



# OPERATION & SERVICE MANUAL



**Model: 08-4060-6700**  
**3 Gallon**  
**Engine Compressor Washer**



08/2022 - Rev. 05

REVISION	DATE	TEXT AFFECTED
01	01/2009	Original Release
02	01/2012	Major revision
03	07/2014	Modified Parts List
04	06/2021	Major revision
05	08/2022	Modified 1.5 Specifications



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This product cannot 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

The engine compressor washer (ECW) is a compact and portable washer design to clean and rinse turbine jet engines. This design best suits very light jet (VLJ) aircraft.

### 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

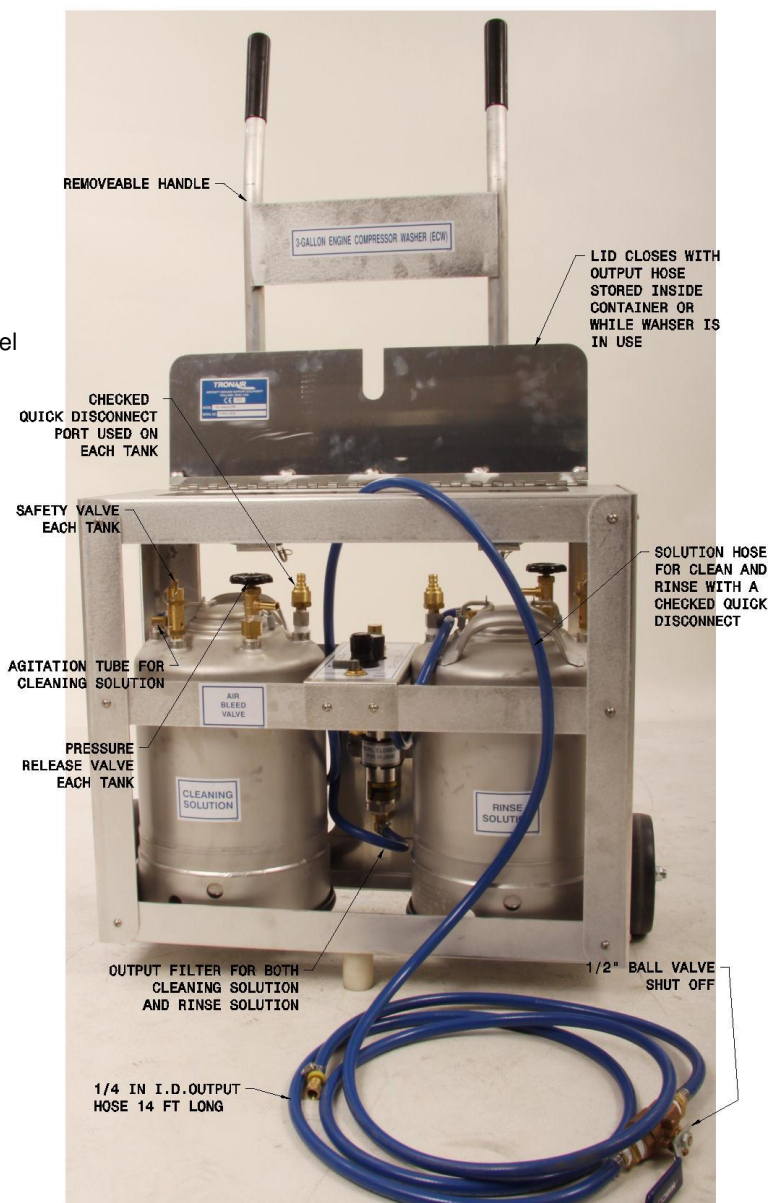
### 1.4 STANDARD FEATURES

- Two 3-gallon pressure tanks
- Air source is shop air (125 psi max)
- Pressure regulator and gauge
- In-line check valve prevents fluid from flooding regulator
- Three-way direction pressure valve
- Manual pressure release valve for each tank
- 150 psi safety valve for each tank
- Agitation tube for cleaning solution tank
- Wash and rinse output fluid is filtered
- Quick disconnects have check valves to keep vessel pressurized and fluid from leaking out of the hose
- 1/4 I.D. delivery hose, 14 ft long
- Delivery hose comes with a 1/2 ball valve shutoff
- Wheels and handle for mobility
- Handle can be removed
- Hose can be stored in the container

### 1.5 SPECIFICATIONS

Weight ..... 48 lbs (21.8 kg) without fluid  
Width ..... 12 in (30.98 cm)  
Length ..... 27 in (68.58 cm)  
Height ..... 22 in (55.88 cm) without handle  
                  45 in (114.3 cm) with handle  
Flow Rate ..... 1 gal/ min @ 20 psi  
                  1.5 gal/min @ 40 psi

**Note: Flow rate is measured through a 1/4" I.D. delivery hose.**



## 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, or substantial property damage** if the warning notice is ignored.

**CAUTION!** — Caution is used to indicate the presence of a hazard that **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

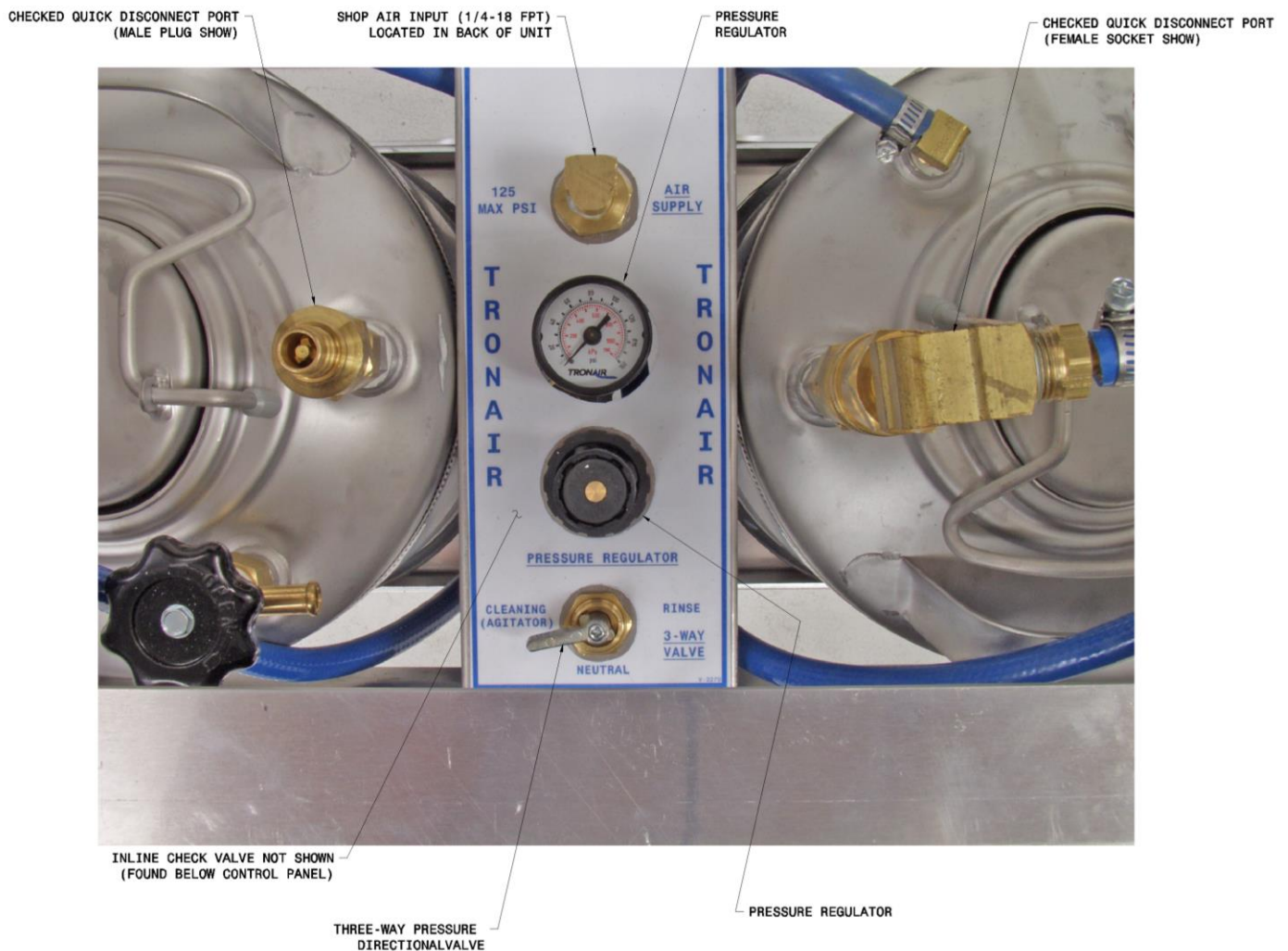
The employer provided operator training program should cover safety procedures concerning use of the unit in and around the intended aircraft at the intended aircraft servicing location.

### 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 CONTROLS



**5.0 OPERATION****WARNING!**

1. Personal injury may result if procedures are not followed!
2. NEVER open fluid tank while under pressure.
3. NEVER pressurize air tank more than 125 psi.

**CAUTION!**

1. Use only clean water and/or cleaning fluids approved by engine manufacturer.
2. Consult aircraft manual for correct procedure in performing engine wash.

**5.1 PREPARATION & OPERATION**

Follow engine manufacturer's recommendations for cleaning and rinsing engine(s). Use only engine manufacturer's approved fluids.

**5.1.1 Preparation**

1. Visually inspect unit for any signs of damage or missing parts.
2. For a new engine compressor washer install ¼ - 18 FPT fitting (not included) for air supply.
3. Remove lids and fill the tanks with the respective cleaning solution or rinse solution.
4. Lock the lids making sure the lids are seated properly
5. Check or close pressure release valves on each tank.
6. Three-way directional valve must be in the neutral position.
7. Connect shop air in the back of the unit with 125 psi maximum.
8. Adjust the pressure regulator to the desired system pressure
9. Allow each vessel to charge to the regulated pressure: Switch the three-way valve from neutral to wash "agitation" and then to "rinse" this will allow the respective vessel to charge.

**NOTE:** The neutral position on the switch will not allow air pressure to flow to either tank. The switch must be returned to the neutral position when the unit is not being used.

**NOTE:** To fill the solution tank or the cleaning tank turn the three-way switch to the neutral position. Then relieve the pressure from the tank with the pressure relief valve on the tank. Once the pressure is released from the tank the lids may be removed.

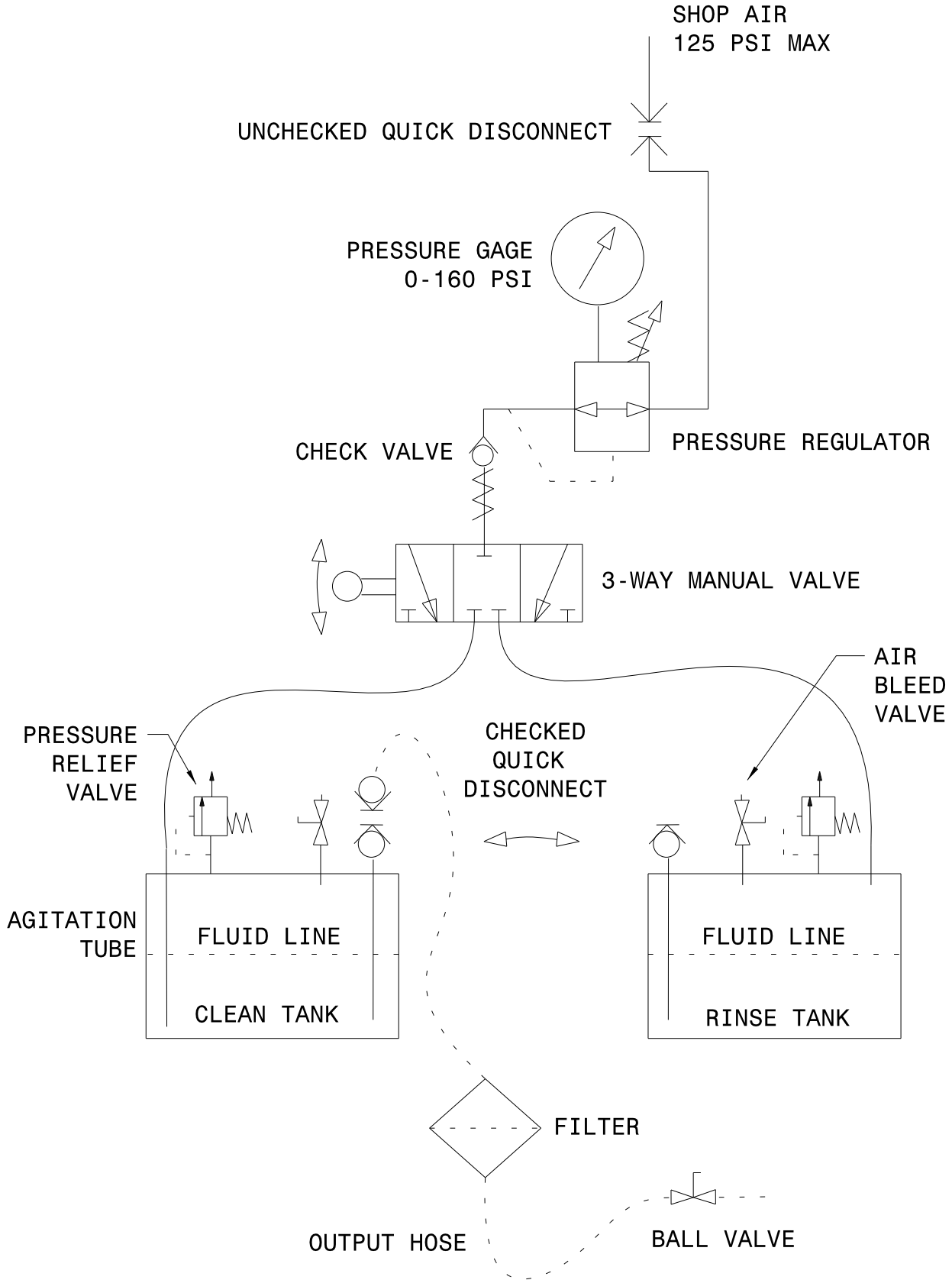
**5.1.2 Cleaning And Rinsing Operation**

1. Select the tank needed for cleaning or rinsing the engine with the three-way valve.
2. Switch fluid output between tanks. The solution hose must be manually disconnected and connected to the respective tank.
3. The hose utilizes checked, quick disconnect couplers so that the tanks remain pressurized with no fluid loss.
4. ½ ball valve at the end of the 1/4 hose is used for a shut off valve and can be used to control the flow of fluid.

**5.1.3 Fluid Agitation**

1. Cleaning solution is continuously agitated while solution flows from tank.
2. If cleaning solution has settled from non-use pressurize tank and slowly open pressure release valve to give tank airflow. This will allow agitation of solution.

5.1.4 Pneumatic And Hydraulic Schematic





## 6.0 MAINTENANCE & STORAGE

### 6.1 HOSES

Replace worn hoses as required.

### 6.2 OUTPUT FILTER

1. Periodically inspect filter for cleanliness. Clean with fresh water.
2. Replace filter element when fluid flow is hindered.

### 6.3 STORAGE

Depressurize entire unit.

## 7.0 PROVISION OF SPARES

### 7.1 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)

### 7.2 RECOMMENDED SPARE PARTS LISTS

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

## 8.0 IN-SERVICE SUPPORT

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

## 9.0 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:

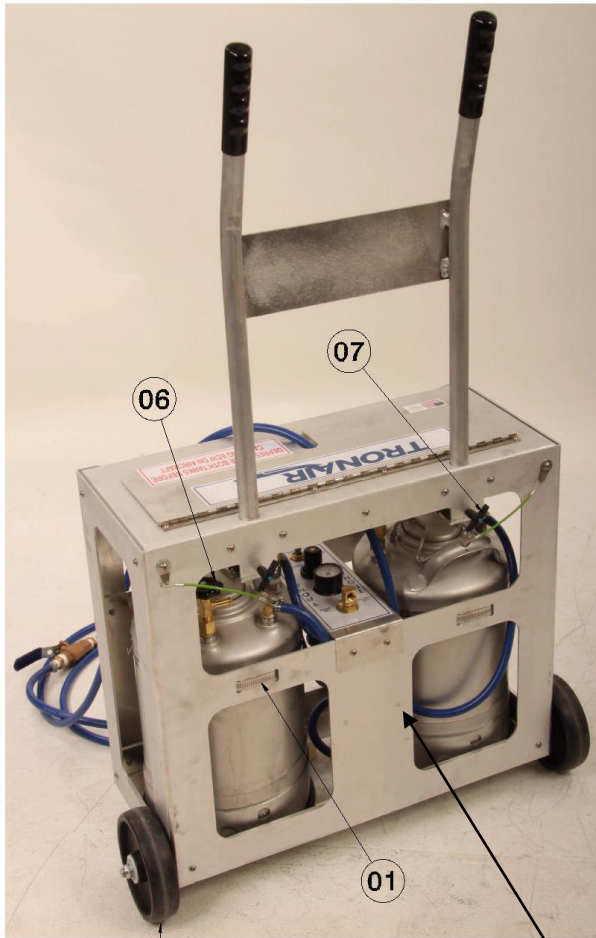
- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

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 and color of your unit.



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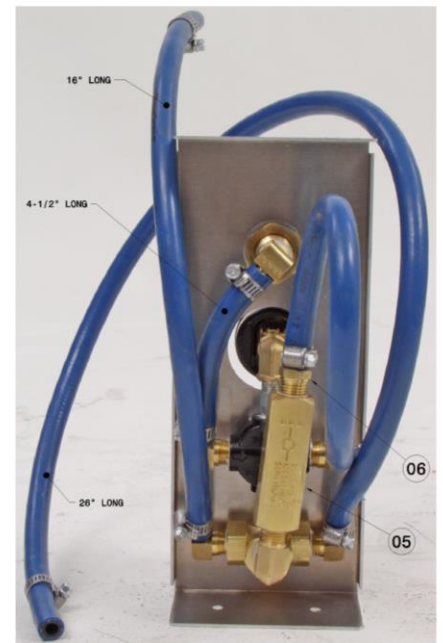
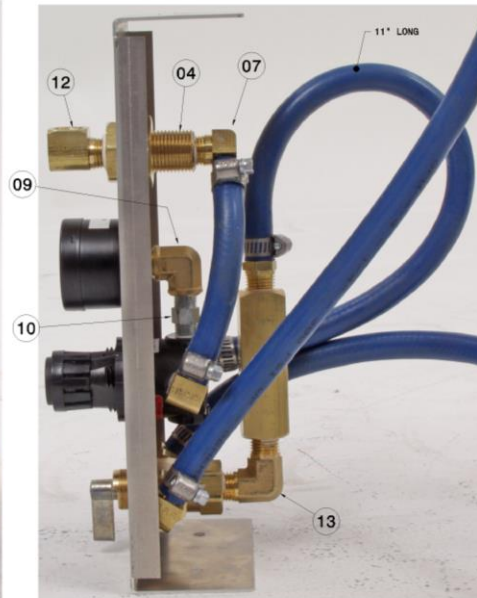
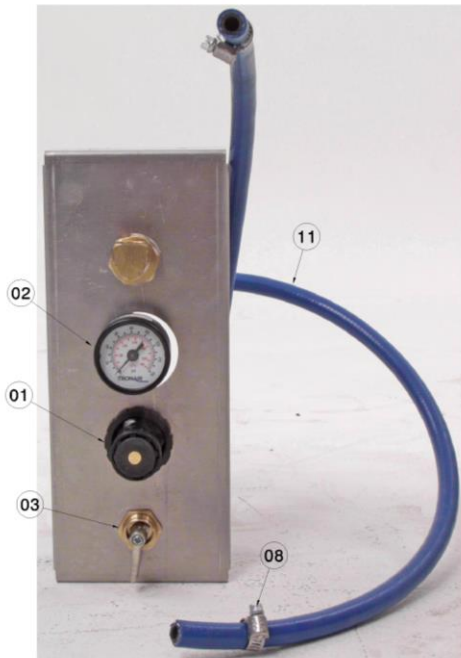
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Item	Part Number	Description	Qty
1	H-1550-12	Snaplock Hose Clamp	2
2	U-1002	Wheels, 6 inch diameter	2
3	G-1100-109526	Bolt, 1/2 20 Hex HD GR5	2
4	G-1203-1095	Jamnut, 1/2 - 20 Elastic	2
5	G-1250-1090N	Flatwasher, 1/2 Narrow	2
6	H-1026*07.0	Assembly, Lanyard	2
7	G-1310-0320	Pin, 3/16 x 2.0 Ball Lok-T	2
8	G-1503-1050N	Flatwasher, 1/4 Narrow SS	1
9	G-1476-105006	Screw, 1/4 - 20 SOC BUT HD CAP SS	1
10	R-2366	Stopper, Nylon	1
11	G-1250-1050N	Flatwasher, 1/4 Narrow	4
12	G-1202-1050	Stopnut, 1/4 - 20 Elastic	2
13	G-1157-105006	Screw, 1/4 - 20	2

### Parts List - Control Panel Assembly

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



Item	Part Number	Description	Qty
1	H-1397	Regulator	1
2	HC-1831	Gauge, Pressure 0-160 psi	1
3	PC-1072	Valve, Three-Way Ball 1/4	1
4	N-2218-03	Connector, Anchor	1
5	H-1773-02	Valve, Check	1
6	N-2412-05	Connector, Straight Male	1
7	N-2410-02	Elbow, 90° Male	5
8	H-1426-22	Clamp, Hose	8
9	N-2222-01	Elbow, 90° Union	1
10	N-2203-02-B	Nipple, Pipe	1
11	TF-1064-04*72.0	Hose, 1/4 ID	1
12	N-2200-03-B	Elbow, Street	1
13	N-2201-04-B	Elbow, Male Street	1
N/S	V-2270	Label, Control Panel	1

### Parts List - Clean Tank Assembly

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



Item	Part Number	Description	Qty
1	H-1216	Vessel, Pressure	1
2	PC-1017-02-150	Valve, Safety (150 psi)	1
3	Z-6929	Weldment, Dip Tube	1
4	H-1529-01	Valve, Shut-Off	1
5	N-2251-04	Adapter, Expanding Pipe	1
6	N-2832-10-B	Plug, Two Way Valved	1

### Parts List - Rinse Tank Assembly

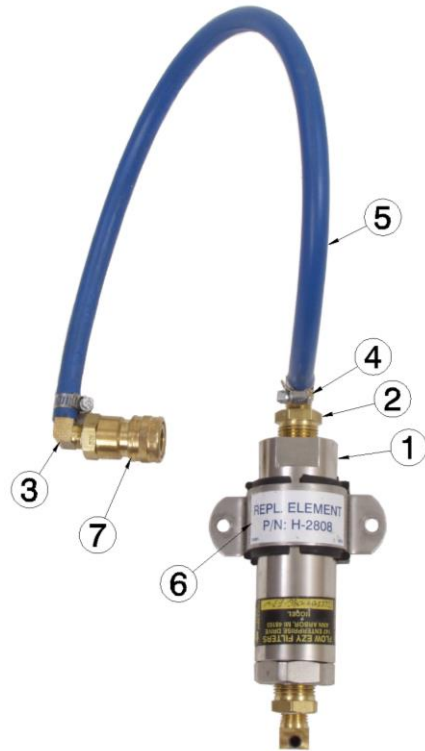
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
1	H-1216	Vessel, Pressure	1
2	PC-1017-02-150	Valve, Safety (150 psi)	1
3	H-1529-01	Valve, Shut-Off	1
4	N-2251-04	Adapter, Expanding Pipe	1
5	N-2832-10-B	Plug, Two Way Valved	1
6	N-2410-02	Elbow, 90° Male	1

### Parts List - Filter Assembly

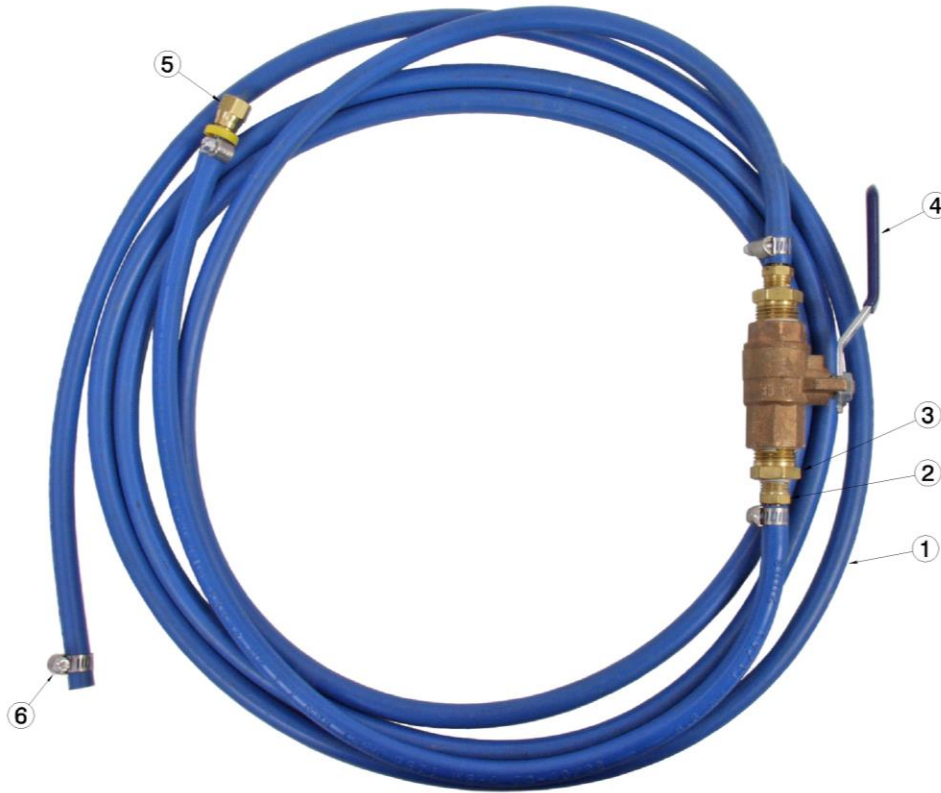
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
1	H-2792	Filter, Output	1
2	N-2210-08-B	Reducer, Pipe Thread	2
3	N-2410-02	Elbow, 90° Male	2
4	H-1426-22	Clamp, Hose	2
5	TF-1064-04*24.0	Hose, 1/4	1
6	V-2081	Label, Replacement Element	1
7	N-2832-01-B	Socket, Two Way Valved	1
N/S	H-2808	Element, Replacement	1

### Parts List - Output Hose Assembly

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



Item	Part Number	Description	Qty
1	TF-1064-04*180	Hose, 1/4 ID	1
2	N-2412-05	Connector, Straight Male	2
3	N-2210-08-B	Reducer, Pipe Thread	2
4	HC-1137	Valve, Ball	1
5	N-2026-01-B	Swivel, JIC 37°	1
6	H-1426-22	Clamp, Hose	4



## **APPENDIX I**

### **Declaration of Conformity**





## Declaration of Conformity

The design, development and manufacture is in accordance with European Community guidelines  
This Declaration of Conformity is issued under the sole responsibility of the Manufacturer

European Representative:  
RAUH Hydraulic GmbH  
Hallstadler Straße 63  
Email: [tronair@rauh-hydraulik.de](mailto:tronair@rauh-hydraulik.de)

Product Type: Powerplant Washing Equipment  
Product Name: Engine Compressor Washer  
Model Number (s): 08-4060-6700

Serial Number (s): \_\_\_\_\_

Relevative directives complied with by the vessels:  
2014/68/EU  
2014/29/EU

Relevative standards complied with by the assembly:  
EN ISO 12100:2010

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

  
\_\_\_\_\_  
Quality Assurance Representative

06/2021  
\_\_\_\_\_  
Date