TO: ALL HOLDERS OF NOSE GEAR ASSEMBLY OVERHAUL MANUAL, 32-26-01

REVISION NO. 69, DATED NOV 1/07

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D&O	D/Assy	Cleaning	Insp/Chk	Repair	Assy	F/C	Test	T/Shooting	S/Tools	Storage	IPL	L/Overhaul
Added clarifications at the steering places						X							

NOSE GEAR ASSEMBLY

32-26-01

BOEING P/N 65-73762-4, -5, -7, -9, -18

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 30613	Deleted
		PRR 30665	Nov 15/67
		PRR 31571	May 15/69
32-1019		PRR 31782	Jun 10/71
32-1039		PRR 31909	Jun 10/71
32-1044, Rev 1		PRR 31936	Jun 10/71
		PRR 32100	Dec 10/71
32-1062		PRR 32163	Jun 25/73
32-1071		PRR 32070-2	Mar 25/73
		PRR 32289	Sep 25/74
32-1072R1		PRR 32397	Mar 25/75
		PRR 32496-23	Jan 5/77
		PRR 32806	Jul 5/78
		MC 3450-14	Jul 5/78
		PRR 32866	Jul 5/79
32-1095		PRR 32951	Jul 5/80
		PRR 32756-15	Jul 5/80
		PRR 33051	Jan 5/81
		PRR 33100	Jan 5/82

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
32-1100		PRR 33102	Jan 5/82
		PRR 33107	Jan 5/82
			Jul 5/82
		PRR 33194	Jul 5/82
		PRR 33201	Jul 5/82
32-1100, Rev 1		PRR 33300	Jan 5/83
32-1126		PRR 33167-R	Jan 5/83
32-1132		PRR 33215	Mar 5/84
32-1129		PRR 33194-R	Dec 5/83
		PRR 33347	Mar 5/84
		PRR 33351	Mar 5/84
32-1139			Mar 5/84
32-1141		PRR 33351-R	Jun 5/84
		PRR 33905	Mar 5/86
		PRR 33536	Sep 5/86
32-1139, Rev 2			Mar 5/87
		PRR 34477	Jun 5/88
		SL 32-40	Sep 5/88
		PRR 34509	Mar 5/89
32-1209		PRR 33890-39	Jun 5/89
32-1211		PRR 34474	Sep 5/89
32-1211, Rev 2			Jun 1/94
32-1129, Rev 3			Mar 1/95
		SL 32-060	Mar 1/96
		SL 32-056-B	Nov 1/00

LIST OF EFFECTIVE PAGES

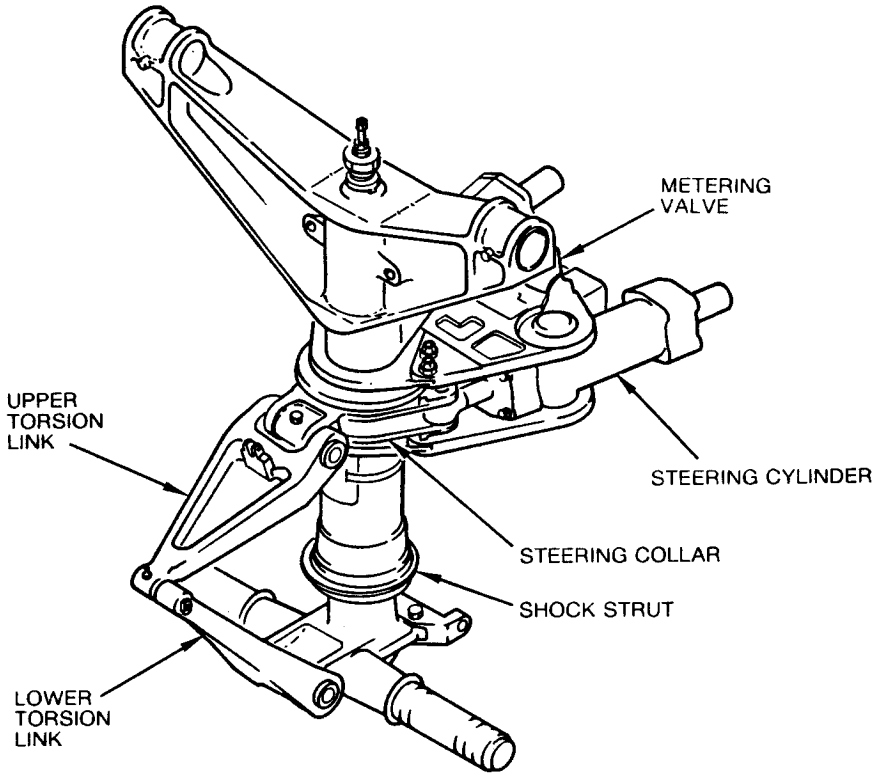
* Indicates pages revised, added or deleted in latest revision
F Indicates foldout pages - print one side only

PAGE	DATE	PAGE	DATE	PAGE	DATE
32-26-01		410B	BLANK	1116	Nov 1/04
T-1	Sep 5/91	411	Mar 1/01	1117	Mar 1/03
T-2	Nov 1/00	412	Nov 1/03	1118	Nov 1/01
* LEP-1	Nov 1/07	413	Jun 1/97	1119	Mar 1/03
LEP-2	BLANK	414	Jun 1/97	1120	BLANK
T/C-1	Jan 5/82	415	Nov 1/05		
T/C-2	BLANK	416	Sep 1/96		
1	Sep 5/88	417	Nov 1/03		
2	BLANK	418	Mar 1/01		
101	Mar 1/01	501	Jul 1/07		
102	Mar 1/01	* 502	Nov 1/07		
103	Mar 1/01	* 502A	Nov 1/07		
104	BLANK	502B	BLANK		
201	Mar 1/01	503	Sep 5/89		
202	BLANK	504	Jul 1/07		
301	Jul 1/01	505	Jul 1/07		
302	BLANK	506	Jul 1/01		
401	Mar 1/04	507	Jul 1/01		
402	Nov 1/03	508	BLANK		
402A	Nov 1/03	601	Sep 5/88		
402B	Nov 1/01	602	Sep 5/88		
402C	Mar 1/03	603	Sep 5/92		
402D	BLANK	604	Sep 5/92		
403	Nov 1/03	605	Mar 1/96		
404	Nov 1/03	606	BLANK		
404A	Nov 1/03	1101	Mar 5/93		
404B	Nov 1/03	1102	Nov 1/00		
405	Mar 1/04	1103	Mar 1/03		
406	Nov 1/01	1104	Sep 5/88		
406A	Jul 1/07	1105	Nov 1/00		
406B	Jul 1/99	1106	Nov 1/04		
406C	BLANK	1107	Nov 1/04		
406D	Jul 1/05	1108	Nov 1/04		
406E	Jul 1/05	1109	Mar 1/03		
406F	Mar 1/04	1110	Mar 1/01		
406G	Jul 1/99	1111	Mar 1/01		
406H	Sep 1/96	1112	Mar 1/01		
407	Sep 1/96	1112A	Mar 1/02		
408	Mar 1/03	1112B	Mar 1/01		
408A	Sep 1/94	1113	Nov 1/05		
408B	Nov 1/05	1114	Nov 1/05		
409	Nov 1/05	1114A	Nov 1/05		
410	Jun 1/97	1114B	BLANK		
410A	Jun 1/97	1115	Mar 1/01		

TABLE OF CONTENTS

*[1] Special instructions not required. Use standard industry practices and the information contained in 20-44-02 and 20-70-01.

NOSE GEAR ASSEMBLY



Nose Gear Assembly
Figure 1

DESCRIPTION AND OPERATION

1. The nose gear assembly consists of the shock strut, attaching torsion links; steering collar, steering cylinders, and steering metering valve.

2. The shock strut absorbs shocks and impacts during take-off, landing, and taxiing operations. The torsion links maintain radial alignment of the shock strut inner and outer cylinders during compression and extension. The metering valve directs hydraulic fluid to the steering cylinders to turn the nose gear by piston action through the steering collar.

3. Leading Particulars (approximate)

   Length -- Centerline of axle to mounting trunnion holes
   Compressed -- 34 inches
   Extended -- 46 inches
   Weight -- 190 pounds

DISASSEMBLY

1. General (Fig. 1101).

   WARNING: DO NOT RELEASE AIR PRESSURE UNLESS THE STRUT IS IN THE VERTICAL POSITION AND THE AIR VALVE AT THE TOP. DO NOT TRY TO REMOVE THE AIR VALVE UNLESS THE PRESSURE IS RELEASED, OR INJURY TO PERSONNEL COULD OCCUR FROM SUDDEN EJECTION OF PARTS.

   A. Install unit in the stand in a vertical position (air valve at top).

   B. Make sure that the air pressure is released from the shock strut. Remove the air valve cap and slowly loosen the swivel nut. After the pressure is released, tighten the air valve nut.

2. Remove Components from Shock Strut (Fig. 1101).

   A. Remove torsion links.

      (1) Cut the lockwire. Remove pin (1), nut (2), washers (3, 4), bearing (4B), bushing (4A) and apex bolt (5) from the upper and lower torsion links.

      (2) Remove parts (6K thru 6G, 6A) or (6F thru 6A), or retaining rings (6), from lower torsion link pin (7). Remove parts (16K thru 16G, 16A), or (16F thru 16A), or retaining rings (16), from upper torsion link pin (17).

      (3) If applicable, remove nuts (8, 18), washers (9, 19), and bolts (10, 20) from the lugs.

      (4) Remove pin (7) and lower link (11) from the shock strut.

      (5) Remove pin (17) and upper link (21) from the collar.

   B. Remove steering metering valve and cylinders.

      (1) Remove cotter pin (26), nut (27), washer (28), and bolt (29) at each steering cylinder (47) rod end.

      (2) Bend the tabs of washers (44) and loosen lower nuts (45).

      CAUTION: SHOCK STRUTS 65-46200-47 AND ON HAVE SPACERS AND WASHERS BETWEEN THE UPPER AND LOWER STEERING PLATES.

      (3) If applicable, remove spacers and related fasteners from two locations between upper and lower steering plates. Make a note of the type and quantity of washers at each location, to help during assembly. The washers were used to adjust the gap between the spacers and the plates during the assembly of the shock strut (OHM 32-21-11).

CAUTION: STEERING PLATES ARE A MATCHED SET WITH THE SHOCK STRUT OUTER CYLINDER. DO NOT REPLACE WITH PARTS FROM OTHER SETS.

(4) Remove nuts, washers, bolts (eight locations) which hold the upper and lower steering plates to the shock strut. Remove the plates from the shock strut.

(5) Remove bolts (32), washers (33), and cover assembly (34). Refer to CMM 32-50-12 for overhaul of the cover assembly.

(6) Remove nuts (35), washers (33), bolts (36), and bracket (37).

CAUTION: MAKE SURE THE THREADED RING OF THE VALVE CYLINDER IS COMPLETELY DISENGAGED FROM THE THREADS IN EACH STEERING CYLINDER TRUNNION.

(7) Remove the sealant from metering valve (41) ring and the steering cylinder trunnions. Unscrew the valve cylinder threaded ring from the steering cylinder trunnion.

NOTE: Metering valve (41) 10-60590-2 has special swivel attachment nuts with O-rings to let you remove, replace, and seal the valve without disassembly of the swivel from the valve.

(8) Remove nuts (38), washers (39), and bolts (40). Remove valve assembly (41).

(9) Remove O-rings (42) and backup rings (43) from valve transfer tubes.

(10) Bend the tabs of washers (44) out of the slots and remove nuts (45) and washers from the steering cylinders.

(11) Remove the plates from steering cylinders (47) and remove bearings (46) from plates. Refer to OHM 32-50-11 for overhaul of the steering cylinders.

(12) Remove nuts (48), washers (49), bolts (50), and supports (51) or support (51A) from upper plate.

(13) Remove unions (53) and O-rings (52) from the valve.

C. Remove steering collars.

CAUTION: BEARING (61) COULD BE OVERSIZE OR UNDERSIZE TO GO WITH REPAIRS TO STEERING COLLARS OR SHOCK STRUT OUTER CYLINDER AND BE MATCHED PARTS.

(1) Remove bushings (30) and each half of collar assembly (54) from shock strut. Keep the collar assembly as a matched set.

(2) Do not remove shim (57A) from aft collar half 65-46203-22, -23 unless repair or replacement is necessary. If removed, make note of the number of shim (57A) laminations to help during assembly.

(3) Remove seals (60). Remove bearing assemblies (61) from shock strut. Keep bearing halves (62 and 63) together as a matched set.

D. Temporarily install the plates back on the shock strut outer cylinder with bolts, washers, nuts (eight locations). If applicable, temporarily install the spacers with washers as noted in step B.(3) above, bolts and nuts. Alternately, put the steering plates and related fasteners in a container and keep with this shock strut as a set. Refer to OHM 32-21-11 for overhaul of the shock strut.

CLEANING

1. Clean all parts not covered by other manuals by standard industry practices and the instructions in SOPM 20-30-01 and 20-30-03.

INSPECTION/CHECK

1. Examine all parts for defects by standard industry practices. Refer to Fits and Clearances (Fig. 601) for design dimensions and wear limits.

2. Magnetic particle check (SOPM 20-20-01): 69-35383-1 bolt (5), pins (7, 17), steel upper and lower torsion links (11, 21), nut (27), bolt (29), bushings (30, 30A), collar assembly (54).

3. Penetrant check (SOPM 20-20-02): BACB30LM10CD52 bolt (5), pins (6B, 16B) aluminum upper and lower torsion links (11, 21), bearing (61).

REPAIR

1. Repair (Fig. 1101)

   A. General

      (1) Repair small defects by standard industry practices.

      (2) Refer to SOPM 20-10-01, SOPM 20-10-02, and CMM 32-00-05 for repair and refinish of high strength steel parts (180 ksi and above).

      (3) Refer to SOPM 20-10-05 for application of thermal spray coatings.

      (4) Refer to SOPM 20-10-09 for machining of copper-beryllium.

   B. Bolts (5, 29), Pins (7, 17) (Fig. 401)

      (1) Machine as required, within repair limits, to remove defects.

      (2) Shot peen as indicated.

      (3) Restore machined surface, unless otherwise noted, by plating and machining to design dimensions and finish.

   C. Steering Collar Assy (55) (Fig. 402)

      (1) Center Bore - Diameter A or 3

         (a) Method 1 -- Chrome plate or thermal spray buildup

            1) Machine collars as required, within repair limits, to remove defects.

            2) Shot peen as indicated.

            3) Build up with chrome plate or thermal spray. Grind to design dimension and finish. Wipe the chrome plate with primer (F-19.45).

         (b) Method 2 -- Oversized bearing

            1) Machine collars as required, within repair limits, to remove defects.

            2) Shot peen as indicated.

            3) Chrome plate the surface 0.003-0.005 inch thick and grind to design dimensions and finish. Wipe the chrome plate with primer (F-19.45).

4) Make a special repair bearing as shown (Fig. 405). If the shock strut mating OD is undersize (OHM 32-21-11), be sure to make the bearing ID undersize also. You can also get the special repair bearing, with the dimensions specially changed for your repair, directly from Yeager Manufacturing Company (V31788).

5) As applicable, be sure to identify the steering collar assembly, the repair bearing, and the shock strut as a matched set. To identify this bearing as a special repair part, we recommend you give it the equivalent part number with an M suffix, such as 69-61785-8M.

(2) Steering Collar (56, 57) Lugs and Holes (Fig. 402)

NOTE: The repair limits are applicable only if the lug radii were not machined to become outside of design dimensions.

(a) Method 1 -- Installation of oversize bushings or repair sleeves (for material removal more than 0.015 inch)

1) Machine lug faces and holes as required, within repair limits, to remove defects.

2) Shot peen, cadmium-titanium plate and apply primer, BMS 10-11, Type 1.

3) Make oversize bushings per Fig. 404, or repair sleeves per Fig. 406, to adjust for the material removed.

4) Install the bushings or sleeves by the shrink fit method (SOPM 20-50-03). If necessary, machine (hone) bushings to design dimensions per Fig. 402. Install the bushings or sleeves with wet BMS 5-95, but not the clearance fit bushings (30, 30A).

(b) Method 2 -- Chrome Plate Buildup on faces only (for aft collar (57) only)

1) Machine lug faces and holes as required, within repair limits, to remove defects.

2) Shot peen, chrome plate (SOPM 20-42-03) and grind to design dimensions and finish. Chrome plate thickness must not be more than 0.015 inch after grinding. If material removal is more than 0.015 inch, nickel plate (SOPM 20-42-09) and then chrome plate 0.003-0.005 inch thick (SOPM 20-42-03) and grind to design dimensions. Total plate thickness must not be more than 0.040 inch after grinding.

3) Install standard bushings (See IPL) per step (2)(a)4) above.

(c) Method 3 -- Nickel Plate Buildup on faces only (for forward collar (56) only)

1) Machine lug faces and holes as required, within repair limits, to remove defects.

2) Shot peen, nickel plate (Ref SOPM 20-42-09) and machine (do not grind) to design dimensions and finish. Nickel plate thickness must not be more than 0.040 inch after machining.

3) Install standard bushings (See IPL) per step (2)(a)4) above.

(d) Method 4 -- Thermal Spray Buildup, only for the mating faces of the two collar halves (Optional)

NOTE: If one faying surface of steering collar half is built up with thermal spray coating, the other matched faying surface must be built up with thermal spray coating.

1) Machine lug faces and holes as required, within repair limits, to remove defects.

2) Shot peen as indicated.

3) Build up with thermal spray coating as indicated. Thickness must not be more than 0.010 inch.

4) Install standard bushings (see IPL) per step (2)(a)4) above.

D. Torsion Link Assy (11, 21) Lug Faces and Holes (Fig. 403)

(1) Machine lugs and holes as required, within repair limits, to remove defects.

(2) Chemical treat or anodize machined surfaces (aluminum links) or cadmium-titanium plate machined surfaces (steel links) and apply one coat BMS 10-11 Type 1 primer.

(3) Make oversize bushings (Fig. 404) or repair sleeves (Fig. 406) as required to make allowance for the amount of material removed in step (1)

(4) Install the bushings or sleeves by the shrink fit method of SOPM 20-50-03. Machine the bores to design dimensions and finish.

2. Refinish (Fig. 1101)

NOTE: Refer to SOPM 20-30-02 for stripping of protective finishes. Refer to SOPM 20-41-01 for explanation of F and SRF finish codes.

A. Pins (7, 17) -- Fig. 401.

B. Bolts (5, 29) -- Fig. 401.

C. Torsion links (12, 22) -- Fig. 403.

D. Torsion link assemblies (11, 21) -- Fig. 403.

E. Steering collar assembly (54) -- Fig. 402.

F. Steering collar (55) -- Fig. 402.

G. Bearings (61)

(1) 69-36626 -- Cadmium plate (F-4.201), but not the OD and flange inner faces that will touch the steering collar. Material: Al-Ni-Brz per AMS 4640 or AMS 4880.

(2) 69-61785-series -- Fig. 405.

H. Support (51) -- Chemical treat or chromic acid anodize and apply BMS 10-11, Type 1 primer (SRF-2.30). Material: Al alloy.

I. Support (51B) -- Cadmium plate (F-15.06). Then apply BMS 10-11, Type 1 primer (F-20.02) and BMS 10-60, color 707 grey gloss enamel (F-14.9813, which replaces SRF-14.9813). Material: AISI 630 CRES.

J. Bushings (30, 30A) -- Passivate (F-8.07) all over, then cadmium plate OD (F-1.1926) the OD. Material: 17-4PH CRES, 180-200 ksi.

K. Shim (57A) -- Apply, BMS 10-11, Type 1 primer (F-20.03) after delamination. Material: Al alloy.

L. End caps (6A, 16A) -- Cadmium plate (F-15.06) all over. Material: Al-Ni-Brz per AMS 4640.

M. Retaining pins (6B, 16B) -- Cadmium plate (F-15.06) all over. Material: A286 CRES.

N. Brackets (37D thru 37F) -- Cadmium plate (F-15.06) then apply BMS 10-11, Type 1 primer (F-20.02) and BMS 10-60, color 707 gray enamel (F-14.9813, which replaces SRF-14.9813). Material: AISI 630 CRES.

O. Bracket (65) -- Cadmium plate (F-1.1926). Material: 17-4PH CRES (no heat treat).

3. Replacement (Fig. 1101)

A. Replace all lockwire and cotter pins.

B. Replace O-rings (42, 52), washers (44), and seals (60).

C. Lube fittings (13, 13A, 23, 23A, 58, 58A) -- Replace per CMM 32-00-03.

D. Bushings -- Remove old bushings. Install replacements by the shrink fit method (SOPM 20-50-03). Machine (hone) bushings to design dimensions per Fig. 402 and 403.

E. Shim (57A) (Fig. 402A)

(1) Put collar halves (56, 57) together and align the holes in the mating lugs. Measure the distance between the adjacent collar faces as shown.

(2) Get a replacement shim (57A) and adjust its size for an approximate fit. It goes on the aft collar half with the chamfer to the center of the ID.

(3) Clean the mating surfaces of the shim and the aft collar per SOPM 20-30-03.

(4) Install the shim on the aft collar half with the chamfer to the center of the ID and bond it in position with BMS 5-95 sealant.

(5) Remove laminations as necessary to get an assembled gap of 0.01-0.03 inch between the shim and the forward collar half, as shown.

(6) Make sure that the shim and the sealant surfaces are not above the surface of the ID of the collar assembly.

(7) Apply two layers of BMS 10-11, Type 1 primer to the shim surfaces after lamination removal.

F. Markers (33A, 33B) -- Apply a replacement marker per SOPM 20-50-05. Seal the edges with Type 41 protective finish.

G. Lube fitting (58B) and bushing (58C) -- Unscrew the lube fitting. Remove the bushing. Install a replacement bushing by the shrink fit method (SOPM 20-50-03). Fillet seal the flange with BMS 5-95 sealant (SOPM 20-50-19). Install the lube fitting and tighten it to 25-30 lb-in.

H. Plug (58D) -- Remove the old plug. Install a replacement plug by the shrink fit method (SOPM 20-50-03). Fillet seal the flange with BMS 5-95 sealant (SOPM 20-50-19).

4. Materials

NOTE: Equivalent materials can be used.

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

B. Corrosion Preventive Compound -- MIL-C-11796, class 1 (SOPM 20-60-02)

C. Corrosion Preventive Compound -- MIL-C-16173, grade 1 (SOPM 20-60-02)

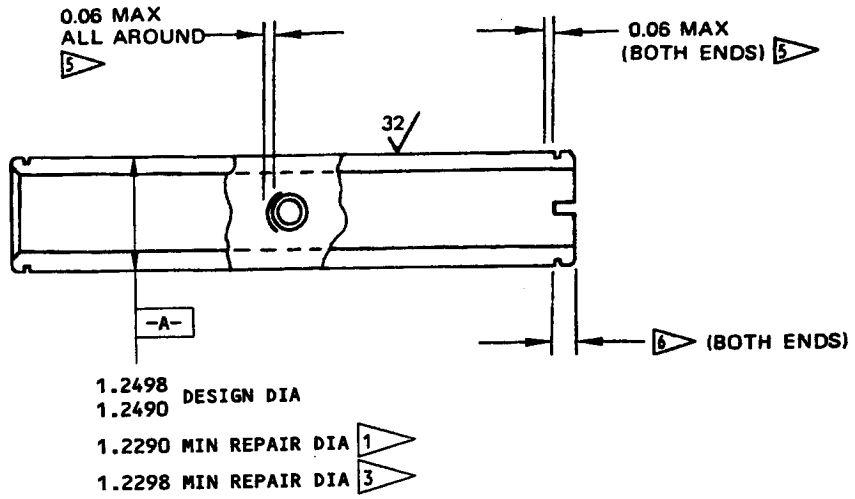
D. Enamel -- BMS 10-11, Type 2 (SOPM 20-60-02)

E. Primer -- MIL-P-8585 (SOPM 20-60-02)

F. Sealant -- BMS 5-95 (SOPM 20-60-04)

G. Enamel -- BMS 10-60, color 707 (SOPM 20-60-02)

H. Protective Finish -- Type 41 (SOPM 20-60-02)



REFINISH

CHROME PLATE (F-15.04) DIA -A-. CADMIUM-TITANIUM PLATE (F-15.01) ALL OTHER SURFACES. APPLY BMS 10-11 TYPE 1 PRIMER (F-20.03) TO HOLE AND BORE. APPLY CORROSION PREVENTIVE COMPOUND, MIL-C-11796, CLASS 1 (F-19.03) IN BORE.

REPAIR

REF 1 3

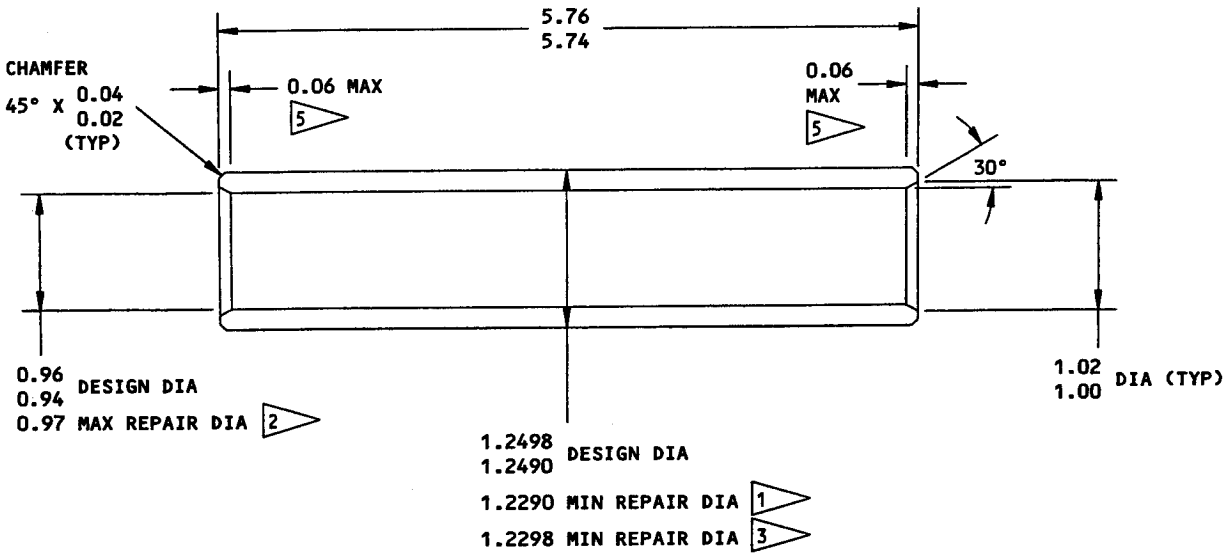
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

SHOT PEEN (SOPM 20-10-03)
0.016-0.033 SHOT SIZE
0.015A2 INTENSITY

ALL DIMENSIONS ARE IN INCHES

PIN (7, 17)
69-35382-1

Pins and Bolts - Repair and Refinish
Figure 401 (Sheet 1)



REFINISH

CHROME PLATE (F-15.04) OD. WIPE CHROME PLATE WITH PRIMER (F-19.45)

CADMIUM-TITANIUM PLATE (F-15.01) AND APPLY BMS 10-11, TYPE 1 PRIMER (F-20.03) TO ALL OTHER SURFACES. APPLY MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03) TO INTERIOR SURFACE

REPAIR

REF 1 2 3

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.02 R MAX

SHOT PEEN: (SOPM 20-10-03)
0.017-0.046 SHOT SIZE
0.010-0.016A2 INTENSITY

MATERIAL: 4340M STEEL (275-300 KSI)

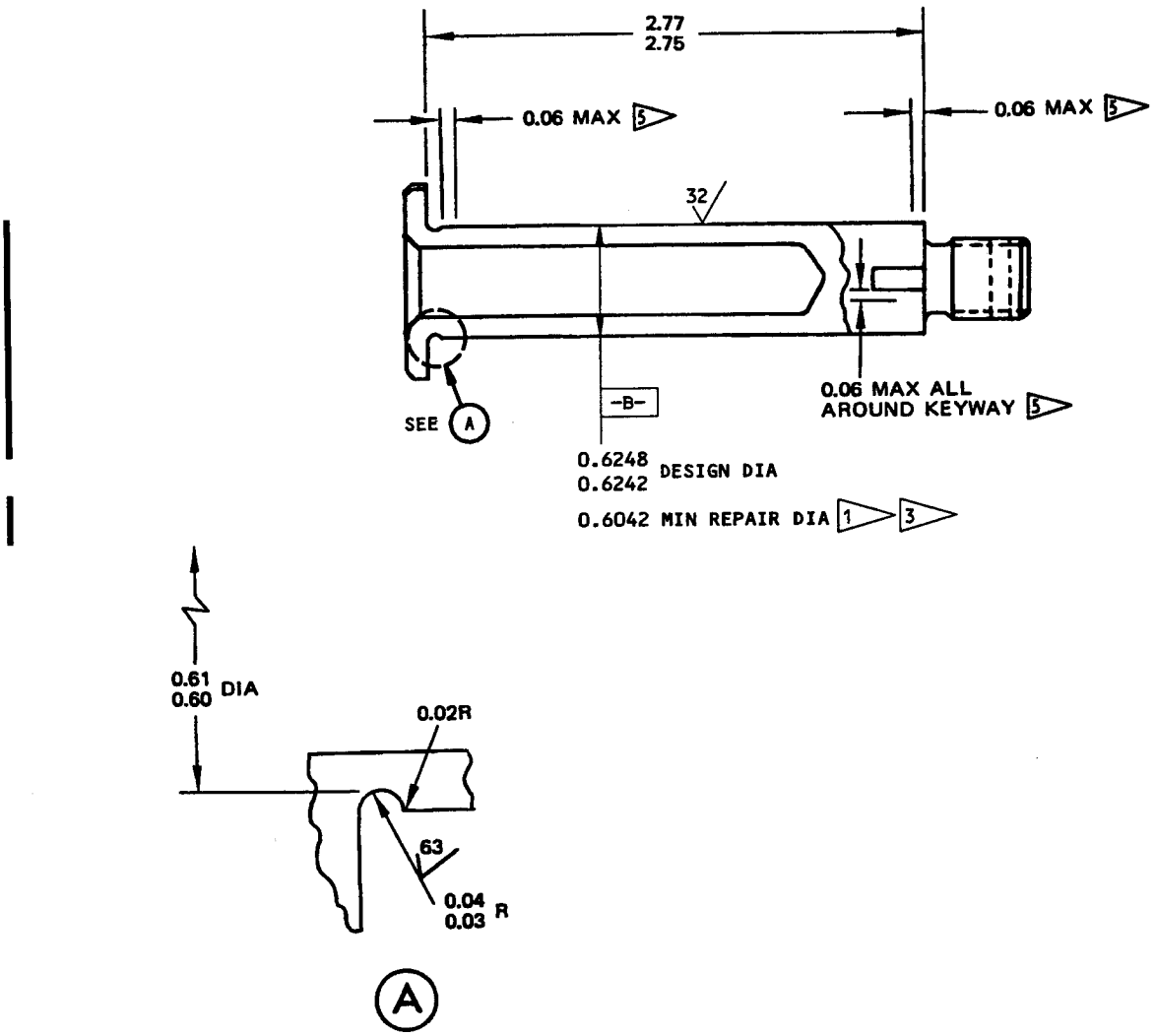
ALL DIMENSIONS ARE IN INCHES

PIN (7, 17)

69-72698-1

Pins and Bolts - Repair and Refinish
Figure 401 (Sheet 2)

E59801



REFINISH

CHROME PLATE (F-15.04) DIA -B-. CADMIUM-TITANIUM PLATE (F-15.01) ALL OTHER SURFACES. ON INTERIOR, ALSO APPLY BMS 10-11 TYPE 1 PRIMER (F-20.03) AND MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

REPAIR

REF 1 3

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

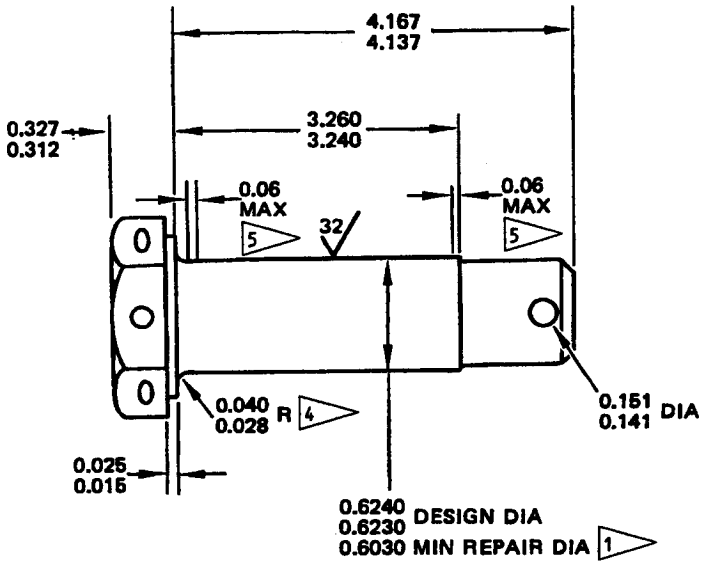
SHOT PEEN: (SOPM 20-10-03)
0.016-0.033 SHOT SIZE
0.012A2 INTENSITY

MATERIAL: 4340 STEEL (180-200 KSI)

ALL DIMENSIONS ARE IN INCHES

APEX BOLT (5)
69-35383-1

Pins and Bolts - Repair and Refinish
Figure 401 (Sheet 3)



REFINISH

CHROME PLATE (F-15.03) (0.0020 MIN THICKNESS) ON SHANK ONLY. PUT A CHROME PLATE RUNOUT AS NOTED 5. PASSIVATE (F-17.13) OTHER SURFACES

REPAIR

REF 1

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

SHOT PEEN: (SOPM 20-10-03)
0.017-0.039 SHOT SIZE
0.016A2 INTENSITY

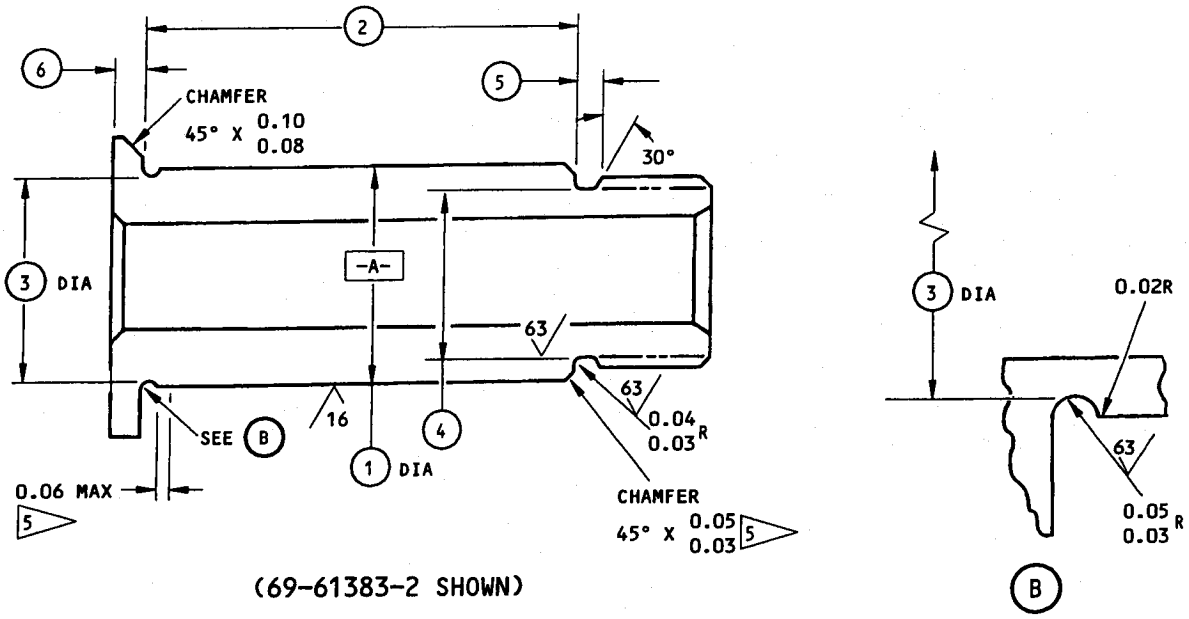
MATERIAL: A286 CRES

ALL DIMENSIONS ARE IN INCHES

APEX BOLT (5)
BACB30LM10

Pins and Bolts - Repair and Refinish
Figure 401 (Sheet 4)

W53727



(69-61383-2 SHOWN)

	1	2	3	4	5	6
DESIGN DIM	0.9998 0.9991	2.16 2.14	0.98 0.97	0.774 0.764	0.153 0.133	0.16 0.14
REPAIR LIMIT	0.9710 ▷1 0.9791 ▷3	—	0.96 ▷2	0.744 ▷2	0.163 ▷2	0.13 ▷2

REFINISH

CHROME PLATE (F-15.03) DIA -A-. CADMIUM PLATE (F-1.32, WHICH REPLACES F-1.1923) ALL OTHER SURFACES. TO BORE AND ITS CHAMFERS, APPLY BMS 10-11 TYPE 1 PRIMER (F-20.03) AND MIL-C-11796 CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03)

▷1 LIMIT FOR BUILDUP WITH CHROME PLATE (SOPM 20-42-03) AND GRIND TO DESIGN DIMENSIONS AND FINISH, WITH PLATING RUNOUT AT EDGES AS SHOWN

▷2 RESTORATION TO DESIGN DIM NOT REQUIRED

▷3 LIMIT FOR BUILDUP WITH BMS 10-67 TYPE 1 OR 17 CLASS 2, 3, OR 4 THERMAL SPRAY (SOPM 20-10-05), 0.010 MAX THICK. PUT A 0.080 MAX RUNOUT AT EDGES. GRIND TO DESIGN DIMENSIONS AND 4 MICROINCH FINISH. THEN CADMIUM-TITANIUM PLATE (SOPM 20-42-02) THE RUNOUT AREA.

REPAIR

REF ▷1 ▷2 ▷3

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

SHOT PEEN: (SOPM 20-10-03)
0.016-0.033 SHOT SIZE
0.012A2 INTENSITY

MATERIAL: 4340 STEEL (180-200 KSI

ALL DIMENSIONS ARE IN INCHES

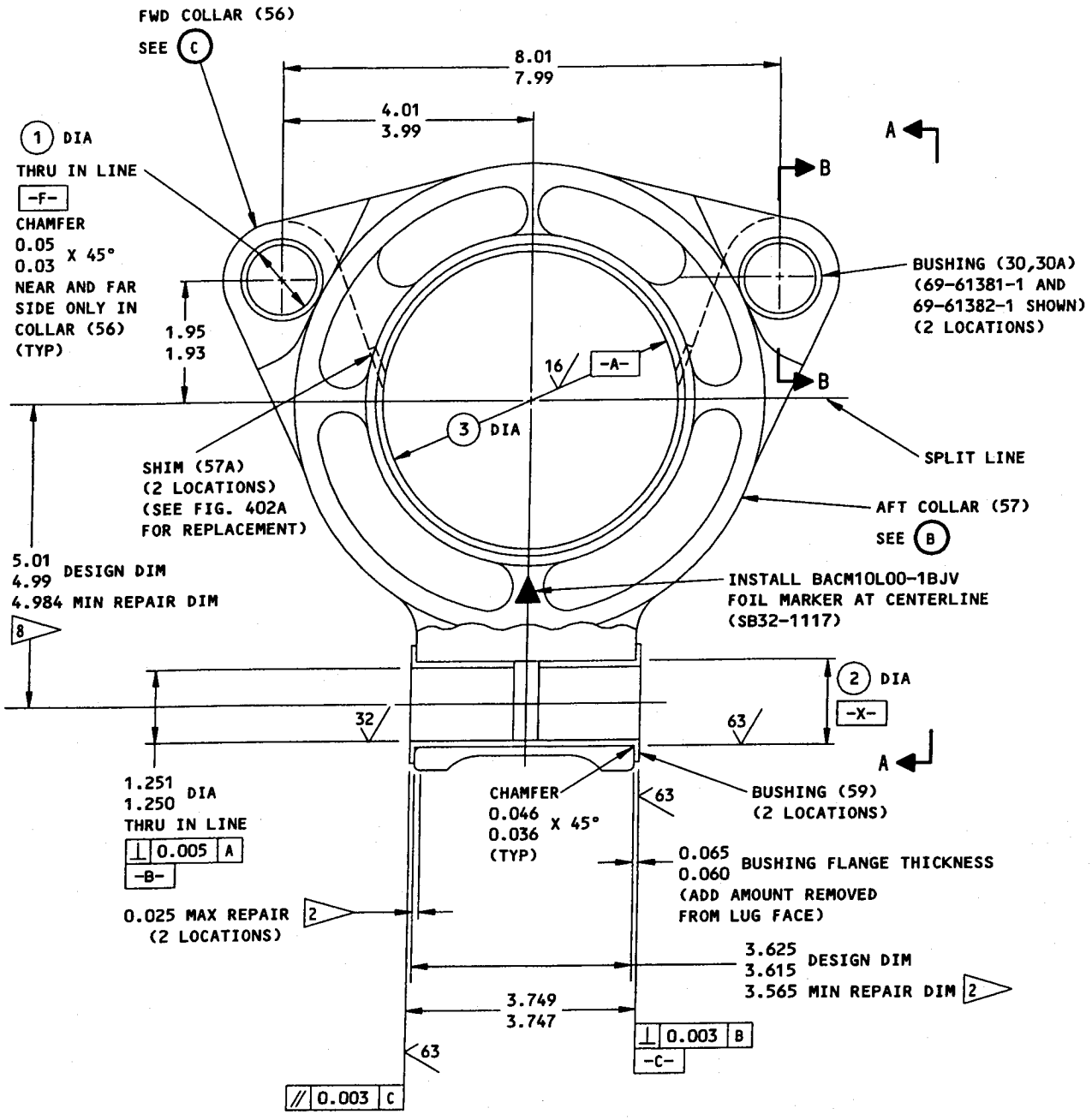
▷4 NO CHROME PLATE

▷5 CHROME PLATE RUNOUT

▷6 CHROME PLATE OPTIONAL

BOLT (29)

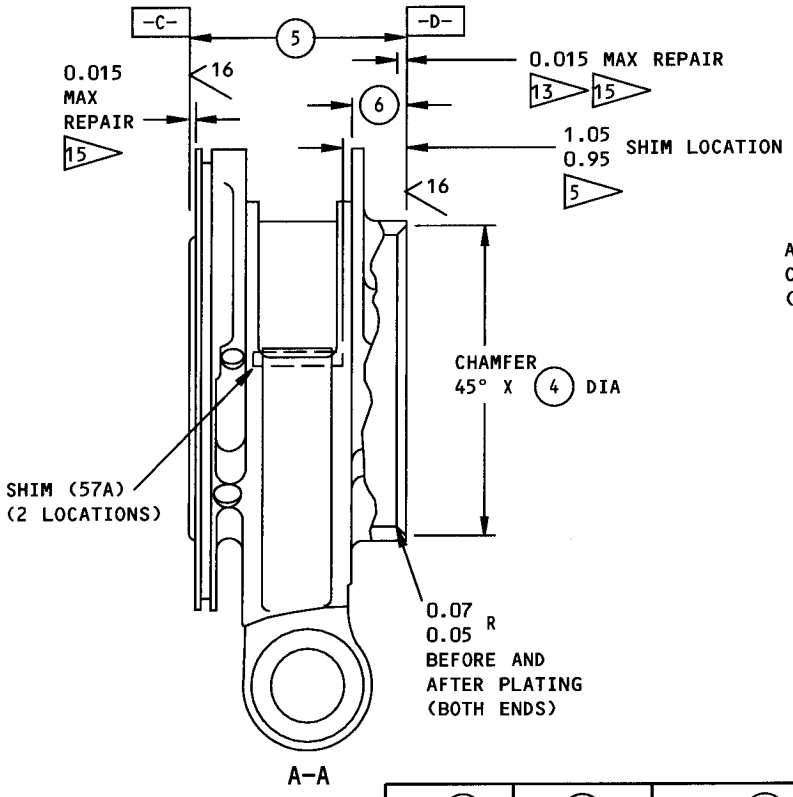
Pins and Bolts - Repair and Refinish
Figure 401 (Sheet 5)



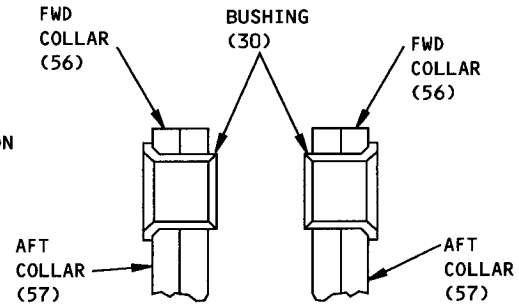
KEEP THE HALVES TOGETHER
AS A MATCHED SET

MACHINE COLLAR ASSY (55)

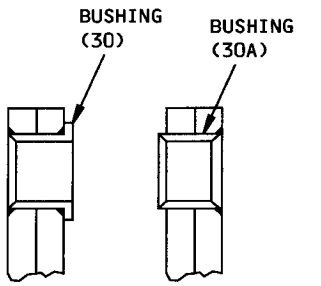
Steering Collar Repair and Refinish
Figure 402 (Sheet 1)



A-A



CONFIG WITH 69-36628-2 BUSHINGS



CONFIG WITH 69-61381-1 AND
69-61382-1 BUSHINGS

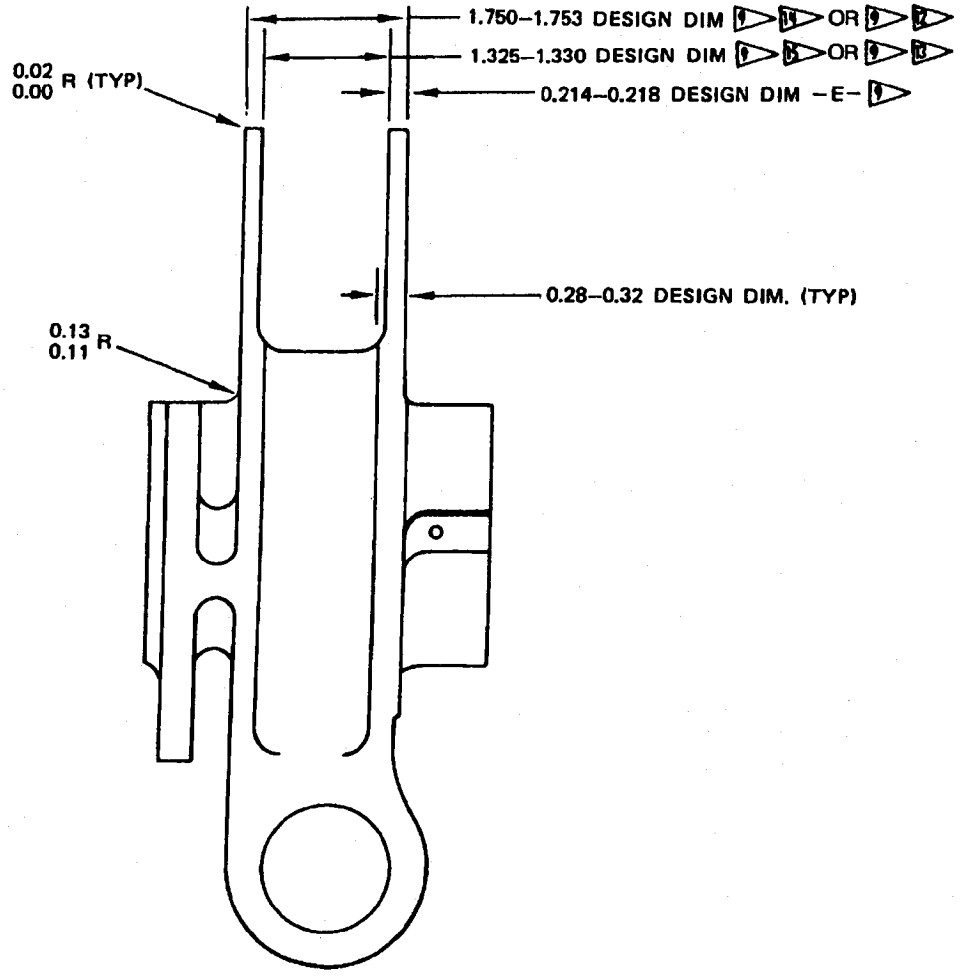
B-B

		①	②	③	④	⑤	⑥
65-46203-4	DESIGN DIM	1.201 1.200	1.438 1.437	4.884 4.882	5.24 5.23	3.517 3.515	0.895 0.890
	REPAIR LIMIT	9	1.600 2	4.904 4 4.914 1 4.975 11	----	3.455 10	9
65-46203-6, -8	DESIGN DIM	1.201 1.200	1.438 1.437	4.999 4.997	5.355 5.345	3.517 3.515	0.895 0.890
	REPAIR LIMIT	9	1.600 2	5.019 4 5.029 1 5.060 11	----	3.455 10	9
65-46203-15, -23	DESIGN DIM	1.201 1.200	1.438 1.437	4.884 4.882	5.12 5.11	3.400 3.398	0.835 0.830
	REPAIR LIMIT	9	1.600 2	4.904 4 4.914 1 4.975 11	----	3.350 10	9
65-46203-16, -18,-22,-25, -27	DESIGN DIM	1.201 1.200	1.438 1.437	4.999 4.997	5.23 5.22	3.400 3.398	0.835 0.830
	REPAIR LIMIT	9	1.600 2	5.019 4 5.029 1 5.060 11	----	3.350 10	9

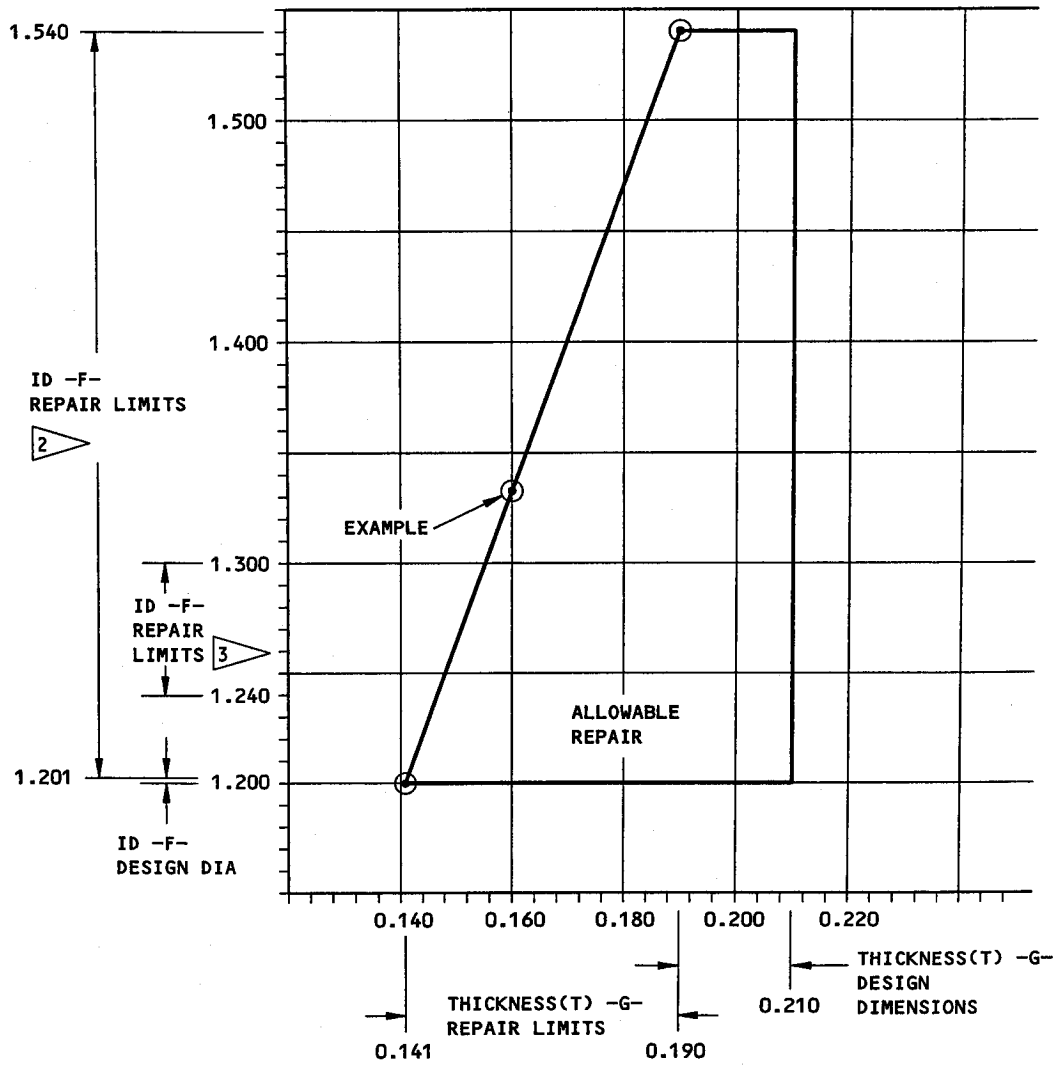
MACHINE COLLAR ASSEMBLY (55)

Steering Collar Repair and Refinish
Figure 402 (Sheet 2)

F57343



Steering Collar Repair and Refinish
Figure 402 (Sheet 3)



REPAIR CRITERIA

THE COMBINATION OF ID AND THICKNESS T REPAIR LIMITS MUST BE WITHIN THE INDICATED AREA OF THE CHART. AN ACCEPTABLE ID OR THICKNESS T CAN BE CALCULATED AS FOLLOWS:

$T \geq 0.1445(ID) - 0.0325$ IF $(1.201 < ID \leq 1.540)$
$T = 0.141$ MINIMUM IF $(1.200 \leq ID \leq 1.201)$

$ID \leq 6.9204(T) + 0.2249$ IF $(0.141 \leq T < 0.190)$
$ID = 1.540$ MAXIMUM IF $(0.190 \leq T \leq 0.210)$

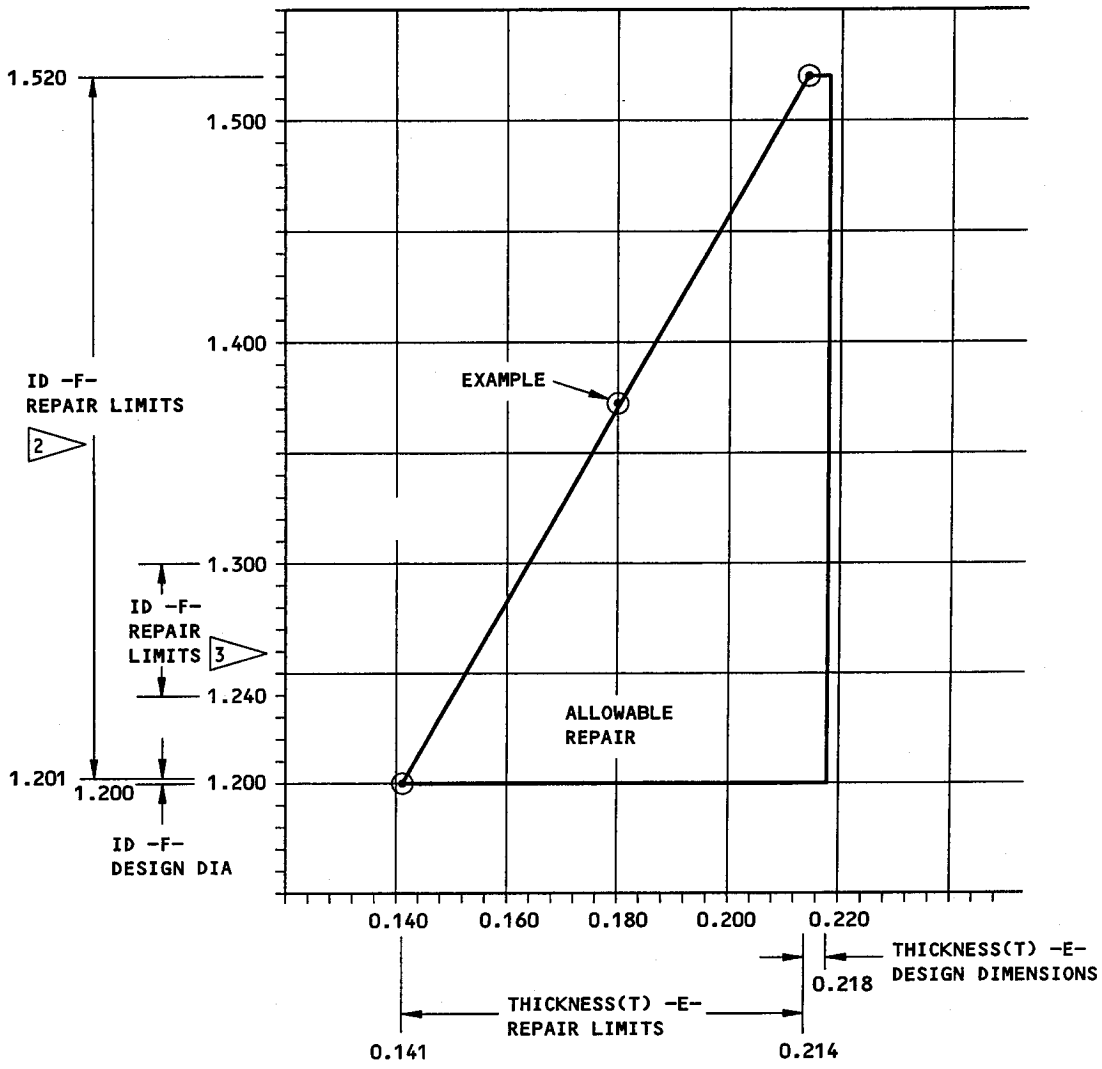
EXAMPLE: IF ID IS MACHINED OUT TO 1.332,
$T \geq 0.1445(1.332) - 0.0325$
$T \geq 0.160$

THIS MEANS THE THICKNESS T MUST BE 0.160 OR GREATER. IF THE THICKNESS T IS KNOWN FIRST, THE ID CAN SIMILARLY BE FOUND.

FORWARD STEERING COLLAR (56)

65-46252-2 THRU -7

Steering Collar Repair and Refinish
Figure 402 (Sheet 4)



REPAIR CRITERIA

THE COMBINATION OF ID AND THICKNESS T REPAIR LIMITS MUST BE WITHIN THE INDICATED AREA OF THE CHART. AN ACCEPTABLE ID OR THICKNESS T CAN BE CALCULATED AS FOLLOWS:

$T \geq 0.2288(ID) - 0.1338$	IF $(1.201 < ID \leq 1.520)$
$T = 0.141$ MINIMUM	IF $(1.200 \leq ID \leq 1.201)$
$ID \leq 4.3706(T) + 0.5848$	IF $(0.141 \leq T < 0.214)$
$ID = 1.520$ MAXIMUM	IF $(0.214 \leq T \leq 0.218)$

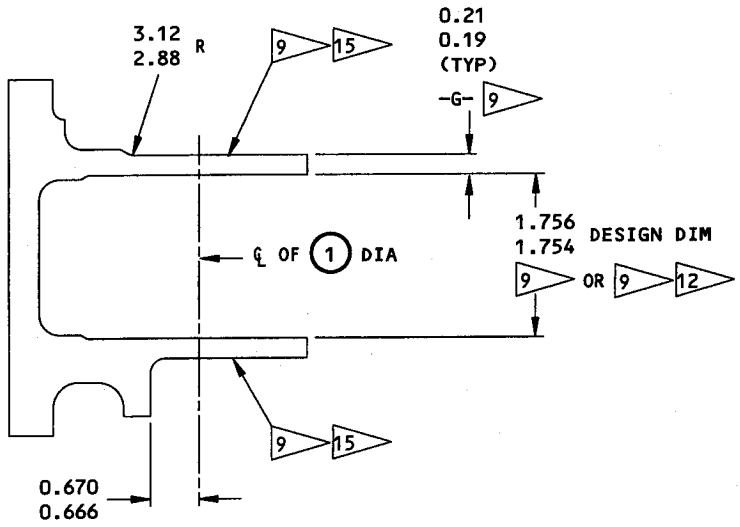
EXAMPLE: IF ID IS MACHINED OUT TO 1.3715,
$T \geq 0.2288(1.3715) - 0.1338$
$T \geq 0.180$

THIS MEANS THE THICKNESS T MUST BE 0.180 OR GREATER. IF THE THICKNESS T IS KNOWN FIRST, THE ID CAN SIMILARLY BE FOUND.

AFT STEERING COLLAR (57)

65-46250-2 THRU -9

Steering Collar Repair and Refinish
Figure 402 (Sheet 5)



C-C

REFINISH

CHROME PLATE (F-15.04) DIA -A-. CADMIUM-TITANIUM PLATE (F-1.308, WHICH REPLACES F-1.181) ALL OTHER SURFACES (THROW-IN PERMITTED IN BORES)

AFTER INSTL OF LUBE FITTINGS AND BUSHINGS, APPLY PRIMER, BMS 10-11, TYPE 1 (SRF-12.205) AND ENAMEL, BMS 10-11, TYPE 2 (SRF-12.63) BUT NOT ON BUSHINGS, LUBE FITTINGS, OR MATING SURFACES AT SPLITLINE. APPLY PRIMER BMS 10-11, TYPE 1 (F-20.02) AND CORROSION PREVENTIVE COMPOUND, MIL-C-16173 GRADE 1 TO EXPOSED AREA BETWEEN BUSHINGS (59)

1 LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03), WITH 0.06 PLATING RUNOUT AT EDGES. GRIND TO DESIGN DIMENSIONS AND FINISH (SOPM 20-10-04)

2 LIMIT FOR INSTALLATION OF OVERSIZE BUSHING

3 LIMIT FOR INSTALLATION OF REPAIR SLEEVES, AND STANDARD BUSHINGS PER PARTS LIST

4 LIMIT FOR BMS 10-67 TYPE 1 OR 17, CLASS 2, 3, OR 4 THERMAL SPRAY BUILDUP (REF SOPM 20-10-05) AND GRIND TO DESIGN DIMENSIONS AND 8 MICROINCH FINISH. A 4 MICROINCH FINISH IS PREFERRED (737-SL-32-065-A). PUT A 0.06 RUNOUT AT EDGES

5 DELETED

REPAIR

REF 1 THRU 4, 8 THRU 15

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

SHOT PEEN: (SOPM 20-10-03)
0.016-0.033 SHOT SIZE
0.009-0.015 A2 INTENSITY

MATERIAL: 4340M STEEL (270-300 KSI)

ALL DIMENSIONS ARE IN INCHES

6 DELETED

7 DELETED

8 LIMIT FOR REMOVAL OF CORROSION AT SPLIT LINE. CADMIUM PLATE (SOPM 20-42-01) AND APPLY BMS 10-11, TYPE 1 PRIMER (F-20.03) AFTER REMOVAL OF DEFECTS. RESTORATION TO DESIGN DIM IS NOT REQUIRED.

9 SEE GRAPH (SHEET 5 AND 6) FOR MAXIMUM HOLE DIAMETER WITH RELATION TO MINIMUM LUG THICKNESS. MAXIMUM AMOUNT OF MATERIAL TO BE REMOVED OFF OF ONE FACE IS 0.040.

10 LIMIT FOR 0.003-0.005 CHROME PLATE BUILDUP (SOPM 20-42-03) AND INSTALLATION OF BEARING WITH THICKER FLANGES (SEE FIG. 405) CHROME PLATE ALLOWED ON CHAMFER. WIPE CHROME WITH PRIMER (F-19.45).

STEERING COLLAR ASSEMBLY (55)

Steering Collar Repair and Refinish
Figure 402 (Sheet 6)

11 LIMIT FOR 0.003-0.005 CHROME PLATE BUILDUP (REF SOPM 20-42-03) AND INSTALLATION OF BEARING WITH LARGER OUTSIDE DIAMETER (SEE FIG. 405), WITH 0.06 PLATING RUNOUT AT EDGES. WIPE CHROME PLATE WITH PRIMER (F-19.45).

12 IF MATERIAL REMOVED FROM THE FACE IS 0.015 OR LESS, LIMIT FOR BUILDUP WITH BMS 10-67, TYPE 1 OR 17, CLASS 2, 3, OR 4 THERMAL SPRAY COATING (REF SOPM 20-10-05) AND GRIND TO DESIGN DIMENSIONS AND 8 MICROINCH FINISH. PUT A 0.06 RUNOUT AT THE EDGES AND RADII. OPTIONAL 14. IF ONE FAYING SURFACE OF STEERING COLLAR HALF IS BUILT UP WITH THERMAL SPRAY COATING, THE OTHER FAYING SURFACE HALF MUST BE BUILT UP WITH THERMAL SPRAY COATING. IF MATERIAL REMOVED FROM THE FACE IS MORE THAN 0.015 SEE 9 14.

13 IF MATERIAL REMOVED IS 0.015 OR LESS, BMS 10-67, TYPE 1 OR 17, LIMIT FOR BUILDUP WITH CLASS 2,3 OR 4 THERMAL SPRAY COATING (REF SOPM 20-10-05) AND GRIND TO DESIGN DIMENSIONS AND 8 MICROINCH FINISH. PUT A 0.06 RUNOUT AT EDGES AND RADII.

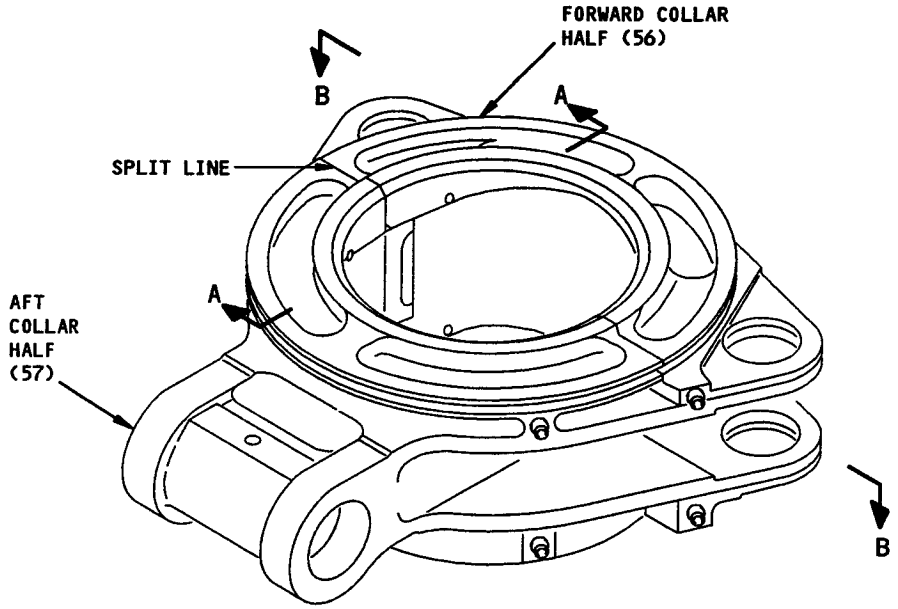
14 IF MATERIAL REMOVED FROM THE FACE IS 0.015 OR LESS, LIMIT FOR CHROME PLATE BUILDUP (REF SOPM 20-42-03) WITH 0.06 PLATING RUNOUT AT EDGES. GRIND TO DESIGN DIMENSION AND FINISH.

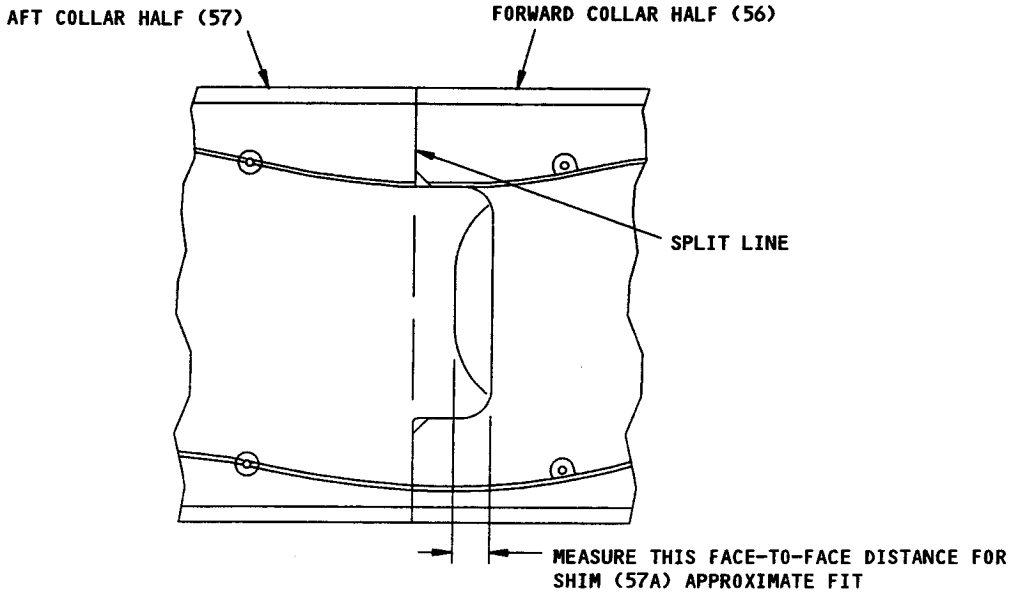
IF MATERIAL REMOVED FROM THE FACE IS MORE THAN 0.015, LIMIT FOR BUILDUP WITH SULFAMATE NICKEL PLATE (REF SOPM 20-42-09). MACHINE TO 0.003-0.005 LESS THAN DESIGN DIMENSION AND FINISH. MAXIMUM TOTAL THICKNESS OF PLATE IS 0.040. APPLY 0.003-0.005 CHROME PLATE (REF SOPM 20-42-03) OVER NICKEL PLATE, WITH 0.06 PLATE RUNOUT AT EDGES. WIPE CHROME PLATE WITH PRIMER (F-19.45).

15 IF MATERIAL REMOVED FROM THE FACE IS 0.015 OR LESS, LIMIT FOR BUILDUP WITH CHROME PLATE (REF SOPM 20-42-03), OR SULFAMATE NICKEL PLATE (REF SOPM 20-42-09). GRIND CHROME PLATE OR MACHINE NICKEL PLATE TO DESIGN DIMENSION AND FINISH, WITH 0.060 PLATING RUNOUT AT EDGES. MAX PLATING THICKNESS IS 0.015. WIPE CHROME PLATE WITH PRIMER (F-19.45).

IF MATERIAL REMOVED FROM THE FACE IS MORE THAN 0.015, LIMIT FOR SULFAMATE NICKEL PLATE BUILDUP (REF SOPM 20-42-09). MACHINE TO DESIGN DIMENSION AND FINISH. MAXIMUM THICKNESS OF PLATING IS 0.040, WITH 0.06 PLATE RUNOUT AT EDGES.

Steering Collar Repair and Refinish
Figure 402 (Sheet 7)





A-A

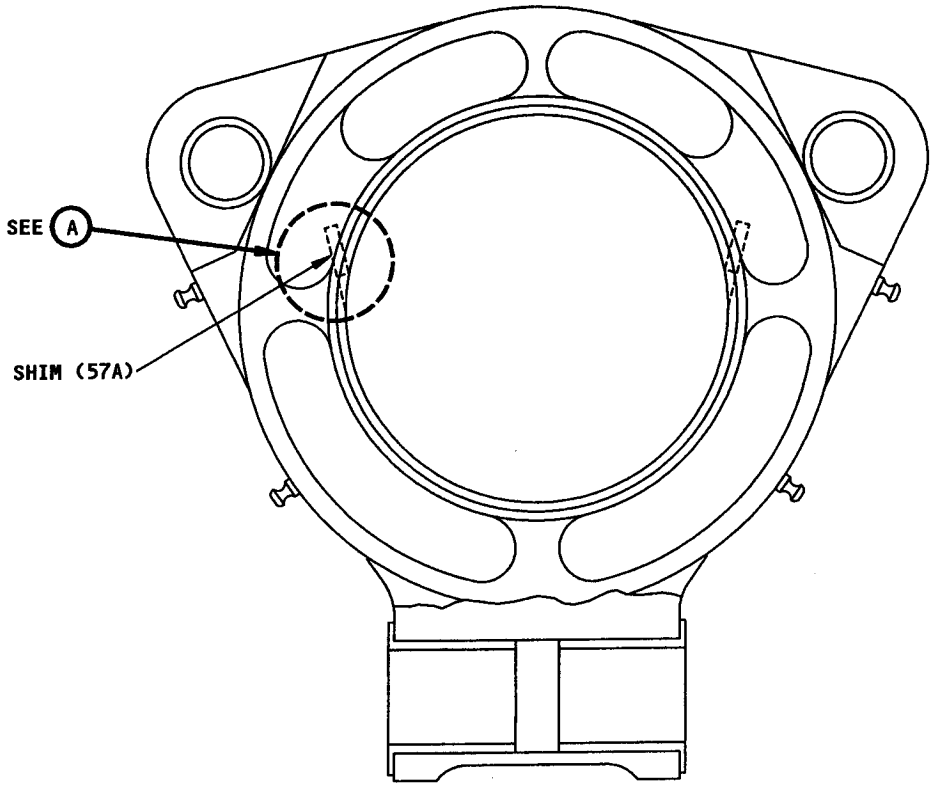
SHIM REMOVED FOR CLARITY

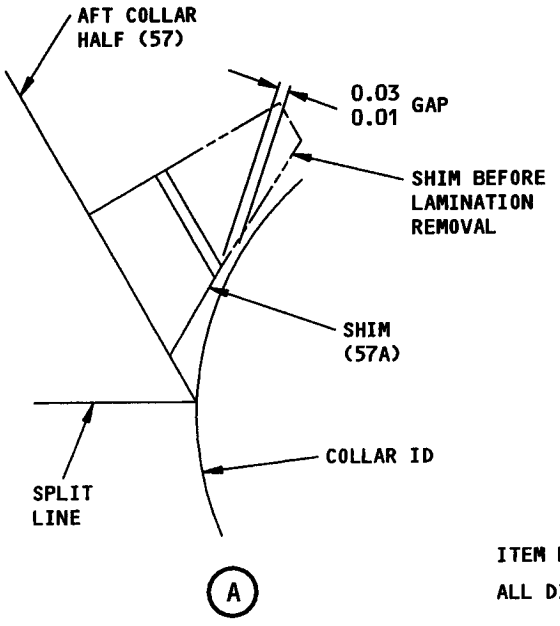
ITEM NUMBERS REFER TO FIG. 1101

MACHINE COLLAR ASSY (55)

Steering Collar Shim Replacement
Figure 402A (Sheet 1)

F92647



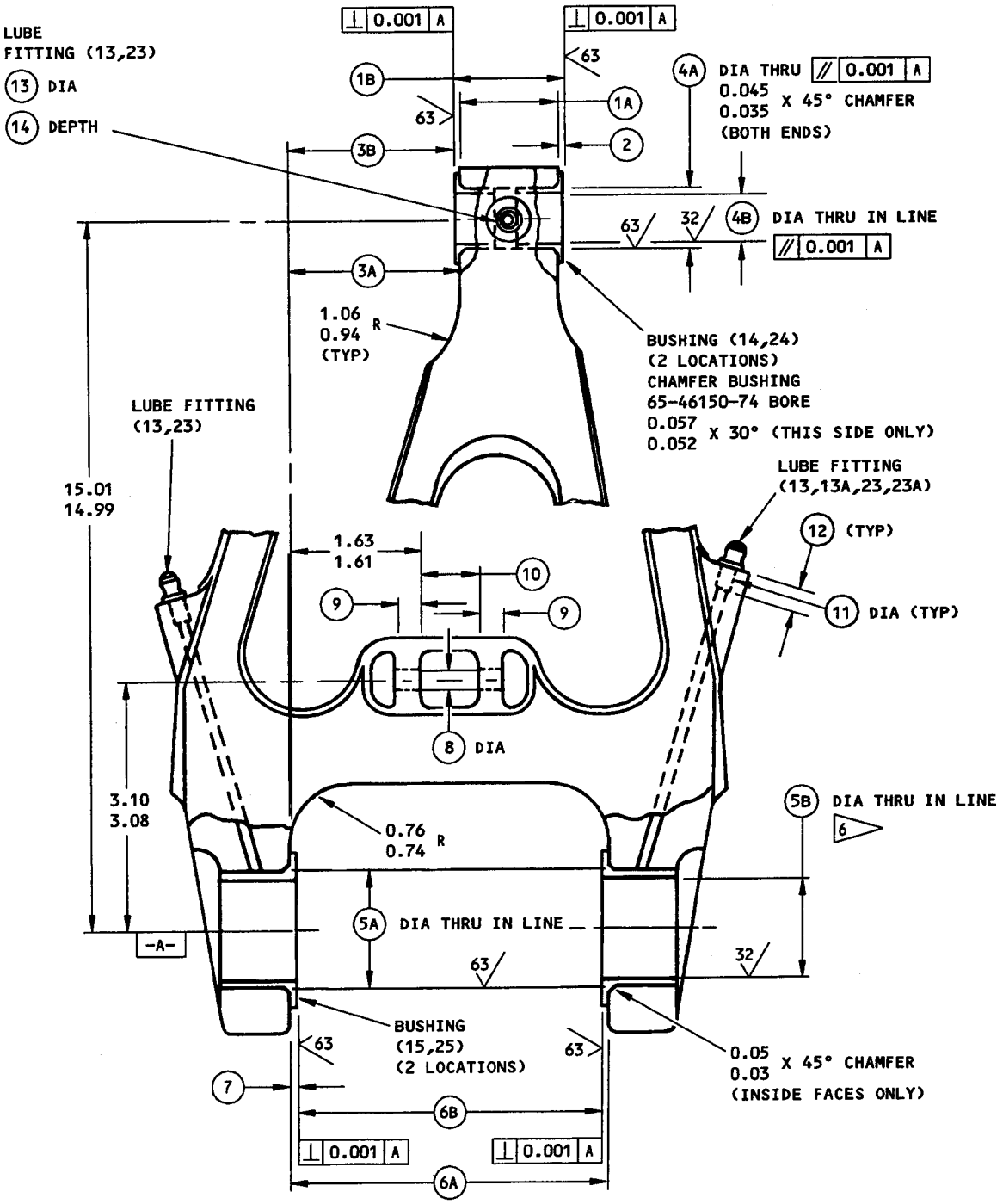


ITEM NUMBERS REFER TO FIG. 1101

ALL DIMENSIONS ARE IN INCHES

MACHINE COLLAR ASSEMBLY (55)

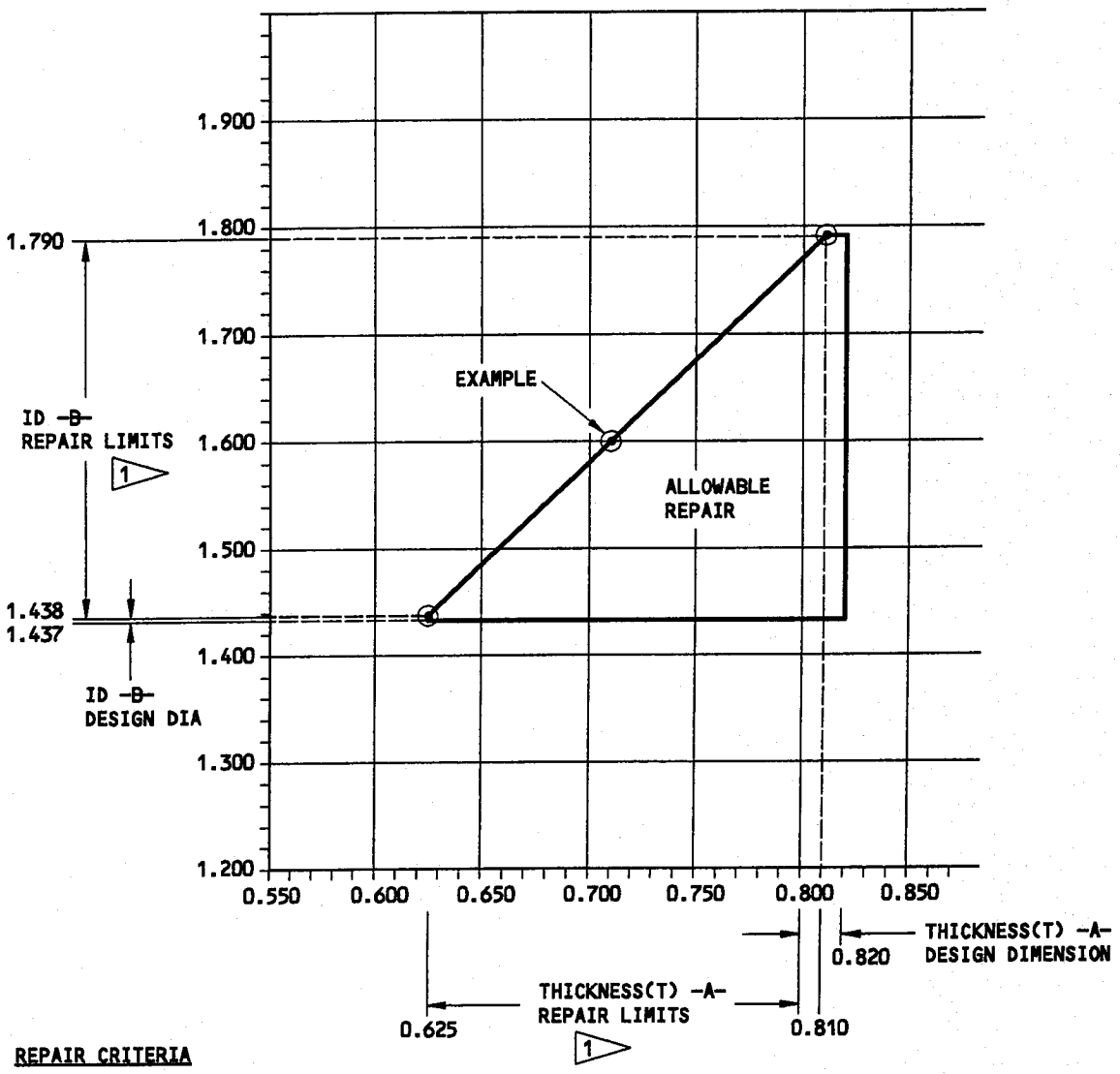
Shim Replacement
Figure 402A (Sheet 2)



TORSION LINK (11,21)
(65-46202 SHOWN)
(65-46288 SIMILAR BUT WITH SIDE LUBE FITTINGS
INBOARD AND WITHOUT CENTRAL LUGS)

Torsion Link Repair and Refinish
Figure 403 (Sheet 1)

F79172



REPAIR CRITERIA

THE COMBINATION OF ID AND THICKNESS REPAIR LIMITS MUST BE WITHIN THE INDICATED AREA OF THE CHART. AN ACCEPTABLE ID OR THICKNESS CAN BE CALCULATED AS FOLLOWS:

$T \geq 0.5256(ID) - 0.1308$	IF $(1.438 < ID \leq 1.790)$
$T = 0.625$ MINIMUM	IF $(1.437 \leq ID \leq 1.438)$
$ID \leq 1.902(T) + 0.2489$	IF $(0.625 \leq T < 0.810)$
$ID = 1.790$ MAXIMUM	IF $(0.810 \leq T \leq 0.820)$

EXAMPLE: IF ID IS MACHINED OUT TO 1.600,
$T = 0.5256(1.600) - 0.1308$
$T = 0.7102$

THIS MEANS THE THICKNESS MUST BE 0.7102 OR GREATER. OR IF YOU KNOW WHAT THE THICKNESS WILL BE FIRST, YOU CAN FIND THE ID LIMIT.

TORSION LINK (11,21)

Torsion Link Repair and Refinish
Figure 403 (Sheet 2)

	(1A) ▷2◁	(1B)	(2)	(3A)	(3B)	(4A)	(4B)	(5A)	(5B)
DESIGN DIM	1.205 1.200	1.325 1.320	0.07 0.06 ▷3◁	2.06 2.04	1.986 1.982	0.7505 0.7500	0.6259 0.6250	1.438 1.437	1.251 1.250
REPAIR LIMIT	1.050 ▷1◁	—	▷4◁	2.14 ▷1◁	—	0.9500 ▷1◁ ▷8◁	—	SEE CHART (SHT. 2)	—

	(6A) ▷2◁	(6B)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
DESIGN DIM	3.943 3.938	3.752 3.750	0.10 0.09 ▷3◁	0.254 0.250	0.32 0.28	0.710 0.705	0.186 0.185	0.40 0.30	0.186 0.185	0.40 0.30
REPAIR LIMIT	SEE CHART (SHT. 2)	—	▷4◁	0.313 ▷5◁	0.22 ▷6◁	0.830 ▷6◁	0.324 ▷7◁	—	0.250 ▷7◁	—

REFINISH

(65-46202-3,-4,-5,-8,-12; 65-46288-2,-4): CHROMIC ACID ANODIZE AND APPLY PRIMER, BMS 10-11, TYPE 1 (SRF-2.19).
(65-46202-14,-15; 65-46288-6,-8): CADMIUM-TITANIUM PLATE (F-15.01) AND APPLY PRIMER, BMS 10-11, TYPE 1 (F-20.02), BUT NO PRIMER IN BORES FOR LUBE FITTINGS

AFTER BUSHING AND LUBE FITTING INSTALLATION, APPLY BMS 10-11, TYPE 2 ENAMEL (SRF-12.63) (65-46202-3,-4,-5,-8,-12; 65-46288-2,-4) OR BMS 10-60 ENAMEL (F-14.9813, WHICH REPLACES SRF-14.9813) (65-46202-14,-15; 65-46288-6,-8), BUT NO ENAMEL ON MACHINED SURFACES OF BUSHINGS, HOLES, OR LUBE FITTINGS

▷1◁ LIMIT FOR INSTALLATION OF OVERSIZE BUSHING (FIG. 404)

▷2◁ LUG FACE MACHINING REQUIREMENTS:

1. MATERIAL REMOVED FROM ANY FACE MUST NOT BE MORE THAN HALF THE DIFFERENCE BETWEEN THE DESIGN DIM AND REPAIR LIMIT
2. FLAT SURFACE MUST BE MINIMUM OF 0.02 LARGER THAN FLANGE DIA OF BUSHING TO INSTALLED
3. BLEND MISMATCH STEPS TO 0.18-0.26 RADIUS, OR IF WITHIN 0.10 OF LUG FILLET RADIUS USE SAME RADIUS AS LUG FILLET. BREAK SHARP EDGES 0.03-0.07R

▷3◁ BUSHING FLANGE THICKNESS

REPAIR

REF ▷1◁ THRU ▷8◁

125√ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.06R UNLESS SHOWN DIFFERENTLY

SHOT PEEN (SOPM 20-10-03)

ALUMINUM PARTS: 0.023-0.028 SHOT SIZE
0.010 A2 INTENSITY

STEEL PARTS: 0.017-0.046 SHOT SIZE
0.016 A2 INTENSITY

MATERIAL:
65-46202-3,-4,-5,-8,-12; 65-46288-2,-4; AL ALLOY
65-46202-14, 65-46288-6; 4340M STEEL, 270-300 KSI
65-46202-15, 65-46288-8 4330M STEEL, 220-240 KSI

ALL DIMENSIONS ARE IN INCHES

▷4◁ DESIGN DIM PLUS AMOUNT REMOVED FROM LUG FACE

▷5◁ LIMIT FOR INSTALLATION OF REPAIR SLEEVE (FIG. 406)

▷6◁ LIMIT FOR INSTALLATION OF FLANGED REPAIR SLEEVES (FIG. 406) OR BONDED SHIMS

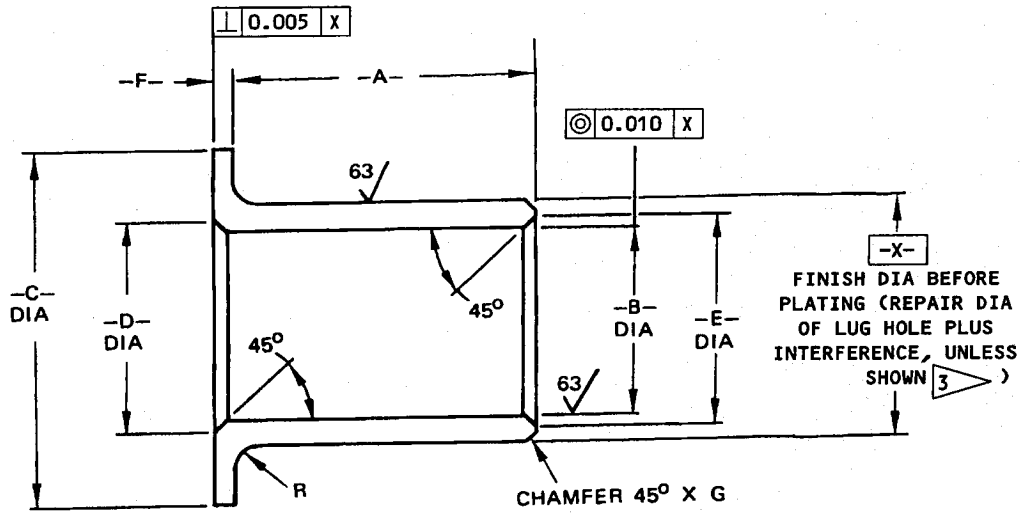
▷7◁ LIMIT FOR INSTALLATION OF REPAIR BUSHING (CMM 32-00-03)

▷8◁ IF MORE MATERIAL THAN THIS MUST BE REMOVED, THE PART MUST BE SCRAPPED

TORSION LINK (11,21)

Torsion Link Repair and Refinish
Figure 403 (Sheet 3)

F79102



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.02 R

ALL DIMENSIONS ARE IN INCHES

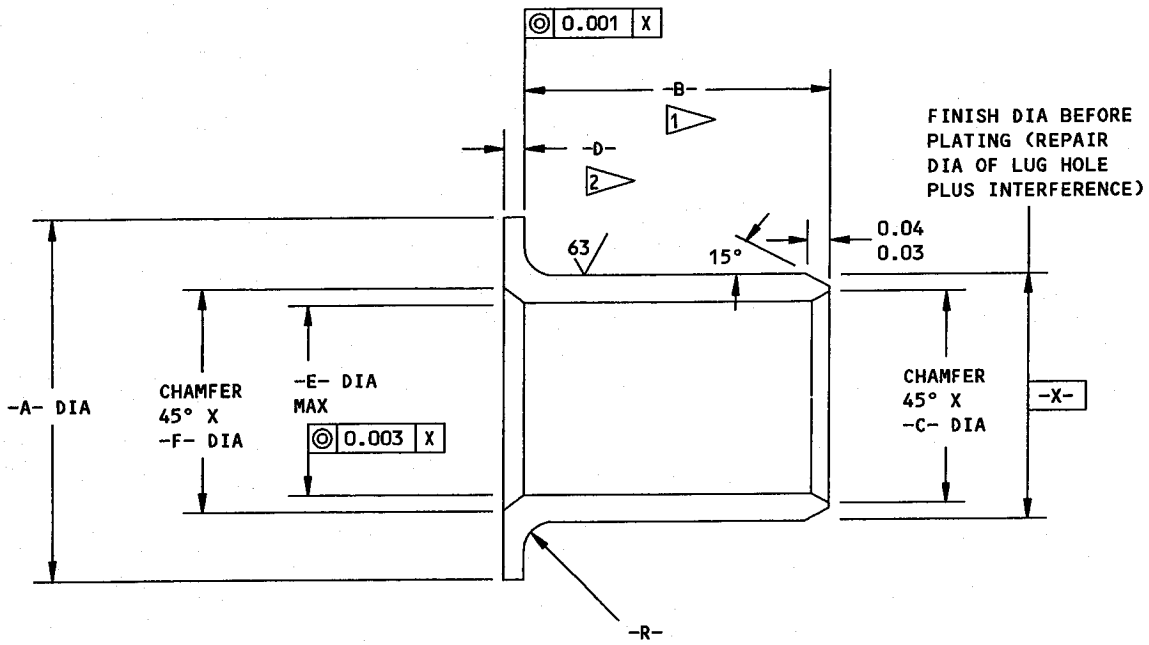
MATERIAL: AS NOTED

FINISH: AS NOTED

HOLE LOCATION	REPAIR FIG.	REPLACES BUSHING (FIG. 1101)	-A-	-B-	-C-	-D-	-E-	-F-	-G-	-R-	INTER-FERENCE	MATERIAL	FINISH
(4A)	403	14,24 (69-61783-1)	0.57 0.55	0.59 MAX	1.13 1.11	0.75 0.73	0.69 0.67	0.10 0.09 1	0.02 0.01	0.03 0.02	4	5	8
—	—	30 (69-61381-1)	0.38 0.37	1.001 1.000	10	1.07 1.05	1.07 1.05	0.11 0.10	0.04 0.02	0.01 MAX	3	5 6	9

Oversize Bushing Details
Figure 404 (Sheet 1)

G49672



HOLE LOCATION	REPAIR FIG.	REPLACES BUSHING (FIG.1101)	-A-	-B- 1	-C-	-D- 2	-E- (MAX)	-F-	-R-	INTERFERENCE	MATERIAL	FINISH
(2)	402	(59) 65-46150-1	1.89 1.87	1.57 1.55	1.31 1.29	0.10 0.09	1.219	1.31 1.29	0.04 0.03	0.0025 0.0006	6	7
(4A)	403	(14,24) 65-46150-17	1.135 1.115	0.57 0.55	0.69 0.67	0.10 0.09	0.594	0.69 0.67	0.03 0.02	5	5	8

125 ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.02R MAX

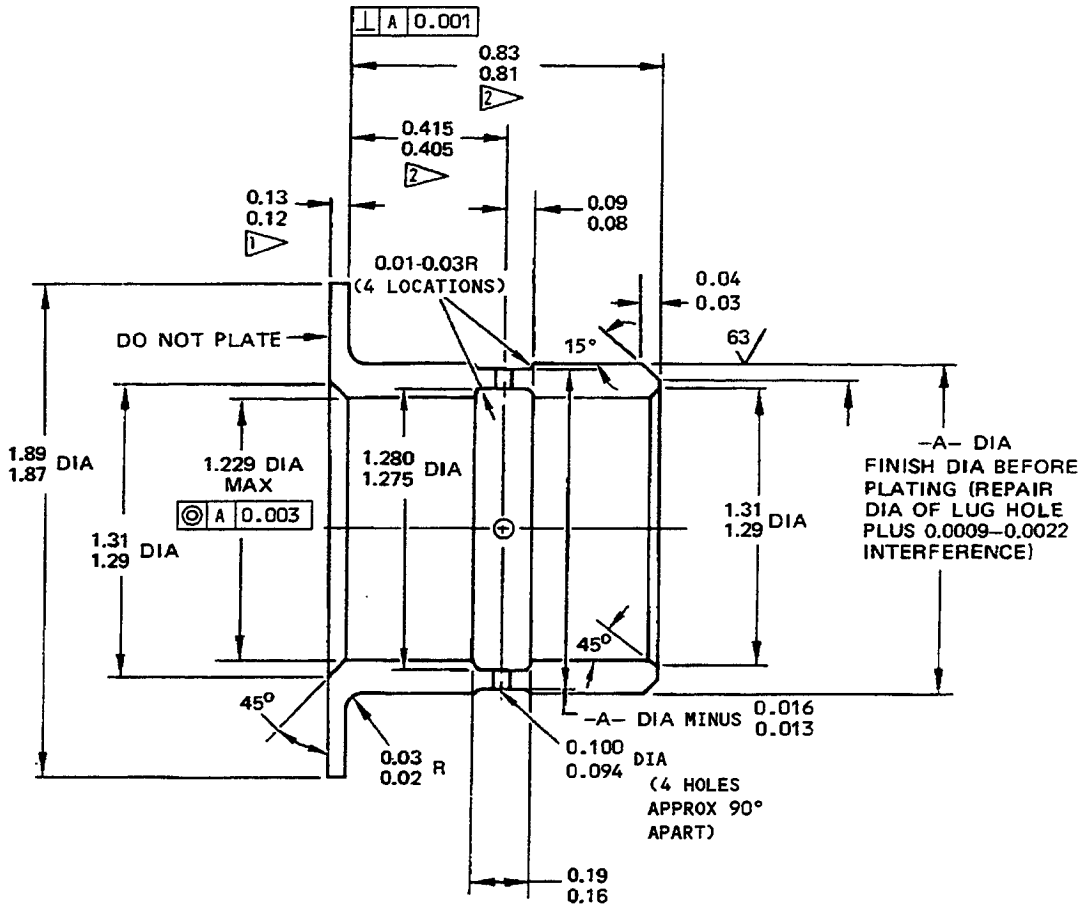
MATERIAL: AS NOTED

FINISH: AS NOTED (OPTIONAL ON ID)

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 404 (Sheet 2)

G49703



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.02R

MATERIAL: AL-NI-BRONZE PER AMS 4640

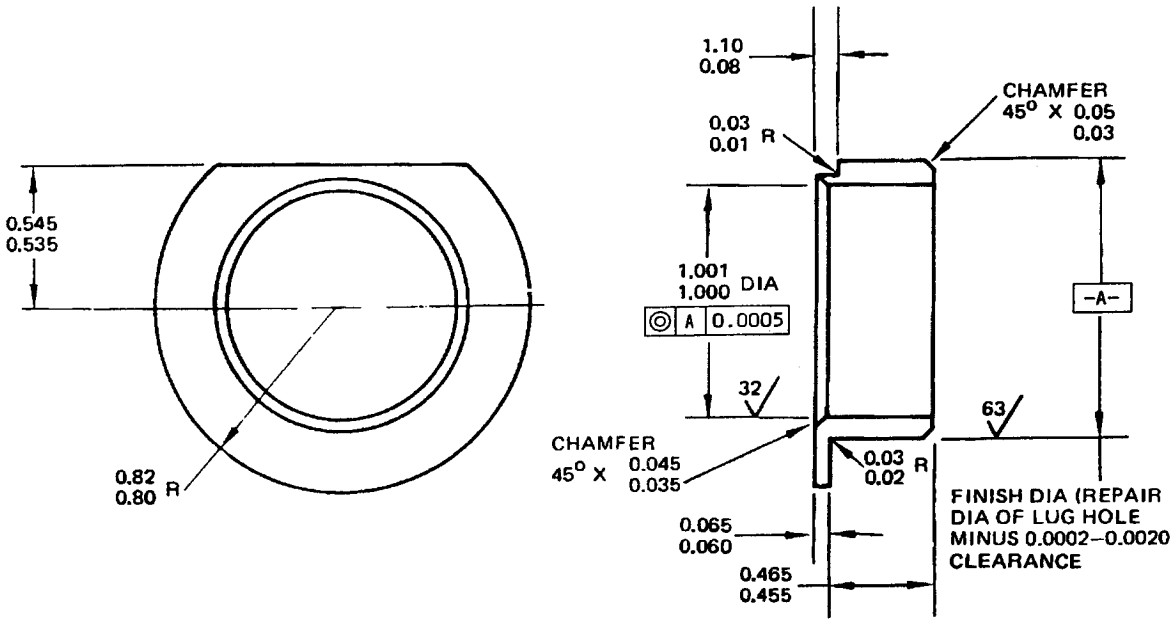
CADMIUM PLATE (F-4.201)
(OPTIONAL ON INTERNAL SURFACES).
PLATING 0.0003 MAX THICK IN HOLES
AND GROOVES

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION (5A) FIG. 403 - REPLACES BUSHING (15,25) 65-46150-18

Oversize Bushing Details
Figure 404 (Sheet 3)

G49698



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.02R MAX UNLESS SHOWN DIFFERENTLY

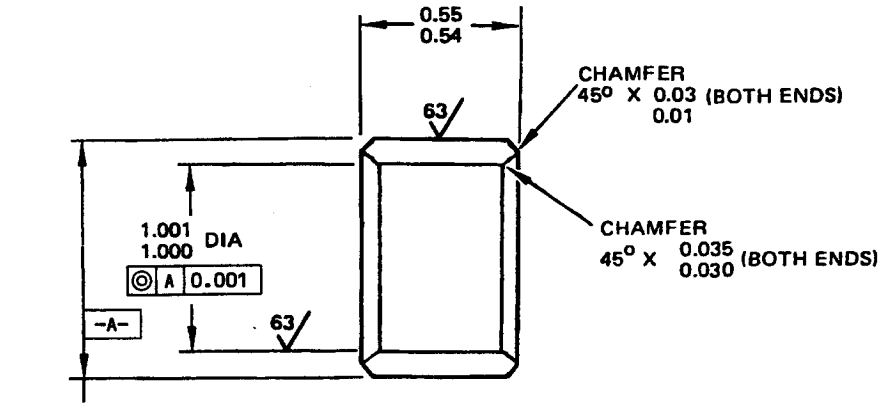
FINISH: PASSIVATE (F-17.25, WHICH REPLACES F-17.09)

MATERIAL: 17-4PH CRES (AMS 5643), SOLUTION TREATED, 180-200 KSI, OR AL-NI-BRONZE (AMS 4640)

ALL DIMENSIONS ARE IN INCHES

REPLACES BUSHING (30)
69-36628-2

Oversize Bushing Details
Figure 404 (Sheet 4)



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

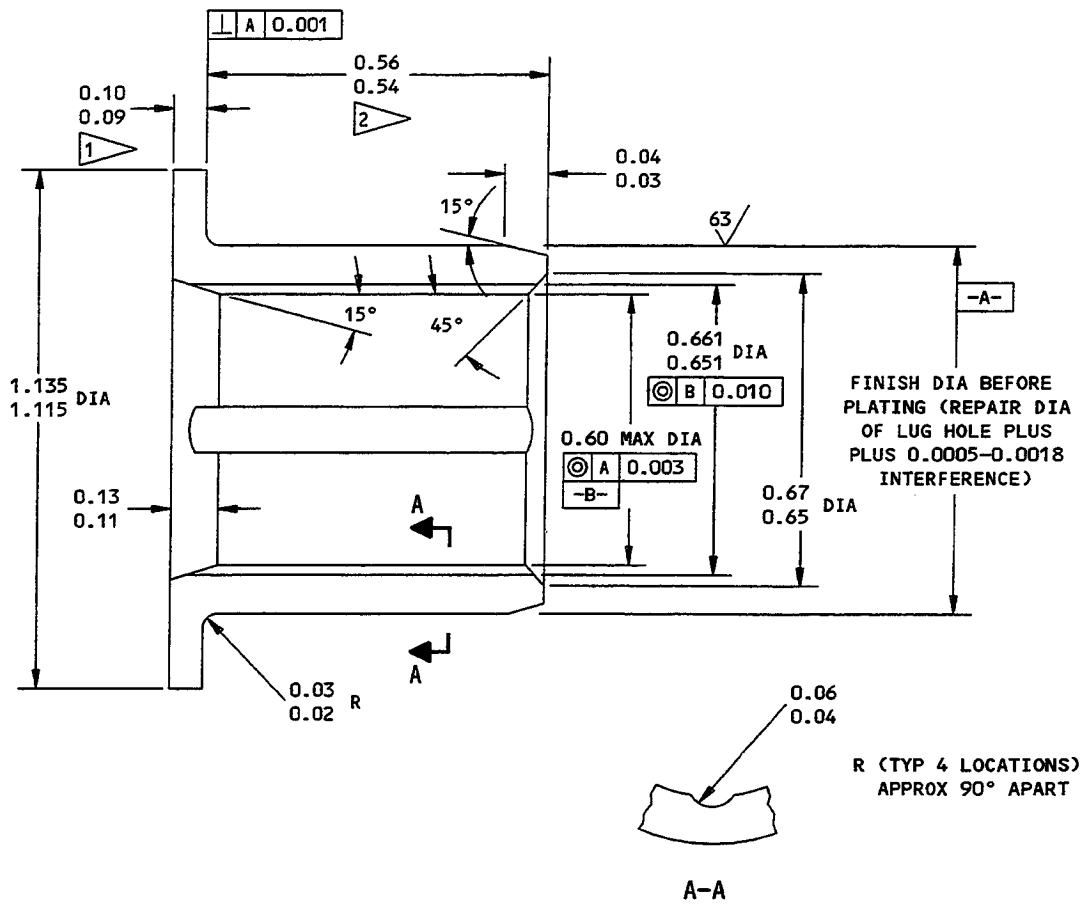
FINISH: CADMIUM PLATE (F-15.02) DIA -A-.
PASSIVATE (F-17.25, WHICH REPLACES F-17.09) OTHER SURFACES

MATERIAL: 17-4PH CRES (AMS 5643),
180-200 KSI, OR
AL-NI-BRONZE (AMS 4640)

ALL DIMENSIONS ARE IN INCHES

REPLACES BUSHING (30A) 69-61382-1

Oversize Bushing Details
Figure 404 (Sheet 5)



125 ALL MACHINED SURFACES EXCEPT AS NOTED

BREAK SHARP EDGES 0.01-0.02 R

MATERIAL: COPPER BERYLLIUM ASTM-B-196 OR AMS 4534, 4535, OR 4651, CONDITION "AT"

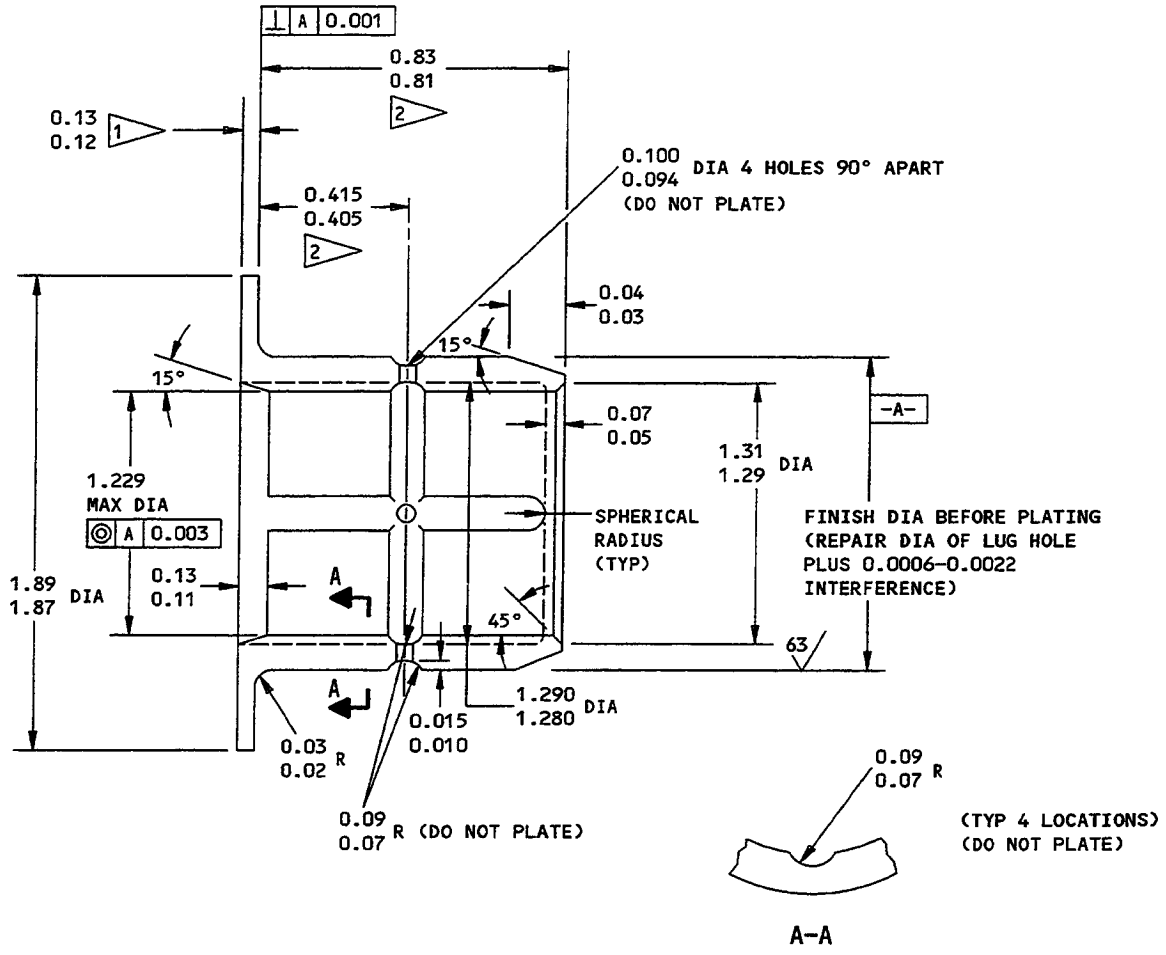
CADMIUM PLATE (F-4.201)(OPTIONAL ON INTERIOR SURFACES)

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION (4A) FIG. 403 - REPLACES BUSHING (14,24) 65-46150-74

Oversize Bushing Details
Figure 404 (Sheet 6)

G49708



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.02 R

MATERIAL: BERYLLIUM ASTM-B-196 OR AMS 4534,4535, OR 4651, CONDITION "AT"

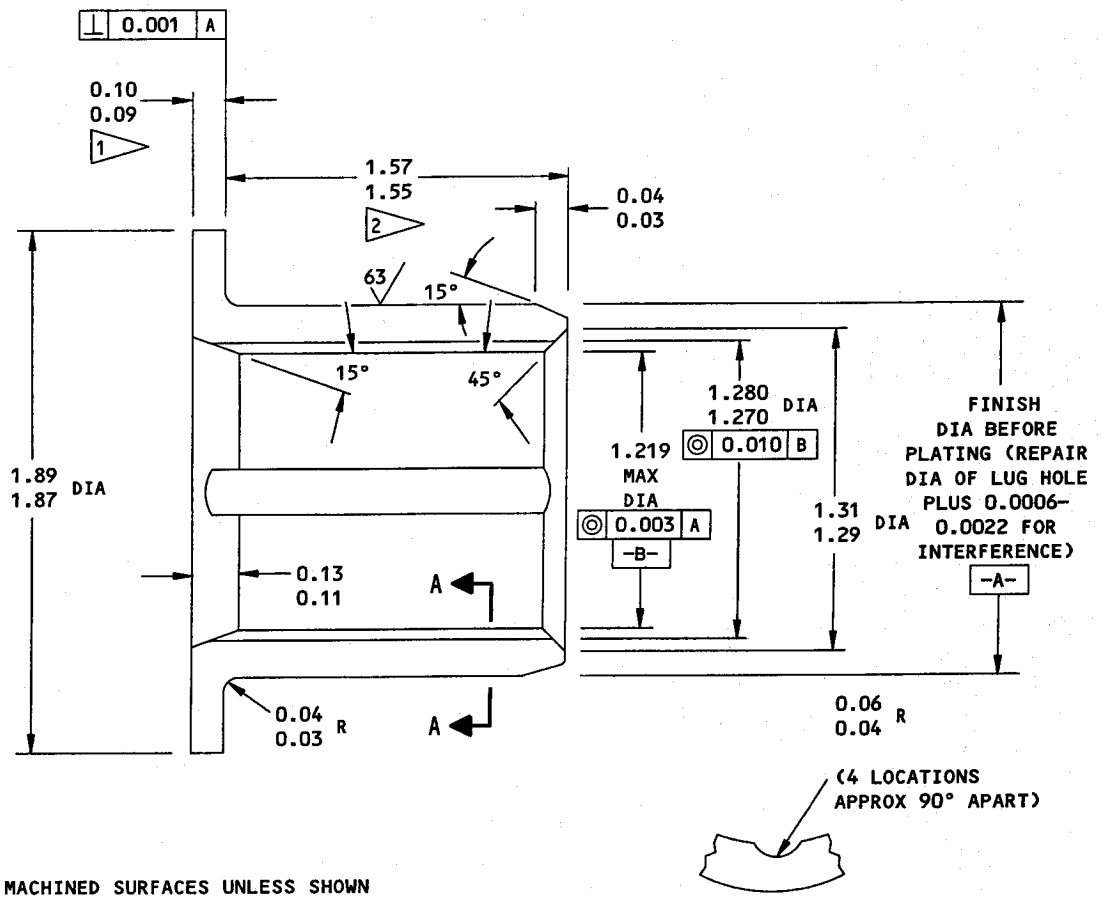
CADMIUM PLATE (F-4.201)
(OPTIONAL ON INTERIOR SURFACES)
PLATING 0.0003 MAX THICK IN
HOLES AND GROOVES

ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION (5A) FIG. 403 - REPLACES BUSHING (15,25) 65-46150-75

Oversize Bushing Details
Figure 404 (Sheet 7)

G49709



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.02 R

MATERIAL: 17-4PH CRES, 180-200 KSI

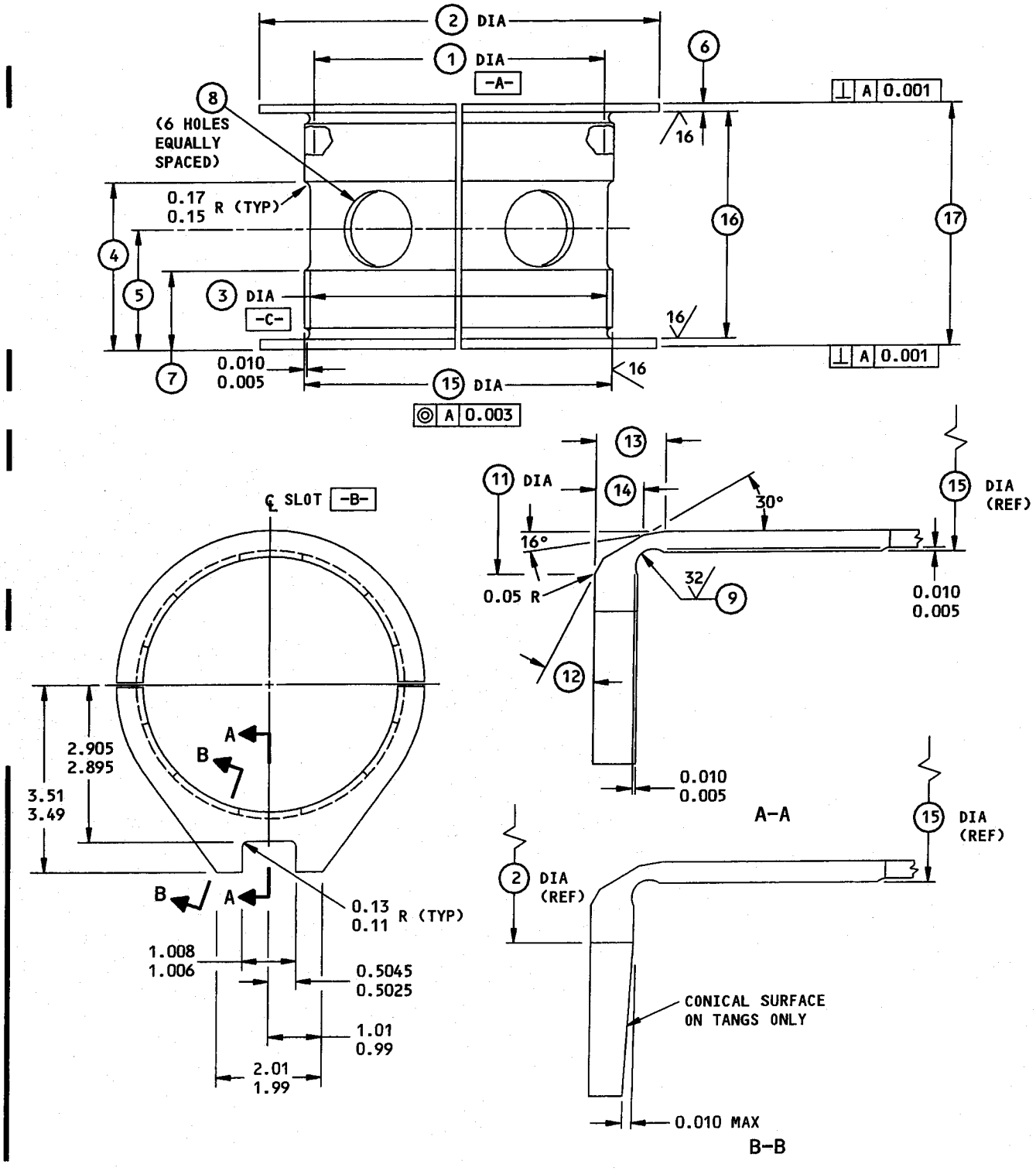
FINISH: CADMIUM PLATE (F-15.06) (OPTIONAL ON INTERIOR SURFACES)

ALL DIMENSIONS ARE IN INCHES

BUSHING (59)
(65-46150-95)

1. PLUS AMOUNT REMOVED FROM LUG FACE
2. MINUS AMOUNT REMOVED FROM LUG FACE
3. BUSHING (30) REQUIRES CLEARANCE INSTEAD OF INTERFERENCE. SUBTRACT 0.0002-0.0020 FROM REPAIR DIA OF HOLE
4. 0.0003-0.0010 INTERFERENCE AFTER PLATING AND PRIMER FOR BUSHINGS USED ON THE 65-46202-1,-2,-6 AND 65-46288-1. 0.0006-0.0018 INTERFERENCE BEFORE PLATING AND PRIMER FOR BUSHINGS USED ON ALL OTHER TORSION LINKS
5. AL-NI-BRZ, AMS 4640
6. 17-4PH CRES, 180-200 KSI, AMS 5643
7. CADMIUM PLATE (F-1.32, WHICH REPLACES F-1.1923)
8. CADMIUM PLATE (F-4.201)
9. CADMIUM PLATE (F-15.02) DIA -X- . PASSIVATE (F-17.25, WHICH REPLACES F-17.09) OTHER SURFACES
10. REPAIR DIA OF LUG HOLE PLUS 0.25

Oversize Bushing Details
Figure 404 (Sheet 8)



REPLACES BEARING (61) 69-61785-SERIES

Repair Bearing Details
Figure 405 (Sheet 1)

F22184

	(1) ▷4	(2)	(3)	(4)	(5)	(6) ▷1	(7)	(8)	(9)
69-61785-1	4.6848 4.6838	5.66 5.64	4.83 4.81	2.61 2.59	1.98 1.92	0.20 0.18	1.31 1.29	1.155 1.095	0.17 0.16
69-61785-2	4.7950 4.7940	5.82 5.80	4.94 4.92	2.61 2.59	1.98 1.92	0.20 0.18	1.31 1.29	1.155 1.095	0.17 0.16
69-61785-7	4.6848 4.6838	5.76 5.74	4.83 4.81	2.61 2.59	1.98 1.92	0.26 0.24	1.31 1.29	1.155 1.095	0.09 0.07
69-61785-8	4.7950 4.7940	5.91 5.89	4.94 4.92	2.61 2.59	1.98 1.92	0.26 0.24	1.31 1.29	1.155 1.095	0.09 0.07

	(11)	(12)	(13)	(14)	(15) ▷6	(16) ▷7	(17) ▷5
69-61785-1	5.11 5.09	22 1/2° 21 1/2°	0.32 0.30	0.27 0.25	4.8800 4.8793	3.520 3.518	3.899 3.895
69-61785-2	5.21 5.19	22 1/2° 21 1/2°	0.32 0.30	0.27 0.25	4.9950 4.9943	3.520 3.518	3.899 3.895
69-61785-7	5.05 5.03	30 1/2° 29 1/2°	0.29 0.27	0.23 0.21	4.8800 4.8793	3.403 3.401	3.899 3.895
69-61785-8	5.15 5.13	30 1/2° 29 1/2°	0.29 0.27	0.23 0.21	4.9950 4.9943	3.403 3.401	3.899 3.895

FINISH

NO FINISH

▷1 PLUS ADJUSTMENTS MADE TO (16) (17), IF APPLICABLE.

▷2 69-61785-1, -2

▷3 69-61785-7, -8

▷4 DECREASE THIS DIAMETER AS NECESSARY TO GET MINUS 0.001 TO PLUS 0.001 CLEARANCE WITH UNDERSIZED OD ON THE STRUT OUTER CYLINDER (REF 32-21-11, FIG. 402).

▷5 INCREASE THIS DIMENSION AS NECESSARY TO GET 0.001-0.007 CLEARANCE WITH DECREASED MATING LUG THICKNESSES ON THE SHOCK STRUT OUTER CYLINDER (REF 32-21-11, FIG. 402).

▷6 INCREASE THIS DIAMETER AS NECESSARY TO GET 0.0020-0.0047 CLEARANCE WITH OVERSIZED ID ON THE STEERING COLLAR (FIG. 402).

▷7 DECREASE THIS DIMENSION AS NECESSARY TO GET 0.001-0.005 CLEARANCE WITH DECREASED FLANGE THICKNESSES ON THE STEERING COLLAR (FIG. 402).

MARK BEARING HALVES AS MATCHED SET

NOTE: TO TELL YOU THIS IS A REPAIR PART WITH CHANGED DIMENSIONS, IDENTIFY THE BEARING WITH THE EQUIVALENT PART NUMBER PLUS AN M SUFFIX

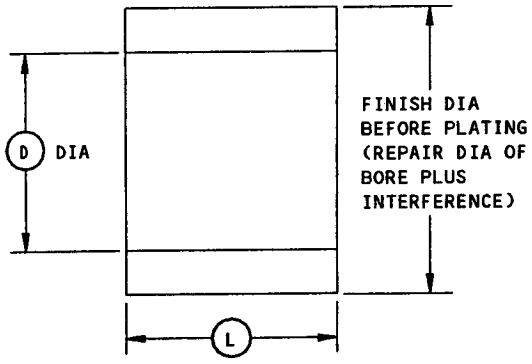
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: BERYLLIUM COPPER PER QQ-C-530 ▷3
AL-NI-BRZ PER AMS 4640 OR AMS4880 ▷2

ALL DIMENSIONS ARE IN INCHES

DIMENSIONS APPLY AFTER PLATING

REPLACES BEARING (61) 69-61785-SERIES
Repair Bearing Details
Figure 405 (Sheet 2)



HOLE LOCATION	REPAIR FIGURE	D	L	INTERFERENCE	OD SURFACE FINISH
1	402	1.201 1.200	2	0.0022 0.0006	63
8	403	0.254 0.250	0.32 0.28 1	0.0013 0.0004	125

FINISH:

CADMIUM PLATE (F-15.06)
(OPTIONAL ON ID)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES

MATERIAL: AL-NI-BRZ PER AMS 4640 OR 4880

ALL DIMENSIONS ARE IN INCHES

1 OR LUG THICKNESS +0.00/-0.01

2 LUG THICKNESS +0.000/-0.005

Repair Sleeve Details
Figure 406

L81668

ASSEMBLY

1. Materials

NOTE: Equivalent substitutes can be used.

A. Hydraulic Fluid -- BMS 3-11 (SOPM 20-60-03)

B. Primer -- Dow Corning RTV 1200 (SOPM 20-60-04)

C. Sealant -- Silicone, RTV174 (Replaces Dow Corning 30-121) (SOPM 20-60-04)

D. Corrosion Preventive Compound -- MIL-C-11796, Class 3 (SOPM 20-60-02)

E. Corrosion Preventive Compound -- BMS 3-27 (SOPM 20-60-02)

F. Grease -- MIL-G-23827 (SOPM 20-60-03)

G. Grease -- MIL-G-21164 (SOPM 20-60-03)

H. Grease -- BMS 3-24 (SOPM 20-60-03)

I. Grease -- BMS 3-33 (SOPM 20-60-03)

J. Sealant -- BMS 5-95 (SOPM 20-60-04)

K. Sealant -- BMS 5-45 (SOPM 20-60-04)

2. Assembly (Fig. 1101)

A. Put the shock strut assembly (64) in upright position in the fixture or stand, with the air valve at the top.

B. If installed, remove the upper and lower steering plates from outer cylinder along with pins, washers, nuts (8 locations) and, if applicable, the spacers and related fasteners (2 locations), but be sure to make a note of the washer type and quantity, because they were adjusted during the gap check you did in OHM 32-21-11.

C. Install supports (51) or support (51A) on upper steering plate with bolts (50), washers (49) and nuts (48).

D. Install bearings (46) in upper and lower steering plates.

E. Drain some hydraulic fluid from steering cylinders (47) to make it easier to extend or retract them during assembly.

F. Assemble the steering cylinders and steering plates.

(1) Install steering cylinders (47) on lower steering plate, with the trunnions through bearings (46). Lightly coat threads of nuts (45) with MIL-G-21164 grease. Install washers (44) with inner tab in groove. Install nuts (45) and tighten until the nut face nearest to the trunnion end is flush with the end of the trunnion, then tighten the nuts 2 more turns.

(2) Install upper steering plate on steering cylinders (47) by the same procedure, but tighten nuts (45) until the nut face nearest to the trunnion end is flush with the end of the trunnion, then tighten the nuts 4 more turns.

(3) If applicable, install the spacers, bolts, washers and nuts between steering plates that were removed in step 3.B. above, with the same type and quantity of washers you removed at that time.

(4) Tighten nuts (45) at the upper steering plate 2-1/4 more turns.

WARNING: BMS 3-27 CORROSION PREVENTIVE COMPOUND CONTAINS ASBESTOS, TOLUENE, XYLENE, STRONTIUM CHROMATE AND BARIUM CHROMATE. REFER TO MATERIAL SAFETY STANDARDS DATA FOR PRECAUTIONS.

CAUTION: BMS 3-27 COMPOUND IS USED ONLY IN STATIC JOINTS WHERE GREASE CANNOT BE APPLIED. BMS 3-27 COMPOUND IN DYNAMIC JOINTS WILL NOT LET THEM MOVE FREELY.

(5) Apply BMS 3-27 compound to all mating surfaces of forward and aft collar halves (56, 57) including the abutment faces and the bushing outside diameter, between bearing (62, 63) and outer cylinder (64), to rod attach bolt (29) (2 locations) inside flange face, undercut, shank, thread relief and threads. Fill any internal voids in the immediate area as shown by Fig. 500.

(6) Apply BMS 3-27 corrosion preventive compound to the mating surfaces of steering plates, the shock strut outer cylinder and bearing retainer brackets (65), the shank of bolts (66, 66A), and the shank, the underhead surface, and the end of the eight pins used to attach the steering plates on the outer cylinder.

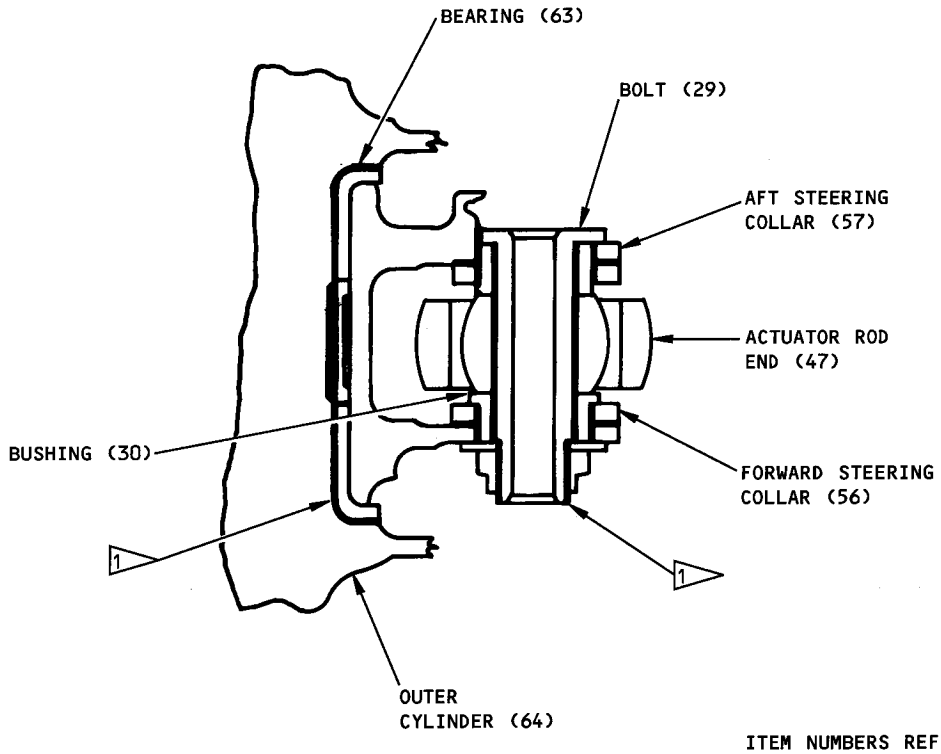
(7) Install bearing retainer brackets (65), bolts (66, 66A), washers (67) and nuts (68, 68A). Use bolt (66A) and nuts (68A) if interference with steering cylinder occurs if you use the original parts (66, 68) at location shown. Install bolt (66A) with head up. Tighten nuts (68, 68A) finger-tight.

G. Slide the upper and lower steering plate sandwich onto the outer cylinder. Install bolts, washers, and nuts (eight locations). Tighten the nuts to 42 pound-feet.

CAUTION: BE SURE THAT BEARING ASSEMBLY (61), COLLAR ASSEMBLY (55), AND SHOCK STRUT ASSEMBLY (64) ARE CORRECTLY RELATED PER PARTS LIST.

H. Install steering collar and bearings.

NOTE: Some configurations use two 69-36626-7 or -8 bearing assemblies (61); others use one 69-61785 series bearing assembly (61). Each bearing assembly (61) has matched halves (62, 63).



ITEM NUMBERS REFER TO FIG. 1101

1 APPLY BMS 3-27 CORROSION PREVENTIVE COMPOUND AS INDICATED BY THESE DARK LINES

Corrosion Preventive Compound Application
Figure 500

1450327

(1) Install forward bearing half (63) on shock strut. If applicable, mate cutout with tab on bearing retainer bracket (65). Install aft bearing half (62), inserting raised tab (if applicable) in mating notch in shock strut outer cylinder.

CAUTION: COLLAR ASSEMBLY (54) IS MATED SET.

(2) If applicable, install seals (60) at split line. For collar assys 65-46203-20 and on, and assys reworked per SB 32-1095, verify that shim (57A) is bonded to ID of aft collar assy (Ref REPAIR par. 3.E.).

(3) Temporarily install steering collar halves (56, 57) over bearing halves (62, 63). Check for 0.01-0.03 inch gap between collar halves.

(4) Insert lower bushings (30) in lower lugs of collar halves. Temporarily install bolts (29), washers (28), and nuts (27).

(5) Temporarily install upper torsion link (21) with pin (17) on steering collar (57).

(6) With upper torsion link positioned horizontally, apply a load of up to five pounds to apex of link so that steering collar rotates on outer cylinder. Check that collar rotates freely approximately 90 degrees in either direction.

NOTE: If a load greater than 5 pounds is required to rotate the steering collar, check installation of bearing halves (62, 63) and for proper lubrication.

I. Connect steering cylinders and install metering valve.

(1) Remove nut (27), washer (28) and bolt (29) from one side of collar (54) and install cylinder (47) rod end into clevis, adjusting nuts (45), finger-tight, to center rod end in clevis with a clearance of 0.001-0.003 inch between lower side of rod end bearing and lower bushings (30) of steering collar.

(2) Install upper bushing (30 or 30A) in upper lugs of steering collar halves. Then install bolt (29) thru collar and cylinder rod end. Install washer (28) and nut (27). Tighten BACB10JD112 nut (27) to 75-150 lb-in or SPS48FT1414 nut (27) to 600-700 lb-in. Secure nut (27) with cotter pin (26).

(3) Advance nut (45) to nearest position of washer (44) tab and bend down tab into slot.

(4) Repeat steps (1) thru (3) on opposite side of collar.

(5) For airplanes with the 69-33575 bracket assembly installed:

(a) Install bracket (37) temporarily with only the right-hand bolt (36), washer (33) and nut (35). Do not tighten nut (35).

(6) Install support (51 or 51A) on the upper steering plate with bolts (50), washers (49) and nuts (48). Attach the support (337) to the lower steering plate with bolts (50B) and washers (50A).

(7) Lubricate O-rings (52) with hydraulic fluid and install with unions (53) on metering valve (41).

(8) Lubricate O-rings (42) and back-up rings (43) with hydraulic fluid and install on each transfer tube. Carefully put the tubes into the valve.

NOTE: The transfer tubes are part of metering valve assembly (41), and they go into the oil ports inside the swivel connection of the valve and the steering cylinder.

(9) For valve (41, Pre SB 32-1139), align valve ports with steering cylinder ports and install valve on upper plate and cylinders. For valve (41, Post SB 32-1139), first loosen swivel jam nuts and bolts on valve (4 locations each side). Then align the valve ports with steering cylinder ports, and install the valve on the upper plate and cylinders (Fig. 501). Install bolts (40), washers (39), and nuts (38). Do not tighten nuts (38).

(10) Turn the retaining nut of the metering valve into the trunnion of the steering cylinder (47). Tighten to 50-100 lb-in. Install with lockwire and apply sealant if applicable (Fig. 501).

(11) For valve (41, Post SB 32-1139 only), tighten swivel bolts (4 locations each side) to 30-40 lb-in. Tighten jam nuts on swivel bolts finger-tight. Install with lockwire (Fig. 501).

(12) Tighten nuts (38) installed in step (9) to 50-100 lb-in.

NOTE: When you are done, there will be a gap between the metering valve body and the face of the swivel housing. This is not a defective condition.

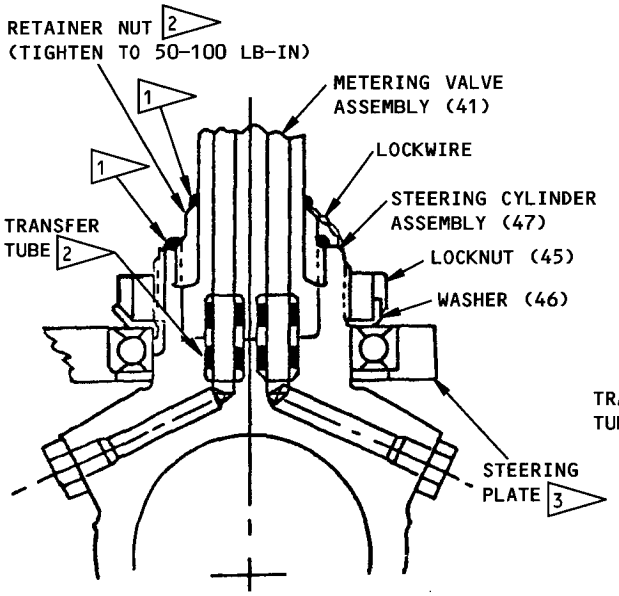
(13) For airplanes with the 69-35575 bracket assembly installed:

(a) Install remaining bolts (36, 36A), washers (33) and nuts (35).

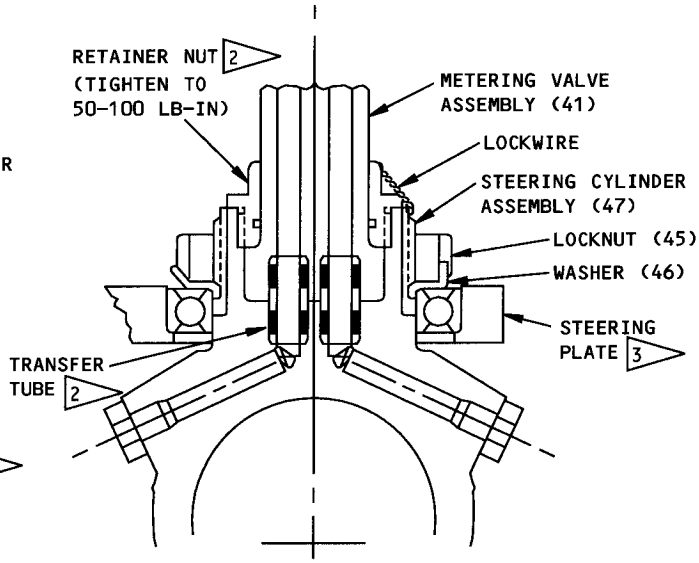
(14) For airplanes with the 65C31100, 65C31101, 65C31102 brackets installed:

(a) Apply BMS 5-45 sealant to the faying surfaces of the bracket assemblies (37A, 37B, 37C) and steering plate.

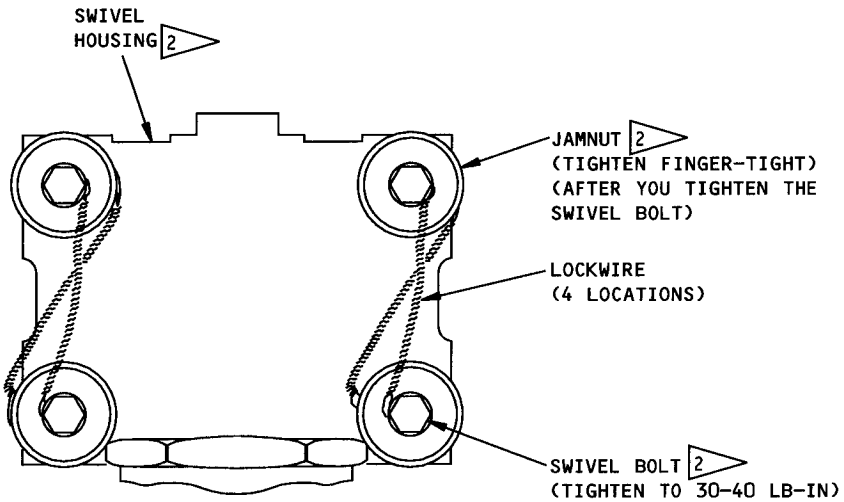
(b) Install bracket assemblies (37A, 37B, 37C) using bolts (310A), washers (307), and nuts (305B).



CONFIGURATIONS WITH METERING VALVE (41) 10-60590-1



CONFIGURATIONS WITH METERING VALVE (41) 10-60590-2 AND ON



SIDE VIEW LOOKING INBOARD
(POST SB 32-1139 ONLY)

1 CLEAN SURFACES AND APPLY PRIMER RTV1200 AND FILLET OF SEALANT RTV174 ALL AROUND

2 PART OF METERING VALVE ASSEMBLY (41)

3 PART OF SHOCK STRUT (64)

ITEM NUMBERS REFER TO FIG. 1101

Metering Valve and Steering Cylinder Installation Details
Figure 501

1378095

(15) On steering collar assemblies 65-46203-20 and on, and assemblies Post SB 32-1095, apply BMS 5-95 sealant in gap between steering collar halves (56, 57) and around interface seam as shown in Fig. 502.

(16) If antirotation bolts (10, 20), washers (9, 19), nuts (8, 18) are not used (Post SB 32-1129), apply BMS 5-95 sealant over both ends of antirotation bolt holes in steering collar and inner cylinder. Make the sealant go 0.25 inch minimum out from the edge of the hole, but do not let sealant get into the bore for the torsion link pin.

(17) Install cover assembly (34) with washers (33) and bolts (32).

J. Install torsion links.

(1) Apply good quantity of BMS 3-33 or MIL-G-23827 grease to bushings in torsion links (21, 11), steering collar (54), and surfaces of pins (17, 7), bolts (5), and washer (4). On units Post SB 32-1129, use BMS 3-33 or BMS 3-24 grease on pins (17, 7) and mating surfaces.

(2) Align upper torsion link (21) on steering collar (54).

(3) Install pin (17).

(4) If antirotation hardware is used (Pre-SB 32-1129), apply corrosion preventive compound, MIL-C-11796, class 3, to bolt (20) and put the bolt through collar and pin (17). Install washer (19), nut (18) and tighten to 100-140 lb-in. Install retaining ring (16) on each end of pin (17).

(5) If antirotation hardware is not used (Post-SB 32-1129), install end caps (16A), retaining pin (16B), washers (16C, 16D), and nuts (16E). Tighten nuts to 30-80 lb-in and install cotter pins (16F) or install end caps (16A), bolt (16G), washers (16H, 16K), nut (16I). Tighten the nut 90-125 pound-inches. Back off a minimum to install the cotter pin. Install cotter pin (16J).

(6) Align lower torsion link (11) on inner cylinder lug.

(7) Insert pin (7).

(8) If antirotation hardware is used (Pre-SB 32-1129), apply MIL-C-11796, class 3 corrosion preventive compound to bolt (10) and put the bolt through strut and pin (7). Install washer (9), nut (8) and tighten to 100-140 lb-in. Install retaining ring (6) on each end of pin (7).

(9) If antirotation hardware is not used (Post SB 32-1129), install end caps (6A), retaining pin (6B), washers (6C, 6D), and nuts (6E). Tighten nuts to 30-80 lb-in and install cotter pins (6F) or install end caps (6A), bolt (6G), washers (6H, 6K), nut (6I). Tighten the nut 90-125 pound-inches. Back off a minimum to install the cotter pin. Install cotter pin (6J).

(10) Install apex bolt (5).

(a) For configurations without bearing (4B), lubricate parts with grease and install apex bolt (5), washer (4) (between torsion links), washer (3) and nut (2). Tighten nut to 225-250 pound-inches then back off nut and tighten finger-tight. Align lock holes and install pin (1). Install lockwire.

(b) For configurations incorporating bearing (4B):

1) Lubricate washer (4) face of bushing (4A), threads of nut (2) and bolt (5) and pack bearing (4B) with MIL-G-21164 grease.

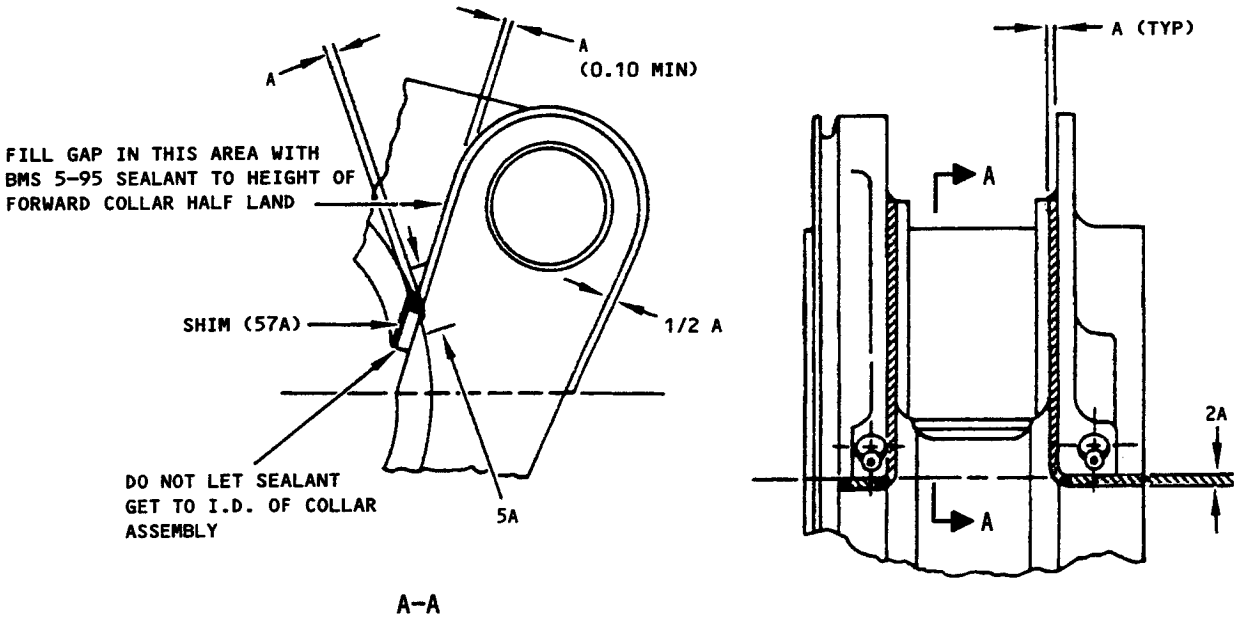
2) Install apex bolt (5) through torsion links with washer (4) installed between links. Head of apex bolt must be at lower torsion link (11) side.

3) Install bearing (4B) on bushing (4A) with bearing seal facing bushing flange and install on bolt (5). Install nut (2).

4) Tighten nut to 225-250 pound-inches, then back off nut and tighten finger-tight. Align lock holes and install cotter pin (1).

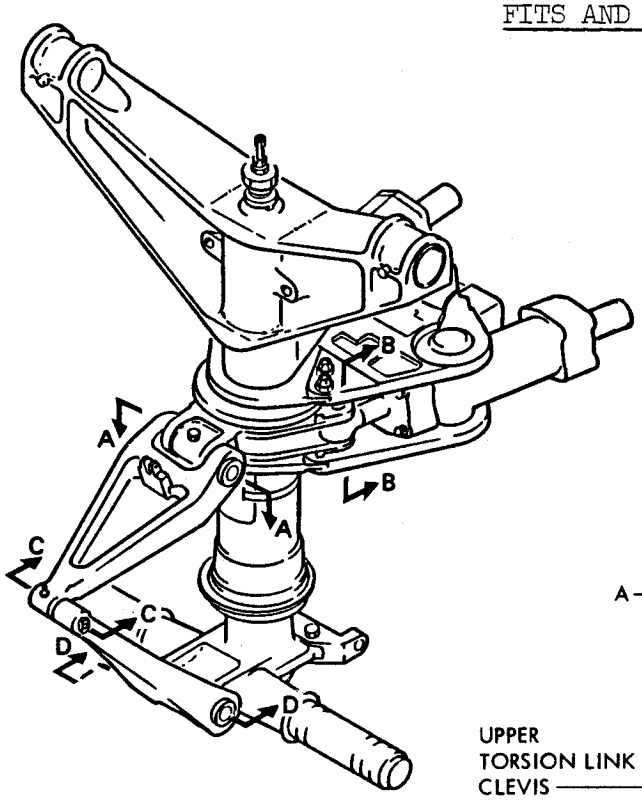
(11) Apply MIL-G-21164 grease at the lube fittings.

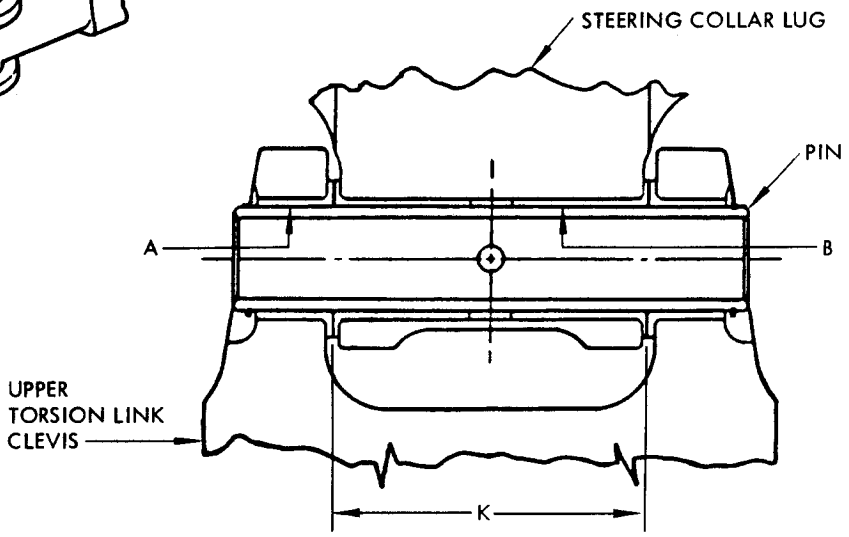
(12) Give protection to torsion links and steering cylinders. Put the unit away by standard industry practices and the instructions in SOPM 20-44-02 and 20-70-01.



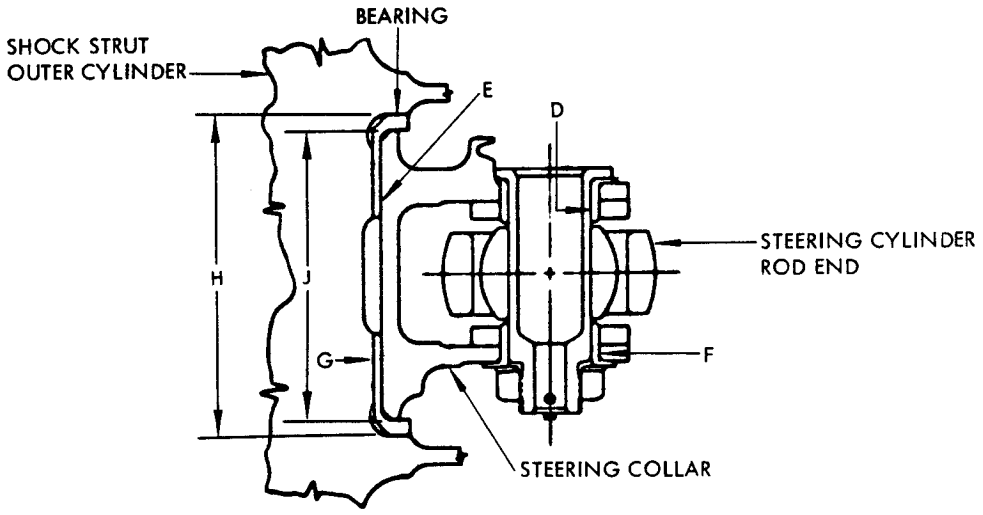
Steering Collar Shim and Sealant Installation
Figure 502

FITS AND CLEARANCES

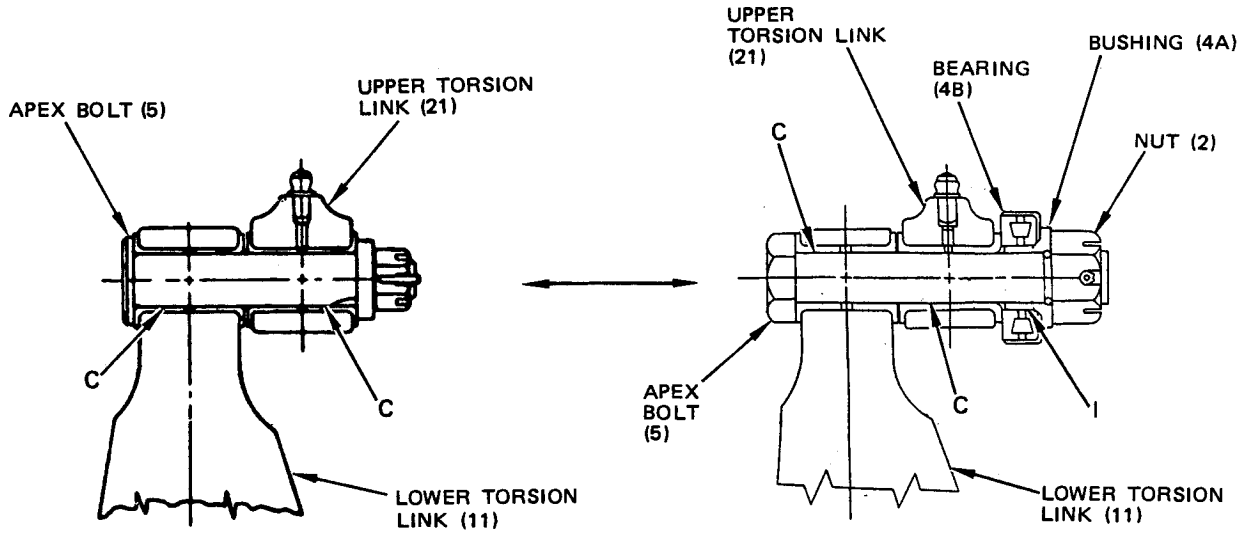




A–A

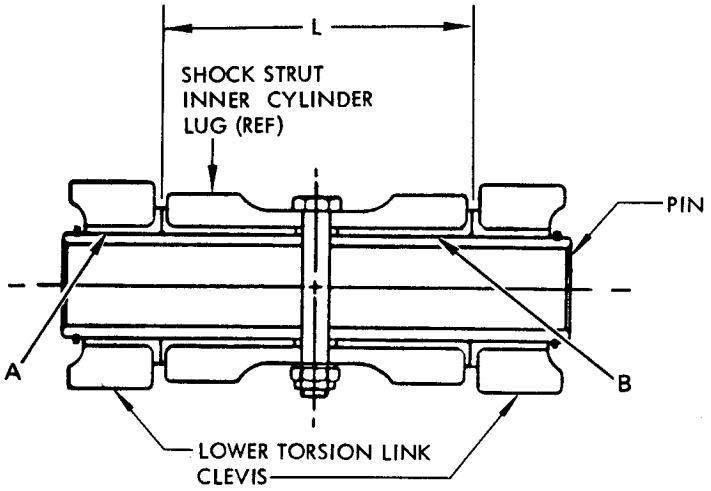


B–B



(POST SB 32–1026)

C–C



D–D

		Design Dimensions				Service Wear Limits		
Ref Letter Fig.601	Mating Item No. Fig. 1101	Dimensions (inch)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
A	ID 15,25 OD 7,17	1.2500 1.2490	1.2510 1.2498	0.0002	0.0020	1.245	1.260	0.010
B	ID 59*[1] OD 7,17	1.2500 1.2490	1.2510 1.2498	0.0002	0.0020	1.245	1.260	0.010
C	ID 14,24 OD 5*[14]	0.6250 0.6242	0.6259 0.6248	0.0002	0.0017	0.6190	0.6340	0.010
C	ID 4A,14,24 OD 5*[15]	0.6250 0.6230	0.6259 0.6240	0.0010	0.0029	0.6190	0.6340	0.010
D	ID 30 OD 29	1.0000 0.9991	1.0010 0.9998	0.0002	0.0019	0.995	1.0080	0.010
E	ID 54 OD 61*[2]	4.8820 4.8793	4.8840 4.8800	0.0020	0.0047	4.8740	4.8880	0.010
E	ID 54*[3] OD 61	4.9970 4.9943	4.9990 4.9950	0.0020	0.0047	4.991	5.003	0.010
F	ID 54 OD 30	1.2000 1.1990	1.2010 1.1998	0.0002	0.0020	1.1980	1.2010	0.003
G	ID 61 OD *[4]	4.6838 4.6838	4.6848 4.6848	-0.0010	0.0010	4.6838	4.6868	0.003
G	ID 61 OD *[5]	4.7940 4.7940	4.7950 4.7950	-0.0010	0.0010	4.7940	4.7970	0.003

		Design Dimensions				Service Wear Limits		
Ref Letter Fig.601	Mating Item No. Fig. 1101	Dimensions (inch)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
H	*[6] 64 *[7] 61	3.900 3.895	3.902 3.899	0.001	0.007	3.887	3.906	0.015
I	ID 4B OD 4A	0.758 0.756	0.764 0.757	0.001	0.008	0.7543	0.7667	0.0097
J*[12]	*[8] 61 *[9] 55	3.518 3.515	3.520 3.517	0.001	0.005	3.511	3.530	0.015
J*[13]	*[8] 61 *[9] 55	3.401 3.398	3.403 3.400	0.001	0.005	3.394	3.413	0.015
K	*[10] 25 *[11] 59	3.750 3.747	3.755 3.749	0.001	0.008	3.734	3.763	0.016
L	*[10] 15 *[11 *[1]	3.750 3.747	3.755 3.749	0.001	0.008	3.734	3.763	0.016

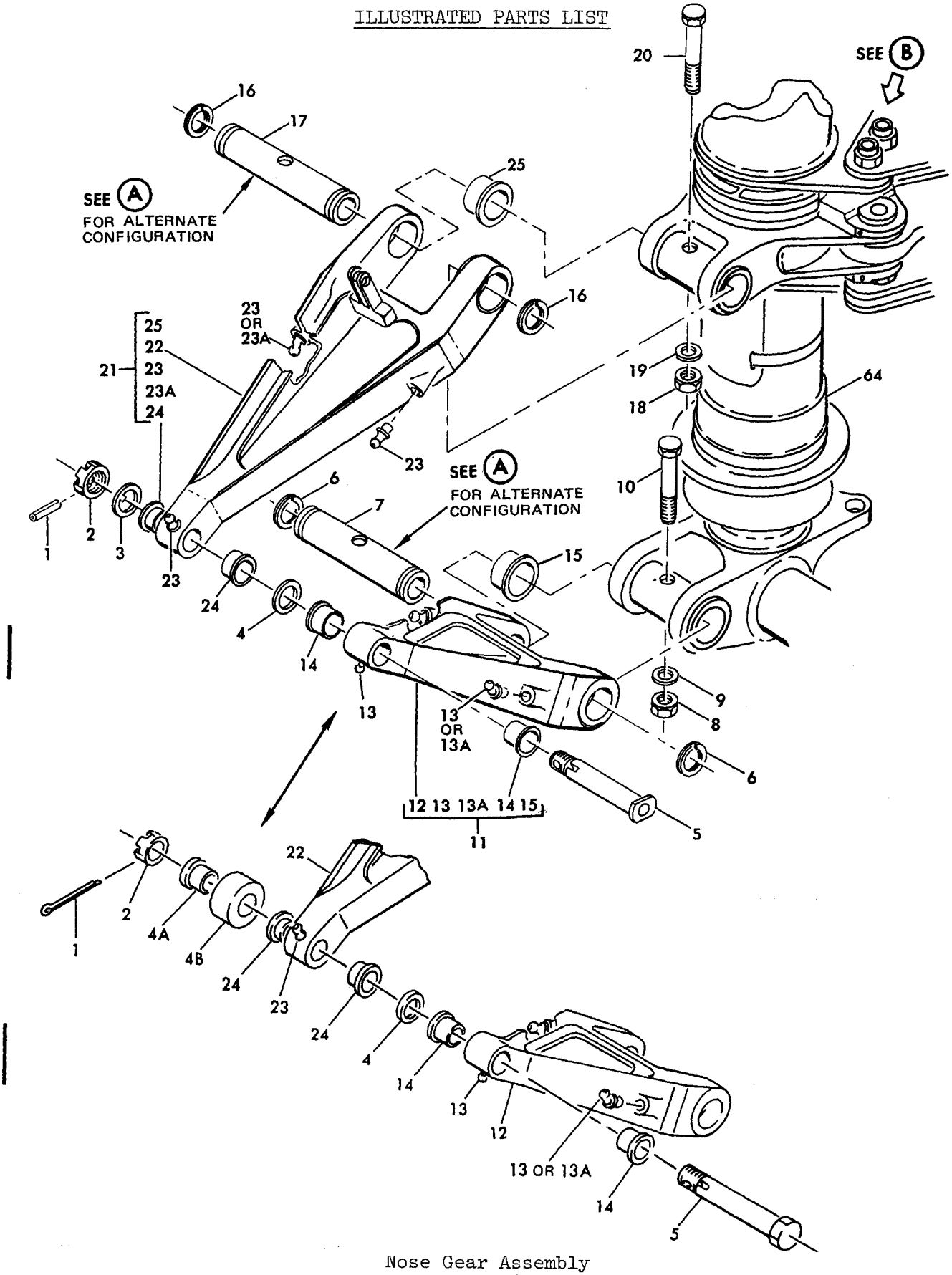
*[1] Bushing in shock strut inner cylinder lug
*[2] 65-46203-3, -9, -11, -13, -21 collar with 69-36626-7 and 69-61785-1, -7 bearing
*[3] 65-46203-5, -7, -10, -12, -14, -17, -20 collar with 69-36626-8 and 69-61785-2, -8 bearing
*[4] 65-46211-3, -5 outer cylinder with 69-36626-7, 69-61785-1, -7 bearing
*[5] 65-46211-4 , -6 outer cylinder with 69-36626-8, 69-61785-2, -8 bearing
*[6] Dimension between sides of bearing groove in outer cylinder
*[7] Dimension across flanges of bearing
*[8] Dimension between faces of bearing
*[9] Dimension across flanges of steering collar
*[10] Dimension between flanges of bushings
*[11] Dimension across flanges of bushings
*[12] 69-36626-7, -8, 69-61785-1, -2 bearing with 65-46203-4, -6, -8 collar
*[13] 69-61785-7, -8 bearing with 65-46203-15, -16, -18, -22, -23 collar
*[14] 69-35383-1 bolt
*[15] BACB30LM10 bolt

FOR TORQUE VALUES OF STANDARD FASTENERS REFER TO 20-50-01			
Item Number Fig. 1101	Name	Torque	
		Pound-Inches	Pound-Feet
2	Torsion Link Apex Nut	225-250 *[1]	
6E, 16E	Nut	30-80	
6G, 16G	Nut	90-125 *[4]	
8, 18	Nut	100-140	
27	Nut	75-150 *[2]	
27	Nut	600-700 *[3]	
38	Nut	50-100	
41	Metering Valve Retaining Nut	50-100	
41	Metering Valve Swivel Bolt	30-40	
58B	Lube Fitting	25-30	
64	Steering Plate Mounting Nut		42

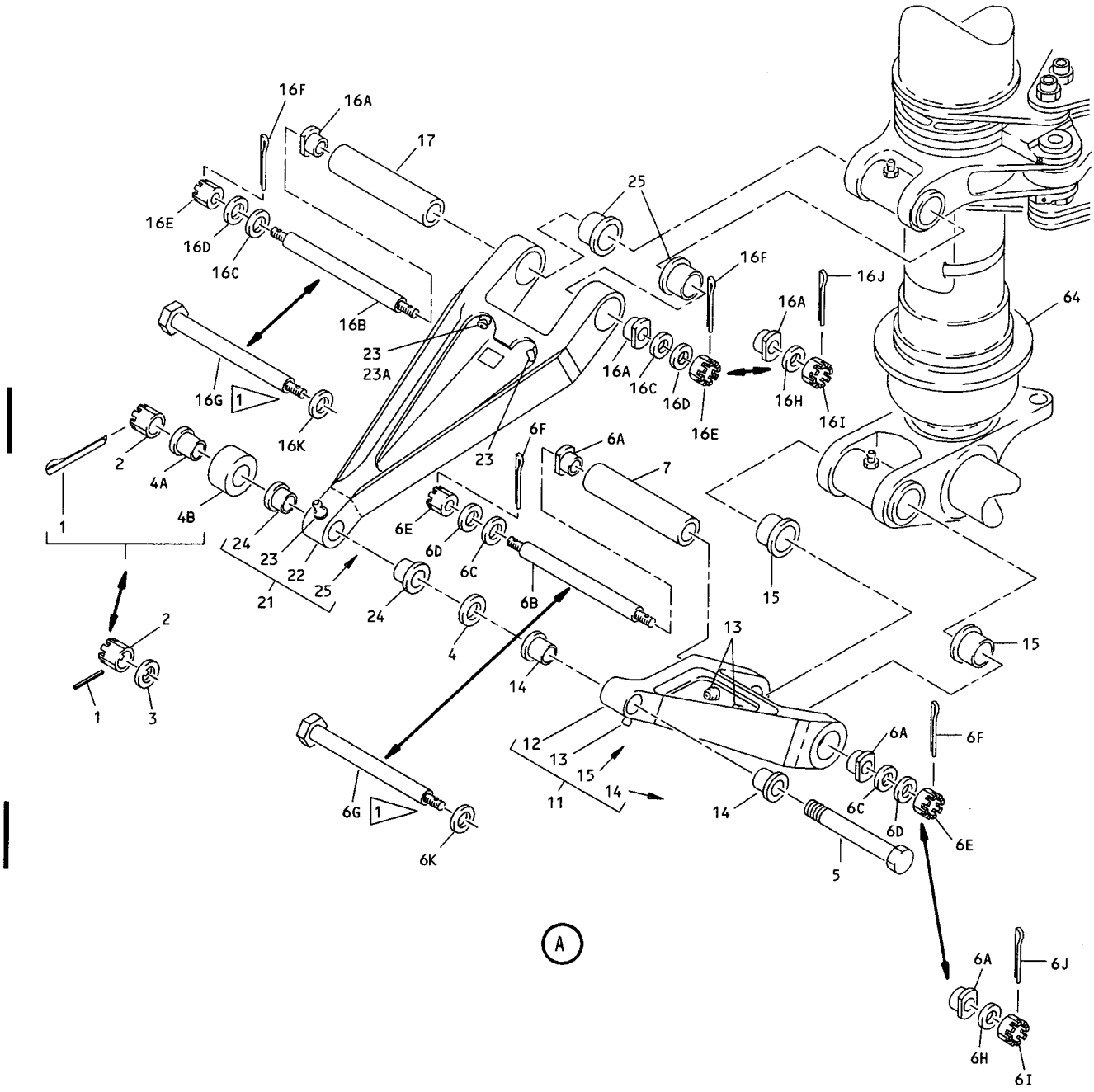
*[1] Back off and tighten finger-tight. Align lock holes and install cotter pin.
*[2] Nut BACB10JD112
*[3] Nut SPS48FT1414
*[4] Back off the minimum necessary to install the cotter pin.

Torque Table
Figure 602

ILLUSTRATED PARTS LIST



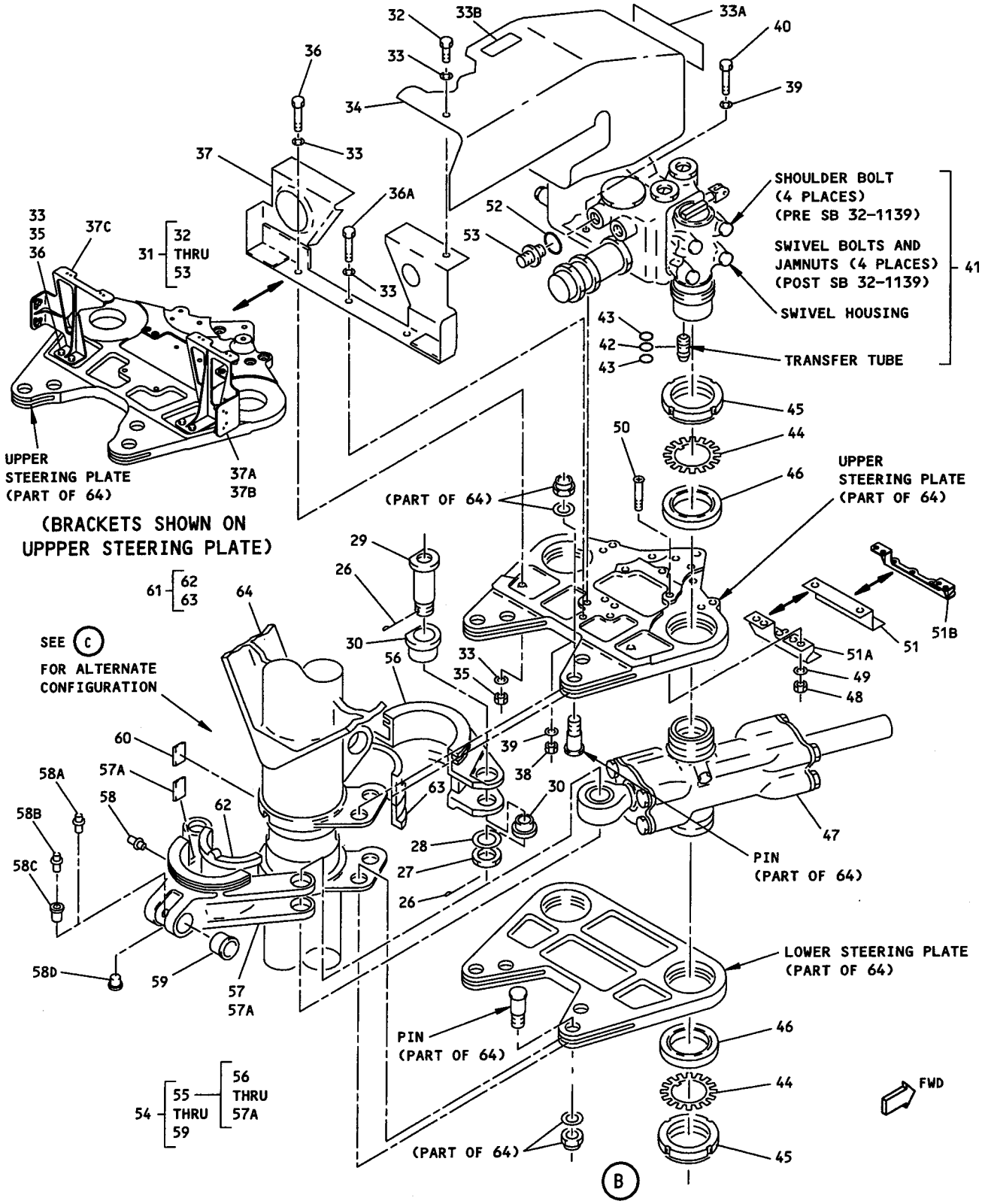
Nose Gear Assembly
Figure 1101 (Sheet 1)



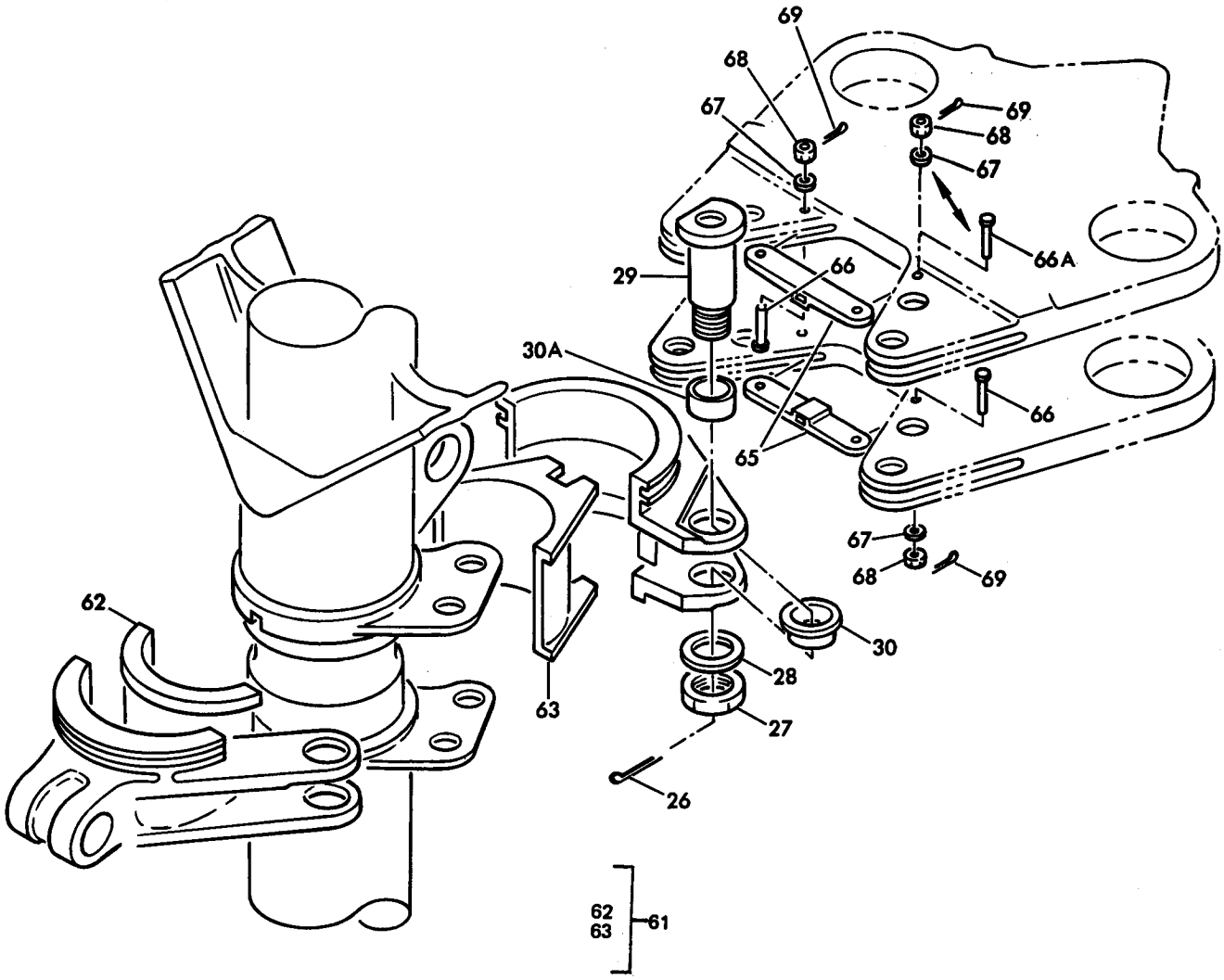
1 BOLTS (6G, 16G) MAY BE INSTALLED IN THE INBOARD OR OUTBOARD DIRECTION

Nose Gear Assembly
Figure 1101 (Sheet 2)

E75114



Nose Gear Assembly
Figure 1101 (Sheet 3)



Nose Gear Assembly
Figure 1101 (Sheet 4)

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-73762-4		NOSE GEAR ASSY *[2]	A	RF
	65-73762-5		NOSE GEAR ASSY *[2]	B	RF
	65-73762-7		NOSE GEAR ASSY *[2]	C	RF
	65-73762-9		NOSE GEAR ASSY *[2]	D	RF
	65-73762-18		NOSE GEAR ASSY *[2]	E	RF
	65-73762-21		DELETED		
1	MS24665-359		. PIN, COTTER (POST SB 32-1062)		1
1	MS51923-243		. PIN, SPRING (POST SB 32-1019) (PRE SB 32-1062)		1
1	MS51923-241		. PIN, SPRING (PRE SB 32-1019) (PRE SB 32-1062)		1
2	BACN10JD10AU		. NUT (POST SB 32-1062)	B-E	1
2	BACN10JD7		. NUT (PRE SB 32-1019)		1
2	AN310-7		. NUT (REPLD BY BACN10JD7) (POST SB 32-1019)	A-D	1
2	69-60720-1		. NUT (POST SB 32-1019) (PRE SB 32-1062)		1
3	69-38183-1		. WASHER (PRE SB 32-1062)		1
4	66-24145-1		. WASHER (PRE SB 32-1062)	A-E	1
4	66-24145-2		. WASHER (POST SB 32-1062)	A-E	1
4	66-24145-3		DELETED		
4A	69-63392-1		. BUSHING (POST SB 32-1062)		1
4B	BACB10C43KP		. BEARING (POST SB 32-1062)		1
5	BACB30LM10CD 52		. BOLT, APEX (POST SB 32-1062)		1
5	69-35383-1		. BOLT, APEX (PRE SB 32-1062)		1
6	RS125		. RING, RETAINER (V80756) (PRE SB 32-1129)		2
6A	69-73012-1		. END CAP (POST SB 32-1129)		2
6B	69-73008-2		. PIN, RETAINING (PRE SB 32-1129)		1
6C	BACW10P186C		. WASHER (PRE SB 32-1129)		2
6D	AN960C416L		. WASHER (PRE SB 32-1129)		2
6E	BACN10JD104		. NUT (PRE SB 32-1129)		2
6F	MS24665-136		. COTTER PIN (PRE SB 32-1129)		2
6G	NAS6705D98		. BOLT (POST SB 32-1129)		1
6G	NAS6706D98		. BOLT (OPT)		1
6H	AN960C516		. WASHER (POST SB 32-1129)		1
6H	AN960C616L		. WASHER (USED WITH ITEM 6G, NAS6706D98)		1
6I	MS14144L5		. NUT (POST SB 32-1129)		1
6I	MS14144L6		. NUT (USED WITH ITEM 6G, NAS6706D98)		1
6J	MS24665-153		. PIN, COTTER (POST SB 32-1129)		1
6J	MS24665-302		. PIN, COTTER (USED WITH ITEM 6G, NAS6706D98)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
6K	AN960C516		. WASHER (UNDER HEAD) (USED WITH ITEM 6G, NAS6705D98) (POST SB 32-1129)		1
6K	BACW10BP6CD		. WASHER (UNDER HEAD) (USED WITH ITEM 6G, NAS6706D98)		1
7	69-35382-1		. PIN (PRE SB 32-1129)	ACDE	1
7	69-72698-1		. PIN (POST SB 32-1129)(LIMITED)	B	1
7	69-72698-4		DELETED		
8	BACN10JC5		. NUT (REPLS NAS679A5) (PRE SB 32-1129)		1
8	NAS679A5		. NUT (REPLD BY BACN10JC5) (PRE SB 32-1129)		1
9	AN960-516		. WASHER (PRE SB 32-1129)		1
10	NAS1105-30		. BOLT (PRE SB 32-1129)		1
11	65-46288-5		. LINK ASSY, LWR TORSION (USED WITH 65-46202-9, ITEM 21)(SB 32-1072) (PRE SB 32-1126)	BC	1
11	65-46288-7		. LINK ASSY, LWR TORSION (POST SB 32-1126)		1
11	65-46288-7		. LINK ASSY, LWR TORSION	B	1
11	65-46288-3		. LINK ASSY, LWR TORSION (USED WITH 65-46202-2,-7, ITEM 21)(REPLS 65-46202-1,-6, 65-46288-1) (PRE SB 32-1126)	BCD	1
11	65-46288-1		. LINK ASSY, LWR TORSION (USED WITH 65-46202-2,-7, ITEM 21)(OPT) (PRE SB 32-1126)	B-E	1
11	65-46202-1		. LINK ASSY, LWR TORSION (USED WITH 65-46202-2,-7, ITEM 21)(OPT) (PRE SB 32-1126)	A-D	1
11	65-46202-6		. LINK ASSY, LWR TORSION (USED WITH 65-46202-2,-7, ITEM 21)(OPT) (PRE SB 32-1126)	BCD	1
11	65-46288-9		DELETED		
11	65-46288-11		DELETED		
11	65-46288-13		DELETED		
12	65-46202-3		. . LINK (USED ON 65-46202-1)		1
12	65-46202-5		. . LINK (USED ON 65-46202-6)		1
12	65-46288-2		. . LINK (USED ON 65-46288-1)		1
12	65-46288-4		. . LINK (USED ON 65-46288-3,-5)		1
12	65-46288-6		. . LINK (USED ON 65-46288-7)(OPT)		1
12	65-46288-8		. . LINK (USED ON 65-46288-7)		1
13	1728B		. . FITTING, LUBE, V95879 (USED ON 65-46202-1 AND 65-46288-1, -3,-5)		2
13	1728B		. . FITTING LUBE, V95879 (USED ON 65-46202-6, 65-46288-7)		3

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
13	1645B		. . FITTING, LUBE, V95879 (USED ON 65-46202-1 AND 65-46288-1,-3,-5) (OPT)		2
13	1645B		. . FITTING, LUBE, V95879 (USED ON 65-46202-6)(OPT)		3
13A	1992B1		. . FITTING, LUBE, V95879 (USED ON 65-46202-1)		1
14	65-46150-17		. . BUSHING (USED ON 65-46202-1,-6)		2
14	69-61783-1		. . BUSHING (USED ON 65-46288-1,-3)		2
14	65-46150-74		. . BUSHING (USED ON 65-46288-5,-7 AND LINKS MODIFIED PER SB 32-1072)		2
14	65-90706-3		DELETED		
15	65-46150-18		. . BUSHING (USED ON 65-46202-1,-6, 65-46288-1,-3)		2
15	65-46150-75		. . BUSHING (USED ON 65-46288-5,-7 AND LINKS MODIFIED PER SB 32-1072)		2
15	65-90706-4		DELETED		
16	RS125		. RING, RETAINER (V80756) (PRE SB 32-1129)		2
16A	69-73012-1		. END CAP (POST SB 32-1129)		2
16B	69-73008-2		. PIN, RETAINING (POST SB 32-1129)		1
16C	BACW10P186C		. WASHER (POST SB 32-1129)		2
16D	AN960C416L		. WASHER (POST SB 32-1129)		2
16E	BACN10JD104		. NUT (POST SB 32-1129)		2
16F	MS24665-136		. COTTER PIN (POST SB 32-1129)		2
16G	NAS6705D98		. BOLT (POST SB 32-1129)		1
16G	NAS6706D98		. BOLT (OPT)		1
16H	AN960C516		. WASHER (POST SB 32-1129)		1
16H	AN960C616L		. WASHER (USED WITH ITEM 16G, NAS6706D98)		1
16I	MS14144L5		. NUT (POST SB 32-1129)		1
16I	MS14144L6		. NUT (USED WITH ITEM 16G, NAS6706D98)		1
16J	MS24665-153		. PIN, COTTER (POST SB 32-1129)		1
16J	MS24665-302		. PIN, COTTER (USED WITH ITEM 16G, NAS6706D98)		1
16K	AN960C516		. WASHER (UNDER HEAD) (USED WITH ITEM 16G, NAS6705D98) (POST SB 32-1129)		1
16K	BACW10BP6CD		. WASHER (UNDER HEAD) (USED WITH ITEM 16G, NAS6706D98)		1
17	69-35382-1		. PIN (PRE SB 32-1129)	ACDE	1
17	69-72698-1		. PIN (POST SB 32-1129)(LIMITED)	B	1
17	69-72698-4		DELETED		
18	BACN10JC5		. NUT (REPLS NAS679A5) (PRE SB 32-1129)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-18	NAS679A5		. NUT (REPLD BY BACN10JC5) (PRE SB 32-1129)		1
19	AN960-516		. WASHER (PRE SB 32-1129)		1
20	NAS1105-30		. BOLT (PRE SB 32-1129)		1
21	65-46202-9		. LINK ASSY, UPPER TORSION (SB 32-1072)	BC	1
21	65-46202-11		. LINK ASSY, UPPER TORSION (OPT TO 65-46202-9)	B	1
21	65-46202-13		. LINK ASSY, UPPER TORSION (USED WITH 65-46288-7)(POST SB 32-1126)		1
21	65-46202-13		. LINK ASSY, UPPER TORSION (OPT TO 65-46202-9)	B	1
21	65-46202-7		. LINK ASSY, UPPER TORSION (USED WITH 65-46202-1,-6, 65-46288-1,-3, ITEM 11)(PRE SB 32-1126)	BCD	1
21	65-46202-2		. LINK ASSY, UPPER TORSION (USED WITH 65-46288-1,-3, ITEM 11) (PRE SB 32-1126)		1
22	65-46202-8		. . LINK (USED ON 65-46202-7,-9)		1
22	65-46202-4		. . LINK (USED ON 65-46202-2)		1
22	65-46202-12		. . LINK (USED ON 65-46202-11)		1
22	65-46202-14		. . LINK (USED ON 65-46202-13)(OPT)		1
22	65-46202-15		. . LINK (USED ON 65-46202-13)		1
23	1728B		. . FITTING, LUBE (V95879)		2
23	1645B		. . FITTING, LUBE (V95879)(OPT)		2
23A	1992B1		. . FITTING, LUBE (V95879)		1
24	65-46150-17		. . BUSHING (USED ON 65-46202-2,-7)		2
24	65-46150-74		. . BUSHING (USED ON 65-46202-9,-11, -13 AND LINKS MODIFIED PER SB 32-1072)		2
25	65-90706-3		DELETED		
25	65-46150-18		. . BUSHING (USED ON 65-46202-2,-7)		2
25	65-46150-75		. . BUSHING (USED ON 65-46202-9,-11, -13, AND LINKS MODIFIED PER SB 32-1072)		2
25	65-90706-4		DELETED		
26	MS24665-376		. PIN, COTTER (USED WITH 69-36627-1, ITEM 29)		2
27	BACN10JD112		. NUT (REPLS AN 320-12)(USED WITH 69-36627-1, ITEM 29)		2
27	48FT1414		. NUT, V56878 (USED WITH 69-61383-2, ITEM 29)		2
27	SPS48FT1414		DELETED		
28	69-62228-1		. WASHER (USED WITH 69-61383-2, ITEM 29)		2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
28	69-62228-2		DELETED		
28	69-76481-1		. WASHER (REPLS 69-62228-1)		2
28	BACW10BN14P		. WASHER (REPLS AN960-1216L)(USED WITH 69-36627-1, ITEM 29)		2
29	69-61383-2		. BOLT (REPLS 69-36627-1)	A-E	2
29	69-61383-3		DELETED		
29	69-36627-1		. BOLT (REPLD BY 69-61383-2)	A-D	2
30	69-61381-1		. BUSHING (REPLS 69-36628-2)		2
30	69-36628-2		. BUSHING (REPLD BY 69-61381-1 AND 69-61382-1 (2 EACH)	A-D	4
30A	69-61382-1		. BUSHING (REPLS 69-36628-2)		2
31	65-44502-1		. COVER INSTL, STEERING CYL VALVE AND *[1]		1
31	65-44502-2		. COVER INSTL, STEERING CYL VALVE AND *[1]		1
31	65-44502-3		. COVER INSTL, STEERING CYL VALVE AND *[1]		1
31	65-44502-4		. COVER INSTL, STEERING CYL VALVE AND *[1]		1
31	65-44502-5		. COVER INSTL, STEERING CYL VALVE AND *[1]		1
31	65-44502-6		. COVER INSTL, STEERING CYL VALVE AND *[1]		1
31	65-44502-7		. COVER INSTL, STEERING CYL VALVE AND *[1]		1
32	NAS603-9P		. . SCREW		8
33	AN960PD10		. . WASHER		22
33A	BAC27DHY0301		. . MARKER (USED ON 65-44502-1,-6)		1
33A	BAC27DLG0116		DELETED		
33A	BAC27DLG0120		DELETED		
33A	BAC27DLG0155		DELETED		
33A	BAC27DLG66		DELETED		
33A	BACM10W2ACF		. . MARKER (USED ON 65-44502-6)		1
33A	BAC27DHY0312		. . MARKER (USED ON 65-44502-1)		1
33B	BAC27TCT0010		. . MARKER		1
34	65-44713-6		. . COVER ASSY (USED ON 65-44502-1, -6)(REPLD BY 65-44713-16) (PRE SB 32-1100)(CMM 32-50-12)		1
34	65-44713-13		. . COVER ASSY (USED ON 65-44502-2) (OPT)(CMM 32-50-12)		1
34	65-44713-16		. . COVER ASSY (USED ON 65-44502-1, -6)(PRE SB 32-1100)(CMM 32-50-12)		1
34	65-44713-17		. . COVER ASSY (USED ON 65-44502-2, -3)(PREF)(CMM 32-50-12)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
34	65-44713-18		. . COVER ASSY (USED ON 65-44502-1, -6)(PRE SB 32-1100)(CMM 32-50-12)		1
34	65-44713-20		. . COVER ASSY (USED ON 65-44502-4) (CMM 32-50-12)		1
34	65-44713-24		. . COVER ASSY (USED ON 65-44502-5) (CMM 32-50-12)		1
34	65-44713-32		. . COVER ASSY (USED ON 65-44502-1, -6)(POST SB 32-1100)(PRE SB 32-1141) (CMM 32-50-12)		1
34	65-44713-33		. . COVER ASSY (USED ON 65-44502-4) (CMM 32-50-12)		1
34	65-44713-34		. . COVER ASSY (USED ON 65-44502-1, -5)(PRE SB 32-1141) (CMM 32-50-12)		1
34	65-44713-41		. . COVER ASSY (USED ON 65-44502-1, -6)(PRE SB 32-1141) (CMM 32-50-12)		1
34	65-44713-42		. . COVER ASSY (USED ON 65-44502-4) (CMM 32-50-12)		1
34	65-44713-50		. . COVER ASSY (USED ON 65-44502-1, -6) (CMM 32-50-12)		1
34	65-44713-52		. . COVER ASSY (USED ON 65-44502-1) (CMM 32-50-12)		1
34	65-44713-56		. . COVER ASSY (USED ON 65-44502-1, -6)(OPT) (CMM 32-50-12)		1
34	65-44713-62		. . COVER ASSY (USED ON 65-44502-7) (CMM 32-50-12)		1
34	65C28115-3		. . COVER ASSY (USED ON 65-44502-1, -5,-6)(POST SB 32-1141) (CMM 32-50-12)		1
35	BACN10JC3		. . NUT (REPLS NAS679A3W)		3
35	NAS679A3W		. . NUT (REPLD BY BACN10JC3)		3
36	NAS1303-10		. . BOLT		2
36A	NAS1303-14		. . BOLT		1
37	69-35575-2		. . BRACKET ASSY (USED ON 65-44502-1, -6)(REPLD BY 65C31100-8, 65C31102-7)(PRE SB 32-1211)		1
37	69-35575-3		. . BRACKET ASSY (USED ON 65-44502-2 THRU -5)(REPLD BY 65C31100-10, 65C31102-7)(PRE SB 32-1211)		1
37	69-35575-4		. . BRACKET ASSY (USED ON 65-44502-1) (REPLD BY 65C31101-4, 65C31102-7)(PRE SB 32-1211)		1
37	69-35575-5		. . BRACKET ASSY (USED ON 65-44502-7) (REPLD BY 65C34813-10,-11) (PRE SB 32-1211)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
37A	65C31100-1		. . BRACKET ASSY (REPLS 69-35575-2, -3)(REPLD BY 65C31100-8) (USED ON 65-44502-1,-2) (PRE SB 32-1211)		1
37A	65C31100-4		. . BRACKET ASSY (REPLS 69-35575-5) (USED ON 65-44502-7)(REPLD BY 65C34813-10)(PRE SB 32-1211)		1
37A	65C31100-5		. . BRACKET ASSY (REPLD BY 65C3110-10)(PRE SB 32-1211)		1
37A	65C31100-8		. . BRACKET ASSY (REPLS 65C31100-1) (POST SB 32-1211)		1
37A	65C31100-10		. . BRACKET ASSY (REPLS 65C31100-5) (POST SB 32-1211)		1
37A	65C34813-10		. . BRACKET ASSY (REPLS 65C31100-4) (POST SB 32-1211)		1
37B	65C31101-1		. . BRACKET ASSY (REPLS 69-35575-4) (REPLD BY 65C31101-4)(USED ON 65-44502-1)(PRE SB 32-1211)		1
37B	65C31101-4		. . BRACKET ASSY (REPLS 65C31101-1) (POST SB 32-1211)		1
37C	65C31102-1		. . BRACKET ASSY (REPLS 69-35575-2, -3,-4)(REPLD BY 65C31102-7) (USED ON 65-44502-1) (PRE SB 32-1211)		1
37C	65C31102-4		. . BRACKET ASSY (REPLS 69-35575-5) (USED ON 65-44502-7)(REPLD BY 65C34813-11)(PRE SB 32-1211)		1
37C	65C31102-7		. . BRACKET ASSY (REPLS 65C31102-1) (POST SB 32-1211)		1
37C	65C34813-11		. . BRACKET ASSY (REPLS 65C31102-4) (POST SB 32-1211)		1
37D	65C31100-2		. . . BRACKET (USED ON 65C31100-1, -4,-5)		1
37D	65C31100-7		. . . BRACKET (USED ON 65C31100-8, 65C34813-10)		1
37D	65C31100-9		. . . BRACKET (USED ON 65C31100-10)		1
37D	65C31101-2		. . . BRACKET (USED ON 65C31101-1)		1
37D	65C31101-6		. . . BRACKET (USED ON 65C31101-4)		1
37E	65C31102-2		. . . BRACKET (USED ON 65C31102-1, -4)		1
37E	65C31102-6		. . . BRACKET (USED ON 65C31102-7, 65C34813-11)		1
37F	BACN10KE3D		. . . NUTPLATE (USED ON ITEM 37A, 37C)		2
37G	BACN10KB3F		. . . NUTPLATE (USED ON 65C31100-8, -10, 65C31102-7)		2
37G	BACN10KB3F		. . . NUTPLATE (USED ON 65C31101-4)		4

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
38	BACN10JC4		. . NUT (REPLS NAS679A4W)		3
38	NAS679A4W		. . NUT (REPLD BY BACN10JC4)		3
39	AN960PD416		. . WASHER		6
40	NAS1304-17		. . BOLT		3
41	4129RA1		. . VALVE, STEERING & METERING, V78062 (BOEING 10-60590-2) (REPLS 4129RA)(PRE SB 32-1139)		1
41	4129RA		. . VALVE, STEERING & METERING, V78062 (BOEING 10-60590-1) (REPLD BY 4129RA1)(PRE SB 32-1139)		1
41	4129RA4		. . VALVE, STEERING & METERING, V78062 (BOEING 10-60590-3) (PRE SB 32-1139)		1
41	4129RA9		. . VALVE, STEERING & METERING, V78062 (BOEING 10-60590-4) (POST SB 32-1139)		1
41	4129RA10		. . VALVE, STEERING & METERING, (V78062)(BOEING 10-60590-5) (USED ON 65-44502-7)		1
42	NAS1611-011		. . O-RING		8
43	MS28782-06		. . BACKUP RING		16
44	MS19070-112		. . WASHER		4
45	MS19068-112		. . NUT, LOCK		4
46	69-35792-1		. . BEARING (PRE SB 32-1209)		4
46	10-62185-1		. . BEARING (POST SB 32-1209)		4
47	65-44710-3		. . CYLINDER ASSY (REPLS 65-44710-2) (OHM 32-50-11)		2
47	65-44710-4		. . CYLINDER ASSY (OPT)(OHM 32-50-11)		2
47	65-44710-2		. . CYLINDER ASSY (REPL BY 65-44710-3) (OHM 32-50-11)		2
47	65-44710-6		. . CYLINDER ASSY (USED ON 65-44502-7) (OHM 32-50-11)		2
47	65-44710-1		DELETED		
48	BACN10JC3		. . NUT (REPLS NAS679A3W)		4
48	NAS679A3W		. . NUT (REPL BY BACN10JC3)		4
49	AN960PD10		. . WASHER		4
50	NAS517-3-13		. . BOLT		4
50A	AN960PD10		. WASHER		4
50B	BACB30NE3-4		. BOLT		4
51	69-35573-1		. . SUPPORT		2
51A	69-73133-1		. . SUPPORT (USED ON 65-44502-1 THRU -6)(REPLD BY 65C31103-1)(PRE SB 32-1211)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
51A	69-73133-3		. . SUPPORT (USED ON 65-44502-7) (REPLD BY 65C31103-3)(PRE SB-32-1211)		1
51B	65C31103-1		. . SUPPORT (REPLS 69-73133-1) (USED ON 65-44502-1)(POST SB 32-1211)		1
51B	65C31103-4		. . SUPPORT (REPLS 69-73133-2) (USED ON 65-44502-7)(POST SB 32-1211)		1
52	NAS1612-6		. . O-RING		2
53	MS21902-6		. . UNION		2
54	65-46203-3		. COLLAR ASSY, STEERING (PRE SB 32-1095)	ACE	1
54	65-46203-5		. COLLAR ASSY, STEERING (OPT TO 65-46203-7)(PRE SB 32-1095)	BD	1
54	65-46203-7		. COLLAR ASSY, STEERING (PRE SB 32-1095)	BD	1
54	65-46203-9		. COLLAR ASSY, STEERING (SB 32-1071) (PRE SB 32-1095)	AC	1
54	65-46203-10		. COLLAR ASSY, STEERING (SB 32-1071) (PRE SB 32-1095)	BD	1
54	65-46203-11		. COLLAR ASSY, STEERING (PRE SB 32-1095)	C	1
54	65-46203-12		. COLLAR ASSY, STEERING (PRE SB 32-1095)	BD	1
54	65-46203-13		. COLLAR ASSY, STEERING (SB 32-1072) (PRE SB 32-1095)	C	1
54	65-46203-14		. COLLAR ASSY, STEERING (SB 32-1072) PR SB 32-1095)	B	1
54	65-46203-17		. COLLAR ASSY, STEERING (OPT TO 65-46203-14)(PRE SB 32-1095)	B	1
54	65-46203-20		. COLLAR ASSY, STEERING (POST SB 32-1095)	B	1
54	65-46203-21		. COLLAR ASSY, STEERING (POST SB 32-1095)	ACE	1
54	65-46203-24		. COLLAR ASSY, STEERING (LTD)	B	1
54	65-46203-26		. COLLAR ASSY, STEERING (PREF)		1
55	65-46203-4		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-3,-9,-11)		1
55	65-46203-6		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-5,-10,-12)		1
55	65-46203-8		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-7)		1
55	65-46203-15		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-13)		1
55	65-46203-16		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-14)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-55	65-46203-18		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-17)		1
55	65-46203-22		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-20)		1
55	65-46203-23		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-21)		1
55	65-46203-25		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-24)		1
55	65-46203-27		. . COLLAR ASSY, MACHINE (MATCHED SET)(USED ON 65-46203-26)		1
56	65-46252-2		. . . COLLAR, FWD (USED ON 65-46203-4)		1
56	65-46252-3		. . . COLLAR, FWD (USED ON 65-46203-6, -8)		1
56	65-46252-4		. . . COLLAR, FWD (USED ON 65-46203-15, -23)		1
56	65-46252-5		. . . COLLAR, FWD (USED ON 65-46203-16, -18,-22,-25)		1
56	65-46252-7		. . . COLLAR, FWD (USED ON 65-46203-27)		1
57	65-46250-2		. . . COLLAR, AFT (USED ON 65-46203-4)		1
57	65-46250-3		. . . COLLAR, AFT (USED ON 65-46203-6)		1
57	65-46250-4		. . . COLLAR, AFT (USED ON 65-46203-8)		1
57	65-46250-5		. . . COLLAR, AFT (USED ON 65-46203-15, -23)		1
57	65-46250-6		. . . COLLAR, AFT (USED ON 65-46203-16, -22)		1
57	65-46250-7		. . . COLLAR, AFT (USED ON 65-46203-18)		1
57	65-46250-8		. . . COLLAR, AFT (USED ON 65-46203-25)		1
57	65-46250-9		. . . COLLAR, AFT (USED ON 65-46203-27)		1
57A	65-46203-19		. . SHIM, LAMINATED (USED ON 65-46203-20, -21, -24, -26)		2
58	1645B		. . FITTING, LUBE (V95879)(OPT) (USED ON 65-46203-3, -5, -7, -9 THRU -14, -20, -21)		8
58	1645B		. . FITTING, LUBE (V95879) (USED ON 65-46203-17)		8
58	1728B		. . FITTING, LUBE (V95879)(USED ON 65-46203-3, -5, -7, -9 THRU -14, -20, -21, -24, -26)		8
58A	1728B		. . FITTING, LUBE (V95879)(USED ON 65-46203-24, -26)		1
58B	MS15001-1		. . FITTING, LUBE (POST SL 32-060) (USED ON 65-46203-3, -5, -7, -9 THRU -14, -17, -20, -21)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-58C	BUSHING		. . BUSHING, THREADED (POST SL 32-060) (USED ON 65-46203-3,-5,-7, -9, THRU -14, -17, -20, -21)		1
58D	PLUG		. . PLUG (POST SL 32-060)(USED ON 65-46203-3,-5,-7,-9 THRU -14,-17,-20, -21)		1
59	65-46150-1		. . BUSHING (USED ON 65-46203-3,-5,-7, -11 THRU -14,-17,-20,-21) (PRE SL 32-060)		2
59	65-46150-95		. . BUSHING (USED ON 65-46203-3,-5,-7, -11 THRU -14,-17,-20,-21) (POST SL 32-060)		2
59	65-46150-95		. . BUSHING (USED ON 65-46203-24,-26)		2
60	69-42182-1		. SEAL (USED WITH 69-36626-7,-8)	A-D	2
61	69-36626-7		. BEARING ASSY, STEERING COLLAR (REPLD BY 69-61785-1 PER SB 32-1044)	AC	2
61	69-61785-1		. BEARING ASSY, STEERING COLLAR (REPLS 69-36626-7 PER SB 32-1044)	ACE	1
61	69-36626-8		. BEARING ASSY, STEERING COLLAR (REPLD BY 69-61785-2 PER SB 32-1044)	BD	2
61	69-32226-8		DELETED		
61	69-61785-2		. BEARING ASSY, STEERING COLLAR (REPLS 69-36626-8 PER SB 32-1044)	BD	1
61	69-61785-7		. BEARING ASSY, STEERING COLLAR (SB 32-1072)	C	1
61	69-61785-8		. BEARING ASSY, STEERING COLLAR (SB 32-1072)	B	1
62	69-36626-6		. . BEARING HALF, AFT (MATCHED WITH 69-36626-2, USED ON 69-36626-7)		1
62	69-36626-9		. . BEARING HALF, AFT (MATCHED WITH 69-36626-10, USED ON 69-36626-8)		1
62	69-61785-3		. . BEARING HALF, AFT (MATCHED WITH 69-61785-4, USED ON 69-61785-1)		1
62	69-61785-5		. . BEARING HALF, AFT (MATCHED WITH 69-61785-6, USED ON 69-61785-2)		1
62	69-61785-9		. . BEARING HALF, AFT (MATCHED WITH 69-61785-10, USED ON 69-61785-7)		1
62	69-61785-11		. . BEARING HALF, AFT (MATCHED WITH 69-61785-12, USED ON 69-61785-8)		1
63	69-36626-2		. . BEARING HALF, FWD (MATCHED WITH 69-36626-6, USED ON 69-36626-7)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-63	69-36626-10		. . BEARING HALF, FWD (MATCHED WITH 69-36626-9, USED ON 69-36626-8)		1
63	69-61785-4		. . BEARING HALF, FWD (MATCHED WITH 69-61785-3, USED ON 69-61785-1)		1
63	69-61785-6		. . BEARING HALF, FWD (MATCHED WITH 69-61785-5, USED ON 69-61785-2)		1
63	69-61785-10		. . BEARING HALF, FWD (MATCHED WITH 69-61785-9, USED ON 69-61785-7)		1
63	69-61785-12		. . BEARING HALF, FWD (MATCHED WITH 69-61785-11, USED ON 69-61785-8)		1
64	65-46200-16		. STRUT ASSY, SHOCK (REF 32-21-11)	A	1
64	65-46200-17		. STRUT ASSY, SHOCK (REF 32-21-11)	A	1
64	65-46200-19		. STRUT ASSY, SHOCK (REF 32-21-11)	C	1
64	65-46200-21		. STRUT ASSY, SHOCK (REF 32-21-11)	C	1
64	65-46200-22		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	BD	1
64	65-46200-25		. STRUT ASSY, SHOCK (REF 32-21-11)	A	1
64	65-46200-26		. STRUT ASSY, SHOCK (REF 32-21-11)	A	1
64	65-46200-27		. STRUT ASSY, SHOCK (REF 32-21-11)	C	1
64	65-46200-28		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	D	1
64	65-46200-29		. STRUT ASSY, SHOCK (REF 32-21-11)	C	1
64	65-46200-30		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1
64	65-46200-32		. STRUT ASSY, SHOCK (REF 32-21-11)	CE	1
64	65-46200-33		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	BD	1
64	65-46200-34		. STRUT ASSY, SHOCK (REF 32-21-11)	C	1
64	65-46200-35		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	BD	1
64	65-46200-36		. STRUT ASSY, SHOCK (REF 32-21-11)	C	1
64	65-46200-37		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-38		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-39		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-40		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-41		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	C	1
64	65-46200-42		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-43		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-46		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-47		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1
64	65-46200-48		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-49		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-50		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-51		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-52		. STRUT ASSY, SHOCK (REF 32-21-11) *[3]	B	1
64	65-46200-53		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
64	65-46200-55		. STRUT ASSY, SHOCK (REF 32-21-11) *[4]	B	1
64	65-46200-56		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1
64	65-46200-63		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1
64	65-46200-64		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1
64	65-46200-65		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1
64	65-46200-66		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1
64	65-46200-67		. STRUT ASSY, SHOCK (REF 32-21-11)	B	1
64	65-46200-60		DELETED		
64	65-46200-61		DELETED		
64	65-46200-62		DELETED		
64	65-46200-68		DELETED		
64	65-46200-69		DELETED		
64	65-46200-74		DELETED		
64	65-46200-76		DELETED		
64	65-46200-77		DELETED		
64	65-46200-78		DELETED		
65	69-62214-1		. BRACKET, BEARING RETAINER		2
66	BACB30NF4D10		. BOLT		4
66	BACB30NF4D10		. BOLT		3
66A	BACB30NF4D8		. BOLT *[5]		1
67	AN960-416L		. WASHER		4
68	BACN10JD4		. NUT		4
68	BACN10JD4		. NUT		3
-68A	BACN10JD104		. NUT (USED WITH ITEM 66A) *[5]		1
69	MS24665-134		. PIN, COTTER		4

- ITEM NOT ILLUSTRATED

*[1] INSTALLATION PARTS (NOT PART OF 65-73762)
*[2] REFER TO SERVICE LETTER 737-SL-32-18 FOR DATA ABOUT INTERCHANGEABILITY OF PARTS THAT MAKE UP THESE COMPONENTS AS THEY ARE USED ON AIRPLANES WITH DIFFERENT MAX GROSS WEIGHTS. THIS SERVICE LETTER NOW INCLUDES LIFE LIMIT DATA.
*[3] PRE SB 32-1132
*[4] POST SB 32-1132
*[5] BOLT (66A) AND NUT (68A) USED IF INTERFERENCE OCCURS WITH STEERING ACTUATOR WHEN YOU USE ORIGINAL BOLT (66) AND NUT (68) AT THIS LOCATION. INSTALL BOLT (66A) WITH HEAD UP AS SHOWN.

VENDORS

V31786	YEAGER MANUFACTURING CO., 2222 EAST ORANGETHORPE AVE., ANAHEIM, CALIFORNIA 92806-1229
V56878	SPS TECHNOLOGIES, INC., AEROSPACE AND INDUSTRIAL PRODUCTS DIV., HIGHLAND AVE., JENKINTOWN, PENNSYLVANIA 19046
V78062	SARGENT CONTROLS, A DOVER DIVERSIFIED COMPANY, 5675 W. BURLINGAME RD., TUCSON, ARIZONA 85743
V80756	SPIROLOX DIV. OF KAYDON CORP., 29 CASSENS STREET, ST. LOUIS, MISSOURI 63026-2542
V95879	ALEMITE DIV. OF STEWART WARNER CORP., 1826 DIVERSEY PARKWAY, CHICAGO, ILLINOIS 60614-1540

Part No.	Fig. and Index No.	Qty. per Assy.
AN310-7	1101-2	1
AN960-416L	67	4
AN960-516	9	1
AN960-516	19	1
AN960C416L	6D	2
AN960C416L	16D	2
AN960C516	6H	1
AN960C516	6K	1
AN960C516	16H	1
AN960C516	16K	1
AN960C616L	6H	1
AN960C616L	16H	1
AN960PD10	33	22
AN960PD10	49	4
AN960PD10	50A	4
AN960PD416	39	6
BAC27DHY0301	33A	1
BAC27DHY0312	33A	1
BAC27DLG0116	33A	
BAC27DLG0120	33A	
BAC27DLG0155	33A	
BAC27DLG66	33A	
BAC27TCT0010	33B	1
BACB10C43KP	4B	1
BACB30LM10CD 52	5	1
BACB30NE3-4	50B	4
BACB30NF4D10	66	4
BACB30NF4D10	66	3
BACB30NF4D8	66A	1
BACM10W2ACF	33A	1
BACN10JC3	35	3
BACN10JC3	48	4
BACN10JC4	38	3
BACN10JC5	8	1
BACN10JC5	18	1
BACN10JD104	6E	2
BACN10JD104	16E	2
BACN10JD104	-68A	1
BACN10JD10AU	2	1
BACN10JD112	27	2
BACN10JD4	68	4
BACN10JD4	68	3
BACN10JD7	2	1
BACN10KB3F	37G	2
BACN10KB3F	37G	4
BACN10KE3D	37F	2
BACW10BN14P	28	2
BACW10BP6CD	6K	1

Part No.	Fig. and Index No.	Qty. per Assy.
BACW10BP6CD	16K	1
BACW10P186C	6C	2
BACW10P186C	16C	2
BUSHING	58C	1
MS14144L5	6I	1
MS14144L5	16I	1
MS14144L6	6I	1
MS14144L6	16I	1
MS15001-1	58B	1
MS19068-112	45	4
MS19070-112	44	4
MS21902-6	53	2
MS24665-134	69	4
MS24665-136	6F	2
MS24665-136	16F	2
MS24665-153	6J	1
MS24665-153	16J	1
MS24665-302	6J	1
MS24665-302	16J	1
MS24665-359	1	1
MS24665-376	26	2
MS28782-06	43	16
MS51923-241	1	1
MS51923-243	1	1
NAS1105-30	10	1
NAS1105-30	20	1
NAS1303-10	36	2
NAS1303-14	36A	1
NAS1304-17	40	3
NAS1611-011	42	8
NAS1612-6	52	2
NAS517-3-13	50	4
NAS603-9P	32	8
NAS6705D98	6G	1
NAS6705D98	16G	1
NAS6706D98	6G	1
NAS6706D98	16G	1
NAS679A3W	35	3
NAS679A3W	48	4
NAS679A4W	38	3
NAS679A5	8	1
NAS679A5	18	1
PLUG	58D	1
RS125	6	2
RS125	16	2
SPS48FT1414	27	
10-62185-1	46	4
1645B	13	2

Part No.	Fig. and Index No.	Qty. per Assy.
1645B	1101-13	3
1645B	23	2
1645B	58	8
1645B	58	8
1728B	13	2
1728B	13	3
1728B	23	2
1728B	58	8
1728B	58A	1
1992B1	13A	1
1992B1	23A	1
4129RA	41	1
4129RA1	41	1
4129RA10	41	1
4129RA4	41	1
4129RA9	41	1
48FT1414	27	2
65-44502-1	31	1
65-44502-2	31	1
65-44502-3	31	1
65-44502-4	31	1
65-44502-5	31	1
65-44502-6	31	1
65-44502-7	31	1
65-44710-1	47	
65-44710-2	47	2
65-44710-3	47	2
65-44710-4	47	2
65-44710-6	47	2
65-44713-13	34	1
65-44713-16	34	1
65-44713-17	34	1
65-44713-18	34	1
65-44713-20	34	1
65-44713-24	34	1
65-44713-32	34	1
65-44713-33	34	1
65-44713-34	34	1
65-44713-41	34	1
65-44713-42	34	1
65-44713-50	34	1
65-44713-52	34	1
65-44713-56	34	1
65-44713-6	34	1
65-44713-62	34	1
65-46150-1	59	2
65-46150-17	14	2
65-46150-17	24	2

Part No.	Fig. and Index No.	Qty. per Assy.
65-46150-18	15	2
65-46150-18	25	2
65-46150-74	14	2
65-46150-74	24	2
65-46150-75	15	2
65-46150-75	25	2
65-46150-95	59	2
65-46200-16	64	1
65-46200-17	64	1
65-46200-19	64	1
65-46200-21	64	1
65-46200-22	64	1
65-46200-25	64	1
65-46200-26	64	1
65-46200-27	64	1
65-46200-28	64	1
65-46200-29	64	1
65-46200-30	64	1
65-46200-32	64	1
65-46200-33	64	1
65-46200-34	64	1
65-46200-35	64	1
65-46200-36	64	1
65-46200-37	64	1
65-46200-38	64	1
65-46200-39	64	1
65-46200-40	64	1
65-46200-41	64	1
65-46200-42	64	1
65-46200-43	64	1
65-46200-46	64	1
65-46200-47	64	1
65-46200-48	64	1
65-46200-49	64	1
65-46200-50	64	1
65-46200-51	64	1
65-46200-52	64	1
65-46200-53	64	1
65-46200-55	64	1
65-46200-56	64	1
65-46200-60	64	
65-46200-61	64	
65-46200-62	64	
65-46200-63	64	1
65-46200-64	64	1
65-46200-65	64	1
65-46200-66	64	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-46200-67	1101-64	1
65-46200-68	64	
65-46200-69	64	
65-46200-74	64	
65-46200-76	64	
65-46200-77	64	
65-46200-78	64	
65-46202-11	21	1
65-46202-12	22	1
65-46202-13	21	1
65-46202-13	21	1
65-46202-14	22	1
65-46202-15	22	1
65-46202-2	21	1
65-46202-3	12	1
65-46202-4	22	1
65-46202-5	12	1
65-46202-6	11	1
65-46202-7	21	1
65-46202-8	22	1
65-46202-9	21	1
65-46202-1	11	1
65-46203-10	54	1
65-46203-11	54	1
65-46203-12	54	1
65-46203-13	54	1
65-46203-14	54	1
65-46203-15	55	1
65-46203-16	55	1
65-46203-17	54	1
65-46203-18	55	1
65-46203-19	57A	2
65-46203-20	54	1
65-46203-21	54	1
65-46203-22	55	1
65-46203-23	55	1
65-46203-24	54	1
65-46203-25	55	1
65-46203-26	54	1
65-46203-27	55	1
65-46203-3	54	1
65-46203-4	55	1
65-46203-5	54	1
65-46203-6	55	1
65-46203-7	54	1
65-46203-8	55	1
65-46203-9	54	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-46250-2	57	1
65-46250-3	57	1
65-46250-4	57	1
65-46250-5	57	1
65-46250-6	57	1
65-46250-7	57	1
65-46250-8	57	1
65-46250-9	57	1
65-46252-2	56	1
65-46252-3	56	1
65-46252-4	56	1
65-46252-5	56	1
65-46252-7	56	1
65-46288-1	11	1
65-46288-11	11	
65-46288-13	11	
65-46288-2	12	1
65-46288-3	11	1
65-46288-4	12	1
65-46288-5	11	1
65-46288-6	12	1
65-46288-7	11	1
65-46288-7	11	1
65-46288-8	12	1
65-46288-9	11	
65-73762-18		RF
65-73762-21		
65-73762-4		RF
65-73762-5		RF
65-73762-7		RF
65-73762-9		RF
65-90706-3	14	
65-90706-3	25	
65-90706-4	15	
65-90706-4	25	
65C28115-3	34	1
65C31100-1	37A	1
65C31100-10	37A	1
65C31100-2	37D	1
65C31100-4	37A	1
65C31100-5	37A	1
65C31100-7	37D	1
65C31100-8	37A	1
65C31100-9	37D	1
65C31101-1	37B	1
65C31101-2	37D	1
65C31101-4	37B	1

Part No.	Fig. and Index No.	Qty. per Assy.
65C31101-6	1101-37D	1
65C31102-1	37C	1
65C31102-2	37E	1
65C31102-4	37C	1
65C31102-6	37E	1
65C31102-7	37C	1
I 65C31103-1	51B	1
65C31103-4	51B	1
65C34813-10	37A	1
65C34813-11	37C	1
66-24145-1	4	1
66-24145-2	4	1
66-24145-3	4	
69-32226-8	61	
69-35382-1	7	1
69-35382-1	17	1
69-35383-1	5	1
69-35573-1	51	2
69-35575-2	37	1
69-35575-3	37	1
69-35575-4	37	1
69-35575-5	37	1
69-35792-1	46	4
69-36626-10	63	1
69-36626-2	63	1
69-36626-6	62	1
69-36626-7	61	2
69-36626-8	61	2
69-36626-9	62	1
69-36627-1	29	2
69-36628-2	30	4
69-38183-1	3	1
69-42182-1	60	2
69-60720-1	2	1
69-61381-1	30	2
69-61382-1	30A	2
I 69-61383-2	29	2
I 69-61383-3	29	
69-61783-1	14	2
69-61785-1	61	1
69-61785-10	63	1
69-61785-11	62	1
69-61785-12	63	1
69-61785-2	61	1
69-61785-3	62	1
69-61785-4	63	1
69-61785-5	62	1

Part No.	Fig. and Index No.	Qty. per Assy.
69-61785-6	63	1
69-61785-7	61	1
69-61785-8	61	1
69-61785-9	62	1
69-62214-1	65	2
69-62228-1	28	2
69-62228-2	28	
69-63392-1	4A	1
69-72698-1	7	1
69-72698-1	17	1
69-72698-4	7	
69-72698-4	17	
69-73008-2	6B	1
69-73008-2	16B	1
69-73012-1	6A	2
69-73012-1	16A	2
69-73133-1	51A	1
69-73133-3	51A	1
69-76481-1	28	2