Spartan Motors Chassis, Inc.

SERVICE BULLETIN

RSB14-270-001

NHTSA Id: 14V-022 **3/21/2014**

Transport Canada Id: TC14-027

SUBJECT: Engine cooling fan vibration and material strength.

CONDITION: Engine cooling fan may come apart.

APPLIES TO: This bulletin applies to certain Gladiator model emergency response chassis cabs equipped with a Cummins ISM engine, direct drive fan, and built between October 10, 2007 and May 11, 2011.

CORRECTION: Install new engine cooling fan.

LABOR ALLOCATION: 1.5 hrs.

PARTS NEEDED:

QTY	Part Number	Description
1	S-2424-001	Kit-Service, Fan Direct, 2007 ISM, ERC

Kit # S-2424-001 Contains:

QTY	Part Number	Description
1	1342-FF1-007	Fan-33", ACS #39325A-30
6	06160350H8Y	Bolt-3/8-16X3.50 HEX GR8
6	06FWSAE8Y	Washer-Flat 3/8 SAE GR8
1	RSB14-270-001	Instruction Document

GENERAL INSTRUCTIONS:

Please thoroughly review entire work procedure before starting work. If there are questions and/or concerns with steps defined in this procedure, contact Spartan Motors Chassis, Inc. Customer & Product Support Group.

All applicable industry safety standards must be followed when performing work identified in this procedure.

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STEP-BY-STEP INSTRUCTIONS:

WARNING **Coolant is toxic. Keep away from children and pets. If not reused, dispose of in accordance with local environmental regulations.**

WARNING **Coolant components and other engine components can be very hot if serviced shortly after operation. Serious personal injury can occur if hot components are touched.**

WARNING **Ensure nuts, bolts, washers, and other hardware items are not dropped into the fan shroud. Loose items left in, or around, the fan may become projectiles resulting in damage or personal injury.**

WARNING **Master Switch and Ignition Switch must be in the "OFF" position before removal of any components; it must remain in "OFF" position during this entire process. Serious personal injury can occur.**

1. Drain approximately 3-4 gallons of coolant from the radiator. Retain fluid for reuse.

   Note: A clean drain pan or catch basin of some type should be used to capture fluid.

2. Disconnect deaeration lines from coolant reservoir and allow them to lie out of the way.

   Note: Allowing them to lie on the valve cover will keep them from dropping down and syphoning/draining coolant.

3. Disconnect the coolant fill line from the reservoir.

   Note: Allow this hose to also lie on the valve cover to eliminate coolant loss.

4. Unplug the low coolant sensor.

5. Remove clamp holding the top coolant tube to the fan shroud. Retain all for reuse.

6. Remove the six bolts securing the fan to the pulley. Properly dispose of hardware.

7. Remove the fan while pulling back on the coolant tube. If spacers come off with fan note order for later re-install. Retain spacers and properly dispose of fan.

CAUTION **Ensure the radiator is not damaged by the fan.**

8. Install the spacers in the same order removed and supplied fan.

Note: For the following instructions apply Loctite® 242® Threadlocker to the bolt on the first five threads from end of bolt.

9. Install the supplied six (6) fasteners and washers and torque in a crisscross pattern to 33-37 lbs. ft. Refer to FIG. 3-1.

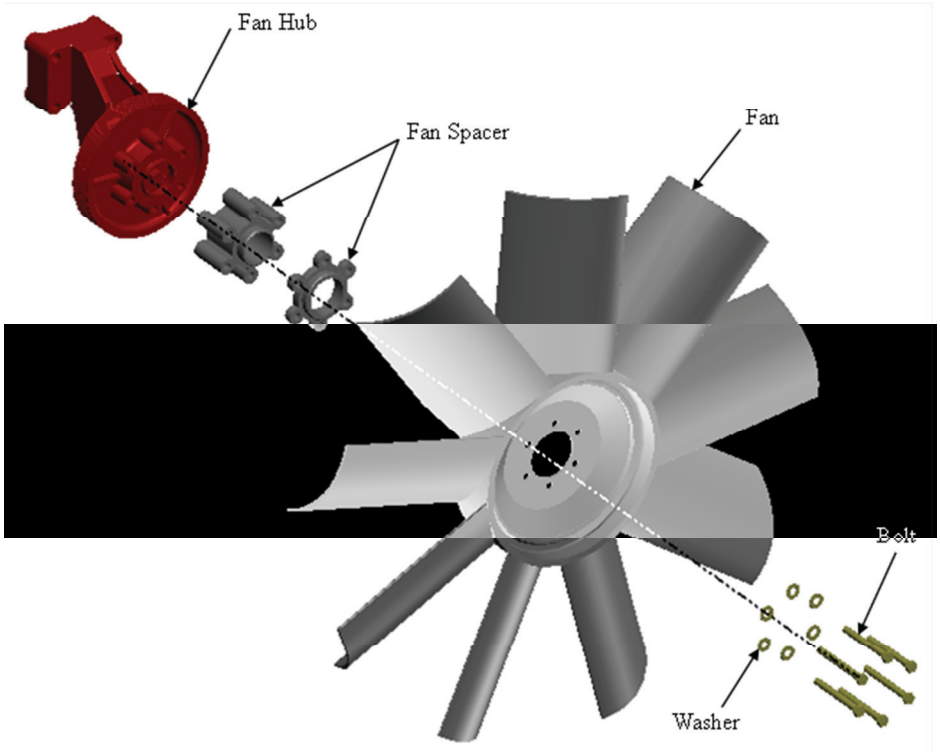

FIG. 3-1

10. Re-install retained clamp and water tube to fan shroud. Clamp shall be snug tightened.

11. Re-connect retained coolant fill and torque clamp to 55 lbs. in.

12. Re-connect retained deaeration lines.

13. Plug low coolant plug into sensor. Secure harness with tie strap if they had to be cut for removal.

14. Top off reservoir with retained coolant. If additional; coolant is needed refer to owner's manual for correct type.

15. Run the engine to verify no coolant leaks exist and proper operation of engine cooling fan.

16. Recheck coolant level and top off reservoir if needed.