General

GENERAL

DESCRIPTION

The heater system delivers fresh air to the windscreen for demisting and to the cab interior or a proportion of both, at a temperature between cold and hot according to the setting of the control. Warm or hot air will be available when the engine has attained normal working temperature.

The fresh air enters the heater by ram effect and may also be boosted by means of the electric fan when required, e.g. when vehicle is stationary.

In addition to the heater outlets there are also independently controlled facia level and foot level vents which deliver unheated air at ambient temperature only and are unaffected by the heater controls.

The engine and heating water circuit incorporates an engine thermostat and a thermostatic heater water valve. Only when the thermostatic heater water valve starts to open is a continuous flow of water from the engine thermostat through the water valve, heater matrix and back to the inlet side of the water pump provided.

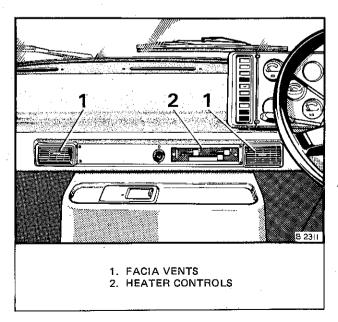


Fig. 1 Controls

Facia Level Vents

Controllable facia level vents are located at each side of the heater control panel see Fig. 2.

They direct a selected rate of unheated air flow to suit individual requirements.

Operating the vertical moving lever (2) controls air flow volume whilst the centrally positioned button (1) controls direction. The heater blower may be used to boost the flow.

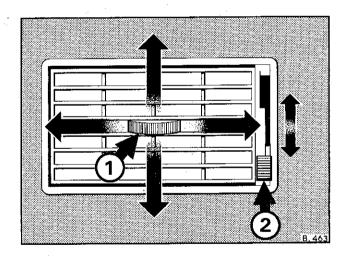


Fig. 2 Facia vent controls

Foot Level Vents

These are located in the outer side panels of the foot wells see Fig. 3.

Regulate the shutter type control to admit air flow to suit individual requirements.

General

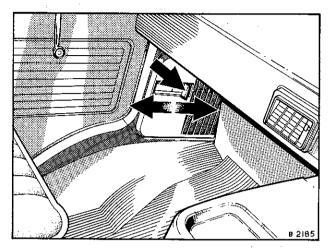


Fig. 3 Foot level control

Heater Blower Switch

The two speed switch is mounted at the side of the instrument panel. Operating the switch activates the heater blower thereby boosting air flow to screen, cab or facia vents.

OPERATION

The heater has three controls see Fig. 4:-

- 1. Regulates air flow to the screen.
- 2. Regulates air flow to the cab interior.
- Regulates the temperature of the air entering the cab.

With both controls (1) and (2) set at OFF, no air will leave the heater other than to the facia vents (if required).

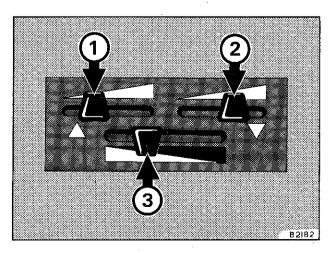


Fig. 4 Heater - temperature and air controls

Thermostatic Water Valve

When the heat control lever (3) is set at "Blue" (cold) the water valve is closed and no heat will be available. Movement of the lever from "Blue" (cold) will open the water valve, allowing hot water to flow through the two heater blocks and warmed air will be available.

A temperature sensitive element is incorporated in the water valve, the purpose of which is automatically to regulate the flow of hot water, in order to maintain a reasonable constant air outlet temperature according to the setting of the control lever.

The element senses temperature changes by means of a capillary tube, the sensitive part of which is coiled and clipped on the fins of the heater block adjacent to the control valve. The tube is positioned in the output air stream, for a given setting of the control, a rise in air temperature around the tube will cause the water valve to close slightly and a fall in output air temperature will cause the water valve to open wider.