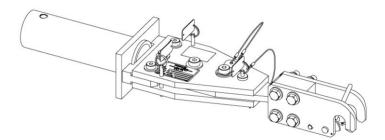


**OPERATION & SERVICE MANUAL** 



Models: 01-0622-0000 Multi-Head Embraer Legacy 450/500

CE

10/2022 - Rev. 04

For Spare Parts, Operations & Service Manuals or Service Needs Scan the QR code or visit Tronair.com/aftermarket



REVISION	DATE	Г
01	12/2015	C
02	01/2018	Ν
03	05/2022	Ν
04	10/2022	Ν

TEXT AFFECTED Original release Modified Parts List Modified Parts List Modified Parts List



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Tronair towbars/heads must only be used with matching Tronair heads/towbars, and Tronair shear pins.

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 PRODUCT INFORMATION

### 1.1 DESCRIPTION

The Tronair Model 01-0622-0000 is a towbar head attachment for the Embraer Legacy 400/500 Aircraft.

The towbar head attachments uses machined tow hooks to interface with the aircraft tow point.

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

Aircraft Application(s)	Embraer Legacy 450/500 Aircraft
Aircraft Gross Weight (Maximum)	38,095 lbs (17.3 metric tons)
Dimensions	
Width	6 ¼ in (15.9 cm)
Length	29 5/32 in (74.1 cm) overall
Height	4 9/32 in (10.9 cm)
Weight	23 lbs (10.5 kg)
Finish	Blue Powder Coat

## 2.0 SAFETY INFORMATION

## 2.1 USAGE AND SAFETY INFORMATION

The Tronair Model 01-0622-0000 towbar head attachment is used for towing the Embraer Legacy 450/500 Aircraft only.

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.



## WARNING!

A damaged or bent towbar should not be used. Towbar should be repaired or replaced.

## WARNING!

Tronair recommends the use of a towbar with a category 1 or category 2 tug and aircraft not exceeding 75,000 lbs gross weight. Using the towbar with aircraft weighing in excess of this specific limitation may result in excessive loads and stresses being applied to the towbar and/or the aircraft. These excessive loads may cause failure of the towbar which could cause damage (INCLUDING WITHOUT LIMITATION to the aircraft) and/or personal injury OR DEATH. *TRONAIR MAKES NO REPRESENTATION, WARRANTY OR GUARANTEE AS TO SUCH MISUSE AND DISCLAIMS ANY AND ALL LIABILITY FOR INJURY, LOSS OR DAMAGE ARISING FROM OR RELATING TO SUCH MISUSE.* 



#### 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 towbar.

#### 3.2 TRAINING PROGRAM

The employer-provided operator training program should cover safety procedures concerning use of the towbar in and around the aircraft at the servicing location.

#### **OPERATOR TRAINING** 3.3

The operator training should provide the required training for safe operation of towbar.

## NOTE: Maintenance and Trouble Shooting are to be performed by the skilled and trained technician.

#### 4.0 **OPERATION**

#### 4.1 TOWBAR CHECKLIST

- Inspect for weld cracks. If found remove the towbar multi-head from service and contact Tronair for repair.
- Inspect weldment members for bending. If found remove the towbar multi-head from service and contact Tronair for repair.
- Inspect the shear plates for bending. If found remove the towbar multi-head from service and contact Tronair for repair.
- Inspect the axle adaptors for bending and excessive wear. If found remove the towbar multi-head from service and contact Tronair for replacement.
- Check the axle adaptor mounting bolts. Ensure they are tight and not missing. Tighten or replace as required.
- Check the axle locking mechanism. Ensure that it springs back to positively hold the axle adaptors on the aircraft towing hook-up. If it does not, contact Tronair for repair or replacement.
- Check the shoulder bolt connections through the shear plates. Verify they are not clamping the shear plates together. There should not be any clamping force applied to the shear plates so the assembly functions properly. If required, back the stopnut off to remove any clamping force applied.
- Inspect the shear pin. If the shear pin is bent, broken, or missing contact Tronair for replacement. Tronair recommends purchasing spare shear pins for rapid replacement, use only Tronair specified shear pins.
- Inspect the shear pin bushings. If the shear pin bushings are cracked or chipped, contact Tronair for replacement, use only Tronair specified shear pin bushings.
- Inspect all steel components for signs of rust. Touch up with paint as required.

Fax:

E-mail:

Website:

#### 5.0 **PROVISION OF SPARES**

#### 5.1 SOURCE OF SPARE PARTS

Spare parts may be obtained from the manufacturer: TRONAIR, Inc. 1 Air Cargo Pkwy East

Telephone: (419) 866-6301 or 800-426-6301 (419) 867-0634 sales@tronair.com www.tronair.com

For Spare Parts, Operations & Service Manuals or Service Needs: Scan the QR code or visit Tronair.com/aftermarket

#### 5.2 **RECOMMENDED SPARE PARTS LISTS**

Swanton, Ohio 43558 USA

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





## 6.0 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.

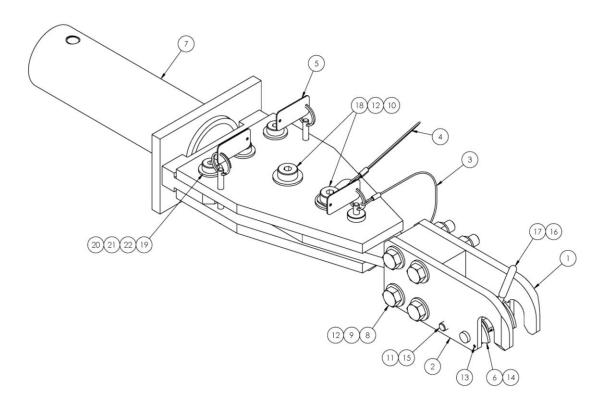
## 7.0 APPENDICES

APPENDIX I Declaration of Conformity



## Parts List

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



ltem	Part Number	Description	Qty
1	J-8213	ADAPTOR, AXLE	1
2	J-8214	ADAPTOR, AXLE	1
3	H-3178-12.0	ASSEMBLY, LANYARD	1
4	H-3221-07.0	ASSEMBLY, LANYARD	1
5	Z-8972	ASSEMBLY, SHEAR PIN	3
6	Z-8201	WELDMENT, AXLE LOCKING	1
7	Z-8969-00	MACHINING, SHEAR PLATE (P)	1
8	G-1100-109032	BOLT, 1/2-13 X 3-1/2" HEX HD GR 5	4
9	G-1250-1090N	FLATWASHER, 1/2 NARROW	8
10	G-1250-1100N	FLATWASHER, 5/8 NARROW	5
11	G-1250-1070W	FLATWASHER, 3/8 WIDE	1
12	G-1202-1090	STOPNUT, 1/2-13 ELASTIC	6
13	G-1300-13040	PIN, 1/8" X 1/2" LG ROLL	2
14	G-1300-13060	PIN, 1/8" X 3/4" LG ROLL	1
15	G-1154-107206	SCREW, 3/8-16 X 3/4" LG. SOCKET BUTT HD CAP	1
16	G-1300-25400	PIN, 1/4" X 4.0" LG ROLL	1
17	H-1205	COVER, RED HANDLE	1
18	G-1155-109216	SCREW, 5/8 X 1-3/4" LG SOCKET HD SHOULDER	2
19	G-1250-1070N	FLATWASHER, 3/8 NARROW	3
20	G-1250-1090N	FLATWASHER, 1/2 NARROW	3
21	G-1155-107214	SCREW, 1/2 X 1-1/2" LG SOCKET HD SHOULDER	3
22	G-1202-1070	STOPNUT, 3/8-16 ELASTIC	3



## **APPENDIX I**

**Declaration of Conformity** 



## **EU Declaration of Conformity**

Model Number(s)	01-0622-0000			
woder warnber(5)	01-0622-0000			
Product Type/Name:	Multi Head			
Serial Number(s):	Enter serial number(s)			
Declaration:	Tronair has assessed the equipment described above against the Essential Health and Safety Requirements of one or more Directives. Based on this assessment, the equipment described above is deemed to comply with the directive(s) listed below.			
	This declaration of conformity is issued under the sole responsibility of the manufacturer.			
Directives:	European Machinery Directive 2006/42/EC			
Standards:	EN ISO 12100-1:2011 Safety of machinery – Basic condepts			
Markings:	ε			
The technical documentation for the machinery is available from:				
	Mr. Joel Nunn 34 Epirus Road, SW6 7UH, London, UK Email: <u>jnunn@tronair.com</u>			
Location of Issue:	Tronair, 1 Air Cargo Parkway East, Swanton, OH 43558			
Certificate:	EU_DoC_01-0622-0000			

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

atuck funch

Quality Assurance Representative

Enter a date

Date

# **TRONAR®** Maintenance Schedule

## Standard Clamp Style Attachment Heads



### www.tronair.com

Tronair • Email: sales@tronair.com • Phone: 419-866-6301 or 800-426-6301 • Fax: 419-867-0634 Asia Sales Offices: China - Email: tronairchina@tronair.com • Phone: 86-592-5560735 • Fax: 86-592-5563132 Asia/Australia - Email: tronairasia@tronair.com • Phone: 66-2665-6511 • Fax: 66-2204-1858 Europe, Middle East & Africa Sales Office • Email: saleseurope@tronair.com • Phone: 44-0-113-245-3300 • Fax: 44-0-113-322-0436