Wiper and Washer Systems: Pinpoint Tests
Test E: The Washer Pump Is Inoperative
PINPOINT TEST E: THE WASHER PUMP IS INOPERATIVE

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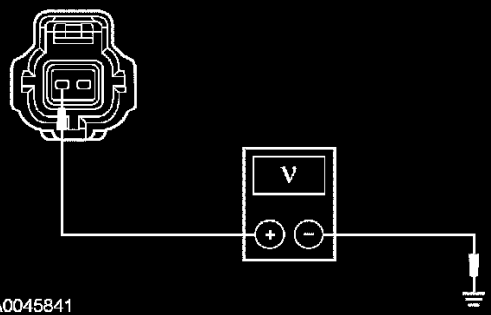
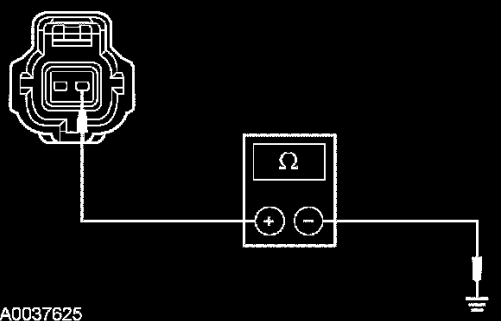
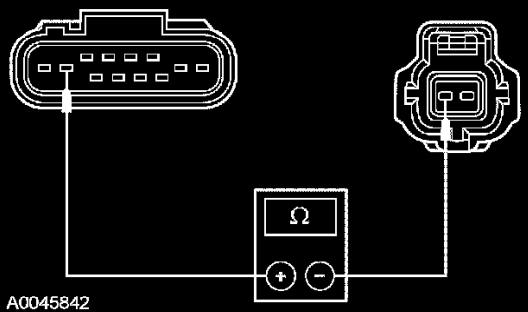
⚠ CAUTION: Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may damage the connector.

Test Step		Result / Action to Take
E1	CHECK THE WASHER PUMP MOTOR FOR VOLTAGE	
	• Key in OFF position. • Disconnect: Windshield Washer Pump C137. • Key in ON position.	

(Continued)

E1

PINPOINT TEST E: THE WASHER PUMP IS INOPERATIVE (Continued)

Test Step		Result / Action to Take
E1	**CHECK THE WASHER PUMP MOTOR FOR VOLTAGE (Continued)**	
	• Measure the voltage between windshield washer pump C137-1, circuit 941 (BK/WH), harness side and ground while depressing the multi-function switch to the wash position.  A0045841 • **Is the voltage greater than 10 volts?**	**Yes** GO to **E2**. **No** GO to **E3**.
E2	**CHECK CIRCUIT 57 (BK) FOR GROUND**	
	• Measure the resistance between the windshield washer pump C137-2, circuit 57 (BK), harness side and ground.  A0037625 • **Is the resistance less than 5 ohms?**	**Yes** INSTALL a new windshield washer pump. **No** REPAIR the circuit. TEST the system for normal operation.
E3	**CHECK CIRCUIT 941 (BK/WH) FOR AN OPEN**	
	• Key in OFF position. • Disconnect: Windshield Wiper Motor C125. • Measure the resistance between windshield wiper motor C125-7, circuit 941 (BK/WH), harness side and windshield washer pump C137-1, circuit 941 (BK/WH), harness side.  A0045842 • **Is the resistance less than 5 ohms?**	**Yes** GO to **E4**. **No** REPAIR the circuit. TEST the system for normal operation.

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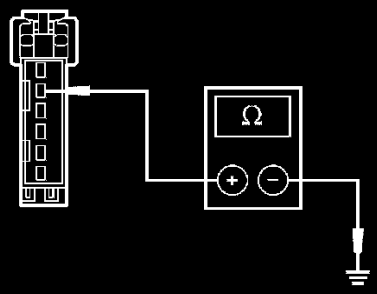
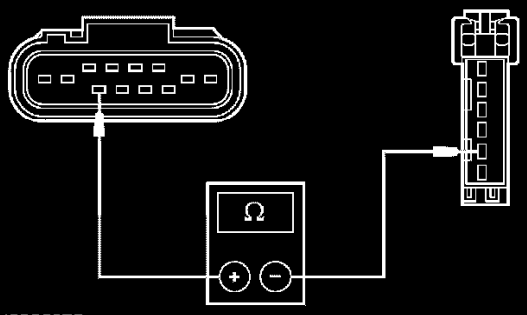
PINPOINT TEST E: THE WASHER PUMP IS INOPERATIVE (Continued)

Test Step		Result / Action to Take
E4	**CHECK THE MULTI-FUNCTION SWITCH**	
	• Key in OFF position. • Disconnect: Multi-function Switch C202b. • Carry out the multi-function switch component test. • **Does the multi-function switch pass the component test?**	**Yes** GO to **E5**. **No** INSTALL a new multi-function switch.
E5	**CHECK CIRCUIT 57 (BK) FOR AN OPEN**	
	• Measure the resistance between multi-function switch C202b-5, circuit 57 (BK), harness side and ground.  N0025872 • **Is the resistance less than 5 ohms?**	**Yes** GO to **E6**. **No** REPAIR the circuit. TEST the system for normal operation.
E6	**CHECK CIRCUIT 680 (LB/OG) FOR AN OPEN**	
	• Measure the resistance between windshield wiper motor C125-12, circuit 680 (LB/OG), harness side and multi-function switch C202b-2, circuit 680 (LB/OG), harness side.  N0025875 • **Is the resistance less than 5 ohms?**	**Yes** GO to **E7**. **No** REPAIR the circuit. TEST the system for normal operation.
E7	**CHECK FOR CORRECT WIPER MOTOR OPERATION**	
	• Disconnect all wiper motor connectors. • Check for: — corrosion. — pushed-out pins. • Connect all wiper motor connectors and make sure they seat correctly. • Operate the system and verify the concern is still present. • **Is the concern still present?**	**Yes** GO to **E8**. **No** The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. TEST the system for normal operation.

(Continued)

E4-E7

PINPOINT TEST E: THE WASHER PUMP IS INOPERATIVE (Continued)

Test Step		Result / Action to Take
E8	**CHECK THE WINDSHIELD WIPER MOTOR**	
	• Key in OFF position. • Disconnect: Windshield Wiper Motor C125. • Carry out the windshield wiper motor component test as outlined. • **Does the windshield wiper motor pass the component test?**	**Yes** The system is operating correctly at this time. The concern may have been caused by binding or incorrect pivot arm adjustment. REFER to Wiper Blade and Pivot Arm Adjustment. TEST the system for normal operation. **No** INSTALL a new windshield wiper motor.

E8

Normal Operation

When the wash function is selected by the operator, the multi-function switch grounds circuit 680 (LB/OG) to the windshield wiper motor. The windshield wiper motor interprets this ground signal and energizes the internal washer relay. Voltage is sent to the washer pump from the windshield wiper motor through circuit 941 (BK/WH). The windshield washer pump motor is grounded through circuit 57 (BK). The multi-function switch is grounded through circuit 57 (BK).

Possible Causes

- Circuit 57 (BK) open
- Circuit 680 (LB/OG) open
- Circuit 941 (BK/WH) open
- Multi-function switch
- Windshield washer pump
- Windshield wiper motor