

Model: 01-1221-0006
Sikorsky
Seahawk/Jayhawk
Portable Towbar



04/2023 – Rev. 01

For Spare Parts, Operations & Service Manuals or Service Needs
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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

Four piece portable, multi-head towbar for use on the Sikorsky Seahawk and Jayhawk.

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
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1.4 SPECIFICATIONS

Towing Capacity.....	2,500 lbs (1,134 kg)
Length	290 in (736.6 cm)
Width	33-3/8 in (84.8 cm)
Weight	130 lbs (56 kg)
Finish.....	Tronair Blue Powder Coat

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 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 TOWBAR CHECKLIST

- Check towing eye for bending, excessive wear and/or deformity. Contact Tronair for repair/replacement if towing eye is bent, excessively worn or deformed.
- Check towing eye mounting bolts. Ensure fasteners are not loose or missing. Tighten to 25 ft-lbs or replace as required.
- Ensure that the towing eye does not turn; if the towing eye can turn it indicates that the centering pin within the shock assembly may have been broken and repairs are needed.
- Inspect the towbar tube for cracks, gouges greater than 1/16 inch, and bends or deformities. A damaged or bent towbar should not be used. Contact Tronair for replacement.
- Inspect towing head attachment ball loc pin. Verify that the factory supplied ball loc pin is used; contact Tronair for replacement if required. Do not substitute without Tronair approval.



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.**

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.

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.

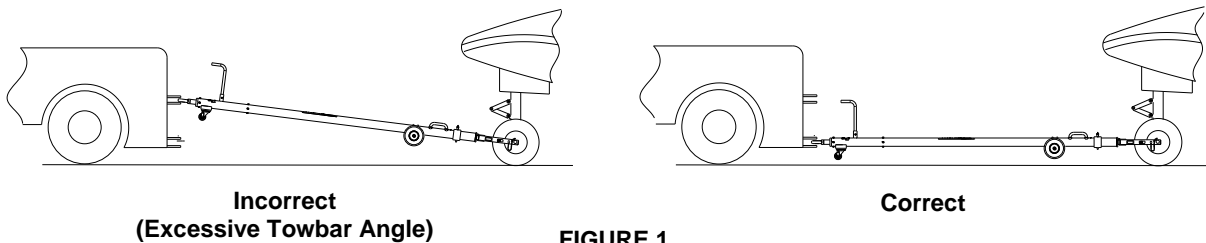


FIGURE 1

4.2.3 Couplers



CAUTION!

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

- Lift Head
- Vertical Side Swing Latch
- Standard Duty 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 2.**

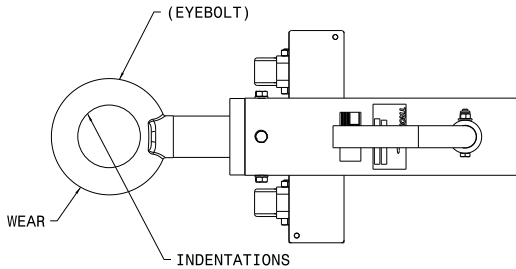


FIGURE 2

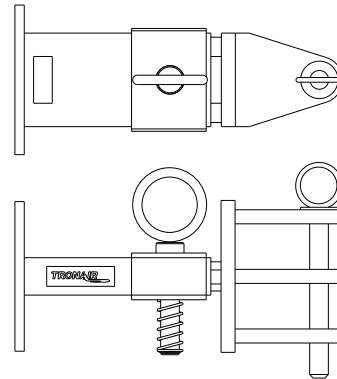


FIGURE 3
01-1950-5000 Standard Telecoupler

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 3.**

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 4.**

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.

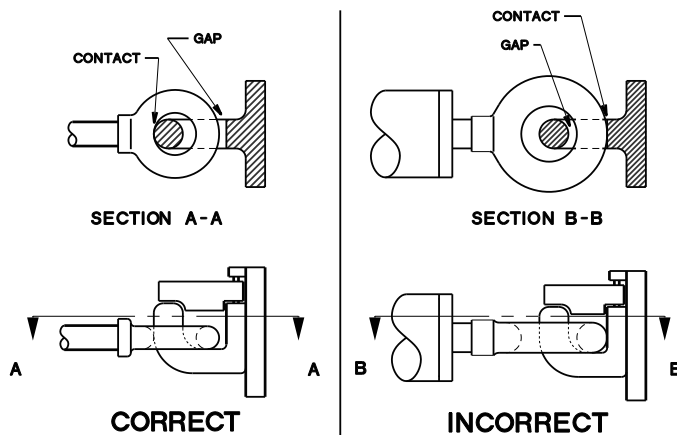


FIGURE 4

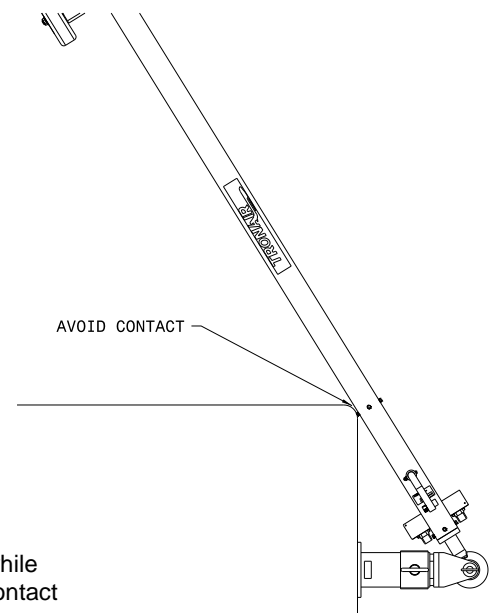


FIGURE 5

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 5.**

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-2296.....Kit, Ball Lok-T Pin Replacement
K-2305.....Kit, Sliding Pin 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:

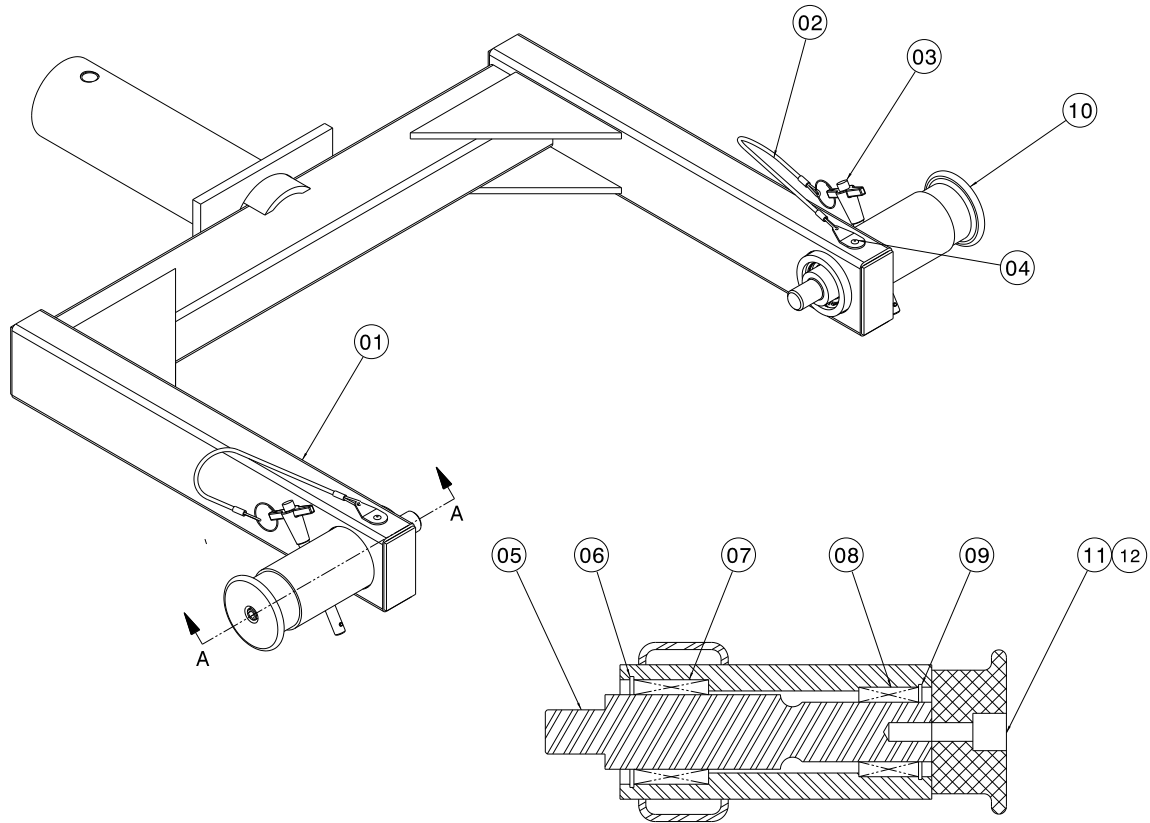
- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

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

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



SECTION A-A

Item	Part Number	Description	Qty
1	Z-2785-01	Weldment, Head	1
2	H-1026*07.0	Assembly, Lanyard	2
3	G-1310-0630	Pin, Ball-Lok , 3/8" x 3" LG	2
4	G-1351-04	Rivet, Pop, 1/8" x 1/4 " Grip	2
5	R-1477	Pin, Sliding	2
6	G-1391-14	Ring, Internal Retaining	2
7	H-1245	Bearing, Roller	2
8	H-1884	Bearing, Roller	2
9	G-1391-13	Ring, Internal Retaining	2
10	B-025	Handle, Locking Pin	2
11	G-1151-106212	Screw, Soc Hex Head, Grade 8, 5/16-18 x 1 1/4 " LG	2
12	G-1251-1060R	Lockwasher, 5/16 Regular	2
	K-2303	Kit, Replacement Head Weldment; consists of:	
1	Z-2785-01	Weldment, Head	1
	K-2296	Kit, Ball-Lok Pin; consists of:	
2	H-1026*07.0	Assembly, Lanyard	1
3	G-1310-0630	Pin, 3/8 x 3.0 Ball-Lok	1
4	G-1351-04	Rivet, 1/8 Open-End Steel	1

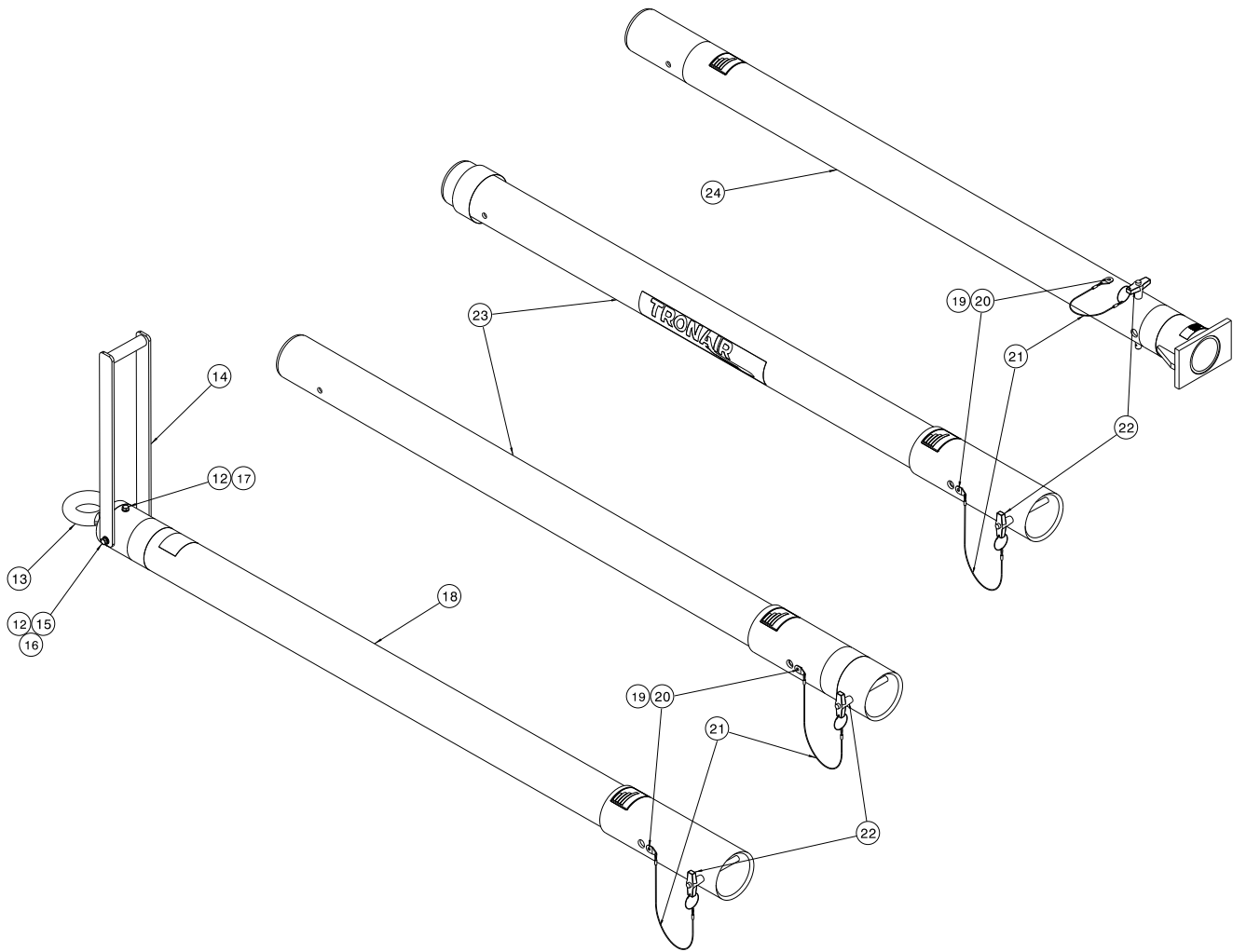
Parts List

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

Item	Part Number	Description	Qty
	K-2306	Kit, Replacement Bearing Assembly; consists of:	
6	G-1391-14	Ring, Internal Retaining	1
7	H-1245	Bearing, Roller	1
8	H-1884	Bearing, Roller	1
9	G-1391-13	Ring, Internal Retaining	1
	K-2305	Kit, Replacement Sliding Pin; consists of:	
5	R-1477	Pin, Sliding	1
10	B-025	Handle, Locking Pin	1
11	G-1151-106212	Screw, 5/16-18 Hex Head Cap	1
12	G-1251-1060R	Lockwasher, 5/16 Regular	1

Parts List

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



Item	Part Number	Description	Qty
12	G-1251-1060R	Lockwasher, 5/16 Regular	2
13	Z-2784	Weldment, Eyebolt	1
14	Z-2909-01	Weldment, Handle	1
15	G-1420-106012	Bolt, Hex Head, Grade 8, 5/16-18 x 1 1/4 " LG	2
16	G-1250-1060N	Flatwasher, 5/16 Narrow	2
17	G-1420-106006	Bolt, Hex Head, Grade 8, 5/16-18 x 3/4 " LG	2
18	Z-2787-01	Weldment, Tube	1
19	G-1351-04	Rivet, Pop, 1/8" Open-End Steel	4
20	G-1282-01	Washer, 1/8 Blind Rivet	4
21	H-1026*12.0	Assembly, Lanyard	4
22	G-1310-0848	Pin, Ball Lok , 1/2 " x 4.8" LG	4
23	Z-2788-01	Weldment, Tube	2
24	Z-2783-01	Machining, Towbar	1

Parts List

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

Item	Part Number	Description	Qty
	K-2300	Kit, Replacement Towbar Section; consists of:	
23	Z-2788-01	Weldment, Tube (without Tronair label)	1
	K-2301	Kit, Replacement Towbar (Section 3); consists of:	
23	Z-2788-01	Weldment, Tube (with Tronair label)	1
	K-2302	Kit, Replacement Towbar Section; consists of:	
24	Z-2783-01	Machining, Towbar	1
	K-2304	Kit, Replacement Ball Lock Pin; consists of:	
19	G-1351-04	Rivet, Pop, 1/8" Open-End Steel	1
20	G-1282-01	Washer, 1/8 Blind Rivet	1
21	H-1026*12.0	Assembly, Lanyard	1
	K-2298	Kit, Replacement Handle Assembly; consists of:	
12	G-1251-1060R	Lockwasher, 5/16 Regular	2
14	Z-2909-01	Weldment, Handle	1
15	G-1420-106012	Bolt, Hex Head, Grade 8, 5/16-18 x 1 ¼ " LG	2
	K-2299	Kit, Replacement Towbar (Section 5); consists of:	
18	Z-2787-01	Weldment, Tube	1



APPENDIX I

Declaration of Conformity



DECLARATION of CONFORMITY

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

Portable Towbar
01-1221-0006

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