

2012 - Mazda6 - Transmission/ Transaxle

NO.14 ENGINE FLARES UP OR SLIPS WHEN UPSHIFTING OR DOWNSHIFTING [FS5A-EL]

14	Engine flares up or slips when upshifting or downshifting
DESCRIPTION	- When the accelerator pedal is depressed for driveaway, engine speed increases but vehicle speed increases slowly. - When the accelerator pedal is depressed while driving, engine speed increases but the vehicle does not.
POSSIBLE CAUSE	- There is clutch slippage because the clutch is stuck or the line pressure is low. - Clutch stuck, slippage, burnt (forward clutch, 3-4 clutch, 2-4 brake band, one-way clutch) - Line pressure low - Shift solenoid D malfunction - Shift solenoid E malfunction - Shift solenoid F malfunction - Shift solenoid A malfunction - Shift solenoid B malfunction - Shift solenoid C malfunction - Pressure control solenoid A malfunction - Body GND malfunction - Control valve body malfunction - Signal malfunction - VSS malfunction - Sensor GND malfunction - APP sensor malfunction - Input/turbine speed sensor malfunction - MAF sensor malfunction - CKP sensor malfunction

3. Poor operation of mechanical pressure

- Selector lever position disparity
- TR switch position disparity

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 SHIFTING FOR MALFUNCTION • Is shift point normal?	Yes Go to the next step.
		No Go to No.9 "ABNORMAL SHIFTING".
2	INSPECT THROTTLE OPENING 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].) ▪ THOP • Is the PID value normal?	Yes Go to the next step.
		No Inspect the PCM PID APP. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5] .) Repair or replace as necessary.
3	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 the open ground circuit. Reconnect the TCM connector.
4	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.
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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