

## Model: 06-5041-3610 Hydraulic Service Unit

12/2002 – Rev. 01

REVISION  
01

DATE  
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TEXT AFFECTED  
Original release

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## **1.0 GENERAL DESCRIPTION**

The Tronair Hydraulic Service Unit (HSU) is a compact unit designed to provide a source of clean, pressurized fluid for filling reservoirs, bleeding brakes and other maintenance functions.

## **2.0 SPECIFICATIONS**

Tank Capacity:	8 gallons
Maximum Pressure:	500/5,000 psig
Fluid:	Phosphate Ester
Filtration:	3 Micron
Weight:	65 lbs

## **3.0 FEATURES**

- 15 foot hose
- Pressure gauge
- Shut-off valve for component testing
- 5,000 psi high/low pump provides high flow and high pressure capability
- Four-way valve for testing double acting cylinder

## **4.0 PREPARATION FOR USE**

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

1. Service Reservoir: Fill reservoir with appropriate clean fluid.
2. Adjust handle height to suit.

### **Remove Air From System By:**

1. Close manual pump release screw located at lower right corner of pump base block.
2. Open shut-off valve adjacent to pressure gauge.
3. Move pump handle to top of stroke.
4. Remove pipe plug located near top side of piston cylinder.
5. Lower handle until there is fluid filling (spilling out) the top cavity.
6. Re-install pipe plug.
7. Flow fluid by actuating manual pump.

## **5.0 OPERATION**

### **5.1 TO USE YOUR HYDRAULIC SERVICE UNIT**

1. Securely attach hose to the aircraft.
2. Close pump release screw.
3. Open shut-off valve.
4. Select output hose #1 or #2 by rotating handle pointer to desired hose.
5. Transfer hydraulic fluid by actuating the manual hydraulic pump.

### **When service has been completed:**

1. Open pump release screw to relieve hydraulic pressure.
2. Disconnect hose from aircraft.
3. Install hose end dust plug.

### **5.2 COMPONENT TESTING**

A shut-off valve had been provided to assure no back flow of fluid. Therefore, shut-off valve is to be closed after the required pressure has built up in the system.

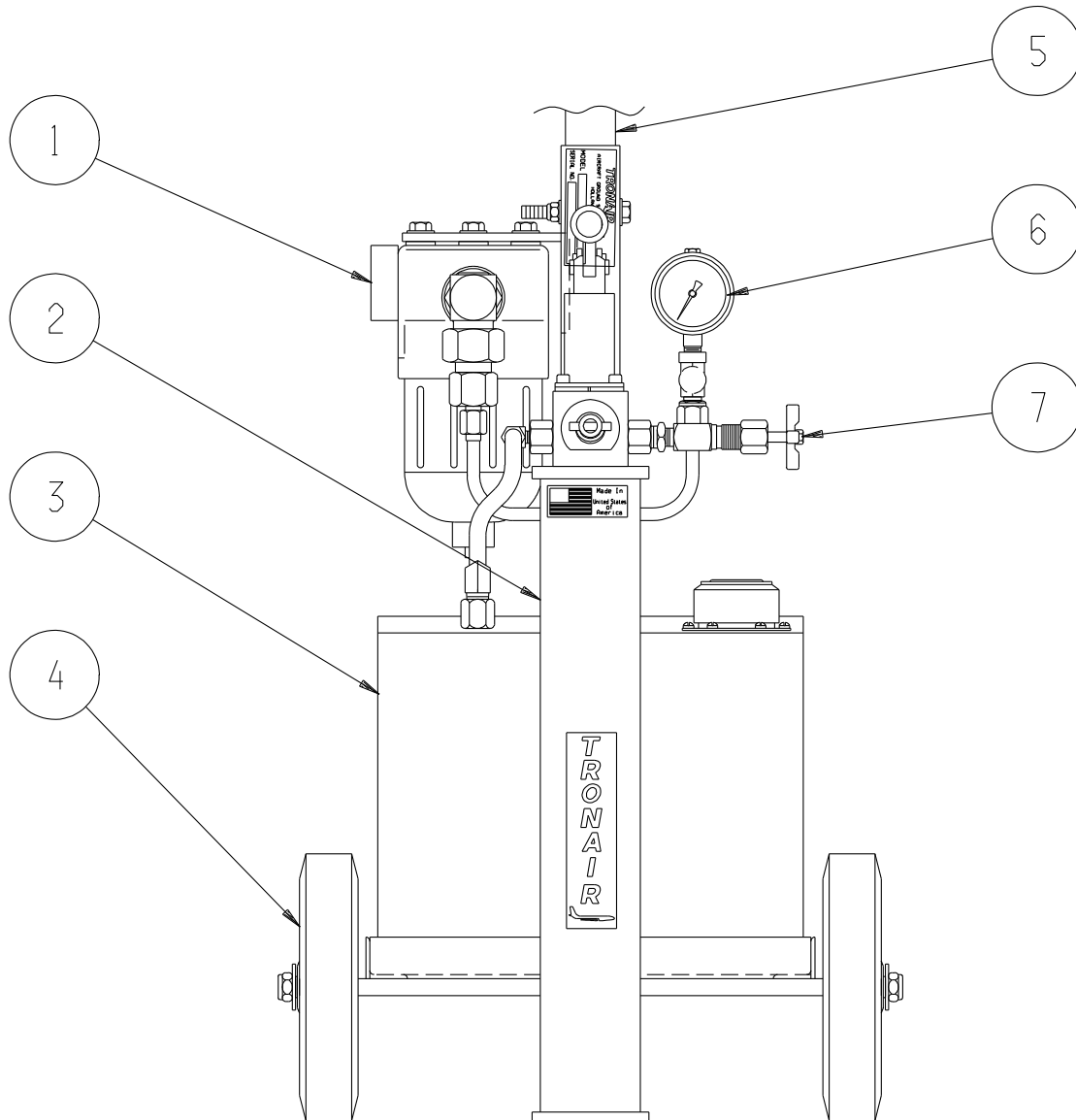
Pressure is relieved by opening this shut-off valve and the pump release screw.

## **6.0 PARTS LIST**

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

## Parts List

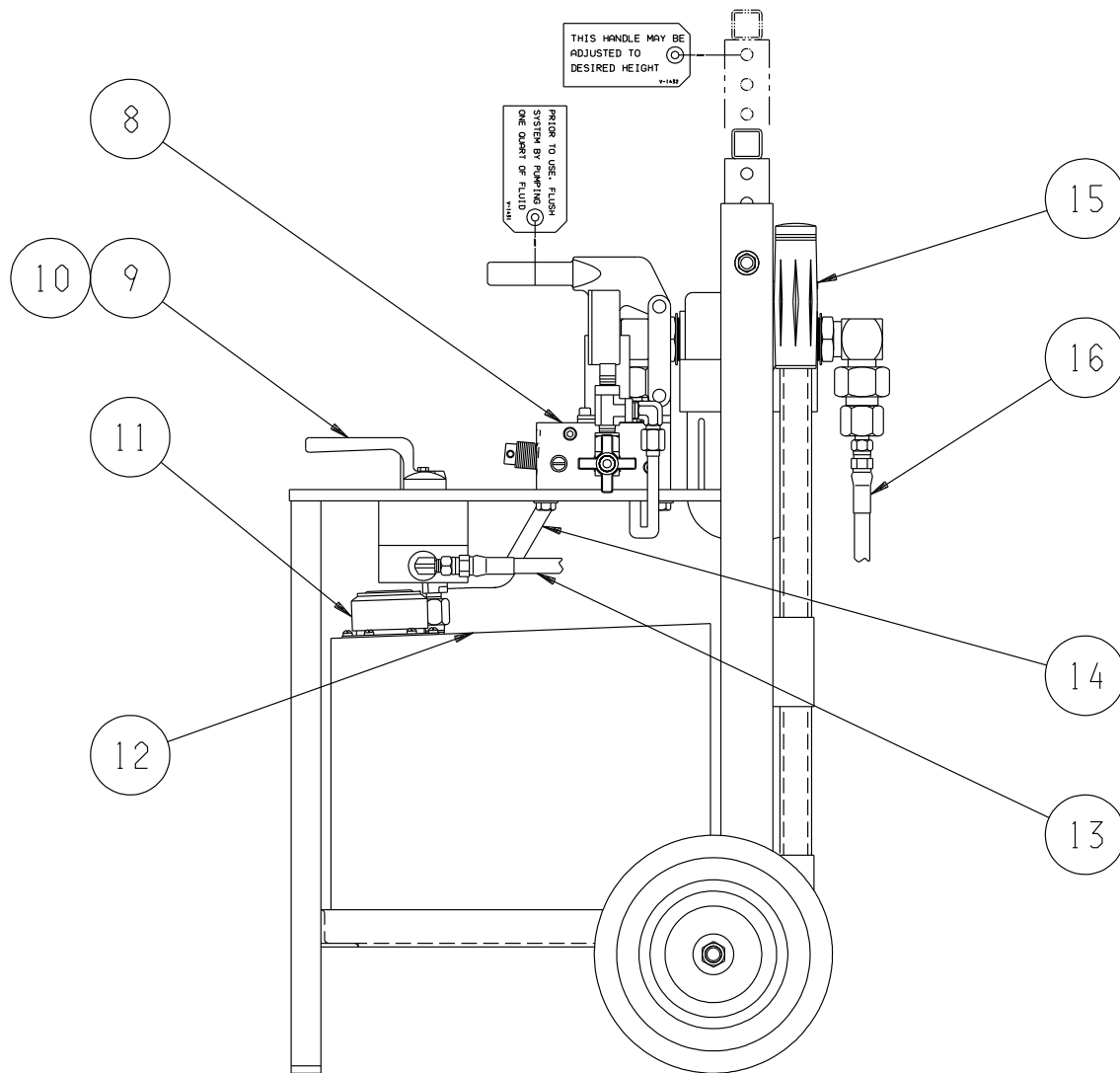
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
1	HC-1581 (See Page 4)	Assembly, Pressure Filter	1
2	Z-4182-01	Frame	1
3	C-189	Tank	1
4	U-1001-01	Wheel	2
5	Z-1083-01	Handle, Unit	1
6	HC-1929	Gauge, Pressure	1
7	HC-1101-02 (See Page 7)	Valve, Shut-off	1

## Parts List

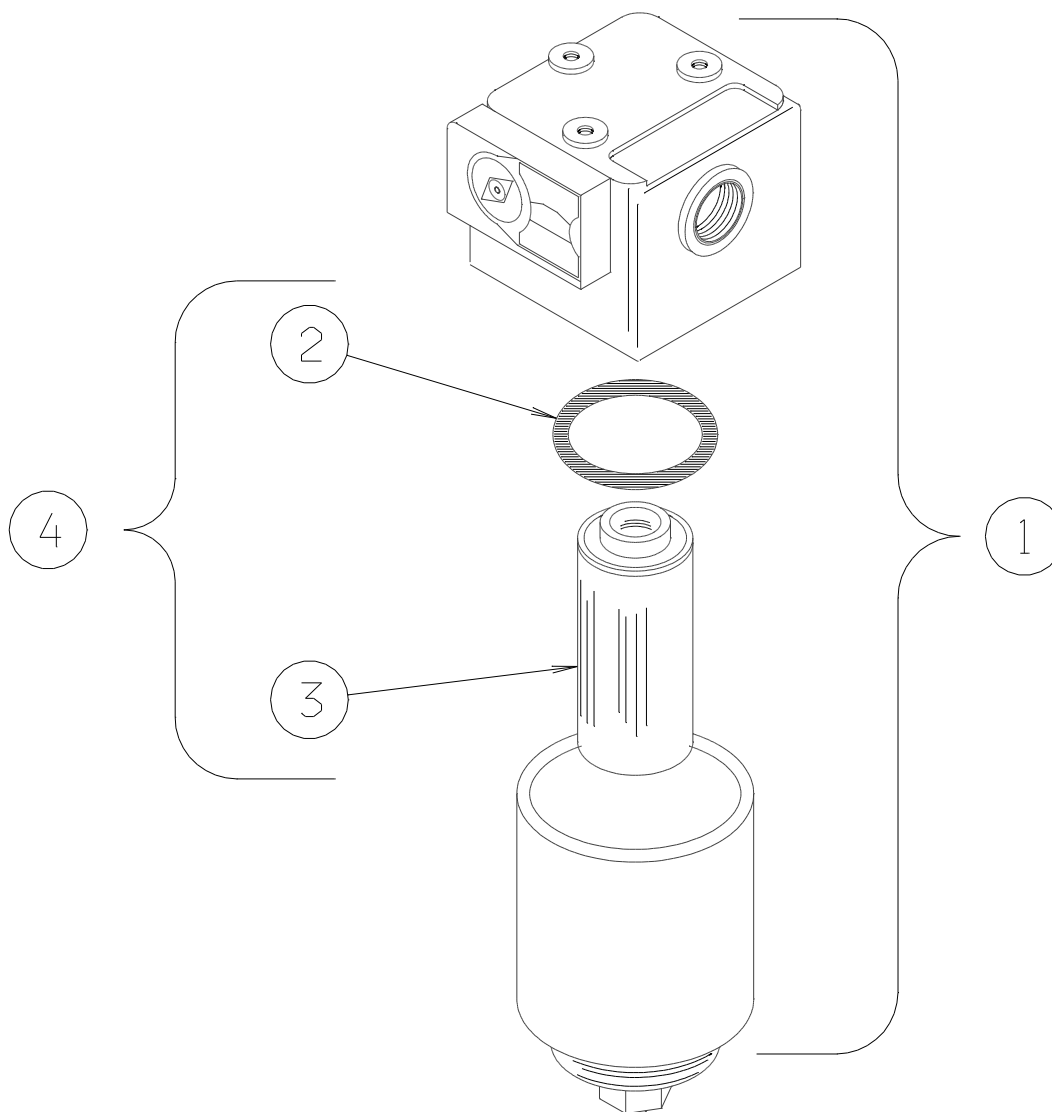
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Item	Part Number	Description	Qty
9	HC-1046-02	Valve, Selector	1
10	TF-1030-01*03.5	Hose, Valve Return	1
11	HC-1030	Breather	1
12	V-1100	Label - Fluid Type	1
13	TF-1041-05*180	Assembly, Hose	1
14	TF-1030-01*06.5	Hose, Pump Suction	1
15	H-1009-01	Handle, Pump	1
16	TF-1041-05*21.8	Assembly, Hose	1
8	<b>K-3116</b>	<b>Kit, Pump Replacement; consists of:</b>	
	HC-1853 (See Pages 5 & 6)	Pump, 2 Stage, 5,000 psi (Phosphate Ester)	1
	INS-1334	Instruction, Pump Replacement	1
	TF-1030-01*12.0	Hose, ¼ Gray, 12" long	1

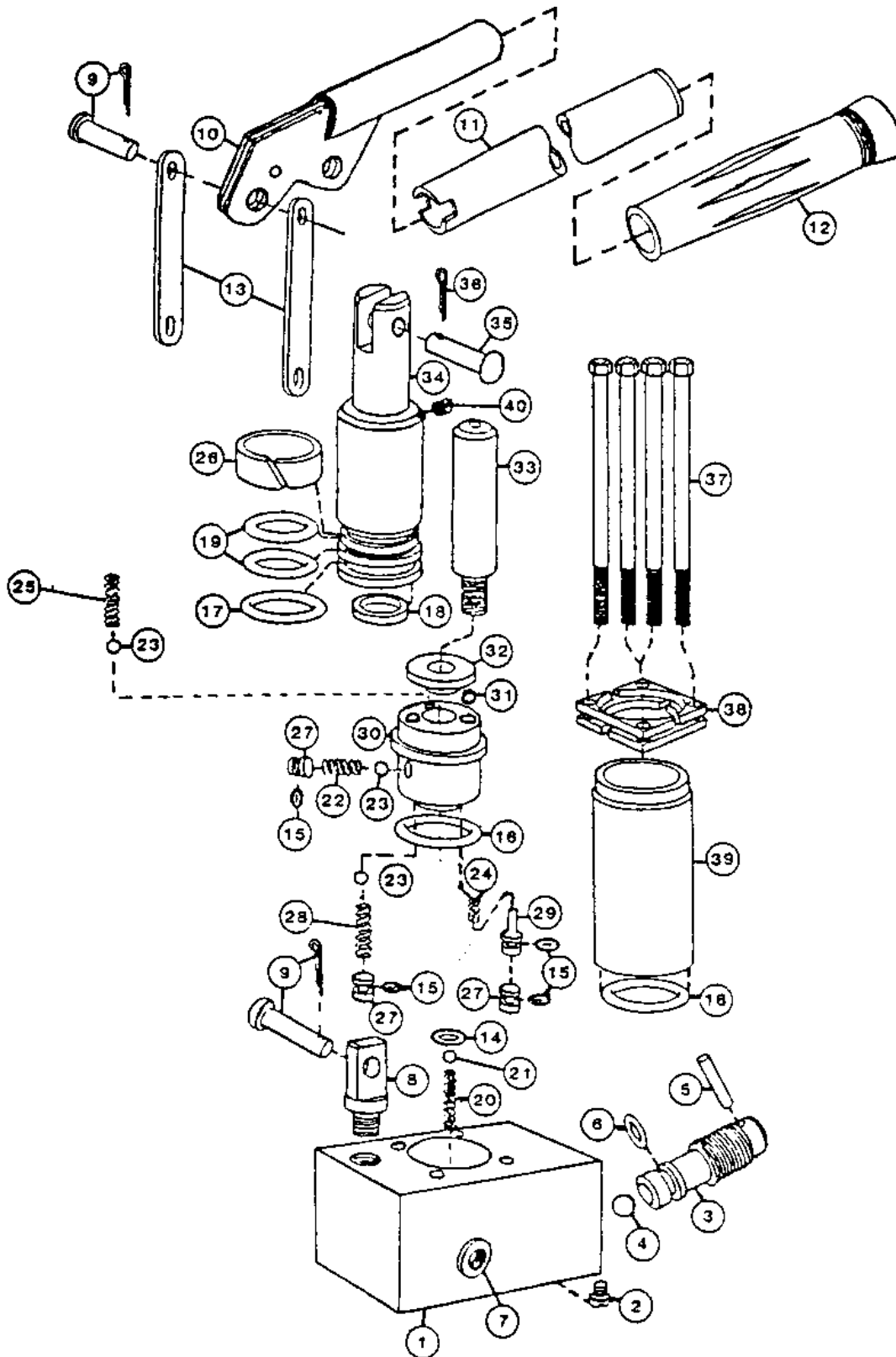
**HC-1581 Pressure Filter Assembly**

When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
1	HC-1581	Assembly, Pressure Filter ( <i>Phosphate Ester</i> )	1
4	<b>K-2131</b>	<b>Kit, Filter Element; consists of:</b>	
2	HC-2006-235	O-ring ( <i>Phosphate Ester</i> )	1
3	HC-1587	Element, Filter ( <i>Phosphate Ester</i> )	1

**HC-1853 Hydraulic Hand Pump**  
This pump is compatible with Phosphate Ester Hydraulic Fluids.





## HC-1853 Hydraulic Hand Pump

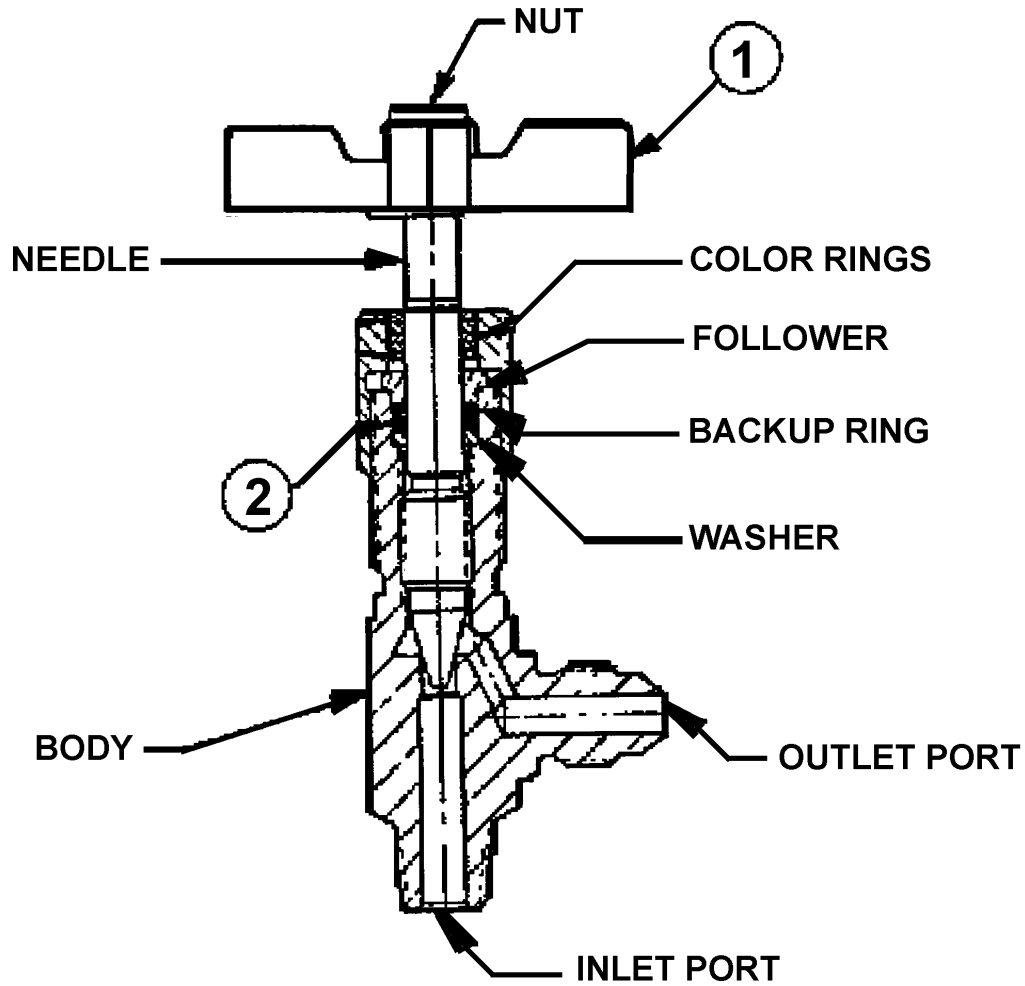
This pump is compatible with Phosphate Ester Hydraulic Fluids.

Item	Part Number	Description	Qty
1	501-000	Pump Body	1
7	555-000	Bushing (3/8 x 3/8 NPT)	1
8	508-000	Pivot	1
9	510-001	Pin Assembly	2
10	509-000	Bracket, Pump Handle	1
11	511-240	Handle	1
12	529-000	Handle Grip	1
13	512-000	Strap	2
27	505-000	Plug	3
28	577-120	Spring, Outlet Plug (L.P.)	1
29	571-120	Piston, Bypass	1
30	560-120	Valve Body	1
31	569-120	Ball, Bypass	1
32	564-120	Retainer Plate	1
33	562-125	Piston, High Pressure	1
34	566-125	Piston, Low Pressure	1
35	531-000	Clevis Pin	1
36	532-000	Cotter Pin	1
37	568-120	Tie Rod	4
38	582-125	Flange	1
39	563-120	Tube, Low Pressure	1
40	583-121	Plug, 1/16 NPT	1
	<b>K-1030</b>	<b>Kit, Pump Valve Rebuilt; consists of:</b>	1
6		O-ring, Release Screw	
14		O-ring, Output Check	
15		O-ring, Inlet Check	
16		O-ring, Valve Body	
17		O-ring, Piston Seal	
18		Packing, Piston	
19		O-ring, Guide Shoe	
26		Piston, Guide Shoe	
	<b>K-1095</b>	<b>Kit, Check Valve Hard Part; consists of:</b>	1
4		Release Ball	
20		Spring, Output Check	
21		Ball, Output Check	
22		Spring, Inlet Check	
23		Ball, Inlet Check	
24		Spring, Bypass	
25		Spring, Intake (L.P.)	
	<b>K-3117</b>	<b>Kit, Relief Valve Rebuilt; consists of:</b>	1
2		Screw Retainer	
3		Release Screw	
4		Release Ball	
5		Drive Pin	
6		O-ring, Release Screw	

- NOTES:**
1. Items designated as kits contain all hardware necessary for installation.
  2. Unless otherwise listed, all replacement bolts should be Grade 5 or better.

**HC-1101-02 Shut-Off Valve**

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



Item	Part Number	Description	Qty
	HC-1101-02	Assembly, Valve ( <i>Phosphate Ester</i> ) ( <i>Complete Component</i> )	1
1	HC-1082	Handle, Valve	1
2	HC-2006-011	O-ring ( <i>Phosphate Ester</i> )	1