

**Model: K-5029**  
**Bell 525 Defuel/Purge Unit**



09/2015 – Rev. 01

REVISION  
01

DATE  
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Original release

## TABLE OF CONTENTS

		<u>PAGE</u>
<b>1.0</b>	<b>PRODUCT INFORMATION .....</b>	<b>1</b>
1.1	DESCRIPTION .....	1
1.2	MODEL & SERIAL NUMBER .....	1
1.3	MANUFACTURER .....	1
1.4	SPECIFICATIONS .....	1
<b>2.0</b>	<b>SAFETY INFORMATION.....</b>	<b>1</b>
2.1	USAGE AND SAFETY INFORMATION .....	1
<b>3.0</b>	<b>TRAINING.....</b>	<b>1</b>
3.1	TRAINING REQUIREMENTS .....	1
3.2	TRAINING PROGRAM.....	1
3.3	OPERATOR TRAINING .....	1
<b>4.0</b>	<b>OPERATION.....</b>	<b>1</b>
4.1	PRE-USE CHECKS .....	1
4.2	NUMERICAL VALUES .....	1
4.3	START UP PROCEDURES .....	2
<b>5.0</b>	<b>TROUBLESHOOTING .....</b>	<b>2</b>
<b>6.0</b>	<b>MAINTENANCE .....</b>	<b>2</b>
6.1	GENERAL .....	2
<b>7.0</b>	<b>PROVISION OF SPARES .....</b>	<b>2</b>
7.1	SOURCE OF SPARE PARTS .....	2
7.2	RECOMMENDED SPARE PARTS LISTS .....	2
<b>8.0</b>	<b>IN SERVICE SUPPORT .....</b>	<b>2</b>
<b>9.0</b>	<b>GUARANTEES/LIMITATION OF LIABILITY .....</b>	<b>3</b>
<b>10.0</b>	<b>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**

The purpose of the Tronair Defuel/Purge unit is to drain the aircraft using the aircraft boost pump, gravity or by attaching to Tronair 07-3000-1921 Defueler to pump the fuel out of the aircraft.

### **1.2 MODEL & SERIAL NUMBER**

Reference nameplate on unit

### **1.3 MANUFACTURER**

**TRONAIR, Inc.**  
1740 Eber Road  
Holland, Ohio 43528-9794 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)

### **1.4 SPECIFICATIONS**

- Welded multi-position cart
- 3 15 foot hoses equipped with shutoff valves and attachment for drain valves
- 2 25 foot hoses equipped with shutoff valves and adapters for boost pumps
- Attachment hose for Tronair 07-3000-1921 Defueler

## **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 OPERATION**

### **4.1 PRE-USE CHECKS**

Refer to the Parts List and Illustration to identify and insure all parts are present. Generally check over unit to ensure the tightness of all connectors and fittings.

### **4.2 NUMERICAL VALUES**

Height: 49 3/16 in (48.7 cm)  
Width: 26 3/16 in (66.5 cm)  
Length: 17 3/8 in (44 cm)  
Finish: Powder Coat

**4.0 OPERATION (continued)****4.3 START UP PROCEDURES**

1. Wear rubber gloves and safety goggles
2. Collapse cart so it is lying flat.
3. Connect static discharge cable to ground point of aircraft and holding tank fuel is being drained into

**CAUTION!**

**To prevent possible explosion, static discharge cable must be connected to proper grounds**

4. Connect hoses to aircraft; depending on drain/defuel method being used.

HOSE P/N	USE	ATTACHMENTS
Z-8792	Use to connect to Tronair 07-3001-1921	N/A
Z-8793	180 inch hose to connect to aircraft drain valves	N/A
Z-8794	300 inch hose to connect to either drain valves or engine boost pumps	Swivel elbow (provided) when connected to boost pumps

5. Open the needed drain valves.
6. Ensure fuel has stopped flowing then remove the draining device from the drain valve

**CAUTION!**

**Do not smoke or use open flame while using the Fuel Sample Unit.**

**5.0 TROUBLESHOOTING**

TROUBLE	PROBABLE CAUSE	ACTION
No fuel drains	Drain Valve not open	Open Drain Valve
Fuel leaks from connections	Loose or damaged component	Tighten fitting or replace damaged component

**6.0 MAINTENANCE****6.1 GENERAL**

- Defuel/Purge Unit should be stored properly to prevent damage
- Check all fittings, connectors and cup for proper assembly and tightness

**7.0 PROVISION OF SPARES****7.1 SOURCE OF SPARE PARTS**

Spare parts may be obtained from the manufacturer:

**TRONAIR, Inc.**

1740 Eber Road

Holland, Ohio 43528-9794 USA

Telephone: (419) 866-6301 or 800-426-6301

Fax: (419) 867-0634

E-mail: sales@tronair.com

Website: www.tronair.com

**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.**

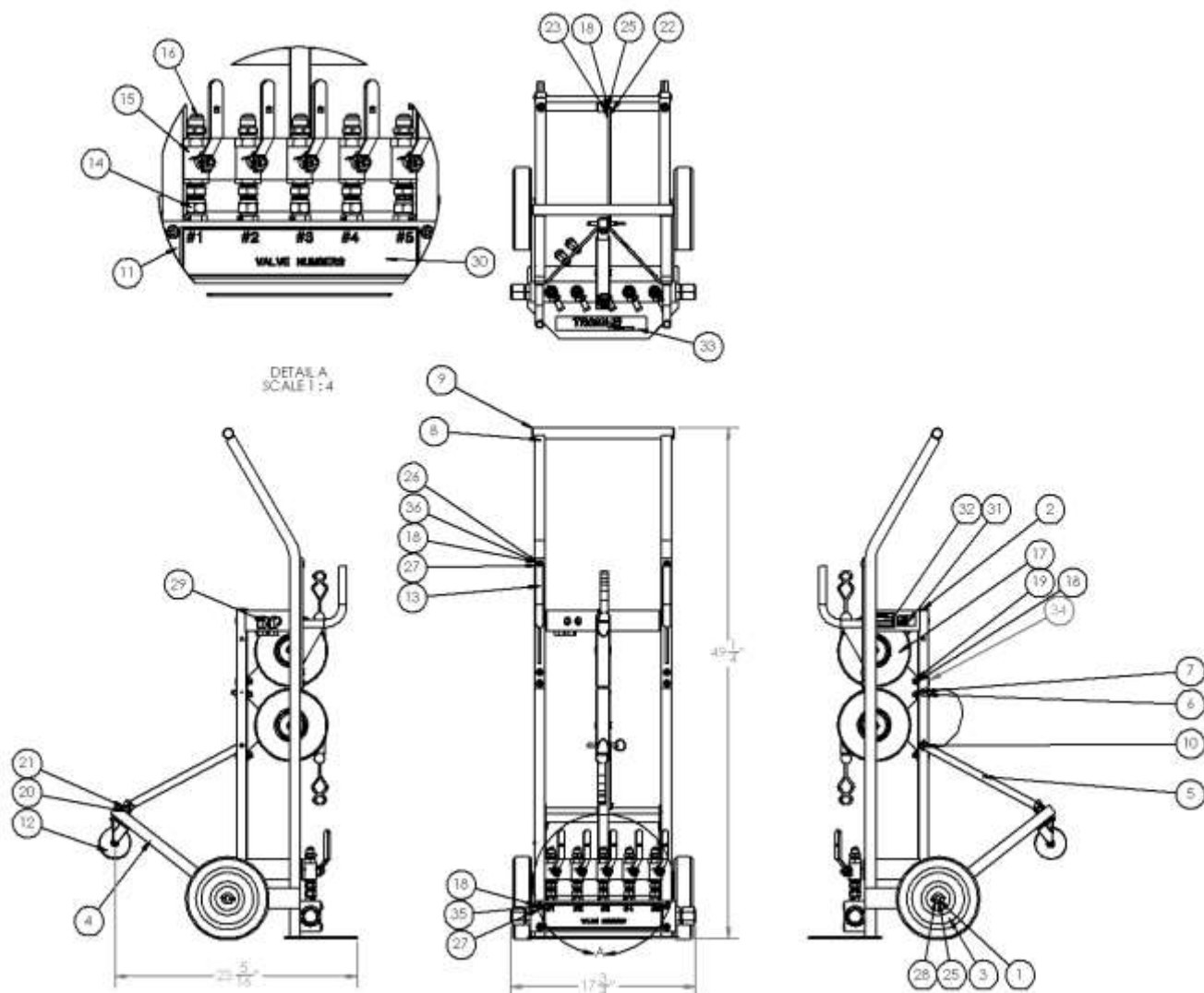
## 10.0 APPENDICES

- APPENDIX I Static Discharge Grounding Reel Installation/Operation Instruction
- APPENDIX II Declaration of Conformity

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## Parts List

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



Item	Part Number	Description	Qty
1	R-1990	Rod, Axle	1
2	H-1143	Cap, End	2
3	U-1001-01	Wheel	2
4	Z-5424-01	Weldment, Caster Frame	1
5	J-3363-01	Plate, Adjustment	1
6	H-1026*12.0	Assembly, Lanyard	1
7	G-1351-04	Rivet, 1/8 Open-End Steel	1
8	Z-8778-01	Weldment, Cart	1
9	H-2589	Cap, Tube End	2
10	G-1449-22	Pin, Shear	1
11	Z-8774	Assembly, Manifold	1
12	U-1104	Caster, Swivel	2
13	Z-5376-01	Weldment, Hose Hanger	2
14	N-2030-05-S	Swivel, #8 JIC X 1/2 NPY	5
15	HC-1137	Valve, Ball	5



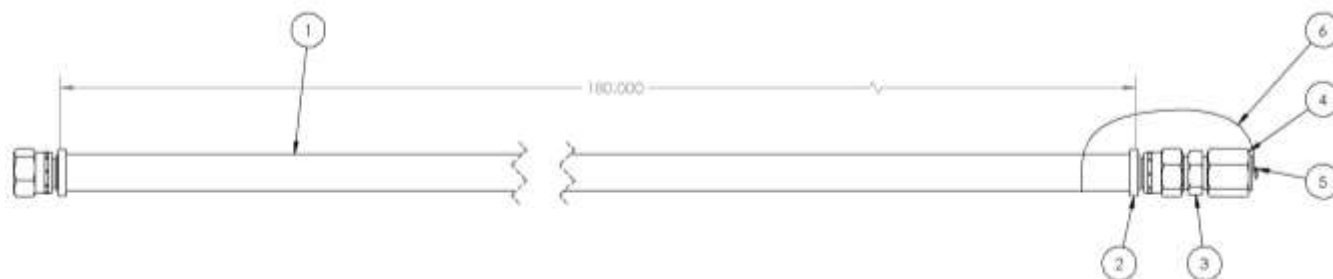
### Parts List

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

Item	Part Number	Description	Qty
16	N-2009-14-S	Connector, Male	5
17	H-1187	Reel, Static Discharge	2
18	G-1250-1050N	Flatwasher, ¼ Narrow	19
19	G-1250-1070N	Flatwasher, ⅜ Narrow	2
20	G-1250-1090N	Flatwasher, ½ Narrow	2
21	G-1202-1050	Stopnut, ¼ - 20 Elastic	4
22	G-1202-1070	Stopnut, ⅜ - 16Elastic	2
23	G-1100-105006	Bolt, Hex Head Grade 5, ¼ - 20	1
24	G-1203-1055	Jamnut, ¼ - 28 Elastic	1
25	TR375-05*00.28	Spacer	1
26	G-1439-1050-S	Nutsert, ¼ - 20 Open End	10
27	G-1251-1050R	Lockwasher, ¼ Regular	10
28	G-1301-02	Pin, Cotter ⅝ x 1 Long	2
29	N-2002-06-S	Elbow, Swivel Nut	2
30	V-2620	Label, Valve Position	1
31	V-1001	Label, Made In USA	1
32	V-1003	Label, Serial No.	1
33	V-1002	Label, Tronair	1
34	G-1100-105016	Bolt, Hex Head Grade 5, ¼ x 1.75 Long	4
35	G-1100-105026	Bolt, Hex Head Grade 5, ¼ x 2.75 Long	4
36	G-1100-105010	Bolt, Hex Head Grade 5, ¼ x 1.5 Long	6
40	EC-1180-10	Terminal, Ring Red ¼	4
Not Shown	Z-8792	Assembly, Hose	1
Not Shown	Z-8793	Assembly, Hose	3
Not Shown	Z-8794	Assembly, Hose	2

### Parts List

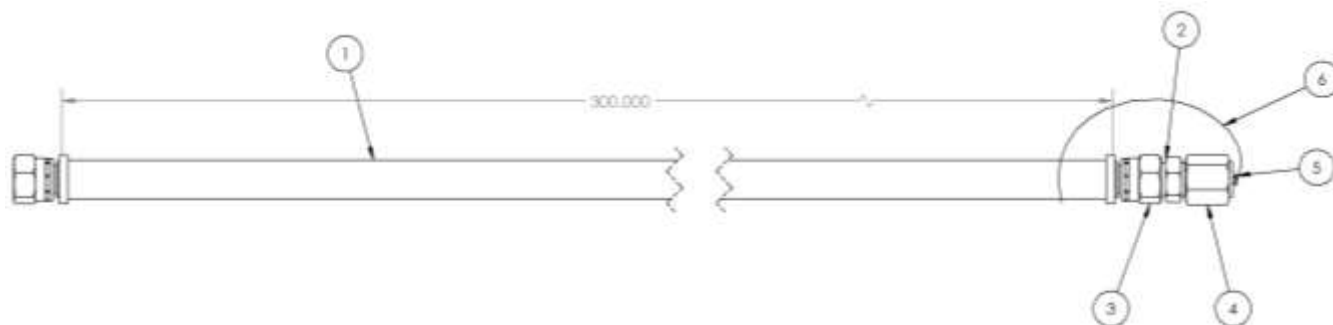
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
1	TF-1047-05-180	Assembly, Hose	1
2	N-2026-05-B	Swivel	2
3	N-2011-06-s	Union	1
4	N-2073-06	Fitting, Cap with Lanyard Hole	1
5	G-1351-04	Rivet, 1/8 Open End Steel	1
6	H-1424*07.0	Lanyard, 7 inch	1

### Parts List

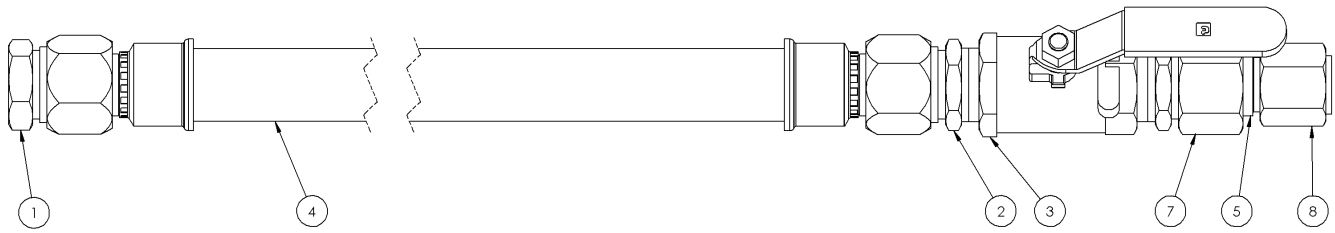
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
1	TF-1047-05-300	Assembly, Hose	1
2	N-2011-06-s	Union	1
3	N-2026-05-B	Swivel	2
4	N-2073-06	Fitting, Cap with Lanyard Hole	1
5	G-1351-04	Rivet, 1/8 Open End Steel	1
6	H-1424*07.0	Lanyard, 7 inch	1

### Parts List

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



Item	Part Number	Description	Qty
1	N-2014-10-S	Plug, #16	1
2	N-2009-23-S	Connector, Male	2
3	HC-1119	Valve, Ball	1
4	TF-1050-02*18.0	Assembly, Hose	1
5	N-2020-14-S	Reducer, Tube End	1
6	N-2008-08-S	Cap, 3/4	1
7	N-2000-10-S	Nut, #16 JIC x 37°	1





## **APPENDIX I**

### **Static Discharge Grounding Reel Installation/Operation Instruction**



# **STATIC DISCHARGE GROUNDING REEL INSTALLATION / OPERATION INSTRUCTION SHEET P/N 922-30-028**

## **Introduction**

Static Discharge Reels; 200-20R, 700-50R and ML2930 & ML3416 Series to be used for bonding and grounding on mobile fuel equipment at bulk stations, airports, terminals, refineries, et cetera.

## **Bonding and Grounding Principles**

Bonding connects various pieces of conductive equipment together to keep them at the same potential. Static sparking can not occur between objects that are at the same potential.

Grounding is a form of bonding in which conductive equipment is connected to an earthing electrode or to a building grounding system in order to prevent sparking between conductive equipment and grounding structures.

**Refer to the National Fire Protection Association Codes, NFPA 77 and NFPA 99 for recommended practice on static electricity.**

## **Reel Installation**

Mount Grounding Reel to object or vehicle with bolts using holes provided in base. Underside of bracket is unpainted providing a conductive surface to interface with a clean conductive surface on the object or vehicle. After mounting reel check electrical continuity (25 ohms. max.) between object or vehicle and grounding clamps at the end of the cable.

## **Reel Operation**

Extend cable to desired object or earthing ground lug and clamp alligator jaw grip or other grounding connector in place. A pawl and ratchet permits locking of cable at any desired length within the reel's capacity. A simple tug on the cable unlocks the reel for a smooth and steady walk-back retraction.

Perform periodic tests of the bonded object to the ground clamp on the end of the cable grounding reel with Ohm Meter to confirm continuity. Maximum resistance to be 25 ohms. If higher, remove and replace reel. Inspect the entire cable length for kinks and/or broken wires. Inspect the cable clamp for good compression force and/or damage.

**Caution:** Do not use any part of the electrical current carrying system as a ground for static grounding. Arcing and fires could occur from current feedback where static control grounds are tied into the electrical system neutral.

## **WARNING:**

**This product can aid in the discharge of static electricity. No prediction or advice, however, can be given about all the different conditions which can cause static discharges to accumulate. Moreover, it can not be guaranteed that the use of this product (without other precautionary steps) will prevent static ignited fires or explosions which may result in serious injury or death.**

**SEEK PROFESSIONAL ADVICE BEFORE INSTALLING AND / OR USING THIS PRODUCT.**







## **APPENDIX II**

### **Declaration of Conformity**





## DECLARATION of CONFORMITY

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

K-5029

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

Relevant standards complied with by the machinery:  
EN ISO 12100-1  
EN 1915-1:2001 (5.20)

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

A handwritten signature in dark ink, reading "David L. Kidd". The signature is written in a cursive style with a large, looped "D" and "K".

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Quality Assurance Representative