FIESTA THERMOSTATIC AIR CLEANER

Fiesta

DESCRIPTION

The air cleaner assembly, used on the Fiesta, is similar to many other units. It is designed to control the temperature of the air entering the carburetor, maintain a constant temperature of this air, and thereby assist in better combustion and lower emissions. The system consists of an air cleaner housing, a sensor inside the housing, a vacuum motor on the snorkel, a door which controls air flow, and necessary connecting tubing.

COLD WEATHER MODULATOR

Some models have a vacuum modulator located in the air cleaner. During engine operation in cold weather, it prevents the air cleaner snorkel door from opening to non-heated air. When ambient temperature is above 55°F (13°C), normal operations will resume.

OPERATION

The intake duct allows cold outside air or heated manifold shroud air to enter the carburetor, depending on the setting of the duct door. The door position is controlled by a vacuum motor which responds to various vacuum signals from a bimetal sensor in the air cleaner housing. During cold engine operation, the snorkel door is in the up, or heat on position. Only heated air from around the exhaust manifold is allowed to enter the carburetor. As the temperature inside the air cleaner warms up, the bimetal sensor bleeds off some vacuum and the snorkel door moves to allow some cooler outside air to enter the carburetor. When full normal operating temperatures are reached, the door will be down, allowing only outside air into the carburetor.

TESTING

THERMOSTATIC AIR CLEANER

NOTE – *Ambient temperature must be above 60°F (16°C) before performing this test.*

1) If vehicle is equipped with Cold Weather Modulator, bypass the modulator by disconnecting hoses from modulator and using a suitable tube to connect them together.

2) Apply parking brake and block drive wheels. Remove air cleaner cover. Visually inspect all components for damage.

3) Remove parts necessary to see into the snorkel and view the door. With engine off (no vacuum), door should be down, in the heat off position. If not, check for binding or sticking.

4) Place a temperature sensor as near to the bimetal sensor as possible. Start the engine. If the door is closed, go to step 7). If it is open, turn off the engine.

5) Cool the temperature sensor with liquid refrigerant.

NOTE – *Engine must NOT be running when spraying liquid refrigerant.*

6) Restart engine. Observe door. It should now be closed. If so, proceed to step 7). If it is still open, check vacuum components for malfunction.

7) Reinstall air cleaner cover (without retaining nuts). With engine running, observe air door and record the time. Door should open within five minutes. If not, remove cover and note temperature.

- If temperature is more than 75°F (24°C), replace the bimetal sensor.
- If temperature is less than 75°F (24°C), reinstall cover and run engine an additional five minutes, check door position and temperature as described above. If door is not open, replace sensor.

8) Turn off engine. Remove temperature gauge from air cleaner. Reinstall all components.

9) As a final test, apply external vacuum of 16" (406 mm) Hg to vacuum motor and hold this level. Motor should remain closed for at least 1 minute. If not, replace duct and valve assembly.

FIESTA CATALYTIC CONVERTER

Fiesta

DESCRIPTION

The catalytic converter used on Fiesta models is designed to reduce the output of carbon monoxide and unburned hydrocarbon emissions. The catalytic converter changes these emissions into a chemical reaction inside the converter. When the hot exhaust gases pass over the converter element, a chemical process causes the emission gases to change their structure.

MAINTENANCE

There is no scheduled maintenance for the catalytic converter. Should the converter become damaged or any of its brackets become damaged, replace them as necessary.

TESTING

There is no testing procedure for the catalytic converter. Excessive fumes, poor idle quality, and such factors are caused by improper tune-up. Locate and correct problem immediately.