

2012 - Mazda6 - Transmission/ Transaxle

NO.22 NO ENGINE BRAKING IN 1GR POSITION OF M POSITION [AY6A-EL]

22	No engine braking in 1GR position of M position	
DESCRIPTION	- Engine speed drops to idle but the vehicle coasts when the accelerator pedal is released during cruising at medium to high speeds. - Engine speed drops to idle but the vehicle coasts when accelerator pedal is released when in M position (1GR) at low vehicle speed.	
POSSIBLE CAUSE	- Clutch slippage, burnt (B2 brake) - Line pressure low - VSS malfunction - Input/turbine speed sensor malfunction - Shift solenoid A or B malfunction - Sensor ground malfunction - Control valve body malfunction NOTE: - Before following the troubleshooting steps, make sure that the Automatic Transaxle On-Board Diagnostic and Automatic Transaxle Basic Inspection are conducted. (See BASIC INSPECTION [AY6A-EL].)	

Diagnostic procedure

STEP	INSPECTION	ACTION	
1	INSPECT FOR TRANSAXLE SLIPPAGE MALFUNCTION - Do the following symptoms occur concurrently? - Engine flares up or slips during acceleration - Engine	Yes	Go to No.14 "ENGINE FLARES UP OR SLIPS WHEN UPSHIFTING OR DOWNSHIFTING", or No.15 "ENGINE FLARES UP OR SLIPS WHEN ACCELERATING VEHICLE".
		No	Go to the next step.

	flares up or slips when shifting		
2	VERIFY IF MALFUNCTION CAUSE IS SHIFT SOLENOIDS OR TRANSAXLE (INCLUDING CONTROL VALVE BODY) • Stop the engine. • Inspect following solenoids. ▪ Shift solenoid A (See SHIFT SOLENOID A INSPECTION [AY6A-EL].) ▪ Shift solenoid B (See SHIFT SOLENOID B INSPECTION [AY6A-EL].) • Are the normal?	Yes Inspect the ATF condition. 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 Inspect the coupler component. If normal, replace the control valve body. (See CONTROL VALVE BODY REMOVAL/ INSTALLATION [AY6A-EL].)	
3	• 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.		

2012 - Mazda6 - Transmission/ Transaxle

NO.22 NO ENGINE BRAKING IN 1GR POSITION OF M POSITION [AY6A-EL]

22	No engine braking in 1GR position of M position	
DESCRIPTION	- Engine speed drops to idle but the vehicle coasts when the accelerator pedal is released during cruising at medium to high speeds. - Engine speed drops to idle but the vehicle coasts when accelerator pedal is released when in M position (1GR) at low vehicle speed.	
POSSIBLE CAUSE	- Clutch slippage, burnt (B2 brake) - Line pressure low - VSS malfunction - Input/turbine speed sensor malfunction - Shift solenoid A or B malfunction - Sensor ground malfunction - Control valve body malfunction NOTE: - Before following the troubleshooting steps, make sure that the Automatic Transaxle On-Board Diagnostic and Automatic Transaxle Basic Inspection are conducted. (See BASIC INSPECTION [AY6A-EL].)	

Diagnostic procedure

STEP	INSPECTION	ACTION	
1	INSPECT FOR TRANSAXLE SLIPPAGE MALFUNCTION - Do the following symptoms occur concurrently? - Engine flares up or slips during acceleration - Engine	Yes	Go to No.14 "ENGINE FLARES UP OR SLIPS WHEN UPSHIFTING OR DOWNSHIFTING", or No.15 "ENGINE FLARES UP OR SLIPS WHEN ACCELERATING VEHICLE".
		No	Go to the next step.

	flares up or slips when shifting		
2	VERIFY IF MALFUNCTION CAUSE IS SHIFT SOLENOIDS OR TRANSAXLE (INCLUDING CONTROL VALVE BODY) • Stop the engine. • Inspect following solenoids. ▪ Shift solenoid A (See SHIFT SOLENOID A INSPECTION [AY6A-EL].) ▪ Shift solenoid B (See SHIFT SOLENOID B INSPECTION [AY6A-EL].) • Are the normal?	Yes Inspect the ATF condition. 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 Inspect the coupler component. If normal, replace the control valve body. (See CONTROL VALVE BODY REMOVAL/ INSTALLATION [AY6A-EL].)	
3	• 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.		