



PROFORM™ Universal Electric Fans

Installation Instructions

Contents of Electric Cooling Fan Kit

Description	Quantity
Electric Fan Assembly	1
90-Degree Mounting Bracket	4
Mounting Tie	4
Rubber Cushion Pad	8
Mounting Tie Lock	4

Note: Retain this Instruction Sheet for Future Reference.

IMPORTANT: Please read these instructions thoroughly before installation. Failure to follow these instructions may lead to improper installation resulting in premature electric fan failure, vehicle and engine damage, personal injury, or void warranty.

Before installation make sure engine and radiator are cool to the touch. Examine coolant transfer tubes and cooling fins to assure radiator is in good physical condition. If coolant transfer tubes or cooling fins are soft, damaged, clogged, or loose, radiator must be recored.

PROFORM™ 12-volt Universal Electric Cooling Fans, designed for "Primary" and "Auxiliary" engine cooling, can push or pull air across the A/C condenser, oil cooler or radiator — whichever your application requires.

These instructions are divided into three different fan-mounting sections, depending upon the requirements of your particular application:

1. Single Fan: Primary Engine Cooling;
2. Single Fan: Auxiliary Engine Cooling;
3. Dual Fans: Primary/Auxiliary Engine Cooling.

Single Electric Fan: Primary Engine Cooling (Puller Air Flow)

Important !

As supplied, all **PROFORM™** Universal Electric Fans must be mounted on the inside (engine side) of radiator because they are supplied for primary engine cooling applications with the fan blades installed in the puller air flow position, rotating in a "clockwise" direction.

1. To access both front and rear area of radiator, it may be necessary to loosen or remove radiator top plate, shroud, and radiator mounts.

2. The stock mechanical fan must be removed from the water pump pulley and the pulley must then be reattached to the water pump hub. Use 5/16" flat washers and lock washers as shims to make up the thickness of the stock fan hub or replace with correct length 5/16" grade 5 bolts and flat washers to secure pulley onto water pump hub. Check hub for coarse or fine threads before replacing studs or bolts in hub.

Note: In some applications it may be necessary to loosen the fan belt in order for pulley to be secured on water pump hub. Refer to vehicle manufacturer's service manual for the proper procedure.

3. Place fan assembly on a clean flat surface with blades facing downward (shroud up). Insert four (4) 90 degree mounting brackets supplied into slots located on fan shroud and push completely in (reinforcement ribs must face upward). The mounting surface on bracket (tapered hole side) must face downward and be flush with fan shroud.
4. Place fan assembly on the inside (engine side) and position in the center of radiator, mark location and remove fan. Use mounting hardware supplied and attach fan to the radiator as follows:
 - A. Insert two (2) mounting ties through the upper mounting brackets. Place one (1) rubber cushion pad onto each mounting tie and slide against mounting bracket. (**Refer to Mounting Tie Illustration**).
 - B. Mount fan onto radiator by sliding mounting ties carefully through cooling fins (rubber cushion pad between mounting bracket and cooling fins). Place one (1) rubber cushion pad onto each mounting tie protruding through front side of radiator and slide against cooling fins. Install lock (flat side with tapered hole) onto each mounting tie and push against cooling fins to secure fan onto radiator loosely. **Caution — do not damage cooling fins.**
Note: When inserting the mounting ties through radiator cooling fins, do not allow fan assembly to hang on coolant tubes.
 - C. Insert mounting ties through lower mounting brackets and gently pull fan away from radiator. Place one (1) rubber cushion pad onto each mounting tie (between mounting bracket and cooling fins) and slide through radiator.

Dual Electric Fans: Primary Engine Cooling (Puller Air Flow) / Auxiliary Engine Cooling (Pusher Air Flow)

Vehicles equipped with air conditioning require using one (1) primary and one (1) auxiliary cooling fan together.

Refer to primary and auxiliary electric fan mounting installations previously listed.

Important !

When mounting dual electric fans onto the A/C condenser and radiator surface, placement of the fans is very important. Fans must be staggered to cover as much cooling surface area as possible.

Auxiliary cooling fan (pusher air flow) must be located on the outside lower end of A/C condenser. Primary cooling fan (puller air flow) must be located on the upper end on inside (engine side) of radiator.

Electric Fan Wire Connections

1. Disconnect negative (-) battery cable before connecting 12-volt electrical power to fan motors.
Caution: ECM (Electronic Control Module) equipped vehicles. When removing or connecting the battery cable terminal, use care to avoid intermittent contact (arcing or sparking) between battery post or battery mounting surface and terminal end. This generates voltage spikes that can damage the electronic control module components or memory circuits.
2. Refer to backside of instructions for the correct electrical connections for single and dual electric fan applications.

Important!

Primary cooling fan — (puller air flow). Fan blade must rotate in a “clockwise” direction. BLUE or YELLOW wire must be connected to 12-volt power lead — BLACK wire must be connected to good negative ground source.

Auxiliary cooling fan — (pusher air flow). Fan blade must rotate in a “counterclockwise” directions. BLACK wire must be connected to a 12-volt power lead — BLUE or YELLOW wire must be connected to good negative ground source.

3. Re-install and secure all radiator mounts, shroud, and sheet metal.
4. Reconnect negative (-) battery cable terminal after electric wiring has been completed.
5. Check coolant level in radiator before starting engine. Make sure radiator is sufficiently cool before attempting to remove radiator cap. Place a heavy shop towel over cap. Carefully turn and allow any pressure that is still inside radiator to escape completely and remove cap. Check coolant inside radiator to be sure it is at the proper level. Re-install radiator cap and tighten securely.

Note: It is recommended that a mechanical water temperature gauge be installed to monitor engine coolant temperature.

6. Check electric fan(s) operation. Verify that fan(s) are rotating in the proper direction, place a piece of paper two (2) to three (3) inches away from the electric fan safety shroud and primary fan (puller air flow) will blow the paper outward away from safety shroud.

- D. Place one (1) rubber cushion pad onto each mounting tie protruding through front side of radiator and slide against cooling fins. Install lock (flat side with tapered hole) onto each mounting tie and push against cooling fins to secure fan onto radiator.
 - E. Secure all mounting tie locks so that the fan assembly can not move up or down. Trim excess length off mounting ties.
5. Before connecting the electric wiring, spin fan blade to be sure there are no obstructions and that blade rotates freely. This will prevent potential damage to the fan assembly or radiator.

Single Electric Fan: Auxiliary Engine Cooling (Pusher Air Flow)

Important !

Auxiliary Electric Cooling Fans are designed to work in conjunction with the stock mechanical belt driven fan blade or primary electric cooling fans for additional engine cooling. These installations require removing the fan blade and reinstalling it in the "reverse" position to push air across A/C condenser or radiator. Fan blade and motor must rotate in the "counterclockwise" direction.

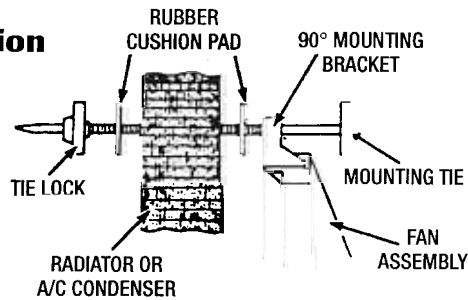
(Refer to Step #2 below)

1. Check vehicle for adequate clearance to be sure there is enough space available for mounting fan in front of A/C condenser or radiator. To access both front and rear area of A/C condenser or radiator, it may be necessary to loosen or remove radiator top plate, shroud, reinforcing supports (located in front of A/C condenser), and radiator mounts.
 2. This fan must be converted for auxiliary engine cooling (pusher air flow). Follow these procedures:
 - A. Place fan assembly on a clean flat surface with blades facing upward (shroud down). Using a small screwdriver, carefully remove "C" clip that secures fan blade to motor shaft, or use a small wrench for fan models equipped with a nut.
 - B. This clip must be reused and should not be bent out of shape, or it will not retain proper tension. Using both hands, place fingers underneath center-hub and thumb on top of motor shaft, lift upward to remove fan blade.
 - C. Re-install fan blade in "reverse" position (convex side of blade facing downward toward shroud). The arrow located in center-hub must be pointing "counterclockwise". Secure fan blade onto motor shaft reusing original "C" clip or nut. Be sure clip is inserted into groove on shaft and pushed in until clip is fully seated.
3. Turn fan assembly over with blades facing downward (shroud up). Insert four (4) 90-degree mounting brackets supplied into slots located on fan shroud and push completely in (reinforcement ribs must face upward). The mounting surface on bracket (tapered hole side) must face downward and be flush with fan shroud edge.
 4. Position fan in the center on front side of the A/C condenser or radiator to cover as much cooling surface as possible. Mark location and remove fan. Use mounting hardware supplied and attach fan to A/C condenser or radiator as follows:
 - A. Insert two (2) mounting brackets. Place one (1) rubber cushion pad onto each mounting tie and slide against mounting bracket. **(Refer to Mounting Tie Illustration).**
 - B. Mount fan onto radiator by sliding mounting ties carefully through cooling fins (rubber cushion pad between mounting bracket and cooling fins). Place one (1) rubber cushion pad onto each mounting tie protruding through front side of radiator and slide against cooling fins. Install lock (flat side with tapered hole) onto each mounting tie and push against cooling fins to secure onto radiator loosely. **Caution — do not damage cooling fins.**
Note: When inserting the mounting ties through radiator cooling fins, do not allow fan assembly to hang on coolant tubes.
 - C. Insert mounting ties through lower mounting brackets and gently pull fan away from radiator. Place one (1) rubber cushion pad onto each mounting tie (between mounting bracket and cooling fins) and slide through radiator.
 - D. Place one (1) rubber cushion pad onto each mounting tie protruding through front side of radiator and slide against cooling fins. Install lock (flat side with tapered hole) onto each mounting tie and push against cooling fins to secure fan onto radiator.
 - E. Secure all mounting tie locks so that fan assembly can not move up or down. Trim excess length off mounting ties.
 5. Before connecting the electrical wiring, spin fan blade to be sure there are no obstructions and that blade rotates freely. This will prevent potential damage to the fan assembly or radiator.

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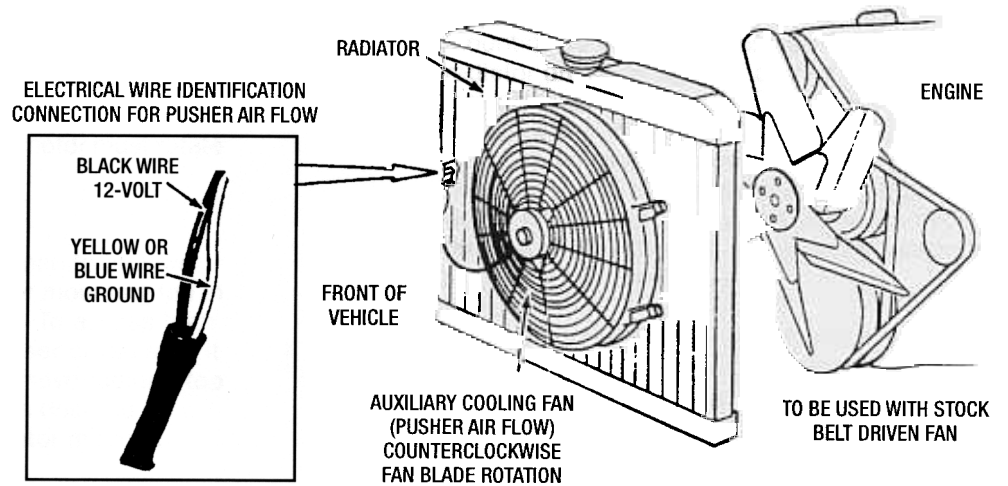
Electric Fan Mounting Installation and Electrical Wire Identification

Mounting Tie Installation



Auxiliary Engine Cooling Single Fan Application

FAN BLADE MUST BE REMOVED AND REINSTALLED IN THE "REVERSE" POSITION FOR AUXILIARY ENGINE COOLING APPLICATIONS



Primary Engine Cooling Single or Dual Fan Applications

VEHICLES EQUIPPED WITH AIR CONDITIONING REQUIRE DUAL (PRIMARY AND AUXILIARY) ELECTRIC COOLING FANS

