

## Installation Instructions

**\*\*Always wear safety glasses during the installation process\*\*** **\*\*Disconnect the battery before starting\*\***

1. This electric fan is a **puller only** fan and is **not reversible**. It is designed to be installed on the engine side of the radiator. Make sure you have enough clearance with the engine pulley system. This fan can be used as the primary cooling fan, or as an auxiliary fan in conjunction with the belt driven fan.
2. Place the fan on a flat surface with the blades facing downward. Insert the four (4) 90-degree mounting feet in an X-shape into the equally spaced slots around the perimeter of the fan shroud so they meet the flat surface. *Or* use the four mounting holes molded into the perimeter of the fan shroud.
3. Mounting Options: **1. Shroud** – if mounting to a shroud, use the supplied screws/nuts/bolts from the shroud manufacturer, or purchase from local hardware store. Skip to **Figure 1** for wiring instructions. **2. Directly to radiator** – if mounting directly to the radiator core use the supplied hardware and follow the steps below:
  - a. Directly to Radiator Core. Place fan assembly on the inside (engine side) and position in the center of the radiator, mark 4 mounting locations and remove fan.
  - b. Take two (2) mounting ties and (2) cushion pads, thread the cushion pads down the mounting ties. Then thread the long end of the mounting tie through the upper two mounting feet of the electric fan.
  - c. Carefully thread the long end of the upper two mounting ties through the fins of the radiator, so they protrude out from the front of the radiator.
  - d. Thread a cushion pad onto each mounting tie so that it is against the radiator core.
  - e. Lastly, take the mounting tie locks and slide them down the mounting ties until the electric fan is held snugly against the radiator core. Trim any extra mounting tie that protrudes from the mounting tie lock.
  - f. Repeat the same procedure for the bottom two mounting locations.
4. **Wiring the fan:** Disconnect (-) battery cable before connecting 12-volt electrical power to the fan motor. **Caution:** ECM (Electronic Control Module) equipped vehicles. When removing or connecting the battery cable terminal, use care to avoid intermittent contact (arching or sparking) between the battery post or battery mounting surface and terminal end. This generates voltage spikes that can damage the electronic control module components or memory circuits.
5. For correct wiring information, see Figure 1.

**\*\*\*\*\*IMPORTANT: Brushless fans DO NOT start instantly when wired up, they take a few seconds to start moving. This is part of their normal operation.\*\*\*\*\***

Figure 1.



### Wiring Legend

**Red Wire:** 12 Volt (+)

**Black Wire:** Ground (-)

**Green Wire:** Voltage Control (+)

### For adjustable on/off temperature controllers

- Suggested wiring when following manufacturer instructions:
  - Connect the **Red Wire** & **Green Wire** together as one (+)
  - **Black Wire** remains the ground (-)

OR

### For PWM Controllers and ECU's. Minimum 110 Hertz required.

- **Red Wire** to 12v (+)
- **Black Wire** to ground (-)
- **Green Wire** to controller that sends (+) positive voltage signal
  - If the controller signal is (-) negative like a Holley® Terminator EFI, then you will need to change the signal polarity to (+) positive with a standard 30/40 Relay

**Note:** you cannot make the fan variable speed by connecting the (+) **RED Wire** to the PWM signal like regular brushed fans because the brushless fan will only operate between 10-15 volts. The (+) **RED Wire** needs 12 volts at all times. The Green Wire controls the fan speed through (+) positive voltage regulation.