

AUDI THERMOSTATIC AIR CLEANER

5000

DESCRIPTION

A thermostatically-controlled air cleaner is used to preheat the incoming air. This system allows closer control of incoming air temperature which, in turn, allows closer calibrating of the combustion system for better performance and emission control. System consists of an air intake pipe for outside air, a shroud and pipe for manifold-heated air, a control box for allowing heated or cooled (or both) air in, and a thermostat which reacts to incoming air temperature to set the air door.

OPERATION

When engine and ambient temperature are cold, below 68°F (20°C), the air door inside the control box will be closed to outside air. The thermostat senses the cold ambient condition and moves the air door to heated air only.

As engine warms up and ambient air temperature increases, the thermostat begins to move the air door off its heat-only position and toward the cold air only position. When ambient air temperature is above 93°F (34°C), only colder, outside air is allowed to enter the intake system.

TESTING

1) Install thermostat in control box and screw it in 3 turns. Place thermostat in container of water at 68°F (20°C) for 2 minutes.

2) Air door must be in position to allow only heated air to enter. If not, screw thermostat in further until air door is shut. Lock thermostat in position using locking compound.

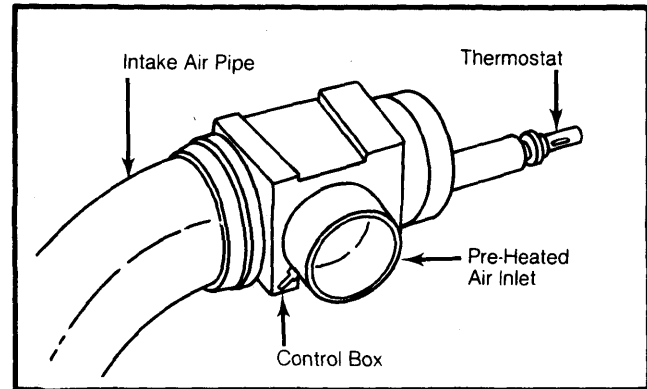


Fig. 1 Air Control Box with Thermostat