TO: ALL HOLDERS OF CENTER SYSTEM HYDRAULIC RESERVOIR ASSEMBLY COMPONENT MAINTENANCE MANUAL 29-11-23

REVISION NO. 3 DATED NOV 01/03

HIGHLIGHTS

All data formerly in manual 29-11-21 is included in this manual 29-11-23.

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

CHAPTER/SECTION AND PAGE NO.	DESCRIPTION OF CHANGE
701	Revised bonding meter part number for Avtron Model T447W to T477W.

CENTER SYSTEM HYDRAULIC RESERVOIR ASSEMBLY

PART NUMBER 271T0115-12,-13

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

REVISION RECORD

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

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

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR B10396	JAN 10/82

PAGE	DATE	CODE
29-11-23		
TITLE PAGE		
1	OCT 01/87	01
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REVISION RECORD		
1	OCT 01/87	01
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TR & SB RECORD		
1	OCT 01/87	01
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*1005	NOV 01/03	01.1
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*1007	NOV 01/03	01.1
*1008	NOV 01/03	01.1
*1009	NOV 01/03	01.1
*1010	NOV 01/03	01.1

* = REVISED, ADDED OR DELETED

PAGE	DATE	CODE
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1011	OCT 01/87	01
1012	OCT 01/87	01
1013	OCT 01/87	01
1014	OCT 01/87	01
1015	OCT 01/87	01
1016	OCT 01/87	01
1017	OCT 01/87	01
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TABLE OF CONTENTS

INTRODUCTION

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

This manual is divided into separate sections:

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

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

The beginning of the REPAIR section includes a list of the separate repairs and a list of applicable standard Boeing practices.

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

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

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

Verification:

Testing: Aug 22/90

Assembly: Aug 22/90

CENTER SYSTEM HYDRAULIC RESERVOIR ASSEMBLY

DESCRIPTION AND OPERATION

1. Description and Operation

   A. The center system hydraulic reservoir assembly is a pressure vessel composed of upper and lower weldment assemblies. The lower weldment assembly contains a manifold, a system return boss, a temperature bulb boss, a thermal bypass boss, a fluid sampling boss, a G-trap ring, the lower shell, and associated parts. The upper weldment assembly contains a pressure relief elbow, a pressurization boss, a fitting boss, a support ring, the upper shell, and associated parts.

   B. Hydraulic fluid stored in the reservoir is pressurized by controlled engine bleed air, to ensure a pressurized supply to the hydraulic pumps and to prevent foaming. A negative-G trap cover divides the reservoir into an upper and lower chamber. Fluid enters the reservoir through a diffuser into the upper chamber, and leaves from the lower chamber supply ports. Flow between the chambers is controlled by the negative-G trap which assures a constant fluid supply to the pumps at all reservoir levels and flight attitudes.

2. Leading Particulars (Approximate)

   Length -- 22 inches
   Width -- 22 inches
   Height -- 21 inches
   Weight -- 22 pounds

TESTING AND TROUBLE SHOOTING

1. Test Equipment and Materials

NOTE: Equivalent substitutes may be used.

A. Hydraulic fluid -- BMS 3-11, type III (Ref 20-60-03)

B. Hydraulic test stand capable of providing 90 psig for 5 minutes using a 15 micron absolute filter.

2. Test

A. Hydraulic reservoir weld assembly pressure test.

(1) Test fluid shall be continuously filtered by a 15 micron absolute filter.

(2) Connect reservoir assy (1, IPL Fig. 1) to test stand.

(3) Test with BMS 3-11 at 90 psig pressure for 5 minutes. There shall be no external leakage nor permanent set.

B. Negative G-Valve Test.

(1) From its normal position, slowly invert the empty reservoir (4B, 4C) and check for audible indication that ball is lifted.

(2) Slowly return the empty reservoir (4B, 4C) to its normal position and check for audible indication that ball (465A) has reseated in its initial position.

DISASSEMBLY

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

1. Disassemble this component using standard industry practices.

   NOTE: Do not disassemble weld assembly (240, IPL Fig. 1). Replace as a unit if damaged or defective.

CLEANING

1. Use standard industry practices and additional procedures in paragraph 3.A. thru H.

2. Materials and Equipment

   NOTE: Equivalent substitutes may be used.

   A. Hydraulic fluid -- BMS 3-11 (Ref 20-60-03)

   B. Hydraulic test stand capable of providing 20 gpm at 55 psig through a 15 micron filter

   C. Cap -- A29005-1

3. Flushing Procedure (IPL Fig. 1, Fig. 701)

   NOTE: This procedure is to be carried out prior to installation in airplane.

   A. Use BMS 3-11 fluid continously filtered through a 15 micron absolute filter.

   B. Connect supply line from test stand to system return port union (105) or unions (105 and 95B).

   C. Connect pressure relief port union (25) to test stand.

   D. Connect return line on test stand to supply connections on lower manifold casting: unions (25, 155) on manifold casting (335A).

      NOTE: There are 4 ports on manifold casting (335A).

   E. Plug reservoir pressurization port union (61) and thermal bypass port union (60) with pressure tight plugs. Make sure drain valve (145A) is closed.

   F. Remove transmitter (125) and cover opening with sealing cap - A29005-1.

   G. Flush reservoir for 10 minutes at 20 gpm flow rate. Do not exceed 55 psi in reservoir during flushing.

   H. Drain reservoir through drain valve (145A).

I. Remove pressure tight cap at transmitter (125) port. Clean area then reinstall transmitter (125) per ASSEMBLY, page 701.

J. Disconnect lines from the test stand and install skydrol resistant plug or cap in all openings.

K. Close drain valve (145A) and lockwire per Fig. 701.

L. Fit other transportation blanks as required to ensure that reservoir is kept clean.

CHECK

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

2. Penetrant check per 20-20-02 -- Weld assembly (240B, IPL Fig. 1), pressure relief elbow (285), pressurization boss (290), boss fitting (295), support ring (300), upper shell (305A), system return boss (315), temperature return boss (320), thermal bypass boss (325), fluid sampling boss (330), lower shell (345A).

   NOTE: Use only VP-30 penetrant (Ref 20-20-02) for welds of weld assembly (240B).

REPAIR - GENERAL

1. Content

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

P/N	NAME	REPAIR
- -	MISC PARTS REFINISH	1-1
271T4551	WELD ASSY	2-1

2. Standard Practices

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

   20-11-03 Repair of Electrical Terminations and Electrical Bonding Area
   20-20-02 Penetrant Methods of Inspection
   20-30-02 Stripping of Protective Finishes
   20-30-03 General Cleaning Procedures
   20-41-01 Decoding Table for Boeing Finish Codes
   20-41-02 Application of Chemical and Solvent Resistant Finishes
   20-43-01 Chromic Acid Anodizing

3. Materials

   NOTE: Equivalent substitutes may be used.

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

   B. Enamel -- BMS 10-11, type 2 (Ref 20-60-02)

MISCELLANEOUS PARTS REFINISH - REPAIR 1-1

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

IPL FIG. & ITEM	MATERIAL	FINISH
Fig. 1		
Bracket (144, 144B)	Al alloy	Treat surface and apply one coat of BMS 10-11, type 1 primer (F-18.06). Apply one coat of BMS 10-11, type 2 enamel, BAC702 white gloss (F-21.03).
Support (205)	Al alloy	Chromic acid anodize, type 1 and apply one coat BMS 10-11, type 1 primer (F-18.13).
Relief valve support channel (230) Relief valve support angle (235)	Al alloy	Chemical treat and apply one coat BMS 10-11, type 1 primer (F-18.06).
Weld assembly (240B)	Al alloy	See REPAIR 2-1.

Refinish Details
Figure 601

WELD ASSEMBLY - REPAIR 2-1

271T4551-8

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

1. System Return Boss Repair (315, IPL Fig. 1)

   A. Repair cracks in weld assy (240) adjacent to system return boss (315) as follows:

      (1) Strip finish per 20-30-02 from an area 5.5 inches in diameter centered on the cracked boss.

      (2) Perform dye penetrant examination per 20-20-02 of sanded area.

      CAUTION: TO AVOID DAMAGING UNDERLYING RESERVOIR STRUCTURE DURING DRILLING OF STOP HOLE, LIMIT DEPTH OF DRILL PENETRATION TO 0.15 INCH MAXIMUM.

      (3) Drill 0.1 inch diameter hole with near side of hole just touching end of crack, at all crack ends. Recheck per 20-20-02 to ensure crack does not continue on far side of hole.

      (4) Grind a V-notch along crack with 60-90 degree included angle, 0.050 to 0.060 inch deep. Remaining material thickness is to be 0.030 inch maximum.

      (5) Clean weld assy per 20-30-03 and dry with compressed air.

      (6) Fusion weld crack by inert gas shielded method, using 4043 aluminum alloy filler. Purge inside of tank with inert gas while welding.

      (7) Check weld per operator's standard practice.

      (8) Manufacture doubler as shown in Fig. 601. Ensure that doubler conforms to weld assy surface.

      (9) Grind crack weld beads under repair doubler (Fig. 601) flush with surface.

(10) Weld repair doubler, as in par. (6), to weld assy. Weld around boss first, completely filling gap. If doubler has not been preformed, form outside periphery of doubler to ensure net fit with tank shell. Weld outside periphery and halves of doubler. Minimize heat input to weld to reduce possibility of cracking at weld area on inside surface of tank.

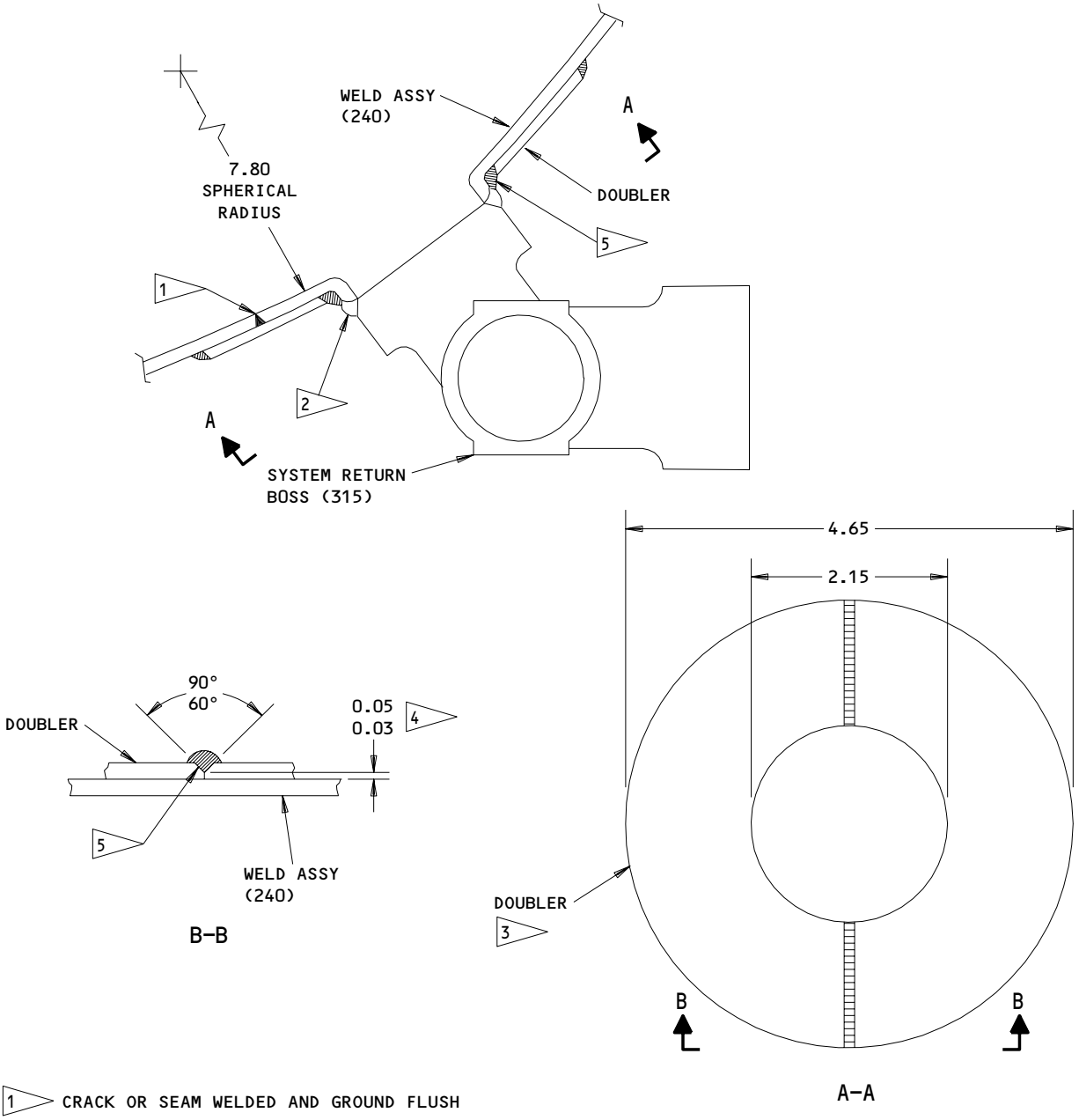
(11) Radiographically check weld to detect possible defects of interior surfaces.

(12) Proof test tank at 90 psi pressure per Testing and Trouble Shooting.

(13) Refinish weld assy per par. 2.

2. Refinish

A. Weld Assembly (240) -- Chemically treat (F-17.07); apply one coat BMS 10-11, type 1 primer (F-20.02) on all outside surfaces, except omit primer from all threaded bosses.



1 CRACK OR SEAM WELDED AND GROUND FLUSH

2 GRIND EXISTING WELD AS REQUIRED TO CLEAR DOUBLER

3 MAKE DOUBLER FROM 0.100 GAGE 6061-O HEAT TREATED TO T4

4 CHAMFER LIMIT

5 WELD PER REPAIR INSTRUCTIONS

ALL DIMENSIONS ARE IN INCHES

271T4551-8
Weld Assembly Repair
Figure 601

ASSEMBLY

1. Materials

NOTE: Equivalent substitutes may be used.

A. Adhesive -- Type 68 (Ref 20-50-12)

B. Clear skydrol resistant top coating -- Type 41 (Ref 20-44-01)

C. Bonding meter -- Avtron model T477W

2. Assembly Sequence (IPL, Fig. 1, Fig. 701)

A. Use standard industry practices for assembly of this component and additional procedures given below.

B. Bond nameplates (480 thru 545) to weld assembly (200B) with type 68 adhesive (Ref 20-50-12) per 20-50-05. After installation, apply clear skydrol resistant topcoating type 41 per 20-44-01. Coating must extend a minimum of 0.38 inch beyond edge of nameplate.

C. Tighten bolts (115A, 135) to 25-30 lb-in. and lockwire using double twist method.

D. Install fluid sampling valve (75) and lockwire valve to boss.

E. Flush reservoir per instructions in cleaning procedure, then cap all ports.

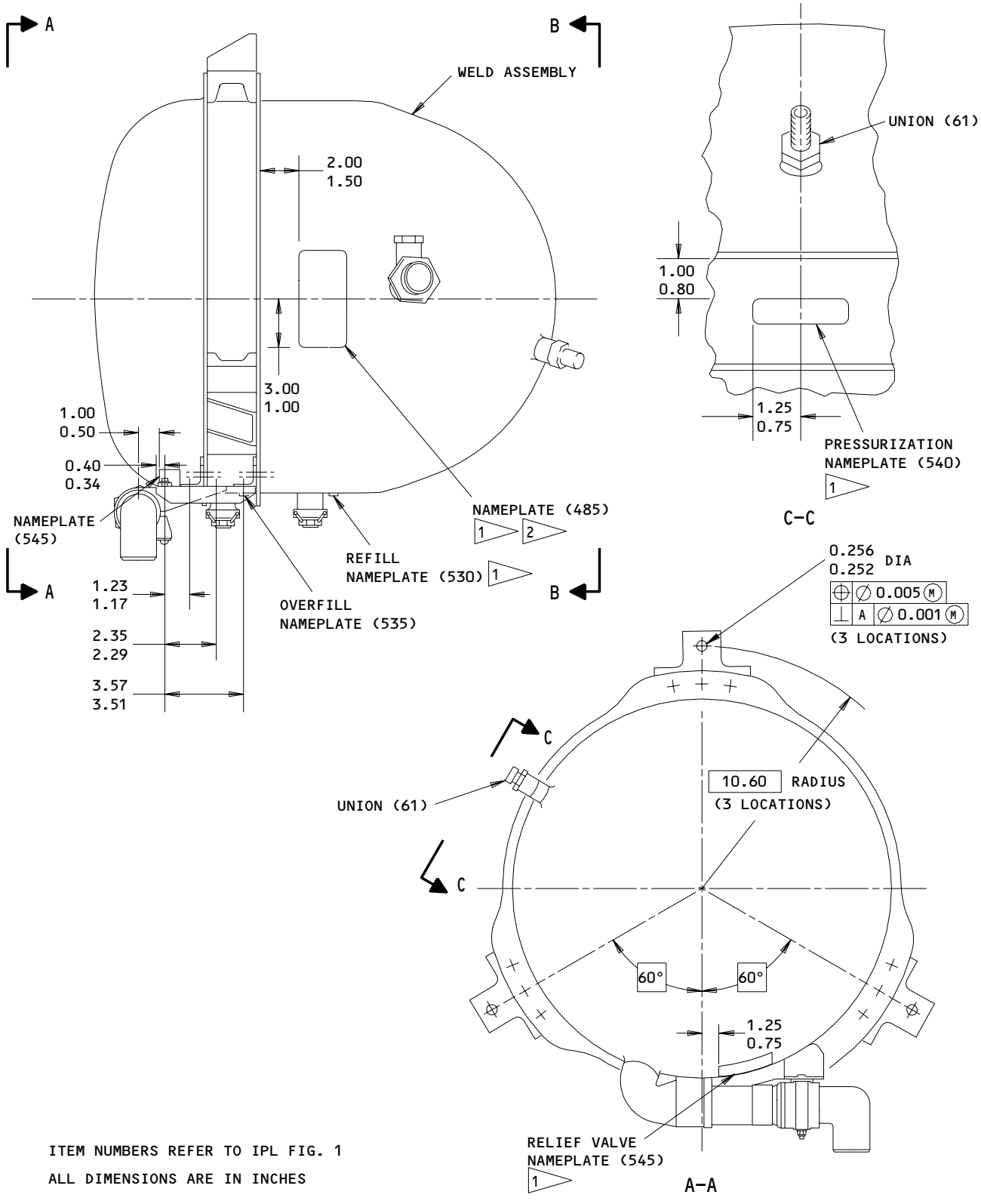
NOTE: Transmitter (125) must be removed during flushing procedure.

F. Prepare faying surfaces and install transmitter (125), refinish exposed surfaces per 20-11-03.

G. Tighten temperature bulb (65B) to 300-350 lb-ins.

H. After completion of assembly, use bonding meter to measure electrical bond for temperature bulb (65B) and transmitter (125), maximum resistance across bond shall be 0.0025 ohm. Resistance must be measured from installed electrical item to true ground.

I. Close sampling valve (75) and lockwire knob.

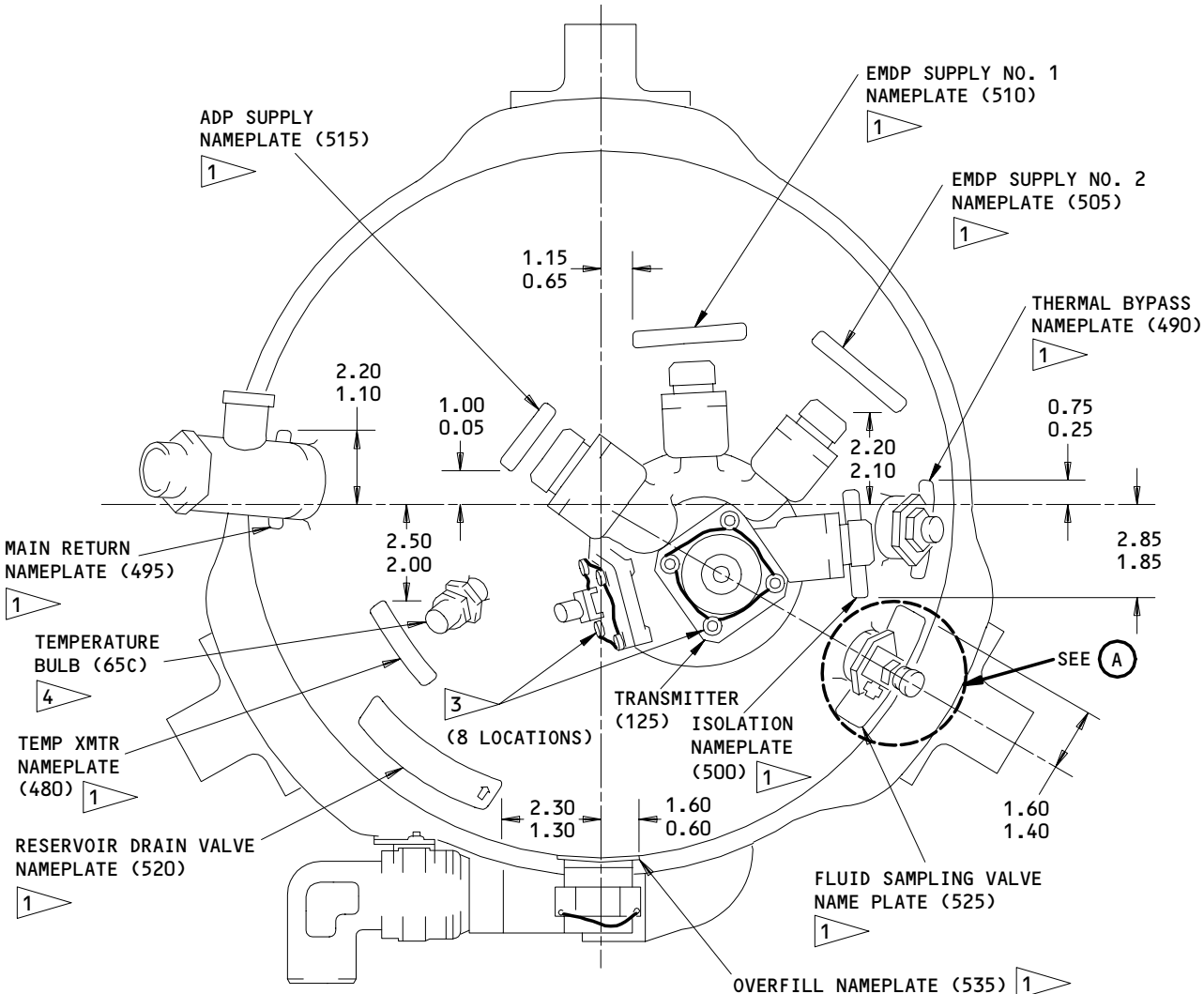


ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Center System Hydraulic Reservoir Assembly
Figure 701 (Sheet 1)

24579



BOTTOM VIEW
B-B

1 BOND NAMEPLATES AS SHOWN IN SOPM 20-50-12 WITH TYPE 68 ADHESIVE AND APPLY PROTECTIVE FINISH

2 VIBRO-ENGRAVE RESERVIOR ASSEMBLY DASH NO. ON NAMEPLATE (485)

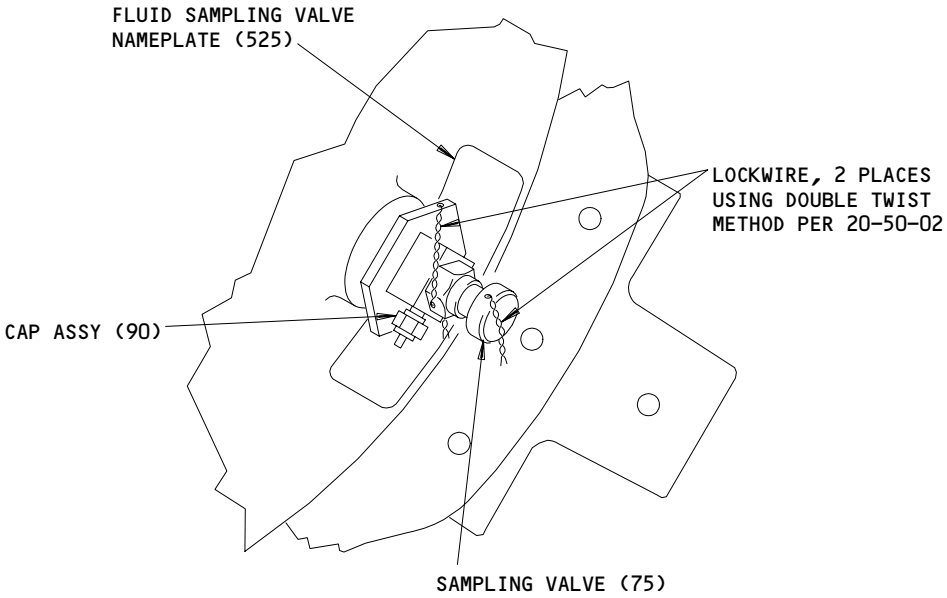
3 TIGHTEN BOLTS TO 25-30 POUND-INCHES AND INSTALL LOCKWIRE AS SHOWN IN SOPM 20-50-02 USING DOUBLE TWIST METHOD

4 TIGHTEN TEMPERATURE BULB (65B) TO 300-350 POUND-INCHES.

ITEM NUMBERS REFER TO IPL FIG. 1

ALL DIMENSIONS ARE IN INCHES

Center System Hydraulic Reservoir Assembly
Figure 701 (Sheet 2)



A

Center System Hydraulic Reservoir Assembly
Figure 701 (Sheet 3)

142849

FOR TORQUE VALUES OF STANDARD FASTENERS, REFER TO 20-50-01			
ITEM NO. IPL FIG. 1	NAME	TORQUE	
		POUND-INCHES	POUND-FEET
115A, 135	BOLT	25 - 30	
65B	TRANSMITTER	300 - 350	

Torque Table
Figure 801

SPECIAL TOOLS

NOTE: Equivalent substitutes may be used.

A. Pressure Transmitter Mount Sealing Cap -- A29005-1

B. Bonding meter - Avtron model T477W

ILLUSTRATED PARTS LIST

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

2. Indentures show parts relationships as follows:

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

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

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

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

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

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

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

6. Parts Interchangeability

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

VENDORS

02107 SPARTA MANUFACTURING COMPANY
PO BOX 449 5200 NORTH WOOSTER ROAD
DOVER, OHIO 44622

06177 PNEUDRAULICS INCORPORATED
8275 HELMS AVENUE
RANCHO CUCAMONGA, CALIFORNIA 91763

07128 TETRAFLUOR INC
2051 EAST MAPLE AVENUE
EL SEGUNDO, CALIFORNIA 90245

11815 TOWNSEND DIV OF TEXTRON INC CHERRY FASTENER UNIT
BOX 2157 1224 EAST WARNER AVENUE
SANTA ANA, CALIFORNIA 92707

15653 KAYNAR MFG COMPANY INC KAYLOCK DIV
PO BOX 3001 800 SOUTH STATE COLLEGE BLVD
FULLERTON, CALIFORNIA 92634

17446 HUCK MFG CO LOS ANGELES DIV
900 WATSON CENTER ROAD
CARSON, CALIFORNIA 90745

26055 GULL AIRBORNE INSTRUMENTS, INCORPORATED
55 ENGINEERS ROAD
SMITHTOWN, N. Y. 11787

26303 OHIO AIRCRAFT SUPPLIES INC
717 HINDRY AVENUE
INGLEWOOD, CALIFORNIA 90301

26879 CORONADO PLASTICS INCORPORATED
11069 PENROSE AVENUE
SUN VALLEY, CALIFORNIA 91352

27545 HARTFORD BALL CO
951 WEST STREET
ROCK HILL, CONNECTICUT 06067

52676 SKF INDUSTRIES INC
1100 FIRST AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19006

VENDORS

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

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

72962 ESNA DIV OF AMERACE CORP
2330 VAUXHALL ROAD
UNION, NEW JERSEY 07083

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

81982 CRANE CO HYDRO-AIRE DIV
3000 WINONA AVENUE
P.O. BOX 7722
BURBANK, CALIFORNIA 91510

92003 PARKER-HANNIFIN CORPORATION
18321 JAMBOREE BOULEVARD
IRVINE, CALIFORNIA 92713

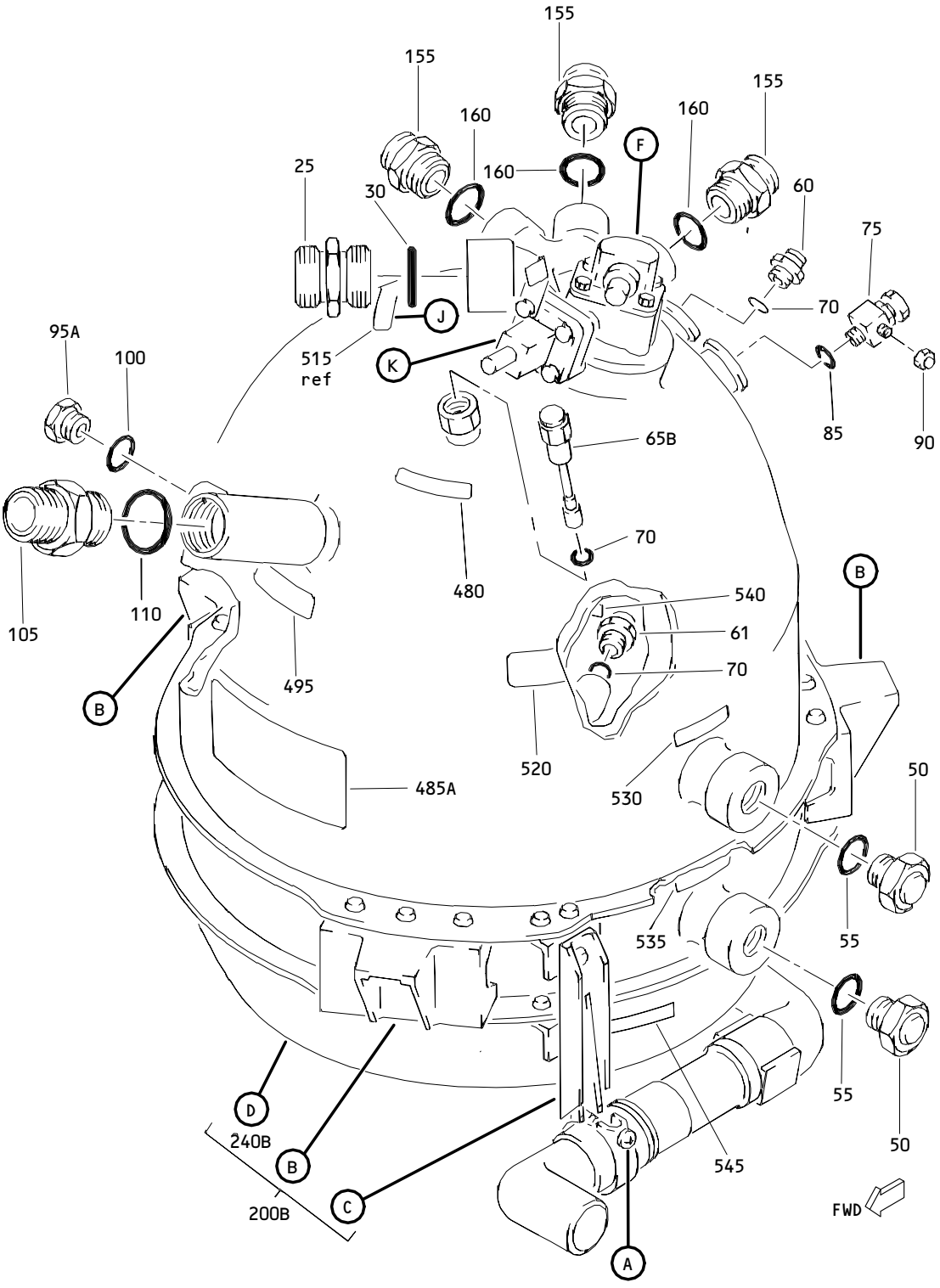
92215 VOI-SHAN DIV OF VSI CORP
8463 HIGUERA STREET
CULVER CITY, CALIFORNIA 90230

94878 RAYBESTOS-MANHATTAN INC PACIFIC COAST DIV
1400 E. ORANGETHROPE
FULLERTON, CALIFORNIA 92631

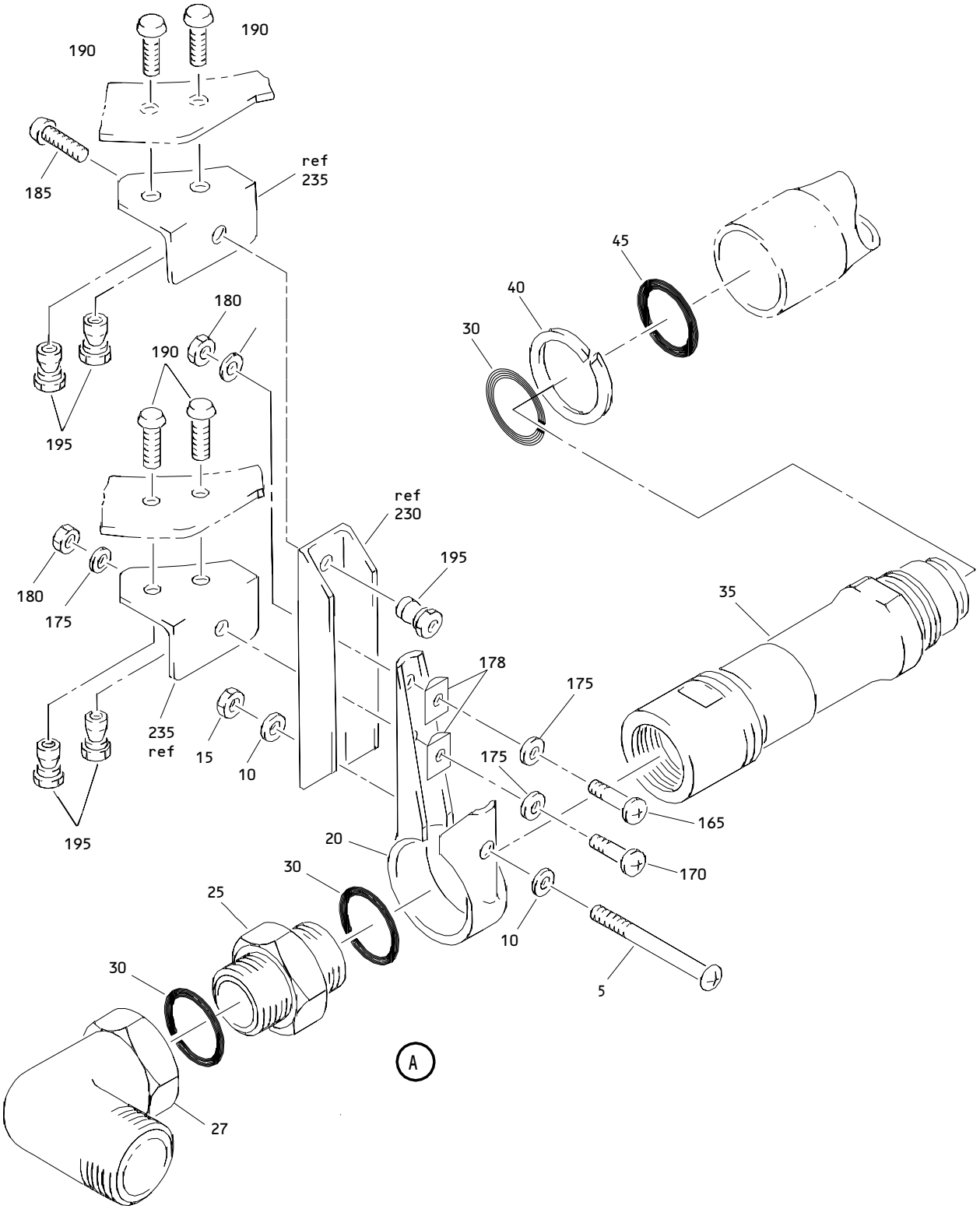
97484 TECHNICAL DEVELOPMENT COMPANY
24 GLENOLDEN AVENUE
GLENOLDEN, PENNSYLVANIA 19036

97820 SHAMBAN W S AND CO
711 MITCHELL ROAD
NEWBURY PARK, CALIFORNIA 91320

98939 FLUID REGULATORS CORPORATION
313 GILLETTE STREET
PAINESVILLE, OHIO 44077

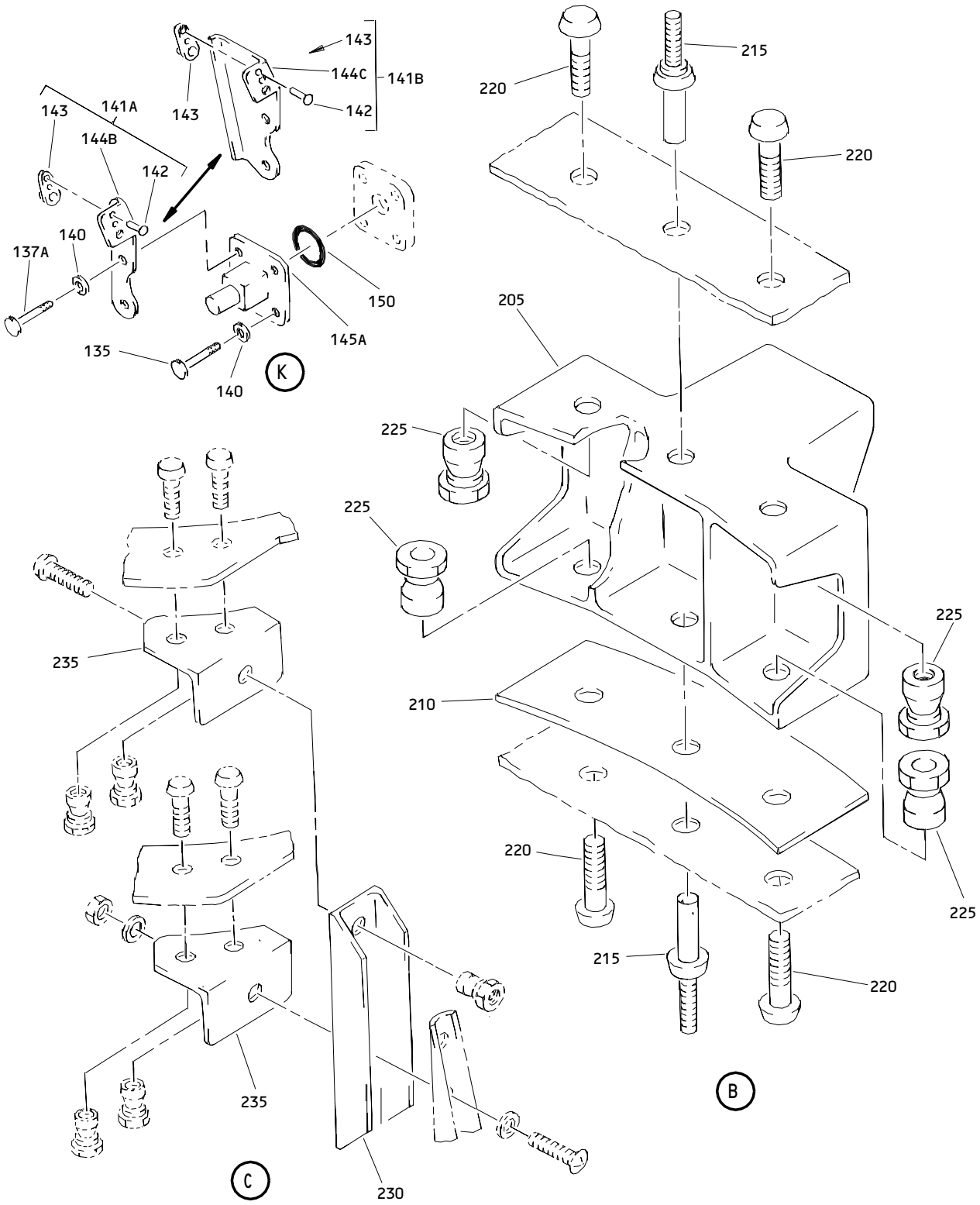


Center System Hydraulic Reservoir Assembly
Figure 1 (Sheet 1)



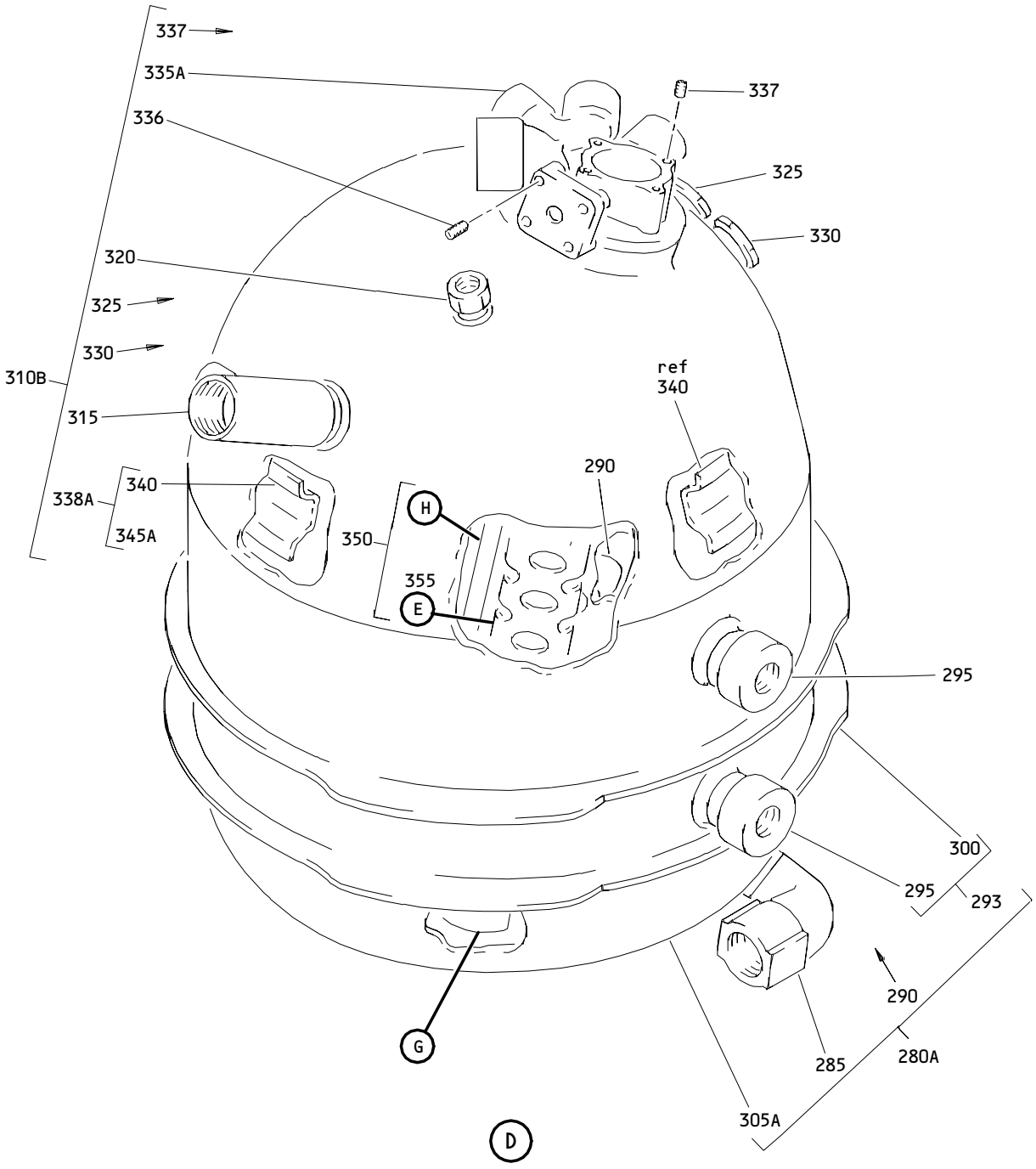
Center System Hydraulic Reservoir Assembly
Figure 1 (Sheet 2)

T36082



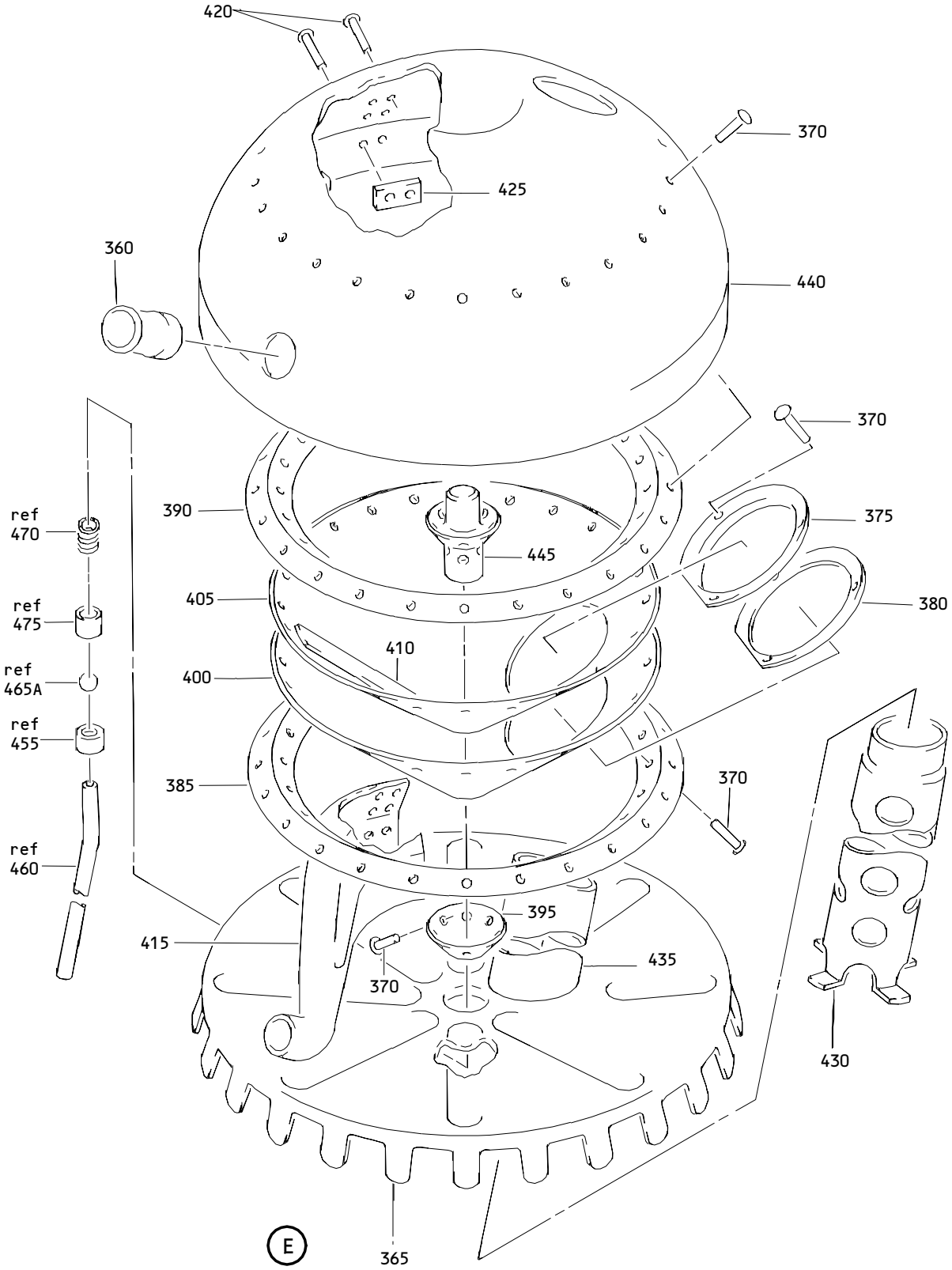
Center System Hydraulic Reservoir Assembly
Figure 1 (Sheet 3)

T81287



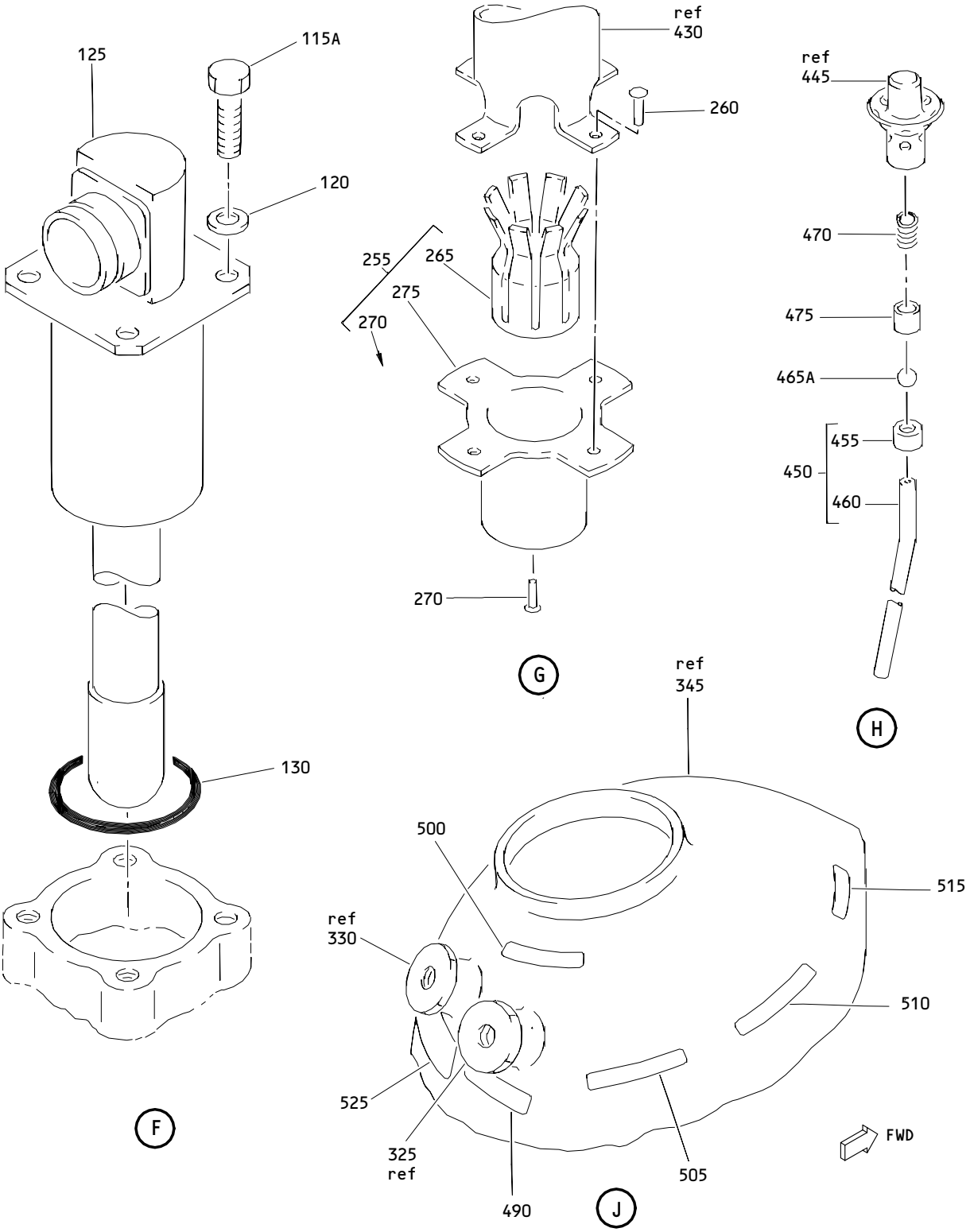
Center System Hydraulic Reservoir Assembly
Figure 1 (Sheet 4)

T36084



Center System Hydraulic Reservoir Assembly
Figure 1 (Sheet 5)

T36085



Center System Hydraulic Reservoir Assembly
Figure 1 (Sheet 6)

T36088

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
1	271T0115-1		DELETED		
1A	271T0115-6		DELETED		
3	271T0115-7		DELETED		
3A	271T0115-8		DELETED		
4	271T0115-9		DELETED		
4A	271T0115-10		DELETED		
-4B	271T0115-12		RESERVOIR ASSY-CTR SYS HYDR	A	RF
-4C	271T0115-13		RESERVOIR ASSY-CTR SYS HYDR	B	RF
5	BACB30NT3C38		DELETED		1
5A	BACB30NT3K38		.BOLT		1
10	AN960PD10		.WASHER		2
15	BRH10-3		.NUT-		1
			(V52828)		
			(SPEC BACN10JC3)		
			(OPT H10-3BAC (V15653))		
			(OPT NS202101-02 (V80539))		
			(OPT RMLH9075-3W (V72962))		
			(OPT T6S1032J (V71087))		
			(OPT VN303A02 (V92215))		
			(OPT 96-02 (V80539))		
20	BACC10AA32-44		.CLAMP-RELIEF VALVE		1
25	MS21902D20		.UNION		2
27	NAS1762D2020		.ELBOW		1
			(OPT ITEM 27A)		
27A	BACE21AW2020L		.ELBOW		1
			(OPT ITEM 27)		
30	NAS1612-20		.PACKING		3
35	1800		.VALVE-RELIEF		1
			(V06177)		
			(SPEC 60B00246-2)		
			(OPT 72086 (V81982))		
			(SPEC 60B00246-1)		

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
40	C11236-217B		.RING-BACKUP (V26879) (SPEC BACR12BM217) (OPT RMR12BM217 (V94878)) (OPT STF800-217 (V02107)) (OPT S30294-217-1 (V97820)) (OPT TF450-217A (V07128)) (OPT 2100-217 (V26303))		1
45	NAS1611-217		.PACKING		1
50	PS53J		.GAGE-SIGHT (V97484)		2
55	NAS1612-8		.PACKING		2
60	MS21902D6		.UNION		1
61	MS21902D6		.UNION		1
65	S270T245-1		DELETED		
65A	1122410		DELETED		
65B	S270T245-3		.BULB-TEMP	A	1
65C	S270T245-1		.BULB-TEMP	B	1
70	NAS1612-6		.PACKING		3
75	S1105-01		.VALVE-SAMPLING (V98939)		1
80	AN814-10DL		DELETED		
85	NAS1612-4		.PACKING		1
90	AN929A2		.CAP ASSY		1
95	MS21913D8		DELETED		
95A	AN814-8D		.PLUG AND BLEEDER	A	1
-95B	MS21902D8		.UNION	B	1
100	NAS1612-8		.PACKING		1
105	MS21902D16		.UNION		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
110	NAS1612-16		.PACKING		1
115	BACB30NE4H2		.BOLT		4
115A	NAS6704H2		DELETED		
120	AN960PD416		.WASHER		4
125	019-012-002		.TRANSMITTER- (V26055) (SPEC S271T455-4)		1
130	NAS1611-224		.PACKING		1
135	BACB30NE3H4		.BOLT		2
135A	NAS6603H4		DELETED		
137	BACB30NE3H5		DELETED		
137A	NAS6603H5		.BOLT		2
140	AN960PD10		.WASHER		4
141	287T4517-43		DELETED		
141A	287T4517-45		.BRACKET ASSY	B	1
141B	287T4517-47		.BRACKET ASSY	A	1
142	BACR15BA3AD		..RIVET		2
143	BACN10JP3B		..NUTPLATE		1
144	287T4517-42		DELETED		
144A	287T4517-42		DELETED		
144B	287T4517-44		..BRACKET	B	1
144C	287T4517-46		..BRACKET	A	1
145	10-60561-1		DELETED		
145A	3-111794		.VALVE-DRAIN (V92003) (SPEC 10-60561-1)		1
150	NAS1611-213		.PACKING		1
155	MS21902D12		.UNION		3
160	NAS1612-12		.PACKING		3
165	NAS623-3-4		DELETED		
165A	NAS623-3-6		.SCREW		1
170	NAS623-3-5		DELETED		
170A	NAS623-3-7		.SCREW		1
175	AN960PD10		.WASHER		4
178	69B80826-1		.FILLER		2
180	BRH10-3		.NUT- (V52828) (SPEC BACN10JC3) (REFER TO ITEM 15 FOR OPT PARTS)		2

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
185	2LPYE5-3		.BOLT- (V11815) (SPEC BACB30GP5-3) (OPT 2LPYE5-3 (V17446))		1
190	2LPYE5-4		.BOLT- (V11815) (SPEC BACB30GP5-4) (OPT 2LPYE5-4 (V17446))		4
195	NAS1080-5		.COLLAR		5
200	271T0115-5		DELETED		
200A	271T0115-11		DELETED		
200B	271T0115-14		.SUPPORT ASSY		1
205	271T4553-1		..SUPPORT ATTACHING PARTS		3
210	271T0115-4		..SHIM		3
215	MS90354-0603		..RIVET		3
220	2LPYE6-4		..BOLT (V11815) (SPEC BACB30GP6-4) (OPT 2LPYE6-4 (V17446))		6
225	NAS1080-6		..COLLAR -------*-------		6
230	271T0115-2		..SUPPORT-RELIEF VALVE		1
235	271T0115-3		..SUPPORT-RELIEF VALVE ANGLE		2
240	271T4551-1		DELETED		
240A	271T4551-6		DELETED		
240B	271T4551-8		..WELD ASSY		1
245	MS21209F1-20		DELETED		
250	MS21209F4-15		DELETED		
255	69B80860-1		...COVER ASSY ATTACHING PARTS ATTACHING PARTS		1
260	BACR15BB4AD		...RIVET -------*-------		4
265	69B80388-1		....CLIP		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
			ATTACHING PARTS		
270	MS20470D5		....RIVET		1
			-------*-------		
275	69B80860-2		....COVER		1
280	271T4551-2		DELETED		
280A	271T4551-10		...WELDMENT ASSY-UPR		1
285	65B82509-1		....ELBOW-PRESSURE RELIEF		1
290	271T5217-1		....BOSS-PRESSURIZATION		1
293	271T4551-5		....BRAZE ASSY		1
295	271T0135-1		.....FITTING-BOSS		2
300	271T4555-1		.....RING-SPRT		1
305	271T4556-1		DELETED		
305A	271T4556-2		....SHELL-UPPER		1
310	271T4551-3		DELETED		1
310A	271T4551-7		DELETED		
310B	271T4551-9		...WELDMENT ASSY-LWR		1
315	271T4559-1		....BOSS-SYS RETURN		1
320	271T0107-1		....BOSS-TEMP BULB		1
325	271T4558-1		....BOSS-THRM BYPASS		1
330	69B80850-1		....BOSS-FLUID SAMPLING		1
335	271T4554-1		DELETED		
-335A	271T4554-2		....MANIFOLD		1
336	MS21209F1-20		....INSERT		4
337	MS21209F4-15		....INSERT		4
338	271T4551-4		DELETED		
338A	271T4551-11		....BRAZE ASSY		1
340	65B82520-1		.....RING-G TRAP		1
345	271T4557-1		DELETED		
345A	271T4557-2		.....SHELL-LWR		1
350	271T0110-1		...TRAP ASSY-G		1
355	271T0110-3		....TRAP SUBASSY		1
360	69B80842-1		.....INSERT		1
365	65B82527-2		.....COVER		1
370	BACR15BB4AD		.....RIVET		59
375	65B82531-1		.....COLLAR-UPR		1
380	65B82531-4		.....COLLAR-LWR		1
385	69B80844-1		.....RING-UPR FLANGE		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
390	69B80843-1		.....RING-LWR FLANGE		1
395	69B80845-1		.....COLLAR-SCREEN		1
400	69B80839-1		.....SCREEN		1
405	69B80849-1		.....SCREEN-SPRT		1
410	69B80849-3		.....STRAP-SPLICE		1
415	65B82528-1		.....DIFFUSER ASSY		1
			ATTACHING PARTS		
420	BACR15BB4AD		.....RIVET		6
425	BACS40H8-18		.....SPACER		1
			-------*-------		
430	271T0108-1		.....TUBE-PROBE		1
			(OPT ITEM 430A)		
-430A	271T0108-2		.....TUBE-PROBE		1
			(OPT ITEM 430)		
435	69B80837-3		.....TUBE-PROBE		1
440	271T0109-1		.....PAN		1
445	69B80834-1		.....BODY		1
450	271T0110-2		....TUBE AND CAP SUBASSY		1
455	69B80835-1		.....CAP		1
460	271T0111-1		.....TUBE		1
465	BACB10TM2-324		DELETED		
465A	BACB10TM2-32A		....BALL-		1
			(V27545)		
			(SPEC BACB10TM2-32A)		
			(OPT BACB10TM2-32A		
			(V52676))		
470	69B80852-1		....SPRING		1
475	69B80851-1		....CUP		1
480	BAC27THY17		.NAMEPLATE		1
485	BAC27THY27		DELETED		
485A	BAC27THY0145		.NAMEPLATE		1
490	BAC27THY29		.NAMEPLATE		1
495	BAC27THY30		.NAMEPLATE		1
500	BAC27THY31		.NAMEPLATE		1
505	BAC27THY32		.NAMEPLATE		1
510	BAC27THY33		.NAMEPLATE		1
515	BAC27THY34		.NAMEPLATE		1
520	BAC27THY35		.NAMEPLATE		1
525	BAC27THY36		.NAMEPLATE		1

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
530	BAC27THY0046		.NAMEPLATE		1
535	BAC27THY0045		.NAMEPLATE		1
540	BAC27THY0137		.NAMEPLATE		1
545	BAC27THY0154		.NAMEPLATE		1