



## TECHNICAL SERVICE BULLETIN

### 2.7L EcoBoost - Lack/Loss Of Power With An Illuminated MIL And DTC P0299 In The PCM - Built On Or Before 14-Jun-2021

**21-2272**16 August  
2021**Model:**

<b>Ford</b> 2021 F-150	Engine: 2.7L EcoBoost
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**Issue:** Some 2021 F-150 vehicles equipped with a 2.7L EcoBoost engine and built on or before 14-Jun-2021 may experience lack/loss of power with an illuminated malfunction indicator lamp (MIL) and diagnostic trouble code (DTC) P0299 in the powertrain control module (PCM). This may be due to the wastegate control actuator question mark upper linkage lever between the wastegate lever arm and the wastegate control actuator becoming disconnected. To correct the condition, follow the Service Procedure to repair the wastegate control actuator question mark upper linkage lever between the wastegate lever arm and the wastegate control actuator.

**Action:** Follow the Service Procedure steps to correct the condition if the vehicle meets all of the following criteria:

- 2021 F-150
- Built on or before 14-Jun-2021
- 2.7L EcoBoost
- Lack/loss of power with an illuminated MIL and DTC P0299 in the PCM

**Parts**

Part Number	Description	Quantity
ML3Z-9G488-NA	Left Turbo Linkage Kit	1
ML3Z-9G488-PA	Right Turbo Linkage Kit	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
2021 F-150 2.7L EcoBoost: Retrieve DTCs, Inspect Actuator Linkage On Both Sides, Install Upper Linkage Lever Kit On One (1) Side Following The Service Procedure (Do Not Use With Any Other Labor Operations)	212272A	1.3 Hrs.
2021 F-150 2.7L EcoBoost: Retrieve DTCs, Inspect Actuator Linkage On Both Sides, Install Upper Linkage Lever Kit On Both (2) Sides Following The Service Procedure (Do Not Use With Any Other Labor Operations)	212272B	1.9 Hrs.

**Repair/Claim Coding**

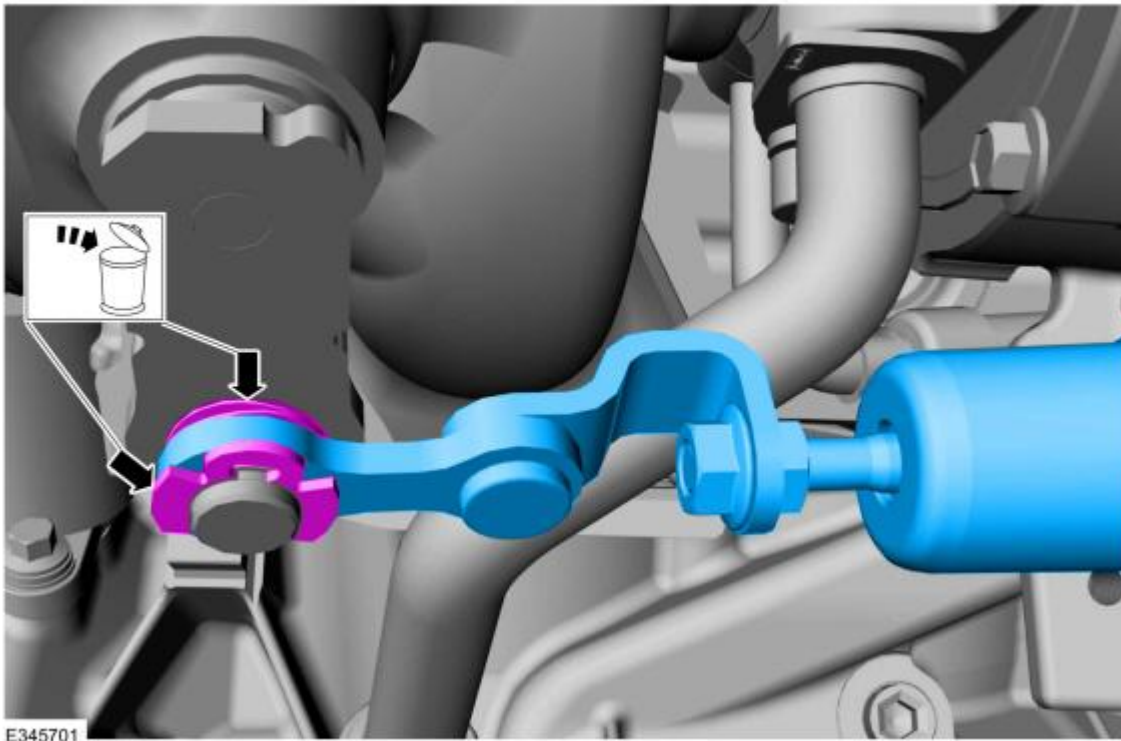
Causal Part:	9G488
Condition Code:	25

**Service Procedure**

1. Inspect the wastegate control actuator linkage on both the left and right side turbochargers for having a wastegate control actuator question mark upper linkage lever disconnected due to missing fasteners.

2. Is a wastegate control actuator question mark upper linkage lever disconnected from the turbochargers on one or both sides due to missing fasteners?
  - (1). Yes - proceed to Step 3.
  - (2). No - this article does not apply. Refer to WSM, Section 303-04G for normal diagnostics.
3. With the vehicle in NEUTRAL, position the vehicle on a hoist. Refer to WSM, Section 100-02.
4. Remove the left and/or right front fender splash shield. Refer to WSM, Section 501-02.
5. Remove and discard the E-clip, disconnect the dog-bone linkage lever from the wastegate lever arm. Remove the wastegate control actuator question mark upper linkage lever from the wastegate control actuator shaft. Remove and discard the noise vibration and harshness (NVH) wave washer. (Figure 1)

Figure 1



6. Push the wastegate control actuator shaft all of the way towards the actuator until it bottoms out.
7. Install the wastegate control actuator question mark upper linkage lever kit on the affected side.
  - (1). If the wastegate control actuator linkage was disconnected on both sides or only the left side, proceed to Step 8.
  - (2). If the wastegate control actuator linkage was disconnected on only the right side, proceed to Step 10.

**NOTE: Note the orientation of the wastegate control actuator question mark upper linkage lever and the lower dog-bone linkage assembly to aid in proper installation.**

8. Install the wastegate control actuator new upper jam nut onto the wastegate control actuator shaft all of the way towards the actuator, finger tight.
9. Refer to WSM, Section 303-04G > Removal and Installation > Wastegate Control Actuator LH and perform only Installation Steps 2 through 4 and then perform only Steps 6 through 9. If only the left side was disconnected, the repair is complete. If the right side is also disconnected, proceed to Step 10.

**NOTE: Note the orientation of the wastegate control actuator question mark upper linkage lever and the lower dog-bone linkage assembly to aid in proper installation.**

10. Install the wastegate control actuator new upper jam nut onto the wastegate control actuator shaft all of the way towards the actuator, finger tight.
11. Refer to WSM, Section 303-04G > Removal and Installation > Wastegate Control Actuator RH and perform only Installation Steps 2 through 4 and then perform only Steps 10 through 13.

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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.