

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

2019 Ranger

Diagnosis and Testing

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>	Description	Action
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).

<u>DTC</u>	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).

<u>DTC</u>	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:

		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).
B1081:12	Left Temperature Damper Motor: 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).
B1081:13	Left Temperature Damper Motor: Circuit 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).
B1082:07	Right 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).
B1082:11	Right Temperature Damper Motor: 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).
B1082:12	Right Temperature Damper Motor: 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).
B1082:13	Right Temperature Damper Motor: Circuit 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).
B1083:07	Recirculation 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).
B1083:11	Recirculation Damper Motor: 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).
B1083:12	Recirculation Damper Motor: 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).
B1083:13	Recirculation Damper Motor: Circuit 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).
B1086:07	Air Distribution 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).
B1086:11	Air Distribution Damper Motor: 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).
B1086:12	Air Distribution Damper Motor: 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).
B1086:13	Air Distribution Damper Motor: Circuit 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).
B10AF:11	Blower Fan Relay: 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).
B10AF:15	Blower Fan Relay: 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).
B10B5:11	Left Panel Air Discharge Temperature: 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).
B10B5:15	Left Panel Air Discharge Temperature: Circuit Short To Battery	REFER to: Climate Control System - Vehicles With:

	or Open	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).
B10B6:11	Left Floor Air Discharge Temperature: 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).
B10B6:15	Left Floor Air Discharge Temperature: 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).
B10B8:63	Push Buttons: Circuit / Component Protection Time-Out	GO to Pinpoint Test AO
B10B9:12	Blower Control: 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).
B10B9:14	Blower Control: 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).
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	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).
B11E5:15	Left HVAC Damper Position 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).
B11E6:11	Right HVAC Damper Position 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).
B11E6:15	Right HVAC Damper Position 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).
B11E7:11	Air Distribution Damper Position 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).
B11E7:15	Air Distribution Damper Position 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).
B11F0:11	Air Intake Damper Position 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).
B11F0:15	Air Intake Damper Position 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).
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	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).
B1A61:15	Cabin 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).
B1A63:11	Right 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).
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>	Description	Action
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</u> hub SYNC features	Refer to the Pinpoint Test	GO to Pinpoint Test M
The right speakers are inoperative when using Bluetooth and <u>USB</u> hub SYNC 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</u> hub SYNC 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

<u>USB</u> 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 IPC 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 FCIM 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>OBTAIN 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

