

# Authorized Field Change



**AFC G-04904**

**Date:** July, 2004

**Subject File:** ENGINE

**Subject:** Fan Blade to Fan Shroud Contact in 5500i and 5600i Models Built Between November 1, 2002 and March 31, 2004 with Post 2004 Cummins and Caterpillar Emission Engines

Truck Model: 5500i

Start Date: 11/01/2002 End Date: 03/31/2004

Truck Model: 5600i

Start Date: 11/01/2002 End Date: 03/31/2004

## DESCRIPTION

Certain 5500i and 5600i Models built between November 1, 2002 and March 31, 2004 with Post 2004 Cummins and Caterpillar Emission Engines may have fan blade to fan shroud contact due to insufficient clearance at the lower right (passenger) side of the shroud. Modifying the fan shroud will prevent fan contact.

## PARTS INFORMATION

Table 1

Part Number	Description	Quantity
2588027C91	Shroud Clip Kit	1

## SERVICE PROCEDURE



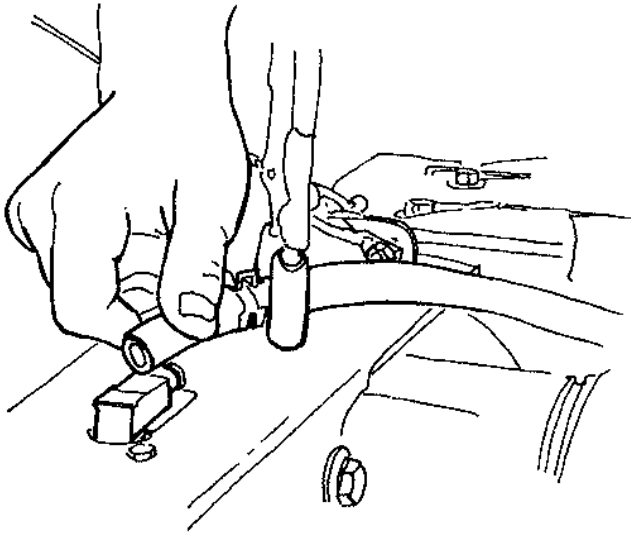
**WARNING – To avoid property damage, personal injury, or death, park the vehicle on a flat level surface, set the parking brake, turn the engine off, and chock the wheels.**

## SERVICE PROCEDURE (CONT.)



**WARNING** – To avoid personal injury or death from hot coolant or steam, allow the engine to cool. Wrap a thick heavy cloth around the radiator cap, push down, loosen the cap slowly to the first notch position and allow the pressure to release through the overflow hose.

1. Crimp the radiator overflow hose to minimize coolant loss and disconnect from the radiator (Figure 1).

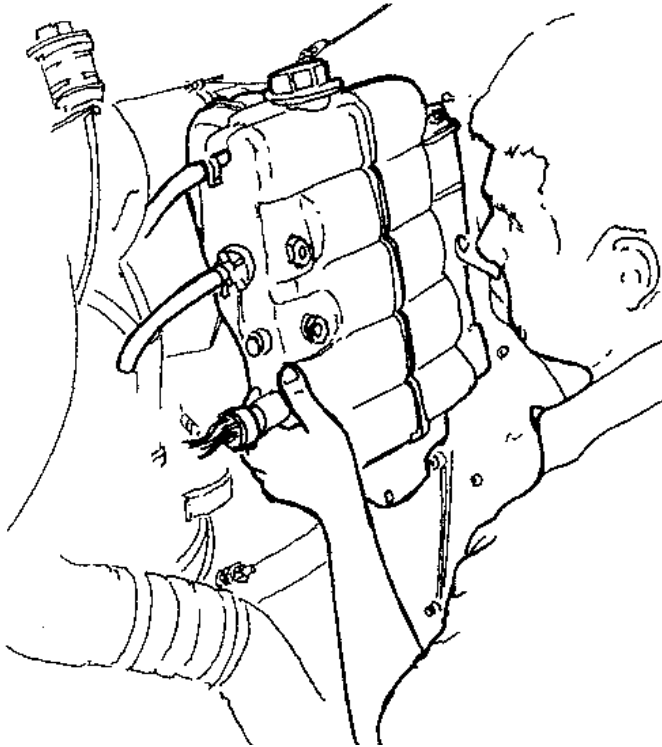


**Figure 1 Disconnect Radiator Overflow Hose**

**NOTE** – Do not drain the cooling system to perform the next Step.

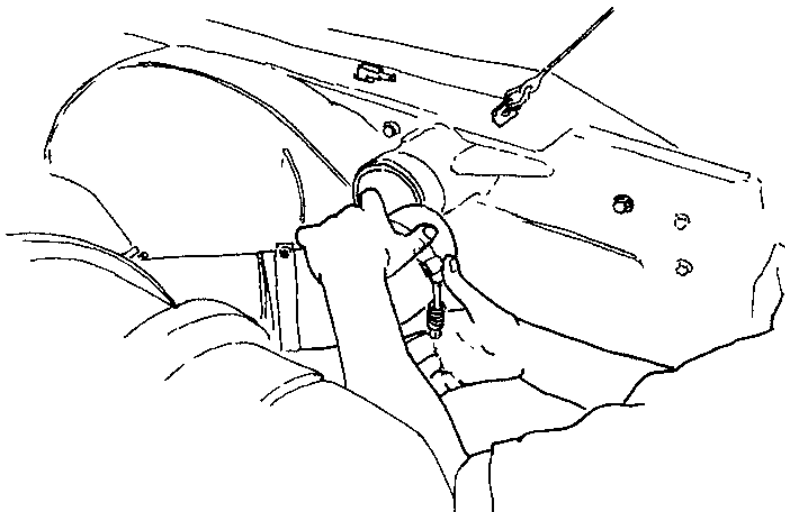
2. Without disconnecting the surge tank hoses, remove the surge tank mounting bolts and move the surge tank (Figure 2) to make clearance for fan shroud removal. With string or wire secure the surge tank to prevent damage.

## SERVICE PROCEDURE (CONT.)



**Figure 2 Remove Surge Tank**

3. Remove the charge air cooler (CAC) flex pipe from the radiator and CAC pipe (Figure 3).



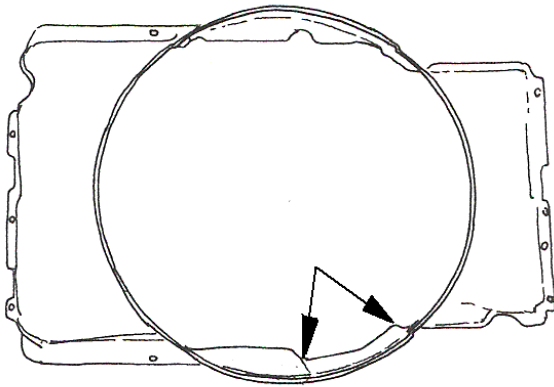
**Figure 3**

4. **Driver Side:** Remove the top radiator stay rod mounting bolt.

## SERVICE PROCEDURE (CONT.)

**Passenger Side:** Remove the top and bottom radiator stay rod mounting bolts and stay rod.

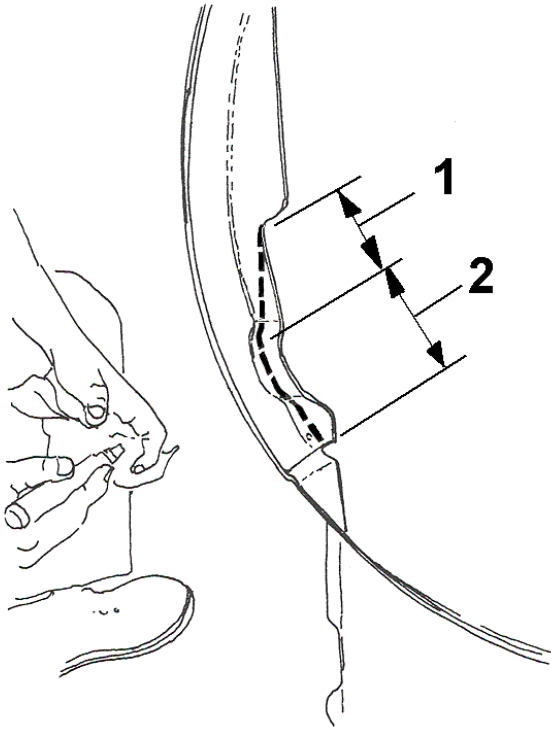
5. Remove six (6) fan to hub mounting bolts and remove the fan.
6. Remove six (6) fan shroud mounting bolts and remove the fan shroud.
7. Lay the fan shroud on a clean level surface (Figure 4). Arrows indicate the area to be modified.



**Figure 4 Fan Shroud to be Modified Between Arrows**

8. Mark a line starting at the right end edge to midway (approximately 5 1/2 inches) on the curve (Figure 5) . Keep the line approximately parallel to the outside diameter of the shroud (Figure 5). Continue marking the line at an angle (approximately 5 inches) to blend with the radius in the left corner (Figure 5).

## SERVICE PROCEDURE (CONT.)

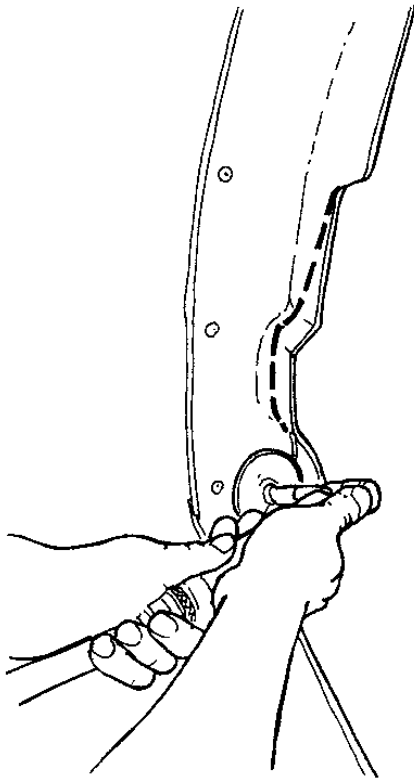


**Figure 5 Mark Fan Shroud Area to be Removed**

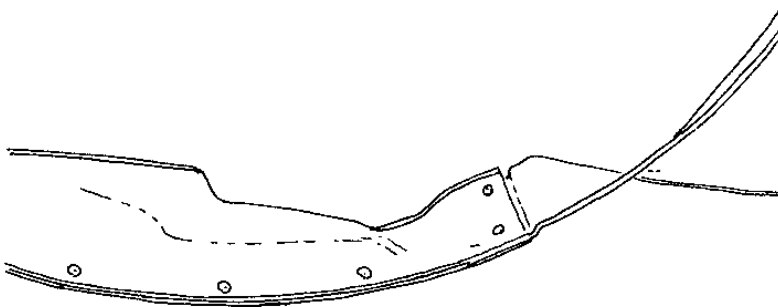
1. 5 Inches
2. 5 1/2 Inches

9. With a suitable cutting tool (Figure 6) remove the marked area from the shroud (Figure 7). Clean the shroud of any cutting debris.

## SERVICE PROCEDURE (CONT.)



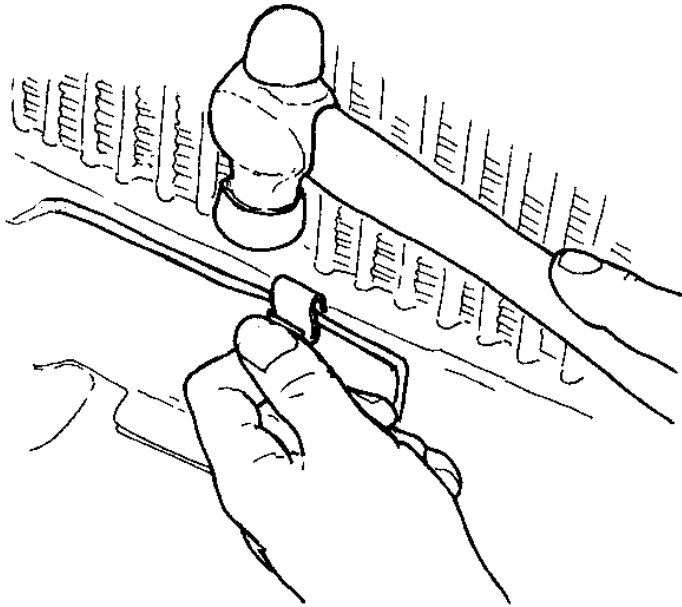
**Figure 6 Remove Area with Cutting Tool**



**Figure 7 Modified Fan Shroud**

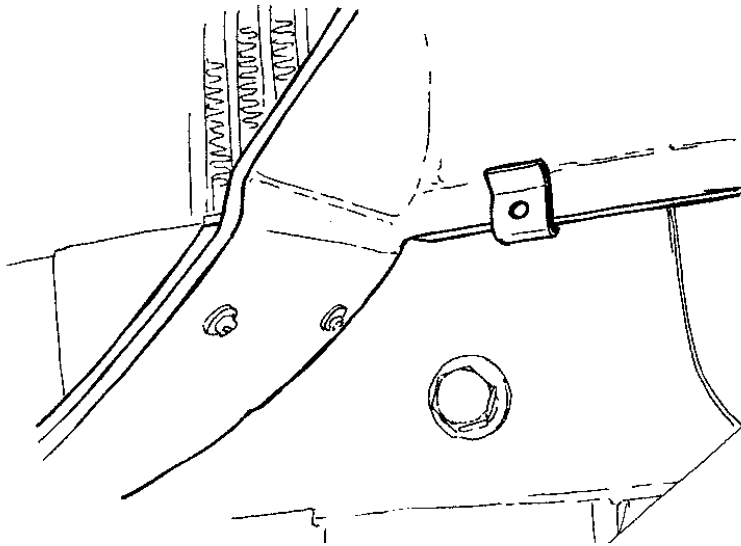
10. Install the narrow opening of the "S" clip, from Kit 2588027C91, on the lower radiator frame 1 1/2 inches from the right edge on the passenger side of the vehicle (Figure 8).

## SERVICE PROCEDURE (CONT.)



**Figure 8 Install "S" Clip**

11. Reinstall the modified shroud making sure the bottom edge is seated into the "S" clip (Figure 9). Tighten the mounting bolts to 15 to 19 Lbf-ft (20 to 26 Nm).



**Figure 9 Verify Modified Fan Shroud Engages "S" Clip**

12. Reinstall the fan to the fan hub. Tighten the mounting bolts to 24 to 28 Lbf-ft (33 to 38 Nm).
13. Continue following Steps 1 through 4 in reverse order. Tighten the surge tank mounting bolts to 21 to 24 Lbf-ft (29 to 32 Nm).

Operation number must appear on all claims.

**Table 2 Labor Information**

Operation No.	Description	Time
A40-04904-1	Remove, Modify and Reinstall Fan Shroud	2.0 Hr.

### ADMINISTRATIVE PROCEDURE

Expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Authorized Field Change Number G-04904.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44.

To assure this important improvement is made in a timely manner, all claims for G-04904 activity must be submitted by July 31, 2005 or within the normal warranty period for the vehicle, if after July 31, 2005.

	GROUP	NOUN	C	WARR.	TP	PAD
GROUP Enter number G—						
NOUN Leave blank						
C (CAUSE) Enter either 1, 2, 3. (see below)						
1. Inspected (No repair required).						
2. Inspected and repaired.						
3. Defective part from parts stock.						
WARRANTY (Warranty Code) Enter 40.						
TYPE PART Enter P for type part causing failure.						
PAD Enter 100						

Distribution: All except J-81  
Reproduction: Not required.

**Figure 10**