TO: ALL HOLDERS OF ENTRY AND SERVICE DOOR COUNTERBALANCE ASSEMBLY COMPONENT MAINTENANCE MANUAL 52-11-64

REVISION NO. 1 DATED MAR 01/97

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
705	Edited without technical change.
1012	

BOEING

COMPONENT
MAINTENANCE MANUAL

ENTRY AND SERVICE DOOR COUNTERBALANCE ASSEMBLY

PART NUMBER 258T1190-6

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

G17773

REVISION RECORD

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

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

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

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

PAGE	DATE	CODE
52-11-64		
TITLE PAGE		
1	DEC 01/96	01
2	BLANK	
REVISION RECORD		
1	DEC 01/96	01
2	BLANK	
TR & SB RECORD		
1	DEC 01/96	01
2	BLANK	
LIST OF EFFECTIVE PAGES		
*1	MAR 01/97	01
THRU LAST PAGE		
CONTENTS		
1	DEC 01/96	01
2	BLANK	
INTRODUCTION		
1	DEC 01/96	01
2	BLANK	
DESCRIPTION & OPERATION		
1	DEC 01/96	01
2	BLANK	
TESTING & TROUBLE SHOOTING		
101	DEC 01/96	01
102	DEC 01/96	01
103	DEC 01/96	01
104	BLANK	
DISASSEMBLY		
301	DEC 01/96	01
302	DEC 01/96	01
303	DEC 01/96	01
304	BLANK	
CLEANING		
401	DEC 01/96	01
402	BLANK	
CHECK		
501	DEC 01/96	01
502	BLANK	
REPAIR-GENERAL		
601	DEC 01/96	01
602	DEC 01/96	01
603	DEC 01/96	01
604	BLANK	
REPAIR 1-1		
601	DEC 01/96	01
602	BLANK	
REPAIR 2-1		
601	DEC 01/96	01
602	BLANK	
REPAIR 3-1		
601	DEC 01/96	01
602	DEC 01/96	01
REPAIR 4-1		
601	DEC 01/96	01
602	BLANK	
REPAIR 5-1		
601	DEC 01/96	01
602	DEC 01/96	01
ASSEMBLY		
701	DEC 01/96	01
702	DEC 01/96	01
703	DEC 01/96	01
704	DEC 01/96	01
*705	MAR 01/97	01.1
706	DEC 01/96	01

* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
FITS AND CLEARANCES		
801	DEC 01/96	01
802	BLANK	
SPECIAL TOOLS		
901	DEC 01/96	01
902	BLANK	
ILLUSTRATED PARTS LIST		
1001	DEC 01/96	01
1002	DEC 01/96	01
1003	DEC 01/96	01
1004	DEC 01/96	01
1005	DEC 01/96	01
1006	DEC 01/96	01
1007	DEC 01/96	01
1008	DEC 01/96	01
1009	DEC 01/96	01
1010	DEC 01/96	01
1011	DEC 01/96	01
*1012	MAR 01/97	01.1
1013	DEC 01/96	01
1014	DEC 01/96	01
1015	DEC 01/96	01
1016	DEC 01/96	01
1017	DEC 01/96	01
1018	DEC 01/96	01
1019	DEC 01/96	01
1020	BLANK	

PAGE	DATE	CODE

* = REVISED, ADDED OR DELETED

TABLE OF CONTENTS

INTRODUCTION

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

This manual is divided into separate sections:

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

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

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

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

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

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

ENTRY AND SERVICE DOOR COUNTERBALANCE ASSEMBLY

DESCRIPTION AND OPERATION

1. Description and Operation

   A. The overhead passenger door counterbalance assembly is used to counter the weight of the door for easy door actuation. The counterbalance consists of a torque shaft assembly, a gearbox assembly, cable drum assembly, and a composite torsion spring. Prior to installation of the counterbalance assembly the torsion spring is preloaded by turning the gearbox assembly handwheel. The door is connected, via cable, to the counterbalance cable drum after installation of the counterbalance assembly.

   B. Energy stored in the torsion spring is used to operate the door. A small electric motor (not installed on all doors) is connected to the counterbalance cable drum and is used to raise and lower the door with the aid of the torsion springs.

2. Leading Particulars (approximate)

   Length -- 26 inches
   Height -- 20 inches
   Width -- 12 inches
   Weight -- 36 pounds

TESTING AND TROUBLE SHOOTING

1. Equipment

   A. Handscale -- 0-50 pounds

2. Functional Test (IPL Fig. 1)

   A. Mount counterbalance assembly on a workbench or restrain counterbalance assembly to resist a 15-pound force applied to the rim of the handwheel.

   WARNING: INJURY COULD RESULT TO PERSONNEL WORKING ON COUNTERBALANCE ASSEMBLY IF PAWL ON GEARBOX ASSEMBLY (95) IS NOT ENGAGED.

   CAUTION: DO NOT ROTATE HANDWHEEL WITH COUNTERBALANCE LOCK INSTALLED. EXCESSIVE ROTATION AND/OR FORCE APPLIED TO HANDWHEEL. COULD CAUSE DAMAGE TO COUNTERBALANCE ASSEMBLY.

   B. Remove lock A52003-1.

      (1) Grasp handwheel and slowly apply force ccw to release load on lock A52003-1. Remove lock A52003-1.

      WARNING: DO NOT RELEASE HANDWHEEL WITH PAWL DISENGAGED, OTHERWISE SPRING WILL UNWIND RAPIDLY AND DAMAGE TO UNIT OR INJURY TO PERSONNEL MAY RESULT. PAWL ON GEARBOX ASSEMBLY (95) MUST BE ENGAGED DURING THIS TEST.

      (2) Make sure pawl is engaged into ratchet on gearbox assembly (95). Slowly allow handwheel to rotate cw until pawl is engaged into ratchet, and handwheel does not rotate.

   C. Prior to performing this test the handwheel revolution counter must be indicating 50 turns. Otherwise obtain the reading as follows:

      (1) If the indication is less than 50, wind hand wheel ccw until indication of 50 is reached.

      (2) If the indication is greater than 50, grasp handwheel and gradually apply force ccw until load on pawl is removed. Disengage pawl and slowly rotate handwheel cw until the revolution counter indicates 50. Engage pawl and slowly allow handwheel to rotate cw until pawl is engaged into ratchet.

D. Using appropriate means, attach handscale to rim of handwheel (not a spoke) as shown in Fig. 101. Attachment must resist a 40 pound load. The radial distance (R), from the attachment point to the handwheel center, as shown in Fig. 101, should equal 5.0 inches. If radial distance does not equal 5.0 inches, record distance (R).

E. Slowly apply ccw tangential load to handwheel by pulling handscale. During load application, the line of force must remain perpendicular to a line from the handwheel center to the handscale attachment point (Fig. 101). Continue increasing load on handwheel until pawl is no longer in contact with notched area of ratchet. Record force reading (F) on handscale.

F. Slowly allow handwheel to rotate cw until pawl is engaged into notched area of ratchet.

G. Using recorded force reading from handscale, verify that the force on the handwheel (for R = 5.0 inches) is 15 ±2 pounds.

   If (R) does not equal 5.0 inches, multiply force times radial distance to calculate torque (FXR = T). Verify that the calculated torque is 75 ±10 pound-inches.

H. Remove handscale.

I. Install lock A52003-1.

   (1) Grasp handwheel and rotate counterclockwise until hole in cable drum and frame assembly line up.

   (2) Install lock A52003-1.

   (3) Slowly rotate handwheel clockwise until lock A52003-1 takes torque load.

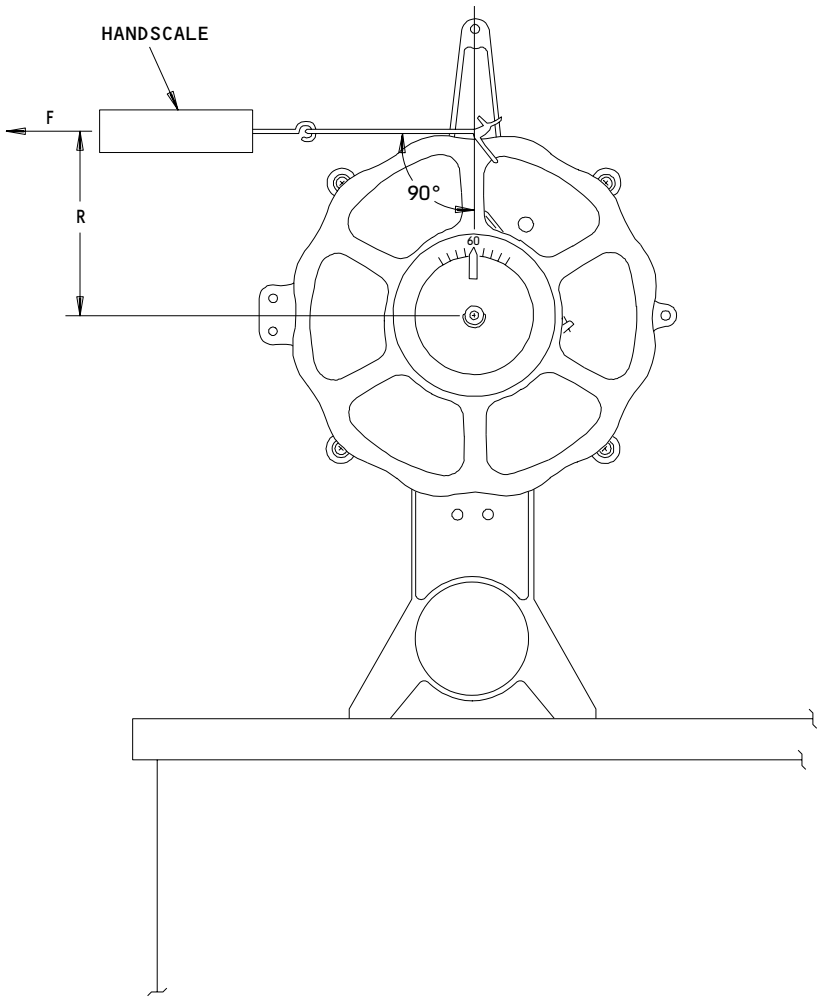
J. If unit fails the functional test:

   (1) Check unit for proper assembly.

   (2) Disassemble unit and check for damage and wear. Replace parts as necessary.

   (3) Check gearbox assembly (95) per CMM 52-11-71, if necessary.

   (4) Assemble unit and perform functional test.



Spring Torque Test
Figure 101

G17776

DISASSEMBLY

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

1. Equipment

   NOTE: Equivalent substitutes may be used.

   A. Counterbalance Lock -- A52003-1

2. Parts Replacement (IPL Fig. 1)

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

   A. Nuts (35, 70, 90, 110, 255, 285)

3. Disassembly (IPL Fig. 1)

   A. Release spring load.

      WARNING: THE SPRING IN THIS UNIT EXERTS A LARGE LOAD. DO NOT ATTEMPT TO DISASSEMBLE UNTIL LOAD HAS BEEN RELEASED, OR INJURY TO PERSONNEL MAY OCCUR.

      (1) Check revolution counter on handwheel of gearbox assembly (95) for load level of spring. A reading of approximately 50 indicates fully wound spring.

      (2) Secure counterbalance assembly.

      (3) Apply force to the handwheel of gearbox assembly (95) in the counterclockwise direction enough to relieve spring force on the lock A52003-1. Remove lock A52003-1.

WARNING: DISENGAGING PAWL WILL TRANSFER THE SPRING FORCE TO THE HANDWHEEL IN THE CLOCKWISE DIRECTION. WITH FULLY WOUND SPRING, THE FORCE ON THE HANDWHEEL IS APPROXIMATELY 15 POUNDS. DO NOT RELEASE HANDWHEEL OTHERWISE SPRING WILL UNWIND RAPIDLY AND DAMAGE TO UNIT OR INJURY TO PERSONNEL MAY RESULT.

(4) Apply force to the handwheel in the counterclockwise direction enough to relieve spring force on pawl. Release pawl. Do not release handwheel.

(5) Slowly rotate handwheel clockwise to release spring force until no spring force is felt on handwheel and revolution counter reads zero.

B. Remove gearbox assembly (95).

(1) Remove bolts (20, 25), washers (30), nuts (35) and retainers (40, 45).

(2) Remove bolt (50), washer (60), spacer (65), nut (70) and retainer (75).

(3) Remove bolts (5, 80), washers (10, 85), nuts (90).

(4) Remove bolts (20, 55), washers (30, 60) and nuts (35, 70) and separate from gearbox assembly (95).

NOTE: Refer to CMM 52-11-71 for overhaul procedures of gearbox assembly (95).

C. Remove bolt (5), washer (10) and tube (15).

D. Remove bolts (80), washers (85), nut (90) and tube (160) from frame assembly (170).

E. Remove bolts (80), washers (85), nuts (90) and fitting (125) from tube (160).

NOTE: Do not remove marker (380) unless necessary for repair or replacement.

F. Restrain torque shaft assembly (315) and remove nut (385) and frame assembly (170) from torque shaft assembly.

G. Remove screws (185), washers (190), retainer (195) and bearing (200) from frame assembly (170).

H. Remove cable guard assembly (145) from frame assembly (170).

I. Remove bolts (210), washers (215) and separate drum assembly (205) from torque shaft assembly (315).

NOTE: Do not remove bearing (220) unless necessary for repair or replacement.

J. Remove bolts (100, 245, 270), washers (105, 250, 275), spacer (280), nut (110, 255, 285), retainers (115, 118, 260, 290) and spring (295).

K. Remove bolts (245), washers (250), nuts (255) and separate guard assembly (300) and torque shaft assembly (315).

NOTE: Do not disassemble guard assembly or torque shaft assembly unless necessary for repair or replacement.

CLEANING

1. Clean all parts except bearings using standard industry practices (Ref 20-30-03).

2. Clean teflon-sealed bearings (200, IPL Fig. 1) per manufacturer's instructions.

CHECK

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

2. Penetrant check per 20-20-02 -- supports (305), fitting (125, 350), tube (160), frame (180), drum (240).

REPAIR - GENERAL

1. Content

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

P/N	NAME	REPAIR
258T1143	DRUM	1-1
258T1170	GUARD, SPRING	2-1
258T1172	SHAFT, TORQUE	3-1
258T1173	CARRIER, SPRING	4-1
- - -	MISC PARTS REFINISH	5-1

2. Standard Practices

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

   20-30-02 Stripping of Protective Finishes
   20-30-03 General Cleaning Procedures
   20-41-01 Decoding Table for Boeing Finish Codes
   20-41-02 Application of Chemical and Solvent Resistant Finishes
   20-43-01 Chromic Acid Anodizing
   20-44-01 Application of Abrasion Resistant Finishes
   20-50-03 Bearing Removal, Installation, and Retention
   20-50-05 Application of Aluminum Foil and Other Markers

3. Materials

   NOTE: Equivalent substitutes may be used.

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

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

   C. Enamel -- BMS 10-11, type 2, color gray (BAC707) (Ref 20-60-02)

D. Teflon-filled Coating -- BMS 10-86, type 1, color gray (Ref 20-60-02)

E. Static Conditioner -- Dexter 28-C-1 (Ref 20-60-02)

F. Surfacer -- Dexter 8-W-5 (Ref 20-60-02)

G. Nylon Coating -- Type 49 (Ref 20-60-02)

H. Grease -- MIL-G-23827

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

EXAMPLES

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

NOTE: DATUM MAY APPEAR AT EITHER SIDE OF TOLERANCE FRAME [0.020 | A] [A | 0.020]

True Position Dimensioning Symbols
Figure 601

G17779

DRUM ASSEMBLY - REPAIR 1-1

258T1143-7

NOTE: Refer to REPAIR-GENERAL for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction.

1. Bearing Replacement (IPL Fig. 1)

   A. Remove bearing (220).

   B. Install bearing per 20-50-03 using wet primer per 20-41-02. Press bearing flush to 0.010 inch below surface of boss in shallow side of drum interior.

2. Refinish

   A. Drum (240) -- Anodize (F-17.05) all over and apply 1 coat of primer (F-20.02) all over per 20-41-02 except in bore for bearing. Material: Al alloy.

SPRING GUARD ASSEMBLY - REPAIR 2-1

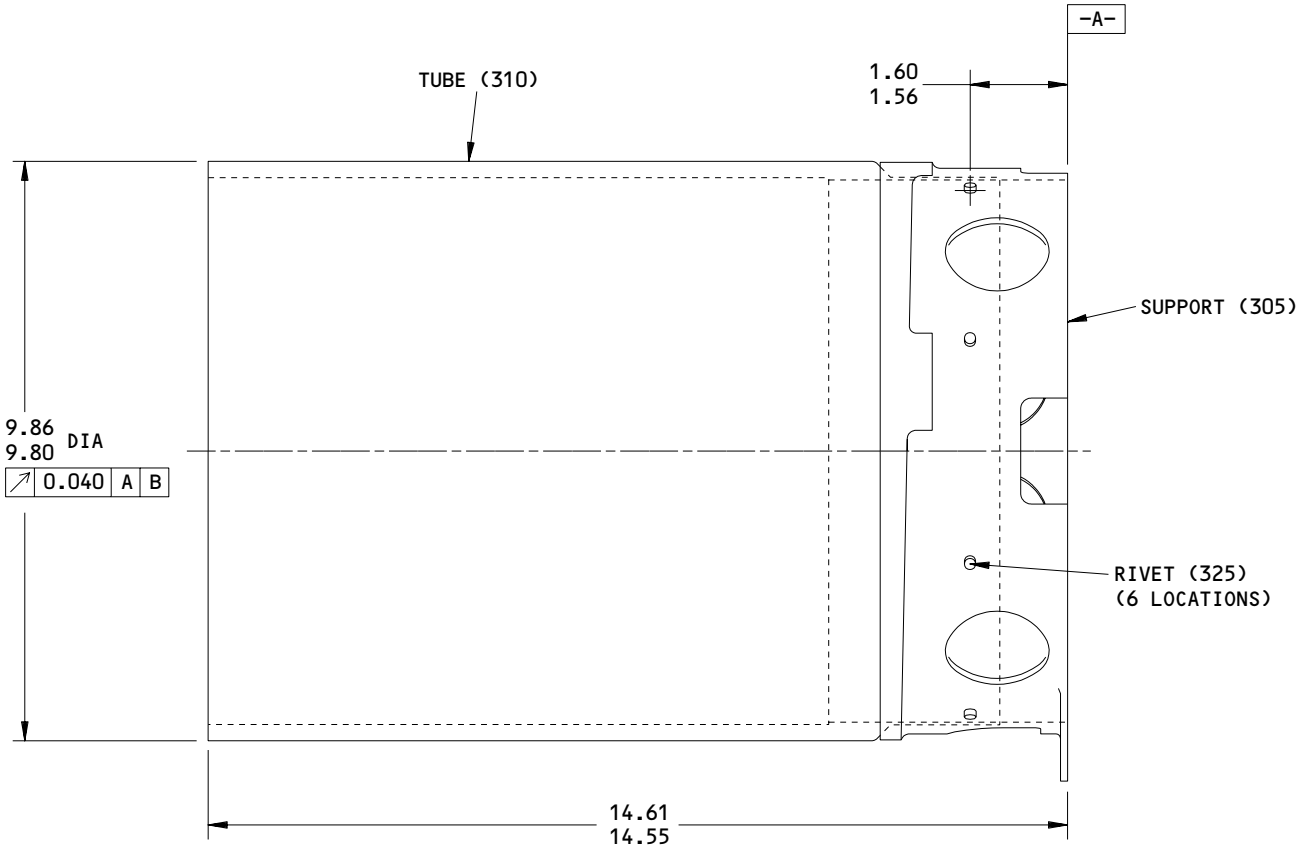
258T1170-3

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

1. Parts Replacement (Fig. 601)

   A. Remove rivets and damaged parts.

   B. Assemble replacement parts, maintain geometric position shown and secure with rivets. Squeeze rivets only.



ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Parts Replacement
Figure 601

G17990

TORQUE SHAFT ASSEMBLY - REPAIR 3-1

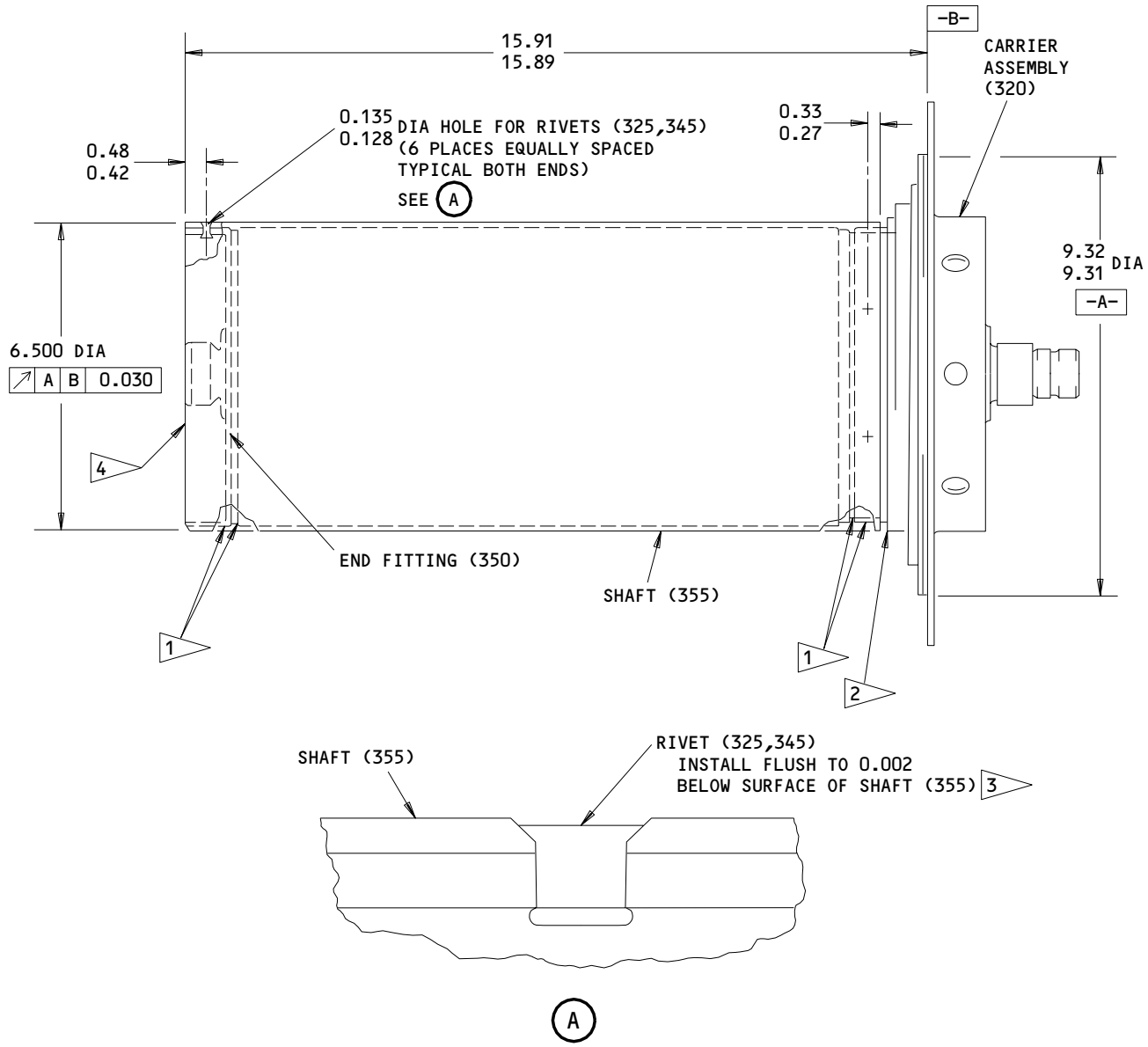
258T1172-1

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

1. Parts Replacement (Fig. 601)

   A. Remove rivets (345) and damaged parts.

   B. Assemble replacement parts, maintain geometric position shown and secure with rivets.



1 APPLY SEALANT BMS 5-95 TO FAYING SURFACES

2 SEAL VOID WITH SEALANT BMS 5-95 FLUSH WITH SURFACE

3 TOUCH UP RIVET HEAD WITH 1 COAT OF PRIMER (F-20.02) AND ENAMEL (F-21.02)

4 SURFACES OF END FITTING (350) AND SHAFT (355) TO BE FLUSH WITHIN 0.01

ALL DIMENSIONS ARE IN INCHES

ITEM NUMBERS REFER TO IPL FIG. 1

Parts Replacement
Figure 601

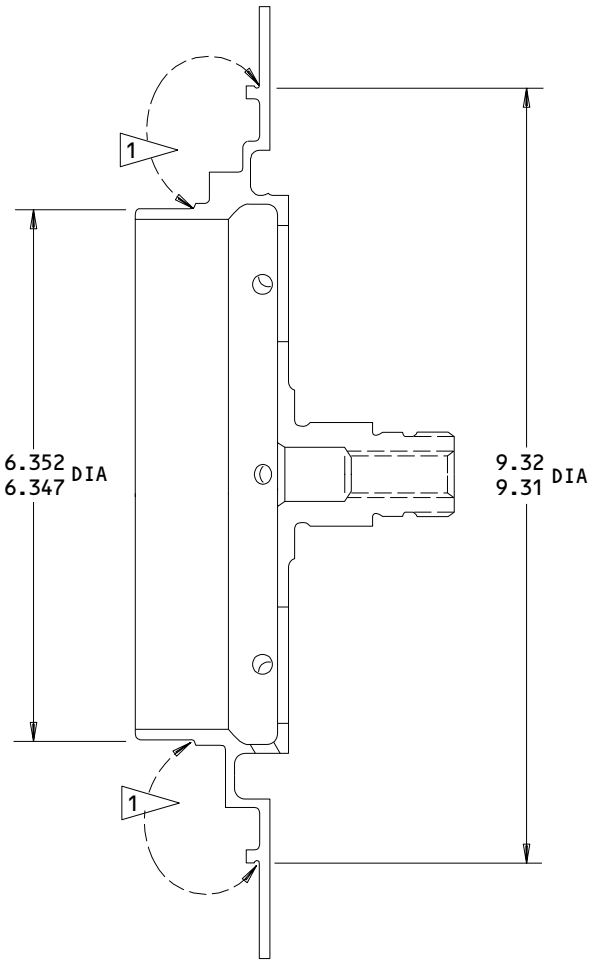
G17780

SPRING CARRIER - REPAIR 4-1

258T1173-1

1. Plating Repair

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



REFINISH

ANODIZE (F-17.05) AND APPLY 1 COAT OF PRIMER (F-20.02) ALL OVER EXCEPT OMIT PRIMER ON THREADS

MATERIAL: AL ALLOY

ALL DIMENSIONS ARE IN INCHES

1 APPLY 1 COAT OF ENAMEL (F-21.02) TO THIS SURFACE

Carrier Refinish
Figure 601

G17781

MISCELLANEOUS PARTS REFINISH - REPAIR 5-1

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

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1		
Tube (15)	Al alloy	Chemical treat (colored film) and apply 1 coat of primer (F-18.07) all over. Apply BMS 3-23 (F-19.26) on all interior surfaces.
Retainers (40,75, 115,260,290)	Al alloy	Chromic acid anodize and apply 1 coat primer (F-18.13) all over. Apply 1 coat of enamel, BMS 10-11, Type 2 color BAC707 gray (F-21.02) all over.
Retainers (45,195, 118)	Al alloy	Chemical treat (colored film) and apply 1 coat of primer (F-18.06) all over.
Support (305)	Al alloy	Anodize (F-17.05) and apply 1 coat of primer (F-20.02) BMS 10,11, Type 1.
Fitting (125)	Al alloy	Anodize (F-18.04). Apply 1 coat of primer (F-20.02) all over except omit primer in 3-inch ID.
Guard (155)	Al alloy	Chromic acid anodize (F-17.04) all over. Apply 1 coat of primer (F-20.02) all over except in 0.25-inch ID.
Tube (160)	Al alloy	Chromic acid anodize (F-17.04) and apply 1 coat of primer (F-20.02) all over.

Refinish Details
Figure 601 (Sheet 1)

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1 (Cont)		
Frame (180)	Al alloy	Anodize (F-17.05) all over. Apply one coat of primer (F-20.02) all over except in bore for bearing.
Tube (310)	Nomex honeycomb	Prepare surface and apply one coat BMS 10-103 (F-14.672). Apply coating BMS 10-86, Type 1, color gray (SRF-14.9625) on exterior surface only.
Carrier (340)	Al alloy	Anodize (F-17.05) and apply one coat of primer (F-20.02) all over except 6.352 dia. and internal splines.
Fitting (350)	Al alloy	Chromic acid anodize and apply one coat of primer (F-18.13) all over except omit primer on splines.
Shaft (355)	Titanium	Coat OD with thermoclad duralon nylon coating per 20-44-01 type 49. Do not coat ID.

Refinish Details
Figure 601 (Sheet 2)

ASSEMBLY

1. Material and Equipment

NOTE: Equivalent substitutes may be used.

A. Counterbalance lock -- A52003-1

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

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

2. Assembly (IPL Fig. 1)

NOTE: Refer to CMM 52-11-71 for assembly procedures of gearbox assembly (95).

A. Predrill fastener holes in gearbox assembly (95), fitting (125), frame assembly (170) and tube (160).

NOTE: Perform this procedure only when gearbox assembly, fitting, frame assembly, or tube is replaced.

(1) Install fitting (125) on tube (160) and insert tube (160) thru gearbox assembly (95). Position gearbox assembly and fitting as shown in Fig. 701 with end of tube flush with gearbox assembly. Hold gearbox assembly, fitting and tube in fixed position.

(2) Install tube (15) and secure to gearbox assembly (95) with bolt (5) and washer (10). Slide frame assembly (170) on tube (160) until it comes in contact with tube (15). Adjust frame assembly as required to obtain dimension shown in Fig. 701 and secure frame assembly to tube (15) with bolt (5) and washer (10). Hold frame assembly in fixed position.

(3) Drill 0.250-0.254-inch diameter holes five places thru gearbox assembly (95) and tube (160) and six places each thru fitting (125), frame assembly (170) and tube (160). Remove bolts (5), washers (10), tube (15), frame assembly (170). Break sharp edges of hole 0.008R.

B. Assemble gearbox assembly (95), fitting (125) and tube (160) and secure with bolts (80), washers (85) and nuts (90). Electrically bond fitting to tube per 20-11-03 at fastener location shown.

C. Install markers (380) on tube (160) at location shown, if required, per 20-50-05.

D. Install nameplate (375) on tube (160).

(1) Steel stamp the assembly dash number, the serial number, the inner spring serial number and the outer spring serial number on the nameplate if necessary.

(2) Use straps (360) to attach the nameplate to the tube as shown in Fig. 702.

NOTE: Nameplate straps may be only used once. Do not reuse existing straps when installing new nameplate or reinstalling existing nameplate.

E. Install support assembly (120) on gearbox assembly (95) and secure with bolts (20, 55), washers (30, 60) and nuts (35, 70).

F. Install bearing (200) on frame assembly (170) with BMS 3-24 grease per 20-50-03. Install retainer (195) and secure with screws (185) and washers (190). Install guard assemblies (145), washers (275) and nuts (285) on frame assembly.

G. Install drum assembly (205) on torque shaft assembly (315) and secure with bolts (210) and washers (215).

H. Install spring (295) on torque shaft assembly (315) with end of spring seated in the notch of torque shaft assembly and secure with retainer (260). Secure retainer with bolts (245), washers (250) and nuts (255).

I. Install spring guard assembly (300) over torque shaft assembly (315) and secure with bolts (245), washers (250) and nuts (255).

J. Position retainers (115, 118, 290) on spring guard assembly (300) and secure with bolts (100, 270), washers (105, 275), spacer (280) and nuts (110, 285) to retain spring (295).

K. Install torque shaft assembly (315) with attached parts on frame assembly (170) and install nut (165). Restrain torque shaft assembly and tighten nut to 500-700 pound-inches. If nut running torque exceeds 500-700 pound-inches, tighten nut 200-400 pound-inches above nut running torque. Apply MIL-G-23827 grease to internal splines of torque shaft assembly (315).

L. Rotate handwheel on gearbox assembly (95) until pointer reads "0". Slide frame assembly (170) with attached parts on tube until torque shaft assembly (315) mates with gearbox assembly.

M. Attach spring (295) to gearbox assembly (95) with retainers (40, 45, 75) and secure retainers with bolts (20, 25, 50), washers (30, 60) spacer (65) and nuts (35, 70).

N. Install tube (15) and secure with bolts (5), washers (10). Secure frame assembly (170) to tube (160) with bolts (80), washers (85) and nuts (90). Electrically bond frame assembly to tube at fastener location shown.

O. Wind up counterbalance.

(1) Check that spring (295) is retained at two clip locations (75, 290).

WARNING: SPRING (295) IS HEAVILY LOADED. SHAFT ASSEMBLY (315) AND FRAME ASSEMBLY MUST BE SECURED IN A FIXED POSITION AND PAWL IN GEARBOX ASSEMBLY (95) MUST BE ENGAGED TO PREVENT INJURY TO PERSONNEL DURING HANDLING.

(2) With pawl engaged, start rotating handwheel on gearbox assembly (95).

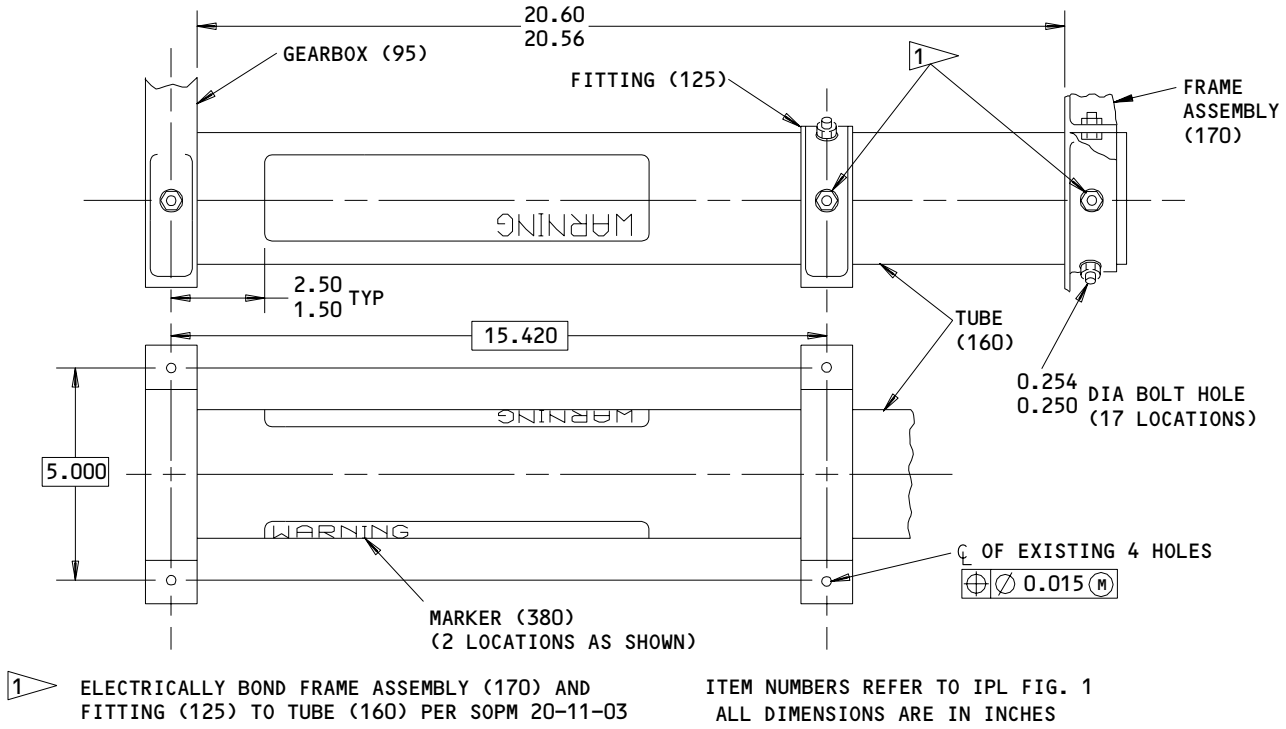
(3) Rotate handwheel on gearbox assembly (95) until the pointer reads "11". Check that spring (295) is seating in groove of retainers (75, 290).

(4) With pawl on gearbox assembly (95) in engaged position, rotate handwheel until pointer reads 50 and install lock A52003-1 through rig pin in frame assembly (170) and drum assembly (205).

P. Test unit per TESTING AND TROUBLE SHOOTING. If unit fails functional test, check unit for proper assembly.

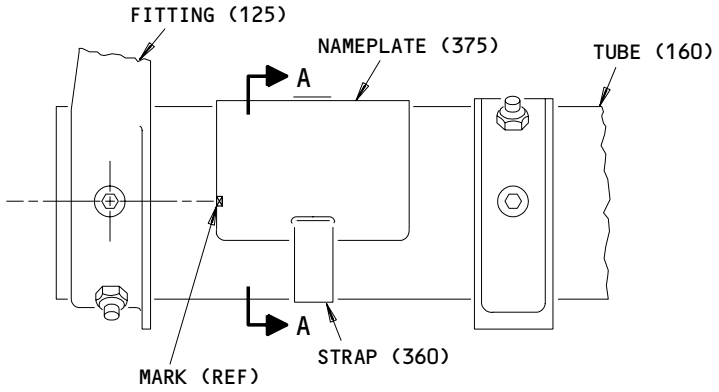
WARNING: SPRING (295) IS HEAVILY LOADED AFTER UNIT IS WOUND. MAKE SURE PAWL IN GEARBOX ASSEMBLY (95) IS ENGAGED TO PREVENT SERIOUS INJURY TO PERSONNEL.

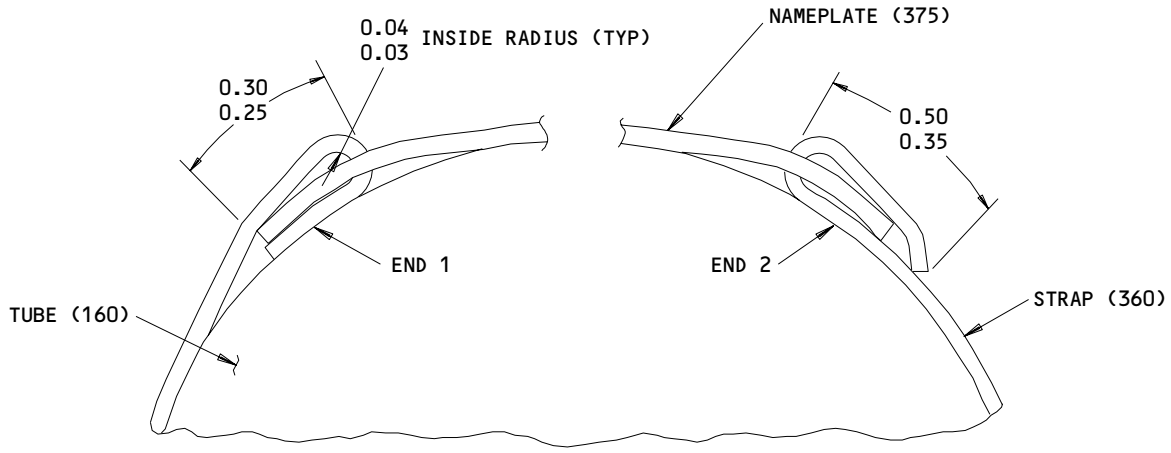
Q. Secure lock A52003-1 with lockwire or tape so it will not come loose during shipment.



Installation of Support Tube
Figure 701

G17783





A-A

NOTE: STRAP MAY BE USED ONLY ONCE. DO NOT RE-USE EXISTING STRAP WHEN INSTALLING NEW NAMEPLATE OR WHEN REINSTALLING EXISTING NAMEPLATE. STRAP AND NAMEPLATE SHALL BE SNUG ON MOUNTING SURFACE.

1. FORM NAMEPLATE TO A RADIUS SLIGHTLY SMALLER THAN BARREL RADIUS.
2 DEFORM CORNERS OF NAMEPLATE SLIGHTLY TOWARDS MOUNTING SURFACE.
3. FORM BEND ON STRAP END 1, INSERT THRU HOLE IN NAMEPLATE AND FORM STRAP END TO COMPLY WITH DRAWING.
4. HOLD NAMEPLATE ON BARREL AND FEED STRAP THRU HOLE.
5. SLIGHTLY BEND STRAP END 2 WHILE APPLYING SUFFICIENT PULLING FORCE TO OBTAIN PRETENSION OF NAMEPLATE AND STRAP.
6. ALIGN THE MARK ON THE NAMEPLATE WITH THE CENTERLINE OF THE BOLT WITHIN -0.10/+0.10 INCHES.
7. CUT STRAP END 2 TO CONFORM TO DIMENSION SHOWN.
8. WHILE MAINTAINING THE PRETENSION, USE SUITABLE TOOL TO MAKE FINAL BEND OF STRAP END 2 AND TO OBTAIN ADDITIONAL TENSION. USE CARE NOT TO TEAR NAMEPLATE HOLE BY OVERTENSION.
9. BEND STRAP END 2 DOWN OVER EDGE OF NAMEPLATE AND TAP WITH SUITABLE SOFT NOSED HAMMER.

ALL DIMENSIONS ARE IN INCHES

BAC27TCT0417 NAMEPLATE
69B80300-9 STRAP

Nameplate Installation
Figure 702

G17785

3. Storage

WARNING: SPRING (295) IS HEAVILY LOADED AFTER ASSEMBLY. LOCK A52003-1 MUST BE INSTALLED AND PAWL IN GEARBOX ASSEMBLY (95) MUST BE ENGAGED TO PREVENT INJURY TO PERSONNEL DURING HANDLING.

A. Tape or lockwire lock A52003-1 in place and check that pawl in gearbox assembly (95) is engaged to ensure personnel safety during handling.

B. Use standard industry practices to store this component.

FITS AND CLEARANCES

1. Tighten nut (165) to 500-700 lb-in. If nut running torque exceeds 500-700 lb-in., tighten nut 200-400 lb-in. above nut running torque.

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

NOTE: Equivalent substitutes may be used.

1. Counterbalance Lock -- A52003-1

2. Handscale -- 0-50 pounds

ILLUSTRATED PARTS LIST

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

2. Indentures show parts relationships as follows:

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

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

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

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

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

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

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

6. Parts Interchangeability

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

VENDORS

0PTK6 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
5195 W 4700 SPO BOX 18459
KEARNS, UTAH 84118

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

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

08524 DEUTSCH FASTENER CORP SEE CODE V97928

10396 HERCULES INC AEROSPACE DIV BACCHUS WORKS
PO BOX 98
MAGNA, UTAH 84044

11815 CHERRY AEROSPACE FASTENERS DIV OF TEXTRON
1224 EAST WARNER AVENUE PO BOX 2157
SANTA ANA, CALIFORNIA 92707-0157

15653 KAYNAR TECHNOLOGY KAYNAR DIV
800 SOUTH STATE COLLEGE BLVD PO BOX 3001
FULLERTON, CALIFORNIA 92634-3001

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

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

40920 MPB MINIATURE PRECISION BEARING DIV
PRECISION PARK PO BOX 547
KEENE, NEW HAMPSHIRE 03431

43991 FAG BEARING INCORPORATED
118 HAMILTON AVENUE
STAMFORD, CONNECTICUT 06904

VENDORS

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

52828 REPUBLIC FASTENER MFG CORP
1300 RANCHO CONEJO BLVD
NEWBURY PARK, CALIFORNIA 91320-1405

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

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

62554 SIMMONDS MECAERO FASTENERS INC
1734 SEQUOIA AVENUE
ORANGE, CALIFORNIA 92668

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

73134 IMO INDUSTRIES INC HEIM BEARINGS DIV
60 ROUND HILL ROAD PO BOX 430
FAIRFIELD, CONNECTICUT 06430

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

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

92215 FAIRCHILD IND INC FAIRCHILD AEROSP FASTNR DIV DESIGN & ENGRG
3000 WEST LOMITA BLVD
TORRANCE, CALIFORNIA 90505-5102

VENDORS

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

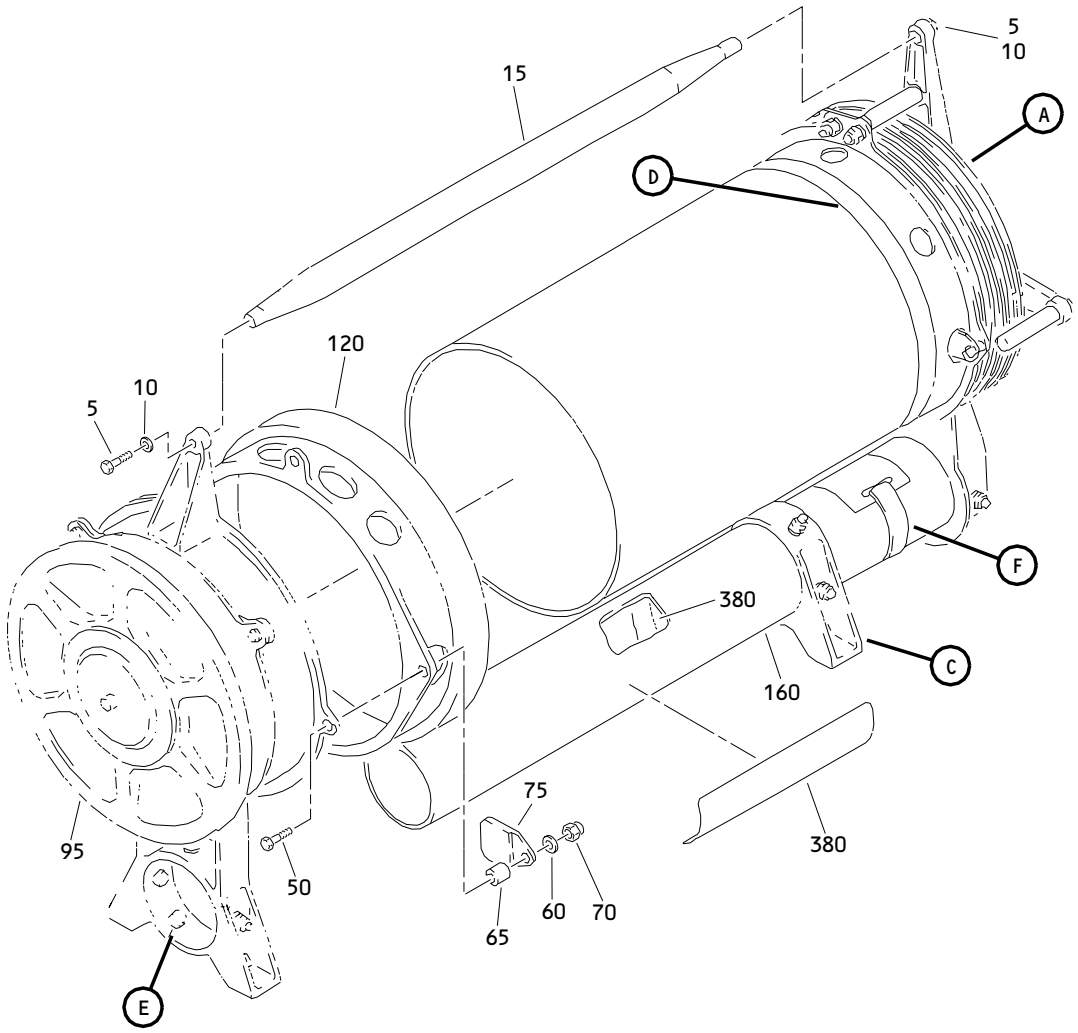
97928 DEUTSCH FASTENER CORP
3969 PARAMONT BOULEVARD
LAKEWOOD, CALIFORNIA 90712-4193

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
AJ20C103		1	220B	1
BACB10AW16		1	200	1
BACB30MB8-11		1	150	4
BACB30NBW8K5		1	100	2
BACB30NR4K10		1	210	4
BACB30NR4K15		1	50	1
BACB30NR4K4		1	25	2
BACB30NR4K5		1	55	1
BACB30NR4K6		1	20	3
BACB30NW8K13		1	270	1
BACB30NW8K3		1	245	4
BACB30VT8K3		1	80	17
BACB30VT8K9		1	130	1
BACN10JP3A		1	235	2
BACN10JP4A		1	335	6
BACN10RF16		1	165	1
BACN10YR4CD		1	35	5
		1	70	2
		1	90	17
		1	110	2
		1	140	1
		1	255	4
		1	285	5
BACR15BA3AD		1	330	12
BACR15BA3D13		1	230	2
BACR15BA3D7		1	225	2
BACR15BA4AD		1	325	6
		1	345	6
BACS18K25-28W		1	65	1
		1	280	1
BAC27TCT0257		1	370	1
BAC27TCT0308		1	365	1
BAC27TCT0417		1	375	1
BAC27TCT453		1	380	2
BJ40TC48A16		1	220	1
BJ40TC48A16Z		1	220A	1
BRM200A3		1	235	2
BRM200A4		1	335	6

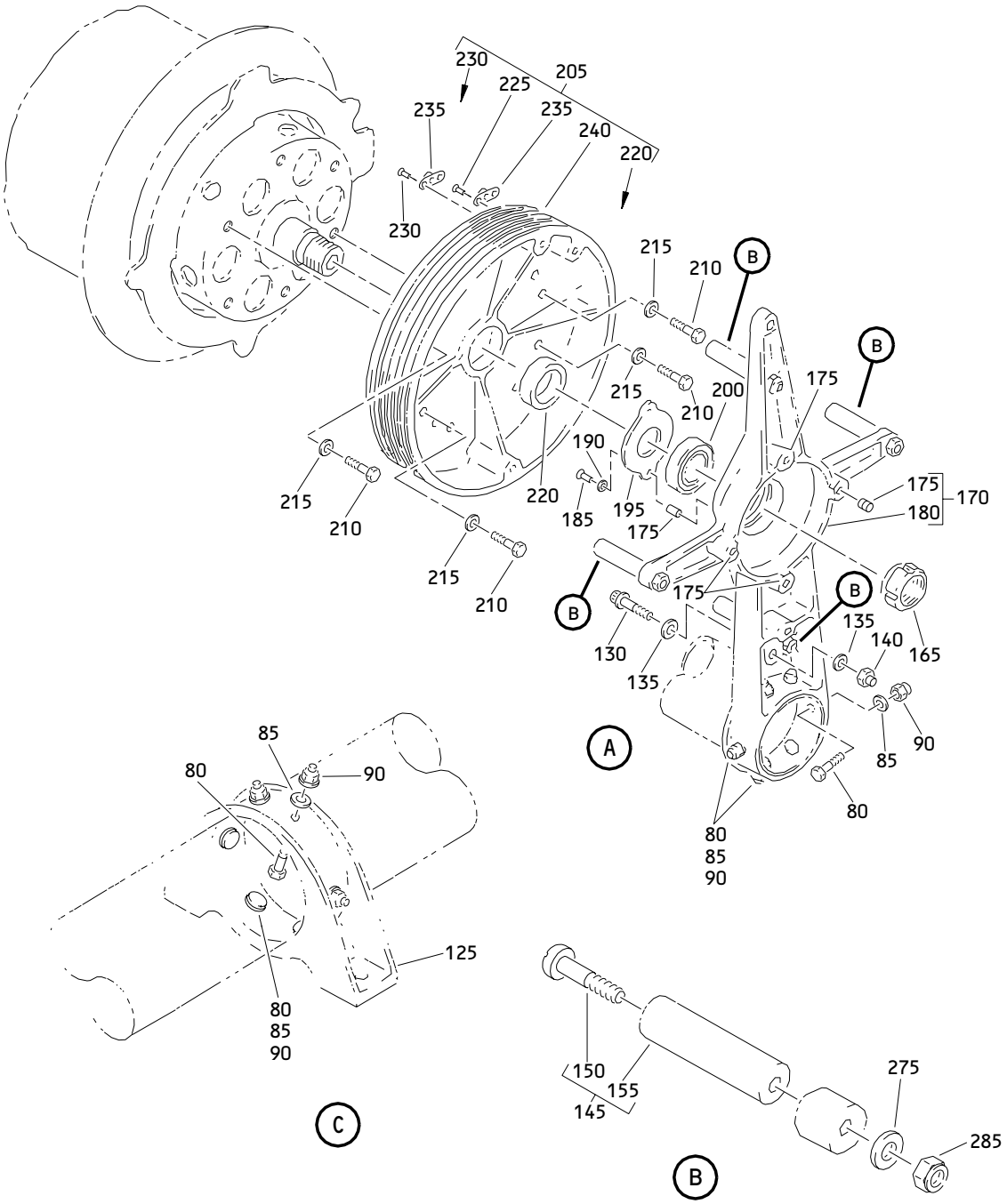
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BR9080-16		1	165	1
B30NW8K13		1	270	1
B30NW8K3		1	245	4
HL11VAZ8-13		1	270	1
HL11VAZ8-3		1	245	4
HL20PB8-11		1	150	4
HST10AG8-3		1	80	17
HST10AG8-9		1	130	1
H52732-4CD		1	35	5
		1	70	2
		1	90	17
		1	110	2
		1	140	1
		1	255	4
		1	285	5
LLMKP16BS		1	200	1
L803-8K13		1	270	1
L803-8K3		1	245	4
L8068-11		1	150	4
MKP16BS		1	200	1
MKP16BSE9273		1	200	1
MKP16BSFS428		1	200	1
MKP16BSG20		1	200	1
MKP16BSSD610		1	200	1
MKP16BSTT		1	200	1
MKP16BS007M		1	200	1
MKP16BS2TS		1	200	1
MK1000-3BAC		1	235	2
MK1000-4BAC		1	335	6
MS21209F1-20P		1	175	6
NAS1149D0316J		1	190	2
NAS1149D0416J		1	30	5
		1	60	2
		1	85	17
NAS1149D0416J		1	105	2
		1	135	2
		1	215	4
		1	250	4
		1	275	5

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
NAS1149D0516J		1	10	2
NAS623-3-1		1	185	2
NAS6605P7		1	5	2
NS103197-02		1	235	2
NS103197-048		1	335	6
PBE20C16BA		1	220C	1
PLH54CD		1	35	5
		1	70	2
		1	90	17
		1	110	2
		1	140	1
		1	255	4
		1	285	5
RMA9201M3		1	235	2
RMA9201M4		1	335	6
SL2822-16		1	165	1
S258T160-5		1	295	1
T8076S1032		1	235	2
T8076S428		1	335	6
VN202A1-02		1	235	2
VN202A1-048		1	335	6
251T0101-303		1	15	1
258T1110-4		1	95A	1
258T1110-6		1	95	1
258T1123-3		1	195	1
258T1123-5		1	45	1
		1	118	1
258T1142-4		1	170	1
258T1142-5		1	180	1
258T1143-7		1	205	1
258T1143-8		1	240	1
258T1144-4		1	125	1
258T1146-3		1	40	2
		1	115	1
		1	260	1
258T1151-2		1	160	1
258T1155-14		1	120	1
		1	305	1
258T1162-1		1	145	4
258T1162-2		1	155	4

PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
258T1170-3		1	300	1
258T1171-1		1	310	1
258T1171-3		1	310A	1
258T1172-1		1	315	1
258T1173-1		1	320	1
258T1173-2		1	340	1
258T1174-1		1	350	1
258T1175-1		1	75	1
		1	290	1
258T1176-1		1	355	1
258T1190-6		1	1A	RF
3000P003-5		1	295	1
69B80300-9		1	360	1
69307-8-11		1	150	4
82631-1612		1	165	1

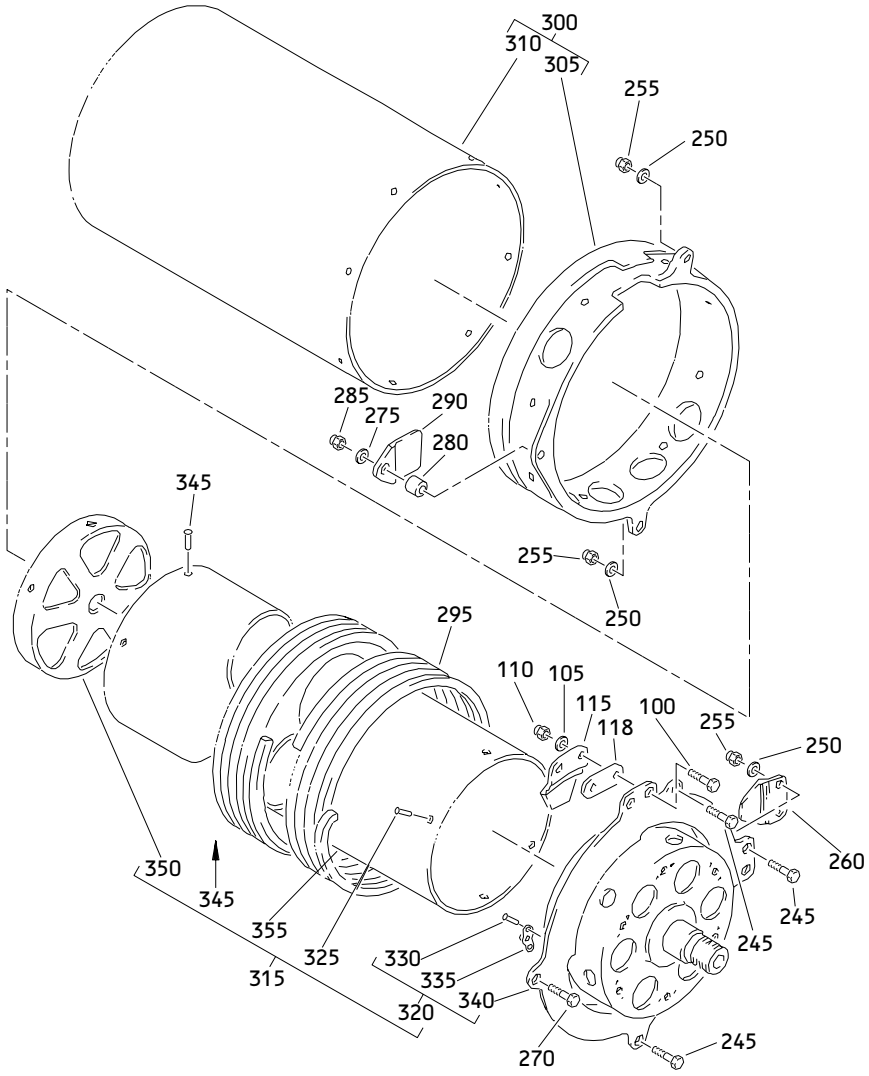


Entry and Service Door Counterbalance Assembly
Figure 1 (Sheet 1)



Entry and Service Door Counterbalance Assembly
Figure 1 (Sheet 2)

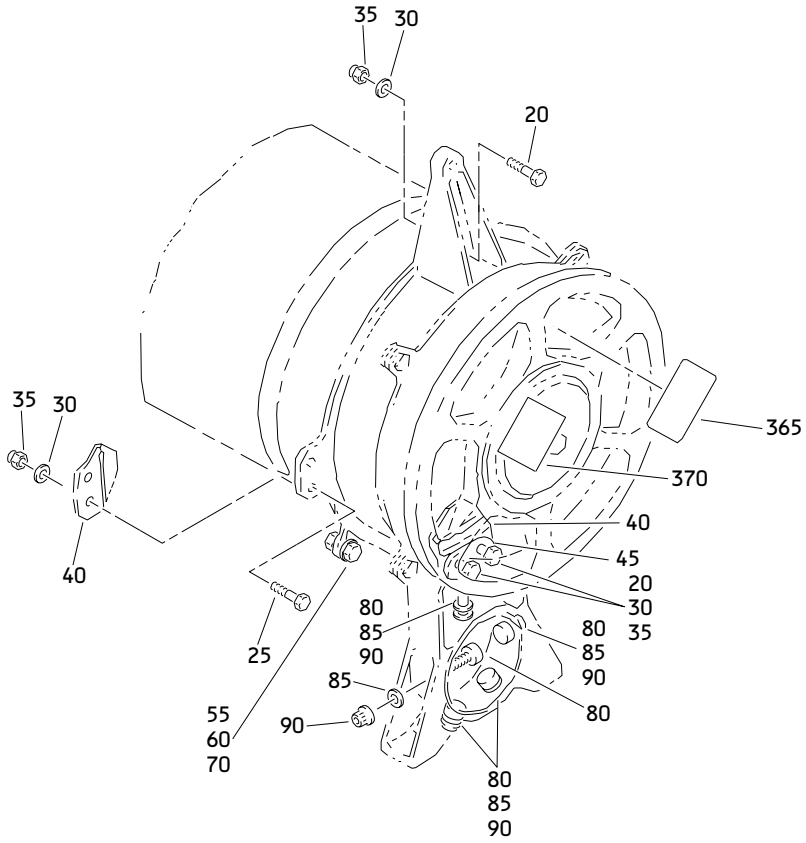
G18043



D

Entry and Service Door Counterbalance Assembly
Figure 1 (Sheet 3)

G18008



Entry and Service Door Counterbalance Assembly
Figure 1 (Sheet 4)

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1A	258T1190-6		COUNTER BALANCE ASSY- ENTRY AND SERVICE DOOR	A	RF
5	NAS6605P7		.BOLT		2
10	NAS1149D0516J		.WASHER		2
15	251T0101-303		.TUBE		1
20	BACB30NR4K6		.BOLT		3
25	BACB30NR4K4		.BOLT		2
30	NAS1149D0416J		.WASHER		5
35	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		5
40	258T1146-3		.RETAINER		2
45	258T1123-5		.RETAINER		1
50	BACB30NR4K15		.BOLT		1
55	BACB30NR4K5		.BOLT		1
60	NAS1149D0416J		.WASHER		2
65	BACS18K25-28W		.SPACER		1
70	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
75	258T1175-1		.RETAINER		1
80	HST10AG8-3		.BOLT- (VOPTK6) (SPEC BACB30VT8K3) (OPT HST10AG8-3 (V06725)) (OPT HST10AG8-3 (V56878)) (OPT HST10AG8-3 (V73197))		17
85	NAS1149D0416J		.WASHER		17
90	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		17

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
95	258T1110-6		.GEARBOX ASSY- (REF CMM 52-11-71) (OPT ITEM 95A)		1
-95A	258T1110-4		.GEARBOX ASSY- (REF CMM 52-11-71) (OPT ITEM 95)		1
100	BACB30NBW8K5		.BOLT		2
105	NAS1149D0416J		.WASHER		2
110	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		2
115	258T1146-3		.RETAINER		1
118	258T1123-5		.RETAINER		1
120	258T1155-14		.SUPPORT		1
125	258T1144-4		.FITTING		1
130	HST10AG8-9		.BOLT- (V0PTK6) (SPEC BACB30VT8K9) (OPT HST10AG8-9 (V06725)) (OPT HST10AG8-9 (V56878)) (OPT HST10AG8-9 (V73197))		1
135	NAS1149D0416J		.WASHER		2
140	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		1
145	258T1162-1		.GUARD ASSY-CABLE		4

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
150	HL20PB8-11		..BOLT- (V56878) (SPEC BACB30MB8-11) (OPT HL20PB8-11 (V73197)) (OPT HL20PB8-11 (V92215)) (OPT HL20PB8-11 (V97928)) (OPT 69307-8-11 (V56878)) (OPT HL20PB8-11 (V80539)) (OPT L8068-11 (V06725)) (OPT HL20PB8-11 (V60516)) (OPT HL20PB8-11 (V08524))		1
155	258T1162-2		..GUARD		1
160	258T1151-2		.TUBE		1
165	SL2822-16		.NUT- (V97393) (SPEC BACN10RF16) (OPT BR9080-16 (V72962)) (OPT 82631-1612 (V56878))		1
170	258T1142-4		.FRAME ASSY		1
175	MS21209F1-20P		..INSERT		6
180	258T1142-5		..FRAME		1
185	NAS623-3-1		.SCREW		2
190	NAS1149D0316J		.WASHER		2
195	258T1123-3		.RETAINER		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
200	MKP16BSFS428		.BEARING- (V21335) (SPEC BACB10AW16) (OPT MKP16BSE9273 (V21335)) (OPT MKP16BSTT (V43991)) (OPT MKP16BS2TS (V43991)) (OPT LLMKP16BS (V38443)) (OPT MKP16BS (V06144)) (OPT MKP16BSG20 (V38443)) (OPT MKP16BSSD610 (V83086)) (OPT MKP16BS007M (V40920))		1
205	258T1143-7		.DRUM ASSY ATTACHING PARTS		1
210	BACB30NR4K10		.BOLT		4
215	NAS1149D0416J		.WASHER -------*-------		4
220	BJ40TC48A16		..BEARING- (V21335) (OPT ITEMS 220A, 220B, 220C)		1
-220A	BJ40TC48A16Z		..BEARING- (V21335) (OPT ITEMS 220, 220B, 220C)		1
-220B	AJ20C103		..BUSHING- (V50294) (OPT ITEMS 220, 220A, 220C)		1
-220C	PBE20C16BA		..BUSHING- (V73134) (OPT ITEMS 220, 220A, 220B)		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
225	BACR15BA3D7		..RIVET		2
230	BACR15BA3D13		..RIVET		2
235	BRM200A3		..NUTPLATE-		2
			(V52828)		
			(SPEC BACN10JP3A)		
			(OPT MK1000-3BAC		
			(V15653))		
			(OPT NS103197-02		
			(V80539))		
			(OPT RMA9201M3		
			(V72962))		
			(OPT T8076S1032		
			(V11815))		
			(OPT VN202A1-02		
			(V92215))		
240	258T1143-8		..DRUM		1
245	HL11VAZ8-3		.BOLT-		4
			(V56878)		
			(SPEC BACB30NW8K3)		
			(OPT B30NW8K3		
			(V97928))		
			(OPT HL11VAZ8-3		
			(V73197))		
			(OPT HL11VAZ8-3		
			(V92215))		
			(OPT HL11VAZ8-3		
			(V97928))		
			(OPT L803-8K3		
			(V06725))		
250	NAS1149D0416J		.WASHER		4
255	H52732-4CD		.NUT-		4
			(V15653)		
			(SPEC BACN10YR4CD)		
			(OPT PLH54CD		
			(V62554))		
260	258T1146-3		.RETAINER		1
265	258T1123-5		DELETED		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
270	HL11VAZ8-13		.BOLT- (V56878) (SPEC BACB30NW8K13) (OPT B30NW8K13 (V97928)) (OPT HL11VAZ8-13 (V73197)) (OPT HL11VAZ8-13 (V92215)) (OPT HL11VAZ8-13 (V97928)) (OPT L803-8K13 (V06725))		1
275	NAS1149D0416J		.WASHER		5
280	BACS18K25-28W		.SPACER		1
285	H52732-4CD		.NUT- (V15653) (SPEC BACN10YR4CD) (OPT PLH54CD (V62554))		5
290	258T1175-1		.RETAINER		1
295	3000P003-5		.SPRING- (V10396) (SPEC S258T160-5)		1
300	258T1170-3		.GUARD ASSY		1
305	258T1155-14		..SUPPORT		1
310	258T1171-1		..TUBE- (OPT ITEM 310A)		1
-310A	258T1171-3		..TUBE- (OPT ITEM 310)		1
315	258T1172-1		.SHAFT ASSY-TORQUE		1
320	258T1173-1		..CARRIER ASSY-SPR ATTACHING PARTS		1
325	BACR15BA4AD		..RIVET- (SIZE DETERMINE ON INST) -------*-------		6
330	BACR15BA3AD		...RIVET- (SIZE DETERMINE ON INST)		12

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
335	BRM200A4		...NUTPLATE- (V52828) (SPEC BACN10JP4A) (OPT MK1000-4BAC (V15653)) (OPT NS103197-048 (V80539)) (OPT RMA9201M4 (V72962)) (OPT T8076S428 (V11815)) (OPT VN202A1-048 (V92215))		6
340	258T1173-2		...CARRIER		1
345	BACR15BA4AD		..RIVET- (SIZE DETERMINE ON INST)		6
350	258T1174-1		..FITTING-END		1
355	258T1176-1		..SHAFT- (OPT ITEM 355A)		1
-355A	258T1176-2		..SHAFT- (OPT ITEM 355)		1
360	69B80300-9		.STRAP (USED WITH ITEM 375)		1
365	BAC27TCT0308		.MARKER-ALUMINUM FOIL WITH PAWL ENGAGED DOOR WILL NOT OPERATE		1
370	BAC27TCT0257		.MARKER-ALUMINUM FOIL		1
375	BAC27TCT0417		.NAMEPLATE (USED WITH ITEM 360)		1
380	BAC27TCT453		.MARKER		2