

2012 - Mazda6 - Transmission/ Transaxle

DTC P1783:00 [AY6A-EL]

DTC P1783:00	ATF high oil temperature malfunction
DETECTION CONDITION	• Conditions: Engine speed < 800 rpm and TCM communication normal • Circumstances: ATF temperature of 150 °C {302 °F} or above detected • Time period: Determined after 1 time lasting 12 seconds Diagnostic support note: • The MIL does not illuminate. • The AT warning light does not illuminate. • PENDING CODE is not available. • FREEZE FRAME DATA is not available. • The DTC is stored in the TCM memory.
FAIL-SAFE FUNCTION	• Request torque limitation
POSSIBLE CAUSE	• High engine load drive (Driving a steep gradient at a low speed) • Insufficient or excess level of ATF • Deteriorated ATF • TCM malfunction
SYSTEM WIRING DIAGRAM	—

Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY RELATED REPAIR INFORMATION AVAILABILITY	Yes Perform repair or diagnosis according to the available repair information.

	• Verify related Service Information availability. • Is any related repair information available?		• If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
2	VERIFY VEHICLE DRIVING CONDITIONS • Verify vehicle driving conditions when a DTC P1783:00 is output according to the customer reports. • Has the vehicle been driven at a high engine load?	Yes	• Go to Step 5. • Inform the customer that the ATX temperature is high due to high engine load driving.
		No	Go to the next step.
3	INSPECT FOR ATF LEAKAGE • Verify that there is no ATF leaking from the transaxle case, and the connecting surfaces of the transaxle and the engine. • Is any ATF leakage verified?	Yes	After repairing the spot where there is ATF leakage, adjust the ATF level, then go to Step 5. (See AUTOMATIC TRANSAXLE FLUID (ATF) LEVEL ADJUSTMENT [AY6A-EL] .)
		No	Go to the next step.
4	INSPECT ATF CONDITION • Inspect the ATF condition. (See AUTOMATIC TRANSAXLE FLUID (ATF) INSPECTION [AY6A-EL] .) • Is it normal?	Yes	Go to the next step.
		No	Replace the ATF, then go to next step. (See AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [AY6A-EL] .)
5	VERIFY DTC TROUBLESHOOTING COMPLETED • Clear the DTC using the M-MDS. • Switch the ignition OFF (LOCK), then switch it ON. • Verify the DTCs recorded in the TCM. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [AY6A-EL] .) • Is the same DTC present?	Yes	Replace the TCM, then go to the next step. (See TCM REMOVAL/ INSTALLATION [AY6A-EL] .)
		No	Go to the next step.
6	VERIFY NO DTCs ARE PRESENT • Perform the "Reading DTCs Procedure". (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [AY6A-EL] .) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [AY6A-EL] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Transmission/ Transaxle

DTC P1783:00 [AY6A-EL]

DTC P1783:00	ATF high oil temperature malfunction
DETECTION CONDITION	• Conditions: Engine speed < 800 rpm and TCM communication normal • Circumstances: ATF temperature of 150 °C {302 °F} or above detected • Time period: Determined after 1 time lasting 12 seconds Diagnostic support note: • The MIL does not illuminate. • The AT warning light does not illuminate. • PENDING CODE is not available. • FREEZE FRAME DATA is not available. • The DTC is stored in the TCM memory.
FAIL-SAFE FUNCTION	• Request torque limitation
POSSIBLE CAUSE	• High engine load drive (Driving a steep gradient at a low speed) • Insufficient or excess level of ATF • Deteriorated ATF • TCM malfunction
SYSTEM WIRING DIAGRAM	—

Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY RELATED REPAIR INFORMATION AVAILABILITY	Yes Perform repair or diagnosis according to the available repair information.

	• Verify related Service Information availability. • Is any related repair information available?		• If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
2	VERIFY VEHICLE DRIVING CONDITIONS • Verify vehicle driving conditions when a DTC P1783:00 is output according to the customer reports. • Has the vehicle been driven at a high engine load?	Yes	• Go to Step 5. • Inform the customer that the ATX temperature is high due to high engine load driving.
		No	Go to the next step.
3	INSPECT FOR ATF LEAKAGE • Verify that there is no ATF leaking from the transaxle case, and the connecting surfaces of the transaxle and the engine. • Is any ATF leakage verified?	Yes	After repairing the spot where there is ATF leakage, adjust the ATF level, then go to Step 5. (See AUTOMATIC TRANSAXLE FLUID (ATF) LEVEL ADJUSTMENT [AY6A-EL] .)
		No	Go to the next step.
4	INSPECT ATF CONDITION • Inspect the ATF condition. (See AUTOMATIC TRANSAXLE FLUID (ATF) INSPECTION [AY6A-EL] .) • Is it normal?	Yes	Go to the next step.
		No	Replace the ATF, then go to next step. (See AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [AY6A-EL] .)
5	VERIFY DTC TROUBLESHOOTING COMPLETED • Clear the DTC using the M-MDS. • Switch the ignition OFF (LOCK), then switch it ON. • Verify the DTCs recorded in the TCM. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [AY6A-EL] .) • Is the same DTC present?	Yes	Replace the TCM, then go to the next step. (See TCM REMOVAL/ INSTALLATION [AY6A-EL] .)
		No	Go to the next step.
6	VERIFY NO DTCs ARE PRESENT • Perform the "Reading DTCs Procedure". (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [AY6A-EL] .) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [AY6A-EL] .)
		No	DTC troubleshooting completed.

