

Exterior Lighting - Trailer Lamps

S-MAX/Galaxy 2006.5 (02/2006-)



Diagnosis and Testing

Refer to Wiring Diagrams Section 417-01, for schematic and connector information.

Special Tool(s)



Terminal Probe Kit
29-011A

Inspection and Testing

NOTE: The generic electronic module (GEM) is part of the central junction box (CJB).

NOTE: A new generic electronic module (GEM) always needs to be configured after installation. For this purpose, the vehicle-specific data are read out of the module to be changed using the diagnostic unit and transferred to the new module.

NOTE: Before reading out the vehicle-specific data make sure that all electrical connections in the vehicle are reconnected so that the module and the diagnostic unit can communicate correctly.

NOTE: Ensure correct engagement of the wiring harness connectors.

NOTE: The maximum output voltage at the trailer socket is 13 Volt.

1. Verify the customer concern.
2. Visually inspect for obvious signs of electrical damage.

Visual Inspection Chart

Electrical

- Fuse(s)
- Bulb(s)
- Connector
- Trailer socket
- Trailer Lamps
- Wiring loom

3. Resolve any obvious causes for a concern found during the visual inspection before carrying out any further tests.
4. If the concern persists after the visual inspection, PERFORM a fault diagnosis on the generic electronic module (GEM) using the diagnostic unit and RESOLVE the fault(s) displayed according to the fault description. CHECK system operates correctly
5. On a vehicle without stored fault(s), continue according to the Symptom Chart and the corresponding symptom.
6. After checking or rectifying the fault(s) and finishing the work, READ OUT the fault memory in the generic electronic module (GEM) and DELETE any saved faults. After performing a road test and CHECKING the system, READ OUT the fault memories again.

Diagnostic Trouble Code (DTC) Table - Generic Electronic Module (GEM)

DTC	Description	Action
C111B-11	Short circuit in stoplamps circuit (short to ground)	GO to Pinpoint Test A .
C111B-12	Short circuit in stoplamps circuit (short to battery positive)	GO to Pinpoint Test C .
C1120-11	Short circuit in stoplamps circuit (short to ground)	GO to Pinpoint Test A .
C1120-12	Short circuit in backup lamps circuit (short to battery positive)	GO to Pinpoint Test C .
C1126-11	Short circuit in clearance lamps circuit (short to ground)	GO to Pinpoint Test A .
C1126-12	Short circuit in clearance lamps circuit (short to battery positive)	GO to Pinpoint Test C .
B1102-62	Conflicting stoplamp input signals at the trailer module (TRM) (CAN bus and circuit)	GO to Pinpoint Test A .
B1A79-11	Short circuit in rear fog lamp circuit (short to ground)	GO to Pinpoint Test A .
B1A79-12	Short circuit in rear fog lamp circuit (short to battery positive)	GO to Pinpoint Test C .
B1D06-11	Short circuit in left-hand turn signal lamp circuit (short to ground)	GO to Pinpoint Test B .
B1D06-12	Short circuit in left-hand turn signal lamp circuit (short to battery positive)	GO to Pinpoint Test C .
B1D07-11	Short circuit in right-hand turn signal lamp circuit (short to ground)	GO to Pinpoint Test B .
B1D07-12	Short circuit in right-hand turn signal lamp circuit (short to battery positive)	GO to Pinpoint Test C .
U0010-00	Communication fault in the MS CAN bus	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).
U0140-00	No communications between the GEM and the trailer module (TRM)	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).
U1300-00	Trailer module (TRM) and software (CAN bus) not compatible	REFER to: Module Configuration (418-01 Module Configuration, General Procedures).
U2100-00	Trailer module (TRM) not configured	REFER to: Module Configuration (418-01 Module Configuration, General Procedures).
U2101-00	Trailer module (TRM) incorrectly configured	REFER to: Module Configuration (418-01 Module Configuration, General Procedures).
U3000-42	Internal module fault - general memory fault	INSTALL A NEW trailer module (TRM)

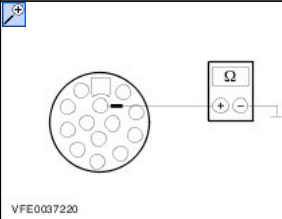
U3000-51	Module programming fault - not programmed	REFER to: Module Configuration (418-01 Module Configuration, General Procedures).
U3003-62	Fault in the power supply to the trailer module (TRM)	GO to Pinpoint Test A .

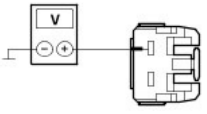
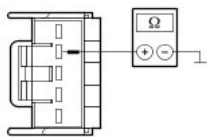
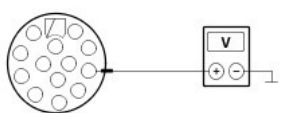
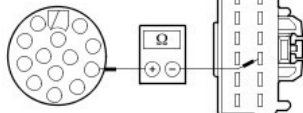
Symptom Chart

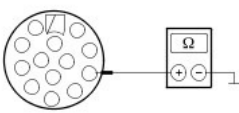
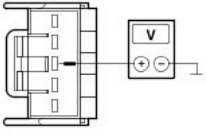
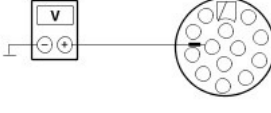
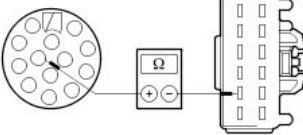
Symptom	Possible Sources	Action
Trailer lamps inoperative, OK on vehicle	* Fuse * Circuit(s) in vehicle * Circuit(s) in trailer * Trailer module (TRM) * Trailer socket	* GO to Pinpoint Test A .
The individual trailer lamp is inoperative	* Circuit(s) in vehicle * Circuit(s) in trailer * Trailer module (TRM) * Trailer socket	* GO to Pinpoint Test B .
The trailer lamps are on continuously	* Circuit(s) in vehicle * Circuit(s) in trailer * Trailer module (TRM) * Trailer socket	* GO to Pinpoint Test C .

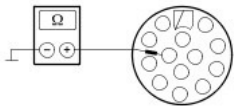
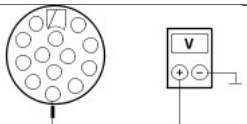
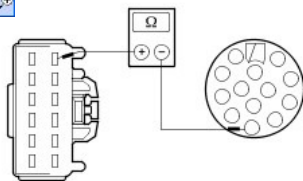
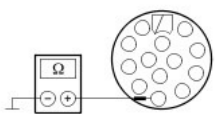
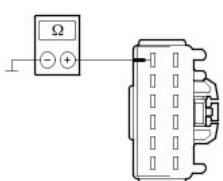
Pinpoint test

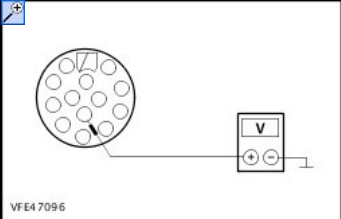
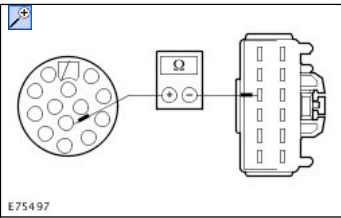
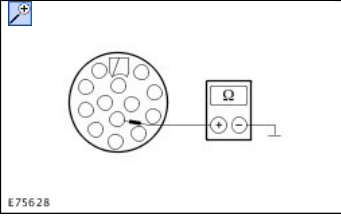
NOTE: Use a digital multimeter for all electrical measurements.

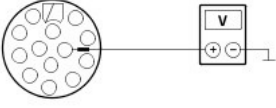
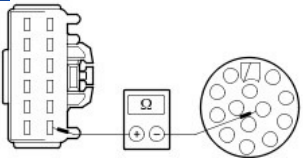
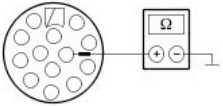
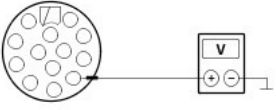
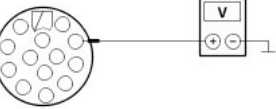
PINPOINT TEST A : TRAILER LAMPS INOPERATIVE, LAMPS ON VEHICLE OK	
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
A1: DETERMINE THE CAUSE OF THE FAULT	
	1 Ignition switch in position II. 2 CHECK the trailer lamps after every step. 3 APPLY the brakes. 4 Switch on the dipped beam. 5 SWITCH ON the rear fog lamps. 6 SWITCH ON the left-hand turn signal. 7 Switch on the RIGHT-HAND TURN SIGNAL. 8 ENGAGE reverse gear. Are all trailer lamps inoperative? Yes GO to A2. No - Both trailer stoplamps inoperative: GO to A7. - Both trailer rear lamps inoperative: GO to A17. - Trailer rear fog lamp inoperative: GO to A11. - Both trailer turn signal lamps inoperative: INSTALL A NEW TRM. CHECK system operates correctly - Trailer backup lamp inoperative: GO to A14. - Stoplamps functioning and clearance lamps permanently lit: REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).
A2: CHECK GROUND CONNECTION OF TRAILER SOCKET FOR OPEN CIRCUIT	
 VFE0037220	1 Measure the resistance between the trailer socket, connector C4AT23-D, pin 3, circuit GD160A(B) (BR/WH) and ground. Is a resistance of less than 2 Ohms registered? Yes GO to A3. No LOCATE and RECTIFY the break in the circuit between the trailer socket and ground connection G4D151 with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
A3: CHECK FUSE FA11 (40 A) (RJB)	
	1 Ignition switch in position 0. 2 Disconnect Fuse FA11 (40 A) (RJB) . 3 CHECK Fuse FA11 (40 A) (RJB) . Is the fuse in order? Yes GO to A4. No RENEW fuse FA11 (40 A) (RJB) and CHECK the operation of the system. If the fuse blows again, LOCATE and RECTIFY the short to ground using the Wiring Diagrams. CHECK system operates correctly
A4: CHECK THE VOLTAGE SUPPLY TO FUSE FA11 (40 A) (RJB) FOR OPEN CIRCUIT	
	1 Connect Fuse FA11 (40 A) (RJB) . 2 Ignition switch in position II. 3 Measure the voltage between fuse FA11 (40 A) (RJB) and ground. Does meter display battery voltage? Yes GO to A5. No LOCATE and RECTIFY the break in the voltage supply of fuse FA11 (40 A) (RJB) with the aid of the Wiring Diagrams. CHECK system operates correctly

A5: CHECK THE VOLTAGE SUPPLY OF THE TRAILER MODULE (TRM) FOR OPEN CIRCUIT	
 E75493	1 Ignition switch in position 0.
	2 Disconnect TRM from connector C4AT23-B.
	3 Ignition switch in position II.
	4 Measure the voltage between the TRM, connector C4AT23-B, pin 2, circuit SBR11A (BU/RD), wiring harness side and ground.
Does the meter display battery voltage?	
Yes GO to A6.	
No LOCATE and RECTIFY the break in the circuit between fuse FA11 (40 A) (RJB) and the TRM. CHECK system operates correctly INSTALL A NEW RJB if required. CHECK system operates correctly	
A6: CHECK THE GROUND CONNECTION OF THE TRAILER MODULE (TRM) FOR OPEN CIRCUIT	
 VFE73601	1 Ignition switch in position 0.
	2 Disconnect TRM from connector C4AT23-C.
	3 Measure the resistance between the TRM, connector C4AT23-C, pin 4, circuit GD152C (BK/BU), wiring harness side and ground.
Is a resistance of less than 2 Ohms registered?	
Yes INSTALL A NEW TRM. CHECK system operates correctly	
No LOCATE and RECTIFY the break in the circuit between the TRM and soldered connection SP600 with the aid of the Wiring Diagrams. CHECK system operates correctly	
A7: CHECK THE VOLTAGE AT THE TRAILER SOCKET WITH THE STOP LAMPS SWITCHED ON	
NOTE: Keep the brake pedal depressed during the following measurement.	
 VFE47092	1 Ignition switch in position II.
	2 APPLY the brakes.
	3 Measure the voltage between the trailer socket, connector C4AT23-D, pin 6, circuit CAT19A (VT) and ground.
Does the meter display battery voltage?	
Yes Continue fault finding on the trailer.	
No GO to A8.	
A8: CHECK CIRCUIT CAT19A (VT) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR OPEN CIRCUIT	
 E75494	1 Ignition switch in position 0.
	2 Disconnect TRM from connector C4AT23-A.
	3 Measure the resistance between the TRM, connector C4AT23-A, pin 3, circuit CAT19A (VT), wiring harness side and the trailer socket, connector C4AT23-D, pin 6, circuit CAT19A (VT), wiring harness side.
Is a resistance of less than 2 Ohms registered?	
Yes GO to A9.	
No LOCATE and RECTIFY the break in the circuit between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly	
A9: CHECK CIRCUIT CAT19A (VT) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR SHORT TO GROUND	
	1 Measure the resistance between the trailer socket, connector C4AT23-D, pin 6, circuit CAT19A (VT), wiring harness side and ground.

 E75625	
	Is a resistance of more than 10,000 Ohm measured? Yes GO to A10. No LOCATE and RECTIFY the short to ground in the circuit between the TRM and the trailer socket with the aid of the wiring diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
A10: CHECK THE CIRCUIT BETWEEN THE SMART JUNCTION BOX AND THE TRAILER MODULE (TRM) FOR OPEN CIRCUIT	
NOTE: Keep the brake pedal depressed during the following measurement.	
	1 Disconnect TRM from connector C4AT23-C. 2 Ignition switch in position II. 3 APPLY the brakes.
 VFE73602	4 Measure the voltage between the TRM, connector C4AT23-C, pin 3, circuit CLS44E (VT/BN), wiring harness side and ground.
	Does the meter display battery voltage? Yes INSTALL A NEW TRM. CHECK system operates correctly No LOCATE and RECTIFY the break in the circuit between soldered connection SP451 and the TRM with the aid of the Wiring Diagrams. CHECK system operates correctly
A11: CHECK THE VOLTAGE AT THE TRAILER SOCKET WITH THE REAR FOG LAMPS SWITCHED ON	
	1 Ignition switch in position II. 2 Switch on the REAR FOG LAMPS. 3 Switch on the dipped beam.
 VFE47093	4 Measure the voltage between the trailer socket, connector C4AT23-D, pin 2, circuit CAT07A (RD/YE) and ground.
	Does the meter display battery voltage? Yes Continue fault finding on the trailer. No GO to A12.
A12: CHECK CIRCUIT CAT07A (RD/YE) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR OPEN CIRCUIT	
	1 Ignition switch in position 0. 2 Disconnect TRM from connector C4AT23-A.
 E75495	3 Measure the resistance between the TRM, connector C4AT23-A, pin 8, circuit CAT07A (RD/YE), wiring harness side and the trailer socket, connector C4AT23-D, pin 2, circuit CAT07A (RD/YE), wiring harness side.
	Is a resistance of less than 2 Ohms registered? Yes GO to A13. No LOCATE and RECTIFY the break in the circuit between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
A13: CHECK CIRCUIT CAT07A (RD/YE) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR SHORT TO GROUND	
	1 Measure the resistance between the trailer socket, connector C4AT23-D, pin 2, circuit CAT07A (RD/YE), wiring harness side and ground.

 E75626	
	Is a resistance of more than 10,000 Ohm measured? Yes INSTALL A NEW TRM. CHECK system operates correctly No LOCATE and RECTIFY the short to ground in the circuit between the TRM and the trailer socket with the aid of the wiring diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
A14: CHECK THE VOLTAGE AT THE TRAILER SOCKET WITH THE REVERSING LAMPS SWITCHED ON	
1 Ignition switch in position II.	
2 ENGAGE the reverse gear.	
 VFE0033932	3 Measure the voltage between the trailer socket C4AT23-D, pin 8, circuit CAT03A (VT/OG) and ground.
	Does the meter display battery voltage? Yes Continue fault finding on the trailer. No GO to A15.
A15: CHECK CIRCUIT CAT03A (VT/OG) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR OPEN CIRCUIT	
1 Ignition switch in position 0.	
2 Disconnect TRM from connector C4AT23-A.	
 E75496	3 Measure the resistance between the TRM, connector C4AT23-A, pin 6, circuit CAT03A (VT/OG), wiring harness side and the trailer socket, connector C4AT23-D, pin 8, circuit CAT03A (VT/OG), wiring harness side.
	Is a resistance of less than 2 Ohms registered? Yes GO to A16. No LOCATE and RECTIFY the break in the circuit between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
A16: CHECK CIRCUIT CAT03A (VT/OG) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR SHORT TO GROUND	
 E75627	1 Measure the resistance between the trailer socket, connector C4AT23-D, pin 8, circuit CAT03A (VT/OG), wiring harness side and ground.
	Is a resistance of more than 10,000 Ohm measured? Yes INSTALL A NEW TRM. CHECK system operates correctly No LOCATE and RECTIFY the short to ground in the circuit between the TRM and the trailer socket with the aid of the wiring diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
A17: CHECK CIRCUITS CAT11A/B (OG) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR SHORT TO GROUND	
1 Ignition switch in position 0.	
2 Disconnect TRM from connector C4AT23-A.	
 E75630	3 Measure the resistance between the TRM, connector C4AT23-A, pin 12, circuit CAT11A/B (OG), wiring harness side and ground.
	Is a resistance of more than 10,000 Ohm measured? Yes

No INSTALL A NEW TRM. CHECK system operates correctly LOCATE and RECTIFY the short to ground in the circuits connected to the TRM, connector C4AT23-A, pin 12 with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly	
PINPOINT TEST B : INDIVIDUAL TRAILER LAMPS INOPERATIVE, LAMPS ON VEHICLE OK	
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
B1: DETERMINE THE CAUSE OF THE FAULT	
 VFE47096	1 Ignition switch in position II. 2 CHECK the trailer lamps after every step. 3 APPLY the brakes. 4 SWITCH ON the left-hand turn signal. 5 SWITCH ON the right-hand turn signal. 6 SWITCH ON the dipped beam.
	Is the left-hand turn signal lamp on the trailer inoperative? Yes GO to B2. No - One trailer stoplamp inoperative: LOCATE and RECTIFY the break in the circuits on the trailer with the aid of the wiring diagrams. CHECK system operates correctly - Right-hand trailer turn signal lamp inoperative: GO to B5. - Left-hand rear trailer rear lamp inoperative: GO to B8. - Right-hand rear trailer lamp inoperative: GO to B9.
	B2: CHECK THE VOLTAGE AT THE TRAILER SOCKET WITH THE LEFT-HAND TURN SIGNAL SWITCHED ON
	1 Ignition switch in position II. 2 SWITCH ON the left-hand turn signal. 3 Measure the voltage between the trailer socket, connector C4AT23-D, pin 1, circuit CAT06A (BU) and ground.
	Does the voltage alternate between 0 V and battery voltage? Yes Continue fault finding on the trailer. No GO to B3.
	B3: CHECK CIRCUIT CAT06A (BU) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR OPEN CIRCUIT
 E75497	1 Ignition switch in position 0. 2 Disconnect TRM from connector C4AT23-A. 3 Measure the resistance between the TRM, connector C4AT23-A, pin 10, circuit CAT06A (BU), wiring harness side and the trailer socket, connector C4AT23-D, pin 1, circuit CAT06A (BU), wiring harness side.
	Is a resistance of less than 2 Ohms registered? Yes GO to B4. No LOCATE and RECTIFY the break in the circuit between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
B4: CHECK CIRCUIT CAT06A (BU) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR SHORT TO GROUND	
 E75628	1 Measure the resistance between the trailer socket, connector C4AT23-D, pin 1, circuit CAT06A (BU), wiring harness side and ground.
	Is a resistance of more than 10,000 Ohm measured? Yes INSTALL A NEW TRM. CHECK system operates correctly No LOCATE and RECTIFY the short to ground in the circuit between the TRM and the trailer socket with the aid of the wiring diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
B5: CHECK THE VOLTAGE AT THE TRAILER SOCKET WITH THE RIGHT-HAND TURN SIGNAL SWITCHED ON	
	1 Ignition switch in position II. 2 SWITCH ON the right-hand turn signal. 3 Measure the voltage between the trailer socket, connector C4AT23-D, pin 4, circuit CAT09A (BU) and ground.

 VFE47097	
	Does the voltage alternate between 0 V and battery voltage? Yes Continue fault finding on the trailer. No GO to B6.
B6: CHECK CIRCUIT CAT09A (BU/RD) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR OPEN CIRCUIT	
1 Ignition switch in position 0.	
2 Disconnect TRM from connector C4AT23-A.	
 E75498	3 Measure the resistance between the TRM, connector C4AT23-A, pin 1, circuit CAT09A (BU/RD), wiring harness side and the trailer socket, connector C4AT23-D, pin 4, circuit CAT09A (BU/RD), wiring harness side.
	Is a resistance of less than 2 Ohms registered? Yes GO to B7. No LOCATE and RECTIFY the break in the circuit between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
B7: CHECK CIRCUIT CAT09A (BU/RD) BETWEEN THE TRAILER MODULE (TRM) AND THE TRAILER SOCKET FOR SHORT TO GROUND	
 E75629	1 Measure the resistance between the trailer socket, connector C4AT23-D, pin 4, circuit CAT09A (BU/RD), wiring harness side and ground.
	Is a resistance of more than 10,000 Ohm measured? Yes INSTALL A NEW TRM. CHECK system operates correctly No LOCATE and RECTIFY the short to ground in the circuit between the TRM and the trailer socket with the aid of the wiring diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
B8: CHECK THE VOLTAGE AT THE TRAILER SOCKET WITH THE SIDE LIGHTS SWITCHED ON	
1 Switch on side light.	
 VFE47094	2 Measure the voltage between the trailer socket, connector C4AT23-D, pin 7, circuit CAT11A (OG) and ground.
	Does the meter display battery voltage? Yes Continue fault finding on the trailer. No LOCATE and RECTIFY the break in the circuit between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
B9: CHECK THE VOLTAGE AT THE TRAILER SOCKET WITH THE SIDE LIGHTS SWITCHED ON	
1 Switch on side light.	
 VFE47095	2 Measure the voltage between the trailer socket, connector C4AT23-D, pin 5, circuit CAT11B (OG) and ground.
	Does the meter display battery voltage? Yes Continue fault finding on the trailer.

		No	LOCATE and RECTIFY the break in the circuit between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly
PINPOINT TEST C : THE TRAILER LAMPS ARE ON CONTINUOUSLY			
TEST CONDITIONS		DETAILS/RESULTS/ACTIONS	
C1: DETERMINE THE FAULT CONDITION			
NOTE: Ensure that no adapter or trailer is connected to the trailer coupling socket.			
		1	Ignition switch in position II.
		2	CHECK the stop lamps at the vehicle.
		Are the stoplamps on the vehicle permanently lit?	
		Yes	
		REFER to: Stoplamps (417-01 Exterior Lighting, Diagnosis and Testing).	
		No	
		GO to C2.	
C2: RULE OUT THE TRAILER MODULE (TRM) AS THE CAUSE OF THE FAULT			
		1	Connect a test adapter or trailer to the trailer coupling socket.
		2	Ignition switch in position 0.
		3	Disconnect Fuse FA11 (40 A) (RJB) .
		4	Ignition switch in position II.
		5	CHECK the trailer lamps.
		Are there any lamps on the trailer which are permanently lit?	
		Yes	
		- Left-hand trailer turn signal lamp permanently lit: LOCATE and RECTIFY the short to battery voltage in circuit CAT06A (BU) between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly - Right-hand trailer turn signal lamp permanently lit: LOCATE and RECTIFY the short to battery voltage in circuit CAT09A (BU/RD) between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly - Trailer stoplamps permanently lit: LOCATE and RECTIFY the short to battery voltage in circuit CAT19A (VT) between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly - Trailer backup lamp permanently lit: LOCATE and RECTIFY the short to battery voltage in circuit CAT03A (VT/OG) between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly - Rear trailer fog lamp permanently lit: LOCATE and RECTIFY the short to battery voltage in circuit CAT07A (RD/YE) between the TRM and the trailer socket with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly - Rear trailer lamps permanently lit: LOCATE and RECTIFY the short to battery voltage in the circuits connected to the TRM, connector C4AT23-A, pin 12 with the aid of the Wiring Diagrams. CHECK system operates correctly If necessary RENEW the trailer socket. CHECK system operates correctly	
		No	
		INSTALL A NEW TRM. CHECK system operates correctly If the concern persists, continue fault finding on the trailer. CHECK system operates correctly	