

415-00B Information and Entertainment System - General Information - Vehicles
With: SYNC 3

Diagnosis and Testing

2019 Ranger

Procedure revision date:
12/7/2018

Information and Entertainment System

DTC Charts

ACM DTC Chart

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).

<u>DTC</u>	<u>Description</u>	<u>Action</u>
B150C:55	Automobile Audio Bus (A2B) Node 1: Not Configured	GO to Pinpoint Test D
B150C:87	Automobile Audio Bus (A2B) Node 1: Missing Message	GO to Pinpoint Test D
B150C:8F	Automobile Audio Bus (A2B) Node 1: Erratic	GO to Pinpoint Test D
B1511:01	Automobile Audio Bus (A2B) Master Node: General Electrical Failure	GO to Pinpoint Test D
B1511:11	Automobile Audio Bus (A2B) Master Node: Circuit Short To Ground	GO to Pinpoint Test D
B1511:12	Automobile Audio Bus (A2B) Master Node: Circuit Short To Battery	GO to Pinpoint Test D
B1511:13	Automobile Audio Bus (A2B) Master Node: Circuit Open	GO to Pinpoint Test D
B1511:95	Automobile Audio Bus (A2B) Master Node: Incorrect Assembly	GO to Pinpoint Test D
B1A01:01	Speaker #1: General Electrical Failure	GO to Pinpoint Test G
B1A01:11	Speaker #1: Circuit Short To Ground	GO to Pinpoint Test G
B1A01:12	Speaker #1: Circuit Short To Battery	GO to Pinpoint Test G
B1A01:13	Speaker #1: Circuit Open	GO to Pinpoint Test G
B1A02:01	Speaker #2: General Electrical Failure	GO to Pinpoint Test G
B1A02:11	Speaker #2: Circuit Short To Ground	GO to Pinpoint Test G

B1A02:12	Speaker #2: Circuit Short To Battery	GO to Pinpoint Test G
B1A02:13	Speaker #2: Circuit Open	GO to Pinpoint Test G
B1A03:01	Speaker #3: General Electrical Failure	GO to Pinpoint Test G
B1A03:11	Speaker #3: Circuit Short To Ground	GO to Pinpoint Test G
B1A03:12	Speaker #3: Circuit Short To Battery	GO to Pinpoint Test G
B1A03:13	Speaker #3: Circuit Open	GO to Pinpoint Test G
B1A04:01	Speaker #4: General Electrical Failure	GO to Pinpoint Test G
B1A04:11	Speaker #4: Circuit Short To Ground	GO to Pinpoint Test G
B1A04:12	Speaker #4: Circuit Short To Battery	GO to Pinpoint Test G
B1A04:13	Speaker #4: Circuit Open	GO to Pinpoint Test G
B1A89:11	Satellite Antenna: Circuit Short To Ground	GO to Pinpoint Test B
B1A89:13	Satellite Antenna: Circuit Open	GO to Pinpoint Test B
U0100:00	Lost Communication With ECM/PCM "A": No Sub Type Information	GO to Pinpoint Test W
U0140:00	Lost Communication With Body Control Module: No Sub Type Information	GO to Pinpoint Test Y
U0155:00	Lost Communication With Instrument Panel Cluster (IPC) Control Module: No Sub Type Information	GO to Pinpoint Test AA
U0238:00	Lost Communication With Digital Audio Control Module "D": No Sub Type Information	GO to Pinpoint Test AG
U0253:00	Lost Communication With Accessory Protocol Interface Module: No Sub Type Information	GO to Pinpoint Test AH
U0256:00	Lost Communication With Front Controls Interface Module "A": No Sub Type Information	GO to Pinpoint Test AI
U201A:51	Control Module Main Calibration Data: Not Programmed	GO to Pinpoint Test AN
U2024:06	Control Module Cal-Config Data: Algorithm Based Failure	GO to Pinpoint Test AN
U2024:41	Control Module Cal-Config Data: General Checksum Failure	GO to Pinpoint Test AN
U2024:44	Control Module Cal-Config Data: Data Memory Failure	GO to Pinpoint Test AN
U2024:51	Control Module Cal-Config Data: Not Programmed	GO to Pinpoint Test AN

U2100:00	Initial Configuration Not Complete: No Sub Type Information	GO to Pinpoint Test AN
U2101:00	Control Module Configuration Incompatible: No Sub Type Information	GO to Pinpoint Test AN
U3000:41	Control Module: General Checksum Failure	GO to Pinpoint Test AO
U3000:42	Control Module: General Memory Failure	GO to Pinpoint Test AO
U3000:44	Control Module: Data Memory Failure	GO to Pinpoint Test AO
U3000:51	Control Module: Not Programmed	GO to Pinpoint Test AO
U3000:88	Control Module: Bus off	GO to Pinpoint Test AO
U3000:94	Control Module: Unexpected Operation	GO to Pinpoint Test AO
U3000:96	Control Module: Component Internal Failure	GO to Pinpoint Test AO
U3003:16	Battery Voltage: Circuit Voltage Below Threshold	GO to Pinpoint Test AJ
U3003:17	Battery Voltage: Circuit Voltage Above Threshold	GO to Pinpoint Test AK

APIM DTC Chart

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).

DTC	Description	Action
B108E:01	Display: General Electrical Failure	GO to Pinpoint Test L
B108E:02	Display: General Signal Failure	<ul style="list-style-type: none"> - For vehicles not equipped with a touchscreen, GO to Pinpoint Test K - For vehicles equipped with a touchscreen, GO to Pinpoint Test L
B108E:4A	Display: Incorrect Component Installed	<ul style="list-style-type: none"> - For vehicles not equipped with a touchscreen, GO to Pinpoint Test K - For vehicles equipped with a touchscreen, GO to Pinpoint Test L
B108E:4B	Display: Over Temperature	<ul style="list-style-type: none"> - For vehicles not equipped with a touchscreen, GO to Pinpoint Test K - For vehicles equipped with a touchscreen, GO to Pinpoint Test L
B108E:63	Display: Circuit / Component Protection Time-Out	GO to Pinpoint Test K
B108E:87	Display: Missing Message	<ul style="list-style-type: none"> - For vehicles not equipped with a

		<ul style="list-style-type: none"> - touchscreen, GO to Pinpoint Test K - For vehicles equipped with a touchscreen, GO to Pinpoint Test L
B119F:01	GPS Antenna: General Electrical Failure	GO to Pinpoint Test S
B119F:13	GPS Antenna: Circuit Open	GO to Pinpoint Test S
B1252:11	USB Port: Circuit Short To Ground	<ul style="list-style-type: none"> - For vehicles not equipped with a touchscreen, GO to Pinpoint Test O - For vehicles equipped with a touchscreen, GO to Pinpoint Test P
B1252:13	USB Port: Circuit Open	<ul style="list-style-type: none"> - For vehicles not equipped with a touchscreen, GO to Pinpoint Test O - For vehicles equipped with a touchscreen, GO to Pinpoint Test P
B14FD:11	External Media Control Connectivity: Circuit Short To Ground	GO to Pinpoint Test P
B1D79:11	Microphone Input: Circuit Short To Ground	GO to Pinpoint Test N
B1D79:12	Microphone Input: Circuit Short To Battery	GO to Pinpoint Test N
B1D79:13	Microphone Input: Circuit Open	GO to Pinpoint Test N
C1001:01	Vision System Camera: General Electrical Failure	REFER to: Parking Aid (413-13A Parking Aid, Diagnosis and Testing).
U0100:00	Lost Communication With ECM/PCM "A": No Sub Type Information	GO to Pinpoint Test W
U0121:00	Lost Communication With Anti-Lock Brake System (ABS) Control Module: No Sub Type Information	GO to Pinpoint Test X
U0140:00	Lost Communication With Body Control Module: No Sub Type Information	GO to Pinpoint Test Y
U0151:00	Lost Communication With Restraints Control Module: No Sub Type Information	GO to Pinpoint Test Z
U0155:00	Lost Communication With Instrument Panel Cluster (IPC) Control Module: No Sub Type Information	GO to Pinpoint Test AA
U0159:00	Lost Communication With Parking Assist Control Module "A": No Sub Type Information	GO to Pinpoint Test AB
U0162:00	Lost Communication With Navigation Display Module: No Sub Type Information	GO to Pinpoint Test L
U0184:00	Lost Communication With Radio: No Sub Type Information	GO to Pinpoint Test AC
U0198:00	Lost Communication With Telematic Control Module: No Sub Type Information	GO to Pinpoint Test AD
U0232:00	Lost Communication With Side Obstacle Detection Control Module - Left: No Sub Type Information	GO to Pinpoint Test AE
U0233:00	Lost Communication With Side Obstacle Detection Control Module - Right: No Sub Type Information	GO to Pinpoint Test AF
U0238:00	Lost Communication With Digital Audio Control Module "D": No Sub Type Information	GO to Pinpoint Test AG

U0256:00	Lost Communication With Front Controls Interface Module "A": No Sub Type Information	GO to Pinpoint Test AI
U0415:00	Invalid Data Received From Anti-Lock Brake System (ABS) Control Module: No Sub Type Information	GO to Pinpoint Test AM
U0422:00	Invalid Data Received From Body Control Module: No Sub Type Information	GO to Pinpoint Test AM
U0423:00	Invalid Data Received From Instrument Panel Cluster Control Module: No Sub Type Information	GO to Pinpoint Test AM
U0452:00	Invalid Data Received From Restraints Control Module: No Sub Type Information	GO to Pinpoint Test AM
U1A00:87	Private Communication Network: Missing Message	GO to Pinpoint Test V
U2017:45	Control Module Software #2: Program Memory Failure	GO to Pinpoint Test AO
U2017:51	Control Module Software #2: Not Programmed	GO to Pinpoint Test AN
U2017:52	Control Module Software #2: Not Activated	GO to Pinpoint Test AN
U2017:54	Control Module Software #2: Missing Calibration	GO to Pinpoint Test AN
U2100:00	Initial Configuration Not Complete: No Sub Type Information	GO to Pinpoint Test AN
U2101:00	Control Module Configuration Incompatible: No Sub Type Information	GO to Pinpoint Test AN
U3000:04	Control Module: System Internal Failure	GO to Pinpoint Test AO
U3000:09	Control Module: Component Failure	GO to Pinpoint Test AO
U3000:41	Control Module: General Checksum Failure	GO to Pinpoint Test AO
U3000:88	Control Module: Bus Off	GO to Pinpoint Test AL
U3003:16	Battery Voltage: Circuit Voltage Below Threshold	GO to Pinpoint Test AJ
U3003:17	Battery Voltage: Circuit Voltage Above Threshold	GO to Pinpoint Test AK

DSP DTC Chart

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).

DTC	Description	Action
B13FB:11	Audio Enable Line: Circuit Short To Ground	GO to Pinpoint Test D
B1A01:01	Speaker #1: General Electrical Failure	GO to Pinpoint Test H
B1A01:11	Speaker #1: Circuit Short To Ground	GO to Pinpoint Test H
B1A01:12	Speaker #1: Circuit Short To Battery	GO to Pinpoint

		Test H
B1A01:13	Speaker #1: Circuit Open	GO to Pinpoint Test H
B1A02:01	Speaker #2: General Electrical Failure	GO to Pinpoint Test H
B1A02:11	Speaker #2: Circuit Short To Ground	GO to Pinpoint Test H
B1A02:12	Speaker #2: Circuit Short To Battery	GO to Pinpoint Test H
B1A02:13	Speaker #2: Circuit Open	GO to Pinpoint Test H
B1A03:01	Speaker #3: General Electrical Failure	GO to Pinpoint Test H
B1A03:11	Speaker #3: Circuit Short To Ground	GO to Pinpoint Test H
B1A03:12	Speaker #3: Circuit Short To Battery	GO to Pinpoint Test H
B1A03:13	Speaker #3: Circuit Open	GO to Pinpoint Test H
B1A04:01	Speaker #4: General Electrical Failure	GO to Pinpoint Test H
B1A04:11	Speaker #4: Circuit Short To Ground	GO to Pinpoint Test H
B1A04:12	Speaker #4: Circuit Short To Battery	GO to Pinpoint Test H
B1A04:13	Speaker #4: Circuit Open	GO to Pinpoint Test H
B1A05:01	Speaker #5: General Electrical Failure	GO to Pinpoint Test H
B1A05:11	Speaker #5: Circuit Short To Ground	GO to Pinpoint Test H
B1A05:12	Speaker #5: Circuit Short To Battery	GO to Pinpoint Test H
B1A05:13	Speaker #5: Circuit Open	GO to Pinpoint Test H
B1A06:01	Speaker #6: General Electrical Failure	GO to Pinpoint Test H
B1A06:11	Speaker #6: Circuit Short To Ground	GO to Pinpoint Test H
B1A06:12	Speaker #6: Circuit Short To Battery	GO to Pinpoint Test H
B1A06:13	Speaker #6: Circuit Open	GO to Pinpoint Test H
U0140:00	Lost Communication With Body Control Module: No Sub Type Information	GO to Pinpoint Test Y

U0155:00	Lost Communication With Instrument Panel Cluster (IPC) Control Module: No Sub Type Information	GO to Pinpoint Test AA
U0184:00	Lost Communication With Radio: No Sub Type Information	GO to Pinpoint Test AC
U0198:00	Lost Communication With Telematic Control Module: No Sub Type Information	GO to Pinpoint Test AD
U0253:00	Lost Communication With Accessory Protocol Interface Module: No Sub Type Information	GO to Pinpoint Test AH
U0256:00	Lost Communication With Front Controls Interface Module "A": No Sub Type Information	GO to Pinpoint Test AI
U0422:00	Invalid Data Received From Body Control Module: No Sub Type Information	GO to Pinpoint Test AM
U201A:51	Control Module Main Calibration Data: Not Programmed	GO to Pinpoint Test AN
U2100:00	Initial Configuration Not Complete: No Sub Type Information	GO to Pinpoint Test AN
U2101:00	Control Module Configuration Incompatible: No Sub Type Information	GO to Pinpoint Test AN
U3000:41	Control Module: General Checksum Failure	GO to Pinpoint Test AO
U3000:42	Control Module: General Memory Failure	GO to Pinpoint Test AO
U3003:16	Battery Voltage: Circuit Voltage Below Threshold	GO to Pinpoint Test AJ
U3003:17	Battery Voltage: Circuit Voltage Above Threshold	GO to Pinpoint Test AK

FCIM DTC Chart

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).

DTC	Description	Action
B00D5:01	Restraint System Passenger Disable Indicator: General Electrical Failure	REFER to: Airbag Supplemental Restraint System (SRS) (501-20B Supplemental Restraint System, Diagnosis and Testing).
B1034:11	Left Front Seat Heater Element: Circuit Short To Ground	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B1034:12	Left Front Seat Heater Element: Circuit Short To Battery	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B1034:13	Left Front Seat Heater Element:	

	Circuit Open	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B1036:11	Right Front Seat Heater Element: Circuit Short To Ground	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B1036:12	Right Front Seat Heater Element: Circuit Short To Battery	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B1036:13	Right Front Seat Heater Element: Circuit Open	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B1038:11	Left Front Seat Heater Sensor: Circuit Short To Ground	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B1038:15	Left Front Seat Heater Sensor: Circuit Short To Battery or Open	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B103A:11	Right Front Seat Heater Sensor: Circuit Short To Ground	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B103A:15	Right Front Seat Heater Sensor: Circuit Short To Battery or Open	REFER to: Front Seats (501-10A Front Seats, Diagnosis and Testing).
B105A:12	Cabin Temperature Sensor Fan: Circuit Short To Battery	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
B105A:14	Cabin Temperature Sensor Fan: Circuit Short To Ground or Open	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
B1081:07	Left Temperature Damper Motor: Mechanical Failure	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
B1081:11	Left Temperature Damper Motor: Circuit Short To Ground	REFER to: Climate Control System - Vehicles With:

		<p>Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1081:12	Left Temperature Damper Motor: Circuit Short To Battery	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1081:13	Left Temperature Damper Motor: Circuit Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1082:07	Right Temperature Damper Motor: Mechanical Failure	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1082:11	Right Temperature Damper Motor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1082:12	Right Temperature Damper Motor: Circuit Short To Battery	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1082:13	Right Temperature Damper Motor: Circuit Open	<p>REFER to: Climate Control System - Vehicles With:</p>

		<p>Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1083:07	Recirculation Damper Motor: Mechanical Failure	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1083:11	Recirculation Damper Motor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1083:12	Recirculation Damper Motor: Circuit Short To Battery	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1083:13	Recirculation Damper Motor: Circuit Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1086:07	Air Distribution Damper Motor: Mechanical Failure	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1086:11	Air Distribution Damper Motor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With:</p>

		<p>Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1086:12	Air Distribution Damper Motor: Circuit Short To Battery	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1086:13	Air Distribution Damper Motor: Circuit Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B10AF:11	Blower Fan Relay: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B10AF:15	Blower Fan Relay: Circuit Short To Battery or Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B10B5:11	Left Panel Air Discharge Temperature: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B10B5:15	Left Panel Air Discharge Temperature: Circuit Short To Battery	REFER to: Climate Control System - Vehicles With:

	or Open	<p>Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B10B6:11	Left Floor Air Discharge Temperature: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B10B6:15	Left Floor Air Discharge Temperature: Circuit Short To Battery or Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B10B8:63	Push Buttons: Circuit / Component Protection Time-Out	GO to Pinpoint Test AO
B10B9:12	Blower Control: Circuit Short To Battery	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B10B9:14	Blower Control: Circuit Short To Ground or Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B113C:11	Hazard Switch Illumination: Circuit Short To Ground	REFER to: Turn Signal and Hazard Lamps (417-01 Exterior Lighting, Diagnosis and Testing).
B11E5:11	Left HVAC Damper Position Sensor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With:</p>

		Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
B11E5:15	Left HVAC Damper Position Sensor: Circuit Short To Battery or Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B11E6:11	Right HVAC Damper Position Sensor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B11E6:15	Right HVAC Damper Position Sensor: Circuit Short To Battery or Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B11E7:11	Air Distribution Damper Position Sensor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B11E7:15	Air Distribution Damper Position Sensor: Circuit Short To Battery or Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B11F0:11	Air Intake Damper Position Sensor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With:</p>

		Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
B11F0:15	Air Intake Damper Position Sensor: Circuit Short To Battery or Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1202:01	Restraint System Passenger Enable Indicator: General Electrical Failure	REFER to: Airbag Supplemental Restraint System (SRS) (501-20B Supplemental Restraint System, Diagnosis and Testing).
B12CA:11	Start/Stop "Eco-Start" Status Indicator: Circuit Short To Ground	REFER to the Diagnosis and Testing in the appropriate 303-06 section.
B12CA:15	Start/Stop "Eco-Start" Status Indicator: Circuit Short To Battery or Open	REFER to the Diagnosis and Testing in the appropriate 303-06 section.
B1A61:11	Cabin Temperature Sensor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1A61:15	Cabin Temperature Sensor: Circuit Short To Battery or Open	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1A63:11	Right Solar Sensor: Circuit Short To Ground	<p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
B1A63:15	Right Solar Sensor: Circuit Short To Battery or Open	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).

		REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing) .
B1A64:11	Left Solar Sensor: Circuit Short To Ground	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing) . REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing) .
B1A64:15	Left Solar Sensor: Circuit Short To Battery or Open	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing) . REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing) .
B1A69:12	Humidity Sensor: Circuit Short To Ground	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing) . REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing) .
B1A69:14	Humidity Sensor: Circuit Short To Battery or Open	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing) . REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing) .
B1B71:11	Evaporator Temperature Sensor: Circuit Short To Ground	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing) . REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing) .
B1B71:15	Evaporator Temperature Sensor: Circuit Short To Battery or Open	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing) .

		REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
B1C83:12	Rear Defog Relay: Circuit Short To Battery	REFER to: Glass, Frames and Mechanisms (501-11 Glass, Frames and Mechanisms, Diagnosis and Testing).
B1C83:14	Rear Defog Relay: Circuit Short To Ground or Open	REFER to: Glass, Frames and Mechanisms (501-11 Glass, Frames and Mechanisms, Diagnosis and Testing).
C1B14:11	Sensor Supply Voltage A: Circuit Short To Ground	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
C1B14:12	Sensor Supply Voltage A: Circuit Short To Battery	REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
U0140:00	Lost Communication With Body Control Module: No Sub Type Information	GO to Pinpoint Test Y
U0151:00	Lost Communication With Restraints Control Module: No Sub Type Information	GO to Pinpoint Test Z
U0155:00	Lost Communication With Instrument Panel Cluster (IPC) Control Module: No Sub Type Information	GO to Pinpoint Test AA
U0253:00	Lost Communication With Accessory Protocol Interface Module: No Sub Type Information	GO to Pinpoint Test AH
U0401:00	Invalid Data Received from ECM/PCM A: No Sub Type Information	GO to Pinpoint Test AM
U0401:82	Invalid Data Received from ECM/PCM A: Alive / Sequence Counter Incorrect / Not Updated	GO to Pinpoint Test AM
U0422:68	Invalid Data Received From Body Control Module: Event Information	GO to Pinpoint Test AM
U0422:81	Invalid Data Received From Body	GO to Pinpoint Test AM

	Control Module: Invalid Serial Data Received	
U0452:82	Invalid Data Received From Restraints Control Module: Alive / Sequence Counter Incorrect / Not Updated	GO to Pinpoint Test AM
U1000:00	Solid State Driver Protection Active - Driver Disabled: No Sub Type Information	GO to Pinpoint Test AO
U2024:51	Control Module Cal-Config Data: Not Programmed	GO to Pinpoint Test AN
U2100:00	Initial Configuration Not Complete: No Sub Type Information	GO to Pinpoint Test AN
U3000:41	Control Module: General Checksum Failure	GO to Pinpoint Test AO
U3000:49	Control Module: Internal Electronic Failure	GO to Pinpoint Test AO
U3003:16	Battery Voltage: Circuit Voltage Below Threshold	GO to Pinpoint Test AJ
U3003:17	Battery Voltage: Circuit Voltage Above Threshold	GO to Pinpoint Test AK

SCCM DTC Chart

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).

<u>DTC</u>	<u>Description</u>	<u>Action</u>
B1380:11	Steering Wheel Right Switch Pack: Circuit Short To Ground	GO to Pinpoint Test J
B1380:13	Steering Wheel Right Switch Pack: Circuit Open	GO to Pinpoint Test J
B1380:96	Steering Wheel Right Switch Pack: Component Internal Failure	GO to Pinpoint Test J
B1380:9E	Steering Wheel Right Switch Pack: Stuck On	GO to Pinpoint Test J
All other Diagnostic Trouble Codes (DTCs)	—	REFER to: Steering Wheel and Column Electrical Components (211-05 Steering Wheel and Column Electrical Components, Diagnosis and Testing).

TCU DTC Chart

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).

DTC	Description	Action
B116C:04	External SIM Cable/SIM Card: System Internal Failure	GO to Pinpoint Test AO
B1246:11	GSM (Group System for Mobile) Antenna: Circuit Short To Ground	GO to Pinpoint Test T
B1246:13	GSM (Group System for Mobile) Antenna: Circuit Open	GO to Pinpoint Test T
B156D:55	TCU Customer Connectivity Settings Synchronization With HMI: Not Configured	GO to Pinpoint Test AO
B156D:89	TCU Customer Connectivity Settings Synchronization With HMI: ISO/SAE Reserved	GO to Pinpoint Test AO
B1D55:11	Antenna #2: Circuit Short To Ground	GO to Pinpoint Test U
B1D55:13	Antenna #2: Circuit Open	GO to Pinpoint Test U
U0100:00	Lost Communication with ECM/PCM "A": No Sub Type Information	GO to Pinpoint Test W
U0140:00	Lost Communication With Body Control Module: No Sub Type Information	GO to Pinpoint Test Y
U0155:00	Lost Communication With Instrument Panel Cluster (IPC) Control Module: No Sub Type Information	GO to Pinpoint Test AA
U0253:00	Lost Communication With Accessory Protocol Interface Module: No Sub Type Information	GO to Pinpoint Test AH
U0422:00	Invalid Data Received From Body Control Module: No Sub Type Information	GO to Pinpoint Test AM
U0554:00	Invalid Data Received From Accessory Protocol Interface Module: No Sub Type Information	GO to Pinpoint Test AM
U2024:00	Control Module Cal-Config Data: No Sub Type Information	GO to Pinpoint Test AN
U2100:00	Initial Configuration Not Complete: No Sub Type Information	GO to Pinpoint Test AN
U2101:00	Control Module Configuration Incompatible: No Sub Type Information	GO to Pinpoint Test AN
U3000:04	Control Module: System Internal Failure	GO to Pinpoint Test AO
U3000:41	Control Module: General Checksum Failure	GO to Pinpoint Test AO
U3000:52	Control Module: Not Activated	GO to Pinpoint Test AO
U3000:56	Control Module: Invalid / Incompatible Configuration	GO to Pinpoint Test AO

U3003:16	Battery Voltage: Circuit Voltage Below Threshold	GO to Pinpoint Test AJ
U3003:17	Battery Voltage: Circuit Voltage Above Threshold	GO to Pinpoint Test AK

Symptom Charts

Symptom Chart: Radio

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).

Condition	Possible Sources	Actions
A module does not respond to the diagnostic scan tool	Refer to the Pinpoint Test	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).
The <u>AM</u> radio is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test A
The <u>FM</u> radio is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test A
Poor <u>AM</u> reception	Refer to the Pinpoint Test	GO to Pinpoint Test A
Poor <u>FM</u> reception	Refer to the Pinpoint Test	GO to Pinpoint Test A
Continuous seek or scan in <u>AM/ FM</u> mode	Refer to the Pinpoint Test	GO to Pinpoint Test A
Poor satellite radio reception	Refer to the Pinpoint Test	GO to Pinpoint Test B
Poor sound quality or no sound while in satellite radio mode - all other functions operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test B
The satellite radio is inoperative or does not operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test B
The audio system does not operate correctly using the <u>FCIM</u> controls	Refer to the Pinpoint Test	GO to Pinpoint Test I
One or more audio steering wheel control button is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test J
Unable to change the audio source	Refer to the Pinpoint Test	GO to Pinpoint Test D
The touchscreen displays Audio System Off at regular intervals	Refer to the Pinpoint Test	GO to Pinpoint Test D

Symptom Chart: Speakers and Sound Quality - 6 Speaker System

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).

Condition	Possible Sources	Actions
A loud popping sound is heard from the speakers when cycling the ignition	Refer to the Pinpoint Test	GO to Pinpoint Test C
No sound from all speakers	Refer to the Pinpoint Test	GO to Pinpoint Test D
The left speakers are inoperative when using Bluetooth and <u>USB hub SYNC</u> features	Refer to the Pinpoint Test	GO to Pinpoint Test M
The right speakers are inoperative when using Bluetooth and <u>USB hub SYNC</u> features	Refer to the Pinpoint Test	GO to Pinpoint Test M
Poor sound quality or distorted sound from one or more speakers (not all speakers)	Refer to the Pinpoint Test	GO to Pinpoint Test E
The speed compensated volume does not operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test F
The left front door woofer speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test G
The right front woofer door speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test G
The left rear door coaxial speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test G
The right rear door coaxial speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test G

Symptom Chart: Speakers and Sound Quality - 8 Speaker System

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).

Condition	Possible Sources	Actions
A loud popping sound is heard from the speakers when cycling the ignition	Refer to the Pinpoint Test	GO to Pinpoint Test C
No sound from all speakers	Refer to the Pinpoint Test	GO to Pinpoint Test D
The left speakers are inoperative when using Bluetooth and <u>USB hub SYNC</u> features	Refer to the Pinpoint Test	GO to Pinpoint Test M
The right speakers are inoperative when using Bluetooth and	Refer to the Pinpoint	GO to Pinpoint

USB hub SYNC features	Test	Test M
Poor sound quality or distorted sound from one or more speakers (not all speakers)	Refer to the Pinpoint Test	GO to Pinpoint Test E
The speed compensated volume does not operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test F
The instrument panel center speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test G
The left front door tweeter speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test G
The right front door tweeter speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test G
The left front door woofer speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test H
The right front door woofer speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test H
The left rear door coaxial speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test H
The right rear door coaxial speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test H
The subwoofer speaker is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test H

Symptom Chart: [FCIM](#)

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).

Condition	Possible Sources	Actions
The FCIM illumination is inoperative or does not dim	Refer to the Pinpoint Test	REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination, Diagnosis and Testing).

Symptom Chart: Non-Touchscreen Display ([FCDIM](#))

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).

Condition	Possible Sources	Actions

The non-touchscreen is blank or black	Refer to the Pinpoint Test	GO to Pinpoint Test K
One or more button on the non-touchscreen is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test K
The image displayed on the non-touchscreen is incorrect, the image color is incorrect, or the image is distorted, flickering, or unclear	Refer to the Pinpoint Test	GO to Pinpoint Test K
The image on the non-touchscreen is locked or frozen	Refer to the Pinpoint Test	GO to Pinpoint Test K
The non-touchscreen changes brightness	<ul style="list-style-type: none"> • Illumination setting • Illumination system concern 	<ul style="list-style-type: none"> - CHECK the operation of the backlighting system and make sure it operates correctly. <ul style="list-style-type: none"> - If the backlighting system operates correctly, REVIEW the brightness settings in the IPC message center and within the display menu with the vehicle owner and ADJUST the settings as necessary. - If the backlighting system does not operate correctly, REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination, Diagnosis and Testing).
The compass is inoperative or does not operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test S

Symptom Chart: Touchscreen Display (FDIM)

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).

Condition	Possible Sources	Actions
The touchscreen is blank or black	Refer to the Pinpoint Test	GO to Pinpoint Test L
The touchscreen is not responsive to touch	Refer to the Pinpoint Test	GO to Pinpoint Test L
The touchscreen is slow to respond to touch	Refer to the Pinpoint Test	GO to Pinpoint Test L
The image displayed on the touchscreen is incorrect, the image color is incorrect, or the image is distorted, flickering, or	Refer to the Pinpoint Test	GO to Pinpoint Test L

unclear		
The image on the touchscreen is locked or frozen	Refer to the Pinpoint Test	GO to Pinpoint Test L
The touchscreen changes brightness	<ul style="list-style-type: none"> • Illumination setting • Illumination system concern 	<ul style="list-style-type: none"> - CHECK the operation of the backlighting system and make sure it operates correctly. <ul style="list-style-type: none"> - If the backlighting system operates correctly, REVIEW the brightness settings in the <u>IPC</u> message center, the instrument panel illumination setting and the display brightness settings within the display menu. REVIEW the available settings with the vehicle owner and ADJUST the settings as necessary. - If the backlighting system does not operate correctly, REFER to: Instrument Panel and Interior Switches Illumination (413-00 Instrument Panel and Interior Switches Illumination, Diagnosis and Testing).

Symptom Chart: SYNC Features/Media/Phone

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).

Condition	Possible Sources	Actions
The SYNC system does not operate correctly using the <u>FCIM</u> controls	Refer to the Pinpoint Test	GO to Pinpoint Test I
One or more steering wheel SYNC control button is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test J
The left speakers are inoperative when using Bluetooth and media hub SYNC features	Refer to the Pinpoint Test	GO to Pinpoint Test M
The right speakers are inoperative when using Bluetooth and media hub SYNC features	Refer to the Pinpoint Test	GO to Pinpoint Test M
The SYNC system audible prompts are inoperative or do not operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test M
During a phone call, no incoming audio is heard in the vehicle	Refer to the Pinpoint Test	GO to Pinpoint Test M

Poor sound quality, distorted, or no sound while in SYNC mode	Refer to the Pinpoint Test	GO to Pinpoint Test M
Voice commands are inoperative or outgoing audio is not transmitted during a phone call	Refer to the Pinpoint Test	GO to Pinpoint Test N
An individual Bluetooth device or feature is inoperative	Device compatibility	<p>NOTE: <i>If an individual Bluetooth device is able to pair with the SYNC system, there are no concerns with the APIM.</i></p> <p>INSTRUCT the vehicle owner to review the device compatibility list. REFER to the appropriate Ford authorized website to view a list of compatible devices and features. Not all phone features are available through the SYNC system. This is normal operation.</p>
Unable to pair Bluetooth device or the Bluetooth functionality is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test Q
A <u>USB</u> device is not recognized by the SYNC system or audio files on a <u>USB</u> device are not found using the SYNC system from one or both <u>USB</u> ports	Refer to the Pinpoint Test	<ul style="list-style-type: none"> - For vehicles not equipped with a touchscreen, GO to Pinpoint Test O - For vehicles equipped with a touchscreen, GO to Pinpoint Test P
The 911 Assist or Emergency Assistance Not Operational message displays	Refer to the Pinpoint Test	GO to Pinpoint Test R
SYNC AppLink is inoperative or does not operate correctly	Refer to the Pinpoint Test	<p>NOTE: <i>AppLink is only possible when Android Auto™ and Apple CarPlay™ are disabled.</i></p> <ul style="list-style-type: none"> • REVIEW the mobile device platform, application, and application version compatibility list. REFER to the appropriate Ford authorized website to view a list of compatible devices and features. It is normal operation for incompatible mobile device platforms, applications, and application versions to be unavailable through SYNC AppLink. <ul style="list-style-type: none"> - If the mobile device platform, application, and application version are compatible, and the device is connected through Bluetooth only, GO to Pinpoint Test Q - For vehicles not equipped with a touchscreen and the mobile device platform, application, and application version are compatible, and the device is connected through Bluetooth and the <u>USB</u> port, GO to Pinpoint Test O - For vehicles not equipped with a touchscreen and the mobile device platform, application, and application version are compatible, and the device is connected through Bluetooth and the <u>USB</u> port, GO to Pinpoint Test P

SYNC Connect is inoperative or does not operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test T
Android Auto™ or Apple CarPlay™ is inoperative	Refer to the Pinpoint Test	<p>NOTE: Make sure the operating system of the device and the SYNC system are current.</p> <ul style="list-style-type: none"> • CHECK the operation of the <u>USB</u> port by using a known good <u>USB</u> device to play audio files. <ul style="list-style-type: none"> – If the SYNC system does not recognize the <u>USB</u> device, GO to Pinpoint Test P – If the SYNC system recognizes the <u>USB</u> device, REFER to the Android Auto™ or Apple CarPlay™ information in the Owner Literature.
The SYNC system is unable to discover or log onto an unsecure Wi-Fi connection	Refer to the Owner Literature	ADVISE the vehicle owner to refer to the SYNC 3 Troubleshooting section of the Owner Literature.
The SYNC Wi-Fi connection does not operate correctly	Refer to the Owner Literature	INSTRUCT the vehicle owner to refer to “Wi-Fi Issues” in the SYNC Troubleshooting section of the Owner Literature.
A device (smartphone/laptop) is unable to discover the vehicle Wi-Fi Hotspot	Wi-Fi Hotspot or visibility is turned off	TURN ON the Wi-Fi Hotspot or visibility feature
A device (smartphone/laptop) is unable to log onto the vehicle Wi-Fi Hotspot connection after a master reset from SYNC Master Reset menu	SSID and password set to factory defaults	<p>NOTE: Passwords may contain a lowercase “L” or a capital “i” They look identical and the wrong character may have been entered.</p> <p>OBTAINT the correct password through the SYNC Wi-Fi Hotspot settings to log onto the Wi-Fi connection. REFER to the Owner Literature.</p>
The vehicle Wi-Fi hotspot feature is inoperative, experiencing poor data speed or cannot stream any data	Refer to the Pinpoint Test	GO to Pinpoint Test U

Symptom Chart: Navigation/Compass

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).

Condition	Possible Sources	Actions
The compass is inoperative or does not operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test S
Navigation is inoperative or does not operate correctly	Refer to the Pinpoint Test	GO to Pinpoint Test S
SIRIUS Travel Link™ is inoperative	Refer to the Pinpoint Test	GO to Pinpoint Test B

Pinpoint Tests

- ▶ PINPOINT TEST A : POOR AM (AMPLITUDE MODULATION) - FM (FREQUENCY MODULATION) RECEPTION
- ▶ PINPOINT TEST B : A SATELLITE RADIO OR TRAVEL LINK CONCERN
- ▶ PINPOINT TEST C : A LOUD POPPING SOUND IS HEARD FROM THE SPEAKERS WHEN CYCLING THE IGNITION
- ▶ PINPOINT TEST D : NO SOUND FROM ALL SPEAKERS
- ▶ PINPOINT TEST E : POOR SOUND QUALITY OR DISTORTED SOUND FROM ONE OR MORE SPEAKERS (NOT ALL SPEAKERS)
- ▶ PINPOINT TEST F : THE SPEED COMPENSATED VOLUME DOES NOT OPERATE CORRECTLY
- ▶ PINPOINT TEST G : ONE OR MORE SPEAKER IS INOPERATIVE - ACM (AUDIO FRONT CONTROL MODULE) CONTROLLED SPEAKERS
- ▶ PINPOINT TEST H : ONE OR MORE SPEAKER IS INOPERATIVE - DSP (AUDIO DIGITAL SIGNAL PROCESSING MODULE) CONTROLLED SPEAKERS
- ▶ PINPOINT TEST I : THE AUDIO/SYNC SYSTEM DOES NOT OPERATE CORRECTLY USING THE FCIM (FRONT CONTROLS INTERFACE MODULE) CONTROLS
- ▶ PINPOINT TEST J : ONE OR MORE AUDIO/SYNC STEERING WHEEL CONTROL BUTTON IS INOPERATIVE
- ▶ PINPOINT TEST K : THE NON-TOUCHSCREEN DISPLAY IS INOPERATIVE OR DOES NOT OPERATE CORRECTLY
- ▶ PINPOINT TEST L : THE TOUCHSCREEN IS INOPERATIVE OR DOES NOT OPERATE CORRECTLY
- ▶ PINPOINT TEST M : SOUND FROM THE SYNC SYSTEM (MUSIC/AUDIBLE PROMPTS) IS INOPERATIVE OR DOES NOT OPERATE CORRECTLY
- ▶ PINPOINT TEST N : VOICE COMMANDS ARE INOPERATIVE OR OUTGOING AUDIO IS NOT TRANSMITTED DURING A PHONE CALL

- ▶ PINPOINT TEST O : A USB (UNIVERSAL SERIAL BUS) DEVICE IS NOT RECOGNIZED BY THE SYNC SYSTEM OR AUDIO FILES ON A USB (UNIVERSAL SERIAL BUS) DEVICE ARE NOT FOUND USING THE SYNC SYSTEM FROM ONE OR BOTH USB (UNIVERSAL SERIAL BUS) PORTS - VEHICLES WITH A NON-TOUCHSCREEN
- ▶ PINPOINT TEST P : A USB (UNIVERSAL SERIAL BUS) DEVICE IS NOT RECOGNIZED BY THE SYNC SYSTEM OR AUDIO FILES ON A USB (UNIVERSAL SERIAL BUS) DEVICE ARE NOT FOUND USING THE SYNC SYSTEM FROM ONE OR BOTH USB (UNIVERSAL SERIAL BUS) PORTS - VEHICLES WITH A TOUCHSCREEN
- ▶ PINPOINT TEST Q : UNABLE TO PAIR BLUETOOTH DEVICE OR THE BLUETOOTH FUNCTIONALITY IS INOPERATIVE
- ▶ PINPOINT TEST R : THE 911 ASSIST OR EMERGENCY ASSISTANCE NOT OPERATIONAL MESSAGE DISPLAYS
- ▶ PINPOINT TEST S : THE COMPASS/NAVIGATION IS INOPERATIVE OR DOES NOT OPERATE CORRECTLY
- ▶ PINPOINT TEST T : THE SYNC CONNECT FEATURE IS INOPERATIVE OR DOES NOT OPERATE CORRECTLY
- ▶ PINPOINT TEST U : THE VEHICLE WI-FI HOTSPOT FEATURE IS INOPERATIVE, EXPERIENCING POOR DATA SPEED OR CANNOT STREAM ANY DATA
- ▶ PINPOINT TEST V : U1A00:87
- ▶ PINPOINT TEST W : U0100:00 (ACM (AUDIO FRONT CONTROL MODULE) , APIM (SYNC MODULE) , TCU (TELEMATIC CONTROL UNIT MODULE))
- ▶ PINPOINT TEST X : U0121:00 (APIM (SYNC MODULE))
- ▶ PINPOINT TEST Y : U0140:00 (ACM (AUDIO FRONT CONTROL MODULE) , APIM (SYNC MODULE) , FCIM (FRONT CONTROLS INTERFACE MODULE) , TCU (TELEMATIC CONTROL UNIT MODULE))
- ▶ PINPOINT TEST Z : U0151:00 (APIM (SYNC MODULE) , FCIM (FRONT CONTROLS INTERFACE MODULE))
- ▶ PINPOINT TEST AA : U0155:00 (ACM (AUDIO FRONT CONTROL MODULE) , APIM (SYNC MODULE) , FCIM (FRONT CONTROLS INTERFACE MODULE) , TCU (TELEMATIC CONTROL UNIT MODULE))
- ▶ PINPOINT TEST AB : U0159:00 (APIM (SYNC MODULE))

- ▶ PINPOINT TEST AC : U0184:00 (APIM (SYNC MODULE) , DSP (AUDIO DIGITAL SIGNAL PROCESSING MODULE))
- ▶ PINPOINT TEST AD : U0198:00 (APIM (SYNC MODULE) , DSP (AUDIO DIGITAL SIGNAL PROCESSING MODULE))
- ▶ PINPOINT TEST AE : U0232:00 (APIM (SYNC MODULE))
- ▶ PINPOINT TEST AF : U0233:00 (APIM (SYNC MODULE))
- ▶ PINPOINT TEST AG : U0238:00 (ACM (AUDIO FRONT CONTROL MODULE) , APIM (SYNC MODULE))
- ▶ PINPOINT TEST AH : U0253:00 (ACM (AUDIO FRONT CONTROL MODULE) , DSP (AUDIO DIGITAL SIGNAL PROCESSING MODULE) , FCIM (FRONT CONTROLS INTERFACE MODULE) , TCU (TELEMATIC CONTROL UNIT MODULE))
- ▶ PINPOINT TEST AI : U0256:00 (ACM (AUDIO FRONT CONTROL MODULE) , APIM (SYNC MODULE) , DSP (AUDIO DIGITAL SIGNAL PROCESSING MODULE))
- ▶ PINPOINT TEST AJ : U3003:16 (ACM (AUDIO FRONT CONTROL MODULE) , APIM (SYNC MODULE) , DSP (AUDIO DIGITAL SIGNAL PROCESSING MODULE) , FCIM (FRONT CONTROLS INTERFACE MODULE) , TCU (TELEMATIC CONTROL UNIT MODULE))
- ▶ PINPOINT TEST AK : U3003:17 (ACM (AUDIO FRONT CONTROL MODULE) , APIM (SYNC MODULE) , DSP (AUDIO DIGITAL SIGNAL PROCESSING MODULE) , FCIM (FRONT CONTROLS INTERFACE MODULE) , TCU (TELEMATIC CONTROL UNIT MODULE))
- ▶ PINPOINT TEST AL : BUS OFF
- ▶ PINPOINT TEST AM : INVALID DATA RECEIVED
- ▶ PINPOINT TEST AN : MODULE CONFIGURATION FAULT
- ▶ PINPOINT TEST AO : INTERNAL MODULE FAILURE

