



<b>Subject:</b>  <b>CONNECTED VEHICLE SYMPTOM TROUBLESHOOTING</b>	<b>Service Alert No.:</b> SA-013/21
	<b>Last Issued:</b> 03/15/2021

## BULLETIN NOTES

This service alert supersedes the previously issued service alert listed below. The changes are noted in Red text.

Previous Service Alert	Date(s) Issued:
SA-013/21	02/22/21, 02/08/21 and 02/02/2021
SA-031/20	12/09/20,11/30/20, 11/06/20, 10/28/20, 06/16/20, 06/05/20, 06/01/20, 05/18/20,04/14/2020, 04/02/20,03/11/20 and 02/27/20

## APPLICABLE MODEL(S)/VINS

2019-2021 Mazda3  
2020-2021 CX-30  
2021 CX-5  
2021 CX-9

## DESCRIPTION

**IMPORTANT NOTE:** Some 2020 Mazda3 vehicles may have incorrect infotainment software version 10042 installed. The incorrect software will cause MyMazda App Connected Vehicle enrollment errors. Go to [SSPC1](#).

Some customers may complain about any of the following:

- Infotainment Center Display does not provide the Authorization Code during the MyMazda App Connected Vehicle enrollment (and Software Update Error message on 2020 Mazda3 only).
- Remote function(s) inoperative.
  - Engine Start / Stop
  - Door Lock / Unlock
  - Lights ON / OFF

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.









Confirm the customer's phone and vehicle have good to strong reception during the concern as shown in the table below.

- If the reception is weak, move the vehicle to a location where the reception is good to strong as shown in the table, then try to get the Authorization Code and/or operate the remote functions before proceeding to the Repair Procedure if there is still an issue.
- If the reception is good to strong, proceed to the Repair Procedure.

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.



Indication	Explanation
	Radio waves are not being received. Move to a location with good reception.
	Weak reception.
	Good Reception
	Strong reception.
	Currently conducting an operation check of the communication unit. If this condition continues, consult an Authorized Mazda Dealer.
	<ol style="list-style-type: none"> <li>1. Connected Service contract has ended (Subscription expired)</li> <li>2. Customer deactivated Connected Services (Opt-Out)                             <ol style="list-style-type: none"> <li>1. eMDCS Warranty Vehicle Inquiry will show Campaign CSP04 Status Closed</li> </ol> </li> <li>3. TCU has not been initialized, go to SA-010/20</li> </ol>

**Remote Engine Start Will Not Function under the following conditions**

Item	Condition
1	Vehicle battery voltage low
2	Automatic Transmission shift position except "P"
3	Vehicles equipped with manual transmission
4	Vehicle speed above 3 mi/h (5 km/h)
5	Brake pedal switch malfunction
6	Engine has been running by remote engine start function
7	Engine started by remote engine start more than 2 consecutive times while the vehicle is not driven.

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

	The vehicle must be driven 1-mile or 24-hours must pass from the last successful Remote Engine Start for the use count to reset.
8	<b>2021 Mazda3 and CX-30: Vehicle's electrical control area network (CAN) is in "Sleep Mode"</b>
9	A registered key is detected in the vehicle
10	Brake pedal switch detects brake application
11	Low fuel warning message
12	Engine starts, then turns OFF due to abnormal high engine rpm detected. (Engine rotation over 3000 rpm continued for more than 0.2[s])
13	No engine rpm detected after sending engine start request. (Engine rotation 0 rpm continued for more than 0.2[s])
14	When the CAN data signal for engine shut off is present (e.g.: door ajar signal)
15	After 10 second maximum cranking time
16	Burglar alarm status is "Alarm" and "Alarm stand by" (CAUTION - DO NOT enable, see Theft-Deterrent System section in <a href="#">SA-013/20</a> )
17	Room fuse blown/missing
18	Connected Vehicle Maintenance Mode enabled (Restricted Transmitting Mode in MDARS)
19	Vehicle is parked (stored) for approximately 1 week or longer or in deep sleep mode. Drive the vehicle for a few miles to recover.
20	DTC Stored
21	Aftermarket Remote Engine Start accessory installed.
22	<p>Mazda Remote Engine Start (BCKA-V7-620) accessory installed (No MyMazda app remote engine start function).</p> <p><b>Mazda Remote Engine Start (RES) Removala.</b> Remove the Mazda Remote Engine Start (RES) accessory module.</p> <p>b. Deactivate and activate Advanced Key(s). Refer to <a href="#">MGSSIMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [(US)]</a></p>
23	First remote control attempt fails, second attempt works fine. Go to TSB <a href="#">16-002/20</a> .

### Remote Engine Start Function Will turn engine OFF under the following conditions

Item	Condition
------	-----------

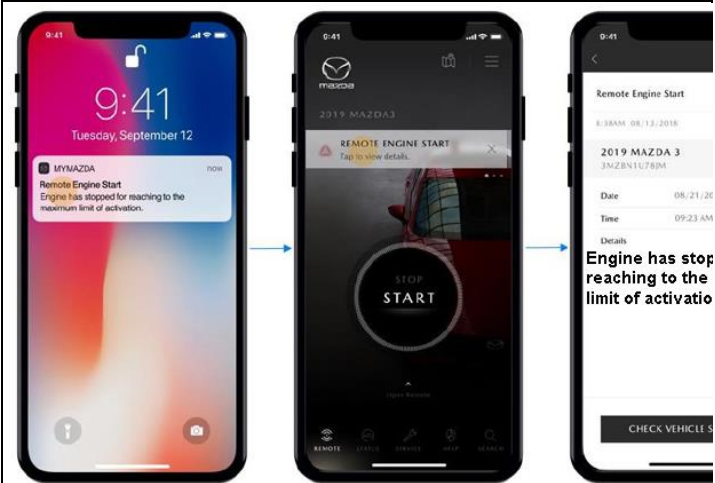
**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

1	Vehicle door(s) opened
2	Vehicle trunk opened
3	Vehicle hood opened
4	Ignition switch push button "ON" detected
5	Remote engine STOP request
6	Brake pedal switch detects brake application
7	DTC Stored
8	Engine will stop running automatically after 15 minutes for safety, security and emissions.

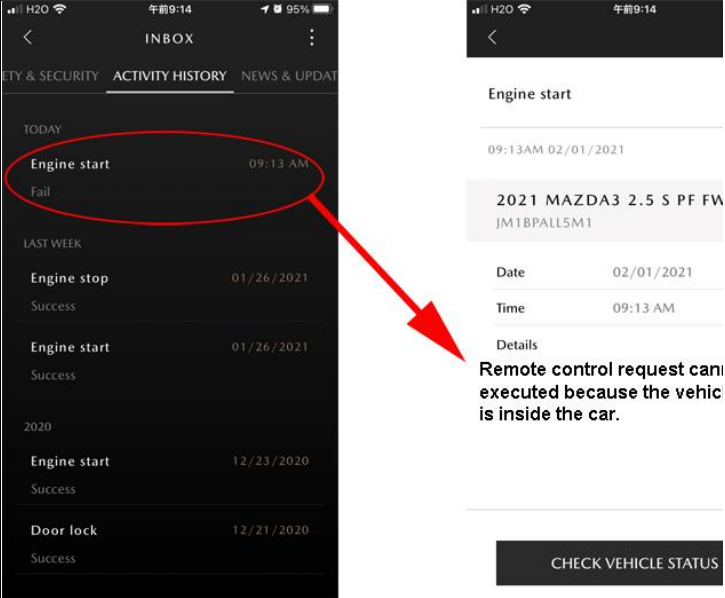
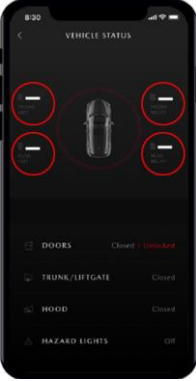
### REPAIR PROCEDURE

**NOTE:** Vehicles stored for long periods may lose GPS clock synchronization. If the vehicle is stored for a long period, test drive the vehicle to give the GPS clock time to synchronize before enrolling or testing connected vehicle functions.

1. Verify customer concern.

Customer Complaint	Action
<ol style="list-style-type: none"> <li>1. Vehicle Center Display does not provide the Authorization Code during the MyMazda App Connected Vehicle enrollment.</li> <li>2. Remote function(s) inoperative.                             <ol style="list-style-type: none"> <li>1. Engine Start / Stop</li> <li>2. Door Lock / Unlock</li> <li>3. Lights ON / OFF</li> </ol> </li> </ol>	<p>Go to Step 2.</p> <p><b>NOTE:</b> The customer can view the reason for remote function failure.</p> <p><b>Example 1 (Push notification)</b></p> 

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

	<table border="1"><tr><td data-bbox="735 203 1003 319"><b>OS Lock Screen</b> Tap the push notification</td><td data-bbox="1003 203 1198 319"><b>Home</b> Tap the alert card</td><td data-bbox="1198 203 1446 319"><b>Inbox Detail</b> Tap "check vehicle status"</td></tr></table> <p><b>Example 2 (Activity History)</b></p>  <p>Except CX-5 and CX-9:</p> <ol style="list-style-type: none"><li>1. MAZDA CONNECT and/or MyMazda APP displays incorrect tire pressures after battery disconnect and/or infotainment CMU software update.</li></ol>  <p>Go to <a href="#">SA-044/20</a>.</p>	<b>OS Lock Screen</b> Tap the push notification	<b>Home</b> Tap the alert card	<b>Inbox Detail</b> Tap "check vehicle status"
<b>OS Lock Screen</b> Tap the push notification	<b>Home</b> Tap the alert card	<b>Inbox Detail</b> Tap "check vehicle status"		

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

All vehicles:

1. The customer is not able to activate Connected Services via the MyMazda app
2. MAZDA CONNECT connected vehicle reception strength icon shows "X".



**1. Did the customer deactivate Connected Services (Opt-Out)?NOTE:** If deactivated, eMDCS Warranty Vehicle Inquiry will show Campaign CSP04 Status Closed.

1. **Yes:** No repair needed.
2. **No:** Go to next step.

2. Check for DTCs.

**Are there any DTC's stored?**

1. **Yes:** Go to MGSS for normal diagnosis.
2. **No:** Go to next step.
3. Disconnect battery terminal for 30 seconds, then move the vehicle. **Is the reception strength signal normal?**

1. **Yes:** Repair complete.
2. **No:** Go to next step.
4. Perform TCU activation. Go to SA-004/21.

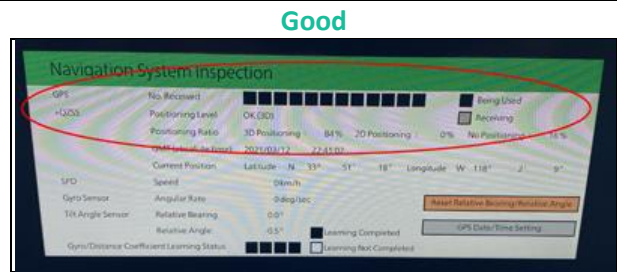
**Is the reception strength signal normal?**

1. **Yes:** Repair complete.
2. **No:** Go to next step.
5. Compare Tel antenna No. 1 signal strength with good known vehicle near by.

Go to DIAGNOSTIC ASSIST FUNCTION [CONNECTIVITY MAST UNIT (US)]

Functional Inspection / Adjustment - Navigation System Inspection

**Example:**



**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

2019 Mazda3 only:

1. The customer is not able to activate Connected Services via the MyMazda app after CSP06 completion.
2. MAZDA CONNECT connected vehicle reception strength icon is missing or shows unsubscribed after CSP06 completion.



2020 Mazda3 only:

1. Infotainment center display does not provide Authorization Code during the MyMazda App Connected Vehicle enrollment and infotainment Software Update Error message.



2021 Mazda3 and CX-3 functions inoperative:



1. **Good:** Contact Hotline for technical support.
2. **No Good:** Swap Tel antenna No. 1 with known good vehicle.


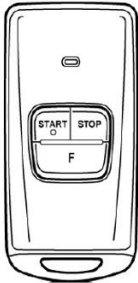
Go to [CSP07 Repair instructions](#).

Go to [SSPC1](#).

Vehicle's electrical control area network (CAN) is in "Sleep Mode".

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.



<ol style="list-style-type: none"> <li>1. Vehicle Status Alert</li> <li>2. Remote Engine Start / Stop</li> <li>3. Remote Door Lock / Unlock</li> <li>4. Remote Hazard Lights ON / OFF</li> <li>5. Vehicle Finder (vehicle location mapping function is available)</li> </ol>	 <p>No dealer visit is required. Sleep Mode can be reset by starting the engine and idling or driving for 5 minutes or longer.</p> <p>See <a href="#">SA-005/21</a>.</p>
<p>First remote control attempt fails, second attempt works fine.</p> <ol style="list-style-type: none"> <li>1. Engine Start / Stop</li> <li>2. Door Lock / Unlock</li> <li>3. Lights ON / OFF</li> </ol>	<p>Go to TSB <a href="#">16-002/20</a>.</p>
<p>Remote Engine Start inoperative due to:</p> <ol style="list-style-type: none"> <li>1. Aftermarket Remote Engine Start accessory installed.</li> <li>2. Mazda Remote Engine Start (BCKA-V7-620) accessory installed.</li> </ol> 	<ol style="list-style-type: none"> <li>1. Remove the aftermarket accessory.</li> <li>2. The customer can use either the Mazda Remote Engine Start accessory or the MyMazda app function. Cannot use both.</li> </ol> <p><b>Mazda Remote Engine Start (RES) Removal.</b> Remove the Mazda Remote Engine Start (RES) accessory module.</p> <p>b. Deactivate and activate Advanced Key(s). Refer to <a href="#">MGSSIMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [(US)]</a>.</p>

2. Use MDARS to ID the vehicle and check for DTC's stored.  
**Are DTC(s) stored?**

- **Yes:** Go to step 3.
- **No:** Perform [ODR Data Collection Procedure](#), then go to step 3.

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

3. Retrieve MAZDA CONNECT CMU log data. Go to [MGSSMAZDA CONNECT CMU Data Retrieval](#)
4. Perform "[Activating Remote Control by Smart Phone](#)".
5. Clear DTC(s).

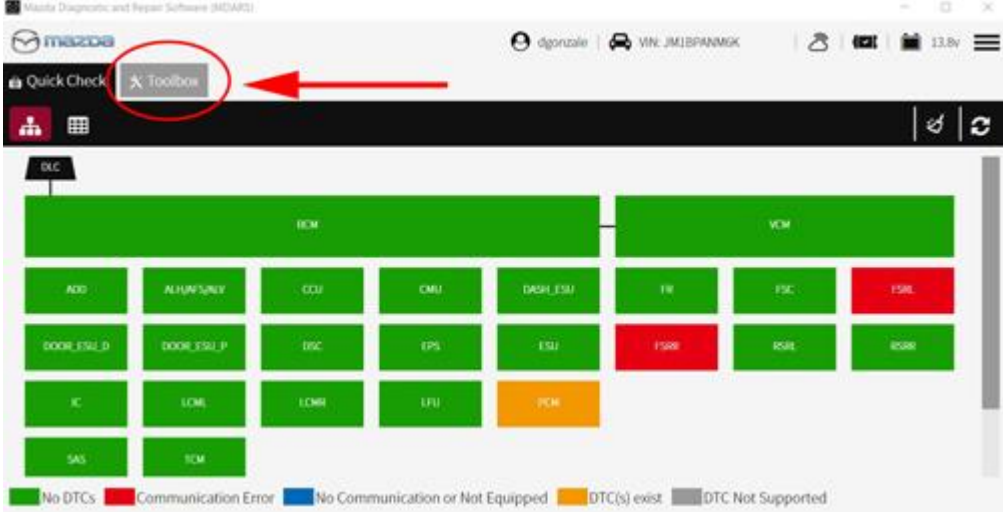
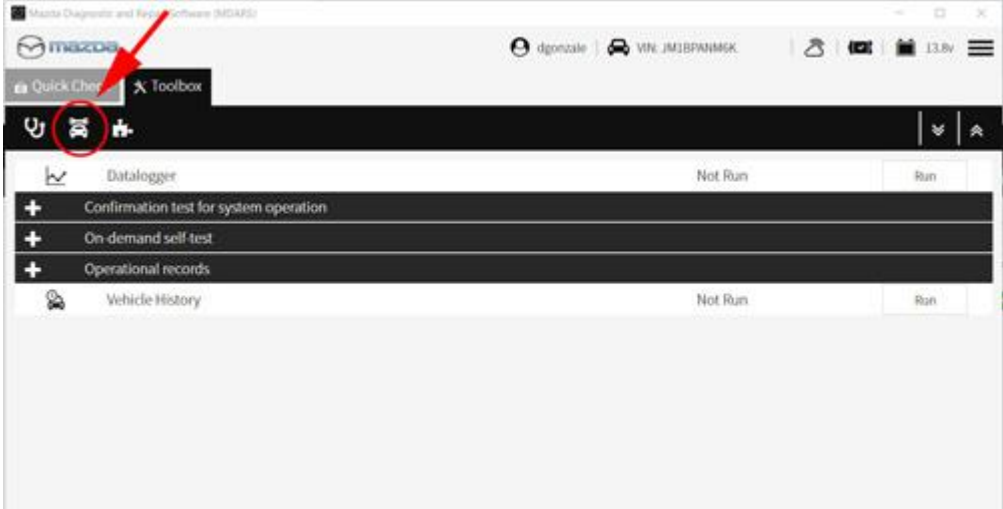
**NOTE:** If DTC 2050:55 is stored, go to [SA-003/20](#) to clear DTC.

6. Perform KAM reset.

**NOTE:** Test drive vehicle after a KAM reset to allow the GPS clock to synchronize before retrying connected vehicle functions.

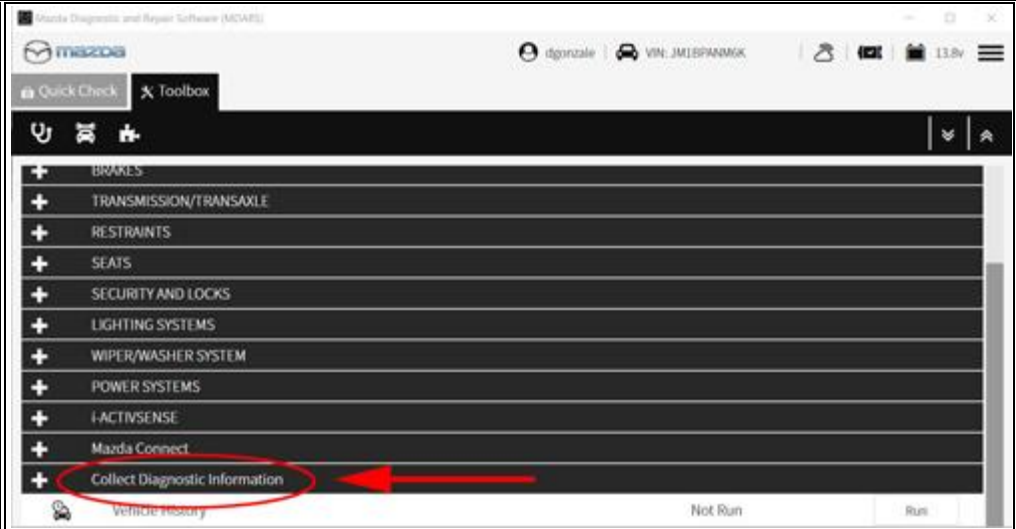
7. Contact Hotline for the latest repair information.

**ODR Data Collection Procedure**

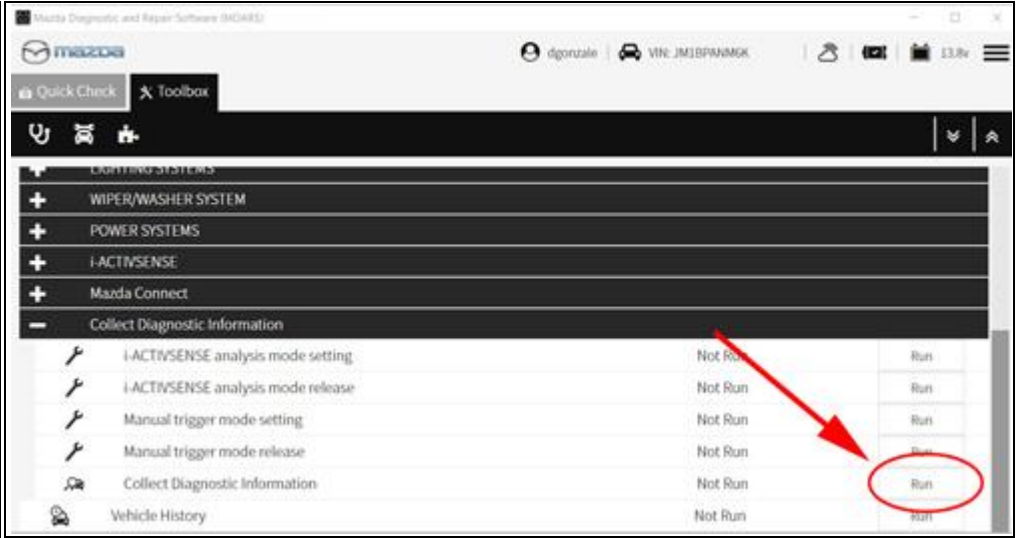
<p>1. ID the vehicle using MDARS</p>	<p>---</p>
<p>2. Select "Toolbox"</p>	 <p>The screenshot shows the Mazda MDARS software interface. At the top, there is a navigation bar with 'Quick Check' and 'Toolbox' buttons. The 'Toolbox' button is circled in red, and a red arrow points to it from the right. Below the navigation bar, there is a grid of colored buttons representing various vehicle systems: ECM, VCM, ADD, ALUW/SUNV, CCU, CMU, DASH_ESU, TR, FSC, FSR, DOOR_ESU_D, DOOR_ESU_P, EDC, EPS, ESU, FSR, RSR, RSR, IC, LCM, LCM, LFI, PCN, SAS, and TCM. A legend at the bottom indicates: Green for 'No DTCs', Red for 'Communication Error', Blue for 'No Communication or Not Equipped', Orange for 'DTC(s) exist', and Grey for 'DTC Not Supported'.</p>
<p>3. Select Vehicle Icon</p>	 <p>The screenshot shows the Mazda MDARS software interface with the 'Toolbox' menu open. A red circle highlights the vehicle icon in the 'Toolbox' menu, with a red arrow pointing to it. Below the 'Toolbox' menu, there are sections for 'Datalogger' and 'Vehicle History'. The 'Datalogger' section has a 'Not Run' status and a 'Run' button. The 'Vehicle History' section also has a 'Not Run' status and a 'Run' button. The 'Datalogger' section includes expandable items: 'Confirmation test for system operation', 'On-demand self test', and 'Operational records'.</p>

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

4. Select "Collect Diagnostic Information"

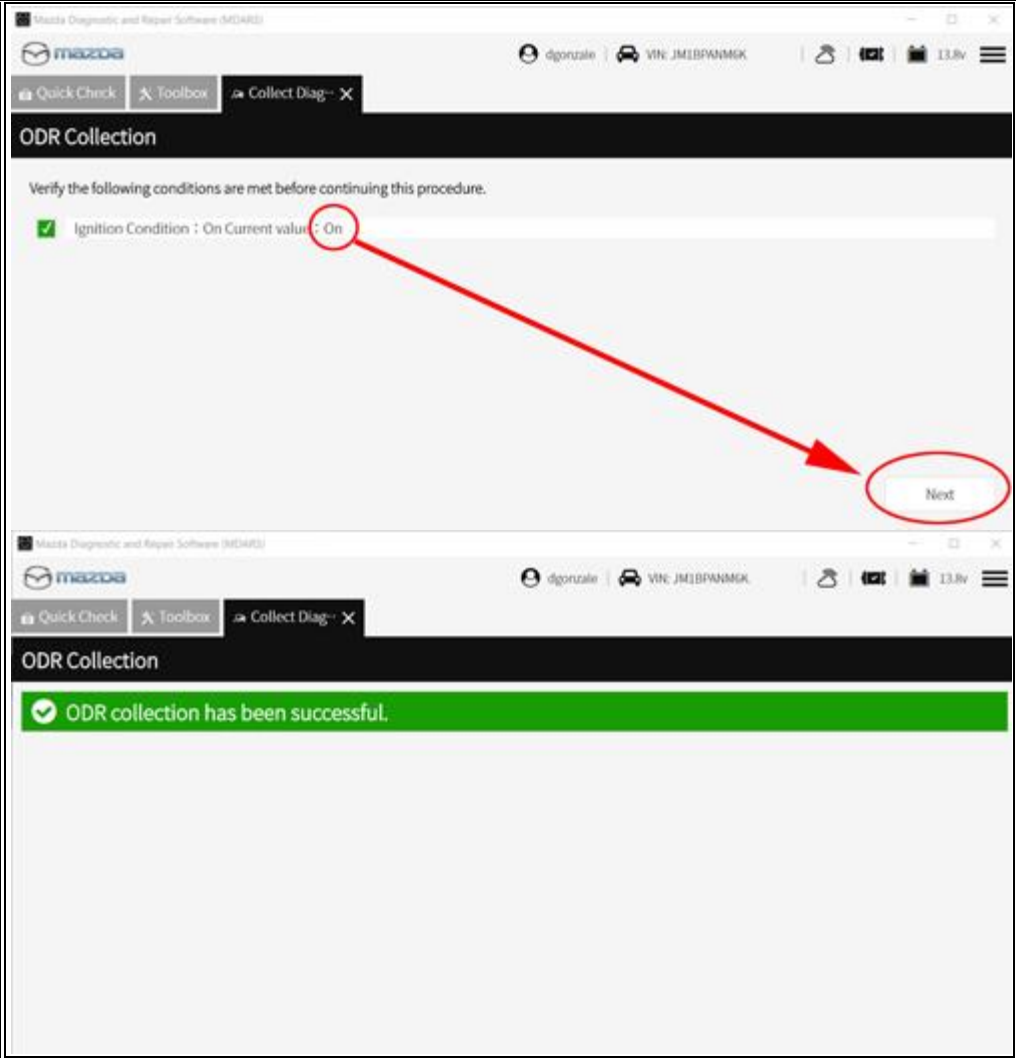


5. Select Collect Diagnostic Information "Run"



**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

6. Turn Ignition ON,  
then select "Next"



**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

**Activating Remote Control by Smart Phone**

**NOTE:** This procedure cannot be performed if the key transmitter power saving function is enabled. See SA-040/20.

1. Connect MDARS.

2. Use MDARS to verify if the Telematics Control Unit (TCU) is at the latest software level (Toolbox Software Update Run TCU).  
**Is the TCU at the latest software level?**

1. **Yes:** Go to step 3.
2. **No:** Update TCU software, then go to step 3.

3. Select the following:

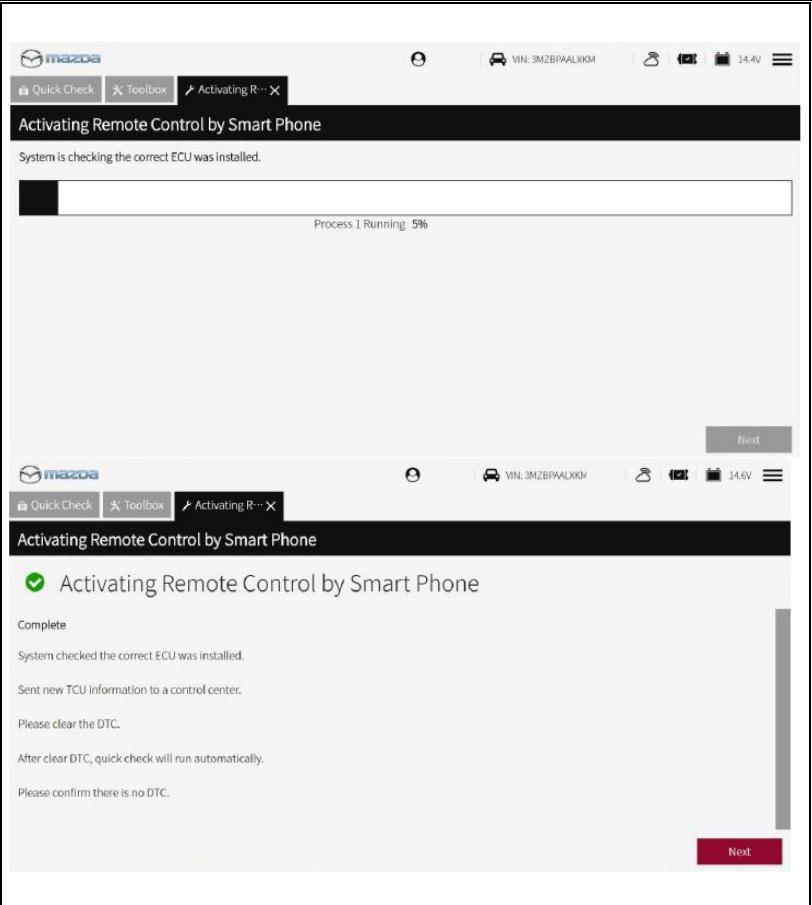
- a. Toolbox
- b. Repair icon
- c. MAZDA CONNECT
- d. Activating Remote Control by Smart Phone
- e. RUN.

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

4. Follow the on-screen instructions and wait for process to complete.

**NOTE:** If the Activating Remote Control by Smart Phone shows "Incomplete", the possible causes are:

- a. The advanced key is not in the vehicle.
- b. The connected Vehicle Maintenance Mode is enabled.
- c. The Key transmitter power saving function is enabled.
- d. The pacemaker radio wave interference prevention function is enabled.



5. Select Quick Check (A), then start the engine and select the DTC Clear icon (B).

**CAUTION:** If the engine is not started, DTC P2610 is stored and cannot be erased.



**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.