

501-16 Wipers and Washers  
Diagnosis and Testing

2019 Ranger  
Procedure revision date: 10/12/2018

## Wipers and Washers

### DTC Chart: BCM

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices. REFER to: [Diagnostic Methods](#) (100-00 General Information, Description and Operation).

### BCM DTC Chart

<u>DTC</u>	<u>Description</u>	<u>Action</u>
B130F:12	Run Accessory Control: Circuit Short To Battery	<a href="#">GO to Pinpoint Test A</a>
B130F:14	Run Accessory Control: Circuit Short To Ground or Open	<ul style="list-style-type: none"> <li>• If the windshield wipers are inoperative, <a href="#">GO to Pinpoint Test A</a></li> <li>• If the windshield wipers operate with the ignition off, <a href="#">GO to Pinpoint Test D</a></li> </ul>
B10AD:9A	Rain Sensor: Component or System Operating Conditions	REFER to the Symptom Chart in this section.
All other Diagnostic Trouble Codes (DTCs)	-	REFER to: <a href="#">Body Control Module (BCM)</a> (419-10 Multifunction Electronic Modules, Diagnosis and Testing).

### DTC Chart: SCCM

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices. REFER to: [Diagnostic Methods](#) (100-00 General Information, Description and Operation).

### SCCM DTC Chart

<u>DTC</u>	<u>Description</u>	<u>Action</u>
B10AD:01	Rain Sensor: General Electrical Failure	<a href="#">GO to Pinpoint Test F</a>
B10AD:02	Rain Sensor: General Signal Failure	<a href="#">GO to Pinpoint Test F</a>
B10AD:08	Rain Sensor: Bus Signal / Message Failure	<a href="#">GO to Pinpoint Test F</a>
B10AD:49	Rain Sensor: Internal Electronic Failure	<a href="#">GO to Pinpoint Test F</a>

B10AD:55	Rain Sensor: Not Configured	<a href="#">GO to Pinpoint Test K</a>
B10AD:9A	Rain Sensor: Component or System Operating Conditions	REFER to the Symptom Chart in this section.
B1131:01	Wiper motor module: General Electrical Failure	<a href="#">GO to Pinpoint Test B</a>
B1131:02	Wiper motor module: General Signal Failure	<a href="#">GO to Pinpoint Test B</a>
B1131:08	Wiper motor module: Bus Signal / Message Failure	<a href="#">GO to Pinpoint Test B</a>
B1131:49	Wiper motor module: Internal Electronic Failure	<a href="#">GO to Pinpoint Test A</a>
B1131:55	Wiper motor module: Not Configured	<a href="#">GO to Pinpoint Test K</a>
B1131:9A	Wiper motor module: Component or System Operating Conditions	REFER to the Symptom Chart in this section.
B124E:11	Wiper Stalk Switch Pack: Circuit Short To Ground	<a href="#">GO to Pinpoint Test L</a>
B124E:13	Wiper Stalk Switch Pack: Circuit Open	<a href="#">GO to Pinpoint Test L</a>
B124E:55	Wiper Stalk Switch Pack: Not Configured	<a href="#">GO to Pinpoint Test L</a>
B124E:96	Wiper Stalk Switch Pack: Component Internal Failure	<a href="#">GO to Pinpoint Test L</a>
B124E:9E	Wiper Stalk Switch Pack: Stuck On	<a href="#">GO to Pinpoint Test L</a>
All other Diagnostic Trouble Codes (DTCs)	-	REFER to: <a href="#">Steering Wheel and Column Electrical Components</a> (211-05 Steering Wheel and Column Electrical Components, Diagnosis and Testing).

## Symptom Chart

### Symptom Chart: Wiper and Washer

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices. REFER to: [Diagnostic Methods](#) (100-00 General Information, Description and Operation).

## Symptom Chart

Condition	Possible Sources	Actions
All windshield wiper modes are inoperative from windshield wiper motor	<ul style="list-style-type: none"> <li>• Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">GO to Pinpoint Test A</a></li> </ul>

The intermittent and/or low speed windshield wipers are inoperative	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test B</a></li> </ul>
The high speed windshield wipers are inoperative	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test C</a></li> </ul>
The windshield wipers stay on continuously	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test D</a></li> </ul>
The windshield wipers do not operate correctly in the intermittent mode	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test E</a></li> </ul>
The rain sensitive wiper feature is inoperative	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test F</a></li> </ul>
The rain sensitive wipers have erratic/inconsistent operation	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test F</a></li> </ul>
The rain sensitive wipers are too sensitive/not sensitive enough to moisture	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test F</a></li> </ul>
The windshield wipers do not park at the correct position	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test G</a></li> </ul>
The windshield washer is inoperative	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test H</a></li> </ul>
The windshield washer is always on	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test I</a></li> </ul>

## Symptom Chart

### Symptom Chart: Heated Wiper Park

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices. REFER to: [Diagnostic Methods](#) (100-00 General Information, Description and Operation).

## Symptom Chart

Condition	Possible Sources	Actions
The heated wiper park is inoperative	<ul style="list-style-type: none"> <li>Refer to the Pinpoint Test</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">GO to Pinpoint Test M</a></li> </ul>

## Pinpoint Tests

### ► [PINPOINT TEST A : ALL WINDSHIELD WIPER MODES ARE INOPERATIVE](#)

### ► [PINPOINT TEST B : THE INTERMITTENT AND/OR LOW SPEED WINDSHIELD WIPERS ARE INOPERATIVE](#)

### ► [PINPOINT TEST C : THE HIGH SPEED WINDSHIELD WIPERS ARE INOPERATIVE](#)

- ▶ PINPOINT TEST D : THE WINDSHIELD WIPERS STAY ON CONTINUOUSLY
- ▶ PINPOINT TEST E : THE WINDSHIELD WIPERS DO NOT OPERATE CORRECTLY IN THE INTERMITTENT MODE
- ▶ PINPOINT TEST F : THE RAIN SENSITIVE WIPER FEATURE IS INOPERATIVE/DOES NOT OPERATE CORRECTLY
- ▶ PINPOINT TEST G : THE WINDSHIELD WIPERS DO NOT PARK AT THE CORRECT POSITION
- ▶ PINPOINT TEST H : THE WINDSHIELD WASHER IS INOPERATIVE
- ▶ PINPOINT TEST I : THE WASHER PUMP IS ALWAYS ON
- ▶ PINPOINT TEST J : DTC B1008:09 OR B12F7:09
- ▶ PINPOINT TEST K : DTCS B10AD:55 OR B1131:55
- ▶ PINPOINT TEST L : DTCS B124E:11, B124E:13, B124E:55, B124E:96, OR B124E:9E
- ▶ PINPOINT TEST M : THE HEATED WIPER PARK IS INOPERATIVE

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