

<b>Subject:</b> <b>"LOW BATTERY RISK. START VEHICLE TO CHARGE 12V BATTERY"                  WARNING MESSAGE</b>	<b>Service Alert No.:</b> SA-005/21
	<b>Last Issued:</b> 02/10/2021

## BULLETIN NOTES

This Service Alert supersedes the previously issued Service Alert(s) listed below: The changes are noted in Red.

Previous Service Alert(s)	Date(s) Issued
SA-005/21	01/29/21 and 01/19/21

## APPLICABLE MODEL(S)/VINS

2021 Mazda3  
2021 CX-30

## DESCRIPTION

Some vehicles may have a "Low Battery Risk. Start Vehicle to Charge 12V Battery" warning message in the instrument cluster and a 30 second alarm sound. This is caused by the vehicle's electrical control area network (CAN) entering "Sleep Mode" when the network awake time reaches 30 cumulative minutes without the engine running.





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The vehicle network starts to wake-up at the moment any side door is opened in order to increase the start-up speed of electrical components and the network awake cumulative time count begins by the customer doing any one of the following wake-up triggers:

- Open any door(s)
- Unlock doors
- Open liftgate
- Depress brake pedal
- Push start/stop button
- Other operations that wake-up the CAN network

No dealer visit is required. The warning message can be cleared by starting the engine and idling or driving for 5 minutes or longer.

DESCRIPTION	CAN network awake time count reaches 30 min without engine running. This will trigger Sleep Mode (forced sleep) to prevent battery charge depletion.	
INSTRUMENT CLUSTER DISPLAY	"Low Battery Risk. Start Vehicle to Charge 12V Battery" warning message and 30 second alarm	
ACTION TO BE TAKEN	No dealer visit is required. The warning message can be cleared by starting the engine and idling or driving for 5 minutes or longer.	
DETECTION CONDITION	After ignition OFF, CAN network wake-up trigger: <ul style="list-style-type: none"> <li>• Open any door</li> <li>• Unlock doors</li> <li>• Open liftgate</li> <li>• Depress brake pedal</li> <li>• Push start/stop button (without engine start)</li> <li>• Other operations that wake-up the CAN network</li> </ul>	
FAIL-SAFE FUNCTION	<ul style="list-style-type: none"> <li>• Prevents CAN network wakeup if a side door(s) is/are opened.</li> <li>• Inhibits some Connected Vehicle functions</li> </ul>	

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<b>NEW VEHICLE DELIVERY OR VEHICLE MAINTENANCE</b>	Allow the engine to idle for a minimum of 5 minutes before customer receives the new vehicle or picks up the vehicle after service to prevent the warning message from coming on.
<b>PREVENT SLEEP MODE FUNCTION</b>	<p>This option can be used on dealer showroom vehicles to reset/prevent warning message.</p> <ol style="list-style-type: none"> <li>1. Remove and install room fuse             <ol style="list-style-type: none"> <li>1. Resets wakeup time count</li> </ol> </li> <li>2. Remove room fuse (all the time)             <ol style="list-style-type: none"> <li>1. Prevents warning message                 <ol style="list-style-type: none"> <li>1. No power liftgate operation</li> <li>2. No Infotainment/center display</li> <li>3. No illumination</li> <li>4. No power seat/driving position memory</li> <li>5. No power door lock</li> </ol> </li> </ol> </li> </ol>

**Owner's Manual Information**

Instrument Cluster Display*1*2	Content	Action to be taken
Low Battery Risk. Start Vehicle to Charge 12V Battery	Displays if the battery charge is depleted.	To charge the battery, start the engine and keep running for 5 minutes or longer.

\*1: A pop-up is displayed when a warning occurs.

\*2: One screen displays four rows. If the entire message cannot be displayed on the screen, it switches to another screen.

<b>Low Battery Charge Warning Sound</b>
A warning sound is activated if the battery charge is depleted. To charge the battery, start the engine and keep running for 5 minutes or longer.

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**Warning Message Details**

There are no issues with regular usage; however, it may cause a low battery and issues with starting the engine when repeatedly opening and closing the door without running the engine.

- The BCM estimates the amount of battery discharge from the cumulative start-up time of the vehicle network when the engine is turned off and notifies the customer with a warning sound/message to promote charging the battery by running the engine.
- The system enters Sleep Mode when the warning is displayed to suppress battery consumption in order to prevent issues with starting the engine.
- The system will enter Sleep Mode when the vehicle network cumulative awake time reaches 30 min.

**Examples of Vehicle Turning on Warning Message and Entering Sleep Mode:**

- **Opening and closing door(s)/liftgate multiple times**
  - Everytime a door or the liftgate is opened and closed (such as when demonstrating vehicle features), the amount of time the door is open plus 5 minutes before the vehicle network goes to sleep is added to the awake time count. If this is repeated multiple times and the cumulative awake time count of the vehicle network reaches 30 mins, Sleep Mode is entered.
- **Door(s)/liftgate opened continuously**
  - When cleaning the vehicle interior, performing maintenance, or installing an accessory with the ignition off and one or more doors/liftgate opened for a continuous 30 minutes, Sleep Mode is entered.

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