MR. GASKET CO.
THE PERFORMANCE PEOPLE.®

HIGH PERFORMANCE ELECTRIC COOLING FAN

Installation Instructions

Mr. Gasket 12-volt Automotive Electric Cooling Fans are designed for "Primary" and "Auxiliary" engine cooling. These fans can push or pull air across the A/C condenser, oil cooler or radiator whichever your application requires. Please take a few minutes to read these instructions thoroughly and familiarize yourself with each part before beginning installation. Failure to follow these instructions can lead to improper installation causing premature failure of electric fan, damage to vehicle, personal injury, or void warranty.

This instruction sheet is divided into three different fan mounting sections for your convenience. Single Fan — Primary Engine Cooling, Single Fan — Auxiliary Engine Cooling and Dual Fans — Primary/Auxiliary Engine Cooling. Select the section that pertains to your particular application.

Note: Before beginning installation of electric fan(s) make sure engine and radiator are cool to the touch. Examine coolant transfer tubes and cooling fins, radiator must be in good physical condition. If coolant transfer tubes or cooling fins are soft, damaged, clogged, or loose, radiator must be recored.

Electric Fan Mounting Installations

Single Electric Fan

Primary Engine Cooling
(Puller Air Flow)

Important!
All Mr. Gasket Electric Fans are supplied for primary engine cooling applications. The fan blade is installed in the puller air flow position and must rotate in a "clockwise" direction. These fans must be mounted on the inside (engine side) of radiator.

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

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

   Note: On 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.

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.

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. It may be necessary to loosen or remove radiator top plate, shroud, reinforcing supports (located in front of A/C condenser), and radiator mounts to access both front and rear area of A/C condenser or radiator.

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.

B) This clip must be reused and should not be distorted 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. 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 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 A/C condenser or 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 rear of A/C condenser or radiator and slide against cooling fins. On some applications the radiator may need to be tilted backward (towards engine) to access inside of condenser. Install lock (flat side with tapered hole) onto each mounting tie and push against cooling fins to secure fan onto A/C condenser or radiator loosely.
Caution — do not damage cooling fins.

Note: When inserting the mounting ties through 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 A/C condenser or radiator. Place one (1) rubber cushion pad onto each mounting tie (between mounting bracket and cooling fins) and slide through A/C condenser or radiator.

D) Place one (1) rubber cushion pad onto each mounting tie protruding through rear side of A/C condenser or 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.

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, A/C condenser or 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

Mr. Gasket Part #1992 Thermostatic Temperature Sensor Kit and Part #1993 On/Off Rocker Switch are recommended to complete the installation and wire connections on single and dual electric cooling fans. (see optional electric fan accessories).

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 sensitive 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" 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" direction. "Black" wire must be connected to 12-volt power lead — "Blue" 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 electrical 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 while fan(s) are operating. The auxiliary fan (pusher air flow) will draw the paper inward against the safety shroud and primary fan (puller air flow) will blow the paper outward away from safety shroud.

Optional Electric Fan Accessories

Part #1992 Thermostatic Temperature Sensor Kit — Recommended for applications where electric fan(s) need to operate automatically at a pre-set temperature. Thermostatic temperature sensor activities at 190 degrees fahrenheit and allows fan(s) to run only as needed. This kit includes a 30 AMP relay, electrical wiring kit with fuse, thermostatic temperature sensor, brass radiator probe, and necessary hardware.

Part #1993 Illuminated "On/Off" Rocker Switch — Recommended to be used with Thermostatic Temperature Sensor Kit above. The manual "On/Off" rocker switch by-passes and overrides the thermostatic sensor allowing electric fan(s) to be turned "On" manually at any temperature. When switch is placed in the "Off" position, fan(s) are controlled by the thermostatic sensor. Switch illuminates when fan(s) are in operation.

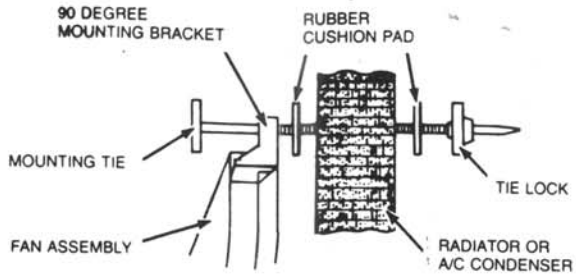
Part #1994 Electric Fan Mounting Kit — Recommended for mounting one electric fan to the radiator cooling fins. This kit contains four (4) mounting ties, eight (8) rubber cushion pads, and four (4) locks to secure mounting ties.

Contents and Identification 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

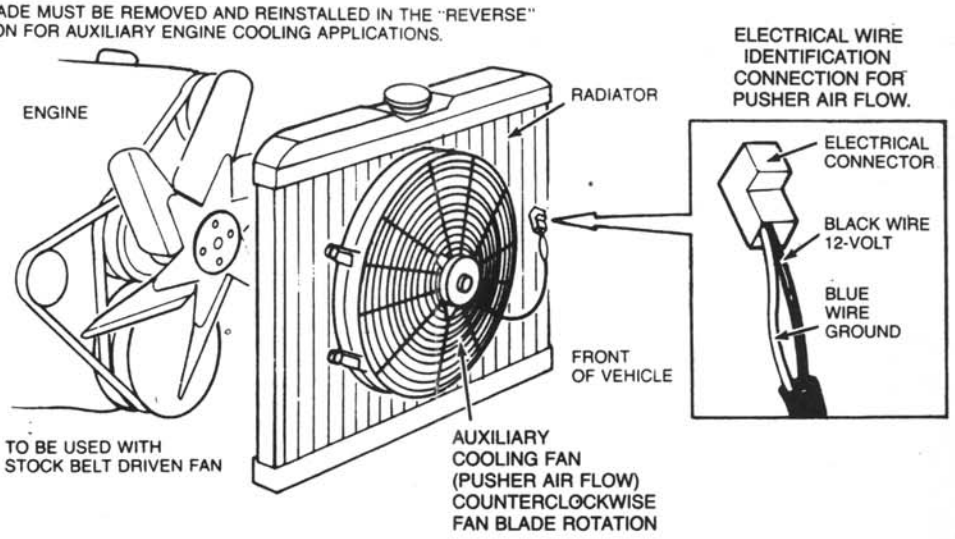
Typical Installations
Electric Fan Mounting Installation And Electrical Wire Identification

Mounting Tie Installation



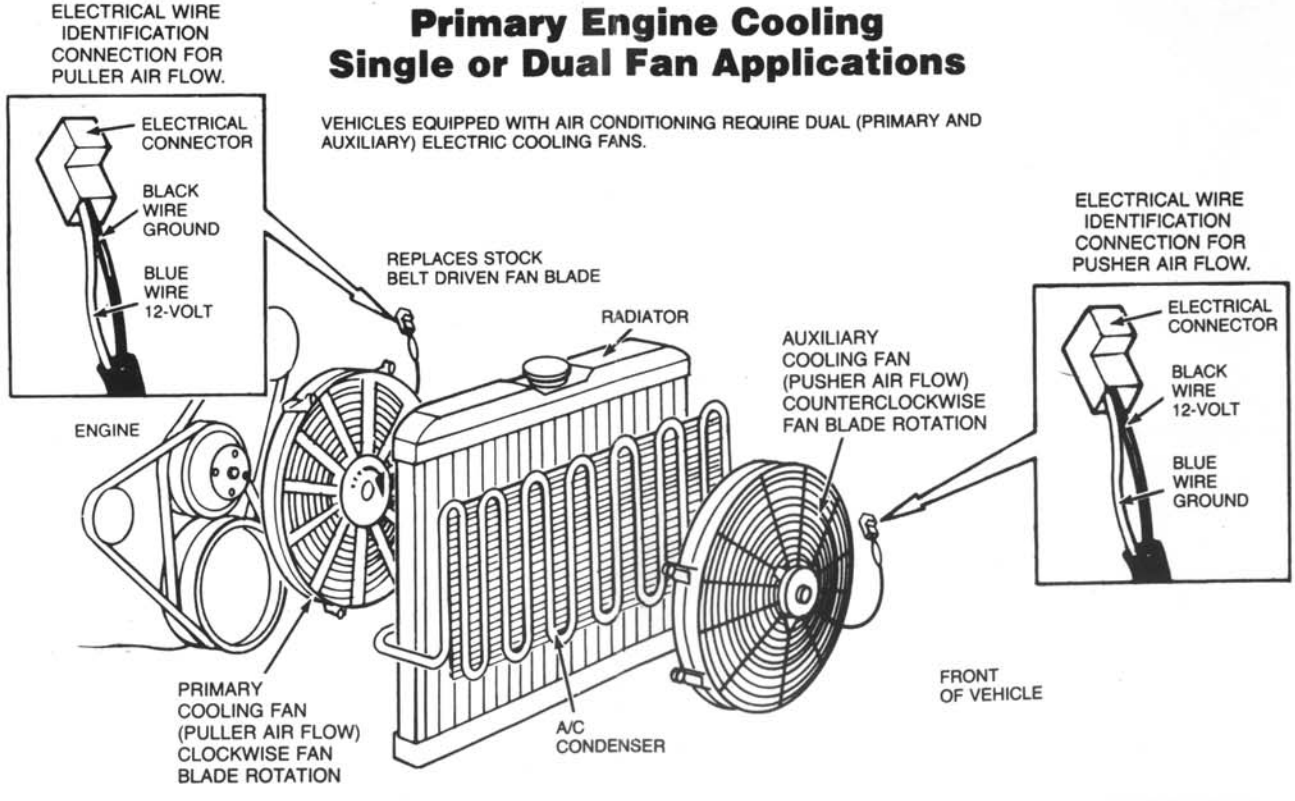
Auxiliary Engine Cooling
Single Fan Application

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.



HIGH PERFORMANCE ELECTRIC COOLING FAN

Supplemental Installation Instructions

MOUNTING KIT: The mounting kit supplied that attaches the electric fan to the radiator is designed to be used with most standard two (2), three (3), or four (4) core radiators. Please check your radiator by measuring the core thickness to be sure the mounting ties are long enough for your application. If the radiator is thicker than 3-1/2 inches, you will have to fabricate a custom mounting kit for your particular application.

ELECTRICAL CONNECTION: If Mr. Gasket Part #1992 or #1995 Thermostatic Temperature Sensor Kit is not installed, use 14 gauge automotive grade electrical wire, 30 amp fuse with holder (in-line with 12-volt lead wire), and corresponding size electrical connectors to complete the wiring installation for single fan installation. Dual electric fan installation requires using two (2) 30 amp fuses and fuse holders, one (1) for each fan.

To find the proper power source, locate fuse block. Using a test light, check for available 12-volt power source that is "Ignition" key activated. Connect the power lead from electrical fan (Blue Wire to Pull or Black Wire to Push Air Flow) to this source. Connect the other wire lead to a good negative "Ground" (metal surface) source. Be sure when ignition key is in the "Off" position that the fan(s) are also "Off" and not operating.

ELECTRIC COOLING FAN SPECIFICATIONS

Part No.	Air Flow	Description	Blades	CFM	RPM	Ampere Draw
1984	Puller/Pusher	9" Diameter	10	700	2600	5.5
1985	Puller/Pusher	10" Diameter	10	950	2650	8.3
1986	Puller/Pusher	12" Diameter	10	1400	2300	10.2
1987	Puller/Pusher	14" Diameter	10	1800	2100	10.3
1988	Puller/Pusher	16" Diameter	10	2000	1900	11.3