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Fitting instructions for electronic fan control

This unit is intended for use on positive earth vehicles only.

Read these instructions carefully before attempting to install the controller on your vehicle.

1. Introduction

The control unit is available in various sizes to match standard hose fittings. The electronic fan control overcomes all of the problems associated with traditional aftermarket cooling fan devices. After installation there are no obstructions to the coolant flow and no intrusion into joints that break the perfect seal. The latest electronic technology provides close and accurate control of coolant fan operation to maintain the optimum engine temperature. The temperature setting is fully adjustable to adapt to the requirements of your vehicle. The kit contains all of the necessary parts to ensure a professional quality installation.

2. Installation

The kit comes as two parts, which are connected by a wiring harness;

a) The control unit which will be mounted into one of the coolant hoses (usually the main top radiator hose)
b) The fan power relay, which will supply the switched 12v, feed for the electric radiator fan.

3. Installing the controller

Before making any alterations to your system ensure that the controller size is correct for your radiator hose. Choose a position for the controller in a straight section of one of the main radiator hoses. Ensure that there is enough room to fit the full length of the controller and that the adjustment will be accessible. Partially drain the cooling system to allow you to remove the hose. Using a sharp knife or hacksaw remove a 20mm section from the hose at the position that you want the controller. Fit the remaining end sections of the hose to the controller making the free ends match their original orientation. Secure the hose to the controller using the pipe clips provided. **Note**: The direction of coolant flow Installing the relay and electrical connection.

The wiring diagram is as follows: through the controller is not important.

Reassemble the hose into the vehicle cooling system, top up the coolant and check for leaks.

Installing the relay and electrical connection. The wiring diagram is as follows:

For safety reasons it is recommended that the vehicle battery is disconnected when you are carrying out this installation procedure.

Failure to adhere to the recommended wiring instructions will invalidate the warranty

For our electronic fan controller to work correctly it is important to have a constant voltage supply, due to the nature of positively earthed cars this can sometimes be a problem, we therefore have isolated the fan controller circuit supply from the fan circuit supply. This means each of the supply and earth wires need to be connected seperately. Mount the relay while ensuring that the wire harness with the relay connector will reach your chosen position allowing you to neatly run the harness with no strain on the wiring. Connect the red wire from the harness to the vehicle earth or chassis. Connect the brown wire directly to a fused (20amp) 12 volt supply from the battery terminal. Connect the black wire from the harness to a fused (3amp) Ov supply, it is recommended that the feed is from an ignition controlled supply and the controller will not operate when the engine is switched off. If the feed is connected to an un-switched supply the controller will coninue to operate and may, if the temperature rises run the fan after the engine is switched off. Connect the blue wire to the positive supply terminal of the fan motor and the black Ov from the fan directly to the negative terminal of the battery.

Secure the wiring harness with the cable ties provided.

Finally reconnect the vehicle battery.

Mount the relay while ensuring that the wire harness with the relay connector will reach your chosen position allowing you to neatly run the harness with no strain on the wiring. Connect the red wire from the harness to the vehicle earth or chassis. Connect the brown wire directly to a fused (20amp) 12 volt supply from the battery terminal. Connect the black wire from the harness to a fused (3amp) Ov supply, it is recommended that the feed is from an ignition controlled supply and the controller will not operate when the engine is switched off. If the feed is connected to an un-switched supply the controller will coninue to operate and may, if the temperature rises run the fan after the engine is switched off. Connect the blue wire to the positive supply terminal of the fan motor and the black Ov from the fan directly to the negative terminal of the battery.

Secure the wiring harness with the cable ties provided.

Finally reconnect the vehicle battery.

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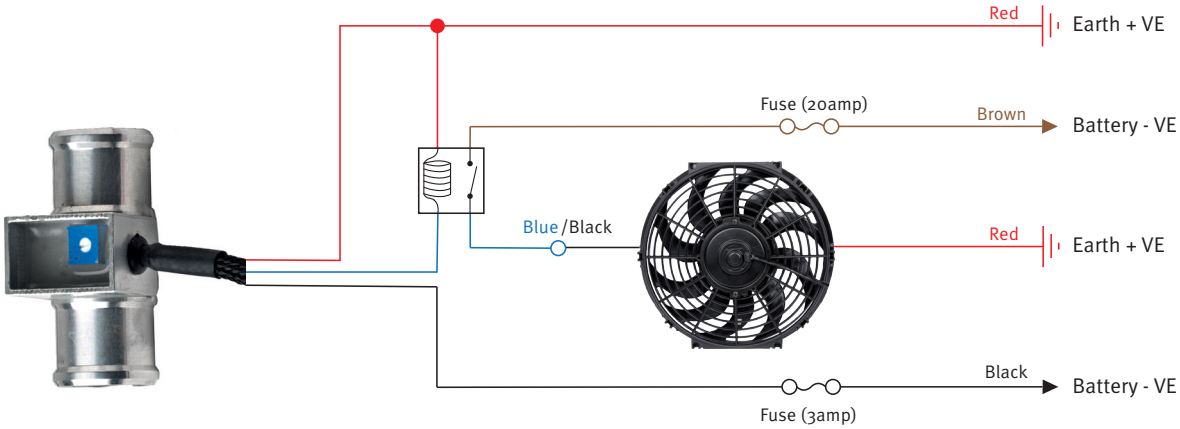
4. Adjustment

The operating temperature for the fan is adjusted by turning the small control inside the body of the unit. The control has a single sweep of just over 3/4 of a turn. The temperature range is 70°C to 120°C increasing in a clockwise direction. Turn the adjuster by hand. Do not use excessive force as damage may occur. Start by setting the unit to its minimum operating temperature (fully counter clockwise). Start the vehicle and get the engine warm. The fan should operate when the engine coolant temperature reaches about 70°C. Increase the adjuster slowly until the fan stops running. This allows you to check the on/off function of the controller. Continue to increase the settrng until the fan remains off when the engine is at normal running temperature. It will then switch the fan on when the engines temperature exceeds normal

When you have finished with the adjustment and the fan control is operating at the desired temperature fit the dust cap into the top of the unit. Warning. The electronic fan control will allow for precise operation of a supplementary cooling fan. The unit cannot compensate for cooling system related problems that may promote overheating. If temperatures in the cooling system exceed 125°C then internal damage to the unit may occur.

Note: Failure to use the electronic fan control with the included relay or modification of the wires in any way will invalidate any warranty.

Important information: The electronic fan control body is constructed from Aluminum because of its excellent heat transmission characteristics. However it can be susceptible to corrosion attack in certain installations therefore it is imperative that a suitable corrosion inhibitor is used in the cooling system.



We advise:

Super coolant

Doubles the wetting ability of water. Improves heat transfer. Reduces cylinder head temperature. Reduces rust, corrosion and electrolysis. Cleans and lubricates water pump seals and can be used with all antifreeze/coolants. Improves the ability of coolant to wet heat transfer surfaces by 50%. This provides significantly better coolant contact in the cylinder head and can reduce coolant and head temperature. Can be used with 100% water in racing but does not protect magnesium or alter freezing point.

Part no.: 303509

Radiator flush.

Removes lime scale, rust and sludge, brings back the full cooling ability of the system. Good preparation before curing the system with No-Rosion cooling system treatment

Part no.: 489511