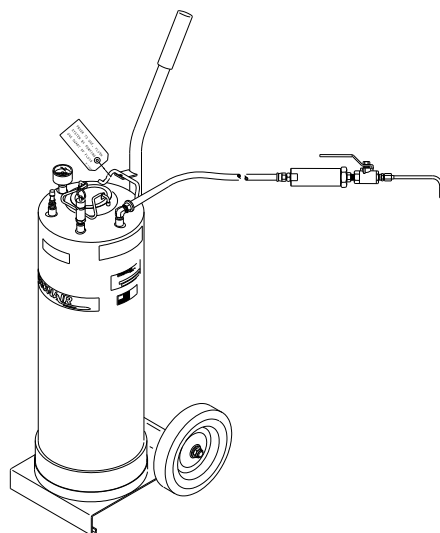




# OPERATION & SERVICE MANUAL



**Model: 06-5010-Series**  
**(06-5010-6500, 06-5010-6600, 06-5010-6800, 06-5010-6800-AD)**  
**Fluid Service Unit**



10/2019 – Rev. 18

**For Spare Parts, Operations & Service Manuals or Service Needs**  
**Scan the QR code or visit [Tronair.com/aftermarket](http://Tronair.com/aftermarket)**



REVISION	DATE	TEXT AFFECTED
13	01/2004	Major Revision
15	02/2004	pg 4 Modified Item 5
16	11/2006	Major Revision added CE
17	07/2014	Modified Parts List
18	10/2019	Major Revision



**TABLE OF CONTENTS**

	<b><u>PAGE</u></b>
<b>1.0 PRODUCT INFORMATION .....</b>	<b>1</b>
1.1 DESCRIPTION.....	1
1.2 MODEL & SERIAL NUMBER.....	1
1.3 MANUFACTURER .....	1
1.4 SPECIFICATIONS .....	1
1.5 FEATURES.....	1
<b>2.0 SAFETY INFORMATION.....</b>	<b>1</b>
2.1 USAGE AND SAFETY INFORMATION .....	1
<b>3.0 TRAINING.....</b>	<b>2</b>
3.1 TRAINING REQUIREMENTS .....	2
3.2 TRAINING PROGRAM .....	2
3.3 OPERATOR TRAINING.....	2
<b>4.0 OPERATION.....</b>	<b>2</b>
4.1 PREPARATIONS FOR USE .....	2
4.2 OPERATING INSTRUCTIONS .....	2
<b>5.0 MAINTENANCE.....</b>	<b>2</b>
5.1 FILTER.....	2
<b>6.0 PROVISION OF SPARES.....</b>	<b>2</b>
6.1 SOURCE OF SPARE PARTS.....	2
6.2 RECOMMENDED SPARE PARTS LISTS .....	2
<b>7.0 IN SERVICE SUPPORT.....</b>	<b>2</b>
<b>8.0 GUARANTEES/LIMITATION OF LIABILITY .....</b>	<b>3</b>
<b>9.0 APPENDICES .....</b>	<b>3</b>

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 PRODUCT INFORMATION

### 1.1 DESCRIPTION

Tronair Fluid Service Unit is a mobile unit designed to provide a source of clean, pressurized fluid for remotely servicing reservoirs and other maintenance functions. This unit will retain enough air pressure for proper operation for an eight hour period. Thereafter, recharging may be required.

### 1.2 MODEL & SERIAL NUMBER

Reference nameplate on unit

### 1.3 MANUFACTURER

**TRONAIR, Inc.**  
1 Air Cargo Pkwy East  
Swanton, Ohio 43558 USA

Telephone: (419) 866-6301 or 800-426-6301  
Fax: (419) 867-0634  
E-mail: sales@tronair.com  
Website: www.tronair.com

### 1.4 SPECIFICATIONS

Model Number: Fluid:  
06-5010-6500.....MIL-H-5606, MIL-PRF-83282  
06-5010-6600.....Phosphate Ester  
06-5010-6800.....MIL-L-23699, MIL-PRF-87257  
06-5010-6800-AD.....Nato O-156, MIL-L-23699

Maximum Pressure .... 125 psi ( 8.6 bar)

Filter .....2 micron

Dimensions:

Length ..... 16-3/4 in (42.5 cm)

Width ..... 13-7/8 in (35 cm)

Height ..... 44-1/8 in (42.8 cm)

Weight ..... 44 lbs (19.8 kg)

Capacity ..... 6 gallons (22.7 liters)

### 1.5 FEATURES

- 15 ft (4.6 m) hose
- Large filtered fill port
- Inline filter

## 2.0 SAFETY INFORMATION

### 2.1 USAGE AND SAFETY INFORMATION

To insure safe operations please read the following statements and understand their meaning. Also refer to your equipment manufacturer's manual for other important safety information. This manual contains safety precautions which are explained below. Please read carefully.



#### **WARNING!**

Warning is used to indicate the presence of a hazard that can cause **severe personal injury, death, and/or substantial property damage** if the Warning Notice is ignored.



#### **CAUTION!**

Caution is used to indicate the presence of a hazard, which will or can cause **minor personal injury or property damage** if the Caution Notice is ignored.

### 3.0 TRAINING

#### 3.1 TRAINING REQUIREMENTS

The employer of the operator is responsible for providing a training program sufficient for the safe operation of the unit.

#### 3.2 TRAINING PROGRAM

The employer provided operator training program should cover safety procedures concerning use of the unit in and around the intended aircraft at the intended aircraft servicing location.

#### 3.3 OPERATOR TRAINING

The operator training should provide the required training for safe operation of the unit.

**NOTE: Maintenance and Trouble Shooting are to be performed by a skilled and trained technician.**

### 4.0 OPERATION

#### 4.1 PREPARATIONS FOR USE

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

**NOTE: 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

#### 4.2 OPERATING INSTRUCTIONS



#### CAUTION!

**Do not use on closed hydraulic systems.**

To use your Fluid Service Unit, follow the steps below:

1. Open ball valve on hose end to deflate pressure from vessel.
2. Close ball valve on hose end.
3. Fill vessel with proper hydraulic fluid.
4. Attach air supply hose to air valve.
5. Pressurize vessel to 85 psig (6 bar) maximum and remove air supply hose from air valve.
6. Transfer hydraulic fluid by opening needle valve on hose end.

### 5.0 MAINTENANCE

#### 5.1 FILTER

The filter is of a non-bypass design. This means that if the filter becomes clogged, no fluid will pass to the aircraft. If this happens, replace filter element.

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.

### 6.0 PROVISION OF SPARES

#### 6.1 SOURCE OF SPARE PARTS

Spare parts may be obtained from the manufacturer:

**TRONAIR, Inc.**  
1 Air Cargo Pkwy East  
Swanton, Ohio 43558 USA

Telephone: (419) 866-6301 or 800-426-6301  
Fax: (419) 867-0634  
E-mail: sales@tronair.com  
Website: www.tronair.com

For Spare Parts, Operations & Service Manuals or Service Needs:  
Scan the QR code or visit [Tronair.com/aftermarket](http://Tronair.com/aftermarket)

#### 6.2 RECOMMENDED SPARE PARTS LISTS

Reference the following page(s) for Replacement Parts and Kits available.

### 7.0 IN SERVICE SUPPORT

Contact Tronair, Inc. for technical services and information. See Section 1.3 – Manufacturer.





## 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.

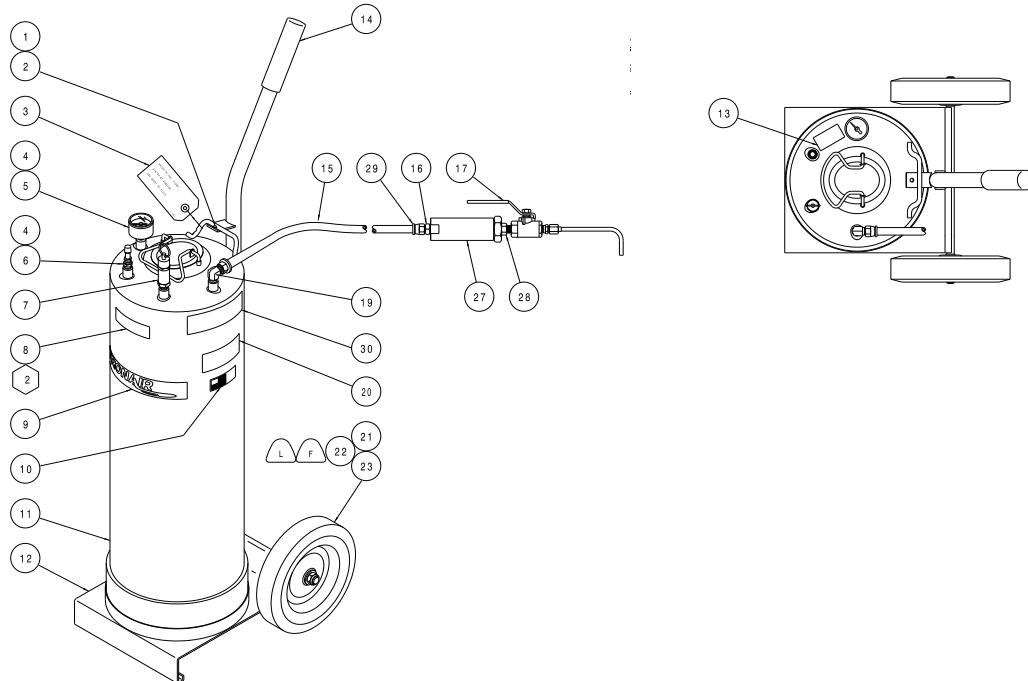
The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins 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.**

## 9.0 APPENDICES

- APPENDIX I Instrument Certification Notice
- APPENDIX II Declaration of Conformity

### Parts List – 06-5010-6500

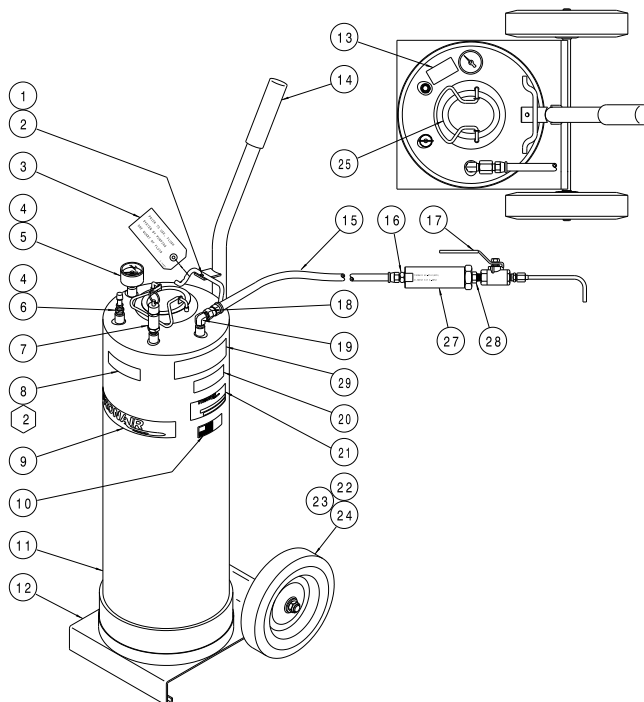
When ordering Replacement Parts/Kits, please specify Model and Serial Number of your product.



Item	Part Number	Description	Qty
1	G-1159-103504	Screw, Round Head	1
2	G-1202-1035	Stopnut, Elastic	1
3	V-1431	Tag, Flush System	1
4	N-2210-02-S	Reducer, Pipe Thread	2
5	HC-1831	Certified Pressure Gauge (0–160 psi/11 bars)	1
6	H-1221	Air Valve	1
7	PC-1017-02-125	Safety Valve (125 psi/9 bars)	1
8	V-1163	Label, Max Fluid level	1
9	V-1002	Label, Tronair	1
10	V-1001	Label, Made In USA	1
11	H-1218	Vessel, Pressure	1
12	Z-1325-00	Weldment, Cart	1
13	V-1164	Label, 85 psi Max	1
14	H-1223	Grip, Handle	1
15	TF-1047-01*180	Hose, Push-on (15 ft/4.57 m)	1
16	N-2007-05-S-B	Straight Thread Connector	1
17	Z-2152	Assembly, Fill Valve	1
19	N-2005-04-S	Elbow, Male	1
20	V-2118	Label, Serial Number (CE)	1
21	G-1250-1090N	Flatwasher	4
22	G-1203-1095	Jamnut, Elastic	2
23	U-1001-01	Wheel	2
27	HC-2141	Assembly, Inline Filter (VITON)	1
28	N-2214-03-S-B	Straight Thread Connector	1
29	N-2026-01-S	Swivel, 37° JIC	2
30	V-2033	Label, Closed Hydraulic System Caution	1
N/S	V-1101	Label, MIL-PRF-83283	1
N/S	V-1102	Label, MIL-PRF-5606	1

### Parts List - 06-5010-6600

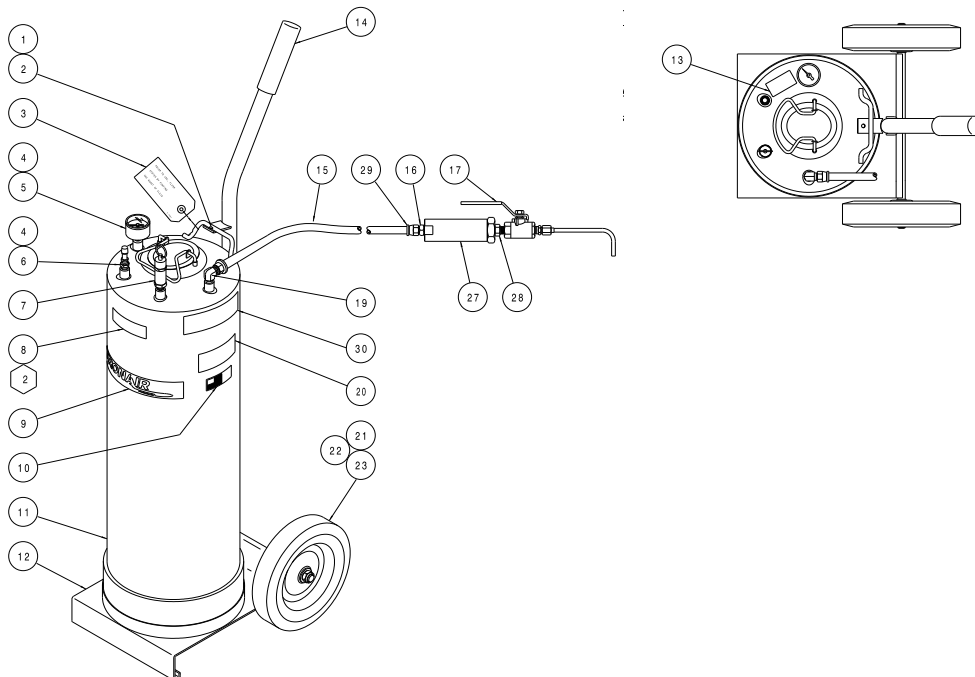
When ordering Replacement Parts/Kits, please specify Model and Serial Number of your product.



Item	Part Number	Description	Qty
1	G-1159-103504	Screw, Round Head	1
2	G-1202-1035	Stopnut, Elastic	1
3	V-1431	Tag, Flush System	1
4	N-2210-02-S	Reducer, Pipe Thread	2
5	HC-1831	Certified Pressure Gauge (0-160 psi/11 bars)	1
6	H-1221	Air Valve	1
7	PC-1017-02-125	Safety Valve (125 psi/9 bars)	1
8	V-1163	Label, Max Fluid level	1
9	V-1002	Label, Tronair	1
10	V-1001	Label, Made In USA	1
11	H-1218	Vessel, Pressure	1
12	Z-1325-00	Weldment, Cart	1
13	V-1164	Label, 85 psi Max	1
14	H-1223	Grip, Handle	1
15	TF-1067-07*180	Assembly, Hose (#4 PE)	1
16	N-2007-05-S-E	Straight Thread Connector	1
17	Z-2152	Assembly, Fill Valve	1
18	N-2010-04-S	Connector, Female	1
19	N-2201-04-S	Elbow, Male	1
20	V-1100	Label, PE Fluid Only	1
21	V-2118	Label, Serial Number (CE)	1
22	G-1250-1090N	Flatwasher	4
23	G-1203-1095	Jamnut, Elastic	2
24	U-1001-01	Wheel	2
25	HC-1395	O-Ring, Closure, EPR	1
27	HC-2140	Assembly, Inline Filter (EPR)	1
28	N-2214-03-S-E	Straight Thread Connector	1
29	V-2033	Label, Closed Hydraulic System Caution	1

### Parts List - 06-5010-6800

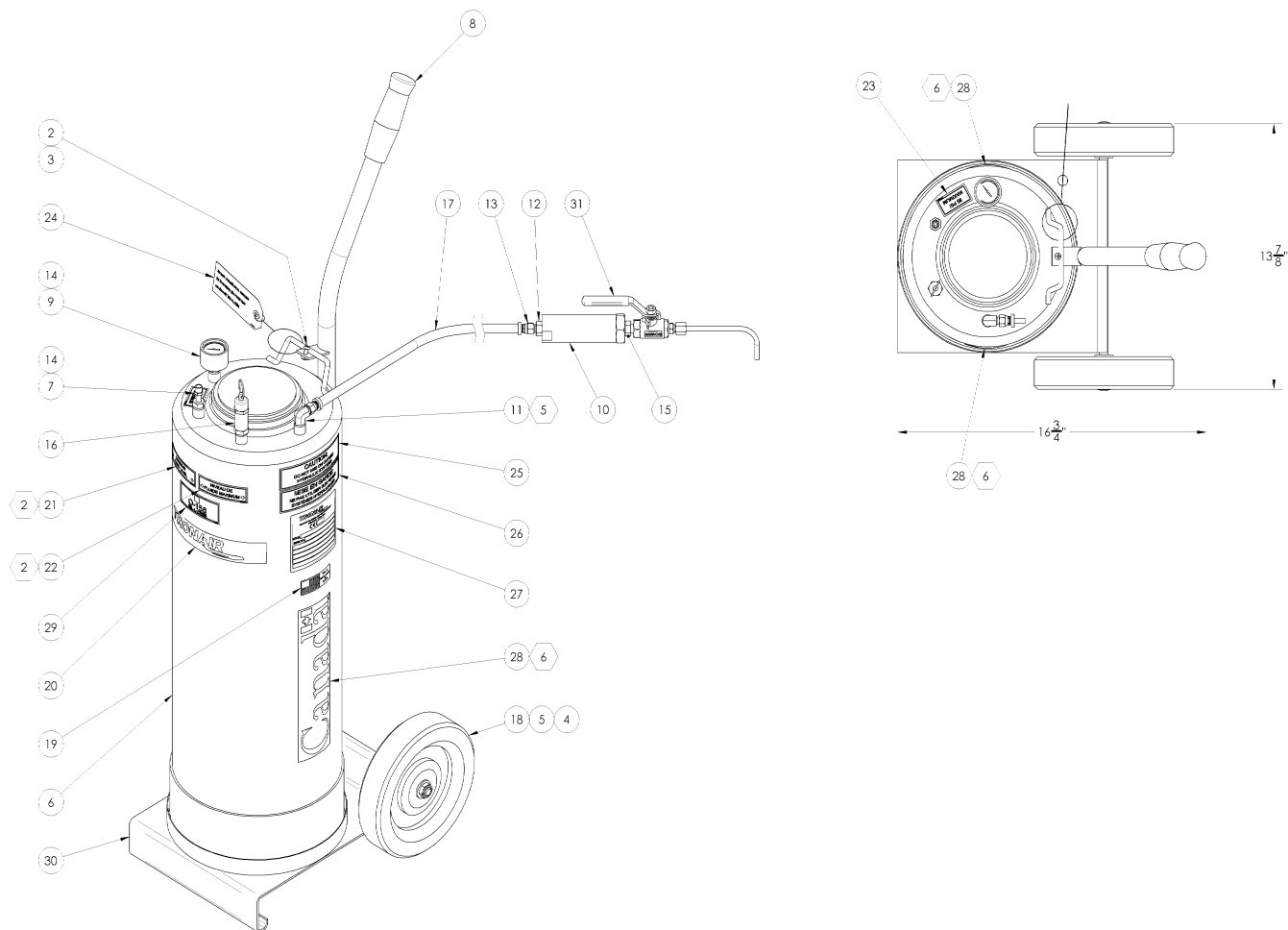
When ordering Replacement Parts/Kits, please specify Model and Serial Number of your product.



Item	Part Number	Description	Qty
1	G-1159-103504	Screw, Round Head	1
2	G-1202-1035	Stopnut, Elastic	1
3	V-1431	Tag, Flush System	1
4	N-2210-02-S	Reducer, Pipe Thread	2
5	HC-1831	Certified Pressure Gauge (0–160 psi/11 bars)	1
6	H-1221	Air Valve	1
7	PC-1017-02-125	Safety Valve (125 psi/9 bars)	1
8	V-1163	Label, Max Fluid level	1
9	V-1002	Label, Tronair	1
10	V-1001	Label, Made In USA	1
11	H-1218	Vessel, Pressure	1
12	Z-1325-00	Weldment, Cart	1
13	V-1164	Label, 85 psi Max	1
14	H-1223	Grip, Handle	1
15	TF-1047-01*180	Hose, Push-on (15 ft/4.57 m)	1
16	N-2007-05-S-B	Straight Thread Connector	1
17	Z-2152	Assembly, Fill Valve	1
19	N-2005-04-S	Elbow, Male	1
20	V-2118	Label, Serial Number (CE)	1
21	G-1250-1090N	Flatwasher	4
22	G-1203-1095	Jamnut, Elastic	2
23	U-1001-01	Wheel	2
27	HC-2141	Assembly, Inline Filter (VITON)	1
28	N-2214-03-S-B	Straight Thread Connector	1
29	N-2026-01-S	Swivel, 37° JIC	2
30	V-2033	Label, Closed Hydraulic System Caution	1
N/S	V-1101	Label, MIL-PRF-83283	1
N/S	V-1102	Label, MIL-PRF-5606	1
N/S	K-5588	Kit, Handheld Flow Meter (purchased seperately)	

## Parts List - 06-5010-6800-AD

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



**Parts List - 06-5010-6800-AD**

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

Item	Part Number	Description	Qty
2	G-1159-103504	SCREW, #10-32 X 1/2" LG. RD HEAD CROSS RECESS MACHINE	1
3	G-1202-1035	STOPNUT, #10-32 ELASTIC	1
4	G-1203-1095	JAMNUT, 1/2-20 ELASTIC	2
5	G-1250-1090N	FLATWASHER, 1/2 NARROW	4
6	H-1218	VESSEL, PRESSURE	1
7	H-1221	VALVE, AIR	1
8	H-1223	GRIP, HANDLE	1
9	HC-1831	GAUGE,PRESSURE 0-160 PSI	1
10	HC-2141	FILTER, IN-LINE (VITON)	1
11	N-2005-04-S	ELBOW, MALE	1
12	N-2007-05-S-V	CONNECTOR, STR THD	1
13	N-2026-01-S	SWIVEL, JIC 37 DEG HOSE FITTING	2
14	N-2210-02-S	REDUCER, PIPE THREAD	2
15	N-2214-03-S-V	CONNECTOR, STRAIGHT THREAD	1
16	PC-1017-02-125	VALVE, SAFETY	1
17	TF-1105-04-180	HOSE, PUSH-ON (MB) 1/4 ID X 180 LG	1
18	U-1001-01	WHEEL	2
19	V-1001	LABEL, MADE IN THE USA	1
20	V-1002	LABEL, TRONAIR	1
21	V-1163-B	LABEL, MAX FLUID LEVEL	1
22	V-1163-F	LABEL, MAX FLUID LEVEL	1
23	V-1164-B	LABEL, 85 PSI MAX	1
24	V-1431-F	TAG, FLUSH SYSTEM	1
25	V-2033-B	LABEL, CLOSED HYDRAULIC SYSTEM CAUTION	1
26	V-2033-F	LABEL, CLOSED HYDRAULIC SYSTEM CAUTION	1
27	V-2118	LABEL, SERIAL NO. (CE)	1
28	V-2815	LABEL, CANADA	2
29	V-2821	LABEL, NATO O-156, MIL-L-23699	1
30	Z-1325-00	WELDMENT, CART	1
31	Z-2152	ASSEMBLY, FILL VALVE	1





## **APPENDIX I**

### **Instrument Certification Notice**





## Instrument Certification Notice

The gauge Certificates of Calibration supplied for the gauge(s) on this unit contain the calibration data for the actual instrument calibrated, along with the calibration date of the **STANDARD** used to perform the calibration check.

The due date for re-calibration of the instrument should be based upon the date the instrument was placed in service in your facility. Re-calibration should be done on a periodic basis as dictated by the end user's quality system or other overriding requirements.

Note that Tronair, Inc. does not supply certificates of calibration on flow meters or pyrometers unless requested at the time of placed order. These instruments are considered reference indicators only and are not critical to the test(s) being performed on the aircraft.

Calibration can be performed at a local metrology lab following national regulations and suitable calibration methods, or alternatively returned to the manufacturer.





## APPENDIX II

### Declaration of Conformity





## DECLARATION of CONFORMITY

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

Fluid Servicing Unit

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

Relevant standards complied with by the machinery:  
ASME Unfired Pressure Vessels, Section VIII, Division I  
OSHA 1910.106

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 solid horizontal line.

Quality Assurance Representative