

2012 - Mazda6 - Transmission/ Transaxle

NO.15 ENGINE FLARES UP OR SLIPS WHEN ACCELERATING VEHICLE [AY6A-EL]

15	Engine flares up or slips when accelerating the vehicle
DESCRIPTION	- Engine flares up when the accelerator pedal is depressed for upshifting. - Engine flares up suddenly when the accelerator pedal is depressed for downshifting.
POSSIBLE CAUSE	- The malfunction is basically the same as for No.14 "ENGINE FLARES UP OR SLIPS WHEN UPSHIFTING OR DOWNSHIFTING". - If conditions for No.14 worsen, the malfunction will develop to No.15.

Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT TCM FOR POOR GROUND - Disconnect the TCM. - Is the resistance between the TCM ground terminal A9 and the body ground less than 5.0 ohms?	Yes Go to the next step.
		No Repair open ground circuit.
2	INSPECT TCC SOLENOID FOR MALFUNCTION - Inspect the TCC solenoid. (See TORQUE CONVERTER CLUTCH (TCC) CONTROL SOLENOID INSPECTION [AY6A-EL] .) - Is the TCC solenoid normal?	Yes Go to the next step.
		No Inspect the coupler component. If normal, replace the control valve body. (See CONTROL VALVE BODY REMOVAL/ INSTALLATION [AY6A-EL] .)
3	VERIFY IF MALFUNCTION CAUSE IS TORQUE CONVERTER OR OTHER - Perform the stall test. (See MECHANICAL SYSTEM TEST [AY6A-EL] .)	Yes Go to the next step.
		No Replace the torque converter. (See TORQUE CONVERTER REMOVAL/ INSTALLATION [AY6A-EL] .)

4	VERIFY IF MALFUNCTION CAUSE IS TRANSAXLE (INCLUDING CONTROL VALVE BODY) OR ATF FLUID LEVEL • Inspect the ATF condition. • Are a metal specks found?	Yes If large amount of metal specks are found, replace the transaxle. (See AUTOMATIC TRANSAXLE REMOVAL/ INSTALLATION [AY6A-EL] .) If a large amount of metal specks are not found, replace the control valve body. (See CONTROL VALVE BODY REMOVAL/ INSTALLATION [AY6A-EL] .)
		No Perform the "AUTOMATIC TRANSAXLE FLUID (ATF) LEVEL ADJUSTMENT" procedure. (See AUTOMATIC TRANSAXLE FLUID (ATF) LEVEL ADJUSTMENT [AY6A-EL] .)
5	• Verify test results. ▪ If normal, return to the diagnostic index to service any additional symptoms. ▪ If malfunction remains, inspect the related Service Bulletins and/or On-line Repair Information and perform repair or diagnosis. • If the vehicle is repaired, troubleshooting completed. • If the vehicle is not repaired or additional diagnostic information is not available, replace the TCM.	

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DESCRIPTION	- Engine flares up when the accelerator pedal is depressed for upshifting. - Engine flares up suddenly when the accelerator pedal is depressed for downshifting.
POSSIBLE CAUSE	- The malfunction is basically the same as for No.14 "ENGINE FLARES UP OR SLIPS WHEN UPSHIFTING OR DOWNSHIFTING". - If conditions for No.14 worsen, the malfunction will develop to No.15.

Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT TCM FOR POOR GROUND - Disconnect the TCM. - Is the resistance between the TCM ground terminal A9 and the body ground less than 5.0 ohms?	Yes Go to the next step.
		No Repair open ground circuit.
2	INSPECT TCC SOLENOID FOR MALFUNCTION - Inspect the TCC solenoid. (See TORQUE CONVERTER CLUTCH (TCC) CONTROL SOLENOID INSPECTION [AY6A-EL].) - Is the TCC solenoid normal?	Yes Go to the next step.
		No Inspect the coupler component. If normal, replace the control valve body. (See CONTROL VALVE BODY REMOVAL/ INSTALLATION [AY6A-EL] .)
3	VERIFY IF MALFUNCTION CAUSE IS TORQUE CONVERTER OR OTHER - Perform the stall test. (See MECHANICAL SYSTEM TEST [AY6A-EL].)	Yes Go to the next step.
		No Replace the torque converter. (See TORQUE CONVERTER REMOVAL/ INSTALLATION [AY6A-EL] .)

4	VERIFY IF MALFUNCTION CAUSE IS TRANSAXLE (INCLUDING CONTROL VALVE BODY) OR ATF FLUID LEVEL • Inspect the ATF condition. • Are a metal specks found?	Yes If large amount of metal specks are found, replace the transaxle. (See AUTOMATIC TRANSAXLE REMOVAL/ INSTALLATION [AY6A-EL] .) If a large amount of metal specks are not found, replace the control valve body. (See CONTROL VALVE BODY REMOVAL/ INSTALLATION [AY6A-EL] .)
		No Perform the "AUTOMATIC TRANSAXLE FLUID (ATF) LEVEL ADJUSTMENT" procedure. (See AUTOMATIC TRANSAXLE FLUID (ATF) LEVEL ADJUSTMENT [AY6A-EL] .)
5	• Verify test results. ▪ If normal, return to the diagnostic index to service any additional symptoms. ▪ If malfunction remains, inspect the related Service Bulletins and/or On-line Repair Information and perform repair or diagnosis. • If the vehicle is repaired, troubleshooting completed. • If the vehicle is not repaired or additional diagnostic information is not available, replace the TCM.	