

Electrical Test Program - Cruise Control Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 1.0	<b>Cruise control switch (S40)</b>				
<b>DTC</b>					
	<b>V</b> Decelerate/set		Ignition: <b>ON</b> Cruise control switch not activated	< 1 V	Wiring, Cruise control switch (S40).
	<b>B</b> Accelerate/set		Position <b>DECEL</b>	11 – 14 V	
	<b>SP</b> Resume		Position <b>RESUME</b>	11 – 14 V	
	<b>A</b> Off		Position <b>ACCEL</b>	11 – 14 V	
	Control switch contact		Switch not activated	11 – 14 V	
			Position <b>OFF</b>	< 1 V	
			Switch not activated	< 1 V	
			Control switch contact in position: <b>DECEL., ACCEL., RESUME OFF.</b>	11 – 14 V	


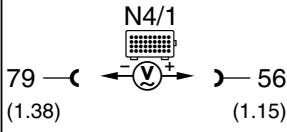

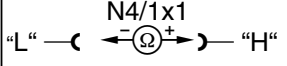
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⇒ 2.0	5 <b>Stop lamp switch (S9/1)</b> Signal (N.C. contact)		Ignition: <b>ON</b> Brake pedal not applied Brake pedal applied	11 – 14 V <1 V	Wiring, Stop lamp switch (S9/1), Base module (N16/1), DM, Chassis & Drivetrain, Vol. 1, section 1.1,
⇒ 3.0	5 <b>Stop lamp switch (S9/1)</b> Signal (N.O. contact)		Ignition: <b>ON</b> Brake pedal not applied Brake pedal applied	<1 V 11 – 14 V	Wiring, Stop lamp switch (S9/1),
⇒ 4.0	5 <b>Starter lock-out/backup lamp switch (S16/3)</b> Transmission range recognition voltage		Ignition: <b>ON</b> Transmission range	P→ 1.0 V R→ 0.3 V N→ 4.0 V D→ 3.5 V 3→ 2.5 V 2→ 1.8 V (± 10%)	Wiring, Starter lock-out/backup lamp switch (S16/3), ⇒ 4.1, EA/CC/ISC control module (N4/1).

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<b>DTC</b>					
⇒ 4.1	Starter lock-out/backup lamp switch (S16/3) Resistance	<p>N4/1 44 ← Ω → 45 (1.3) (1.4)</p>	Disconnect EA/CC/ISC control module (N4/1) Ignition: <b>ON</b>  Transmission range    P→ R→ N→ D→ 3→ 2→	1.4 kΩ 294 Ω 28 kΩ 11.3 kΩ 5.9 kΩ 3.1 kΩ  (± 10%)	Wiring, Starter lock-out/backup lamp switch (S16/3).
⇒ 5.0	<b>Non-USA vehicles only.</b> Continue to next test step.				

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<p>⇒ 6.0</p> <p><b>DTC</b></p>	<p> <b>Left front axle vehicle speed sensor (L6/1)</b> Speed signal</p>		<p>Lift front of vehicle: Ignition: <b>ON</b> Turn left front wheel by hand</p>	<p>4 – 8 V</p>	<p>Wiring, Left front axle vehicle speed sensor (L6/1), DM, Chassis &amp; Drivetrain, Vol. 1, section 5.2,</p> <p><b>Note:</b> Upon completion of test, erase DTC's stored in ABS/ASR control module memory.</p>
<p>⇒ 7.0</p>	<p> <b>CAN data bus</b></p>		<p>Ignition: <b>OFF</b> EA/CC/ISC control module (N4/1) disconnected.</p> <p>Measure resistance at connector (see Figure 8)</p>	<p>55 – 65 Ω</p>	<p>Wiring, LH-SFI control module (N3/1), DM, Engines, Vol. 2, section 3.1, Ignition control module (N1/2), DM, Engines, Vol. 2, section 5.2.</p>

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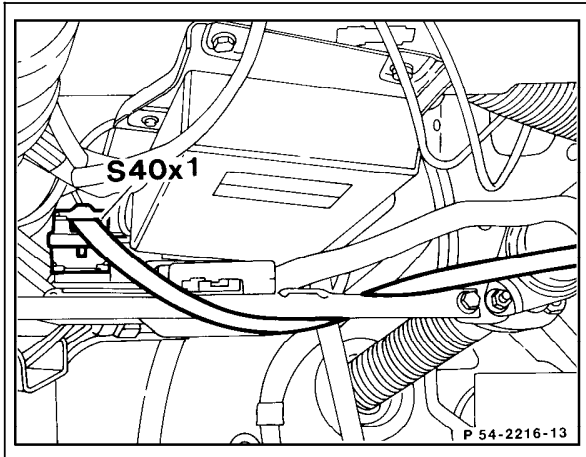


Figure 1  
Model 124  
S40x1 Cruise control switch connector

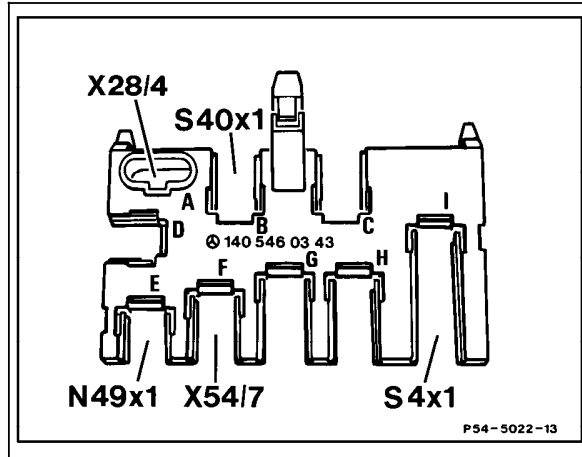


Figure 2  
Model 140  
S40x1 Cruise control switch connector

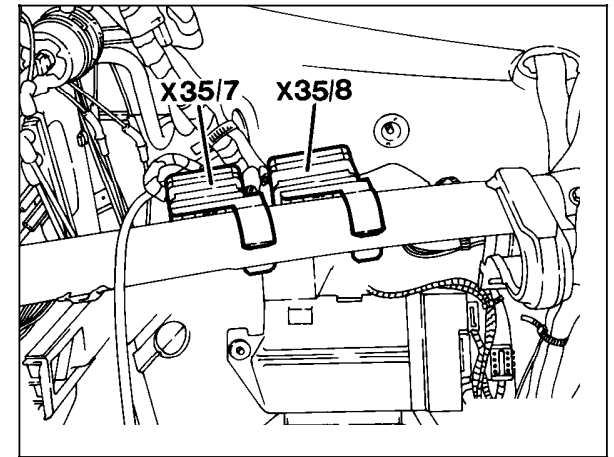


Figure 3  
Model 124  
X35/8 Cockpit/module box plug connection (electronic accelerator/cruise control/idle speed control) (16-pole)

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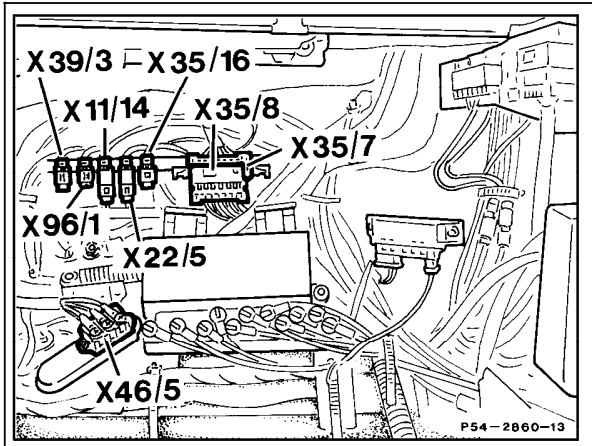


Figure 4  
Model 140  
P54-2860-13

X35/8 Cockpit/module box plug connection (electronic accelerator/cruise control/idle speed control) (16-pole)

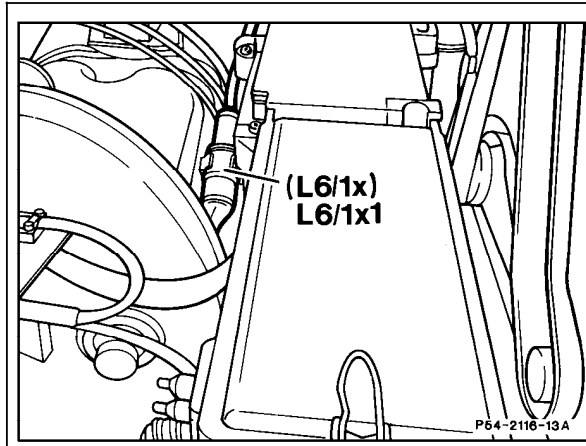


Figure 5  
Model 124  
P54-2116-13A

L6/1x1 Left front axle vehicle speed sensor harness connector

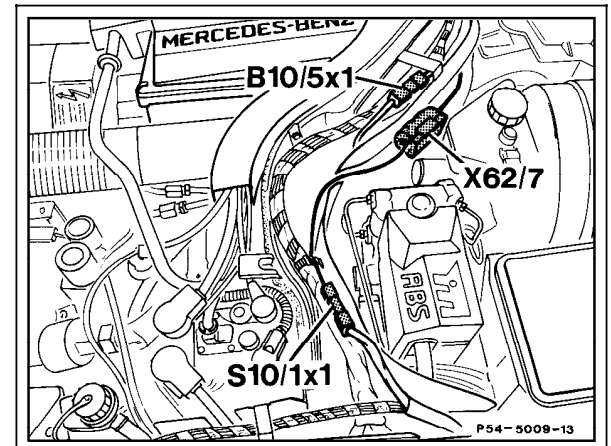


Figure 6  
Model 140  
P54-5009-13

X62/7 Left front axle vehicle speed sensor connector (component compartment)

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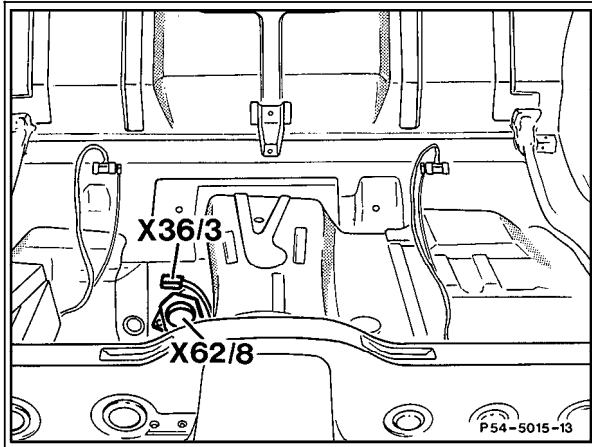


Figure 7  
Model 140

X62/8 Rear axle multiple circuit junction connector

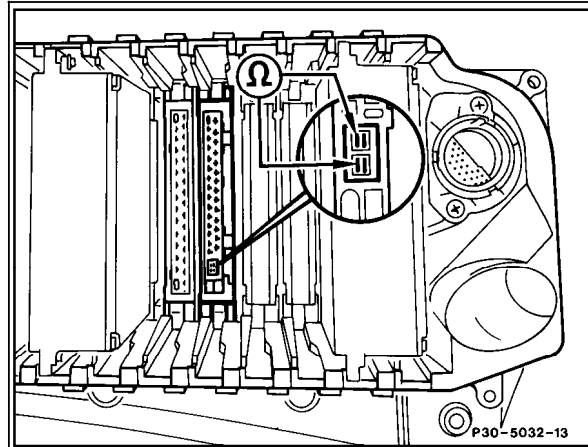


Figure 8

N4/1x1 EA/CC/ISC control module connector  
Circle = CAN Bus