

TECHNICAL SERVICE BULLETIN 6.2L/7.3L - 10R140 - Illuminated MIL With DTCs P0132, P0135, P0138, P0141, P0152, P0155, P0158 And/Or P0161

21-2090

16 July 2021

This bulletin supersedes 20-2380. Reason for update: Missing or Incorrect Applications

Model:

| Ford | Engine: 6.2L |
|-------------------|----------------------------------|
| 2020 F-Super Duty | Engine: 7.3L |
| | Transmission/Transaxle: (10R140) |

Summary

This article supersedes TSB 20-2380 to update the vehicles affected and parts list.

Issue: Some 2020 F-Super Duty vehicles equipped with a 6.2L or 7.3L engine, 10R140 transmission, and built on or before 05-Jun-2020 may exhibit an illuminated malfunction indicator lamp (MIL) with diagnostic trouble codes (DTCs) P0132, P0135, P0138, P0141, P0152, P0155, P0158 and/or P0161 stored in the powertrain control module (PCM). This may be due to water intrusion into heated oxygen sensor (HO $_2$ S) connectors C141, C142, C1571 and/or C1572 on the transmission harness where it connects to the engine exhaust sensors. To correct the condition, follow the Service Procedure steps to replace the transmission harness and the affected HO $_2$ S and/or the catalyst monitor sensor.

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

- 2020 F-Super Duty
- Built on or before 05-Jun-2020
- 6.2L or 7.3L engine
- 10R140 Transmission
- DTCs P0132, P0135, P0138, P0141, P0152, P0155, P0158 and/or P0161 stored in the PCM

NOTE: Part quantity refers to the number of that service part number required, which may be different than the number of individual pieces. Service part numbers contain 1 piece unless otherwise stated. "As Needed" indicates the part is required but the number may vary or is not a whole number; parts can be billed out as non-whole numbers, including less than 1.

Parts

| Part Number | Description | Quantity |
|------------------|---|--------------------------|
| LC3Z-9F472- C | 7.3L Heated Oxygen Sensor (HO2) (Same Part For Both Banks) | 1 Per Affected Sensor |
| FR3Z-9F472- A | 6.2L Heated Oxygen Sensor (HO2) (Same Part For Both Banks) | 1 Per Affected Sensor |
| 9G444 | Catalyst Monitor Sensor - Refer To The Parts Catalog For The VIN Specific Application | 1 Per Affected Sensor |
| LC3Z-7C078- D | Wiring Harness - 2-wheel Drive (2WD) | 1 |
| LC3Z-7C078- F | Wiring Harness - 4-wheel Drive (4WD) | 1 |

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Emissions Warranty/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/Emissions Warranty/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 |
|--|------------------|-------------|
| 2020 F-Super Duty 6.2L/7.3L: Retrieve DTCs, Replace One (1) Sensor And Wire Harness Assembly (Do Not Use With Any Other Labor Operations) | 212090A | 1.0 Hrs. |
| 2020 F-Super Duty 6.2L/7.3L: Retrieve DTCs, Replace Two (2) Sensors And Wire Harness Assembly (Do Not Use With Any Other Labor Operations) | 212090B | 1.2 Hrs. |
| 2020 F-Super Duty 6.2L/7.3L: Retrieve DTCs, Replace Three (3) Sensors And Wire Harness Assembly (Do Not Use With Any Other Labor Operations) | 212090C | 1.4 Hrs. |
| 2020 F-Super Duty 6.2L/7.3L: Retrieve DTCs, Replace Four (4) Sensors And Wire Harness Assembly (Do Not Use With Any Other Labor Operations) | 212090D | 1.5 Hrs. |

Repair/Claim Coding

| Causal Part: | 7C078 |
|-----------------|-------|
| Condition Code: | 42 |

Service Procedure

CAUTION: Do not use dielectric grease in the sensor or harness connectors as the sensors breathe through the wiring strands for proper sensor venting. Using dielectric grease in the sensor connectors may lead to repeat repairs.

- 1. Disconnect the appropriate HO₂S and/or the catalyst monitor sensor based on the DTC(s) received and inspect for moisture and/or corrosion on the pins of the sensor or the wiring harness. Are there any signs of moisture and/or corrosion present? (Figures 1-2)
 - (1). Yes replace the affected HO₂S and/or the catalyst monitor sensor. Refer to Workshop Manual (WSM), Section 303-14. Proceed to Step 2.
 - (2). No this article does not apply. Refer to the Powertrain Control and Emissions Diagnosis (PC/ED) Manual for normal diagnostics.

Figure 1

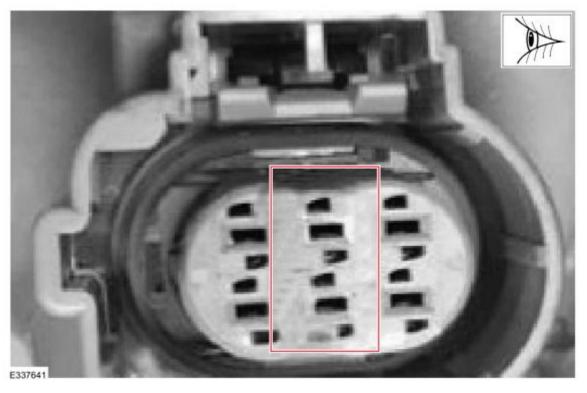
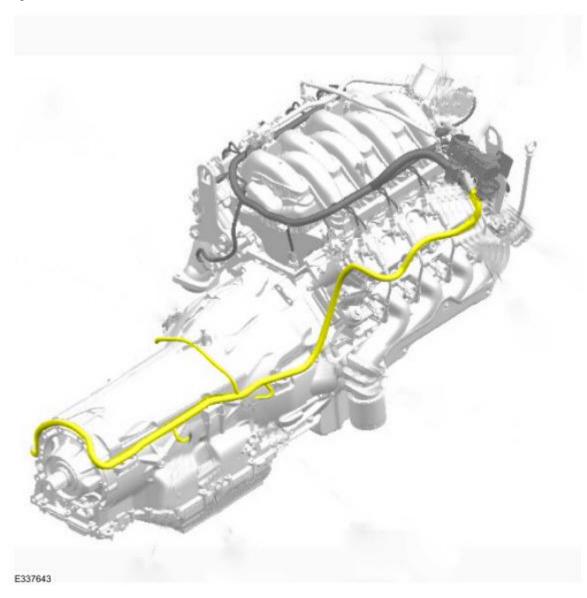


Figure 2



2. Replace the 7C078 wire harness assembly for the vehicle. Make sure to correctly route the harness and connectors. (Figure 3)

Figure 3



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.