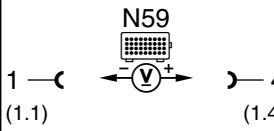
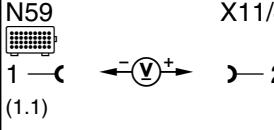
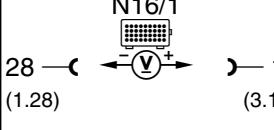
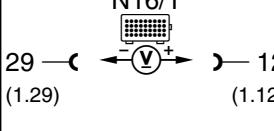
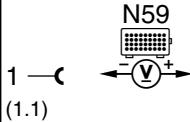
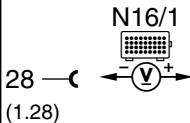
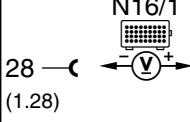


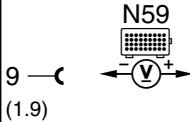
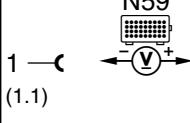
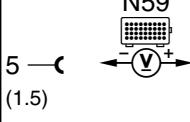
## Electrical Test Program - Test

Test step <b>DTC</b>	Scope of test	Test connection	Test condition	Nominal value	Possible cause/remedy
⇒ 1.0	<b>Diagnostic module (N59)</b> Voltage supply Circuit 30		Ignition: <b>ON</b>	11 – 14 V	⇒ 1.1 – 1.3.
⇒ 1.1	Ground, module box bracket (W27)		Ignition: <b>ON</b>	11 – 14 V	Ground wire at W27.
⇒ 1.2	Base module (N16/1) Voltage supply Circuit 30		<b>Connect socket box to N16/1.</b> Ignition: <b>ON</b>	11 – 14 V	Wire to terminal block (X4/10).
⇒ 1.3	9  DTC readout from base module (N16/1) Voltage supply from N16/1 to diagnostic module (N59) Circuit 30		Ignition: <b>ON</b>	11 – 14 V	N16/1.

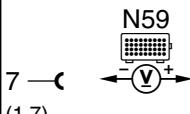
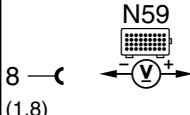
## Electrical Test Program - Test

Test step DTC	Scope of test	Test connection	Test condition	Nominal value	Possible cause/remedy
⇒ 2.0	Diagnostic module (N59) Voltage supply Circuit 87L		Ignition: ON	11 – 14 V	⇒ 2.1 – 2.2.
⇒ 2.1	Base module (N16/1) Voltage supply Circuit 15, unfused		<b>Connect socket box to N16/1.</b> Ignition: ON  Ignition: OFF	11 – 14 V  <1 V	Open circuit, Ignition/starter switch (S2/1).  Open circuit, S2/1.
⇒ 2.2 10	⚠ Impulse readout from base module (N16/1) Voltage supply (fused) for LH-SFI control module (N3/1)		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	<b>Control of “CHECK ENGINE” malfunction indicator lamp</b>		Ignition: ON	11 – 14 V	N59.
⇒ 4.0	<b>Control of diagnostic wire</b>		Ignition: ON	11 – 14 V	Open circuit, N59.
⇒ 5.0	<b>Control of pushbutton (X11/21)</b>		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	<b>Diagnostic module coding</b> 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	L — N59 — H	Ignition: OFF Unplug test cable or diagnostic module. Test with ohmmeter directly at 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	L — N3/1 — 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	(B) 3 — N1/3 — (B) 4	Unplug connector "B" at ignition control module and test directly at control module (see Figure 4).	115 – 125 Ω	Ignition control module.

## 8.1 Diagnostic Module (DM)

Engine 119 LH-SFI

### Electrical Test Program - Test

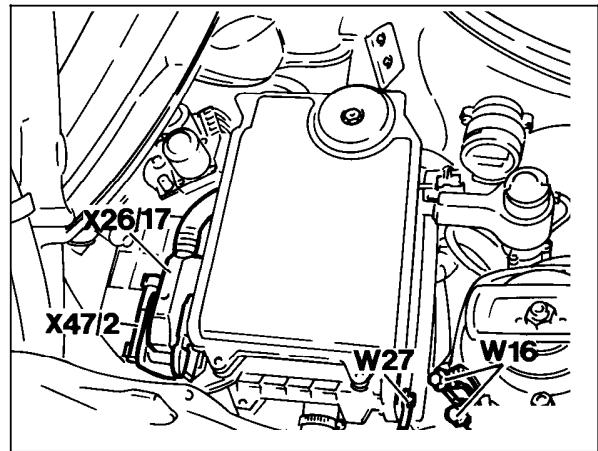


Figure 1

W16      Ground, component compartment  
W27      Ground, module box bracket  
X26/17    Engine plug connection (36-pole)  
X47/2     Camshaft position sensor connector

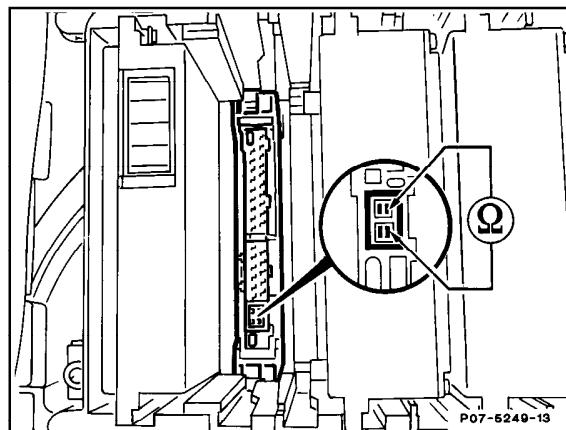


Figure 2

N59x      Diagnostic module connector

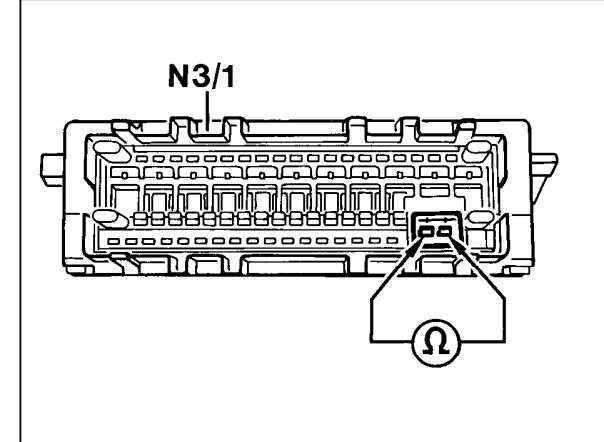


Figure 3

N3/1      LH-SFI control module

### Electrical Test Program - Test

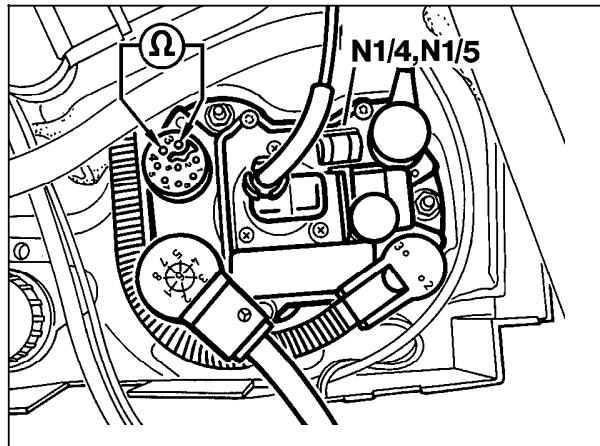


Figure 4

P15-5058-13

N1/3      Ignition control module