



# INSTALLATION INSTRUCTIONS

## SINGLE STAGE ELECTRIC FAN THERMOSTAT

### PART # 16720 & 16721

Please read these instructions completely before beginning installation

#### KIT CONTENTS

QTY. DESCRIPTION	QTY. DESCRIPTION
1 Thermostat Switch	1 Roll Extra Wire
1 Relay Wire Harness	1 Blue 5/16" Ring Terminal
1 1/8" Thermostat Adapter	2 Blue #10 Ring Terminal
1 3/8" Thermostat Adapter	2 Blue Butt Connectors
3 #10 Sheet Metal Screw	2 Blue Female Connectors
4 4" Wire Ties	2 Blue Wire Tap Connectors

#### TOOLS NEEDED

12V Test Light	Sealant Tape
Wire Stripper	Standard Screw Driver or a 5/16" Nut Driver
Crimping Tool	Drill
5/8" Open End Wrench	5/32" Drill Bit
11/16" Open End Wrench	

#### IMPORTANT

This single stage electric fan thermostat will control up to two different fans with a **COMBINED MAXIMUM DRAW OF 25 CONTINUOUS AMPS**. If fans exceed 25 amps combined we recommend using one switch per fan.

#### THERMOSTAT PROBE INSTALLATION

**Placement:** Locate a port on the vehicle, **generally** found on the vehicles radiator, manifold or water outlet. The port will either be 1/8" NPT or 3/8". Decide which size is needed and then thread in 1/8" or 3/8" Thermostat Adapter into Thermostat Switch finger tight (only 1 size will be used). Note: Do not use any thread sealant tape when threading Thermostat Switch into Adapter.

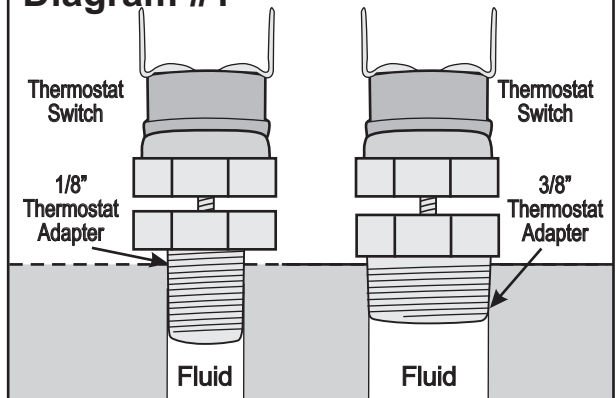
**Port installation** - Using Thread Sealant Tape or suitable sealant install the Thermostat Adapter into the 1/8" or 3/8" NPT port on the vehicle.

(See Diagram #1)

#### RELAY WIRE HARNESS MOUNTING

- Taking into consideration probe placement and wire routing requirements, choose a convenient location. Avoid mounting near HOT engine components.
- Using the relay bracket as a template, mark and drill a 5/32" hole in the proper location.

**Diagram #1**



#### WIRING

Before starting, disconnect the Negative (-) cable on the vehicles battery.

Using the electrical connectors and wire ties provided, follow the directions below.

**WARNING:** When extending wires always use the identical gauge wire as provided.

**See Diagrams # 2 & 3 on page 2**

**Red:** Using the Blue 5/16" Ring Terminal provided attach to the Positive (+) terminal of the battery.

**Black:** Using the Blue #10 Ring Terminal and #10 Sheet Metal Screw provided attach to a good chassis ground (-).

**Yellow Wire** - Using the Blue Female Connector provided, attach the Yellow Wire to EITHER terminal on the Thermostat Switch.

**Thermostat Switch** - Using the Blue Female Connector, Blue Wire Tap Connector and Wire provided, attach the remaining Thermostat Switch Lead to a Positive (+) switched ignition source.

**Warning:** Attaching this wire directly to a 12V non-switched source will allow the fan to run after the vehicle has been turned off which could effect the vehicles battery performance.

**Green (Optional):** The green wire is designed to work in two different configurations. When used, this will allow the fan(s) to be turned on regardless of the temperature of the thermostat as it simply overrides all other functions. If you choose to not use this option disregard the wire.

- A/C Override - Using the Blue Wire Tap provided, attach the green wire to the positive (+) lead on the air conditioning compressor.
- Manual Switch Override - Attach the Green Wire to the manual switch NOT PROVIDED. (See Diagram #4 on page 2)

**Orange/Blue Wires:** See page 2 for single or dual fan configurations.

(Continues on reverse side)

## SINGLE FAN CONFIGURATION

**Orange Wire:** Attach to a 30 Amp fused Circuit (Fuse not included), after the fuse connection attach to the Positive Electric Fan Lead (Fan +).

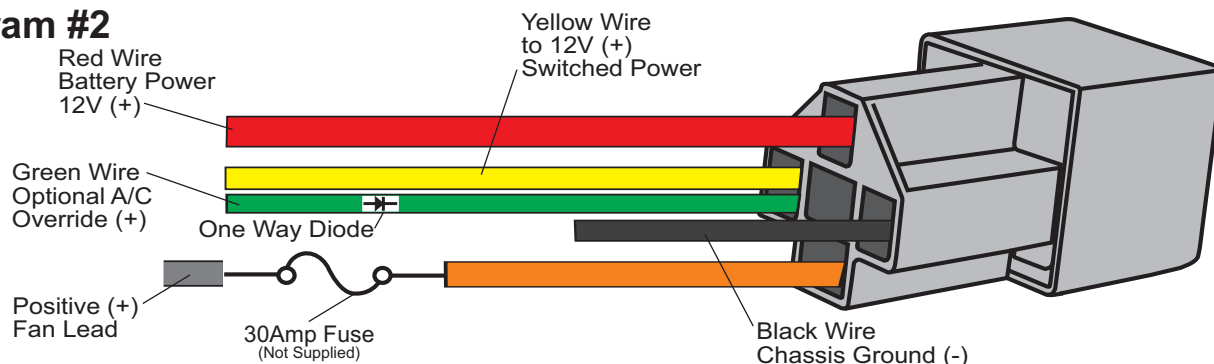
**Negative Fan Wire:** Using a Blue Ring Terminal provided, attach Negative (-) electric fan lead to a good chassis ground (-). Reattach the Negative (-) cable on the vehicles battery.

## DUAL FAN CONFIGURATION

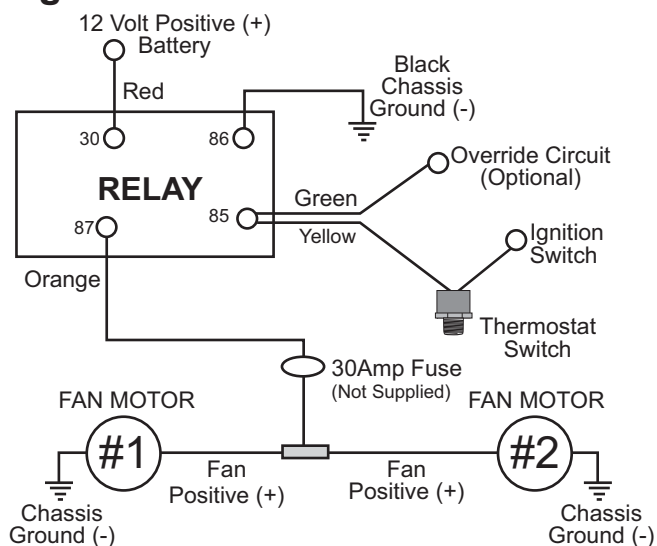
**Orange Wire:** Attach to a 30 Amp fused Circuit (Fuse not included), after the fuse connection attach to the Positive Electric Fan Leads (Fan +).

**Negative Fan Wires:** Using a Blue Ring Terminal provided, attach BOTH Negative (-) electric fan leads to a good chassis ground (-). Reattach the Negative (-) cable on the vehicles battery.

### Diagram #2

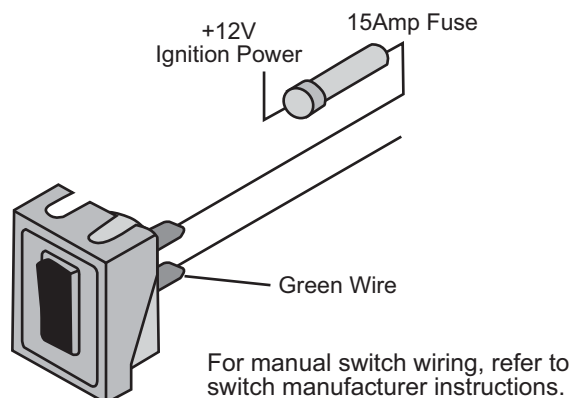


### Diagram #3



### Diagram #4

#### Manual Switch Override Instructions (Switch Not Included)



## TROUBLE SHOOTING Q&A

Q: Why doesn't the fan(s) turn on?

A: 1. Check all connections to make sure all contacts are crimped correctly.

2. Check all Ground (-) connections to make sure all paint is sanded off and you are getting a metal to metal contact.

Q: Why does the fan(s) run after the engine is turned off?

A: Check the wire going to the Thermostat Switch, this wire should be connected to a 12V Positive (+) switched ignition source.

Q: Why doesn't the fan(s) turn on when I use the Override function?

A: To quickly test the Override circuit, disconnect the Green Wire and run a jumper wire directly to the Positive (+) terminal on the battery. The electric fan should start immediately. If fan started, reattach the Green Wire to the proper (+) wire on the A/C clutch or Manual Switch.

**Warning:** Installation of accessories should only be undertaken by those with mechanical knowledge and are familiar with working on vehicles. Always use eye protection (goggles, safety glasses or shield). Park the vehicle in a well lit area, on level ground and apply the parking brake. Only work on a cold vehicle that has been sitting overnight, failure to do so will result in severe burns and injury. Before starting the vehicle, make sure no tools or any other items are left under hood that could interfere with or be drawn into moving parts of the engine. Failure to follow instructions can lead to severe damage and personal injury.