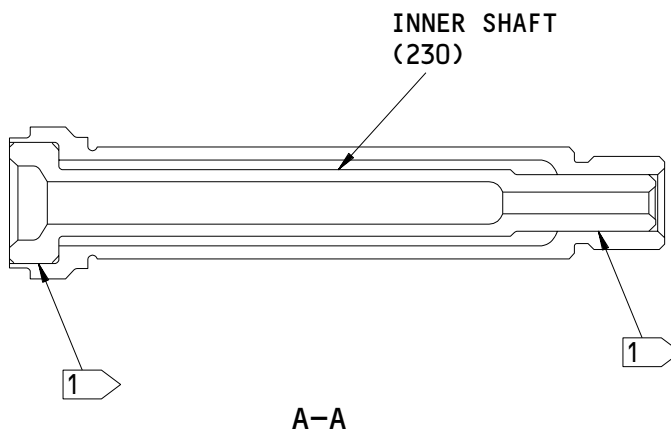
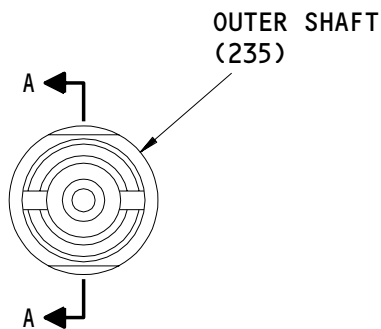
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1 APPLY BMS 10-11 PRIMER TO ALL FAYING SURFACES. ITEM NUMBERS REFER TO IPL FIG. 1

254W2013-1
Shaft Assembly Inner Shaft Replacement
Figure 601

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REPAIR 6-1
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SHAFT – REPAIR 6-2

254W2013-2, -3

1. General

- A. This procedure has the data necessary to refinish the Inner Shaft (230) and the outer shaft (235).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. General Repair Details:
 - (1) Material: 15-5 CRES Bar
- E. Refer to IPL Fig. 1 for item numbers.

2. Inner Shaft Repair

- | A. References
 - | (1) SOPM 20-10-01, Repair and Refinish of High Strength Steel Parts
 - | (2) SOPM 20-10-02, Machining of Alloy Steel
 - | (3) SOPM 20-10-03, Shot Peening
 - | (4) SOPM 20-10-04, Grinding of Chrome Plated Parts
 - | (5) SOPM 20-42-03, Hard Chrome Plating

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REPAIR 6-2

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(6) SOPM 20-41-01, Decoding Table for Boeing Finish Codes

B. Procedure

(1) If you find wear or corrosion damage, then machine the inner shaft (230), as given in SOPM 20-10-01 and SOPM 20-10-02, to remove the damaged area.

NOTE: Use the repair limits given in Fig. 601 to machine the inner shaft.

(2) Use standard industry practices to break all sharp edges as necessary.

(3) Shot peen the machined surface as given in SOPM 20-10-03.

(4) Apply a layer of hard chrome plate to the machined surface as given in SOPM 20-42-03. Use Class 3 plating procedure.

NOTE: After you plate the surface, the maximum thickness permitted of the hard chrome layer is 0.015-inch.

(5) After the surface is plated, finish grind the surface (SOPM 20-10-04) to the design dimensions given in Fig. 601.

NOTE: After you finish grind the surface, the minimum thickness permitted of the hard chrome layer is 0.003-inch.

3. Outer Shaft Repair

A. References

(1) SOPM 20-10-01, Repair and Refinish of High Strength Steel Parts

(2) SOPM 20-10-02, Machining of Alloy Steel

(3) SOPM 20-10-03, Shot Peening

(4) SOPM 20-10-04, Grinding of Chrome Plated Parts

(5) SOPM 20-42-03, Hard Chrome Plating

(6) SOPM 20-41-01, Decoding Table for Boeing Finish Codes

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B. Procedure

- (1) If you find wear or corrosion damage, then machine the outer shaft (235), as given in SOPM 20-10-01 and SOPM 20-10-02, to remove the damaged area.

NOTE: Use the repair limits given in Figure 602 to machine the inner shaft.

- (2) Use standard industry practices to break all sharp edges as necessary.

- (3) Shot peen the machined surface as given in SOPM 20-10-03.

- (4) Apply a layer of hard chrome plate to the machined surface as given in SOPM 20-42-03. Use Class 3 plating procedure.

NOTE: After you plate the surface, the maximum thickness permitted of the hard chrome layer is 0.015-inch.

- (5) After the surface is plated, finish grind the surface (SOPM 20-10-04) to the design dimensions given in Fig. 602.

NOTE: After you finish grind the surface, the minimum thickness permitted of the hard chrome layer is 0.003-inch.

4. Shaft Refinish**A. References**

- (1) SOPM 20-41-01, Decoding of Boeing Finish Codes

B. Procedure

- (1) Passivate (F-17.25) the required shafts (230, 235) all over.

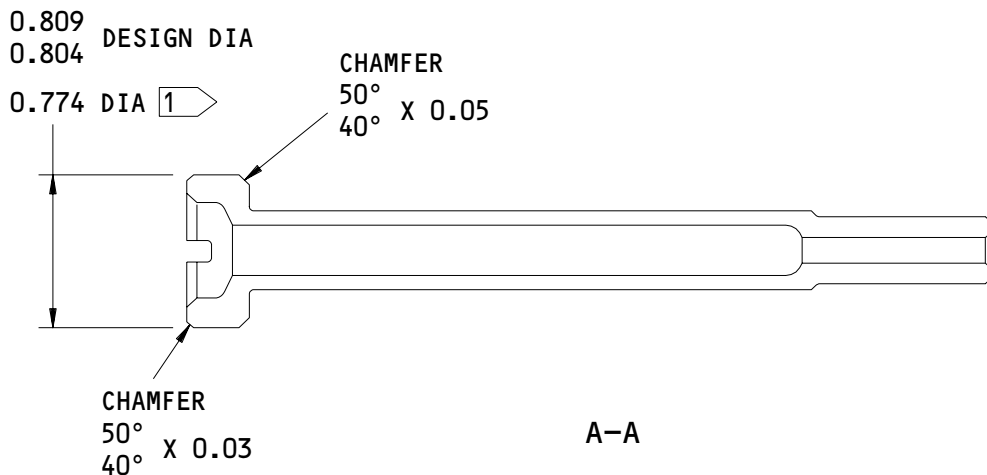
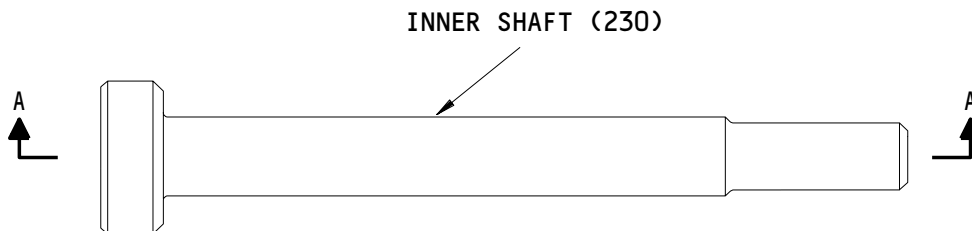
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1 REPAIR LIMIT

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

254W2013-2
 Inner Shaft Repair
 Figure 601

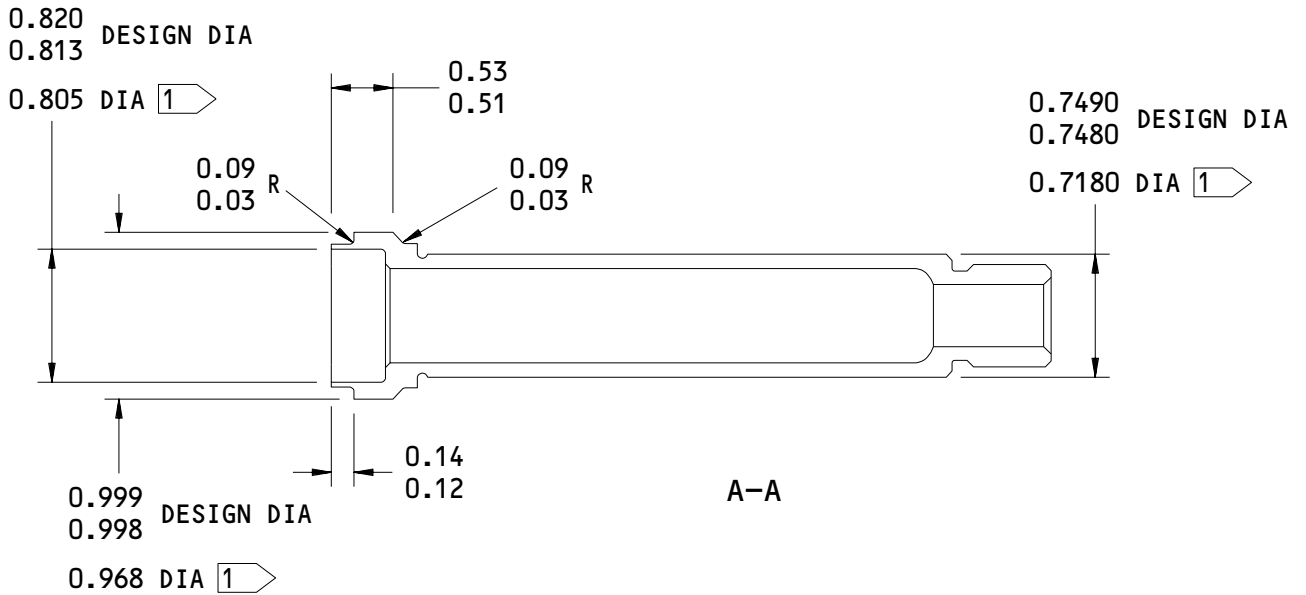
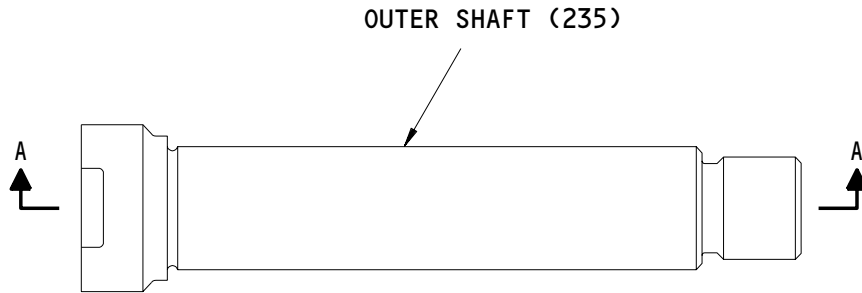
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REPAIR 6-2

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1 REPAIR LIMIT

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

254W2013-3
 Outer Shaft Repair
 Figure 602

76-11-22

REPAIR 6-2

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SUPPORT ASSEMBLY – REPAIR 7-1

254W2016-1

1. General

- A. This procedure has the data necessary to repair the Support Assembly (15).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Bearing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) C00259 Primer -- BMS 10-11, type 1 (SOPM 20-60-02)

B. References

- (1) SOPM 20-41-01, Decoding Table for Boeing Finish Codes
- (2) SOPM 20-50-03, Bearing Removal, Installation, and Retention
- (3) SOPM 20-60-02, Finishing Materials

C. Procedure

CAUTION: THE BEARING (20) REPLACEMENT IS A ONE-TIME REPLACEMENT. RETENTION OF THE BEARING MAY NOT OCCUR, IF A BEARING IS REPLACED MORE THAN ONE TIME IN THE SAME HOUSING.

- (1) Carefully press the worn or damaged bearing (20) out of the support (25).

NOTE: If you cannot remove the bearing from the support without doing damage to the support, then you will have to replace the support assembly (15).

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REPAIR 7-1

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- (2) Install the new bearing (20) into the support (25) with BMS 10-11, type 1 primer, then roller swage the support (25) over the bearing (20) as specified by SOPM 20-50-03.
- (3) Roller swage the bearing (20) as specified by SOPM 20-50-03.

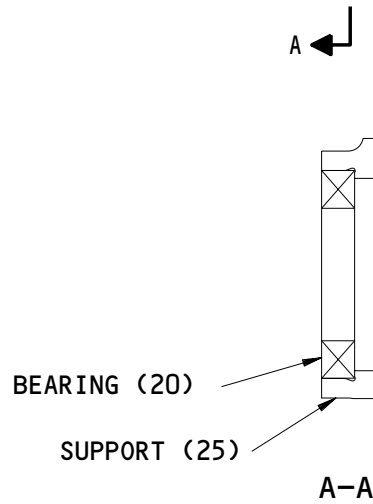
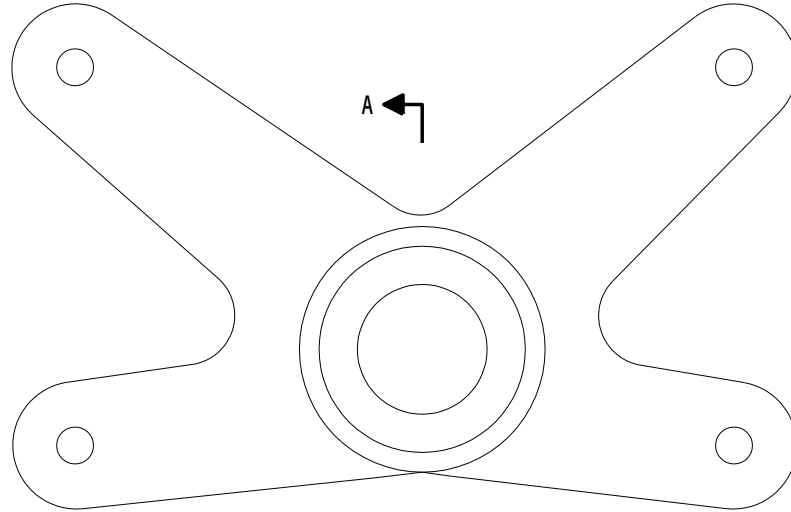
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ITEM NUMBERS REFER TO IPL FIG. 1

254W2016-1
Support Assembly Bearing Replacement
Figure 601

76-11-22

REPAIR 7-1

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SUPPORT – REPAIR 7-2

254W2016-2

1. General

- A. This procedure has the data necessary to refinish the Support (25).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. General Repair Details:
 - (1) Material: 7075-T7351 Al alloy
- E. Refer to IPL Fig. 1 for item numbers.

2. Support Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) C00259 Primer -- BMS 10-11, type 1 (SOPM 20-60-02)

B. References

- (1) SOPM 20-41-01, Decoding of Boeing Finish Codes
- (2) SOPM 20-60-02, Finishing Materials

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C. Procedure

- (1) Anodize and apply one layer of BMS 10-11, type 1 primer (F-18.13) to the support (25), except do not apply primer in the hole for the bearing as shown in Fig. 601.

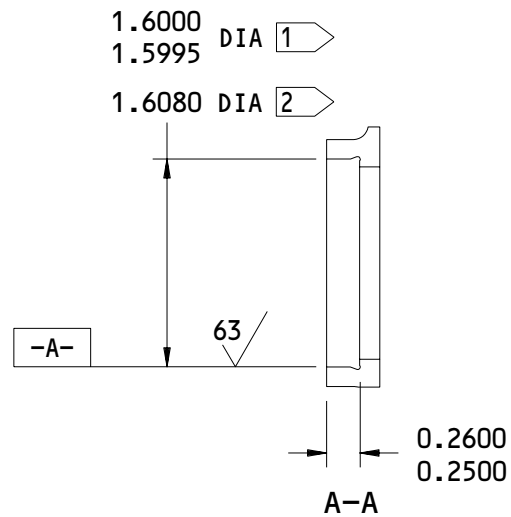
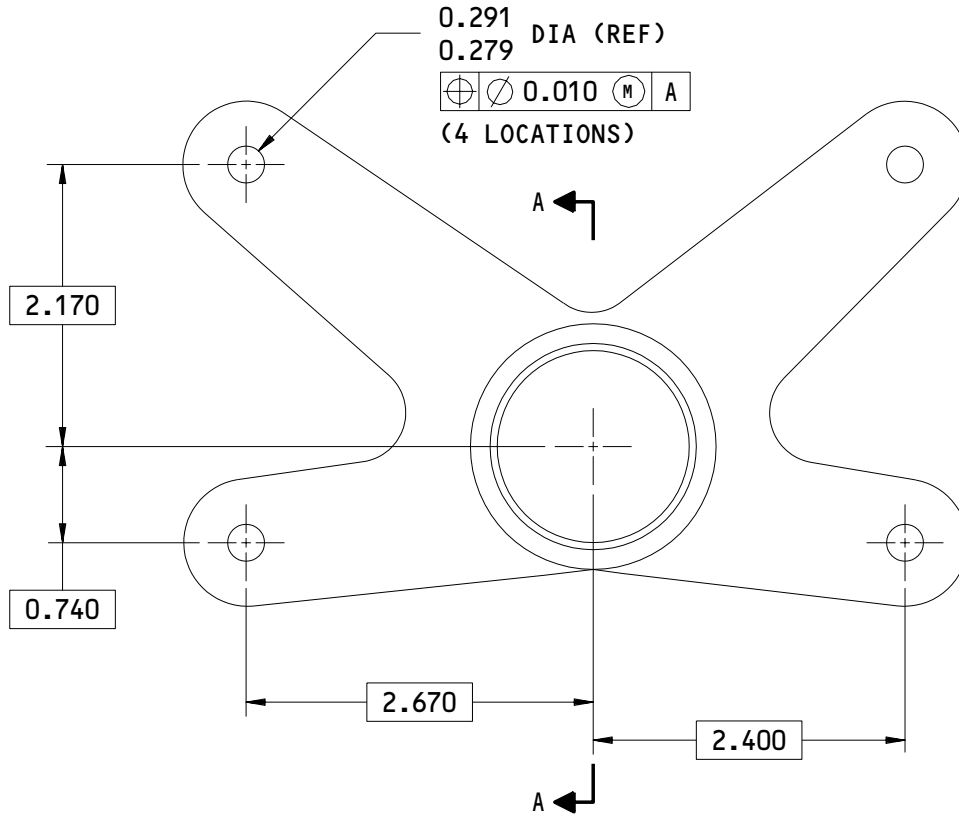
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BOEING
 COMPONENT
 MAINTENANCE MANUAL



1 DO NOT APPLY BMS 10-11, TYPE 1 PRIMER
 IN THE INNER DIAMETER

2 REPAIR LIMIT

125 ALL MACHINED SURFACES UNLESS
 SHOWN DIFFERENTLY

ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

254W2016-2
 Support Repair
 Figure 601

76-11-22

REPAIR 7-2

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CRANK ASSEMBLY – REPAIR 8-1

254W2018-1, -2

1. General

- A. This procedure has the data necessary to repair the Crank Assembly (150, 155).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR – GENERAL (76-11-22/601, REPAIR – GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. Refer to IPL Fig. 1 for item numbers.

2. Cam Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) A00247 Sealant -- BMS 5-95 (SOPM 20-60-04)

B. References

- (1) SOPM 20-50-19, General Sealing
- (2) SOPM 20-60-04, Miscellaneous Materials

C. Procedure

- (1) Remove the collars (175), the washers (170), the bolts (160, 165), the bushing (180), and the cam (215, 220) from the crank assembly (185, 190).
- (2) Apply BMS 5-95 sealant to the cam (215, 220) as specified by SOPM 20-50-19, then install it onto the crank assembly (185, 190) with the bolts (160, 165), the washers (170), the bushing (180), and the collars (175) as shown in Fig. 601.

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REPAIR 8-1

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3. Bearing Replacement

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) A00247 Sealant -- BMS 5-95 (SOPM 20-60-04)

B. References

- (1) SOPM 20-50-03, Bearing Installation, Removal, and Retention

C. Procedure

CAUTION: THE BEARING (195, 200) REPLACEMENT IS A ONE-TIME REPLACEMENT. RETENTION OF THE BEARING MAY NOT OCCUR, IF A BEARING IS REPLACED MORE THAN ONE TIME IN THE SAME HOUSING.

- (1) Carefully remove the worn or damaged bearing (195, 200) from the crank (205, 210) as specified by SOPM 20-50-03.

NOTE: If you cannot remove the bearings from the crank without doing damage to the crank, then you will have to replace the crank assembly (185, 190).

- (2) Install the new bearing (195, 200) into the crank (205, 210) with BMS 5-95 sealant and swage both sides as specified by SOPM 20-50-03.

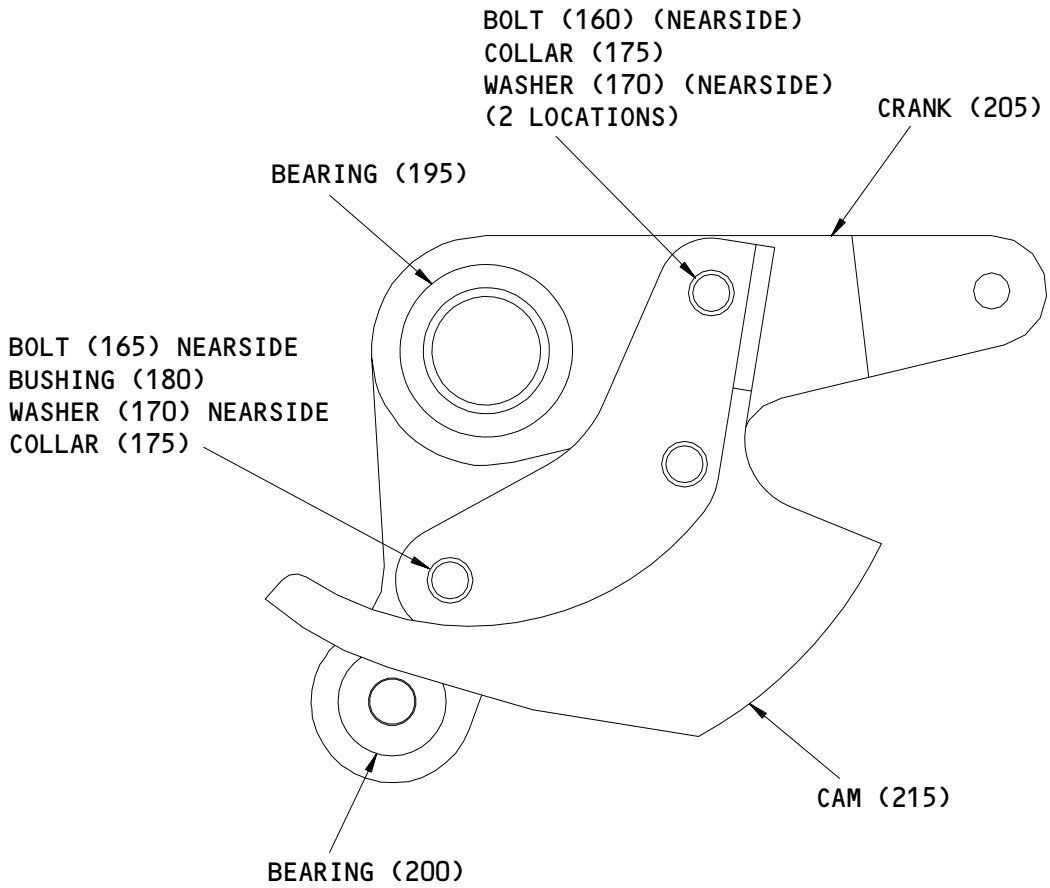
76-11-22

REPAIR 8-1

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254W2018-1 SHOWN
254W2018-2 OPPOSITE

ITEM NUMBERS REFER TO IPL FIG. 1

254W2018-1,-2
Crank Assembly Cam and Bearing Replacement
Figure 601

76-11-22

REPAIR 8-1

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**BOEING**
COMPONENT
MAINTENANCE MANUALCRANK - REPAIR 8-2

253U5830-11, -12

1. General

- A. This procedure has the data necessary to refinish the Crank (205, 210).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to the REPAIR - GENERAL (76-11-22/601, REPAIR - GENERAL) for the Standard True Position Dimensioning Symbols shown in the repair.
- D. General Repair Details:
 - (1) Material: 17-4 PH CRES
- E. Refer to IPL Fig. 1 for item numbers.

2. Crank Refinish

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) C00259 Primer -- BMS 10-11, type 1 (SOPM 20-60-02)

B. References

- (1) SOPM 20-41-01, Decoding of Boeing Finish Codes
- (2) SOPM 20-60-02, Finishing Materials

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C. Procedure

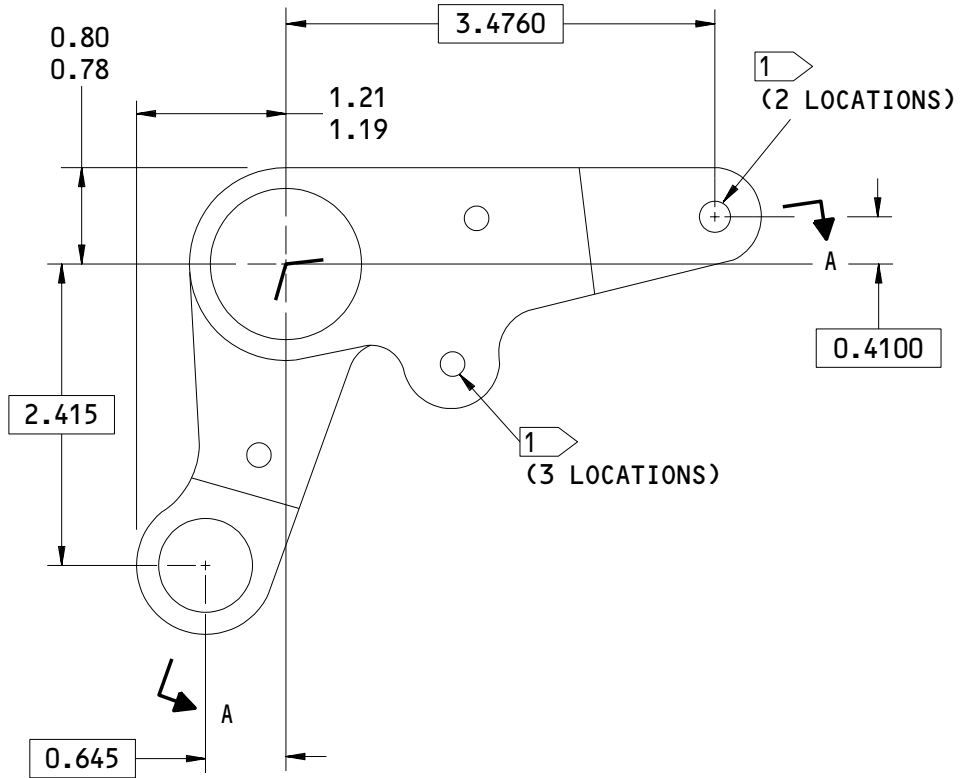
- (1) Prepare and passivate (F-17.09) the crank (205, 210) all over.
- (2) Cadmium plate and apply one layer of BMS 10-11, type 1 primer (F-16.01) to the crank (205, 210), except do not apply the primer in the holes as shown in Fig. 601.

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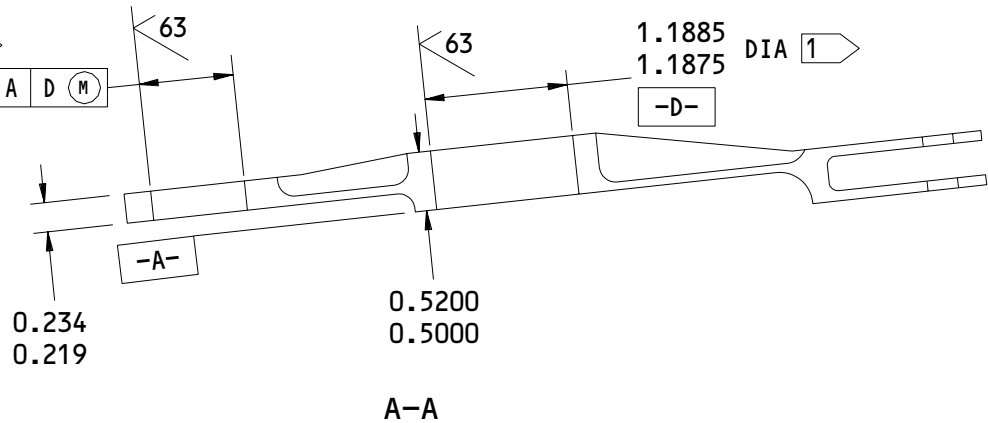


253U5830-11 SHOWN
 253U5830-12 OPPOSITE

0.7510
 0.7500 DIA 1

0.7810 DIA 2

⊕ ⊖ 0.006 M A D M



1 DO NOT APPLY BMS 10-11 PRIMER TO
 INSIDE DIAMETER

2 REPAIR LIMIT

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

253U5830-11,-12
 Crank Repair and Refinish
 Figure 601

76-11-22

REPAIR 8-2

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ASSEMBLY1. General

- A. This procedure has the data necessary to assemble the Control Stand Thrust Lever Assembly (IPL Fig. 1; 1A).
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for details of the SOPM chapters identified in this procedure.
- C. Refer to IPL Fig. 1 for item numbers.

2. Thrust Lever Assembly

A. Consumable Materials

NOTE: Equivalent material can be used.

- (1) D00015 Lubricant -- BMS 3-24 (SOPM 20-60-03)
- (2) G02104 Tubing -- Heat shrink, color yellow, RT876 (SOPM 20-60-04)
- (3) G00973 Tubing -- Heat shrink, TFE-4X, (SOPM 20-60-04)

B. References

- (1) CMM 76-11-22, TESTING AND FAULT ISOLATION
- (2) SOPM 20-41-01, Decoding Table for Boeing Finish Codes
- (3) SOPM 20-50-01, Bolt and Nut Installation
- (4) SOPM 20-50-02, Installation of Safetying Devices
- (5) SOPM 20-50-03, Bearing Removal, Installation, and Retention
- (6) SOPM 20-60-03, Lubricants
- (7) SOPM 20-60-04, Miscellaneous Materials

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C. Procedure

- (1) Assemble the pack assembly (30). Refer to Fig. 701.
 - (a) Install the reverse thrust lever assembly (545, 550).
 - 1) Install the reverse thrust lever assembly (545, 550), the cam assembly (520, 525), the washers (515), and the bolt (510).
 - 2) Tighten the bolt (510) to a torque which is 7 - 10 pound-inches greater than the run-on torque.
 - 3) Make sure that the reverse thrust lever assembly (545, 550) moves smoothly and does not bind.
 - (b) Install the side plate assembly (450, 455).
 - 1) Align the side plate assembly (450, 455) on the body assembly (695, 700).
 - 2) Install the side plate assembly (450, 455) onto the body assembly (695, 700) with the screws (440, 445), the bolt (675), the washer (680), and the nut (685).
 - 3) Put TRE-4X heat shrink tube over the end of the screw (440) after it is installed.
 - (c) Install the support (670), the screws (655), the washers (660), and the nuts (665) onto the body assembly (695, 700).
 - (d) Install the wire shield (625), the bolts (630, 635), the washers (640), the spacer (645), and the nuts (650).
 - (e) If necessary, install the decals (840 thru 882) as shown in Fig. 702.
 - (f) Install the trigger (430, 435).
 - 1) Install the trigger (430, 435), the washer (425), and the bolt (420) onto the bellcrank support assembly (465).
 - 2) Install the spring (415) onto the trigger (430, 435) and the side plate assembly (450, 455).

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COMPONENT
MAINTENANCE MANUAL

- 3) Make sure that the trigger (430, 435) moves smoothly and does not bind.
- (g) Install the latch (370).
- 1) Align the pin hole in the latch (370) with the pin hole in the body assembly (695, 700).
 - 2) Install the pin (365).
 - 3) Install the cotter pin (360) as specified by S0PM 20-50-02, except do not install a washer.
- (h) If necessary, install the decals (885, 890) on the inside surface of the cover (265, 270).
- (i) Install the follower arm assembly (375, 380), the washer (390), and the screw (385) onto the body assembly (695, 700).
- (j) Install the spacer (345), the leaf spring (350, 355), and the screws (340) onto the body assembly (695, 700).
- (k) Install the support (330A).
- 1) Align the support (330A) with the follower arm assembly (375, 380), the anchor plate (730), and the leaf spring (350, 355).
 - 2) Install the pin (325).
 - 3) Install the cotter pin (320) as specified by S0PM 20-50-02, except do not install a washer.
 - 4) Install the spring (335), the washer (312), the spacer (307), and the nuts (305A, 300).
- NOTE:** The location of the nut (305A) and the nut (300) will be adjusted as shown in the TESTING AND FAULT ISOLATION section.
- (l) Make sure that the support (330A) and the follower arm assembly (375, 380) operate smoothly and do not bind.

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(m) Assemble the wire bundle assembly (780, 785).

- 1) Gather the wires into separate bundles and apply the RT876 heat shrink tubing as shown in Fig. 703. Overlap with the adjacent sleeving a minimum of 0.50 inch.
- 2) Attach either the switches (285, 290, 605) or the connectors (790 thru 825) to the wiring as shown in Fig. 702.

NOTE: Do not install both the switches (285, 290, 605) and the connectors (790 thru 825) before you attempt to route the wire bundle into the body assembly (695, 700). One end of the wire bundle (780, 785) must remain disconnected to allow the wire bundle (780, 785) to be routed into the body assembly (695, 700).

(n) Install the wire bundle (780A, 785A) into the body assembly (695, 700).

- 1) Install the wire bundle (780A, 785A) through the wire shield (625) and the body assembly (695, 700).

NOTE: Make sure there is enough excess wire in the knob assembly (610, 615) to allow it to be removed.

- 2) Attach the switches (285, 290, 605) or the connectors (790A thru 825) to the wire bundle (780, 785) which were not previously installed.

NOTE: Switch (285) requires the wires to be soldered.

(o) Install the switch (605).

- 1) Attach the switch (605) to the terminals of the wire bundle assembly (780A, 785A), if not already done, as shown in Fig. 703.
- 2) If necessary, install the decals (850, 855) as shown in Fig. 702.
- 3) Install the switch (605) into the knob assembly (610, 615).
- 4) Install the packing (600), the retainer (595), and the ring (590).

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COMPONENT
MAINTENANCE MANUAL

- 5) Install the knob assembly (610, 615) and the screw (620) onto the body assembly (695, 700).
- (p) Install the take-off/go-around switches (290).
- 1) Attach the switches (290) to the wire bundle assembly (780A, 785A), if not already done, as shown in Fig. 703.
- 2) Install the switches (290), the switch actuators (295), and the screws (275, 280).
- NOTE: Install the switches (290) and switch actuators (295) in the position retained in the disassembly process.
- (q) Install the reverse lever switch (285).
- 1) Solder the wires of the wire bundle assembly (780, 785) to the switch (285), if not already done, as shown in Fig. 702.
- 2) Install the switch (285) and the screws (280).
- (r) Make sure that the wire bundle (780A, 785A) extends beyond the wire shield (625) as shown in Fig. 703.
- (s) Install the switch cover (265, 270), and the screws (690).
- (t) Install the cover (255, 260), and the screws (250, 690).
- (2) Assemble the crank assembly (150, 155).
- (a) Align the cam (215, 220) with the crank assembly (185, 190).
- (b) Install the bolts (160, 165), the washers (170), the bushings (180), and the collars (175).

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- (3) Assemble the control assembly (30).
 - (a) Install one or two of the shims (140), as required, on the shaft assembly (225) to achieve the dimensions as shown in Fig. 704.
 - (b) Install one bearing (145) on the shaft assembly (225) with BMS 3-24 lubricant as shown in Fig. 704 and as specified by SOPM 20-50-03.
 - (c) Install one spacer (130) on both sides of the pivot hole in the crank assembly (150).
 - (d) Align the pivot holes in the crank assembly (150) with the pivot hole in the thrust lever assembly (240).
 - (e) Insert the shaft assembly (225) into the pivot holes.
 - (f) Insert the spacer (135) onto the shaft assembly (225).
 - (g) Install one or two of the shims (140), as required, onto the shaft assembly (225) to achieve the dimensions shown in Fig. 704.
 - (h) Install one spacer (130) on both sides of the crank assembly (155).
 - (i) Align the pivot holes in the crank assembly (155) with the pivot hole in the thrust lever assembly (245).
 - (j) Insert the shaft assembly (225) into the pivot holes.
 - (k) Install one bearing (145) on the shaft assembly (225) with BMS 3-24 lubricant as shown in Fig. 704 and as specified by SOPM 20-50-03.
 - (l) Install one or two of the shims (140), as required, onto the shaft assembly (225) to achieve the dimensions shown in Fig. 704.
 - (m) Install the spacer (110) onto the shaft assembly (225).
 - (n) Install the support assembly (115) onto the shaft assembly (225).

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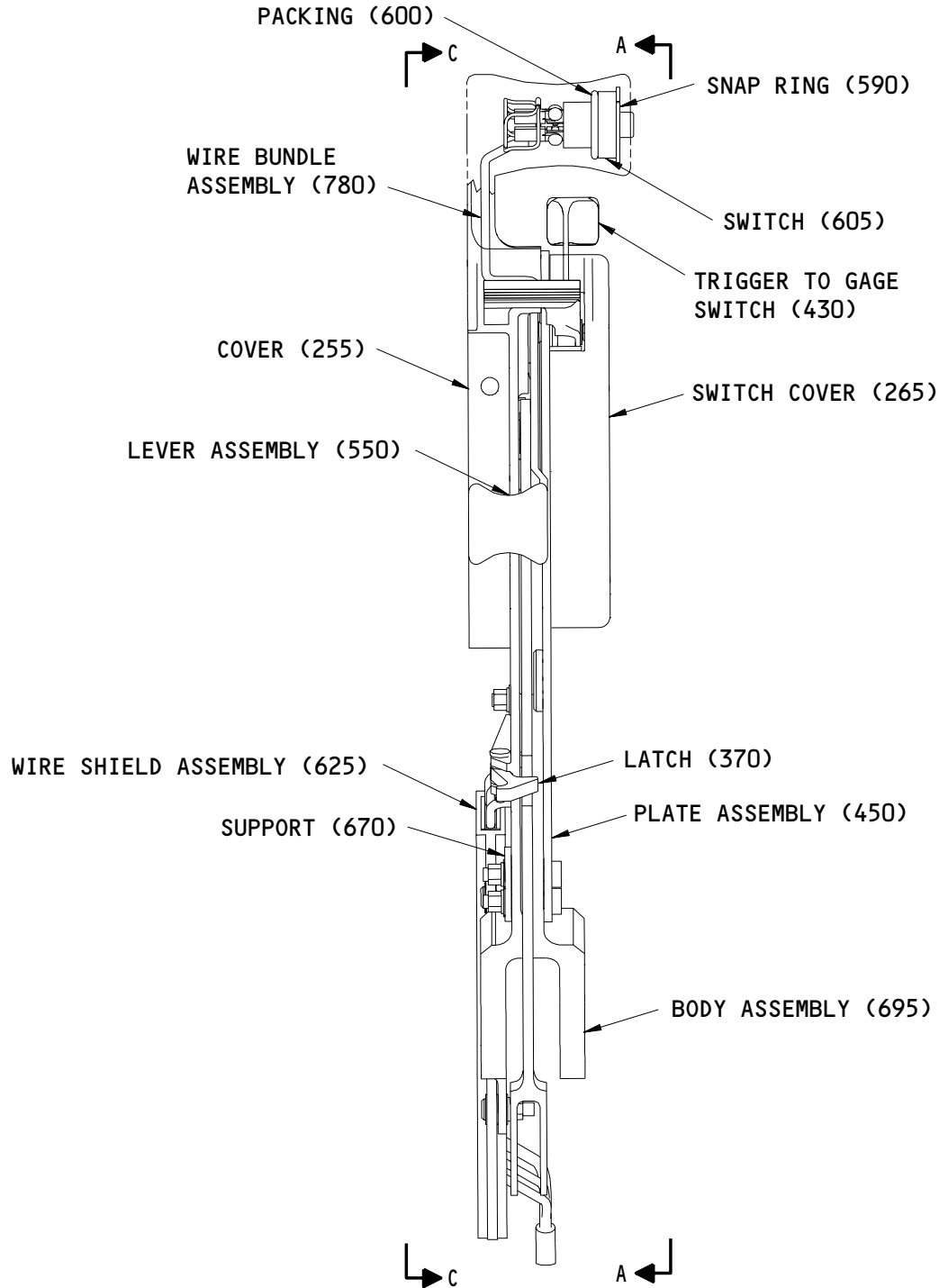
01.1

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COMPONENT
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- (o) Install the washer (105) and the nut (100) onto the shaft assembly (225).
 - (p) Tighten the nut (100) to a torque value which is 80 - 100 pound-inches greater than the run-on torque.
 - (q) Align the links from the lever assembly (240, 245) and the crank assembly (150, 155).
 - (r) Install the bolts (37), the washers (40), and the nuts (45).
 - (s) Make sure that the lever assemblies (240, 245) and the crank assemblies (150, 155) operate smoothly and do not bind.
- (4) Install the push rod assembly (50).
- (a) Align the holes in the ends of the push rods (50) with hole in the links of the crank assemblies (150, 155).
 - (b) Install the bolts (35), the washers (40), and the nuts (45).
- D. Install the pack assembly (30) and the support assembly (15).
- | E. Do the tests as shown in the TESTING & FAULT ISOLATION section.

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01.1



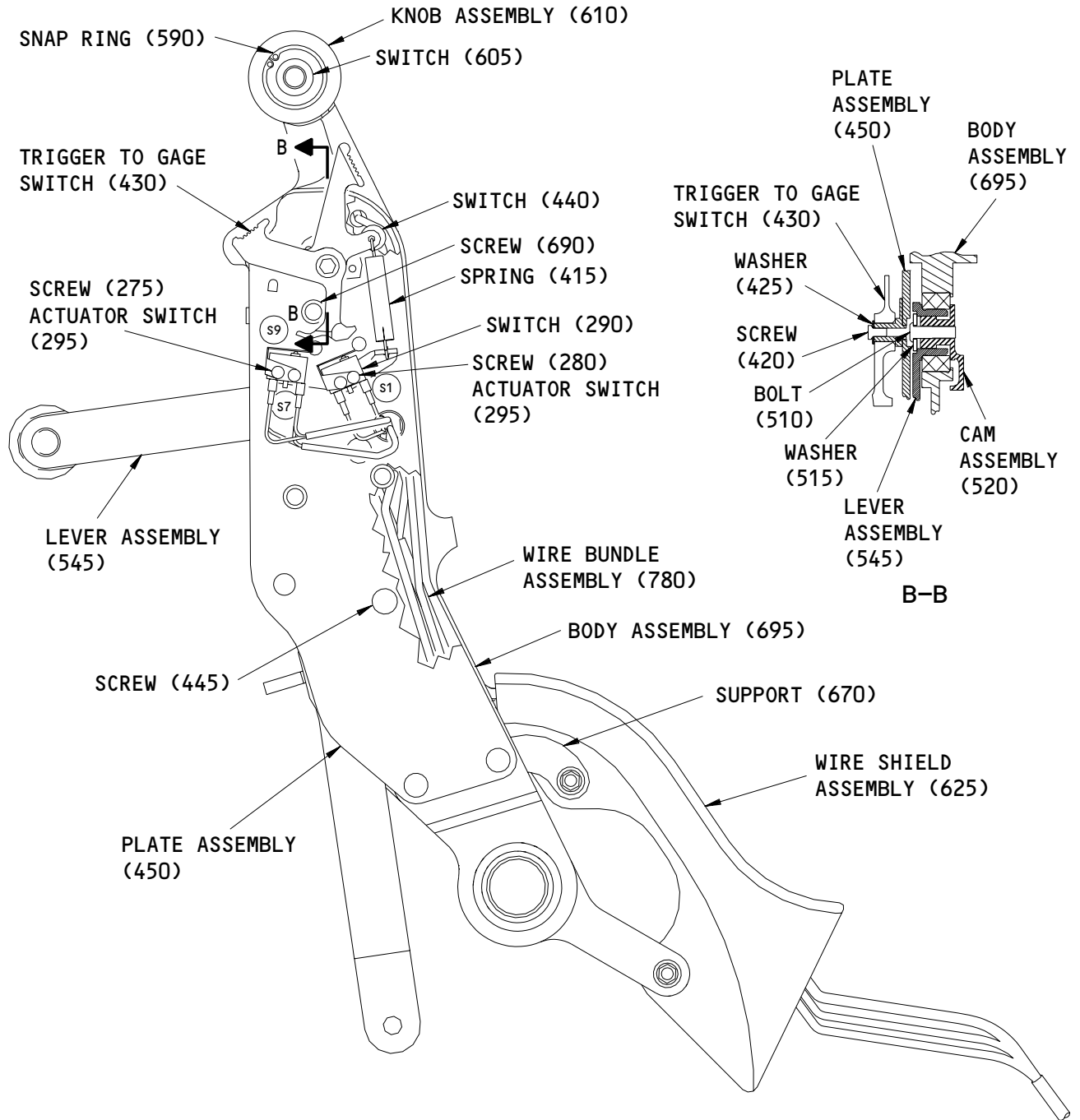
254T2001-1 SHOWN
 254T2001-2 OPPOSITE

Control Stand Thrust Lever Assembly Installation
 Figure 701 (Sheet 1)

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01.1



A-A

B-B

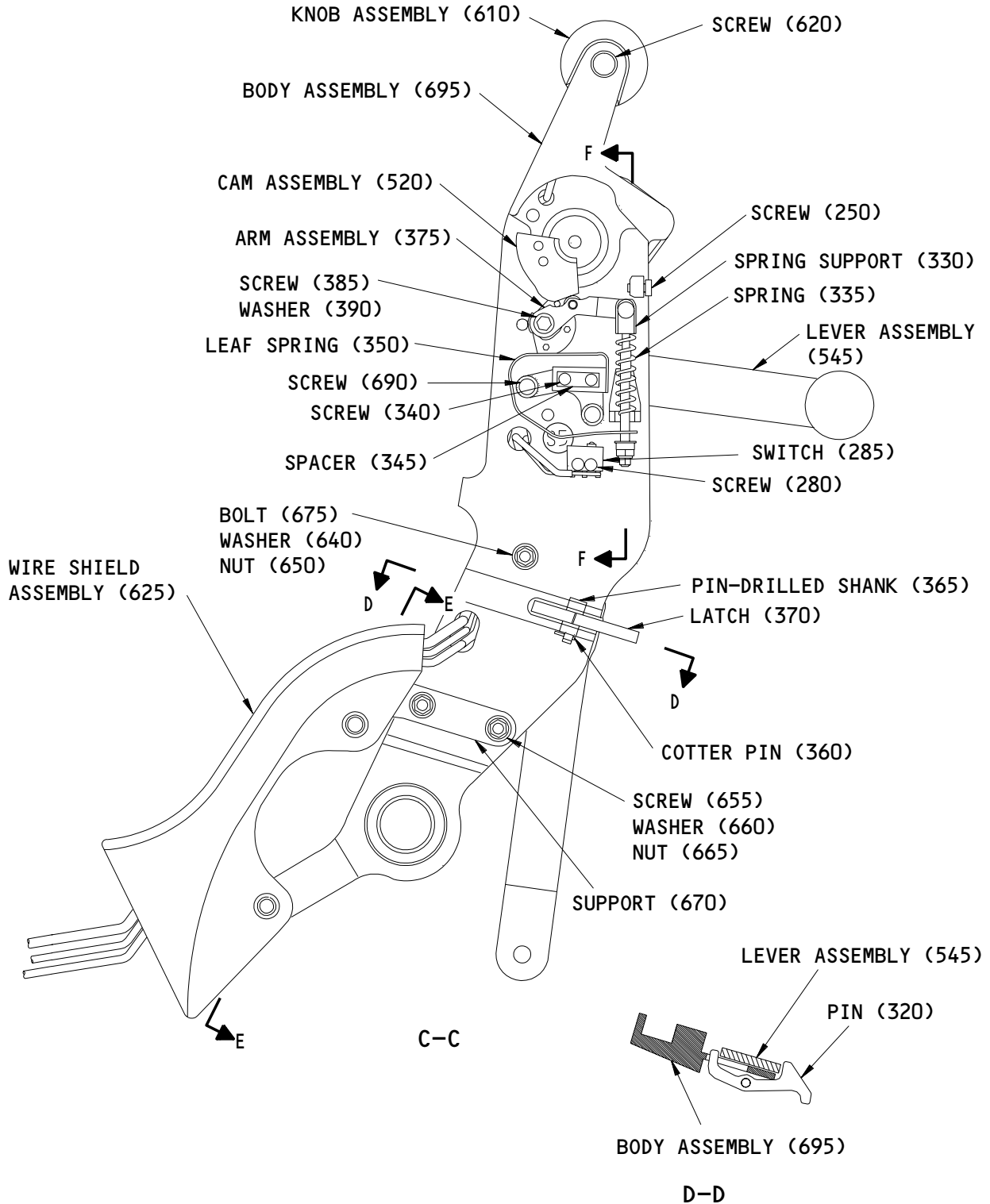
Control Stand Thrust Lever Assembly Installation
Figure 701 (Sheet 2)

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01.1

L52041

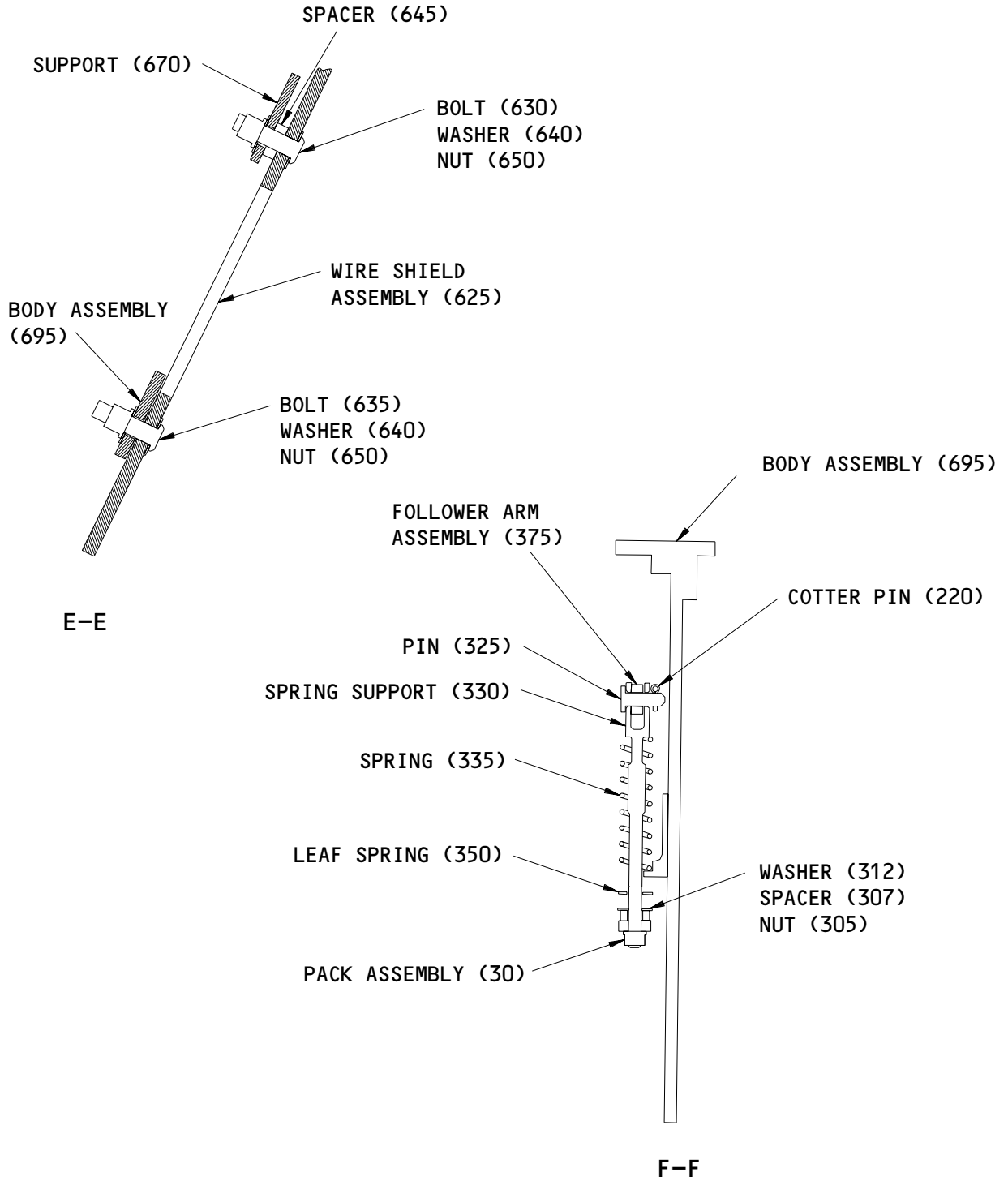


Control Stand Thrust Lever Assembly Installation
 Figure 701 (Sheet 3)

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01.1



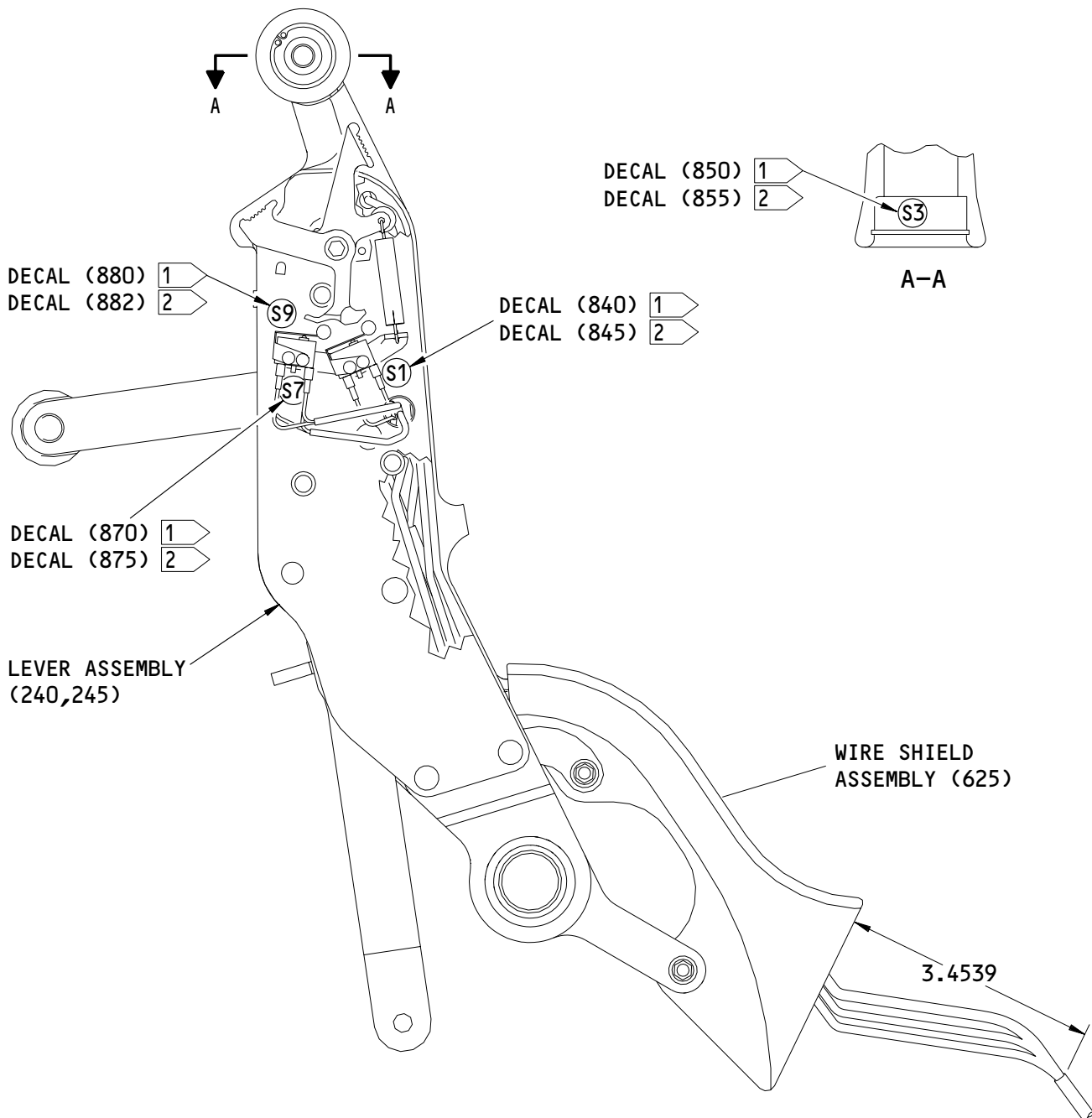
ITEM NUMBERS REFER TO IPL FIG. 1

Control Stand Thrust Lever Assembly Installation
Figure 701 (Sheet 4)

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01.1



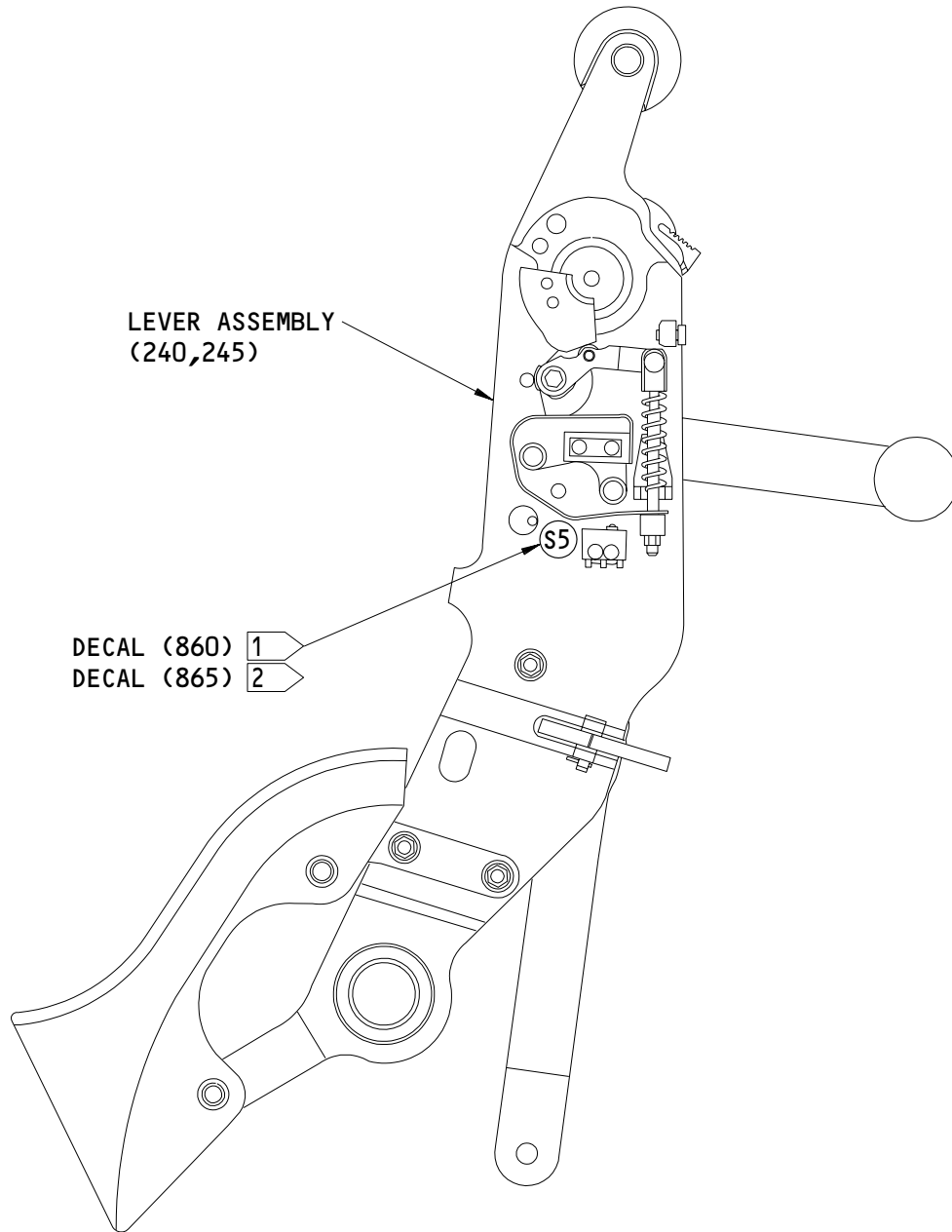
254T2001-1 SHOWN
 254T2001-2 OPPOSITE

Decal Installation
 Figure 702 (Sheet 1)

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01.1



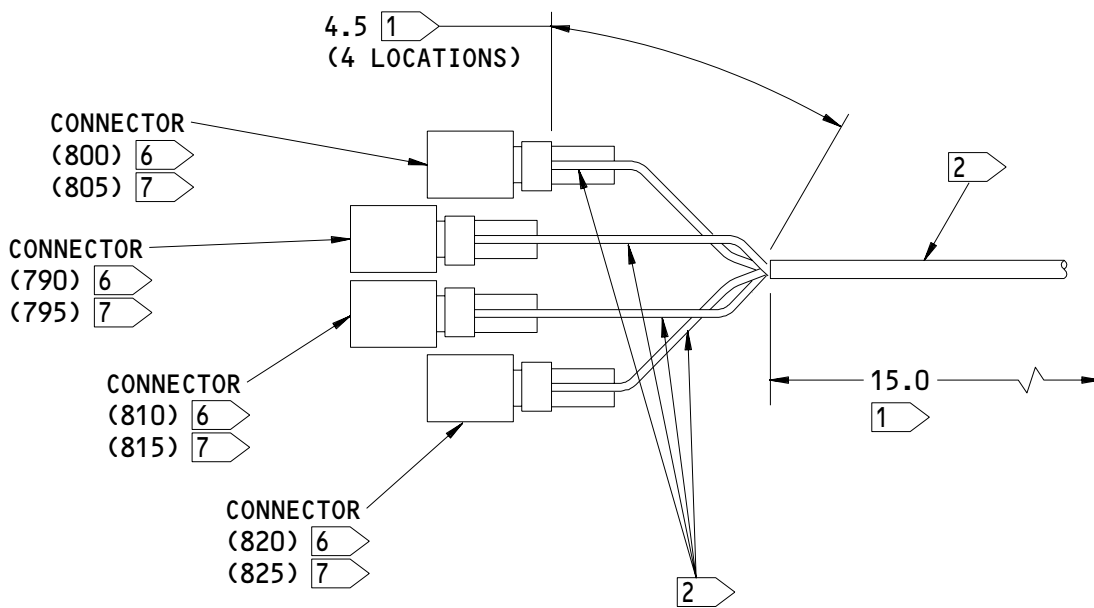
- 1 FOR LEVER ASSEMBLY (240)
- 2 FOR LEVER ASSEMBLY (245)

Decal Installation
Figure 702 (Sheet 2)

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01.1

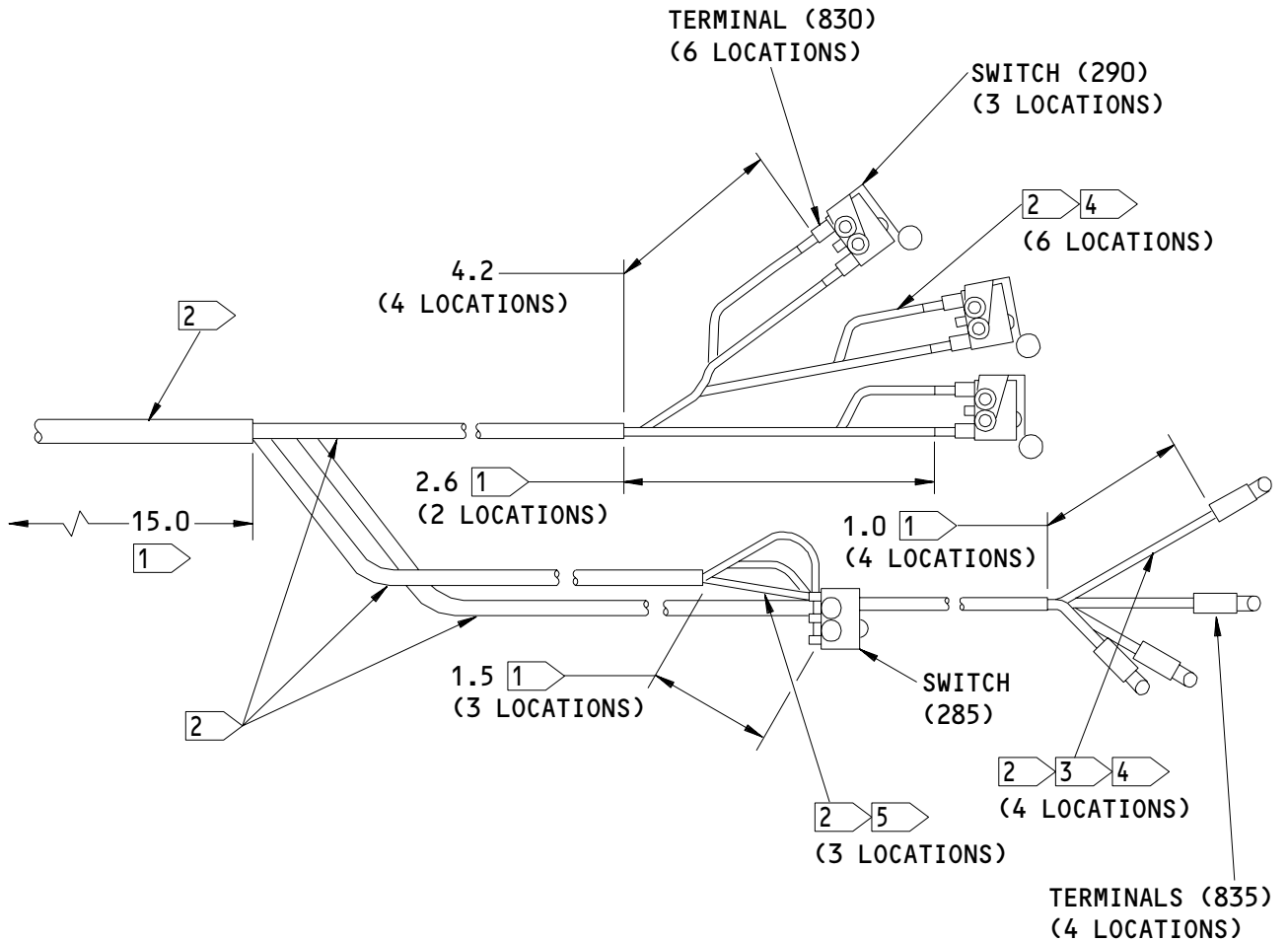


Wire Bundle Assembly
 Figure 703 (Sheet 1)

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- 1 DIMENSION APPLICABLE TO STRAIGHT LENGTH OF WIRE
- 2 APPLY RT876 HEAT SHRINK TUBING OVER LENGTH SHOWN. OVERLAP WITH ADJACENT SLEEVING 0.50 INCH MINIMUM. APPLY TUBING OVER UNUSED SWITCH TERMINALS
- 3 STOW ENOUGH WIRE IN THE KNOB ASSEMBLY (605,610) TO ALLOW REMOVAL OF THE SWITCH (600)
- 4 BMS 13-48, TYPE 11, CLASS 1, 24AWG WIRE
- 5 BMS 13-48, TYPE 10, CLASS 1, 22AWG WIRE
- 6 FOR WIRE BUNDLE ASSEMBLY (775)
- 7 FOR WIRE BUNDLE ASSEMBLY (780)

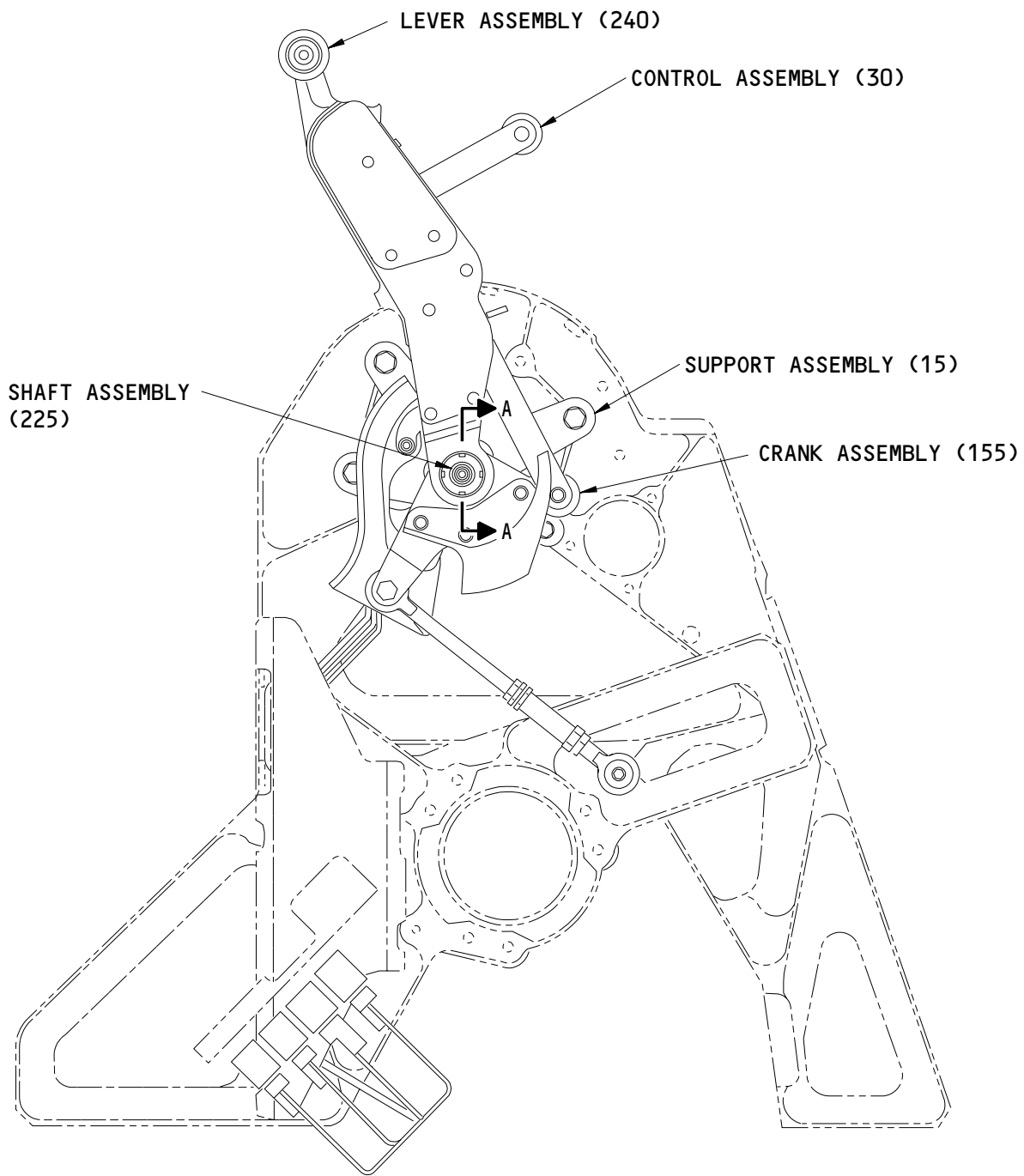
ITEM NUMBERS REFER TO IPL FIG. 1

Wire Bundle Assembly
 Figure 703 (Sheet 2)

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01.1



ITEM NUMBERS REFER TO IPL FIG. 1

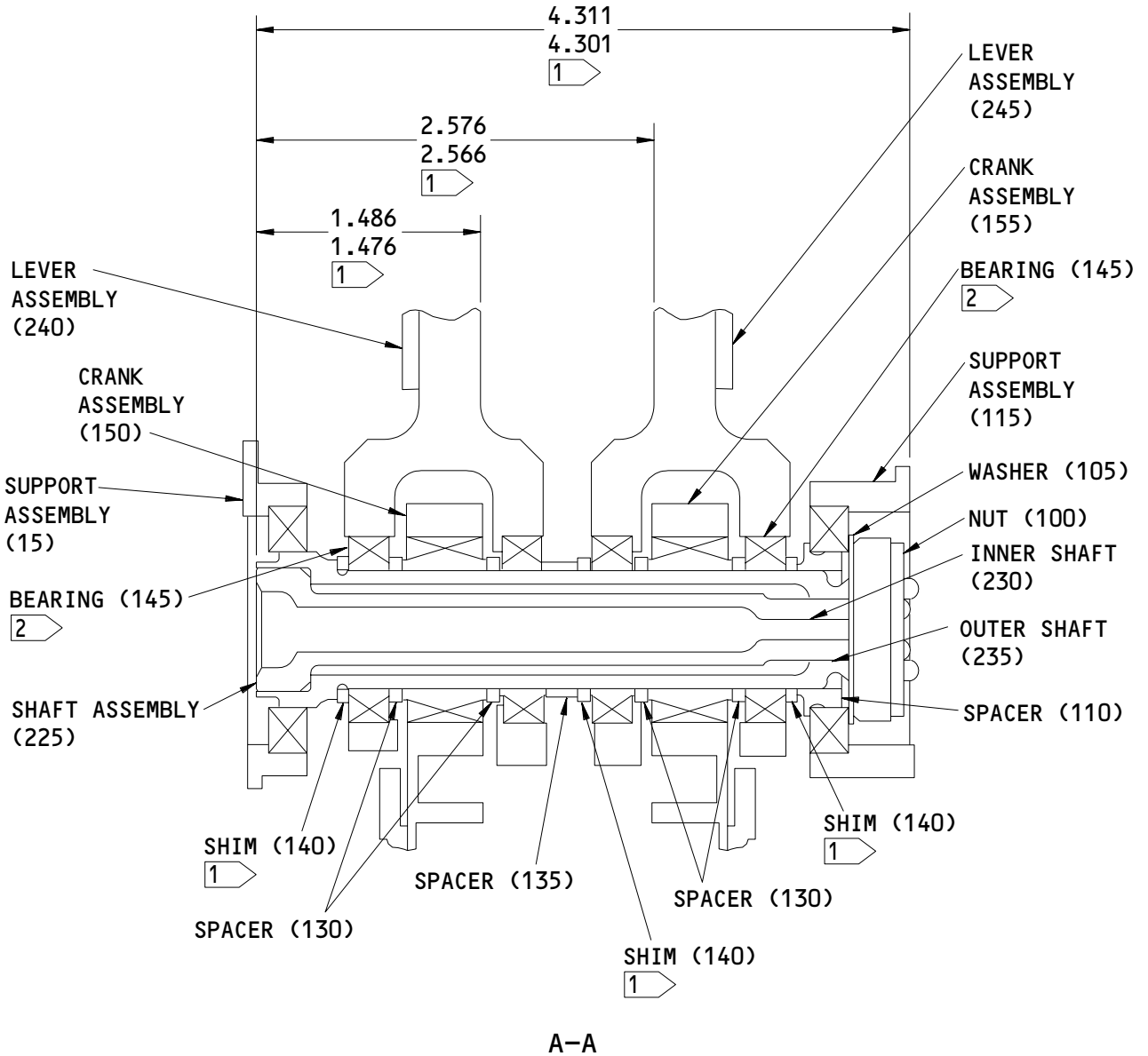
Control Assembly
Figure 704 (Sheet 1)

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1 ONE OR TWO SHIMS (140) ARE NECESSARY AT EACH LOCATION GIVEN. ADJUST THE SHIM THICKNESS AS NECESSARY TO ACHIEVE THE DIMENSIONS SHOWN

2 INSTALL THE BEARING (145) WITH GREASE AS SHOWN IN SOPM 20-50-03

ITEM NUMBERS REFER TO IPL FIG. 1

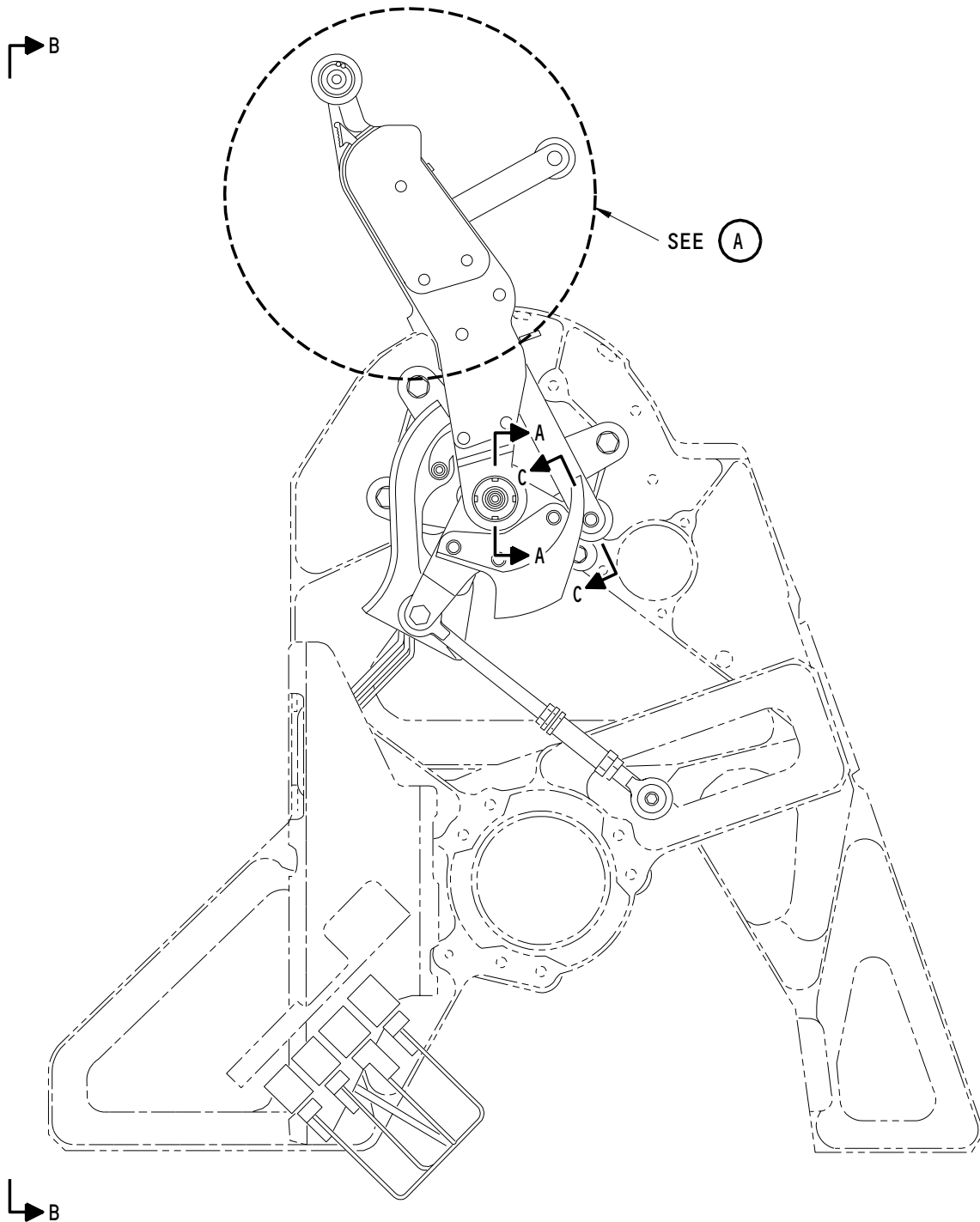
Control Assembly
 Figure 704 (Sheet 2)

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01.1

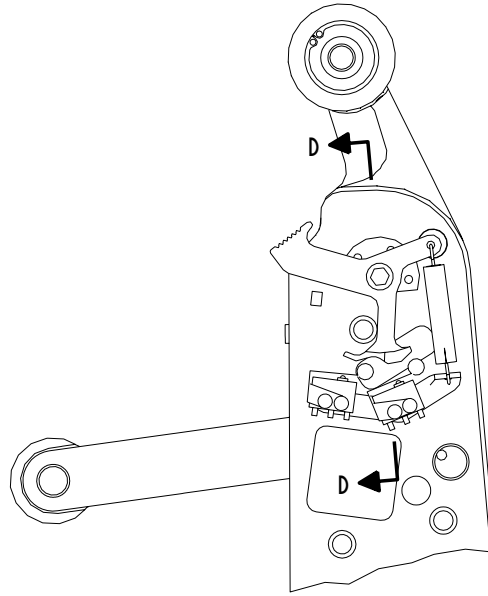
BOEING
COMPONENT
MAINTENANCE MANUAL
FITS AND CLEARANCES



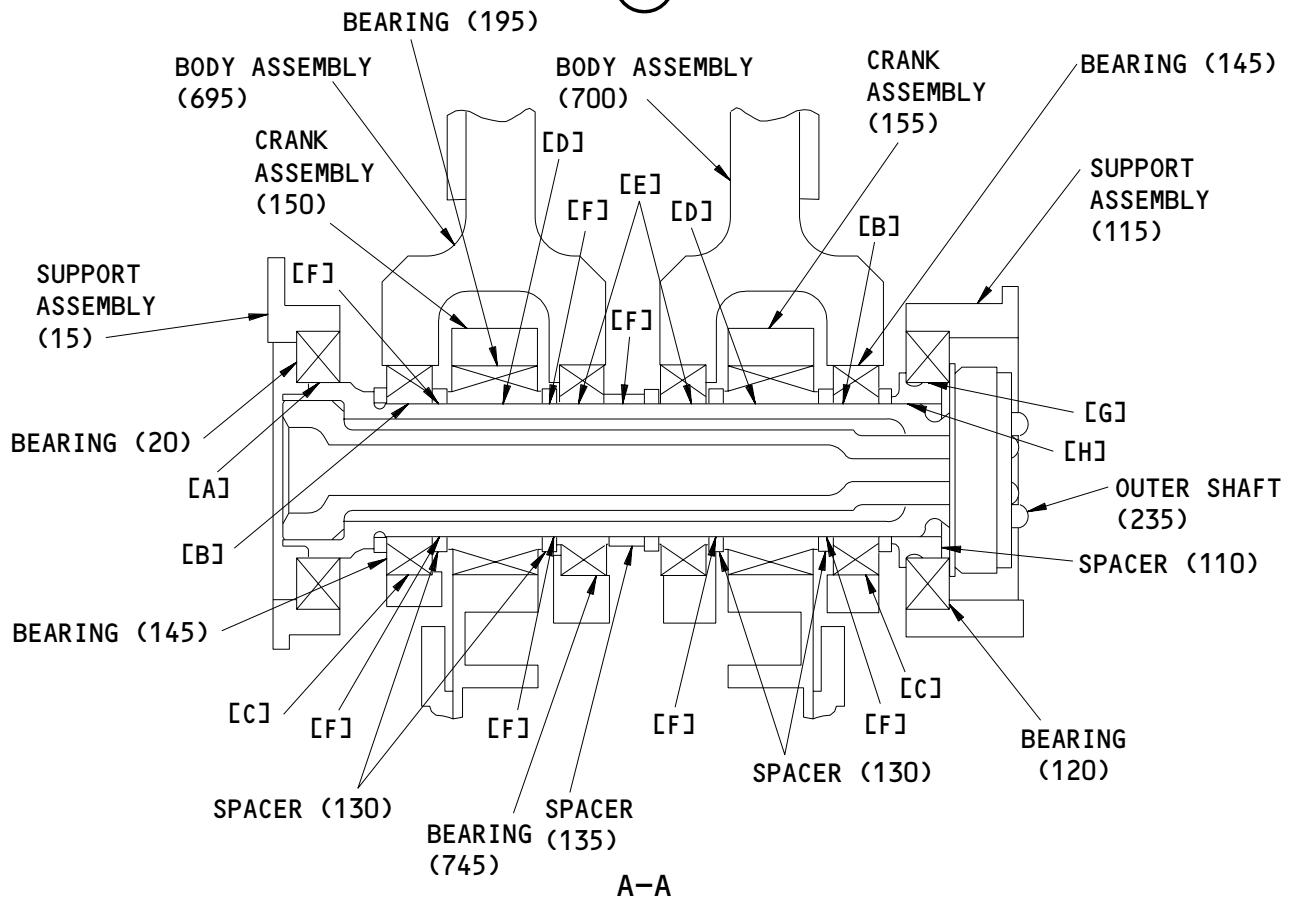
Fits and Clearances
Figure 801 (Sheet 1)

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FITS AND CLEARANCES
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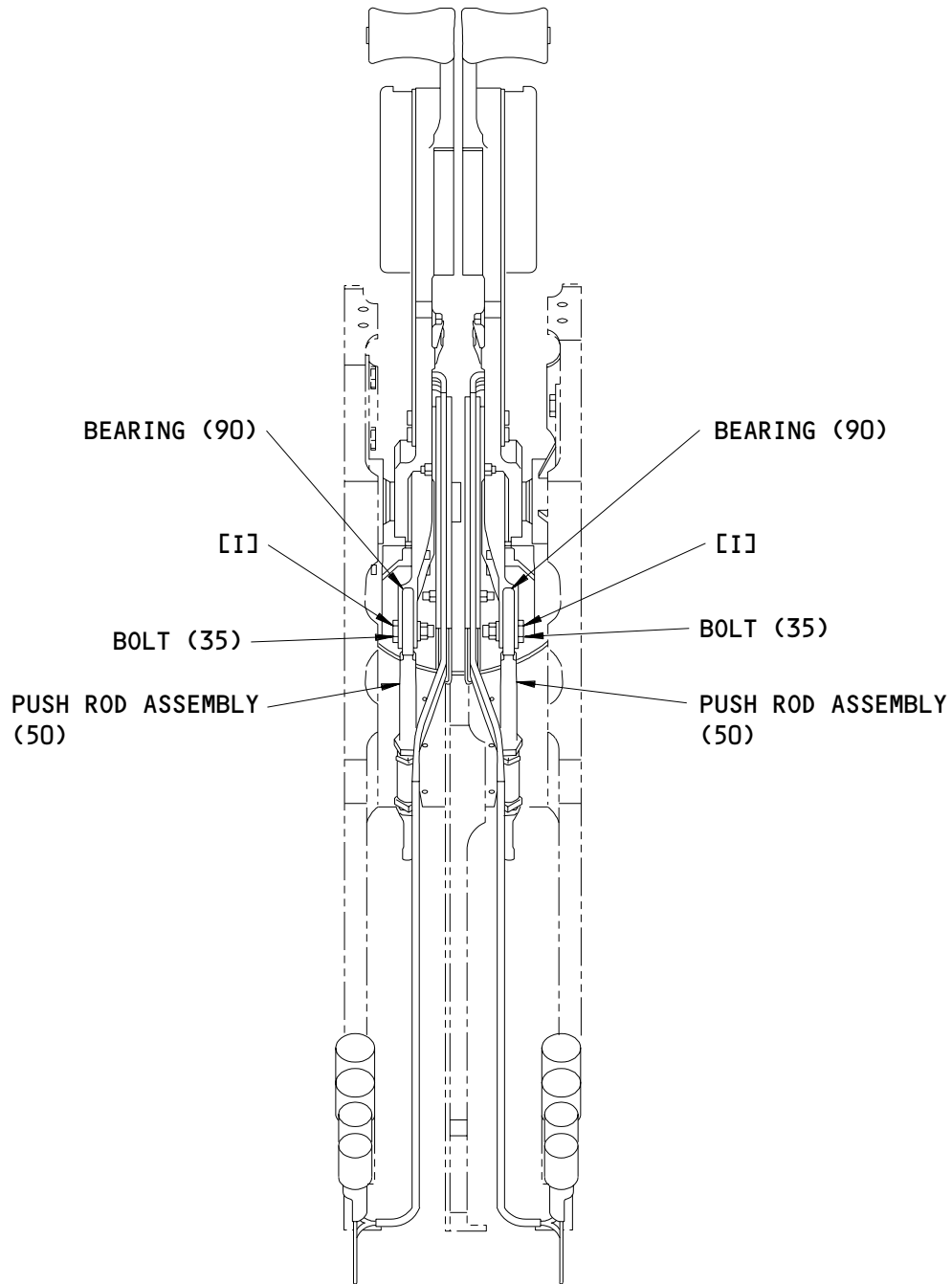
(A)



Fits and Clearances
 Figure 801 (Sheet 2)

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K26680

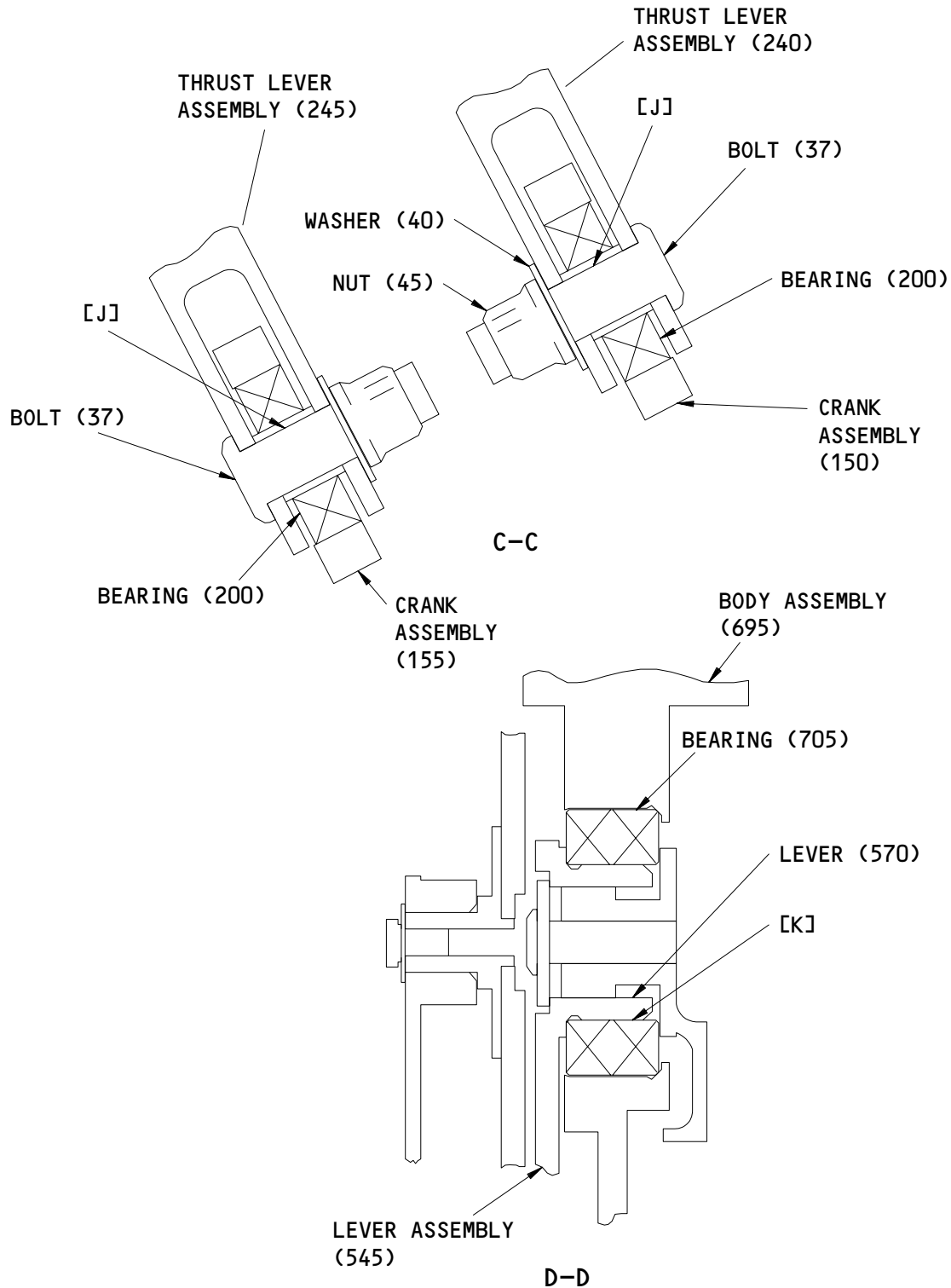


B-B

Fits and Clearances
Figure 801 (Sheet 3)

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Fits and Clearances
Figure 801 (Sheet 4)

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 COMPONENT
 MAINTENANCE MANUAL

REF LETTER	REF IPL		DESIGN DIMENSION*				SERVICE WEAR LIMIT*		
	FIG. 1, MATING ITEM NO.		DIMENSION		ASSEMBLY CLEARANCE		DIMENSION		MAXIMUM CLEARANCE
			MIN	MAX	MIN	MAX	MIN	MAX	
[A]	ID	20	0.9995	1.0000	0.0005	0.0020	0.9970	1.0010	0.0040
	OD	235	0.9980	0.9990					
[B]	ID	145	0.7495	0.7500	0.0005	0.0020	0.7470	0.7510	0.0040
	OD	235	0.7480	0.7490					
[C]	ID	695	1.1875	1.1885	0.0000	0.0015	1.1834	1.1921	0.0095
	OD	145	1.1870	1.1875					
[D]	ID	195	0.7495	0.7500	0.0005	0.0020	0.7440	0.7540	0.0100
	OD	235	0.7480	0.7490					
[E]	ID	745	0.7495	0.7500	0.0005	0.0020	0.7470	0.7510	0.0040
	OD	235	0.7480	0.7490					
[F]	ID		0.7550	0.7600	0.0060	0.0120	0.7470	0.7640	0.0170
	OD	235	0.7480	0.7490					
[G]	ID	120	0.9995	1.0000	0.0000	0.0010	0.9974	1.0016	0.0042
	OD	110	0.9990	0.9995					
[H]	ID	110	0.7493	0.7507	0.0003	0.0027	0.7462	0.7525	0.0063
	OD	235	0.7480	0.7490					
[I]	ID	90	0.2495	0.2500	0.0000	0.0015	0.2461	0.2524	0.0063
	OD	35	0.2485	0.2495					
[J]	ID	200	0.2497	0.2500	0.0002	0.0015	0.2445	0.2540	0.0095
	OD	37	0.2485	0.2495					
[K]	ID	705	0.6245	0.6250	0.0000	0.0010	0.6224	0.6266	0.0042
	OD	570	0.6240	0.6245					



* ALL DIMENSIONS ARE IN INCHES

 SPACER (130,135)

Fits and Clearances
 Figure 801 (Sheet 5)

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FITS AND CLEARANCES
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REF IPL		NAME	TORQUE*	
FIG. NO.	ITEM NO.		POUND-INCHES	POUND-FEET
1	510	Bolt	7-10 	0.6-0.8
1	100	Nut	80-100 	6.7-8.3

* REFER TO SOPM 20-50-01 FOR TORQUE VALUES OF STANDARD FASTENERS.

 GREATER THAN RUN-ON TORQUE.

Torque Table
 Figure 802

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FITS AND CLEARANCES
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SPECIAL TOOLS AND EQUIPMENT

NOTE: Equivalent tools and equipment can be used.

1. G76002-15 -- Reverse Thrust Lever Protractor (supersedes G76002-7)
2. J76002-2 -- Spanner Wrench

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SPECIAL TOOLS

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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.

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ILLUSTRATED PARTS LIST

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VENDORS

K8455 RHP BEARINGS PLC RHP AEROSPACE
OLDENDS LANE
STONEHOUSE GL10 3RM UK

OPTK6 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
5195 W 4700 SPO BOX 18459
KEARNS, UTAH 84118

00779 AMP, INCORPORATED
2800 FULLING MILL RD PO BOX 3608
MIDDLETOWN, PENNSYLVANIA 17057

06144 INDUSTRIAL TECTONICS BEARING CORP
18301 SOUTH SANTA FE AVENUE
RANCO DOMINQUEZ, CALIFORNIA 90221
FORMERLY IN COMPTON, CALIFORNIA

06725 AIR INDUSTRIES CORPORATION
12570 KNOTT STREET
GARDEN GROVE, CALIFORNIA 92641-3932
FORMERLY AIR INDUSTRIES OF CALIF IN GARDENA, CALIF.

06950 SCREWCORP VSI AEROSPACE PRODUCTS DIV FAIRCHILD IND DIV
13001 EAST TEMPLE AVENUE PO BOX 730
CITY OF INDUSTRY, CALIFORNIA 91746-1417
FORMERLY VB0096 AND VSI CORP SCREWCORP DIV
FORMERLY IN CULVER CITY, CALIFORNIA

08524 DEUTSCH FASTENER CORP SEE CODE V97928

15653 KAYNAR TECHNOLOGY KAYNAR DIV
800 SOUTH STATE COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92831-3001
FORMERLY MICRODOT AEROSP LTD VK6405

18342 AMP INC SYSCOM DIV USE V00779

21335 TORRINGTON CO FAFNIR BEARING DIV
59 FIELD STREET
TORRINGTON, CONNECTICUT 06790-1008
FORMERLY FAFNIR BRG AND TEXTRON INC FAFNIR DIV IN
NEW BRITAIN, CONNECTICUT

21649 OTTO CONTROLS DIV OF OTTO ENGRG INC
2 EAST MAIN STREET
CARPENTERSVILLE, ILLINOIS 60110

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ILLUSTRATED PARTS LIST
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**BOEING**
COMPONENT
MAINTENANCE MANUALVENDORS

27238 BRISTOL INDUSTRIES
630 EAST LAMBERT ROAD PO BOX 630
BREA, CALIFORNIA 92621-4119

27737 INA BEARING COMPANY INC
1 INA DRIVE
CHERAW, SOUTH CAROLINA 29520
FORMERLY FAFNIR INA NEEDLE ROLLER BEARING CO.

30163 VALENTEC DAYRON INC
333 MAGUIRE BLVD PO BOX 140394
ORLANDO, FLORIDA 32814-0394

38443 MRC BEARINGS
402 CHANDLER STREET
JAMESTOWN, NEW YORK 14701-3802
FORMERLY MARLIN-ROCKWELL CORP DIV TRW AND TRW INC

40920 MPB MINIATURE PRECISION BEARING DIV
PRECISION PARK PO BOX 547
KEENE, NEW HAMPSHIRE 03431
FORMERLY MPB CORP AND MINIATURE BRG DIV MPB CORP

43991 FAG BEARING INCORPORATED
118 HAMILTON AVENUE
STAMFORD, CONNECTICUT 06904
FORMERLY NORMA-HOFFMAN BEARING CORPORATION
FORMERLY NORMA FAG BEARINGS CORPORATION

5M902 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV
3016 W LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5103
FMLY IN REDONDO BEACH, CALIF

56878 SPS TECHNOLOGIES INC AEROSPACE AND INDUSTRIAL PRODUCTS DIV
HIGHLAND AVENUE
JENKINTOWN, PENNSYLVANIA 19046
FORMERLY STANDARD PRESSED STEEL

60516 WEST COAST AEROSPACE INC
812 MIRAFLORES STREET
SAN PEDRO, CALIFORNIA 90731-1439

72962 HARVARD INDUSTRIES INC
3 WERNER WAY SUITE 210
LEBANON, NEW JERSEY 08833
FORMERLY AMERACE CORP ESNA DIV
FORMERLY ELASTIC STOP NUT IN UNION, NJ

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VENDORS

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
FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539
AND STANDARD PRESSED STEEL WESTERN DIV V17279

81640 EATON CORP AEROSPACE AND COMMERCIAL CONTROLS DIV
2250 WHITFIELD AVENUE EAST
SARASOTA, FLORIDA 34243-9703
FORMERLY SINGER CO CONTROLS DIV AND CONTROLS CO OF AMERICA
AND CONTROL SWITCH A CUTLER-HAMMER CO AND EATON CORP
CUTLER-HAMMER GROUP V97198, V81641 IN FOLCROFT, PENNSYLVANIA

83086 NEW HAMPSHIRE BALL BEARINGS, INCORPORATED
ROUTE 202
PETERBOROUGH, NEW HAMPSHIRE 03458

9N513 VOI SHAN/CHATSWORTH DIV OF VSI CORP SUB OF FAIRCHILD IND
CHATSWORTH, CALIFORNIA 91311-5013
COMPANY NO LONGER WISHES TO BE CONSIDERED FOR FED CONTRCTG

91929 HONEYWELL INC MICRO SWITCH DIV
11 WEST SPRING STREET
FREEPORT, ILLINOIS 61032
FORMERLY MICRO SWITCH A DIV OF HONEYWELL
FORMERLY V74059 AND V40228

92215 FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV
3010 W LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5102
FORMERLY VOI-SHAN IN CULVER CITY, CALIF

97393 SHUR-LOK CORPORATION
2541 WHITE ROAD PO BOX 19584
IRVINE, CALIFORNIA 92713
FORMERLY SHUR LOK CORP VB0060
FORMERLY IN SANTA ANA, CALIFORNIA 92714

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
AN316-6L		1	60	2
AN316-6R		1	55	2
BACB10AC4A		1	75	2
		1	90	2
BACB10AS12		1	145	2
		1	745	2
BACB28AK03-042		1	180	2
BACB30FM5A4		1	510	2
BACB30FM8A7		1	37	2
BACB30LJ4-7		1	35	2
BACB30LU2-6		1	675	2
BACB30NR4K2		1	5	8
BACB30VT5HK4		1	635	2
BACB30VT5HK5		1	630	2
BACB30VT6K5		1	160	4
BACB30VT6K9		1	165	2
BACC30BL6		1	175	6
BACC45FT10-5P		1	810	1
BACC45FT10-5P6		1	820	1
BACC45FT10-5P7		1	825	1
BACC45FT10-5P8		1	815	1
BACC45FT8-3P		1	790A	1
BACC45FT8-3P6		1	800A	1
BACC45FT8-3P7		1	805A	1
BACC45FT8-3P8		1	795A	1
BACN10JC08CD		1	650	4
		1	665	4
		1	685	2
BACN10JC4CD		1	45	4
BACN10RF10		1	100	1
BACN10YR04CD		1	300	2
BACP18BC01A02P		1	320	2
		1	360	2
BACP18BD1R15		1	365	2
BACR15BA3AD		1	460	6
		1	710	10
BACR15BA5AD		1	480	2
BACR15BB3AD		1	735	4
BACS12BE02-4		1	340	4
BACS12BE02-6		1	280	8
BACS12BE02-9		1	275	4
BACS12BP3BP8		1	555	2
BACS12BP3P5		1	620	2

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 ILLUSTRATED PARTS LIST
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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACS12GX04H5		1	690	10
BACT12AC43		1	835	8
BAC27TCT0012		1	840	1
BAC27TCT0013		1	845	1
BAC27TCT0014		1	850	1
BAC27TCT0015		1	855	1
BAC27TCT0016		1	860	1
BAC27TCT0017		1	865	1
BAC27TCT0031		1	870	1
BAC27TCT0032		1	875	1
BAC27TCT0033		1	880	1
BAC27TCT0034		1	895	1
BAC27TCT0156		1	885	1
BAC27TCT0157		1	890	1
BH00312-04		1	300	2
BR9080-10		1	100	1
B5539WZZFS428		1	195	2
C2006		1	605A	2
HHKSP4A		1	75	2
		1	90	2
HL440UC5-4		1	510	2
HL440UC8-7		1	37	2
HST10AG6-5		1	160	4
HST10AG6-9		1	165	2
HST79-6		1	175	6
HST79CY6		1	175	6
H52732-04CD		1	300	2
JX45		1	295	6
KSP4AE9440A		1	75	2
		1	90	2
KSP4AFS428		1	75	2
		1	90	2
KSP4AG27		1	75	2
		1	90	2
KSP4ASD610		1	75	2
		1	90	2
KSP4A2TS		1	75	2
		1	90	2
LLKP16BS1		1	20	1
		1	120	1
LLMB539		1	145	2
		1	745	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
MB539-2TS		1	145	2
		1	745	2
MB539DD		1	145	2
		1	745	2
MB539DDFS428		1	145	2
		1	745	2
MB539DDG20		1	145	2
		1	745	2
MB539DDL196		1	145	2
		1	745	2
MB539DSD610		1	145	2
		1	745	2
MB539TT		1	145	2
		1	745	2
MKP16BS2E9881		1	20	1
		1	120	1
MKP16BS2SD750		1	20	1
		1	120	1
MKSP4AFS428		1	200	2
MS16625-4086		1	590	2
MS21209C0220P		1	495	8
		1	765	8
MS21209C0410		1	470	2
		1	720	2
MS21209C0415P		1	750	2
MS21209C0420P		1	490	6
		1	755	4
MS21209C0815		1	530	2
MS21209C0820P		1	760	4
MS24547-1		1	285	2
MS24586C48		1	415	2
MS28775-114		1	600	2
MS35649-244		1	305A	2
MT339E		1	145	2
		1	745	2
M834611-114		1	600A	2
NAS1149CN416R		1	312	2
		1	390	2
		1	425	2
NAS1149CN949B		1	515A	2
NAS1149C1032R		1	105	1
NAS1149DN816J		1	640	10
		1	660	4
		1	680	2
NAS1149D0316J		1	170	6

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS1149D0432J		1	10	8
		1	40	4
NAS1801-04-3		1	385	2
		1	420	2
NAS43DD1-6FC		1	307	2
NAS43DD3-7FC		1	645	2
NAS514P832-7		1	445	2
NAS514P832-9		1	440	2
NAS600-4P		1	250	2
NAS623-2-9		1	655	4
P8-4000003		1	605	2
SL2822-10		1	100	1
VL310AG5-4		1	635	2
VL310AG5-5		1	630	2
WC130-5-4		1	510	2
WC130-8-7		1	37	2
Y010		1	20	1
		1	120	1
Y164		1	20	1
		1	120	1
1SX1H58		1	290	6
10633		1	20	1
		1	120	1
253T5829-1		1	115	1
253T5829-2		1	125	1
253T5829-3		1	125A	1
253U5810-1		1	565	2
253U5813-2		1	485	2
253U5814-1		1	625	2
253U5815-1		1	670	2
253U5818-1		1	580	1
253U5818-2		1	585	1
253U5819-1		1	130	4
253U5819-4		1	135	1
253U5822-1		1	50	2
253U5824-1		1	335	2
253U5828-2		1	400	2
253U5830-11		1	185	1
253U5830-12		1	190	1
253U5830-13		1	205	1
253U5830-14		1	210	1
253U5831-1		1	370	2
253U5833-1		1	140	3
253U5834-1		1	325	2
253U5838-1		1	465	2
		1	715	2

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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
253U5838-2		1	475	2
		1	725	2
253U5844-1		1	65	2
253U5856-1		1	520	1
253U5856-2		1	525	1
253U5856-3		1	535	1
253U5856-4		1	540	1
253U5859-1		1	70	2
253U5859-2		1	80	2
253U5860-1		1	85	2
253U5860-2		1	95	2
253U7314-1		1	345	2
254N1173-1		1	110	1
254T2000-1SP		1	1A	RF
254T2000-2		1	30	1
254T2001-1		1	240	1
254T2001-2		1	245	1
254T2001-3		1	780A	1
254T2001-4		1	785A	1
254T2011-1		1	430	1
254T2011-2		1	435	1
254W2002-11SP		1	695	1
254W2002-12SP		1	700	1
254W2002-13SP		1	770	1
254W2002-14SP		1	775	1
254W2002-5		1	705	2
254W2003-1		1	740	2
254W2004-1		1	730	2
254W2005-10SP		1	455	1
254W2005-11SP		1	500	1
254W2005-12SP		1	505	1
254W2005-9SP		1	450	1
254W2006-1SP		1	255	1
254W2006-2SP		1	260	1
254W2007-10		1	270	1
254W2007-9		1	265	1
254W2009-5		1	375	1
254W2009-6		1	380	1
254W2009-7		1	405	1
254W2009-8		1	410	1
254W2010-2		1	330A	2
254W2011-1		1	350	1
254W2011-2		1	355	1
254W2012-1		1	610	1
254W2012-2		1	615	1

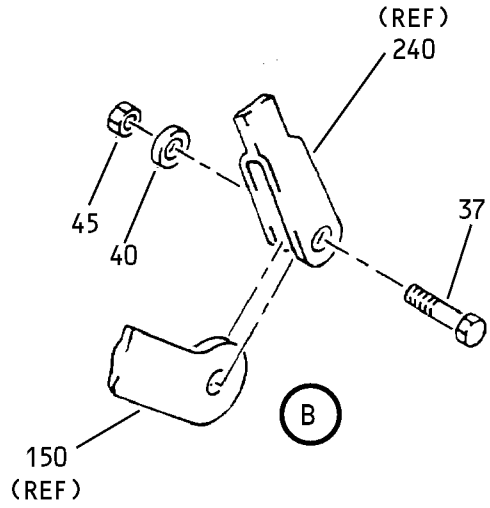
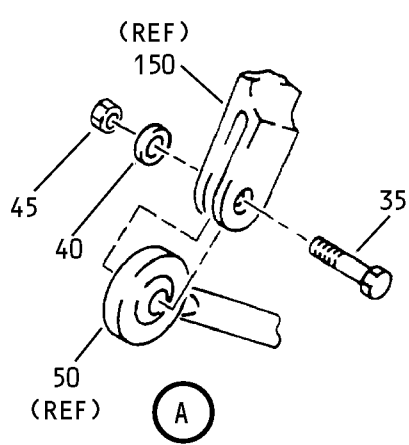
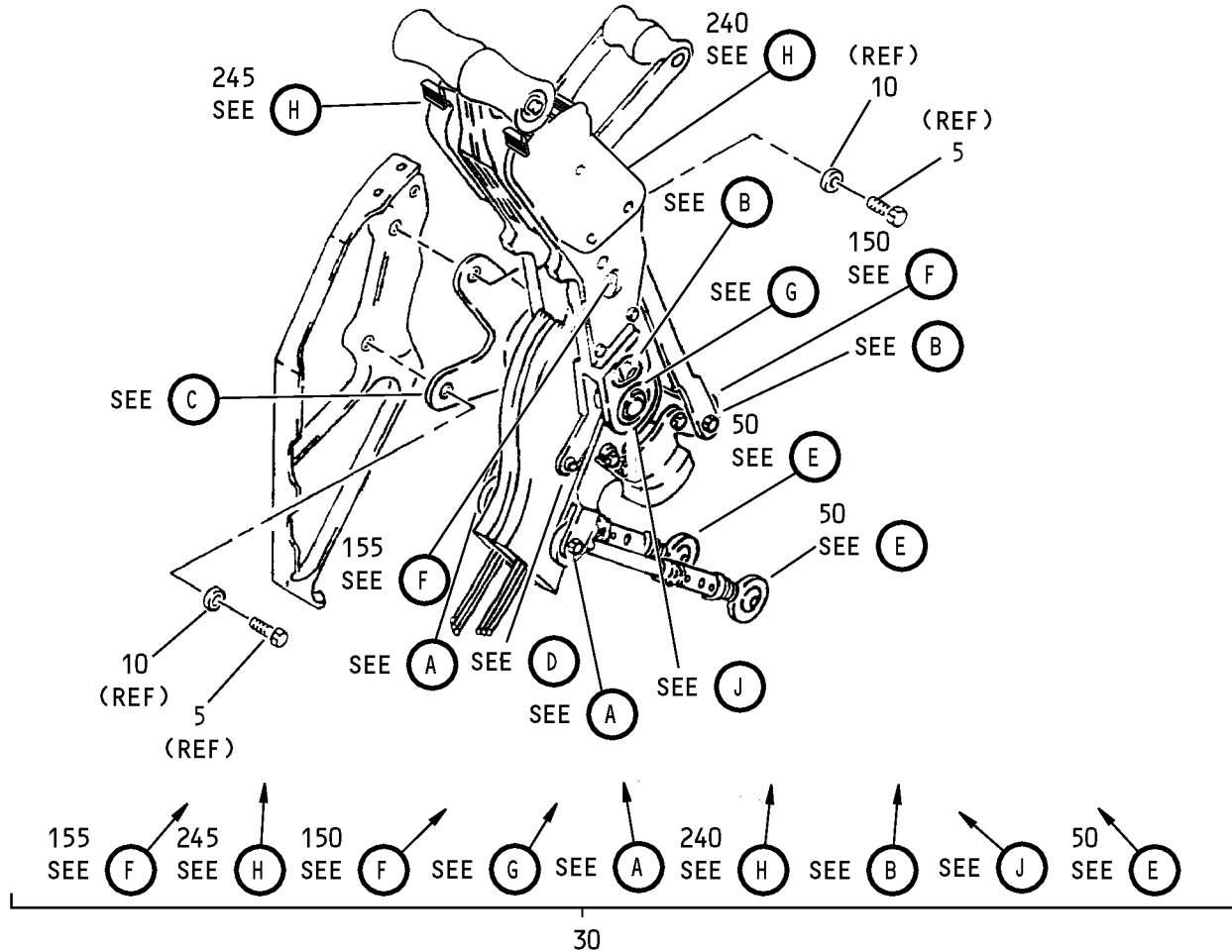
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PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
254W2013-1		1	225	1
254W2013-2		1	230	1
254W2013-3		1	235	1
254W2014-1		1	545	1
254W2014-2		1	550	1
254W2015-1		1	570	1
254W2015-2		1	575	1
254W2016-1		1	15	1
254W2016-2		1	25	1
254W2017-1		1	215	1
254W2017-2		1	220	1
254W2017-3		1	215A	1
254W2017-4		1	220A	1
254W2018-1		1	150	1
254W2018-2		1	155	1
323912		1	835	8
4AFS428		1	75	2
		1	90	2
60B00179-100		1	20	1
		1	120	1
60789-2		1	830A	12
65C14183-46		1	560	2
66-25941-1		1	395	2
67067-5A4		1	510	2
67067-8A7		1	37	2
69-35353-3		1	595	2
82631-1018		1	100	1

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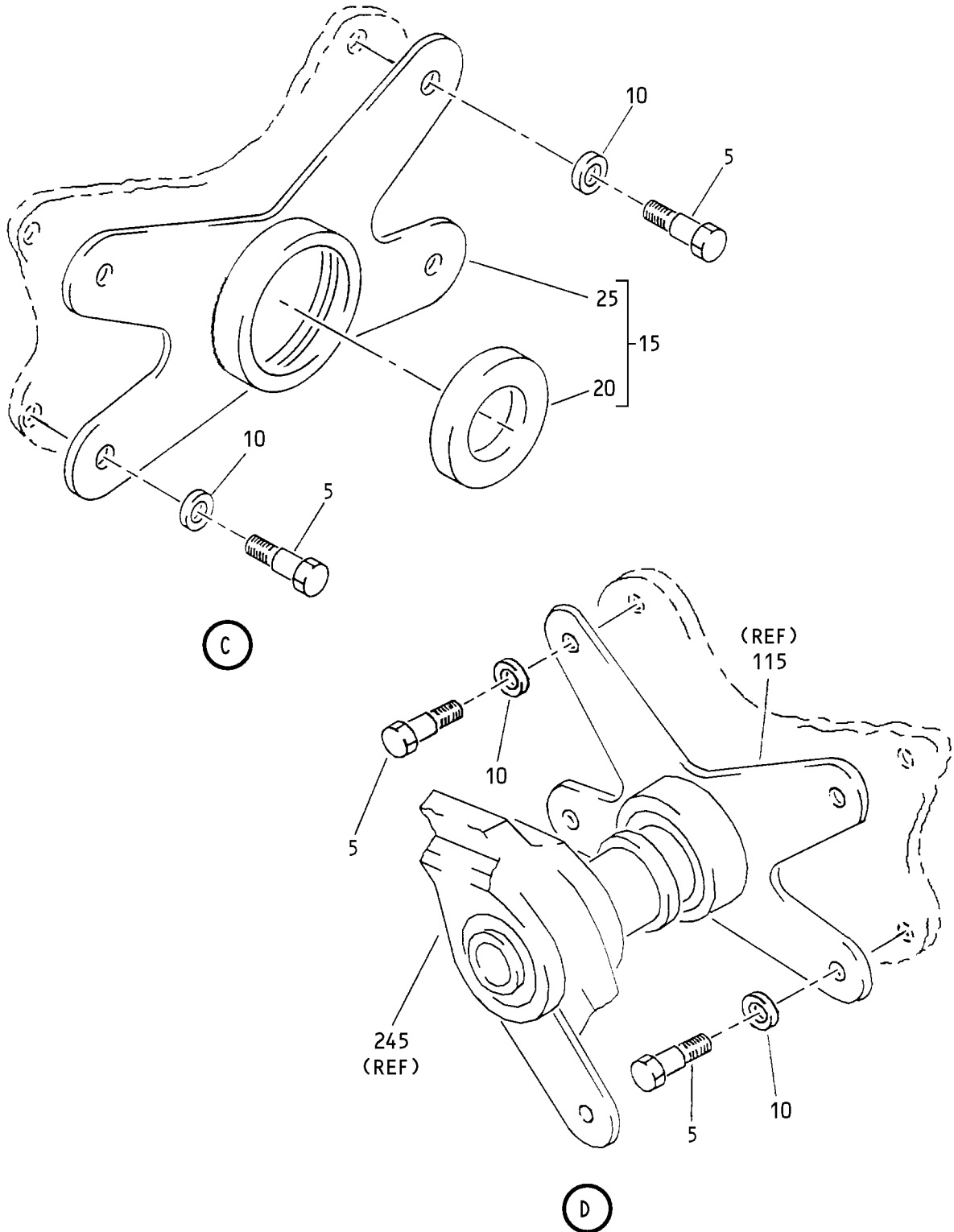
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Control Stand Thrust Lever Assembly
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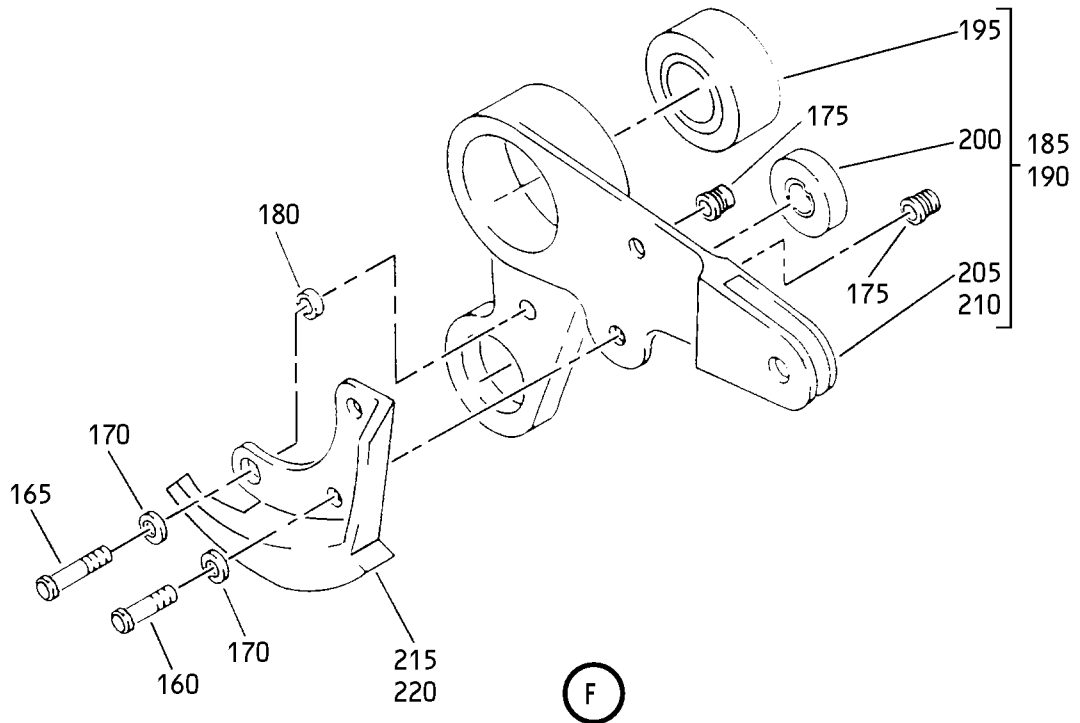
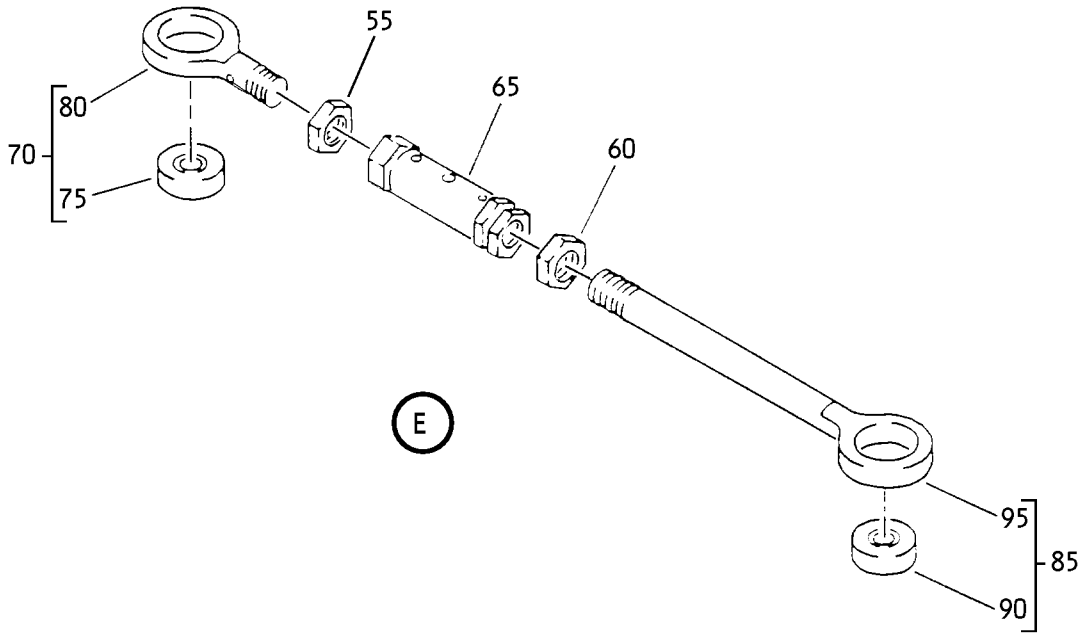
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Control Stand Thrust Lever Assembly
Figure 1 (Sheet 2)

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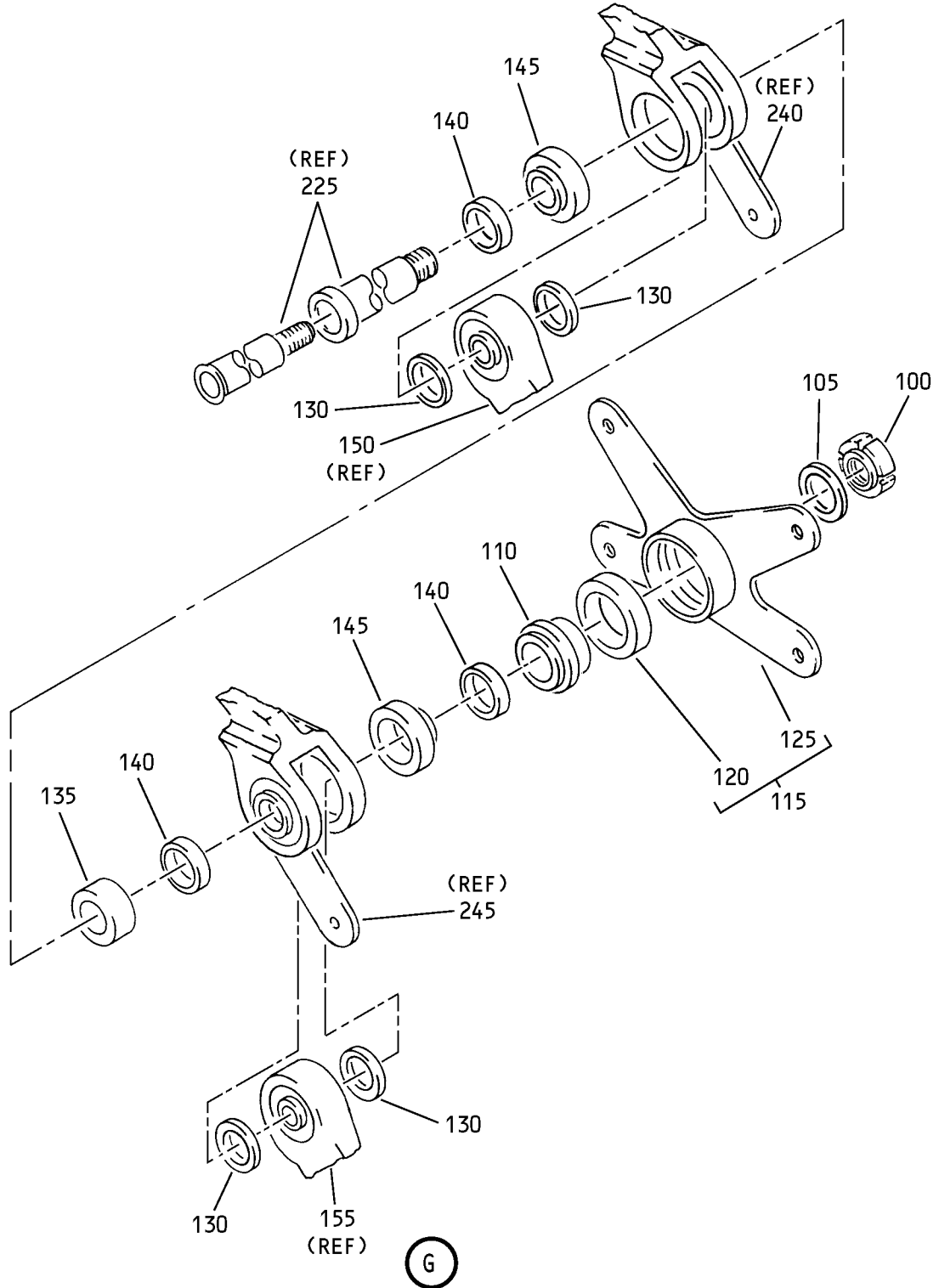
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Control Stand Thrust Lever Assembly
 Figure 1 (Sheet 3)

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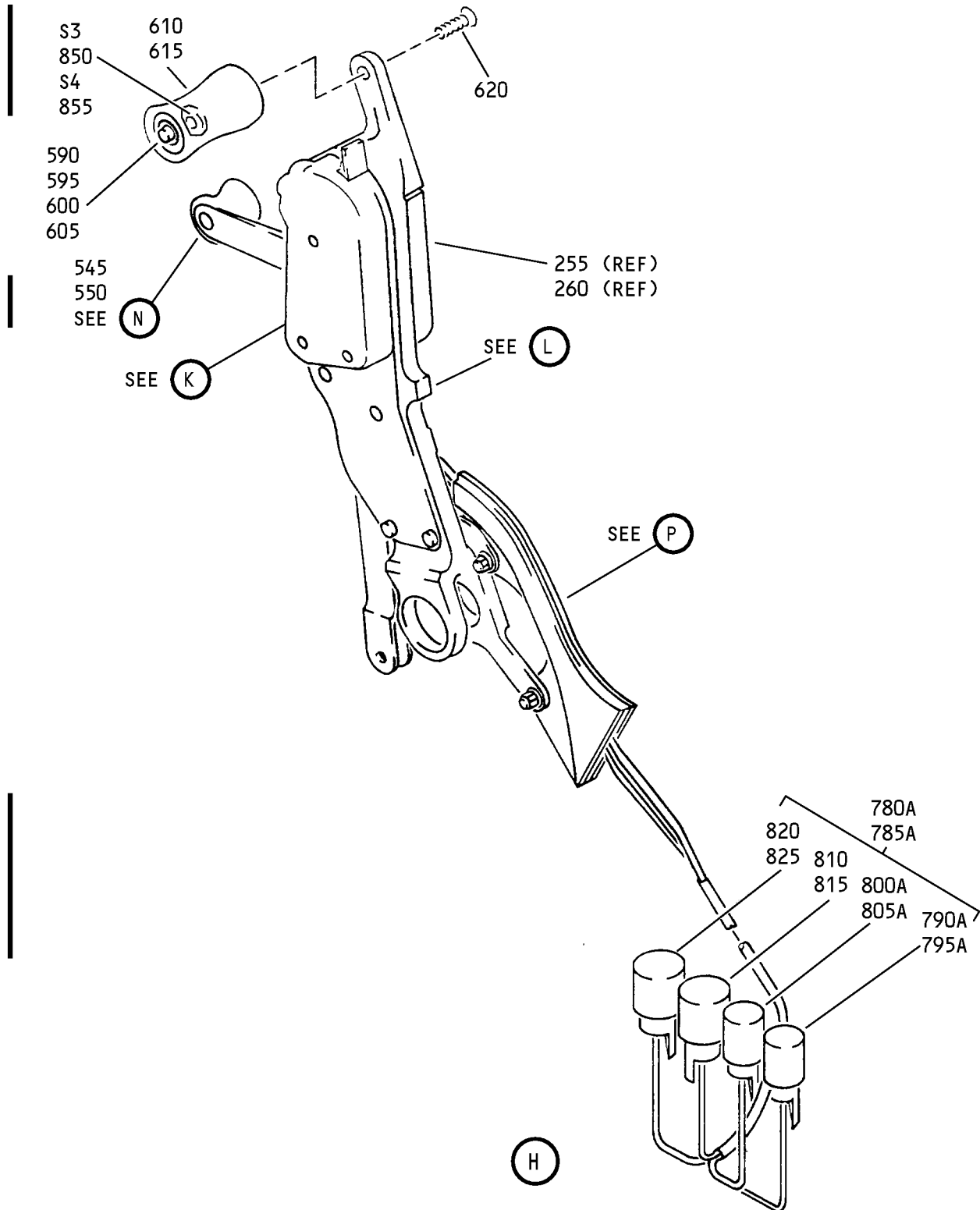
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Control Stand Thrust Lever Assembly
Figure 1 (Sheet 4)

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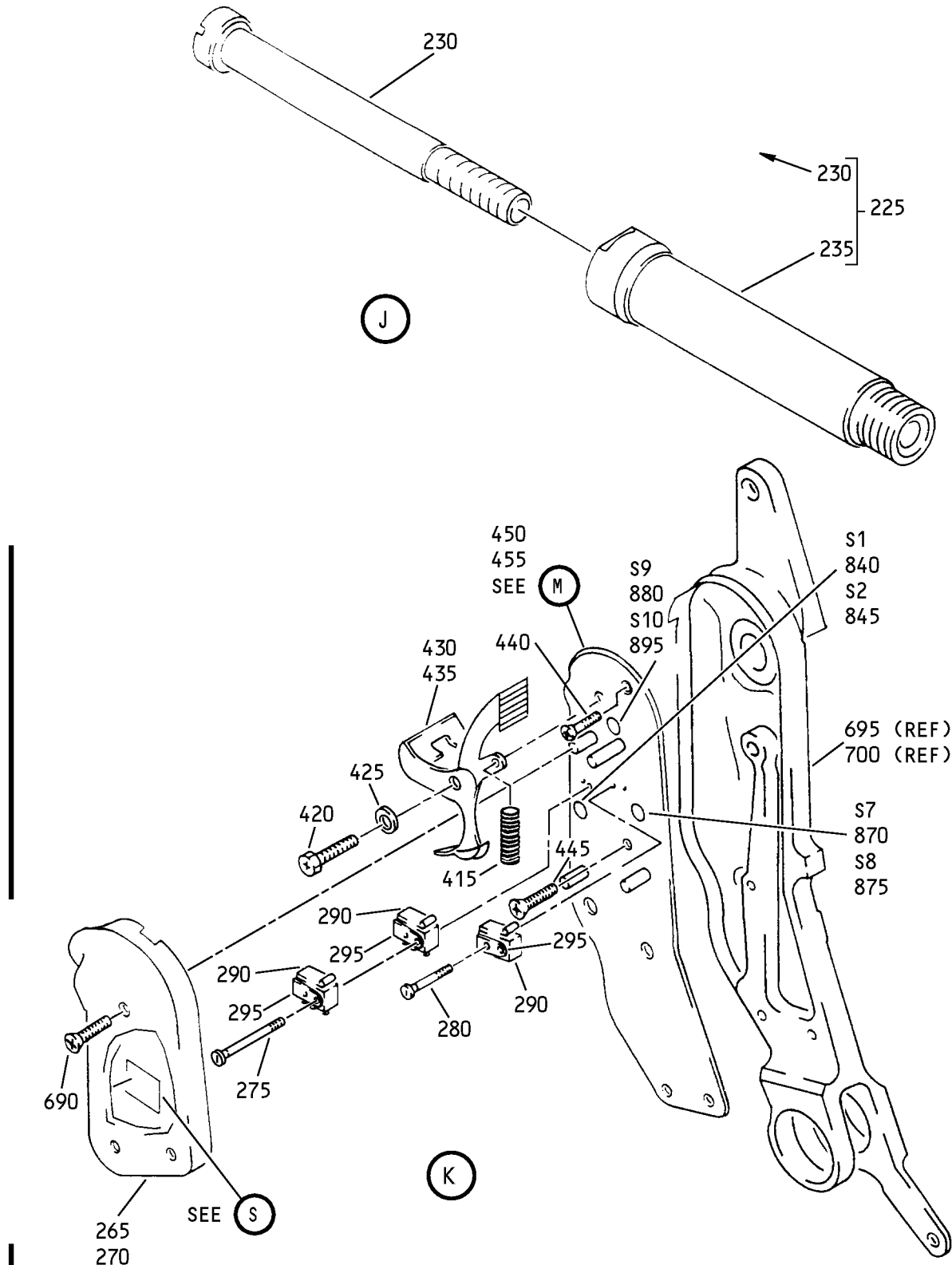
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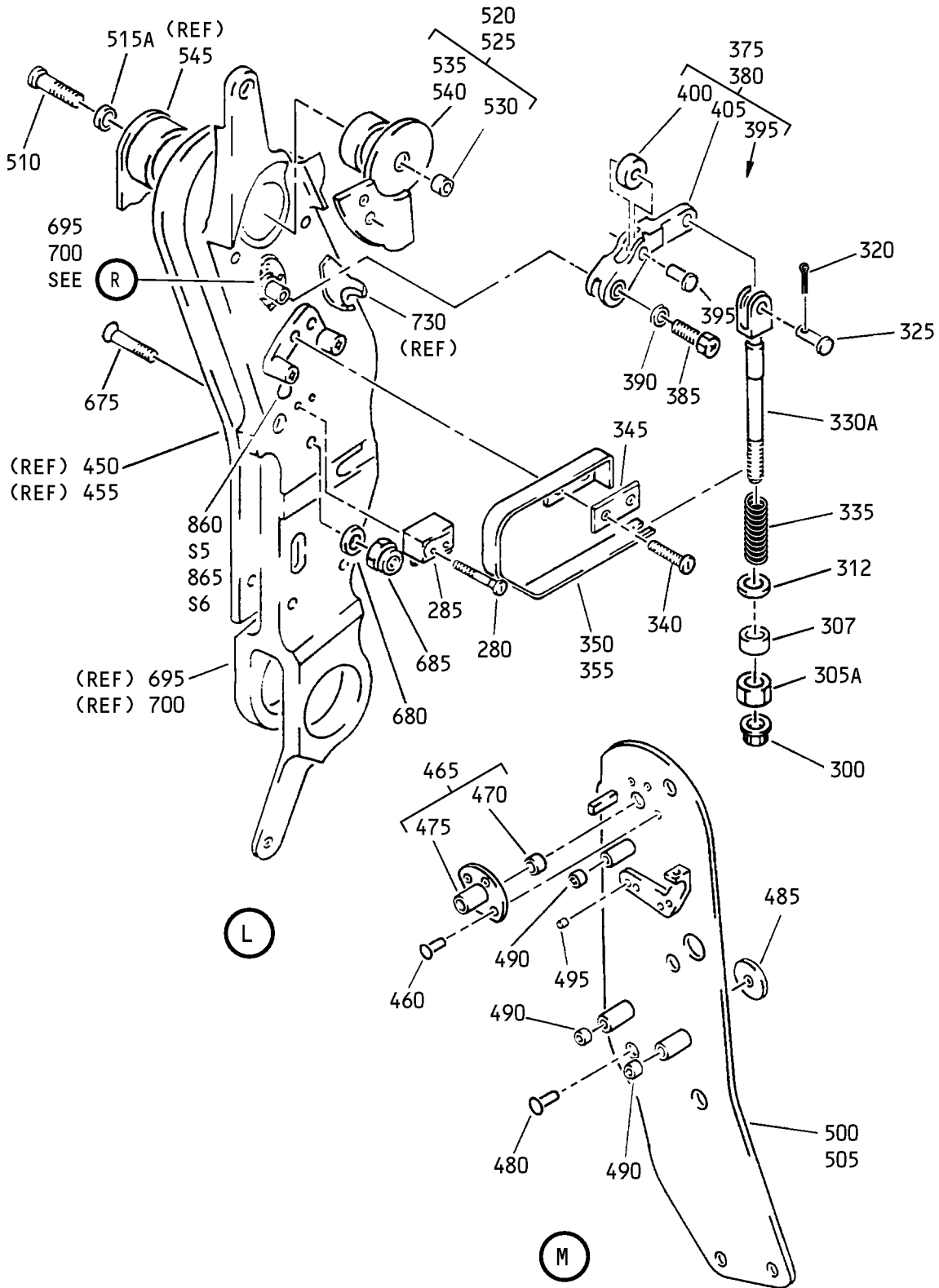


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Figure 1 (Sheet 6)

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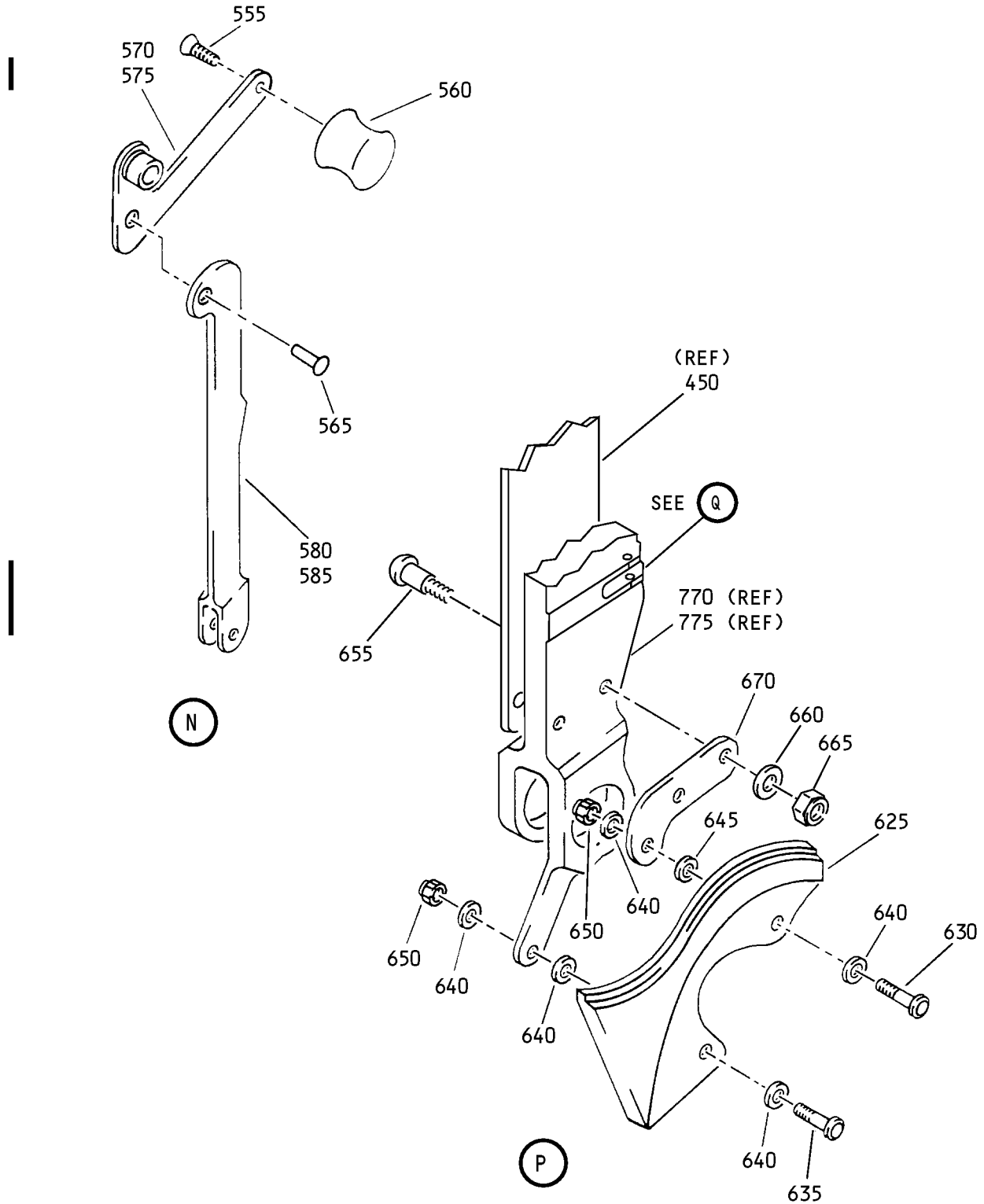
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Control Stand Thrust Lever Assembly
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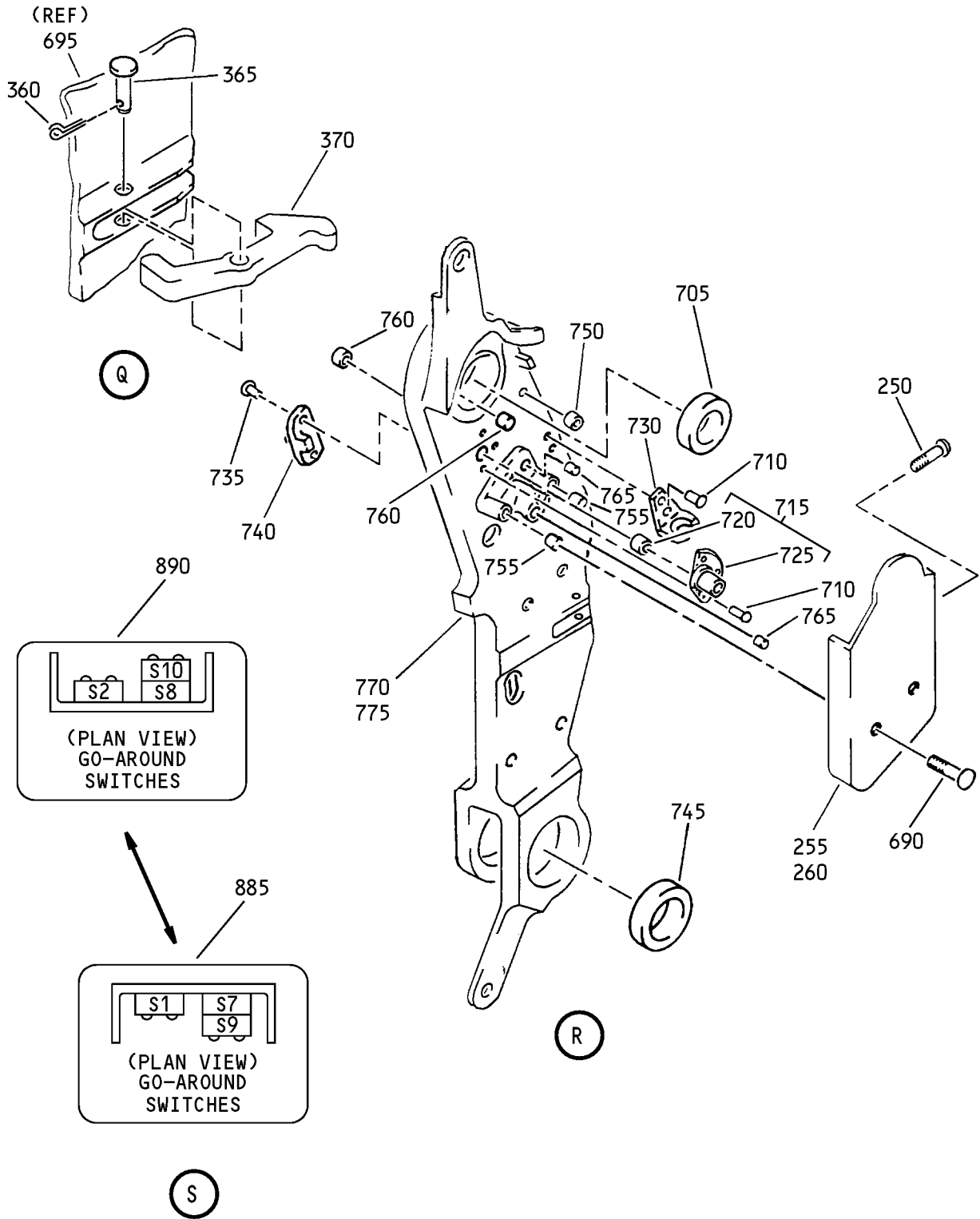
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Control Stand Thrust Lever Assembly
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Control Stand Thrust Lever Assembly
 Figure 1 (Sheet 9)

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -1A	254T2000-1SP		CONTROL ASSY-THRUST LEVER CONTROL STAND		RF
5	BACB30NR4K2		.BOLT		8
10	NAS1149D0432J		.WASHER		8
15	254W2016-1		.SUPPORT ASSY		1
20	Y010		..BEARING- (V40920) (SPEC 60B00179-100) (OPT LLKP16BS1 (V38443)) (OPT 10633 (V06144)) (OPT MKP16BS2E9881 (V21335)) (OPT MKP16BS2SD750 (V83086)) (OPT Y164 (V40920))		1
25	254W2016-2		..SUPPORT		1
30	254T2000-2		.PACK ASSY		1
35	BACB30LJ4-7		..BOLT		2
37	HL440UC8-7		..BOLT- (V56878) (SPEC BACB30FM8A7) (OPT HL440UC8-7 (V73197)) (OPT HL440UC8-7 (V92215)) (OPT HL440UC8-7 (V97928)) (OPT HL440UC8-7 (V80539)) (OPT WC130-8-7 (V60516)) (OPT 67067-8A7 (V56878)) (OPT HL440UC8-7 (V60516)) (OPT HL440UC8-7 (V08524))		2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
40	NAS1149D0432J		..WASHER		4
45	BACN10JC4CD		..NUT		4
50	253U5822-1		..ROD ASSY-PUSH		2
55	AN316-6R		...NUT-JAM		1
60	AN316-6L		...NUT-JAM		1
65	253U5844-1		...BARREL		1
70	253U5859-1		...END ASSY		1
75	KSP4ASD610		....BEARING- (V83086) (SPEC BACB10AC4A) (OPT HHKSP4A (V38443)) (OPT KSP4AE9440A (V21335)) (OPT KSP4AFS428 (V21335)) (OPT KSP4A2TS (V43991)) (OPT KSP4AG27 (V30163)) (OPT 4AFS428 (V21335))		1
80	253U5859-2		....END		1
85	253U5860-1		...END ASSY		1
90	KSP4ASD610	BEARING- (V83086) (SPEC BACB10AC4A) (OPT HHKSP4A (V38443)) (OPT KSP4AE9440A (V21335)) (OPT KSP4AFS428 (V21335)) (OPT KSP4A2TS (V43991)) (OPT KSP4AG27 (V30163)) (OPT 4AFS428 (V21335))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-95	253U5860-2		....END		1
100	SL2822-10		..NUT- (V97393) (SPEC BACN10RF10) (OPT 82631-1018 (V56878)) (OPT BR9080-10 (V72962))		1
105	NAS1149C1032R		..WASHER		1
110	254N1173-1		..SPACER		1
115	253T5829-1		..SUPPORT ASSY		1
120	Y010		...BEARING- (V40920) (SPEC 60B00179-100) (OPT LLKP16BS1 (V38443)) (OPT 10633 (V06144)) (OPT MKP16BS2E9881 (V21335)) (OPT MKP16BS2SD750 (V83086)) (OPT Y164 (V40920))		1
125	253T5829-2		...SUPPORT- (OPT ITEM 125A)		1
-125A	253T5829-3		...SUPPORT- (OPT ITEM 125)		1
130	253U5819-1		..SPACER		4

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
135	253U5819-4		..SPACER		1
140	253U5833-1		..SHIM		3
145	MB539DDSD610		..BEARING- (V83086) (SPEC BACB10AS12) (OPT LLMB539 (V38443)) (OPT MB539-2TS (V43991)) (OPT MB539DDFS428 (V21335)) (OPT MB539TT (V43991)) (OPT MB539DDG20 (V38443)) (OPT MT339E (VK8455)) (OPT MB539DDL196 (V40920)) (OPT MB539DD (V06144))		2
150	254W2018-1		..CRANK ASSY		1
155	254W2018-2		..CRANK ASSY		1
160	HST10AG6-5		...BOLT- (VOPTK6) (SPEC BACB30VT6K5) (OPT HST10AG6-5 (V06725)) (OPT HST10AG6-5 (V56878)) (OPT HST10AG6-5 (V73197))		2
165	HST10AG6-9		...BOLT- (VOPTK6) (SPEC BACB30VT6K9) (OPT HST10AG6-9 (V06725)) (OPT HST10AG6-9 (V56878)) (OPT HST10AG6-9 (V73197))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
170	NAS1149D0316J		...WASHER		3
175	HST79CY6		...COLLAR- (V73197) (SPEC BACC30BL6) (OPT HST79-6 (V92215)) (OPT HST79CY6 (V56878)) (OPT HST79CY6 (V5M902))		3
180	BACB28AK03-042		...BUSHING		1
185	253U5830-11		...CRANK ASSY- (USED ON ITEM 150)		1
190	253U5830-12		...CRANK ASSY- (USED ON ITEM 155)		1
195	B5539WZZFS428		....BEARING- (V27737)		1
200	MKSP4AFS428		....BEARING- (V27737)		1
205	253U5830-13		....CRANK- (USED ON ITEM 185)		1
210	253U5830-14		....CRANK- (USED ON ITEM 190)		1
215	254W2017-1		...CAM- (OPT ITEM 215A) (USED ON ITEM 150)		1
-215A	254W2017-3		...CAM- (OPT ITEM 215) (USED ON ITEM 150)		1
220	254W2017-2		...CAM- (OPT ITEM 220A) (USED ON ITEM 155)		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -220A	254W2017-4		...CAM- (OPT ITEM 220) (USED ON ITEM 155)		1
225	254W2013-1		..SHAFT ASSY		1
230	254W2013-2		...SHAFT-INNER		1
235	254W2013-3		...SHAFT-OUTER		1
240	254T2001-1		..LEVER ASSY-THRUST		1
245	254T2001-2		..LEVER ASSY-THRUST		1
250	NAS600-4P		...SCREW		1
255	254W2006-1SP		...COVER- (USED ON ITEM 240)		1
260	254W2006-2SP		...COVER- (USED ON ITEM 245)		1
265	254W2007-9		...COVER-SWITCH (USED ON ITEM 240)		1
270	254W2007-10		...COVER-SWITCH (USED ON ITEM 245)		1
275	BACS12BE02-9		...SCREW		2
280	BACS12BE02-6		...SCREW		4
285	MS24547-1		...SWITCH		1
290	1SX1H58		...SWITCH- (V91929)		3
295	JX45		...ACTUATOR-SWITCH (V91929)		3
300	H52732-04CD		...NUT- (V15653) (SPEC BACN10YR04CD) (OPT BH00312-04 (V27238))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
305	69-73217-5		DELETED		
305A	MS35649-244		...NUT		1
307	NAS43DD1-6FC		...SPACER		1
310	MS1209C0410		DELETED		
312	NAS1149CN416R		...WASHER		1
315	69-73217-6		DELETED		
320	BACP18BC01A02P		...PIN-COTTER		1
325	253U5834-1		...PIN		1
330	254W2010-1		DELETED		
330A	254W2010-2		...SUPPORT-FEEL SPR		1
335	253U5824-1		...SPRING		1
340	BACS12BE02-4		...SCREW		2
345	253U7314-1		...SPACER		1
350	254W2011-1		...SPRING-LEAF (USED ON ITEM 240)_		1
355	254W2011-2		...SPRING-LEAF (USED ON ITEM 245)		1
360	BACP18BC01A02P		...PIN-COTTER		1
365	BACP18BD1R15		...PIN-DRILLED SHANK		1
370	253U5831-1		...LATCH		1
375	254W2009-5		...ARM ASSY-FOLLOWER (USED ON ITEM 240)		1
380	254W2009-6		...ARM ASSY-FOLLOWER (USED ON ITEM 245) ATTACHING PARTS		1
385	NAS1801-04-3		...SCREW		1
390	NAS1149CN416R		...WASHER -----*-----		1
395	66-25941-1		....PIN		1
400	253U5828-2		....ROLLER-CAM		1
405	254W2009-7		....ARM- (USED ON ITEM 375)		1
-410	254W2009-8		....ARM- (USED ON ITEM 380)		1
415	MS24586C48		...SPRING		1
420	NAS1801-04-3		...SCREW		1
425	NAS1149CN416R		...WASHER		1
430	254T2011-1		...TRIGGER-TO GA SWITCHES (USED ON ITEM 240)		1
435	254T2011-2		...TRIGGER- (USED ON ITEM 245)		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
440	NAS514P832-9		...SCREW		1
445	NAS514P832-7		...SCREW		1
450	254W2005-9SP		...PLATE ASSY-SIDE (USED ON ITEM 240)		1
455	254W2005-10SP		...PLATE ASSY-SIDE (USED ON ITEM 245)		1
460	BACR15BA3AD		....RIVET- (SIZE DETERMINE ON INST)		3
465	253U5838-1		....SUPPORT ASSY-BELLCRANK		1
470	MS21209C0410		.....INSERT		1
475	253U5838-2		.....SUPPORT		1
480	BACR15BA5AD		....RIVET- (SIZE DETERMINE ON INST)		1
485	253U5813-2		....SPACER		1
490	MS21209C0420P		....INSERT		3
495	MS21209C0220P		....INSERT		4
500	254W2005-11SP		....PLATE- (USED ON ITEM 450)	D	1
505	254W2005-12SP		....PLATE- (USED ON ITEM 455)		1
510	HL440UC5-4		...BOLT- (V56878) (SPEC BACB30FM5A4) (OPT HL440UC5-4 (V73197)) (OPT HL440UC5-4 (V92215)) (OPT HL440UC5-4 (V97928)) (OPT HL440UC5-4 (V80539)) (OPT WC130-5-4 (V60516)) (OPT 67067-5A4 (V56878)) (OPT HL440UC5-4 (V60516)) (OPT HL440UC5-4 (V08524))		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
515	NAS1149CN949		DELETED		
515A	NAS1149CN949B		...WASHER		1
520	253U5856-1		...CAM ASSY- (USED ON ITEM 240)		1
525	253U5856-2		...CAM ASSY- (USED ON ITEM 245)		1
530	MS21209C0815		....INSERT		1
535	253U5856-3		....CAM- (USED ON ITEM 520)		1
540	253U5856-4		....CAM- (USED ON ITEM 525)		1
545	254W2014-1		...LEVER ASSY- (USED ON ITEM 240)		1
550	254W2014-2		...LEVER ASSY- (USED ON ITEM 245)		1
555	BACS12BP3BP8		....SCREW		1
560	65C14183-46		....KNOB		1
565	253U5810-1		....RIVET		1
570	254W2015-1		....LEVER- (USED ON ITEM 545)		1
575	254W2015-2		....LEVER- (USED ON ITEM 550)		1
580	253U5818-1		....LINK- (USED ON ITEM 545)		1
585	253U5818-2		....LINK- (USED ON ITEM 550)		1
590	MS16625-4086		...RING-SNAP		1
595	69-35353-3		...RETAINER		1
600	MS28775-114		...PACKING- (OPT ITEM 600A)		1
-600A	M834611-114		...PACKING- (OPT ITEM 600)		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-605	P8-4000003		...SWITCH- (V21649) (OPT ITEM 605A)		1
-605A	C2006		...SWITCH- (V81640) (OPT ITEM 605)		1
610	254W2012-1		...KNOB ASSY- (USED ON ITEM 240)		1
615	254W2012-2		...KNOB ASSY- (USED ON ITEM 245)		1
620	BACS12BP3P5		...SCREW -----*-----		1
625	253U5814-1		...SHIELD ASSY-WIRE ATTACHING PARTS		1
630	VL310AG5-5		...BOLT- (V06950) (SPEC BACB30VT5HK5) (OPT VL310AG5-5 (V9N513)) (OPT VL310AG5-5 (V97928))		1
635	VL310AG5-4		...BOLT- (V06950) (SPEC BACB30VT5HK4) (OPT VL310AG5-4 (V9N513)) (OPT VL310AG5-4 (V97928))		1
640	NAS1149DN816J		...WASHER		5
645	NAS43DD3-7FC		...SPACER		1
650	BACN10JC08CD		...NUT -----*-----		2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
655	NAS623-2-9		...SCREW		2
660	NAS1149DN816J		...WASHER		2
665	BACN10JC08CD		...NUT		2
670	253U5815-1		...SUPPORT		1
675	BACB30LU2-6		...BOLT		1
680	NAS1149DN816J		...WASHER		1
685	BACN10JC08CD		...NUT		1
690	BACS12GX04H5		...SCREW		5
695	254W2002-11SP		...BODY ASSY- (USED ON ITEM 240)		1
700	254W2002-12SP		...BODY- (USED ON ITEM 245)		1
705	254W2002-5		....BEARING		1
710	BACR15BA3AD		....RIVET- (SIZE DETERMINE ON INST)		5
715	253U5838-1		....SUPPORT ASSY-BELLCRANK		1
720	MS21209C0410		.....INSERT		1
725	253U5838-2		.....SUPPORT		1
730	254W2004-1		....PLATE-ANCHOR		1
735	BACR15BB3AD		....RIVET- (SIZE DETERMINE ON INST)		2
740	254W2003-1		....PLATE-STOP		1
745	MB539DDSD610		....BEARING- (V83086) (SPEC BACB10AS12) (OPT LLMB539 (V38443)) (OPT MB539-2TS (V43991)) (OPT MB539DDFS428 (V21335)) (OPT MB539TT (V43991)) (OPT MB539DDG20 (V38443)) (OPT MT339E (VK8455)) (OPT MB539DDL196 (V40920)) (OPT MB539DD (V06144))		1
750	MS21209C0415P		....INSERT		1
755	MS21209C0420P	INSERT		2
760	MS21209C0820P	INSERT		2
765	MS21209C0220P	INSERT		4

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-770	254W2002-13SP		....BODY- (USED ON ITEM 695)		1
775	254W2002-14SP		....BODY- (USED ON ITEM 700)		1
780	254W2001-3		DELETED		
780A	254T2001-3		...WIRE BUNDLE ASSY- (USED ON ITEM 240)		1
-785	254W2001-4		DELETED		
R -785A	254T2001-4		...WIRE BUNDLE ASSY- (USED ON ITEM 245)		1
790	BACC45FT8-2P6		DELETED		
R -790A	BACC45FT8-3P		....CONNECTOR- (USED ON ITEM 780)		1
-795	BACC45FT8-2P7		DELETED		
795A	BACC45FT8-3P8		....CONNECTOR- (USED ON ITEM 785)		1
800	BACC45FT8-2P		DELETED		
800A	BACC45FT8-3P6		....CONNECTOR- (USED ON ITEM 780)		1
-805	BACC45FT8-2P8		DELETED		
R -805A	BACC45FT8-3P7		....CONNECTOR- (USED ON ITEM 785)		1
810	BACC45FT10-5P		....CONNECTOR- (USED ON ITEM 780)		1
R -815	BACC45FT10-5P8		....CONNECTOR- (USED ON ITEM 785)		1
820	BACC45FT10-5P6		....CONNECTOR- (USED ON ITEM 780)		1
R -825	BACC45FT10-5P7	CONNECTOR- (USED ON ITEM 785)		1
-830	640024-1	PIN- (V00779) (OPT ITEM 830A)		6

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -830A	60789-2		....PIN- (V18342) (OPT ITEM 830)		6
-835	323912		....TERMINAL- (V00779) (SPEC BACT12AC43)		4
840	BAC27TCT0012		...DECAL-(S1) (USED ON ITEM 240)		1
845	BAC27TCT0013		...DECAL-(S2) (USED ON ITEM 245)		1
850	BAC27TCT0014		...DECAL-(S3) (USED ON ITEM 240)		1
855	BAC27TCT0015		...DECAL-(S4) (USED ON ITEM 245)		1
860	BAC27TCT0016		...DECAL-(S5) (USED ON ITEM 240)		1
865	BAC27TCT0017		...DECAL-(S6) (USED ON ITEM 245)		1
870	BAC27TCT0031		...DECAL-(S7) (USED ON ITEM 240)		1
R 875	BAC27TCT0032		...DECAL-(S8) (USED ON ITEM 245)		1
880	BAC27TCT0033		...DECAL-(S9) (USED ON ITEM 240)		1
885	BAC27TCT0156		...DECAL- GO AROUND SWITCH (USED ON ITEM 240)		1
890	BAC27TCT0157		...DECAL- GO AROUND SWITCH (USED ON ITEM 245)		1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE	EFF CODE	QTY PER ASSY
01-895	BAC27TCT0034		1234567 ...DECAL-(S10) (USED ON ITEM 245)		1

- Item Not Illustrated

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