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### Revotec Electronic Fan Controller (EFC)

This unit is only for use on negative earth vehicles. Read these instructions carefully before attempting to install the controller on your vehicle.

### 1 INTRODUCTION.

The EFC is available in various sizes to match standard hoses. The Revotec EFC 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 DESCRIPTION.

The kit comprises:-

- A) The EFC contains a sealed temperature circuit which is adjustable and monitors coolant temperature. Set at approx 70°C (See fig 1.)
- B) Harness.
- C) 30amp Relay.
- D) Dust Cap & Cable Ties.

#### 3 INSTALLING THE CONTROLLER.

Before making any alterations to your system ensure that the Revotec 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. Ensuring that...

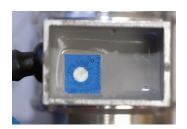
- A) There is enough room to fit the full length of the controller and that the adjustment will be accessible.
- B) The EFC will be in constant contact with the water.

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 EFC in to the hoses making sure the free ends match their original orientation. Secure the hose to the controller using the hose clips provided. Note: The direction of coolant flow through the controller is not important.

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

Fig 1:





Increase Temperature

# 4 ELECTRICAL WIRING CONNECTIONS (Fig 2.)

For safety reasons it is recommended that the vehicle battery is disconnected before making any connections. Mount the relay in a suitable position protected from the elements.

Ensure 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 BLACK wire from the harness to the vehicle earth or chassis. Connect the RED wire to a fused 12v supply. It is recommended that the feed is from an ignition controlled supply such that the controller will not operate when the engine is switched off. If the feed is connected to an un-switched supply the controller will continue to operate and may run the fan after the engine is switched off, if the temperature rises above the setting.

This may affect alarm/immobilizer operation or drain the vehicle battery If left for long periods.

Connect the BLUE wire to the positive supply terminal of the fan motor.

Note: The second (negative) terminal of the fan motor must be connected to vehicle earth. Secure the wiring harness with the cable ties provided. Finally reconnect the vehicle battery.

### 5 SET UP.

The temperature at which the fan switches on is adjusted by turning the small control inside the body of the unit (see fig 1.) 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 with a small screwdriver.

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 setting until the fan remains off when the engine is at normal running temperature. It will then switch the fan on when the engines exceeds normal operating temperature. When you have finished with the adjustment and the fan control is operating at the desired temperature fit the dust cap onto the top of the unit.

## **6 IMPORTANT INFORMATION.**

**A)** Warning. The Revotec Electronic Fan Controller will allow for precise operation of a supplementary cooling fan. The unit cannot compensate for cooling system related problems that may lead to overheating. If temperatures in the cooling system exceed 125°C then internal damage to the EFC may occur.

- **B)** Failure to use the EFC with the included relay or modification of the wires in any way will invalidate any warranty.
- **C)** The EFC body is constructed from aluminium 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.

