

RON FRANCIS
Wiring

AR-77
Dual Cooling Fan
Sensor System
(On 176 / Off 161)

This kit has been designed so you have two options on the control of your dual cooling fans. Control one fan by the temperature sensor and the other by the ignition key or have both fans controlled by the sensor. The system has been designed to handle two individual fans not drawing more than 30 amp each. A 30 amp fuse is in line on each of the blue wires running to the fans to protect the circuit.

IMPORTANT: The sensor is designed to be mounted in the cylinder head. Mounting the sensor in another location "WILL" cause the fans to turn on at a higher temperature than designed. WIRE WORKS recommends installing the sensor in the head only!

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 sensor from ground and cause poor operation.

Choose the box below that pertains to the way you would like your fan controlled:

(A) One fan controlled by the sensor and the other by the ignition key

Mount the relay under the dash and wire as follows:

Two Red (12 gauge wires): Run both wires to the battery post side of the starter solenoid (the same post as the battery cable) or if you have our Express wiring kit, connect to the junction block using the yellow ring terminals provided.

Blue (PRIMARY FAN & SECONDARY FAN) (12 gauge wire): Connect the PRIMARY FAN wire to the fan you would like to be controlled by the temperature sensor. Connect the other blue wire SECONDARY FAN to the fan controlled by the ignition key. Ground the other wire running from the cooling fans to a very good ground!

Orange (IGNITION FD 1 & IGNITION FD 2) (18 gauge wire): Connect both wires to an ignition hot with the key on.

Note: If you would like the fan to continue to operate after the key is turned off, connect the IGNITION FD 1 wire to a battery hot all the time circuit.

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.

Black wire: runs to a good ground.

Important!

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

(B) Both fans controlled by the sensor

Mount the relay under the dash and wire as follows:

Two Red (12 gauge wire): Run both wires to the battery post side of the starter solenoid (the same post as the battery cable) or if you have our Express wiring kit, connect to the junction block using the yellow ring terminals provided.

Blue (PRIMARY FAN & SECONDARY FAN) (12 gauge wire): Connect to each cooling fan. Ground the other wire running from the cooling fans.

Orange (IGNITION FD 1 & IGNITION FD 2) (18 gauge wire): Connect both wires to an ignition hot with the key on.

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.

Black wire: Splice this wire to the green wire running to the temperature sensor noted above.

Important!

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

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