

THERMOSTATICALLY CONTROLLED ELECTRIC FANS

Chrysler Corp.

Aries, Horizon, LeBaron, Omni,
Rampage, Reliant, & 400

Ford Motor Co.

Escort, EXP, LN7, Lynx & All
Models Equipped with 2.3L Engines

General Motors

Cavalier, Celebrity, Century, Cimarron,
Citation, Cutlass Ciera, Firenza, J-2000,
Omega, Phoenix, Skyhawk, Skylark & 6000

DESCRIPTION

All electrically-driven fans are actuated by thermal relay switches. Thermal switches turn fan motor on when necessary and shut fan motor off when not needed. All air conditioned vehicles are equipped with over-ride switches. These switches turn fan motor on whenever air conditioning system is operating, and return fan motor control to thermal relay when system is turned off.

Although all electric fans operate on same principle, the following are special descriptions that apply to specific models:

Chrysler Corp. — Radiator fan switch activates fan motor only when coolant temperature reaches 193-207°F, or when A/C compressor is turned on. Fan motor shuts off when ignition switch is turned off, except on 2.6L (156") engine. On 2.6L (156") engines, fan motor will run approximately 5 minutes after ignition is turned off if fan discharge air temperature is 100°F or higher.

The 1.7L (105") and 2.2L (135") engines without A/C use a 12.3", 2-blade, aluminum fan, driven by a 4.5 ampere electric motor. On 1.7L (105") and 2.2L (135") engines with A/C, a 15", 4-blade, plastic fan, driven by a 10 ampere electric motor is used. The 2.6L (156") engine uses a 15", 5-blade, plastic fan, driven by 7 ampere (Non A/C) and 10 ampere (A/C models) electric motors.

Ford Motor Co. — Coolant temperature switch activates coolant relay to provide battery power to fan motor when engine temperature reaches 221°F; relay shuts fan off when temperature drops sufficiently. After vehicle operation or when carburetor temperature exceeds 155°F, carburetor tem-

perature relay switch activates timer relay. Timer relay turns fan on for a period of 15 minutes or until temperature drops to 155°F or less.

NOTE — Timer relay works only when ignition switch is turned off. Avoid working around fan with ignition off when temperature at carburetor may exceed 155°F.

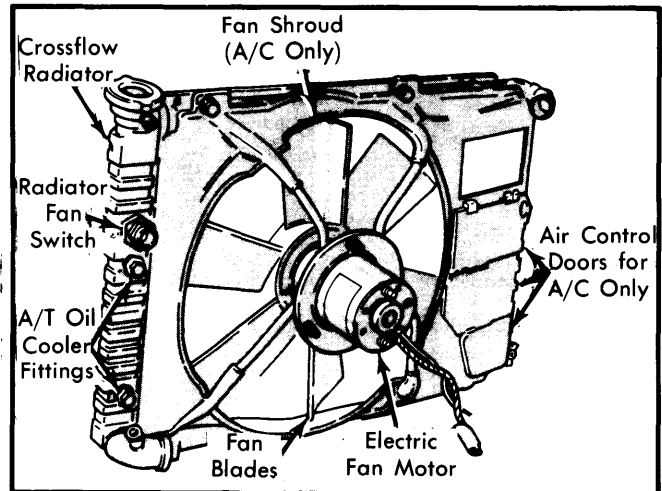


Fig. 1 Thermostatically Controlled Electric Fan (Chrysler Corp.)

General Motors — Coolant temperature switch turns fan motor on at specified temperatures. Fan will also come on instantly when A/C is turned on. Fan motor shuts off when ignition switch is turned off, regardless of coolant temperature. The fan used on General Motors vehicles is 12" in diameter, made of plastic and has 5 blades.

TESTING

If fan is not operating properly, disconnect fan motor wire connector and connect it with 14 gauge wire to a good 12-volt battery. If fan runs, motor is all right, indicating car battery, radiator fan switch (Chrysler), coolant relay, timer relay (Ford), coolant temperature switch (GM) or A/C relay (all models) may be defective. If fan motor does not run when connected directly to a good battery, replace fan motor.

VARIABLE SPEED COOLING FANS

FLEX-BLADE FAN

American Motors

Chrysler Corp.

Ford Motor Co.

Pontiac

DESCRIPTION

This unit is a fixed blade assembly designed to flex the blades as the engine RPM increases. As RPM increases blade pitch decreases, thereby saving power and decreasing noise level. No adjustment or test is required beyond keeping the fan belt adjusted to the proper tension.

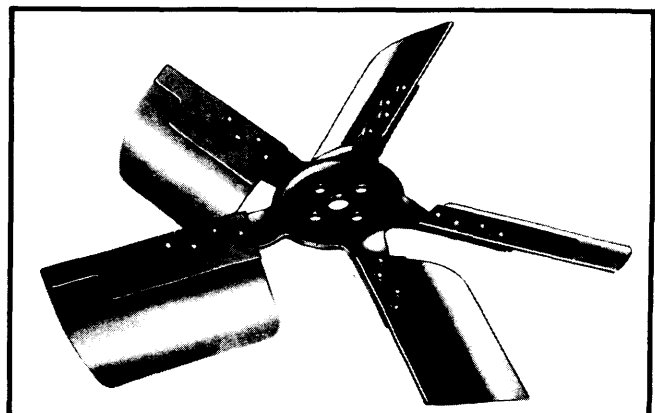


Fig. 1 Flex Blade Fan