

SERVICE BULLETIN Document No. 159-024-00 Rev. 0 Date: October 24, 2008

Subject:	3K Long Line Hook Keeper Bolt	
Cargo Hooks Affected:	P/N 528-018-00 and P/N 528-018-01	
Compliance:	Recommended within 2 months of the issue date of this Service Bulletin.	
Description:	Onboard Systems has received reports of failure of the keeper bolt on the 3K Long Line Cargo Hook 528-018-01.	
Cause:	It has been determined that the keeper's bolt is inadequate to support rigging loads which repeatedly ride against the keeper. The situation is also made worse if the keeper is installed improperly in reverse orientation.	



Figure 1 — Keeper Bolt Location

Action: Two actions are required:

- 1. Replace 1/4" keeper bolt with 5/16" keeper bolt.
- 2. Verify proper orientation of keeper (see Figure 8).



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Flow Monitoring Systems



Customer Directed Development

Manpower: Approximately 1.5 man-hours will be required.

Required The following materials are required for accomplishment of this bulletin and may be **Material:** obtained from Onboard Systems as Modification Kit 212-025-00:

ON	ONBOARD SYSTEMS MODIFICATION KIT 212-025-00				
Qty	P/N	Description	Mfg P/N		
(1)	510-714-00	Bolt	NAS6205-36		
(1)	510-239-00	Washer	NAS 1149F0532P		
(1)	510-370-00	Nut	AN365-524		
(1)	514-014-00	Spring	Same		
(1)	510-715-00	Drill	5/16 x 12"		
(1)	291-277-00	Alignment Pin	Same		

Special Tools: Drill Press, clamps, parallel blocks, and drill vise.

- Weight & Not affected Balance:
- Electrical Load Not affected Data:
 - Publications120-090-00 Talon 3,000 LB Long Line Cargo Hook Owners ManualAffected:

Accomplishment Instructions:

- 1. Check the serial plate of the Cargo Hook to determine whether this service bulletin has been previously complied with. The serial plate is marked 528-018-02 after compliance with this bulletin.
- 2. Figure 2 below gives an illustrated parts list of the replacement parts and parts to be modified.



ITEM	P/N	DESCRIPTION
1	232-127-00	MAIN PLATE ASSEMBLY
2	290-615-00	KEEPER
3	290-681-00	SPACER
4	290-682-00	SOLENOID HOUSING
5	510-714-00	BOLT
6	510-239-00	WASHER
7	510-370-00	NUT
8	514-014-00	SPRING

Figure 2 — Illustrated Parts

3. Begin by removing the Keeper, P/N 290-615-00, Spring P/N 514-003-00 and Spacer P/N 290-681-00 by removing and discarding the existing bolt, nut and washer. *Do not separate the Solenoid Housing from the Main Plate Assembly.* Retain the Spacer and Keeper.



It is not necessary to fully disassemble the Cargo Hook to remove and replace the Keeper. Carefully follow the instructions for replacement of the Keeper.

- **4.** Securely clamp the Keeper in the drill press vise and drill the bolt hole to a diameter of .313" +.01/-0.00. Deburr holes.
- 5. Securely clamp the hook assembly to the drill press table as shown in Figure 3. With a $5/16 \times 12^{\circ}$ drill bit, drill the keeper bolt hole to a diameter of $.313^{\circ} + .01/-0.00$. Deburr holes.



Figure 3 — Drill Setup

- 6. Securely clamp the Spacer P/N 290-681-00 in the drill press vise or lathe and drill the bolt hole to a diameter of .313" +.01/-0.00. Deburr holes.
- 7. Trim the ends of the Spring P/N 514-014-00 as shown in Figure 4.



Figure 4 — Trim Spring

8. Assemble the Keeper, Keeper Spring and Spacer together with Alignment Pin, P/N 138-441-00 as shown in Figure 5. (Note orientation of Keeper, Spring and Spacer). Slide the assembly into the Cargo Hook so that the long end of the spring engages the Solenoid cover as shown in Figure 6, ensuring that the Keeper is oriented as shown in Figure 7. Align the bolt holes, and install the bolt, pushing out the alignment pin.



Figure 5 — Assemble Keeper, Spring, Spacer & Alignment Pin.



Figure 6 — Engage long end of spring with Solenoid Cover.



Figure 7 — Ensure proper Orientation of Keeper.

- 9. Check for free operation of the keeper.
- 10. Re-stamp the part number of the Cargo Hook as 528-018-02 to denote compliance with this bulletin.