

2012 - Mazda6 - Transmission/ Transaxle

NO.30 DOES NOT DOWNSHIFT IN M POSITION [AY6A-EL]

30	Does not downshift in M position
DESCRIPTION	Gear position indicator light in instrument cluster illuminates, but the vehicle does not downshift when the selector lever is pushed to “-” side.
POSSIBLE CAUSE	- Down 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?	Yes Go to appropriate the DTC inspection. (See DTC TABLE [MULTIPLEX COMMUNICATION SYSTEM] .)
		No Go to the next step.
2	DETERMINE IF MALFUNCTION CAUSE IS M POSITION SWITCH OR DOWN SWITCH	Yes Go 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 DOWN SWITCH SIGNAL OR INSTRUMENT CLUSTER - Access the TCM PID DWN_SW using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM PID/ DATA MONITOR INSPECTION [AY6A-EL].) - Monitor the DWN_SW PID with move the selector lever to "–" with M position. - Does the DWN_SW PID indicate properly?	Yes	Inspect the instrument cluster. (See INSTRUMENT CLUSTER INSPECTION .)
		No	Inspect the down switch. (See DOWN SWITCH INSPECTION [AY6A-EL] .) If the down switch is normal, inspect for continuity between the selector lever component terminal C and TCM terminal A4.
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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