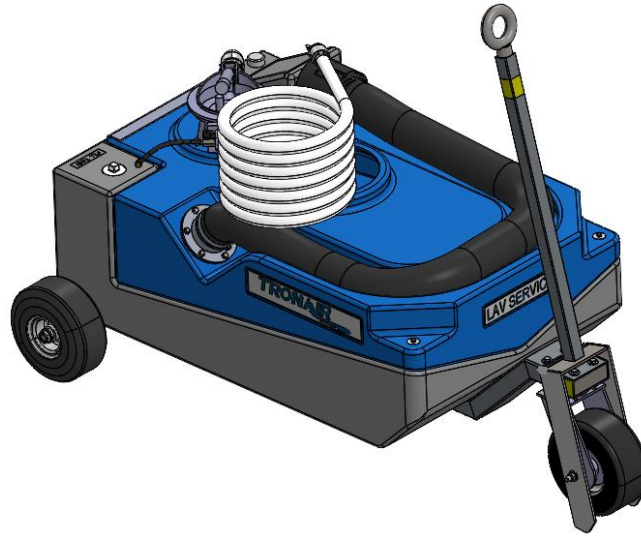




# OPERATION & SERVICE MANUAL



**Model: 10-6409-0000  
Lavatory Service Unit**



09/2024 – Rev. 04

The Tronair Group of Companies: Tronair | EBIS | Columbus Jack | Eagle | DAE | Malabar International

**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)

REVISION	DATE	TEXT AFFECTED
01	08/2007	Original Release
02	06/2008	Modified Parts List
03	11/2021	Major revision
04	09/2024	Modified Parts List



**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 TECHNICAL SPECIFICATIONS.....	1
1.5 FILL (FRESH) SYSTEM .....	1
1.6 DUMP SYSTEM.....	1
1.7 MECHANICAL .....	1
1.8 FIELD INSTALLED KITS .....	1
<b>2.0 SAFETY INFORMATION.....</b>	<b>2</b>
2.1 USAGE AND SAFETY INFORMATION.....	2
<b>3.0 PREPARATION FOR USE .....</b>	<b>2</b>
<b>4.0 TRAINING.....</b>	<b>2</b>
4.1 TRAINING REQUIREMENTS.....	2
4.2 TRAINING PROGRAM .....	2
4.3 OPERATOR TRAINING.....	2
<b>5.0 OPERATING INSTRUCTIONS .....</b>	<b>2</b>
<b>6.0 TROUBLE SHOOTING.....</b>	<b>2</b>
6.1 FAILURE TO PUMP LIQUID .....	2
<b>7.0 MAINTENANCE.....</b>	<b>3</b>
<b>8.0 PROVISION OF SPARES.....</b>	<b>3</b>
8.1 SOURCE OF SPARE PARTS .....	3
8.2 RECOMMENDED SPARE PARTS LISTS .....	3
<b>9.0 IN SERVICE SUPPORT .....</b>	<b>3</b>
<b>10.0 GUARANTEES/LIMITATION OF LIABILITY.....</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

The Tronair Model 10-6409-0000 Lavatory Service Unit (LSU) provides a clean, sanitary means of servicing the aircraft lavatory system and transporting the waste fluid to the dump station.

Some important features are:

- Easily maneuverable with towbar
- Drain back system on dump hose to prevent fluid spillage
- Heavy duty fill pump
- Fill and dump tanks made of non-corroding HD polyethylene material with UV inhibitor
- Permanent connection of dump hose to dump tank

### 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 TECHNICAL SPECIFICATIONS

Length..... 65 ¼ in (165.7 cm)

Width..... 39 ¼ in (99.7 cm)

Height..... 27 ¼ in (69.2 cm)

Weight..... 194 lbs (88 kg)

### 1.5 FILL (FRESH) SYSTEM

- 25 gallon tank capacity; HD polyethylene with UV inhibitor
- One (1) gallon per four (4) strokes fill pump
- Two (2) inch fill port
- Twelve (12) foot fill hose
- 20 psi max fill pump pressure

### 1.6 DUMP SYSTEM

- 30 gallon tank capacity; HD polyethylene with UV inhibitor
- Ten (10) inch tank clean out port with cover
- Four (4) inch aluminum tank flange for aircraft dump hose connection
- 10 foot dump tank hose

### 1.7 MECHANICAL

- Ten (10) inch pneumatic tires; 50 psi tire pressure maximum
- Roller bearings in wheels; zerk fittings
- 10 mph maximum towing speed.

### 1.8 FIELD INSTALLED KITS

K-2030 ..... Kit, Dump Connector

K-3606 ..... Kit, Hose Cap (Dump 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, 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 PREPARATION FOR USE**

This lavatory service unit has been thoroughly inspected and tested prior to packaging and shipment. The unit is shipped completely assembled and is ready to use.

You are requested to generally check over the unit to assure the tightness of all nuts, bolts and screws that may have loosened during shipment. Bolts and elastic stopnuts should be tightened to a torque not to exceed industry standards for Grade '5' bolts.

Tire pressure should not exceed 50 PSI.

**4.0 TRAINING****4.1 TRAINING REQUIREMENTS**

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

**4.2 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.

**4.3 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.**

**5.0 OPERATING INSTRUCTIONS**

1. Open access panel on aircraft. Remove drain and fill coupling caps.
2. Connect the dump hose assembly to the aircraft drain coupling and fill hose assembly to mating aircraft coupling.
3. Follow aircraft manufacturer's instructions to drain sewage from aircraft into dump tank.
4. Follow aircraft manufacturer's requirements for flushing. Four (4) strokes of fill pump will deliver one (1) gallon.
5. Remove dump and fill hoses from aircraft. Flush dump hose and dump tank several times.
6. Following aircraft manufacturer's instructions, replace coupling caps on aircraft fittings. Close the access panel securely.
7. Pump sewage into approved disposal system. Refill fill tank as required. Lavatory Service Unit is now ready for reuse.

**6.0 TROUBLE SHOOTING**

If fill pump fails during use, refer to illustration of WC-1053 Pump Assembly on Page 7 and disassemble for inspection of pump internals. Clean inside of pump. Replace any damaged parts.

**6.1 FAILURE TO PUMP LIQUID**

**Pump Will Not Prime...** Possible Clogged Suction; check that suction tubes are clear.

**Not Enough Flow .....** Check suction and discharge hoses for clogging or pinching. Verify that nozzle is not clogged.

**7.0 MAINTENANCE**

1. Lubricate wheel bearings with multi-purpose grease a minimum of every six (6) months.
2. Lubricate front caster swivel plate bearings with multi-purpose grease every six (6) months; minimum.
3. Periodically check for leaks at hose connections and tighten hose clamps as required.
4. Daily check fluid levels in tanks.
5. Monthly clean finish with mild soap and water.
6. Rinse dump hose and tank with fresh water after every use.
7. Regularly wash tanks and hoses with a mild detergent according to local procedures and regulations.

**8.0 PROVISION OF SPARES****8.1 SOURCE OF SPARE PARTS**

Spare parts may be obtained from the manufacturer:

<b>TRONAIR, Inc.</b>	Telephone: (419) 866-6301 or 800-426-6301
1 Air Cargo Pkwy East	Fax: (419) 867-0634
Swanton, Ohio 43558 USA	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

**8.2 RECOMMENDED SPARE PARTS LISTS**

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

**9.0 IN SERVICE SUPPORT**

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

**10.0 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:

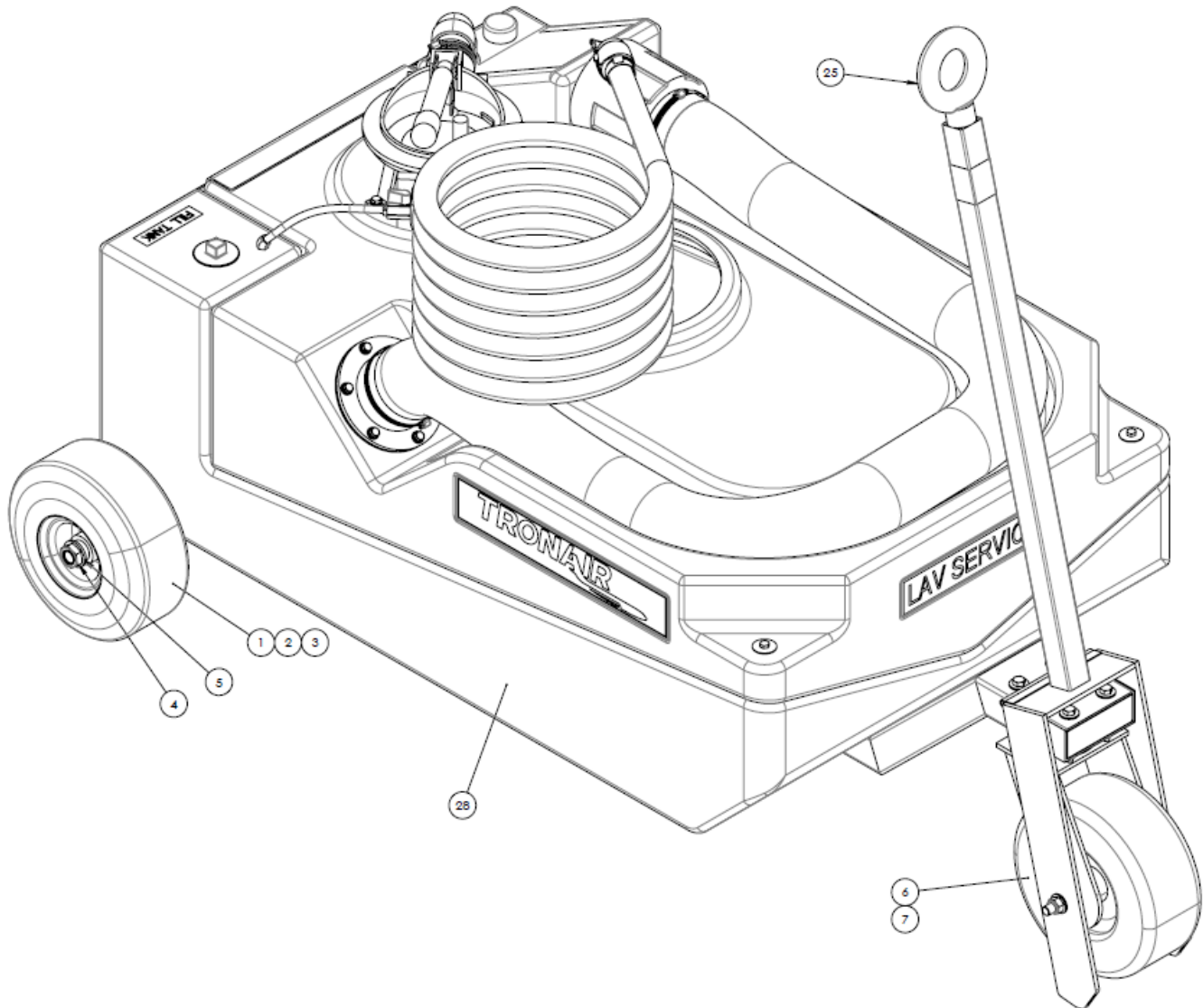
- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

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

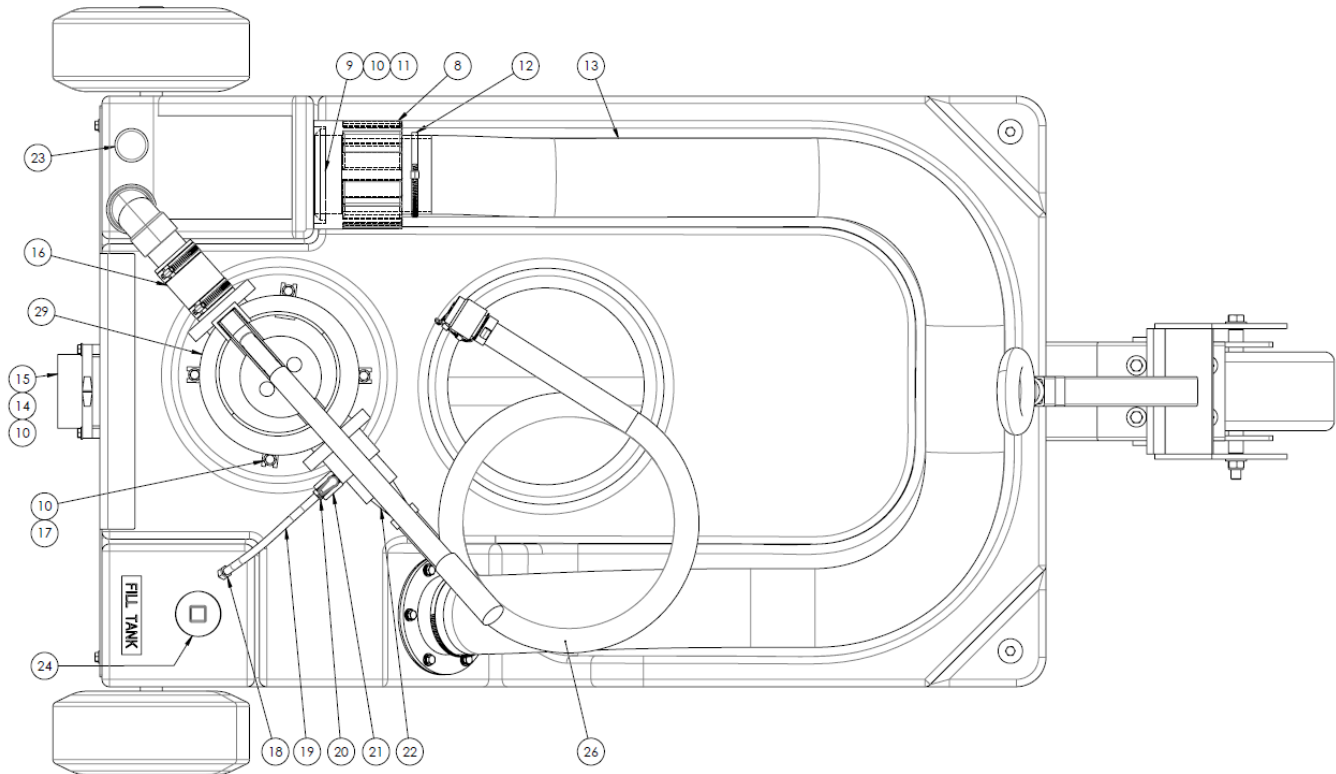
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
1	U-1126	WHEEL, PNEUMATIC	2
2	TR-2004	SPACER, WHEEL	2
3	TR-2014	SPACER, WHEEL	2
4	G-1203-1115	JAMNUT, 3/4-16 ELASTIC	2
5	G-1250-1110N	FLATWASHER, 3/4 NARROW	2
6	U-1125	CASTER, PNEUMATIC SWIVEL	1
7	TR-2008	SPACER, WHEEL	2
25	<b>K-4165</b>	<b>KIT, WELDMENT TOWBAR; consists of:</b>	1
	Z-6637-01	WELDMENT, TOWBAR	1
	G-1100-109580	BOLT, 1/2-20 X 8.0" HEX HD GR 5	1
	G-1202-1095	STOPNUT, 1/2-20 ELASTIC	1
	G-1250-1090N	FLATWASHER, 1/2 NARROW	2
	H-1295-02*06.0	SEAL, TRIM	1
28	<b>K-4708</b>	<b>KIT, TANKS</b>	1

**Parts List**

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



Item	Part Number	Description	Qty
8	H-1956	COUPLING, LSU DUMP	1
9	G-1100-105010	BOLT, 1/4-20 X 1.0" LG HEX HD GR 5	2
10	G-1250-1050N	FLATWASHER, 1/4 NARROW	12
11	H-3027	MOUNT, DUMP COUPLER	1
12	H-1426-17	HOSE CLAMP	2
13	TF-1157-072.00	HOSE, WASTE	1
14	G-1100-105016	BOLT, 1/4-20 X 1-3/4" LG HEX HD GR 5	4
15	H-1333	VALVE, DRAIN	1
16	N-3183	FLEX COUPLER FOR 1.5" PVC	1
17	G-1100-105006	BOLT, 1/4-20 X 3/4" LG HEX HD GR 5	4
18	N-2409-01	ELBOW, 45 DEG MALE	1
19	TF-1009-02*08.0	HOSE, WASTE	1
20	N-2412-05	CONNECTOR, STRAIGHT MALE	1
21	H-3026	VALVE, BLEED LINE	1
22	H-3028	REDUCER, PIPE TO HOSE	1
23	H-1045	BREATHER	1
24	N-1507	PLUG, PVC 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
26	<b>K-4167</b>	<b>KIT, FILL HOSE; consists of:</b>	1
	TF-1081-07-144	HOSE, FILL	1
	H-1954	WATER, HOSE COUPLER	1
	N-2440-04-A	CAP, FILL COUPLER	1
	H-1426-05	CLAMP, HOSE	2
	G-1351-04	RIVET, 1/8 OPEN-END STL	1
	H-1424-12.0	ASSEMBLY, LANYARD	1
29	<b>K-4843</b>	<b>KIT, MODIFIED PUMP</b>	1
N/S	<b>K-4166</b>	<b>KIT, WASTE OUTLET HOSE; consists of:</b>	1
	H-1332	45° HOSE ADOPTER	1
	H-1426-12	CLAMP, HOSE #12	1
	TF-1158-120.00	HOSE, WASTE OUTLET	1



### Pump Assembly Component Parts List

Item	Part Number	Description	Qty
	<b>K-4843</b>	<b>KIT, PUMP MODIFIED; consists of:</b>	
1	WC-1053-01	INLET FLANGE	1
2	Contact Tronair for replacement	OUTLET FLANGE, MODIFIED	1
3	WC-1053-03	BUTTON	2
4	WC-1053-04	CLEVIS ASSEMBLY; consists of:	
	WC-1053-05	CLEVIS PIN	1
	WC-1053-06	CLEVIS SUPPORTS	2
	WC-1053-07	SIDE PLATES	2
	WC-1053-08	BUSHINGS A & B	2
	WC-1053-09	O-RINGS #111	2
	WC-1053-10	SS WASHERS	2
	WC-1053-11	TH ¼ - 20 X 5/8	2
5	WC-1053-12	BODY	1
6	WC-1053-13	CLAMP RING	1
8	WC-1053-14	HANDLE WITH GRIP	1
11	WC-1053-15	ACTUATOR EXTENSION	1
12	WC-1053-16	HARDWARE SET; Consists of:	
	WC-1053-17	HH ¼ - 20 X 7/8 (INLET/OUTLET)	8
	WC-1053-18	HH ¼ - 20 X 1 (CLAMP RING)	6
	WC-1053-19	HN ¼ - 20	14
	WC-1053-20	HH 5/16 – 18 X 1 ¼ (ACTUATOR)	2
	WC-1053-21	HN 5/16 – 18 (ACTUATOR)	2
	WC-1053-22	HH 3/8 – 16 X 2 (ACTUATOR)	1
	WC-1053-23	HN 3/8 – 16 (ACTUATOR)	1
13	WC-1053-24	DIAPHRAGM	1
14	WC-1053-25	FLAPPER VALVES	2