

Model: 01-0548-0000
Nihon YS-11 Multi-Head



12/2007 – Rev. 02

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02

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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 DESCRIPTION

The Tronair Model 01-0548-0000 Multi-Head Towbar is designed for towing Nihon YS-11 Aircraft manufactured by Nihon.

The towbar head attachment is designed for use with Tronair Multi-Head Towbar Model 01-1202-0000 for towing the previously stated aircraft. The towbar head attachment uses a sliding pin/stationary pin arrangement to interface with the aircraft tow point. The towbar head is equipped with shear protection.

1.1 SPECIFICATIONS

Aircraft Application: Nihon YS-11 manufactured by Nihon

Maximum Aircraft Gross Weight..... 54,010 lbs (24.5 Metric tons)

Dimensions Length: 31 1/8 in (79.1 cm) Centerline to centerline

Width..... 35 1/2 in (90.2 cm) at aircraft interface

Height 4 in (10.2 cm)

Weight 37.5 lbs (17 kg)

Finish..... Blue Powder Coat

2.0 SAFETY INFORMATION

2.1 GENERAL

The Tronair Model 01-0548-0000 Towbar Head Attachment is used for towing the Nihon YS-11 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.

Towbars should be used with category 1 tugs **ONLY** in accordance with AHM 995 "Functional specifications for an aircraft tractor" Using a category 2 or higher tug 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 to the aircraft or personal injury.

3.0 OPERATION

3.1 PRELIMINARY CHECKLIST

3.1.1 Head Attachment Weldment

- Check weld between connector tube and head plate for cracks.
- Check weld between side rails and head plate for cracks.
- Check weld between side rail and stationary pin for cracks.
- Check weld between side rail and sliding pin sleeve for cracks.

3.1.2 Sliding Pin

- Check sliding pin for bending or excessive wear. Ensure sliding pin slides freely.
- Check sliding pin ball lok-T pin. Ensure ball lok-T pin is securely attached to the head attachment via its lanyard.
- Ensure ball lok-T pin is not loose or missing.

3.2 USAGE PROCEDURE

3.2.1 Multi-Head Attachment

Secure the towbar head attachment using the ball lok-T pin (supplied with the multi-head towbar) onto one of the following Tronair Multi-Head Towbar Models:

- 01-1202-0000

- Ensure the sliding pin is locked in place using the ball lok-T pin.



CAUTION!

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

4.0 TRAINING

4.1 TRAINING REQUIREMENTS

The employer of the operator is responsible for providing a training program sufficient for the safe operation of the towbar.

4.2 TRAINING PROGRAM

The employer provided operator training program should cover safety procedures concerning use of the towbar in and around the Nihon YS-11 Aircraft at the servicing location.

4.3 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.

5.0 PROVISION OF SPARES

5.1 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

When ordering spare parts/kits, please specify Model & Serial Number of your product.

5.2 PARTS LIST AND ILLUSTRATIONS

Reference the following pages for ordering information of Replacement Parts and Kits

6.0 IN-SERVICE SUPPORT

Contact Tronair for technical services and information.

7.0 GUARANTEES

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:

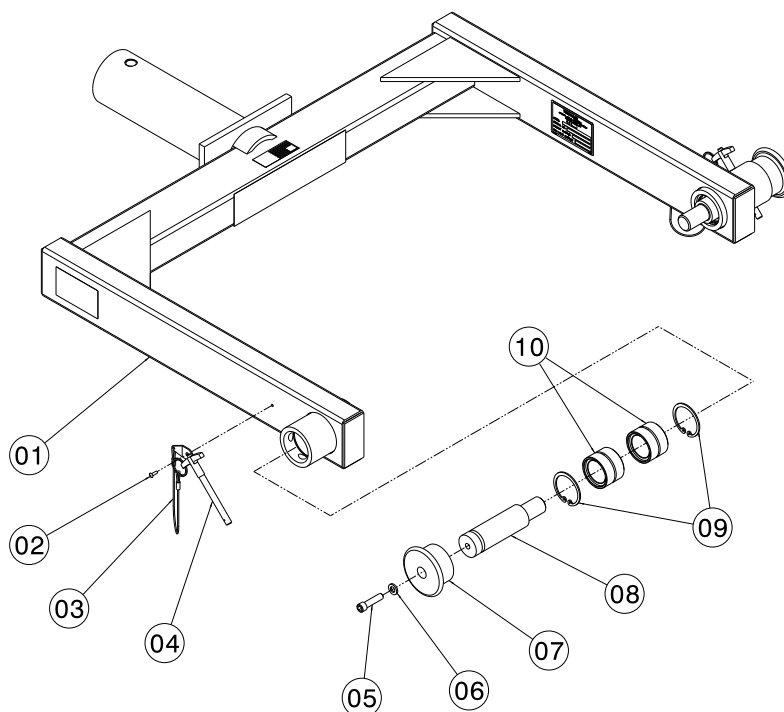
- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

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.



Item	Part Number	Description	Qty
1	Z-1538-01	Weldment, Head	1
2	G-1351-04	Rivet, Open End Steel, 1/8" x 1/4 " Grip	2
3	H-1026*07.0	Assembly, Lanyard	2
4	G-1310-0525	Pin, Ball Lok-T, 5/16" x 2 1/2 " long	2
5	G-1151-106212	Screw Allen HC, 5/16 – 18 x 1 1/4 " long	2
6	G-1251-1060R	Lockwasher, 5/16 Regular	2
7	B-025	Handle, Locking Pin	2
8	B-261-02	Pin, Sliding	2
9	G-1391-14	Ring, Internal Retaining	4
10	H-1245	Bearing, Roller	4
	K-1120	Kit, Replacement Handle (Single); consists of:	
5	G-1151-106212	Screw Allen HC, 5/16 – 18 x 1 1/4 " long	2
6	G-1251-1060R	Lockwasher, 5/16 Regular	2
7	B-025	Handle, Locking Pin	2
	K-1215	Kit, Replacement Sliding Pin; consists of:	
5	G-1151-106212	Screw Allen HC, 5/16 – 18 x 1 1/4 " long	2
6	G-1251-1060R	Lockwasher, 5/16 Regular	2
7	B-025	Handle, Locking Pin	2
8	B-261-02	Pin, Sliding	2
	K-1271	Kit, Replacement Bearing (Set); consists of:	
9	G-1391-14	Ring, Internal Retaining	4
10	H-1245	Bearing, Roller	4
	K-1337	Kit, Replacement Ball Lock Pin; consists of:	
2	G-1351-04	Rivet, Open End Steel, 1/8" x 1/4 " Grip	2
3	H-1026*07.0	Assembly, Lanyard	2
4	G-1310-0525	Pin, Ball Lok-T, 5/16" x 2 1/2 " long	2



APPENDIX I

Declaration of Conformity



DECLARATION of CONFORMITY

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

Multi-Head
01-0548-0000

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, reading "Patrick Funch", is written over a horizontal line.

Quality Assurance Representative