

SERVICE BULLETIN

Subject: AS350 Cargo Hook replacement kits—manual release cable & bumper upgrade.

Helicopters Affected: Airbus Helicopters AS350 series.

Parts Affected: Cargo Hook replacement kits installed under kit P/Ns listed in Table 1 below:

Table 1 – Affected Cargo Hook Replacement Kits

Kit P/N	Cargo Hook P/N	STC
200-261-00	528-023-01	SR00886SE
200-261-01	528-029-00	SR00886SE

Compliance: Recommended.

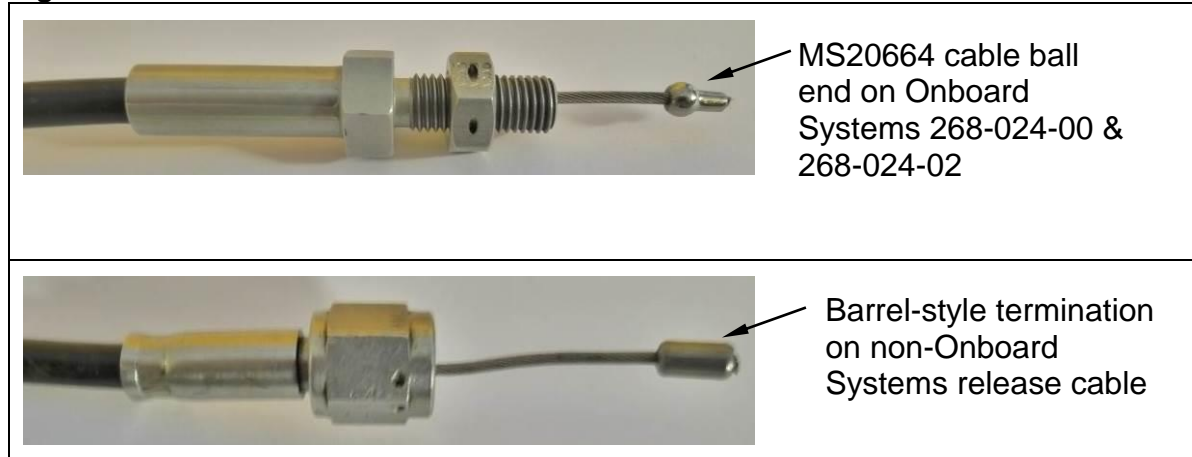
Ownership: Please review this information and determine if the equipment is still in your possession. If this equipment is no longer in your possession, please forward this notice to the current owner or to your customer, as applicable.

Description: Onboard Systems has received a report of an inadvertent load release with a cargo hook using a manual release cable with a barrel-shaped inner cable termination (see Figure 1). The large cable termination can potentially bind on the manual release cover and prevent the cargo hook from completely re-latching—resulting in an inadvertent load release.

Action: To comply with this bulletin, perform the following:

- 1) **Check manual release cable configuration.** Check the configuration of the manual release cable installed. Onboard Systems release cables can be identified by the part number marking on the cable housing. If P/N 268-024-00 or 268-024-02 is already installed, skip to step 3.
- 2) **Replace manual release cable.** If the configuration of the manual release cable installed is any other than P/N 268-024-00 or 268-024-02, obtain manual release cable P/N 268-024-02 and remove and replace the manual release cable per the instructions in this Service Bulletin.

Figure 1 - Manual Release Cable Terminations



- 3) **Check for Cargo Hook bumper on Cargo Swing installation.** The 200-261-00 and 200-261-01 kits can be installed in two basic configurations on the AS350 series, a Cargo *Swing* and Cargo *Sling* installation. See Figures 2 and 3.

If the cargo hook kit is installed on a Cargo Swing, check for presence of the cargo hook bumper (see Figure 2). The bumper prevents damage to the manual release cable as the cargo hook moves. This damage could cause the manual release cable's conduit to kink or separate from the fitting at the cargo hook and result in an inadvertent load release.

If the bumper is not present, obtain the bumper kit P/N 232-155-00 and install per the instructions in this Service Bulletin. The bumper is not necessary, nor adds value to a Cargo Sling installation.

Figure 2 - AS350 Cargo 'Swing'

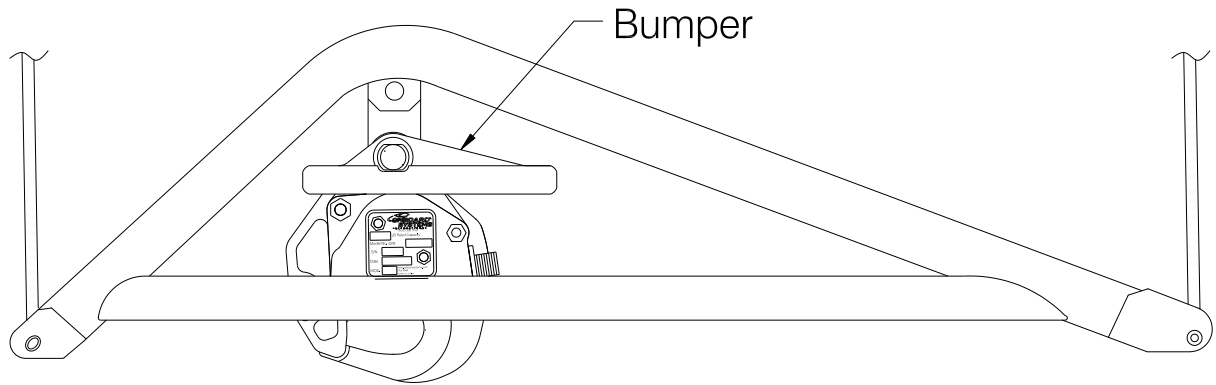
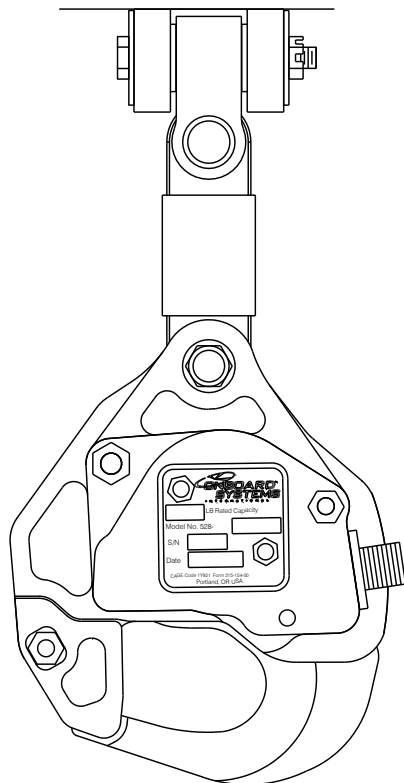


Figure 3 - AS350 Cargo 'Sling'



Manpower: Approximately 1.0 man-hour(s) will be required.

Required Materials: Depending on which components are installed, one or both of the following items are required for accomplishment of this bulletin.

Table 1 Materials

Part No.	Description	Quantity
268-024-02	Manual Release Cable	1
232-155-00*	Bumper Kit	1

*Bumper kit includes all attach hardware shown in figure 7 required for installation.

Special Tools: None

Weight and Balance: Not affected

Electrical Load Data: Not affected

References: None

Publications Affected: The following publications can be downloaded from the company web site by visiting the following link:

http://www.onboardsystems.com/Support/Manuals_and_Documents.php

Owner's Manuals: 120-094-00 and 120-094-01

ICA(s): 123-002-00 and 123-002-01

Contact Information: Technical support questions regarding this bulletin can be addressed through the following contact methods:

Onboard Systems
13915 NW 3rd Court
Vancouver, WA 98685 USA
Phone: 360-546-3072
Fax: 360-546-3073
E-mail: techhelp@onboardsystems.com
Web: www.onboardsystems.com

Disposition of Parts Removed: Discard.

Material/Part availability: Contact Onboard Systems for pricing and availability of replacement parts.

Accomplishment Instructions:

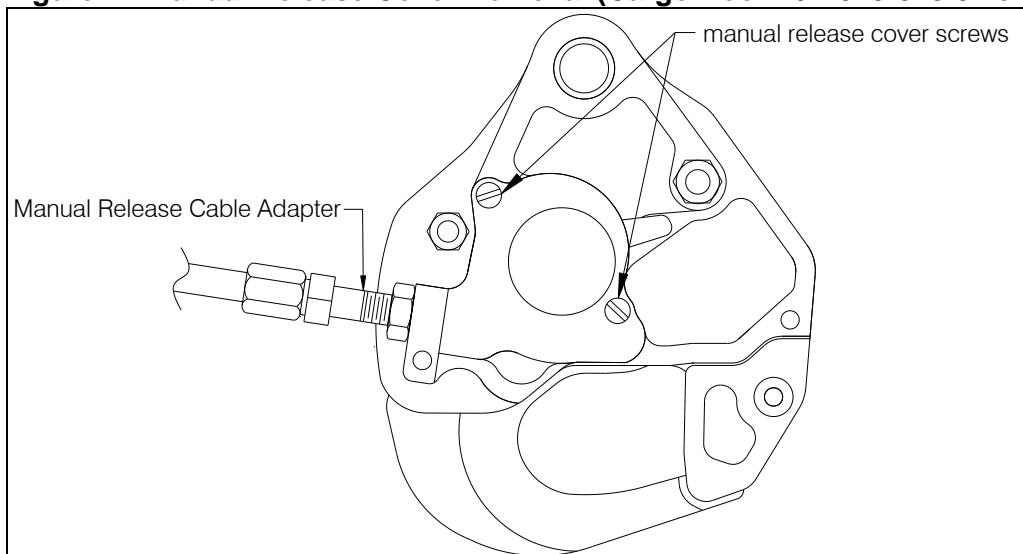
Section 1 of the accomplishment instructions provides instructions for replacing the existing Manual Release Cable with Manual Release Cable P/N 268-024-02. Section 2 provides instructions for installing the Bumper Kit P/N 232-155-00 onto the cargo hook.

Section 1 – Manual Release Cable Replacement

Remove existing manual release cable

1. Disconnect the manual release cable from the fixed manual release cable at the bracket on the belly of the helicopter and remove it from supporting clips on the belly of the aircraft.
2. Remove the manual release cover from the cargo hook by removing two screws (see Figure 4) and disengage the inner cable from the fork fitting in the cargo hook. Unthread and remove the manual release cable.
3. Loosen the jam nut and unthread the Manual Release Cable Adapter and discard as it will not be used with Manual Release Cable P/N 268-024-02.

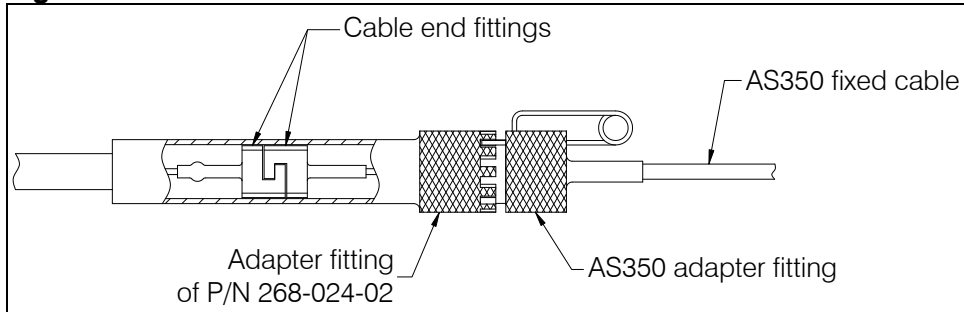
Figure 4 - Manual Release Cover Removal (Cargo Hook P/N 528-023-01 shown)



Install new manual release cable P/N 268-024-02

4. Thread the fitting at the end of the Manual Release cable P/N 268-024-02 into the side plate until the threads extend through the boss (see Figure 6) and secure with jam nut.
5. Connect the other end of the manual release cable to the fixed manual release cable by mating the cable end fittings as shown below. Slide the adapter fitting forward and thread it onto the mating adapter fitting of the fixed manual release cable.

Figure 5 - Manual Release Cable Connection to Fixed Cable



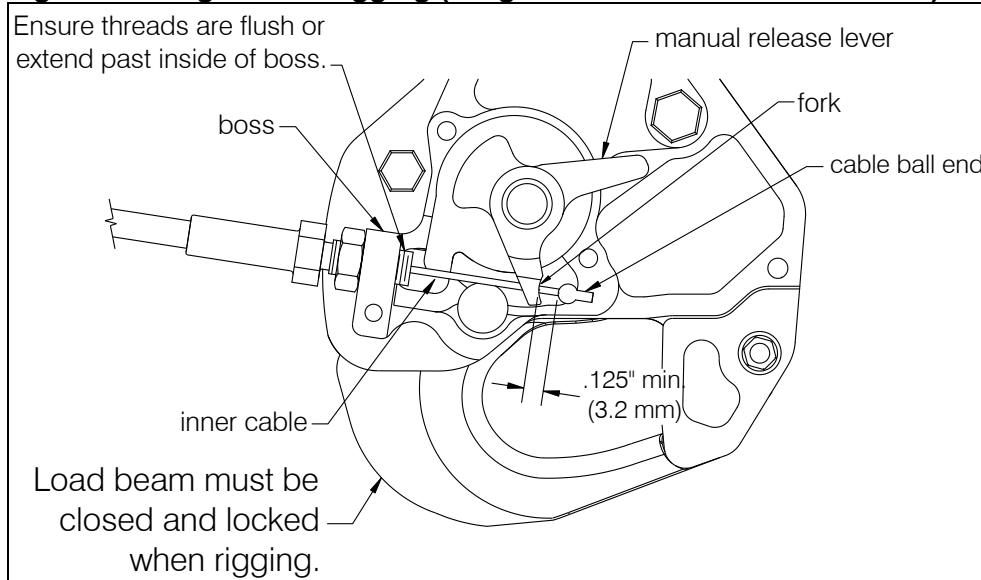
6. At the cargo hook insert the inner cable through the fork fitting (see Figure 6).
7. Check the rigging of the Manual Release Cable by rotating the manual release lever in the clockwise direction to remove free play (this is felt as the lever rotates relatively easily for several degrees before free play is taken up) and measure the gap between the cable ball end and the fork fitting as shown in Figure 6. This gap should be a minimum of .125 inches (3.2 mm). If it is less than .125 inches, adjustments can be made at the cargo hook by loosening the jam nut and threading the manual release cable end fitting further. Adjustments can also be made at the Airbus release lever on the collective.

Refer also to the applicable ICA for detailed information on the Manual Release Cable rigging.



Failure to appropriately set the manual release cable free play will result in uncommanded release of load.

Figure 6 - Cargo Hook Rigging (Cargo Hook P/N 528-023-01 shown)



! WARNING

Adjustment of the manual release cable free play must be accomplished with the cargo hook load beam in the closed and locked position.

8. Re-install manual release cover and secure screws with safety wire.
9. Move the cargo hook throughout its range of motion and verify that the manual release cable is not pulled tight in any possible position of the cargo hook.
10. Verify manual release system function by pulling the release lever in the cockpit and ensuring the cargo hook load beam falls open.

! WARNING

For safe operation of manual release cable -

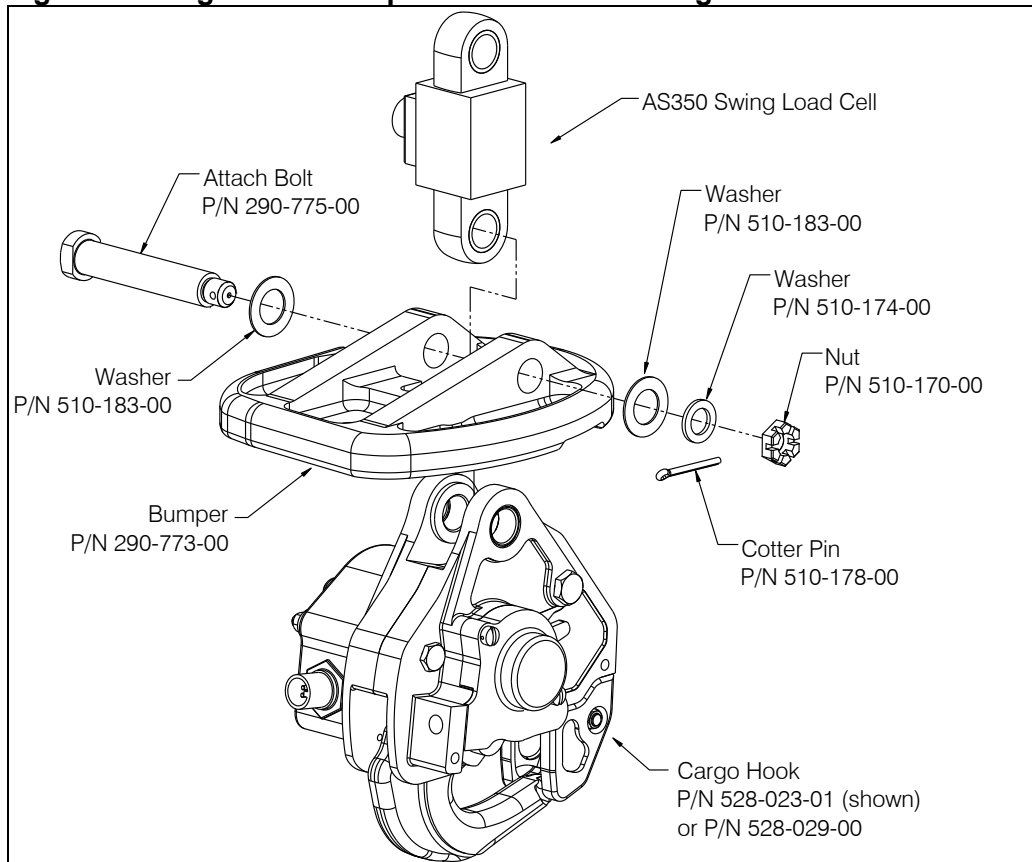
- Route to avoid strain
- Rig with proper free play
- Replace as condition requires

Section 2 – Bumper Kit Installation

Install the cargo hook bumper kit per the following.

1. Remove the cotter pin from the cargo hook's attach bolt and remove the nut, washers, and the attach bolt.
2. Disassemble the hardware that is provided pre-assembled onto the bumper and place the bumper over the cargo hook in the orientation shown in Figure 7. The bumper is an interference fit and it may be necessary to use a mallet to tap it into a position where the attach bolt can be inserted.
3. Re-assemble the hardware through the bumper, cargo hook and the load cell as shown below. Rotate the nut finger tight until fully seated. Back nut off to previous castellation, if needed, when aligning cotter pin for installation.

Figure 7 - Cargo Hook Bumper Attachment to Cargo Hook



4. Make logbook entry as appropriate.