



Spartan Motors Chassis, Inc.

SERVICE BULLETIN

RSB13-270-002

NHTSA Id: 13V-467

11/15/2013

SUBJECT: Breaking engine cooling fans

CONDITION: Engine cooling fans are subject to an over speed condition.

APPLIES TO: This bulletin applies to certain MM model motorhome chassis equipped with an engine mounted fan (in the rear) during vehicles dates of manufacturing of January 28, 2010 and March 12, 2012.

CORRECTION: Inspect fan hub, remove fan spacer and replace engine cooling fan.

LABOR ALLOCATION: 4 hrs.

PARTS NEEDED:

<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	S-2422-001	Kit-Service, Fan, 2010 ISC, Rr, SVC

Kit # S-2422-001 Contains:

<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	2598-FF1-001	Fan-30", 9 Blade, ACS 443100-30
1	2602-FF1-001	Stiffener Disk-Fan, ACS 100 BC
4	06FWSAE8Y	Washer-Flat 3/8 SAE Gr8
4	M10150080H7Y	Bolt-M10x1.50x80 Hex Gr9.8
1	RSB13-270-002	Instruction Document

GENERAL INSTRUCTIONS:

This bulletin refers to Cummins® inspection procedures that must be performed by a repair facility qualified on Cummins® CM2250 engines.

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.

Technical Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of product specific nature in conjunction with industry standards. Professional Technicians are appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.



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

Never remove radiator cap while coolant is hot. Remove cap slowly when coolant is at ambient temperature. A sudden release of pressure from a heated cooling system can result in serious personal injury from burst of hot coolant.

CAUTION

The work described in this bulletin must be performed through the living space of the coach. Take appropriate measures to ensure the interior space, and its contents, are not damaged in the course of performing this work.

CAUTION

DO NOT operate the engine without the engine access panel installed. Damage to the coach interior may result.

1. Remove the engine access panel from the floor of the coach located above the engine and cooling package. Retain panel and all hardware for re-install.

⚠ 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.

CAUTION

Ensure the radiator is not damaged by the fan.

2. Remove the serpentine belt.
3. Inspect the belt per Cummins procedure 008-002. If the belt is damaged or worn, obtain a replacement belt; otherwise, retain the belt for re-use.
4. Remove the refrigerant compressor drive belt and retain for reuse.



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5. Remove engine cooling fan. Retain one of the fan spacers for re-use; properly dispose of the other one. Retain one of the bolts for use as an alignment tool and properly dispose of the fan and remaining hardware.
6. Inspect fan hub per Cummins procedure 008-036. If the hub is not suitable for re-use, replace the hub per Cummins TSB130052.
7. Cut the head off the fan attachment bolt retained in step 5.
8. Thread the headless bolt into one of the fan attachment holes of the fan hub.
9. Using the headless bolt as a temporary alignment guide; slide the fan drive pulley, compressor drive pulley, fan spacer, stiffener disk and fan onto the hub. Refer to FIG. 3-1.

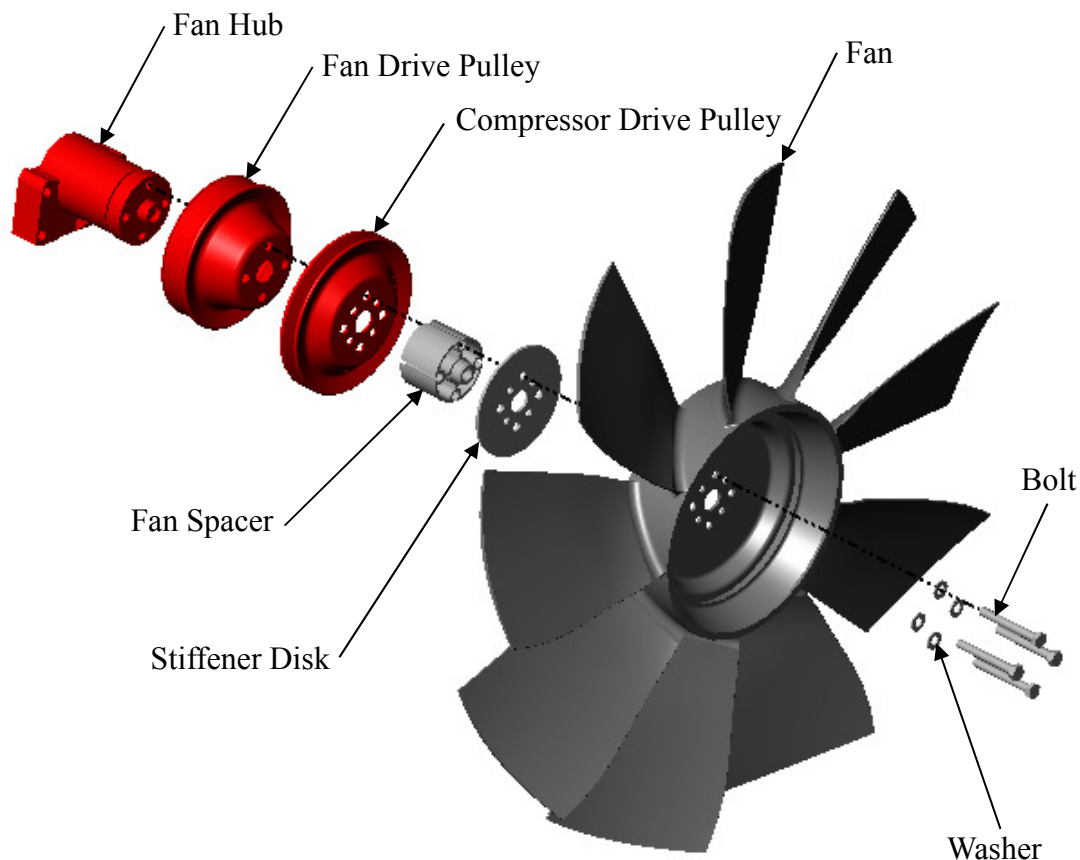


FIG. 3-1

10. Install new fan attachment washer and bolts, removing the temporary alignment guide. Apply Loctite 242® to the first 5 threads of the bolts. Torque bolts to 45-55 lbs. ft.

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11. Install the serpentine belt retained in step 3 ensuring it's properly aligned.
12. Install the refrigerant compressor drive belt retained in step 4. Set belt tension with a belt tensioning gauge to 130 lbs. Reset belt tension after unit has run for a minimum of 5 minutes.

CAUTION

DO NOT operate the engine without the engine access panel installed. Damage to the coach interior may result.

13. Re-install the engine access panel using retain hardware.

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