

Model: 01-1122-0010
Universal Snap-Bak Towbar



12/2022 – Rev. 03

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



REVISION
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12/2022

TEXT AFFECTED
Major revision

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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., 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

Patented snap-back feature allows towbar to flex when safe turning radius is exceeded.

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

Capacity 7,500 lbs (3,402 kg)
Length 92 in (234 cm) From eyebolt centerline to aircraft attachment centerline
Weight 28 lbs (13 kg)
Material Steel

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.



WARNING!

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

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

Your Tronair towbar is engineered and built to the highest standards of quality and workmanship. Under normal usage and with minimal maintenance this towbar will provide exceptional service.



WARNING! A damaged or bent towbar should not be used, but should be repaired or replaced.

Using a damaged or bent towbar can result in aircraft or equipment damage and possible personal injury.



WARNING! Towbars With Hydraulic Lifting Mechanism:

The hydraulic lift mechanism (on those towbars so equipped) should only be used to raise the towbar to facilitate connection to the aircraft or tug.

Release any hydraulic pressure when towing aircraft or moving towbar.

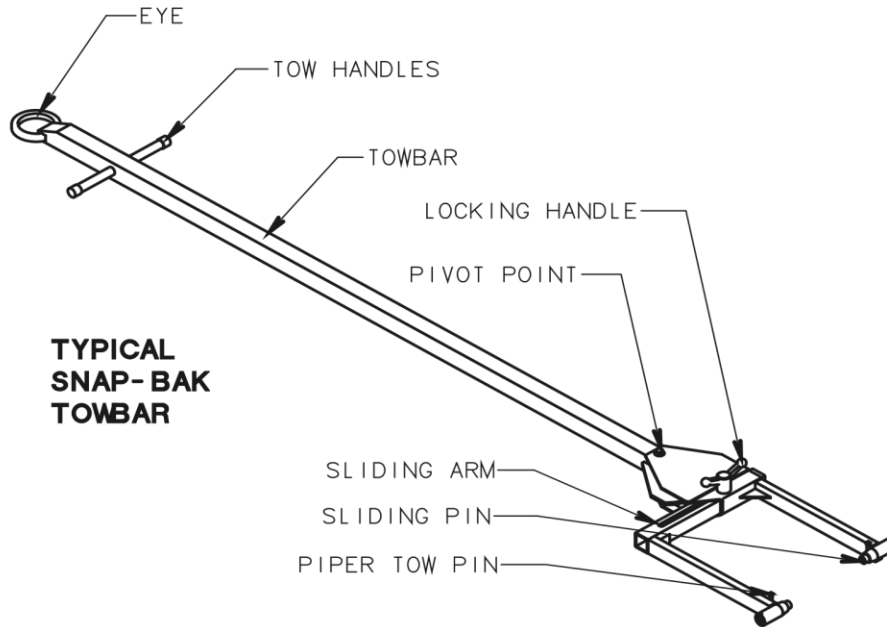


WARNING! Towbars Should be Used with Category 1 Tugs:

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.*

BEFORE USING TOWBAR, COMPLETE THE FOLLOWING CHECKLISTS:

Reference Figure



Area of Towbar	Check
Towbar	<ol style="list-style-type: none"> 1. Spring (Has it taken a set? Loose in the assembly?) 2. Eyebolt (Is it bent, worn down, or deformed?) 3. Tube (Is it bent, dented, bowed, or cracked? Is it rusted badly?) 4. Welds (Are there any cracks in the welds?) 5. Head Hole (Is it elongated? Is the bolt attached correctly?)
Function	Does it snap back?
Head	<ol style="list-style-type: none"> 1. Pivot Bolt (Is it present along with washers? Is the nut tight? Is it rusted?) 2. Roll Pin(s) (Are they rusted? Are they missing? Are they loose?) 3. Weldment (Is it deformed, bent, or rusted beyond reasonable use?) 4. Lanyard (Is it attached to weldment?) 5. Sliding Pin(s) (Are they bent, cracked or rusted? Does it slide?)

4.1 USAGE PROCEDURE

Aircraft Attachment:

It is recommended that your towbar be attached to the aircraft first, and then connected to the tug to avoid possible aircraft damage.

Ensure sliding pins are locked in place before towing aircraft.

Tug Attachment:

Damage to the towbar or aircraft can result from an excessive towbar angle during towing operations (Reference to *Figure 3*). If aircraft with both high and low tow points are encountered, consider using two pintle hooks, as shown in *Figures 4 & 5*, so that the towbar is as level as possible during towing. Also pintle hook height should prevent contact of towbar wheels with the ground, during towing. (Reference *Figure 5*).

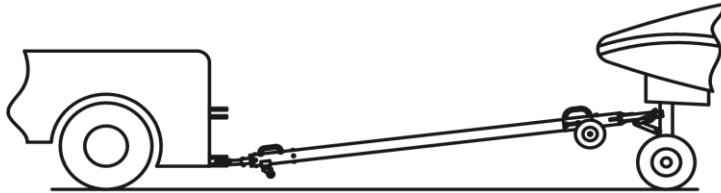


FIGURE 3 - INCORRECT

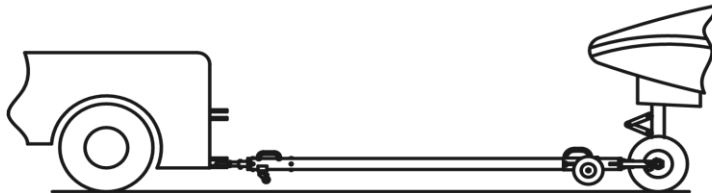


FIGURE 4 - CORRECT

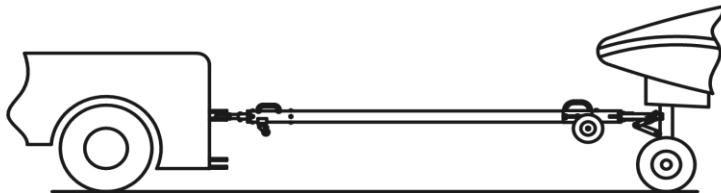


FIGURE 5 - CORRECT

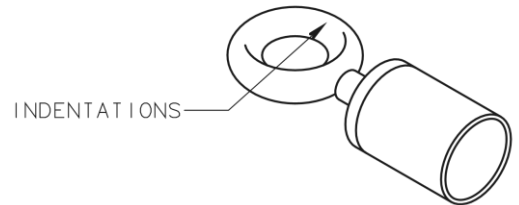
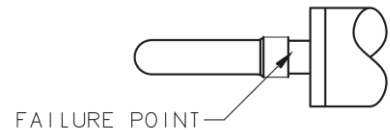
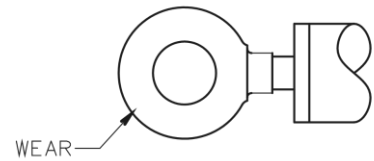


FIGURE 6

Type Of Coupler:

Damage to the towbar or aircraft can result while towing with the following type of couplers:

- Lift Head
- Standard Duty Latch
- Vertical Side Swing Latch
- Swivel Hook

These types of couplers are known to cause binding and failure in the eyebolt. Indicators of eyebolt binding are wear on the outside diameter of the eye and indentations on the inside diameter. The failure will begin at the head of the eye. See *Figure 6*.

4.1 USAGE PROCEDURE (continued)

Figure 7 illustrates a pintle hook arrangement that is known to eliminate eyebolt binding. Tronair recommends using this type of hook on your tug.

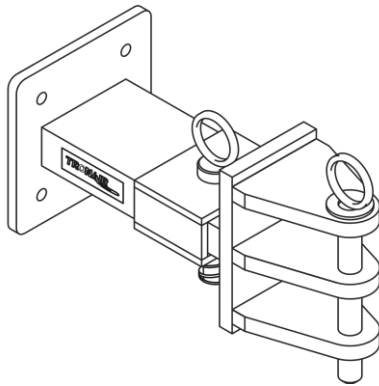


FIGURE 7

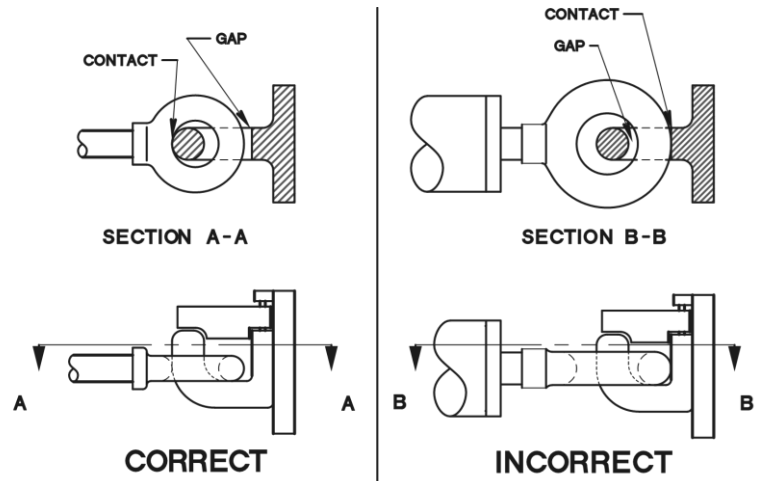


FIGURE 8

Eyebolt and Pintle Pin Size:

Damage to the towbar or aircraft can result by towing or pushing an aircraft with an incorrect size eyebolt or pintle pin. A correct size eyebolt will make contact with the pintle pin. A gap between the eyebolt outside diameter and the coupler face plate should be easily seen. An eyebolt which is too large will cause the eyebolt to make contact with the face plate of the coupler. When the eyebolt is too large for the coupler, a gap between the inside diameter of the eyebolt and the coupler face plate will be seen. See **Figure 8**.

To ensure proper towing and pushing, check to make sure that the pintle pin diameter is not too large for the eyebolt's inside diameter. Approximately a one-half inch (1/2") gap between the pin diameter and the eyebolt should be seen. If any of these conditions are not met, please contact Tronair for information to obtain a new coupler.

Towing Angle:

Damage to the towbar or aircraft can result from pushing an aircraft while maintaining too sharp of an angle between the tug and the towbar. Contact between the towbar weldment and tug must be avoided. It is recommended that the angle between the tug and towbar not exceed 90°. See **Figure 9**.

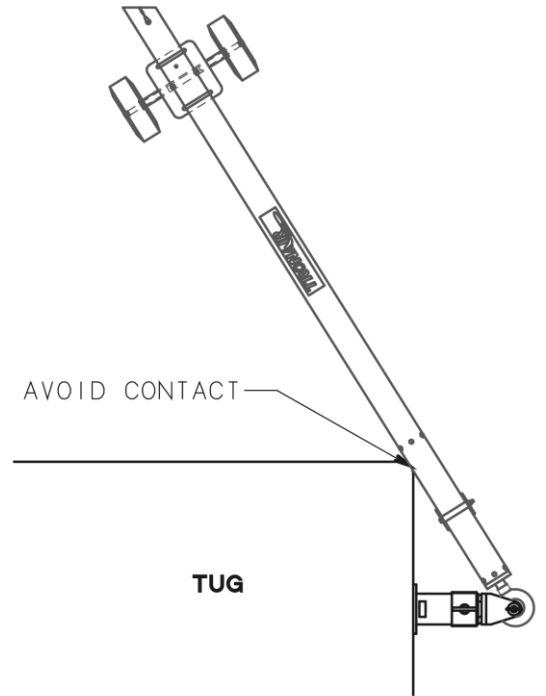


FIGURE 9

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
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



For Spare Parts, Operations & Service Manuals or Service Needs:

Scan the QR code or visit Tronair.com/aftermarket

5.2 RECOMMENDED SPARE PARTS LISTS

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

PART NUMBER	DESCRIPTION
K-3147	KIT, PIVOT BOLT
K-1279	KIT, REPL. SLIDING PIN
K-1492	KIT, REPL. HANDLE

5.0 IN SERVICE SUPPORT

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

5.0 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.

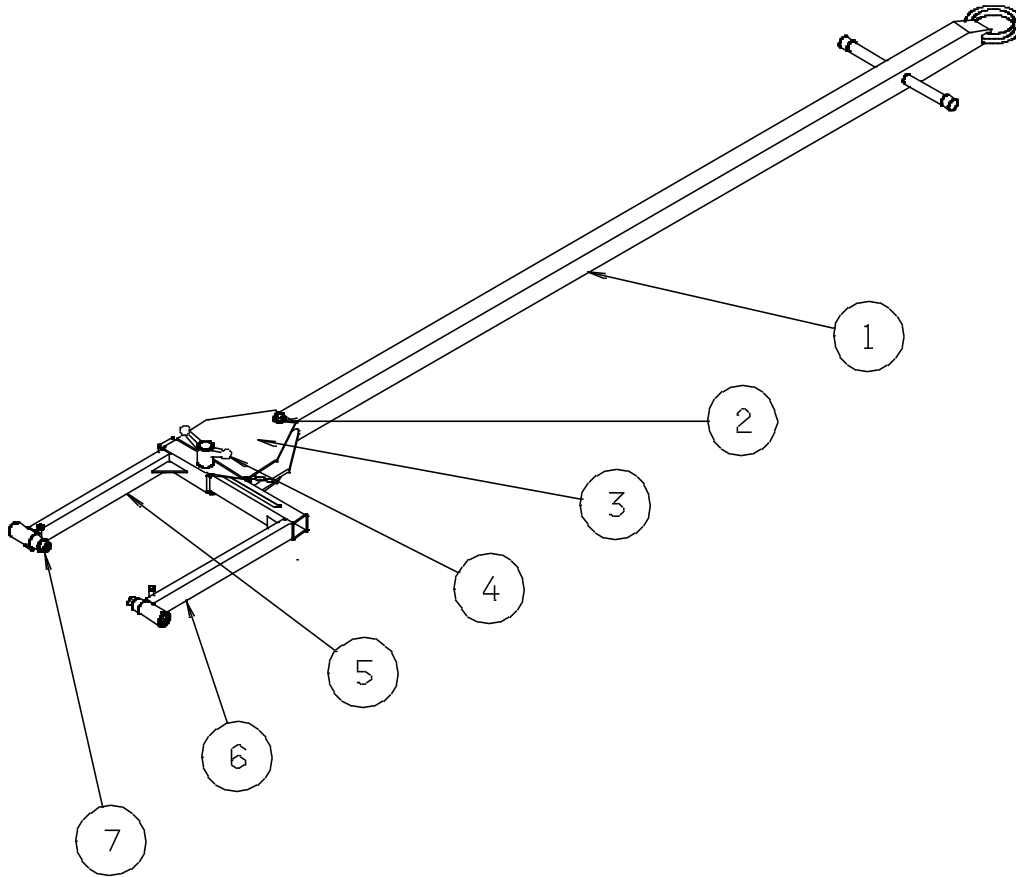
The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins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

5.0 APPENDICIES

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	Y-1002-01	ASSEMBLY, TOWBAR	1
3	H-1231	SPRING	1
2	K-3147	KIT, PIVOT BOLT REPLACEMENT; consists of:	
	G-1155-106222	SCREW, HEX SOCKET HEAD SHOULDER, 5/16-18, 3/8 DIAMETER X 2-1/4 LG	1
	G-1250-1060N	FLATWASHER, 5/16 NARROW	1
	G-1202-1060	STOPNUT, 3/8-24 ELASTIC	1
	TR-1672-01	SLEEVE	1
4	K-1492	KIT, HANDLE REPLACEMENT; consists of F:	
	G-1250-1070N	FLATWASHER, 3/8 NARROW	1
	Z-2418	ASSEMBLY, HANDLE	1
	J-1713	PLATE, LOCKING	1
	G-1203-1070	JAMNUT, 3/8-16 ELASTIC	1
5	K-1494	KIT, HEAD ASSEMBLY REPLACEMENT; consists of:	
	X-1029	ASSEMBLY, HEAD	1
	G-1155-106222	SCREW, HEX SOCKET HEAD SHOULDER, 5/16-18, 3/8 DIAMETER X 2-1/4 LG	1
	G-1250-1060N	FLATWASHER, 5/16 NARROW	1
	G-1202-1060	STOPNUT, 3/8-24 ELASTIC	1
	TR-1672-01	SLEEVE	1
6	K-1493	KIT, SLIDING ARM REPLACEMENT; consists of:	
	G-1250-1070N	FLATWASHER, 3/8 NARROW	1
	J-1713	PLATE, LOCKING	1
	G-1203-1070	JAMNUT, 3/8-16 ELASTIC	1
	Z-1911-01	WELDMENT, SLIDING ARM	1
	G-1255-09	WASHER, 1/2 AN	2
	B-337	SPRING	1
	B-285	PIN, SLIDING	1
	G-1300-13110	PIN, ROLL, 1/8" DIAMETER X 1-1/8" LONG	1
7	K-1279	KIT, SLIDING PIN REPLACEMENT; consists of F:	
	B-285	PIN, SLIDING	2
	B-337	SPRING	2
	G-1255-09	WASHER, 1/2 AN	4
	G-1300-13110	PIN, ROLL, 1/8" DIAMETER X 1-1/8" LONG	2



APPENDIX I

Declaration of Conformity

Model Number(s) 01-1122-0010

Product Type/Name: Snap-Bak Towbar


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 12100:2011 Safety of machinery – General principles for design – Risk assessment and risk reduction

Markings: 

The technical documentation for the machinery is available from:

Mr. Joel Nunn
34 Epirus Road, SW6 7UH, London, UK
Email: jnunn@tronair.com

Location of Issue: Tronair, 1 Air Cargo Parkway East, Swanton, OH 43558

Certificate: EU_DoC_01-1122-0010

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


Quality Assurance Representative

Enter a date
Date