

Subject: "LOW BATTERY RISK. START VEHICLE TO CHARGE 12V BATTERY" WARNING MESSAGE	Service Alert No.: SA-005/21
	Last Issued: 01/19/2021

APPLICABLE MODEL(S)/VINS

2021 Mazda3
2021 CX-30

DESCRIPTION

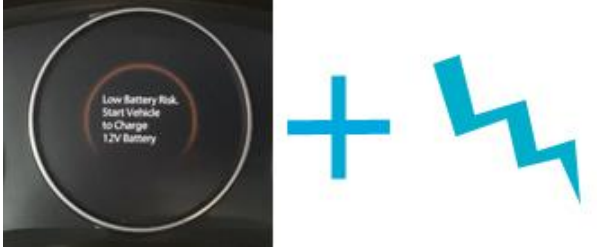

Some vehicles may have a "Low Battery Risk. Start Vehicle to Charge 12V Battery" warning message in the instrument cluster and a 30 second alarm sound. This may be caused by the customer doing any one of the following several times without starting the engine for an extended period of time:

- Open any door(s)
- Unlock doors
- Open liftgate
- Depress brake pedal
- Push start/stop button

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



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DESCRIPTION	CAN network wake-up time count exceeds 30 min without engine start. This will trigger Non-wakeup mode function (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 wakeup trigger: <ul style="list-style-type: none"> • Open any door • Unlock doors • Open liftgate • Depress brake pedal • Push start/stop button (without engine start) • Other operations that wake-up the CAN network 	
FAIL-SAFE FUNCTION	<ul style="list-style-type: none"> • Prevents CAN network wakeup if a side door(s) is/are opened. • Inhibits some Connected Vehicle functions 	
PREVENT NON-WAKEUP MODE FUNCTION	This option can be used on dealer showroom vehicles to reset/prevent warning message. <ol style="list-style-type: none"> 1. Remove and install room fuse <ol style="list-style-type: none"> 1. Resets wakeup time count 2. Remove room fuse (all the time) <ol style="list-style-type: none"> 1. No power liftgate operation 2. No Infotainment/center display 3. No illumination 4. No power seat/driving position memory 5. No power door lock 	

Owner's Manual Information

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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.

Low Battery Charge Warning Sound
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.

Warning Message Details

For affected 7th Gen vehicles, the vehicle network starts at the moment when any side door is opened in order to increase the start-up speed of electrical components.

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.

- Non-wakeup mode 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 non-wakeup mode when the warning is displayed to suppress battery consumption in order to prevent issues with starting the engine.
- The system will enter non-wakeup mode when the vehicle network cumulative wakeup time reaches 30 min.

Examples of Vehicle Turning on Warning Message and Entering Non-Wakeup 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 time count. If this is repeated multiple times and the cumulative wake-up time count of the vehicle network reaches 30 mins, non-wakeup 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, non-wakeup mode is entered.

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