

TECHNICAL SERVICE BULLETIN

23-2020

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

26 January

This bulletin supersedes 22-2178.

Model:

Ford	Built on or before 28-May-2022
2021-2022 Mustang Mach-E	-

Markets: Canada, USA

Summary

This article supersedes TSB 22-2178 to update the Issue, Action, and Service Procedure.

Issue: Some 2021-2022 Mustang Mach-E vehicles built on or before 28-May-2022 may exhibit an illuminated malfunction indicator lamp (MIL) and/or powertrain malfunction (wrench) indicator with diagnostic trouble codes (DTCs) P0563, P0ADA, P0ADE, P0AA1, P0AA4, P0AA5, P0AA2, P0D10, P0D0F, and/or P0C78 stored in battery energy control module (BECM). It may also have a low/discharged 12V battery and/or display a Stop Safely Now message in the instrument panel cluster (IPC). This may be due to the high voltage battery junction box (HVBJB). To correct the condition, follow the Service Procedure to replace the HVBJB 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	Quantity	Description	Unit of Issue	Piece Quantity
LK9Z-10C666-B	1	High Voltage Battery Junction Box (GT)	1	1
NK4Z-10C666-C	1	High Voltage Battery Junction Box (AWD Base/Extended Range)	1	1
NK4Z-10C666-D	1	High Voltage Battery Junction Box (RWD Base/Extended Range)	1	1
W717859-S439	1	Battery Mounting Bracket Bolts	4	2
VC-13-G	As Needed	Motorcraft® Yellow Concentrated Antifreeze/Coolant (All Markets Except Canada)		
CVC-13-G	13-G As Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)			

Parts

Service Part Number	Quantity	Description	Unit of Issue
LJ9Z-10A687-A	If Needed	High Voltage Battery Cover Seal	1

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.

If Needed indicates the part is not mandatory.

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
2021-2022 Mustang Mach-E: Retrieve DTCs And Vehicle Build Date, Replace The HVBJB (Do Not Use With Any Operations Outside Of This Article)	232020A	5.7 Hrs.
2021-2022 Mustang Mach-E Reprogram The Appropriate Modules As Required By The Software Update And Service Procedure (Can Be Claimed With Operation A)	MT232020	Actual Time

Repair/Claim Coding

Causal Part:	10C666
Condition Code:	42

Service Procedure

- 1. Replace the HVBJB. Refer to Workshop Manual (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, recover the battery. Refer to Workshop Manual (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 Ford Diagnosis and Repair System (FDRS) scan tool.
- 4. Check the availability of software updates on the following modules and update as required:
 - Secondary on-board diagnostic control module (SOBDM)
 - Battery energy control module (BECM)
 - Secondary on-board diagnostic control module B (SOBDMB)
 - Secondary on-board diagnostic control module C (SOBDMC)
 - · Anti-lock brake system (ABS) module

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

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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.