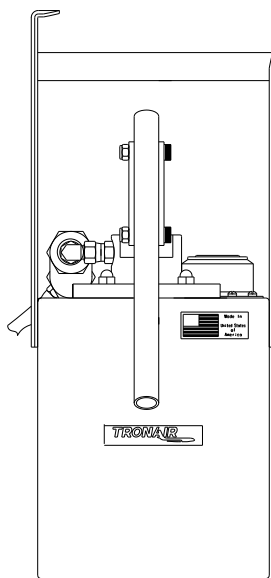




# OPERATION & SERVICE MANUAL



**Model: 06-5022-6X00  
Fluid Servicing Unit**



04/2005 - Rev. 15

| REVISION | DATE    | TEXT AFFECTED  |
|----------|---------|--|
| Rev. 13  | 01/2004 | Cover Changed to read "06-5022-6X00 Fluid Servicing Unit"<br>Description: Changed Reservoir to "Fluid"<br>Specifications: Changed fluid type in 6800,<br>Added Capacity Line, Modified Dimensions<br>Preparations for Use - Added 6800 model to cautionary note<br>Parts List: Added MIL-PRF-87257 to list |
| Rev. 14  | 04/2004 | Parts List: Modifications to fluid type  |
| Rev 15   | 04/2005 | Added Recommend Spare Parts List<br>Modified Parts List  |

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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. Only Tronair OEM replacement parts shall be used.

## 1.0 GENERAL DESCRIPTION

The Fluid Reservoir Service Unit is a compact unit primarily designed to provide a source of clean fluid for filling reservoirs. It is not intended for performing any pressure testing tasks.

## 2.0 SPECIFICATIONS

|                      |   |
|----------------------|---|
| <b>Model Number:</b> | <b>Fluid:</b>                             |
| 06-5022-6500         | MIL-PRF-5606/MIL-PRF-83282 (Mineral Base) |
| 06-5022-6600         | Phosphate Ester, Type IV                  |
| 06-5022-6600-A2      | Phosphate Ester, Type IV                  |
| 06-5022-6800         | MIL-L-23699 / MIL-PRF-87257               |

|                           |   |
|---------------------------|---|
| <b>Capacity:</b>          | 2 gal (7.6 lt)  |
| <b>Maximum Pressure:</b>  | 200 psi (13.8 bar)  |
| <b>Filter:</b>            | 2 micron  |
| <b>Dimensions:</b>        | 8.25 in (21 cm) Wide<br>8.25 in (21 cm) Long<br>20.25 in (51.4 cm) High |
| <b>Weight:</b>            | 18 lbs (8.16 kg)  |
| <b>Pump Displacement:</b> | 4.4 cubic inch/stroke (72.11 cc/stroke)                                 |

## 3.0 FEATURES

- 15 foot (4.6 m) hose
- Large filtered fill port
- Inline filter after pump

## 4.0 PREPARATION FOR USE

The unit is shipped fully assembled, and only the following steps are required to make it operational:

**NOTE:** On 06-5022-6500 & 6800 units only, apply appropriate fluid label to top of reservoir near fill opening.



### CAUTION!

Only use the type of fluid for which the unit is designed. Using other fluids will cause contamination and seal deterioration.

1. Remove the fill cap and fill reservoir.
2. Operate hand pump several times to fill line and purge air. Install coupling at hose end if applicable.

## 5.0 OPERATION

### To Use the Unit:

1. Securely attach hose to aircraft.
2. Operate pump handle at a slow to moderate pace with even pressure.

**NOTES:** 1. *It is not necessary to operate pump rapidly. The pump moves a large volume of oil per stroke and will fill a reservoir much faster than standard pumps.*  
2. *A slow movement of the pump handle with a steady pressure works best.*

### When Service Has Been Completed:

1. Disconnect hose from aircraft.
2. Replace protective cap on hose end to prevent dirt ingestion.

## 6.0 MAINTENANCE

### 6.1 FILTER

The filter is of a non-bypass design. This means that, if the filter becomes clogged, no fluid will pass to the aircraft and a high handle force will result. If this happens, replace filter element. **DO NOT FORCE** the pump handle as damage to unit components could result.

Element replacement schedule should be based on usage and actual fluid samples. For units with low usage, element should be changed at least once annually.

## 7.0 PARTS LIST

Reference following pages for ordering information of Replacement Parts and Kits.

**8.0 GUARANTEES/LIMITATION OF LIABILITY**

Tronair products are warranted to be free of manufacturing or material defects for a period of one year after shipment to the original customer. This is solely limited to the repair or replacement of defective components. This warranty does not cover the following items:

- a) Parts required for normal maintenance
- b) Parts covered by a component manufacturers warranty
- c) Replacement parts have a 90-day warranty from date of shipment

If you have a problem that may require service, contact Tronair immediately. Do not attempt to repair or disassemble a product without first contacting Tronair, any action may affect warranty coverage. When you contact Tronair be prepared to provide the following information:

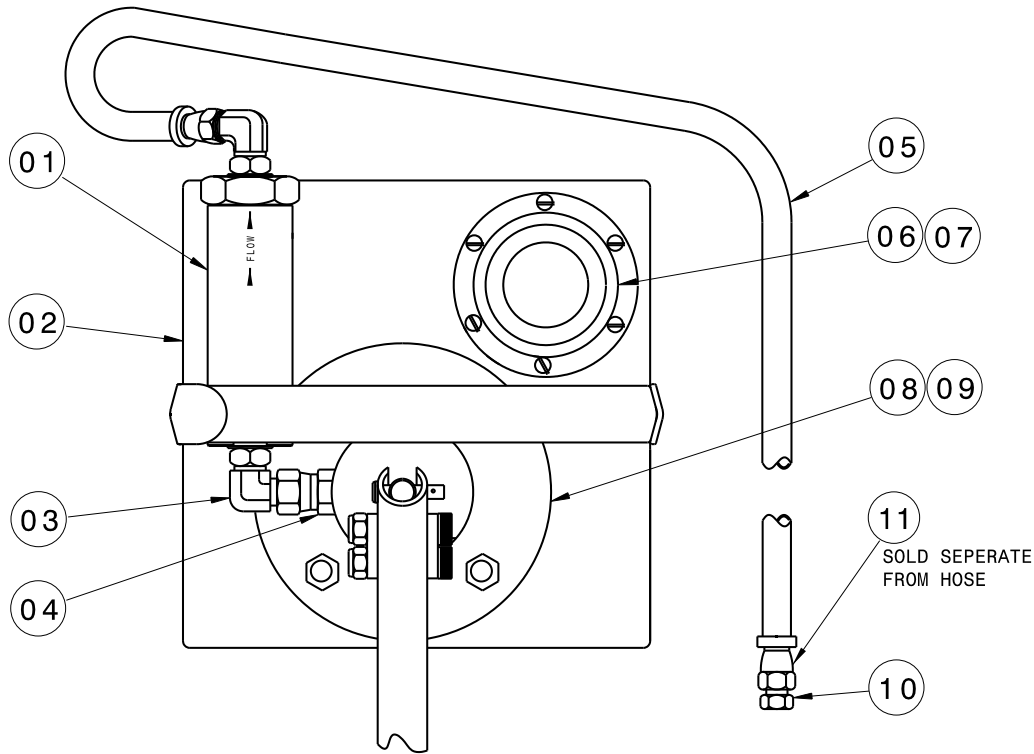
- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

If warranty coverage is approved, either replacement parts will be sent or the product will have to be returned to Tronair for repairs. If the product is to be returned, a Return Material Authorization (RMA) number will be issued for reference purposes on any shipping documents. Failure to obtain a RMA in advance of returning an item will result in a service fee. A decision on the extent of warranty coverage on returned products is reserved pending inspection at Tronair. Any shipments to Tronair must be shipped freight prepaid. Freight costs on shipments to customers will be paid by Tronair on any warranty claims only. Any unauthorized modification of the Tronair products or use of the Tronair products in violation of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by Tronair will immediately void any warranty, express or implied.

The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by Tronair will immediately void any warranty, express or implied and Tronair disclaims any and all liability for injury (WITHOUT LIMITATION and including DEATH), loss or damage arising from or relating to such misuse.**

## Parts List

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

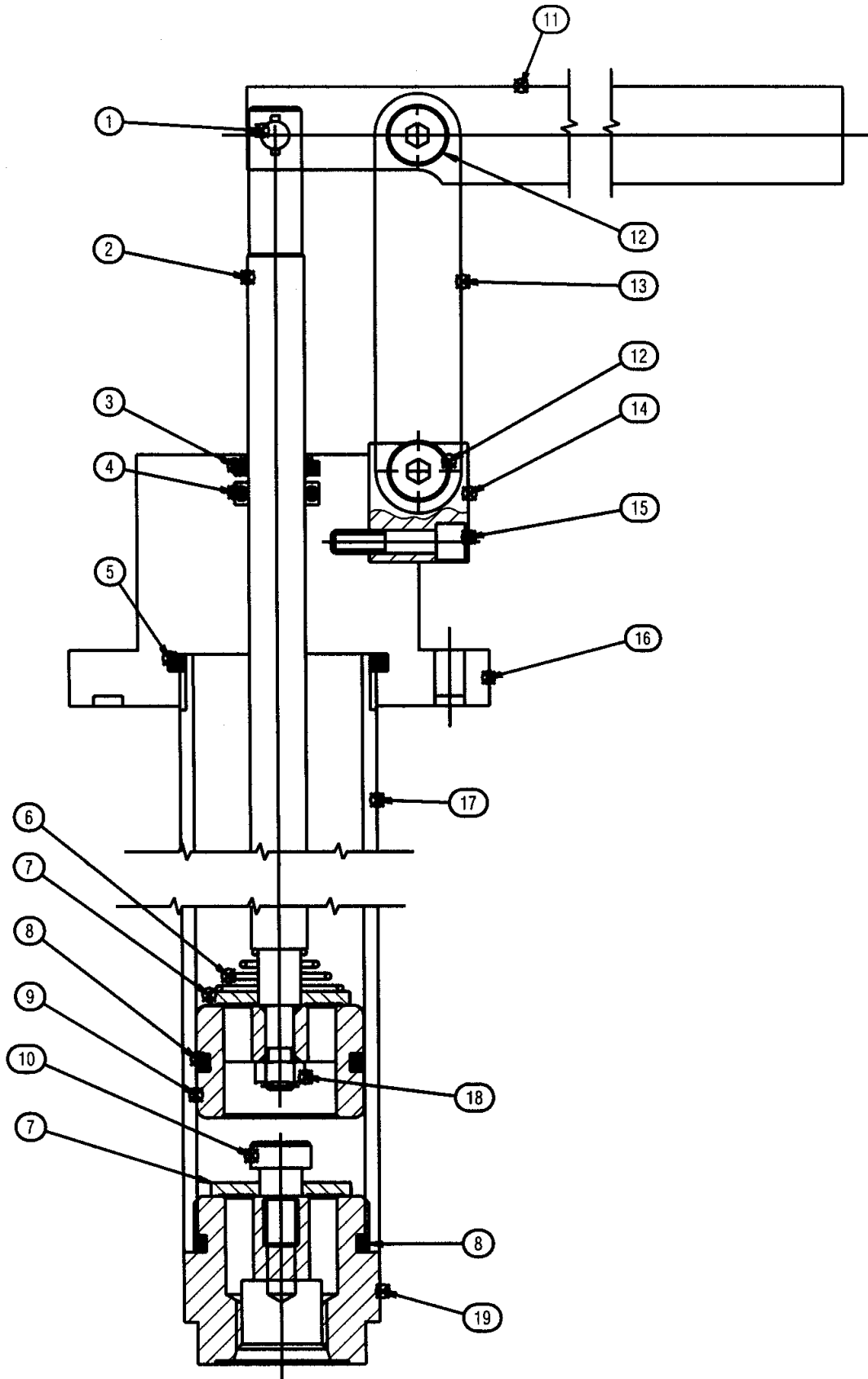


| Item | Fluid                       | Part Number    | Description            | Qty |
|------|-----------------------------|----------------|------------------------|-----|
| 1    | MIL-PRF-5606/MIL-PRF-83282  | K-3659         | Kit, Filter Element    | 1   |
|      | Phosphate Ester             | K-3658         | Kit, Filter Element    | 1   |
|      | MIL-PRF-23699/MIL-PRF-87257 | K-3659         | Kit, Filter Element    | 1   |
| 2    | N/A                         | Z-5587         | Reservoir              | 1   |
| 3    | MIL-PRF-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-PRF-23699/MIL-PRF-87257 | N-2001-08-S-V  | Elbow, Straight Thread | 2   |
|      | MIL-PRF-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-PRF-23699/MIL-PRF-87257 | N-2036-03-S-V  | Swivel, 37° JIC        | 1   |
| 5    | MIL-PRF-5606/MIL-PRF-83282  | TF-1047-04*180 | Hose, Push-on          | 1   |
|      | Phosphate Ester             | TF-1134-01*180 | Assembly, Hose         | 1   |
|      | MIL-PRF-23699/MIL-PRF-87257 | TF-1105-06*180 | Hose, Push-on          | 1   |
| 6    | N/A                         | HC-1030        | Filter, Breather       | 1   |
| 7    | N/A                         | G-1179-103506  | Screw, #10 Pan Head    | 6   |
| ♦ 8  | MIL-PRF-5606/MIL-PRF-83282  | HC-2156        | Pump, Hand             | 1   |
|      | Phosphate Ester             | HC-2157        | Pump, Hand             | 1   |
|      | MIL-PRF-23699/MIL-PRF-87257 | HC-2171        | Pump, Hand             | 1   |
| 9    | MIL-PRF-5606/MIL-PRF-83282  | HC-2000-334    | O-ring, Series 2       | 1   |
|      | Phosphate Ester             | HC-2006-334    | O-ring, Series 2       | 1   |
|      | MIL-PRF-23699/MIL-PRF-87257 | HC-2007-334    | O-ring, Series 2       | 1   |
| 10   | N/A                         | N-2014-05-S    | Plug, 37° JIC #6       | 1   |
| 11   | N/A                         | N-2026-03-B    | Swivel, Hose           | 2   |

♦ Reference Pages 5 & 6 for Item 8 (Hand Pump) View and Replacement Parts.

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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   |
| 13  | 512-000            | Strap   | 2   |
| 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   |
|   | <b>HK-3717</b>     | <b>Kit, Handle Replacement; consists of:</b>    | 1   |
| 1   |                    | Pin Linkage Assembly                            | 1   |
| 11  |                    | Pump Handle                                     | 1   |
| 12  |                    | Pin Linkage Assembly                            | 2   |
| <b>HC-2156 (MIL-PRF-5606/MIL-PRF-83282)</b>     |                    |   |     |
|   | <b>HK-3682</b>     | <b>Kit, Pump Seal Replacement; consists of:</b> | 1   |
| 3   |                    | Wiper, Urethane                                 | 1   |
| 4   |                    | O-ring, BUNA                                    | 1   |
| 5   |                    | O-ring, BUNA                                    | 1   |
| 8   |                    | O-ring  | 2   |
| <b>HC-2157 (Phosphate Ester, Type IV Fluid)</b> |                    |   |     |
|   | <b>HK-3683</b>     | <b>Kit, Pump Seal Replacement; consists of:</b> | 1   |
| 3   |                    | Wiper, EPR                                      | 1   |
| 4   |                    | O-ring, EPR                                     | 1   |
| 5   |                    | O-ring, EPR                                     | 1   |
| 8   |                    | O-ring, EPR                                     | 2   |
| <b>HC-2171 (MIL-PRF-23699, MIL-PRF-87257)</b>   |                    |   |     |
|   | <b>HK-3715</b>     | <b>Kit, Pump Seal Replacement; consists of:</b> | 1   |
| 3   |                    | Wiper, Viton                                    | 1   |
| 4   |                    | O-ring, Viton                                   | 1   |
| 5   |                    | O-ring, Viton                                   | 1   |
| 8   |                    | O-ring, Viton                                   | 2   |

**Recommended Spare Parts List**

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

| Part Number    | Description                           | Qty |
|----------------|---------------------------------------|-----|
|                | <b>06-5022-6500 (Mineral Base)</b>    |     |
| K-3659         | Kit, Filter Element                   | 1   |
| TF-1047-04*180 | Hose, Push-On                         | 1   |
| HK-3717        | Kit, Handle Replacement               | 1   |
|                | <b>06-5022-6600 (Phosphate Ester)</b> |     |
| K-3658         | Kit, Filter Element                   | 1   |
| TF-1134-01*180 | Hose, Push-On                         | 1   |
| HK-3717        | Kit, Handle Replacement               | 1   |
|                | <b>06-5022-6800 (Engine Oils)</b>     |     |
| K-3659         | Kit, Filter Element                   | 1   |
| TF-1105-06*180 | Hose, Push-On                         | 1   |
| HK-3717        | Kit, Handle Replacement               | 1   |

\*\*Tested life cycle of Handle Assembly is 40,000 cycles.

**06-5022-6600-A2****Parts List – Quick Disconnect Kit**

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

| <b>Part Number</b> | <b>Description</b>           | <b>Qty</b> |
|--------------------|------------------------------|------------|
| N-2617-01          | Coupling, Quick Disconnect * | 1          |
| N-2673-01          | Plug, Dust *                 | 1          |
| N-2052-06          | Expander, 4-6 Tube           | 1          |





## **APPENDIX I**

### **Declaration of Conformity**





## DECLARATION of CONFORMITY

The design, development and manufacture is in accordance with European Community guidelines

Fluid Servicing Unit  
06-5022-6500  
06-5022-6600  
06-5022-6600-A2  
06-5022-6800

Relevant provisions complied with by the machinery:  
2006/42/EC

Identification of person empowered to sign on behalf of the Manufacturer:

A handwritten signature in cursive script that reads "Patrick Finch". The signature is written in black ink and is positioned above a horizontal line.

Quality Assurance Representative