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Coding Information

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**Title: Fan Blade Failures**

**Applies To: 5500i 5600i 5900i 7600 7700**

It is important to understand what causes a fan blade failure while changing the fan blade. The two most common failures are breakage at the end of the blade or where the blade is molded to the center section of the fan assembly.

## PARTS INFORMATION

For 5000i models built with a Pre-2007 engine, the part number is 3625639C1.

For 5000i models built with a post-2007 engine, the part number is 3820083C1.

For 7600 and 7700 models, the part number is 3625639C1.

## Service procedure



**WARNING:**

To prevent unexpected movement of the vehicle and possible serious personal injury or death, park the vehicle on a flat, level surface, set the parking brake, turn the engine off, and chock the wheels to prevent the vehicle from moving in both directions.



**WARNING:**

To avoid personal injury or death, disconnect battery cables so engine can not be started while working in the fan area.



**NOTE:**

Give the engine time to cool down before working on or around the fan.



Figure 1. Typical Fan Blade Tip Failures

The fan blade will crack at the tip when the blade comes in contact with a stationary component (radiator shroud, engine idler, bracket, etc.) or loose foreign material (small rocks or stones).

1. Check front and rear engine mounts to ensure they are tight and that the insulators are in good condition.
2. Determine if the vehicle been operating in severe terrain, which could cause the frame to twist and flex?
3. Check the fan shroud to make sure that it is not loose, or pieces of it are hanging in the path of the fan blade travel.
4. Check the fan blade to make sure it is the correct one for the vehicle.
5. Correct any problems found from above inspection.

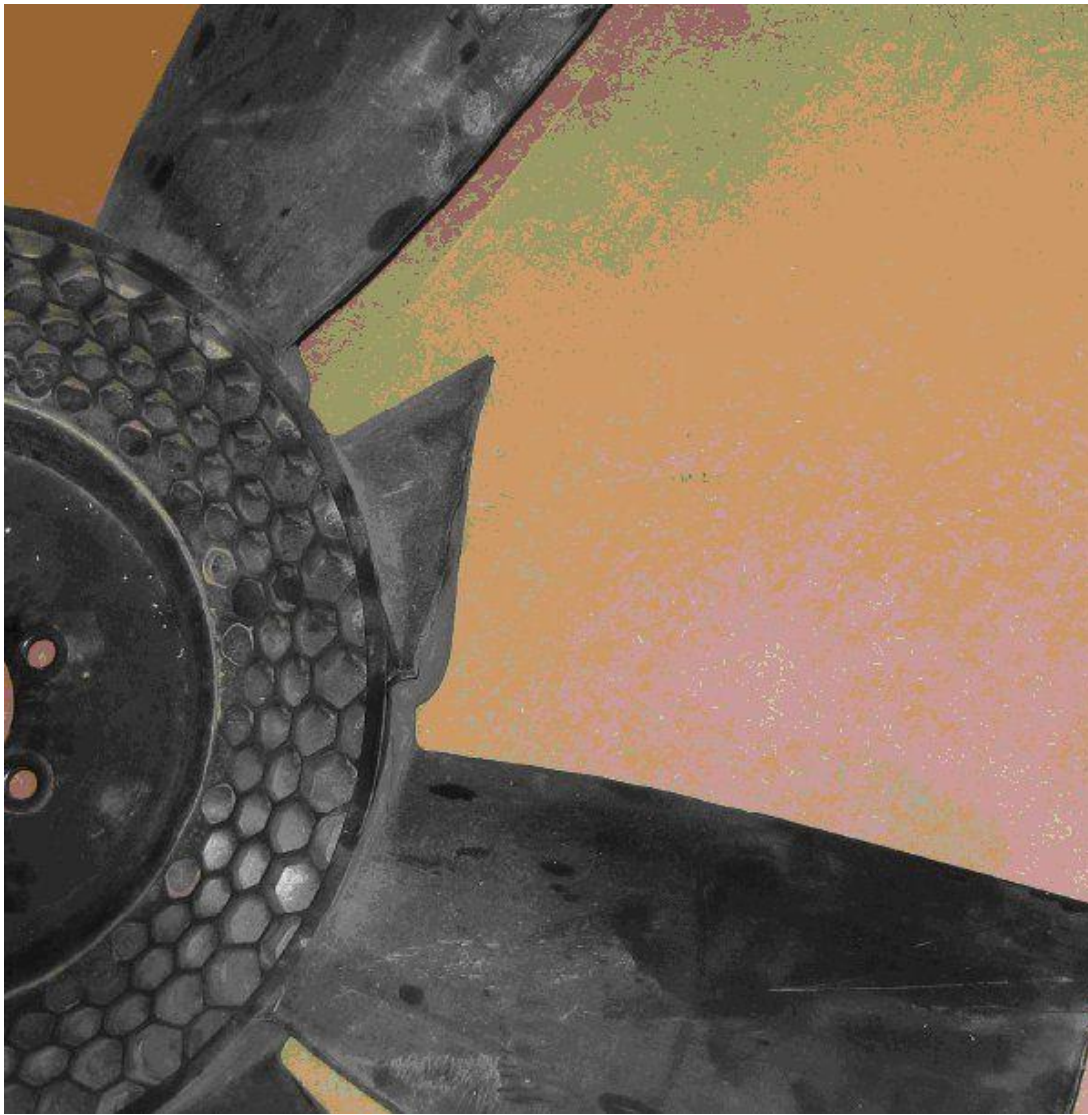


Figure 2. Typical Fan Blade Root Failure

Cracks at the fan blade root are usually caused by the fan speed exceeding its rated RPM.

1. Check engine RPM to make sure it is not operating over 2300 RPMs.
2. Improper downshifting can also cause fan overspeed.
3. In the event that the overrun condition can not be corrected, a new fan blade has been designed to operate up to 3300 RPMs.

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