

# Wiring Harness

# Installation Instructions

Made Easy





### **Dual Electric Fan Wiring Kit**

**Dual Electric Fan Wiring Harness with Temperature Sending Unit and 40 Amp Waterproof Relays** 

#### **Be Cool Part Numbers:**

#75100 - Temperature Sending Unit Turns Fans on at 210°, off at 190°

#75117 - Temperature Sending Unit Turns Fans on at 195°, off at 175°

#75104 - Temperature Sending Unit Turns Fans on at 185°, off at 165°

#### Kit Contents for #75100, #75117, or #75104:

- 2 Harnesses with Relays, Sockets, and Fuse Holders
- #75099 Temperature Sending Unit (for kit #75100)
- #75030 Temperature Sending Unit (for kit #75117)
- #75029 Temperature Sending Unit (for kit #75104)
- Butt and Eyelet Connectors
- Shrink Tubing



See page 5 for installation instructions, pages 6 & 7 for wiring diagrams for vehicles without air conditioning, and pages 8 & 9 for vehicles with air conditioning.



### Single Electric Fan Wiring Kit

#### Single Electric Fan Wiring Harness with Temperature Sending Unit and 40 Amp Waterproof Relay

#### **Be Cool Part Numbers:**

#75098 - Temperature Sending Unit Turns Fan on at 210°, off at 190°

#75021 - Temperature Sending Unit Turns Fan on at 195°, off at 175°

#75032 - Temperature Sending Unit Turns Fan on at 185°, off at 165°

**#75017 - Wiring Kit with no Temperature Sending Unit** 

#### Kit Contents for #75017, #75021, #75032, or #75098:

- Harness with Relay, Socket, and Fuse Holder
- #75030 Temperature Sending Unit (for kit #75021)
- Butt and Eyelet Connectors

- #75029 Temperature Sending Unit (for kit #75032)
- #75099 Temperature Sending Unit (for kit #75098)
- Shrink Tubing





75017 without Sending Unit

See page 5 for installation instructions, pages 6 & 7 for wiring diagrams for vehicles without air conditioning, and pages 8 & 9 for vehicles with air conditioning.



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### **Dual & Single Electric Fan Wiring Kits**

#### **Design Intent:**

- These wiring harness kits are designed to enable a simple and dependable installation for high performance electric fan(s).
- They are compatible with all vehicles and can be used on any positive or negative ground 12 volt DC vehicle with no modifications.
- The wiring harness is protected by many weatherproof components. However, care should be taken to position the devices where they will be as dry as possible and the least exposed to extreme temperatures.

#### Installation of the Temperature Sending Unit:

- DO NOT attempt installation when the engine is hot.
- The temperature sending unit is designed to mount in the intake manifold for the most accurate control of the system.
- The switch has 3/8"-18 N.P.T threads and will work in many applications. A 1/2" N.P.T. adapter is included in the kit if larger threads are needed for this switch installation
- DO NOT use "Teflon" style tape on the temperature sending unit as this could cause a poor electrical ground and improper
  operation.
- If you need to cut and splice the wires, use the provided butt connectors and shrink tubing for a proper connection.

See page 5 for installation instructions, pages 6 & 7 for wiring diagrams for vehicles without air conditioning, and pages 8 & 9 for vehicles with air conditioning.



# Installation Instructions

### **Dual & Single Electic Fan Wiring Kits**

<b>DISCONNECT BATTERY</b> before any mechanical or electrical installation.  Mount the relay in a dry position on the vehicle. When this is completed, connect the wires as per the diagram.	
Red Wire:	Plug the red and black wires (with white plastic plug) from the relay to the white plastic plug on the fan harness.
Gray Wire:	Connect the gray wire from the relay to the temperature sending unit using the enclosed eyelet connector.
Orange Wire/Fuse:	Connect the eyelet end on the fuse holder assembly to the positive battery terminal.
Green Wire:	Connect the green wire from the relay to the ignition terminal in fuse box.
For air conditioned	vehicles, use Be Cool Kit #75095. When air conditioning is activated, fans will turn on regardless of engine

### temperature.

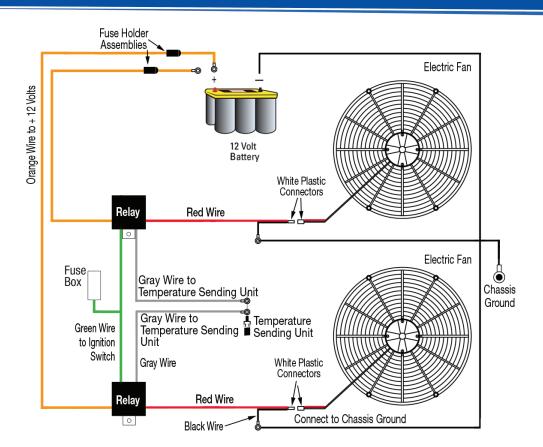
#### Wiring Instructions for Optional A/C Wiring Harness Kit Be Cool Part #75095 Blue Wire: Connect the blue wire to the blue wire on the A/C compressor power input with butt connector. **Gray Wire:** Connect the gray wire from the relay to the temperature sending unit using the enclosed eyelet connector. Black Wire: Connect the black wire to the eyelet connector, and then to the chassis ground. Connect a high amp toggle switch (Be Cool Kit #75096) to the temperature sending unit's gray wire. This will Optional ----> close the circuit when the switch (SPST; Single Pole, Single Throw) is on.



### Dual Fan Wiring Diagram

For Vehicles
WITHOUT
Air Conditioning

Wiring Diagram
for Be Cool Kit
Part Numbers:
#75100 w/Sending Unit
#75117 w/Sending Unit
#75104 w/Sending Unit



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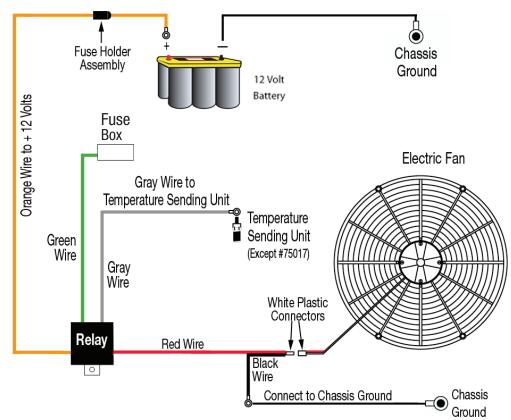


### Single Fan Wiring Diagram

For Vehicles
WITHOUT

**Air Conditioning** 

Wiring Diagram
for Be Cool Kit
Part Numbers:
#75017 w/o Sending Unit
#75021 w/Sending Unit
#75032 w/Sending Unit
#75098 w/Sending Unit



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Vehicles originally equipped with (factory air-conditioning) use Be Cool air conditioning harness 75095

Vehicles with (aftermarket air-conditioning) contact Manufacture for proper recommendation.

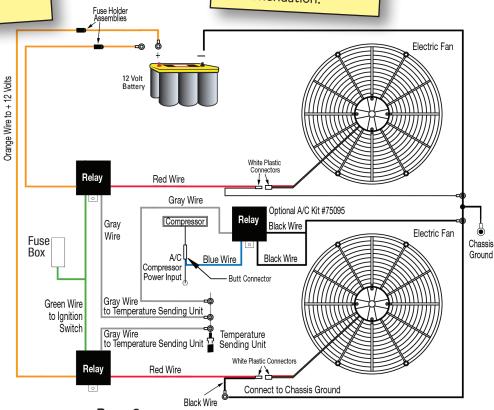
### Dual Fan Wiring Diagram

For Vehicles WITH Air Conditioning

Wiring Diagram for Be Cool Kit Part Numbers: #75100 w/Sending Unit

#75117 w/Sending Unit #75104 w/Sending Unit

With A/C Wiring Harness Kit Part #75095



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Vehicles originally equipped with (factory air-conditioning) use Be Cool air conditioning harness 75095

### Single Fan Wiring Diagram

For Vehicles WITH Air Conditioning

Wiring Diagram for Be Cool Kit Part Numbers:

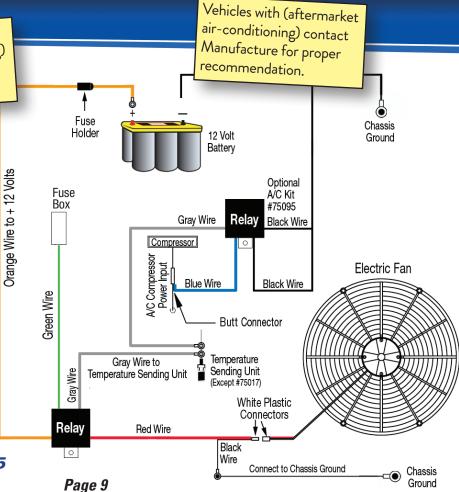
#75017 w/o Sending Unit

#75021 w/Sending Unit

#75032 w/Sending Unit

#75098 w/Sending Unit

With Air Conditioning
Harness Part Number #75095





### **Electric Fan A/C Wiring Harness Kits**

**Electric Fan Air Conditioning Wiring Harness Kit with 40 Amp Waterproof Relay** 

# Be Cool Part: #75095

#### Kit Contents for #75095:

- Weatherproof Relay and Socket
- Wire Terminated at the Relay
- Butt and Eyelet Connectors



See page 12 for installation instructions and page 13 for a wiring diagram.



# Overview.

### Electric Fan A/C Wiring Harness Kit

#### **Design Intent:**

- This kit is designed to operate electrical fan(s) in conjunction with an air conditioning system.
- To prevent damage to the A/C system the electric fan(s) should move air through condenser when the A/C is turned on.
- It is compatible with all vehicles and wiring harnesses. It can be used on a positive or negative ground 12 volt DC vehicle.
- This kit can be used with Be Cool Wiring Harness Kits #75021, #75032, #75098, #75100, #75117, or #75104.
- The wiring harness is protected by many weatherproof components. However, care should be taken to position the device where it will be as dry as possible and the least exposed to extreme temperatures.

#### Theory of Operation:

- The relay is actuated by power to the air conditioning compressor.
- When the relay is actuated one set of contacts closes the circuit to bypass the temperature sending unit.

See page 12 for installation instructions and page 13 for wiring diagram.



# Installation Instructions

### **Electric Fan A/C Wiring Harness Kit**

ı	DISCONNECT RATTERY	before mechanical or electrical installation.	
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Mount the relay in a dry position on the vehicle. When this is completed, connect the wires as per the diagram.

Blue Wire:	Connect the blue wire to the blue wire on the A/C compressor power input with butt connector.
Gray Wire:	Connect the gray wire from the relay to the temperature sending unit using the enclosed eyelet connector.
Black Wire:	Connect the black wire to the eyelet connector and then to the chassis ground.

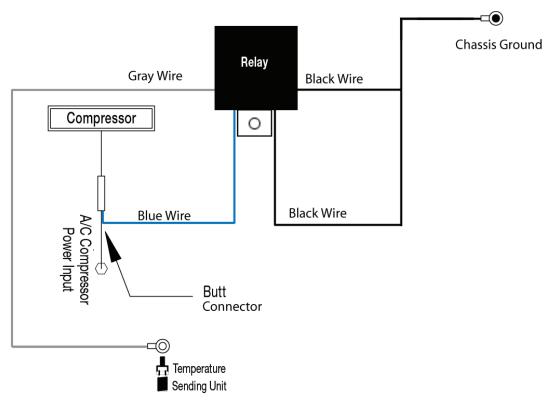




# A/C Wiring Harness Diagram

Wiring Diagram for Be Cool Kit Part Number:

**#75095** 



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### **High Amp Electric Fan Toggle Switch Kits**

### High Amp Toggle Switch Wiring Harness with 40 amp Relay for use with Single or Dual Electric Fans

#### **Be Cool Part: #75196**

#### Kit Contents for #75196:

- High Amp Toggle Switch with Wires
- Relay, Socket, and Fuse Holder
- Fan Harness
- Wire Sleeve and Shrink Tubing
- Butt and Evelet Connectors



#### **High Amp Toggle Switch with Wiring for use with Single or Dual Electric Fans**

#### Be Cool Part: #75096

#### Kit Contents for #75096:

- High Amp Toggle Switch with Wires
- Wire Sleeve
- Eyelet Connectors



See page 16 for installation instructions and pages 17 & 18 for wiring diagrams.



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### **High Amp Electric Fan Toggle Switch Kits**

#### **Design Intent:**

- These optional high amp toggle switch harness kits are designed to enable simple installation of high performance electric fan(s).
- It is a universal fit. It can be used on any positive or negative ground 12 volt DC vehicle.
- These switches can be used with or without a temperature sending unit using the diagram on pages 17 & 18.
- The wiring harness is protected by many weatherproof components. However, care should be taken to position the device where it will be as dry as possible and the least exposed to extreme temperatures.

#### Theory of Operation:

- When the temperature sending unit reaches its operating temperature it brings the attached wire to ground.
- When this happens the relay is "turned on" which, in turn, operates the electric fan(s).
- These manual high amp toggle switches serve as a bypass to the temperature sending unit and will operate the fans at your desired temperature.

#### Installation of the High Amp Toggle Switches:

- DO NOT attempt installation when the engine is hot.
- Disconnect the battery before installing wiring.
- If you need to cut and splice the wires, use the provided butt connectors and shrink tubing for a proper connection.

See page 16 for installation instructions and pages 17 & 18 for a wiring diagram.



# Installation Instructions

### **High Amp Electric Fan Toggle Switch Kits**

	DISCONNECT RATTERY	hofore any machanica	l or electrical installation.
ı	UISCUININECI DAI IERT	belore any mechanica	i or electrical installation.

Mount the relay in a dry position on the vehicle. When this is completed, connect the wires as per the diagram.

Red Wire:	Plug the red and black wires (with white plastic plug) from the relay to the white plastic plug on the fan harness.
Gray Wire:	Connect the gray wire from the relay to the temperature sending unit using the enclosed eyelet connector.
Orange Wire/Fuse:	Connect the eyelet end on the fuse holder assembly to the positive battery terminal.
Green Wire:	Connect the green wire from the relay to the ignition terminal in fuse box.

#### Wiring Instructions for Be Cool Kit Part #75096

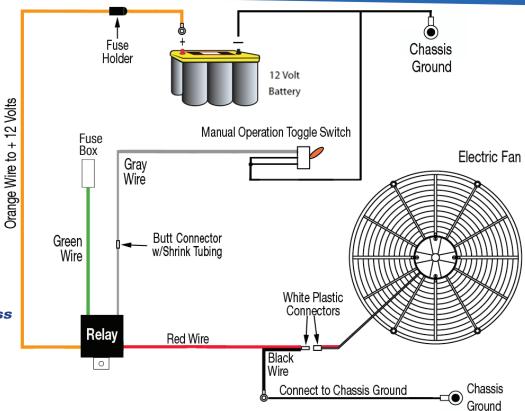
Gray Wire:	Connect the gray wire from the relay to the temperature sending unit using the enclosed butt connector.
Black Wire:	Connect the black wire to the eyelet connector and then to the chassis ground.
Instructions:	Connect a high amp toggle switch (Be Cool Kit #75096) to the temperature sending unit's gray wire. This will close the circuit when the switch (SPST; Single Pole, Single Throw) is on.



### Toggle Switch Wiring Diagram

Wiring Diagram for Be Cool Kit Part Number:

#75196 w/Wiring Harness



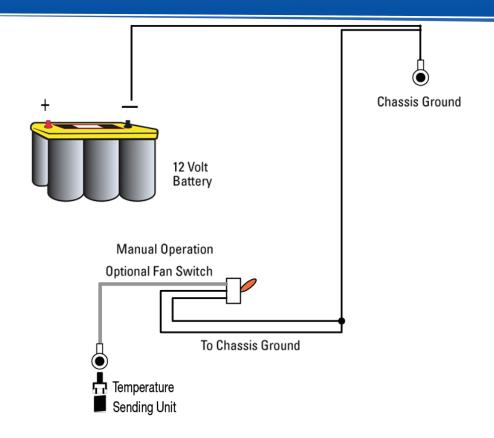
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### Toggle Switch Wiring Diagram

Wiring Diagram for Be Cool Kit Part Number:

#75096 Toggle Switch



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# Accessories

Make sure your alternator has a minimum of 100 AMPS at idle to maintain a consistent at idle to 4.2 volts.

This will ensure your electric fans are operating at maximum efficiency.









Electric Fan Temperature Sending Units	Part Number
Electric Fan Temperature Sending Unit 3/8" to 1/2" N.P.T. to Turn On at 185 Degrees and Turn Off at 165 Degrees	75029
Electric Fan Temperature Sending Unit 3/8" to 1/2" N.P.T. to Turn On at 195 Degrees and Turn Off at 175 Degrees	75030
Electric Fan Temperature Sending Unit 3/8" to 1/2" N.P.T. to Turn On at 210 Degrees and Turn Off at 190 Degrees	75099
Electric Fan Relays	
40 Amp Replacement Waterproof Relay	75022
Electric Fan Connectors	
Weatherhead Pigtail Connector, for #75066, #75068, and/or #75069 Electric Fans	75071
Electric Fan Standard Pigtail Connector	75221



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America's Leader In Power Cooling Technology