ON-BOARD DIAGNOSTIC SYSTEM MALFUNCTION DETECTION FUNCTION [FW6A-EL, FW6AX-EL]

Caution

Vehicle specifications differ depending on the vehicle identification number (VIN).

— Type A VIN: JM0 KE***** 100001-JM6 KE***** 100001— JM7 KE***** 100001-JM8 KE***** 100001-JMZ KE***** 100001-KE10** 100001— Type B VIN: JM0 KE***** 200001— JM6 KE***** 200001-JM8 KE***** 200001-JMZ KE***** 200001-KE10** 200001-

Purpose/Function

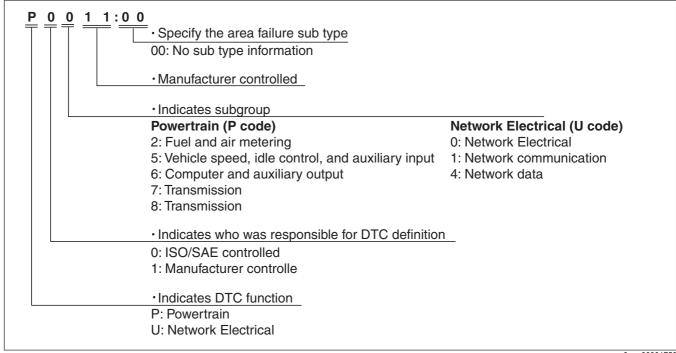
- The malfunction diagnostic function detects transaxle malfunctions.
- · Accurate and quick repair/service can be performed to facilitate malfunction cause determination using the malfunction detection function.

Construction/Operation

If a malfunction occurs in the transaxle, it is recorded as a DTC. A DTC can be read by the Mazda Modular Diagnostic System (M-MDS).

DTC 7-digit code definition

When related systems or components have failed, the CM stores the DTC of the malfunctioning part in the CM memory, and allows for the retrieval of the stored data using the scanning tool when necessary. The DTCs are indicated using seven digits. Each digit indicates the following.



am3uun00001750

DTC table Type A VIN

DTC No.	Check engine light	Automatic transaxle warning light	Description	Fail-safe function	Drive cycle	Self test type*1	Memory function
P0218:00	Illuminated	Illuminated	Automatic transaxle protection control	×	1	С	×
P0500:00	Illuminated	_	Vehicle speed signal circuit malfunction	×	1	С	×
P0666:00	Illuminated	Illuminated	ECU internal temperature sensor circuit(s) malfunction	×	2	С	×
P0667:00	Illuminated	Illuminated	ECU internal temperature sensor two-range/performance problem	×	2	С	×
P06B8:00	Illuminated	_	NVRAM malfunction	_	1	C, O	×
P0706:00	Illuminated	Illuminated	Transaxle range sensor range/ performance problem	×	2	С	×
P0707:00	Illuminated	Illuminated	Transaxle range sensor circuit low input	×	1	C, O	×
P0708:00	Illuminated	Illuminated	Transaxle range sensor circuit high input	×	1	C, O	×
P0711:00	Illuminated	Illuminated	TFT sensor range/performance problem	×	2	С	×
P0712:00	Illuminated	Illuminated	TFT sensor circuit low input	×	1	C, O	×
P0713:00	Illuminated	Illuminated	TFT sensor circuit high input	×	2	С	×
P0716:00	Illuminated	Illuminated	Turbine/input shaft speed sensor range/performance problem	×	1	С	×
P0717:00	Illuminated	Illuminated	Open circuit in turbine/input shaft speed sensor circuit	×	1	С	×
P0721:00	Illuminated	Illuminated	Output shaft speed sensor/ sensor output range malfunction	×	1	С	×
P0722:00	Illuminated	Illuminated	Open circuit in output shaft speed sensor circuit	×	1	С	×
P0729:00	_	<u> </u>	6GR incorrect ratio	×	2	С	×
P0731:00	_	<u> </u>	1GR incorrect ratio	×	2	С	×
P0732:00	_	_	2GR incorrect ratio	×	2	С	×
P0733:00	_		3GR incorrect ratio	×	2	С	×
P0734:00	_	-	4GR incorrect ratio	×	2	С	×
P0735:00		_	5GR incorrect ratio	×	2	С	×
P0736:00	<u> </u>	Illuminated	Gear reverse incorrect ratio	×	2	С	×
P0741:00	Illuminated	Illuminated	TCC control solenoid stuck off	×	2	С	×
P0743:00	Illuminated	Illuminated	TCC control solenoid circuit malfunction	×	1	C, O	×
P0746:00	Illuminated	Illuminated	Pressure control solenoid stuck off	×	2	С	×
P0748:00	Illuminated	Illuminated	Pressure control solenoid circuit malfunction	×	1	C, O	×
P0751:00	Illuminated	Illuminated	Shift solenoid No.1 stuck off	×	2	С	×
P0752:00 P0753:00	Illuminated Illuminated	Illuminated Illuminated	Shift solenoid No.1 stuck on Shift solenoid No.1 circuit	×	2	C C, O	×
			malfunction	, î			
P0756:00	Illuminated	Illuminated	Shift solenoid No.2 stuck off	×	2	С	×
P0757:00	Illuminated	Illuminated	Shift solenoid No.2 stuck on	×	2	С	×
P0758:00	Illuminated	Illuminated	Shift solenoid No.2 circuit malfunction	×	1	C, O	×
P0761:00	Illuminated	Illuminated	Shift solenoid No.3 stuck off	×	2	С	×
P0762:00 P0763:00	Illuminated	Illuminated	Shift solenoid No.3 stuck on Shift solenoid No.3 circuit	×	2	C C, O	×
		Illuminated	malfunction	_ ^			
P0766:00	Illuminated	Illuminated	Shift solenoid No.4 stuck off	×	2	С	×
P0767:00	Illuminated	Illuminated	Shift solenoid No.4 stuck on	×	2	С	×
P0768:00	Illuminated	Illuminated	Shift solenoid No.4 circuit malfunction	×	1	C, O	×
P0771:00	Illuminated	Illuminated	On/off solenoid stuck off	×	2	С	×
P0772:00	Illuminated	Illuminated	On/off solenoid stuck on	×	2	С	×

DTC No.	Check engine light	Automatic transaxle warning light	Description	Fail-safe function	Drive cycle	Self test type*1	Memory function
P0773:00	Illuminated	Illuminated	On/off solenoid circuit malfunction	×	1	C, O	×
P0780:00	Illuminated	Illuminated	Gear shifting malfunction	×	2	С	×
P079A:00	Illuminated	Illuminated	Shift solenoid No.3 stuck off/On/off solenoid stuck on	×	2	С	×
P0819:00	_	_	M position switch/Up switch/ Down switch signal error	×	1	С	×
P0842:00	Illuminated	Illuminated	Oil pressure switch No.1 stuck on	×	2	С	×
P0843:00	Illuminated	Illuminated	Oil pressure switch No.1 stuck off	×	2	С	×
P0847:00	Illuminated	Illuminated	Oil pressure switch No.2 stuck on	×	2	С	×
P0848:00	Illuminated	Illuminated	Oil pressure switch No.2 stuck off	×	2	С	×
P0872:00	Illuminated	Illuminated	Oil pressure switch No.3 stuck on	×	2	С	×
P0873:00	Illuminated	Illuminated	Oil pressure switch No.3 stuck off	×	2	С	×
P0877:00	Illuminated	Illuminated	Oil pressure switch No.4 stuck on	×	2	С	×
P0878:00	Illuminated	Illuminated	Oil pressure switch No.4 stuck off	×	2	С	×
P0882:00	Illuminated	_	TCM power supply voltage low	×	1	С	×
P0883:00	Illuminated	_	TCM power supply voltage high	×	1	C, O	×
P0C2C:00	_	_	Electric AT oil pump rotation malfunction	×	1	С	×
P1728:00	_	_	Clutch slippage	×	2	С	×
P1738:00	_	Illuminated	Automatic transaxle internal malfunction	×	2	С	×
P1784:00	_	Illuminated	Hi cut valve stuck off/R-3-5 cut valve stuck on	×	2	С	×
P181F:00	_	_	Electric AT oil pump/Electric AT oil pump relay circuit malfunction	×	1	С	×
P2530:00	_	_	Ignition switch stuck off	×	1	С	×
P2712:00	_	_	Oil pump shift valve stuck	×	1	С	×
U0073:00	_	_	CAN system communication error (HS CAN)	×	1	C, O	×
U0074:00	_	_	CAN system communication error (local CAN between TCM and PCM)	×	1	C, O	×
U0100:00	Illuminated	_	Communication error to PCM (HS CAN)	×	1	C, O	×
U0115:00	Illuminated	_	Communication error to PCM (local CAN between TCM and PCM)	×	1	C, O	×
U0121:00	Illuminated	_	Communication error to DSC HU/CM	×	1	C, O	×
U0131:00	_		Communication error to EPS control module	×	1	C, O	×
U0155:00	Illuminated		Communication error to instrument cluster	×	1	C, O	×
U0442:00	_	_	Invalid data received from PCM (local CAN between TCM and PCM)	×	1	C, O	×

Type B VIN

×: Applicable
—: Not applicable

DTC No.	Check engine light	Automatic transaxle warning light	Description	Fail-safe function	Drive cycle	Self test type*1	Memory function	
P0218:00	Illuminated	Illuminated	Automatic transaxle protection control	×	1	С	×	

DTC No.	Check engine light	Automatic transaxle warning light	Description	Fail-safe function	Drive cycle	Self test type*1	Memory function
P0500:00	Illuminated	_	Vehicle speed signal circuit malfunction	×	1	С	×
P0666:00	Illuminated	Illuminated	ECU internal temperature sensor circuit malfunction	×	1	С	×
P0667:00	Illuminated	Illuminated	ECU internal temperature sensor/performance problem	×	2	С	×
P06B8:00	Illuminated	-	NVRAM malfunction	_	1	C, O	×
P0706:00	Illuminated	Illuminated	Transaxle range sensor range/ performance problem	×	2	С	×
P0707:00	Illuminated	Illuminated	Transaxle range sensor circuit low input	×	1	C, O	×
P0708:00	Illuminated	Illuminated	Transaxle range sensor circuit high input	×	1	C, O	×
P0711:00	Illuminated	Illuminated	TFT sensor range/performance problem	×	2	С	×
P0712:00	Illuminated	Illuminated	TFT sensor circuit low input	×	1	C, O	×
P0713:00	Illuminated	Illuminated	TFT sensor circuit high input	×	2	С	×
P0715:00	Illuminated	Illuminated	Turbine/input shaft speed sensor/sensor output range malfunction	×	1	С	×
P0716:00	Illuminated	Illuminated	Turbine/input shaft speed sensor range/performance problem	×	1	С	×
P0717:00	Illuminated	Illuminated	Open circuit in turbine/input shaft speed sensor circuit	×	1	С	×
P0720:00	Illuminated	Illuminated	Output shaft speed sensor range/performance problem	×	1	С	×
P0721:00	Illuminated	Illuminated	Output shaft speed sensor/ sensor output range malfunction	×	1	С	×
P0722:00	Illuminated	Illuminated	Open circuit in output shaft speed sensor circuit	×	1	С	×
P0729:00	_	_	6GR incorrect ratio	×	2	С	×
P0731:00	_	_	1GR incorrect ratio	×	2	С	×
P0732:00	_	_	2GR incorrect ratio	×	2	С	×
P0733:00	_	_	3GR incorrect ratio	×	2	С	×
P0734:00	_	_	4GR incorrect ratio	×	2	С	×
P0735:00	_	_	5GR incorrect ratio	×	2	С	×
P0736:00	_	Illuminated	Gear reverse incorrect ratio	×	2	С	×
P073D:00	_	_	Neutral incorrect ratio	_	2	С	×
P0741:00	Illuminated	Illuminated	TCC control solenoid stuck off	×	2	С	×
P0743:00	Illuminated	Illuminated	TCC control solenoid circuit malfunction	×	1	C, O	×
P0746:00	Illuminated	Illuminated	Pressure control solenoid stuck off	×	2	С	×
P0748:00	Illuminated	Illuminated	Pressure control solenoid circuit malfunction	×	1	C, O	×
P0751:00	Illuminated	Illuminated	Shift solenoid No.1 stuck off	×	2	С	×
P0752:00	Illuminated	Illuminated	Shift solenoid No.1 stuck on Shift solenoid No.1 circuit	×	2	С	×
P0753:00	Illuminated	Illuminated	malfunction	×	2	C, O	×
P0756:00	Illuminated	Illuminated	Shift solenoid No.2 stuck off		2	C	
P0757:00 P0758:00	Illuminated Illuminated	Illuminated Illuminated	Shift solenoid No.2 stuck on Shift solenoid No.2 circuit	×	1	C, O	×
D0761:00	Illuminated	Illuminated	malfunction Shift solonoid No 3 stuck off		2		
P0761:00	Illuminated	Illuminated	Shift solenoid No.3 stuck off	×	2	C	×
P0762:00 P0763:00	Illuminated Illuminated	Illuminated Illuminated	Shift solenoid No.3 stuck on Shift solenoid No.3 circuit malfunction	×	1	C, O	×
	Illuminated	Illuminated	Shift solenoid No.4 stuck off	×	2	С	×
P0766:00			COUNTY SOURCE OF THE STORY OF T	. ^	_		. ^

DTC No.	Check engine light	Automatic transaxle warning light	Description	Fail-safe function	Drive cycle	Self test type*1	Memory function
P0768:00	Illuminated	Illuminated	Shift solenoid No.4 circuit malfunction	×	1	C, O	×
P0771:00	Illuminated	Illuminated	On/off solenoid stuck off	×	2	С	×
P0772:00	Illuminated	Illuminated	On/off solenoid stuck on	×	2	С	×
P0773:00	Illuminated	Illuminated	On/off solenoid circuit malfunction	×	1	C, O	×
P0780:00	Illuminated	Illuminated	Gear shifting malfunction	×	2	С	×
P079A:00	Illuminated	Illuminated	Shift solenoid No.3 stuck off/On/ off solenoid stuck on	×	2	С	×
P0819:00	_	_	M position switch/Up switch/ Down switch signal error	×	1	С	×
P0842:00	Illuminated	Illuminated	Oil pressure switch No.1 stuck on	×	2	С	×
P0843:00	Illuminated	Illuminated	Oil pressure switch No.1 stuck off	×	2	C	×
P0847:00	Illuminated	Illuminated	Oil pressure switch No.2 stuck on	×	2	C	×
P0848:00	Illuminated	Illuminated	Oil pressure switch No.2 stuck off	×	2	C	×
P0872:00	Illuminated	Illuminated	Oil pressure switch No.3 stuck on	×	2	C	×
P0873:00	Illuminated	Illuminated	Oil pressure switch No.3 stuck off	×	2	C	×
			•				
P0877:00	Illuminated	Illuminated	Oil pressure switch No.4 stuck on	×	2	C	×
P0878:00	Illuminated	Illuminated	Oil pressure switch No.4 stuck off	×	2	С	×
P0882:00	Illuminated		TCM power supply voltage low	×	1	С	×
P0883:00	Illuminated		TCM power supply voltage high	×	1	C, O	×
P0C2C:00	_	_	Electric AT oil pump rotation malfunction	×	1	С	×
P1728:00	_	_	Clutch slippage	×	2	С	×
P1738:00	_	Illuminated	Automatic transaxle internal malfunction	×	2	С	×
P1784:00	_	Illuminated	Hi cut valve stuck off/R-3-5 cut valve stuck on	×	2	С	×
P181F:00	_	_	Electric AT oil pump/Electric AT oil pump relay circuit malfunction	×	1	С	×
P2530:00	_	_	Ignition switch stuck off	×	1	С	×
P2712:00	_	_	Oil pump shift valve stuck	×	1	С	×
U0073:00	_	_	CAN system communication error (HS CAN)	×	1	C, O	×
U0074:00	_		CAN system communication error (local CAN between TCM and PCM)	×	1	C, O	×
U0100:00	Illuminated		Communication error to PCM (HS CAN)	×	1	C, O	×
U0115:00	Illuminated	l	Communication error to PCM (local CAN between TCM and PCM)	×	1	C, O	×
U0121:00	Illuminated	_	Communication error to DSC HU/CM	×	1	C, O	×
U0131:00	_	_	Communication error to EPS control module	×	1	C, O	×
U0155:00	Illuminated		Communication error to instrument cluster	×	1	C, O	×
U0442:00	_	_	Invalid data received from PCM (local CAN between TCM and PCM)	×	1	C, O	×

^{*1 :} C: CMDTC self test, O: KOEO self test, R: KOER self test

DTC separate detection condition

Type A VIN

Type A VINDTC No.	Description	Detection condition
		• Under the following conditions, the ATF temperature is 135 °C {275 °F} or
P0218:00	Automatic transaxle protection	more for 10 s:
1 02 10.00	control	Engine is running.
		TFT sensor related DTC is not recorded.
		• Under the following conditions, the vehicle speed signal input from DSC HU/
		CM is incorrect for 10 s :
P0500:00	Vehicle speed signal circuit	Engine is running.
1 0000.00	malfunction	Vehicle speed is 16 km/h {9.9 mph} or more.
		There is no difference in speed between turbine/input shaft speed sensor
		and output shaft speed sensor.
		• Under the following condition, there is malfunction in circuits of two or more
		ECU internal temperature sensors:
		— Battery voltage is 8 V or more .
P0666:00	ECU internal temperature sensor	Under the following conditions, one ECU internal temperature sensor has
	circuit(s) malfunction	malfunction, with difference in temperature between remaining two ECU
		internal temperature sensors being 10 °C {18 °F} or more:
		— Battery voltage is 8 V or more .
		Soaked for 6 hours or more . Under the following conditions, the difference between ECU internal
		temperatures of three ECU internal temperature sensors is 10 °C {18 °F} or
P0667:00	ECIL internal temperature conser	
	ECU internal temperature sensor two-range/performance problem	more: — Engine is running.
		Soaked for 6 hours or more.
		No malfunction in ECU internal temperature sensor circuit
		Under the following condition, TCM internal NVRAM data retention/read/write
P06B8:00	NVRAM malfunction	disabled:
1 0000.00	Trons an industrial	Battery voltage is 8 V or more .
		Under the following condition, pattern identification error in switch condition
P0706:00	Transaxle range sensor range/	of transaxle range sensors 1 to 4:
	performance problem	— Battery voltage is 8 V or more.
	Transcrite rouge company singuit law	• Under the following condition, incorrect voltage in any one of transaxle range
P0707:00	Transaxle range sensor circuit low	sensors 1 to 4:
	input	Battery voltage is 8 V or more .
	Transaxle range sensor circuit	• Under the following condition, incorrect voltage in any one of transaxle range
P0708:00	high input	sensors 1 to 4:
	Tilgit iliput	 Battery voltage is 8 V or more.
		 Under the following conditions, the ATF temperature is 40 °C {104 °F} or
		less:
P0711:00	TFT sensor range/performance	Certain period has elapsed since engine start.
	problem	ECU internal temperature sensor related DTC is not recorded.
		— Soaked for 6 hours or more.
		ECU internal temperature increases above specified temperature.
D0740.00	TET concer singuit law input	• Under the following condition, the TFT sensor voltage is 0.12 V or less for
P0712:00	TFT sensor circuit low input	5 s:
		— Battery voltage is 8 V or more .
		• Under the following conditions, the ATF temperature is -40 °C {-40 °F} or less for 5 s:
D0712:00	TET consor circuit high input	
P0713:00	TFT sensor circuit high input	— Battery voltage is 8 V or more. — IAT is -25 °C {-13 °F} or more.
		IAT is -25 C (-13 F) or more. IAT sensor related DTC is not recorded.
		Under the following conditions, the turbine/input shaft speed is 9,000 rpm or
		more for 1 s:
P0716:00	Turbine/input shaft speed sensor	— Engine is running.
1 07 10.00	range/performance problem	Battery voltage is 10 V or more.
		Engine speed is 7,500 rpm or less .
		Linguis opeca io 1,000 ipini di 1000.

DTC No.	Description	Detection condition
P0717:00	Open circuit in turbine/input shaft speed sensor circuit	 Under the following conditions, the turbine/input shaft speed sensor signal is not input for 1 s: Engine is running. Vehicle speed signal related DTC is not recorded. Vehicle speed is 16 km/h {9.9 mph} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. DTC U0121:00 is not recorded.
P0721:00	Output shaft speed sensor/sensor output range malfunction	 Under the following conditions, the output shaft speed is 13,560 rpm or more for 1 s: Engine is running. Battery voltage is 10 V or more. Under the following conditions, the vehicle speed signal from the DSC HU/CM and the output shaft speed sensor signal differ by 520 rpm or more for 1 s: Engine is running. Battery voltage is 10 V or more. Vehicle speed signal related DTC is not recorded. Vehicle speed is 16 km/h {9.9 mph} or more. Vehicle speed signal from DSC HU/CM and turbine/input shaft speed sensor signal do not differ. Output shaft speed sensor signal is input. Output shaft speed is 13,560 rpm or less.
P0722:00	Open circuit in output shaft speed sensor circuit	 Under the following conditions, the output shaft speed sensor signal is not input for 1 s: Engine is running. Vehicle speed signal related DTC is not recorded. Vehicle speed is 16 km/h {9.9 mph} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. DTC U0121:00 is not recorded.
P0729:00	6GR incorrect ratio	 In D position, 6GR, the following phenomenon occurs: There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.
P0731:00	1GR incorrect ratio	 In D position, 1GR, the following phenomenon occurs: Speed ratio is 0.75 to 1.2 for 2,000 ms while vehicle is stopped in D position. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.
P0732:00	2GR incorrect ratio	 In D position, 2GR, the following phenomenon occurs: There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.
P0733:00	3GR incorrect ratio	 In D position, 3GR, the following phenomenon occurs: There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.

DTC No.	Description	Detection condition
P0734:00	4GR incorrect ratio	 In D position, 4GR, the following phenomenon occurs: There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.
P0735:00	5GR incorrect ratio	 In D position, 5GR, the following phenomenon occurs: There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.
P0736:00	Gear reverse incorrect ratio	• Speed ratio is 0.75 to 1.2 for 2,000 ms while vehicle is stopped in R position.
P0741:00	TCC control solenoid stuck off	 Under the following conditions, difference in slip amount over 5 s compared to target slip amount is 200 rpm or more, and TCC feedback hydraulic pressure is 200 kPa {2.04 kgf/cm², 29.0 psi} or more occurs: Selector lever position is D position. No electrical malfunction in TCC control solenoid During TCC or TCC feedback There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Engine is running. ATF temperature is -25 °C {-13 °F} or more. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0743:00	TCC control solenoid circuit malfunction	Under the following condition, the TCM detects the TCC control solenoid circuit malfunction: Battery voltage is 10.5 V or more.
P0746:00	Pressure control solenoid stuck off	 Under the following conditions, pressure control solenoid stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0748:00	Pressure control solenoid circuit malfunction	Under the following condition, the TCM detects the pressure control solenoid circuit malfunction: Battery voltage is 10.5 V or more.
P0751:00	Shift solenoid No.1 stuck off	 Under the following conditions, shift solenoid No.1 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded. Under the following conditions, shift solenoid No.1 stuck-on detected by
P0752:00	Shift solenoid No.1 stuck on	 combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0753:00	Shift solenoid No.1 circuit malfunction	Under the following condition, the TCM detects the shift solenoid No.1 circuit malfunction: Battery voltage is 10.5 V or more.

DTC No.	Description	Detection condition
	= 555 pc.	Under the following conditions, shift solenoid No.2 stuck-off detected by
		combination of gear ratio malfunction and oil pressure switch pattern
		malfunction:
		Engine is running.
P0756:00	Shift solenoid No.2 stuck off	ATF temperature is 20 °C {68 °F} or more.
		There is no difference between vehicle speed signal from DSC HU/CM
		and output shaft speed sensor signal.
		 Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
		Under the following conditions, shift solenoid No.2 stuck-on detected by
		combination of gear ratio malfunction and oil pressure switch pattern
		malfunction:
		Engine is running.
P0757:00	Shift solenoid No.2 stuck on	— ATF temperature is 20 °C {68 °F} or more.
		There is no difference between vehicle speed signal from DSC HU/CM
		and output shaft speed sensor signal.
		 Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
		Under the following condition, the TCM detects the shift solenoid No.2 circuit
P0758:00	Shift solenoid No.2 circuit	malfunction:
	malfunction	Battery voltage is 10.5 V or more.
		Under the following conditions, shift solenoid No.3 stuck-off detected by
		combination of gear ratio malfunction and oil pressure switch pattern
		malfunction:
D0704 00	Oliffication of the Octable of	— Engine is running.
P0761:00	Shift solenoid No.3 stuck off	ATF temperature is 20 °C {68 °F} or more. There is no difference between which are additional from DSC LILLYON.
		 There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal.
		Turbine/input shaft speed sensor and output shaft speed sensor DTC is
		not recorded.
		Under the following conditions, shift solenoid No.3 stuck-on detected by
		combination of gear ratio malfunction and oil pressure switch pattern
		malfunction:
D0700 00	Oliff and and I No. O. of all and	— Engine is running.
P0762:00	Shift solenoid No.3 stuck on	ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HII/CM.
		 There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal.
		Turbine/input shaft speed sensor and output shaft speed sensor DTC is
		not recorded.
	Shift solenoid No.3 circuit	Under the following condition, the TCM detects the shift solenoid No.3 circuit
P0763:00	malfunction	malfunction:
	manariotion	Battery voltage is 10.5 V or more.
		Under the following conditions, shift solenoid No.4 stuck-off detected by
		combination of gear ratio malfunction and oil pressure switch pattern malfunction:
		— Engine is running.
P0766:00	Shift solenoid No.4 stuck off	ATF temperature is 20 °C {68 °F} or more.
		There is no difference between vehicle speed signal from DSC HU/CM
		and output shaft speed sensor signal.
		Turbine/input shaft speed sensor and output shaft speed sensor DTC is
		not recorded.
		Under the following conditions, shift solenoid No.4 stuck-on detected by combination of good ratio malfunction and ail procesure switch nattern.
		combination of gear ratio malfunction and oil pressure switch pattern malfunction:
		Engine is running.
P0767:00	Shift solenoid No.4 stuck on	ATF temperature is 20 °C {68 °F} or more.
		There is no difference between vehicle speed signal from DSC HU/CM
		and output shaft speed sensor signal.
		Turbine/input shaft speed sensor and output shaft speed sensor DTC is
		not recorded.
D0760-00	Shift solenoid No.4 circuit	Under the following condition, the TCM detects the shift solenoid No.4 circuit malfunction:
P0768:00	malfunction	malfunction:
		— Battery voltage is 10.5 V or more .

DTC No.	Description	Detection condition
P0771:00	On/off solenoid stuck off	 Under the following conditions, on/off solenoid stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0772:00	On/off solenoid stuck on	 Under the following conditions, on/off solenoid stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0773:00	On/off solenoid circuit malfunction	Under the following condition, the TCM detects the on/off solenoid circuit malfunction: Battery voltage is 10.5 V or more.
P0780:00	Gear shifting malfunction	Under the following condition, the gear shifting inhibited: Engine is running.
P079A:00	Shift solenoid No.3 stuck off/On/off solenoid stuck on	 Under the following conditions, shift solenoid No.3 stuck-off or on/off solenoid stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0819:00	M position switch/Up switch/Down switch signal error	 Under the following conditions, any of (1) to (4) conditions occurs for 1 s: Engine is running. Battery voltage is 8 V or more. Transaxle range sensor related DTC is not recorded. (1) M position switch signal is on even though forward oil pressure switch is on in any position other than D position. (2) M position switch signal is off even though up or down switch signal is on in D position. (3) Up switch signal is on even though M position switch signal is off in any position other than D position. (4) Down switch signal is on even though M position switch signal is off in any position other than D position.
P0842:00	Oil pressure switch No.1 stuck on	Under the following conditions, oil pressure switch No.1 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0843:00	Oil pressure switch No.1 stuck off	 Under the following conditions, oil pressure switch No.1 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.

DTC No.	Description	Detection condition
		• Under the following conditions, oil pressure switch No.2 stuck-on detected
P0847:00	Oil pressure switch No.2 stuck on	 by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0848:00	Oil pressure switch No.2 stuck off	 Under the following conditions, oil pressure switch No.2 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0872:00	Oil pressure switch No.3 stuck on	 Under the following conditions, oil pressure switch No.3 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0873:00	Oil pressure switch No.3 stuck off	 Under the following conditions, oil pressure switch No.3 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0877:00	Oil pressure switch No.4 stuck on	 Under the following conditions, oil pressure switch No.4 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0878:00	Oil pressure switch No.4 stuck off	 Under the following conditions, oil pressure switch No.4 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
	TCM power supply voltage low TCM power supply voltage high	 Under the following conditions, the TCM power supply voltage is 8—10.5 V or less (varies with ATF temperature): 5 s or more has elapsed or battery voltage exceeds 11 V or more for 0.2 s since engine speed increases -200 rpm or more of target idle speed. Selector lever position is D or R position. TCM power supply voltage is 18 V or more for 5 s.

DTC No.	Description	Detection condition
		• The actual electric AT oil pump rotation speed under the following conditions
		is 100 rpm or less for a continuous 10 s :
P0C2C:00	Electric AT oil pump rotation	Electric AT oil pump rotation speed command value is 500 rpm or
1 0020.00	malfunction	more.
		Electric AT oil pump relay is ON.
		— DTC P181F:00 is not recorded.
		Under the following conditions, turbine/input shaft speed suddenly increases
		300 rpm or more for 1,450 ms:
		— Engine is running.
		 Vehicle speed is 5 km/h {3 mph} or more. There is no difference between vehicle speed signal from DSC HU/CM
P1728:00	Clutch slippage	and output shaft speed sensor signal.
		Not shifting
		Selector lever position is D position.
		Turbine/input shaft speed is 1,200 rpm or more.
		Oil pressure switch pattern (1st—6th) is normal.
	Automatic transaxle internal	Malfunction location cannot be determined based on combination of gear
P1738:00	malfunction	ratio malfunction and oil pressure switch pattern malfunction.
		Under the following conditions, hi cut valve stuck-off or R-3-5 cut valve stuck-
		on detected by combination of gear ratio malfunction and oil pressure switch
		pattern malfunction:
	Lii aastaalaa attib o	- Engine is running.
P1784:00	Hi cut valve stuck off/R-3-5 cut	 ATF temperature is 20 °C {68 °F} or more.
	valve stuck on	 There is no difference between vehicle speed signal from DSC HU/CM
		and output shaft speed sensor signal.
		 Turbine/input shaft speed sensor and output shaft speed sensor DTC is
		not recorded.
	Electric AT oil pump/Electric AT oil pump relay circuit malfunction	• If the TCM detects any of the following conditions for a continuous 5 s :
P181F:00		Electric AT oil pump circuit has a malfunction.
	parity relay of our maintainer	Electric AT oil pump relay circuit has a malfunction.
		• If the IG ON time count of the instrument cluster proceeds 5 s under the
P2530:00	Ignition switch stuck off	following condition:
		— Ignition switch signal off
		 Under the following conditions, oil pressure switch No.1 OFF output continues for 10 s:
		DTC P0753:00, P0C2C:00 and P181F:00 are not recorded.
		During i-stop operation
P2712:00	Oil pump shift valve stuck	Selector lever position is D or N position.
		During electric AT oil pump operation
		Oil pressure switch, low clutch and transaxle range sensor are normal.
		Rate of speed change normal
110070.00	CAN system communication error	Under the following condition, a communication error (HS CAN) occurs:
U0073:00	(HS CAN)	 Battery voltage is 10 V or more.
	CAN system communication error	Under the following condition, a communication error (local CAN between
U0074:00	(local CAN between TCM and	TCM and PCM) occurs:
	PCM)	 Battery voltage is 10 V or more.
	Communication error to PCM (HS	• Under the following condition, the TCM cannot receive the signal from PCM
U0100:00	CAN)	(HS CAN):
	· ·	Battery voltage is 10 V or more.
	Communication error to PCM	Under the following condition, the TCM cannot receive the signal from PCM
U0115:00	(local CAN between TCM and	(local CAN between TCM and PCM):
	PCM)	— Battery voltage is 10 V or more .
110404.55	Communication error to DSC HU/	Under the following condition, the TCM cannot receive the signal from DSC
U0121:00	CM	HU/CM:
		— Battery voltage is 10 V or more .
110404.00	Communication error to EPS	Under the following condition, the TCM cannot receive the signal from EPS
U0131:00	control module	control module:
		Battery voltage is 10 V or more. Linder the following condition, the TCM connect receive the signal from
110155.00	Communication error to	Under the following condition, the TCM cannot receive the signal from instrument cluster:
U0155:00	instrument cluster	instrument cluster:
		Battery voltage is 10 V or more.

DTC No.	Description	Detection condition
	Invalid data received from PCM	• Under the following condition, the TCM detects the invalid PCM signal for 0.5
U0442:00	(local CAN between TCM and	s:
	PCM)	Battery voltage is 10 V or more.

<u>Fype B VII</u> DTC No.	Description	Detection condition
P0218:00	Automatic transaxle protection control	 Under the following conditions, the ATF temperature is 135 °C {275 °F} or more for 10 s: Engine is running. TFT sensor related DTC is not recorded.
P0500:00	Vehicle speed signal circuit malfunction	 Under the following conditions, the vehicle speed signal input from DSC HU/CM is incorrect for 10 s: Engine is running. The vehicle is driven in D position or R position. Output shaft speed sensor related DTC is not recorded There is no difference between vehicle speed signal from DSC HU/CM and turbine/input shaft speed sensor signal.
P0666:00	ECU internal temperature sensor circuit malfunction	 Under the following condition, there is malfunction in circuit of ECU internal temperature sensor: Battery voltage is 8 V or more.
P0667:00	ECU internal temperature sensor/ performance problem	 Under the following conditions, the difference between ECU internal temperatures of three ECU internal temperature sensors is 15 °C {59 °F} or more: Engine is running. Soaked for 6 hours or more. No malfunction in ECU internal temperature sensor circuit
P06B8:00	NVRAM malfunction	 Under the following condition, TCM internal NVRAM data retention/read/write disabled: Battery voltage is 8 V or more.
P0706:00	Transaxle range sensor range/ performance problem	 Under the following condition, pattern identification error in switch condition of transaxle range sensors 1 to 4: Battery voltage is 8 V or more.
P0707:00	Transaxle range sensor circuit low input	 Under the following condition, incorrect voltage in any one of transaxle range sensors 1 to 4: Battery voltage is 8 V or more.
P0708:00	Transaxle range sensor circuit high input	 Under the following condition, incorrect voltage in any one of transaxle range sensors 1 to 4: Battery voltage is 8 V or more.
P0711:00	TFT sensor range/performance problem	 Under the following conditions, the ATF temperature is 40 °C {104 °F} or less: Certain period has elapsed since engine start. ECU internal temperature sensor related DTC is not recorded. Soaked for 6 hours or more. ECU internal temperature is 60 °C {140 °F} or more. Vehicle speed is 45 km/h {28 mph} or more. Under the following conditions, the ATF temperature is 120 °C {248 °F} or more: Certain period has elapsed since engine start. ECU internal temperature sensor related DTC is not recorded. Soaked for 6 hours or more. ECU internal temperature is 95 °C {203 °F} or less. Vehicle speed is 45 km/h {28 mph} or more.
P0712:00	TFT sensor circuit low input	 Under the following condition, the TFT sensor voltage is 0.12 V or less for 5 s: Battery voltage is 8 V or more.
P0713:00	TFT sensor circuit high input	 Under the following conditions, the ATF temperature is -40 °C {-40 °F} or less for 5 s: Battery voltage is 8 V or more. IAT is -25 °C {-13 °F} or more. IAT sensor related DTC is not recorded.

DTC No.	Description	Detection condition
		Under the following conditions, the difference between engine speed signal
	Turbine/input shaft speed sensor/	and turbine/input shaft speed signal is 400 rpm or more for 1 s:
P0715:00	sensor output range malfunction	Engine is running.
	Serisor output range manufiction	 Turbine/input shaft speed sensor is 9,000 rpm or less.
		The gear shift position is in the neutral condition.
D0740.00	Turbine/input shaft speed sensor	• Under the following condition, the turbine/input shaft speed is 9,000 rpm or
P0716:00	range/performance problem	more for 1 s:
		— Battery voltage is 8 V or more .
		Under the following conditions, the turbine/input shaft speed sensor signal is not input for 1 s:
		Engine is running.
	Open circuit in turbine/input shaft	Vehicle speed signal related DTC is not recorded.
P0717:00	speed sensor circuit	Vehicle speed is 16 km/h {9.9 mph} or more.
		There is no difference between vehicle speed signal from DSC HU/CM
		and output shaft speed sensor signal.
		DTC U0121:00 is not recorded.
		Under the following conditions, there is difference between vehicle speed
		signal from DSC HU/CM and output shaft speed sensor signal for 1 s :
		Engine is running.
		The vehicle is driven in D position or R position.
P0720:00	Output shaft speed sensor range/	 Vehicle speed signal related DTC is not recorded.
. 0720.00	performance problem	There is no difference between vehicle speed signal from DSC HU/CM
		and turbine/input shaft speed sensor signal.
		Output shaft speed sensor signal is input. Forward Output shaft speed in 42 500 years on less.
		Forward: Output shaft speed is 13,560 rpm or less. Poveres: Output shaft speed is 2,000 rpm or less.
		 Reverse: Output shaft speed is 2,000 rpm or less. Under the following condition, the output shaft speed is 13,560 rpm or
P0721:00	Output shaft speed sensor/sensor	more in forward or 2,000 rpm or more in reverse for a continuous 1 s:
1 0721.00	output range malfunction	Battery voltage is 8 V or more.
		Under the following conditions, the output shaft speed sensor signal is not
		input for 1 s:
		Engine is running.
D0700.00	Open circuit in output shaft speed	Vehicle speed signal related DTC is not recorded.
P0722:00	sensor circuit	Vehicle speed is 16 km/h {9.9 mph} or more.
		There is no difference between vehicle speed signal from DSC HU/CM
		and output shaft speed sensor signal.
		— DTC U0121:00 is not recorded.
		• In D position, 6GR, the following phenomenon occurs:
		There is difference between turbine/input shaft speed and output shaft
D0720-00	6CP incorrect ratio	speed sensor speed for 230 to 1,980 ms (varies with ATF temperature
P0729:00	6GR incorrect ratio	and ECT) during shift-up. — There is difference between turbine/input shaft speed and output shaft
		speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature)
		while driving without shifting.
		In D position, 1GR, the following phenomenon occurs:
		Speed ratio is 0.75 to 1.2 for 2,000 ms while vehicle is stopped in D
		position.
		There is difference between turbine/input shaft speed and output shaft
P0731:00	1GR incorrect ratio	speed sensor speed for 230 to 1,980 ms (varies with ATF temperature
		and ECT) during shift-up.
		There is difference between turbine/input shaft speed and output shaft
		speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature)
		while driving without shifting.
P0732:00		• In D position, 2GR, the following phenomenon occurs:
	2GR incorrect ratio	There is difference between turbine/input shaft speed and output shaft and a great speed for 200 to 4 000 ms (varies with ATE temporature).
		speed sensor speed for 230 to 1,980 ms (varies with ATF temperature
		and ECT) during shift-up. — There is difference between turbine/input shaft speed and output shaft
		speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature)
		while driving without shifting.
	1	wine driving without silliting.

DTC No.	Description	Detection condition
P0733:00	3GR incorrect ratio	 In D position, 3GR, the following phenomenon occurs: There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.
P0734:00	4GR incorrect ratio	 In D position, 4GR, the following phenomenon occurs: There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.
P0735:00	5GR incorrect ratio	 In D position, 5GR, the following phenomenon occurs: There is difference between turbine/input shaft speed and output shaft speed sensor speed for 230 to 1,980 ms (varies with ATF temperature and ECT) during shift-up. There is difference between turbine/input shaft speed and output shaft speed sensor speed for 1,500 to 3,900 ms (varies with ATF temperature) while driving without shifting.
P0736:00	Gear reverse incorrect ratio	• Speed ratio is 0.75 to 1.2 for 2,000 ms while vehicle is stopped in R position.
P073D:00	Neutral incorrect ratio	 In P or N position, the following phenomenon occurs: Speed ratio is 0.5 or less for 2 s while vehicle is stopped in P or N position.
P0741:00	TCC control solenoid stuck off	 Under the following conditions, difference in slip amount over 5 s compared to target slip amount is 200 rpm or more, and TCC feedback hydraulic pressure is 200 kPa {2.04 kgf/cm², 29.0 psi} or more occurs: Selector lever position is D position. No electrical malfunction in TCC control solenoid During TCC or TCC feedback There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Engine is running. ATF temperature is -25 °C {-13 °F} or more. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0743:00	TCC control solenoid circuit malfunction	 Under the following condition, the TCM detects the TCC control solenoid circuit malfunction: Battery voltage is 10.5 V or more.
P0746:00	Pressure control solenoid stuck off	 Under the following conditions, pressure control solenoid stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0748:00	Pressure control solenoid circuit malfunction	 Under the following condition, the TCM detects the pressure control solenoid circuit malfunction: Battery voltage is 10.5 V or more.
P0751:00	Shift solenoid No.1 stuck off	 Under the following conditions, shift solenoid No.1 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.

DTC No.	Description	Detection condition
P0752:00	Shift solenoid No.1 stuck on	 Under the following conditions, shift solenoid No.1 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal.
P0753:00	Shift solenoid No.1 circuit	Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded. Under the following condition, the TCM detects the shift solenoid No.1 circuit malfunction:
F0755.00	malfunction	— Battery voltage is 10.5 V or more.
P0756:00	Shift solenoid No.2 stuck off	 Under the following conditions, shift solenoid No.2 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0757:00	Shift solenoid No.2 stuck on	 Under the following conditions, shift solenoid No.2 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0758:00	Shift solenoid No.2 circuit malfunction	 Under the following condition, the TCM detects the shift solenoid No.2 circuit malfunction: Battery voltage is 10.5 V or more.
P0761:00	Shift solenoid No.3 stuck off	 Under the following conditions, shift solenoid No.3 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0762:00	Shift solenoid No.3 stuck on	 Under the following conditions, shift solenoid No.3 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0763:00	Shift solenoid No.3 circuit malfunction	 Under the following condition, the TCM detects the shift solenoid No.3 circuit malfunction: Battery voltage is 10.5 V or more.
P0766:00	Shift solenoid No.4 stuck off	 Under the following conditions, shift solenoid No.4 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.

DTC No.	Description	Detection condition
	Shift solenoid No.4 stuck on	Under the following conditions, shift solenoid No.4 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction:
P0767:00		 Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0768:00	Shift solenoid No.4 circuit malfunction	Under the following condition, the TCM detects the shift solenoid No.4 circuit malfunction: Battery voltage is 10.5 V or more.
P0771:00	On/off solenoid stuck off	 Under the following conditions, on/off solenoid stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0772:00	On/off solenoid stuck on	 Under the following conditions, on/off solenoid stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0773:00	On/off solenoid circuit malfunction	 Under the following condition, the TCM detects the on/off solenoid circuit malfunction: Battery voltage is 10.5 V or more.
P0780:00	Gear shifting malfunction	Under the following condition, the gear shifting inhibited: Engine is running.
P079A:00	Shift solenoid No.3 stuck off/On/off solenoid stuck on	 Under the following conditions, shift solenoid No.3 stuck-off or on/off solenoid stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0819:00	M position switch/Up switch/Down switch signal error	 Under the following conditions, any of (1) to (4) conditions occurs for 1 s: Engine is running. Battery voltage is 8 V or more. Transaxle range sensor related DTC is not recorded. (1) M position switch signal is on even though forward oil pressure switch is on in any position other than D position. (2) M position switch signal is off even though up or down switch signal is on in D position. (3) Up switch signal is on even though M position switch signal is off in any position other than D position. (4) Down switch signal is on even though M position switch signal is off in any position other than D position.

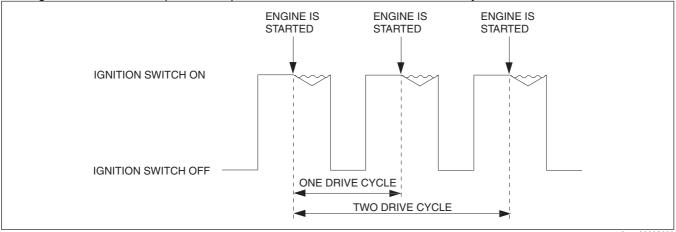
DTC No.	Description	Detection condition
P0842:00	Oil pressure switch No.1 stuck on	 Under the following conditions, oil pressure switch No.1 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0843:00	Oil pressure switch No.1 stuck off	 Under the following conditions, oil pressure switch No.1 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0847:00	Oil pressure switch No.2 stuck on	Under the following conditions, oil pressure switch No.2 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0848:00	Oil pressure switch No.2 stuck off	 Under the following conditions, oil pressure switch No.2 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0872:00	Oil pressure switch No.3 stuck on	 Under the following conditions, oil pressure switch No.3 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0873:00	Oil pressure switch No.3 stuck off	 Under the following conditions, oil pressure switch No.3 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.
P0877:00	Oil pressure switch No.4 stuck on	 Under the following conditions, oil pressure switch No.4 stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.

DTC No.	Description	Detection condition	
P0878:00	Oil pressure switch No.4 stuck off	 Under the following conditions, oil pressure switch No.4 stuck-off detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: Engine is running. ATF temperature is 20 °C {68 °F} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Turbine/input shaft speed sensor and output shaft speed sensor DTC is 	
P0882:00	TCM power supply voltage low	 not recorded. Under the following conditions, the TCM power supply voltage is 8—10.5 \ or less (varies with ATF temperature): 5 s or more has elapsed or battery voltage exceeds 11 V or more for 0.2 s since engine speed increases -200 rpm or more of target idle speed. Selector lever position is D or R position. 	
P0883:00	TCM power supply voltage high	• TCM power supply voltage is 18 V or more for 5 s .	
P0C2C:00	Electric AT oil pump rotation malfunction	 The actual electric AT oil pump rotation speed under the following conditions is 100 rpm or less for a continuous 10 s: Electric AT oil pump rotation speed command value is 500 rpm or more. Electric AT oil pump relay is ON. DTC P181F:00 is not recorded. 	
P1728:00	Clutch slippage	 Under the following conditions, turbine/input shaft speed suddenly increases 300 rpm or more for 1,450 ms: Engine is running. Vehicle speed is 5 km/h {3 mph} or more. There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. Not shifting Selector lever position is D position. Turbine/input shaft speed is 1,200 rpm or more. Oil pressure switch pattern (1st—6th) is normal. 	
P1738:00	Automatic transaxle internal	Malfunction location cannot be determined based on combination of gear	
P1784:00	Hi cut valve stuck off/R-3-5 cut valve stuck on	ratio malfunction and oil pressure switch pattern malfunction. • Under the following conditions, hi cut valve stuck-off or R-3-5 cut valve stuck-on detected by combination of gear ratio malfunction and oil pressure switch pattern malfunction: — Engine is running. — ATF temperature is 20 °C {68 °F} or more. — There is no difference between vehicle speed signal from DSC HU/CM and output shaft speed sensor signal. — Turbine/input shaft speed sensor and output shaft speed sensor DTC is not recorded.	
P181F:00	Electric AT oil pump/Electric AT oil pump relay circuit malfunction	 If the TCM detects any of the following conditions for a continuous 5 s: Electric AT oil pump circuit has a malfunction. Electric AT oil pump relay circuit has a malfunction. 	
P2530:00	Ignition switch stuck off	 If the IG ON time count of the instrument cluster proceeds 5 s under the following condition: Ignition switch signal off 	
P2712:00	Oil pump shift valve stuck	 Under the following conditions, oil pressure switch No.1 OFF output continues for 10 s: DTC P0753:00, P0C2C:00 and P181F:00 are not recorded. During i-stop operation Selector lever position is D or N position. During electric AT oil pump operation Oil pressure switch, low clutch and transaxle range sensor are normal. Rate of speed change normal 	
U0073:00	CAN system communication error (HS CAN)	 Under the following condition, a communication error (HS CAN) occurs: Battery voltage is 10 V or more. 	
U0074:00	CAN system communication error (local CAN between TCM and PCM)	 Under the following condition, a communication error (local CAN between TCM and PCM) occurs: Battery voltage is 10 V or more. 	

DTC No.	Description	Detection condition
U0100:00	Communication error to PCM (HS CAN)	Under the following condition, the TCM cannot receive the signal from PCM (HS CAN): Battery voltage is 10 V or more.
U0115:00	Communication error to PCM (local CAN between TCM and PCM)	Under the following condition, the TCM cannot receive the signal from PCM (local CAN between TCM and PCM): Battery voltage is 10 V or more.
U0121:00	Communication error to DSC HU/	Under the following condition, the TCM cannot receive the signal from DSC HU/CM: Battery voltage is 10 V or more.
U0131:00	Communication error to EPS control module	Under the following condition, the TCM cannot receive the signal from EPS control module: Battery voltage is 10 V or more.
U0155:00	Communication error to instrument cluster	Under the following condition, the TCM cannot receive the signal from instrument cluster: Battery voltage is 10 V or more.
U0442:00	Invalid data received from PCM (local CAN between TCM and PCM)	 Under the following condition, the TCM detects the invalid PCM signal for 0.5 Battery voltage is 10 V or more.

Drive cycle

- The drive cycle is the period of time from when the engine is started to the next time the engine is started.
- One drive cycle, as shown in the figure, indicates the period from the time engine is started to the next time the engine is started. If this period is repeated twice it then becomes two drive cycles.



am3uun00002080

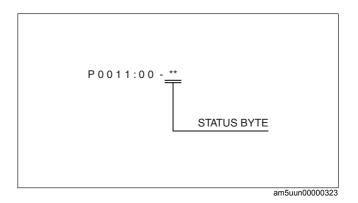
To detect DTCs, a required number of drive cycles for pre-detection has been set. For the number of drive cycles required for detection, refer to the DTC table.

Pending code

- The pending code is temporary malfunction code which differs from DTCs which are recorded when the TCM detects a transaxle malfunction.
- DTCs are recorded in the TCM according to the number of drive cycles when the TCM detects a transaxle malfunction. At the same time, pending code is recorded in the TCM regardless of the number of drive cycles.
- Pending code recorded in the TCM is erased from the TCM, from the next drive cycle, when the TCM determines that the transaxle is normal.

Status byte for DTC

- The status byte is the two-digit code (two digits after hyphen (-)) after the DTC.
- The status byte is a code which indicates the pending code, current/past malfunction status, or warning illumination status.
- The status byte can be read by performing a CMDTC self test using the M-MDS.
- For details on the status byte, refer to the explanation on the M-MDS when reading the DTC.



Self-test function

- When the self-test is implemented, the TCM performs diagnosis of the transaxle control system. If a malfunction
 is detected with the results of the diagnosis, an applicable DTC is recorded. A recorded DTC can be read by the
 M-MDS.
- By implementing the self-test function, verification of the current malfunction and verification after repair is facilitated.

CMDTC (Continuous Memory Diagnostic Trouble Code) self-test

• The CMDTC self-test is a function which reads all DTCs recorded in the TCM after the previous DTCs are erased no matter whether they are past malfunctions or current malfunctions.

KOEO (Key On Engine Off) self-test

The KOEO self-test can perform malfunction diagnosis of DTCs corresponding to this self-test function when the
ignition is switched ON and the engine is stopped. This self-test implements based on the test implementation
command signal sent to the TCM from the M-MDS.

Freeze frame data/Snapshot data

Freeze frame data

- The freeze frame data consists of data for vehicle and transaxle control system operation conditions when
 malfunctions in the transaxle control system are detected and stored in the TCM.
- Freeze frame data is stored at the instant the malfunction indicator lamp illuminates, and only a part of the DTC data is stored.

Snapshot data

The data for all DTCs currently detected is stored.

Recorded DTC timing

- For DTCs with one drive cycle, data is recorded during the malfunction determination period.
- For DTCs with two drive cycles, data is recorded during non-determination (1st diagnosis) periods.

Freeze frame data item table

—: Not applicable

Freeze frame data	Unit	Description	Corresponding PID/DATA monitor
iteiii			item
LOAD	%	Calculated engine load	_
ECT	°C {°F}	Engine coolant temperature	ECT
RPM	RPM	Engine speed	RPM
VS	KPH (MPH)	Vehicle speed	VSS
IAT	°C {°F}	Intake air temperature	_
TP	%	Throttle valve position No.1	_
RUNTM	hh:mm:ss	Time from engine start	_
VPWR	V	Module supply voltage	VPWR
APP_D	%	Accelerator pedal position No.1	_

Snapshot data item table

-: Not applicable

S	napshot data item	Unit	Description	Corresponding PID/DATA monitor item
	LOAD	%	Calculated engine load	_

Snapshot data item	Unit	Description	Corresponding PID/DATA monitor item
ECT	°C {°F}	Engine coolant temperature	ECT
RPM	RPM	Engine speed	RPM
VSS	KPH (MPH)	Vehicle speed	VSS
IAT	°C {°F}	Intake air temperature	_
EG_RUN_TIME	_	Time from engine start	_
VPWR	V	Module supply voltage	VPWR
APP1	%	Accelerator pedal position No.1	_
GEAR_SEL	1/2/3/4/5/6	Gear shift position	GEAR_SEL
TSS	RPM	Turbine/input shaft speed	TSS
TFT	°C {°F}	ATF temperature	TFT
OSS	RPM	Output shaft speed	OSS
LOCK_UP	Off/SLIP/On	Torque converter (TCC condition)	LOCK_UP
OIL PRES SW2	Off/On	Oil pressure switch No.2 condition	OP SW2
OIL PRES SW1	Off/On	Oil pressure switch No.1 condition	OP SW1
SS ON OFF	Off/On	On/off solenoid condition	SS ON-OFF
TORQUE DES	Nm	Desired engine torque	TORQUE DES
APP	%	Accelerator pedal position No.1	
G INHIBIT 6	Off/On	6GR is inhibited due to malfunction.	_
G INHIBIT 5	Off/On	5GR is inhibited due to malfunction.	_
G INHIBIT 4	Off/On	4GR is inhibited due to malfunction.	_
G INHIBIT 3	Off/On	3GR is inhibited due to malfunction.	_
G INHIBIT 2	Off/On	2GR is inhibited due to malfunction.	_
G INHIBIT 1	Off/On	1GR is inhibited due to malfunction.	_
G INHIBIT R	Off/On	R position is inhibited due to malfunction.	_
G_INHIBIT_N	Off/On	N position is inhibited due to malfunction.	_
OIL PRES SW4	Off/On	Oil pressure switch No.4 condition	OP SW4
OIL_PRES_SW3	Off/On	Oil pressure switch No.3 condition	OP SW3
EOP RLY	Off/On	Electric AT oil pump relay condition	EOP RLY
SHIFT_CTRL	DEFAULT/ MANUAL/ C_CONTROL/ HIGH_TEMP/ D_MANUAL/ FAIL_SAFE	Shift control mode	SHIFT_CTRL
SLIP_VALUE	RPM	Actual slip value between TSS and OSS	_
HTM_DIS	km {mile}	Travel distance since determination of ATF high temperature mode	HTM_DIS
MST_REC_SFT	_	The gear shift position before shifting gears is displayed.	SE_TYPE
SFT_CTL_STS	_	The shift control execution condition is displayed.	SC_STATE
SERIAL_DTC	_	DTC	
TR	_	Transaxle range sensor position.	TR