

Hackney Bigfoot Berth Condensation

Model: 30C10.11FR

Year: 2006

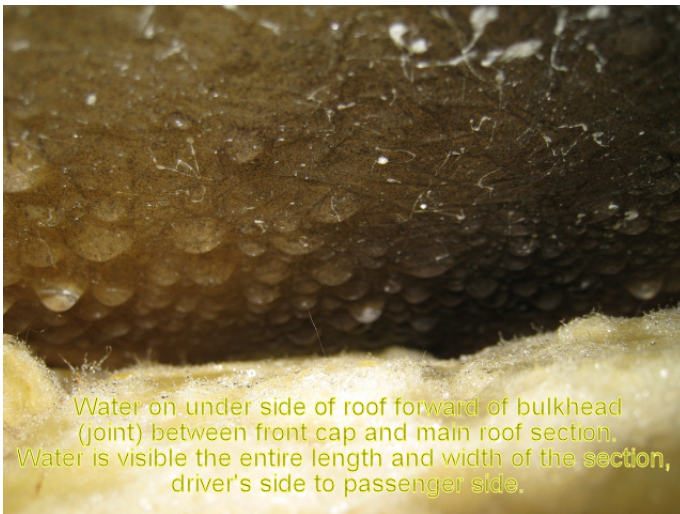
Date: 1 May 2008

Water on the interior surface of the fiberglass forward of the bulkhead (joint) between the main roof section and the front cap.

I visually observed water on the interior side of the fiberglass across that entire section.

I also felt water on the interior side of the fiberglass on the vertical surface of the front cap.

Affected Area



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I believe there are two possibilities for the cause:

1. The joint between the main and front cap sections is leaking badly enough for there to be water beaded up across the entire roof section and then migrating down the vertical surface of the front cap.
2. The water is coming from condensation.

I think possibility #1 is unlikely for several reasons. First, it implies a failure of the joint severe enough for ingress of enough water to cover all the surfaces, water that then propagated evenly around the entire interior surface of the front cap. The water is everywhere and not limited to a certain channel or path.

Therefore, I believe it is condensation.

In the past month we've been in frost conditions, then moved to an area of weeks of rain and high humidity.

We just had two warm, sunny days after heavy downpours to showers of light rain nearly every day for several weeks.

Current exterior temps are low 40sF at night to 60sF during the day.

Camper interior temps in the berth area are an estimated 60-75F at night (warm if we are running the video system) to low 70'sF in the daytime.

Due to the low to mild temps we have not been running the berth fan(s), so the berth area has not been getting much ventilation.

Issue Resolution

5 May 2008

Steps taken to resolve severe berth ceiling condensation.

1. Removed the front ceiling headliner/batten.
2. Removed all the existing fiberglass insulation. It was soaked with moisture and we didn't feel we could effectively dry it in our location.
3. Thoroughly dried the area by manual drying with towels. Ventilated area for two days using our two berth fans (Hella marine pivoting fans mounted on both sides of the berth) and the Fantastic Fan vent over the berth (poorly installed by our dealer and re-installed by me while on the road in the U.S.)
4. Monitored the area during the rains of the same period to confirm the problem was condensation and not a leak of the bulkhead seal.
5. Installed a vapor barrier using plastic sheeting used in home insulation projects.
6. Installed new fiberglass insulation in entire space above berth forward of front bulkhead. Packed insulation tightly to eliminate air gaps.
7. Tucked vapor barrier behind berth front paneling.
8. Used carpet cleaner to remove stains in berth carpet headliner.
9. Reinstalled front ceiling headliner/batten.
10. Attempted to always have at least one vent open and at least one ceiling exhaust fan running to promote ventilation.
11. Used berth fans to promote ventilation.



Back at the camp site after a run to the local home improvement store for supplies.

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Cutting the vapor barrier.

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Installing the vapor barrier. Steph's hands were smaller and could get into the tight corners, so she got this job.

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Cutting the insulation to fit. We very carefully cut two layers of pieces to fit the tapered spaces, overlapped so no joint would penetrate the installation. I ended up just stuffing the pieces in to fill all the air gaps, so almost all of this work was for unneeded.

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Insulation stuffed into the entire space between the forward bulkhead and the top of the forward wall panel.

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Moisture barrier extends from bulkhead and is tucked behind forward wall panel.

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Moisture barrier extends from bulkhead and is tucked behind forward wall panel.