

AR-23
Cooling Fan Sensor System
& AC Request
(On 176 / Off 161)

IMPORTANT: The sensor is designed to be mounted **in the cylinder head**. Mounting the sensor in another location "WILL" cause the fan(s) to turn on at a <u>higher temperature</u> than designed. Ron Francis Wiring recommends installing the sensor in the head only!

The **best location** to install the sensor is in the water jacket of the cylinder head. If this location presents a problem due to headers or exhaust manifolds it can be located in the intake manifold.

This cooling fan relay will handle one large or two small radiator cooling fans. A 30 amp fuse is in line on the **blue** wire running to the fan to protect the circuit. A 160°F thermostat should be used.

The water temperature sensor has 3/8 pipe thread and is the only size thread available. Depending on engine year or the location you choose to mount the sensor, it may be necessary to use a pipe thread reducer for the temperature sensor installation.

NOTE: Do not use Teflon tape or sealant on the threads, doing so will insulate the circuit from ground and cause poor operation.

Mount the relay under the dash and wire as follows:

Red run this to the starter solenoid and connect it to the same terminal as the positive battery cable using the yellow ring terminal provided.

Blue: connect this to the cooling fan(s).

Green: Run to the temperature sensor and plug in making sure the wire is kept clear of the exhaust manifolds and other moving parts.

Purple: connects to the wire that engages the air conditioning compressor clutch. (**NOTE:** This wire is only used on vehicles with A/C).

Orange: to ignition hot with the key on.

Note: If you would like the fan to continue to operate after the key is turned off, connect this wire to a battery hot all the time circuit.

Black: runs to a good ground.

Ground the other wire running from the cooling fan(s).

IMPORTANT

Our color coded wires do not always match the fan wire colors

Check the fan rotation to assure the completed unit is pushing or pulling the air according to your application