
FAN CLUTCH INSTRUCTION SHEET

HOW IT WORKS:

A thermostatic Fan Clutch operates the engine-cooling fan in a low speed condition when the engine is cold. The clutch senses the temperature of the air passing through the radiator and increases the fan speed proportionally to the engine speed up to a pre-set limit. When the engine is sufficiently cooled, the clutch reduces the fan speed to a low speed condition saving engine power.

APPLICATION INFORMATION:

This viscous fan clutch has been manufactured using the same process as that used in the manufacture of original equipment parts. The fan clutch is designed for a specific application and cooling requirement. Therefore, it is important to use the correct fan clutch for the specific application to ensure proper cooling. Use of the wrong fan clutch can result in failure of the fan clutch and extensive damage to your engine.

Clockwise or counter-clockwise rotation of the fan blade is defined as viewed from the front of the vehicle looking toward the rear. The replacement counter-clockwise fan clutch will be marked "REVERSE". Always check for proper rotation of the fan clutch before starting the installation.

Before removing the fan blade from the fan clutch note whether the fan is mounted on the front side or shaft side of the fan clutch body. Install the replacement fan clutch exactly as the original.

Some applications use studs and nuts to attach the fan to the fan clutch while others use bolts and washers. Do not discard the original fan mounting hardware, as it will be needed to install the replacement fan clutch.

Some VOLVO applications require a pilot bushing to be installed. Note during the removal of the fan clutch whether a pilot bushing is required. The diameter of the water pump pilot must be the same as the pilot hole in the fan clutch shaft. If the water pump pilot is smaller, then use the bushing supplied in the installation kit.

REMOVAL INSTRUCTIONS:

Follow the vehicle manufacturer's instructions to remove necessary components to allow access to the fan clutch and fan assembly.

- Remove the bolts that attach the fan clutch and fan assembly to the water pump.
- Remove the bolts (or nuts) that attach the fan to the fan clutch. Do not discard the mounting hardware. Note whether the fan is mounted on the front side or the shaft side of the fan clutch body. Remove the fan blade.

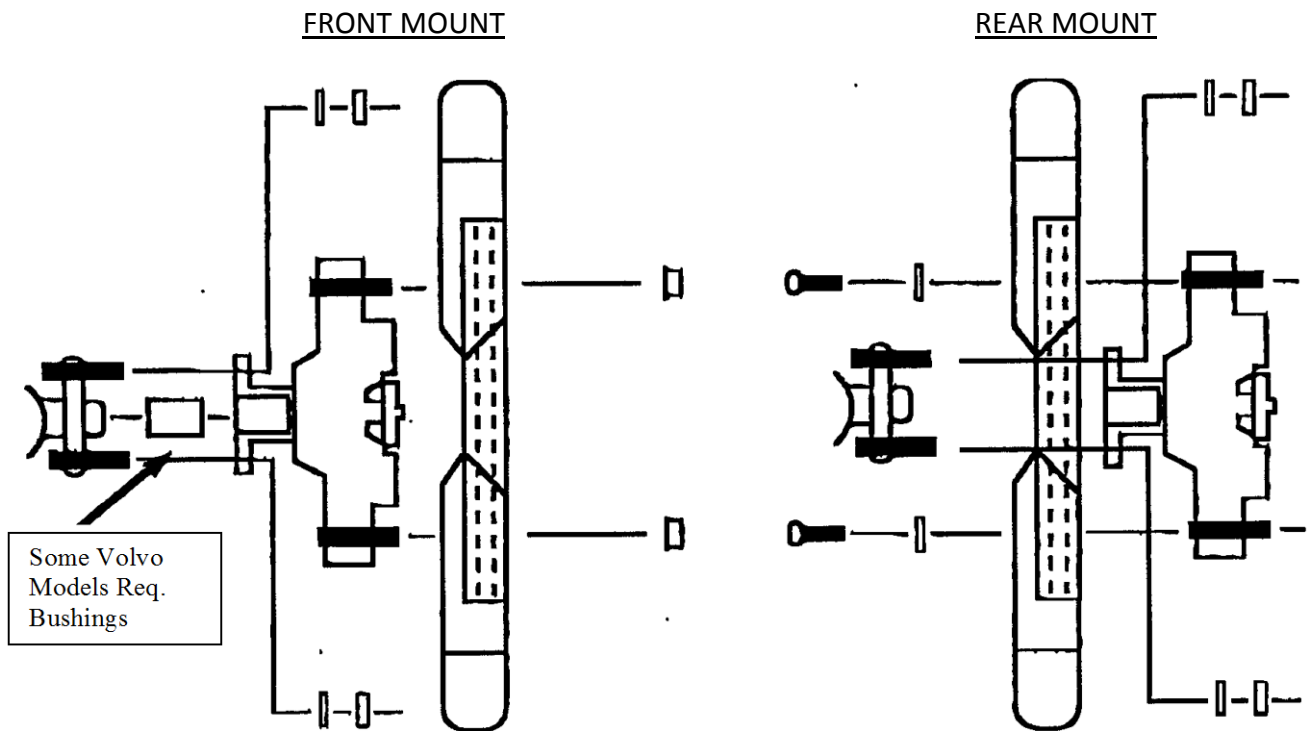
Some fan clutches have a single hexagonal stud that screws on to the water pump. NOTE: This is a right-hand thread on counter-clockwise clutches and a left-hand thread on clockwise clutches.

The fan blade and water pump should be inspected and replaced if found to be defective. Replace both fan clutch and water pump if either bearing has failed.

IMPORTANT:

ALWAYS REPLACE DAMAGED FANS. Do not attempt to repair a damaged fan. Inspect fan blades for:

1. Missing or broken blades.
2. Bent or cracked spider.
3. Loose or missing rivets.
4. Bent blades.



INSTALLATION INSTRUCTIONS:

- Position the fan on the clutch exactly as the original was removed.
- Install and tighten the fan bolts or nuts. Torque 6mm bolts or nuts 3 – 5 ft.lbs (5.0Nm). Torque 5/16" bolts 15 – 18 ft.lbs (20-24Nm). Over-tightening can strip the threads from the fan clutch holes.
- If the bolts or nuts that attach the fan to the clutch must be replaced use 6mm x 1.0 GRADE 5 or better.
- Install fan and clutch assembly on to the water pump. (Use pilot bushing for some VOLVO applications if water pump pilot is smaller than fan clutch hole pilot.)
- Install the four nuts and tighten to vehicle manufacturer's recommended torque.
- Visually check that all vehicle components clear the fan blade.
- Install other components removed per vehicle manufacturer's instructions.
- Start vehicle and check for proper operation of the fan clutch assembly.

WARNING!

Do not attempt to stop the fan from rotating when the motor is operating.

WARRANTY:

We hereby guarantee that for a period of two (2) years or 40,000km (whichever is the lesser) from the date of purchase, we shall carry out, free of cost, any repairs that are reasonably necessary to correct any fault in the operation of your Fan Clutch provided that such a fault is directly attributable to a defect in the workmanship or materials used in the manufacture of the part(s) and is not due to installation other than described in these instructions. Labour and consequential costs are excluded from this warranty.

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Warranty registration on-line at:
www.daviescraig.com.au