DTC	P0604/89	INTERNAL CONTROL MODULE RANDOM ACCESS MEMORY (RAM) ERROR

DTC	P0606/89	ECM/PCM PROCESSOR

DTC	P0607/89	CONTROL MODULE PERFORMANCE

DTC	P0657/89	ACTUATOR SUPPLY VOLTAGE CIRCUIT/OPEN

CIRCUIT DESCRIPTION

The ECM continuously monitors its internal memory status, internal circuits, and output signals to the throttle actuator. This self–check ensures that the ECM is functioning properly. If any malfunction is detected, the ECM sets appropriate DTCs and illuminates the MIL.

The ECM memory status is diagnosed by internal ”mirroring” of the main CPU and the sub CPU to detect Random Access Memory (RAM) errors. The two CPUs also perform continuous mutual monitoring.

DTC No.	DTC Detection Condition	Trouble Area
P0604/89 P0606/89 P0607/89 P0657/89	ECM internal error	• ECM

INSPECTION PROCEDURE

HINT:

Read freeze frame data using the intelligent tester II. Freeze frame data record the engine condition when malfunctions are detected. When troubleshooting, freeze frame data can help determine if the vehicle was moving or stationary, if the engine was warmed up or not, if the air–fuel ratio was lean or rich, and other data from the time the malfunction occurred.

1	**REPLACE ECM (See page 10–12)**