



**Folsom 30L4RE-01: Radiator Upper Support Rework**

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**Property and Top Bus Number:** Folsom, 146000



**Issue:** Upper radiator support may crack.

**Reason/ cause:** Misalignment of the upper radiator support rod may contribute the failure of the upper radiator support.

**Solution:** Reinforce the upper radiator support per this work instruction (SOI). Also check the alignment to minimize the load on this support.

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**Number of affected buses:** 5 buses

**Estimate repair hours/bus:** 10 hours

**Necessary parts:**

Block, AL, 1.5"x1"x3/8",  
Paint, black,

NABI P/N: **NPN**,  
NABI P/N: **NPN**,

3 / bus,  
1 can / 5 buses

**Necessary tools:**

Usual hand tools (wrenches, sockets, pliers, etc.), container to drain coolant, welder for aluminum, grinder with 80G abrasive disc suitable for AL material



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### **SAFETY PRECAUTIONS MUST BE FOLLOWED ACCORDING TO ACCEPTED INDUSTRY STANDARDS AND LOCAL/PROPERTY REQUIREMENTS.**

1. Turn the main battery disconnect switches off.
2. Tag and disconnect battery cables.
3. Open the rear engine compartment door and the street side rear radiator access door.
4. Turn ¼-turn coolant valves off.



5. Drain coolant. Follow safety recommendation per the Maintenance Manual and per the local requirements.
6. Disconnect upper coolant lines from radiator.



7. Disconnect upper pipes from charge air cooler (CAC).

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8. Disconnect upper hydraulic line from hydraulic cooler.
9. Disconnect fan support bracket from radiator.
10. Remove closeout panels from radiator.
11. Disconnect upper support rod of radiator.



12. Lift the bus and place jack stands underneath the official jacking pads.
13. Disconnect lower coolant pipe from radiator.



14. Disconnect lower pipes from charge air cooler (CAC).
15. Disconnect lower hydraulic line from hydraulic cooler.
16. Cap or cover all of the disconnected hoses/pipes to prevent contamination.
17. Support radiator with a transmission jack (or forklift also could be used).
18. Disconnect lower radiator mounts.

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19. Remove radiator assembly.

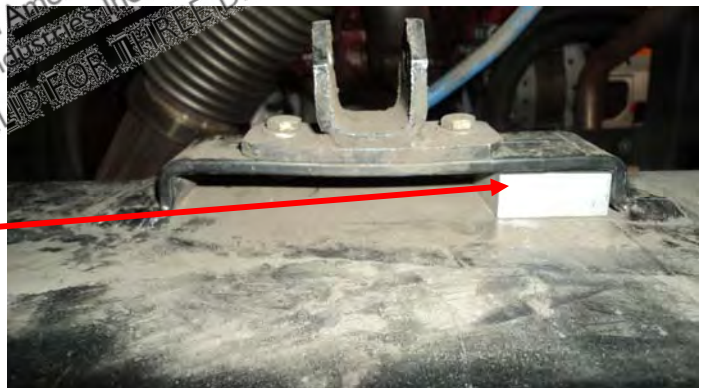
20. Remove paint from underneath the upper support bracket.



21. Degrease surfaces with brake cleaner or denatured alcohol.

22. Weld support bracket if cracked.

23. Insert support blocks underneath the bracket.



24. Weld support blocks to the radiator and to the bracket.

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25. Spray black paint onto the welded area.



26. Reinstall radiator by following the reverse of the removal process detailed above. **Replace damaged components (radiator mounts, hoses, etc.) as required.**

27. Torque clamps and other hardware per the Maintenance Manual.

28. Check and adjust upper support rod if required. Ensure that the radiator assembly is not rubbing the bus frame.



29. Turn the 1/4-turn coolant valves on.

30. Refill and de-aerate cooling system per the Maintenance Manual.

31. Record bus number, date of repair and name of technician who completed the work.