

ONBOARD SYSTEMS
INTERNATIONAL

SERVICE BULLETIN

Document No. 159-021-00 Rev. 0

Date: November 1, 2007

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USA

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www.OnboardSystems.com

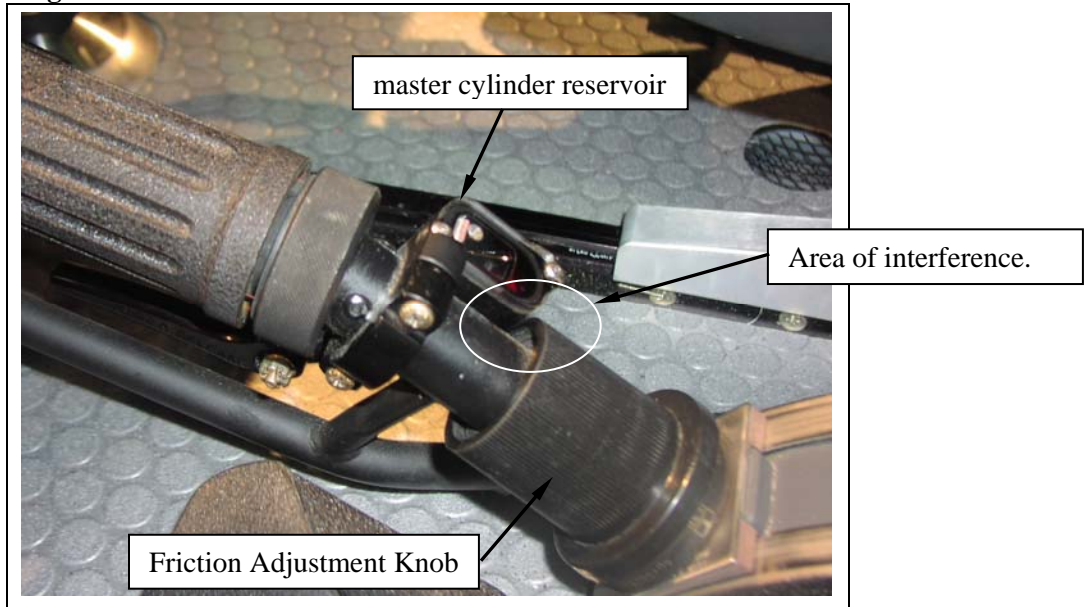
Subject: Collective Friction Knob

Helicopters Affected: All Eurocopter model AS350B3 helicopters with Onboard Systems Cargo Hook Swing Suspension Kit P/N 200-280-02 installed per STC SR01164SE.

Compliance: Recommended within 6 months of the issue date of this Service Bulletin.

Description: Onboard Systems kit P/N 200-280-02 includes a hydraulic release system as the secondary means of releasing an external load from the cargo hook. The hydraulic release system has a release lever and master cylinder assembly installed on the collective. It has been found that, on the AS350B3 model, the master cylinder assembly reservoir interferes with the operation of the collective friction adjustment knob. The master cylinder reservoir prevents the friction adjustment knob from being adjusted fully outward from the collective base. Onboard Systems has developed a shorter collective friction adjustment knob for use with the 200-280-02 kit to eliminate this interference problem. In addition, Onboard Systems has developed an optimized release lever for the cargo hook release lever assembly. The lever has improved geometry, which allows a greater range of adjustment for better positioning. It is recommended that the release lever be replaced.

Figure 1



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Approval: The engineering design aspects of this bulletin are FAA/DER approved.

Manpower: Approximately 4.0 man-hours will be required.

Required Material: The following material is required for accomplishment of this bulletin and may be obtained from Onboard Systems:

- 291-105-00, Friction Knob
- 290-811-01, Lever

Special Tools: None

Weight and Balance: Not affected

Electrical Load Data: Not affected

References: None

Publications Affected: Cargo Hook Owner's Manual 120-104-02.
ICA Manual 123-011-02
RFMS 121-012-02

The latest manual revisions are available through Onboard Systems' website at www.onboardsystems.com.

Point of Contact: For additional assistance, contact Keys Miller at Onboard Systems. Phone: 360-546-3072 or 1-800-275-0883. Email: keys@onboardsystems.com.

Disposition of Parts Removed: Return removed levers to the factory.

Material/Part availability: Parts will be available from Onboard Systems at no charge to the customer during the recommended period of compliance.



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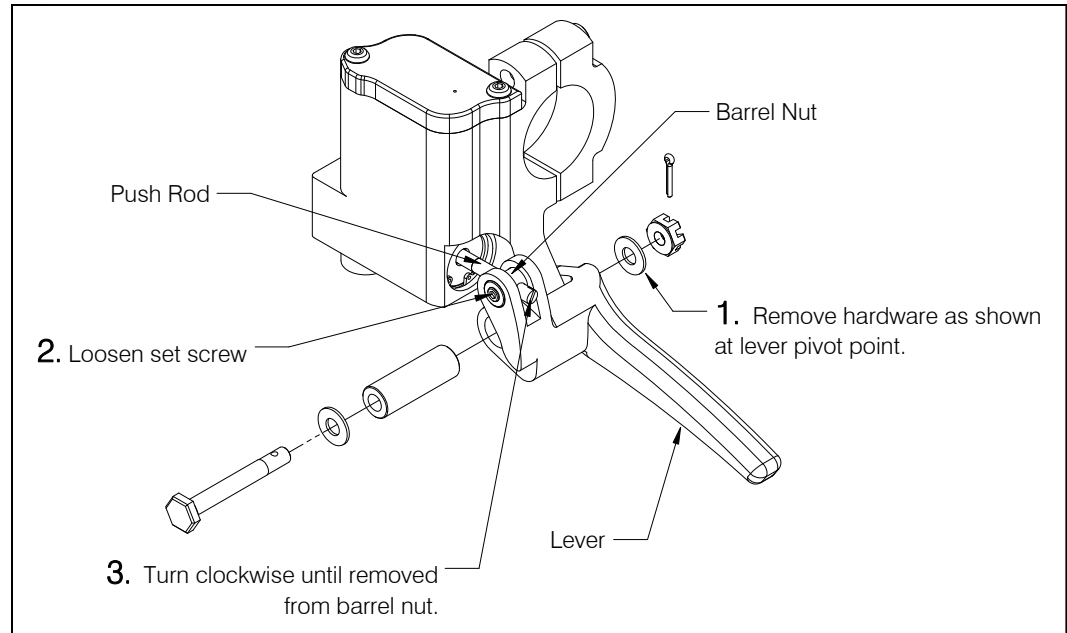
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Accomplishment Instructions:

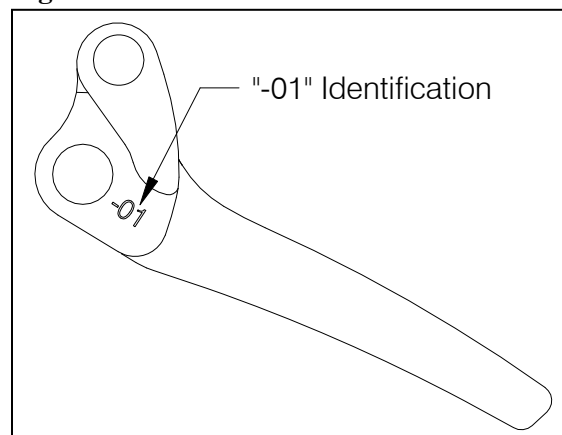
1. Remove the release lever assembly from the collective. Prop the assembly upright to prevent the hydraulic fluid from draining out and air from entering the system.
2. Remove the collective assembly from the helicopter to the extent necessary to remove the friction adjustment knob. Refer to Eurocopter maintenance documentation for instructions.
3. Remove the friction adjustment knob and replace with Onboard Systems P/N 291-105-00.
4. Re-install the collective assembly per Eurocopter maintenance documentation instructions.
5. Remove the lever from the release lever assembly per the instructions in Figure 2.

Figure 2



6. Replace the lever with P/N 290-811-01. This lever is identified with a “-01” as shown below.

Figure 3



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7. Re-install the release lever assembly onto the collective with the clamp and two screws removed at step 1.
8. Adjust the lever position, if necessary, by loosening the set-screw and turning the lever adjustment screw (reference Figure 4). Adjust per Figure 5. Tighten set screw.

Figure 4

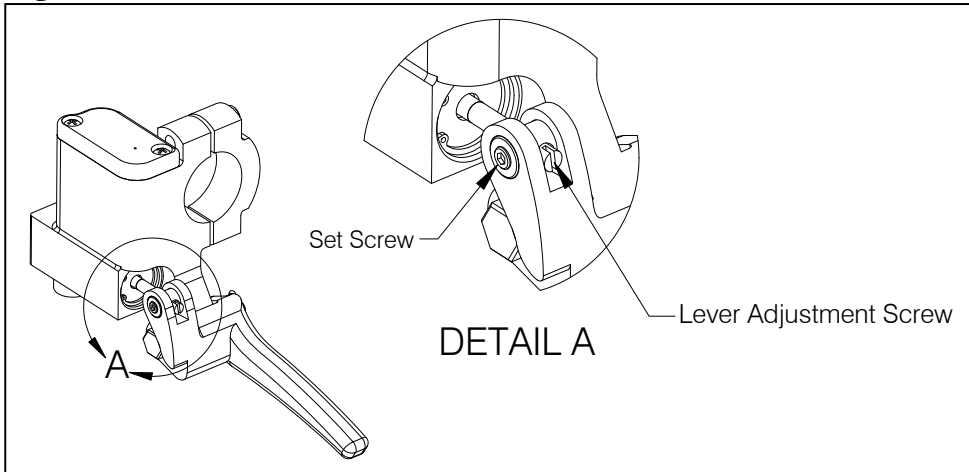
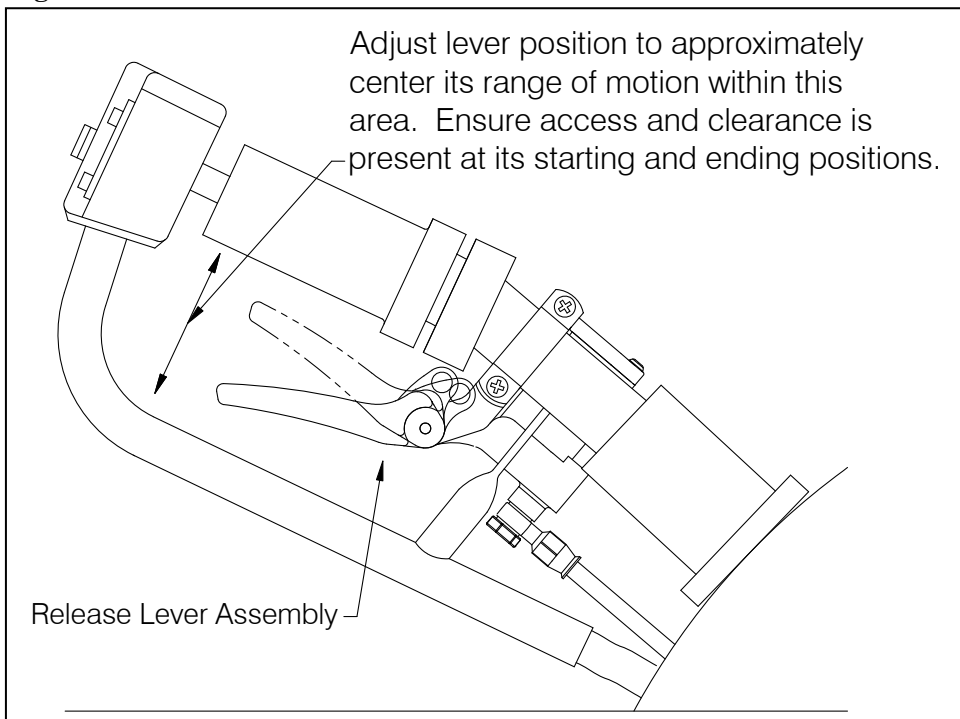


Figure 5



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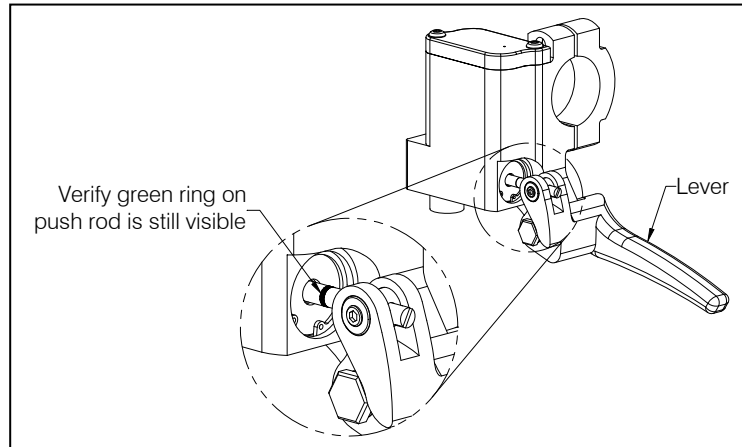
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9. Perform the following checks.

- ❑ With no load on the cargo hook load beam, pull the lever to operate the cargo hook hydraulic release, the Cargo Hook should release. Reset the cargo hook load beam.
- ❑ Check the hydraulic release system for excess air in the lines by pulling the release lever firmly until it bottoms out. Check the push rod position (see Figure 6). If some of the green ring on the push rod is visible, the system is ready for use. If none of the green ring is visible, the system needs to be bled. Refer to applicable Owner's Manual or ICA for bleed instructions.

Figure 6



- ❑ Actuate the release lever and observe its range of motion. Ensure that it is accessible and that there is no interference throughout its range of motion.
- ❑ Spin the friction adjustment knob to move it throughout its range of motion, ensure that it moves freely and that there is clearance at its fully outward position.

10. Make logbook entry.



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SERVICE BULLETIN COMPLIANCE RECORD

AS350B3 Collective Friction Adjustment Knob
Document No. 159-021-00, Revision 0

To help us monitor compliance with this Service Bulletin, please fill out and fax this form to (360) 546-3073.

<i>Company name:</i>	
<i>Date of SB compliance:</i>	
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<i>Contact person:</i>	
<i>Address:</i>	
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