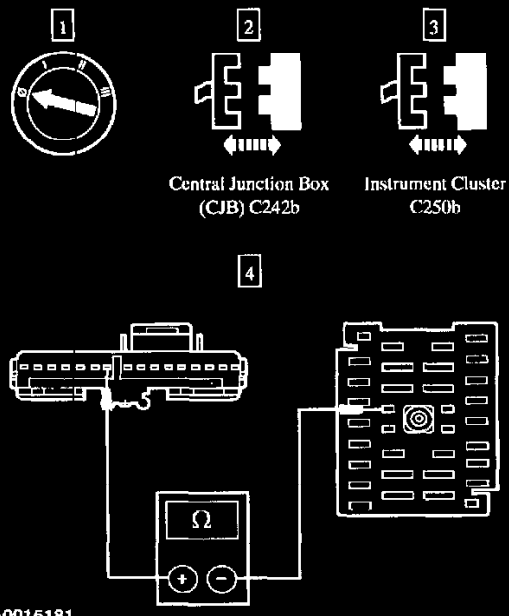
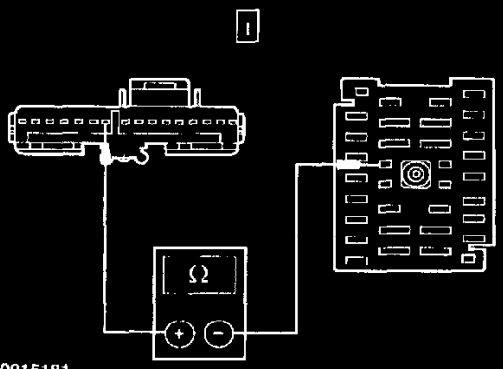
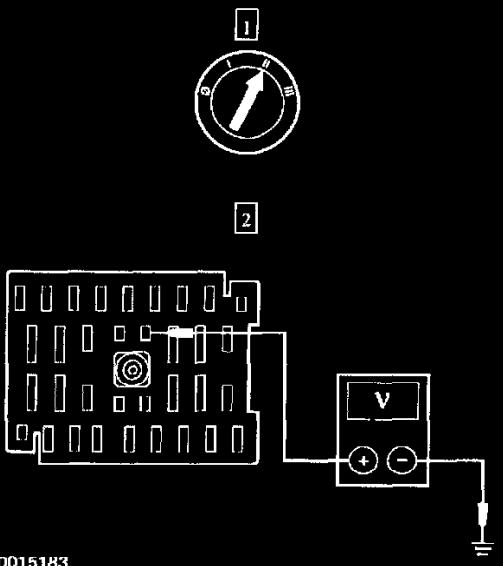
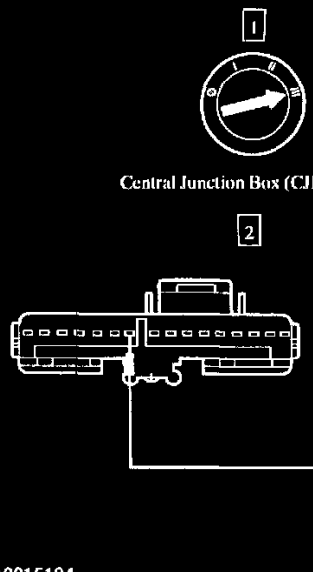
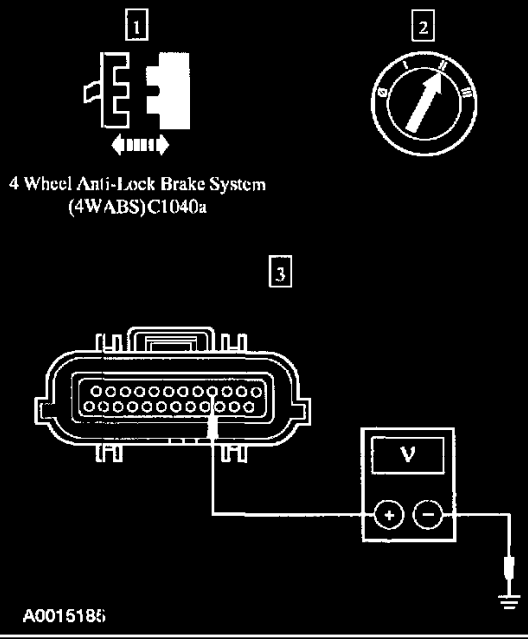
Instrument Panel, Gauges and Warning Indicators: Testing and Inspection
Test H: Speedometer Is Inoperative (Except Motrohome)

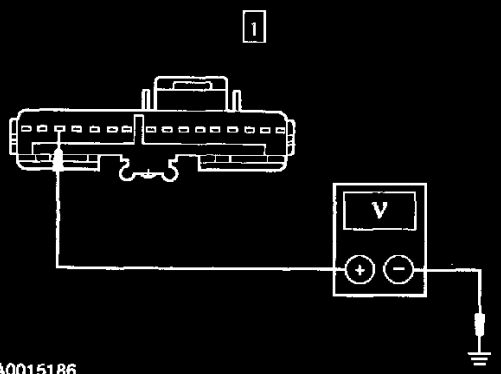
TEST CONDITIONS	TEST DETAILS/RESULTS/ACTIONS
H1 CHECK THE GEM PID VSS__GEM (EXCEPT MOTORHOME)	
	2 Monitor the GEM PID VSS__GEM while driving vehicle between 0 and 89 km/h (0 and 55 mph). • Does the PID VSS__GEM value agree with the speedometer? → **Yes** GO to **H2**. → **No** REFER to Transfer Case.
H2 CHECK THE CIRCUIT 679 (GY/BK) FOR OPEN	
	4 Measure the resistance between central junction box (CJB) C242b pin 14, circuit 679 (GY/BK), harness side and instrument cluster C250b pin 7, circuit 679 (GY/BK), harness side. • Is the resistance less than 5 ohms? → **Yes** GO to **H3**. → **No** REPAIR the circuit. TEST the system for normal operation.

H1 - H2

TEST CONDITIONS	TEST DETAILS/RESULTS/ACTIONS
H3 CHECK OVERHEAD CONSOLE FOR SHORT TO GROUND	
	1 Measure the resistance between CJB C242b pin 22, circuit 679 (GY/BK), harness side and ground. • Is the resistance greater than 10,000 ohms? → **Yes** GO to **H4**. → **No** REPAIR the circuit. TEST the system for normal operation.
H4 CHECH OVERHEAD CONSOLE FOR SHORT TO POWER	
	2 Measure the voltage between CJB C240b pin 22, circuit 679 (LG/BK), harness side and ground. • Is voltage present? → **Yes** REPAIR the circuit. TEST the system for normal operation. → **No** GO to **H5**.

H3 - H4

TEST CONDITIONS	TEST DETAILS/RESULTS/ACTIONS
H5 CHECK CIRCUIT 679 (GY/BK) FOR SHORT TO GROUND	
	2 Measure the resistance between instrument cluster C250b pin 7, circuit 679 (GY/BK), harness side and ground. • Is the resistance greater than 10,000 ohms? → **Yes** GO to **H6**. → **No** REPAIR the circuit. TEST the system for normal operation.
H6 CHECK CIRCUIT 679 (GY/BK) FOR SHORT TO POWER	
	3 Measure the voltage between 4WABS C1040a pin 16, circuit 679 (GY/BK), harness side and ground. • Is voltage present? → **Yes** REPAIR the circuit. TEST the system for normal operation. → **No** GO to **H7**.

TEST CONDITIONS	TESTDETAILS/RESULTS/ACTIONS
H7 CHECK CIRCUIT 729 (RD/WH) FOR POWER	
 A0015186	1 Measure voltage between instrument cluster C250b pin 3, circuit 729 (RD/WH), harness side and ground. • Is the voltage greater than 10 volts? → **Yes** GO to **H8**. → **No** REPAIR the circuit. TEST the system for normal operation.
H8 CHECK FOR CORRECT INSTRUMENT CLUSTER OPERATION	
	1 Check: • for corrosion • for pushed-out pins • that connector seats correctly 2 Connect any disconnected connectors. 3 Make sure all other system connectors are fully seated. 4 Operate the system and verify the concern is still present. • Is the concern still present? → **Yes** INSTALL a new instrument cluster. REFER to Instrument Panel. → **No** The system is operating correctly at this time. Concern may have been caused by a loose or corroded connector. CLEAR the DTCs. REPEAT the self-test.