Model Year 2021 – 2023 Bronco Sport
Loss of Motive Power

CONCERN DRIVEN REPORTING (CDR)

The CDR system is a database which receives a nightly feed of data from multiple Ford systems. Three of these systems which provide a nightly feed to CDR are:

- Global Contact Center Technology (GCCT) system or "OWNER REPORTS"
- Common Quality Indicator System (CQIS) or "FIELD REPORTS"
- Ford's Global System for Analytics and Reporting (GSAR) or "WARRANTY"

The CDR system created a common data repository to house reports across different systems. To do this, CDR uses both structured and unstructured data. The structured data is used to map from the Source system codes to the CDR commodity codes.

- GCCT - Symptom Code to CDR commodity
- CQIS - Symptom Code to CDR Commodity
- GSAR - Warranty Classification Code (WCC) to CDR Commodity

CDR Commodity Codes are hierarchical codes with up to five levels depending on the commodity.
Two examples are:

- Body – Glass – Back glass - Heated back glass elements
- Chassis - Service Brakes - Air Brake System

Once the structured mapping is completed, CDR then text mines the unstructured data to further qualify the commodity levels within the commodity main level. In addition, CDR uses text mining to assign a CDR symptom(s) to the report.
Two examples are:

- Air in system
- Battery - dead / weak

CDR also utilizes text mining to flag reports for review for the five TREAD significant events of: Fatality - Personal Injury – Fire – Rollover - Property Damage where appropriate.

In responding to this information request, Ford electronically searched the CDR database using the following criteria for subject vehicles:

Selection Summary: Subject Vehicles

Make	Ford
Model year	2021; 2022;2023.
Vehicle line	BRONCO SPORT.
Commodity category	electrical
Commodity Level 1	start-charge; wiring
Commodity Level 2	alternator/generator; battery; connectors; ground wires; main body wiring; start-charge wiring; starter; voltage regulator

Reports were then filtered for vehicles manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

An additional search of the GSAR database for potentially responsive warranty claims for the subject vehicles was run using the criteria noted in the WARRANTY section below.

A more detailed explanation of the source systems listed is provided below.

OWNER REPORTS

As the agency is aware, within FCSD's North American Customer Service Operations, there is a Customer Relationship Center (CRC) that is responsible for facilitating communication between customers, dealerships and Ford Motor Company. Among other things, the CRC handles telephonic, electronic, and written inquiries, suggestions, informational requests, and concerns ("contacts") from Ford and Lincoln-Mercury vehicle owners about their vehicles or sales and service experience. The contacts are handled by CRC customer service representatives who enter a summary of the customer contact into a database known as FMC360.

The CRC assigns to each vehicle-related contact report a "symptom code" or category that generally characterizes the nature of the customer contact or vehicle concern, as described by the owner. The CRC does not undertake to confirm the accuracy of the description provided by the owner; they simply record what is reported. Therefore, given the complexity of the modern motor vehicle, it is Ford's experience that a significant percentage of owner contacts do not contain sufficient information to make a technical assessment of the condition of the vehicle or the cause of the event reported. Accordingly, although owner contact reports may be useful in identifying potential problems and trends, the records are not the empirical equivalent of confirmed incidents and/or dealership's diagnosis. In the interest of responding promptly to this inquiry, Ford has not undertaken to gather the electronic images related to these contacts because of the largely duplicative nature of the information contained in the images, as well as the time and the burden associated with locating and producing those documents. The pertinent information related to those contacts generally would be included in the contact reports obtained from the FMC360 system. To the extent that those documents exist, they are characterized in the comments of FMC360 contact reports. Upon request, Ford will attempt to locate any specific items that are of interest to the agency.

In responding to this information request, Ford electronically searched the FMC360 database using the same criteria as described on the CDR section above.

LEGAL CONTACTS

Beginning in early 2008, most consumer complaints and all legal claim processing has been centralized in OGC within the Consumer Litigation team. A transition has occurred such that all legal contacts (including those formerly handled by "Litigation Prevention") are coordinated through this team.

Prior to the transition, there was a Consumer Affairs Department within FCSD that managed customer concerns, which could not be resolved by the Customer Relationship Center (CRC). Among other things, the Consumer Affairs Department had a section, known as "Litigation

Prevention," that handled a variety of informal (i.e., non-litigation) claims, such as property damage claims or attorney demand claims.

The Litigation Prevention section had been centralized in the Consumer Affairs Department since 1995, in Dearborn, Michigan. Prior to that time, Litigation Prevention personnel operated on a regional basis. For matters that the Litigation Prevention section handled, there were typically paper files that reflected the handling, investigation and resolution of property damage claims.

The claims, known as "Legal Contacts" are entered into the FMC360 database that the CRC uses to enter other customer communications. When a customer contact is designated as a Legal Contact, it is so indicated near the top of the contact report.

FIELD REPORTS

Within FCSD, there is a Vehicle Service & Programs Office that has overall responsibility for vehicle service and technical support activities, including the administration of field actions. That Office is the primary source within Ford of vehicle concern information originating from Ford and Lincoln-Mercury dealerships, field personnel, and other sources. The information is maintained in a database known as the Common Quality Indicator System (CQIS). The CQIS database includes reports compiled from more than 40 Company sources (e.g., Company-owned vehicle surveys, service technicians, field service and quality engineers, and technical hot line reports, etc.) providing what is intended to be a comprehensive concern identification resource. As with FMC360 contact reports, CQIS reports are assigned a "symptom code" or category that generally reflects the nature of the concern.

In responding to this information request, Ford electronically searched CQIS using the same criteria as described on the CDR section above.

OASIS MESSAGES

FCSD is responsible for communicating a variety of vehicle and service information, such as warranty information for up to the past 360 days, Extended Service Plan part coverage information, and technical repair information, to North American Ford and Lincoln dealers. This information is communicated primarily through OASIS, which serves as an electronic link between Ford Motor Company and the dealers. OASIS covers all North American Ford and Lincoln-Mercury cars and light trucks, and medium and heavy-duty Ford trucks, for the ten most current model years. Technical diagnostic and repair information on OASIS is contained in Special Service Messages (SSMs) and Technical Service Bulletin (TSBs) titles and brief summaries. It should be noted that dealers cannot access brief summaries.

SSMs and TSB titles are coded in OASIS by model year and vehicle line, and may be coded to other specific vehicle attributes (body style, engine code, or vehicle identification number) and one or more OASIS Service Code(s). The dealers with access to OASIS usually search for information on the database by entering a VIN and the applicable Service Codes. SSMs and TSB titles that become inactive or superseded continue to be accessible by Ford employees, but no longer are accessible by the dealers. Dealers also are able to determine the recalls applicable to a particular vehicle by searching a particular VIN in OASIS. Recall information available on OASIS cannot be searched by Service Codes.

In responding to this information request, Ford searched Global OASIS for active, inactive, and superceded TSB titles and SSMs using the following search criteria:

Model Year: 2021 - 2023

Subject Vehicle: Ford Bronco Sport vehicles manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Date Parameters: Through February 8, 2024

OASIS Service Code(s):

Symptom Category	Symptom Code	Symptom Description
Stalls/Quits	552102	Driving Performance, Stalls/Quits, At Idle, Always
Stalls/Quits	552112	Driving Performance, Stalls/Quits, At Idle, Cold
Stalls/Quits	552134	Driving Performance, Stalls/Quits, At Idle, Hot
Stalls/Quits	552139	Driving Performance, Stalls/Quits, At Idle, Intermittent
Stalls/Quits	552100	Driving Performance, Stalls/Quits, At Idle, UNKNOWN
Stalls/Quits	552202	Driving Performance, Stalls/Quits, Acceleration, Always
Stalls/Quits	552212	Driving Performance, Stalls/Quits, Acceleration, Cold
Stalls/Quits	552234	Driving Performance, Stalls/Quits, Acceleration, Hot
Stalls/Quits	552239	Driving Performance, Stalls/Quits, Acceleration, Intermittent
Stalls/Quits	552200	Driving Performance, Stalls/Quits, Acceleration, UNKNOWN
Stalls/Quits	552302	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, Always
Stalls/Quits	552312	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, Cold
Stalls/Quits	552334	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, Hot
Stalls/Quits	552339	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, Intermittent
Stalls/Quits	552300	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, UNKNOWN
Stalls/Quits	552402	Driving Performance, Stalls/Quits, Deceleration, Always
Stalls/Quits	552412	Driving Performance, Stalls/Quits, Deceleration, Cold
Stalls/Quits	552434	Driving Performance, Stalls/Quits, Deceleration, Hot
Stalls/Quits	552439	Driving Performance, Stalls/Quits, Deceleration, Intermittent
Stalls/Quits	552300	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, UNKNOWN
Stalls/Quits	552402	Driving Performance, Stalls/Quits, Deceleration, Always
Stalls/Quits	552412	Driving Performance, Stalls/Quits, Deceleration, Cold
Stalls/Quits	552434	Driving Performance, Stalls/Quits, Deceleration, Hot
Stalls/Quits	552439	Driving Performance, Stalls/Quits, Deceleration, Intermittent
Stalls/Quits	552400	Driving Performance, Stalls/Quits, Deceleration, UNKNOWN
Stalls/Quits	552000	Driving Performance, Stalls/Quits, UNKNOWN, UNKNOWN
Stalls/Quits	552Z00	Driving Performance, Stalls/Quits, Not Listed, UNKNOWN

OASIS 2 and Global OASIS are not capable of performing electronic word searches, so the search results are reviewed manually to determine their applicability to the alleged defect in the subject vehicles.

The OASIS database also contains Broadcast Messages. Typically, these messages are directed to all dealerships and either are notifications of new SSMs/TSBs, or announcements with non-technical information (for example, "the Dealer Hotline will be closed today"). Broadcast Messages cannot be searched by OASIS service codes, and can be retrieved only

while active (approximately 2 to 4 days). Ford has not undertaken to search for Broadcast Messages because Ford expects that any responsive information obtained with such a search generally would be non-substantive in nature or duplicative of the information obtained with the TSB title and SSM search described above.

INTERNAL SERVICE MESSAGES

FCSD, as part of its technical support activities, maintains fleet and technical telephone "hotlines." During the early stages of Ford's efforts to identify and resolve potential vehicle concerns, hotline personnel may draft Internal Service Messages (ISMs) on CQIS for their internal use. The ISMs are assigned a CQIS "symptom code" or category that generally reflects the nature of the concern. An ISM can form the basis for an oral response over the technical hotline to an inquiry from an individual dealer or fleet technician. The ISMs, however, are not made available electronically to fleets and dealers. Therefore, although ISMs are not "issued" to dealers like OASIS messages, Ford is construing this request broadly to include ISMs that may be related to the alleged defect in the subject vehicles.

In responding to this information request, Ford searched CQIS for active ISMs using the following search criteria:

Model Year: 2021 - 2023

Subject Vehicle: Ford Bronco Sport vehicles manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Date Parameters: Through February 8, 2024

Symptom Category	Symptom Code	Symptom Description
Stalls/Quits	552102	Driving Performance, Stalls/Quits, At Idle, Always
Stalls/Quits	552112	Driving Performance, Stalls/Quits, At Idle, Cold
Stalls/Quits	552134	Driving Performance, Stalls/Quits, At Idle, Hot
Stalls/Quits	552139	Driving Performance, Stalls/Quits, At Idle, Intermittent
Stalls/Quits	552100	Driving Performance, Stalls/Quits, At Idle, UNKNOWN
Stalls/Quits	552202	Driving Performance, Stalls/Quits, Acceleration, Always
Stalls/Quits	552212	Driving Performance, Stalls/Quits, Acceleration, Cold
Stalls/Quits	552234	Driving Performance, Stalls/Quits, Acceleration, Hot
Stalls/Quits	552239	Driving Performance, Stalls/Quits, Acceleration, Intermittent
Stalls/Quits	552200	Driving Performance, Stalls/Quits, Acceleration, UNKNOWN
Stalls/Quits	552302	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, Always
Stalls/Quits	552312	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, Cold
Stalls/Quits	552334	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, Hot
Stalls/Quits	552339	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, Intermittent
Stalls/Quits	552300	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, UNKNOWN
Stalls/Quits	552402	Driving Performance, Stalls/Quits, Deceleration, Always
Stalls/Quits	552412	Driving Performance, Stalls/Quits, Deceleration, Cold
Stalls/Quits	552434	Driving Performance, Stalls/Quits, Deceleration, Hot
Stalls/Quits	552439	Driving Performance, Stalls/Quits, Deceleration, Intermittent
Stalls/Quits	552300	Driving Performance, Stalls/Quits, Cruise/ Steady Speed, UNKNOWN

Stalls/Quits	552402	Driving Performance, Stalls/Quits, Deceleration, Always
Stalls/Quits	552412	Driving Performance, Stalls/Quits, Deceleration, Cold
Stalls/Quits	552434	Driving Performance, Stalls/Quits, Deceleration, Hot
Stalls/Quits	552439	Driving Performance, Stalls/Quits, Deceleration, Intermittent
Stalls/Quits	552400	Driving Performance, Stalls/Quits, Deceleration, UNKNOWN
Stalls/Quits	552000	Driving Performance, Stalls/Quits, UNKNOWN, UNKNOWN
Stalls/Quits	552Z00	Driving Performance, Stalls/Quits, Not Listed, UNKNOWN

The CQIS database in which the ISMs reside is not capable of performing word searches, so the search results were reviewed manually to determine their applicability to the alleged defect in the subject vehicles.

FIELD REVIEW COMMITTEE

Ford's Field Review Committee reviews all potential field service actions, including safety recalls and customer satisfaction programs, and recommends appropriate actions to corporate management. A Vehicle Service & Programs representative serves as Secretary to the Field Review Committee. Following approval of a field service action, the Vehicle Service & Programs Office prepares and launches the action. A representative copy of the communication to Ford's dealers, fleets, and Regional offices announcing the field service action is maintained in the Field Review Committee files.

WARRANTY

Ford's Global System for Analytics and Reporting (GSAR) contains warranty claims and vehicle information for model years 1991 and forward for North America, and model years 1992 and forward for Europe.

Ford performed a search of GSAR for potentially responsive reports using the following search criteria for subject vehicles:

Model Year: 2021 - 2023

Subject Vehicle: Ford Bronco Sport vehicles manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Customer Concern Code(s):

CCC	Description
C26	Weak or low electrical power
C27	Power supply troubles
C31	12V Battery

Ford performed a search of GSAR for potentially responsive reports using the following search criteria for peer vehicles:

Model Year: 2021 - 2023

Subject Vehicle: Ford Escape, Ford Maverick, and Lincoln Corsair vehicles manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Customer Concern Code(s):

CCC	Description
C26	Weak or low electrical power
C27	Power supply troubles
C31	12V Battery

Word Searches:
The reports located using the search criteria described above were then searched using the Electronic Data Download System using a keyword process. Those reports that were identified by the keyword search described here were manually reviewed for relevance. The following keyword search**(es)** was **(were)** conducted:

Shut down + lost power + shut off + stopped + dead + died + power failure + no lights, warnings, electrical power, stall + stalled, went out + power out + stranded + auto stop, auto start, battery + motive power + quit + while driving, while at a stop, stop sign + stop light

Given the number of reports and to be able to provide a timely answer to the Agency, Ford used a smart natural language annotation platform to review the reports identified and classify them. This platform enables machine-learning text categorization process with various natural language processing techniques such as word embeddings, topic, discovery, and active learning, as well as deep learning techniques. The platform classified most of the reports for this investigation with at least 80% of accuracy.