



**Model: 08-4059-0013**  
**Engine Compressor Washer**



11/2023 - Rev. 04

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

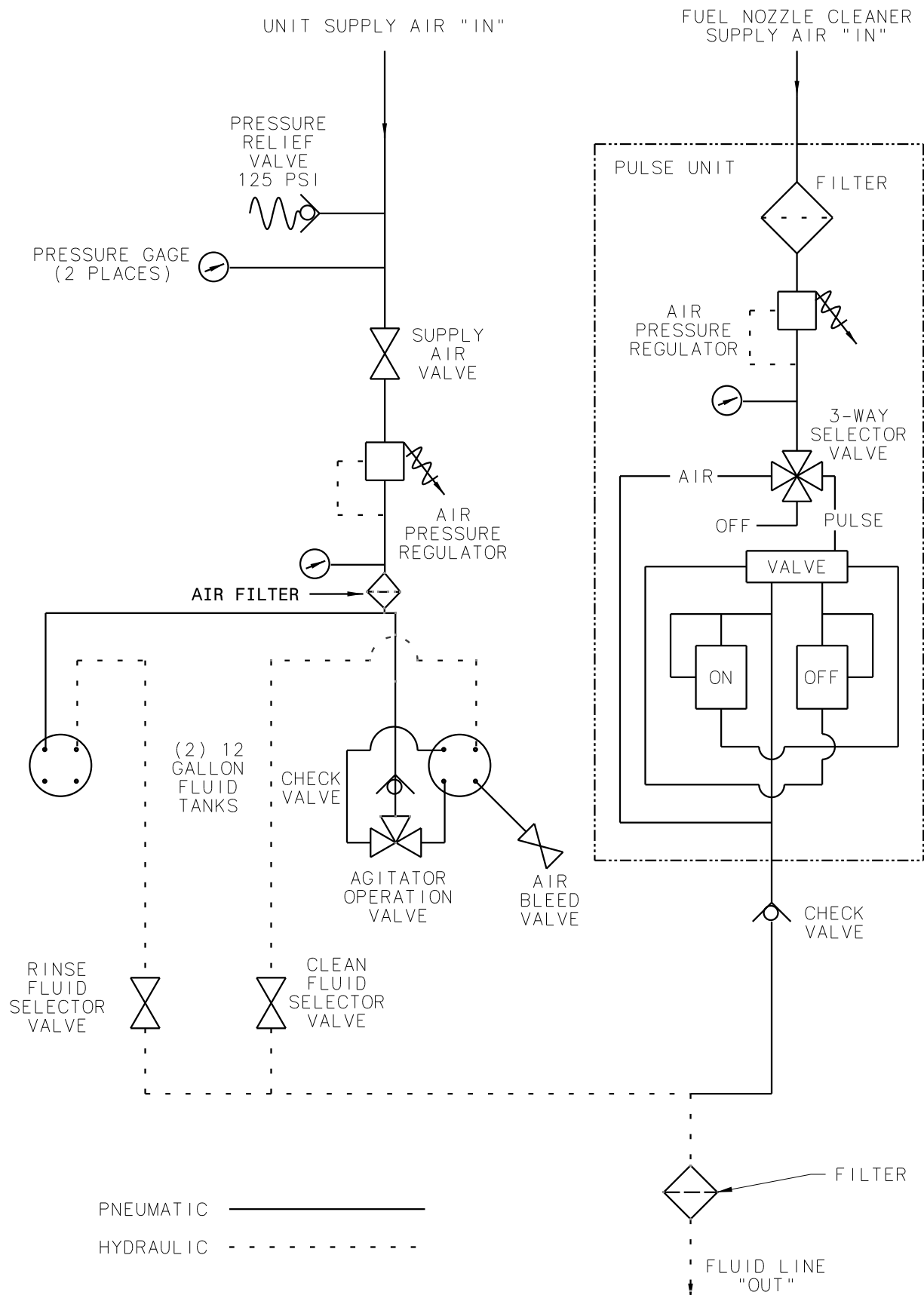


| REVISION | DATE    | TEXT AFFECTED                                                                   |
|----------|---------|---------------------------------------------------------------------------------|
| 01       | 05/2008 | Original Release                                                                |
| 02       | 01/2009 | Modified Schematic and Parts List                                               |
| 03       | 06/2021 | Major revision                                                                  |
| 04       | 11/2023 | Modified 4.1.2 Fluid Agitation, 4.1.3 Cleaning Operation, 4.1.4 Rinse Operation |

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## Schematic



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

The Engine Compressor Washer is a portable unit designed to spray cleaning solution and/or clean de-mineralized water into jet and turboprop engines.

The two fluid tanks hold 12 gallons (45.4 L) each. The nozzle mounted on the panel may be installed into the wand to regulate the fluid flow to the approximate rate as indicated.

### 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](mailto:sales@tronair.com)  
Website: [www.tronair.com](http://www.tronair.com)

## 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 engine compressor washer.

### 3.2 TRAINING PROGRAM

The employer provided operator training program should cover safety procedures concerning use of the engine compressor washer 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 engine compressor washer.

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

## 4.0 OPERATION



### WARNING!

1. Personal injury may result if procedures are not followed.
2. Never open fluid tank while under pressure.
3. Never connect to shop air that is more than 125 psi (8.6 bar).



### CAUTION!

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

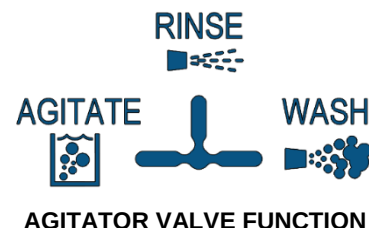
## 4.1 PREPARATION & OPERATION

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

### 4.1.2 Fluid Agitation

**NOTE: The valve must either be in the "AGITATE" or "WASH" position to pressurize solution tank.**

1. Fully charge air supply tanks. Turn agitation valve to "AGITATE" and ensure supply air valve is in the off position (closed).
2. Open air bleed valve on top of solution tank.
3. Set regulator to desired agitation pressure (30 psi recommended).
4. Slowly open supply air valve. When suds start coming out of the air bleed valve, or desired agitation is reached, close air bleed valve and turn the agitation valve to "WASH".



### 4.1.3 Cleaning Operation

1. Ensure tanks are charged and rinse and clean selector valves are closed and agitation valve is set to "WASH."
2. Connect output hose to engine or wand assembly.
3. Open supply air valve.
4. Adjust cleaning pressure by adjusting air regulator on Control Panel per engine manufacturer's recommendations.
5. Turn clean selector valve to Open when ready to start cleaning.
6. If using wand, point wand away from personnel and turn on wand valve to start cleaning process.
7. Upon completion of cleaning (or if tank has been emptied), turn wand valve off and/or close clean selector valve on Control Panel.

### VALVE ORIENTATION FOR CYCLE STEPS

| Cycle Steps    | Selector Valve | Supply Air Valve | Clean Valve | Rinse Valve |
|----------------|----------------|------------------|-------------|-------------|
| Detergent Wash | Pulse          | Open             | Open        | Closed      |
| System Rinse   | Pulse          | Open             | Closed      | Open        |
| Soak/Off       | Off            | Closed           | Closed      | Closed      |
| Air Dry System | Air dry        | Closed           | Closed      | Closed      |

### 4.1.4 Rinse Operation

**NOTE: Agitator operation valve must be set to "RINSE" during rinse operation. Failure to do so may result in cleaning solution being discharged during rinse operation.**

1. Adjust rinsing pressure by adjusting air regulator on Control Panel per engine manufacturer's recommendations.
2. Set agitation valve to "RINSE."
3. Turn rinse selector valve to Open position on the Control Panel to start rinse.
4. If using wand, point wand away from personnel and turn on wand valve to start rinse process.
5. After completion of rinsing, turn wand valve Off and/or close rinse selector valve on Control Panel.

## 5.0 STORAGE

- Ensure fluid tanks are clean. (Reference Section 6.1)
- Clean the unit exterior prior to storage.
- Depressurize entire unit.

**6.0 MAINTENANCE****6.1 CLEANING FLUID TANKS**

**NOTE: For tank cleaning, wand must be attached to output hose to let fluid discharge.**

After each use, complete the following:

1. Close supply air valve.
2. Open air bleed valve, let tanks de-pressurize.
3. Remove cleaning tank lid and fill with approximately one gallon (3.8 L) of water.
4. Close cleaning tank lid and air bleed valve. Open supply air valve.
5. Open clean selector valve and wand valve.
6. Close supply air valve when tank is empty.
7. Close clean selector valve, wand valve. Open air bleed valve.
8. Hydrostatically or pneumatically test tank(s) as required due to physical damage, or as required by local law.

**6.2 HOSES**

Replace worn hoses as required.

**6.3 HYDROSTATIC TANK TEST**

Hydrostatically or pneumatically test tank(s) as required due to physical damage, or as required by local law.

**6.4 OUTPUT FILTER**

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

**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](mailto:sales@tronair.com)

Website: [www.tronair.com](http://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.**

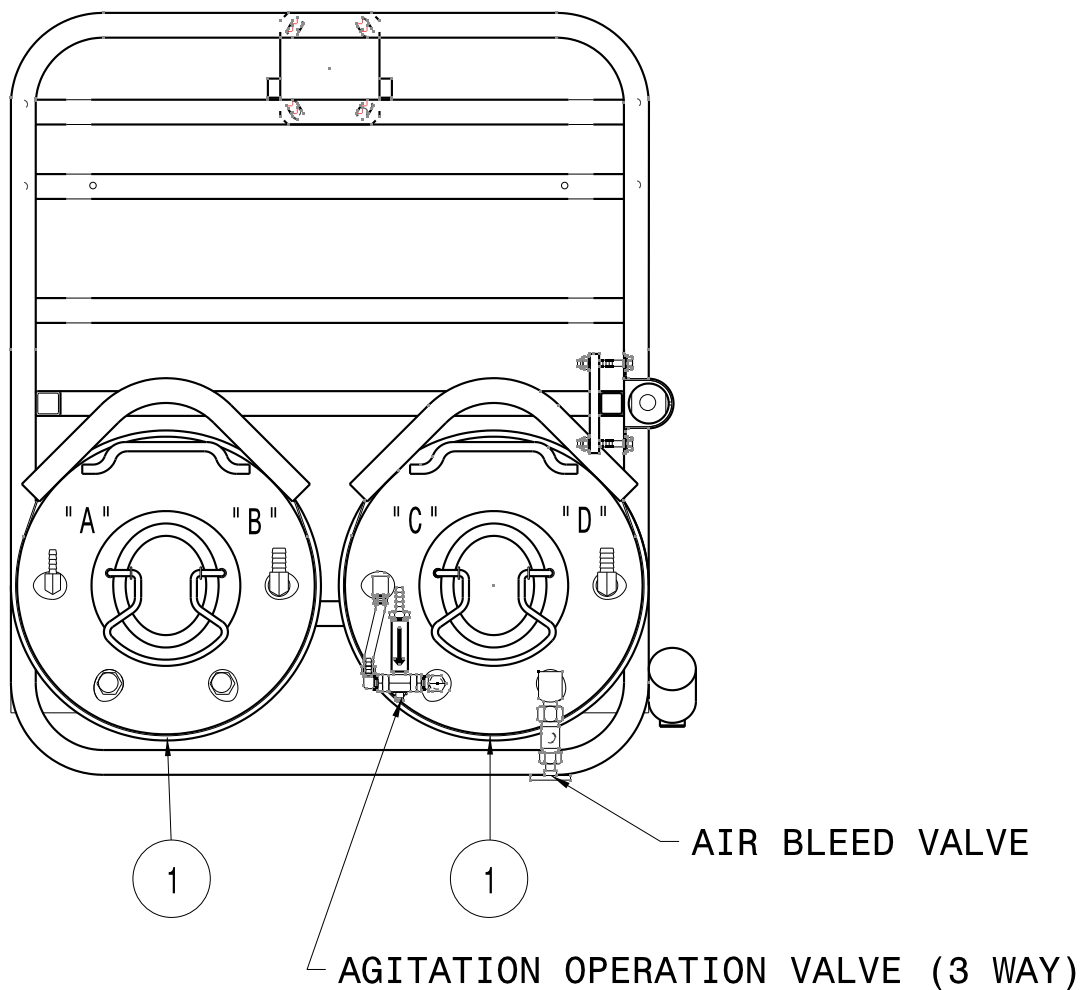
**10.0 APPENDICES**

APPENDIX I Declaration of Conformity



## Parts List

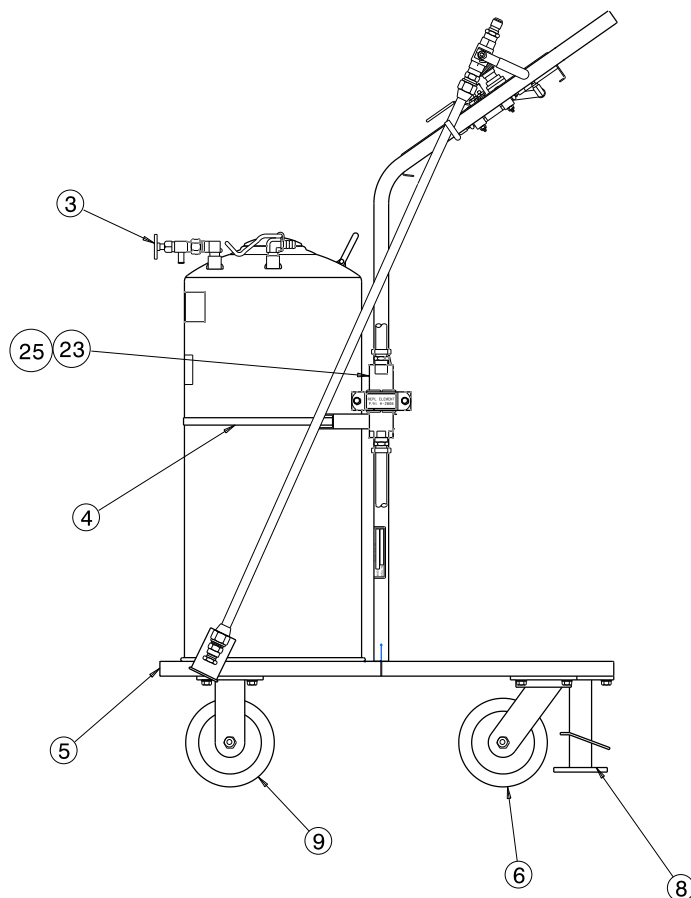
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



| Item | Part Number | Description      | Qty |
|------|-------------|------------------|-----|
| 1    | PC-1128     | Vessel, Pressure | 2   |
| N/S  | HC-1400     | O-Ring, Closure  | 2   |

## Parts List

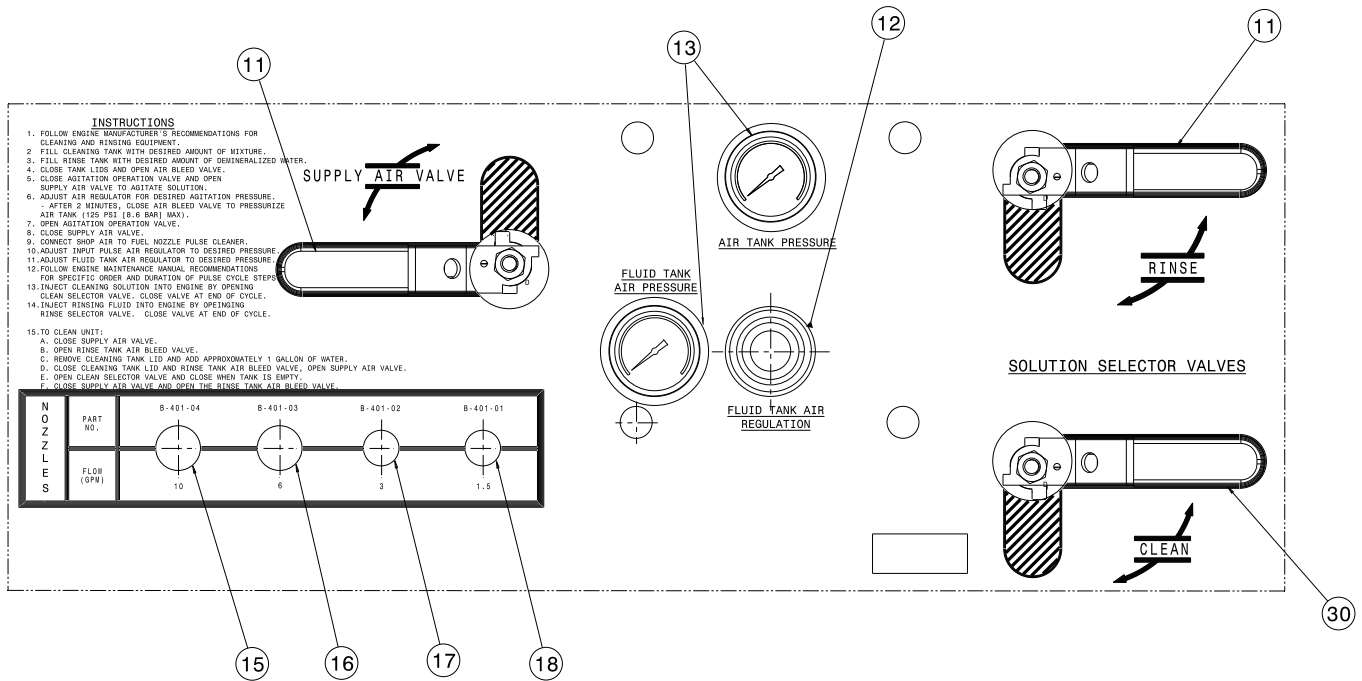
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



| Item | Part Number    | Description                                                 | Qty |
|------|----------------|-------------------------------------------------------------|-----|
| 3    | H-1529-01      | Valve, Shut-off                                             | 1   |
| 4    | H-1550-14      | Clamp, Snaplock                                             | 2   |
| 5    | Z-6700-01      | Weldment, Frame                                             | 1   |
| 19   | PC-1017-02-125 | Valve, Safety                                               | 1   |
| 23   | H-2792         | Filter, Output                                              | 1   |
| 25   | H-2808         | Element, Replacement (for H-2792)                           | Ref |
| 6    | <b>K-2291</b>  | <b>Kit, Swivel Caster Replacement; consists of:</b>         |     |
|      | U-1014         | Caster, Swivel                                              | 1   |
|      | G-1180-107006  | Screw, 3/8 Hex Head, Tpg. Type F                            | 4   |
|      | G-1250-1070N   | Flatwasher, 3/8 Narrow                                      | 4   |
|      | G-1251-1070R   | Lockwasher, 3/8 Regular                                     | 4   |
| 8    | <b>K-2292</b>  | <b>Kit, Floor Lock Replacement; consists of:</b>            |     |
|      | H-1175         | Lock, Floor                                                 | 1   |
|      | G-1180-107006  | Screw, 3/8 Hex Head, Tpg. Type F                            | 3   |
|      | G-1250-1070N   | Flatwasher, 3/8 Narrow                                      | 3   |
|      | G-1251-1070R   | Lockwasher, 3/8 Regular                                     | 3   |
| 9    | <b>K-2293</b>  | <b>Kit, Rigid Caster Assembly Replacement; consists of:</b> |     |
|      | U-1013         | Caster                                                      | 1   |
|      | G-1180-107006  | Screw, 3/8 Hex Head, Tpg. Type F                            | 3   |
|      | G-1250-1070N   | Flatwasher, 3/8 Narrow                                      | 3   |
|      | G-1251-1070R   | Lockwasher, 3/8 Regular                                     | 3   |

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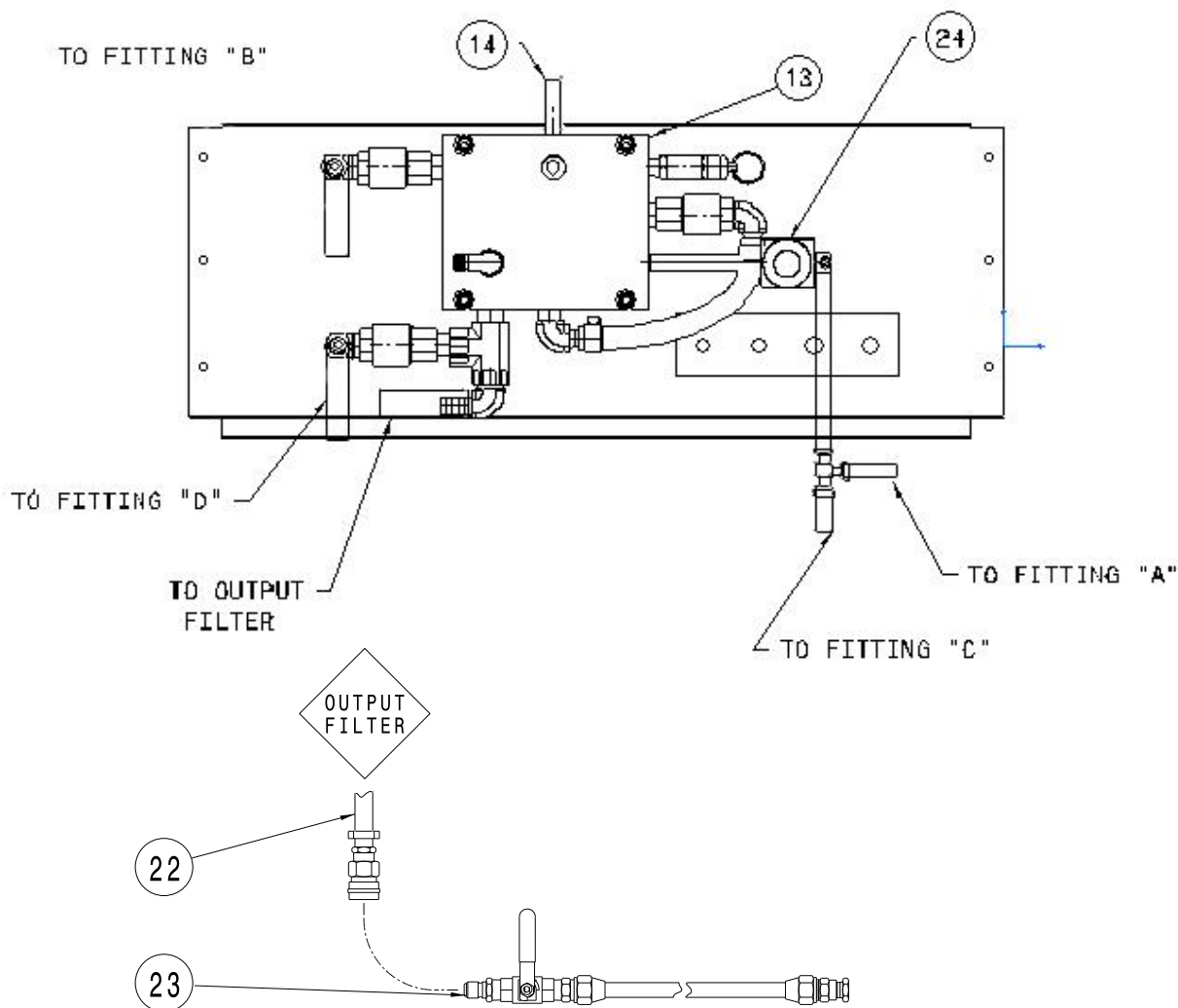
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



| Item | Part Number | Description         | Qty |
|------|-------------|---------------------|-----|
| 11   | HC-2416     | Valve, Ball         | 2   |
| 12   | H-3033      | Regulator           | 1   |
| 13   | HC-1831     | Gauge, Pressure     | 2   |
| 15   | B-401-04    | 3/8 Nozzle, 10 gpm  | 1   |
| 16   | B-401-03    | 3/8 Nozzle, 6 gpm   | 1   |
| 17   | B-401-02    | 1/4 Nozzle, 3 gpm   | 1   |
| 18   | B-401-01    | 1/4 Nozzle, 1.5 gpm | 1   |
| 30   | HC-2350-03  | Valve, Ball 1/2 NPT | 1   |

### Parts List

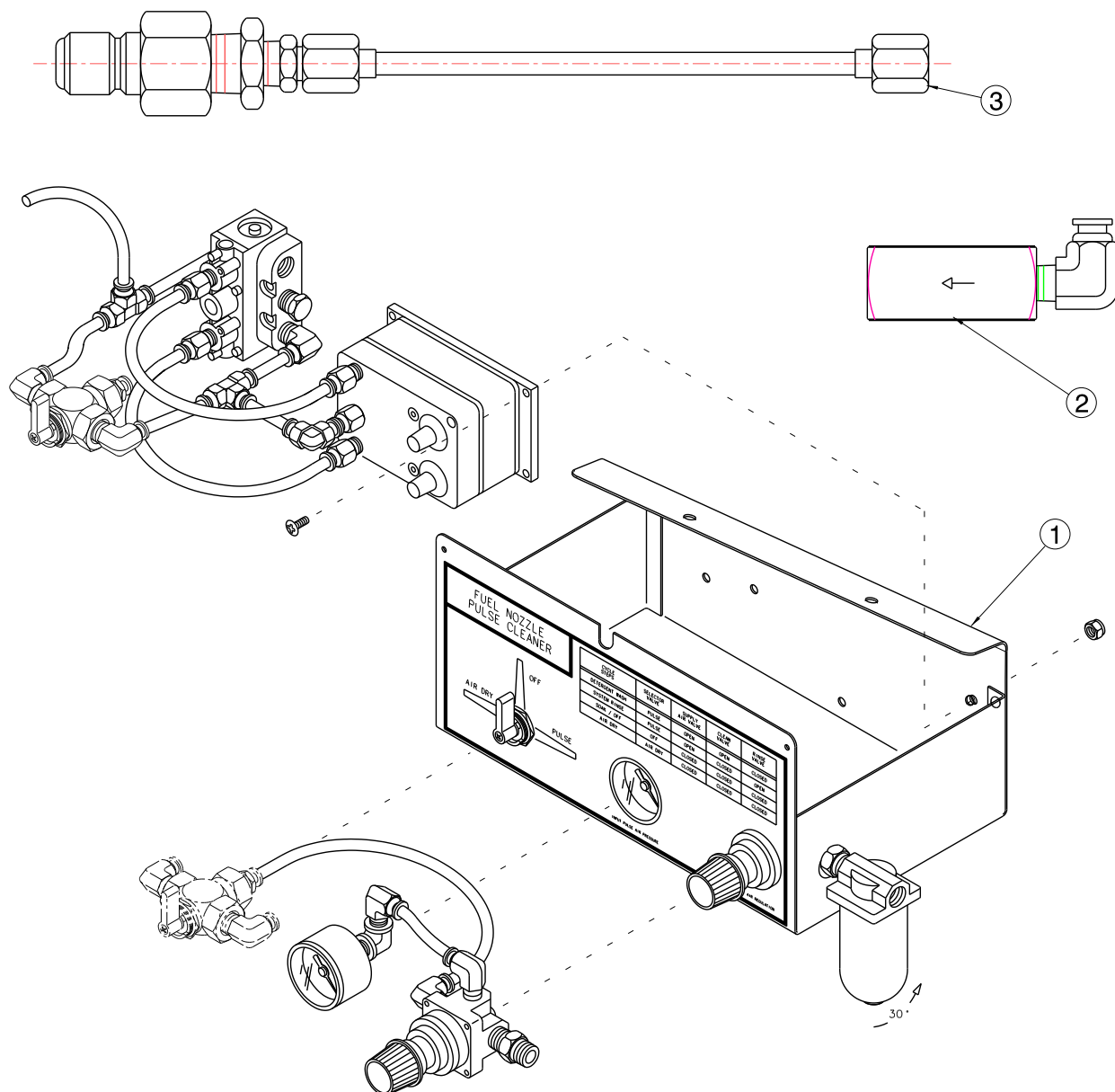
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



| Item | Part Number    | Description                                         | Qty |
|------|----------------|-----------------------------------------------------|-----|
| 13   | J-4306         | Manifold                                            | 1   |
| 14   | N-2804         | Pipe, Thread                                        | 1   |
| 24   | H-1775         | Filter, Air                                         | 1   |
| 22   | <b>K-1410</b>  | <b>Kit, Hose Assembly Replacement; consists of:</b> |     |
|      | H-1426-02      | Clamp, Hose                                         | 1   |
|      | H-1516-13      | Clamp, 2 Ear Hose                                   | 1   |
|      | N-2402-041-B   | Socket, Female                                      | 1   |
|      | N-2412-16      | Connector, Straight Male                            | 1   |
|      | TF-1064-08*240 | Hose, 20 ft Blue                                    | 1   |
| 23   | <b>K-1411</b>  | <b>Kit, Wand Assembly Replacement; consists of:</b> |     |
|      | HC-1137        | Valve, Ball                                         | 1   |
|      | N-2009-16-B    | Connector, Male                                     | 1   |
|      | N-2010-13-B    | Connector, Female                                   | 1   |
|      | N-2210-05-B    | Reducer, Pipe Thread                                | 1   |
|      | N-2403-04-B    | Plug, Male Thread                                   | 1   |
|      | Z-1890         | Assembly, Tube Wand                                 | 1   |

## Parts List

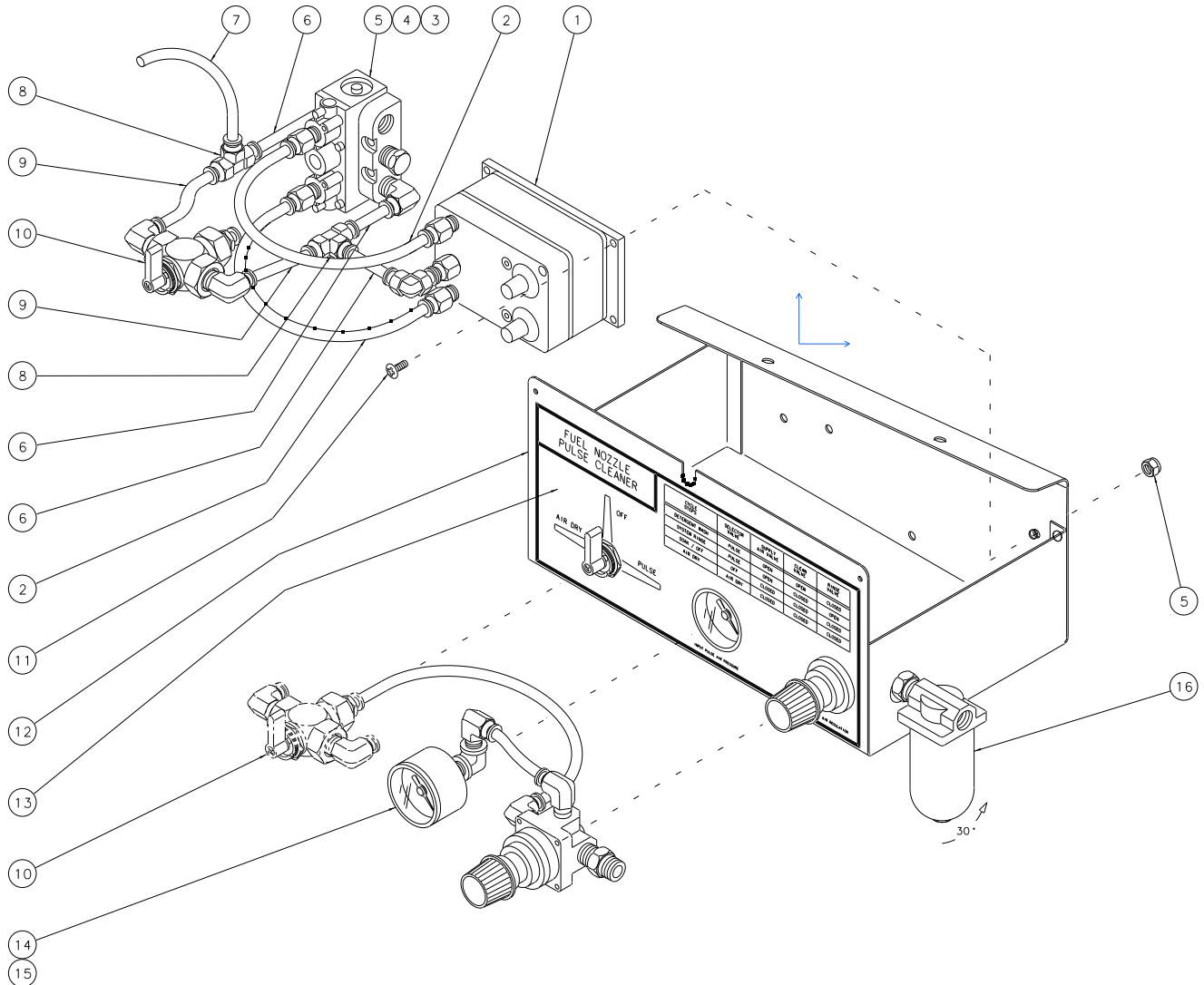
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



| Item      | Part Number   | Description                                         | Qty |
|-----------|---------------|-----------------------------------------------------|-----|
|           | <b>Z-6873</b> | <b>Option 5, Fuel Nozzle Cleaning; consists of:</b> |     |
| 1         | Z-6872        | Assembly, Fuel Nozzle Cleaning                      | 1   |
| 2         | Z-2318        | Assembly, Panel Adaptor                             | 1   |
| 3         | Z-2319        | Assembly, PT-6 Engine Connection                    | 1   |
| Not Shown | G-1179-103004 | Screw, #10 PAN HD CR REC TPG                        | 2   |
| Not Shown | G-1250-1030N  | Flatwasher, #10 Narrow                              | 2   |
| Not Shown | N-2201-04-B   | Union                                               | 1   |

## Parts List

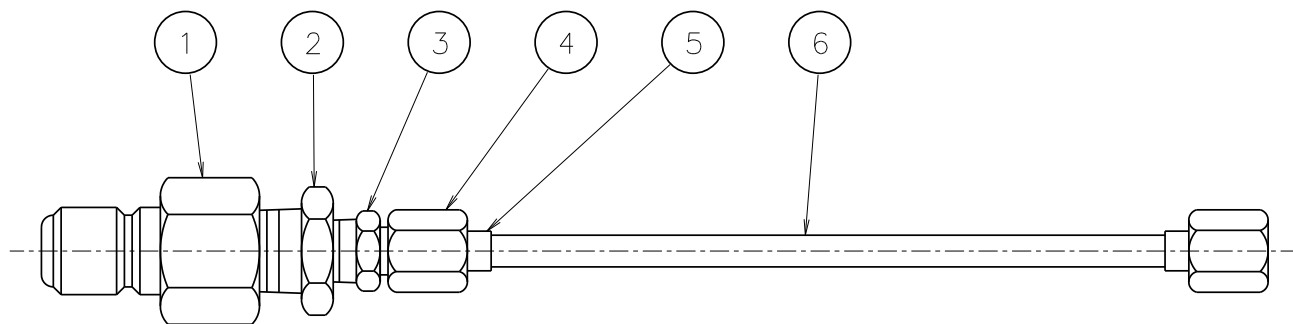
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



| Item | Part Number   | Description                                         | Qty |
|------|---------------|-----------------------------------------------------|-----|
|      | <b>Z-6872</b> | <b>Assembly, Fuel Nozzle Cleaning; consists of:</b> |     |
| 1    | Z-2313        | Assmebly, Oscillator                                | 1   |
| 2    | TF-1012*10.3  | Hose, ¼ Polyethylene x 10 ¼ LG                      | 2   |
| 3    | Z-2310        | Assembly, Valve                                     | 1   |
| 4    | G-1159-103512 | Screw, RD HD CR REC, 10-32 x 1 ¼ LG                 | 2   |
| 5    | G-1202-1035   | Stopnut, Elastic, 10-32                             | 4   |
| 6    | TF-1012*02.3  | Hose, ¼ Polyethylene x 2 ¼ LG                       | 3   |
| 7    | TF-1012*09.0  | Hose, ¼ Polyethylene x 9 LG                         | 1   |
| 8    | N-2458-03     | Tee, Union, ¼ Hose                                  | 2   |
| 9    | TF-1012*01.5  | Hose, ¼ Polyethylene x 1 ½ LG                       | 2   |
| 10   | Z-2312        | Assembly, 3 Way Valve                               | 1   |
| 11   | G-1159-103506 | Screw, RD HD CR REC, 10-32 x ¾ LG                   | 2   |
| 12   | Z-6871-01     | Weldment, Box                                       | 1   |
| 13   | V-1420        | Label, Fuel Nozzle Cleaning                         | 1   |
| 14   | Z-2311        | Assembly, Regulator                                 | 1   |
| 15   | H-1426-06     | Clamp, Hose                                         | 1   |
| 16   | H-1775        | Filter, Air                                         | 1   |

## Parts List

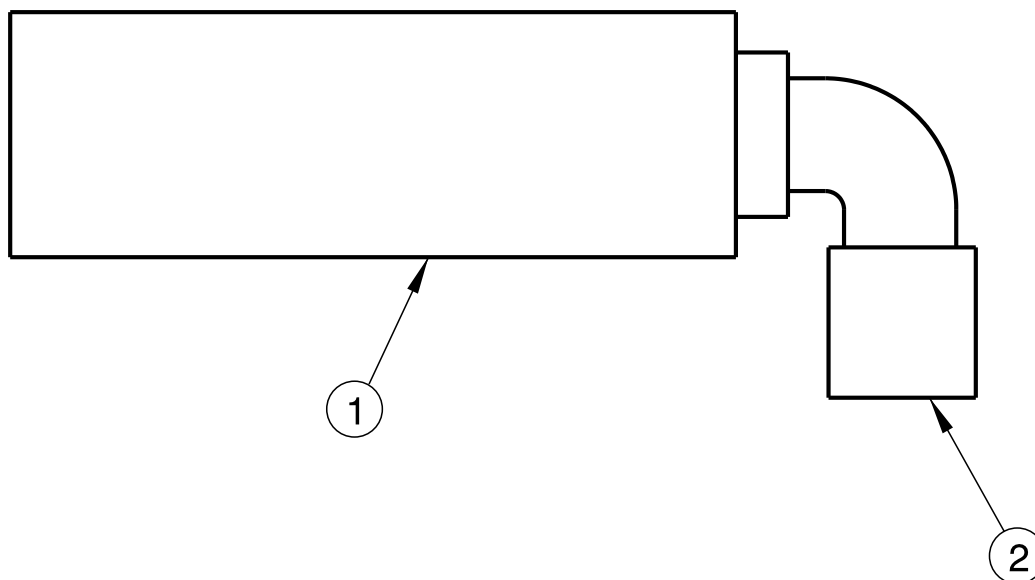
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



| Item | Part Number     | Description                                           | Qty |
|------|-----------------|-------------------------------------------------------|-----|
|      | <b>Z-2319</b>   | <b>Assembly, PT-6 Engine Connection; consists of:</b> |     |
| 1    | N-2401-04-B     | Plug, Female Thread ½ NPT                             | 1   |
| 2    | N-2210-08-B     | Reducer, Pipe Thread ½ Male x ¼ Female                | 1   |
| 3    | N-2009-04-S     | Connector, Male ¼ NPT x #4                            | 1   |
| 4    | N-2000-03-S     | Nut, 37° Flare #4                                     | 2   |
| 5    | N-2019-03-S     | Sleeve                                                | 2   |
| 6    | TR373-05*006.00 | Tubing, Stainless, ¼ OD, .049 Wall x 6 LG             | 1   |

## Parts List

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



| Item | Part Number   | Description                                  | Qty |
|------|---------------|----------------------------------------------|-----|
|      | <b>Z-2318</b> | <b>Assembly, Panel Adaptor; consists of:</b> |     |
| 1    | H-1773-02     | Valve, Check ¼ NPT                           | 1   |
| 2    | N-2446-05     | Elbow, 90° Male, ¼ Tube x ¼ NPT              | 1   |

### Optional Adapter Kits

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

| Part Number | Application                        |
|-------------|------------------------------------|
| K-1037      | DeHavilland Dash 7                 |
| K-1057      | Garrett TPE331                     |
| K-1152      | Pratt & Whitney PT6A               |
| K-1243      | Cessna Caravan                     |
| K-1357      | Saab 340                           |
| K-1709      | DeHavilland DHC6                   |
| K-1710      | Canadair Challenger                |
| K-1953      | Allison 250 - C20J, Bell 206 - JR3 |
| K-1269      | Beech King Air 200                 |
| K-2248      | General Electric CFM56             |





## **APPENDIX I**

### **Declaration of Conformity**





# EU Declaration of Conformity

**Model Number(s)** 08-4059-0013

**Product Type/Name:** Engine Compressor Washer

**Serial Number(s):** Enter serial number(s)

**Declaration:** Tronair has assessed the equipment described above against the Essential Health and Safety Requirements of one or more Directives. Based on this assessment, the equipment described above is deemed to comply with the directive(s) listed below.

This declaration of conformity is issued under the sole responsibility of the manufacturer.

**Directives:** European Machinery Directive 2014/68/EU

European Machinery Directive 2014/29/EU

**Standards:** EN ISO 12100:2011 Safety of machinery – General principles for design – Risk assessment and risk reduction

**Markings:**



**The technical documentation for the machinery is available from:**

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

**Location of Issue:** Tronair, 1 Air Cargo Parkway East, Swanton, OH 43558

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

*Patrick Finch*  
Quality Assurance Representative

Enter a date

Date



**Tronair, Inc.**  
1 Air Cargo Pkwy East  
Swanton, OH 43558

Phone: (419) 866-6301 | 800-426-6301  
Web: [www.tronair.com](http://www.tronair.com)  
Email: [sales@tronair.com](mailto:sales@tronair.com)