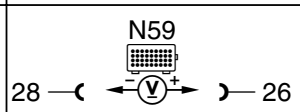
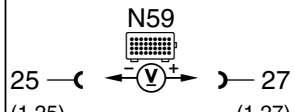
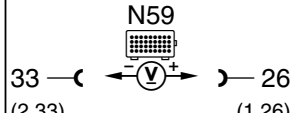
Electrical Test Program - Test

Test step DTC	Scope of test	Test connection	Test condition	Nominal value	Possible cause/remedy
⇒ 1.0	**Diagnostic module (N59)** Voltage supply Circuit 30	N59 25 (1.25) — 5 (1.5)	Ignition: **ON**	11 – 14 V	⇒ 1.1 – 1.3.
⇒ 1.1	Ground, output ground, electronics (W15) (right footwell)	N59 — X11/4 25 (1.25) — 2	Ignition: **ON**	11 – 14 V	Ground wire at W15.
⇒ 1.2	Base module (N16/1) Voltage supply Circuit 30	N16/1 28 (1.28) — 1 (3.1)	**Connect socket box to N16/1.** Ignition: **ON**	11 – 14 V	Wire to terminal block (X4/10).
⇒ 1.3 *9* ⚠	Diagnostic Trouble Code from base module (N16/1) Voltage supply from N16/1 to diagnostic module (N59) Circuit 30	N16/1 29 (1.29) — 12 (1.12)	Ignition: **ON**	11 – 14 V	N16/1.

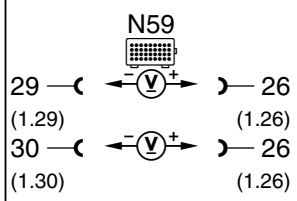
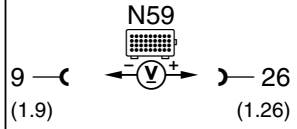
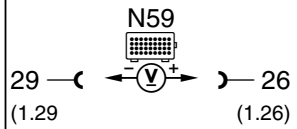
Electrical Test Program - Test

Test step **DTC**	Scope of test	Test connection	Test condition	Nominal value	Possible cause/remedy
⇒ 2.0	**Diagnostic module (N59)** Voltage supply Circuit 87L	N59 25 (1.25) — V — 26 (1.26)	Ignition: **ON**	11 – 14 V	⇒ 2.1 – 2.2.
⇒ 2.1	Base module (N16/1) Voltage supply Circuit 15, unfused	N16/1 28 (1.28) — V — 34 (1.34)	**Connect socket box to N16/1.** Ignition: **ON** Ignition: **OFF**	 11 – 14 V <1 V	 Open circuit, Ignition/starter switch (S2/1). Open circuit, S2/1.
⇒ 2.2 *10*	⚠ Diagnostic Trouble Code from base module (N16/1) Voltage supply (fused) for LH-SFI control module (N3/1)	N16/1 28 (1.28) — V — 7 (1.7)	Ignition: **ON** Ignition: **OFF**	11 – 14 V <1 V	Fuse (F2) at N16/1, N16/1.

Electrical Test Program - Test

Test step **DTC**	Scope of test	Test connection	Test condition	Nominal value	Possible cause/remedy
⇒ 3.0	**Control of "CHECK ENGINE" malfunction indicator lamp**		Ignition: **ON**	11 – 14 V	N59.
⇒ 4.0	**Control of diagnostic wire**		Ignition: **ON**	11 – 14 V	Open circuit, N59.
⇒ 5.0	**Control of pushbutton (X11/21)**		Ignition: **ON** Press pushbutton (X11/21).	11 – 14 V	Open circuit, Pushbutton (X11/21), N59.

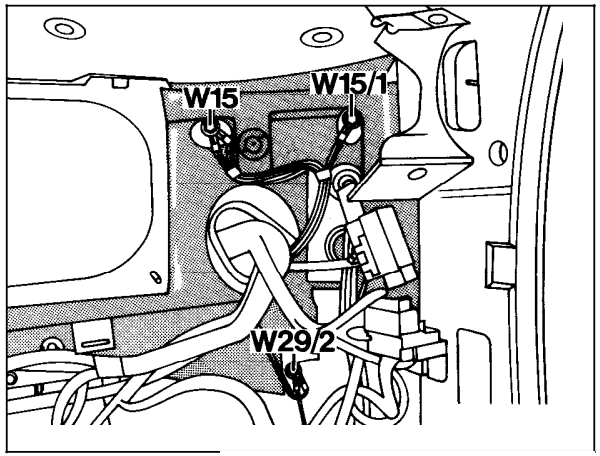
Electrical Test Program - Test

Test step **DTC**	Scope of test	Test connection	Test condition	Nominal value	Possible cause/remedy
⇒ 6.0	**Diagnostic module coding** Engine 104		Ignition: **ON**	11 – 14 V	Open circuit.
	Engine 119 (4.2 liter)		Ignition: **ON**	11 – 14 V	Open circuit.
	Engine 119 (5.0 liter)		Ignition: **ON**	11 – 14 V	Open circuit.

Electrical Test Program - Test

Test step **DTC**	Scope of test	Test connection	Test condition	Nominal value	Possible cause/remedy
⇒ 7.0	**CAN data bus**	N59 L — ☾ — Ω — ☽ — H	Ignition: **OFF** Pull out contact module or diagnostic module. Test with ohmmeter directly at the the two wide connections of the diagnostic module connector (see Figure 2).	55 – 65 Ω	Data line, ⇒ 8.1, ⇒ 8.2.
⇒ 7.1	CAN Interface in LH-SFI control module (N3/1) Resistance	N3/1 L — Ω — H	Pull out LH-SFI control module (N3/1) and test directly at LH-SFI control module (see Figure 3).	115 – 125 Ω	N3/1.
⇒ 7.2	CAN Interface in ignition control module (N1/3) Resistance	N1/3 (B) 3 — Ω — 4 (B)	Unplug connector “B” at ignition control module and test directly at control module (see Figure 4).	115 – 125 Ω	Ignition control module.

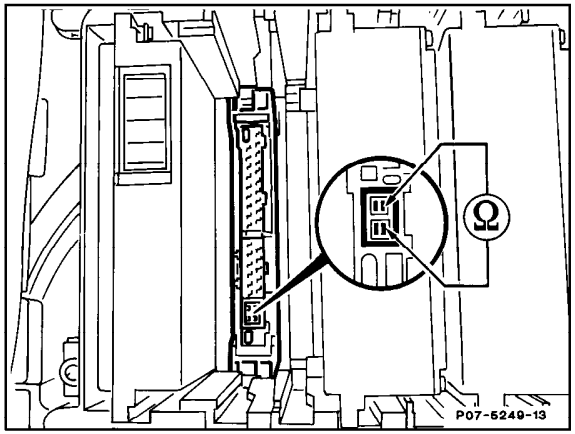
Electrical Test Program - Test



P54-2796-13

Figure 1

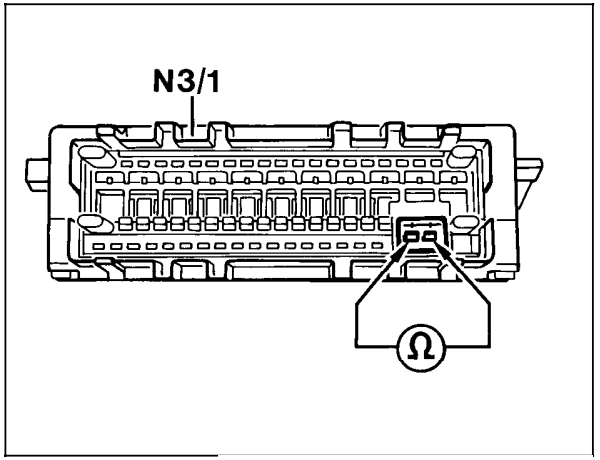
W15	Ground (electronics output ground -right footwell)
W15/1	Ground (electronics - right footwell)
W29/2	Ground (right A-pillar)



P07-5249-13

Figure 2

N59x	Diagnostic module connector

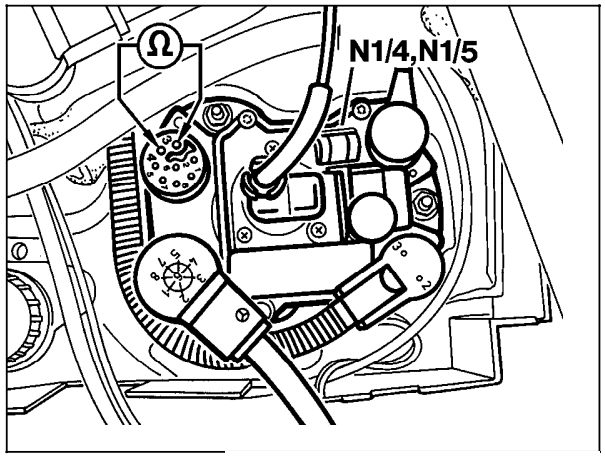


P07-5159-13A

Figure 3

N3/1	LH-SFI control module

Electrical Test Program - Test



P15-5058-13

Figure 4

N1/3 Ignition control module