

2012 - Mazda6 - Transmission/ Transaxle

NO.2 VEHICLE MOVES IN N POSITION [FS5A-EL]

2	Vehicle moves in N position
DESCRIPTION	- Vehicle creeps in N position. - Vehicle creeps if brake pedal is not depressed in N position.
POSSIBLE CAUSE	- If the vehicle moves in N position, basically, the malfunction is in the ATX. Since a malfunction 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. - Clutch burnt (Forward clutch) - Control valve body malfunction - Selector lever position disparity (Although the selector indicator shows N position, the hydraulic circuit shows D or R position) 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 SELECTOR CABLE ADJUSTMENT FOR MALFUNCTION	Yes Go to the next step.
	Does the vehicle creep when the selector lever is moved slightly in N position?	No Adjust the selector cable. (See AUTOMATIC TRANSAXLE SHIFT MECHANISM REMOVAL/ INSTALLATION.)
2	INSPECT TCM FOR POOR GND	Yes Go to the next step.
	- Disconnect the TCM connector. - Is the resistance between the ground terminal at the TCM connector and the	No Repair open ground circuit. Reconnect the TCM connector.

	body ground less than 5.0 ohms?		
3	VERIFY IF MALFUNCTION CAUSE IS LINE PRESSURE CONTROL SIGNAL OR TRANSAXLE (INCLUDING CONTROL VALVE BODY) - 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 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	Repair or replace any malfunctioning parts.
4	- 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.		

2012 - Mazda6 - Transmission/ Transaxle

NO.2 VEHICLE MOVES IN N POSITION [FS5A-EL]

2	Vehicle moves in N position
DESCRIPTION	- Vehicle creeps in N position. - Vehicle creeps if brake pedal is not depressed in N position.
POSSIBLE CAUSE	- If the vehicle moves in N position, basically, the malfunction is in the ATX. Since a malfunction 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. - Clutch burnt (Forward clutch) - Control valve body malfunction - Selector lever position disparity (Although the selector indicator shows N position, the hydraulic circuit shows D or R position) 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 SELECTOR CABLE ADJUSTMENT FOR MALFUNCTION	Yes Go to the next step.
	Does the vehicle creep when the selector lever is moved slightly in N position?	No Adjust the selector cable. (See AUTOMATIC TRANSAXLE SHIFT MECHANISM REMOVAL/ INSTALLATION.)
2	INSPECT TCM FOR POOR GND	Yes Go to the next step.
	- Disconnect the TCM connector. - Is the resistance between the ground terminal at the TCM connector and the	No Repair open ground circuit. Reconnect the TCM connector.

	body ground less than 5.0 ohms?		
3	VERIFY IF MALFUNCTION CAUSE IS LINE PRESSURE CONTROL SIGNAL OR TRANSAXLE (INCLUDING CONTROL VALVE BODY) - 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 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 Repair or replace any malfunctioning parts.
4	- 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.		