

Service Alert

Mazda North American Operations
Irvine, CA 92618-2922



Subject: PHEV VEHICLE WILL NOT START (NO READY-ON) DUE TO 12V BATTERY AND/OR HIGH VOLTAGE BATTERY DISCHARGED	Service Alert No.: SA-051/23
	Last Issued : 10/23/2023

BULLETIN NOTES

This bulletin supersedes the previously issued Service Alert(s) listed below.

Previous SAs:	Date(s) Issued:
SA-051/23	09/01/23

Applicable Models/VINs:

2024 CX-90 PHEV

DESCRIPTION

Some customers may experience a vehicle no start (no "Ready-ON") due to the 12V battery discharged or the High Voltage (HV) battery discharged. This may be caused by:

- Ignition left ON when exiting the vehicle (exiting the vehicle during "Ready-On").
- Door/liftgate opened multiple times without ignition "Ready-ON" or driving vehicle.
- Installation of aftermarket electronic devices.

To minimize THE battery drain concern, ensure that the vehicle shift selector is in Park when exiting and verify the ignition is turned OFF when exiting.

NOTE: If multiple door/liftgate opening without "Ready-ON", drive vehicle to charge 12V battery.

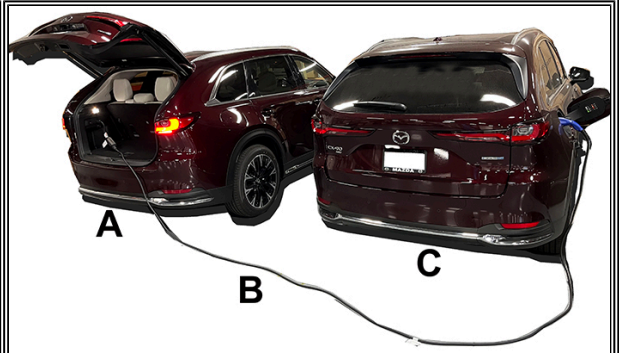
Customers having this concern should have their vehicle repaired using the following repair procedure.

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REPAIR PROCEDURE

Conditions	12V Battery	High Voltage Battery	Repair
Condition 1	Discharged	Unknown	1. Jump Start the 12V battery. Did vehicle start? <ul style="list-style-type: none"> • Yes - Charge the 12V battery • No - <ul style="list-style-type: none"> ◦ <u>With</u> MDARS - Go to Condition 2, MDARS PID data check and Repair. ◦ <u>Without</u> MDARS - Go to Condition 3, Infotainment Center Display SOC % check and Repair.
Condition 2 MDARS is available for use	12V Battery is OK (12.4 V or higher)	Discharged MDARS -> PID/DATA MONITOR TABLE [MHB (e-SKYACTIV PHEV)] PID data: <ul style="list-style-type: none"> • HV_BATT_SOC - 0-6% • HV_BATT_VOLT - below 300V 	1. Charge the HV Battery using wall charger. Note: If a wall charger is not available, go to next step. 2. Using a donor PHEV vehicle (A) with a high SOC%, turn on the AC Power Outlet (120 V/1,500 W) <ol style="list-style-type: none"> a. Ignition ON without depressing brake pedal "Not Ready-ON" b. Press the power switch 2 times. <div data-bbox="1050 1032 1353 1256" data-label="Image"> </div> c. The indicator light flashes and turns on solid amber when it is ready to be used. <div data-bbox="1050 1330 1353 1554" data-label="Image"> </div> d. Open the lid and connect the vehicle supplied HV charge cable (B). 3. Connect the other end of the vehicle supplied HV charge cable to the vehicle (C) charge port. Vehicle (C) charge port indicator will illuminate solid green .

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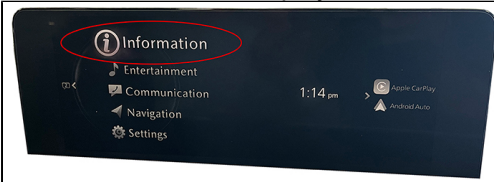
- (A) - Doner vehicle equipped with 1500w charging outlet and with high HV Battery SOC%.
- (B) - Vehicle supplied HV charge cable
- (C) - Vehicle with discharged HV Battery

4. When vehicle (C) shows PID data HV_BATT_SOC 7% or higher, try to start vehicle.

Condition 3
MDARS is NOT available for use

12V Battery is OK (12.4 V or higher)

Discharged Infotainment Center Display -> Information



-> High Voltage Battery Monitor



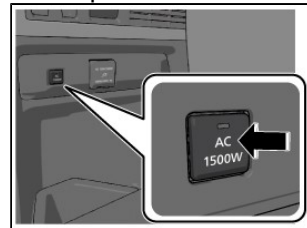
-> Battery Charge Level - - - - %



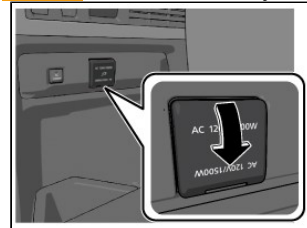
1. Charge the HV Battery using wall charger.
Note: If a wall charger is not available, go to next step.

2. Using a donor PHEV vehicle (A) with a high SOC%, turn on the AC Power Outlet (120 V/1,500 W)

- a. Ignition ON without depressing brake pedal "Not Ready-ON"
- b. Press the power switch 2 times.



c. The indicator light flashes and turns on solid **amber** when it is ready to be used.

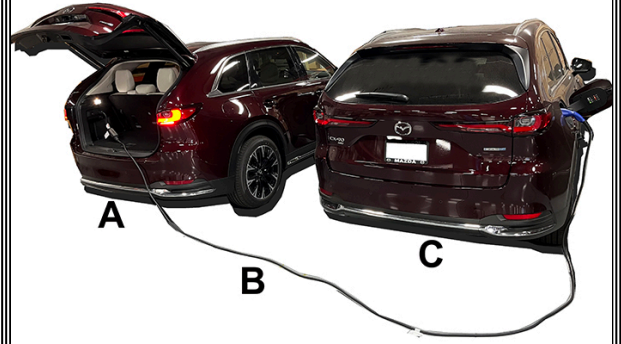


d. Open the lid and connect the vehicle supplied HV charge cable (B).

3. Connect the other end of the vehicle supplied

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HV charge cable to the vehicle (C) charge port. Vehicle (C) charge port indicator will illuminate solid **green**.



(A) - Doner vehicle equipped with 1500w charging outlet and with high HV Battery SOC%.

(B) - Vehicle supplied HV charge cable

(C) - Vehicle with discharged HV Battery

4. When vehicle (C) shows Battery Charge Level 1 % or higher, try to start vehicle.



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