



TECHNICAL SERVICE BULLETIN

23-2267

DRLs Stay On For Up To 10 Minutes After The Vehicle Is Turned Off And/Or DRLs Dim To Park Intensity After Turn Signal Lamp Is Cancelled

22 August
2023

Model:

Ford 2021-2023 Bronco Sport	Built on or before 01-Nov-2022
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Issue: Some 2021-2023 Bronco Sport vehicles built on or before 01-Nov-2022 equipped with light emitting diode (LED) control module (A2C7636130500 printed onto the module label) may exhibit a condition where the daytime running lamps (DRLs) stay on for up to 10 minutes after the vehicle is turned off and/or daytime running lamps momentarily dim to park intensity when the turn signal lamp is cancelled before returning to full DRL intensity. This may be due to the software in the LED control module. To correct this condition, follow the Service Procedure to replace both LED control modules and update the configuration of the body control module (BCM).

Action: Follow the Service Procedure to correct the condition on vehicles that meet all the following criteria:

- 2021-2023 Bronco Sport
- Built on or before 01-Nov-2022
- Equipped with LED control module (A2C7636130500)
- At least one of the following conditions:
 - Daytime running lamps stay on for up to 10 minutes after the vehicle is turned off
 - Daytime running lamps momentarily dim to park intensity when the turn signal lamp is cancelled before returning to full DRL intensity.

Parts

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
NC5Z-13C788-A	2	LED Control Module	1	2
XL-2	As Needed	Motorcraft® High Temperature Nickel Anti-Seize Lubricant		

Quantity refers to the amount of the service part number required to repair the vehicle.

Unit of Issue refers to the number of individual pieces included in a service part number package.

Piece Quantity refers to the total number of individual pieces required to repair the vehicle.

As Needed indicates the amount of the part may vary and/or is not a whole number. Parts can be billed out as non-whole numbers, including less than 1.

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time
2021-2023 Bronco Sport: Inspect And Replace Both LED Control Modules Following The Service Procedures (Do Not Use With Any Other Labor Operations)	232267A	1.9 Hrs.

Repair/Claim Coding

Causal Part:	13C788
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Service Procedure

⚠ WARNING: For the vehicle safety systems to operate as intended, a configuration update will need to be performed when LED control modules have been changed. Failure to do so may increase the risk of a flickering condition in the headlamps. Carefully read this bulletin and the instructions given in Ford Diagnosis and Repair System (FDRS).

NOTE: For 2022 Bronco Sport vehicles, make sure that the following procedure is performed only if the vehicle identification number (VIN) is not listed in the Field Service Action (FSA) 22C22. The new LED control modules contain the software fix for this concern.

1. Using the latest version of the FDRS scan tool, check for diagnostic trouble codes (DTCs) stored in the body control module. Does the vehicle exhibit a DTC B1533 or do the DRLs stay on for more than 10 minutes?
 - (1). Yes - this article does not apply, perform normal diagnostics outside of this article. Refer to the Workshop Manual (WSM), Section 417-01 Exterior Lighting > Diagnosis and Testing > Pinpoint test A.
 - (2). No - proceed to Step 2.
2. Inspect both LED control module part numbers using a mirror. The part number is in the lower section of the LED control module. (Figure 1)

Figure 1



3. Determine if the vehicle has an LED control module part number indicated in the image. (Figure 2, Callout 1) Does the vehicle have the LED control module part number A2C7636130500 as indicated in the image?

Figure 2



(1). Yes - replace both LED control modules. Refer to the WSM, Section 417-01 Exterior Lighting > Removal and Installation. Proceed to Step 4.

NOTE: It is not necessary to perform the BCM-Local Interconnect Network (LIN) New Module Initialization app after the installation of the new LED control modules. The Initialization routine is included in the BCM-Light Emitting Diode (LED) Control Module Configuration app and will be performed automatically.

(2). No - this article does not apply.

4. Using FDRS scan tool, check the BCM for software updates.

(1). Download and run the BCM-Body Control Module (BCM) Software Update.

5. Run the BCM-Light Emitting Diode (LED) Control Module Configuration app. Follow the on-screen instructions to update the BCM configuration.

(1). A password will be required to run the BCM-Light Emitting Diode (LED) Control Module Configuration app. Use the password 05660159.

6. Perform the following headlamp validation tests with the key ignition on and confirm for proper operation.

(1). Position the left steering column multifunction switch in the high beam position and confirm the correct operation of the headlamps.

(2). Position the left steering column multifunction switch in the low beam position and confirm the correct operation of the headlamps.

(3). Position the headlamp switch to parking lamps position and confirm the correct operation of the parking lamps.

(4). Apply the brake pedal and confirm with the help of another technician that the rear lamps and high mounted stop lamps remain lit during turn signal activation in night mode

(5). Push the left steering column multifunction switch up and down to activate the direction indicators. Confirm that the front and rear turn lamps are flashing.

(3)

7. For North America market vehicles except Canada, validate the DRL functionality and perform the following tests. An assistant may be needed outside of the vehicle.

NOTE: For the next steps, it is important to park the vehicle in a well-lit area.

NOTE: DRL and Park function use the same lit elements within the lamp. The park function use a lower intensity output intended to be seen at night without blinding or distracting other drivers. The DRL function use a much higher intensity output in order to be seen during the day. During the validation tests below, DRL

refers to the higher intensity output and Park intensity refers to the lower intensity output intended for nighttime use.

- (1). Make sure to enable the DRLs in the center display screen. To enable DRLs, turn the ignition on. Press the vehicle settings button. Select lighting in the menu. Swipe to the right to enable the daytime running lights.
- (2). Turn the ignition on, position the headlamp switch in the off position, apply the parking brake, position the gearshift module in drive (D). Confirm that the DRL remains off.
- (3). Turn the ignition on, position the headlamp switch in the off position, apply the parking brake, position the gearshift module in drive (D) and activate the turn signal lamp. Confirm that the DRL remains off and the turn signal activated remains flashing.
- (4). Turn the ignition on, position the headlamp switch in the parking lamps position, apply the parking brake and position the gearshift module in drive (D). Confirm that the parking lamps turn on.
- (5). Turn the ignition on, position the headlamp switch in the parking lamps position, apply the parking brake, position the gearshift module in drive (D) and activate the turn signal lamp. Confirm that the parking lamps turn on and the turn signal activated remains flashing.
- (6). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake, position the gearshift module in drive (D) and activate the fog lamps. Confirm that the DRL turns on and the fog lamps remain off.
- (7). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake, position the gearshift module in drive (D) and deactivate the fog lamps. Confirm that the DRL turns on.
- (8). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake, position the gearshift module in drive (D), activate or deactivate the fog lamps and activate the turn signal lamp. Confirm that the DRL turns off on the side of the turn signal activated and then turns back on after the turn signal is cancelled.
- (9). Turn the ignition on, position the headlamp switch in the low beam position, apply the parking brake, position the gearshift module in drive (D). Confirm that the low beams turn on and position intensity.
- (10). Turn the ignition on, position the headlamp switch in the low beam position, apply the parking brake, position the gearshift module in drive (D) and activate the turn signal lamp. Confirm that the parking lamp stays lit during a turn cycle and does not turn off.

NOTE: For the next steps, it is important to simulate night mode conditions. Cover the light sensor located in the center section of the dashboard or park the vehicle in a dark area.

- (11). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake, position the gearshift module in drive (D). Confirm that the parking lamps stay on at park intensity.
- (12). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake, position the gearshift module in drive (D) and activate the turn signal lamp. Confirm that the parking lamps stay on during turn signal activation.

8. For Canadian market vehicles only, validate the DRL functionality and perform the following tests. An assistant may be needed outside of the vehicle.

NOTE: For the next steps, it is important to park the vehicle in a well-lit area.

- (1). DRLs are not configurable and are activated by default.
- (2). Turn the ignition on, position the headlamp switch in the off position, apply the parking brake, position the gearshift module in drive (D). Confirm that the DRL remains on at full intensity.
- (3). Turn the ignition on, position the headlamp switch in the off position, apply the parking brake, position the gearshift module in drive (D) and activate the turn signal. Confirm that the DRL dims to park intensity on the side of the turn signal activated and then confirm that the DRL turns back on after the turn signal is cancelled.
- (4). Turn the ignition on, position the headlamp switch in the parking lamps position, apply the parking brake, position the gearshift module in drive (D) and activate the fog lamps. Confirm that the DRL dims to park intensity.
- (5). Turn the ignition on, position the headlamp switch in the parking lamps position, apply the parking brake, position the gearshift module in drive (D) and deactivate the fog lamps. Confirm that the DRL is at full light intensity.
- (6). Turn the ignition on, position the headlamp switch in the parking lamps position, apply the parking brake, position the gearshift module in drive (D), activate the fog lamps and activate the turn signal lamp. Confirm that the DRL dims to park intensity and the turn signal lamp activated remains flashing then deactivate the fog lamps and confirm that the DRL returns to full light intensity after cancelling the turn signal lamp.

(7). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake and position the gearshift module in drive (D). Confirm that the DRL is at full light intensity.

(8). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake, position the gearshift module in drive (D) and activate the turn signal lamp. Confirm that the DRL dims to park intensity and the turn signal activated remains flashing.

(9). Turn the ignition on, position the headlamp switch in the low beam position, apply the parking brake, position the gearshift module in drive (D). Confirm that the low beams turn on and position intensity.

(10). Turn the ignition on, position the headlamp switch in the low beam position, apply the parking brake, position the gearshift module in drive (D) and activate the turn signal lamp. Confirm that the parking lamp stays lit during a turn cycle and does not turn off.

NOTE: For the next steps, it is important to simulate night mode conditions. Cover the light sensor located in the center section of the dashboard or park the vehicle in a dark area.

(11). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake, position the gearshift module in drive (D). Confirm that the parking lamps stay on at park intensity.

(12). Turn the ignition on, position the headlamp switch in the auto lamp position, apply the parking brake, position the gearshift module in drive (D) and activate the turn signal lamp. Confirm that the parking lamps stays on during turn signal activation.

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NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.