TO: ALL HOLDERS OF OVERHEAD PASSENGER DOOR COUNTERBALANCE ASSEMBLY COMPONENT MAINTENANCE MANUAL 52-11-63

REVISION NO. 6 DATED MAR 01/99

HIGHLIGHTS

All data formerly in manual 52-11-61 is included in this manual 52-11-63.

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

CHAPTER/SECTION AND PAGE NO.	DESCRIPTION OF CHANGE
1006,1016	Clarified the assembly view of rivet (Item 275) and added AN960PD8 washers (Item 278) as specified in the current engineering data for Item 250A guard assembly.

COMPONENT
MAINTENANCE MANUAL

OVERHEAD PASSENGER DOOR COUNTERBALANCE ASSEMBLY

PART NUMBER 258T1100-5 THRU -12

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

T22019

BOEING

COMPONENT
MAINTENANCE MANUAL

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

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

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1017	OCT 01/87	01
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*[1] Special instructions not required. Use standard industry practices.

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. An asterisked flagnote *[ ] in place of the page number indicates that no special instructions are provided since the function can be performed using standard industry practices.

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

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

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

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

Verification:

Disassembly	Apr 12/83
Assembly	Apr 12/83

OVERHEAD PASSENGER 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 gearbox assembly, cable drum assembly, frame assembly, and two titanium torsion springs. Prior to installation of the counterbalance assembly the torsion springs are preloaded by turning the gearbox handwheel. The door is connected, via cable, to the counterbalance cable drum after installation of the counterbalance assembly.

   B. Energy stored in the torsion springs 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)

   Weight -- 64 lbs (258T1100-5, -7, -9, -11), 71 lbs (258T1100-6, -8, -10, -12)
   Length -- 26 inches
   Height -- 18 inches
   Width -- 14 inches

TESTING AND TROUBLE SHOOTING

1. Equipment

   A. Handscale -- 0-50 pounds

2. Functional Test (IPL, Fig. 1)

   A. Mount counterbalance assembly on a work bench or restrain counterbalance assembly to resist a 30 to 40 pound force applied to the rim of the hand wheel.

   WARNING: INJURY COULD RESULT TO PERSONNEL WORKING ON COUNTERBALANCE ASSEMBLY IF PAWL ON GEARBOX ASSEMBLY (45) 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 counterclockwise to release load on lock A52003-1. Remove lock A52003-1.

      WARNING: DO NOT RELEASE HANDWHEEL WITH PAWL DISENGAGED, OTHERWISE SPRINGS WILL UNWIND RAPIDLY AND DAMAGE TO UNIT OR INJURY TO PERSONNEL MAY RESULT. PAWL ON GEARBOX ASSEMBLY (45) MUST BE ENGAGED DURING THIS TEST.

      (2) Make sure pawl is engaged into ratchet on gearbox assembly (45). Slowly allow handwheel to rotate clockwise until pawl is engaged into ratchet, and handwheel does not rotate.

   C. Prior to performing this test the handwheel revolution counter must be indicating 60 turns. Otherwise obtain this reading as follows:

      (1) If the indication is less than 60, wind hand wheel counterclockwise until indication of 60 is reached.

(2) If the indication is greater than 60, grasp the handwheel and gradually apply force counterclockwise until the load on the pawl is removed. Disengage pawl and slowly rotate handwheel clockwise until the revolution counter indicates 60. Engage pawl and slowly allow handwheel to rotate clockwise 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 counterclockwise tangential load to handwheel by pulling on 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 on handscale.

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

G. Using recorded force reading from handscale, verify that force on the handwheel (for R = 5.0 inches) is 35 ±2 pounds (counterbalance assemblies 258T1100-6, -8, -10, -12), or 29 ±1 pounds (counterbalance assemblies 285T1100-5, -7, -9, -11). If R does not equal 5.0 inches, multiply force times distance to calculate torque (FXR=T). Verify that the calculated torque (T) is 175 ±10 inches-pound (counterbalance assemblies 258T1100-6, -8, -10, -12) or 145 ±10 inches-pound (counterbalance assemblies 25T1100-5, -7, -9, -11).

H. Remove handscale.

I. Install lock A52003-1.

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

(2) Install lock A52003-1.

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

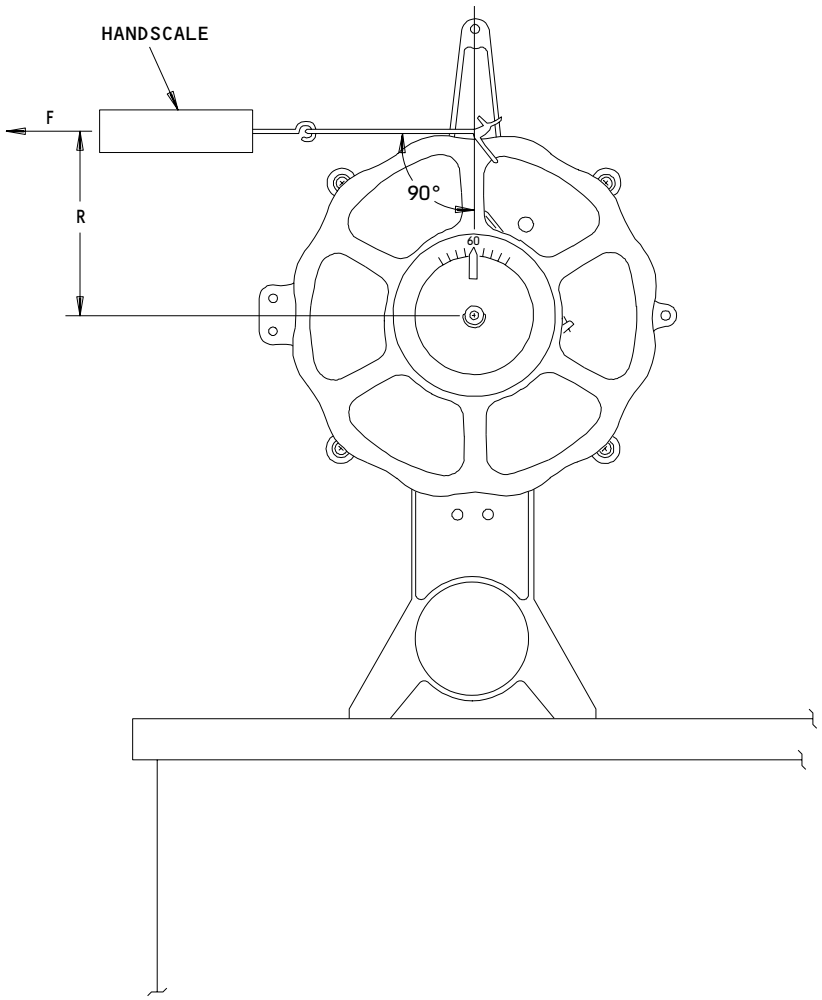
J. If unit fails functional test:

(1) Check unit for proper assembly.

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

(3) Check gearbox assembly (45) per CMM 52-11-71, if necessary.

(4) Assemble unit and perform functional test.



Spring Torque Test
Figure 101

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, 60, 75, 95, 105, 140, 203, 225, 265)

3. Release Spring Load (IPL Fig. 1)

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

   A. Check revolution counter on handwheel of gearbox assembly (45) for load level of springs. A reading of approximately 60 indicates fully wound spring.

   B. Secure counterbalance assembly.

   WARNING: DISENGAGING PAWL WILL TRANSFER THE SPRING FORCE TO THE HANDWHEEL IN THE CLOCKWISE DIRECTION. WITH FULLY WOUND SPRINGS, THE FORCE ON THE HANDWHEEL IS APPROXIMATELY 35 LBS. DO NOT RELEASE HANDWHEEL OTHERWISE SPRINGS WILL UNWIND RAPIDLY AND DAMAGE TO UNIT OR INJURY TO PERSONNEL MAY RESULT.

   C. Apply force to the handwheel of gearbox assembly (45) in the counterclockwise direction enough to relieve spring force on lock A52003-1. Remove lock A52003-1.

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

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

4. Disassembly (IPL Fig. 1)

A. Remove gearbox assembly (45) and support assembly (305).

(1) Remove bolts (240), washers (245) and retainers (235).

(2) Remove bolts (201), washers (202), nuts (203) and retainer (204G).

(3) Remove bolts (27, 25A), washers (30), nuts (35) and retainers (20, 40).

(4) Remove bolt (47), washer (49), spacer (48), nut (60) and retainer (204).

(5) Remove bolts (10, 65), washers (15, 70), nuts (75) and remove gearbox assembly (45) with attached support assembly (305).

(6) Remove bolts (50A), washers (55) and nuts (60) and separate support assembly (305) from gearbox assembly (45).

NOTE: Refer to CMM 52-11-71 for overhaul procedures of gearbox assembly (45).

Do not disassemble support assembly (305) unless necessary for repair or replacement.

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

C. Remove bolts (130), washers (135), nut (140) and tube (385A) from frame assembly (125).

D. Remove bolts (85), washers (90), nuts (95) and fitting (80) from tube (385A).

NOTE: Do not remove marker (390) unless necessary for repair or replacement.

E. Restrain torque shaft assembly (335) and remove nut (145) and frame assembly (125) from torque shaft assembly.

F. Remove screws (165), retainer (160) and bearing (170) from frame assembly (125).

G. Remove nuts (105), washers (110A) and cable guard assemblies (100, 102) from frame assembly (125). Note position of cable guard assemblies (102) for reference during assembly.

H. Remove bolts (185A), washers (190) and separate drum assembly (180) from torque shaft assembly (335). Remove spacer (175) from drum assembly (180).

NOTE: Do not remove bearing (192) unless necessary for repair or replacement.

I. Remove bolts (240), washers (245), retainer (235).

J. Remove bolts (201), washers (202), nuts (203) and retainer (204G). Remove spring (330).

K. Remove bolt (253), washer (260), spacer (254), nut (265), and retainer (204).

L. Remove bolts (210, 215), washers (220), nut (225), retainers (205, 227) and spring (230).

M. Remove bolts (255), washers (260), nuts (265) and separate guard assembly (250A) and torque shaft assembly (335).

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

CHECK

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

2. Magnetic particle check per 20-20-01 -- shaft (380, IPL Fig. 1)

3. Penetrant check per 20-20-02 -- support fitting (80), frame (155), spacer (175), drum (200), torsion springs (230, 330), supports (295, 325), carrier (375), and support tube (385A).

4. Check bearing surfaces on splines for obvious evidence of uneven wear or pitting.

REPAIR - GENERAL

1. Content

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

P/N	NAME	REPAIR
258T1143	DRUM	1-1
- -	MISCELLANEOUS PARTS	2-1
258T1165	SHAFT	3-1

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
   20-41-03 Application of Corrosion Preventives to Closed End Tubes
   20-41-05 Application of Corrosion Inhibiting Compounds
   20-42-05 Bright Cadmium Plating
   20-42-04 Electrodeposited Nickel Plating
   20-43-01 Chromic Acid Anodizing
   20-50-03 Bearing Installation and Retention

3. Materials

   NOTE: Equivalent substitutes may be used.

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

   B. Enamel -- BMS 10-60, type 2 (Ref 20-60-02)

   C. Compound -- BMS 3-23, type 1 (Ref 20-60-04)

   D. Compound -- Corrosion Preventive MIL-C-11796, Class 1 (Ref 20-60-02)

   E. Enamel -- BMS 10-11, type 2, BAC 702 white (Ref 20-60-02)

4. Dimensioning Symbols

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

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

EXAMPLES

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

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

True Position Dimensioning Symbols
Figure 601

DRUM ASSEMBLY - REPAIR 1-1

258T1143-4

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

1. Bearing (192) Replacement (IPL Fig. 1)

   A. Remove bearing.

   B. Install bearing per 20-50-03 using wet BMS 10-11, type 1 primer. Press flush to 0.010 below surface of boss in shallow side of drum interior.

2. Refinish

   A. Drum (200) -- chromic acid anodize, type 1, or sulfuric acid anodize, type 2 (F-17.05). Apply one coat BMS 10-11, type 1 primer (F-20.02) except omit primer from hole for bearing. Material: Aluminum alloy.

MISCELLANEOUS PARTS - REPAIR 2-1

1. Repair of these parts consists of restoration of original finish.

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1		
Tube (5)	Aluminum alloy	Chemically treat interior and exterior surfaces (colored film) and apply one coat BMS 10-11, type 1 primer (F-18.07). Interior surface apply BMS 3-23 (F-19.26) all over.
Retainer (20,205, 235), Support 295,325)	Aluminum alloy	Chromic acid anodize, type 1, or sulfuric acid anodize, type 2 (F-17.05). Apply one coat BMS 10-11, type 1 primer (F-20.02) all over.
Retainer (20A,205)	Aluminum alloy	Chromic acid anodize; apply one coat BMS 10-11, type 1 primer (F-18.13) plus one coat BMS 10-11, type 2 enamel, BAC707 gray (F-21.02) all over.
Retainer (40,160, 227,280,310)	Aluminum alloy	Chemically treat (colored film), and apply one coat BMS 10-11, type 1 primer (F-18.06) all over.
Fitting (80)	Aluminum alloy	Chromic acid anodize, type 1, or sulfuric acid anodize, type 2 (F-17.05). Apply one coat BMS 10-11, type 1 primer (F-20.02), omit primer from 3-inch ID.
Guard (120)	Aluminum alloy	Chromic acid anodize, type 1 (F-17.04). Apply one coat BMS 10-11, type 1 primer (F-20.02), omit from 0.25-inch ID.
Frame (155)	Aluminum alloy	Chromic acid anodize, type 1, or sulfuric acid anodize, type 2 (F-17.05). Apply one coat BMS 10-11, type 1 primer (F-20.02), omit primer from ID of hole for bearing (170).

Refinish Details
Figure 601 (Sheet 1)

IPL FIG. & ITEM	MATERIAL	FINISH
Spacer (175)	Aluminum alloy	Chromic acid anodize, type 1 and apply one coat BMS 10-11, type 1 primer (F-18.13), omit primer from 1-1/4 inches OD.
Fitting (340)	4340 Steel 150-170 ksi	Cadmium plate (0.0002 to 0.0003 inch) type 2, class 3 (F-15.02). Apply one coat BMS 10-11, type 1 primer (F-20.02) on all outside surface except gear teeth.
Carrier (375)	Aluminum alloy	Chromic acid anodize, type 1 or sulfuric acid anodize, type 2 (F-17.05) all over. Apply one coat BMS 10-11, type 1 primer (F-20.02) except omit primer from internal spline.
Tube (385A)	Aluminum alloy	Chromic acid anodize, type 1 (F-17.04). Apply one coat BMS 10-11, type 1 primer (F-20.02) all over.
Retainer (204,204G)	Aluminum alloy	Chromic acid anodize, type 1 and apply one coat BMS 10-11, type 1 primer (F-18.13). Apply one coat BMS 10-11, type 2 enamel, color BAC702 white gloss (F-21.03).

Refinish Details
Figure 601 (Sheet 2)

SHAFT - REPAIR 3-1

258T1165-1

NOTE: Refer to REPAIR-GEN for list of applicable standard practices. For repair of surfaces which may only require stripping and restoration of original finish, refer to REFINISH instruction, Fig. 601.

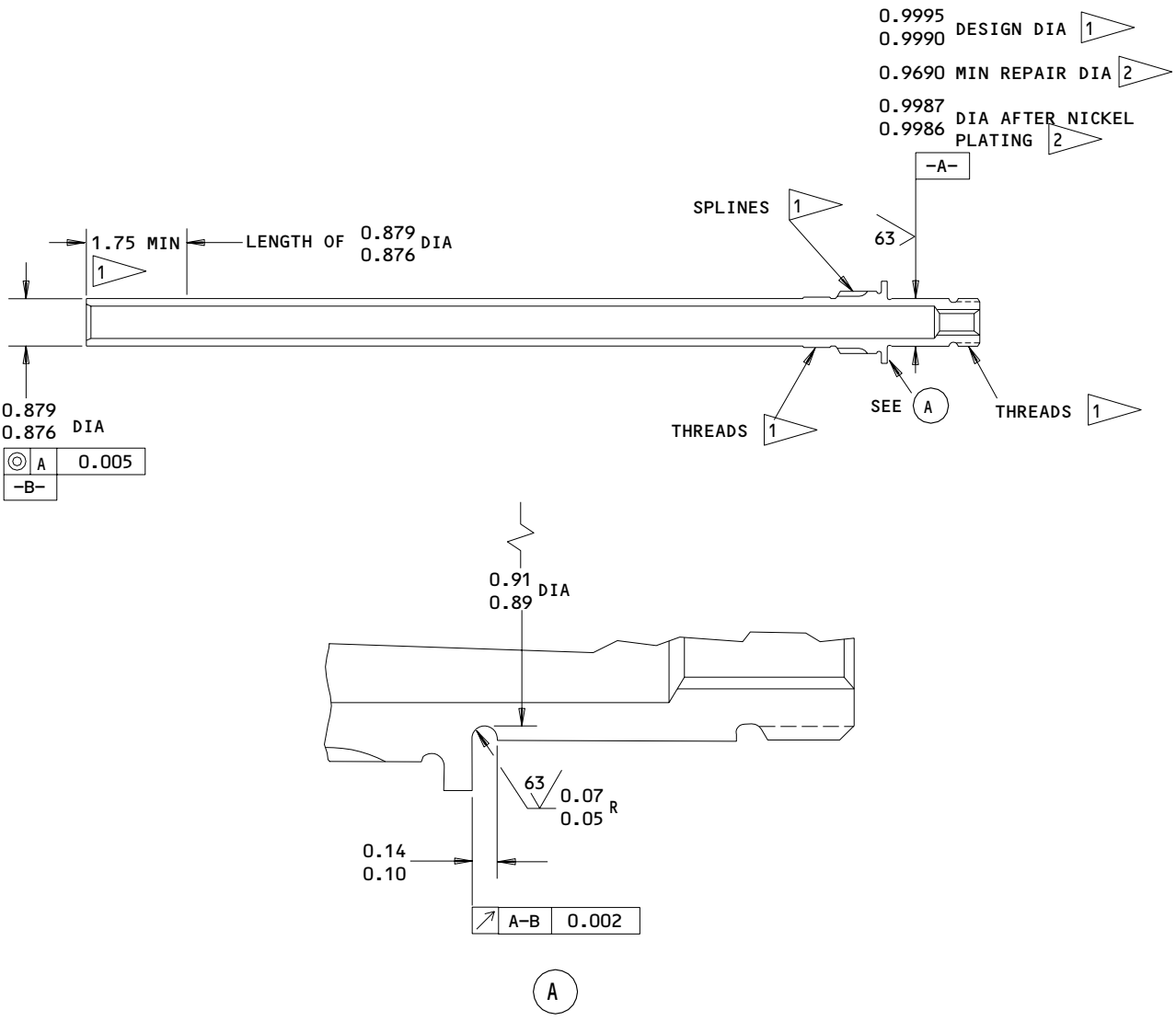
1. Bearing Seat Repair (Fig. 601)

   A. Machine bearing seat as required, within repair limit shown, to remove defects.

   B. Shot peen repair surface as indicated.

   C. Build up with nickel plate and machine to dimensions shown.

   D. Cadmium plate repair surface to original design dimension and apply wipe on primer to repair surface.



REFINISH

CADMIUM PLATE (F-15.02) AND APPLY ONE COAT OF PRIMER (F-20.02) ON ALL EXTERIOR SURFACES EXCEPT AS NOTED IN 1. PHOSPHATE COAT (F-18.02) EXCEPT OMIT LUBRICANT AND APPLY TWO COATS OF PRIMER (F-20.03) ON ALL INTERIOR SURFACES

1. OMIT PRIMER (F-20.02) THIS SURFACE. APPLY WIPE ON PRIMER (F-19.45) INSTEAD

2. BUILD UP WITH NICKEL PLATE (F-15.10) AND MACHINE TO DIMENSIONS SHOWN. CADMIUM PLATE (F-15.02) OVER NICKEL PLATED AREA TO DESIGN DIMENSIONS AND APPLY WIPE ON PRIMER (F-19.45)

REPAIR

REF 2

SHOT PEEN: (REF 20-10-03)
0.017-0.046 SHOT SIZE
0.014A2 INTENSITY

125 ALL MACHINED SURFACES EXCEPT AS NOTED

63 ON SPLINE PROFILE AND AS NOTED

BREAK ALL SHARP EDGES 0.008R

DIMENSIONS APPLY AFTER PLATING

MATERIAL: 4340 STEEL, 180-200 KSI

ALL DIMENSIONS ARE IN INCHES

Shaft Repair
Figure 601

158698

ASSEMBLY

1. Materials and Equipment

NOTE: Equivalent substitutes may be used.

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

B. Counterbalance lock -- A52003-1

C. Primer -- BMS 10-11, Type 1 (Ref 20-60-02)

D. Corrosion preventive compound -- MIL-C-11796, Class 1 (Ref 20-60-02)

2. Assembly (IPL Fig. 1)

NOTE: Refer to CMM 52-11-71 for assembly procedures of gearbox assembly (45).

A. Predrill fastener holes in gearbox assembly (45), fitting (80), frame assembly (125) and tube (385A).

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

(1) Locate gearbox (45) and fitting (80) as shown in Fig. 701. Insert tube (385A) thru fitting and gearbox with end of tube flush with end of gear box. Hold all parts in fixed position.

(2) Install frame assembly (125) on tube (385A). Install tube (5) and secure to gearbox with bolt (10) and washer (15). Slide frame assembly until it comes in contact with tube (5). Install bolt (10) and washer (15). Check that joint is not preloaded. Hold frame assembly in fixed position.

(3) If any new parts are being installed, drill 0.250-0.254 inch diameter holes five places through gearbox (45) and tube (385), six places through fitting (80) and tube (385A) and six places through frame assembly (125) and tube (385A). Remove tube (5), bolts (10), washers (15) and frame assembly (125) with attached parts. Deburr holes.

B. Install gearbox (45), fitting (80) and tube (385A) and secure with bolts (65, 85), washers (70, 90) and nuts (75, 95). Electrically bond fitting (80) to tube (385A) per 20-11-03 at fastener location shown in Fig. 701.

C. Install markers (390, 395) on tube (385A) and gearbox (45) per 20-50-05, as required at position shown.

D. Install support assembly (305) on gearbox assembly (45) and secure with bolts (50A), washers (55) and nuts (60).

E. Install bearing (170) on frame assembly (125) with BMS 3-24 grease per 20-50-03. Install retainer (160) and secure with screws (165). Install guard assemblies (100), washers (110A) and nuts (105) on frame assembly (125). Install guard assemblies (102) in positions noted in Disassembly.

F. Assemble torque shaft (335).

NOTE: Perform this procedure only when torque shaft was disassembled for repair or replacement.

(1) Apply MIL-C-11796, Class 1, corrosion preventive compound to interior of shaft (380).

(2) Apply BMS 10-11, type 1 primer to mating surfaces of carrier (350) and shaft (380).

(3) Assemble carrier (350), washer (360) and nut (355). Tighten nut (355) to 1400-1700 pound-inches.

(4) Apply BMS 10-11, type 1 primer to mating surfaces of fitting (340) and shaft (380). Attach fitting (340) to shaft (380) with rivets (345).

G. Install spacer (175) on drum assembly (180). Position drum assembly (180) on shaft assembly (335) and secure with bolts (185A), washers (190).

H. Install shaft assembly (335) on frame assembly (125) and secure with nut (145). Tighten nut (145) to 375-400 pound-inches.

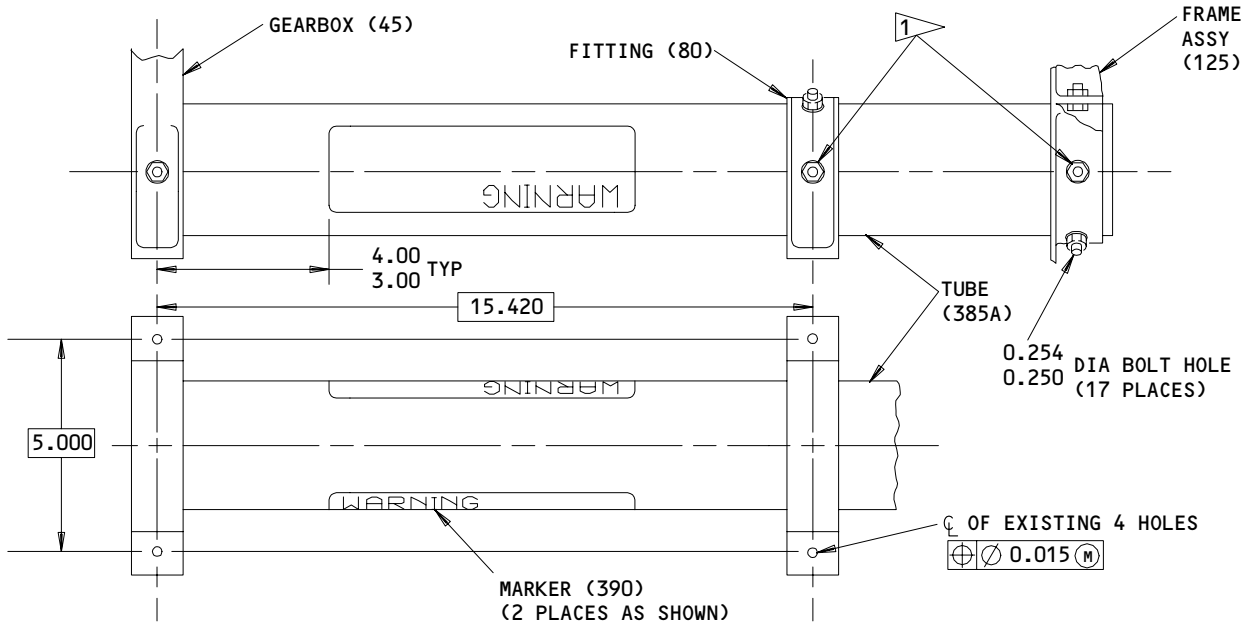
I. Install guard assembly (250A) on shaft assembly (335) and secure with bolts (255), washers (260) and nuts (265).

J. Install spring (230) on shaft assembly (335). Install retainers (205, 227) to secure spring (230) and install bolts (210, 215), washers (220) and nuts (225). Install bolt (253), spacer (254), retainer (204), washer (260) and nut (265) to retain spring (230).

K. Install spring (330) and retainer (235) on guard assembly (250A) and secure retainer with bolts (240), washers (245).

L. Rotate hand wheel on gearbox assembly (45) until pointer indicates "0" reading. Install frame assembly (125) with attached parts, on tube (385A) so that shaft assembly (335) engages to gearbox assembly (45).

M. Install bolts (130), washers (135) and nuts (140) to secure frame assembly (125) to tube (385A). Electrically bond frame assembly (125) to tube (385A) at fastener location shown in Fig. 701.



1 ELECTRICALLY BOND FRAME ASSY (125) AND FITTING (80) TO TUBE (385A) PER 20-11-03

Installation of Support Tube
Figure 701

13250

N. Install tube (5) and secure with bolts (10) and washers (15).

O. Install retainers (20, 40) on gearbox assembly (45) and secure with bolts (25A, 27), washers (30), nuts (35).

P. Install bolt (47), spacer (48), retainer (204), washer (49) and nut (60) to secure support assembly (305) to gearbox assembly (45) with retainer (204) engaged to spring (230).

Q. Install retainer (235), bolt (240), and washer (245) on support assembly (305) to secure spring (330).

R. Position retainers (204G) thru slot in support assemblies (270, 305) and secure retainers (204G) to retainer (204) with bolts (201), washers (202), and nuts (203).

S. Check that the end coil of spring (330) is retained by retainers (204G, 310) on gearbox assembly (45) and retainers (204G, 280) on frame assembly (125).

WARNING: SPRINGS (230, 330) ARE PRELOADED AFTER ASSEMBLY. SHAFT ASSEMBLY (335) AND FRAME ASSEMBLY MUST BE SECURED IN FIXED POSITION AND PAWL IN GEARBOX ASSEMBLY (45) MUST BE ENGAGED TO PREVENT INJURY TO PERSONNEL DURING HANDLING.

T. With pawl engaged, rotate the handwheel on the gearbox assembly (45) in a counterclockwise direction until pointer reads 59-60 and insert lock A52003-1 through hole in frame assembly (125) and shaft assembly (335) per Fig. 702.

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

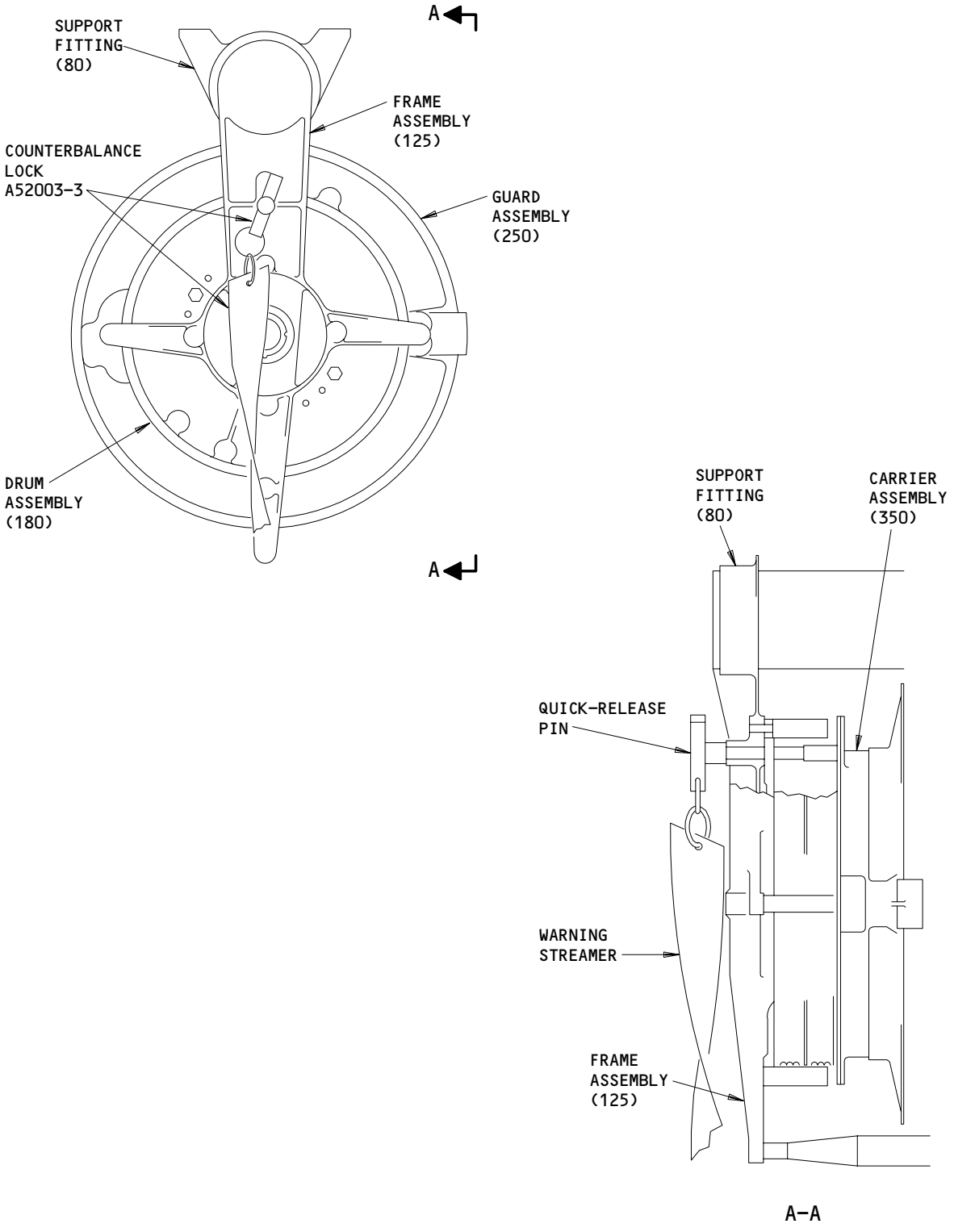
WARNING: SPRINGS (230, 330) ARE HEAVILY LOADED AFTER UNIT IS WOUND. MAKE SURE PAWL IN GEARBOX ASSEMBLY (45) IS ENGAGED TO PREVENT SERIOUS INJURY TO PERSONNEL.

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

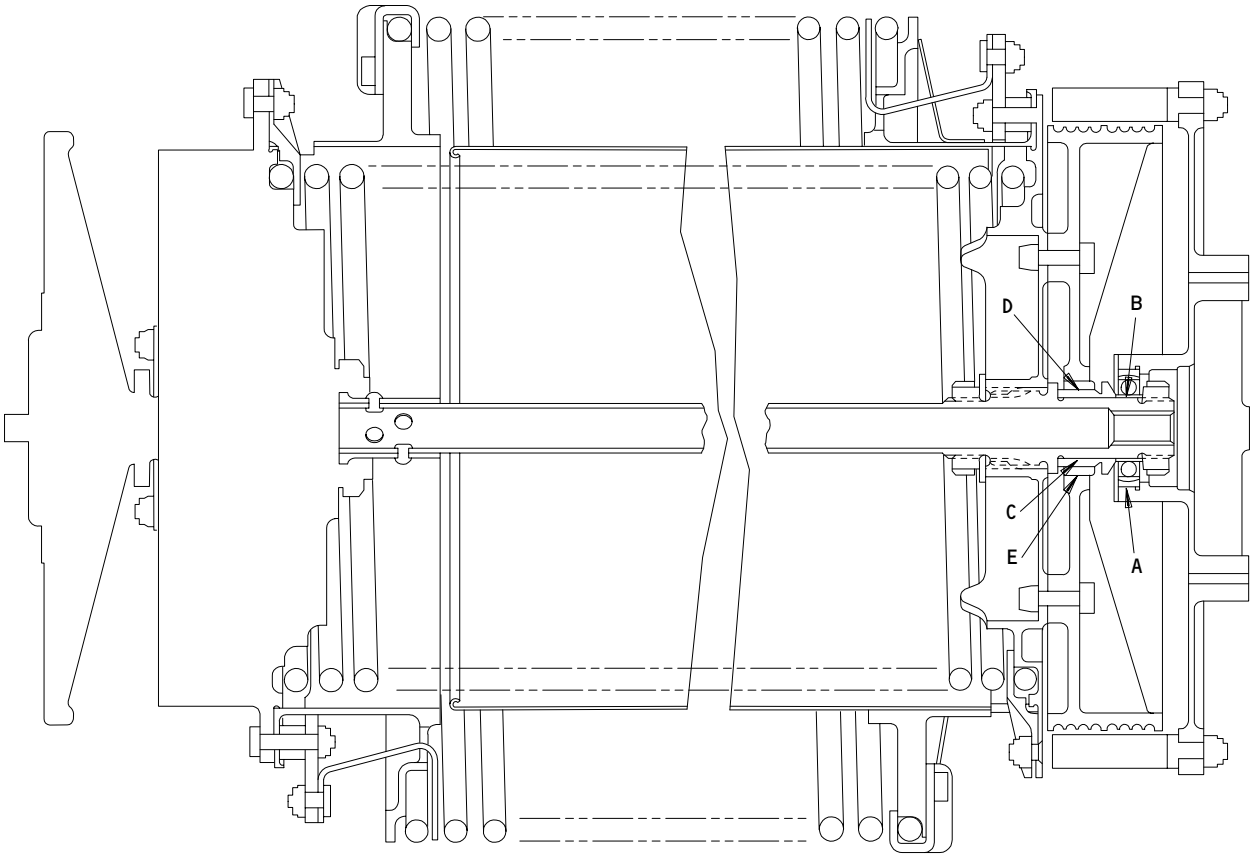
3. Storage

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

B. Use standard industry practices to store this component.



Counterbalance Lock Installation
Figure 702



Fits and Clearances
Figure 801 (Sheet 1)

Ref Letter Fig.801	Mating Item No. IPL Fig. 1	Design Dimensions				Service Wear Limits		
		Dimensions		Assembly Clearance *[1]		Dimensions		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 125 OD 170	1.9375 1.9365	1.9385 1.9375	0.0000	0.0020	1.9335	1.9415	0.0040
B	ID 170 OD 380	0.9995 0.9990	1.0000 0.9995	0.0000	0.0010	0.9975	1.0015	0.0020
C	ID 175 OD 380	1.0000 0.9990	1.0010 0.9995	0.0005	0.0020	0.9960	1.0035	0.0040
D	ID 192 OD 175	1.2555 1.2525	1.2565 1.2535	0.0020	0.0040	1.2475	1.2615	0.0080
E	ID 200 OD 192A	1.4990 1.5005	1.5000 1.5015	-0.0025	-0.0005	1.5000	1.5005	0.0000

*[1] NEGATIVE VALUES DENOTE INTERFERENCE FIT

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
Figure 801 (Sheet 2)

158693

FOR TORQUE VALUES OF STANDARD FASTENERS, REFER TO 20-50-01			
ITEM NO. IPL FIG. 1	NAME	TORQUE	
		POUND-INCHES	POUND-FEET
145	NUT	375-400	
355	NUT	1400-1700	

Torque Table
Figure 802

158691

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

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

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

22599 AMERACE CORP ESNA DIV
VAN NUYS, CALIFORNIA 91411-3532

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

43991 FAG BEARING INCORPORATED
118 HAMILTON AVENUE
STAMFORD, CONNECTICUT 06904

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

56878 SPS TECHNOLOGIES INC
HIGHLAND AVENUE
JENKINTOWN, PENNSYLVANIA 19046

71087 BOOTS ACFT NUT DIV TOWNSEND CO SEE TEXTRON INC CHERRY
FASTENER TOWNSEND DIV V11815

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

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

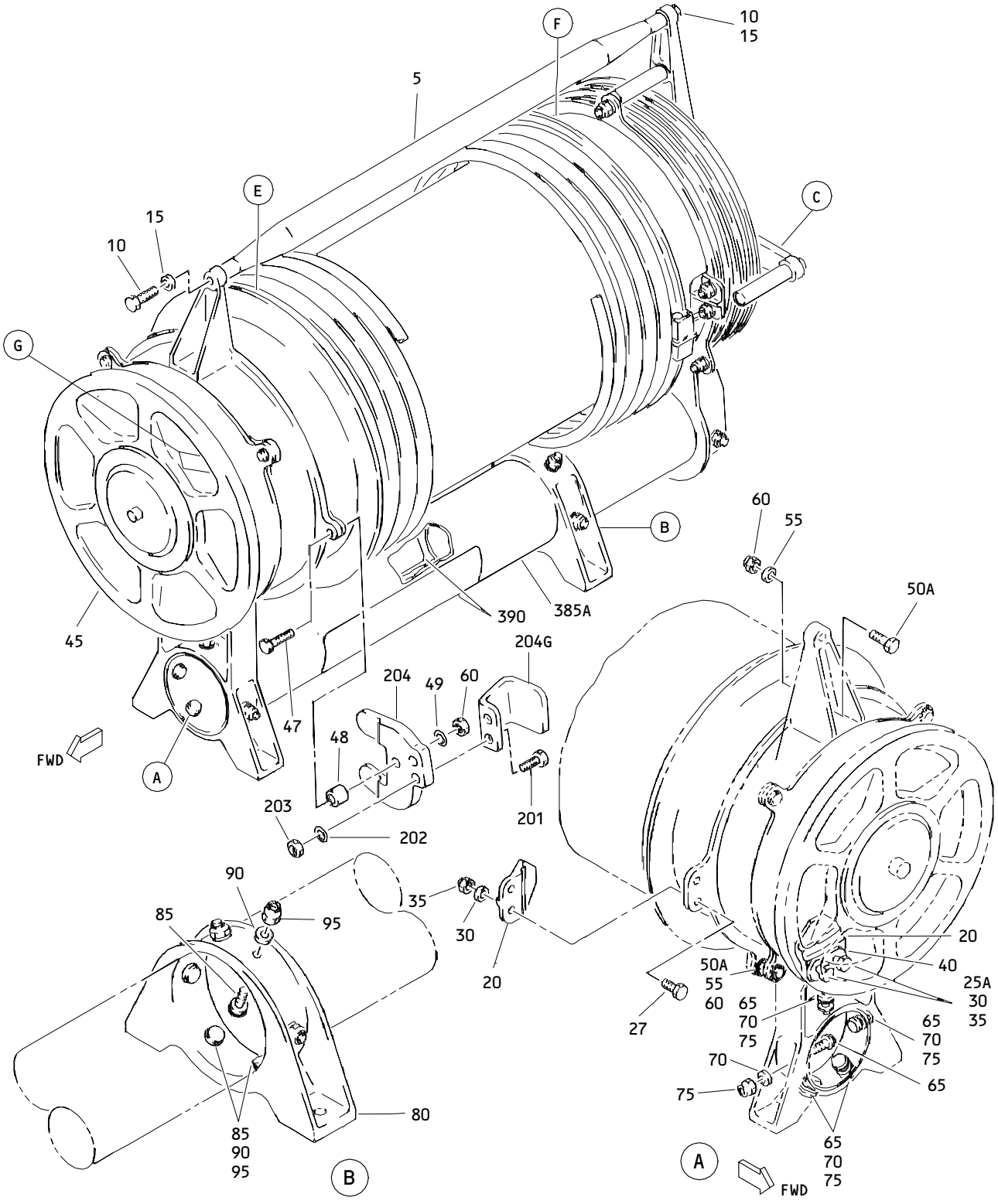
80539 SPS TECHNOLOGIES INC AEROSPACE PRODUCTS DIV
2701 SOUTH HARBOR BOULEVARD PO BOX 1259
SANTA ANA, CALIFORNIA 92702-1259

VENDORS

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

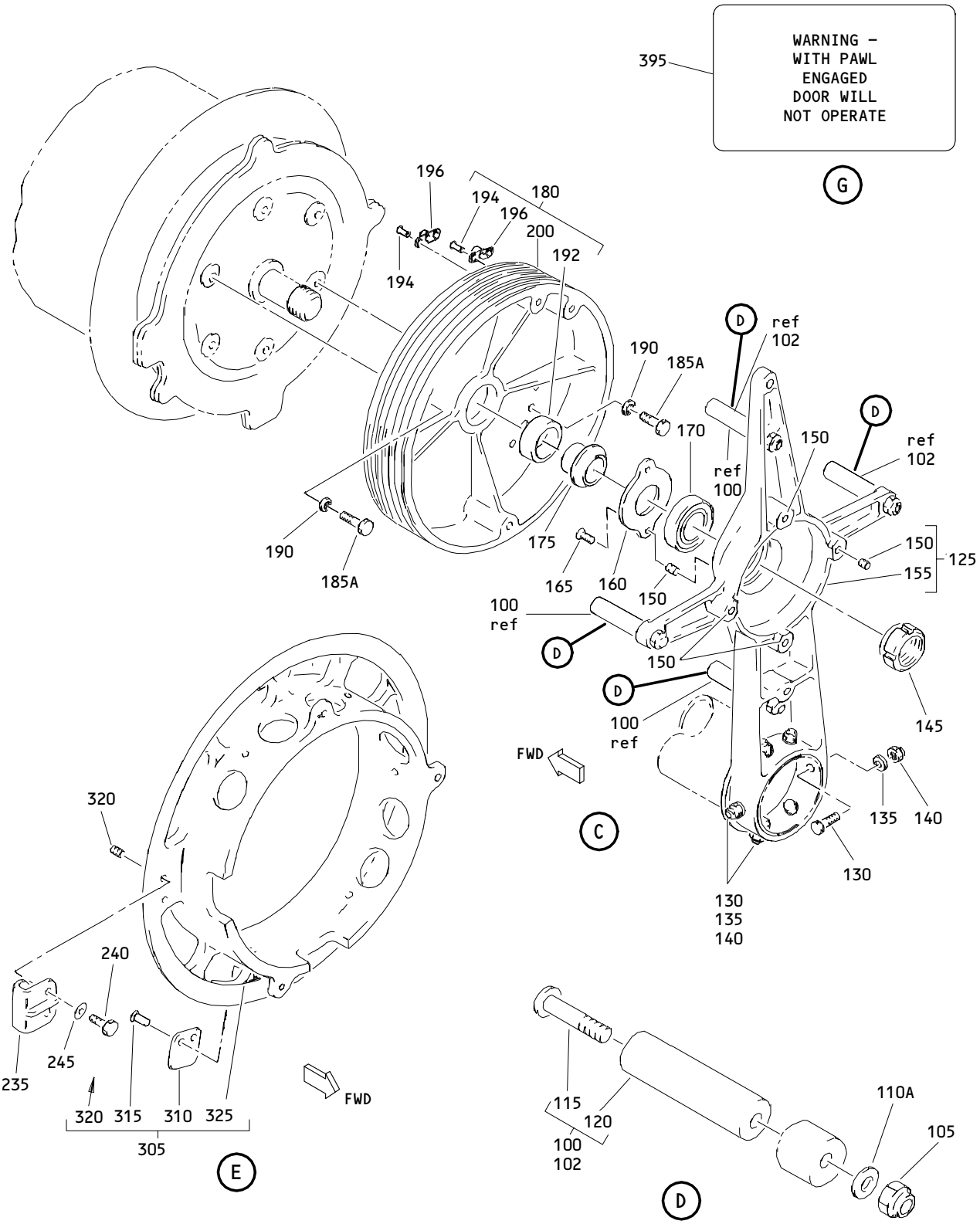
97393 SHUR-LOK CORPORATION
2541 WHITE ROAD PO BOX 19584
IRVINE, CALIFORNIA 92713

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



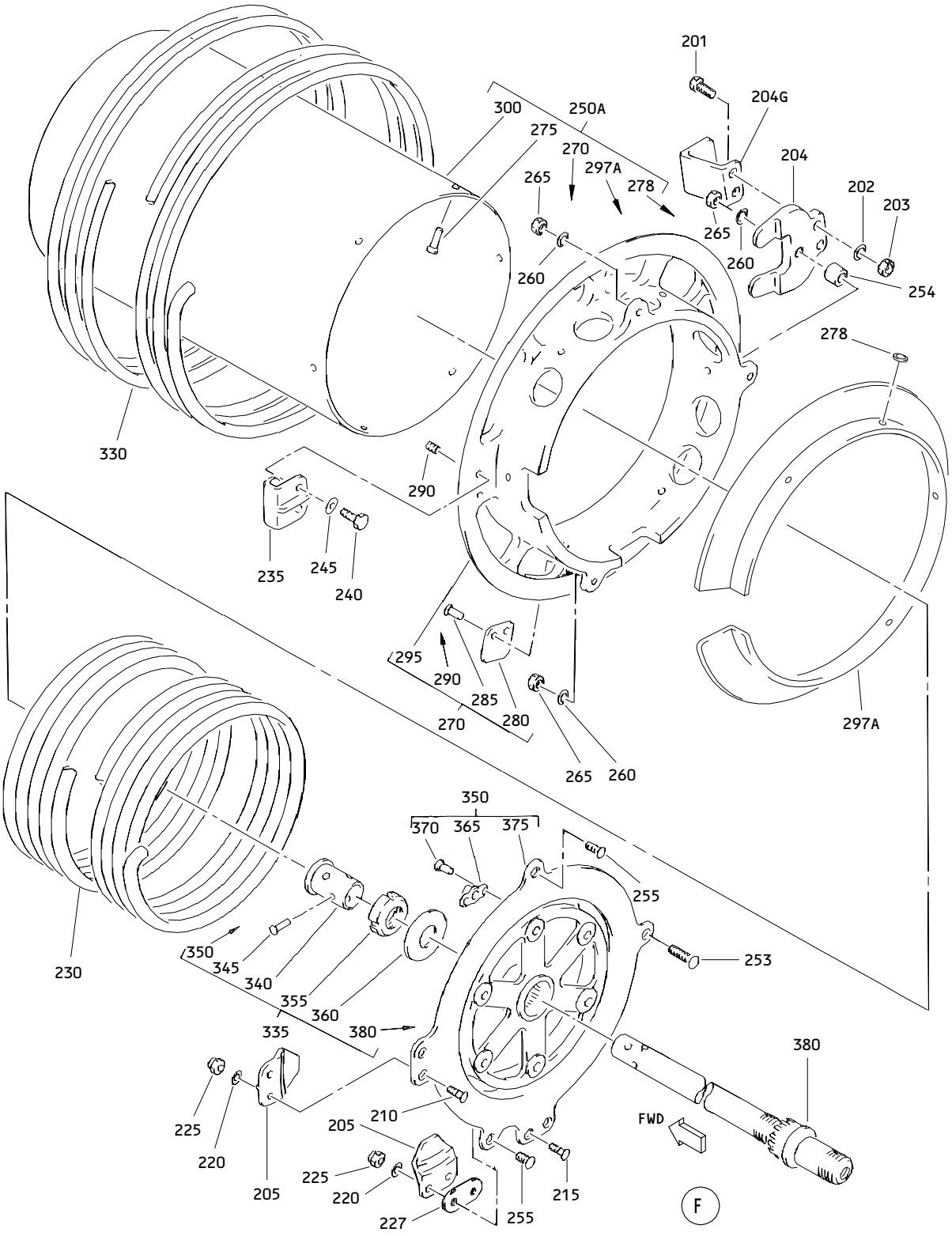
Overhead Passenger Door Counter Balance Assembly
Figure 1 (Sheet 1)

T63976



Overhead Passenger Door Counter Balance Assembly
Figure 1 (Sheet 2)

T63977



Overhead Passenger Door Counter Balance Assembly
Figure 1 (Sheet 3)

T63978

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-1	258T1100-1		DELETED		
-1A	258T1100-2		DELETED		
-1B	258T1100-5		COUNTERBALANCE ASSY-OVHD PASS. DOOR (PRE SB 11-6)	A	RF
-1C	258T1100-6		COUNTERBALANCE ASSY-OVHD PASS. DOOR(PRE SB 11-6)	B	RF
-1D	258T1100-7		COUNTERBALANCE ASSY-OVHD PASS. DOOR(POST SB 11-6) (PRE SB 52-29)	C	RF
-1E	258T1100-8		COUNTERBALANCE ASSY-OVHD PASS. DOOR(POST SB 11-6) (PRE SB 52-29)	D	RF
-1F	258T1100-9		COUNTERBALANCE ASSY-OVHD PASS. DOOR (PRE SB 52-29)	E	RF
-1G	258T1100-10		COUNTERBALANCE ASSY-OVHD PASS. DOOR (PRE SB 52-29)	F	RF
-1H	258T1100-11		COUNTERBALANCE ASSY-OVHD PASS. DOOR (POST SB 52-29)	G	RF
-1J	258T1100-12		COUNTERBALANCE ASSY-OVHD PASS. DOOR (POST SB 52-29)	H	RF
5	251T0101-303		.TUBE ATTACHING PARTS		1
10	NAS6605P7		.BOLT		2
15	AN960PD516L		.WASHER -------*-------		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
20	258T1146-1		.RETAINER-SPR (OPT ITEM 20A)		2
20A	258T1146-3		.RETAINER-SPR (OPT ITEM 20)		2
			ATTACHING PARTS		
25	BACB30NF4-8		DELETED		
25A	BACB30NF4-6		.BOLT - (V06710) (V06725) (V06950) (V08524) (V17943) (V27624) (V58678) (V80539) (V92215) (V97928)		2
27	BACB30NF4-5		.BOLT - (REFER TO ITEM 25A FOR VENDORS)		2
30	AN960PD416L		.WASHER		4
35	BRH10-4		.NUT- (V52828) (SPEC BACN10JC4) (OPT H10-4BAC (V15653)) (OPT NS202101-048 (V80539)) (OPT RMLH9075-4W (V72962)) (OPT T6S428J (V71087)) (OPT VN303A048 (V92215)) (OPT 96-048 (V80539))		4
			-------*-------		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
40	258T1123-5		.RETAINER		1
45	258T1110-1		.GEARBOX ASSY- (FOR DETAILS SEE CMM 52-11-71)	A-D	1
-45A	258T1110-3		.GEARBOX ASSY- (FOR DETAILS SEE CMM 52-11-71)	EF	1
-45B	258T1110-5		.GEARBOX ASSY- (FOR DETAILS SEE CMM 52-11-71)	GH	1
			ATTACHING PARTS		
47	BACB30NF4-15		.BOLT (REFER TO ITEM 25A FOR VENDORS)		1
48	BACS18K25-29W		.SPACER		1
49	AN960PD416		.WASHER		1
50	BACB30NF4-6		DELETED		
50A	BACB30NF4-5		.BOLT- (REFER TO ITEM 25A FOR VENDORS)		2
55	AN960PD416L		.WASHER		2
60	BRH10-4		.NUT- (V52828) (SPEC BACN10JC4) (REFER TO ITEM 35 FOR OPT PARTS)		3
65	HL18PB8-3		.BOLT- (V56878) (SPEC BACB30FM8-3) (OPT HL18PB8-3 (V73197)) (OPT HL18PB8-3 (V92215)) (OPT HL18PB8-3 (V97928)) (OPT 6255O-8-3 (V56878))		5

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
70	AN960PD416L		.WASHER		5
75	BRH10-4		.NUT- (V52828) (SPEC BACN10JC4) (REFER TO ITEM 35 FOR OPT PARTS) -------*-------		5
80	258T1144-1		.FITTING-SPRT ATTACHING PARTS		1
85	HL18PB8-3		.BOLT- (V56878) (SPEC BACB30FM8-3) (REFER TO ITEM 65 FOR OPTIONAL PARTS)		6
90	AN960PD416L		.WASHER		6
95	BRH10-4		.NUT- (V52828) (SPEC BACN10JC4) (REFER TO ITEM 35 FOR OPT PARTS) -------*-------		6
100	258T1162-1		.GUARD ASSY-CABLE		2
-100A	258T1162-1		DELETED		
102	258T1162-1		.GUARD ASSY-CABLE	A-F	2
-102A	258T1162-3		.GUARD ASSY-CABLE ATTACHING PARTS	GH	2
105	BRH10-4		.NUT- (V52828) (SPEC BACN10JC4) (REFER TO ITEM 35 FOR OPT PARTS)		4

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
110	AN960PD416		DELETED		
110A	AN960PD416L		.WASHER		4
			-------*-------		
115	HL20PB8-11		..BOLT-		1
			(V56878)		
			(SPEC BACB30MB8-11)		
			(OPT HL20PB8-11		
			(V73197))		
			(OPT HL20PB8-11		
			(V92215))		
			(OPT HL20PB8-11		
			(V97928))		
			(OPT 69307-8-11		
			(V56878))		
120	258T1162-2		..GUARD		1
125	258T1142-1		.FRAME ASSY		1
			ATTACHING PARTS		
130	HL18PB8-3		.BOLT-		6
			(V56878)		
			(SPEC BACB30FM8-3)		
			(REFER TO ITEM 65		
			FOR OPT PARTS)		
135	AN960PD416L		.WASHER		6
140	BRH10-4		.NUT-		6
			(V52828)		
			(SPEC BACN10JC4)		
			(REFER TO ITEM 35		
			FOR OPT PARTS)		
145	SL2822-16		.NUT-		1
			(V97393)		
			(SPEC BACN10RF16)		
			(OPT BR9080-16		
			(V72962))		
			-------*-------		
150	MS21209F1-20P		..INSERT		6
155	258T1142-2		..FRAME		1
160	258T1123-3		.RETAINER		1
			ATTACHING PARTS		
165	NAS623-3-1		.SCREW		2
			-------*-------		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
170	MKP16BSFS428		.BEARING- (V21335) (SPEC BACB10AW16) (OPT MKP16BSE9273 (V21335)) (OPT MKP16BSTT (V43991)) (OPT MKP16BS2TS (V43991)) (OPT LLMKP16BS (V38443))		1
175	258T1122-1		.SPACER		1
180	258T1143-4		.DRUM ASSY ATTACHING PARTS		1
185	BACB30NF4-11		DELETED		
185A	BACB30NF4-10		.BOLT (REFER TO ITEM 25A FOR VENDORS)		2
190	AN960PD416L		.WASHER -------*-------		2
192	BJ40TC48A16		..BEARING (OPT ITEMS 192A,193) (V21335)		1
-192A	BJ40TC48A16Z		..BEARING (OPT ITEMS 192,193) (V21335)		1
-193	AJ20C-103		..BUSHING (OPT ITEMS 192,192A) (V50294)		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
194	BACR15BA3D6		..RIVET		4
196	BRM200A3		..NUTPLATE-		2
			(V52828)		
			(SPEC BACN10JP3A)		
			(OPT MK1000-3BAC (V15653))		
			(OPT NS103197-02 (V80539))		
			(OPT RMA9201M3 (V22599))		
			(OPT RMA9201M3 (V72962))		
			(OPT T8076S1032 (V71087))		
			(OPT VN202A1-02 (V92215))		
200	258T1143-5		..DRUM		1
201	BACB30NF4-4		.BOLT		4
			(REFER TO ITEM 25A FOR VENDORS)		
202	AN960PD416L		.WASHER		4
203	BRH10-4		.NUT		4
			(V52828)		
			(SPEC BACN10JC4)		
			(REFER TO ITEM 35 FOR OPT PARTS)		
204	258T1169-1		.RETAINER-SPR		2
204G	258T1168-1		.RETAINER-SPR		2
205	258T1146-1		.RETAINER-SPR		2
			(OPT ITEM 205A)		
-205A	258T1146-3		.RETAINER-SPR		2
			(OPT ITEM 205)		
			ATTACHING PARTS		
210	HL19PB8-3		.BOLT-		2
			(V56878)		
			(SPEC BACB30FN8-3)		
			(OPT HL19PB8-3 (V73197))		
			(OPT HL19PB8-3 (V92215))		
			(OPT HL19PB8-3 (V97928))		
			(OPT 62547-8-3 (V56878))		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
215	HL19PB8-5		.BOLT- (V56878) (SPEC BACB30FN8-5) (OPT HL19PB8-5 (V73197)) (OPT HL19PB8-5 (V92215)) (OPT HL19PB8-5 (V97928)) (OPT 62547-8-5 (V56878))		2
220	AN960PD416L		.WASHER		4
225	BRH10-4		.NUT- (V52828) (SPEC BACN10JC4) (REFER TO ITEM 35 FOR OPT PARTS) -------*-------		4
227	258T1123-5		.RETAINER		1
230	258T1141-1		.SPRING-TORSION (OPT ITEM 230B)	ACEG	1
-230A	258T1141-3		.SPRING-TORSION (OPT ITEM 230C)	BDFH	1
-230B	258T1141-5		.SPRING-TORSION (OPT ITEM 230)	ACEG	1
-230C	258T1141-7		.SPRING-TORSION (OPT ITEM 230A)	BDFH	1
235	258T1145-1		.RETAINER-SPR ATTACHING PARTS		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
240	BACB30NF4-3		.BOLT		4
245	AN960PD416L		.WASHER		4
			-------*-------		
250	258T1154-1		DELETED		
250A	258T1154-2		.GUARD ASSY SPR		1
			ATTACHING PARTS		
253	HL19PB8-13		.BOLT		1
			(V56878)		
			(SPEC BACB30FN8-13)		
			(OPT HL19PB8-13		
			(V73197))		
			(OPT HL19PB8-13		
			(V92215))		
			(OPT HL19PB8-13		
			(V97928))		
			(OPT 62547-8-13		
			(V56878))		
254	BACS18K25-29W		.SPACER		1
255	HL19PB8-3		.BOLT-		2
			(V56878)		
			(SPEC BACB30FN8-3)		
			(REFER TO ITEM 210		
			FOR OPT PARTS)		
260	AN960PD416L		.WASHER		3
265	BRH10-4		.NUT-		3
			(V52828)		
			(SPEC BACN10JC4)		
			(REFER TO ITEM 35		
			FOR OPT PARTS)		
			-------*-------		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
270	258T1155-1		..SUPPORT ASSY		1
			(OPT ITEM 270A)		
-270A	258T1155-4		..SUPPORT ASSY		1
			(OPT ITEM 270)		
			ATTACHING PARTS		
275	BACR15BB5AD		..RIVET		6
278	AN960PD8		..WASHER		6
			-------*-------		
280	258T1123-4		...RETAINER		1
			ATTACHING PARTS		
285	BACR15BA5AD4		...RIVET		2
			(USED ON ITEM 270)		
			-------*-------		
290	MS21209F4-15P		...INSERT		2
295	258T1155-2		...SUPPORT		1
			(USED ON ITEM 270)		
-295A	258T1155-5		...SUPPORT		1
			(USED ON ITEM 270A)		
297	258T1164-1		DELETED		
297A	258T1164-2		..GUARD		1
300	258T1156-1		..TUBE		1
305	258T1155-1		.SUPPORT ASSY		1
			(OPT ITEM 305A)		
-305A	258T1155-4		.SUPPORT ASSY		1
			(OPT ITEM 305)		
310	258T1123-4		..RETAINER		1
			ATTACHING PARTS		
315	BACR15BA5AD4		..RIVET		2
			(USED ON ITEM 305)		
			-------*-------		
320	MS21209F4-15P		..INSERT		2
325	258T1155-2		..SUPPORT		1
			(USED ON ITEM 305)		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
-325A	258T1155-5		..SUPPORT (USED ON ITEM 305A)		1
330	258T1141-2		.SPRING-TORSION (OPT ITEM 330B)	ACEG	1
-330A	258T1141-4		.SPRING-TORSION (OPT ITEM 330C)	BDFH	1
-330B	258T1141-6		.SPRING-TORSION (OPT ITEM 330)	ACEG	1
-330C	258T1141-8		.SPRING-TORSION (OPT ITEM 330A)	BDFH	1
335	258T1152-1		.SHAFT ASSY-TORQUE		1
340	69B81312-3		..FITTING ATTACHING PARTS		1
345	NAS1398C6-3		..RIVET -------*-------		6
350	258T1153-1		..CARRIER ASSY ATTACHING PARTS		1
355	SL2822-16		..NUT- (V97393) (SPEC BACN10RF16) (OPT BR9080-16 (V72962))		1
360	AN960PD1616		..WASHER -------*-------		1
365	BRM200A4		...NUTPLATE- (V52828) (SPEC BACN10JP4A) (OPT MK1000-4BAC (V15653)) (OPT NS103197-048 (V80539)) (OPT RMA9201M4 (V22599)) (OPT RMA9201M4 (V72962)) (OPT T8076S428 (V71087)) (OPT VN202A1-048 (V92215)) ATTACHING PARTS		6

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
370	BACR15BA3AD6		...RIVET		12
			-------*-------		
375	258T1153-2		...CARRIER		1
380	258T1165-1		..SHAFT		1
385	258T1151-1		DELETED		
385A	258T1151-2		.TUBE-SPRT		1
390	BAC27TCT0001		.MARKER	AB	2
-390A	BAC27TCT0326		.MARKER	C-H	2
395	BAC27TCT0308		.MARKER-FOIL		1