2012 - Mazda6 - Transmission/ Transaxle

NO.1 VEHICLE DOES NOT MOVE IN D, M OR IN R POSITION [FS5A-EL]

1	**Vehicle does not move in D, M or in R position**
DESCRIPTION	• Vehicle does not move when the accelerator pedal is depressed.
POSSIBLE CAUSE	• If the vehicle does not move in D, M or R position, basically, the malfunction is in the ATX. (Vehicle will move even with a malfunction in the TCM.) Since a malfunction is in the sensor circuit or output circuit is the cause of the malfunction in the ATX, inspect the sensors, output circuit, and the related wiring harnesses. 1. Clutch slippage, worn (D, M positions-Forward clutch, R position-Reverse clutch, Low and reverse brake, Reduction brake) • Line pressure low • Shift solenoid D malfunction • Shift solenoid A malfunction • Shift solenoid B malfunction • Pressure control solenoid A malfunction • Pressure control solenoid B malfunction • Body GND malfunction • Control valve body malfunction 2. Selector lever malfunction 3. Improper operation of parking mechanism 4. Torque converter malfunction **NOTE:** • Before following the troubleshooting steps, make sure that the Automatic Transaxle On-Board Diagnostic and Automatic Transaxle Basic Inspection are conducted.

Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT PARKING MECHANISM FOR MALFUNCTION** • When the vehicle is stopped on a flat, level road and the engine is off, does the vehicle move when pushed? (in D or N, R positions with the brake pedal released)	Yes	Go to the next step.
		No	Inspect for parking mechanism. (See Automatic Transaxle Workshop Manual FS5A-EL.)
2	**INSPECT TCM FOR POOR GND** • Disconnect the TCM connector. • Is the resistance between the ground terminal at the TCM connector and the body ground **less than 5.0 ohms**?	Yes	Go to the next step.
		No	Repair open ground circuit.
3	**INSPECT LINE PRESSURE CONTROL SIGNAL FOR MALFUNCTION** • Inspect the value at the following TCM PID using the M-MDS. (See **ON-BOARD DIAGNOSTIC SYSTEM PID/ DATA MONITOR INSPECTION [FS5A-EL]**.) ▪ LPS • Is the LPS PID value normal?	Yes	Go to the next step.
		No	Repair or replace any malfunctioning parts.
4	**VERIFY IF MALFUNCTION CAUSE IS TORQUE CONVERTER OR TRANSAXLE (INCLUDING CONTROL VALVE BODY)** • Perform the stall test. (See **MECHANICAL SYSTEM TEST [FS5A-EL]**.) • Is the stall speed normal?	Yes	Overhaul the control valve body and repair or replace any malfunctioning parts. (See Automatic Transaxle Workshop Manual FS5A-EL.) If any problem remains, overhaul the transaxle and repair or replace any malfunctioning parts. (See Automatic Transaxle Workshop Manual FS5A-EL.)
		No	Replace the torque converter. (See Automatic Transaxle Workshop Manual FS5A-EL.)
5	• Verify the test results. ▪ If normal, return to the diagnostic index to service any additional symptoms. ▪ If the malfunction remains, inspect the related Service Bulletins and/or On-line Repair Information and perform repair or diagnosis.		

		• If the vehicle is repaired, troubleshooting is completed. • If the vehicle is not repaired or additional diagnostic information is not available, replace the TCM.

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