



Remote Cargo Hook

Product Manual

Part Number(s): T016-00-01
Working Load Limit: 3300 lb [1500 kg]



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Record of Revisions

Rev	Date	Page(s)	Description of Revision	Approved
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1.0 Purpose

This manual contains instructions for use and care of the Taeron Remote Cargo Hook, P/N T016-00-01.

1.1 List of Acronyms

ID: Inner Diameter
P/N: Part Number
WLL: Working Load Limit

2.0 General Information

2.1 Part Numbers

- P/N T016-00-01
 - Remote Hook with keeper and Auto-Lock

2.2 Product Specifications

- Working Load Limit: 3,300 lb [1500 kg]
- Ultimate Strength: 13,200 lb [6000 kg]
- Power Required: 28 V, 7 A
- Overall Weight: 20 lb [9 kg]
- Overall Size (Approx): 12" x 12" x 12"
- Minimum Release Load: 10 lb [4.5 kg]

3.0 Electrical Connection

- Connect the included 3 prong plug to the remote hook cable using the following reference table.
- Ensure the plug polarity correlates to your receptacle polarity.
- **Note: Powering the Remote Hook in reverse polarity may cause damage**, please return the remote hook to Taeron Systems for inspection and maintenance if this happens.
- A jumper between white and black terminals in the male plug may be installed at the user's discretion. Installation of a jumper shall be performed by qualified personnel only and it is the user's responsibility to ensure the plug wiring is safe and suitable for operational needs.

Remote Hook Wire	Polarity	Suggested Plug Terminal
White	+	Spade Pin
Green	-	Ground Pin
Black	No Connection	No Connection

- Power supply from Helicopter
 - Voltage: 20 V to 31 V
 - Current maximum: 7.3 A



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Figure: Electrical Wiring of the Remote Cargo Hook

4.0 Hardware Connection

- Connect the remote hook to the helicopter longline or swivel via the included 2 tonne [4,400 lb] WLL shackle or equivalent size shackle of minimum 3,300 lb WLL. Ensure the shackle cotter pin is properly installed prior to use. Use hardware with a WLL of at least 3,300 lb to not limit the full load capacity of Remote Cargo Hook.
- Connect load (Max Ring Size: 3" ID) to load beam by:
 - Option 1: push ring against keeper, moving the ring far enough into the load beam throat to allow the keeper to return closed. Pull at least 10 lb on the load to ensure the hook is properly latched.
 - Option 2: Rotate the manual release knob counterclockwise while pulling at least 10 lb on the load beam to force the load beam open. Locate the ring in the throat of the load beam and return the load beam to the latched position.



Figure: Manual Release Knob of the Hook

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5.0 Use and Care

5.1 Installation Checks

Perform installation checks on each installation

1. Confirm the cargo hook is secured to the longline or swivel via the remote hook 2 tonne shackle.
 - a. **Warning: a longline and remote hook installed without a swivel may cause damage to the longline, or remote hook wiring.**
2. Confirm the remote hook is connected to the helicopter power via a three prong plug. A small wrap of electrical tape around the plugs may be required to ensure connection to the helicopter power is maintained during flight.

5.2 Functional Checks

Perform functional checks on initial receipt of the remote hook and prior to each day of operation.

1. Connect the remote hook to the helicopter power via the three prong plug. Apply approximately 10 lb to the remote hook load beam and provide power to the remote hook. Confirm the load beam opens when power is provided.
 - a. **Warning: Do not apply power to the hook for longer than 10 seconds per minute, or damage to the solenoid may occur.**
2. Apply approximately 10 lb to the load beam and turn the manual release knob counterclockwise. Confirm the load beam opens when the manual release knob is rotated.

The remote hook is not safe to operate if it fails any of these tests. Please return to Taeron Systems for inspection and maintenance before further use.

5.3 Operational Requirements

5.3.1 Loaded Release

The Remote Cargo Hook is designed to be able to release up to 1.5 x WLL, however, continuous operation of the hook release under loaded conditions may prematurely wear the hook.

- If releasing the Remote Cargo Hook at the WLL (3300 lb) more than 10 times, return to Taeron Systems for inspection and overhaul.
- If releasing the Remote Cargo Hook at loads less than the WLL (3300 lb), but greater than 500 lb. Return the hook to Taeron after 50 releases.

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- If releasing the Remote Cargo Hook below 500 lb, maintenance of the hook is as per this manual.

5.4 Storage Requirements

Store remote cargo hook in a warm dry environment when not in use.

5.5 Maintenance Requirements

5.5.1 Cleaning

Clean the hooks externally with mild detergent and water. Use a synthetic brush or cotton cloth to wipe down. Do not wash with boiling water. Do not spray with high pressure water. Do not immerse in water.

5.5.2 Corrosion Prevention

When used in corrosive environments, apply a corrosion prevention compound to the exterior surfaces of the remote hook.

5.5.3 Inspection

Inspect the remote hook for wear, damage, corrosion, or distortion prior to use. Checks include

- All shafts are rotating freely
- There are no signs of cracking or bending in the housing or load beam
- There is no separation of the housing from the steel frame
- All fasteners are secure

If any of these are observed to interfere with the function of the remote hook then it should be returned to Taeron Systems for inspection and maintenance before further use.

5.6 Overhaul Instructions

Due to the new nature of this product, Taeron would like to return, inspect and overhaul the hook on an annual basis. Send back to Taeron Systems for overhaul at:

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