TO: ALL HOLDERS OF MAIN GEAR ASSEMBLY OVERHAUL MANUAL, 32-16-01

REVISION NO. 93, DATED JUL 1/09

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 clarification to details on trunnion pin 65C32964 and trunnion link 65-63378					X								
Added tamper-proof putty on nuts (43, 55)						X							
Expanded heat treat callouts for nuts (74)					X								
Changed thread specification for nut 69-78313-2					X								
Changed refinish of washer (63)					X								
Added more details for door rod attachment (160)					X							X	
Changed some true position dimension symbols on the lower drag strut					X								

MAIN GEAR ASSEMBLY

32-16-01

BOEING P/N 65-73761-11 thru -16, -31 thru -42, -65, -66, -81, -82, -87, -88, -97, -98, -109, -110, -115, -116, -121, -122, -125 thru -128

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 30624	Aug 15/68
		PRR 30815	Aug 15/68
32-1016		PRR 31261	Aug 15/69
32-1047		PRR 31963	Mar 10/71
		PRR 32062	Jun 10/72
		PRR 32121-25	Jun 10/72
		PRR 32198	Dec 25/72
32-1064		PRR 32152-R	Jun 25/75
		MC 3450-13	Jun 25/75
		PRR 32553	Dec 25/75
		PRR 32568	Jul 5/76
	32-4		Jan 5/80
		PRR 32936	Jul 5/80
32-1104		PRR 32975	Jan 5/81
		PRR 32982	Jul 5/80
32-1108		PRR 33015	Jul 5/81
32-1123		PRR 33066	Mar 5/84

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
32A1113, Rev 2		PRR 33066-R	Jan 5/82
32-1123		PRR 33146	Mar 5/84
	32-5		Jan 5/83
32-1104, Rev 1			Jan 5/83
32-1123, Rev 1			Dec 5/84
		PRR 34319	Dec 5/87
		PRR 34401	Jun 5/88
		PRR 34477	Jun 5/88
		SL 32-40	Sep 5/88
		SL 32-41	Sep 5/88
32-1198			Mar 5/89
		PRR 34509-1	Mar 5/89
32-1224	32-14		Sep 5/89
32A1113, Rev 4			Dec 5/89
		PRR 34746	Mar 5/90
32-1123, Rev 2			Jun 5/90
		PRR 34875	Mar 5/91
		PRR 34939	Sep 5/91
		PRR 34984	Sep 5/91
32A1224, Rev 2			Sep 5/91
		PRR 33890-83	Dec 5/91
	32-21		Dec 5/91
32-1123, Rev 4			Sep 5/92
32-1104, Rev 2			Mar 5/93
		MC 0310MK3259	Mar 5/93
32A1224, Rev 3		PRR 34875R	Jun 5/93
32-1198, Rev 2			Sep 5/93

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
	32-16-01			411	Mar 1/00		428	Nov 1/06
	T-1	Mar 5/89		412	Nov 1/02		428A	Mar 1/96
	T-2	Sep 5/93		413	Sep 1/95		428B	BLANK
*	LEP-1	Jul 1/09		414	Sep 1/95		429	Mar 1/96
*	LEP-2	Jul 1/09	F	414A	Nov 1/03		430	Jul 1/07
	T/C-1	Jul 5/81		414B	BLANK		430A	Jul 1/07
	T/C-2	BLANK		414C	Mar 1/06		430B	BLANK
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	402A	Mar 1/06		420	Sep 1/97		435	Jul 1/99
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*	402C	Jul 1/09		420B	Jul 1/99		436A	Jul 1/00
*	402D	Jul 1/09		421	BLANK		436B	BLANK
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	404	Sep 5/88		422A	Dec 1/94		438	Jun 1/96
	405	Nov 1/03		422B	Dec 1/94		439	Jun 5/89
	406	Nov 1/03		422C	Mar 1/01		440	Dec 5/93
	406A	Jul 1/01		422D	Mar 1/06		441	Sep 5/84
	406B	Nov 1/03		422E	Jun 5/92		442	Jul 1/08
	406C	Mar 1/08		422F	BLANK		443	Nov 1/07
	406D	Mar 1/08		423	Sep 5/84	*	444	Jul 1/09
	406E	Mar 1/08		424	Nov 1/07	*	501	Jul 1/09
*	406F	Jul 1/09		424A	Nov 1/07	*	502	Jul 1/09
	407	Mar 1/08		424B	Mar 1/08		503	Mar 1/00
	408	Mar 1/08		424C	Mar 1/04		504	Sep 1/95
	409	Mar 1/06		424D	BLANK	*	505	Jul 1/09
	410	Jul 1/05	*	425	Jul 1/09		506	BLANK
	410A	Nov 1/99		426	Jul 1/98		601	Jul 1/07
	410B	BLANK		426A	Mar 1/99		602	Mar 1/00
F	410C	Nov 1/03		426B	Nov 1/03		603	Mar 1/00
	410D	BLANK		426C	Jul 1/99		604	Mar 1/00
	410E	Mar 1/04		426D	Mar 1/05		605	Mar 1/00
	410F	BLANK		426E	Jul 1/05		606	Mar 1/00
* F	410G	Jul 1/09		426F	Jun 1/96		607	Jul 1/07
	410H	BLANK		426G	Nov 1/03		608	Jul 1/07
	410I	Mar 1/97		426H	BLANK		609	Mar 1/00
	410J	Nov 1/03		427	Mar 1/06		610	BLANK

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	PAGE	DATE	PAGE	DATE	PAGE	DATE
	32-16-01 (cont)					
	1001	Mar 1/99				
	1002	BLANK				
	1101	Mar 1/00				
*	1102	Jul 1/09				
*	1103	Jul 1/09				
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	1106A	Nov 1/02				
	1106B	BLANK				
	1107	Dec 1/96				
	1108	Nov 1/00				
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	1119	Mar 1/03				
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*	1121	Jul 1/09				
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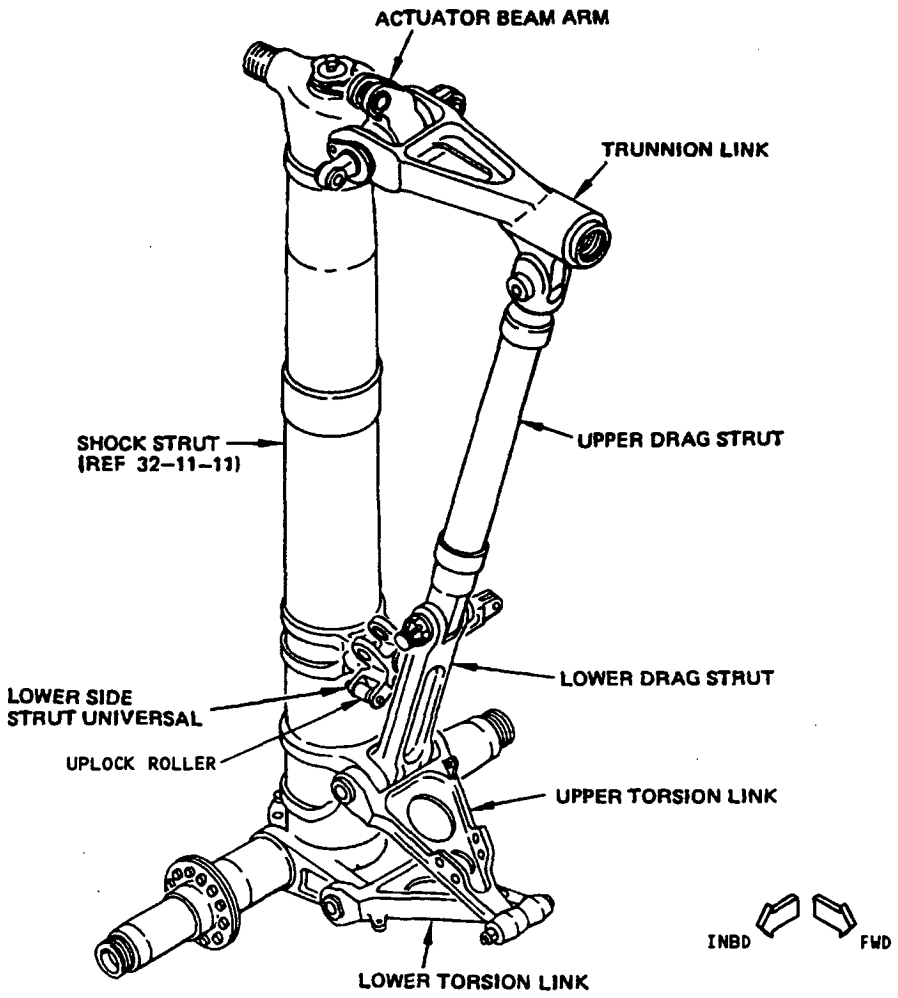
*[1] Special instructions not required. Use standard industry practices and the information contained in 20-30-01 and 20-30-03.

*[2] Special instructions not required. Use standard industry practices and the information contained in 20-44-02, 20-70-01, and 32-11-11.

MAIN GEAR ASSEMBLY



Main Gear Assembly
Figure 1

DESCRIPTION AND OPERATION

1. The main gear assembly includes the primary structural components of the main landing gear: the shock strut, upper and lower torsion links, upper and lower drag struts, lower side strut universal, actuator beam arm, and trunnion link. The unlock roller could be included.

2. The main gear assembly has the same basic functions as the shock strut: it holds up the airplane on the ground, absorbs landing and taxiing shocks and dampens vibrations.

   A. The torsion links keep the shock strut inner and outer cylinders radially aligned.

   B. The shock strut inner cylinder has an axle for the wheels and brakes.

3. Leading Particulars (Approximate)

   Length -- 32 inches
   Height -- 70 inches
   Width -- 41 inches
   Weight -- 450 pounds

DISASSEMBLY

WARNING: DO NOT START DISASSEMBLY OR UNSCREW AIR VALVE BODY ON SHOCK STRUT UNTIL ALL AIR PRESSURE IS RELEASED, OR INJURY TO PERSONNEL COULD OCCUR FROM SUDDEN EJECTION OF PARTS. REFER TO OHM 32-11-11 FOR THE PROCEDURE.

NOTE: Give protection to axle sleeves and threads with axle and thread protection set, F72913-series and thread protectors F80115-series.

1. Disassemble parts (1 thru 8) (Fig. 1101).

2. Disassemble parts (9 thru 14A (as applicable), 22, 27).

CAUTION: NUT (43) AND WASHER (44) COULD BE SPECIAL PARTS IF TEE BOLT (58) HAS UNDERSIZE THREADS.

3. Disassemble parts (33 thru 38, 43, or 43A, 44, 44J or 44K if applicable, 45, 50, 54), and, if included, parts (120 thru 140, 155).

CAUTION: BOLT (57) COULD HAVE UNDERSIZE THREADS AND BE A MATCHED SET WITH NUT (55) AND ATTACHMENT (160). TEE BOLT (58) COULD HAVE UNDERSIZE THREADS AND BE A MATCHED SET WITH NUT (43) AND WASHER (44).

4. Remove nut (55), bolt (57) and tee bolt (58).

CAUTION: TRUNNION PIN (73) COULD HAVE UNDERSIZE THREADS AND BE A MATCHED SET WITH TRUNNION PIN NUT (64).

5. Disassemble parts (61 thru 67) and remove parts (68, 74, 78). Use wrench adapter F80020-3 to unscrew trunnion pin nut (64).

   NOTE: Shim(s) (63A) are not necessary, but can be kept.

INSPECTION/CHECK

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

CAUTION: BOLT (57) COULD HAVE UNDERSIZE THREADS AND BE A MATCHED SET WITH NUT (55) AND ATTACHMENT (160). TEE BOLT FITTING (60) COULD HAVE UNDERSIZE THREADS AND BE USED WITH SPECIAL UNDERSIZE WASHER (44) AND NUT (43). TRUNNION PIN (73) COULD HAVE UNDERSIZE THREADS, AND BE USED WITH SPECIAL UNDERSIZE NUT (64).

2. Magnetic particle examine (SOPM 20-20-01) pins (10 or 10A, 14 or 14A, 73), links (26, 32), nuts (34, 64), bolts (36, 37, 57), struts (42, 49), universal (53), fitting (60), washer (63), arm (77), adapter (81C), and trunnion (82), and roller (150) if included.

3. Examine 65-46109-10, -12, -14 actuator beam arm (77) for damage at the lug radii that could touch the outer cylinder mating lug.

4. Look for broken or missing locking tabs on trunnion link (82), if the link has locking tabs.

REPAIR

1. General

   A. Repair small defects by standard industry practices. Refer to Fits and Clearances for design dimensions and wear limits.

   B. Refer to CMM 32-00-05 and SOPM 20-10-01 for machining of high strength steel.

   C. Refer to SOPM 20-10-09 for machining of copper beryllium.

CAUTION: BOLT (57) COULD HAVE UNDERSIZE THREADS AND BE USED WITH SPECIAL REPAIR NUT (55) AND ATTACHMENT (160). TRUNNION PIN (73) COULD HAVE UNDERSIZE THREADS AND HAVE SPECIAL PART MARKING TO MAKE SURE YOU USE SPECIAL UNDERSIZE NUT (64).

2. Pins (10, 10A, 14, 14A, 73), Bolts (36, 36B, 37, 37B, 57), Fitting (60), Trunnion Links (82) (Fig. 401 thru 407).

   A. Machine as required, within repair limits, to remove defects.

   B. Shot peen as indicated.

   C. Unless shown differently, build up the surface with chrome plate or thermal spray coating as applicable, and grind to design dimensions and finish.

   D. Bolt (57) Threads (69-51833-series) (Fig. 404A)

      (1) Cut the threads to a smaller size. If repair to a size smaller than shown is necessary, the trunnion pin must be scrapped.

      (2) Cadmium-titanium plate the threads. Wipe them with BMS 10-11, Type 1 primer (F-19.45).

      (3) Be sure to identify the bolt as indicated, to make sure you use the correct special undersize nut (55) and attachment (160).

   E. Tee Bolt Fitting (60) Threads

      (1) Blend out corrosion and defects from up to 25% lengthwise in each of four quadrants. Do not remove more than 25% of any one thread from the circumference. On fittings 65-46140-5, -7, if you remove threads from the area which will engage the nut locking feature, you cannot use the standard self-locking nut (43). Then you must use nut AN310-14 or BACN10JD14 and cotter pin MS24665-465. Drill a 0.165-0.175 inch diameter hole through the tee bolt threads to fit the cotter pin. (Fitting 65-46140-9 comes with a hole for cotter pin (44J), and a new hole is not necessary.)

      (2) If you must remove more threads than the limits above, cut the threads undersize as shown in Fig. 405. Use the specified undersize washer (44) and nut (43).

F. Trunnion Pin (73) Threads

(1) Cut the threads to a smaller size as shown in Fig. 406 or 406A. If repair to a size smaller than shown is necessary, the trunnion pin must be scrapped.

(2) Cadmium-titanium plate the threads. Wipe them with primer (F-19.45).

(3) Be sure to identify the pin as indicated, to make sure you use the correct special undersize nut (64).

G. Trunnion Link (82) Locking Tabs (if applicable)

(1) A maximum of 4 out of the 12 tabs can be missing or removed in any position or combination of positions.

(2) Cut off the bad or missing tab and blend the area smooth, with a surface finish of 63 microinches or smoother.

(3) Magnetic particle examine to make sure there are no cracks.

(4) Shot peen.

(5) Refinish as indicated.

3. Holes and Lugs (Fig. 405 thru 413A)

NOTE: For repair of lower drag strut (45) antirotation bolt holes, refer to par. 4.

A. Method 1 -- Installation of sleeve, oversize bushing, or shim.

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

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

(3) Make a repair sleeve, oversize bushing, or shim (Fig. 406B, 414 thru 419), as required, to adjust for the material removed in step (1).

(4) Install the sleeve or bushing by the shrink fit method (SOPM 20-50-03) with wet BMS 5-95 sealant.

(5) Machine the bushing or sleeve to design dimensions and finish specified.

B. Method 2 -- Adjustment of Lug Radius on 65-46109-10, -14 Actuator Beam Arm (77)

NOTE: This procedure is for beam arms that will get no other repair at this time. If the beam arm will be repaired per CMM 32-00-05, the steps about finish removal and replacement and shot peening will not be applicable because the part will be completely stripped, machined, shot peened and refinished during the other repairs.

(1) Machine the 0.74-0.76 inch radius as shown in View B of Fig. 408. Use hand tools as necessary to make a 0.09-0.12 inch edge radius between the two lugs.

(2) Examine the machined surfaces visually for defects. Then apply a mask around the machined area, approximately 0.1 inch inside its edges. Surface temper etch examine the surfaces with ammonium persulfate per SOPM 20-10-02. Do not stress relieve.

(3) Remove the mask. Then magnetic particle examine (SOPM 20-20-01, Class A critical).

(4) Mask around the machined area, approximately 0.1 inch outside its edges. Then shot peen the machined area as indicated.

(5) Abrasive grit blast the surface (SOPM 20-30-03) to blend into the adjacent finish.

(6) Stylus cadmium plate the machined area (SOPM 20-42-10).

(7) Apply primer as indicated to the repaired area.

(8) Fillet seal the bushing flanges with BMS 5-95 sealant as necessary.

(9) Change the part number of the beam arm from 65-46109-15 to 65-46109-19.

(a) Remove the layers of finish over the -15 and an area large enough above it to add a -19.

(b) Cross out the -15 so it cannot be read. Do not grind it off.

(c) Vibroengrave a -19 above this area. Do not use a steel stamp.

(10) Stylus cadmium plate the area (SOPM 20-42-10).

(11) Apply primer as indicated to the area.

(12) Apply enamel as indicated to the repaired area and the part-mark area. Then identify the actuator beam arm assembly as a 65-46109-18 with a rubber stamp.

4. Lower Drag Strut (45) Antirotation Bolt Holes (Fig. 412A)

NOTE: Method 1 keeps the holes for the antirotation bolts (Pre SB 32-1123). Methods 2, 3 plug the holes when antirotation bolts are deleted (Post SB 32-1123).

A. Method 1 -- Installation of Repair Bushings

(1) Machine the holes oversize and treat them per par. 3.A.(1), (2) preceding.

(2) Make repair bushings (Fig. 417).

(3) Install the bushings and machine the bores per par. 3.A.(4), (5) preceding.

(4) Fillet seal the bushing flanges with BMS 5-95 sealant.

B. Method 2 -- Installation of Plugs and Lube Fitting (holes not repaired before by Method 1 above)

NOTE: If holes were machined oversize before by Method 1, repair the holes by Method 3 below.

(1) Machine holes to the repair limit for installation of standard plugs per parts list. Restore the chamfers and break the edges as noted.

(2) Install plugs (49B, 49C) by the shrink fit method (SOPM 20-50-03) with wet BMS 5-95 sealant.

(3) Drill a 0.188-0.189 dia hole through plug (49B) and install lube fitting (49A) in hole.

(4) Fillet seal the plug flanges with BMS 5-95 sealant.

C. Method 3 -- Installation of Oversize Plugs and Lube Fitting (holes repaired by Method 1 above)

NOTE: If the holes were not machined oversize before by Method 1, repair the holes by Method 2 above.

(1) Remove the repair bushings from the holes.

(2) Machine holes to the repair limit for installation of oversize plugs. Restore the chamfers and break the edges as noted.

(3) Make oversize plugs as shown (Fig. 419A).

(4) Install the plugs in the holes by the shrink fit method (SOPM 20-50-03) with wet BMS 5-95 sealant.

(5) Drill a 0.188-0.189 dia hole through the upper plug and install lube fitting (49A).

(6) Fillet seal the plug flanges with BMS 5-95 sealant.

5. Refinish

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. If cadmium-titanium plate is specified, low hydrogen embrittlement cadmium plate (SOPM 20-42-01) can be used as an alternative finish.

A. Lower torsion link pin (10) -- Fig. 401.

B. Upper torsion link pin (14) -- Fig. 402.

C. Torsion link pins (10A, 14A) -- Fig. 402A

D. Torsion links (26, 32) -- Fig. 409, 410.

E. Drag strut nut (34) -- Cadmium plate (F-1.32) all over. Material: 4140 steel, 150-170 ksi.

F. Washer (35) -- Cadmium plate (F-1.32) all over. Material: 4130 steel, 95-120 ksi.

G. Drag strut bolt (36, 37) -- Fig. 403.

H. Drag strut (42, 49) -- Fig. 411, 412.

I. Lower side strut universal (53) -- Fig. 413.

J. Thrust washer (54) -- Chrome plate (F-15.04) flat face only (0.001 inch minimum thick after grinding). Cadmium plate (F-4.201) all other surfaces. Material: Al-Ni-Brz per AMS 4640.

CAUTION: TEE FITTING BOLT (57) COULD HAVE UNDERSIZE THREADS.

K. Tee fitting bolt (57) -- Fig. 404.

CAUTION: TEE BOLT FITTING (60) COULD HAVE UNDERSIZE THREADS.

L. Tee bolt fitting (60) -- Fig. 405.

M. Washer (63)

(1) 69-41634-1, -2 -- Cadmium plate (F-15.02). Apply BMS 10-11, Type 1 primer (F-20.02) but not on serrations. Wipe serrations with BMS 10-11, Type 1 primer (F-19.45). Material: 4340 steel, 180-200 ksi.

(2) 69-41634-3, -4 -- Cadmium plate (F-15.02). Apply BMS 10-11, Type 1 primer (F-20.02) and BMS 10-11, Type 2 enamel (F-21.02) but no primer or enamel on serrations. Wipe serrations with BMS 10-11, Type 1 primer (F-19.45). Material: 4340 steel, 180-200 ksi.

N. Spacer (63B)

(1) 69-61223-1 -- No finish. Material: 17-7PH CRES, 180-200 ksi.

(2) 69-61223-2, -3 -- Cadmium plate (F-15.02). Material: 17-7PH CRES, 180-200 ksi.

CAUTION: TRUNNION PIN NUT (64) COULD HAVE UNDERSIZE THREADS.

O. Trunnion pin nut (64) -- Fig. 413B.

CAUTION: TRUNNION PIN (73) COULD HAVE UNDERSIZE THREADS.

P. Trunnion pin (73) (65-46113) -- Fig. 406. Be sure to include the special stencil marking if the pin has undersize threads, to tell you to use the correct nut (64).

Q. Trunnion pin (73) (65C32964) -- Fig. 406A. Be sure to include the special stencil marking if the pin has undersize threads, to tell you to use the correct nut (64).

R. Actuator beam arm (77) -- Fig. 408.

S. Dowel pin (79) -- Fig. 420.

T. Adapter (81C) -- Cadmium-titanium plate (F-15.01). Material: 4340 steel, 125-145 ksi.

U. Trunnion link (82) -- Fig. 407.

V. Roller (150) -- Fig. 413A.

W. Spacer (155) -- Passivate (F-17.25, which replaces F-17.09). Material: 17-4PH CRES, 180-200 ksi.

X. Attachment (160)

(1) 69-53345-series -- Cadmium plate and apply BMS 10-11, Type 1 primer (F-16.01), but no primer in holes. Material: 4130 steel, 125-145 ksi.

(2) 69-58823-series -- Cadmium plate and apply BMS 10-11, Type 1 primer (SRF-1.285) and BMS 10-60 enamel (F-14.9813, which replaces SRF-14.9813), but no primer or enamel in holes. Material: 4130 steel, 125-145 ksi.

6. Replacement

   A. Replace all cotter pins.

   B. Replace all irreparable or unservicable parts.

   C. Lube fittings (23, 28, 37A, 49A, 53A, 70, 77B, 81A, 81B), Adapter (81C) -- Replace per CMM 32-00-03.

   D. Bushings

      (1) Remove the old bushings.

      (2) Install replacement bushings by the shrink fit method (SOPM 20-50-03). Use wet sealant BMS 5-95 on mating surfaces, but use BMS 3-33 or BMS 3-24 grease on bushings in 65-67963 torsion links, bushings (75) in 65C33032-4, -6 actuator beam arms; and bushings (81L, 81M) in 65-63378-13, -14 trunnion links.

      (3) Machine the bushings to design dimensions per Fig. 421 thru 429. Bushings (145) in the uplock roller come pre-machined to give final dimensions, and adjustment after installation is not necessary.

      (4) On bushings with lubrication provisions, to make sure the lube passages are not blocked, remove unwanted sealant from between back-to-back bushings and apply grease at the lube fittings until you see grease come out at the ID of the bushings.

   E. Plug (69) -- Remove the old plug from the trunnion pin. Install a replacement plug with wet or dry BMS 10-11, Type 1 primer on mating surfaces.

7. Materials

   NOTE: Equivalent substitutes can be used.

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

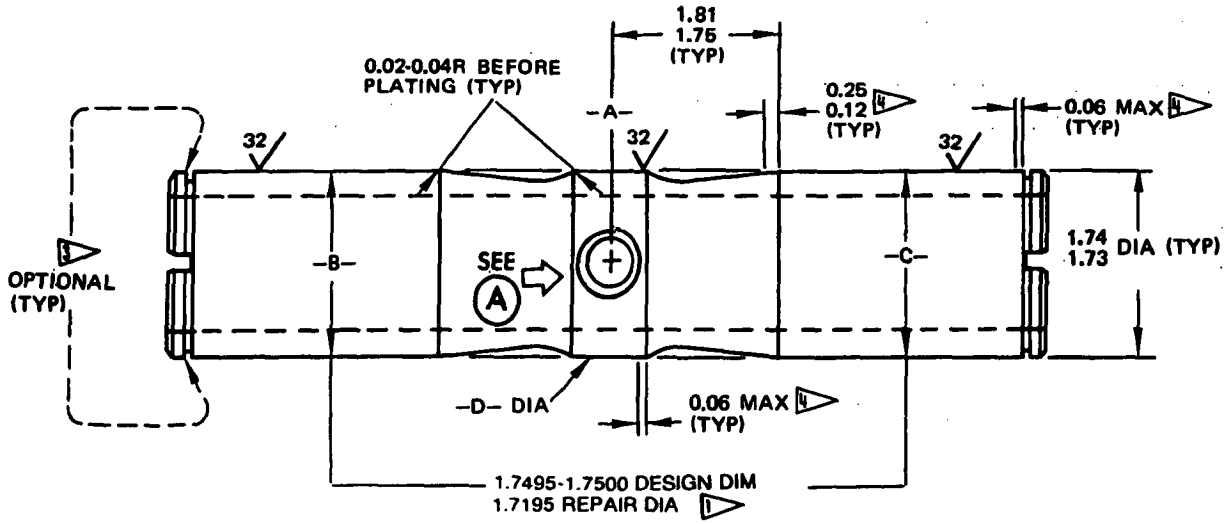
   B. Enamel -- BMS 10-11, Type 2 (SOPM 20-60-02)

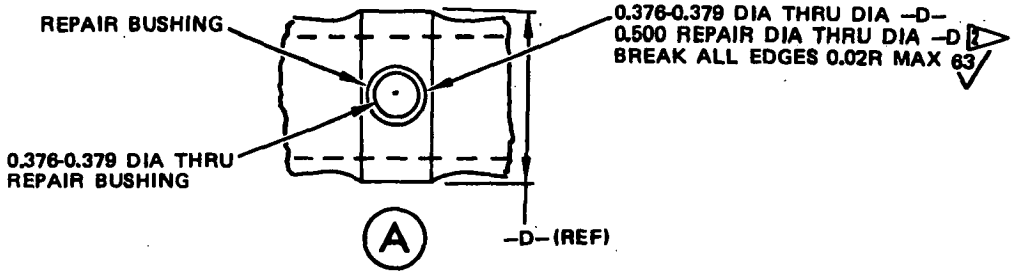
   C. Corrosion Preventive Compound -- MIL-C-11796, Class 1 (SOPM 20-60-02)

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

   E. Grease -- BMS 3-33 or BMS 3-24 (SOPM 20-60-03)

   F. Sealant -- Ucar 100 (SOPM 20-60-04)





REFINISH

CHROME PLATE (F-15.04) DIAS -B- AND -C-. CADMIUM-TITANIUM PLATE (F-15.01) OTHER SURFACES, (INTERIOR AND EXTERIOR). CHROME PLATE IS OPTIONAL ON DIA -D-. ON INTERIOR SURFACES AND HOLE ONLY, AFTER PLATING, APPLY TWO COATS OF PRIMER, BMS 10-11, TYPE 1 (F-20.03) AND CORROSION PREVENTIVE COMPOUND (F-19.03).

REPAIR

REF 1 2

125 MACHINE FINISH EXCEPT AS NOTED

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

MATERIAL: 4340M STEEL, 270-300 KSI

ALL DIMENSIONS ARE IN INCHES

1 LIMIT FOR CHROME PLATE BUILDUP (REF 20-42-03) AND GRINDING TO DESIGN DIMENSIONS. OBSERVE PLATING RUNOUT AT EDGES AND RELIEFS AS NOTED.

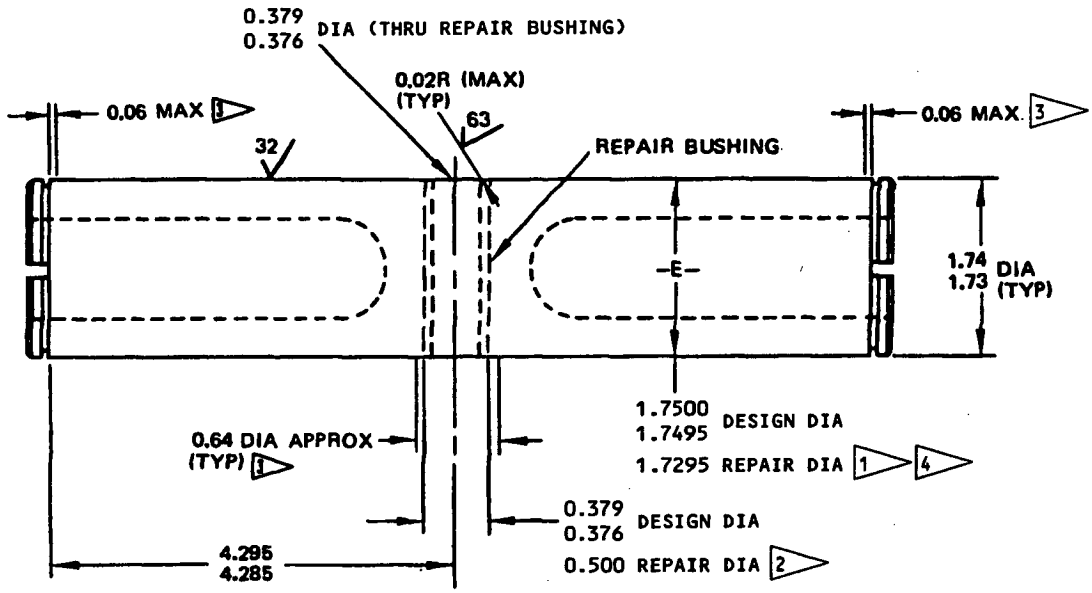
2 LIMIT FOR INSTL OF REPAIR BUSHING (FIG. 417)

3 APPLY 2 COATS PRIMER, BMS 10-11, TYPE 1 (SRF-12.206 OR F-20.03), FOLLOWED BY ENAMEL BMS 10-11, TYPE 2 (SRF-12.63).

4 CHROME PLATING RUNOUT

PIN (10)

Lower Torsion Link Pin Repair and Refinish
Figure 401



REFINISH

CHROME PLATE (F-15.04) DIA -E-. CADMIUM-TITANIUM PLATE (F-15.01) ALL OTHER SURFACES (INTERIOR AND EXTERIOR). ON INTERIOR AND HOLE ONLY, AFTER PLATING, 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 CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRIND TO DESIGN DIMENSIONS AND FINISH. PUT A PLATING RUNOUT AT EDGES AND RELIEFS AS SHOWN.

2 LIMIT FOR INSTALLATION OF REPAIR BUSHING (FIG. 417)

3 CROME PLATING RUNOUT

4 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 THRU 4

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

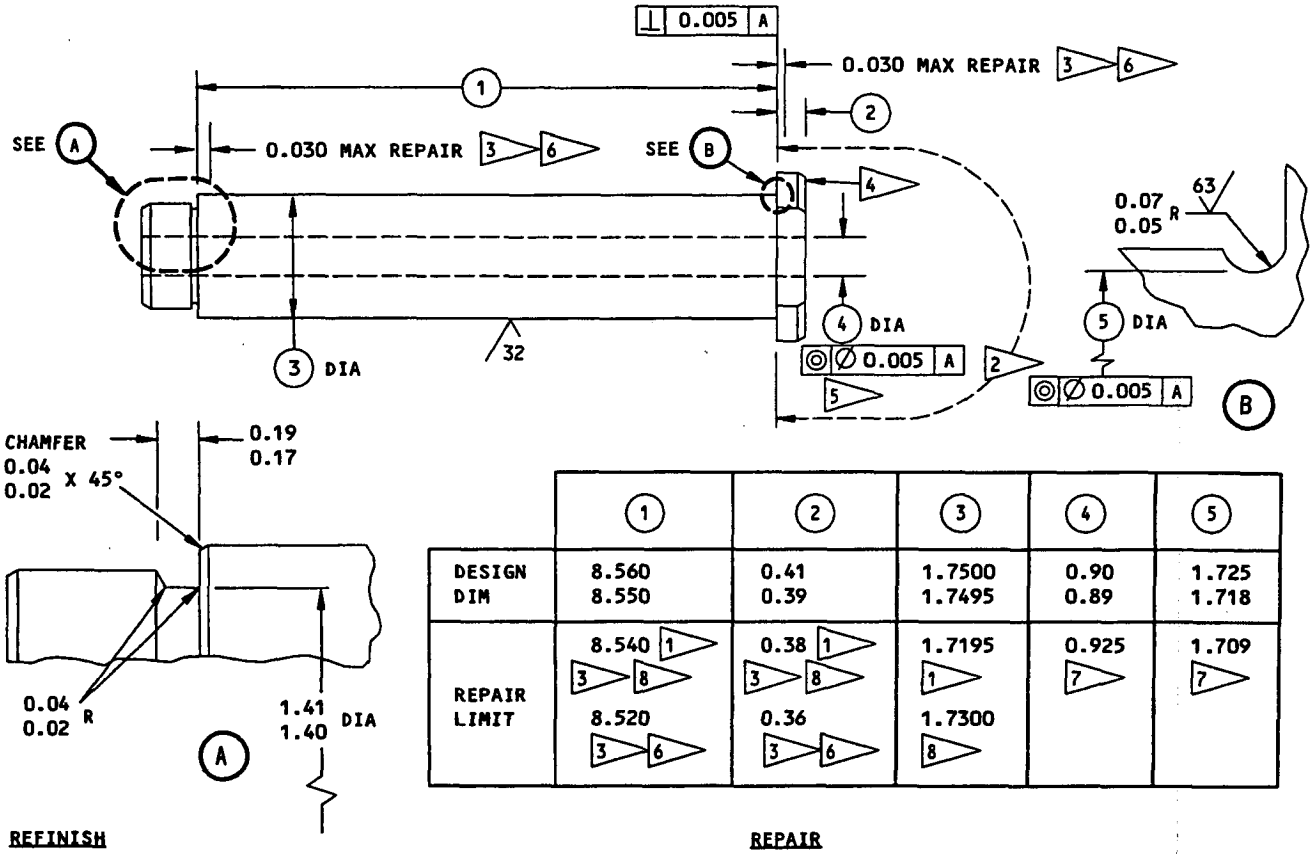
SHOT PEEN (SOPM 20-10-03)
0.016-0.033 SHOT SIZE
0.015 A2 INTENSITY

MATERIAL: 4340M STEEL, 270-300 KSI

ALL DIMENSIONS ARE IN INCHES

PIN (14)

Upper Torsion Link Pin Repair and Refinish
Figure 402



	1	2	3	4	5
DESIGN DIM	8.560 8.550	0.41 0.39	1.7500 1.7495	0.90 0.89	1.725 1.718
REPAIR LIMIT	8.540 1 3 8 8.520 3 6	0.38 1 3 8 0.36 3 6	1.7195 1 1.7300 8	0.925 7	1.709 7

REFINISH

CHROME PLATE (F-15.04) DIA -A-. CADMIUM-TITANIUM PLATE (F-15.01) ALL OTHER SURFACES, 0.0002-0.0004 THICK, INCLUDING THREADS. WIPE WITH PRIMER (F-19.45), THE CHROME PLATED SURFACES AND THREADS. APPLY PRIMER (F-20.03) ON OTHER SURFACES EXCEPT AS NOTED. APPLY PRIMER AND ENAMEL TO BOLT HEAD PER 2. ON 69-72023-2 AND ON, APPLY PRIMER, BMS 10-11, TYPE 1 (F-20.03) AND CORROSION PREVENTIVE COMPOUND (F-19.03) IN INTERIOR

REPAIR

REF 1 3 6 7 8

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

SHOT PEEN (SOPM 20-10-03)

0.016-0.033 SHOT SIZE
0.015 A2 INTENSITY

MATERIAL: 4340M STEEL, 270-300 KSI

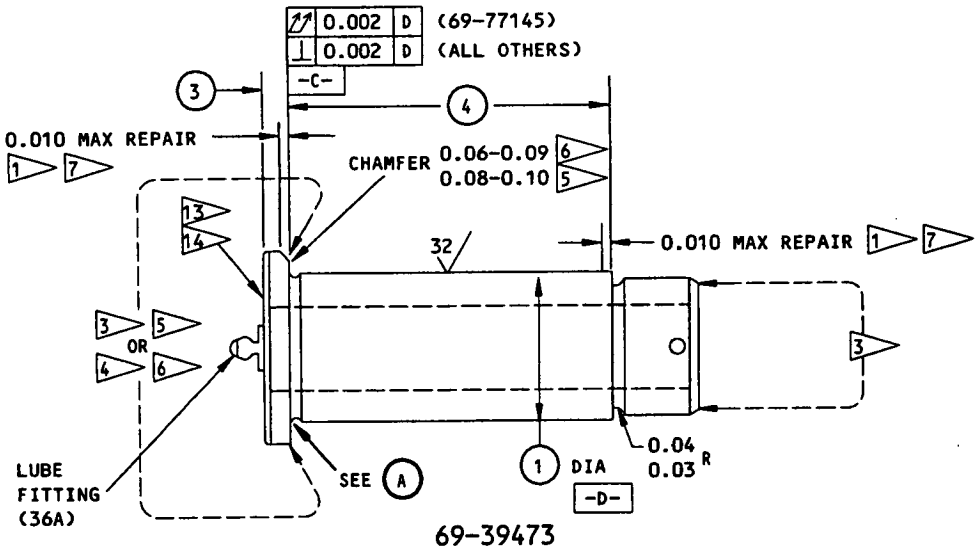
ALL DIMENSIONS ARE IN INCHES

1. LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRINDING TO DESIGN DIMENSIONS AND FINISH, WITH 0.06 PLATING RUNOUT AT EDGES AND RELIEFS
2. APPLY PRIMER, BMS 10-11, TYPE 1 (F-20.02) AND ENAMEL, BMS 10-11, TYPE 2 COLOR 707 GRAY (F-21.02)
3. PLATING PER 1 OR 6 IS NOT NECESSARY IF GRIP LENGTH IS ADJUSTED BY MATERIAL REMOVAL AT THREAD END OR HEAD END FACE
4. VIBRO ENGRAVE PART NUMBER SERIAL NUMBER AND VENDOR NUMBER THIS AREA
5. 69-72023-2 AND ON
6. LIMIT FOR NICKEL PLATE BUILDUP (SOPM 20-42-09), 0.030 MAX THICK, AND THEN CHROME PLATE BUILDUP (SOPM 20-42-03), 0.015 MAX THICK, WITH 0.06 PLATING RUNOUT AT EDGES AND RELIEFS
7. RESTORATION TO DESIGN DIMENSION NOT REQUIRED
8. 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.

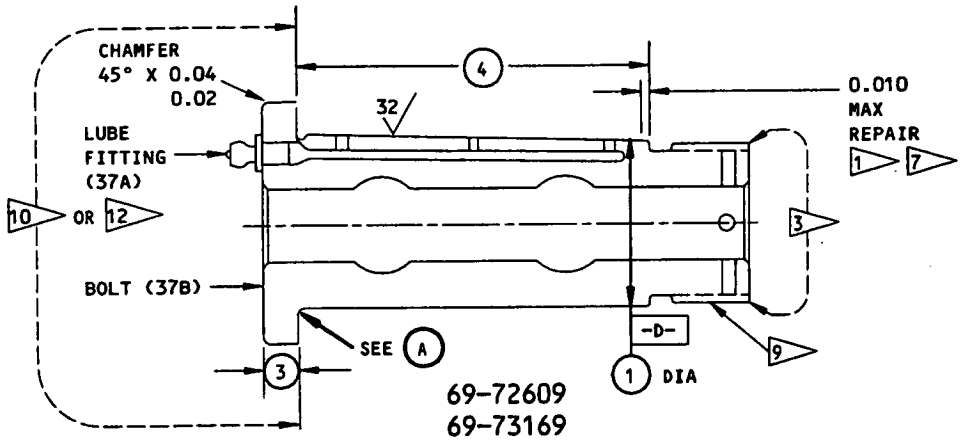
PIN (10A, 14A)

Torsion Link Pin Repair and Refinish
Figure 402A

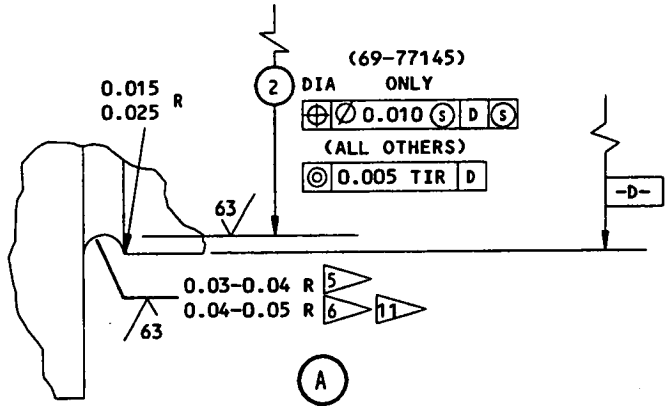
E88031



69-39473
69-39476



69-72609
69-73169
69-77145
BOLT ASSY (37)



BOLTS (36,36B,37,37B)

Drag Strut Bolt Repair and Refinish
Figure 403 (Sheet 1)

		①	②	③	④
69-39473 (36,36B)	DESIGN DIM	1.499 1.498	1.48 1.47	0.26 0.24	3.24 3.23
	REPAIR LIMIT	1.478 1 2 15	1.45 8	0.23 1 7 15	3.25 1 7 15
69-39476 69-72609 69-73169 69-77145 (FUSE BOLT) (37,37B)	DESIGN DIM	1.499 1.498	1.48 1.47	0.32 0.30	3.10 3.09
	REPAIR LIMIT	1.489 1 2 15	1.45 8	0.29 1 7 15	3.11 1 7 15

REFINISH

CHROME PLATE (F-15.34) DIA -D-, 0.003 MIN THICK. CADMIUM-TITANIUM PLATE (F-15.01) ALL OTHER SURFACES, 0.0005 MIN THICK. AFTER PLATING APPLY BMS 10-11, TYPE 1 PRIMER (F-20.03) CORROSION PREVENTIVE COMPOUND (F-19.03) TO BORE ONLY. APPLY PRIMER AND ENAMEL PER 3 4 9 10 12 AS APPLICABLE.

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

2 IF REPAIR IS NECESSARY BEYOND THESE LIMITS, THE BOLT MUST BE SCRAPPED.

3 APPLY BMS 10-11, TYPE 1 PRIMER (SRF 12.205) FOLLOWED BY BMS 10-11, TYPE 2 ENAMEL (SRF-12.63).

4 APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) AND YELLOW ENAMEL, BMS 10-11, TYPE 2 (F-21.27-3295, WHICH REPLACES SRF-14.904-3295).

5 DRAG STRUT LOWER ATTACH BOLT (36) (69-39473-SERIES)

6 DRAG STRUT UPPER ATTACH (FUSE) BOLT (37) (69-39476-SERIES)

7 PLATING PER 1 OR COATING PER 15 IS NOT NECESSARY IF GRIP LENGTH IS ADJUSTED BY MATERIAL REMOVED AT THREAD END FACE.

8 RESTORATION TO DESIGN DIM NOT REQUIRED.

9 WIPE THREADS WITH BMS 10-11, TYPE 1 PRIMER (F-19.45).

10 FUSE BOLT (37) (69-72609, 69-73169)

1. ON 69-72609-1,-3, APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) AND YELLOW BMS 10-60 ENAMEL (F-19.39-302).
2. ON 69-72609-5,-7, 69-73169-1,-3, APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) AND YELLOW BMS 10-60 ENAMEL (F-14.9815-302, WHICH REPLACES SRF-14.9815-302).

REPAIR

REF 1 2 7 8 15

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

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

MATERIAL: 4340M STEEL, 270-300 KSI 5
4330M STEEL, 220-235 KSI 6 11

ALL DIMENSIONS ARE IN INCHES

11 DRAG STRUT UPPER ATTACH (FUSE) BOLT (37B) (69-72609,69-73169,69-77145)

12 FUSE BOLT (37) (69-77145)

1. ON 69-77145-1, APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) AND GRAY BMS 10-11, TYPE 2 ENAMEL (F-21.02).
2. ON 69-77145-3 AND ON, APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) AND YELLOW BMS 10-60 ENAMEL (F-14.9815-302, WHICH REPLACES SRF-14.9815-302).

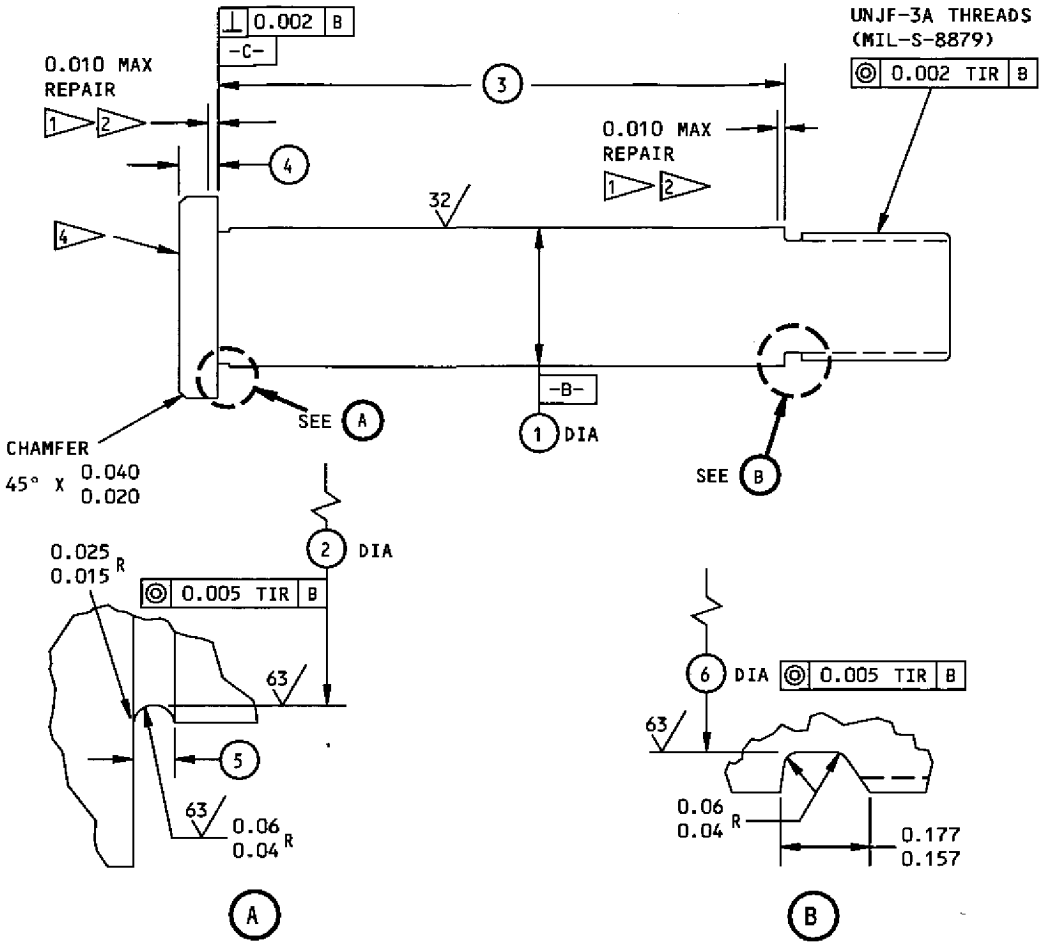
13 VIBRO ENGRAVE PART NUMBER AND SERIAL NUMBER THIS AREA (69-77145,69-73169)

14 STEEL STAMP PART NUMBER, SERIAL NUMBER AND VENDOR NUMBER THIS AREA. OPTIONAL ELECTRO CHEMICAL ETCH. (69-39473, 69-72609)

15 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.

BOLTS (36,36B,37,37B)
Drag Strut Bolt Repair and Refinish
Figure 403 (Sheet 2)

G13000



	1	2	3	4	5	6	7
DESIGN DIM	1.249 1.248	1.24 1.23	5.67 5.66	0.390 0.370	0.060 MAX	1.010 1.005	-----
REPAIR LIMIT	1.228 1, 6	1.21 3	5.68 1, 2, 6	0.360 1, 2, 6	0.160 3	-----	-----

TABLE A

BOLT (57)

69-39472-2,-3

Tee Fitting Bolt Repair and Refinish
Figure 404 (Sheet 1)

U34940

REFINISH

CHROME PLATE (F-15.04) DIA -B-, 0.002 MIN THICK AFTER GRINDING. CADMIUM-TITANIUM PLATE (F-15.01) OTHER SURFACES, BUT 0.0002-0.0004 THICK ON THREADS.

1> LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRIND TO DESIGN DIMENSIONS AND FINISH. PUT A 0.06 PLATING RUNOUT AT EDGES AND RELIEFS

2> PLATING PER 1> IS NOT NECESSARY IF GRIP LENGTH (3) IS ADJUSTED BY MATERIAL REMOVAL FROM SHOULDER AT THREAD ENDS

3> RESTORATION TO DESIGN DIMENSION NOT REQUIRED

4> PART NUMBER, AND, ON 69-39472-3, SERIAL NUMBER

5> RESERVED

REPAIR

REF 1> 2> 3> 5> 6>

125√ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

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

MATERIAL: 4340M STEEL, 270-300 KSI

ALL DIMENSIONS ARE IN INCHES

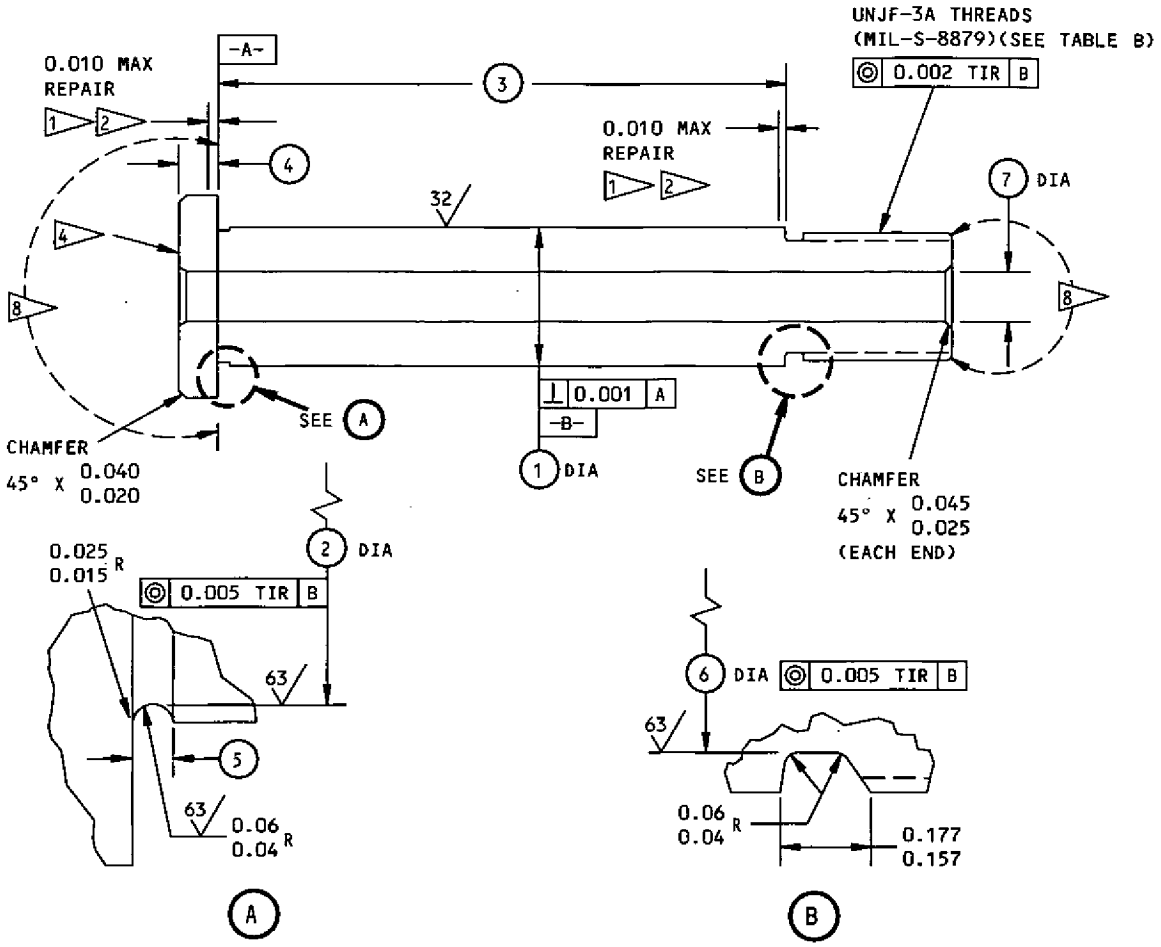
6> LIMIT FOR BUILDUP WITH BMS 10-67, TYPE 1 OR 17, CLASS 2, 3, OR 4 THERMAL SPRAY (SOPM 20-10-05), 0.010 MAX THICK. PUT A 0.080 MAX RUNOUT AT EDGES. GRIND TO DESIGN DIMENSIONS AND 4 MICROINCH FINISH. THEN CADMIUM-TITANIUM PLATE (SOPM 20-42-02) THE RUNOUT AREA.

BOLT (57)

69-39472-2,-3

Tee Fitting Bolt Repair and Refinish
Figure 404 (Sheet 2)

1503680



	1	2	3	4	5	6	7
DESIGN DIM	1.374 1.373	1.361 1.356	5.75 5.74	0.390 0.370	0.120 0.080	1.125 1.115	0.51 0.49
REPAIR LIMIT	1.343 (1 5) 1.353 (6)	1.236 (3)	5.76 (1 2 6)	0.345 (1 2 6 7)	0.160 (3)	SEE TABLE B	-----

TABLE A

BOLT (57)
69-51833-1 THRU -4

Tee Fitting Bolt Repair and Refinish
Figure 404A (Sheet 1)

1503345

UNJF-3 THREAD SIZE	1.250-12 (DESIGN)	1.125-12 (1/8 UNDERSIZE)	1.0625-12 (3/16 UNDERSIZE)
MAJOR DIA	1.2500 1.2386	1.1250 1.1136	1.0625 1.0511
PITCH DIA	1.1959 1.1913	1.0709 1.0664	1.0084 1.0042
MINOR DIA	1.1538 1.1442	1.0288 1.0192	0.9663 0.9570
ROOT RADIUS	0.0150 0.0125	0.0150 0.0125	0.0150 0.0125
THREAD RELIEF DESIGN DIA	1.125 1.115	1.000 0.990	0.9375 0.9275
THREAD RELIEF REPAIR DIA (3)	0.932	-----	-----
NUT (55)	BACN10B512 BACN10GW20	BACN10GW18	CONTACT BOEING
ROD ATTACHMENT (160)	69-53345-3 OR 69-58823-4	69-53345-1 OR 69-58823-1	CONTACT BOEING

TABLE B

PART NUMBER	BASIC FINISH	SHANK DIA -B-	BORE	THREADS	HEAD AND TAIL (8)
69-51833-1	F-15.01	F-15.04, 0.002 MIN THICK	F-15.01 + F-20.03	F-15.01, 0.0002-0.0004 THICK	F-15.01
69-51833-2	F-15.01 + F-20.03	F-15.04, 0.003 MIN THICK + F-19.45	F-15.01 + F-20.03	F-15.01, 0.0002-0.0004 THICK + F-19.45	F-15.01 + F-20.03 + F-21.02
69-51833-3,-4	F-15.01 + F-20.02	F-15.34, 0.003 MIN THICK + F-19.45	F-15.01 + F-20.02 + F-19.03	F-15.01, 0.0002-0.0004 THICK + F-19.45	F-15.01 + F-20.03 + F-21.02

TABLE C

BOLT (57)

69-51833-1 THRU -4

Tee Fitting Bolt Repair and Refinish
Figure 404A (Sheet 2)

1503732

REFINISH

SEE TABLE C

1. LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRIND TO DESIGN DIMENSIONS AND FINISH. PUT A 0.06 PLATING RUNOUT AT EDGES AND RELIEFS
2. PLATING PER 1 IS NOT NECESSARY IF GRIP LENGTH (3) IS ADJUSTED BY MATERIAL REMOVAL FROM SHOULDER AT THREAD ENDS
3. RESTORATION TO DESIGN DIMENSION NOT REQUIRED
4. VIBRO ENGRAVE PART NUMBER, SERIAL NUMBER AND VENDOR NUMBER THIS AREA (69-51833)
5. IF MORE MATERIAL THAN THIS MUST BE REMOVED, THE BOLT MUST BE DISCARDED
6. 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 5 6 7

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

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

MATERIAL: 4340M STEEL, 270-300 KSI

ALL DIMENSIONS ARE IN INCHES

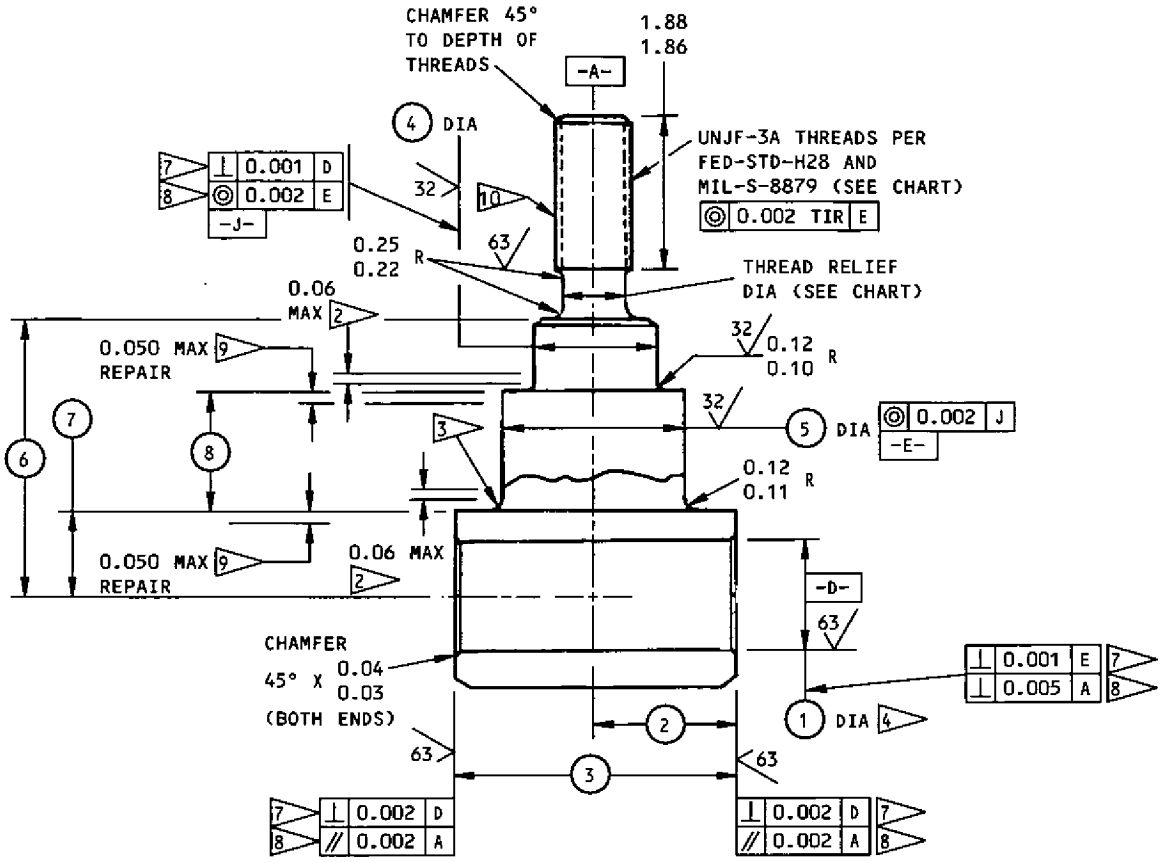
7. LIMIT FOR NICKEL PLATE BUILDUP (SOPM 20-42-09), 0.030 MAX THICK, THEN CHROME PLATE BUILDUP (SOPM 20-42-03), 0.015 MAX THICK, WITH 0.06 PLATING RUNOUT AT EDGES AND RELIEFS
8. APPLY PRIMER AND ENAMEL TO THESE SURFACES (TABLE C).

BOLT (57)

69-51833-1 THRU -4

Tee Fitting Bolt Repair and Refinish
Figure 404A (Sheet 3)

H10122



		1	2	3	4	5	6	7	8
65-46140-5	DESIGN DIM	1.3765 1.3750	1.755 1.745	3.505 3.495	1.500 1.499	2.252 2.251	3.39 3.37	1.12 1.10	1.501 1.500
	REPAIR LIMIT	1.470 5	1.730 5 6	3.465 5 6	1.470 1 1.415 9	2.220 1 2.170 9 2.231 11	---	---	---
65-46140-7, -10	DESIGN DIM	1.5015 1.5000	1.755 1.745	3.505 3.495	1.500 1.499	2.252 2.251	3.69 3.67	1.22 1.20	1.501 1.500
	REPAIR LIMIT	1.630 5	1.700 5 6	3.400 5 6	1.470 1 1.415 9	2.220 1 2.170 9 2.231 11	---	---	---

TEE BOLT FITTING (60)

Fitting Repair and Refinish
Figure 405 (Sheet 1)

K53443

UNJF-3 THREAD SIZE	7/8 - 14 (DESIGN)	3/4 - 16 (1/8 UNDERSIZE)
MAJOR DIA	0.8750 0.8647	0.7500 0.7406
PITCH DIA	0.8286 0.8245	0.7094 0.7056
MINOR DIA	0.7925 0.7841	0.6778 0.6702
ROOT RADIUS	0.0129 0.0107	0.0113 0.0094
THREAD RELIEF DIA	0.760 0.740	0.646 0.636
NUT (43)	BACN10GW14 BACN10HR14	BACN10HR12
WASHER (44)	AN960-1416	AN960-1216

REFINISH

CHROME PLATE (F-15.34) DIAS -E-, -J-, 0.003 MINIMUM THICK. CADMIUM-TITANIUM PLATE (F-1.308, WHICH REPLACES F-1.181, OR F-15.01) OTHER SURFACES. WIPE WITH PRIMER (F-19.45) THREADS AND CHROME PLATED SURFACES. APPLY PRIMER BMS 10-11, TYPE 1 (SRF-12.205 OR F-20.02) AND ENAMEL BMS 10-11, TYPE 2 (SRF-12.63 OR F-21.02) UNLESS SHOWN BY 3 4.

CAUTION: IF THIS PART HAS UNDERSIZE THREADS, USE YELLOW ENAMEL. BE SURE TO IDENTIFY AS A MATCHED SET THIS PART AND THE SPECIAL NUT (43) AND WASHER (44).

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

2 CHROME PLATE RUNOUT.

3 NO PRIMER AND ENAMEL THIS SURFACE.

4 NO ENAMEL THIS SURFACE.

5 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS.

6 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 BE 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.

7 65-46140-5

REPAIR

REF 1 2 5 THRU 11

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.003R

SHOT PEEN: (SOPM 20-10-03) (DO NOT SHOT PEEN THREADS)

0.016-0.033 SHOT SIZE
0.015 A2 INTENSITY

MATERIAL: 4340M STEEL, 270-300 KSI

ALL DIMENSIONS ARE IN INCHES

8 65-46140-7,-10

9 IF MAXIMUM MATERIAL REMOVAL IS 0.015 OR LESS PER SURFACE, THEN CHROME PLATE (SOPM 20-42-03) BACK TO DESIGN DIMENSIONS. PUT PLATING RUNOUTS AT EDGES, HOLES AND RELIEFS.

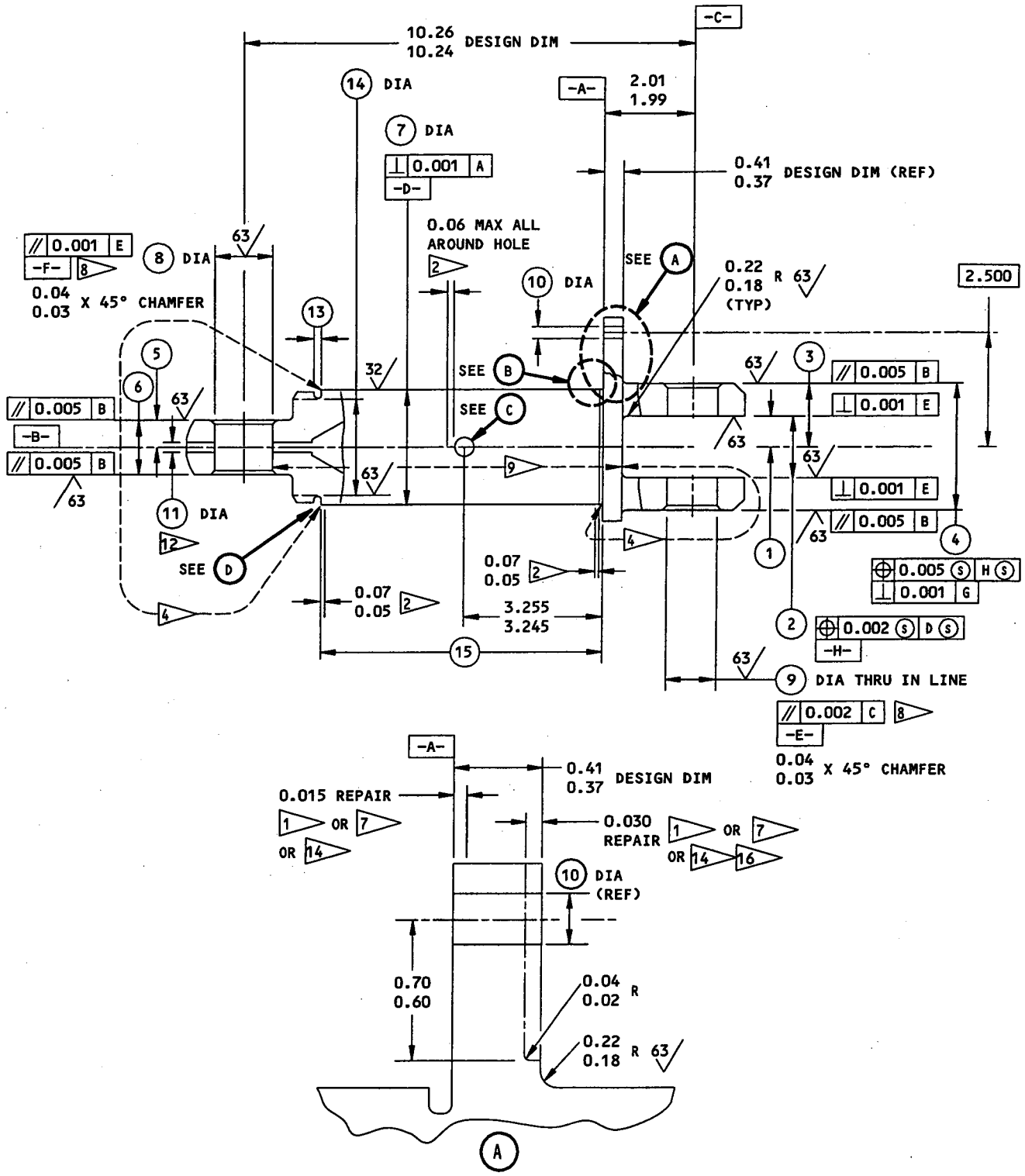
IF MATERIAL REMOVAL IS MORE THAN 0.015 PER SURFACE, THEN SULFAMATE NICKEL PLATE (0.001 MINIMUM THICKNESS) (SOPM 20-42-09) AND THEN CHROME PLATE (0.003-0.005 THICK) (SOPM 20-42-03) BACK TO DESIGN DIMENSIONS. PUT PLATING RUNOUTS AT EDGES, HOLES AND RELIEFS.

10 DEFECTS CAN BE REMOVED FROM UP TO 25% OF THE THREADS IN EACH OF THE 4 QUADRANTS, BUT IF YOU DO THIS TO FITTINGS 65-46140-5,-7 IN THE THREADS THAT WILL ENGAGE THE NUT LOCKING FEATURE, YOU MUST USE NUT (43A) AND COTTER PIN (44K).

11 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.

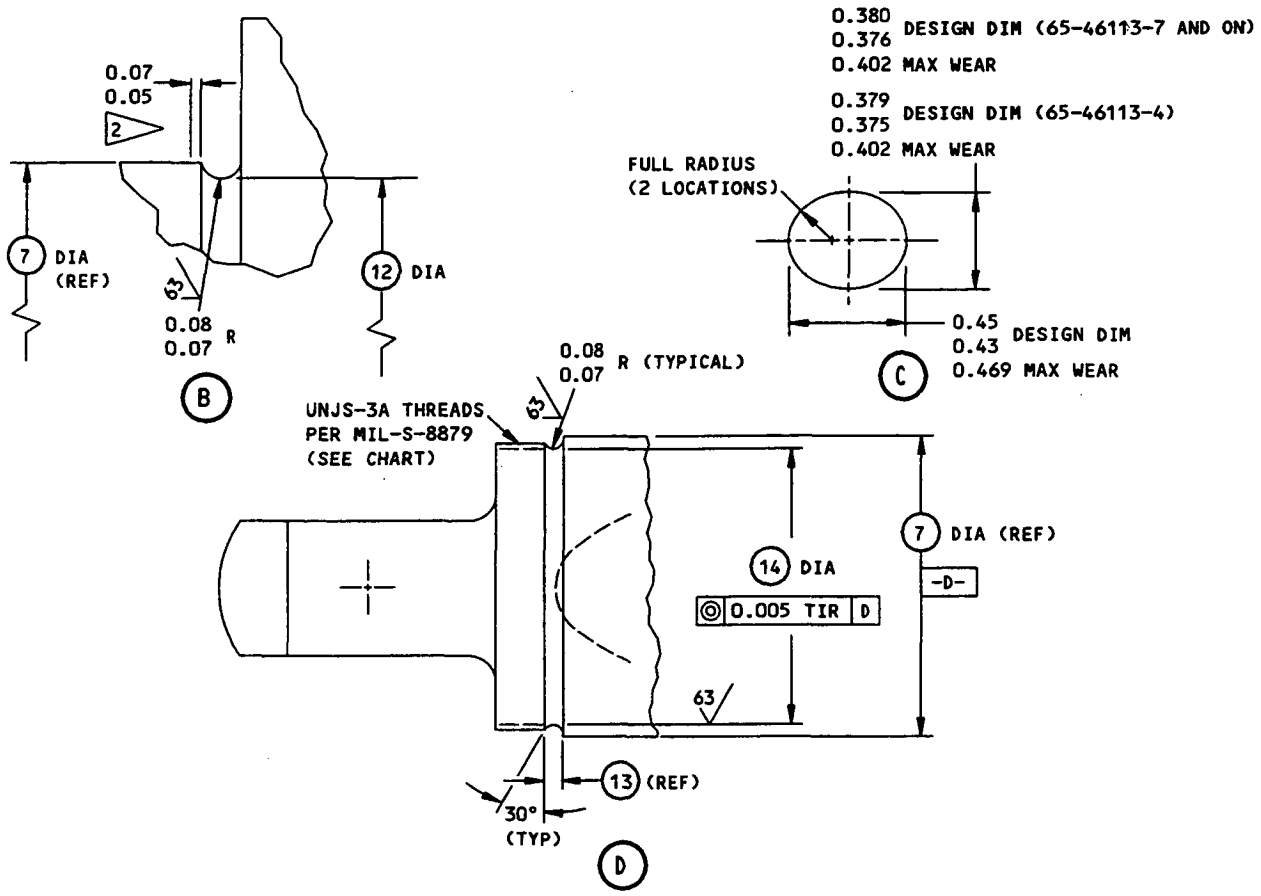
TEE BOLT FITTING (60)

Fitting Repair and Refinish
Figure 405 (Sheet 2)



PIN (73)
65-46113

Trunnion Pin Repair and Refinish
Figure 406 (Sheet 1)



UNJS-3A THREAD SIZE	2 1/2-16 (DESIGN)	2 7/16-16 (1/16 UNDERSIZE)	2 3/8-16 (1/8 UNDERSIZE)
MAJOR DIA	2.5000 2.4906	2.4375 2.4281	2.3750 2.3656
PITCH DIA	2.4594 2.4553	2.3969 2.3928	2.3344 2.3303
MINOR DIA	2.4278 2.4199	2.3653 2.3574	2.3028 2.2949
RELIEF DESIGN DIA	2.410 2.403	2.347 2.340	2.284 2.277
RELIEF REPAIR DIA 10	2.277	---	---
MATING REPAIR TRUNNION PIN NUT (64) PART NUMBER		69-78313-1	69-78313-2

NOTE: MACHINING DETAILS ONLY. REFINISH NOT SHOWN. IF REPAIR MORE THAN 1/8 UNDERSIZE IS NECESSARY, THE PIN MUST BE SCRAPPED.

PIN (73)
65-46113
Trunnion Pin Repair and Refinish
Figure 406 (Sheet 2)

		①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮
65-46113-4	DESIGN DIM	0.752 0.750	1.503 1.501	1.42 1.40	2.825 2.815	0.627 0.623	1.255 1.250	2.624 2.623	1.3755 1.3745	1.126 1.125	0.461 0.457	0.378 0.373	2.605 2.601	0.135 0.115	2.410 2.403	6.49 6.48
	REPAIR LIMIT	0.7665 5 1	1.532 1 5 6 1.521 6 17	1.385 5	2.785 5 6	0.608 5	1.220 5 6	2.594 1 15 17	1.436 5	1.186 5	0.580 13	0.3796 0.3794 3	2.570 10 15	0.205 10 11	2.277 10	6.39 10 11
65-46113-7,-9	DESIGN DIM	0.752 0.750	1.505 1.502	1.42 1.40	2.825 2.815	0.627 0.623	1.255 1.250	2.624 2.623	1.3755 1.3745	1.126 1.125	0.466 0.461	0.378 0.373	2.605 2.601	0.135 0.115	2.410 2.403	6.49 6.48
	REPAIR LIMIT	0.7665 5 1	1.532 1 5 6 1.521 6 17	1.385 5	2.785 5 6	0.608 5	1.220 5 6	2.594 1 15 17	1.436 5	1.186 5	0.580 13	0.3796 0.3794 3	2.570 10 15	0.205 10 11	2.277 10	6.39 10 11
65-46113-11	DESIGN DIM	0.752 0.750	1.505 1.502	1.42 1.40	2.825 2.815	0.627 0.623	1.255 1.250	2.624 2.623	1.3755 1.3745	1.126 1.125	0.466 0.461	0.248 0.247	2.605 2.601	0.135 0.115	2.410 2.403	6.49 6.48
	REPAIR LIMIT	0.7665 5 1	1.532 1 5 6 1.521 6 17	1.385 5	2.785 5 6	0.608 5	1.220 5 6	2.594 1 15 17	1.436 5	1.186 5	0.580 13	0.3796 0.3794 3	2.570 10 15	0.205 10 11	2.277 10	6.39 10 11
65-46113-14	DESIGN DIM	0.752 0.750	1.505 1.502	1.42 1.40	2.825 2.815	0.627 0.623	1.255 1.250	2.624 2.623	1.3755 1.3745	1.126 1.125	0.466 0.461	0.248 0.247	2.605 2.601	0.135 0.115	2.410 2.403	6.49 6.48
	REPAIR LIMIT	0.7665 5 1	1.532 1 5 6 1.521 6 17	1.385 5	2.785 5 6	0.608 5	1.220 5 6	2.594 1 15 17	1.436 5	1.186 5	0.580 13	0.3796 0.3794 3	2.570 10 15	0.205 10 11	2.277 10	6.39 10 11
65-46113-15	DESIGN DIM	0.752 0.750	1.505 1.502	1.42 1.40	2.825 2.815	0.627 0.623	1.255 1.250	2.624 2.623	1.3755 1.3745	1.126 1.125	0.466 0.461	0.248 0.247	2.605 2.601	0.195 0.175	2.410 2.403	6.43 6.42
	REPAIR LIMIT	0.7665 5 1	1.532 1 5 6 1.521 6 17	1.385 5	2.785 5 6	0.608 5	1.220 5 6	2.594 1 15 17	1.436 5	1.186 5	0.580 13	0.3796 0.3794 3	2.570 10 15	0.205 10	2.277 10	6.39 10
65-46113-18,-20,-22	DESIGN DIM	0.752 0.750	1.505 1.502	1.42 1.40	2.825 2.815	0.627 0.623	1.255 1.250	2.624 2.623	1.3755 1.3745	1.376 1.375	0.466 0.461	0.248 0.247	2.605 2.601	0.195 0.175	2.410 2.403	6.43 6.42
	REPAIR LIMIT	0.7665 5 1	1.532 1 5 6 1.521 6 17	1.385 5	2.785 5 6	0.608 5	1.220 5 6	2.594 1 15 17	1.436 5	1.436 5	0.580 13	0.3796 0.3794 3	2.570 10 15	0.205 10	2.277 10	6.39 10
65-46113-24	DESIGN DIM	---	1.521 1.516	---	2.825 2.815	0.627 0.623	1.255 1.250	2.624 2.623	1.3755 1.3745	1.376 1.375	0.466 0.461	0.248 0.247	2.605 2.601	0.195 0.175	2.410 2.403	6.43 6.42
	REPAIR LIMIT	---	---	---	2.785 5 6	0.608 5	1.220 5 6	2.594 1 15 2.603 17	1.436 5	1.436 5	0.580 13	0.3796 0.3794 3	2.570 10 15	0.205 10	2.277 10	6.39 10

PIN (73)
65-46113
Trunnion Pin Repair and Refinish
Figure 406 (Sheet 3)

REFINISH

CHROME PLATE (F-15.34), DIA -D- AND FLANGE FACE -A-, 0.003 MINIMUM THICK AFTER GRINDING. CADMIUM-TITANIUM PLATE (F-15.32) HOLES FOR BUSHINGS. CADMIUM-TITANIUM PLATE (F-15.01) ALL OTHER SURFACES (INTERIOR AND EXTERIOR) 0.0005 MINIMUM THICK. APPLY PRIMER PER 8 TO HOLES FOR BUSHINGS. APPLY PRIMER AND ENAMEL PER 4 ON EXTERIOR EXCEPT OMIT PRIMER AND ENAMEL ON THREADS, CHROME PLATE, AND AREAS NOTED 12. APPLY PRIMER AND CORROSION PREVENTION COMPOUND PER 9 TO ALL INNER SURFACES. WIPE THREADS AND CHROME PLATED SURFACES WITH PRIMER (F-19.45).

CAUTION: IF THE THREADS ARE UNDERSIZED, IDENTIFY THE TRUNNION PIN WITH BLACK STENCIL "SPECIAL UNDERSIZE NUT P/N _____ REQUIRED" ON A YELLOW BACKGROUND ON THE OUTER EDGE OF THE ANTI-ROTATION FLANGE.

REPAIR

REF 1 3 5 6 7 10 11 13 THRU 17

125 MACHINE FINISH EXCEPT AS NOTED

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

MATERIAL: 4340M STEEL (270-300 KSI)

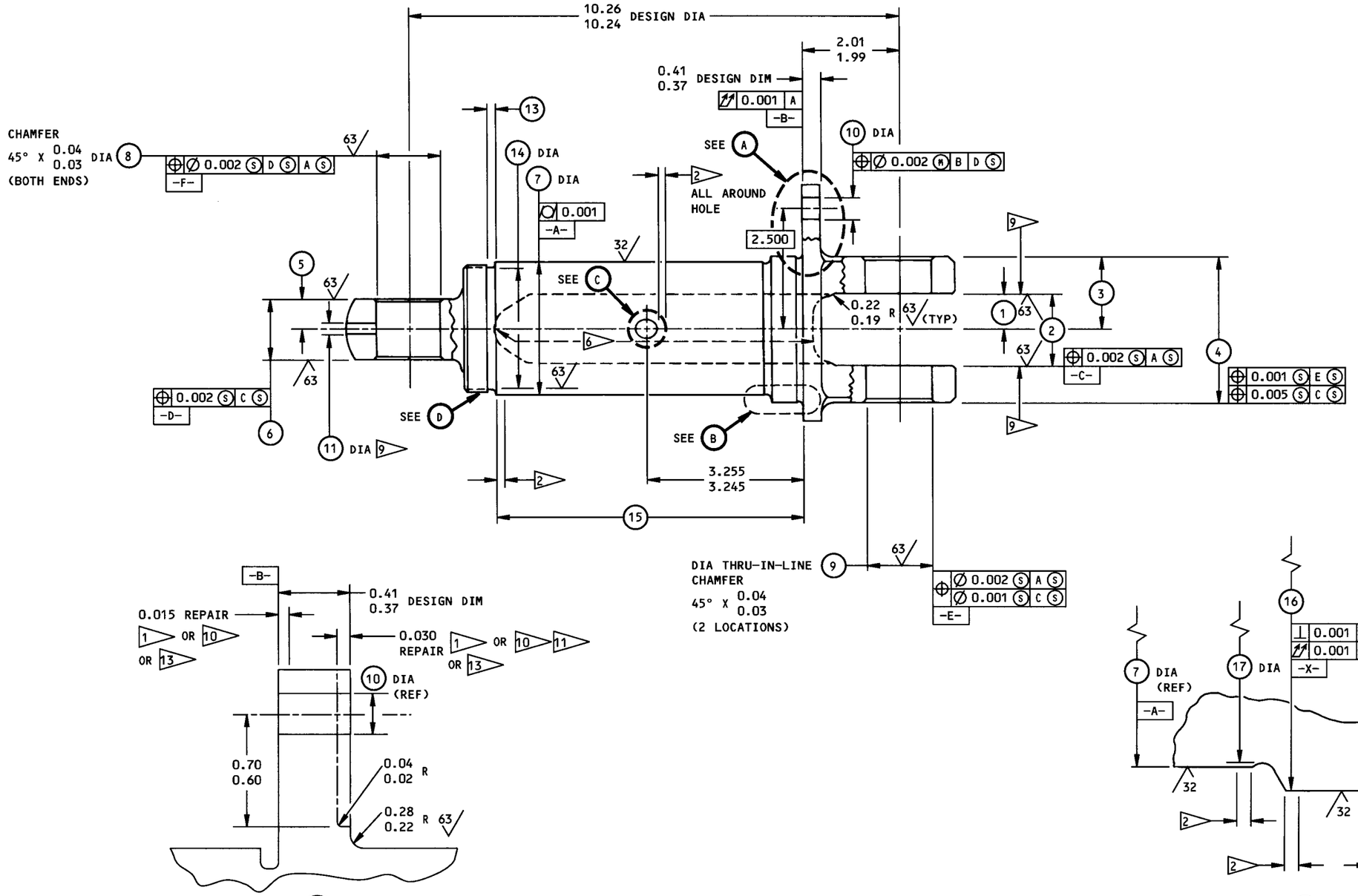
ALL DIMENSIONS ARE IN INCHES

NOTE: IF YOU UNDERSIZE THE THREADS OF THIS TRUNNION PIN (73), APPLY BLACK STENCIL "SPECIAL UNDERSIZE NUT P/N _____ REQUIRED" ON A YELLOW BACKGROUND ON THE OUTER EDGE OF THE ANTI-ROTATION FLANGE.

1. LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRINDING TO DESIGN DIM AND FINISH. PUT A PLATING RUNOUT AT HOLES, EDGES, AND RELIEFS. MAXIMUM THICKNESS AFTER GRINDING 0.015. THEN WIPE WITH PRIMER (F-19.45).
2. CHROME PLATE RUNOUT
3. LIMIT FOR INSTALLATION OF OVERSIZE EQUIVALENT OF BUSHING (70A) (FIG. 417) BEFORE PLATING.
4. APPLY PRIMER BMS 10-11, TYPE 1 (SRF-12.205 OR F-20.02) FOLLOWED BY ENAMEL, BMS 10-11, TYPE 2 COLOR 707 (SRF-12.63 OR SRF-14.904-707 OR F-21.02).
5. LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS AND INSTALLATION OF BUSHINGS LISTED IN PARTS LIST.
6. LUG FACE MACHINING REQUIREMENTS
   1. MATERIAL REMOVED FROM ANY FACE MUST NOT EXCEED 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 BE 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.
7. LIMIT FOR NICKEL PLATE BUILDUP (SOPM 20-42-09) AND MACHINE TO DESIGN DIMENSIONS AND FINISH.
8. AFTER PLATING, APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02).
9. IN BORE AFTER PLATING, APPLY PRIMER (F-20.03) AND CORROSION PREVENTIVE COMPOUND (F-19.03).
10. RESTORATION TO DESIGN DIM NOT REQUIRED.
11. ON THESE PINS, WE RECOMMEND YOU REMOVE MATERIAL FROM THE SHOULDER TO INCREASE (13) AND DECREASE (15) TO THE DESIGN. DIMENSIONS SHOWN FOR PINS 65-46113-15 AND ON.
12. OMIT PRIMER AND ENAMEL THIS SURFACE.
13. LIMIT FOR INSTALLATION OF REPAIR SLEEVE, WITH 0.020 MINIMUM WALL THICKNESS (FIG. 417).
14. LUG FACE CAN BE CHROME PLATED 0.003-0.005 THICK, WITH PLATING RUNOUT AT EDGES, HOLES, AND RELIEFS. WIPE CHROME PLATE WITH PRIMER (F-19.45). MAKE A REPAIR SHIM (FIG. 406B) WITH THICKNESS NECESSARY TO RETURN LUG TO DESIGN DIMENSION. INSTALL WITH WET BMS 5-95 SEALANT.
15. IF REPAIR IS NECESSARY BEYOND THIS LIMIT, THE PART MUST BE SCRAPPED.
16. CUT THE REPAIR SHIM TO FIT.
17. 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.

PIN (73)
65-46113

Trunnion Pin Repair and Refinish
Figure 406 (Sheet 4)

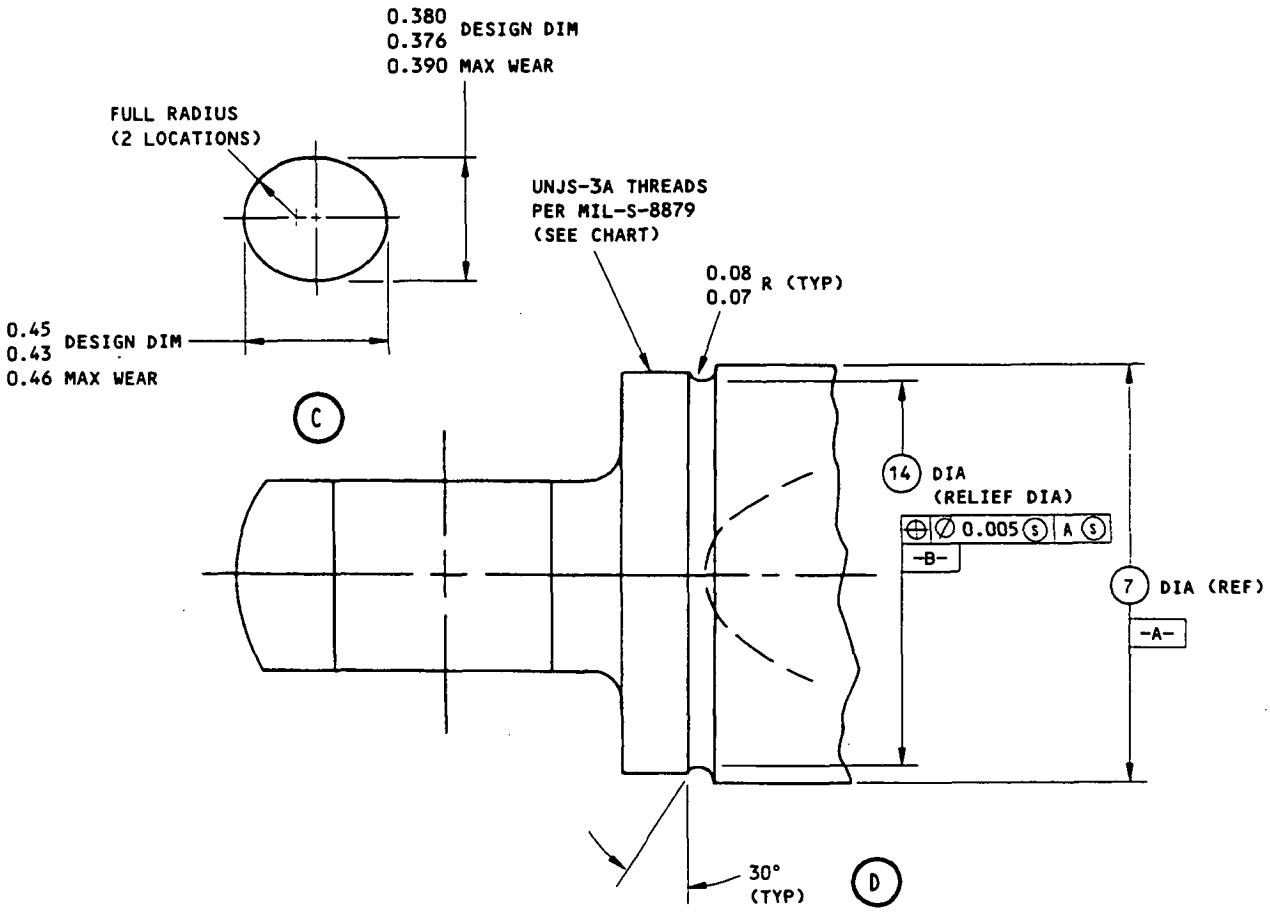


PIN (73)
65C32964

PIN (73)
65C32964

Trunnion Pin Repair and Refinish
Figure 406A (Sheet 1)

F40329



UNJS-3A THREAD SIZE	2 5/8-16 (DESIGN)	2 9/16-16 (1 /16 UNDERSIZE)	2 1/2-16 (1/8 UNDERSIZE)
MAJOR DIA	2.6250 2.6156	2.5625 2.5531	2 5000 2.4906
PITCH DIA	2.5844 2.5803	2.5219 2.5178	2.4594 2.4553
MINOR DIA	2.5528 2.5449	2.4903 2.4824	2.4278 2.4199
RELIEF DIA	2.535 2.528	2.472 2.465	2.409 2.402
RELIEF REPAIR DIA ▷8	2.402	- - -	- - -
MATING REPAIR TRUNNION PIN NUT PART NUMBER		69-78313-3	69-41633-5

TABLE 1

NOTE: MACHINING DETAILS ONLY. REFINISH NOT SHOWN.

PIN (73)
65C32964

Trunnion Pin Repair and Refinish
Figure 406A (Sheet 2)

	(1) 7	(1) 12	(2) 7	(2) 12	(3)	(4)	(5)	(6)	(7)
DESIGN DIM	0.7515 0.7495	0.7605 0.7580	1.505 1.502	1.521 1.516	1.475 1.470	2.950 2.940	0.627 0.623	1.255 1.250	2.749 2.748
REPAIR LIMIT	0.7665 1 5 0.7595 5 14	0.7660 1 5 0.7595 5 14	1.535 1 5 1.522 5 14	1.532 1 5 1.522 5 14	1.455 4 5	2.910 4 5	0.608 4 5	1.220 4 5	2.728 1 14

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
DESIGN DIM	1.3755 1.3745	1.3755 1.3745	0.466 0.461	0.248 0.247	2.979 2.975	0.195 0.175	2.535 2.528	6.43 6.42	2.999 2.998	2.729 2.725
REPAIR LIMIT	1.436 4	1.436 4	0.580 3	—	2.945 8	—	2.402 8	—	2.978 1	—

TABLE 2

REFINISH

CHROME PLATE (F-15.34) DIAS -A-, -X-, AND FLANGE FACE -B-, 0.003 MIN THICK. CADMIUM-TITANIUM PLATE (F-15.01) ALL OTHER SURFACES (INTERIOR AND EXTERIOR). APPLY PRIMER, BMS 10-11, TYPE 1 (F-20.02) AND ENAMEL, BMS 10-11, TYPE 2 (F-21.02) ON RELIEFS, UNDERCUTS, AND OTHER EXTERNAL SURFACES EXCEPT ON THREADS AND CHROME PLATE. WIPE THREADS AND CHROME PLATE WITH PRIMER (F-19.45). IN INTERIOR, APPLY PRIMER, AND CORROSION PREVENTIVE COMPOUND PER 6
PER

REPAIR

REF 1 3 4 5 8 10 11 13 14

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

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

MATERIAL: 4340M STEEL, 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

NOTE: IF YOU UNDERSIZE THE THREADS OF THIS TRUNNION PIN (73), APPLY BLACK STENCIL "SPECIAL UNDERSIZE NUT P/N _____ REQUIRED" ON A YELLOW BACKGROUND ON THE OUTER EDGE OF THE ANTI-ROTATION FLANGE.

1 LIMIT FOR BUILDUP WITH CHROME PLATE BUILDUP (SOPM 20-42-03) AND GRINDING TO DESIGN DIM AND FINISH. PUT A PLATING RUNOUT PER 2 AT HOLES, EDGES AND RELIEFS.

2 0.06 MAX CHROME PLATE RUNOUT.

3 LIMIT FOR INSTL OF REPAIR SLEEVE (FIG. 417).

4 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS.

5 LUG FACE MACHINING REQUIREMENTS:

1. MATERIAL REMOVED FROM ANY FACE MUST NOT EXCEED 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 BE 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 0.03-0.07 R.

6 IN BORE, AFTER PLATING PRIMER (F-20.03) AND CORROSION PREVENTIVE COMPOUND (F-19.03).

7 65C32964-2,-6

8 RESTORATION TO DESIGN DIM NOT REQUIRED.

9 NO PRIMER OR ENAMEL ON THIS AREA.

10 LUG FACE CAN BE CHROME PLATED 0.003 - 0.005 THICK, WITH PLATING RUNOUT AT EDGES, HOLES, AND RELIEFS. WIPE CHROME PLATE WITH PRIMER (F-19.45). MAKE A REPAIR SHIM (FIG. 406B) WITH THICKNESS NECESSARY TO RETURN LUG TO DESIGN DIMENSION. INSTALL WITH WET BMS 5-95 SEALANT.

11 CUT THE REPAIR SHIM TO FIT.

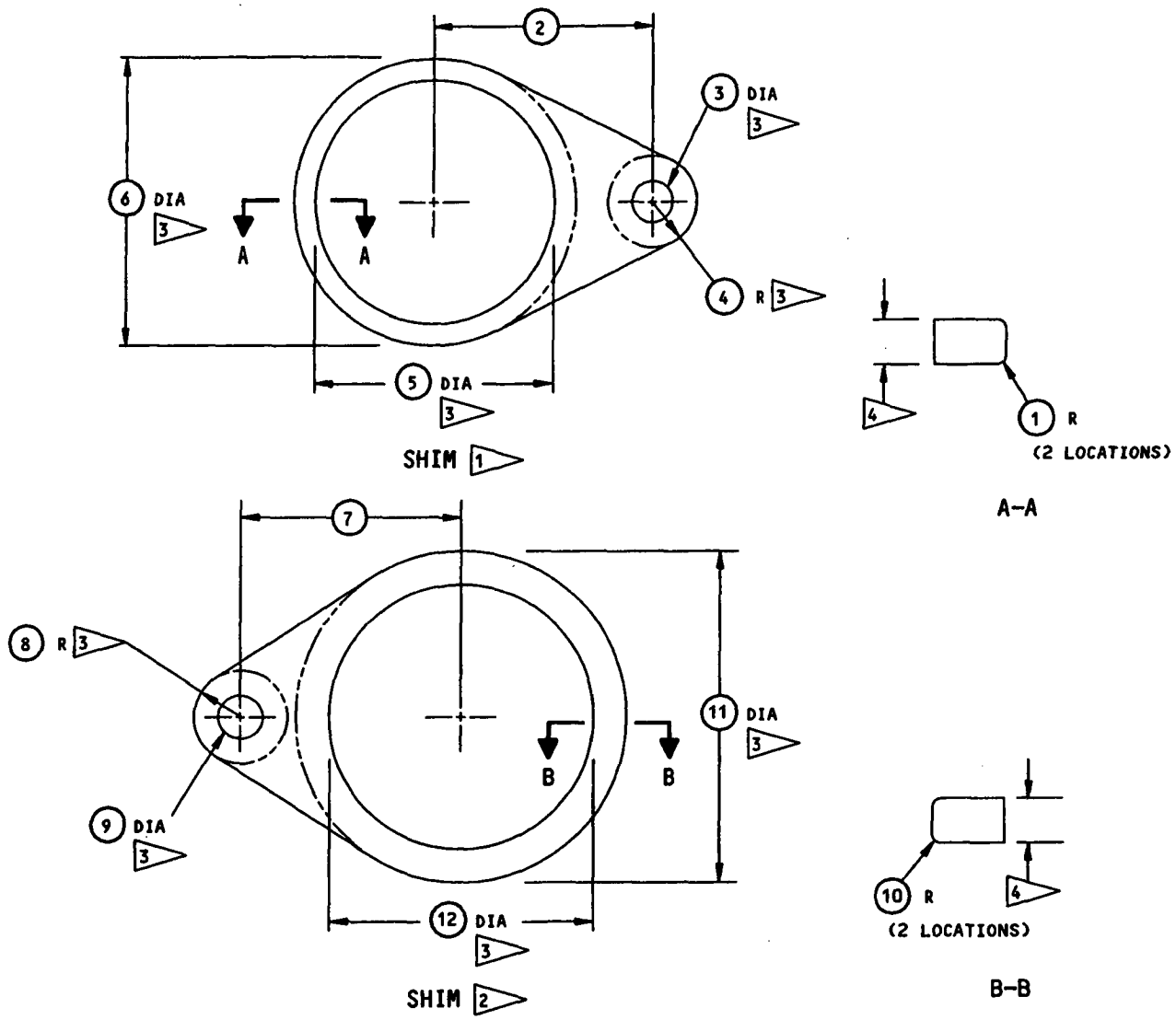
12 65C32964-8

13 LIMIT FOR NICKEL PLATE BUILDUP (SOPM 20-42-09) AND MACHINE TO DESIGN DIMENSIONS AND FINISH.

14 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.

PIN (73)
65C32964

Trunnion Pin Repair and Refinish
Figure 406A (Sheet 3)



	1	2	3	4	5	6	7	8	9	10	11	12
DESIGN DIM	0.015 0.005	2.510 2.490	0.475 0.465	0.51 0.49	2.680 2.660	3.260 3.240	2.510 2.490	0.51 0.49	0.475 0.465	0.015 0.005	3.810 3.790	3.030 3.010

1 USE WITH TRUNNION PIN 65-46113

2 USE WITH TRUNNION PIN 65C32964

3 OPTIONAL: USE CIRCULAR WASHERS OF DIMENSIONS (3)(4), (5)(6), (8)(9) OR (11)(12) AS APPLICABLE

4 THICKNESS AS NECESSARY TO RESTORE FLANGE DESIGN DIMENSION

125 MACHINE FINISH

MATERIAL: 15-5PH OR 17-7PH CRES, 150-170 KSI

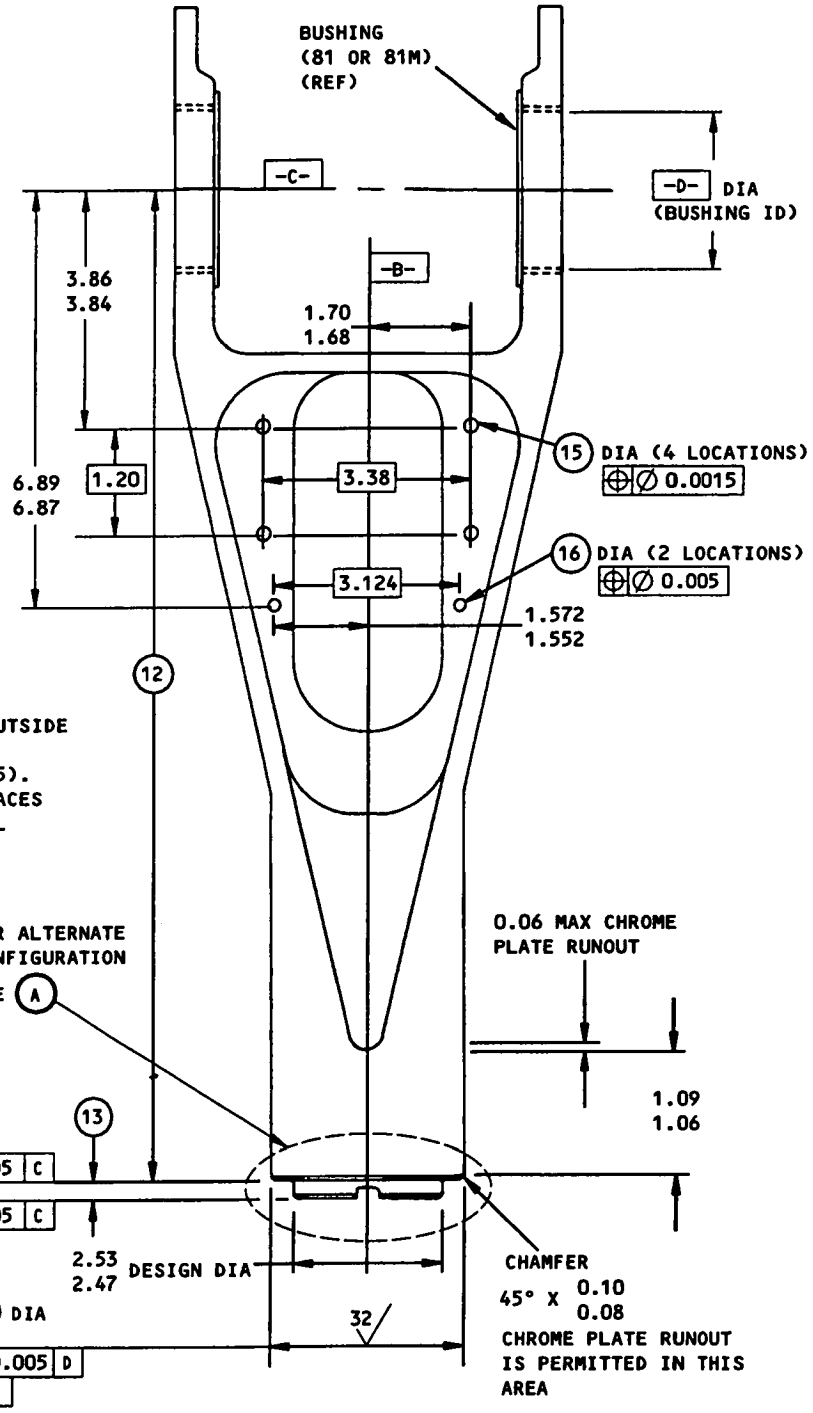
FINISH: CADMIUM PLATE (F-15.02)

ALL DIMENSIONS ARE IN INCHES

REPAIR SHIM (73A)
(NO BOEING PART NUMBER)

Repair Shim Details
Figure 406B

A10900



REPAIR

REF 1 4 5 THRU 12

125 MACHINE FINISH UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.03R

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

MATERIAL: 4340M STEEL, 270-300 KSI

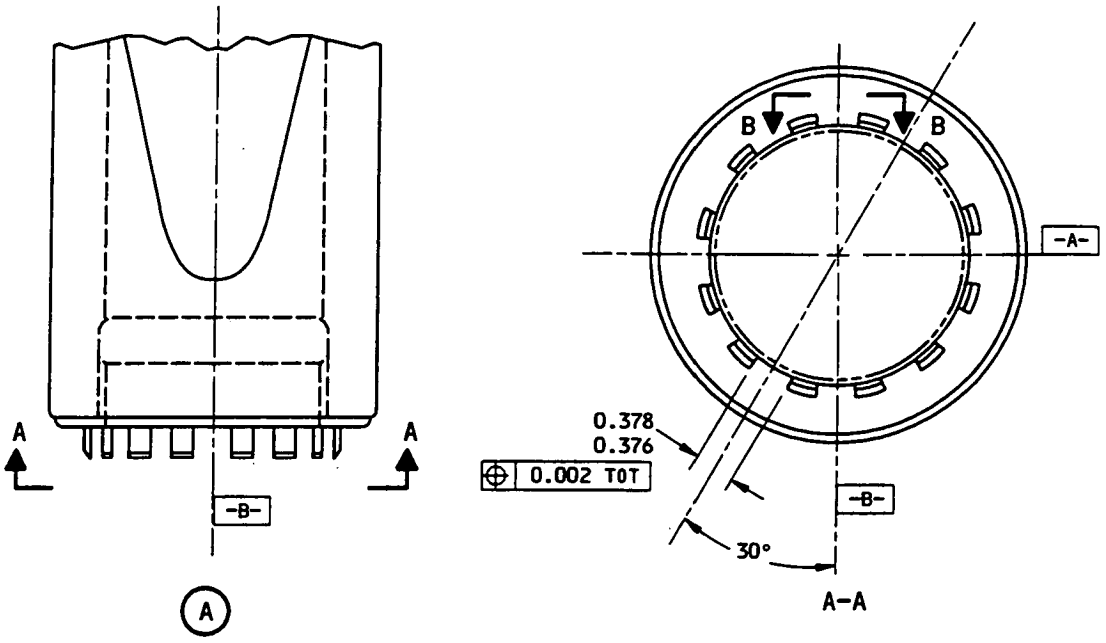
ALL DIMENSIONS ARE IN INCHES

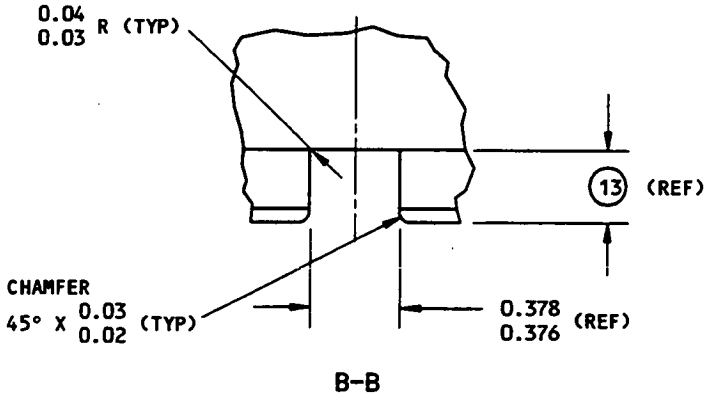
REFINISH

CHROME PLATE (F-15.34) DIA -F-, AND OUTSIDE FACES -Y-, -Z- OF LUGS, WIPE CHROME PLATE WITH PRIMER (F-19.45). CADMIUM-TITANIUM PLATE ALL OTHER SURFACES PER 2 FOLLOWED BY PRIMER AND ENAMEL PER 3 EXCEPT OMIT PRIMER & ENAMEL FROM BORES FOR BUSHINGS.

LINK (82)

Trunnion Link Repair and Refinish
Figure 407 (Sheet 1)





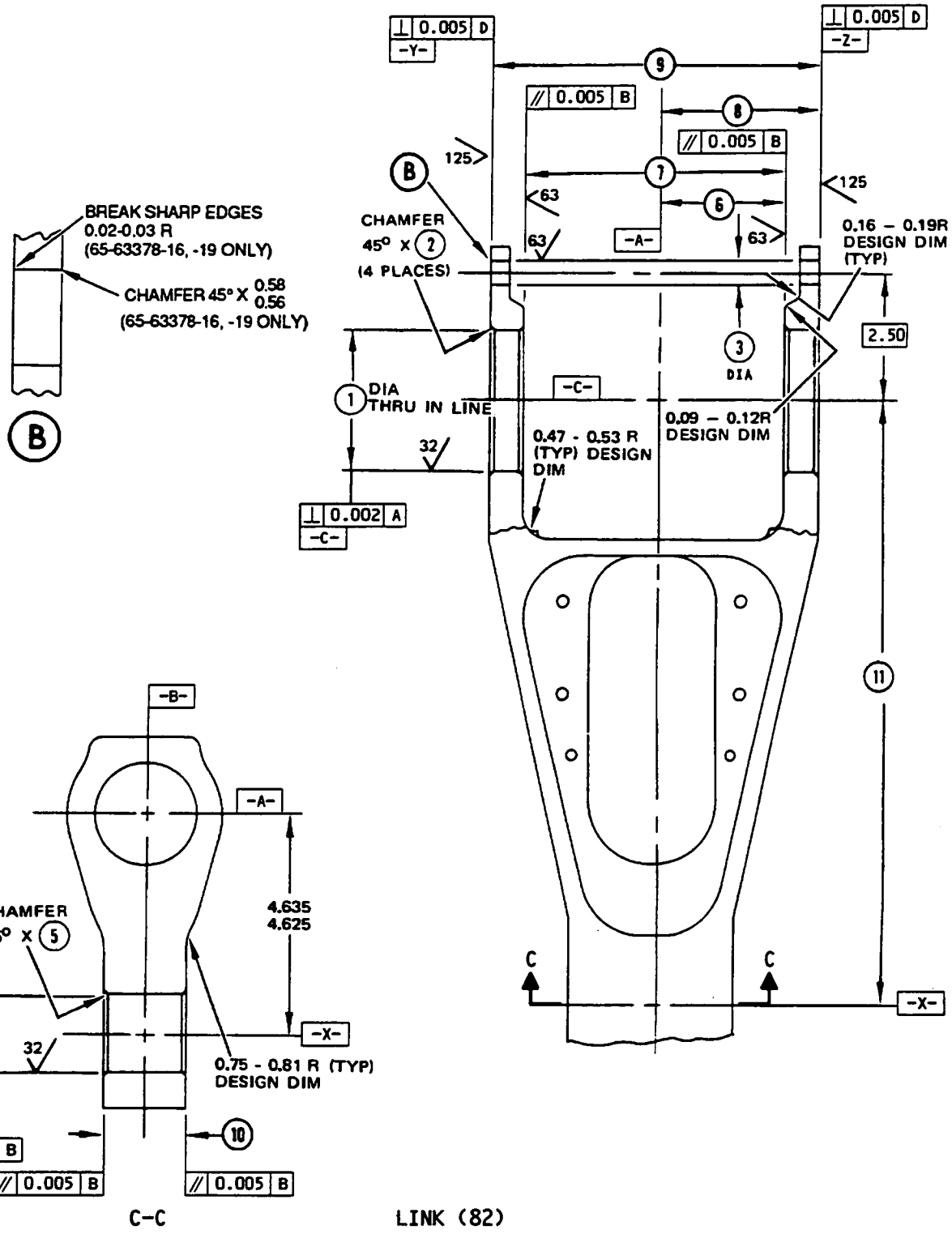
B-B

LINK (82)

65-46101-12
65-63378-4,-6,-8,-10,-12,-16,-19,-23,-24
65-75330-3,-4

Trunnion Link Repair and Refinish
Figure 407 (Sheet 2)

F12509



C-C

LINK (82)

Trunnion Link Repair and Refinish
Figure 407 (Sheet 3)

		(1)	(2)	(3)	(4)	(5)	(6)	(7) ▷6	(8)	(9) ▷6	(10) ▷6	(11)	(12)	(13)	(14)	(15)	(16)	(17) ▷8
65-46101-8,-10,-12 65-75330-3	DESIGN DIM	2.7511 2.7500	0.067 0.057	0.4545 0.4540	1.626 1.625	0.067 0.057	2.598 2.593	5.200 5.186	3.255 3.250	6.505 6.500	1.505 1.500	12.595 12.585	16.77 16.75	0.31 0.30	3.2495 3.2485	0.257 0.254	0.197 0.194	0.33 0.31
	REPAIR LIMIT	2.900 ▷10	—	0.600 ▷9	1.725 ▷10	—	2.650 ▷5	5.300 ▷5	3.200 ▷4	6.400 ▷4	1.400 ▷5	—	16.73 ▷11	0.270 ▷7	3.2295 ▷1 ▷12	0.316 ▷10	0.262 ▷10	—
65-63378-2,-4,-6 65-75330-4	DESIGN DIM	2.7511 2.7500	0.050 0.040	0.4545 0.4540	1.626 1.625	0.048 0.032	2.598 2.593	5.200 5.186	3.255 3.250	6.505 6.500	1.510 1.500	12.295 12.285	16.47 16.45	0.31 0.30	3.2495 3.2485	0.257 0.254	0.197 0.194	0.36 0.34
	REPAIR LIMIT	2.900 ▷10	—	0.600 ▷9	1.725 ▷10	—	2.650 ▷5	5.300 ▷5	3.200 ▷4	6.400 ▷4	1.400 ▷5	—	16.43 ▷11	0.270 ▷7	3.2295 ▷1 ▷12	0.316 ▷10	0.262 ▷10	—
65-63378-8,-10	DESIGN DIM	2.7511 2.7500	0.050 0.040	0.4545 0.4540	1.646 1.645	0.048 0.032	2.598 2.593	5.200 5.186	3.255 3.250	6.505 6.500	1.510 1.500	12.295 12.285	16.47 16.45	0.31 0.30	3.2495 3.2485	0.257 0.254	0.197 0.194	0.36 0.34
	REPAIR LIMIT	2.900 ▷10	—	0.600 ▷9	1.810 ▷10	—	2.650 ▷5	5.300 ▷5	3.200 ▷4	6.400 ▷4	1.400 ▷5	—	16.43 ▷11	0.270 ▷7	3.2295 ▷1 ▷12	0.316 ▷10	0.262 ▷10	—
65-63378-12	DESIGN DIM	3.181 3.180	0.050 0.040	0.4545 0.4540	1.646 1.645	0.048 0.032	2.598 2.593	5.200 5.186	3.255 3.250	6.505 6.500	1.510 1.500	12.295 12.285	16.47 16.45	0.31 0.30	3.2495 3.2485	0.257 0.254	0.197 0.194	0.36 0.34
	REPAIR LIMIT	3.240 ▷10	—	0.600 ▷9	1.810 ▷10	—	2.650 ▷5	5.300 ▷5	3.200 ▷4	6.400 ▷4	1.400 ▷5	—	16.43 ▷11	0.270 ▷7	3.2295 ▷1 ▷12	0.316 ▷10	0.262 ▷10	—
65-63378-16,-23	DESIGN DIM	2.7511 2.7500	0.050 0.040	0.4545 0.4540	1.646 1.645	0.048 0.032	2.598 2.593	5.200 5.186	3.255 3.248	6.507 6.498	1.510 1.500	12.295 12.285	16.47 16.45	0.31 0.30	3.2495 3.2485	0.257 0.254	0.197 0.194	0.36 0.34
	REPAIR LIMIT	2.900 ▷10	—	0.600 ▷9	1.810 ▷10	—	2.650 ▷5	5.300 ▷5	3.233 ▷1 3.200 ▷4 3.235 ▷12	6.468 ▷1 6.400 ▷4 6.478 ▷12	1.400 ▷5	—	16.43 ▷11	0.270 ▷7	3.2295 ▷1 ▷12	0.316 ▷10	0.262 ▷10	—
65-63378-19,-24	DESIGN DIM	3.181 3.180	0.050 0.040	0.4545 0.4540	1.646 1.645	0.048 0.032	2.598 2.593	5.200 5.186	3.255 3.248	6.507 6.498	1.510 1.500	12.295 12.285	16.47 16.45	0.31 0.30	3.2495 3.2485	0.257 0.254	0.197 0.194	0.36 0.34
	REPAIR LIMIT	3.240 ▷10	—	0.600 ▷9	1.810 ▷10	—	2.650 ▷5	5.300 ▷5	3.233 ▷1 3.200 ▷4 3.235 ▷12	6.468 ▷1 6.400 ▷4 6.478 ▷12	1.400 ▷5	—	16.43 ▷11	0.270 ▷7	3.2295 ▷1 ▷12	0.316 ▷10	0.262 ▷10	—

▷1 LIMIT FOR CHROME PLATE BUILDUP (REF 20-42-03) 0.003-0.015 THICK AND GRIND TO DESIGN DIMENSIONS AND FINISH. PUT A PLATING RUNOUT AT EDGES, HOLES AND RELIEFS. WIPE CHROME PLATE WITH PRIMER (F-19.45).

▷2 CADMIUM-TITANIUM PLATE (F-15.01) 0.0005 MIN THICK

▷3 APPLY PRIMER BMS 10-11, TYPE 1 (F-20.02) FOLLOWED BY ENAMEL, BMS 10-11, TYPE 2 (F-14.9813, WHICH REPLACES SRF-14.9813)

▷4
1. FOR PLATING REPAIR UP TO 0.015 PER FACE:
   A. PREFERRED - CHROME PLATE (SOPM 20-42-03) AND GRIND TO DESIGN DIMENSIONS AND FINISH. WIPE WITH PRIMER (F-19.45)
   B. OPTIONAL - NICKEL PLATE (REF 20-42-09) AND MACHINE TO DESIGN DIMENSIONS AND FINISH.
   C. OPTIONAL - THERMAL SPRAY BUILDUP PER ▷12
2. FOR PLATING REPAIR UP TO 0.020 PER FACE, NICKEL PLATE ONLY AND MACHINE TO DESIGN DIMENSIONS.
3. FOR PLATING REPAIR UP TO 0.045 PER FACE, NICKEL PLATE UP TO0.030 THICK, THEN CHROME PLATE 0.003-0.015 THICK TO GET TO DESIGN DIMENSIONS. WIPE WITH PRIMER (F-19.45)
4. FOR REPAIRS OVER 0.020 PER FACE, WITHIN REPAIR LIMITS, YOU CAN ALSO USE REPAIR SHIM (FIG. 406B) OF THICKNESS NECESSARY TO RETURN LUG TO DESIGN DIMENSION FLASH CHROME PLATE LUG FACE BEFORE SHIM INSTALLATION, THEN INSTALL THE SHIM WITH BMS 5-95 SEALANT. PUT A PLATING RUNOUT AT EDGES, HOLES AND RELIEFS. WIPE CHROME PLATE WITH PRIMER (F-19.45)

▷5 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS OR SULFAMATE NICKEL PLATE (SOPM 20-42-09) AND/OR CHROME PLATE (SOPM 20-42-03) AND INSTALLATION OF BUSHINGS LISTED IN PARTS LIST.

▷6 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 BE 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

▷7 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED

▷8 WEB THICKNESS AT HOLES (15) (16)

▷9 LIMIT FOR INSTALLATION OF REPAIR BUSHING (FIG. 417) OR OVERSIZE DOWEL PIN (FIG. 420). IF REPAIR BUSHING IS USED, WALL THICKNESS MUST BE 0.025 MIN

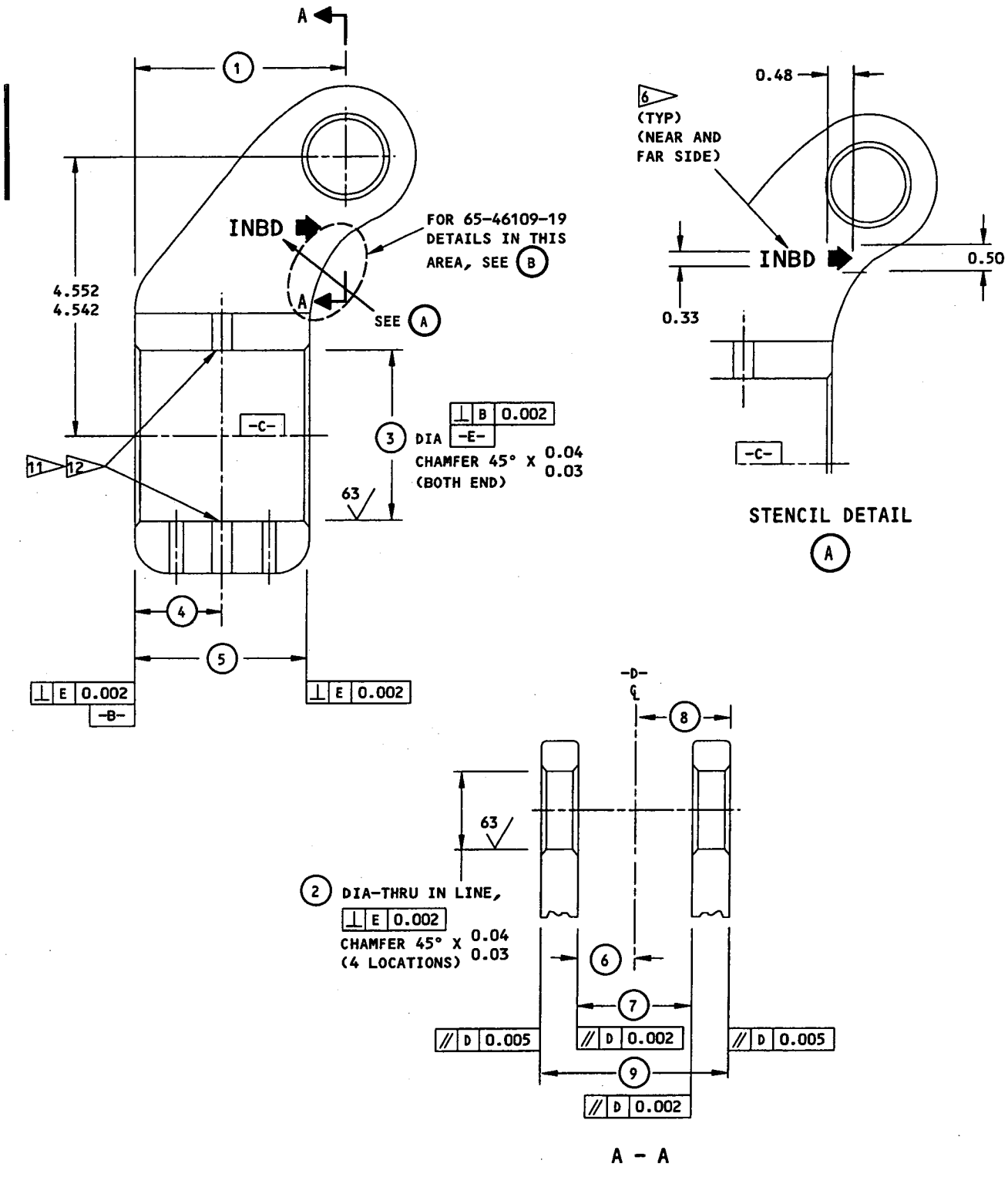
▷10 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS OR REPAIR SLEEVES

▷11 LIMIT FOR CHROME PLATE BUILDUP (SOPM 20-42-03), 0.003-0.005 THICK, WITH WIPED PRIMER (F-19.45), AND INSTALLATION OF CADMIUM-PLATED 17-4PH REPAIR SHIMS. INSTALL SHIMS WITH WET BMS 5-95 SEALANT

▷12 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.

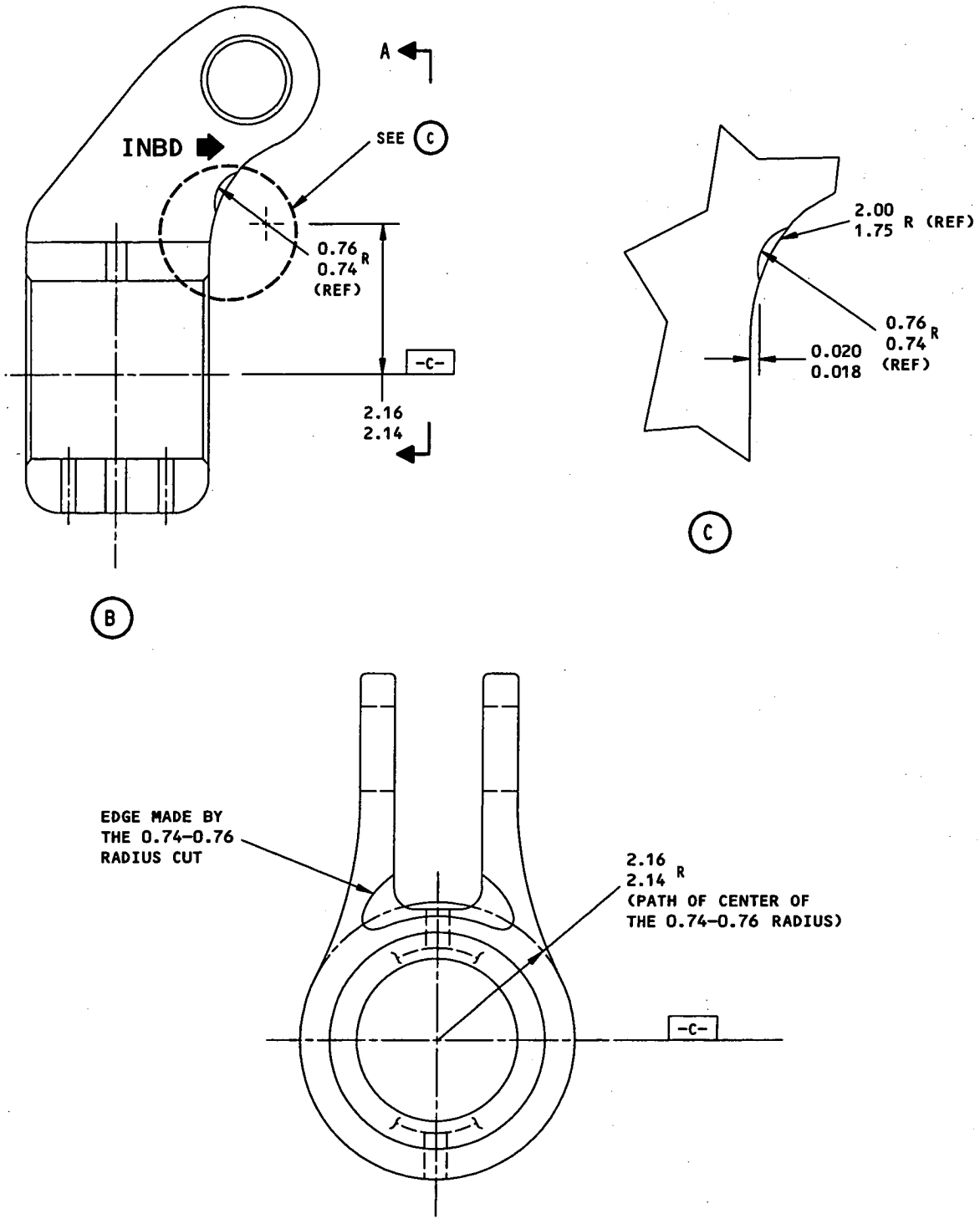
LINK (82)

Trunnion Link Repair and Refinish
Figure 407 (Sheet 4)



ARM (77)

Actuator Beam Arm Repair and Refinish
Figure 408 (Sheet 1)



65-46109-19

Actuator Beam Arm Repair and Refinish
Figure 408 (Sheet 2)

		①	②	③	④	⑤	⑥	⑦	⑧	⑨
65-46109-5 13	DESIGN DIM	3.525 3.515	1.376 1.375	2.7511 2.7500	1.441 1.440	2.885 2.875	0.753 0.751 9	1.505 1.502 9	1.30 1.28	2.59 2.57
65-46109-7 14	DESIGN DIM	3.475 3.465	1.376 1.375	2.7511 2.7500	1.391 1.390	2.785 2.775	0.753 0.751 9	1.505 1.502 9	1.30 1.28	2.59 2.57
65C33032-2 15	DESIGN DIM	3.475 3.465	1.3755 1.3745	2.931 2.930	1.391 1.390	2.785 2.775	0.753 0.751	1.505 1.502	1.475 1.470	2.950 2.940
65-46109-11	DESIGN DIM	3.475 3.465	1.501 1.500	2.7511 2.7500	1.395 1.391	2.785 2.775	0.768 0.763 9	1.535 9 1.525 10	1.295 1.290	2.590 2.580
	REPAIR LIMIT	———	1.560 7	2.8310 7	1.355 1	2.684 1	0.793 2 3	1.586 2 3 10	1.263 1 2	2.526 1 2
65-46109-15, -15L, -19, -21 16	DESIGN DIM 9	3.475 3.465	1.5025 1.5015	2.7511 2.7500	1.395 1.391	2.785 2.775	0.761 0.758	1.521 1.516 10	1.295 1.290	2.590 2.580
	REPAIR LIMIT	———	1.560 7	2.8310 7	1.355 1	2.684 1	0.793 2 3	1.586 2 3 10	1.263 1 2	2.526 1 2
65-46109-13	DESIGN DIM	3.475 3.465	1.376 1.375	2.7511 2.7500	1.395 1.391	2.785 2.775	0.761 0.758 9	1.521 1.516 9	1.30 1.28	2.590 2.570
	REPAIR LIMIT	———	1.436 7	2.8310 7	1.355 1	2.684 1	0.778 2 3	1.556 2 3	1.255 1 2	2.510 1 2
65-46109-17	DESIGN DIM 9	3.525 3.515	1.376 1.375	2.7511 2.7500	1.445 1.441	2.885 2.875	0.761 0.758	1.521 1.516	1.30 1.28	2.590 2.570
	REPAIR LIMIT	———	1.436 7	2.810 7	1.425 1	2.845 1	0.778 2 3	1.556 2 3	1.255 1 2	2.510 1 2
65C33032-5	DESIGN DIM	3.475 3.465	1.377 1.376	2.931 2.930	1.395 1.391	2.785 2.775	0.761 0.758	1.521 1.516	1.475 1.470	2.950 2.940
	REPAIR LIMIT	———	1.436 7	2.991 7	1.375 1	2.745 1	0.778 2 3	1.556 2 3	1.448 1 2	2.896 1 2
65C33032-7	DESIGN DIM	3.475 3.465	1.3755 1.3745	2.931 2.930	1.395 1.391	2.785 2.775	0.761 0.758	1.521 1.516	1.475 1.470	2.950 2.940
	REPAIR LIMIT	———	1.436 7	2.991 7	1.375 1	2.745 1	0.778 2 3	1.556 2 3	1.448 1 2	2.896 1 2

ARM (77)
POST SB-32A1224

Actuator Beam Arm Repair and Refinish
Figure 408 (Sheet 3)

E75087

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) AND APPLY PRIMER, BMS 10-11, TYPE 1 (F-20.02) ALL OVER. AFTER INSTL OF BUSHINGS AND LUBE FITTINGS, APPLY ENAMEL BMS 10-11, TYPE 2 (F-21.02) ON ALL EXTERIOR SURFACES EXCEPT ON BUSHINGS AND LUBE FITTINGS. RESTORE MARKINGS PER 6.

REPAIR

REF 1, 2, 3, 11, 12

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.03

SHOT PEEN: (SOPM 20-20-03)
0.016-0.033 SHOT SIZE
0.012-0.015A2 INTENSITY

MATERIAL: 4340M STEEL (275-300 KSI)

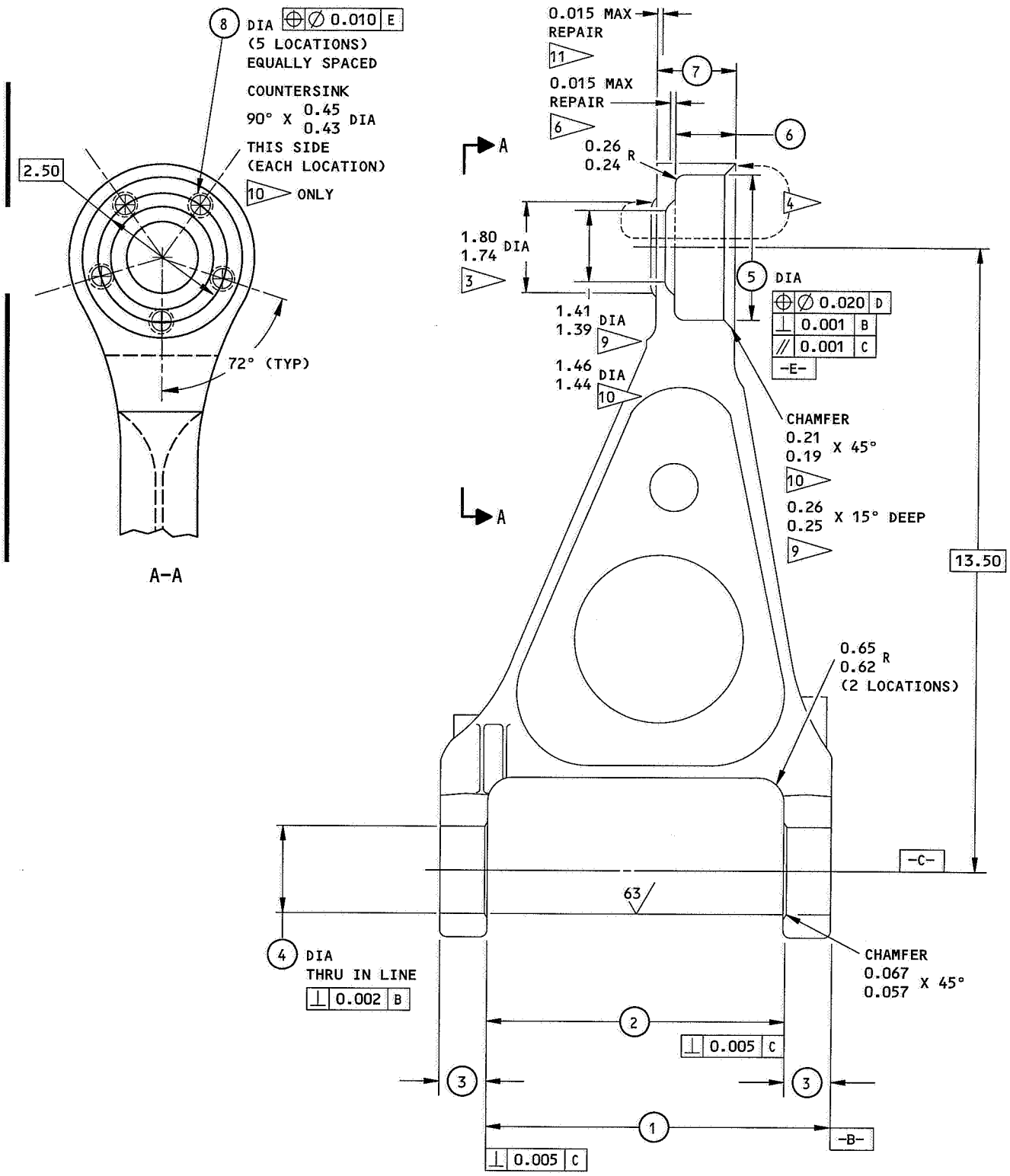
DIMENSIONS ARE AFTER PLATING UNLESS SHOWN BY 9

ALL DIMENSIONS ARE IN INCHES

1. LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS OR CHROME OR NICKEL PLATE BUILDUP AND INSTALLATION OF BUSHINGS LISTED IN PARTS LIST.
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 BE 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 0.30-0.07 R.
3. RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED.
4. DELETED
5. DELETED
6. SILK SCREEN MARKINGS (SOPM 20-50-10) COLOR 31136 RED (FED-STD-595).
7. LIMIT FOR INSTALLATION OF OVERSIZE BUSHING.
8. DELETED
9. THESE DIMENSIONS APPLY BEFORE PLATING.
10. DIMENSION IS NOT AFFECTED BY SB-32A1224.
11. ANTIROTATION HOLE REPAIR BUSHING: SEE FIG. 417. INSTALL BUSHING WITH WET BMS 5-95 SEALANT
12. ANTIROTATION HOLE: 0.379-0.375 DESIGN DIA THRU. 0.510 MAX REPAIR DIA, FOR INSTALLATION OF 11.
13. AFTER REPAIR PER SB-32A1224, 65-46109-5 IS IDENTIFIED AS 65-46109-17.
14. AFTER REPAIR PER SB-32A1224, 65-46109-7 IS IDENTIFIED AS 65-46109-13.
15. AFTER REPAIR PER SB-32A1224, 65C33032-2 IS IDENTIFIED AS 65C33032-7.
16. THE L SUFFIX IDENTIFIES AN ACTUATOR BEAM ARM WHICH HAD A CLEARANCE CHECK TO MAKE SURE A RADIUS DOES NOT TOUCH THE MATING LUG ON THE OUTER CYLINDER.

ARM (77)
POST SB-32A1224

Actuator Beam Arm Repair and Refinish
Figure 408 (Sheet 4)



UPPER TORSION LINK (26)
Upper Torsion Link Repair and Refinish
Figure 409 (Sheet 1)

F11149

	(1)	(2)	(3)	(4)	(5)	(6) (9)	(6) (10)	(7) (9)	(7) (10)	(8)
DESIGN DIM	7.520 7.505	6.505 6.495	1.020 1.000	1.8760 1.8750	3.125 3.120	1.350 1.330	1.300 1.280	1.743 1.738	1.695 1.685	0.354 0.342
REPAIR LIMIT	1 5	6.580 1 2	0.967 1 2	1.987 1	3.185 6 3.245 7	1.365 6	1.315 6	---	1.675 11	0.375 8 0.474 7

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER UNLESS SHOWN BY 3. APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02). AFTER INSTALLATION OF BUSHING AND LUBE FITTINGS, APPLY BMS 10-11, TYPE 2 ENAMEL (F-21.02) BUT NOT ON BUSHINGS OR LUBE FITTINGS OR AS SHOWN BY 4.

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS (FIG. 418).

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 BE 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 CHROME PLATE (F-15.34) THIS AREA, 0.003-0.005 THICK, WITH 0.03 MAX CHROME PLATE RUNOUT AT EDGE OF 1.44-1.46 DIA HOLE.

REPAIR

REF 1 2 5 THRU 8 11

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01 - 0.03

SHOT PEEN: (SOPM 20-10-03)
0.016-0.033 SHOT SIZE
0.012-0.015 A2 INTENSITY

MATERIAL: 4340M STEEL, (275-300 KSI)

ALL DIMENSIONS ARE IN INCHES

4 NO PRIMER OR ENAMEL

5 RESTORATION TO DESIGN DIMENSIONS IS NOT REQUIRED. DESIGN DIMENSIONS ARE SHOWN ONLY TO HELP MAKE OVERSIZE BUSHINGS. (REPAIR DIMENSION IS CONTROLLED BY MATERIAL REMOVAL FROM OTHER DIMENSIONS)

6 LIMIT FOR SULFAMATE NICKEL PLATE BUILDUP (SOPM 20-42-09)

7 LIMIT FOR INSTALLATION OF REPAIR SLEEVE (FIG. 417)

8 RESTORATION TO DESIGN DIMENSIONS IS NOT REQUIRED

9 65-67963-2

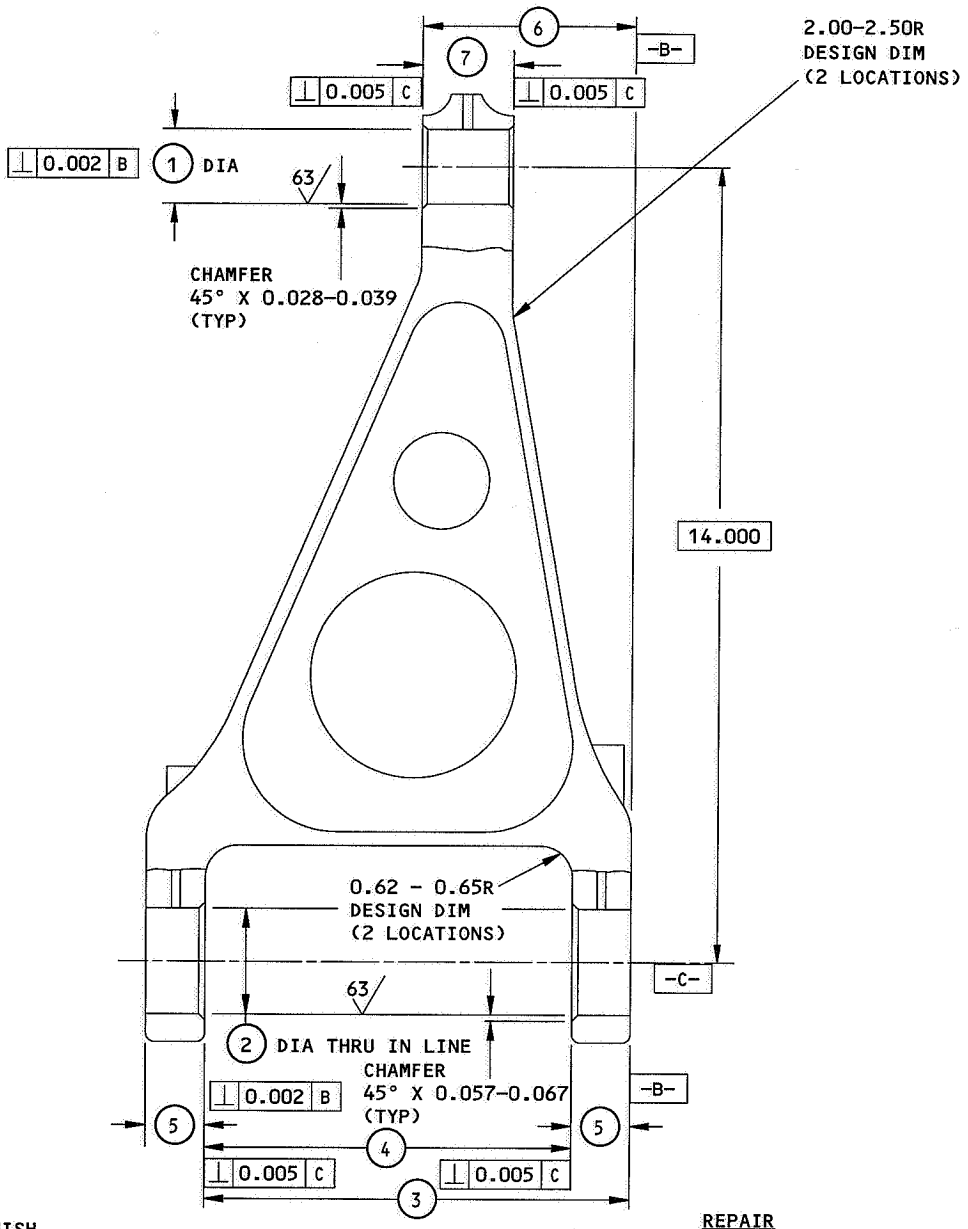
10 65-67963-4, 69-54798-15

11 LIMIT FOR CHROME PLATE BUILDUP PER 20-42-03

UPPER TORSION LINK (26)

Upper Torsion Link Repair and Refinish
Figure 409 (Sheet 2)

F11275



REFINISH

CADMIUM-TITANIUM PLATE (F-1.181 OR F-15.01) ALL OVER. APPLY PRIMER PER 3. AFTER INSTALLATION OF BUSHINGS AND LUBE FITTINGS, APPLY ENAMEL PER 4 BUT NOT ON BUSHING OR LUBE FITTINGS.

REPAIR

REF 1

125 MACHINE FINISH EXCEPT AS NOTED.

BREAK SHARP EDGES 0.01-0.03

SHOT PEEN: (SOPM 20-10-03)
0.016-0.033 SHOT SIZE
0.012-0.015A2 INTENSITY

MATERIAL: 4340M STEEL, 270-300 KSI ON:
65-46102-19,-20
65-67968-SERIES
69-54798-SERIES
4340M STEEL, 275-300 KSI ON:
65-46102-22,-24

ALL DIMENSIONS ARE IN INCHES

LOWER TORSION LINK (32)

Lower Torsion Link Repair and Refinish
Figure 410 (Sheet 1)

		①	②	③	④	⑤	⑥	⑦
65-46102-19, -20 65-67968-3, -4	DESIGN DIM	1.3135 1.3120	1.876 1.875	7.520 7.505	6.505 6.495	1.020 1.000	3.905 3.895	1.735 1.725
	REPAIR LIMIT	1.373 ▷1	1.954 ▷1	▷1 ▷5	6.580 ▷1 ▷2	0.960 ▷1 ▷2	▷1 ▷5	1.500 ▷1 ▷2
65-46102-22, -24 69-54798, -5,-16,-17	DESIGN DIM	1.3135 1.3120	1.876 1.875	7.520 7.505	6.505 6.495	1.020 1.000	3.780 3.770	1.605 1.600
	REPAIR LIMIT	1.373 ▷1	1.954 ▷1	▷1 ▷5	6.580 ▷1 ▷2	0.960 ▷1 ▷2	▷1 ▷5	1.500 ▷1 ▷2

▷1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS (FIG. 415, 418)

▷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 BE 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 APPLY BMS 10-11, TYPE 1 PRIMER (SRF-12.205 OR F-20.02)

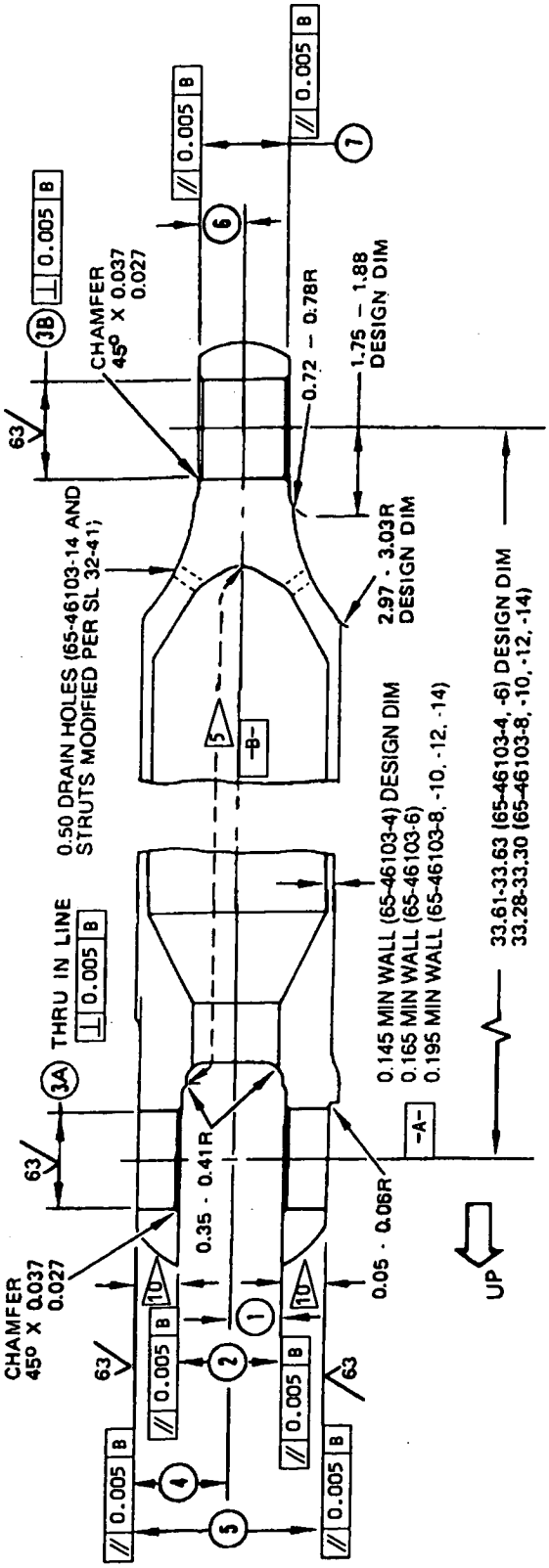
▷4 APPLY BMS 10-11, TYPE 2 ENAMEL (SRF-12.63 OR F-21.02)

▷5 RESTORATION TO DESIGN DIMENSIONS IS NOT REQUIRED. DESIGN DIMENSIONS ARE SHOWN ONLY TO HELP MAKE OVERSIZE BUSHINGS. (REPAIR DIMENSION IS CONTROLLED BY MATERIAL REMOVAL FROM OTHER DIMENSIONS)

LOWER TORSION LINK (32)

Lower Torsion Link Repair and Refinish
Figure 410 (Sheet 2)

G92484



REFINISH

65-46103-() AND STRUTS MODIFIED PER SL 32-41:

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER. APPLY BMS 10-11 TYPE 1 PRIMER (20.02) ALL OVER BUT NOT ON INTERIOR BORE.

FINISH INTERIOR BORE PER 5

AFTER INSTALLATION OF BUSHINGS AND FITTINGS, APPLY BMS 10-11, TYPE 2 ENAMEL (F-21.02) ALL OVER BUT NOT ON INTERIOR BORE, BUSHINGS OR FITTINGS.

REPAIR

REF 1 2 6 THRU 10

125 MACHINE FINISH EXCEPT AS NOTED

BREAK SHARP EDGES 0.01-0.03

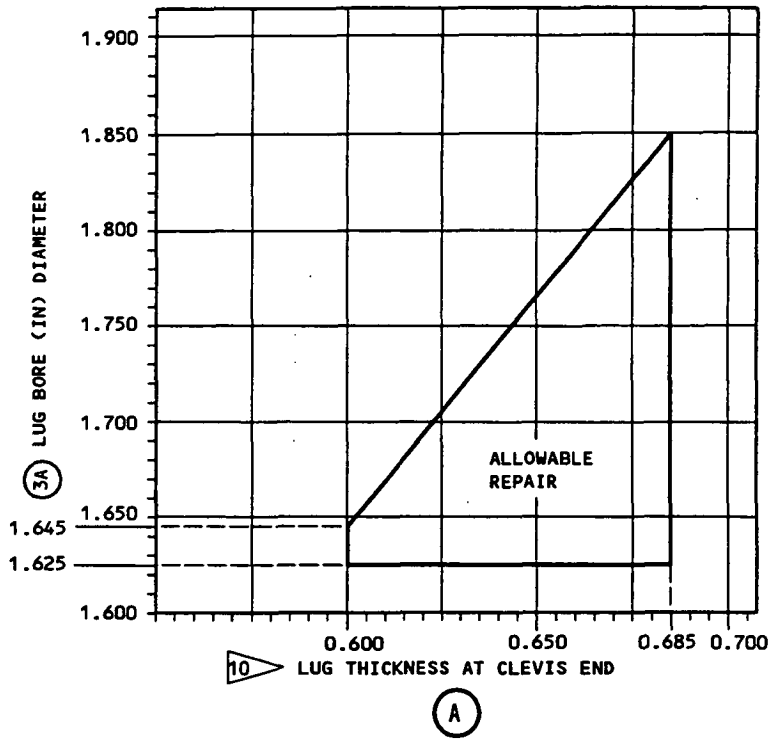
SHOT PEEN: (REF 20-10-03)
0.016-0.033 SHOT SIZE
0.012-0.015A2 INTENSITY

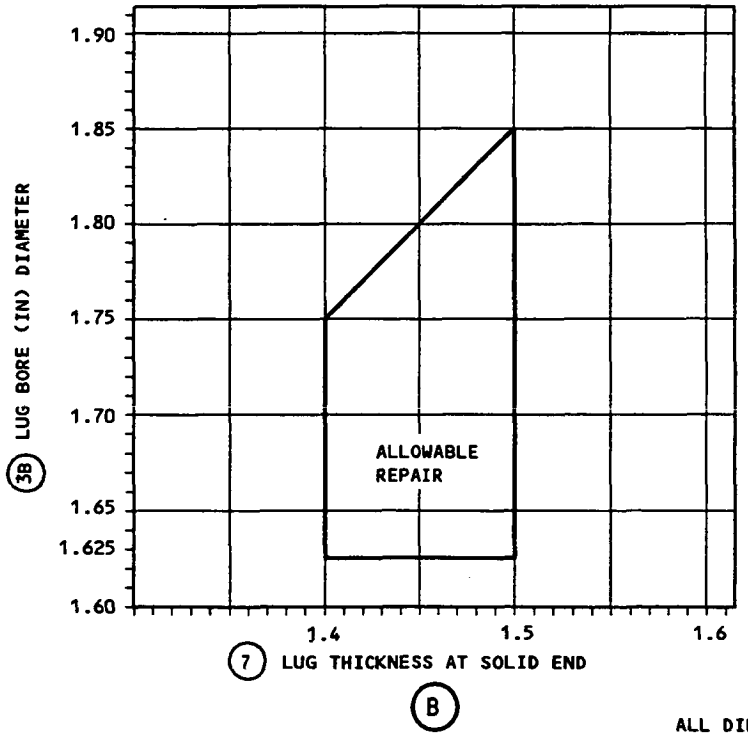
MATERIAL: 4340M STEEL (270-300 KSI)

ALL DIMENSIONS ARE IN INCHES

UPPER DRAG STRUT (42)

Upper Drag Strut Repair and Refinish
Figure 411 (Sheet 1)





ALL DIMENSIONS ARE IN INCHES

UPPER DRAG STRUT (42)

Upper Drag Strut Repair and Refinish
Figure 411 (Sheet 2)

A11873

	①	②	③A ▷3	④A ▷4	③B ▷3	④B ▷4	④	⑤	⑥	⑦
DESIGN DIM	0.877 0.873	1.755 1.745	1.626 1 625	1.646 1 645	1.626 1.625	1.646 1.645	1.562 1.558	3.125 3.115	0.752 0.748	1.505 1.495
REPAIR LIMIT	▷2 ▷6 ▷9	▷2 ▷6 ▷9	▷1 ▷6	▷1 ▷6	▷1 ▷7	▷1 ▷7	1.523 ▷2 ▷6 ▷9	3.045 ▷2 ▷6 ▷9	▷2 ▷7 ▷9	▷2 ▷7 ▷9

▷1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

▷2 LUG FACE MACHINING REQUIREMENTS:

1. FLAT SURFACE MUST BE MINIMUM OF 0.02 LARGER THAN FLANGE DIA OF BUSHING TO BE INSTALLED.
2. 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 65-46103-4,-6,-8,-10

▷4 65-46103-12,-14

▷5 APPLY BMS 10-11 TYPE 1 PRIMER (F-20.03) AND THEN MIL-C-11796, CLASS 1 CORROSION PREVENTIVE COMPOUND (F-19.03).

FOR 65-46103-14 AND STRUTS MODIFIED PER SL 32-41, MAKE SURE THE 0.50 DIA DRAINAGE HOLES AT THE LOWER END ARE OPEN.

▷6 SEE GRAPH (A) FOR REPAIR LIMIT.

▷7 SEE GRAPH (B) FOR REPAIR LIMIT.

▷8 LIMIT FOR SULFAMATE NICKEL PLATE BUILDUP. AS AN ALTERNATIVE, YOU CAN BUILD UP WITH CHROME PLATE IF BUILDUP REQUIRED IS 0.015 OR LESS.

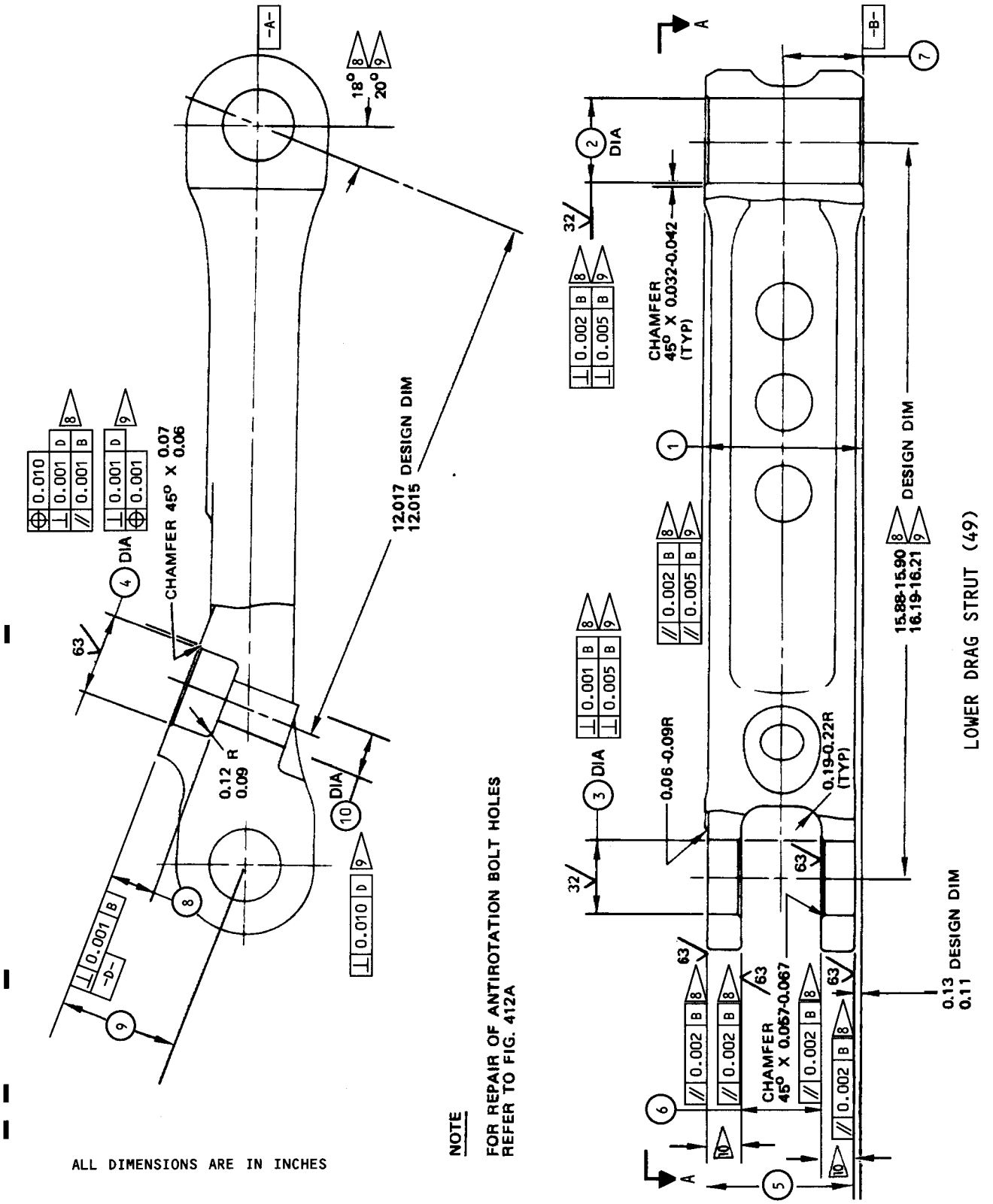
▷9 LIMIT FOR INSTALLATION OF OVERSIZED FLANGED BUSHINGS OR SULFAMATE NICKEL WITH STANDARD BUSHINGS IF 0.040 OR LESS PLATING THICKNESS IS REQUIRED. CHROME PLATE WITH STANDARD BUSHINGS IS OPTIONAL IF 0.015 OR LESS PLATING THICKNESS IS REQUIRED.

▷10 THICKNESS OF EACH LUG AT THE UPPER (CLEVIS) END. SEE GRAPH (A) FOR REPAIR LIMIT.

UPPER DRAG STRUT (42)

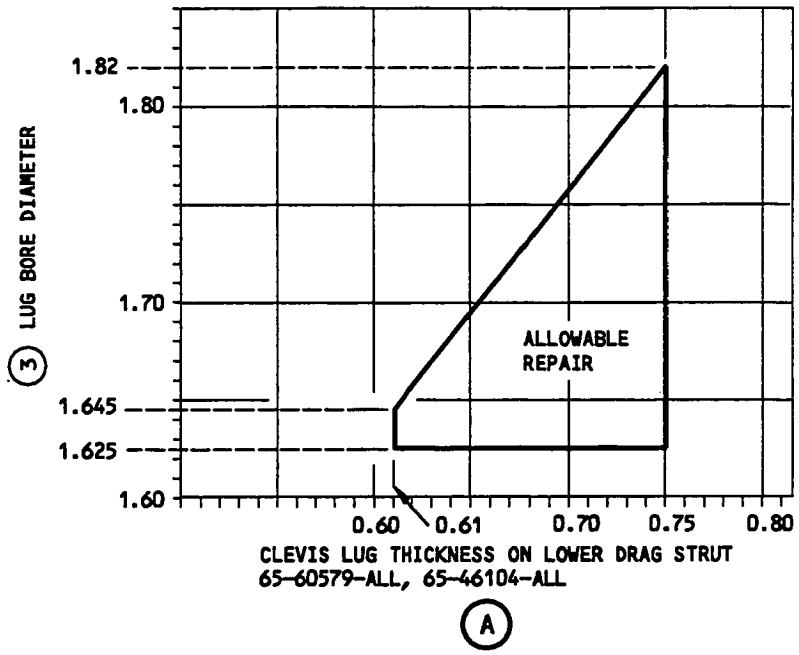
Upper Drag Strut Repair and Refinish
Figure 411 (Sheet 3)

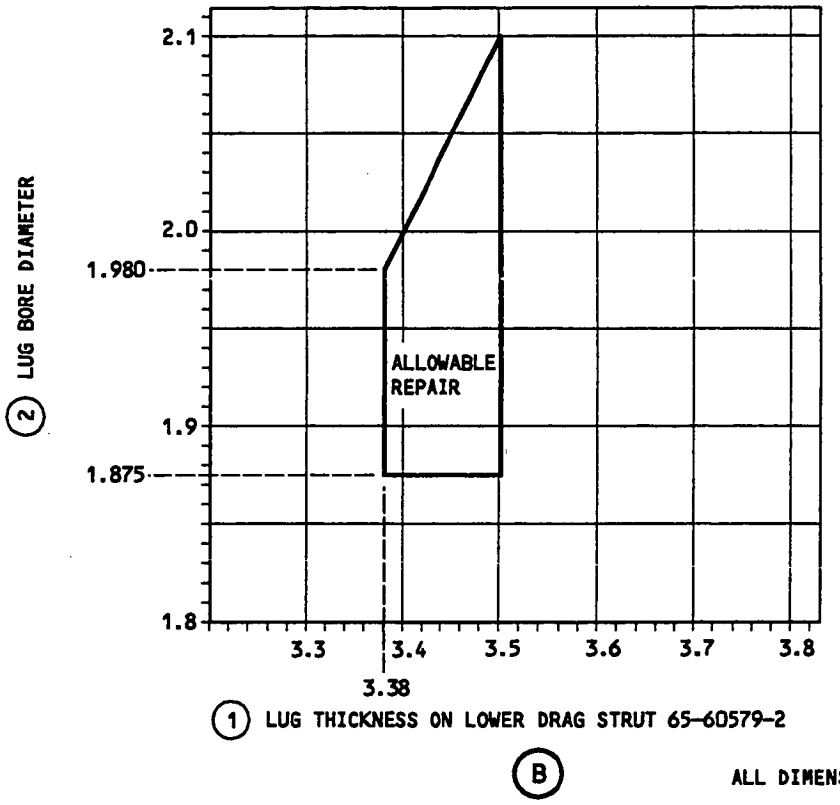
A12037



Lower Drag Strut Repair and Refinish
Figure 412 (Sheet 1)

G72716



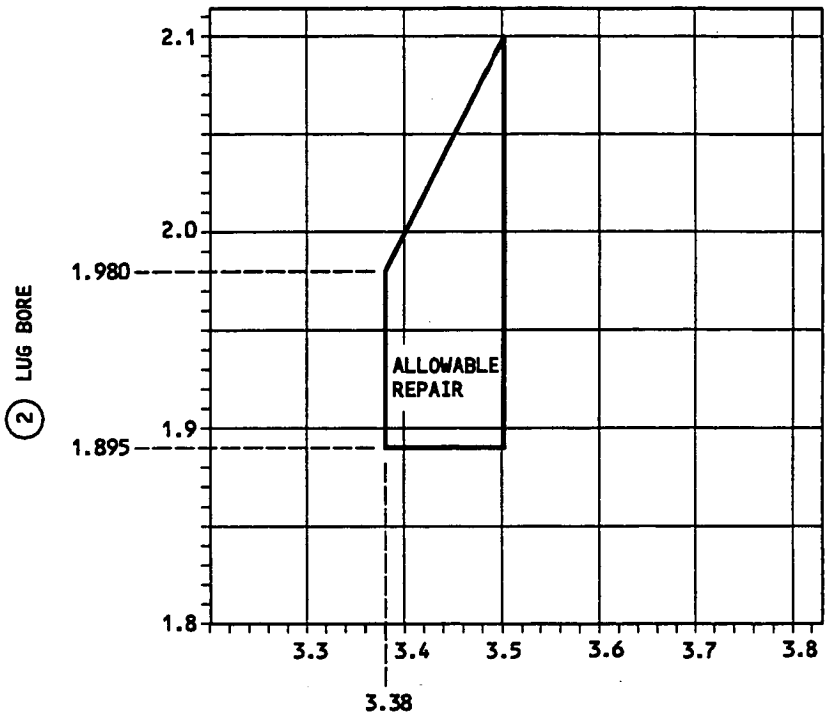


ALL DIMENSIONS ARE IN INCHES

LOWER DRAG STRUT (49)

Lower Drag Strut Repair and Refinish
Figure 412 (Sheet 2)

A11875



ALL DIMENSIONS ARE IN INCHES

C

LOWER DRAG STRUT (49)

Lower Drag Strut Repair and Refinish
Figure 412 (Sheet 3)

		① 2	② 2	③	④	⑤ 2	⑥ 2	⑦ 2
65-46104	DESIGN DIM	3.508 3.498	1.8765 1.8750	1.626 1.625	1.751 1.750	3.255 3.245	1.760 1.740	1.754 1.749
	REPAIR LIMIT 1	3.38 3	2.10	SEE CHART (A)	1.850	SEE CHART (A) 3	SEE CHART (A) 3	1.69 3
65-60579-2	DESIGN DIM	3.508 3.498	1.8765 1.8750	1.626 1.625	1.751 1.750	3.255 3.245	1.755 1.745	1.754 1.749
	REPAIR LIMIT 1	SEE CHART (B) 3	SEE CHART (B)	SEE CHART (A)	1.850	SEE CHART (A) 3	SEE CHART (A) 3	SEE CHART (B) 3
65-60579-4, -6	DESIGN DIM	3.508 3.498	1.896 1.895	1.646 1.645	1.751 1.750	3.255 3.245	1.755 1.745	1.754 1.749
	REPAIR LIMIT 1	SEE CHART (C) 3	SEE CHART (C)	SEE CHART (A)	1.850	SEE CHART (A) 3	SEE CHART (A) 3	SEE CHART (C) 3

		⑧	⑨	⑩
65-46104	DESIGN DIM	0.84 0.81	2.199 2.189	0.95 0.93
	REPAIR LIMIT	0.855 6	2.178 7	1.070 6
65-60579-2	DESIGN DIM	0.95 0.93	2.738 2.734	0.95 0.93
	REPAIR LIMIT	0.965 6	2.720 7	1.070 6
65-60579-4, -6	DESIGN DIM	0.95 0.93	2.738 2.734	0.95 0.93
	REPAIR LIMIT	0.965 6	2.720 7	1.070 6

LOWER DRAG STRUT (49)

Lower Drag Strut Repair and Refinish
Figure 412 (Sheet 4)

A11494

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) AND APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02). AFTER INSTL OF BUSHINGS AND LUBE FITTINGS, APPLY BMS 10-11, TYPE 2 ENAMEL (F-21.02), BUT NOT ON BUSHINGS OR LUBE FITTINGS

REPAIR

REF 1 3 6 7

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.03

SHOT PEEN: (REF 20-10-03)
0.016-0.033 SHOT SIZE
0.012-0.015 A2 INTENSITY

MATERIAL: 4340M STEEL (270-300 KSI)

ALL DIMENSIONS ARE IN INCHES

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS.

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. (1) DIMENSION ONLY
2. FLAT SURFACE MUST BE MINIMUM OF 0.02 LARGER THAN FLANGE DIA OF BUSHING TO BE 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 (OPTIONAL TO 1, FOR LUG FACES ONLY) LIMIT FOR ONE OF THESE ALTERNATIVES:

1. CHROME PLATE BUILDUP, 0.015 MAX THICK
2. SULFAMATE NICKEL PLATE, THEN 0.012-0.015 THICK CHROME PLATE BUILDUP
3. SULFAMATE NICKEL PLATE BUILDUP

4 DELETED

5 DELETED

6 RESTORATION TO DESIGN DIM NOT NECESSARY

7 LIMIT FOR INSTL OF OVERSIZE FLANGED BUSHING. ENLARGE SPOTFACE TO 3.50 DIA X 0.09-0.15 FILLET RADIUS. RESTORE HOLE CHAMFER

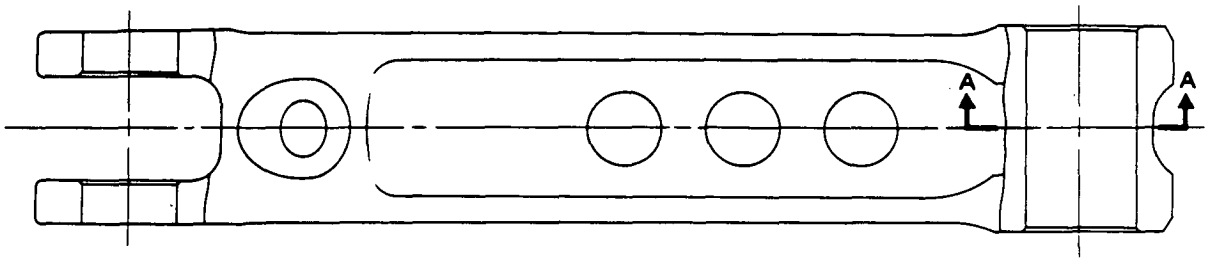
8 65-46104

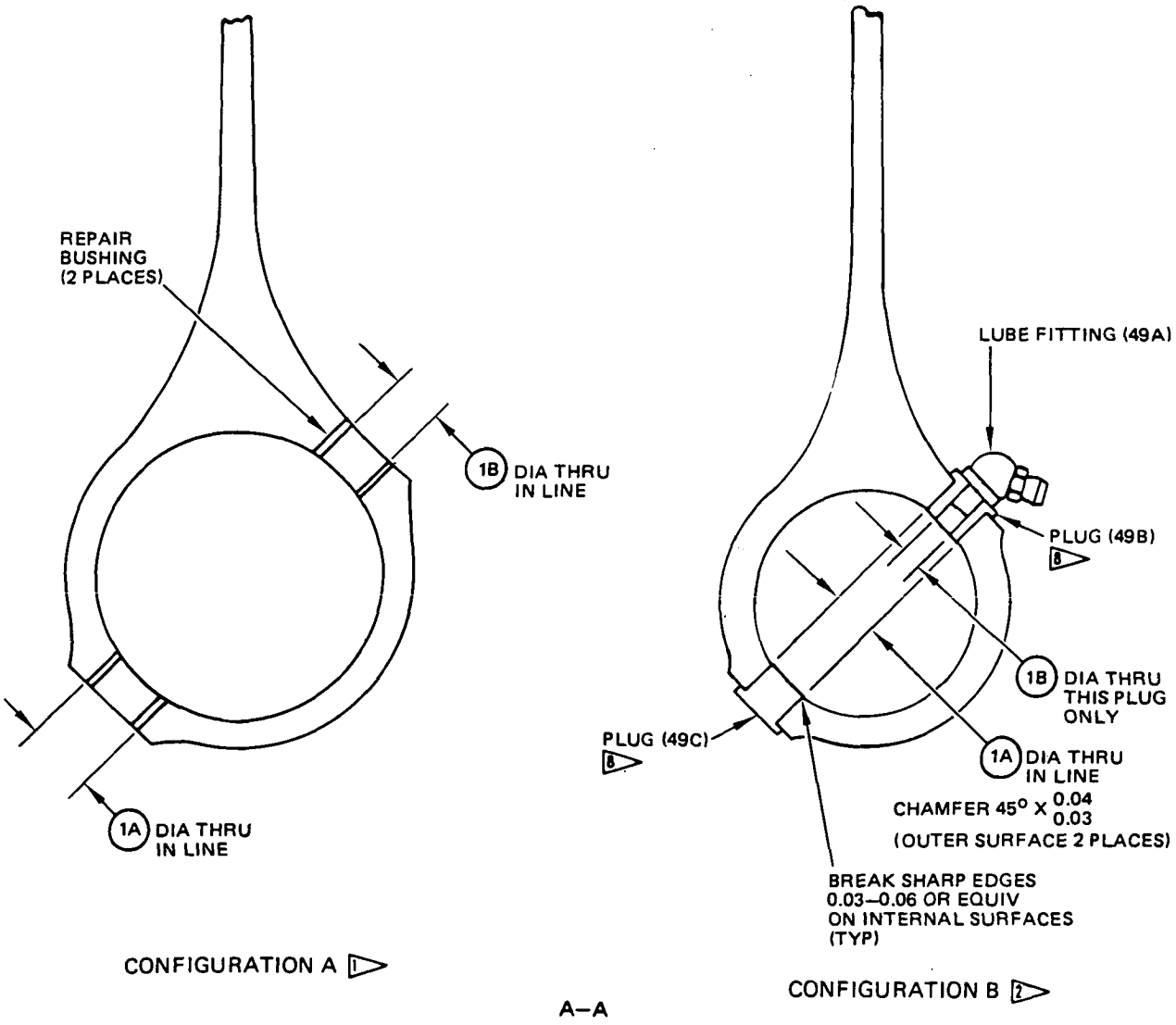
9 65-60579

10 FOR THESE LUG THICKNESSES, SEE CHART (A)

LOWER DRAG STRUT (49)

Lower Drag Strut Repair and Refinish
Figure 412 (Sheet 5)





Lower Drag Strut - Antirotation Bolt Hole Repair
Figure 412A (Sheet 1)

	(1A) 1	(1A) 2	(1B) 1	(1B) 2
DESIGN DIM	0.376 0.375 6	0.3795 0.3790	0.376 0.375 7	0.189 0.188
REPAIR LIMIT 3	0.3795 0.3790	—	—	—
REPAIR LIMIT 4	0.500	0.500	—	—
REPAIR LIMIT 5	0.500 0.438	—	—	—

1 CONFIG USING ANTIROTATION BOLTS (PRE SB 32–1123)

2 CONFIG USING PLUGS & LUBE FITTING (ANTIROTATION BOLTS DELETED) (POST SB 32–1123)

3 LIMIT FOR INSTL OF PLUGS (49B, 49C) PER PARTS LITS. (CHANGES TO CONFIG B)

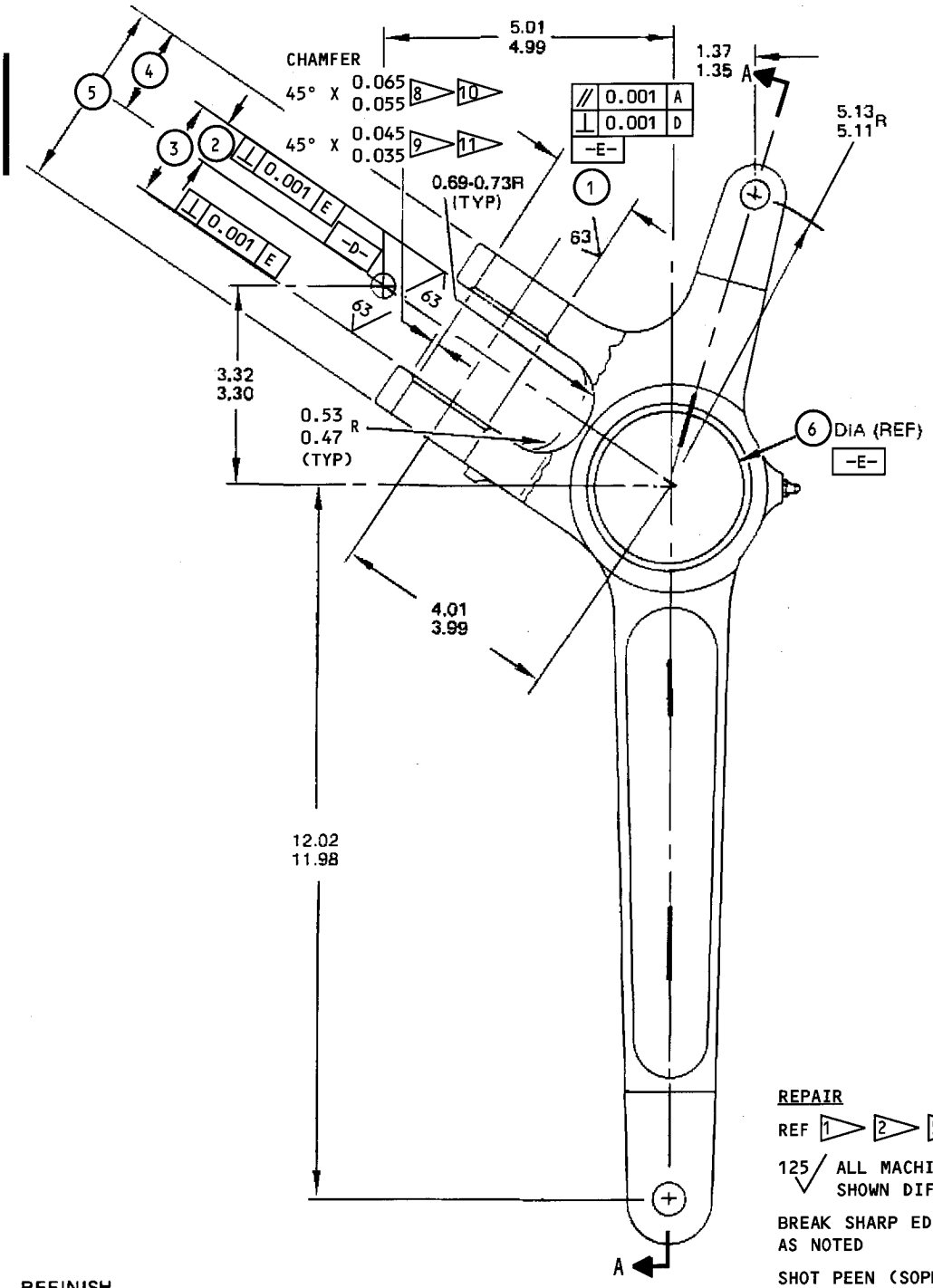
4 LIMIT FOR INSTL OF OVERSIZE PLUGS PER FIG. 419A (FOR REPAIR OF CONFIG A OR B; RESULTS IN CONFIG B)

5 LIMIT FOR INSTL OF REPAIR BUSHINGS PER FIG. 417 (FOR REPAIR OF CONFIG A; CONFIG A RETAINED)

6 ORIGINAL DESIGN DIA, BEFORE REPAIR PER 3 OR 4 OR 5

7 FINISH DIA OF REPAIR BUSHING, AFTER REPAIR PER 5

8 INSTALL PLUGS BY SHRINK FIT METHOD, WITH WET PRIMER BMS 10–11, TYPE 1 ON FAYING SURFACES. AFTER PLUG (49B) INSTL, DRILL HOLE FOR LUBE FITTING THRU PLUG. FILLET SEAL PLUG FLANGES WITH BMS 5–95 SEALANT.



REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) AND APPLY PRIMER PER 3 ALL OVER. AFTER INSTL OF BUSHINGS & FITTINGS, APPLY ENAMEL PER 4 EXCEPT ON BUSHINGS & FITTINGS

REPAIR

REF 1 2 5 6

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.03 EXCEPT AS NOTED

SHOT PEEN (SOPM 20-10-03)
0.016-0.033 SHOT SIZE
0.012-0.015 A2 INTENSITY

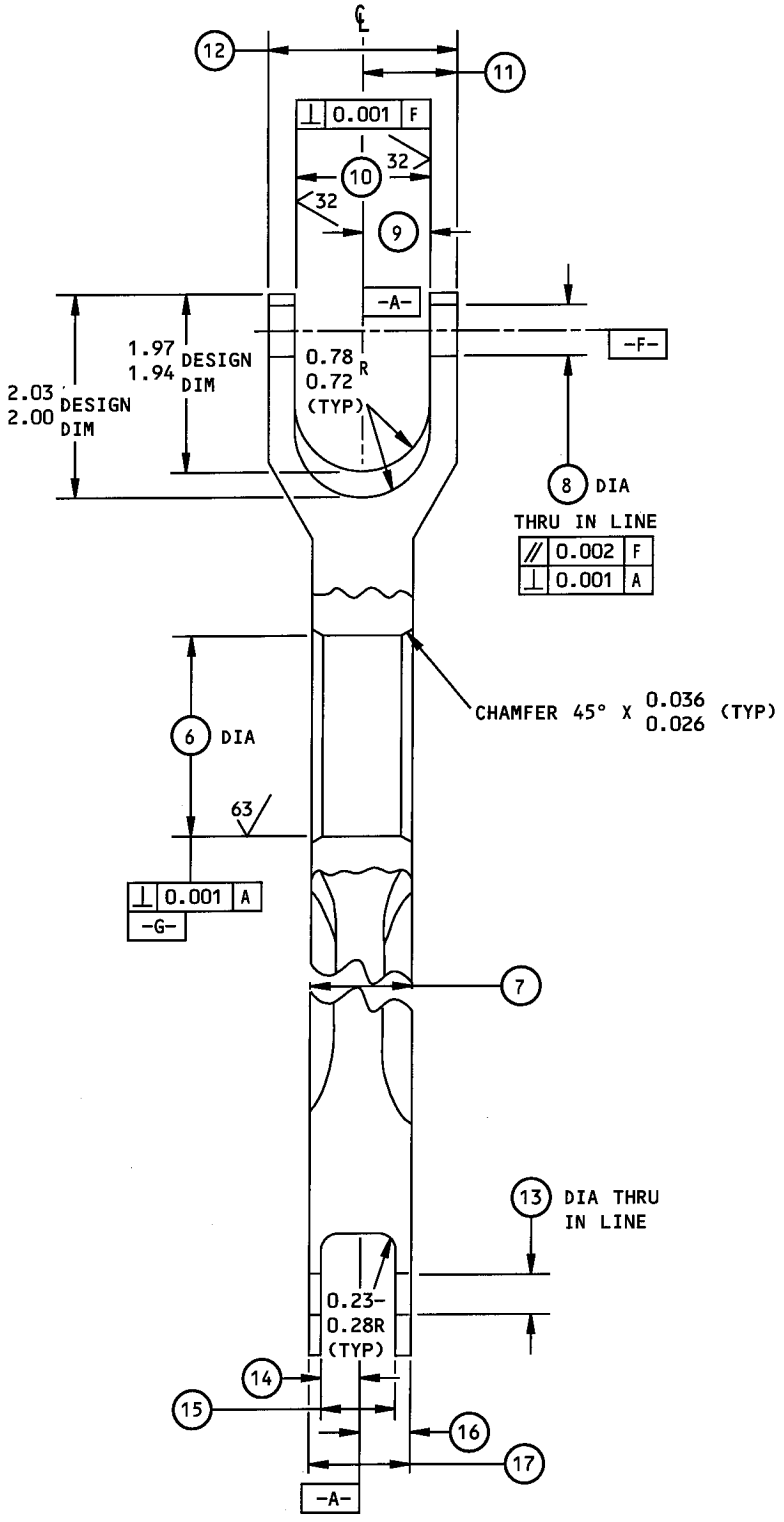
MATERIAL: 4340M STEEL, 275-300 KSI

ALL DIMENSIONS ARE IN INCHES

UNIVERSAL (53)

Universal Repair and Refinish
Figure 413 (Sheet 1)

G74607



A-A

UNIVERSAL (53)

Universal Repair and Refinish
Figure 413 (Sheet 2)

G74568

	(1) (8>10)	(1) (9>11)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (8>9)	(8) (10>11)
DESIGN DIM	1.501 1.500	1.564 1.563	0.880 0.870	1.755 1.745	1.640 1.620	3.265 3.245	2.438 2.437	1.2550 1.2450	0.501 0.500	0.5025 0.5015
REPAIR LIMIT	1.579 1>	1.643 1>	0.895 1>2> 5>	1.800 1>2> 5>	1.600 1>2> 5>	3.200 1>2> 5>	2.498 1>	1.1854 1>2> 5>	0.600 7>	0.6000 7>

	(9)	(10)	(11)	(12)	(13) (8>9)	(13) (10>11)	(14)	(15)	(16)	(17)
DESIGN DIM	0.877 0.875	1.755 1.751	1.160 1.152	2.315 2.305	0.438 0.437	0.439 0.438	0.440 0.438	0.880 0.876	0.610 0.595	1.22 1.19
REPAIR LIMIT	0.905 2>5>	1.811 2>5>	1.130 2>6>	2.255 2>6>	0.581 7>	0.581 7>	0.455 2>6>	0.909 2>6>	0.575 2>6>	1.16 2>6>

1> LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS.

2> LUG FACE MACHINING REQUIREMENTS:

1. MATERIAL REMOVED FROM ANY FACE MUST NOT BE MORE THAN HALF THE DIFFERENCE BETWEEN THE DESIGN DIMENSION AND REPAIR LIMIT.
2. FLAT SURFACE MUST BE MINIMUM OF 0.02 LARGER THAN FLANGE DIA OF BUSHING TO BE 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> APPLY PRIMER BMS 10-11, TYPE 1 (F-20.02)

4> APPLY ENAMEL, BMS 10-11, TYPE 2 (F-21.02)

5> 1. IF MAXIMUM MATERIAL REMOVAL IS 0.015 OR LESS PER SURFACE, THEN CHROME PLATE BACK TO DESIGN DIMENSIONS. PUT 0.040-0.060 RUNOUTS AT FILLETS AND EDGES.

2. IF MATERIAL REMOVAL IS MORE THAN 0.015 PER SURFACE, THEN SULFAMATE NICKEL PLATE (0.001 MINIMUM THICKNESS) AND THEN CHROME PLATE (0.003 MINIMUM, 0.015 MAXIMUM THICKNESS) BACK TO DESIGN DIMENSIONS. PUT 0.040-0.060 RUNOUTS AT FILLETS AND EDGES.

6> LIMIT FOR SULFAMATE NICKEL PLATE BUILDUP. CHROME PLATE BUILDUP OPTIONAL IF NOT THICKER THAN 0.015

7> LIMIT FOR INSTL OF REPAIR SLEEVE (FIG. 417)

8> 65-46106-2,-4,-6,-8

9> 65-46106-10

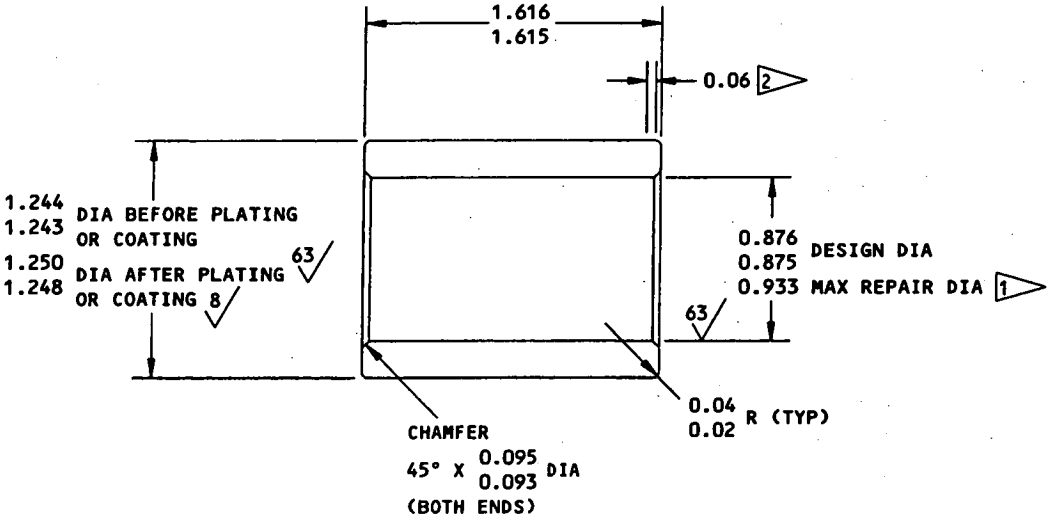
10> 65-46106-12

11> 65-46106-14

UNIVERSAL (53)

Universal Repair and Refinish
Figure 413 (Sheet 3)

G74571



REFINISH

CHROME PLATE (F-15.04 WHICH REPLACES F-1.846) THE OD OR APPLY BMS 10-67, TYPE 1 OR 17, CLASS 2, 3 OR 4 THERMAL SPRAY COATING (REF SOPM 20-10-05). GRIND TO DESIGN DIMENSIONS AND 8 MICROINCH FINISH. CADMIUM-TITANIUM PLATE (F-1.308, WHICH REPLACES F-1.181) ALL OTHER SURFACES, 0.0005 MIN THICK. CADMIUM-TITANIUM PLATING THROW-IN IS PREFERRED ON ID.

REPAIR

REF 1

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: 4330M STEEL, 220-240 KSI

DIMENSIONS ARE AFTER PLATING UNLESS SHOWN DIFFERENTLY

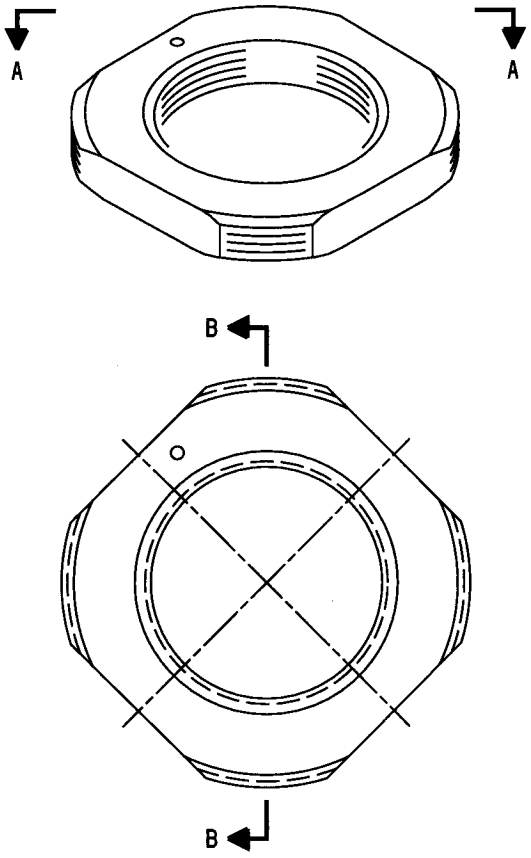
ALL DIMENSIONS ARE IN INCHES

1 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS, OR REPAIR SLEEVE AND STANDARD BUSHINGS.

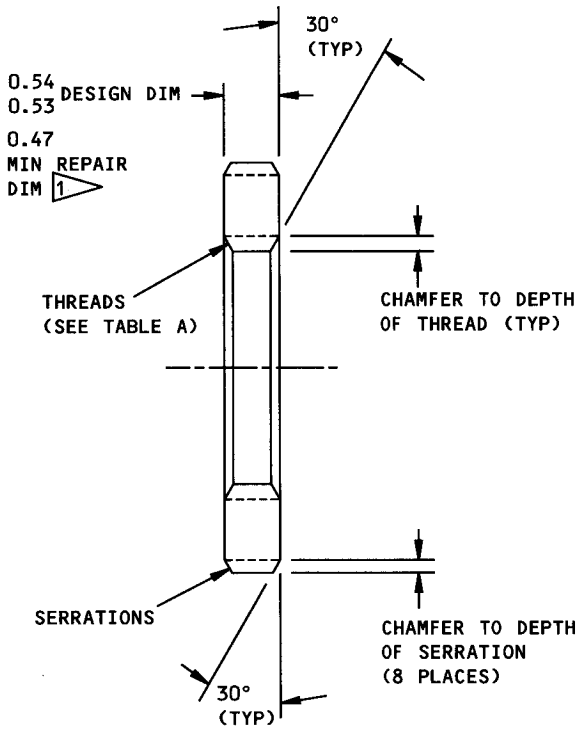
2 CHROME PLATE RUNOUT

ROLLER (150)

Roller Repair and Refinish
Figure 413A



A-A



B-B

THREAD SIZE	PART NUMBER
2.3125-16UNJS-3B	69-78313-4
2.3750-16UNJ-3B	69-78313-2
2.4375-16UNJS-3B	69-78313-1
2.5000-16UNJ-3B	69-41633-1,-3,-5
2.5625-16UNJS-3B	69-78313-3
2.6250-16UNJ-3B	69-41633-2,-4,-6

TABLE A

REFINISH

CADMIUM-TITANIUM PLATE (F-15.01) ALL OVER. WIPE WITH PRIMER (F-19.45) THE THREADS AND SERRATIONS. ON OTHER SURFACES, APPLY BMS 10-11, TYPE 1 PRIMER (F-20.02) AND BMS 10-11, TYPE 2 ENAMEL (F-21.02).

1 RESTORATION TO DESIGN DIMENSIONS NOT REQUIRED. IF MORE MATERIAL THAN THIS MUST BE REMOVED, THE PART MUST BE SCRAPPED

REPAIR

REF 1

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

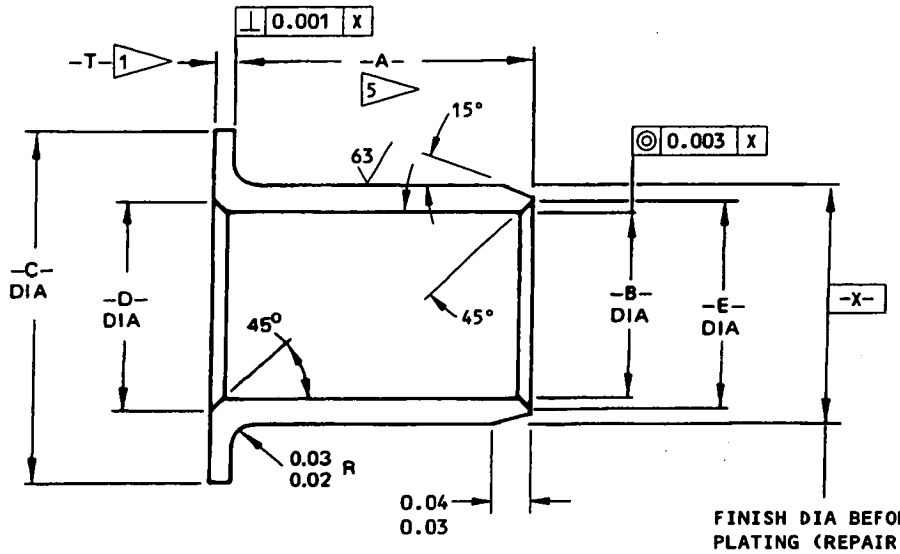
MATERIAL: 4340M STEEL, 270-300 KSI
(69-41633-1 ONLY)
4340M STEEL, 275-300 KSI
(ALL OTHERS)

ALL DIMENSIONS ARE IN INCHES

NUT (64)

Nut Repair and Refinish
Figure 413B

W75937



125 MACHINE FINISH EXCEPT AS NOTED.

BREAK SHARP EDGES 0.01-0.02R

CADMIUM PLATE (F-15.06) (OPTIONAL ON INTERNAL SURFACES AND FACE)

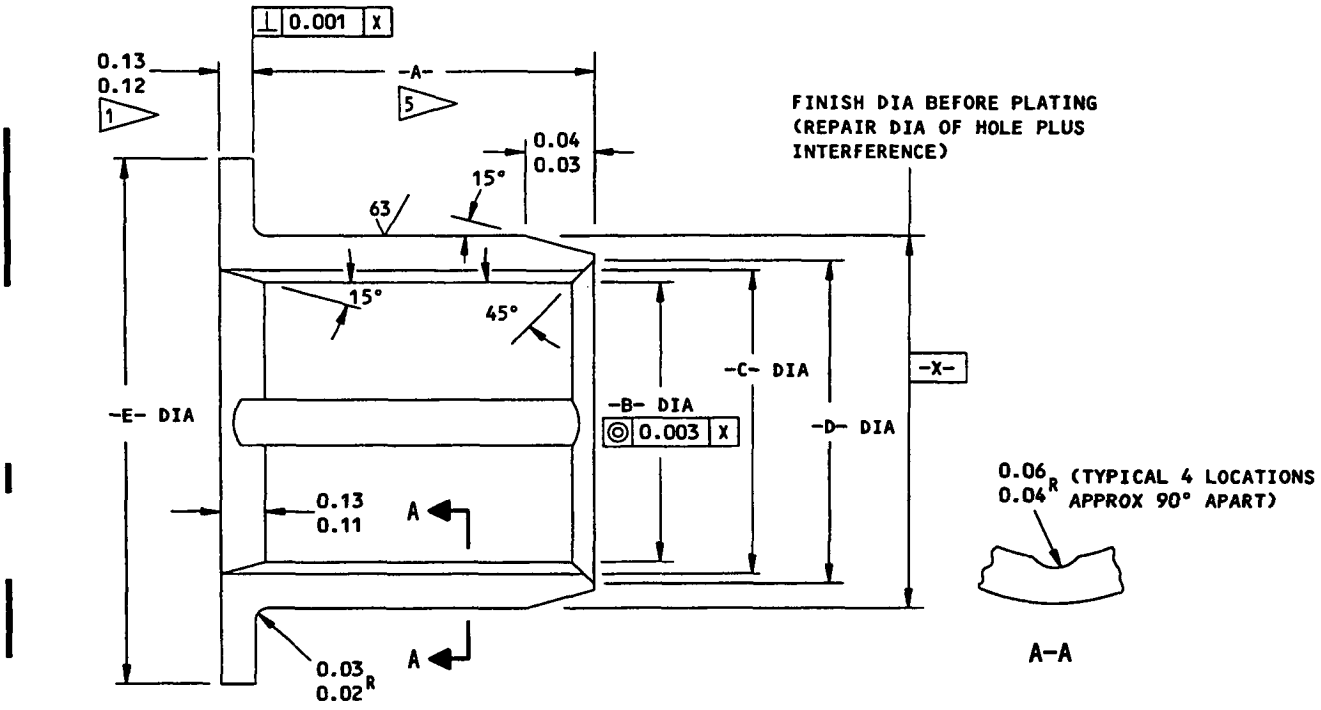
ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 414 (Sheet 1)

BUSHING TO BE REPLACED	-A- ±0.01	-B- MAX	-C- ±0.01	-D- ±0.01	-E- ±0.01	-T-	INTER-FERENCE	MATERIAL
40 (65-46150-16)	0.65	1.469	2.00	1.72	1.56	0.13 0.12	0.0025 0.0008	2
41 (65-46150-56)	0.72	1.469	2.00	1.56	1.56	0.13 0.12	0.0025 0.0008	4
41 (65-46150-26)	0.72	1.469	2.00	1.72	1.56	0.13 0.12	0.0025 0.0008	3
47 (65-46150-30)	0.72	1.469	2.00	1.66	1.56	0.13 0.12	0.0025 0.0008	2
48 (65-46150-31)	1.40	1.719	2.40	1.99	1.81	0.13 0.12	0.0025 0.0008	3
51 (65-46150-44)	0.72	1.345	2.00	1.60	1.44	0.13 0.12	0.0025 0.0008	2
51 (65-46150-113)	0.72	1.408	2.06	1.64	1.49	0.13 0.12	0.0025 0.0008	3
59 (65-46150-35)	1.50	1.219	1.60	1.42	1.30	0.13 0.12	0.0022 0.0006	2
59 (65-46150-55)	1.50	1.344	1.85	1.50	1.41	0.13 0.12	0.0025 0.0008	2
71 (65-46150-47)	0.44	1.219	1.75	1.47	1.31	0.13 0.12	0.0022 0.0006	2
71 (65-46150-61)	0.58	1.219	1.75	1.47	1.31	0.13 0.12	0.0022 0.0006	3
71 (65-46150-83)	0.58	1.219	1.75	1.47	1.31	0.13 0.12	0.0022 0.0006	4
72 (65-46150-49)	0.67	0.97	1.75	1.19	1.06	0.10 0.08	0.0022 0.0006	2
72 (65-46150-105)	0.70	1.220	2.00	1.44	1.31	0.13 0.12	0.0022 0.0006	3
72 (65-46150-106)	0.66	1.220	1.75	1.45	1.31	0.10 0.08	0.0022 0.0006	3
75 (65-46150-43)	1.00	2.594	3.30	2.87	2.69	0.13 0.12	0.0031 0.0012	2
76 9 (65-46150-127)								
80 (65-46150-15)	0.72	1.469	2.20	1.72	1.56	0.13 0.12	0.0025 0.0008	3
80 (65-46150-57)	0.72	1.469	2.20	1.72	1.56	0.13 0.12	0.0025 0.0008	4
81 (65-46150-52)	0.63	2.594	3.25	2.85	2.69	0.13 0.12	0.0031 0.0012	3
81 (65-46150-100)	0.60	2.594	3.25	2.85	2.69	0.13 0.12	0.0031 0.0012	3

POST SB-32A1224

Oversize Bushing Details
Figure 414 (Sheet 2)



FINISH

CADMIUM PLATE (F-15.06) ALL OVER
(OPT ON INTERNAL SURFACES)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

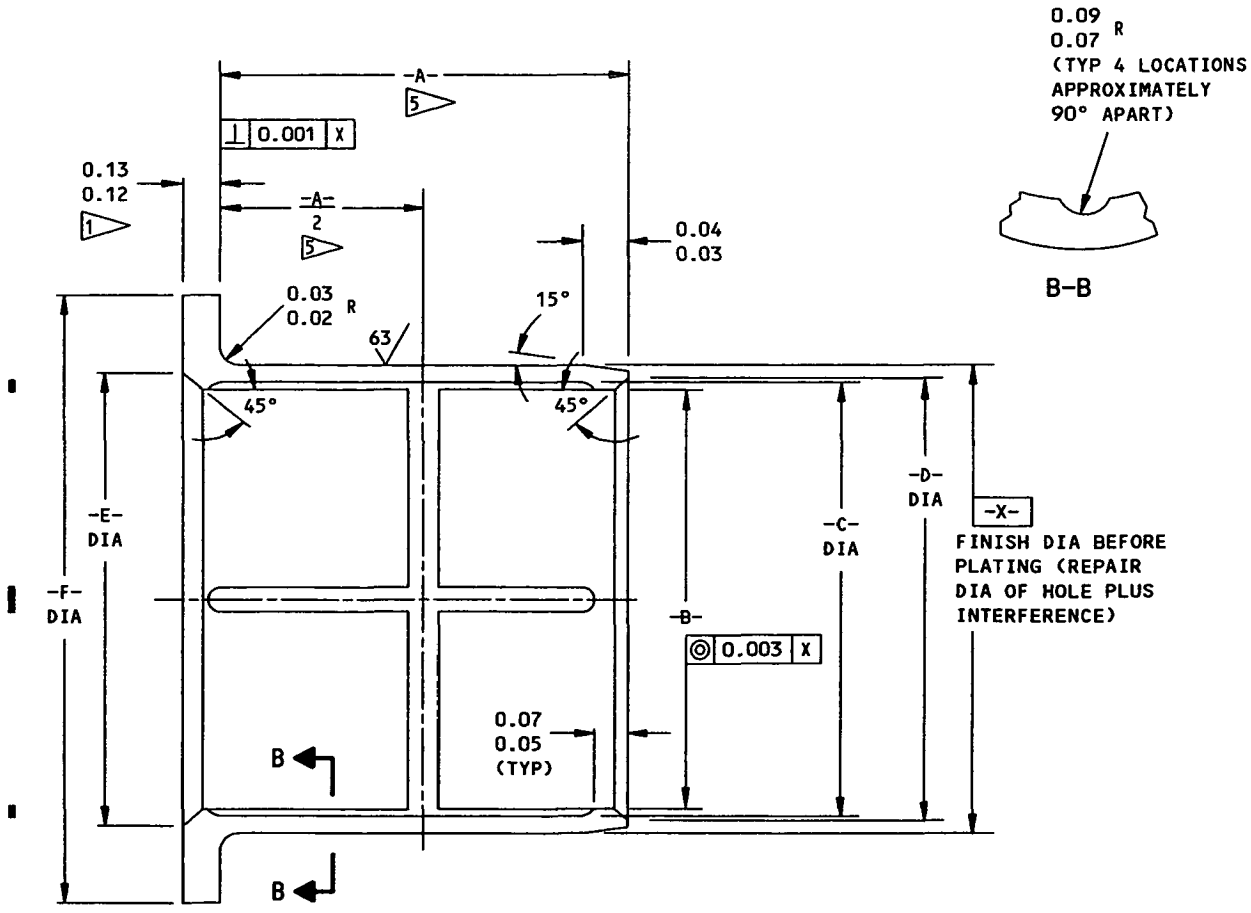
MATERIAL: AS NOTED

ALL DIMENSIONS ARE IN INCHES

BUSHING TO BE REPLACED	-A-	-B- MAX	-C-	-D-	-E-	INTER-FERENCE	MATERIAL
48 (65-46150-87)	1.41 1.39	1.719	1.780 1.770	1.82 1.80	2.41 2.39	0.0025 0.0008	3
41 (65-46150-90)	0.73 0.71	1.469	1.530 1.520	1.57 1.55	2.01 1.99	0.0025 0.0008	4
80 (65-46150-91)	0.73 0.71	1.469	1.530 1.520	1.57 1.55	2.21 2.19	0.0025 0.0008	4

Oversize Bushing Details
Figure 414 (Sheet 3)

F77302



FINISH

CADMIUM PLATE (F-15.06) ALL OVER
(OPT ON INTERNAL SURFACES)

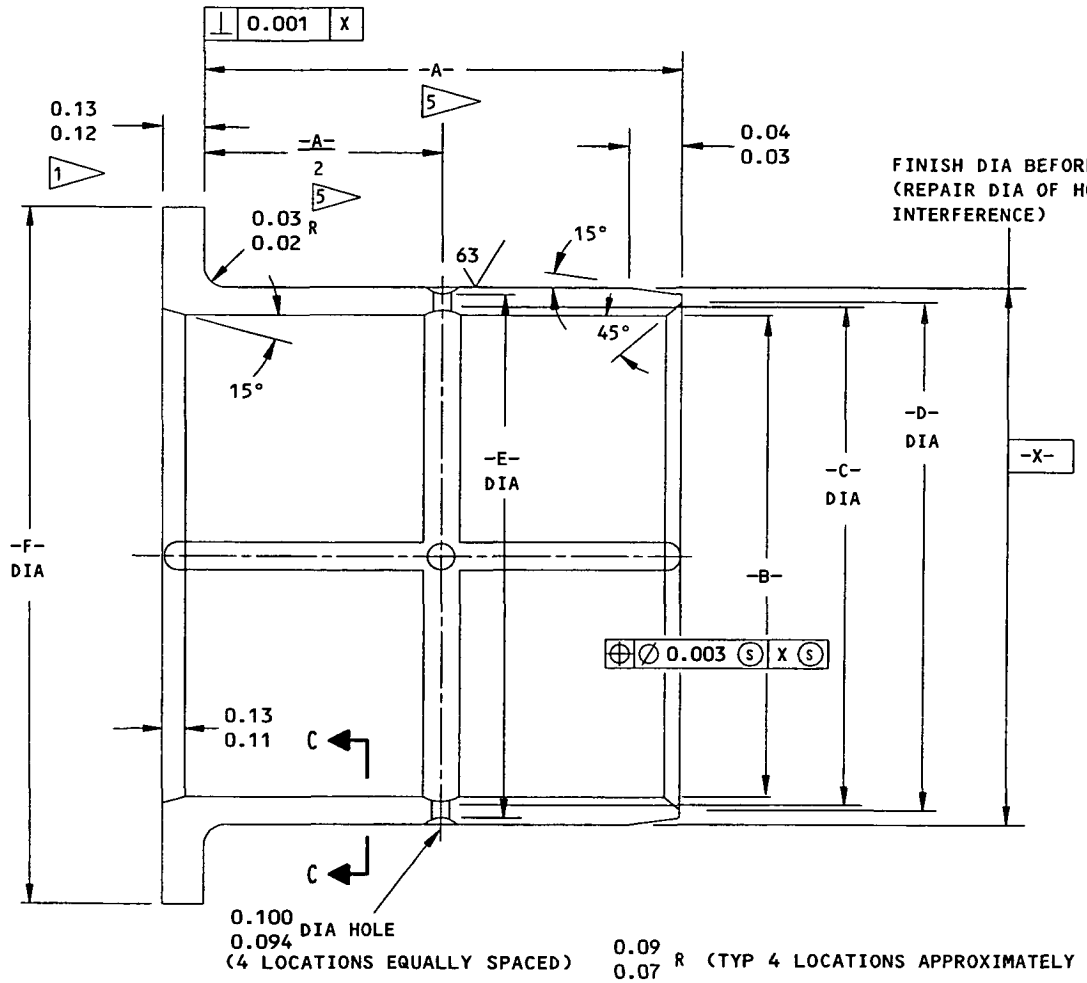
125 MACHINE FINISH EXCEPT AS NOTED

MATERIAL: AS NOTED

ALL DIMENSIONS ARE IN INCHES

BUSHING TO BE REPLACED	-A-	-B-	-C-	-D-	-E-	-F-	INTER-FERENCE	MATERIAL
47 65-46150-86	0.73 0.71	1.469	1.53 1.52	1.57 1.55	1.57 1.55	2.01 1.99	0.0025 0.0008	2 6
40 65-46150-92	0.66 0.64	1.469	1.53 1.52	1.57 1.55	1.57 1.55	2.10 1.99	0.0025 0.0008	2 6

Oversize Bushing Details
Figure 414 (Sheet 4)



C-C

FINISH

CADMIUM PLATE (F-15.06) ALL OVER
(OPT ON INTERNAL SURFACES)

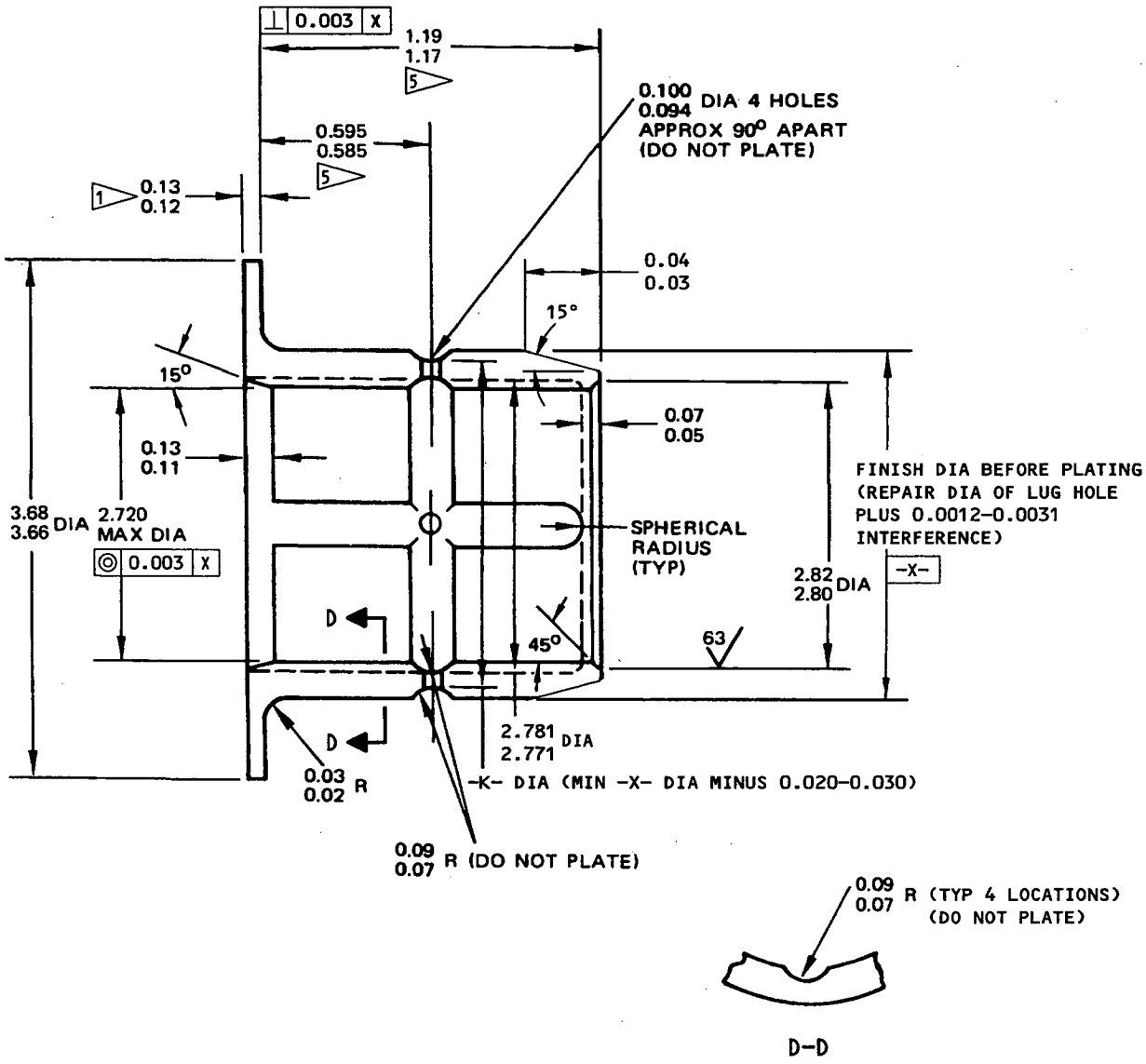
125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: AS NOTED

ALL DIMENSIONS ARE IN INCHES

BUSHING TO BE REPLACED	-A-	-B- MAX	-C-	-D-	-E-	-F-	INTER-FERENCE	MATERIAL
81M 65-46150-102	0.61 0.59	2.970	3.031 3.021	3.07 3.05	3.1624 3.1525	3.68 3.66	0.0035 0.0015	3
81L 65-46150-103	0.61 0.59	2.720	2.781 2.771	2.82 2.80	3.1624 3.1525	3.68 3.66	0.0031 0.0012	3

Oversize Bushing Details
Figure 414 (Sheet 5)



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01–0.02 R

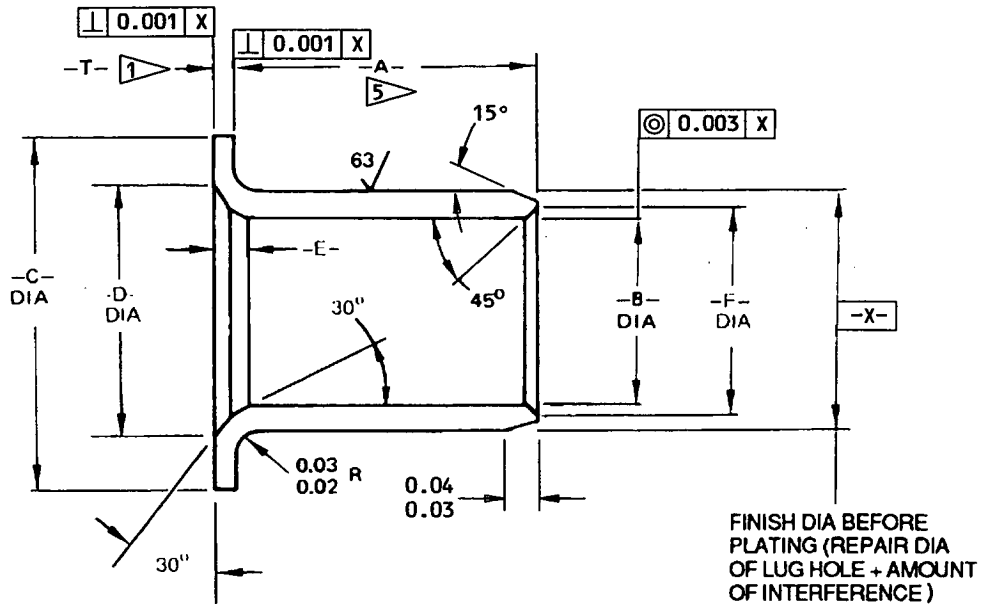
MATERIAL: 17-4PH CRES, 180-200 KSI

CADMIUM PLATE (F-15.06) (OPT ON INTERIOR SURFACES) DO NOT PLATE GROOVES OR HOLES

ALL DIMENSIONS ARE IN INCHES

REPLACES BUSHING (75)
65–46150–104

Oversize Bushing Details
Figure 414 (Sheet 6)



NOTE: DOUBLE CHAMFER APPLIES TO 65-46150-126, -129, -130, -131

FINISH

CADMIUM PLATE (F-15.06) ALL OVER (OPT ON INTERNAL SURFACES)

125 MACHINE FINISH EXCEPT AS NOTED

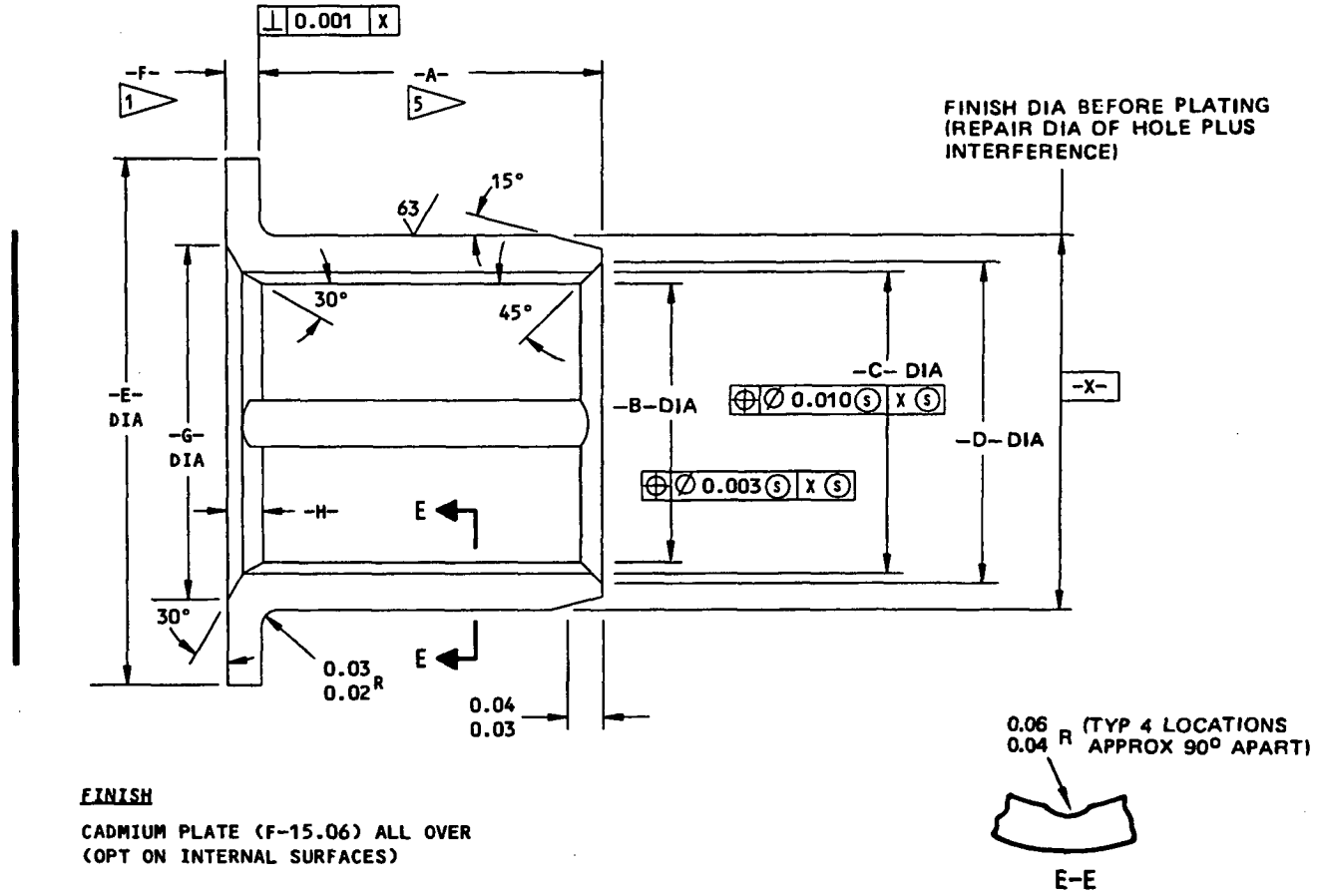
MATERIAL: AS NOTED

ALL DIMENSIONS ARE IN INCHES

BUSHING TO BE REPLACED	-A-	-B-	-C-	-D-	-E-	-F-	-T-	INTER-FERENCE	MATERIAL
72 (65-46150-125)	0.670 0.650	1.230 1.210	1.820 1.800	—	0.205 0.185	1.320 1.300	0.200 0.190	0.0025 0.0010	3
72 (65-46150-126)	0.710 0.690	1.230 1.210	1.820 1.800	1.59 1.57	0.165 0.145	1.320 1.300	0.130 0.120	0.0025 0.0010	3
76 (65-46150-129)	0.760 0.740	1.220 1.210	1.820 1.800	1.42 1.40	0.120 0.100	—	0.090 0.085	0.0025 0.0010	8
76 (65-46150-130)	0.570 0.550	1.220 1.210	1.820 1.800	1.42 1.40	0.120 0.100	—	0.065 0.060	0.0025 0.0010	8
76 (65-46150-131)	0.570 0.550	1.220 1.210	1.820 1.800	1.42 1.40	0.120 0.100	—	0.065 0.060	0.0025 0.0010	8

Oversize Bushing Details
Figure 414 (Sheet 7)

F77429



FINISH

CADMIUM PLATE (F-15.06) ALL OVER
(OPT ON INTERNAL SURFACES)

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

MATERIAL: AS NOTED

ALL DIMENSIONS ARE IN INCHES

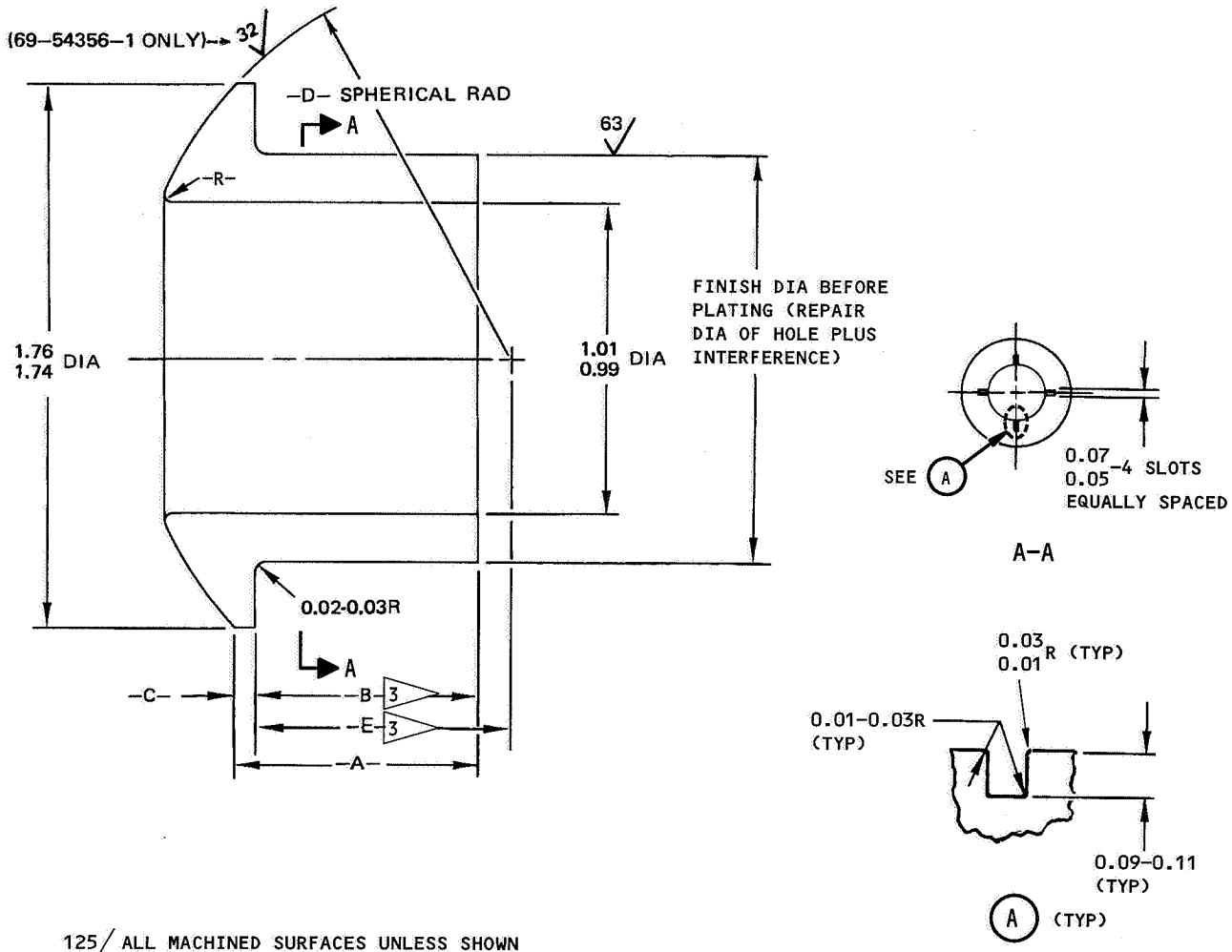
BUSHING TO BE REPLACED	-A-	-B- MAX	-C-	-D-	-E-	-F-	-G-	-H-	INTER-FERENCE	MATERIAL
72 65-46150-134	0.72 0.71	1.220	1.280 1.270	—	1.82 1.80	0.20 0.19	—	0.205 0.185	0.0025 0.0010	3
72 65-46150-135	0.79 0.77	1.220	1.280 1.270	—	1.82 1.80	0.13 0.12	1.59 1.57	0.165 0.145	0.0025 0.0010	3

Oversize Bushing Details
Figure 414 (Sheet 8)

F77459

1. PLUS AMOUNT REMOVED FROM LUG FACE
2. 17-4PH CRES (AMS 5643), SOLUTION TREATED, 180-200 KSI
3. AL-NI-BRONZE (AMS 4640)
4. BERYLLIUM COPPER (AMS 4533 OR AMS 4535)
5. MINUS AMOUNT REMOVED FROM LUG FACE
6. OVERSIZE EQUIVALENTS OF THESE BUSHINGS CAN BE MADE FROM MATERIAL PER 4
7. DELETED
8. 17-4PH CRES, 180-200 KSI (AMS 5643), OR MAKE FROM BUSHING 65-46150-132, WHICH HAS THICKER FLANGE, LONGER LENGTH, LARGER OD.
9. BUSHING 65-46150-127 IS REPLACED BY BUSHING 65-46150-130 PER SB 32A1224

Oversize Bushing Details
Figure 414 (Sheet 9)



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK ALL SHARP EDGES 0.01-0.03R OR EQUIVALENT

CADMIUM PLATE 0.003 THICK (F-4.201 OR F-15.06) (OPTIONAL ON ID)

ALL DIMENSIONS ARE IN INCHES

1 AL-NI BRONZE PER (AMS 4640)

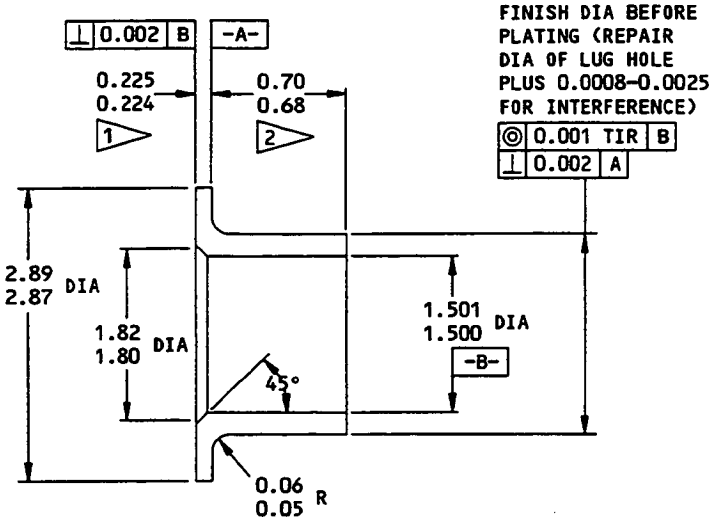
2 COPPER BERYLLIUM (AMS 4533 OR AMS 4535) (REPLACES QQ-C-530, CONDITION HT)

3 MINUS AMOUNT REMOVED FROM LUG FACE

BUSHING TO BE REPLACED	-A-	-B-	-C-	-D-	-E-	-R-	INTER-FERENCE	MATERIAL
29 (69-54356-1)	0.80 0.78	0.72	0.08 0.06	1.285 1.275	---	0.05 0.03	0.0022 0.0006	1
29 (69-63929-1,-2)	USE OVERSIZE EQUIVALENTS OF BUSHINGS (29A, 29B) 69-78230-1,-2							
29B (69-78230-1)	---	0.71 0.69	---	1.282 1.275	0.867 0.862	0.05 0.03	0.0022 0.0006	2
29A (69-78230-2)	---	0.71 0.69	---	1.282 1.275	0.742 0.737	0.05 0.03	0.0022 0.0006	2

Oversize Bushing Details
Figure 415

F11286



63 ALL MACHINED SURFACES

BREAK ALL SHARP EDGES 0.01-0.03 R

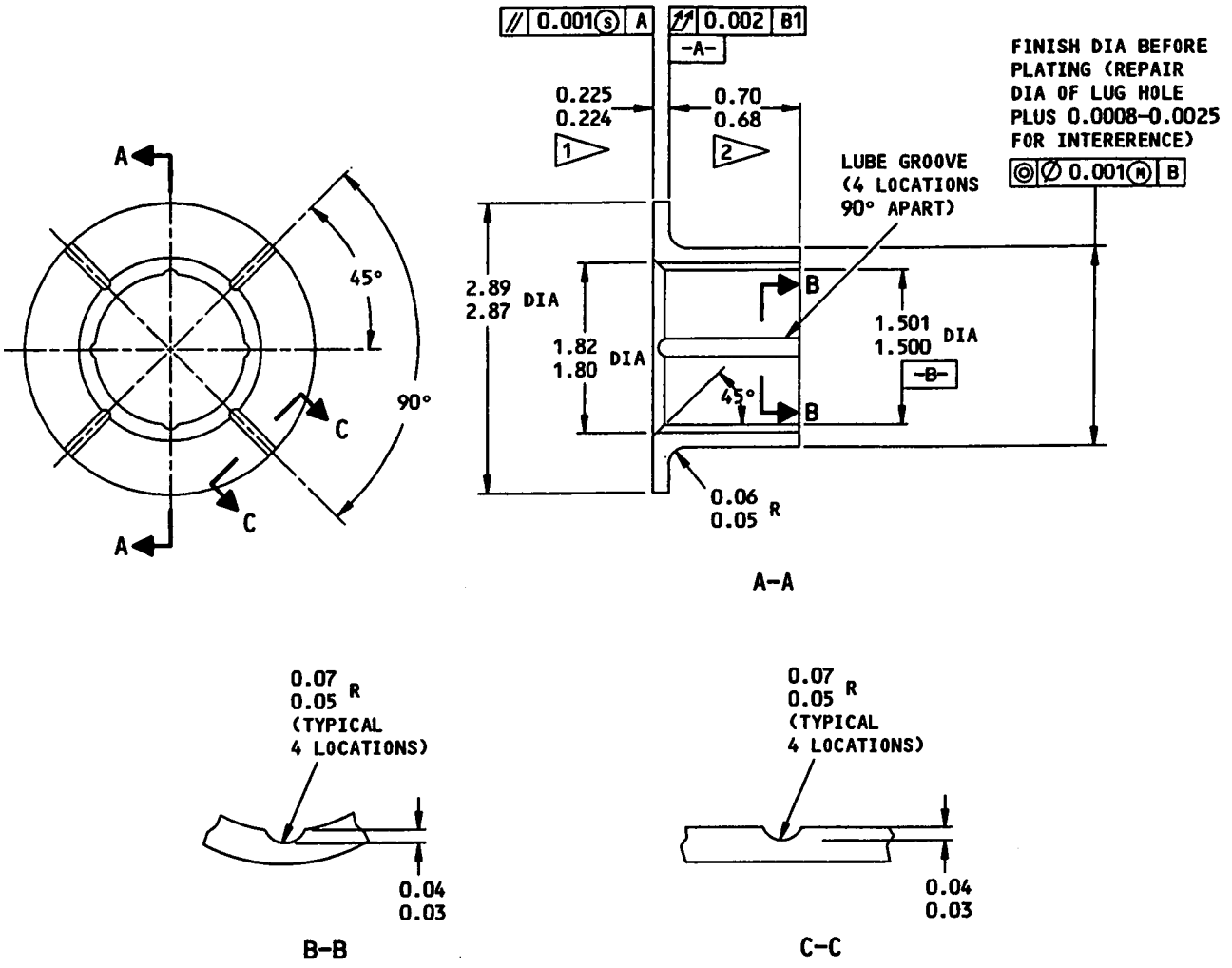
CADMIUM PLATE (F-15.02) (0.0002-0.0004 THICK) EXTERNAL SURFACES ONLY

MATERIAL: 17-4PH CRES PER AMS 5643, 180-200 KSI

ALL DIMENSIONS ARE IN INCHES

REPLACES BUSHING (46) 69-38965-4

Oversize Bushing Details
Figure 416 (Sheet 1)



63/ ALL MACHINED SURFACES

BREAK ALL SHARP EDGES 0.01-0.02 R

CADMIUM PLATE (F-15.06) EXTERNAL SURFACES ONLY

MATERIAL: 17-4PH CRES PER AMS 5643, 180-200 KSI

ALL DIMENSIONS ARE IN INCHES

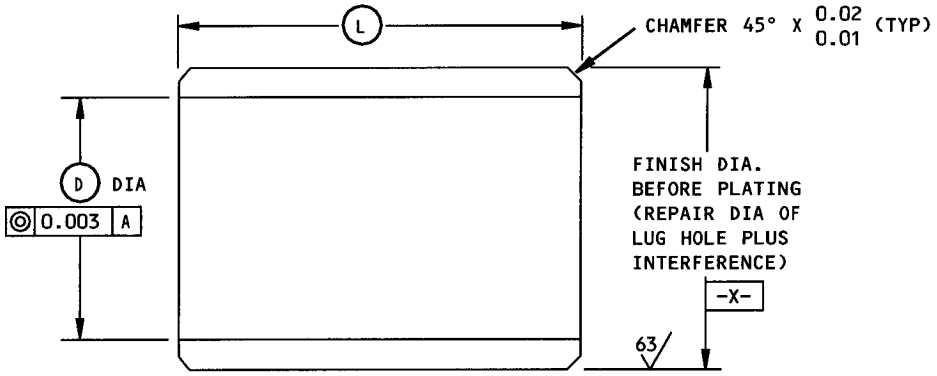
1 PLUS AMOUNT REMOVED FROM LUG FACE

2 MINUS AMOUNT REMOVED FROM LUG FACE

REPLACES BUSHING (46) 69-77452-1

Oversize Bushing Details
Figure 416 (Sheet 2)

F56697



APPLICATION	L	D	INTER-FERENCE	MATERIAL
1	1.73 1.72	0.36 0.34	0.0013 0.0003	7
2 DRAG STRUT (49)	0.32 0.31	0.374 0.372	0.0013 0.0003	7
2 ACTUATOR BEAM ARM (77)	10	0.379 0.375	0.0010 0.0005	7
3	0.41 0.40	0.457 0.455	0.0013 0.0003	7
4	0.278 0.276	0.49 0.47	0.0013 0.0003	7
5	0.185 0.183	0.437 0.435	0.0013 0.0003	7
6 11	0.36 0.35	0.45 0.44	0.0013 0.0003	7
6 12	0.46 0.45	0.45 0.44	0.0013 0.0003	7
OVERSIZE BUSHING (70A) (69-71754-1)	0.51 0.49	0.24 0.22	0.0013 0.0003	8
(5) DIA FIG. 409	0.81 0.80	3.125 3.120	0.0025 0.0015	9
(8) DIA FIG. 409	10	0.354 0.342	0.0015 0.0005	7 OR 9
ID FIG. 413A	1.615 1.614	0.876 0.875	0.0020 0.0004	9
(15) DIA FIG. 407	0.36 0.34 10	0.257 0.254	0.0013 0.0003	7
(16) DIA FIG. 407	0.36 0.34 10	0.197 0.194	0.0013 0.0003	7

Repair Bushing and Sleeve Details
Figure 417 (Sheet 1)

F11303

1. PIN (10, 14)
2. ANTIROTATION BOLT HOLES
3. TRUNNION PIN (73) FLANGE
4. UNIVERSAL (50) UPPER LUG HOLES
5. UNIVERSAL (50) LOWER HOLES
6. TRUNNION LINK (82) DOWEL PIN HOLES
7. 17-4PH CRES PER AMS 5643,
   SOLUTION TREATED, 180-200 KSI
8. 4130 STEEL TUBING PER AMS 6361. OPTIONAL
   4340 ALLOY STEEL BAR PER AMS 6415
   HEAT TREAT 125-145 KSI
9. AL-NI-BRZ PER AMS 4640 OR 4880
10. PART THICKNESS LESS 0.003 MAX
11. TRUNNION LINKS 65-46101-SERIES, 65-63378-2,-4,-6,-8,-10,-16,-23
12. TRUNNION LINKS 65-63378-12,-19,-24

125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.02R

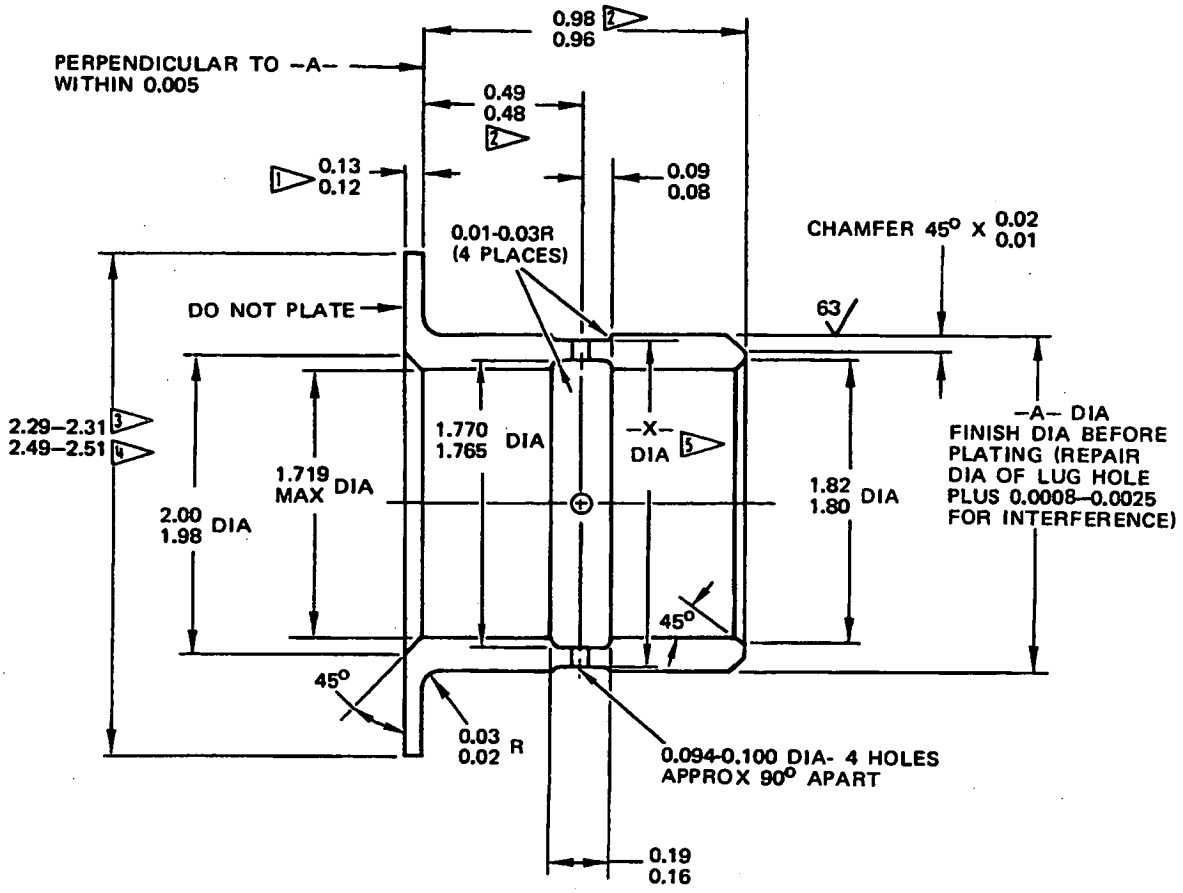
CADMIUM PLATE (F-15.06) (OPTIONAL ON ID)

MATERIAL: AS SHOWN BY 7 8 9

ALL DIMENSIONS ARE IN INCHES

Repair Bushing and Sleeve Details
Figure 417 (Sheet 2)

N47490



125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01-0.02R

MATERIAL - AL-NI BRONZE (AMS 4640) 3
BERYLLIUM COPPER
(AMS 4533 OR AMS 4535) 4

CADMIUM PLATE (F-4.201 OR F-15.06)
(OPT ON INTERNAL SURFACES)

ALL DIMENSIONS ARE IN INCHES

1 PLUS AMOUNT REMOVED FROM LUG FACE

2 LESS AMOUNT REMOVED FROM LUG FACE

3 65-46150-6

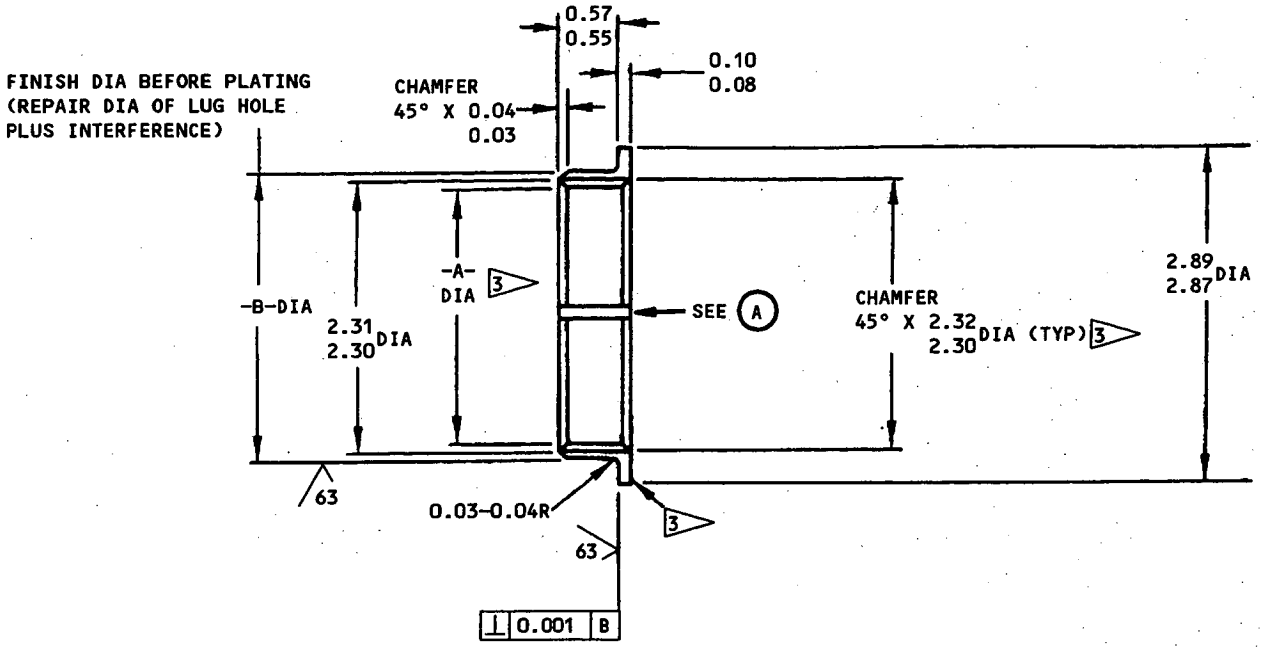
4 65-46150-70, -73

5 -A- DIA MINUS 0.013-0.016 (65-46150-6, -70), OR
-A- DIA MINUS 0.0765-0.0795 (65-46150-73)

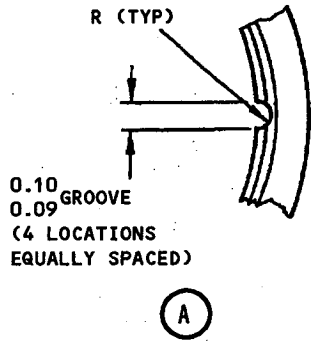
REPLACES BUSHING (25, 30)
65-46150-6, -70, -73

Oversize Bushing Details
Figure 418

F11309



BUSHING TO BE REPLACED	-A-	INTER-FERENCE
69-39477-1 (PRE SB32-1047)	2.22 / 2.20 [1]	0.0031 / 0.0012
69-39477-2 (POST SB32-1047)	2.252 / 2.248 [2]	0.0031 / 0.0012



125 MACHINE FINISH EXCEPT AS NOTED

BREAK SHARP EDGES 0.01-0.02R

CADMIUM PLATE (F-15.06) ALL OVER UNLESS SHOWN BY 3

MATERIAL: AL-NI-BRONZE PER AMS 4640

ALL DIMENSIONS ARE IN INCHES
DIMENSIONS APPLY AFTER PLATING EXCEPT AS NOTED

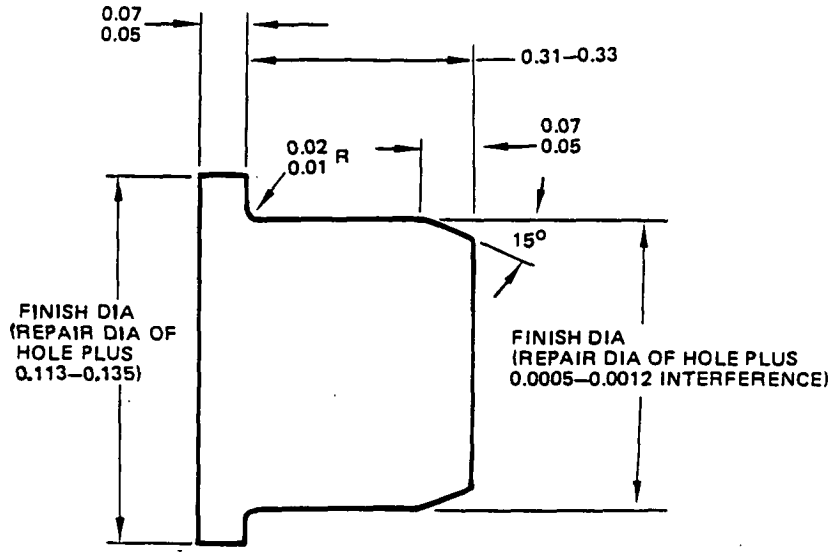
1 ◎ 0.010 TIR B

2 ◎ 0.001 TIR B

3 DO NOT PLATE

HOLE LOCATION (6) FIG. 413 - REPLACES BUSHING (52)
69-39477-1, -2

Oversize Bushing Details
Figure 419



125 MACHINE FINISH EXCEPT AS NOTED

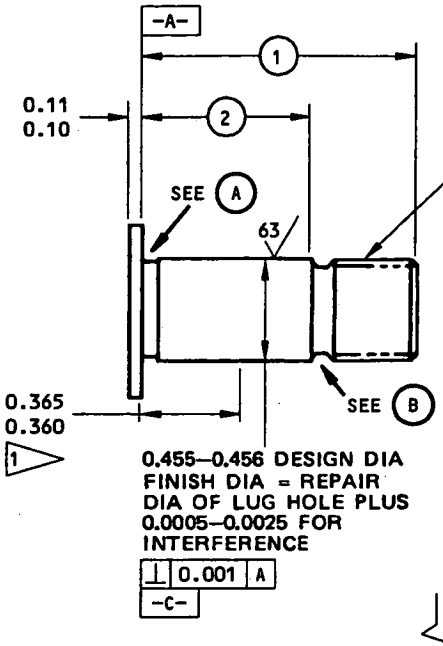
BREAK SHARP EDGES 0.01–0.02 R

PASSIVATE (F–17.09) ALL OVER

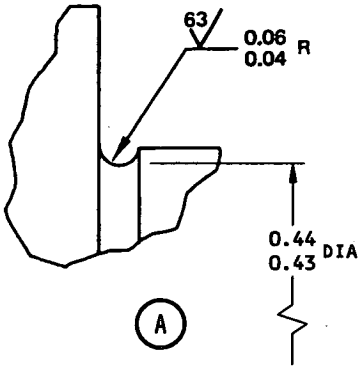
MATERIAL: 17–4PH CRES, 170–190 KSI

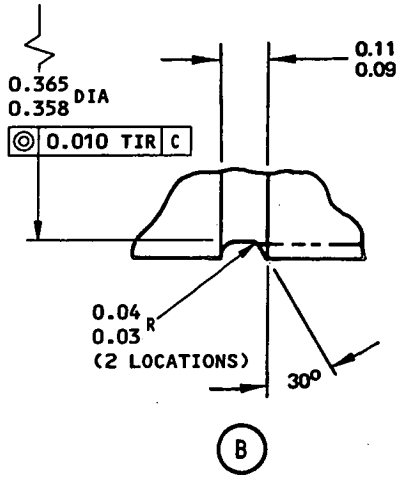
ALL DIMENSIONS ARE IN INCHES

HOLE LOCATION (1A) FIG. 412A – REPLACES PLUG (49B, 49C) 65–46116–40



APPLICATION	1	2
69–42195–1	1.21 1.19	0.75 0.74
69–42195–2	1.31 1.29	0.85 0.84





125 ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

BREAK SHARP EDGES 0.01–0.02R

FINISH: CADMIUM PLATE (F-15.02) ALL OVER. APPLY PRIMER AS SHOWN BY 2

MATERIAL: 4340 STEEL, 180–200 KSI

MAGNETIC PARTICLE EXAMINE (SOPM 20-20-01)

DIMENSIONS ARE AFTER PLATING

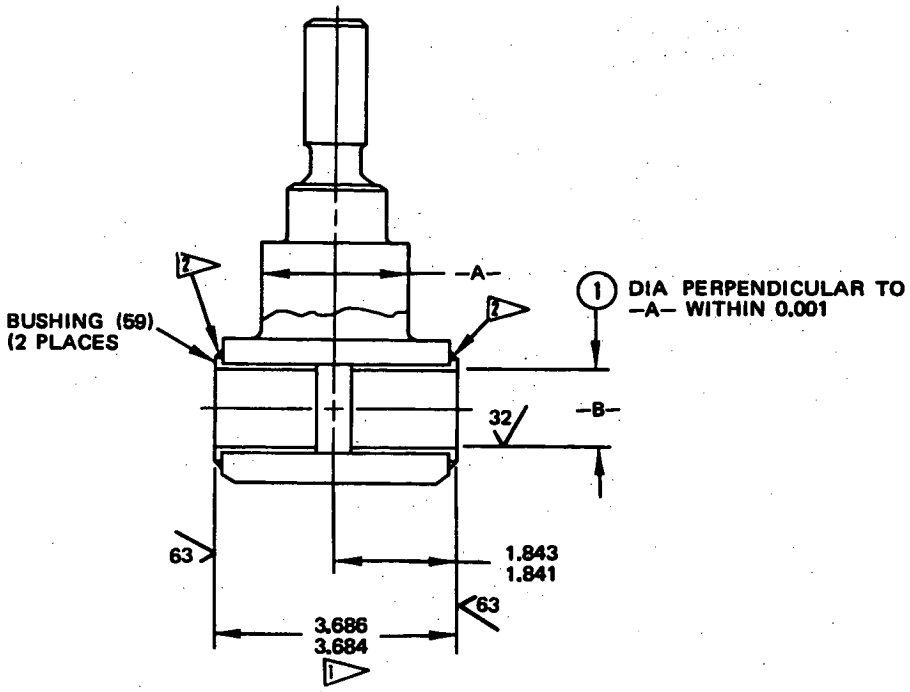
ALL DIMENSIONS ARE IN INCHES

1 OVERSIZE SHANK DIA -C- LIMITED TO THIS AREA, TO PERMIT FIT WITH MATING PARTS.

2 WIPE THREADS AND THREAD RELIEF WITH PRIMER (F-19.45)

REPLACES DOWEL PIN (79)

Oversize Dowel Pin Details
Figure 420



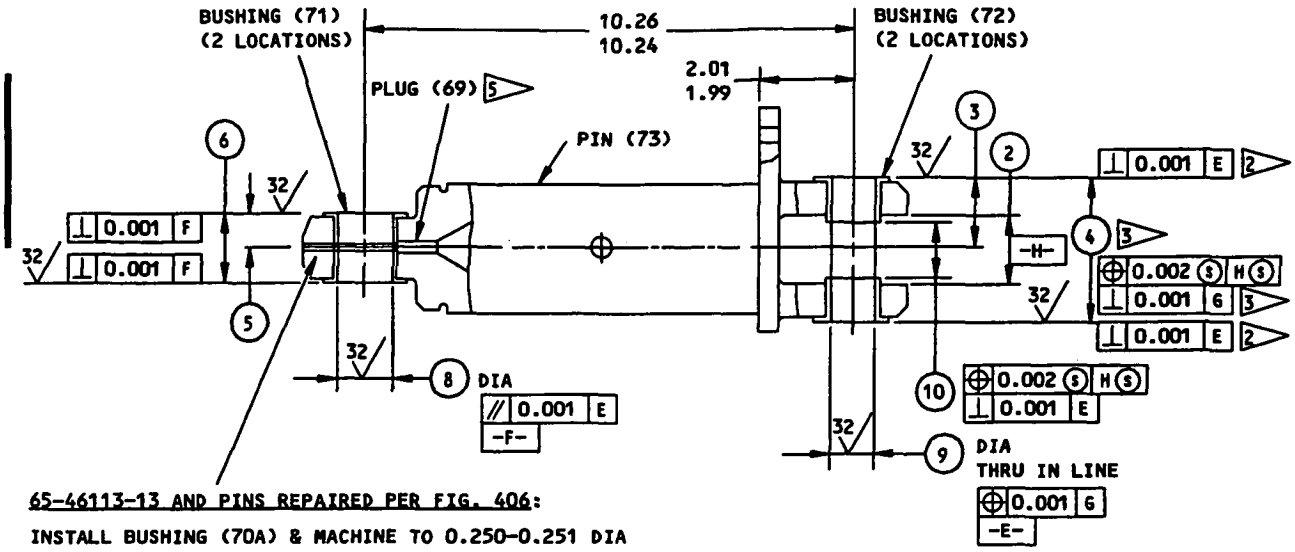
PART NO.	1
65-46140-4	1.251 1.250
65-46140-6,-9	1.376 1.375

1 BUSHING FACES PERPENDICULAR TO -B- WITHIN 0.001

2 FILLET SEAL BUSHINGS WITH BMS 5-95 SEALANT

ALL DIMENSIONS ARE IN INCHES

Tee Bolt Bushing Installation
Figure 421



65-46113-13 AND PINS REPAIRED PER FIG. 406:

INSTALL BUSHING (70A) & MACHINE TO 0.250-0.251 DIA FOR INSTL OF LUBE FITTING 1744B1.

NOTE: 65-46113-6, -8, -10 ASSYS WITH ORIGINAL 1732B LUBE FITTING BECOME EQUIVALENT TO 65-46113-13 AFTER REPAIR WITH BUSHING (70A) AND LUBE FITTING 1744B1.

		(2) (REF)	(3)	(4)	(5)	(6)	(8)	(9)	(10) 1
65-46113-3,-5	DESIGN DIM	1.503 1.501	1.48 1.47	2.95 2.94 4	0.687 0.685	1.374 1.371	1.251 1.250	1.001 1.000 4	—
65-46113-6,-8, -10,-12,-13,-16	DESIGN DIM	1.505 1.502	1.48 1.47	2.95 2.94 4	0.687 0.685	1.374 1.371	1.251 1.250	1.001 1.000 4	1.505 1.502
65-46113-17	DESIGN DIM	1.505 1.502	1.48 1.47	2.95 2.94 4	0.687 0.685	1.374 1.371	1.251 1.250	1.251 1.250	1.505 1.502
65-46113-19, -21,-23	DESIGN DIM	1.505 1.502	1.57 1.56	3.13 3.12	0.687 0.685	1.374 1.371	1.251 1.250	1.251 1.250	1.505 1.502
65-46113-25	DESIGN DIM	1.521 1.516	—	3.13 3.12	0.687 0.685	1.374 1.371	1.251 1.250	1.251 1.250	1.505 1.502

1 AFTER INSTALLATION, MACHINE THE BUSHING ENDS TO GET THIS DIMENSION.

2 65-46113-3,-5,-6,-8,-10,-12,-13, -16,-17,-19,-21,-23

3 65-46113-25

4 PRE SB 32-1198 (REPLACES SB 32A1224)

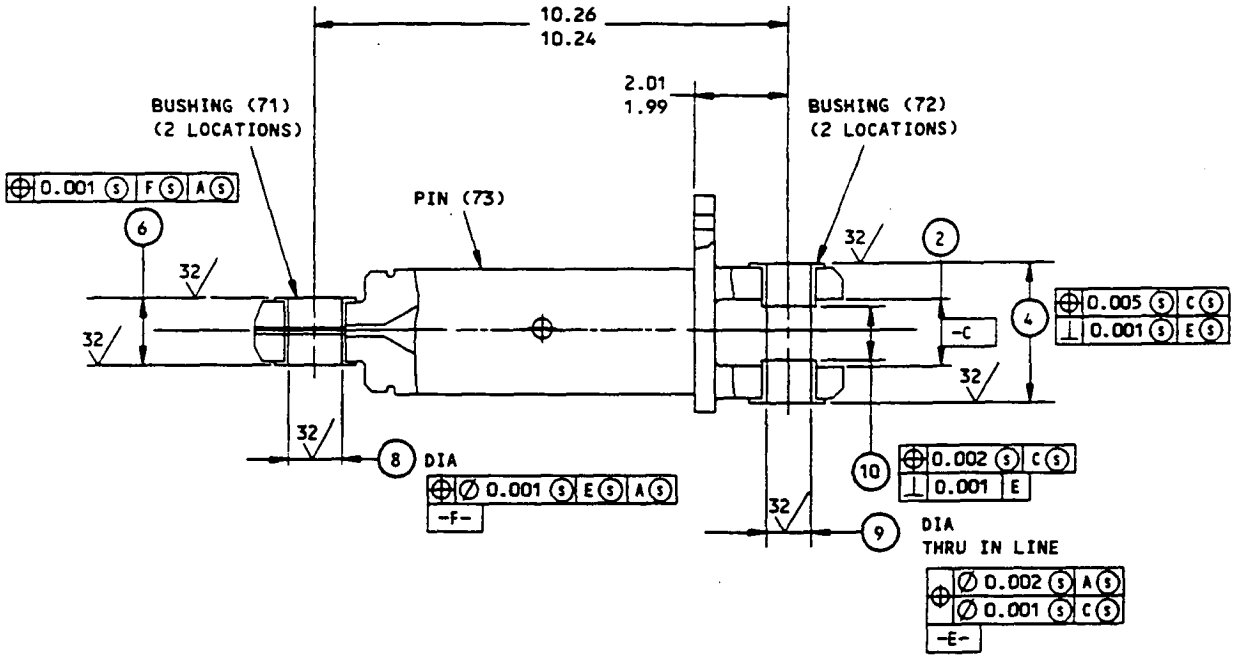
5 65-46113-3,-5

ITEM NUMBERS REFER TO FIG. 1101

ALL DIMENSIONS ARE IN INCHES

TRUNNION PIN (68)
65-46113-SERIES

Trunnion Pin Bushing Replacement
Figure 422



	(2) 2	(2) 3	(4)	(6)	(8)	(9)	(10) 1 3
DESIGN DIM	1.505 1.502	1.521 1.516	3.13 3.12	1.374 1.371	1.251 1.250	1.251 1.250	1.505 1.502

ITEM NUMBERS REFER TO FIG. 1101
ALL DIMENSIONS ARE IN INCHES.

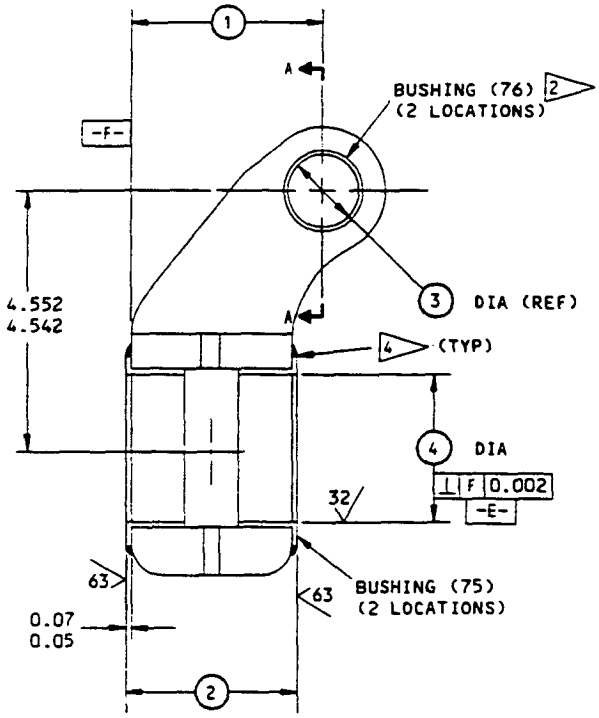
1 AFTER INSTALLATION, MACHINE THE BUSHING ENDS TO GET THIS DIMENSIONS.

2 65C32964-1,-3,-5,-7

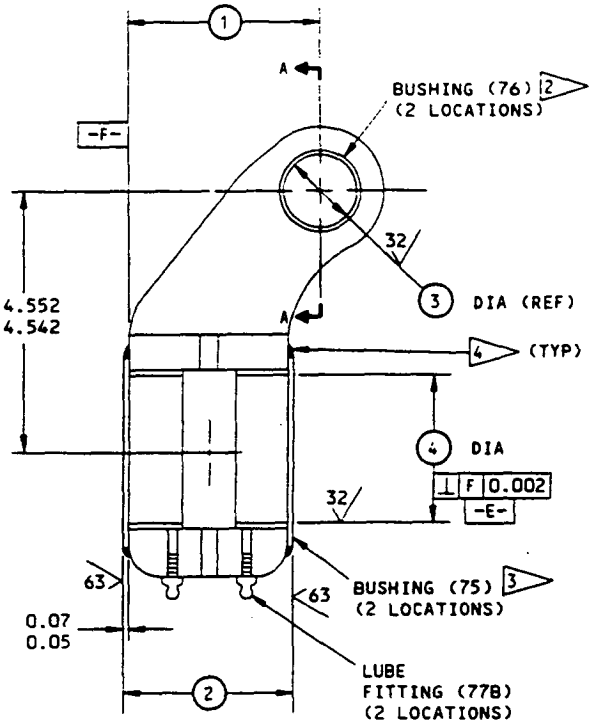
3 65C32964-9

TRUNNION PIN (68)
65C32964-SERIES

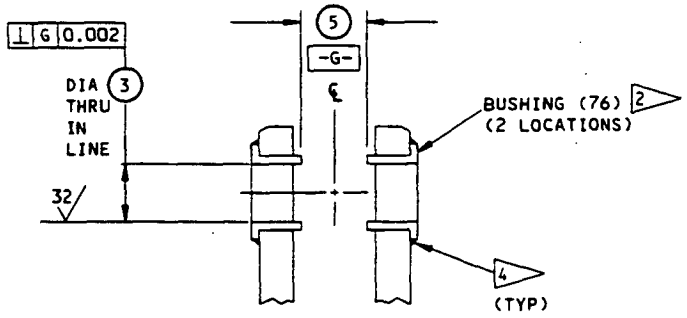
Trunnion Pin Bushing Replacement
Figure 422A



65-46109-SERIES



65C33032-SERIES



65-46109-12,-14,-14L,-16,-18,-20
65C33032-4,-6

A-A

ACTUATOR BEAM ARM (74)
POST SB 32A1224

Actuator Beam Arm Bushing Replacement
Figure 423 (Sheet 1)

E41266

PART NO.	(1)	(2)	(3)	(4)	(5) ▷1
65-46109-4, -16 ▷5	3.525 3.515	2.999 2.998	1.251 1.250	2.627 2.625	1.505 1.502
65-46109-6, -10,-12,-14, -14L,-18,-20 ▷6 ▷7	3.475 3.465	2.899 2.898	1.251 1.250	2.627 2.625	1.505 1.502
65C33032-1, -3,-4,-6 ▷8	3.475 3.465	2.899 2.898	1.251 1.250	2.752 2.750	1.505 1.502

ALL DIMENSIONS ARE IN INCHES

▷1 MACHINE BUSHING ENDS TO DIMENSIONS SHOWN AFTER INSTALLATION.

▷2 INSTALL BY SHRINK FIT METHOD, WITH BMS 5-95 SEALANT, PER 20-50-03.

▷3 INSTALL BY SHRINK FIT METHOD, WITH BMS 3-24 GREASE, PER 20-50-03.

▷4 FILLET SEAL THE FLANGE EDGE WITH BMS 5-95 SEALANT.

▷5 AFTER REPAIR, 65-46109-4 IS IDENTIFIED AS 65-46109-16.

▷6 AFTER REPAIR, 65-46109-6 IS IDENTIFIED AS 65-46109-12.

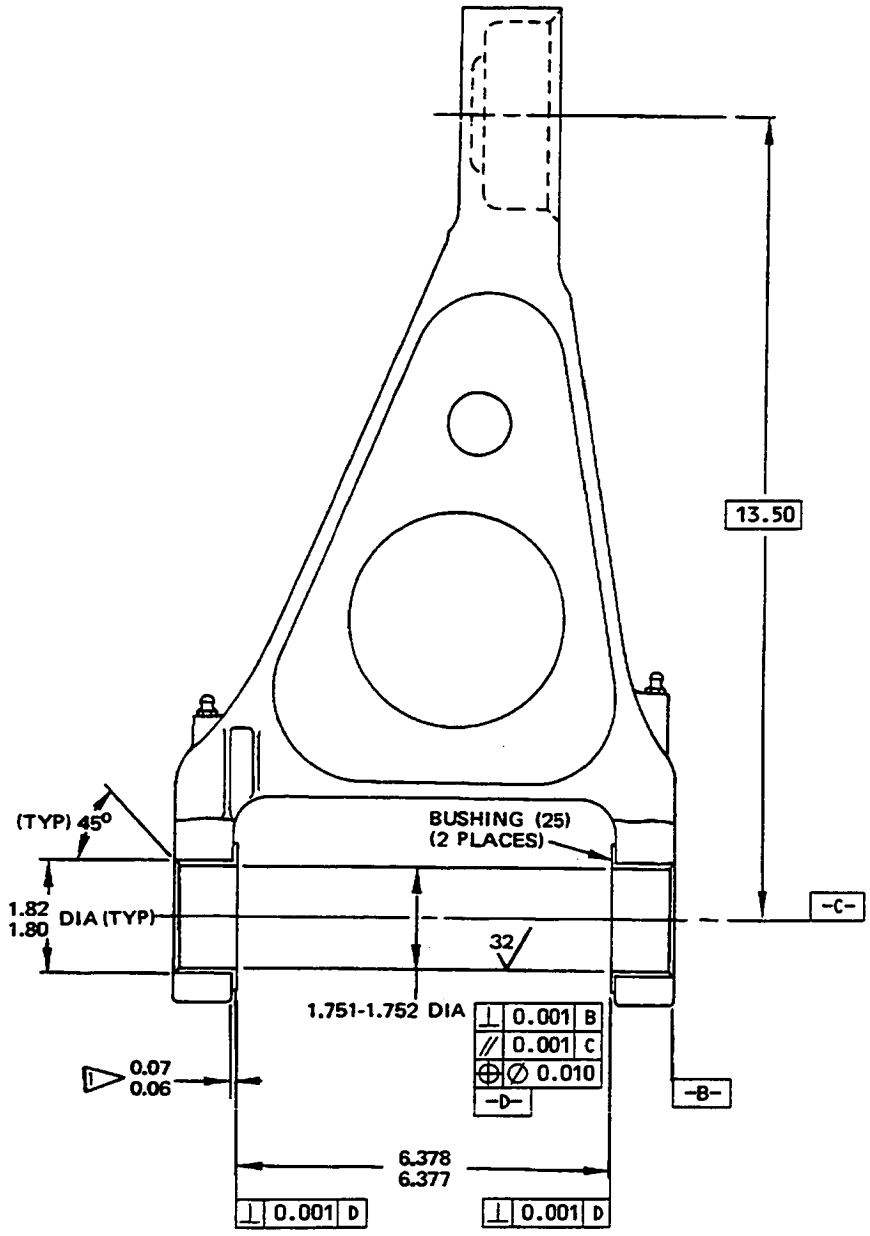
▷7 AFTER REPAIR, 65-46109-10 IS IDENTIFIED AS 65-46109-14.

▷8 AFTER REPAIR, 65C33032-3 IS IDENTIFIED AS 65C33032-6.

ACTUATOR BEAM ARM (74)
POST SB 32A1224

Actuator Beam Arm Bushing Replacement
Figure 423 (Sheet 2)

E41791



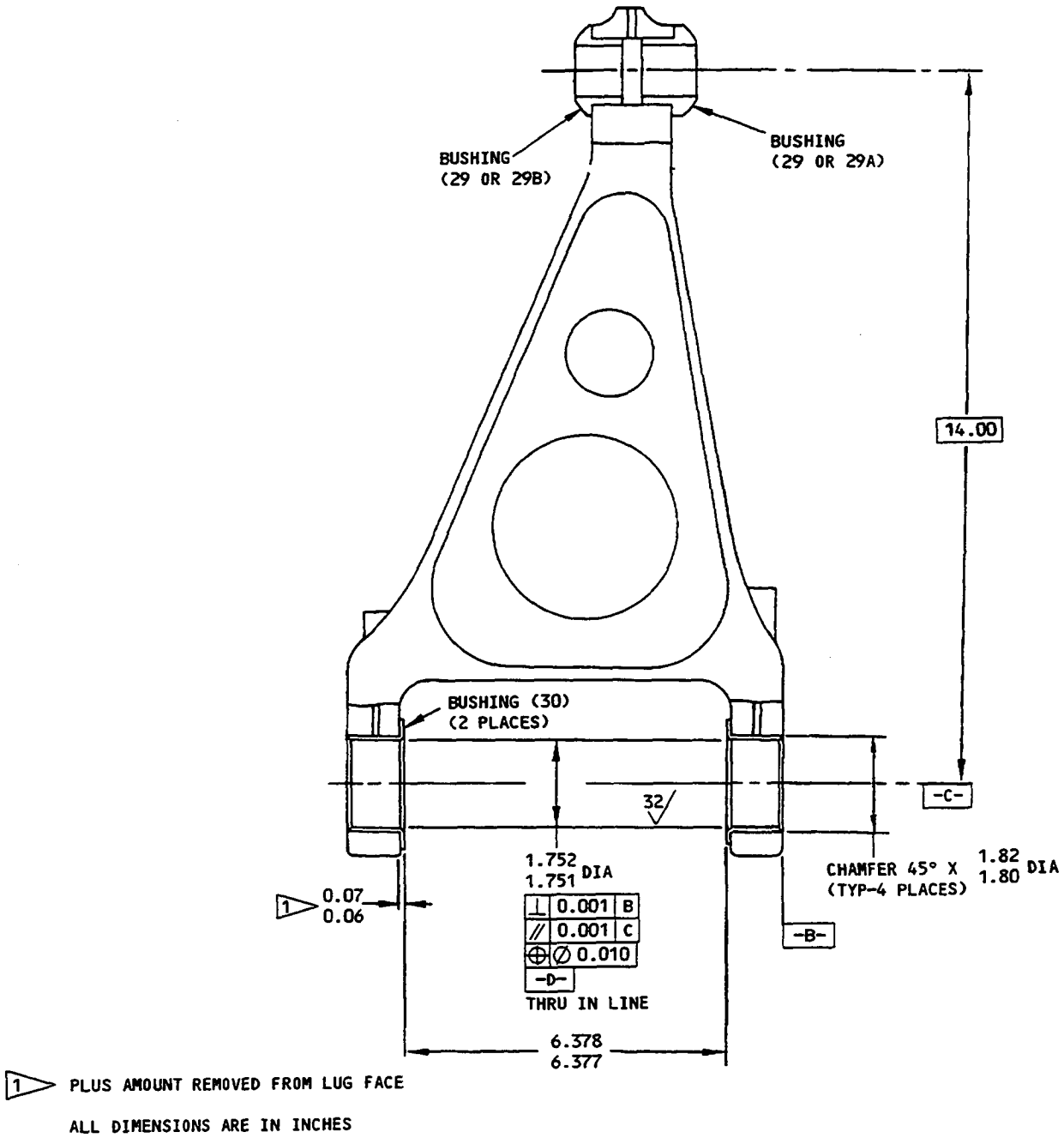
1 PLUS AMOUNT REMOVED FROM LUG FACE

ALL DIMENSIONS ARE IN INCHES

UPPER TORSION LINK (22)

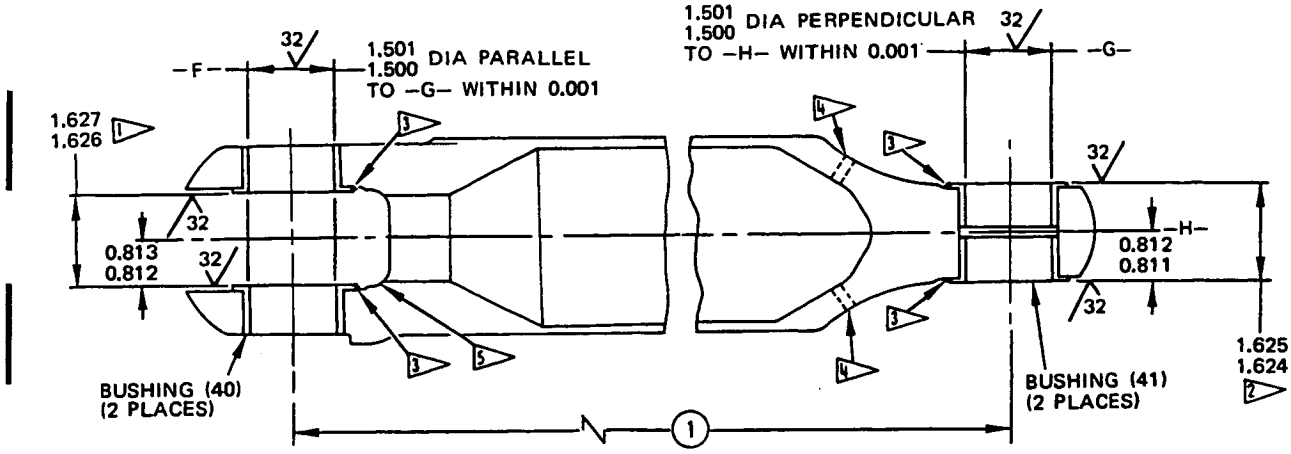
Upper Torsion Link Assembly - Bushing Replacement
Figure 424

f11323



Lower Torsion Link Assembly - Bushing Replacement
Figure 425

F11367

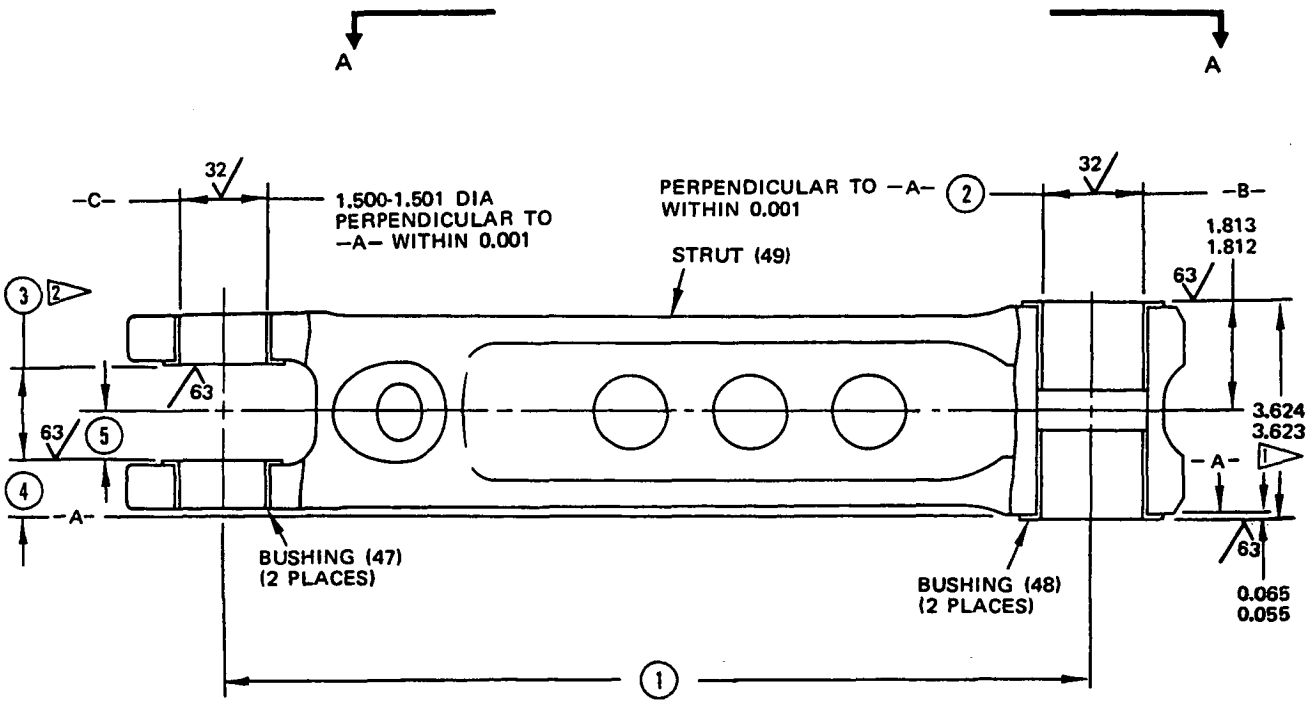


PART NO.	①
65-46103-3, -5	33.63 33.61
65-46103-7, -9, -11, -13	33.30 33.28

ALL DIMENSIONS ARE IN INCHES

DRAG STRUT (38)

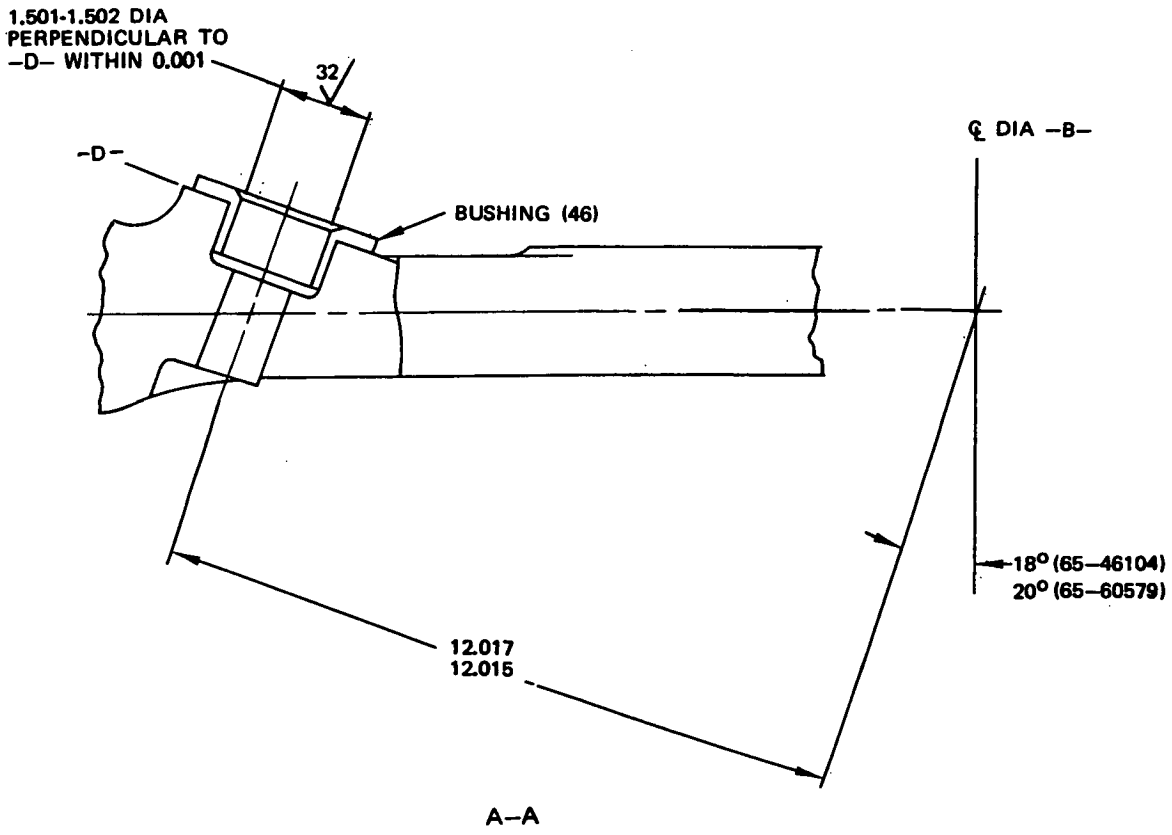
1. BUSHING FACES PERPENDICULAR TO –F– WITHIN 0.001
2. BUSHING FACES PERPENDICULAR TO –G– WITHIN 0.001
3. (65-46103-11, -13) FILLET SEAL BUSHING FLANGES WITH BMS 5-95 SEALANT. OVERCOAT SEALANT WITH BMS 10-60 ENAMEL (SRF-14.9813)
4. 0.50 DRAW HOLES (65-46103-14 AND STRUTS MODIFIED PER SL 32-41)
5. PLUG (39) DELETED PER SL 32-41



PART NO.	(1)	(2)	(3)	(4)	(5)
65-46104-3, -5	15.90 15.88	1.7520 1.7505	1.627 1.626	—	0.814 0.813
65-60579-1, -3, -5	16.21 16.19	1.7515 1.7505	1.627 1.626	0.94 0.92	—

DRAG STRUT (45)

Lower Drag Strut Bushing Replacement
Figure 427 (Sheet 1)

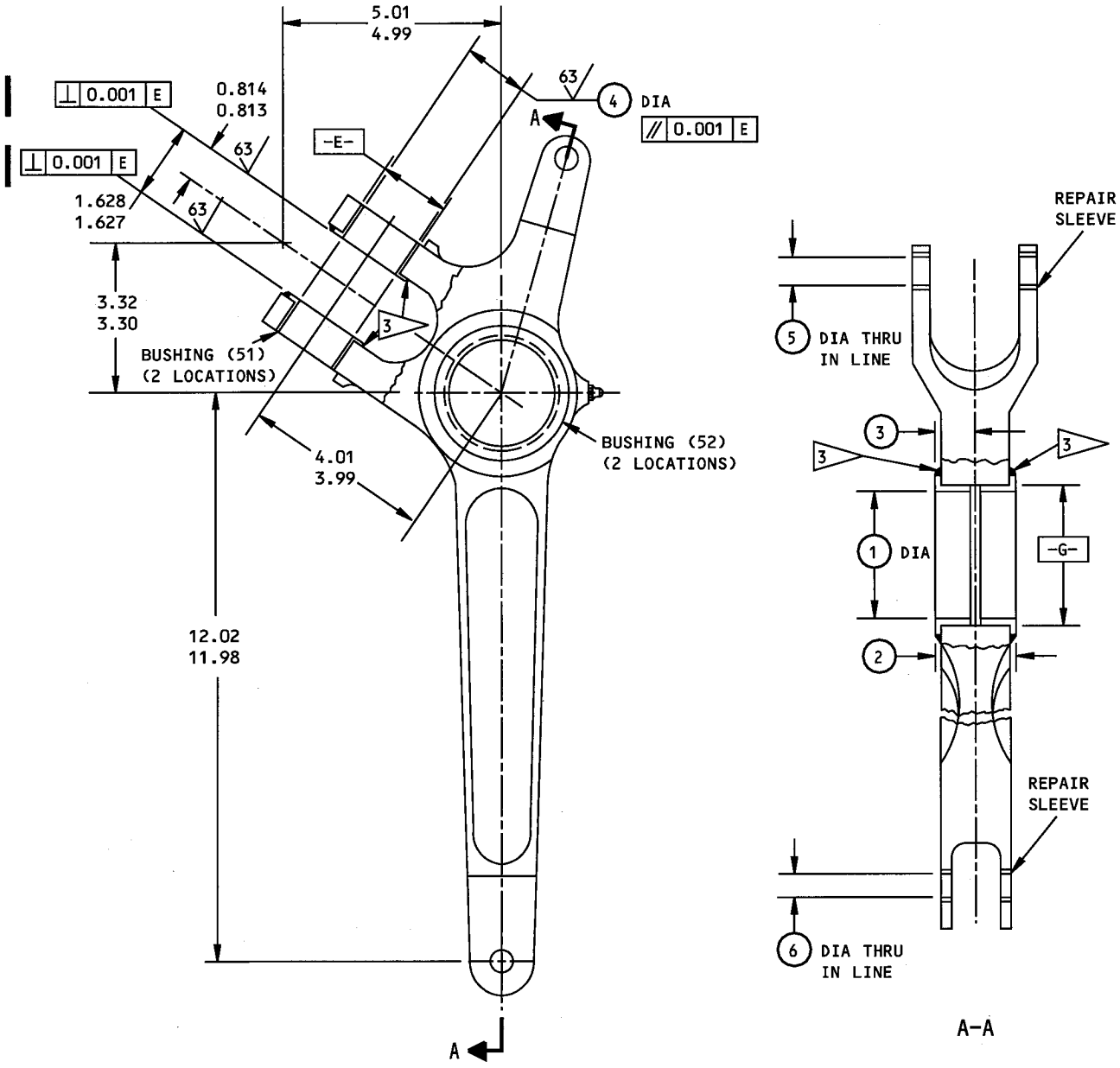


1 BUSHING FACES PERPENDICULAR TO -B- WITHIN 0.001

2 BUSHING FACES PERPENDICULAR TO -C- WITHIN 0.001

LOWER DRAG STRUT (45)

Lower Drag Strut Assembly Bushing Replacement
Figure 427 (Sheet 2)



UNIVERSAL ASSEMBLY (50)

Universal Assembly Bushing Replacement
Figure 428 (Sheet 1)

M19845

	①	②	③	④	⑤	⑥
65-46106-1,-3 (PRE SB 32-1047)	2.254 2.253 ▷1	1.373 1.370	0.687 0.685	1.376 1.375	0.5010 0.5000	0.438 0.437
65-46106-5,-7 AND CONFIGS POST SB 32-1047	2.258 2.257 ▷2	1.363 1.360	0.682 0.680	1.376 1.375	0.5010 0.5000	0.438 0.437
65-46106-9	2.258 2.257 ▷2	1.363 1.360	0.682 0.680	1.438 1.437	0.5010 0.5000	0.438 0.437
65-46106-11	2.258 2.257 ▷2	1.363 1.360	0.682 0.680	1.376 1.375	0.5025 0.5015	0.439 0.438
65-46106-13	2.258 2.257 ▷2	1.363 1.360	0.682 0.680	1.438 1.437	0.5025 0.5015	0.439 0.438

▷1 // 0.001 G

▷2 ◎ 0.002 TIR G

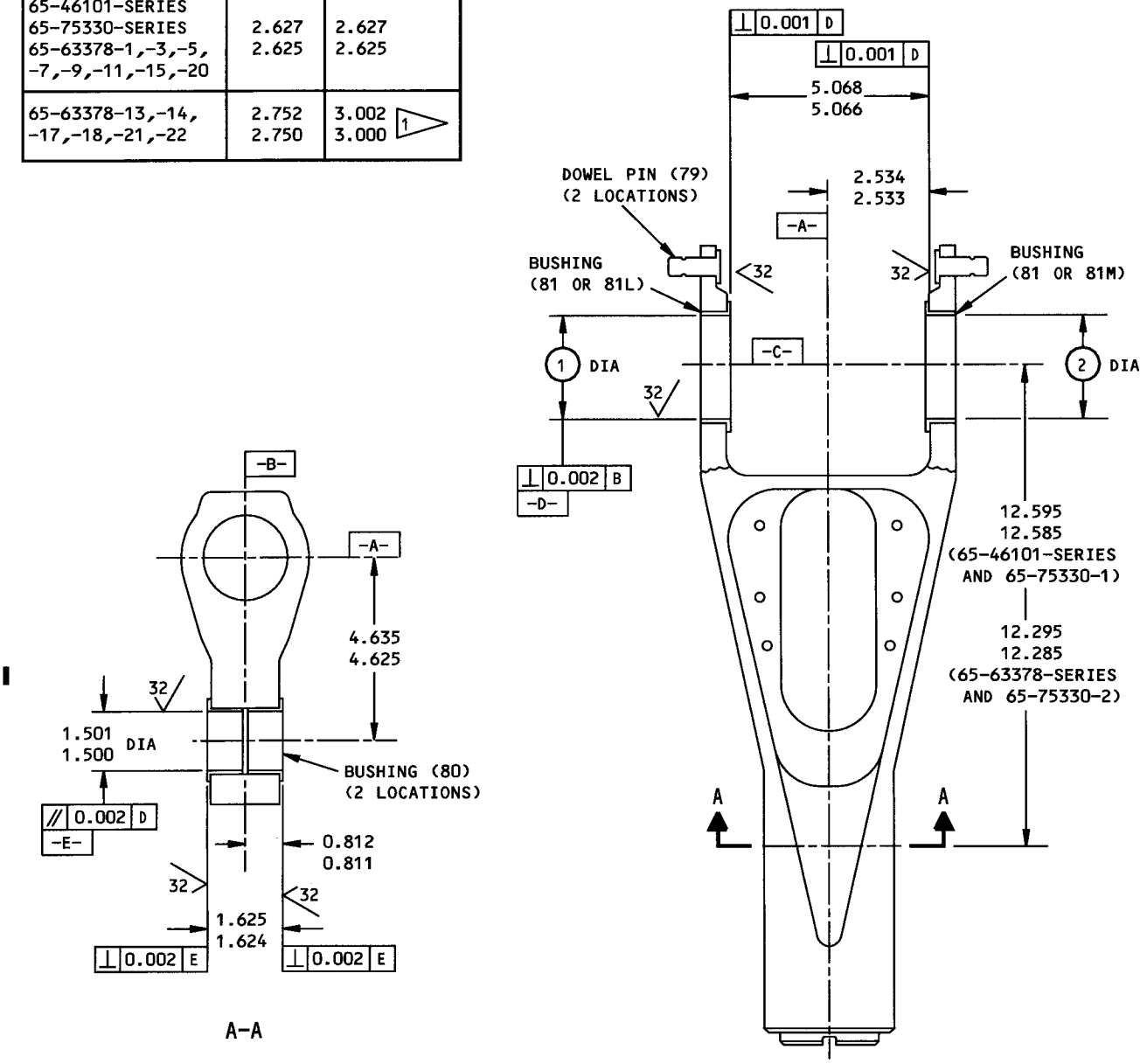
▷3 FILLET SEAL BUSHING FLANGES WITH BMS 5-95 SEALANT (SOPM 20-50-19). PAINT THE SEALANT WITH BMS 10-60 ENAMEL (F-14.9813, WHICH REPLACES SRF-14.9813).

UNIVERSAL ASSEMBLY (50)

Universal Assembly Bushing Replacement
Figure 428 (Sheet 2)

M19863

	①	②
65-46101-SERIES 65-75330-SERIES 65-63378-1,-3,-5, -7,-9,-11,-15,-20	2.627 2.625	2.627 2.625
65-63378-13,-14, -17,-18,-21,-22	2.752 2.750	3.002 3.000 ▷1



TRUNNION LINK (78)

▷1 POSITION AS SHOWN FOR 65-63378-13,-17,-21
OPPOSITE FOR 65-63378-14,-18,-22

Trunnion Link Parts Replacement
Figure 429

F11384

ASSEMBLY

1. Materials and Equipment

   NOTE: Equivalent substitutes can be used.

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

   B. Corrosion inhibiting compound -- BMS 3-23 (SOPM 20-60-02)

   C. Corrosion preventive compound -- BMS 3-27 (SOPM 20-60-02)

   D. Wrench adapter -- F80020-5

   E. Thread Protector and Alignment Tools -- F80115-series

   F. Tamper-proof putty -- BMS 8-45 (SOPM 20-60-04)

2. General

   A. Use F80115-series tools to give protection to threads.

   B. Lubricate all pins, shanks, threads and washer surfaces with MIL-G-21164 grease.

   C. Apply MIL-G-21164 grease at all lube fittings after assembly is completed.

   D. Install and tighten bolts and nuts per SOPM 20-50-01 unless shown differently.

   E. Install nuts with threads lubricated.

3. Assembly

   A. Put shock strut (83) upright in a support stand.

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

   CAUTION: TRUNNION PIN (68) COULD HAVE UNDERSIZE THREADS AND BE A MATCHED SET WITH NUT (64).

   B. Apply BMS 3-27 compound to repair shim (73A), if used, and to the applicable surfaces of trunnion pin (68) and the adjacent areas as shown in Fig. 501.

   C. Put trunnion link (78) and actuator beam arm (74) on lugs of shock strut with shim(s) (63A) if applicable. (Shim(s) (63A) are not necessary but can be used.) Align bores. Slide repair shim (73A), if used, onto trunnion pin assy (68), then put trunnion pin (68) through the bores.

D. Align bores in actuator beam arm (74) and trunnion pin (68). Install bolt (67) and parts (66, 65).

CAUTION: IF TRUNNION PIN (68) HAS UNDERSIZE THREADS, A MATCHED UNDERSIZE NUT (64) MUST BE USED.

E. Make sure that spacer (63B) is free from burrs and rough edges, then install on trunnion pin (73). Screw nut (64) on trunnion pin with wrench adapter F80020-5. Install parts (63, 62, 61). Do not tighten nut (64) because trunnion pin (68) must be removed for installation on the airplane.

WARNING: BMS 3-27 CORROSION PREVENTIVE COMPOUND CONTAINS ASBESTOS, TOLUENE, XYLENE, STRONTIUM CHROMATE AND BARIUM CHROMATE. CONSULT APPROPRIATE SAFETY STANDARDS PERSONNEL FOR PROPER HANDLING 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.

CAUTION: TEE BOLT (58) COULD HAVE UNDERSIZE THREADS AND BE A MATCHED SET WITH SPECIAL NUT (43) AND WASHER (44).

F. Apply BMS 3-27 compound to the applicable surfaces of tee bolt (58) as shown in Fig. 501. Do not apply BMS 3-27 compound under the universal. The universal must be greased and free to turn.

CAUTION: BOLT (57) COULD HAVE UNDERSIZE THREADS AND BE A MATCHED SET WITH SPECIAL NUT (55) AND ATTACHMENT (160).

G. Put tee bolt (58) between the shock strut outer cylinder lugs. Align the holes and install tee fitting bolt (57) with BMS 3-27 compound as shown in Fig. 501. Install attachment (160) and nut (55) and tighten the nut to driving torque plus 400 lb-in. Apply BMS 8-45 tamper-proof putty to nut (55) (SOPM 20-50-26).

H. Put parts (54, 50, 45) on tee bolt (58). Lubricate threads on tee bolt with MIL-G-21164 grease. Install parts (44, 43 or 43A) and tighten nut (43 or 43A) to 1200-1500 lb-in. If applicable, install cotter pin (44J or 44K). Apply BMS 8-45 tamper-proof putty to nut (43) (SOPM 20-50-26).

CAUTION: BE SURE TO USE A BOLT (37) OF THE CORRECT PART NUMBER BETWEEN UPPER DRAG STRUT (38) AND TRUNNION LINK (78). BOLT (37) IS A STRUCTURAL FUSE.

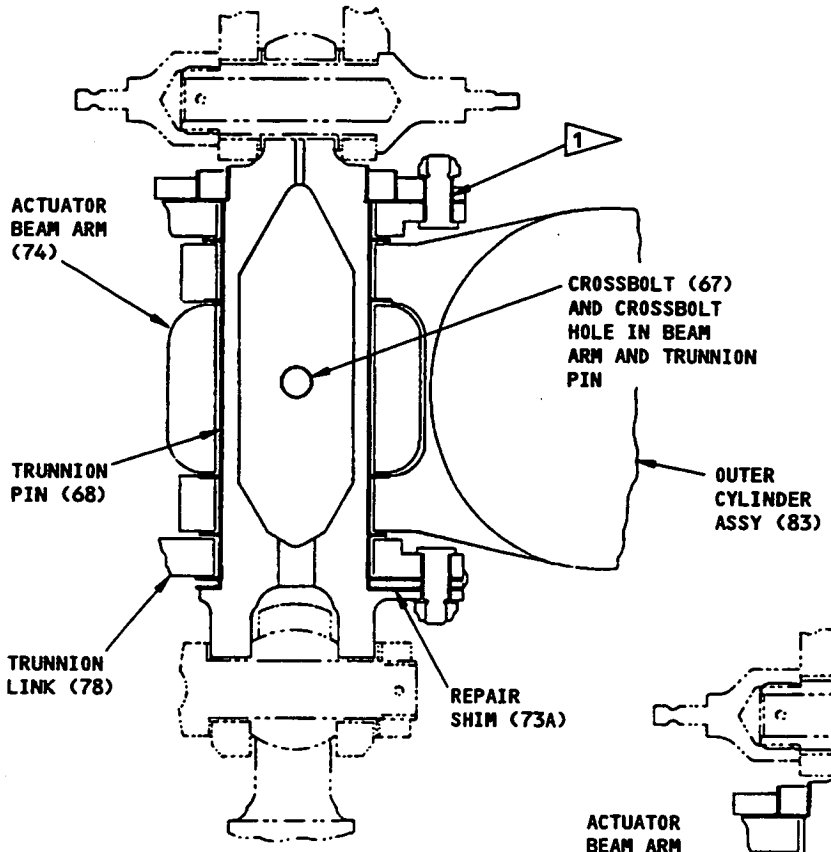
I. Install upper drag strut (38) between lower drag strut (45) and trunnion link (78). Connect the upper drag strut to the trunnion link with bolt (37) (head inboard), washer (35), nut (34). Connect the upper drag strut to the lower drag strut with bolt (36), washer (35), nut (34). Put bolt (36) with its head outboard on the left gear and inboard on the right gear. Tighten nuts (34) as tightly as possible by hand. If necessary for installation of cotter pin, back off the nut to the first castellation which aligns with the hole in the bolt. Install cotter pins (33).

J. Install lower torsion link (27) and upper torsion link (22) on shock strut. Install pins (10A, 14A) with parts (9A, 9B, 9C), or pins (10, 14) with retainers (9), and parts (11, 12, 13). Put the head of pins (10A, 14A) inboard. Tighten nuts (9B) to 100-180 lb-ft; back off as necessary to install cotter pin (9A). (A torque of zero is permitted after backing off.) Tighten nut (11) to 30-40 lb-in. Fully coat torsion link attach lugs on shock strut, torsion link lugs, and torsion link pin (10) with corrosion inhibiting compound BMS 3-23 per SOPM 20-41-05.

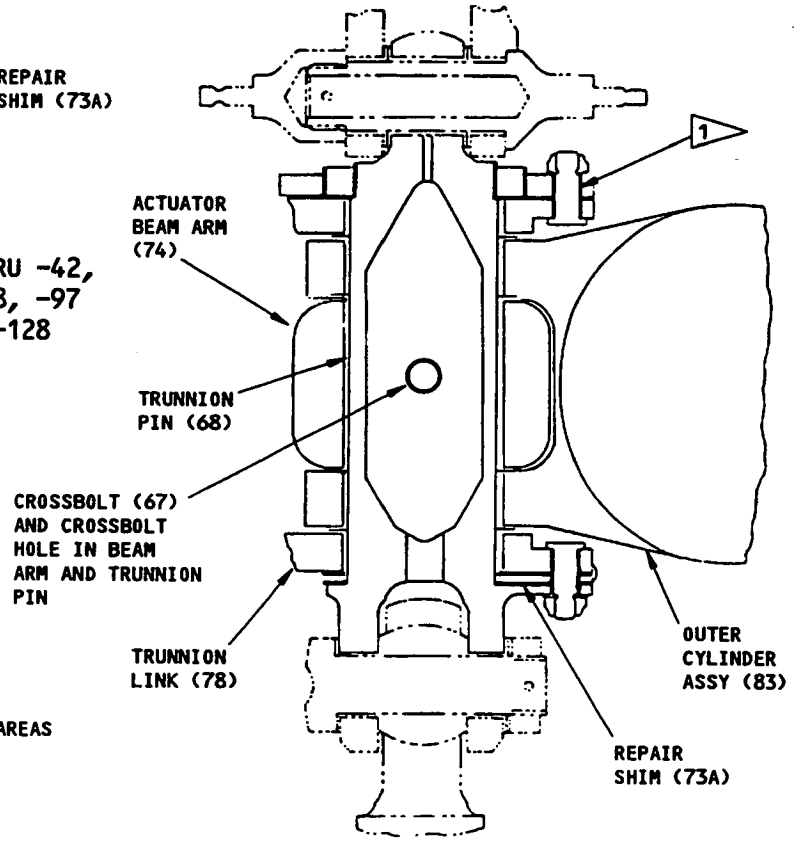
K. Install static ground strap (7) on support bracket (8) with parts (6, 5, 4). Now install bracket (8) with attached parts on shock strut. Align the holes in lower torsion link pin (10) with those in inner cylinder lug, then install parts (3, 2, 1). Tighten nut (1) to 30-40 lb-in. After approximately 1 hour, wipe off the unwanted corrosion inhibiting compound, to let stay only a thin layer on the exposed surfaces. More compound than this does not increase protection.

L. Make sure the lower side strut universal (50) can turn freely.

M. If you have the uplock roller and its related parts (items 120 thru 155), install them on lower side strut universal (50). Lubricate mating surfaces with MIL-G-21164 grease.



65-73761-11 THRU -16, -31 THRU -42, -65, -66, -81, -82, -87, -88, -97 -98, -109, -110, -125 THRU -128



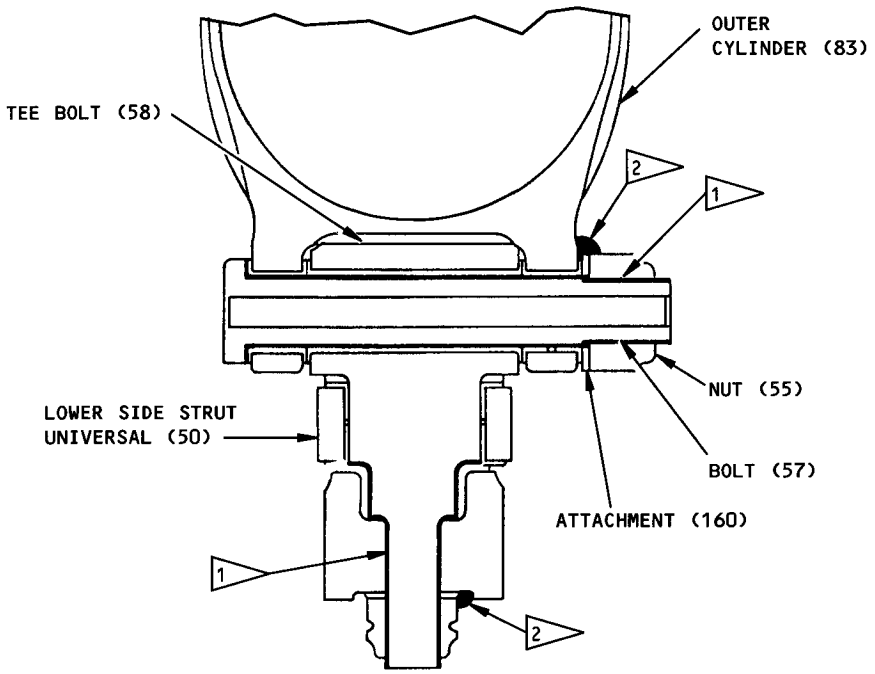
65-73761-115, -116, -121, -122

1 APPLY BMS 3-27 COMPOUND TO THE AREAS INDICATED BY THESE DARK LINES

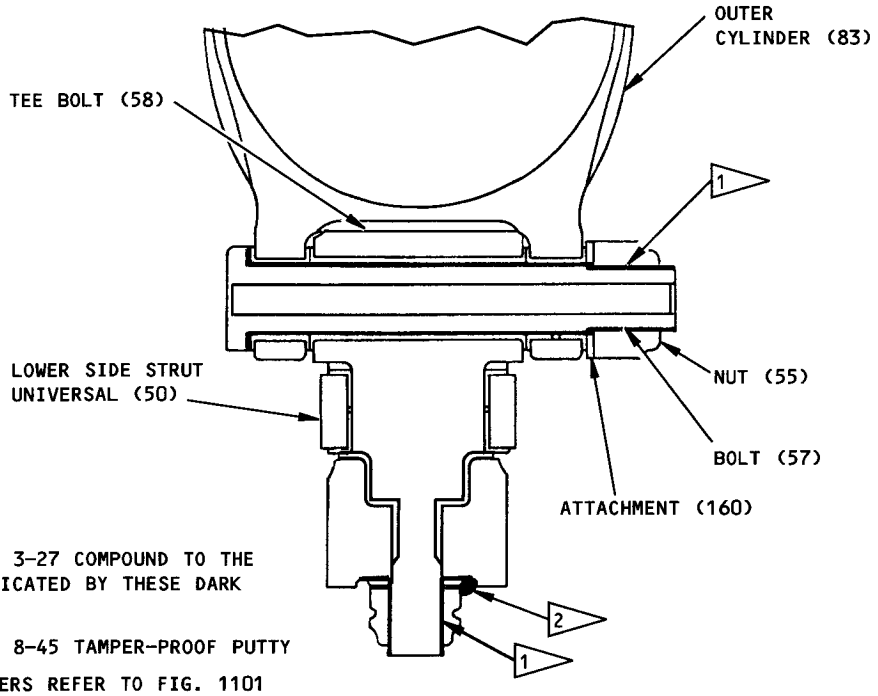
ITEM NUMBERS REFER TO FIG. 1101

Corrosion Preventive Compound Application
Figure 501 (Sheet 1)

F12365



65-73761-11 THRU -16, -31 THRU -42, -65, -66, -81, -82, -87, -88, -97, -98, -109, -110, -125 THRU -128



1 APPLY BMS 3-27 COMPOUND TO THE AREAS INDICATED BY THESE DARK LINES.

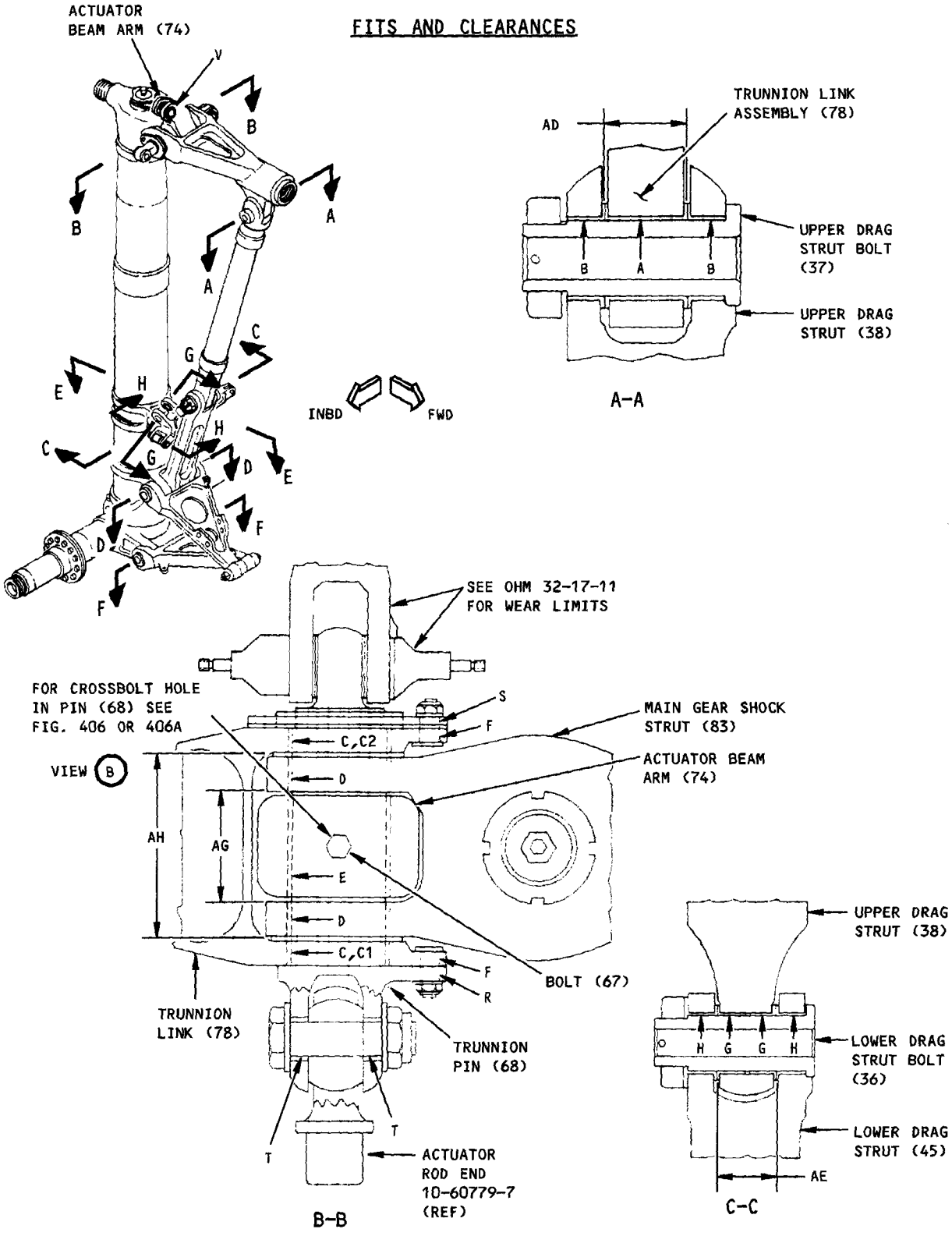
2 APPLY BMS 8-45 TAMPER-PROOF PUTTY

ITEM NUMBERS REFER TO FIG. 1101

65-73761-115, -116, -121, -122

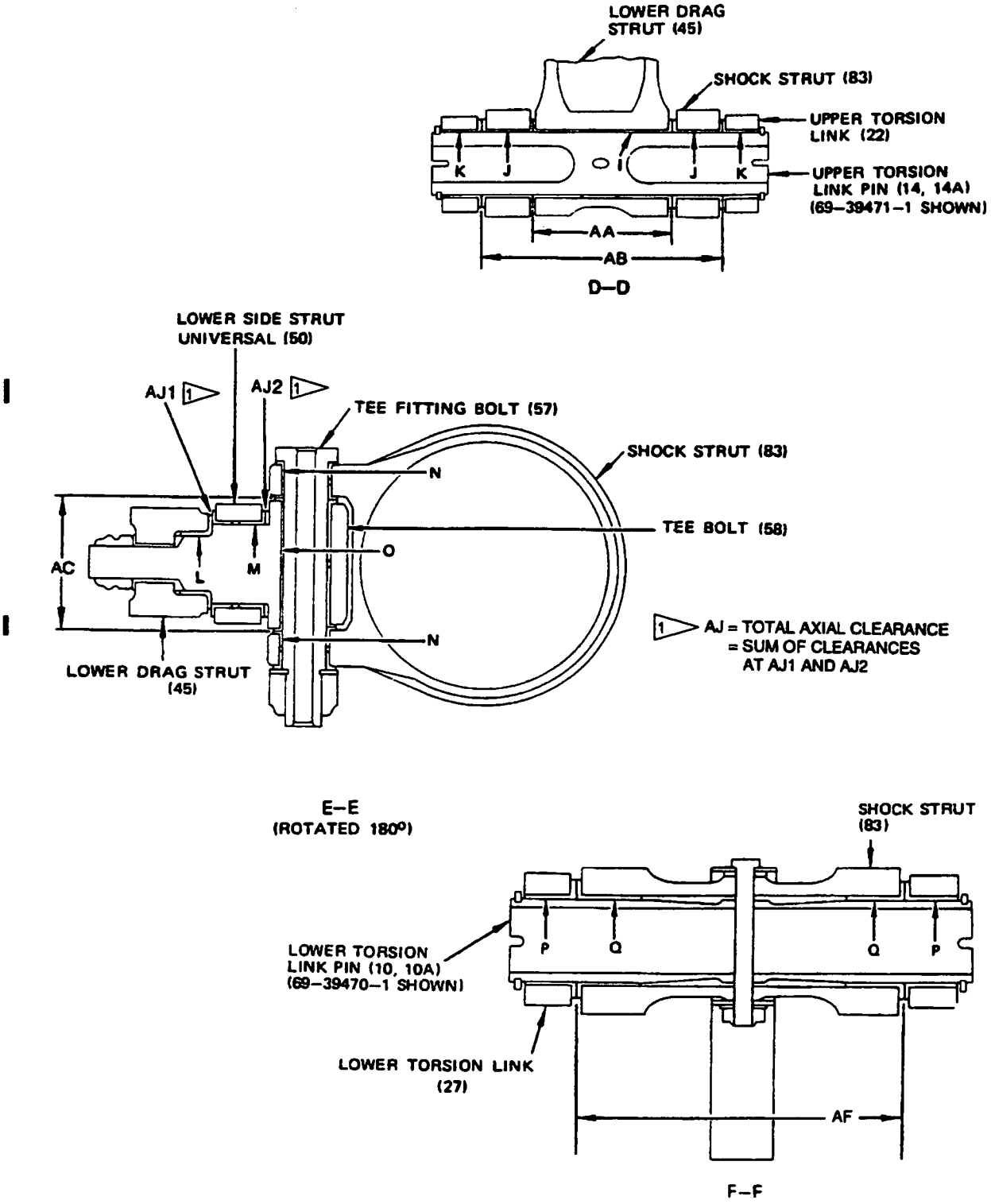
Corrosion Preventive Compound Application
Figure 501 (Sheet 2)

FITS AND CLEARANCES

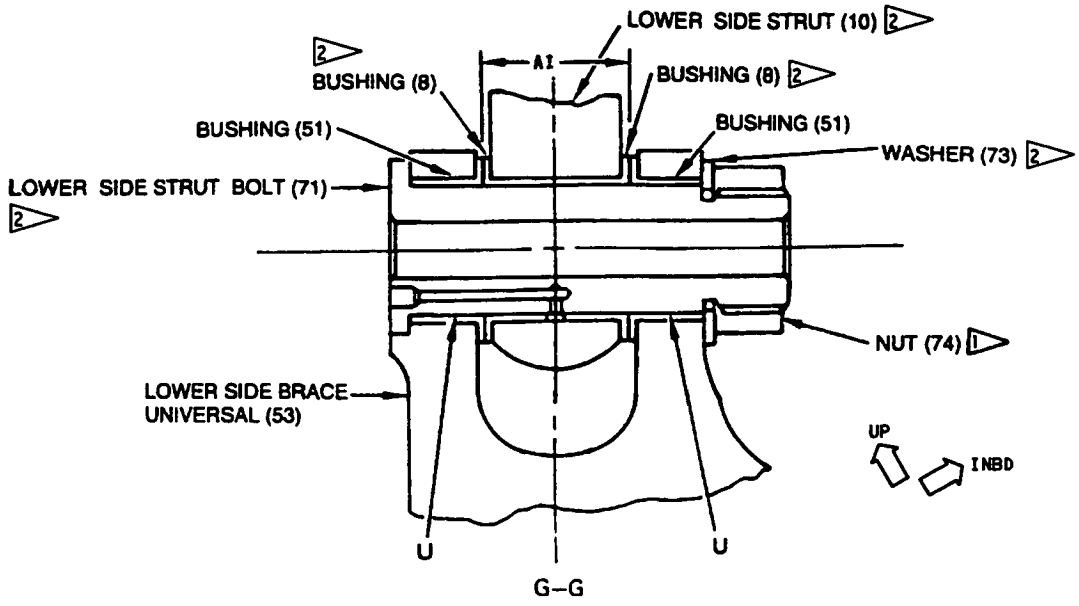


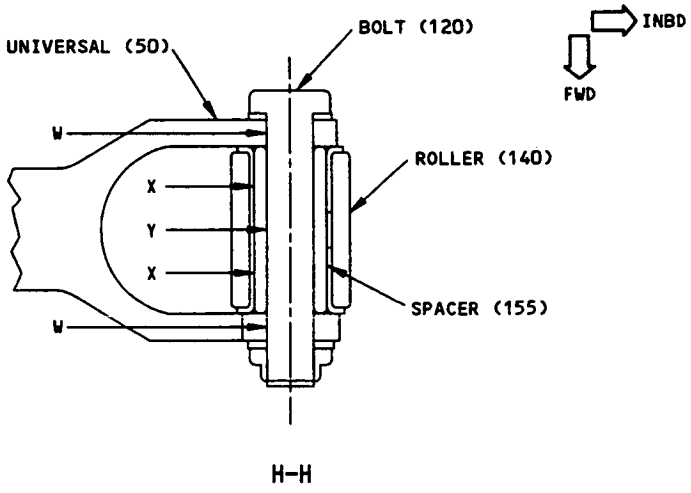
Fits and Clearances
Figure 601 (Sheet 1)

D692S1



Fits and Clearances
Figure 601 (Sheet 2)





2 THESE ITEM NUMBERS REFER TO OHM 32-17-11 FIG. 1101.

Fits and Clearances
Figure 601 (Sheet 3)

		Design Dimensions				Service Wear Limits		
Ref Letter Fig. 601	Mating Item No. Fig. 1101	Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
A	ID 78	1.500	1.501	0.001	0.003		1.502	0.005
	OD 37	1.498	1.499			1.497		
B	ID 38	1.500	1.501	0.001	0.003		1.502	0.005
	OD 37	1.498	1.499			1.497		
C *[14]	ID 78	2.625	2.627	0.001	0.004		2.629	0.006
	OD 68	2.623	2.624			2.622		
C1 *[15]	ID 78	3.000	3.002	0.001	0.004		3.004	0.006
	OD 68	2.998	2.999			2.997		
C2 *[15]	ID 78	2.750	2.752	0.001	0.004		2.754	0.006
	OD 68	2.748	2.749			2.747		
D *[14]	ID 83*[1]	2.625	2.627	0.001	0.004		2.629	0.006
	OD 68	2.623	2.624			2.622		
D *[15]	ID 83*[1]	2.750	2.752	0.001	0.004		2.754	0.006
	OD 68	2.748	2.749			2.747		
E *[14]	ID 74	2.625	2.627	0.001	0.004		2.629	0.006
	OD 68	2.623	2.624			2.622		
E *[15]	ID 74	2.750	2.752	0.001	0.004		2.754	0.006
	OD 68	2.748	2.749			2.747		
F	ID 82	0.4540	0.4545	-0.0005 *[2]	-0.0020 *[2]		0.456	0.000
	OD 79	0.4550	0.4560			- - - -		
G	ID 38	1.500	1.501	0.001	0.003		1.503	0.005
	OD 36	1.498	1.499			1.497		
H	ID 45	1.500	1.501	0.001	0.003		1.503	0.005
	OD 36	1.498	1.499			1.497		
I	ID 45*[3]	1.7505	1.7520	0.0005	0.0025		1.7535	0.0050
	OD 14,14A	1.7495	1.7500			1.7485		

Fits and Clearances
Figure 601 (Sheet 4)

		Original Design Dimensions				Service Wear Limits		
Ref Letter Fig. 601	Mating Item No. Fig. 1101	Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
I	ID 45*[4] OD 14,14A	1.7505 1.7495	1.7515 1.7500	0.0005	0.0020	1.7485	1.7535	0.0050
J	ID 83*[5] OD 14,14A	1.7505 1.7495	1.7520 1.7500	0.0005	0.0025	1.7485	1.7535	0.0050
J	ID 83*[19] OD 14,14A	1.7505 1.7495	1.7515 1.7500	0.0005	0.0020	1.7485	1.7535	0.0050
K	ID 22 OD 14,14A	1.7510 1.7495	1.7520 1.7500	0.0010	0.0025	1.7485	1.7535	0.0050
L	ID 45 OD 58	1.501 1.499	1.502 1.500	0.001	0.003	1.498	1.503	0.005
M	ID 50*[12] OD 58	2.253 2.251	2.254 2.252	0.001	0.003	2.250	2.260	0.010
M	ID 50*[13] OD 58	2.257 2.251	2.258 2.252	0.005	0.007	2.250	2.260	0.010
N	ID 83*[6] OD 57*[7]	1.250 1.248	1.251 1.249	0.001	0.003	1.247	1.253	0.005
N	ID 83*[18] OD 57*[8]	1.375 1.373	1.376 1.374	0.001	0.003	1.372	1.378	0.005
O	ID 58*[9] OD 57*[7]	1.250 1.248	1.251 1.249	0.001	0.003	1.247	1.253	0.005
O	ID 58*[10] OD 57*[8]	1.375 1.373	1.376 1.374	0.001	0.003	1.372	1.378	0.005
P	ID 27 OD 10,10A	1.7510 1.7495	1.7520 1.7500	0.0010	0.0025	1.7485	1.7535	0.0050
Q	ID 83*[11] OD 10,10A	1.7505 1.7495	1.7520 1.7500	0.0005	0.0025	1.7485	1.7535	0.0050

Fits and Clearances
Figure 601 (Sheet 5)

Ref Letter Fig. 601	Mating Item No. Fig. 1101	Original Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
R	ID 68	0.461	0.466	0.005	0.011		0.469	0.015
	OD 79	0.455	0.456			0.454		
S	ID 63	0.460	0.465	0.004	0.010		0.469	0.015
	OD 79	0.455	0.456			0.454		
T	ID 68*[27]	1.000	1.001	0.001	0.003		1.003	0.005
	OD *[22]	0.998	0.999			0.997		
T	ID 68*[28]	1.2500	1.2510	0.001	0.0035		1.253	0.005
	OD *[23]	1.2475	1.2490			1.2465		
U	ID 51*[20]	1.375	1.376	0.001	0.003		1.378	0.005
	OD *[24]	1.373	1.374			1.372		
U	ID 51*[21]	1.437	1.438	0.001	0.003		1.440	0.005
	OD *[25]	1.435	1.436			1.434		
V	ID 76	1.2500	1.2510	0.001	0.0030		1.2530	0.0050
	OD 100*[31]	1.2480	1.2490			1.2470		
V	ID 76	1.2500	1.2510	0.001	0.0035		1.2530	0.0050
	OD 100*[32]	1.2475	1.2490			1.2470		
W	ID 50 *[29]	0.5000	0.5010	0.0005	0.0025			
	OD 120	0.4985	0.4995					
W	ID 50 *[30]	0.5015	0.5025	0.0020	0.0040			
	OD 120	0.4985	0.4995					
X	ID 140	0.750	0.753	0.000	0.004			
	OD 155	0.749	0.750					
Y	ID 155 *[34]	0.4995	0.5005	0.0000	0.0020			
	OD 120	0.4985	0.4995					
Y	ID 155 *[35]	0.5000	0.5010	0.0005	0.0025			
	OD 120	0.4985	0.4995					

Fits and Clearances
Figure 601 (Sheet 6)

Ref Letter Fig. 601	Mating Item No. Fig. 1101	Original Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
AA	*[16] 83 *[17] 45	3.625 3.623	3.627 3.624	0.001	0.004	3.619	3.632	0.008
AB	*[16] 22 *[17] 83*[5]	6.377 6.374	6.378 6.376	0.001	0.004	6.371	6.382	0.011
AB	*[16] 22 *[17] 83*[19]	6.377 6.375	6.378 6.376	0.001	0.003	6.371	6.382	0.011
AC	*[16] 83 *[36] *[17] 58	3.686 3.684	3.688 3.686	0.000	0.004	3.680	3.691	0.008
AC	*[16] 83 *[37] *[17] 58	3.687 3.684	3.688 3.686	0.001	0.004	3.680	3.691	0.008
AD	*[16] 38 *[17] 78	1.626 1.624	1.627 1.625	0.001	0.003	1.619	1.632	0.008
AE	*[16] 45 *[17] 38	1.626 1.624	1.627 1.625	0.001	0.003	1.619	1.632	0.008
AF	*[16] 27 *[17] 83	6.377 6.374	6.378 6.376	0.001	0.004	6.371	6.382	0.011
AG	*[16] 83 *[17] 74	2.900 2.898	2.901 2.899	0.001	0.003	2.897	2.902	0.005
AH	*[16] 78 *[17] 83 *[36]	5.066 5.062	5.068 5.064	0.002	0.006	5.058	5.072	0.010
AH	*[16] 78 *[17] 83 *[37]	5.066 5.062	5.068 5.063	0.003	0.006	5.058	5.072	0.010
AI	*[16] 50 *[17] *[26]	1.627 1.623	1.628 1.626	0.001	0.005	1.618	1.633	0.015
AJ	58, 54 *[33] *[12}	- - -	- - -	0.000	0.006	- - -	- - -	0.020
AJ	58, 54 *[33] *[13]	- - -	- - -	0.010	0.016	- - -	- - -	0.020

Fits and Clearances
Figure 601 (Sheet 7)

*[1] Trunnion link attachment lugs on shock strut outer cylinder (OHM 32-11-11)
*[2] Negative values are an interference fit
*[3] 65-46104
*[4] 65-60579
*[5] Upper torsion link attachment lugs on shock strut outer cylinder 65-46110 (OHM 32-11-11)
*[6] Tee bolt attachment lugs on shock strut outer cylinder 65-46110 (OHM 32-11-11)
*[7] 69-39472-2
*[8] 69-51833-series
*[9] 65-46140-4
*[10] 65-46140-6, -9
*[11] Lower torsion link attachment lugs on shock strut inner cylinder 65-46116 (OHM 32-11-11)
*[12] 65-46106-1, -3
*[13] 65-46106-5, -7, -9, -11, -13
*[14] Assemblies thru 65-73761-110, -127, -128
*[15] Assemblies 65-73761-115, -116, -121, -122
*[16] Dimension between inner faces of bushings or lugs
*[17] Dimension across outer faces of bushings or lugs
*[18] Tee bolt attachment lugs on shock strut outer cylinder 65-61740 (OHM 32-11-11)
*[19] Upper torsion link attachment lugs on shock strut outer cylinder 65-61740 (OHM 32-11-11)
*[20] 65-46106-1, -3, -5, -7, -11
*[21] 65-46106-9, -13
*[22] Installation bolt BACB30LJ16( ). The bolt at this location is a life limited part. Because it is not serialized by Boeing, we recommend you either (a) discard the bolt at each overhaul and replace it with a new bolt, or (b) identify the bolt with a permanent serial number and use it here with the life limit requirements in SL 737-32-18.
*[23] Installation bolt BACB30LJ20( ) or bolt 65C36459. The bolt at this location is a life limited part. Because it is not serialized by Boeing, we recommend you either (a) discard the bolt at each overhaul and replace it with a new bolt, or (b) identify the bolt with a permanent serial number and use it here with the life limit requirements in SL 737-32-18.
*[24] Lower side strut bolt 69-68151 (OHM 32-16-31)
*[25] Lower side strut bolt 69-77524 (OHM 32-16-31)
*[26] Lower side brace universal attachment lug on side strut 65-63397 (OHM 32-17-11)
*[27] Trunnion pin assemblies thru 65-46113-16
*[28] Trunnion pin assemblies 65-46113-17, -19, -21 and 65C32964-series
*[29] 65-46106-1, -3, -5, -7, -9
*[30] 65-46106-11, -13
*[31] Inboard actuator beam bolt 69-42199 (Pre SB 32A1224)
*[32] Installation bolt BACB30LJ20( ). The bolt at this location is a life limited part. Because it is not serialized by Boeing, we recommend you either (a) discard the bolt at each overhaul and replace it with a new bolt, or (b) identify the bolt with a permanent serial number and use it here with the life limit requirements in SL 737-32-18.
*[33] Total axial clearance, which is the sum of the axial clearances between lower drag strut (45), lower side strut universal (50), and tee bolt (58)
*[34] 69-42190-1
*[35] 69-42190-2
*[36] Shock strut outer cylinder 65-46110 (OHM 32-11-11)
*[37] Shock strut outer cylinder 65-61740 (OHM 32-11-11)

Fits and Clearances
Figure 601 (Sheet 8)

FOR TORQUE VALUES OF STANDARD FASTENERS REFER TO SOPM 20-50-01			
Item Number Fig. 1101	Name	Torque	
		Pound-Inches	Pound-Feet
1	Nut	30-40	
9B	Nut		100-180*[1]*[3]
11	Nut	30-40	
34	Nut	Hand tight *[1]	
43	Nut	1200-1500	
55	Nut	400 *[2}	

*[1] Back off as necessary for installation of cotter pin

*[2] Above driving torque

*[3] This torque can be zero, after backing off per *[1]

Torque Table
Figure 602

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

NOTE: Equivalent substitutes can be used.

1. F80020-5 -- Wrench Adapter
2. F80007-1 -- Axle Protection Sleeve (Replaced by F72913-7)
3. F72913-7 -- Axle and Thread Protection Set (Replaces F80007-1)
4. F80115-series -- Thread Protector and Alignment Tools

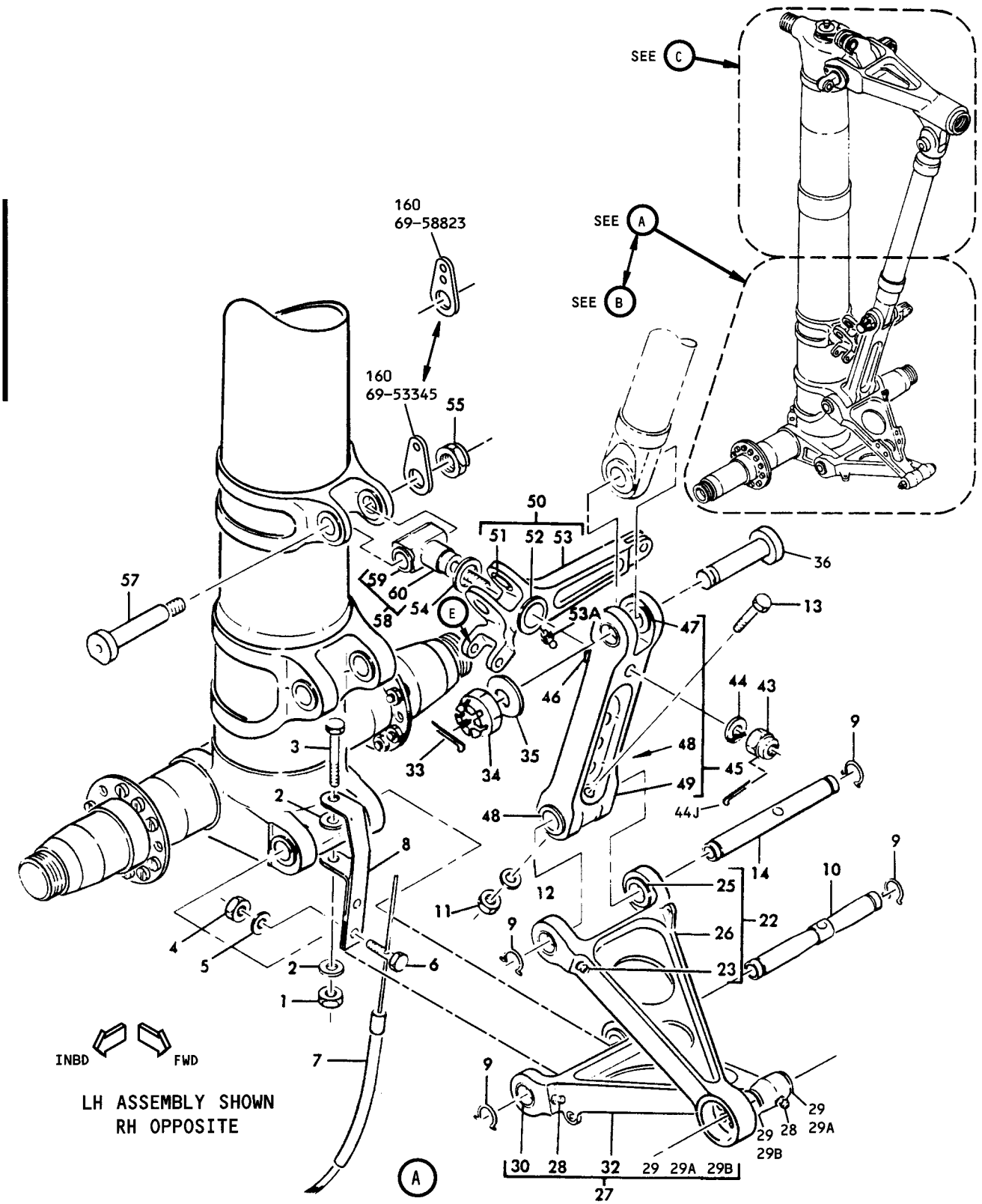
ILLUSTRATED PARTS LIST

VENDORS

/50632 KAMATICS CORP., SUB. OF KAMAN CORP., 1330 BLUE HILLS AVE., P.O. BOX 3, BLOOMFIELD, CONNECTICUT 06002-1304

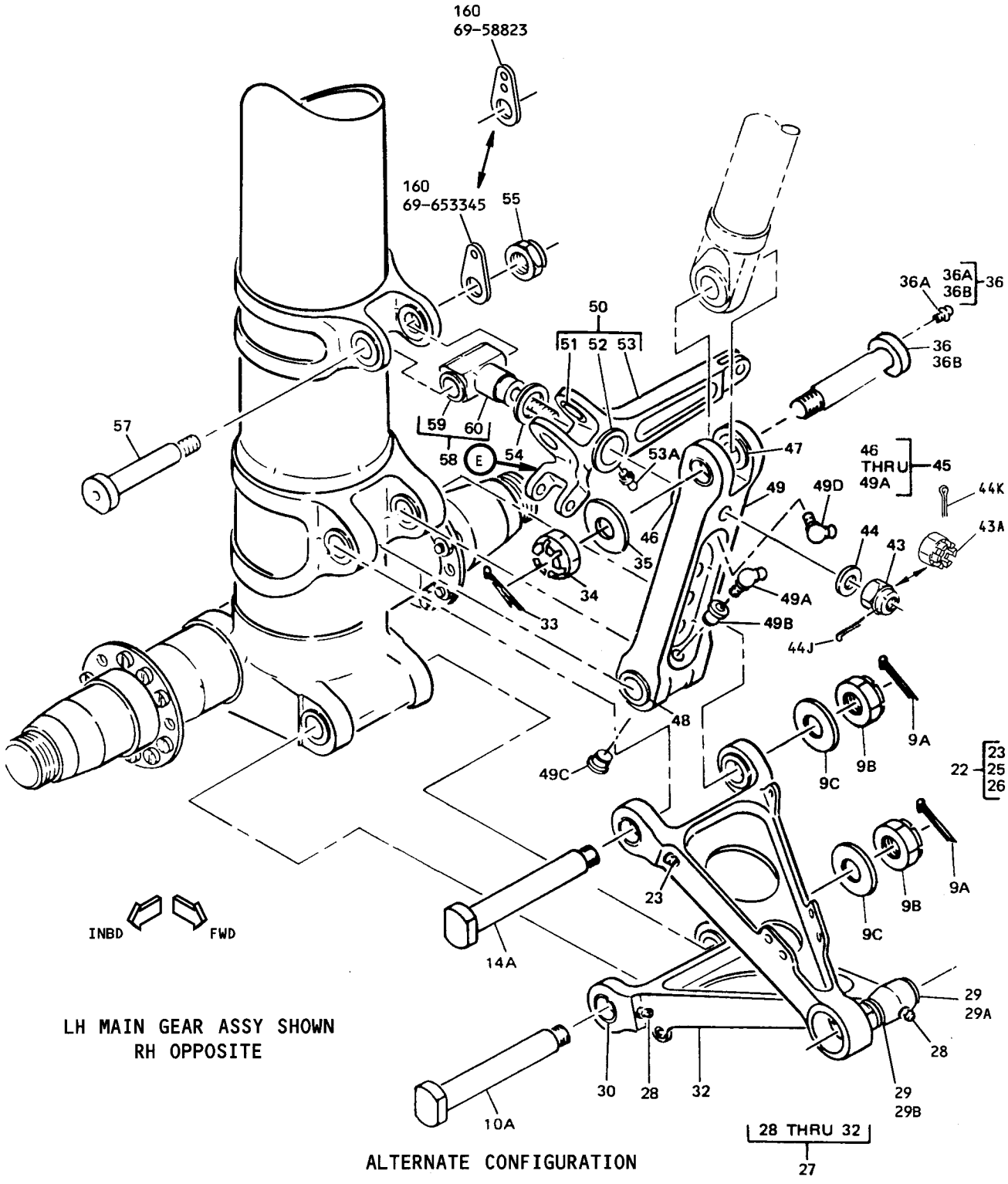
/80756 SPIROLOX, DIV. OF KAYDON CORP., 29 CASSENS CT., FENTON, MISSOURI 63026-2542

/95879 STEWART WARNER ALEMITE CORP., 1826 DIVERSEY PKWY, CHICAGO, ILLINOIS 60614-1540



Main Gear Assembly
Figure 1101 (Sheet 1)

F11412



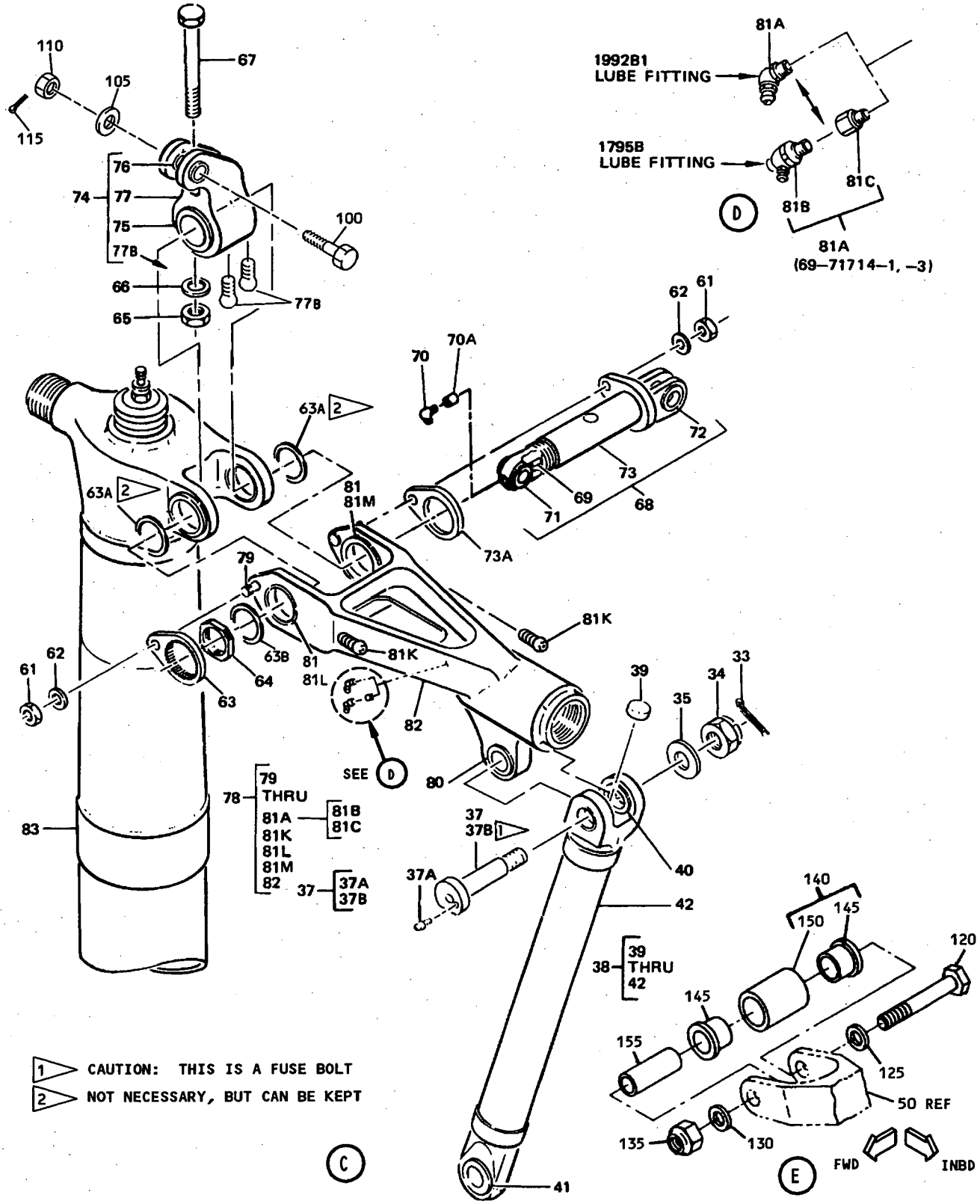
LH MAIN GEAR ASSY SHOWN
RH OPPOSITE

ALTERNATE CONFIGURATION

(B)

Main Gear Assembly
Figure 1101 (Sheet 2)

F11422



Main Gear Assembly
Figure 1101 (Sheet 3)

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-73761-11		MAIN GEAR ASSY (LH) *[2]	A	RF
	65-73761-12		MAIN GEAR ASSY (RH) *[2]	B	RF
	65-73761-13		MAIN GEAR ASSY (LH) *[2]	C	RF
	65-73761-14		MAIN GEAR ASSY (RH) *[2]	D	RF
	65-73761-15		MAIN GEAR ASSY (LH) *[2]	E	RF
	65-73761-16		MAIN GEAR ASSY (RH) *[2]	F	RF
	65-73761-31		MAIN GEAR ASSY (LH) *[2]	G	RF
	65-73761-32		MAIN GEAR ASSY (RH) *[2]	H	RF
	65-73761-33		MAIN GEAR ASSY (LH) *[2]	I	RF
	65-73761-34		MAIN GEAR ASSY (RH) *[2]	J	RF
	65-73761-35		MAIN GEAR ASSY (LH) *[2]	K	RF
	65-73761-36		MAIN GEAR ASSY (RH) *[2]	L	RF
	65-73761-37		MAIN GEAR ASSY (LH) *[2]	M	RF
	65-73761-38		MAIN GEAR ASSY (RH) *[2]	N	RF
	65-73761-39		MAIN GEAR ASSY (LH) *[2]	O	RF
	65-73761-40		MAIN GEAR ASSY (RH) *[2]	P	RF
	65-73761-41		MAIN GEAR ASSY (LH) *[2]	Q	RF
	65-73761-42		MAIN GEAR ASSY (RH) *[2]	R	RF
	65-73761-65		MAIN GEAR ASSY (LH) *[2]	S	RF
	65-73761-66		MAIN GEAR ASSY (RH) *[2]	T	RF
	65-73761-81		MAIN GEAR ASSY (LH) *[2]	U	RF
	65-73761-82		MAIN GEAR ASSY (RH) *[2]	V	RF
	65-73761-87		MAIN GEAR ASSY (LH) *[2]	W	RF
	65-73761-88		MAIN GEAR ASSY (RH) *[2]	X	RF
	65-73761-97		MAIN GEAR ASSY (LH) *[2]	Y	RF
	65-73761-98		MAIN GEAR ASSY (RH) *[2]	Z	RF
	65-73761-109		MAIN GEAR ASSY (LH) *[2]	BA	RF
	65-73761-110		MAIN GEAR ASSY (RH) *[2]	CA	RF
	65-73761-115		MAIN GEAR ASSY (LH) *[2]	DA	RF
	65-73761-116		MAIN GEAR ASSY (RH) *[2]	EA	RF
	65-73761-121		MAIN GEAR ASSY (LH) *[2]	FA	RF
	65-73761-122		MAIN GEAR ASSY (RH) *[2]	GA	RF
	65-73761-125		MAIN GEAR ASSY (LH) *[2]	HA	RF
	65-73761-126		MAIN GEAR ASSY (RH) *[2]	IA	RF
	65-73761-127		MAIN GEAR ASSY (LH) *[2]	JA	RF
	65-73761-128		MAIN GEAR ASSY (RH) *[2]	KA	RF
1	BACN10JC6		. NUT (REPLS NAS679A6) *[1]		1
2	AN960-616		. WASHER *[3]		2
3	NAS1106-41		. BOLT *[3]		1
4	BACN10JC3		. NUT *[3]		2
5	AN960-10		. WASHER *[3]		2
6	69-36446-4		. BOLT *[3]		2
7	69-41900-5		. STRAP *[3]		1
8	69-44404-1		. BRACKET *[3]		1
9	RST175		. RING, RETAINER, V80756	A-V	4

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
9A	MS24665-363		. PIN, COTTER (USED WITH 69-72023-1)		2
9B	MS21025-24		. NUT (USED WITH 69-72023-1)		2
9C	BACW10BP241P		. WASHER (USED WITH 69-72023-1)		2
10	69-39470-1		. PIN, LWR TORSION LINK (PRE SB 32A1113)	A-V	1
-10A	69-72023-1		. PIN (SUPSDS 69-39470-1) (POST SB 32A1113)	A-V	1
-10A	69-72023-1		. PIN (OPT TO 69-72023-2,-3) (POST SB 32A1113)	W-CA	1
-10A	69-72023-2		. PIN (OPT TO 69-72023-1) (POST SB 32A1113)	W-KA	1
-10A	69-72023-3		. PIN (OPT TO 69-72023-4) (PREF PART)(POST SB 32A1113)	FA GA JA KA	1
-10A	69-72023-4		. PIN (SERIALIZED)(LIMITED)	FA GA JA KA	1
-10A	69-72023-5		. PIN (SERIALIZED)(LIMITED)	FA GA JA KA	1
11	BACN10MD6		. NUT	A-V	1
12	AN960-616		. WASHER	A-V	1
13	BACB30EK6A40C		. BOLT (REPLS BACB30EK6A40)	A-V	1
14	69-39471-1		. PIN, UPPER TORSION LINK	A-V	1
-14A	69-72023-1		. PIN (SUPSDS 69-39471-1) (POST SB 32A1113)	A-V	1
-14A	69-72023-1		. PIN (OPT TO 69-72023-2,-3)	W-CA	1
-14A	69-72023-2		. PIN (OPT TO 69-72023-1)	W-KA	1
-14A	69-72023-3		. PIN (OPT TO 69-72023-4)(PREF PART) (POST SB 32A1113)	FA GA JA KA	1
-14A	69-72023-4		. PIN (SERIALIZED)(LIMITED)	FA GA JA KA	1
-14A	69-72023-5		. PIN (SERIALIZED)(LIMITED)	FA GA JA KA	1
22	65-67963-1		. LINK ASSY, UPPER TORSION	A-RUV	1
22	65-67963-1		. LINK ASSY, UPPER TORSION (OPT)	GHKLO PUV	1
22	65-67963-3		. LINK ASSY, UPPER TORSION	GHKLO PS-KA	1
22	69-54798-12		. LINK ASSY, UPPER TORSION (SB 32-1064)	A-R	1
23	1645B		. . FITTING, LUBE, V95879		3
25	65-46150-6		. . BUSHING (USED ON 65-67963-1)		2
25	65-46150-70		. . BUSHING (USED ON 65-67963-3)		2
25	65-46150-73		. . BUSHING (USED ON 69-54798-12)		2
26	65-67963-2		. . LINK (USED ON 65-67963-1)		1
26	65-67963-4		. . LINK (USED ON 65-67963-3)		1
26	69-54798-4		DELETED		

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
26	69-54798-15		. . LINK (USED ON 69-54798-12)		1
27	65-46102-17		. LINK ASSY, LWR TORSION (OPT)	A-DIJ	1
27	65-46102-18		. LINK ASSY, LWR TORSION	A-R	1
27	65-46102-18		. LINK ASSY, LWR TORSION (OPT)	UV	1
27	65-46102-21		. LINK ASSY, LWR TORSION	GHKLO PS-EA HA-KA	1
27	65-46102-23		. LINK ASSY, LWR TORSION	FA GA	1
27	65-67968-1		. LINK ASSY, LWR TORSION (OPT)	A-D	1
27	65-67968-2		. LINK ASSY, LWR TORSION (OPT)	A-D	1
27	69-54798-3		. LINK ASSY, LWR TORSION (SB 32-1064)	A-FI-R	1
27	69-54798-7		. LINK ASSY, LWR TORSION (SB 32-1064)	A-DIJ	1
27	69-54798-13		. LINK ASSY, LWR TORSION (SB 32-1064)	A-FI-R	1
27	69-54798-14		. LINK ASSY, LWR TORSION (SB 32-1064)	A-DIJ	1
28	1645B		. . FITTING, LUBE, V95879 (USED ON 65-46102-17,-18,-21) (OPT TO1645B)		3
28	1728B		. . FITTING, LUBE, V95879 (USED ON 65-46102-17,-18,-21) (OPT TO 1645B)		3
28	1728B		. . FITTING, LUBE, V95879 (USED ON 65-46102-23)		3
29	69-54356-1		. . BUSHING (USED ON 65-46102-17,-18, 65-67968-1,-2)		2
29	69-63929-1		. . BUSHING (USED ON 69-54798-3,-7)		2
29	69-63929-1		. . BUSHING (USED ON 65-46102-21) (REPLD BY 69-78230-1,-2)		2
29	69-63929-1		. . BUSHING (USED ON 65-46102-23) (REPLD BY 69-78230-1,-2)		2
29	69-63929-2		. . BUSHING (USED ON 69-54798-13,-14)		2
29A	69-78230-2		. . BUSHING (USED ON 65-46102-21) (OPT TO 69-63929-1)		1
29A	69-78230-2		. . BUSHING (USED ON 65-46102-23) (REPLS 69-63929-1)		1
29B	69-78230-1		. . BUSHING (USED ON 65-46102-21) (OPT TO 69-63929-1)		1
29B	69-78230-1		. . BUSHING (USED ON 65-46102-23) (REPLS 69-63929-1)		1
30	65-46150-70		. . BUSHING (USED ON 65-46102-21, -23, 69-54798-3,-7)		2
30	65-46150-6		. . BUSHING (USED ON 65-46102-17, -18, 65-67968-1,-2)		2
30	65-46150-73		. . BUSHING (USED ON 69-54798-13,-14)		2
32	65-46102-19		. . LINK (USED ON 65-46102-17)		1
32	65-46102-20		. . LINK (USED ON 65-46102-18)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
32	65-46102-22		. . LINK (USED ON 65-46102-21)		1
32	65-46102-24		. . LINK (USED ON 65-46102-23)		1
32	65-67968-3		. . LINK (USED ON 65-67968-1)		1
32	65-67968-4		. . LINK (USED ON 65-67968-2)		1
32	69-54798-5		. . LINK (USED ON 69-54798-3)		1
32	69-54798-6		. . LINK (USED ON 69-54798-7)		1
32	69-54798-16		. . LINK (USED ON 69-54798-13)		1
32	69-54798-17		. . LINK (USED ON 69-54798-14)		1
33	MS24665-378		. PIN, COTTER		2
34	69-41637-1		. NUT, UPPER DRAG STRUT		2
35	69-41638-1		. WASHER		2
36	69-39473-1		. BOLT, LOWER DRAG STRUT (PRE SB 32-1123)	AB	1
36	69-39473-2		. BOLT, LOWER DRAG STRUT (PRE SB 32-1123)	C-Z	1
36	69-39473-3		. BOLT ASSY, LOWER DRAG STRUT (POST SB 32-1123)(REPLD BY 69-39473-5,-6)	A-Z	1
36	69-39473-3		. BOLT ASSY, LOWER DRAG STRUT (REPLD BY 69-39473-5,-6)	W-KA	1
36	69-39473-5		. BOLT ASSY, LOWER DRAG STRUT (REPLS 69-39473-3)	FA GA JA KA	1
36	69-39473-6		. BOLT ASSY, LOWER DRAG STRUT (REPLS 69-39473-3) (SERIALIZED)	FA GA JA KA	1
36	69-39473-5		. BOLT ASSY, LOWER DRAG STRUT (POST SB 32-1123)(REPLS 69-39473-3)	C-Z	1
36	69-39473-6		. BOLT ASSY, LOWER DRAG STRUT (POST SB 32-1123)(REPLS 69-39473-3) (SERIALIZED)	C-Z	1
36A	1728B		. . FITTING, LUBE, V95879 (USED ON 69-39473-3,-5,-6)		1
36B	69-39473-4		. . BOLT (USED ON 69-39473-3,-5)		1
36B	69-39473-7		. . BOLT (USED ON 69-39473-6)		1
37	69-39476-5		. BOLT, UPPER DRAG STRUT (PRE SB 32-1123)	A-DG-J MNS-V	1
37	69-39476-6		. BOLT, UPPER DRAG STRUT(PRE SB 32-1123)	EFKL O-R W-Z	1
37	69-39476-7		. BOLT, UPPER DRAG STRUT (POST SB 32-1108) (PRE SB 32-1123)	EFKL O-R W-Z	1
37	69-39476-8		. BOLT, UPPER DRAG STRUT (POST SB 32-1108) (PRE SB 32-1123)	A-D G-J MNS-V	1
37	69-39476-9		. BOLT, UPPER DRAG STRUT (SERIALIZED)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
37	69-72609-1		. BOLT ASSY, UPPER DRAG STRUT (POST SB 32-1123) (REPLD BY 69-72609-5)	EFKL-O-R W-Z	1
37	69-72609-3		. BOLT ASSY, UPPER DRAG STRUT (POST SB 32-1123) (REPLD BY 69-72609-7)	A-DG-J MNS-V	1
37	69-72609-5		. BOLT ASSY, UPPER DRAG STRUT (SERIALIZED) (REPLS 69-72609-1)	EFKLO-R W-Z	1
37	69-72609-7		. BOLT ASSY, UPPER DRAG STRUT (SERIALIZED) (REPLS 69-72609-3)	A-DG-J MNS-V	1
37	69-73169-1		. BOLT ASSY, UPPER DRAG STRUT	BA CA	1
37	69-73169-3		. BOLT ASSY, UPPER DRAG STRUT	JA KA	1
37	69-77145-1		. BOLT ASSY, UPPER DRAG STRUT (REPLD BY 69-77145-3)	DA EA	1
37	69-77145-3		. BOLT ASSY, UPPER DRAG STRUT	DA EA	1
37	69-77145-3		. BOLT ASSY, UPPER DRAG STRUT (LIMITED)	FA GA	1
37	69-77145-5		. BOLT ASSY, UPPER DRAG STRUT (LIMITED)(SERIALIZED)	FA GA	1
37A	1728B		. . FITTING, LUBE, V95879 (USED ON 69-72609-1,-3,-5,-7, 69-73169-1, 69-77145-1,-3,-5)		1
37B	69-72609-2		. . BOLT (USED ON 69-72609-1)		1
37B	69-72609-4		. . BOLT (USED ON 69-72609-3)		1
37B	69-72609-6		. . BOLT (USED ON 69-72609-5)		1
37B	69-72609-8		. . BOLT (USED ON 69-72609-7)		1
37B	69-73169-2		. . BOLT (USED ON 69-73169-1)		1
37B	69-73169-4		. . BOLT (USED ON 69-73169-3)		1
37B	69-77145-2		. . BOLT (USED ON 69-77145-1,-3)		1
37B	69-77145-4		. . BOLT (USED ON 69-77145-5)		1
38	65-46103-3		. STRUT ASSY, UPPER DRAG (PRE SB 32-1123)	AB	1
38	65-46103-5		. STRUT ASSY, UPPER DRAG (PRE SB 32-1123)	CDIJ S-V	1
38	65-46103-7		. STRUT ASSY, UPPER DRAG (PRE SB 32-1123)	E-H M-R	1
38	65-46103-7		. STRUT ASSY, UPPER DRAG (OPT) (PRE SB 32-1123)	KLW-Z	1
38	65-46103-9		. STRUT ASSY, UPPER DRAG (PRE SB 32-1123)	GHKLO PW-Z	1
38	65-46103-11		. STRUT ASSY, UPPER DRAG (POST SB 32-1123)	E-H K-R W-Z	1
38	65-46103-11		. STRUT ASSY, UPPER DRAG	W-EA	1
38	65-46103-13		. STRUT ASSY, UPPER DRAG (OPT)	W-KA	1
38	65-46103-13		. STRUT ASSY, UPPER DRAG	FA GA	1
39	66-24421-1		. . PLUG (USED ON 65-46103-3,-5,-7,-9,-11) (DELETED BY SL 32-41)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
40	65-46150-16		. . BUSHING (USED ON 65-46103-3,-5,-7, -9 (PRE SB 32-1123)		2
40	65-46150-92		. . BUSHING (USED ON 65-46103-11,-13) (POST SB 32-1123)		2
41	65-46150-26		. . BUSHING (USED ON 65-46103-3,-5) (PRE SB 32-1123)		2
41	65-46150-56		. . BUSHING (USED ON 65-46103-7,-9) (PRE SB 32-1123)		2
41	65-46150-90		. . BUSHING (USED ON 65-46103-11,-13) (POST SB 32-1123)		2
42	65-46103-4		. . STRUT (USED ON 65-46103-3)		1
42	65-46103-6		. . STRUT (USED ON 65-46103-5)		1
42	65-46103-8		. . STRUT (USED ON 65-46103-7)		1
42	65-46103-10		. . STRUT (USED ON 65-46103-9)		1
42	65-46103-12		. . STRUT (USED ON 65-46103-11)		1
42	65-46103-14		. . STRUT (USED ON 65-46103-13)		1
43	BACN10GW14		. NUT	A-DIJS-V FA GA	1
43	BACN10HR14		. NUT	E-H K-R W-EA HA-KA	1
43	BACN10HR12		. NUT (REPAIR PART)		1
43A	AN310-14		. NUT (REPAIR PART)		1
43A	BACN10JD14		. NUT (REPAIR PART)		1
44	AN960-1416		. WASHER		1
44	AN960-1216		. WASHER (REPAIR PART)		1
44J	MS24665-374		. PIN, COTTER (USED WITH BACN10GW14, ITEM 43)	FA GA	1
44K	MS24665-465		. PIN, COTTER (REPAIR PART)		1
45	65-46104-3		. STRUT ASSY, LOWER DRAG (PRE SB 32-1123)	AB	1
45	65-46104-5		. STRUT ASSY, LOWER DRAG (PRE SB 32-1123)	CDIJ S-V	1
45	65-60579-1		. STRUT ASSY, LOWER DRAG (PRE SB 32-1123)	E-HK-R W-Z	1
45	65-60579-3		. STRUT ASSY, LOWER DRAG (POST SB 32-1123)	E-HK-R W-Z	1
45	65-60579-3		. STRUT ASSY, LOWER DRAG	W-EA HA-KA	1
45	65-60579-5		. STRUT ASSY, LOWER DRAG	FA GA	1
46	69-38965-2		DELETED		
46	69-38965-4		. . BUSHING (USED ON 65-46104-3,-5, 65-60579-1,-3)		1
46	69-77452-1		. . BUSHING (USED ON 65-60579-5)		1
47	65-46150-30		. . BUSHING (USED ON 65-46104-3,-5, 65-60579-1) (PRE SB 32-1123)		2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-47	65-46150-86		. . BUSHING (USED ON 65-46104-3,-5, 65-60579-1) (POST SB 32-1123)		2
47	65-46150-86		. . BUSHING (USED ON 65-60579-3,-5)		2
48	65-46150-31		. . BUSHING (USED ON 65-46104-3,-5) 65-60579-1)(PRE SB 32-1123)		2
48	65-46150-87		. . BUSHING (USED ON 65-46150-3,-5, 65-60579-1)(POST SB 32-1123)		2
48	65-46150-87		. . BUSHING (USED ON 65-60579-3,-5)		2
49	65-46104-4		. . STRUT (USED ON 65-46104-3)		1
49	65-46104-6		. . STRUT (USED ON 65-46104-5)		1
49	65-60579-2		. . STRUT (USED ON 65-60579-1)		1
49	65-60579-4		. . STRUT (USED ON 65-60579-3)		1
49	65-60579-6		. . STRUT (USED ON 65-60579-5)		1
49	65-60579-7		. . STRUT (USED ON 65-60579-5) (OPT)		1
49A	1646B1		. . FITTING, LUBE, V95879 (USED ON 65-60579-3)(PRE SB 32-1123)		1
49A	1728B		. . FITTING, LUBE, V95879 (USED ON 65-60579-3)(POST SB 32-1123)		1
49B	65-46116-40		. . PLUG (POST SB 32-1123)		1
49C	65-46116-40		. . PLUG (POST SB 32-1123)		1
49D	1992B		. . FITTING, LUBE, V95879 (USED ON 65-60579-5)		1
50	65-46106-1		. UNIVERSAL ASSY, LWR SIDE STRUT (OPT)	A-D	1
50	65-46106-1		. UNIVERSAL ASSY, LWR SIDE STRUT (PRE SB 32-1047)	UV	1
50	65-46106-3		. UNIVERSAL ASSY, LWR SIDE STRUT (PRE SB 32-1047)	E-H	1
50	65-46106-5		. UNIVERSAL ASSY, LWR SIDE STRUT (POST SB 32-1047)	A-DIJ	1
50	65-46106-5		. UNIVERSAL ASSY, LWR SIDE STRUT	ST	1
50	65-46106-7		. UNIVERSAL ASSY, LWR SIDE STRUT (POST SB 32-1047)(REPLS 65-46106-3)	E-H K-R	1
50	65-46106-7		. UNIVERSAL ASSY, LWR SIDE STRUT	W-EA HA-KA	1
50	65-46106-9		. UNIVERSAL ASSY, LWR SIDE STRUT	FA GA	1
50	65-46106-11		. UNIVERSAL ASSY, LWR SIDE STRUT	JA KA	1
50	65-46106-13		. UNIVERSAL ASSY, LWR SIDE STRUT	FA GA	1
51	65-46150-44		. . BUSHING (USED ON 65-46106-1,-3,-5, -7,-11)		2
51	65-46150-113		. . BUSHING (USED ON 65-46106-9,-13)		2
52	69-39477-1		. . BUSHING (USED ON 65-46106-1,-3)		2
52	69-39477-2		. . BUSHING (USED ON 65-46106-5,-7,-9, -11,-13 AND ASSYS POST SB 32-1047)		2
53	65-46106-2		. . UNIVERSAL (USED ON 65-46106-1)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
53	65-46106-4		. . UNIVERSAL (USED ON 65-46106-3)		1
53	65-46106-6		. . UNIVERSAL (USED ON 65-46106-5)		1
53	65-46106-8		. . UNIVERSAL (USED ON 65-46106-7)		1
53	65-46106-10		. . UNIVERSAL (USED ON 65-46106-9)		1
53	65-46106-12		. . UNIVERSAL (USED ON 65-46106-11)		1
53	65-46106-14		. . UNIVERSAL (USED ON 65-46106-13)		1
53A	1645B		. . FITTING, LUBE, V95879 (OPT) (USED ON 65-46106-1,-3,-5,-7)		1
53A	1728B		. . FITTING, LUBE, V95879		1
54	69-41619-1		. WASHER, THRUST		1
55	BACN10GW18		. NUT (REPLS BACN10B482)	A-DIJS-V	1
55	BACN10GW20		. NUT (REPLS BACN10B512)	E-HK-R W-KA	1
55	BACN10GW18		. NUT (REPAIR PART)	E-H K-R W-KA	1
57	69-39472-2		. BOLT, TEE FITTING	A-DIJ S-V	1
57	69-39472-3		. BOLT, TEE FITTING (PREF)	A-DIJ S-V	1
57	69-51833-1		. BOLT, TEE FITTING (OPT)	E-HK-R W-CA	1
57	69-51833-2		. BOLT, TEE FITTING	E-HK-R W-EA HA-IA	1
57	69-51833-2		. BOLT, TEE FITTING (LIMITED)	FA GA JA KA	1
57	69-51833-3		. BOLT, TEE FITTING (LIMITED) (OPT TO 69-51833-4)	FA GA JA KA	1
57	69-51833-4		. BOLT, TEE FITTING (SERIALIZED) (LIMITED)	FA GA JA KA	1
58	65-46140-4		. BOLT ASSY, DRAG STRUT TEE	A-DIJ S-V	1
58	65-46140-6		. BOLT ASSY, DRAG STRUT TEE	E-HK-R W-EA HA-KA	1
58	65-46140-9		. BOLT ASSY, DRAG STRUT TEE	FA GA	1
59	65-46150-35		. . BUSHING (USED ON 65-46140-4)		2
59	65-46150-55		. . BUSHING (USED ON 65-46140-6,-9)		2
60	65-46140-5		. . FITTING (USED ON 65-46140-4)		1
60	65-46140-7		. . FITTING (USED ON 65-46140-6)		1
60	65-46140-10		. . FITTING (USED ON 65-46140-9)		1
61	BACN10JC7		. NUT (REPLS NAS679A7)		2
62	AN960-716L		. WASHER		2
63	69-41634-1		. WASHER, TRUNNION NUT RETAINER	A-CA HA-IA	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-63	69-41634-1		. WASHER, TRUNNION NUT RETAINER (LIMITED)(OPT TO 69-41634-2)	JA KA	1
63	69-41634-2		. WASHER, TRUNNION NUT RETAINER	DA-EA	1
63	69-41634-2		. WASHER, TRUNNION NUT RETAINER (LIMITED)(OPT TO 69-41634-1)(PREF)	JA KA	1
63	69-41634-2		. WASHER, TRUNNION NUT RETAINER (LIMITED)	FA GA	1
63	69-41634-3		. WASHER, TRUNNION NUT RETAINER (LIMITED)(OPT TO 69-41634-4)	JA KA	1
63	69-41634-4		. WASHER, TRUNNION NUT RETAINER (LIMITED)	FA GA	1
63	69-41634-4		. WASHER, TRUNNION NUT RETAINER (LIMITED)(PREF)(OPT TO 69-41634-3	JA KA	1
63A	69-53852-1		. SHIM, LAMINATED (OPT) *[5]	A-G	1
63A	69-53852-1		. SHIM, LAMINATED (OPT) *[5]	I-V	2
63B	69-61223-1		. SPACER	A-Z	1
63B	69-61223-2		. SPACER	W-CA HA-KA	1
63B	69-61223-3		. SPACER	DA-GA	1
64	69-41633-1		. NUT, TRUNNION PIN	A-CA HA-IA	1
64	69-41633-1		. NUT, TRUNNION PIN (LIMITED) (OPT TO 69-41633-5)	JA-KA	1
64	69-41633-2		. NUT, TRUNNION PIN	DA-EA	1
64	69-41633-2		. NUT, TRUNNION PIN (LIMITED) (OPT TO 69-41633-6)	FA-GA	1
64	69-41633-3		. NUT, TRUNNION PIN (LIMITED) (OPT TO 69-41633-5)	JA-KA	1
64	69-41633-4		. NUT, TRUNNION PIN (LIMITED) (OPT TO 69-41633-6)	FA-GA	1
64	69-41633-5		. NUT, TRUNNION PIN (SERIALIZED) (LIMITED)	JA-KA	1
64	69-41633-6		. NUT, TRUNNION PIN (SERIALIZED) (LIMITED)	FA-GA	1
64	69-78313-1		. NUT, TRUNNION PIN (1/16 INCH UNDERSIZE) (SERIALIZED) (REPAIR PART FOR PIN 65-46113)	A-CA HA-KA	1
64	69-78313-2		. NUT, TRUNNION PIN (1/8 INCH UNDERSIZE) (SERIALIZED) (REPAIR PART FOR PIN 65-46113)	A-CA HA-KA	1
64	69-78313-3		. NUT, TRUNNION PIN (1/16 INCH UNDERSIZE) (SERIALIZED) (REPAIR PART FOR PIN 65C32964)	DA-GA	1
64	69-41633-5		. NUT, TRUNNION PIN (1/8 INCH UNDERSIZE) (SERIALIZED) (REPAIR PART FOR PIN 65C32964)	DA-GA	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
65	BACN10JC6		. NUT (REPLS NAS679A6)		1
66	AN960-616		. WASHER		1
67	NAS1106-68		. BOLT	A-DIJ S-V	1
67	NAS1106-72		. BOLT	E-HK-R U-CA	1
67	BACB30NF6-73		. BOLT	DA EA	1
68	65-46113-3		. PIN ASSY, TRUNNION (OPT) (PRE SB 32-1198, 32A1224)	A-D	1
68	65-46113-5		. PIN ASSY, TRUNNION (OPT) (PRE SB 32-1198, 32A1224)	C-F	1
68	65-46113-6		. PIN ASSY, TRUNNION (PRE SB 32-1198, 32A1224)	A-V	1
68	65-46113-8		. PIN ASSY, TRUNNION (PRE SB 32-1198, 32A1224)	G-LOPS	1
68	65-46113-10		. PIN ASSY, TRUNNION (PRE SB 32-1198, 32A1224)	W-Z	1
68	65-46113-12		. PIN ASSY, TRUNNION (PRE SB 32-1198, 32A1224)	W-CA	1
68	65-46113-13		. PIN ASSY, TRUNNION (PRE SB 32-1198, 32A1224)	W-Z	1
68	65-46113-16		. PIN ASSY, TRUNNION (SB 32-1198, SB 32A1224)	WX BA	1
68	65-46113-17		. PIN ASSY, TRUNNION (PRE SB 32-1198)	W-CA	1
68	65-46113-19		. PIN ASSY, TRUNNION *[4]	HA-KA	1
68	65-46113-21		. PIN ASSY, TRUNNION (POST SB 32-1198)		1
68	65-46113-21		. PIN ASSY, TRUNNION *[4]	JA-KA	1
68	65-46113-23		. PIN ASSY, TRUNNION (LIMITED)	JA KA	1
68	65-46113-25		. PIN ASSY, TRUNNION (LIMITED)	JA KA	1
68	65C32964-1		. PIN ASSY, TRUNNION (REPLD BY 65C32964-3)		
68	65C32964-3		. PIN ASSY, TRUNNION	DA-EA	1
68	65C32964-3		. PIN ASSY, TRUNNION (OPT TO 65C32964-5) (LIMITED)	FA-GA	1
68	65C32964-5		. PIN ASSY, TRUNNION (OPT TO 65C32964-3) (LIMITED)	FA-GA	1
68	65C32964-7		. PIN ASSY, TRUNNION (LIMITED)	FA GA	1
68	65C32964-9		. PIN ASSY, TRUNNION (LIMITED)	FA GA	1
69	69-50596-1		. . PLUG (USED ON 65-46113-3,-5)		1
70	1723B		. . FITTING, LUBE, V95879 (USED ON 65-46113-3,-5,-6,-8,-10)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-70	1744B1		. . FITTING, LUBE, V95879 (USED ON 65-46113-12,-13,-16,-17,-19,-21, -23,-25, 65C32964-1,-3,-5,-7,-9)		1
70A	69-71754-1		. . BUSHING (USED ON 65-46113-13)		1
71	65-46150-47		. . BUSHING (USED ON 65-46113-3)		2
71	65-46150-61		. . BUSHING (USED ON 65-46113-5,-6,-8)		2
71	65-46150-83		. . BUSHING (USED ON 65-46113-10, -12,-13,-16,-17,-19,-21,-23,-25, 65C32964-1,-3,-5,-7,-9)		2
72	65-46150-49		. . BUSHING (USED ON 65-46113-3,-5, -6,-8,-10,-12,-13,-16) (PRE SB 32-1198)		2
72	65-46150-106		. . BUSHING (USED ON 65-46113-17) (PRE SB 32-1198)		2
72	65-46150-125		. . BUSHING (USED ON 65-46113-3,-5,-6, -8,-10,-12,-13,-16,-17) (POST SB 32-1198)		2
72	65-46150-125		. . BUSHING (USED ON 65-46113-19,-21, -23)		2
72	65-46150-105		. . BUSHING (USED ON 65C32964-1)		2
72	65-46150-126		. . BUSHING (USED ON 65C32964-3,-5, -7)		2
72	65-46150-134		. . BUSHING (USED ON 65-46113-25)		2
72	65-46150-135		. . BUSHING (USED ON 65C32964-9)		2
73	65-46113-4		. . PIN (USED ON 65-46113-3,-5)		1
73	65-46113-7		. . SPIN (USED ON 65-46113-6)		1
73	65-46113-9		. . PIN (USED ON 65-46113-8,-10)		1
73	65-46113-11		. . PIN (USED ON 65-46113-12)		1
73	65-46113-14		. . PIN (USED ON 65-46113-13)		1
73	65-46113-15		. . PIN (USED ON 65-46113-16)		1
73	65-46113-18		. . PIN (USED ON 65-46113-17,-19)		1
73	65-46113-20		. . PIN (USED ON 65-46113-21)		1
73	65-46113-22		. . SPIN (USED ON 65-46113-23)		1
73	65-46113-24		. . PIN (USED ON 65-46113-25)		1
73	65C32964-2		. . PIN (USED ON 65C32964-1,-3,-5)		1
73	65C32964-6		. . PIN (USED ON 65C32964-7)		1
73	65C32964-8		. . PIN (USED ON 65C32964-9)		1
73A	SHIM		. SHIM, REPAIR (REPAIR FIG. 406B)		1
74	65-46109-4		. ARM ASSY, ACTUATOR BEAM (PRE SB 32A1224)	A-DIJ S-V	1
74	65-46109-6		. ARM ASSY, ACTUATOR BEAM (PRE SB 32A1224)	E-HK-R W-CA HA IA	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
74	65-46109-6		. ARM ASSY, ACTUATOR BEAM (LIMITED) (PRE SB 32A1224)	JA KA	1
74	65C33032-1		DELETED		
74	65C33032-3		. ARM ASSY, ACTUATOR BEAM (PRE SB 32A1224)	DA EA	1
74	65C33032-3		. ARM ASSY, ACTUATOR BEAM (LIMITED) (PRE SB 32A1224)	FA GA	1
74	65C33032-4		. ARM ASSY, ACTUATOR BEAM (LIMITED) (POST SB 32A1224)	FA GA	1
74	65C33032-6		. ARM ASSY, ACTUATOR BEAM (LIMITED)	FA GA	1
74	65C33032-6		. ARM ASSY, ACTUATOR (POST SB 32A1224)	DA EA	1
74	65C33032-6		. ARM ASSY, ACTUATOR (LIMITED) (POST SB 32A1224)	FA GA	1
74	65-46109-10		. ARM ASSY, ACTUATOR BEAM (LIMITED) (PRE SB 32A1224)	JA KA	1
74	65-46109-12		. ARM ASSY, ACTUATOR BEAM (LIMITED)	JA KA	1
74	65-46109-12		. ARM ASSY, ACTUATOR (POST SB 32A1224)	E-HK-R W-CA HA IA	1
74	65-46109-12		. ARM ASSY, ACTUATOR (LIMITED) (POST SB 32A1224)	JA KA	1
74	65-46109-14		. ARM ASSY, ACTUATOR BEAM (LIMITED) (POST SB 32A1224)	JA KA	1
74	65-46109-14L		. ARM ASSY, ACTUATOR BEAM (LIMITED) (POST SB 32A1224) *[6]	JA KA	1
74	65-46109-16		. ARM ASSY, ACTUATOR BEAM (POST SB 32A1224)	A-DIJ S-V	1
74	65-46109-18		. ARM ASSY, ACTUATOR BEAM (LIMITED) (POST SB 32A1224)	JA KA	1
74	65-46109-20		. ARM ASSY, ACTUATOR BEAM (LIMITED) (POST SB 32A1224)	JA KA	1
75	65-46150-43		. . BUSHING (USED ON 65-46109-4,-6, -10,-12,-14,-14L,-16,-18,-20)		2
75	65-46150-104		. . BUSHING (USED ON 65C33032-3,-4, -6)		2
76	65-46150-50		. . BUSHING (USED ON 65-46109-4,-6)		2
76	65-46150-127		. . BUSHING (USED ON 65-46109-10)		2
76	65-46150-126		. . BUSHING (USED ON 65C33032-3)		2
76	65-46150-129		. . BUSHING (USED ON 65C33032-4,-6)		2
76	65-46150-130		. . BUSHING (USED ON 65-46109-14,-14L, -18,-20)		2
76	65-46150-131		. . BUSHING (USED ON 65-46109-12,-16)		2

FIG. ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
77	65-46109-5		. . ARM (USED ON 65-46109-4)		1
77	65-46109-7		. . ARM (USED ON 65-46109-6)		1
77	65-46109-11		. . ARM (USED ON 65-46109-10)		1
77	65C33032-2		. . ARM (USED ON 65C33032-3)		1
77	65-46109-13		. . ARM (USED ON 65-46109-12)		1
77	65-46109-15		. . ARM (USED ON 65-46109-14)		1
77	65-46109-15L		. . ARM (USED ON 65-46109-14L) *[6]		1
77	65-46109-17		. . ARM (USED ON 65-46109-16)		1
77	65C33032-5		. . ARM (USED ON 65C33032-4)		1
77	65C33032-7		. . ARM (USED ON 65C33032-6)		1
77	65-46109-19		. . ARM (USED ON 65-46109-18)		1
77	65-46109-21		. . ARM (USED ON 65-46109-20)		1
77A	69-53852-1		DELETED		
77B	1728B		. . FITTING, LUBE (V95879)(USED ON 65C33032-4,-6)		2
78	65-46101-9		. LINK ASSY, TRUNNION (SB 32-1016) (PRE SB 32-1123)	A-D	1
78	65-46101-11		. LINK ASSY, TRUNNION (PRE SB 32-1104, 32-1123)	CDIJ S-V	1
78	65-63378-1		. LINK ASSY, TRUNNION (SB 32-1016) (PRE SB 32-1123)	EF	1
78	65-63378-3		. LINK ASSY, TRUNNION (PRE SB 32-1104, 32-1123)	E-HK-R W-Z	1
78	65-63378-5		. LINK ASSY, TRUNNION (PRE SB 32-1104, 32-1123)	KLOP	1
78	65-63378-7		. LINK ASSY, TRUNNION (PRE SB 32-1123)	W-Z	1
78	65-63378-7		. LINK ASSY, TRUNNION (POST SB 32-1104)(PRE SB 32-1123)	C-V	1
78	69-63378-9		. LINK ASSY, TRUNNION (POST SB 32-1123)	C-Z	1
78	65-63378-9		. LINK ASSY, TRUNNION(POST SB 32-1123)	W-CA	1
78	65-63378-11		. LINK ASSY, TRUNNION	W-CA HA-KA	1
78	65-63378-13		. LINK ASSY, TRUNNION	DA FA	1
78	65-63378-14		. LINK ASSY, TRUNNION	EA GA	1
78	65-63378-15		. LINK ASSY, TRUNNION	JA KA	1
78	65-63378-17		. LINK ASSY, TRUNNION	FA	1
78	65-63378-18		. LINK ASSY, TRUNNION	GA	1
78	65-63378-20		. LINK ASSY, TRUNNION (SERIALIZED)	JA KA	1
78	65-63378-21		. LINK ASSY, TRUNNION (SERIALIZED)	FA	1
78	65-63378-22		. LINK ASSY, TRUNNION (SERIALIZED)	GA	1
78	65-75330-1		. LINK ASSY, TRUNNION (OPT TO 65-46101-11) (SB 32-1016) (PRE SB 32-1104, 32-1123)	CD	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-78	65-75330-2		. LINK ASSY, TRUNNION (OPT TO 65-63378-3) (SB 32-1016) (PRE SB 32-1104, 32-1123)	E-HMN	1
79	69-42195-1		. . PIN, DOWEL (USED ON 65-46101-9, -11; 65-63378-1,-3,-5,-7,-9, -11,-15,-20)		2
79	69-42195-2		. . PIN, DOWEL (USED ON 65-63378-13, -14,-17,-18,-21,-22)		2
80	65-46150-15		. . BUSHING (USED ON 65-46101-9,-11, 65-75330-1) (PRE SB 32-1123)		2
80	65-46150-57		. . BUSHING (USED ON 65-63378-1,-3,-5, -7, 65-75330-2) (PRE SB 32-1123)		2
80	65-46150-91		. . BUSHING (USED ON 65-63378-9,-11, -13,-14,-15,-17,-18,-20,-21, -22 AND ASSYS REWORKED PER SB 32-1123) (POST SB 32-1123)		2
81	65-46150-52		. . BUSHING (USED ON 65-46101-9,-11, 65-63378-1,-3,-5,-7,-9)		2
81	65-46150-100		. . BUSHING (USED ON 65-63378-11,-15, -20)		2
81A	1992B1		. . FITTING, LUBE, V95879 (USED ON65-46101-11, 65-63378-3,-5, 65-75330-1,-2) (PRE SB 32-1104)		1
81A	69-71714-1		. . LUBE FITTING ASSY (PRE SB 32-1104)		1
81A	69-71714-3		. . LUBE FITTING ASSY (USED ON 65-63378-7,-9,-11,-13,-14,-15,-17, -18, -20,-21,-22) (POST SB 32-1104)		1
81B	1795B		. . . FITTING, LUBE, V95879 (USED ON 69-71714-1,-3)		1
81C	69-71714-2		. . . ADAPTER (USED ON 69-71714-1)		1
81C	69-71714-4		. . . ADAPTER (USED ON 69-71714-3)		1
81K	1728B		. . FITTING, LUBE, V95879 (USED ON 65-63378-13,-14,-17,-18,-21, -22)		2
81L	65-46150-103		. . BUSHING (USED ON 65-63378-13,-14, -17,-18,-21,-22)		1
81M	65-46150-102		. . BUSHING (USED ON 65-63378-13,-14, -17,-18,-21,-22)		1
82	65-46101-10		. . LINK (USED ON 65-46101-9)		1
82	65-46101-12		. . LINK (USED ON 65-46101-11)		1
82	65-63378-2		. . LINK (USED ON 65-63378-1)		1
82	65-63378-4		. . LINK (USED ON 65-63378-3,-7)		1
82	65-63378-6		. . LINK (USED ON 65-63378-5)		1
82	65-63378-8		. . LINK (USED ON 65-63378-9)		1
82	65-63378-10		. . LINK (USED ON 65-63378-11)		1
82	65-63378-12		. . LINK (USED ON 65-63378-13,-14)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
82	65-63378-16		. . LINK (USED ON 65-63378-15)		1
82	65-63378-19		. . LINK (USED ON 65-63378-17,-18)		1
82	65-63378-23		. . LINK (USED ON 65-63378-20)		1
82	65-63378-24		. . LINK (USED ON 65-63378-21,-22)		1
82	65-75330-3		. . LINK (USED ON 65-75330-1)		1
82	65-75330-4		. . LINK (USED ON 65-75330-2)		1
83	65-46100-5		. STRUT ASSY, SHOCK *[1]	EF	1
83	65-46100-6		. STRUT ASSY, SHOCK *[1]	AB	1
83	65-46100-9		. STRUT ASSY, SHOCK *[1]	CD	1
83	65-46100-10		. STRUT ASSY, SHOCK *[1]	CD	1
83	65-46100-11		. STRUT ASSY, SHOCK *[1]	EF	1
83	65-46100-12		. STRUT ASSY, SHOCK *[1]	CDUV	1
83	65-46100-13		. STRUT ASSY, SHOCK *[1]	E-H	1
83	65-46100-14		. STRUT ASSY, SHOCK *[1]	IJ	1
83	65-46100-15		. STRUT ASSY, SHOCK *[1]	MN	1
83	65-46100-16		. STRUT ASSY, SHOCK *[1]	OP	1
83	65-46100-17		. STRUT ASSY, SHOCK *[1]	IJ	1
83	65-46100-18		. STRUT ASSY, SHOCK *[1]	KLQR	1
83	65-46100-19		. STRUT ASSY, SHOCK *[1]	E-HOP	1
83	65-46100-20		. STRUT ASSY, SHOCK *[1]	IJ	1
83	65-46100-21		. STRUT ASSY, SHOCK *[1]	KL	1
83	65-46100-22		. STRUT ASSY, SHOCK *[1]	GHOP	1
83	65-46100-23		. STRUT ASSY, SHOCK *[1]	ST	1
83	65-46100-25		. STRUT ASSY, SHOCK *[1]	KL	1
83	65-46100-27		. STRUT ASSY, SHOCK *[1]	ST	1
83	65-46100-28		. STRUT ASSY, SHOCK *[1]	WX	1
83	65-46100-29		. STRUT ASSY, SHOCK *[1]	KL	1
83	65-46100-30		. STRUT ASSY, SHOCK *[1]	OP	1
83	65-46100-31		. STRUT ASSY, SHOCK *[1]	KL	1
83	65-46100-33		. STRUT ASSY, SHOCK *[1]	OP	1
83	65-46100-34		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-35		. STRUT ASSY, SHOCK *[1]	OP	1
83	65-46100-36		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-37		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-38		. STRUT ASSY, SHOCK *[1]	W-Z	1
83	65-46100-39		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-40		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-41		. STRUT ASSY, SHOCK *[1]	W-Z	1
83	65-46100-42		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-43		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-44		. STRUT ASSY, SHOCK *[1]	WX	1
83	65-46100-45		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-46		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-47		. STRUT ASSY, SHOCK *[1]	YZ	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
83	65-46100-48		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-49		. STRUT ASSY, SHOCK *[1]	WX	1
83	65-46100-50		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-51		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-52		. STRUT ASSY, SHOCK *[1]	WX HA IA	1
83	65-46100-53		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-54		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-55		. STRUT ASSY, SHOCK *[1]	YZ	1
83	65-46100-56		. STRUT ASSY, SHOCK *[1]	BA CA JA KA	1
83	65-46100-57		. STRUT ASSY, SHOCK *[1]	BA CA	1
83	65-46100-58		. STRUT ASSY, SHOCK *[1]	DA EA	1
83	65-46100-59		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-60		. STRUT ASSY, SHOCK *[1]	BA CA JA KA	1
83	65-46100-61		. STRUT ASSY, SHOCK *[1]	BA CA	1
83	65-46100-62		. STRUT ASSY, SHOCK *[1]	JA KA	1
83	65-46100-64		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-65		. STRUT ASSY, SHOCK *[1]	JA KA	1
83	65-46100-66		. STRUT ASSY, SHOCK *[1]	JA KA	1
83	65-46100-67		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-68		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-69		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-70		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-71		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-72		. STRUT ASSY, SHOCK *[1]	JA KA	1
83	65-46100-73		. STRUT ASSY, SHOCK *[1]	JA KA	1
83	65-46100-74		. STRUT ASSY, SHOCK *[1]	JA KA	1
83	65-46100-75		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-76		. STRUT ASSY, SHOCK *[1]	JA KA	1
83	65-46100-77		. STRUT ASSY, SHOCK *[1]	JA KA	1
83	65-46100-78		. STRUT ASSY, SHOCK *[1]	FA GA	1
83	65-46100-79		. STRUT ASSY, SHOCK *[1]	JA KA	1
			INSTALLATION PARTS		
100	69-42199-1		BOLT (USED WITH 65-46109-4, -6) (REF OHM 32-16-31)		1
100	69-42199-2		BOLT (USED WITH 65-46109-4, -6) (REF OHM 32-16-31)		1
100	69-42199-3		BOLT (SERIALIZED) (USED WITH 65-46109-4, -6) (REF OHM 32-16-31)		1
100	BACB30LJ20CD41		BOLT (USED WITH 65-46109-4, -6) (REF OHM 32-16-31)		1
100	BACB30LJ20CD43		BOLT (USED WITH 65-46109-10, -12, -14, -14L, -16, -18, -20) (REF OHM 32-16-31)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
100	BACB30LJ20CD48		BOLT (USED WITH 65C33032-SERIES) (REF OHM 32-16-31)		1
105	AN960-1816		WASHER (USED WITH 69-42199-1,-2)		1
105	AN960C2016		WASHER (USED WITH BACB30LJ20CD-SERIES)		AR
110	AN320-18		NUT (USED WITH 69-42199-1,-2)		1
110	BACN10JD120CD		NUT (USED WITH BACB30LJ20CD-SERIES)		1
115	MS24665-378		PIN, COTTER		1
120	NAS1108-38		BOLT		1
125	MS20002C8		WASHER		1
130	AN960-816L		WASHER		1
135	BACN10BY58		NUT		1
140	69-42187-1		ROLLER ASSY, UPLOCK		1
145	10-60516-248		. BUSHING (OPT)		2
145	KJB438212B1		. BUSHING, V50632		2
145	KJB438212B2		. BUSHING, V50632 (0.03 OVERSIZE OD) (REPAIR PART)		AR
145	KJB438212B3		. BUSHING, V50632 (0.03 OVERSIZE OD) (REPAIR PART)		AR
150	69-42187-2		. ROLLER		1
155	69-42190-1		SPACER (LIMITED)		1
155	69-42190-2		SPACER (LIMITED)		1
160	69-53345-1		ATTACHMENT, MLG DOOR ROD (USED WITH ITEM 57, 69-39472-SERIES) (LIMITED)		1
160	69-53345-1		ATTACHMENT, MLG DOOR ROD (REPAIR PART) (USED WITH ITEM 57, 69-51833-SERIES) (LIMITED)		1
160	69-53345-3		ATTACHMENT, MLG DOOR ROD (USED WITH ITEM 57, 69-51833-SERIES) (LIMITED)		1
160	69-58823-1		ATTACHMENT, MLG DOOR ROD (USED WITH ITEM 57, 69-39472-SERIES) (LIMITED)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101- 160	69-58823-1		ATTACHMENT, MLG DOOR ROD (REPAIR PART) (USED WITH ITEM 57, 69-51833-SERIES) (LIMITED)		1
160	69-58823-4		ATTACHMENT, MLG DOOR ROD (USED WITH ITEM 57, 69-51833-SERIES) (LIMITED)		1

*[1] OHM 32-11-11
*[2] REFER TO SERVICE LETTER 737-SL-32-18 FOR DATA ABOUT INTERCHANGEABILITY OF PARTS WHICH 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 32A1113
*[4] EXAMINED PER SB 32-1198 OR 32A1224 (NO PART NUMBER CHANGE).
*[5] THIS SHIM IS NOT NECESSARY, BUT CAN BE USED.
*[6] THIS "L" SUFFIX IDENTIFIES PARTS WHICH HAD A CLEARANCE CHECK TO MAKE SURE A RADIUS DOES NOT TOUCH THE MATING LUG ON THE OUTER CYLINDER.