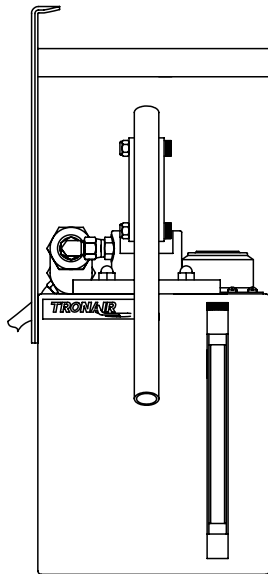




Operation & Service Manual



Model: 06-5053-6500 Reservoir Service Unit

10/2004 – AA – Rev. OR

Includes Illustrated Parts Lists

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**Model: 06-5053-6500
Reservoir Service Unit**

This product can not be modified without the written approval of Tronair, Inc. Any modifications done without written approval voids all warranties and releases Tronair, Inc., its suppliers, distributors, employees, or financial institutions from any liability from consequences that may occur.

1.0 GENERAL DESCRIPTION

The Reservoir Service Unit is a compact unit with features added to support control of contamination in aircraft hydraulic systems through the servicing process.

There are three primary contaminants for hydraulic fluid; dirt, air, and water. The unit will remove dirt, metal, or other solid particles with a 2 micron filter located in the output (servicing) line. Pressure and vacuum valves in the reservoir fill cap minimize tank breathing and thereby control the entry of water into the fluid.

2.0 SPECIFICATIONS

Weight:	Approximately 18 lbs (8.2 kg) Dry
Height:	21 in (53.3 cm)
Width (Overall):	8 ¼ in (20.32 cm)
Depth (Overall):	13 in (33.02 cm)
Fluid:	MIL-PRF-83282, MIL-H-5606
Filtration:	2 micron inline filter with replaceable element
External Hose:	15 ft (4.6 m) 0.25 in (6.35 mm) I.D.
Reservoir:	Sealed, 2 gal (7.6 lt) capacity, stainless steel tank, with carrying handle
Pump:	4 cu in (65.5 cu cm) per stroke (cycle). Maximum output pressure rating is 200 psi (13.8 bar)

3.0 FEATURES

- 8 in (20.3 cm) sight glass for easy detection of fluid level.
- Sealed fill cap with pressure relief and vacuum breaker valves.

4.0 PREPARATION FOR USE

The unit is shipped fully assembled. Only the following steps are required to make it operational.



CAUTION!

Use only the type of fluid for which the unit is labeled. Using other fluids will cause contamination and seal deterioration.

1. Remove the fill cap and fill reservoir to maximum fill arrow.

NOTE: Filling must be accomplished in a dry area to control water contamination.

2. Stroke hand pump several cycles to purge air from the service line.

5.0 OPERATION

The Reservoir Service Unit has a two inch fill cap for gravity filling from one quart or one gallon cans.

Filling must be accomplished in a dry area. The fill cap must always be kept securely closed when the reservoir is not being filled. The cap is equipped with a dual check valve to prevent humid air from contaminating the fluid. One portion of the check valve prevents the dry air in the reservoir from escaping until internal pressure reaches 5 psi (0.34 bar). The second portion of the valve prevents moist air from entering the reservoir until a vacuum of approximately 0.5 (1/2) psi (0.034 bar) is created. This fill cap automatically vents the unit to allow fluid to be dispensed but greatly limits the exchange of air with the atmosphere during daily temperature changes.

To Use the Reservoir Service Unit:

1. Stroke the pump several times prior to each servicing operation. If the pumps action is spongy, re-circulate the fluid using full strokes to eliminate air in the pump. The pump handle should stay completely down when released.
2. Fill the reservoir to the proper level. The hand pump will dispense one quart per 15–17 strokes.

6.0 MAINTENANCE

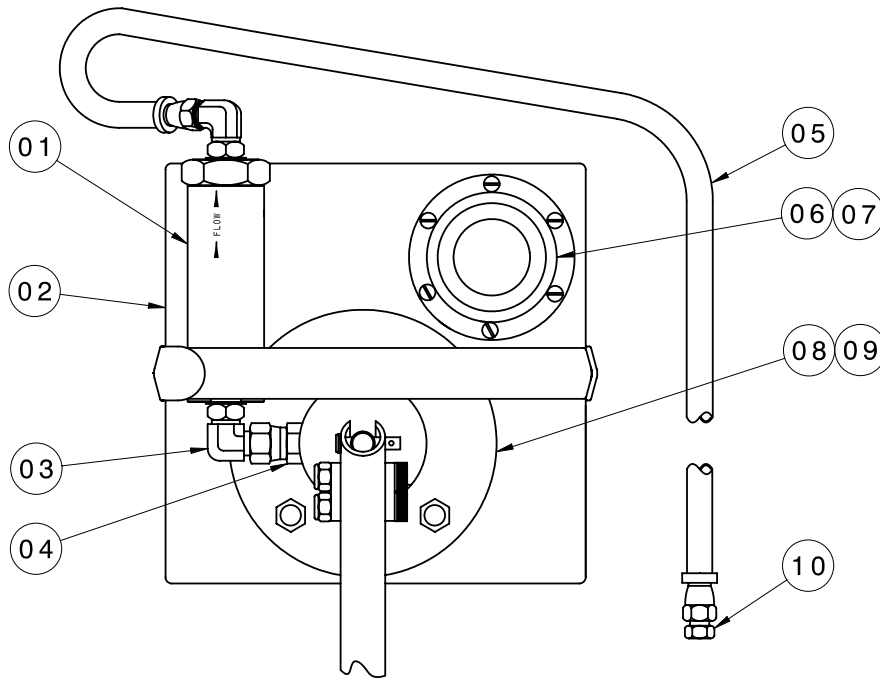
- The filter is of a non-bypass design with a replaceable element. As the filter element becomes clogged, higher handle force may be required for a given flow rate. High handle force while in a re-circulating or other “free flow” condition indicates the need for filter element replacement.
- DO NOT force the pump handle when a clogged filter element is suspected.
- It is best to set up a filter maintenance schedule based on usage and actual fluid samples. For units with low usage, the filter element should be changed at least once annually.

7.0 PARTS LISTS & ILLUSTRATIONS

Reference Pages 3 to 5 for Replacement Parts and Kits available.

Parts List

When ordering Replacement Parts/Kits, please specify Model & Serial Number of your product.



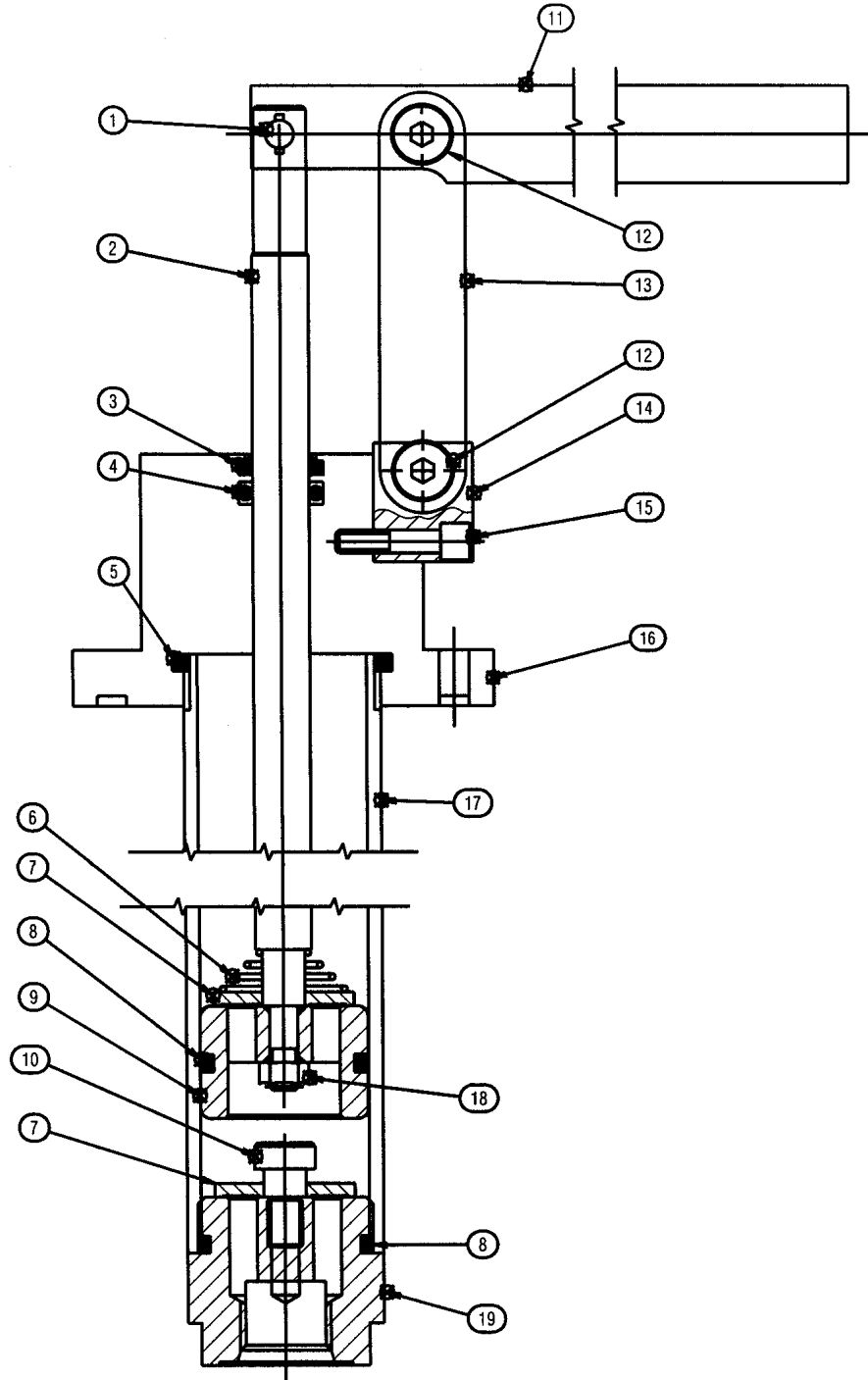
REPLACEMENT PARTS

ITEM	FLUID	PART NUMBER	DESCRIPTION	QTY
1	MIL-H-5606/MIL-PRF-83282	K-3659	Kit, Filter Element	1
	Phosphate Ester	K-3658	Kit, Filter Element	1
	MIL-L-23699/MIL-PRF-87257	K-3659	Kit, Filter Element	1
2	N/A	Z-6050	Reservoir	1
3	MIL-H-5606/MIL-PRF-83282	N-2001-08-S-B	Elbow, Straight Thread	2
	Phosphate Ester	N-2001-08-S-E	Elbow, Straight Thread	2
	MIL-L-23699/MIL-PRF-87257	N-2001-08-S-V	Elbow, Straight Thread	2
4	MIL-H-5606/MIL-PRF-83282	N-2036-03-S-B	Swivel, 37° JIC	1
	Phosphate Ester	N-2036-03-S-E	Swivel, 37° JIC	1
	MIL-L-23699/MIL-PRF-87257	N-2036-03-S-V	Swivel, 37° JIC	1
5	MIL-H-5606/MIL-PRF-83282	TF-1047-04*180	Hose, Push-on	1
	Phosphate Ester	TF-1134-01*180	Hose, Push-on	1
	MIL-L-23699/MIL-PRF-87257	TF-1105-06*180	Hose, Push-on	1
6	N/A	HC-2166	Filter, Breather	1
7	N/A	G-1157-103506	Screw, #10 Pan Head	6
◆ 8	MIL-H-5606/MIL-PRF-83282	HC-2156	Pump, Hand	1
	Phosphate Ester	HC-2157	Pump, Hand	1
	MIL-L-23699/MIL-PRF-87257	HC-2171	Pump, Hand	1
9	MIL-H-5606/MIL-PRF-83282	HC-2000-334	O-ring, Series 2	1
	Phosphate Ester	HC-2006-334	O-ring, Series 2	1
	MIL-L-23699/MIL-PRF-87257	HC-2007-334	O-ring, Series 2	1
10	N/A	N-2014-05-S	Plug, 37° JIC #6	1

◆ Reference Pages 4& 5 for Item 8 (Hand Pump) View and Replacement Parts.

Parts List

Hand Pump Illustration



Parts List

When ordering Replacement Parts/Kits, please specify Model & Serial Number of your product.

ITEM	PART NUMBER	DESCRIPTION	QTY
2	CXD-020004-004	Piston Rod	1
6	CENT-TA-2098	Spring	1
7	CXD-020004-006	Flapper	2
9	CXD-020004-005	Piston	1
14	CXD-020004-009	Mounting Block	1
15	09-ADDF-0J-32 x 14	Socket Head Cap Screw	1
16	CXD-020004-002	Cap & Mounting Flange	1
17	CXD-020004-003	Tube	1
18	08-ADFH-04-28	Prevailing Locknut	1
19	CXD-020004-001	End Cap, Blind End	1
	HK-3717	Kit, Handle Replacement; consists of:	1
1		Pin Linkage Assembly	1
11		Pump Handle	1
12		Pin Linkage Assembly	2
13		Strap	2
	HC-2156 (MIL-H-5606/MIL-PRF-83282)		
	HK-3682	Kit, Pump Seal Replacement; consists of:	1
3		Wiper, Urethane	1
4		O-ring, BUNA	1
5		O-ring, BUNA	1
8		O-ring	2
	HC-2157 (Phosphate Ester, Type IV Fluid)		
	HK-3683	Kit, Pump Seal Replacement; consists of:	1
3		Wiper, EPR	1
4		O-ring, EPR	1
5		O-ring, EPR	1
8		O-ring, EPR	2
	HC-2171 (MIL-L-23699, MIL-PRF-87257)		
	HK-3715	Kit, Pump Seal Replacement; consists of:	1
3		Wiper, Viton	1
4		O-ring, Viton	1
5		O-ring, Viton	1
8		O-ring, Viton	2