



TECHNICAL SERVICE BULLETIN

Illuminated MIL And/Or Powertrain Malfunction (Wrench) Indicator With Various DTCs - Built On Or Before 28-May-2022

24-2163

23 May 2024

This bulletin supersedes 24-2017. Reason for update: revised Service Procedure and Part List

Model:

Ford 2021-2022 Mustang Mach-E	Built on or before 28-May-2022
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Markets: Canada, USA

Issue: Some 2021-2022 Mustang Mach-E vehicles built on or before 28-May-2022 may exhibit an illuminated MIL and/or powertrain malfunction (wrench) indicator with DTC P0563, P0ADA, P0ADE, P0AA1, P0AA4, P0AA5, P0AA2, P0D10, P0D0F and/or P0C78 stored in the BECM. It may also have a low/discharged 12V battery and/or display a "Stop Safely Now" message in the IPC. This may be due to the high voltage battery junction box. To correct the condition, follow the Service Procedure to replace the high voltage battery junction box and reprogram the BECM.

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

- 2021-2022 Mustang Mach-E
- Built on or before 28-May-2022
- Illuminated MIL and/or powertrain malfunction (wrench) indicator with DTCs P0563, P0ADA, P0ADE, P0AA1, P0AA4, P0AA5, P0AA2, P0D10, P0D0F and/or P0C78 in the BECM

Parts

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
LK9Z-10C666-C	1	1	1	High Voltage Battery Junction Box (GT)
NK4Z-10C666-F	1	1	1	High Voltage Battery Junction Box (RWD Base)
NK4Z-10C666-E	1	1	1	High Voltage Battery Junction Box (AWD Base)
W717859-S439	2	1	4	Battery Mounting Bracket Bolts
VC-13-G	As Needed	As Needed		Motorcraft® Yellow Concentrated Antifreeze/Coolant (All Markets Except Canada)
CVC-13-G	As Needed	As Needed		Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)

Parts - Parts To Inspect And Replace Only If Necessary

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
LJ9Z-10A687-A	Only If Necessary	Only If Necessary	1	High Voltage Battery Cover Seal

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

Package Order Quantity refers to the amount of the service part number package(s) required to repair the vehicle.

Number In Package refers to the number of individual pieces included in a service part number package.

As Needed indicates the part is necessary but 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.

Only If Necessary indicates the part is not mandatory. Refer to the Service Procedure to determine the inspection/inclusion criteria.

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
2021-2022 Mustang Mach-E: Retrieve DTCs And Vehicle Build Date, Replace The High Voltage Battery Junction Box (Do Not Use With Any Operations Outside Of This Article)	242163A	5.7 Hrs.
2021-2022 Mustang Mach-E: Reprogram The Appropriate Modules As Required By The Software Update And Service Procedure, Includes Time To Download And Run The BECM Reset DTC Occurrence Counter Application If Required (Can Be Claimed With Operation A)	MT242163	Actual Time

Repair/Claim Coding

Causal Part:	10C666
Condition Code:	42

Service Procedure

NOTE: If the FSA 23S56 is active for a specific VIN, this article does not apply and the FSA must be performed.

NOTE: Review the vehicle warranty history. If the FSA 23S56 was already performed or a high voltage battery junction box replacement occurred on or after 11-Nov-2023, this article does not apply and the high voltage battery junction box must be replaced. Refer to WSM, Section 414-03A.

1. Replace the high voltage battery junction box. Refer to WSM, Section 414-03A, Removal and installation.
2. Reprogram the BECM to latest software available. The BECM is part of the powertrain coordinated flash.
 - (1). Connect a battery charger to the 12-volt battery. If the 12-volt battery is discharged, charge the battery. Refer to WSM, Section 414-01, Diagnosis and Testing.

NOTE: To prevent the battery saver mode from activating on the vehicle, make sure the negative cable of the charger is installed on a chassis or engine ground and not the 12-volt battery negative terminal. Do not have the vehicle plugged into the high voltage battery charger during programming. This can cause incorrect module programming. Make sure only the 12-volt battery charger is installed.

3. Reprogram the PCM using the latest software level of the FDRS scan tool.
4. Check the availability of software updates on the following modules and update as required:
 - (1). SOBDM
 - (2). BECM
 - (3). SOBDMB
 - (4). SOBDMC
 - (5). ABS module

NOTE: Only one module may be updated at a time.

5. Clear any stored DTCs related to this concern.
6. If DTCs P0ADA, P0ADE, P0AA1, and/or P0AA4 remain present, download and run the "BECM - Reset Diagnostic Trouble Code (DTC) Occurrence Counter" application in FDRS.

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.