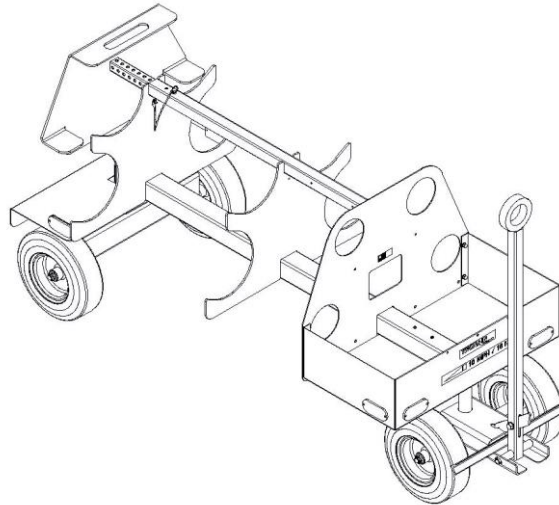




OPERATION & SERVICE MANUAL



Model: 12-3104-0000
4 Bottle Cart



11/2018 – Rev. 04

REVISION	DATE	TEXT AFFECTED
02	01/2004	Cover: Replaced drawing pg 1 Specifications: Modified all specifications Optional Kits : Modified kit numbers & Descriptions Features: Added "Instrument Panel Mounting"
03	04/2006	pg 3 Added Parts List with Illustrations
04	11/2018	pg 1 Modified 2.1 Optional Kits Major revision



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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., 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 4 Bottle Cart is a compact unit primarily designed to transport Nitrogen/Oxygen bottles which are used in the aviation industry.

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 SPECIFICATIONS

Height: 36-7/16 in (92.5 cm)
Length: 80-1/8 in (203.5 cm)
Width: 30-1/8 in (77.5 cm)
Weight: 265 lbs (120 kg)
Finish: Powder Coat

1.5 OPTIONAL KITS

Nitrogen Handling

K-3835: Nitrogen Booster Kit, regulates Nitrogen from 0-500 psi (34.5 bar) output pressure and 25-4000 psi (1.7- 276 bar). Tronair recommends only 3000 psi (207 bar). Also includes a booster pump to increase bottle supply pressure to 4000 psi (276 bar) maximum.

K-3836: Low Pressure Regulator Kit, regulates Nitrogen from 0-500 psi (34.5 bar) output pressure. Also includes low pressure regulator that regulates Nitrogen from 0-500 (34.5 bar) output pressure.

K-3837: High Pressure Regulator Kit, regulates Nitrogen from 25-4000 psi (1.7-276 bar) (Tronair recommends only 3000 psi/207 bar).

1.6 FEATURES

- Easy loading
- Use with all standard 9" diameter bottles
- Adjustable bottle stop
- Bottles fully captured
- Pneumatic tires
- Parking brake
- Hose compartment
- Instrument Panel Mounting

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 unit is shipped fully assembled and is ready for supply bottle(s) installation.



CAUTION!

Only use 9 in (22.9 cm) diameter bottles for which this unit was designed.

Install bottles by removing bottle stop pin and sliding bottle stop rearward, place bottles in cart, slide bottles forward against front stop. If using only one or two bottles load the lower bottle compartment, this will prevent the cart from becoming too top heavy. Slide bottle stop securely against the back of the bottles and install bottle stop pin.



CAUTION!

Maximum towing speed is 10 mph.

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 MAINTENANCE

1. Maintain pressure listed on tires.
2. Grease wheel bearings on a quarterly-based schedule.

6.0 PROVISION OF SPARES

6.1 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

6.2 RECOMMENDED SPARE PARTS LISTS

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

7.0 IN-SERVICE SUPPORT

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



8.0 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.**

9.0 APPENDICES

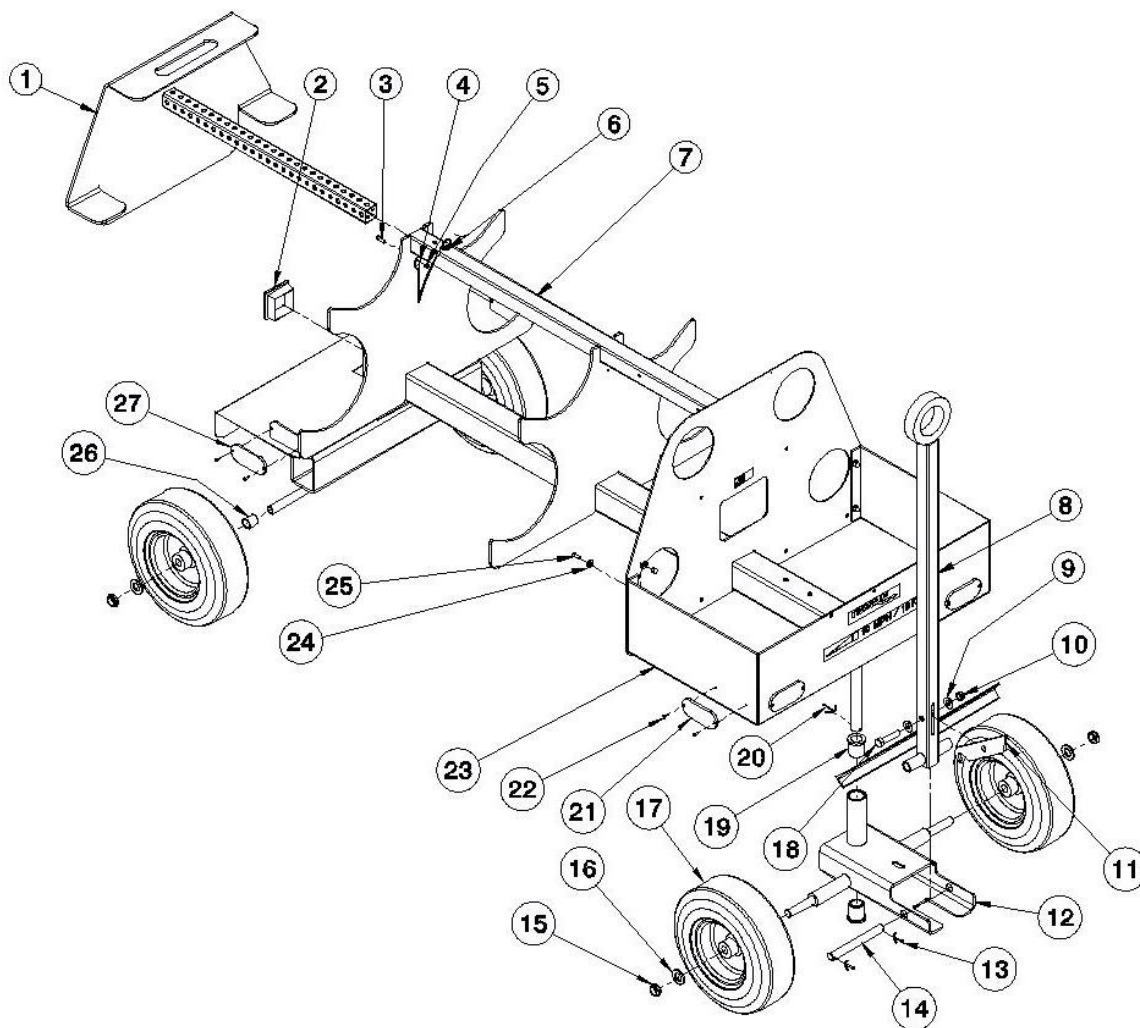
APPENDIX I Declaration of Conformity



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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	Z-5585-01	Weldment, Back Stop	1
2	H-2649-18	Cap	1
3	G-1150-103506	Screw, Hex Head Machine, #10-32 x 3/4" long	1
4	H-1026*12.0	Assembly, Lanyard	1
5	G-1202-1035	Elastic Stopnut, #10-32	1
6	G-1307-0618	Pin, Aerofast	1
7	Z-5582-01	Weldment, Bottle Cart	1
8	Z-5584-01	Weldment, Towbar	1
9	G-1250-1090N	Flatwasher, 1/2 narrow	2
10	G-1203-1095	Elastic Jamnut, 1/2 - 20	1
11	J-3427	Lever	1
12	Z-5580-01	Weldment, Front Truck	1
13	G-1301-02	Pin, Cotter	2
14	R-2096	Pin, Towbar	1
15	G-1203-1115	Elastic, Jamnut 3/4 - 16	4
16	G-1250-1110N	Flatwasher, 3/4 narrow	4

Parts List

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

Item	Part Number	Description	Qty
17	U-1041	Wheel, Pneumatic	4
18	G-1100-109522	Bolt, Hex Head Grade 5, ½ - 20 x 2-1/4" long	1
19	H-2019-76	Bearing, Flange	2
20	G-1301-03	Pin, Cotter	1
21	H-1427-02	Reflector, Amber	4
22	G-1352-17	Rivet, Pop	16
23	S-1866-01	Shelf, 4-bottle cart	1
24	G-1489	Washer, Finish	4
25	G-1158-106106	Screw, Machine, ¼ - 20 x ¾" long	4
26	TR-1813	Spacer, Wheel	2
27	H-1427-01	Reflector, Red	4



APPENDIX I

Declaration of Conformity



DECLARATION of CONFORMITY

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

12-3104-0000

Relevant provisions complied with by the machinery:
2006/42/EC

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

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

A handwritten signature in cursive script that reads "Patrick Finch". The signature is written in black ink and is positioned above a horizontal line.

Quality Assurance Representative