

Technical Service Bulletin

67006, Life Preserver, Hammerhead, Black, CSF

ISSUE DATE:	June 06, 2014	TSB NUMBER	TSB-14-004
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HAZARD / URGENCY RATING	
X	DANGER – Injury possible if TSB not observed or followed
	WARNING – Product damage possible if TSB not observed or followed
	CAUTION – Essential issue affecting operation, service, or parts
	INFORMATIONAL – Advisory which may be of interest

APPLICATION:

This Technical Service Bulletin (TSB) applies to Hammerhead Life Preservers with the following part number and Serial Numbers:

67006, Life Preserver, Hammerhead, Black, CSF

SN#: 67006-13-001 to 67006-14-1083

SUMMARY:

This Technical Service Bulletin recommends that Hammerhead Life Preservers within the above listed serial numbers be inspected for potential pressure loss at the inflators during inflation. The cause of CO₂ escaping at the inflator during inflation has been identified to be cross threading and/or an improperly torqued hex cap nut.

Pressure loss during inflation can result in an underinflated or partially inflated life jacket, regardless if it is automatically or manually fired.

Inflator Hex Cap Nut



Figure 1: Life preserver Hammerhead unfold, Neck area

Tulmar recommends performing life jacket inspections with specific attention on the inflator hex cap nut as presented in this TSB.

IMPACT:

CO₂ leakage at the inflator resulting in a non-inflated or underinflated life jacket may occur regardless if it is automatically or manually fired. Severe consequences may result if the life preserver is automatically fired while being worn by an unconscious user.

ACTION:

Equipment needed:

- a) Torque wrench, 25-30in.lbs
- b) 9/16" socket.
- c) P/N 3714 New hex cap nut (As required)
- d) P/N 67200-001 New bladder (As required)

1. Lay the life preserver onto a flat, clean surface, chassis side (handles and pull cords) facing upwards.
2. Expose the inflation units by grasping the head lobe and separating the fastening strips on the center and each side to unfold.



Figure 2: Folded Head Lobe

3. Open the cylinder webbing loops. Grasp the CO₂ cylinders and turn counter-clockwise to unscrew it from the inflator mechanisms. Ensure the cylinder gaskets are still present after having removed the cylinders.

Inflator Hex Cap Nut



Figure 3: Unfold jacket head lobe

4. For both inflators, visually inspect the position of the Hex Cap nut.

- a. When the hex cap nut is properly installed, it will sit perpendicular to the inflator body (figure 4). Verify the torque applied on the hex cap nut is between 25 and 30 in.lbs using the torque wrench. Record the jacket serial number and the action taken in a log book. Once both inflators have been verified, proceed to step 11.

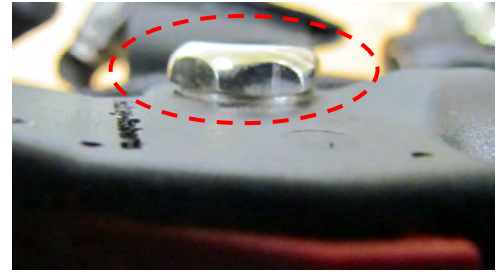


Figure 4: Hex cap nut properly threaded

- b. When a hex cap nut is cross threaded, it will appear angled to the inflator body as can be seen in figure 5



Figure 5: Cross threaded hex cap nut

5. Unscrew the hex cap nut using the ratchet and remove the inflator from the bladder inflation valve.

6. Visually inspect the threads of the brass bladder valve to ensure they are not damaged. To confirm the integrity of the threads on the valve, screw on a **NEW** hex cap nut, by hand, without the inflator.

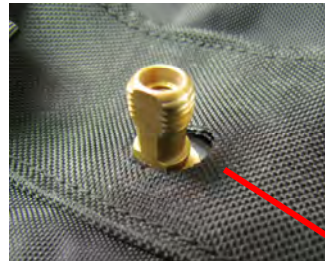
- a. If the threads on the valve are undamaged, the cap nut will easily engage on the valve and will thread/unthread completely, easily and freely. Proceed to step 7 to 11.
- b. If it is difficult to screw on the hex cap nut completely and freely by hand, the valve threads are damaged and the entire bladder must be replaced with new one. Proceed to step 12 to 15.

7. Ensure the two valve o-ring seals are present on the inflator. Re-install the inflator ensuring fabric is not caught between the inflator body and the bottom of the inflation valve. Refer to figure 6 for proper alignment of the cover, figure 7 show a cover improperly aligned on the valve. When the cover is properly positioned, 3 full threads will be visible protruding from the inflator body (*See figures 8*). Compare to figure 9 which present the result when fabric get caught between the valve and the inflator.



3 full threads are visible.

Figure 6: Bladder inflation valve, Ready to install inflator



Only 1 or 2 threads protrude from the inflator, indicating the cover is improperly positioned.

Figure 7: Bladder inflation valve, Incorrect positioning of the cover



Figure 9: Inflator properly seated on valve stem



Figure 8: Inflator improperly seated on valve stem

8. Screw on the new hex cap nut and thread it by hand making sure it is properly engaged on the valve. Verify the cap is not cross-threaded (figures 10 and 11).

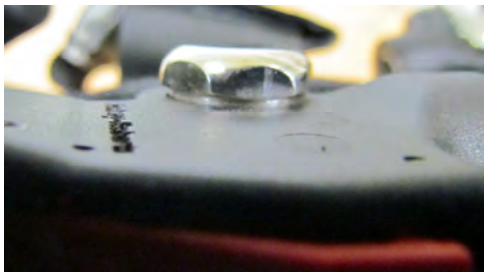


Figure 10: Hex cap nut properly threaded



Figure 11: Cross threaded hex cap nut

9. Torque the hex cap nut to 25-30in.lbs.
10. Once both inflators have been completed, record the jacket serial number and the action taken in a log book.
11. Inspect, rearm and repack the life preserver according to the user's manual.
12. In the event a valve thread is damaged, the entire bladder will need to be replaced. Carefully remove the bladder from the jacket. The bladder must be kept for further inspection by Tulmar.
13. Insert a new bladder into the jacket. Refer to Tulmar Work Instruction 0015 for proper bladder installation.
14. Record the jacket serial number and the action taken in a log book
15. Inspect, rearm and repack as required the life preserver according to the user's manual.

TULMAR

CONTACT:

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