

EGR FUNCTION TESTING - DIESEL

General Motors

GENERAL MOTORS

TEST 1

Diesel EGR (1982-89)

1. Warm engine to normal operating temperature. Remove air cleaner cover to observe operation of EGR valve. With engine at idle, EGR valve should be open. If valve is not open, check and correct any electrical and hose connection which may be loose or disconnected.
2. Disconnect vacuum hose from EGR valve. EGR valve head should drop with noticeable reduction in noise. If EGR valve does not operate as specified, clean or replace EGR valve as necessary. Reconnect vacuum hose.
3. With engine at idle, vacuum hose to EGR valve should have at least 20 in. Hg. If vacuum is not present, check output to vacuum pump at pump. Pump should produce a minimum of 20 in. Hg.
4. Turn engine off. Disconnect vacuum hose to EGR valve. Connect vacuum pump to EGR valve and apply 10 in. Hg. EGR valve should move up and stay up for at least 20 seconds. If not, replace EGR valve.

TEST 2

Diesel EGR (1990-99)

1. Turn engine off. Disconnect vacuum hose to EGR valve. Connect a hand-held vacuum pump to EGR valve and apply 10 in. Hg. EGR pintle should move up and stay up for at least 20 seconds. If not, replace EGR valve.
2. To check vacuum pump operation, connect vacuum gauge to vacuum inlet (small fitting). DO NOT plug or disconnect outlet fitting. With engine idling, vacuum should be at least 18 in Hg one minute after start. If not, check for belt slippage, vacuum leaks or other obvious defects. If vacuum reading is as specified, replace EGR valve.

TEST 3

Diesel (2001-13)

1. The barometric pressure (BARO) is at least 72 kPa.
2. Turn OFF all of the accessories, e.g., A/C, blower fan, etc.
3. Start and allow the engine to idle for 2 minutes.
4. Observe the DTC Information with a scan tool.

If scan tool shows failed EGR DTCs, follow appropriate diagnostic information.
