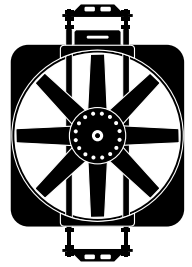




Black Magic 175

for the FORD MUSTANG 5.0 (1986-1993)



Prior to fan installation

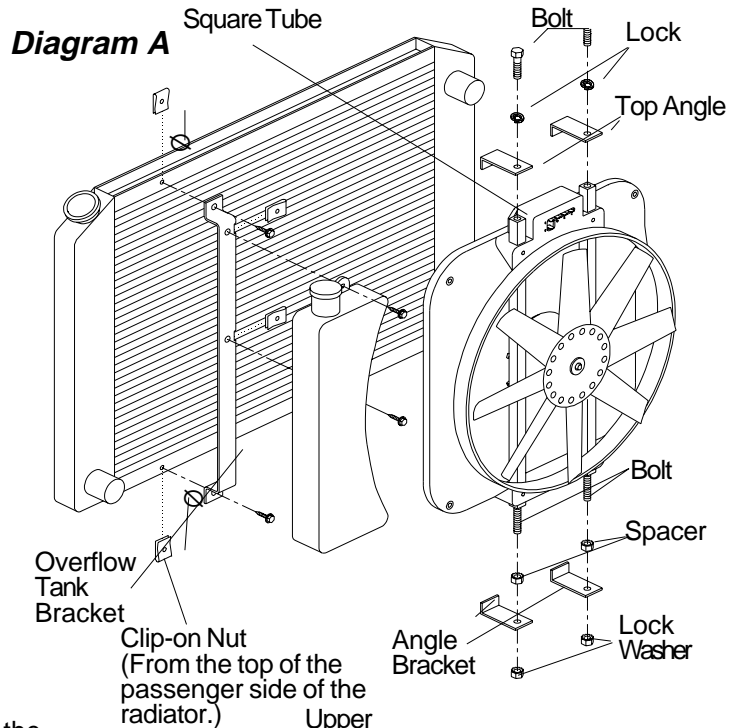
1. Remove fan, fan clutch, shroud, and radiator overflow tank. Replace the bolts to the water pump pulley. Rotate the water pump pulley to verify clearance of bolts to waterpump housing.

Note: Save the screws and clip-on nuts from the top of the radiator channel and from the shroud.

Installation Instructions

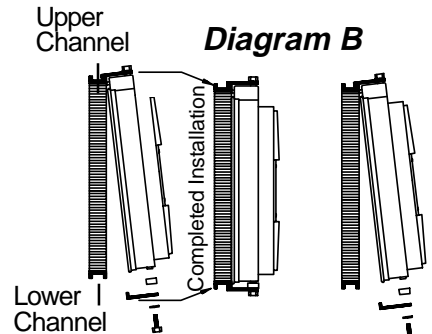
Overflow tank and bracket installation

2. Remove the clip-on nut from the top of the passenger side radiator channel. Place the clip-on nut on the bottom of the drivers side radiator channel. Use the original screws to mount the overflow tank bracket to the radiator. (see Diagram A)
3. Remove the 2 clip-on nuts from the original fan shroud, attach them to the holes on the overflow tank bracket provided in the kit. Use the original screws holding the overflow tank to the original shroud to attach the overflow tank to the new bracket. (see Diagram A)



175 Electric fan mounting instructions

4. Loosely fasten angle brackets to the ends of the square tubing on the temperature sensor side of the shroud. (see Diagram A) Hook the fan unit to the top of the radiator channel. (see Diagram B)
5. Position the fan unit between the overflow tank and the passenger side radiator tank.
6. Push the bottom of the fan unit towards the lower radiator channel, while holding the fan unit to the radiator hook one end of the angle bracket to the radiator and pass the lock washer and bolt through the angle bracket and spacer, fastening it to the square tubing. Push the fan unit towards the radiator and tighten the bolts until snug. (see Diagram B)
7. Tighten upper bracket bolts, check to see that the fan unit is secure.
8. See wiring instructions on back page.



POSITION CAPILLARY TUBE

This temperature sensor sends engine coolant data to the temperature control for more efficient cooling of your vehicle. The temperature sensor needs to be carefully placed through the radiator core to detect engine coolant temperature.

1. Locate your radiator inlet hose; one of two large hoses that attach to the radiator. The inlet hose from the engine should be mounted higher than the other hose. Release the clip holding the thin capillary tube. Mount the fan so you can reach the inlet hose with the temperature probe. Be careful not to kink or pinch the capillary tube.
2. With a small Phillips style screwdriver, gently separate the cooling fins on the radiator near the inlet hose. You will gently push the screwdriver through the radiator to create a hole for the temperature sensor to rest. Move only the thin fins, do not disturb the thicker tubes which carry the coolant through the radiator.
3. Remove the protective cap and gently push the temperature sensor through the hole. The temperature sensor should fit snug in the core.
4. After placing the sensor, replace the plastic cap. It is important to replace the cap to prevent the tube from pulling out of the radiator. The cap also insulates the sensor from cool air passing through the grill.
5. Gently coil the extra capillary tube and place it out the way of moving objects. Be careful no to kink the tube. If you must put a bend in the tube, bend the tube around a pen or small bolt to prevent pinching the tube.

MANDATORY CONNECTIONS

1. Disconnect the battery. Negative terminal
2. Connect the “+” terminal of the control box to a 12V positive (+) power source (i.e. fuse box), using the thin red wire and fuse taps (if necessary) provided in the kit.

Note: Attach this wire to an ignition controlled source to stop the fan when the vehicle is shut off.

Note: Attach this wire to a non-ignition source to keep the fan running after the vehicle is shut off.

3. Connect the “B” terminal to a high amp 12V positive power source (i.e. battery, alternator) using the thick red wire and in line fuse holder provided in the kit. (Do not install fuse at this time)
4. Connect the “G” terminal to ground (i.e. chassis, negative side of battery) using the thick black wire provided in the kit.
5. **If you have air conditioning:** with 3-way connector provided, pass the A/C clutch positive(+) wire (connected to the A/C compressor) through the connector. Place the green wire provided into the closed end of the connector. Crimp metal plate. Snap plastic cover into place. Attach green wire to the "C" terminal of the control box.

Air Conditioning Relay activates fan when A/C is turned on

6. Insert probe in radiator core near upper hose. Install rubber cap over end of probe.

ADJUSTING THE TEMPERATURE CONTROL

1. Attach the temperature control knob to the control box.
2. Turn the knob clockwise completely.
3. Idle the vehicle, observe the temperature of the vehicle. (Use the vehicles gauge)
4. When the temperature of the vehicle reaches above normal, turn the control knob counter-clockwise until the fan turns on. From here on the fan should activate at this temperature setting. Adjust as necessary according to your vehicle needs.

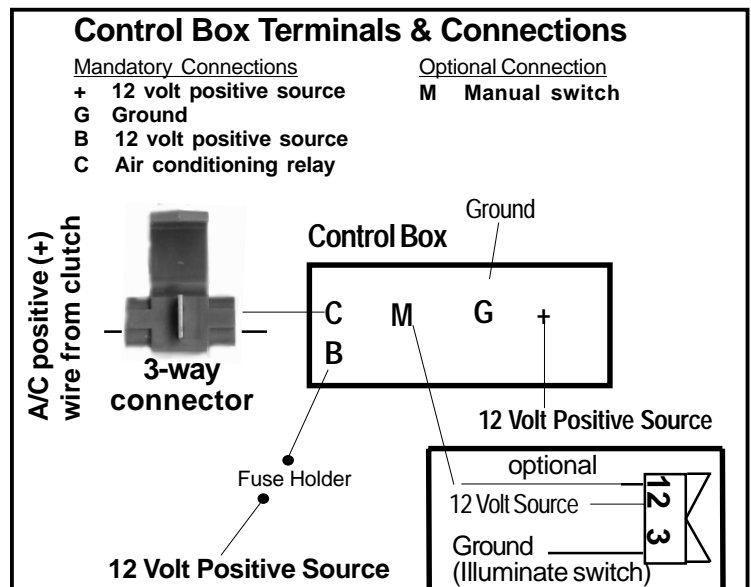
OPTIONAL CONNECTIONS

Manual Switch (not included) - Allows manual operation of the fan.

(This step is based on Flex-a-lite's manual switch part #31148, other switches will cause this unit fail.)

1. Connect the “M” terminal to terminal 1 on the switch.
2. Attach terminal 2 of the switch to a 12V positive (+) source.
3. Attach terminal 3 of the switch to ground, in order to illuminate the switch.

Note (optional): To stop the fan from activating thermostatically, omit the lead to the “+” terminal of the control box. “B”, “G”, & “M” must remain connected.



***WARNING: IF NOT USING FLEX-A-LITE'S ILLUMINATED SWITCH (PN #31148) YOU MUST DISCONNECT THE SWITCH GROUND.**

The Flex-a-lite Limited Warranty

Flex-a-lite Consolidated, 7213-45th St. Ct. E., Fife, WA 98424, Telephone No. 253-922-2700, warrants to the original purchasing user, that all Flex-a-lite products to be free of defects in material and workmanship for a period of 365 days (1 year) from date of purchase. Flex-a-lite products failing within 365 days (1 year) from date of purchase may be returned to the factory through the point of purchase, transportation charges prepaid. If, on inspection, cause of failure is determined to be defective material or workmanship and not by misuse, accidental or improper installation, Flex-a-lite will replace the fan free of charge, transportation prepaid. **Flex-a-lite will not be liable for incidental, progressive or consequential damages.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state to state. The Flex-a-lite warranty is in compliance with the Magnuson-Moss Warranty Act of 1975.