

Adjustable Radiator Fan Controller

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

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 the necessary parts to ensure a professional quality installation.

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.

INSTALLING THE CONTROLLER

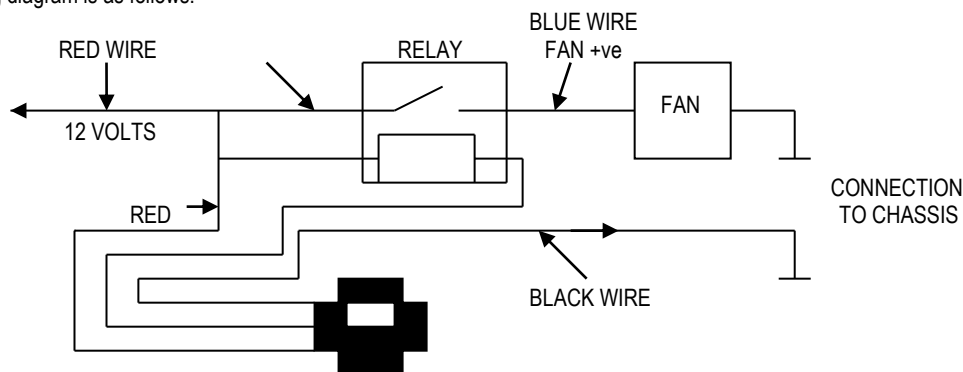
Before making any alterations to your system ensure that the controller size is correct for your radiator hose. Choose a position for the controller in a straight section of one of the main radiator hoses. Ensure that there is enough room to fit the full length of the controller and that the adjustment 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 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 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 & 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.

Choose a position for the relay, mark and drill a hole 2.0mm. Mount the relay using the self tapping screw provided. 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 and the controller will not operate when the engine is switched off. If the feed is connected to an unswitched 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/immobiliser 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 for the fan motor must be connected to vehicle earth. Secure the wiring harness with the cable ties provided. Finally reconnect the vehicle battery.

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 ¼ 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 setting 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 controller 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 EFC WITH THE INCLUDED RELAY OR MODIFICATION OF THE WIRES IN ANY WAY WILL INVALIDATE ANY WARRANTY.