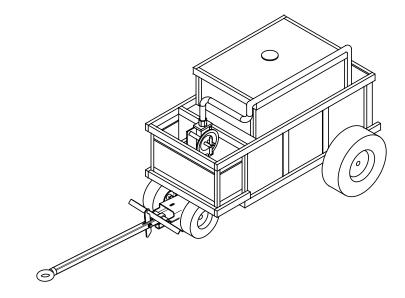


OPERATION & SERVICE MANUAL



Model: 10-6402-0010 Lavatory Service Unit

CE

04/2010 - Rev. 10

REVISION	DATE	TEXT AFFECTED
09	02/2006	Modified Cover Illustration
		Modified Parts List
10	04/2010	Added CE documentation



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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., it 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 Tronair Model 10-6402-0010 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
- Brakes on front tires for locking in static position
- Drain back system on fill hose to prevent fluid spillage
- Storage provided for fill and dump hoses and connector
- Heavy duty fill pump
- Fill and dump tanks made of non-corroding HD polyethylene material with UV inhibitor
- 3 inch I.D. gravity drain valve in dump tank with removable hose and fitting

2.0 TECHNICAL SPECIFICATIONS

Dimensions: 64 inches Long x 37-1/2 inches Wide x 49-1/2 inches High (with towbar in up position.)

• Weight: 600 pounds

2.1 FILL (FRESH) SYSTEM

- 31 gallon tank capacity; HD polyethylene
- One (1) gallon per six (6) strokes fill pump
- Three (3) inch tank fill port with cover
- Eight (8) foot fill hose
- 20 psi max fill pump pressure

2.2 DUMP SYSTEM

- 68 gallon tank capacity; HD polyethylene
- Six (6) inch tank clean out port with cover
- Four (4) inch aluminum tank flange for aircraft dump hose connection
- 18 inch long, three (3) inch I.D. dump tank hose with 45 connector

2.3 MECHANICAL

- Pneumatic tires front (steering) wheels with semi-sealed ball bearing (Tire size 410/350 x 4) 50 psi tire pressure maximum
- Pneumatic tired rear wheels with tapered roller bearings (Tire size 4.80/4.00 x 8) 50 psi tire pressure maximum
- Towing speed 10 mph maximum

2.4 KITS

The following kits are available for Model: 10-6402-0010 LSU:

- K-2410 Kit, Fill Connector
- K-2412 Kit, Dump Connector with 5 foot hose
- K-2029 Kit, Dump Connector
- K-2030 Kit, Dump Connector; mates with K-2412
- K-3606 Kit, Hose Cap (Dump Hose)
- K-4456 Kit, Converts Cart to Electric Fill Pump

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 for 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 OPERATING INSTRUCTIONS

- 1. Open access panel on aircraft. Remove drain and fill coupling caps.
- 2. Connect dump hose assembly to 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. To flush aircraft toilet, the ball valve after the fill pump must have its handle in the up position (perpendicular to valve). Follow aircraft manufacturer's requirements for flushing. Six strokes of fill pump will deliver one (1) gallon.
- 5. After flushing, position ball valve handle in down position (parallel to valves). This allows for fill hose to be partially drained prior to disconnecting from aircraft.
- 6. Remove dump and fill hoses from aircraft and stow.
- 7. Following aircraft manufacturer's instructions, replace coupling caps on aircraft fittings. Close access panel.
- 8. Drain sewage into approved disposal system. Refill fill tank as required. Lavatory Service Unit is now ready for re-use.

5.0 MAINTENANCE

- 1. Lubricate wheel bearings with multi-purpose grease; every 6 months minimum.
- 2. Lubricate front caster swivel plate bearings with multi-purpose grease; every 6 months minimum.
- 3. Periodically check for leaks at hose connections and tighten hose clamps, as required.
- 4. Regularly wash tanks and hoses with a mild detergent according to local procedures and regulations.

6.0 TROUBLE SHOOTING

- 1 If fill pump fails during use, refer to Illustrated Parts List for WC-1053 Fill Pump Assembly and disassemble for inspection of pump internals. Clean inside of pump. Replace any damaged parts. Failure to pump liquid may be caused by the following reasons:
 - Pump Will Not Prime: 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 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.

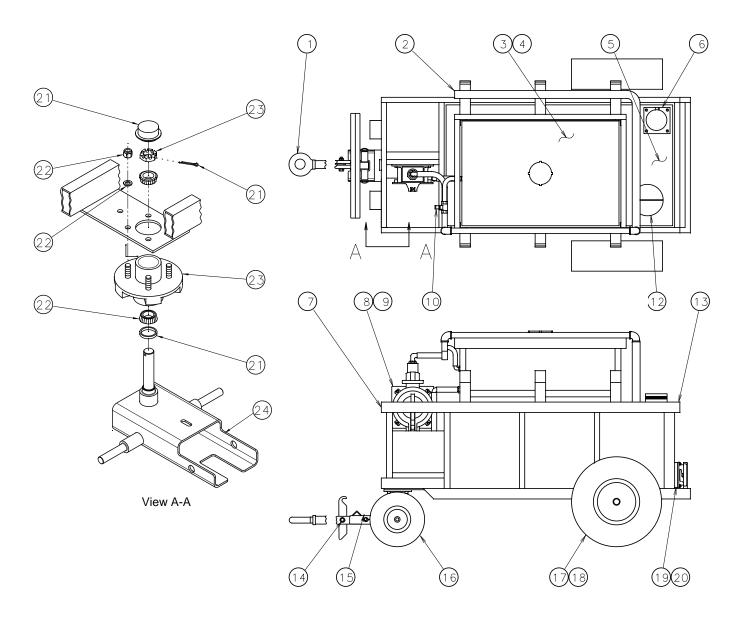
The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins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

8.0 APPENDICES

APPENDIX I Declaration of Conformity



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





Parts List

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

Item	Part Number	Description	Qty
1	Z-5584-01	Weldment, Tongue	1
2	TF-1005*96.0	Hose, 1.0 ID x 96 Long	1
7	Z-1517	Weldment, Frame	1
10	HC-1137	Valve, Ball	1
12	K-4916	Kit, Fillwell Replacement	1
17	U-1010	Assembly, Tire/Wheel	2
24	Z-6182-01	Weldment, Steering Axle	1
26	H-1416	Flowmeter	1
Not Shown	K-4098	Kit, Drain Hose Assembly	1
3	K-1256	Kit, Fill Tank Replacement; consists of:	
	H-1316	Tank, 31 Gallon	1
	V-1033-01	Label, "Tronair"	1
4	K-1688	Kit, Lid Replacement; consists of:	
	H-1626	Cover	1
	H-1627	Gasket	1
5	K-1251	Kit, Dump Tank Replacement; consists of:	
	H-1331	Tank, 68 Gallon	1
	H-1286	Cap, Plastic	1
	K-1210	Kit, 4" Flange (See Item 6)	1
	K-1208	Kit, 6" Fillwell (See Item 12)	1
	K-1246	Kit, Drain Valve (See Item 19)	1
6	K-1210	Kit, 4" Flange Replacement; consists of:	
	G-1100-105010	Bolt, Hex Head, Grade 5, 1/4-20 x 1" long	4
	G-1251-1050R	Lockwasher, 1/4 Regular	4
	H-1426-16	Clamp, Hose	1
	J-1403-02	Flange, Inner	1
	Z-1462	Weldment, Flanged 4" Adaptor	1
8	K-1786	Kit, Pump Mounting Plate Replacement; consists of:	
	G-1100-107520	Bolt, Hex Head, Grade 5, 3/8-24 x 2" long	4
	G-1202-1075	Stopnut, 3/8-24 Elastic	4
	G-1250-1070N	Flatwasher, 3/8 Narrow	8
	J-1798	Plate, Pump Mount	1
9	K-1702	Kit, Pump Replacement; consists of.	
	G-1100-105006	Bolt, Hex Head, Grade 5, 1/4-20 x 3/4" long	4
	G-1202-1050	Stopnut, 1/4-20 Elastic	4
	G-1250-1050N	Flatwasher, 1/4 Narrow	8
	WC-1053	Pump, Hand	1
13	K-1252	Kit, Rear Tank Gate Replacement; consists of:	
	G-1100-105016	Bolt, Hex Head, Grade 5, 1/4-20 x 1-3/4 " long	4
	G-1250-1050N	Flatwasher, 1/4 Narrow	4
	G-1251-1050R	Lockwasher, 1/4 Regular	4
	Z-1508-01-01	Weldment, Rear Tank Gate	1



Parts List

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

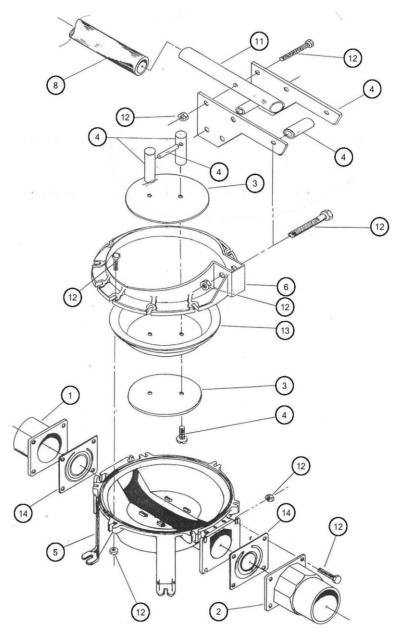
ltem	Part Number	Description	Qty
14	K-3971	Kit, Lever Replacement; consists of:	
	G-1100-109522	Bolt, Hex Head, Grade 5, 1/2-20 x 2-1/4" long	1
	G-1203-1095	Stopnut, 1/2-20 Elastic	1
	G-1250-1090N	Flatwasher, 1/2 Narrow	1
	J-3427	Lever	1
15	K-3970	Kit, Pin Replacement; consists of:	
	G-1301-02	Pin, Cotter, 1/8" diameter x 1" long	2
	R-2096	Pin	1
16	K-1550	Kit, Wheel (Single) Replacement; 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
18	K-1633	Kit, Wheel Bearing & Seal Replacement; consists of:	
	U-1010	Wheel/Tire Assembly	1
	G-1230-01	Nut, Axle, 1"-14 UNS Thread	1
	G-1301-05	Pin, Cotter, 5/32" diameter x 1-1/2" long	1
	H-1155-01	Cap, Dust	1
	H-1559-01	Bearing	2
	H-1561-05	Seal, Grease	1
	H-1676-01	Cup, Bearing	2
19	K-1246	Kit, Drain Valve Replacement; consists of:	
	G-1100-105016	Bolt, Hex Head, Grade 5, 1/4-20 x 2" long	4
	G-1202-1050	Stopnut, 1/4-20 Elastic	4
	G-1250-1050N	Flatwasher, 1/4 Narrow	4
	H-1334	Seal, Stat-O	4
	H-1333	Valve, Drain	1
20	K-1245	Kit, Valve Mounting Replacement; consists of:	
	G-1100-105016	Bolt, Hex Head, Grade 5, 1/4-20 x 2" long	4
	G-1202-1050	Stopnut, 1/4-20 Elastic	4
	G-1250-1050N	Flatwasher, 1/4 Narrow	4
	H-1334	Seal, Stat-O	4
21	K-1253	Kit, Bearing & Seal Replacement; consists of.	
	G-1301-03	Pin, Cotter, 1/8" diameter x 1-1/2" long	1
	H-1155-01	Cap, Dust	1
	H-1559-01	Bearing	2
	H-1561-05	Seal, Grease	1
22	K-1254	Kit, Hub Mounting Replacement; consists of:	
	G-1100-109514	Bolt, Hex Head, Grade 5, 1/2-20 x 1-1/2" long	4
	G-1202-1095	Stopnut, 1/2-20 Elastic	4
	G-1250-1090N	Flatwasher, 1/2 Narrow	4
	G-1251-1090R	Lockwasher, 1/2 Regular	4
23	K-1255	Kit, Hub Replacement; consists of:	
	G-1202-1095	Stopnut, 1/2-20 Elastic	4
	G-1250-1090N	Flatwasher, 1/2 Narrow	4
	G-1230-01	Nut, Axle, 1"-14 UNS Thread	1
	G-1301-03	Pin, Cotter, 1/8" diameter x 1-1/2" long	1
	H-1335	Hub, Idler	1



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WC-1053 Pump Assembly Component



Item	Part Number	Description	Qty
	WC-1053	Pump Assembly	REF
1	WC-1053-01	Inlet Flange	1
2	WC-1053-02	Outlet Flange	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



Pump Assembly Component

Item	Part Number	Description	Qty
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



APPENDIX I

Declaration of Conformity



DECLARATION of CONFORMITY

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

Electric Lavatory Service Unit 10-6402-0010

Relevant provisions complied with by the machinery: $$2006/42/\mbox{EC}$$

Relevant standards complied with by the machinery: EN ISO 12100-1

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

atric

Quality Assurance Representative