

2012 - Mazda6 - Transmission/ Transaxle

NO.29 DOES NOT UPSHIFT IN M POSITION [AY6A-EL]

29	Does not upshift in M position
DESCRIPTION	• Gear position indicator light in instrument cluster illuminates, but the vehicle does not upshift when the selector lever is pushed to “+” side.
POSSIBLE CAUSE	• Up switch, M position switch (built-in selector lever component) or related wiring harness malfunction • Multiplex communication system malfunction (Shift position signal is incorrect.) ▪ Between TCM and instrument cluster 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	VERIFY IF MALFUNCTION CAUSE IS MULTIPLEX COMMUNICATION SYSTEM • Retrieve any instrument cluster DTCs using the M-MDS. (See DTC INSPECTION [INSTRUMENT CLUSTER].) • Are there any CAN communication DTCs displayed?	YesGo to appropriate the DTC inspection. (See DTC TABLE [MULTIPLEX COMMUNICATION SYSTEM] .)
		NoGo to the next step.
2	DETERMINE IF MALFUNCTION CAUSE IS M POSITION SWITCH OR UP SWITCH	YesGo to the next step.

	Shift the selector lever to M position. • Verify that the gear position indicator light illumination. • Does the gear position indicator light illuminate?	No	Go to No.27 "GEAR POSITION INDICATOR LIGHT DOES NOT ILLUMINATE IN D OR M POSITION".
3	VERIFY IF MALFUNCTION CAUSE IS UP SWITCH SIGNAL OR INSTRUMENT CLUSTER • Access the TCM PID UP_SW using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM PID/ DATA MONITOR INSPECTION [AY6A-EL] .) • Monitor the UP_SW PID with move the selector lever to "+" with M position. • Does the UP_SW PID indicate properly?	Yes	Inspect the instrument cluster. (See INSTRUMENT CLUSTER INSPECTION .)
		No	Inspect the up switch. (See UP SWITCH INSPECTION [AY6A-EL] .) If the up switch is normal, inspect for continuity between the selector lever component terminal B and TCM terminal A3.
4	• 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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