

**RON FRANCIS**  
*Wiring*

**AR-27**  
**Cooling Fan Relay**  
**& Sensor Wiring**  
**(On 176/Off 161**

This cooling fan relay mounted in the fuse panel will handle one large or two small radiator cooling fans (up to 30 amps). 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.

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. The unit is designed to turn the fan on at 176 degrees and off at 161 degrees with a tolerance of +/- ten degrees.

**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 higher temperature than designed. **WIRE WORKS recommends installing the sensor in the head only!**

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

**Wiring**

**Red (BATTERY FD) (12 gauge wire):** connects to terminal #C on the panel and run to the starter solenoid. Connect this wire to the same terminal as the positive battery cable using the yellow ring terminal pro

**NOTE: The fan relay must be powered through an external source. We recommend powering the relay direct from the battery connection on the starter solenoid or from the battery itself. The fan relay is fused through #C on the fuse panel through a 30 amp fuse installed in the panel. DO NOT CONNECT THIS WIRE TO A POWER FEED SOURCE ON THE FUSE PANEL.**

**Blue (COOLING FAN) (12 gauge wire):** connects to terminal #D on the panel and run to the cooling fan(s).

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

**Orange IGNITION FD (18 gauge wire):** Connects this wire from terminal #G to terminal #H on the panel. This is the ignition feed to the relay.

**Green (SENSOR GRND) wire:** Run to the temperature sensor and plug in making sure the wire is kept clear of the exhaust manifolds and other moving parts. Connect the other end to terminal #F on the panel using the red fork terminal supplied.

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