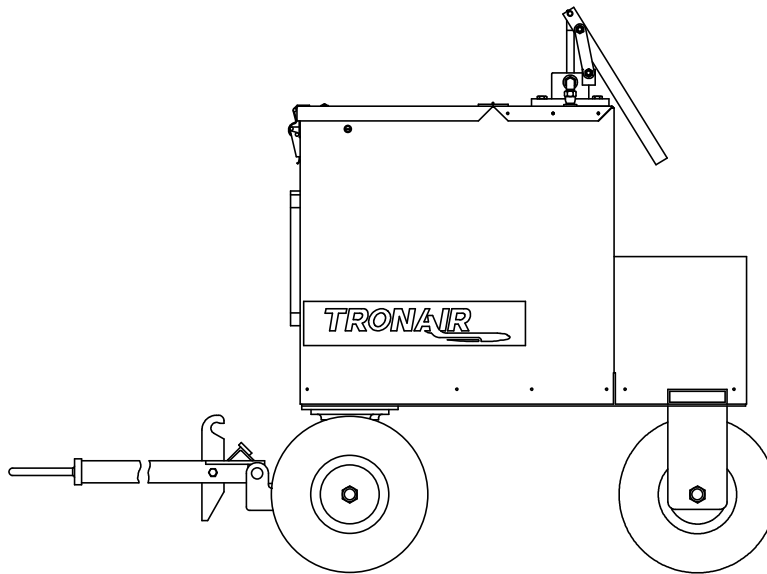




Operation & Service Manual



Model: 06-5043 -XX00 Fluid Servicing Unit

01/2004 – Rev. 04

Includes Illustrated Parts List

Tronair, Inc.

1740 Eber Road
Holland, Ohio 43528-9794
USA

Telephone: (419) 866-6301 • 800-426-6301

Fax: (419) 867-0634

Web Site: www.tronair.com E-mail: sales@tronair.com

**Model: 06-5043 Series
Fluid Servicing Unit**

TABLE OF CONTENTS

PAGE

1.0	General Description	1
2.0	Specifications	1
3.0	Features	1
4.0	Preparation For Use	1
5.0	Operation	2
6.0	Maintenance	2
	Parts List Index	2

**Model: 06-5043 Series
Fluid Servicing Unit**

Revision	Date	Text Affected
Rev.03 AD	01/10/2004	Cover: Changed "Hydraulic" to "Fluid"

**Model: 06-5043 Series
Fluid Servicing 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. 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

Model Number	Fluid
06-5043-1500	MIL-H-5606 / MIL-PRF-83282
06-5043-1800	MIL-PRF-87257 / MIL-L-23699
06-5043-3600	Skydrol/Hyjet
Maximum Pressure:	150 psi (10.3 bars)
Filter:	2 Micron
Dimensions:	Length: 45 in (114.3 cm) Width: 29 in (74.7 cm) Height: 35 in (89 cm)
Weight:	250 lbs (113.4 kg)
Pump Displacement:	7.8 cubic in/stroke (127.82 cc/stroke)
Hose:	15 ft (4.6 m)
Reservoir Capacity:	15 gal (57 l) Stainless Steel
Maximum Towing Speed:	10 mph (16.1 k/hr)
Paint:	Powder Coat Tronair Blue

3.0 FEATURES

- Pneumatic tires
- Replaceable filter element

4.0 PREPARATION FOR USE

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

1. Fill reservoir with the correct fluid until fluid level is slightly above the minimum oil level mark.



CAUTION!

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

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

Tires: Maintain 45 – 50 psi (3.1 – 3.4 bars) tire pressure.

Filters: The 2 micron pressure filter is of a non-bypass design. This means that, if filter becomes clogged, no fluid will pass to the aircraft *and* a high handle force will result. If this happens, service the filter. **Do not** force the pump handle as damage to unit components could result.

Service: The 2 micron pressure filter inside the unit is of a throw-away design and is *not cleanable*.

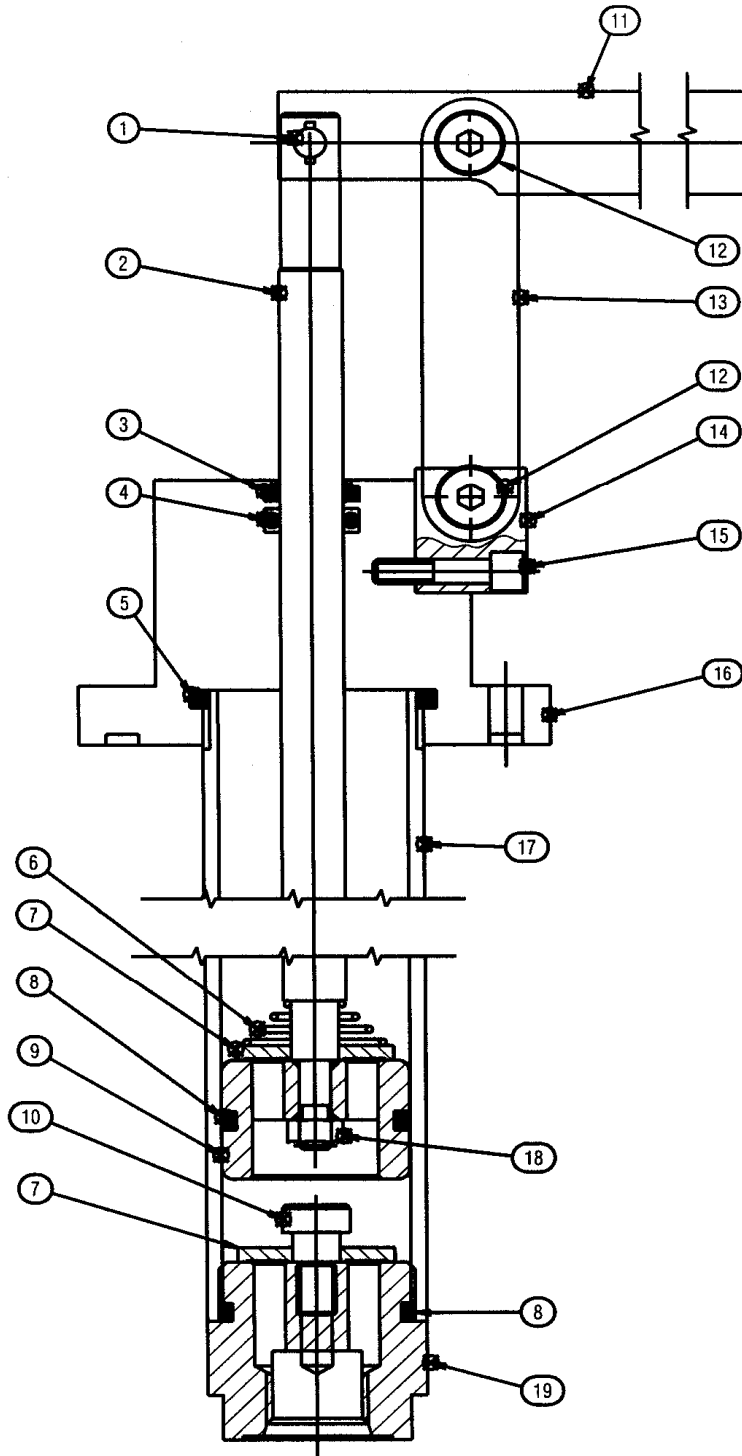
Parts List Index

<u>Contents</u>	<u>Page</u>
HC-2252/HC-2172/HC-2173 Hand Pump Parts List & Illustration	4
Internal/External Components Parts List & Illustrations	6 - 7
Filter Assembly	8
Reservoir Assembly.....	9
Towbar Assembly	10
Truck Assembly	11

**Model: 06-5043 Series
Fluid Servicing Unit**

This page left blank intentionally

HC-2252/HC-2172/HC-2173 Hand Pump Section View



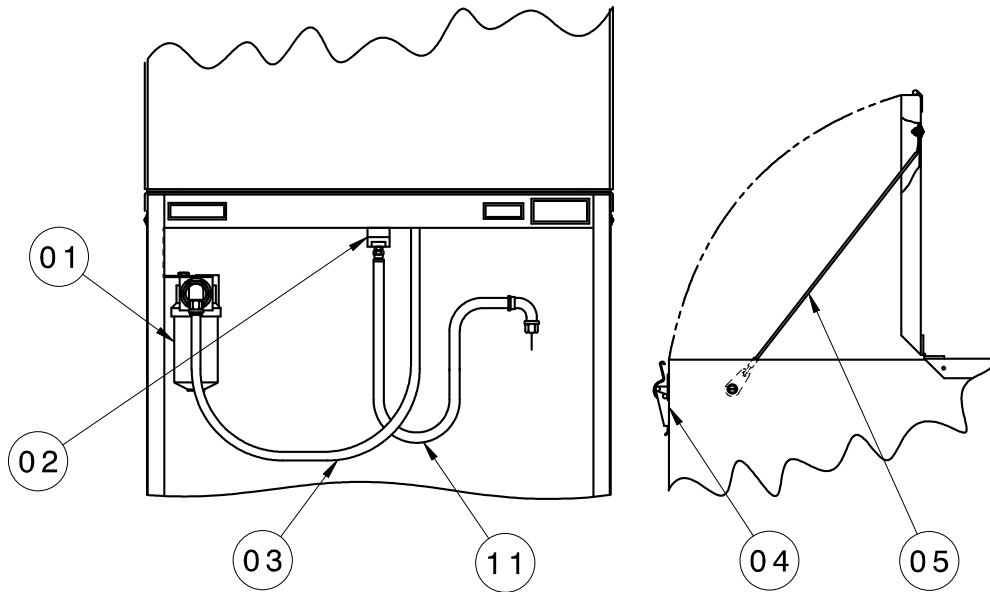
Parts List

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

ITEM	PART NUMBER	DESCRIPTION	QTY
2.....	CXD-020046-004-1	Piston Rod.....	1
6.....	CENT-TA-2098	Spring	1
7.....	CXD-020004-006.....	Flapper	2
9.....	CDX-020004-05.....	Piston	1
10.....	09-AHDF-06-18 x 04	Shoulder Screw	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-020046-002.....	Cap & Mounting Flange	1
17.....	CXD-020046-003.....	Tube	1
18.....	08-ADFH-04-28	Prevailing Locknut.....	1
19.....	CXD-020046-001.....	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
	HC-2173 (Phosphate Ester, Type IV Fluid)		
	HK-3720	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-2252 (MIL-L-23699, MIL-PRF-87257)		
	K-3834	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
	HC-2172 (MIL-H-5606, MIL-PRF-83282)		
	HK-3719	Kit, Pump	1
3.....		Wiper, BUNA	1
4.....		O-ring, BUNA	1
5.....		O-ring, BUNA	1
8.....		O-ring, BUNA	2

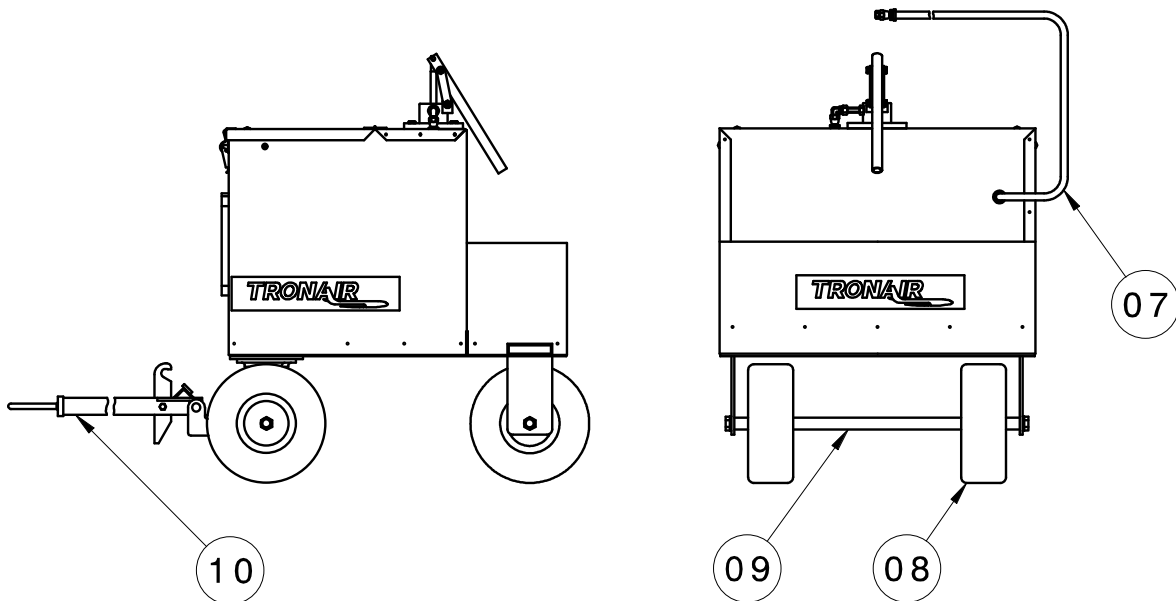
Internal Components

Reference Page 7 for available Replacement Kits.



External Components

Reference Page 7 for available Replacement Kits.

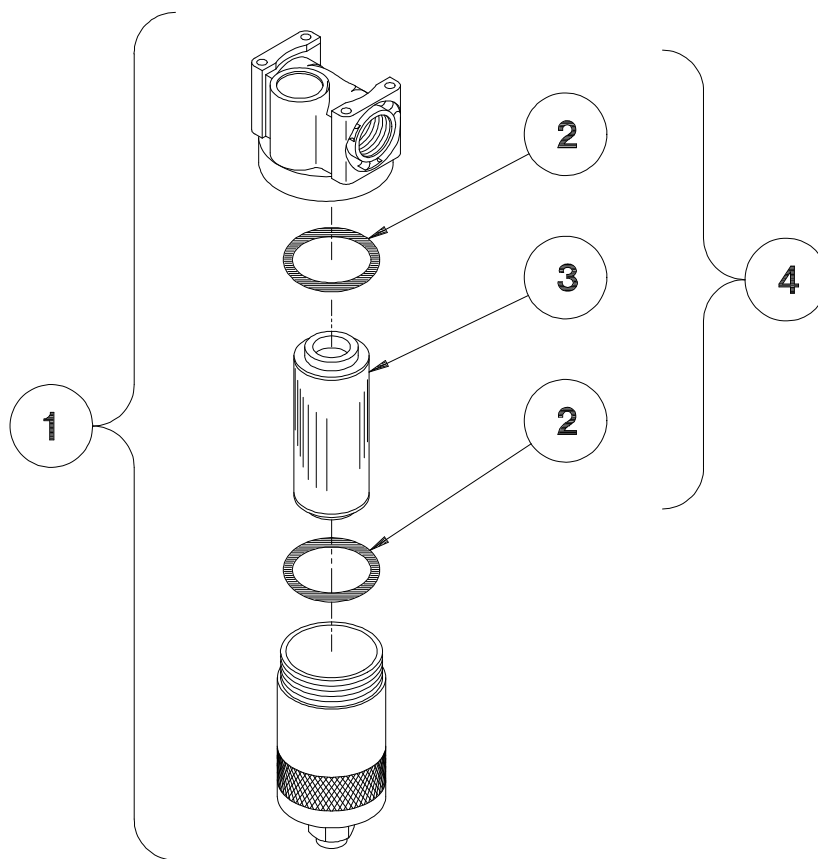


Internal/External Components

Reference Illustrations on Page 6.

ITEM	FLUID	PART NUMBER	DESCRIPTION	QTY
1	Phosphate Ester	HC-1480	Assembly, Filter	1
	MIL-L-23699/MIL-PRF-87257	HC-1826	Assembly, Filter	1
	MIL-H-5606/MIL-PRF-83282	HC-1481	Assembly, Filter	1
2	Phosphate Ester	HC-2173	Hand Pump	1
	MIL-L-23699/MIL-PRF-87257	HC-2252	Hand Pump	1
	MIL-H-5606/MIL-PRF-83282	HC-2172	Hand Pump	1
3	Phosphate Ester	TF-1067-01*40.0	Assembly, Hose	1
	MIL-L-23699/MIL-PRF-87257	TF-1105-06*40.0	Hose, 3/8	1
	MIL-H-5606/MIL-PRF-83282	TF-1047-04*40.0	Hose, 3/8	1
4	N/A	K-1768	Kit, Latch; consists of:	
		H-1646	Strike, Right Angle	1
		H-1647	Clamp	1
5	N/A	K-1767	Kit, Lanyard Assembly; consists of:	
		G-1159-103504	Screw, #10-32, Round Head Cross Recess	4
		G-1202-1035	Stopnut, #10-32 Elastic	4
		G-1250-1070N	Flatwasher, 3/8 Narrow	4
		Z-1597*18.0	Assembly, Lanyard	2
7	Phosphate Ester	TF-1067-01*180	Assembly, Hose	1
	MIL-L-23699/MIL-PRF-87257	N-2026-03-B	Swivel, JIC 37°	1
		TF-1105-06*18.0	Hose, 3/8" x 180" long	1
	MIL-H-5606/MIL-PRF-83282	TF-1047-04*180	Hose, 3/8" x 180" long	1
8	N/A	K-1550	Kit, Wheel (Single); consists of:	
		G-1203-1115	Jamnut, 3/4-16 Elastic	1
		G-1250-1110N	Flatwasher, 3/4 Narrow	1
		TR-1585	Spacer, Wheel	1
		U-1027	Wheel, Pneumatic Tire	1
9	N/A	K-1765	Kit, Axle; consists of:	
		G-1203-1115	Jamnut, 3/4-16 Elastic	1
		G-1250-1110N	Flatwasher, 3/4 Narrow	1
		R-1292	Axle	1
10	N/A	Z-2036	Weldment, Tongue	1
11	Phosphate Ester	TF-1067-03*36.0	Assembly, Hose	1
	MIL-L-23699/MIL-PRF-87257	TF-1105-08*36.0	Assembly, Hose	1
	MIL-H-5606/MIL-PRF-83282	TF-1047-05*36.0	Assembly, Hose	1
Not Shown	N/A	N-2052-06	Tube, Expander	1

Filter Assembly

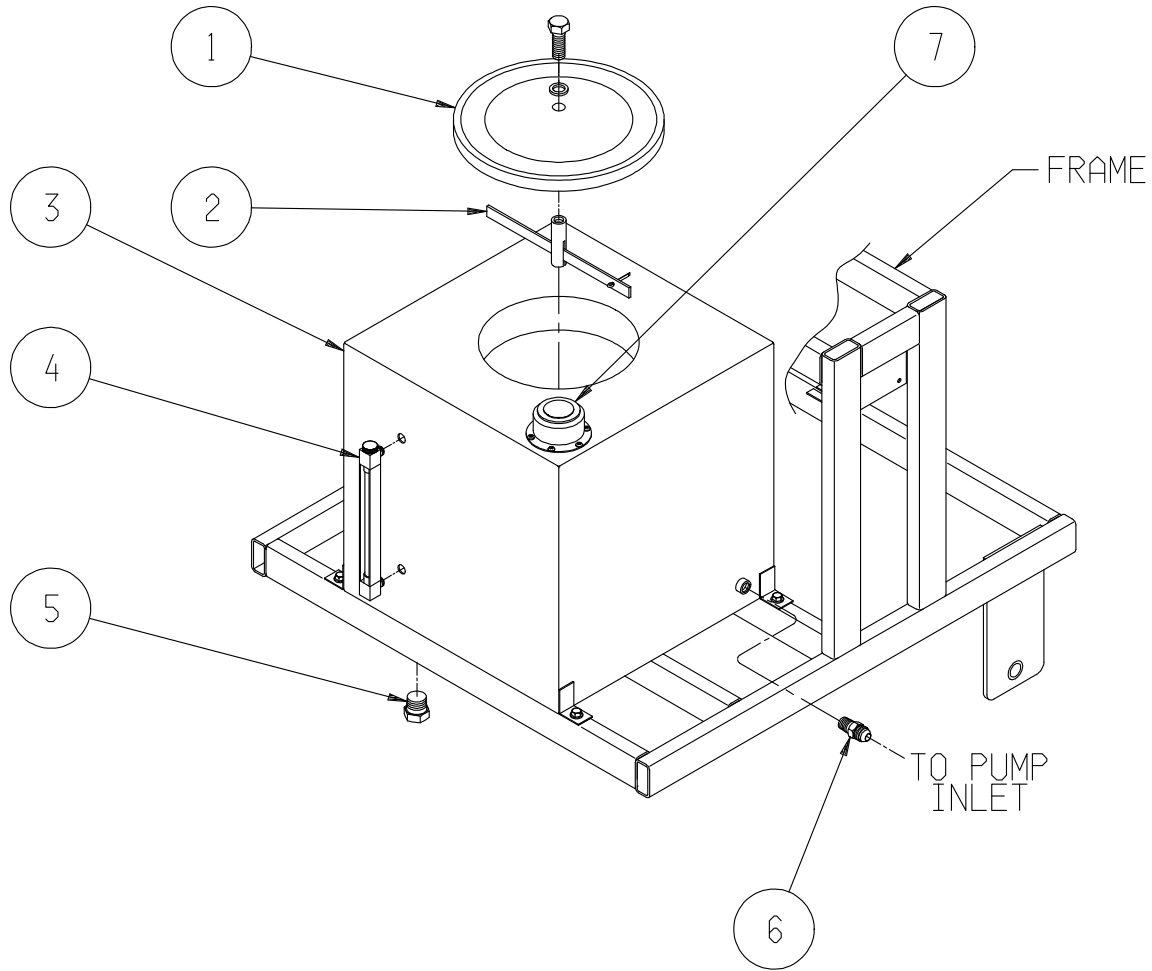


ITEM	FLUID	PART NUMBER	DESCRIPTION	QTY
.....	MIL-H-5606/MIL-PRF-83282	HC-1481	Assembly, Filter	1
1	MIL-L-23699/MIL-PRF-87257	HC-1826	Assembly, Filter	1
.....	Phosphate Ester	HC-1480	Assembly, Filter	1
3	ALL Mineral Base	HC-1482	Element, Filter	1
.....	Phosphate Ester	HC-1483	Element, Filter	1

FILTER REPLACEMENT PARTS

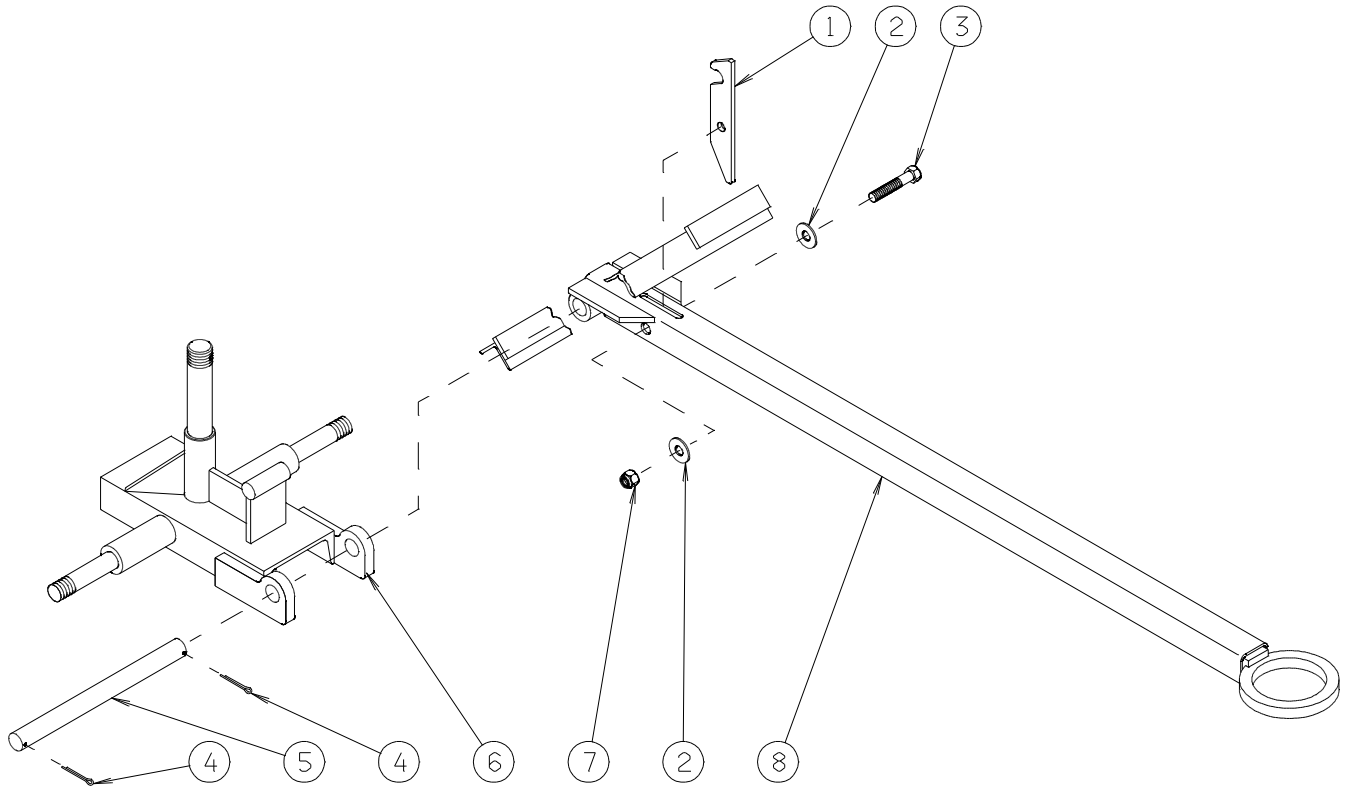
ITEM	FLUID	PART NUMBER	DESCRIPTION	QTY
2	ALL Mineral Base	HC-2007-142	O-Ring, Series 2 (VITON)	2
.....	Phosphate Ester	HC-2006-142	O-Ring, Series 2 (EPR)	2
4	ALL Mineral Base	K-3098	Kit, Filter Element	1
.....	Phosphate Ester	K-3099	Kit, Filter Element	1

Reservoir Assembly



ITEM	FLUID	PART NUMBER	DESCRIPTION	QTY
1	Mineral Base	H-1740	Assembly, Cover	1
	Phosphate Ester	H-1741	Assembly, Cover	1
2	N/A	Z-2394-01	Assembly, Clamp	1
3	N/A	H-2355	Reservoir, 15 gallon Stainless Steel	1
4	MIL-H-5606/MIL-PRF-83282	HC-1382-08	Gauge, Sight	1
	Phosphate Ester	HC-1383-08	Gauge, Sight	1
	MIL-L-23699/MIL-PRF-87257	HC-2212-08	Gauge, Sight	1
5	N/A	N-2206-06-S	Plug, Hex Head, 3/4 NPT	1
6	N/A	N-2009-14-S	Connector, Male, #8 JIC x 1/2 NPT	1
7	N/A	HC-1030	Filler-Breather	1

Towbar Assembly



REPLACEMENT PARTS

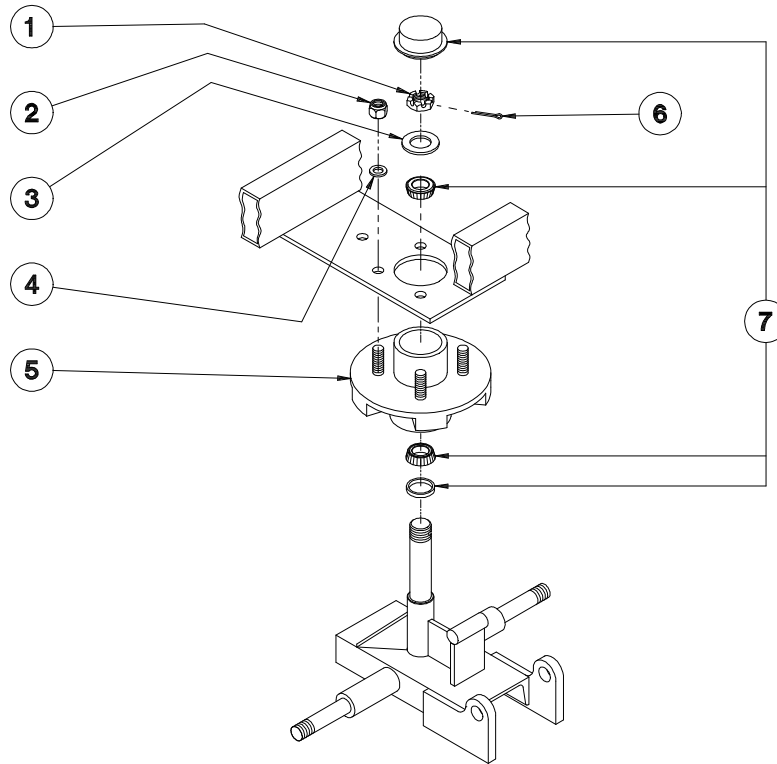
ITEM	PART NUMBER	DESCRIPTION	QTY
6	Z-2037	Weldment, Truck	1
8	Z-2036	Weldment, Tongue	1

(All other parts available in replacement kits only.)

REPLACEMENT KITS

ITEM	PART NUMBER	DESCRIPTION	QTY
	K-1249	Kit, Towbar Pin Replacement; consists of:	
4	G-1301-03	Pin, 1/8" diameter x 1-1/2" long	2
5	R-1122	Pin	1
	K-1320	Kit, Locking Lever Replacement; consists of:	
1	J-1626	Lever	1
2	G-1250-1090N	Flatwasher, 1/2 Narrow	2
3	G-1100-109522	Bolt, Hex Head, Grade 5, 1/2-20 x 2-1/4" long	1
7	G-1202-1095	Stopnut, 1/2-20 Elastic	1

Truck Assembly



REPLACEMENT PARTS

ITEM	PART NUMBER	DESCRIPTION	QTY
3	G-1283	Spindle Washer	1

REPLACEMENT KITS

ITEM	PART NUMBER	DESCRIPTION	QTY
	K-1253	Kit, Hub Bearing and Seal; consists of:	
- Item 7	G-1561-05	Seal, Grease	1
	H-1559-01	Bearings	2
	H-1155-01	Cap, Dust	1
	G-1301-03	Pin, Cotter	1
	K-1255	Kit, Hub Assembly; consists of:	
- Item 1	G-1230-01	Nut, Axle	1
- Item 2	G-1202-1095	Stopnut, 1/2-20 Elastic	4
- Item 4	G-1250-1090N	Flatwasher, 1/2 Narrow	4
- Item 5	H-1335	Hub, Idler	1
- Item 6	G-1301-03	Pin, Cotter	1