

Traction Systems (ETS) - Diagnostic Trouble Code (DTC) Memory

Preparation for DTC Readout

1. Review section 0 and □ 21, □ 22, □ 23
2. Connect Hand-Held Tester (HHT) to data link connector (X11/4) according to connection diagram (see section 0).
3. Ignition: **ON**
4. Read out DTC memory for the ETS, ME-SFI and ETC control modules.
5. Perform nominal/actual values comparison.
6. Perform activations.
7. Follow-up and repair all displayed DTCs.
8. After successful repairs, erase all DTCs.



- DTC readout is no longer possible using the impulse counter scan tool.

Special Tools




965 589 00 01 00

Hand-Held-Tester



965 589 00 40 00

Test cable

DTC 	Possible cause	Test step/Remedy 1)
-	No fault in system	In case of complaint: □ 23 (entire test).
C 1000	ETS/SPS control module (N47-2)	N47-2
C 1010	Battery voltage too low, circuit 15	□ 23 ⇒ 1.0
	Battery voltage too high, circuit 15	□ 23 ⇒ 1.0

C 1012		
C 1020	CAN communication faulty overall	Wiring, □ 23 ⇒ 3.0
C 1022	CAN communication with engine control module (ME-SFI) (N3/10) interrupted	Read out DTC's from (N3/10).
C 1024	CAN communication with transmission control module (N15/3) interrupted	Read out DTC's from (N15/3).
C 1029	CAN communication with All-Activity control module (AAM) (N10) interrupted	Read out DTC's from (N10).
C 1030	CAN communication with Transfer case control module (N78) interrupted	Read out DTC's from (N78).
C 1100	Left front axle VSS sensor (L6/1), open circuit Left front axle VSS sensor (L6/1), loose connection Left front axle VSS sensor (L6/1), implausible 2)	□ 23 ⇒ 6.0
C 1101	Right front axle VSS sensor (L6/2), open circuit Right front axle VSS sensor (L6/2), loose connection Right front axle VSS sensor (L6/2), implausible 2)	□ 23 ⇒ 7.0
C 1102	Left rear axle VSS sensor (L6/3), open circuit Left rear axle VSS sensor (L6/3), loose connection Left rear axle VSS sensor (L6/3), implausible 2)	□ 23 ⇒ 8.0
C 1103	Right rear axle VSS sensor (L6/4), open circuit Right rear axle VSS sensor (L6/4), loose connection Right rear axle VSS sensor (L6/4), implausible 2)	□ 23 ⇒ 9.0
C 1200	Stop lamp switch (S9/1) short/open circuit S9/1 implausible	Wiring, S/91
C 1210	Brake fluid level switch (S11) short/open circuit	Wiring, S/11
C 1300	Left front axle solenoid valve (hold) (A7/3y6), short/open circuit	□ 23 ⇒ 11.0
C 1301	Left front axle solenoid valve (release) (A7/3y7), short/open circuit	□ 23 ⇒ 12.0
C 1302	Right front axle solenoid valve (hold) (A7/3y8), short/open circuit	□ 23 ⇒ 13.0
C 1303	Right front axle solenoid valve (release) (A7/3y9), short/open circuit	□ 23 ⇒ 14.0

C 1304	Left rear axle solenoid valve (hold) (A7/3y10), short/open circuit	<input type="checkbox"/> 23 ⇒ 15.0
C 1305	Left rear axle solenoid valve (release) (A7/3y11), short/open circuit	<input type="checkbox"/> 23 ⇒ 16.0
C 1306	Right rear axle solenoid valve (hold) (A7/3y12), short/open circuit	<input type="checkbox"/> 23 ⇒ 17.0
C 1307	Right rear axle solenoid valve (release) (A7/3y13), short/open circuit	<input type="checkbox"/> 23 ⇒ 18.0
C 1314	Solenoid valves (A7/3), voltage supply	<input type="checkbox"/> 23 ⇒ 10.0 <input type="checkbox"/> 23 ⇒ 2.0
C 1316	Pressure circuit 1 switchover solenoid valve (A7/3y24) short/open circuit	<input type="checkbox"/> 23 ⇒ 19.0
C 1317	Pressure circuit 1 vacuum solenoid valve (A7/3y26)	<input type="checkbox"/> 23 ⇒ 21.0
C 1318	Pressure circuit 2 switchover solenoid valve (A7/3y25) short/open circuit	<input type="checkbox"/> 23 ⇒ 20.0
C 1319	Pressure circuit 2 vacuum solenoid valve (A7/3y27) short/open circuit	<input type="checkbox"/> 23 ⇒ 22.0
C 1401	High pressure return pump (A7/3m1), short/open circuit High pressure return pump (A7/3m1), will not shut off	<input type="checkbox"/> 23 ⇒ 5.0
C 1512	Brakes overheated	Brakes were momentarily overloaded, erase DTC.

1) Observe Preparation for Test, see ☐ 22.

2) Rotor with incorrect tooth count, dirt accumulation on or damaged rotor, incorrect rear axle ratio, wrong wheel or tire size.
If DTC appears only after repair work, it was caused by applying the brakes or driving vehicle on a dynamometer, erase DTC.