

**Model: 13-6622-0000  
RAT Protection Cage**

09/2021 – Rev. 02

REVISION  
01  
02

DATE  
08/2015  
09/2021

TEXT AFFECTED  
Original release  
Updated Parts List

**TABLE OF CONTENTS**

	<b><u>PAGE</u></b>
<b>1.0 PRODUCT INFORMATION .....</b>	<b>4</b>
1.1 DESCRIPTION.....	4
1.2 MODEL & SERIAL NUMBER.....	4
1.3 MANUFACTURER.....	4
1.4 FUNCTION.....	4
<b>2.0 SAFETY INFORMATION.....</b>	<b>4</b>
2.1 USAGE AND SAFETY INFORMATION.....	4
2.2 COMPONENT SAFETY FEATURES.....	4
2.3 FUNCTIONAL SAFETY FEATURES.....	4
<b>3.0 TRAINING.....</b>	<b>4</b>
3.1 TRAINING REQUIREMENTS.....	4
3.2 TRAINING PROGRAM.....	4
3.3 OPERATOR TRAINING.....	4
<b>4.0 OPERATION.....</b>	<b>5</b>
4.1 NUMERICAL VALUES.....	5
4.2 START UP PROCEDURES.....	5
<b>5.0 PACKAGING AND STORAGE.....</b>	<b>5</b>
<b>6.0 PROVISION OF SPARES.....</b>	<b>5</b>
6.1 SOURCE OF SPARE PARTS.....	5
6.2 RECOMMENDED SPARE PARTS LISTS.....	5
<b>7.0 IN SERVICE SUPPORT.....</b>	<b>5</b>
<b>8.0 GUARANTEES/LIMITATION OF LIABILITY.....</b>	<b>5</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

Ram Air Turbine (RAT) protection cage

### 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 FUNCTION

The RAT protection cage is assembled around the RAT to provide personal protection at a safe distance during test procedures.

## 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.

### 2.2 COMPONENT SAFETY FEATURES

- Caster locks

### 2.3 FUNCTIONAL SAFETY FEATURES

- Ball-loc pins for panel storage
- Carabineers to secure chain

## 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 NUMERICAL VALUES

Length: 83 ¼ in (211.5 cm)  
Width: 94 in (239 cm)  
Height: 46 ¼ in (117.5 cm)  
Weight: 327 lbs (148 kg)

### 4.2 START UP PROCEDURES

- Position side frames (casters) to left and right of aircraft RAT
- Space each approximately 46 in (116.84 cm) away
- Remove front and rear panels (from storage position) from side frames and latch into side frames
- Square up cage for even distance around rat and set locks on casters
- Adjust chain to take weight off GTT hoses

## 5.0 PACKAGING AND STORAGE

Front and rear panels can be stored on the side frames and secured with ball-locks

## 6.0 PROVISION OF SPARES

### 6.1 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

### 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:

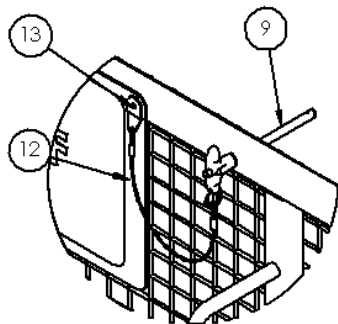
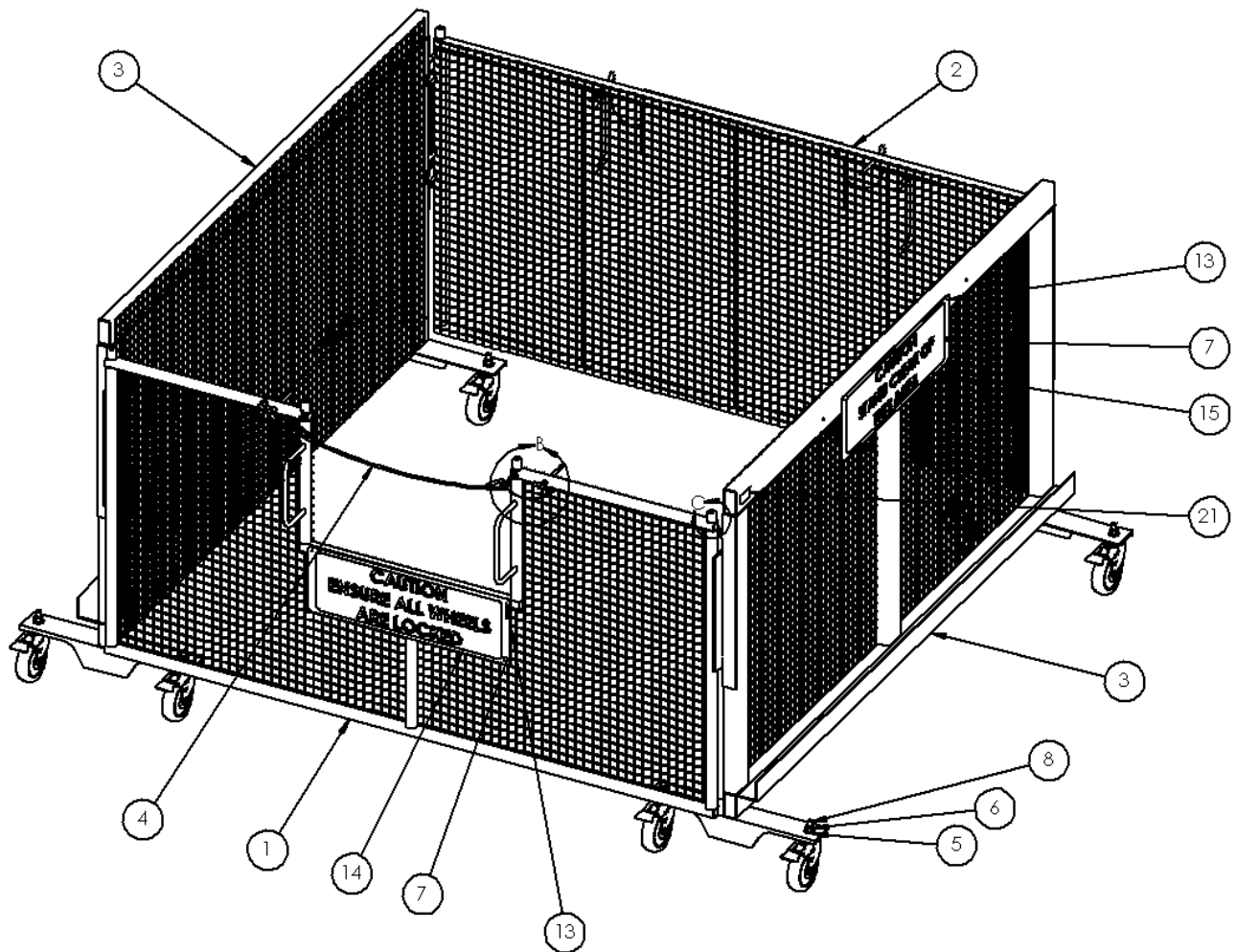
- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

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.

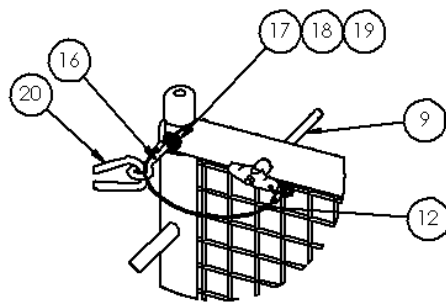
The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins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

**Parts List**

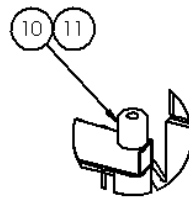
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



DETAIL A  
REAR PANEL, 2 PLCS  
SCALE 1 : 4



DETAIL B  
FRONT PANEL, 2 PLCS  
SCALE 1 : 4



DETAIL C, 6 PLCS  
SCALE 1 : 4

### Parts List

Item	Part Number	Description	Qty
1	Z-8784-01	Weldment, Rear Frame	1
2	Z-8782-01	Weldment, Front Frame	1
3	Z-8761-01	Weldment, Side Frame	2
4	H-2241-10-36.00	Chain, Welded	1
5	G-1250-1090N	Flatwasher, ½ Narrow	8
6	G-1202-1090	Stopnut, ½ - 13 Elastic	8
7	S-2805-01	Panel, Label	4
8	H-3861	Caster, Swivel w/Total Lock	4
9	G-1310-0535	Pin, Ball Lok-T, 5/16 x 3.5	4
10	H-1547-13	Bumper, Rubber	6
11	G-1159-101010	Screw, Round Head Cross Recess, #6 – 32 x 1 Long	6
12	H-1026-07.0	Lanyard	4
13	G-1352-19	Rivet, Open End 5/32	8
14	V-2617	Label, Wheels Locked	1
15	V-2618	Label, Stand Clear	3
16	G-1680	Eyebolt, ¼ - 20 x 3 Long	2
17	G-1250-1050N	Flatwasher, ¼ Narrow	4
18	G-1207-1050	Nut, Hex Jam ¼ - 20	2
19	G-1202-1050	Stopnut, Elastic ¼ - 20	2
20	H-3688-02	Connector, Carabineer	2
21	V-2059	Label, Serial Number	1