Diagnosis - Diagnostic Trouble Code (DTC) Memory

Preparation for DTC Readout

1. Connect impulse counter scan tool or Hand-Held Tester (HHT) to data link connector (X11/4) according to connection diagram (see section 0).

Note:

Connect yellow wire from impulse counter scan tool to:

ABS/ASR control module (N30/1)	socket 6
BM (N16/1)	socket 8
SPS control module (N49/1)	socket 12
ADS control module (N51)	socket 11
TCM (N15/1)	socket 10
EA/CC/ISC control module (N4/1)	socket 7

Engine (N3/4), LH-SFI (N3/1) or	
Right LH-SFI control module (N3/3)	socket 4
Left LH-SFI control module (N3/2)	socket 5
DI (N1/3) or Right DI control module (N1/5)	socket 17
Left DI control module (N1/4)	socket 18

2. Ignition: **ON**
3. Read out DTC`s for control modules listed.

Special Tools

Equipment

Hand-Held Tester (HHT)	See S.I. in groups 58 and 99.

Diagnosis - Diagnostic Trouble Code (DTC) Memory

Diagnostic trouble code (DTC)		Possible cause	Test step/Remedy [1]
N	A		
I	–	No fault in system.	In case of complaint: **j** 23 and **j** 33 (entire test)
2	002	Left front axle VSS sensor (L6/1), open circuit	**j** 23**t** 14.0
3	003	Right front axle VSS sensor (L6/2), open circuit	**j** 23**t** 16.0
4	004	Left rear axle VSS sensor (L6/3), open circuit	**j** 23**t** 18.0
5	005	Right rear axle VSS sensor (L6/4), open circuit	**j** 23**t** 20.0
6	006	ABS/ASR hydraulic unit, left front axle solenoid valve (A7/3y1)	**j** 23**t** 23.0
7	007	ABS/ASR hydraulic unit, right front axle solenoid valve (A7/3y2)	**j** 23**t** 24.0
8	008	ABS/ASR hydraulic unit, left rear axle solenoid valve (A7/3y3)	**j** 23**t** 25.0
9	009	ABS/ASR hydraulic unit, right rear axle solenoid valve (A7/3y4)	**j** 23**t** 26.0
I0	0I0	ABS/ASR hydraulic unit, high-pressure/return pump relay (A7/3k2),	**j** 23**t** 8.0
		ABS/ASR hydraulic unit, high-pressure/return pump (A7/3m1)	**j** 23**t** 2.0
II	0II	ABS/ASR hydraulic unit, solenoid valve relay (A7/3k1)	**j** 23**t** 7.0
Models 124.036 (02/92 !), 129.076, 140.04/05/07			
I2	0I2	Master brake cylinder switchover valve (Y61)	**j** 23**t** 9.0
I3	0I3	Stop lamp switch (S9/1)	**j** 23**t** 10.0

[1] Observe Preparation for Test, see **j** 22.

Diagnosis - Diagnostic Trouble Code (DTC) Memory

Diagnostic trouble code (DTC) N	A	Possible cause	Test step/Remedy [1]
Model 124.036 (02/93 ！), 129.076, 140.04/04/07			
I4	0I4	ABS lateral acceleration sensor (B24/2), open circuit	j 23t 13.0
I5	0I5	ABS/ASR control module (N30/1)	Replace N30/1
I6	0I6	Vehicle speed signal (VSS) (L6/1, L6/2, L6/3, L6/4), implausible [2] [3]	j 23t 14.0 j 23t 16.0 j 23t 18.0 j 23t 20.0 Visually inspect
I7	0I7	Battery voltage too low	j 23t 1.0
20	020	ABS/ASR hydraulic unit, switchover/solenoid valve (A7/3y5)	j 23t 27.0
2I	02I	ABS/ASR hydraulic unit, pressure switch (A7/3s1), charge	j 23t 1.0, 2.0 j 23t 22.0
22	022	ABS/ASR hydraulic unit, pressure switch (A7/3s1), leakage	j 23t 1.0, 2.0 j 23t 22.0
23	023	ABS/ASR hydraulic unit, pressure switch (A7/3s1), hydraulic	j 23t 1.0, 2.0 j 23t 22.0

[1] Observe Preparation for Test, see j 22.
[2] Rotor with incorrect tooth count, dirt accumulation on or damaged rotor, incorrect rear axle ratio, wrong wheel or tire size.
[3] If DTC appears only after repair work, it was caused by applying the brakes or driving vehicle on a dynamometer, erase DTC.

Diagnosis - Diagnostic Trouble Code (DTC) Memory

Diagnostic trouble code (DTC) N	A	Possible cause	Test step/Remedy [1]
24	024	ASR charging pump (M15)	Wiring, j 33t 1.0, 2.0
25	025	Left front axle VSS sensor (L6/1), implausible [2]	j 23t 14.0 Visually inspect.
26	026	Right front axle VSS sensor (L6/2), implausible [2]	j 23t 16.0 Visually inspect.
27	027	Left rear axle VSS sensor (L6/3), implausible [2]	j 23t 18.0 Visually inspect.
28	028	Right rear axle VSS sensor (L6/4), implausible [2]	j 23t 20.0 Visually inspect.
Model 124.036 (02/93 ！), 129.076, 140.04/04/07			
29	029	ABS lateral acceleration sensor (B24/2), implausible	j 23t 13.0
30	030	CAN data bus to EA/CC/ISC control module (N4/1), interrupted	j 23t 28.0 Read out DTC for N4/1: see DM, Engines, Vol. 2, sections 6.2 or 6.3 j 11

[1] Observe Preparation for Test, see j 22.
[2] Rotor with incorrect tooth count, dirt accumulation on or damaged rotor, incorrect rear axle ratio, wrong wheel or tire size.

Diagnosis - Diagnostic Trouble Code (DTC) Memory

Diagnostic trouble code (DTC) N	A	Possible cause	Test step/Remedy [1]
3I	03I	CAN data bus to LH-SFI control module (N3/1), Left LH-SFI control module (N3/2), Right LH-SFI control module (N3/3), or Engine control module (N 3/4), interrupted	j 23t 28.0 Read out DTC for N3/1, N3/2, N3/3, N3/4: see DM, Engines, Vol. 2, sections 1.1, 3.1 or 3.2 j 11
32	032	CAN data bus to DI control module (N1/3), Left DI control module (N1/4), Right DI control module (N1/5), interrupted	j 23t 28.0 Read out DTC for N1/3, N1/4, N1/5: see DM, Engines, Vol. 2 sections 5.2 or 5.3 j 11

33	033	CAN data bus, interrupted	**j** 23**t** 28.0
			Read out DTC for N4/1: see DM, Engines, Vol. 2, sections 6.2 or 6.3 **j** 11
			Read out DTC for N1/3, N1/4, N1/5: see DM, Engines, Vol. 2 sections 5.2 or 5.3 **j** 11
			Read out DTC for N3/1, N3/2, N3/3, N3/4: see DM, Engines, Vol. 2, sections 1.1, 3.1 or 3.2 **j** 11
			Read out DTC for N15/1: see DM, Chassis & Drivetrain, Vol. 1 section 2.2 **j** 12

1) Observe Preparation for Test, see **j** 22.