

**Model: 01-1210-0010
Custom Towbar
Eurocopter
SA-366G-1, HH-65A Dolphin**



03/2023 - Rev. 04

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



REVISION	DATE	TEXT AFFECTED
02	08/2004	Modified Parts List
03	10/2007	Modified Parts List, Added CE Marking
04	03/2023	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

The Tronair Model 01-1210-0010 Custom Towbar is designed for towing the Eurocopter SA-366-G1 and HH-65A Dolphin Aircraft manufactured by Eurocopter.

The custom towbar includes pivoting aircraft attachment arms for remote interface to the aircraft tow point. There is a handle and an eyebolt at the end of the towbar for towing. The eyebolt incorporates a compression spring to dampen shock loads during towing.

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 Applications.....Eurocopter SA-366-G1 and HH-65A Dolphin manufactured by Eurocopter
Maximum Aircraft Gross Weight.....9,370 lbs (4.25 Metric tons)
Length171.94 in (437 cm) From eyebolt centerline to aircraft attachment centerline
Width22.88 in (58.1 cm)
Height25.82 in (65.6 cm)
Weight94 lbs (42.6 kg)

2.0 SAFETY INFORMATION

2.1 GENERAL

The Tronair Model 01-1210-0010 Custom Towbar is used for moving the Eurocopter SA-366-G1 and HH-65A Dolphin Aircraft only.

To ensure safe operation, please read the following statements and understand their meaning. This manual contains safety precautions which are explained as follows. 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 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.

3.3 OPERATOR TRAINING

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

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

4.0 OPERATION

4.1 PRELIMINARY CHECKLIST

4.1.1 Towbar

- Check lunette eye for wear or deformation.
- Check shock mounting bolts. Ensure shock mounting bolts are not loose or missing.
- Check remote linkage lever assembly. Ensure assembly operates freely.
- Check remote linkage latch mechanism. Ensure mechanism latches on the remote linkage lever.

4.1.2 Towing Head

- Check welds between head rail and head plate for cracks.
- Check fastener connection of towing head to towbar. Ensure the connection is not loose or missing.
- Check side arm pivots. Ensure pivot fasteners are not loose or missing. Ensure side arms pivot freely.
- Check weld between side rails and aircraft attachment pins for cracks.

4.2 USAGE PROCEDURE

4.2.1 Aircraft Attachment

CAUTION!



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

- Ensure the slide block is locked in place using the detent ball plungers.

4.2.2 Tug Attachment

CAUTION!



Damage to the towbar or aircraft can result from an excessive towbar angle during towing operations. Reference Figure 1.

- Use a pintle height so that the towbar is as level as possible during towing. Also, the pintle hook height should prevent contact of the towbar with the ground during towing.

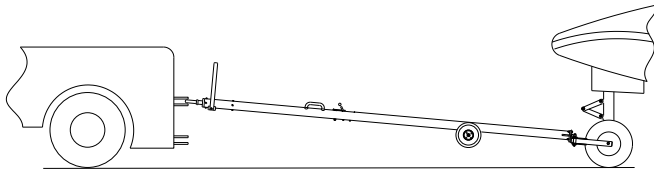


FIGURE 1 – Incorrect

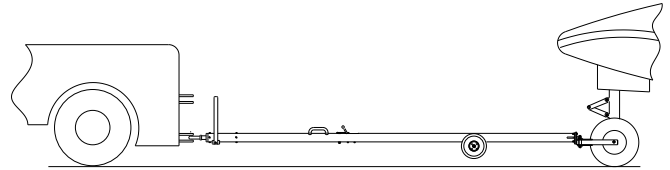


FIGURE 2 – Correct

4.2.3 Couplers



CAUTION!

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

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

The couplers listed above are known to cause binding and failure in the lunette eye. Indicators of binding are wear on outside diameter of the eyebolt and indentation on the inside diameter of the eyebolt. **Reference Figure 3.**

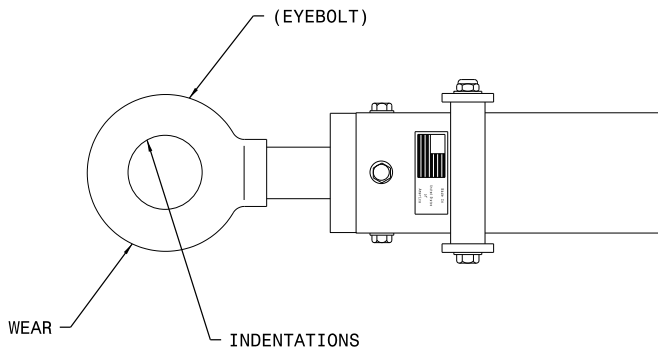
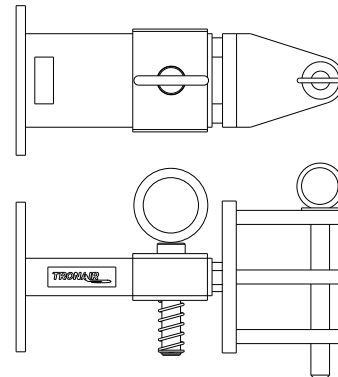


FIGURE 3



**FIGURE 4 - 01-1950-5000
Standard Telecoupler**

Tronair recommends a telecoupler pintle hook arrangement. This arrangement is known to eliminate binding. Tronair offers a Standard Telecoupler, Model Number 01-1950-5000, for use on tugs. **Reference Figure 4.**

Damage to the towbar and/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. **Reference Figure 5.**

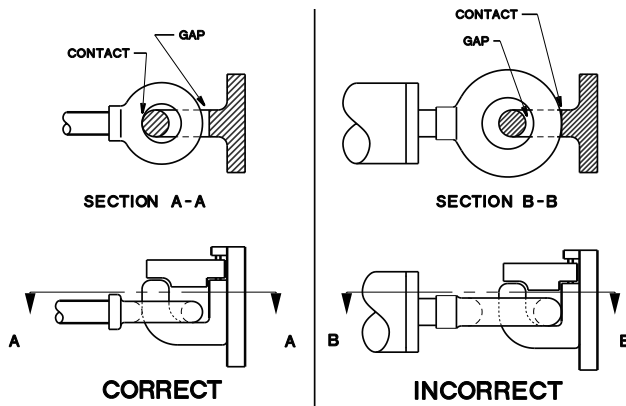


FIGURE 5

To ensure proper towing and pushing, check to make sure the pintle pin diameter is not too long for the eyebolt's inside diameter. An approximate 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.

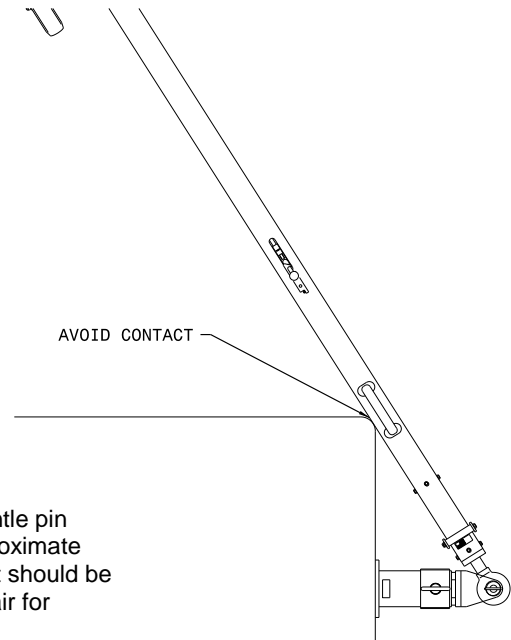


FIGURE 6

4.2.4 Towing Operation

Damage to the towbar or aircraft can result from pushing an aircraft while maintaining too sharp of an angle between the tug and the aircraft. Contact between the towbar weldment and the tug must be avoided. It is recommended that the angle between the tug and towbar not exceed 90°. **Reference Figure 6.**

5.0 PROVISION OF SPARES

5.1 SOURCE OF SPARE PARTS

Spare parts may be obtained from the manufacturer:

TRONAIR , Inc.	Telephone: (419) 866-6301 or 800-426-6301
1 Air Cargo Pkwy East	Fax: (419) 867-0634
Swanton, Ohio 43558 USA	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.

Recommended Spares to be kept on hand:

- K-1143.....Kit, Wheel Replacement
- K-1565.....Kit, Safety Catch Replacement
- K-1788.....Kit, Toggle Linkage Replacement

6.0 IN-SERVICE SUPPORT

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

7.0 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:

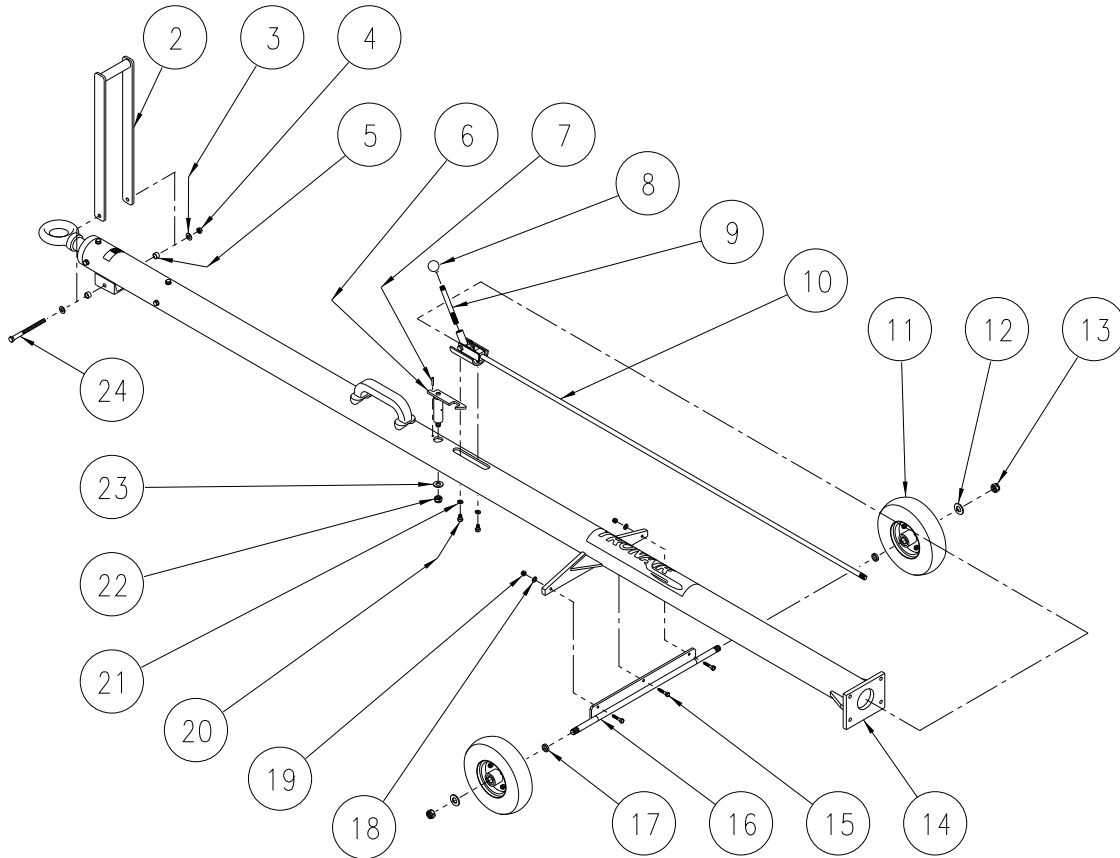
- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

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

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



Item	Part Number	Description	Qty
2	Z-1390-01	Weldment, Handle	1
3	G-1250-1070N	Flatwasher, 3/8 Narrow	2
4	G-1203-1075	Jamnut, 3/8-24 Elastic	1
5	TR378-03*000.38	Spacer	2
6	Z-1393	Assembly, Safety Catch	1
7	G-1300-16100	Pin, 5/32" diameter x 1" long Roll	1
8	H-1141	Handle, Ball	1
9	R-1025	Handle	1
10	Z-1180-05	Assembly, Toggle Linkage	1
11	U-1021	Wheel	1
12	G-1250-1100N	Flatwasher, 5/8 Narrow	2
13	G-1203-1105	Jamnut, 5/8-18 Elastic	2
14	Z-2076-1210-A1	Weldment, Towbar - Not Sold Separately	REF
15	G-1100-105512	Bolt, Hex Head, Grade 5, 1/4-28 x 1 1/4" long	3
16	Z-1443-01	Weldment, Axle Mounting Bracket	1
17	TR-1583	Spacer, Wheel	2
18	G-1250-1050N	Flatwasher, 1/4 Narrow	3
19	G-1202-1055	Stopnut, 1/4-28 Elastic	3
20	G-1100-106504	Bolt, Hex Head, Grade 5, 5/16-24 x 1/2" long	2
21	G-1251-1060R	Lockwasher, 5/16 Regular	2

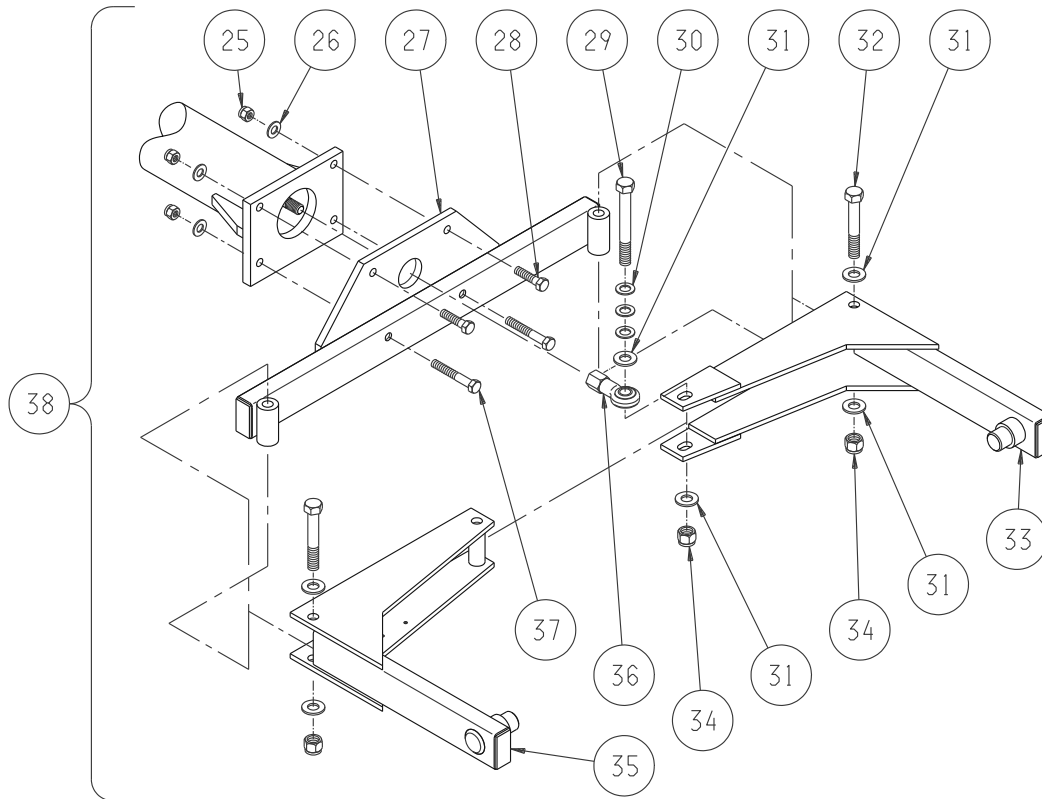
Parts List

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

Item	Part Number	Description	Qty
22	G-1203-1095	Jamnut, 1/2-20 Elastic	1
23	G-1250-1090N	Flatwasher, 1/2 Narrow	1
24	G-1100-107550	Bolt, Hex Head, Grade 5, 3/8-24 x 5" long	1
	K-1143	Kit, Wheel Replacement; consists of:	
11	U-1021	Wheel	1
12	G-1250-1100N	Flatwasher, 5/8 Narrow	2
13	G-1203-1105	Jamnut, 5/8-18 Elastic	2
	K-1565	Kit, Safety Catch Replacement; consists of:	
6	Z-1393	Assembly, Safety Catch	1
7	G-1300-16100	Pin, 5/32" diameter x 1" long Roll	1
22	G-1203-1095	Jamnut, 1/2-20 Elastic	1
23	G-1250-1090N	Flatwasher, 1/2 Narrow	1
	K-1603	Kit, Handle Replacement; consists of:	
2	Z-1390-01	Weldment, Handle	1
3	G-1250-1070N	Flatwasher, 3/8 Narrow	2
4	G-1203-1075	Jamnut, 3/8-24 Elastic	1
5	TR378-03*000.38	Spacer	2
24	G-1100-107550	Bolt, Hex Head, Grade 5, 3/8-24 x 5" long	1
	K-1788	Kit, Toggle Linkage Replacement; consists of:	
8	H-1141	Handle, Ball	1
9	R-1025	Handle	1
10	Z-1180-05	Assembly, Toggle Linkage	1
20	G-1100-106504	Bolt, Hex Head, Grade 5, 5/16-24 x 1/2" long	2
21	G-1251-1060R	Lockwasher, 5/16 Regular	2
	K-2795	Kit, Axle Replacement; consists of:	
12	G-1250-1100N	Flatwasher, 5/8 Narrow	2
13	G-1203-1105	Jamnut, 5/8-18 Elastic	2
15	G-1100-105512	Bolt, Hex Head, Grade 5, 1/4-28 x 1 1/4" long	3
16	Z-1443-01	Weldment, Axle Mounting Bracket	1
17	TR-1583	Spacer, Wheel	2
18	G-1250-1050N	Flatwasher, 1/4 Narrow	3
19	G-1202-1055	Stopnut, 1/4-28 Elastic	3

Parts List

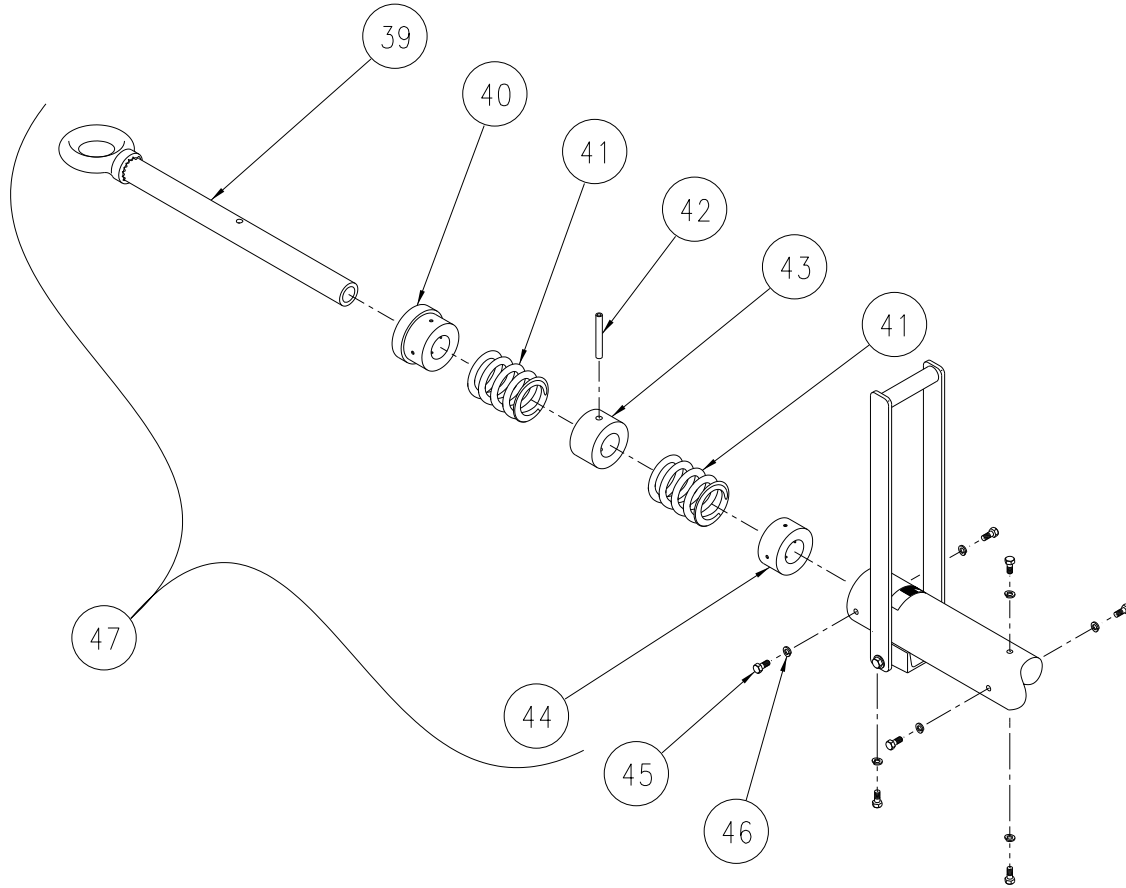
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Item	Part Number	Description	Qty
25	G-1202-1075	Stopnut, 3/8-24 Elastic	4
26	G-1250-1070N	Flatwasher, 3/8 Narrow	4
27	Z-4262-01	Head Rail	1
28	G-1100-107516	Bolt, Hex Head, Grade 5, 3/8-24 x 1-3/4" long	2
29	G-1100-109544	Bolt, Hex Head, Grade 5, 1/2-20 x 4-1/2" long	1
30	G-1255-09	Washer, 1/2 AN	3
31	G-1250-1090N	Flatwasher, 1/2" Narrow	4
32	G-1100-109532	Bolt, Hex Head, Grade 5, 1/2-20 x 3 1/4" long	2
33	Z-5681-01	Arm, Movable (Right)	1
34	G-1203-1095	Jamnut, 1/2-20 Elastic	2
35	Z-5682-01	Arm, Movable (Left)	1
36	H-1140-07	Rod End, Female, 1/2-20	1
37	G-1100-107526	Bolt, Hex Head, Grade 5, 3/8-24 x 2-3/4" long	2
	K-1789	Kit, Head Plate Assembly Replacement; consists of:	
25	G-1202-1075	Stopnut, 3/8-24 Elastic	4
26	G-1250-1070N	Flatwasher, 3/8 Narrow	4
28	G-1100-107516	Bolt, Hex Head, Grade 5, 3/8-24 x 1 3/4" long	2
30	G-1255-09	Washer, 1/2 AN	3
31	G-1250-1090N	Flatwasher, 1/2" Narrow	4
32	G-1100-109532	Bolt, Hex Head, Grade 5, 1/2-20 x 3 1/4" long	2
34	G-1203-1095	Jamnut, 1/2-20 Elastic	2
36	H-1140-07	Rod End, Female, 1/2-20	1
37	G-1100-107526	Bolt, Hex Head, Grade 5, 3/8-24 x 2-3/4" long	2
38	X-1141	Assembly, Head (with Label)	1

Parts List

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Item	Part Number	Description	Qty
39	Z-4613	Machining, Eyebolt	1
40	B-002-01	Sleeve, Outer	1
41	B-013	Spring	2
42	G-1322-05	Pin, 3/8" diameter x 3" long Groove	1
43	B-003-01	Sleeve, Center	1
44	B-001-01	Sleeve, Inner	1
45	G-1420-106006	Bolt, Hex Head, Grade 8, 5/16-18 x 3/4" long	8
46	G-1251-1060R	Lockwasher, 5/16 Regular	8
47	Z-0002	Assembly, Shock	1
	K-1109	Kit, Eyebolt Assembly Replacement; consists of:	
39	Z-4613	Machining, Eyebolt	1
42	G-1322-05	Pin, 3/8" diameter x 3" long Groove	1
45	G-1420-106006	Bolt, Hex Head, Grade 8, 5/16-18 x 3/4" long	8
46	G-1251-1060R	Lockwasher, 5/16 Regular	8



APPENDIX I

Declaration of Conformity



DECLARATION of CONFORMITY

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

Custom Towbar
01-1210-0010

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:

Quality Assurance Representative



