

# Service Alert

Mazda North American Operations  
Irvine, CA 92618-2922



|   |                                     |
|---|-------------------------------------|
| <b>Subject:</b><br><br><b>CONNECTED VEHICLE SYMPTOM TROUBLESHOOTING</b> | <b>Service Alert No.: SA-013/21</b> |
|   | <b>Last Issued : 09/14/2021</b>     |

## 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              | 06/02/21, 05/11/21, 04/27/21, 03/15/21, 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

Some customers may complain about any of the following:








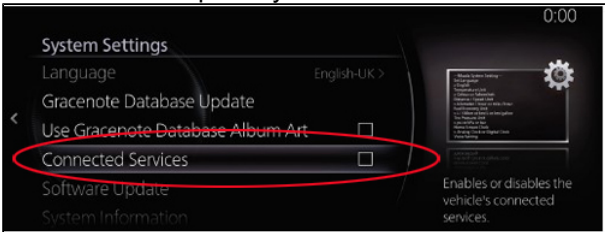


- Infotainment Center Display does not provide the Authorization Code during the MyMazda App Connected Vehicle enrollment.
- Remote function(s) inoperative.
  - Engine Start / Stop
  - Door Lock / Unlock
  - Lights ON / OFF
- MAZDA CONNECT connected vehicle reception strength icon shows "X" or "\".

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.

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| Indication   | Explanation   |
|--|---|
| Mazda3, CX-30<br>   | Radio waves are not being received.<br>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.   |
|                   | Currently conducting an operation check of the onboard communication unit.<br><b>NOTE:</b> Communication is not possible during this display.   |
| CX-5, CX-9<br>    | The communication function is temporarily disabled due to infotainment system setting.<br>  |
| Mazda3, CX-30<br> | <ul style="list-style-type: none"> <li>• Connected Service contract has ended (Subscription expired)</li> <li>• Customer deactivated Connected Services (Opt-Out)                             <ul style="list-style-type: none"> <li>◦ eMDCS Warranty Vehicle Inquiry will show Campaign <b>CSP04</b> Status Closed</li> </ul> </li> <li>• TCU has not been initialized, go to <a href="#">SA-004/21</a></li> </ul> |
| CX-5, CX-9<br>    |   |

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

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| 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. 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    | 2021 Mazda3 and CX-30: Vehicle's electrical control area network (CAN) is in "Sleep Mode"  |
| 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-012/20</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   | Mazda Remote Engine Start (BCKA-V7-620) accessory installed (No MyMazda app remote engine start function).<br><b>Mazda Remote Engine Start (RES) Removal</b><br>a. Remove the Mazda Remote Engine Start (RES) accessory module.<br>b. Deactivate and activate Advanced Key(s). Refer to MGSS <a href="#">IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [(US)]</a> |
| 23   | First remote control attempt fails, second attempt works fine.<br>Go to TSB <a href="#">16-002/20</a> .  |

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

| Item | Condition              |
|------|------------------------|
| 1    | Vehicle door(s) opened |

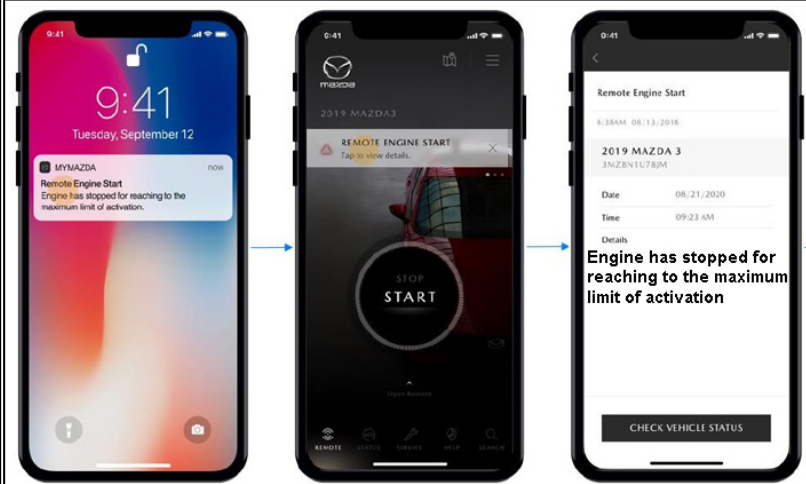
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|   |   |
|---|---|
| 2 | Vehicle trunk opened  |
| 3 | Vehicle hood opened   |
| 4 | Ignition switch push button "ON" detected   |
| 5 | Remote engine STOP request  |
| 6 | Brake pedal switch detects brake application  |
| 7 | DTC Stored  |
| 8 |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

**REPAIR PROCEDURE**

**CAUTION:** DO NOT swap TCU with another vehicle as the TCU is VIN locked after activation. A TCU swap with another vehicle will disable Connected Services on both vehicles.

**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.

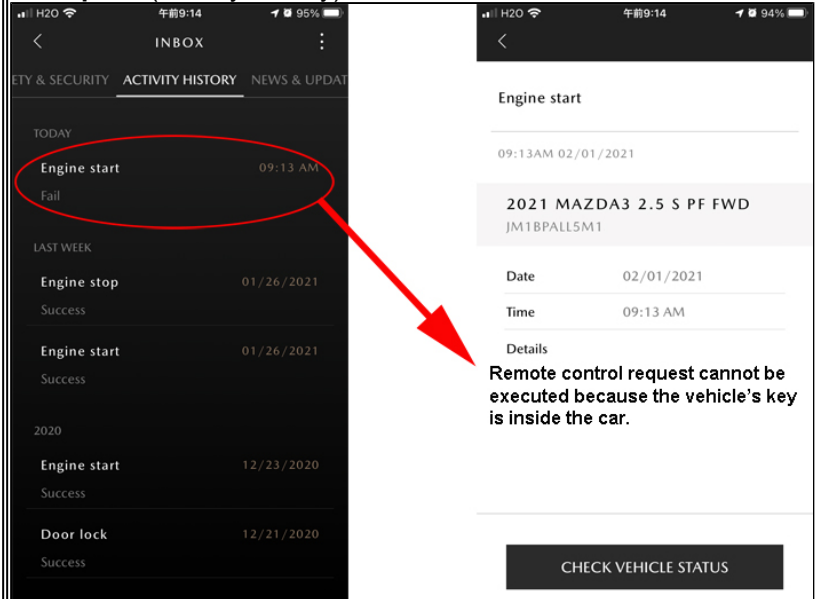
| Customer Complaint  | Action   |
|---|--|
| <p>Remote function(s) inoperative.</p> <ul style="list-style-type: none"> <li>• Engine Start / Stop</li> <li>• Door Lock / Unlock</li> <li>• Lights ON / OFF</li> </ul> | <ol style="list-style-type: none"> <li>1. Go to the MyMazda App INBOX -&gt; ACTIVITY HISTORY -&gt; to view reason for remote function failure.</li> <li>2. If necessary, use MDARS to ID the vehicle and check for DTC's stored.</li> </ol> <p><b>Are DTC(s) stored?</b></p> <ul style="list-style-type: none"> <li>• <b>Yes:</b> Go to MGSS for normal DTC diagnosis..</li> <li>• <b>No:</b> Contact Hotline for technical support if needed.</li> </ul> <p><b>NOTE:</b> The customer can view the reason for remote function failure.</p> <p><b>Example 1 (Push notification)</b></p>  <p style="text-align: center;"> <span data-bbox="703 1682 1007 1720">OS Lock Screen</span> <span data-bbox="1007 1682 1257 1720">Home</span> <span data-bbox="1257 1682 1513 1720">Inbox Detail</span> </p> |

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Tap the push notification

Tap the alert card

Tap "check vehicle status"

**Example 2 (Activity History)**

1. If applicable, confirm SSPC7 or DRW41 is closed. Go to [eMDCS Vehicle Inquiry](#).

2. Confirm TCU software version is at:

- 10020 or later for CX-5 and CX-9
- 10004 or later for CX-30 and Mazda3

Go to [SA-004/21](#) -> TCU Activation -> see **NOTE** after step 12.

Vehicle Center Display does not provide the Authorization Code during the MyMazda App Connected Vehicle enrollment.

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

- **Yes:** Go to step 2.
- **No:** Perform [ODR Data Collection Procedure](#), then go to step 2.

2. Retrieve MAZDA CONNECT CMU log data. Go to MGSS [MAZDA CONNECT CMU Data Retrieval](#)

3. Perform "[Activating Remote Control by Smart Phone](#)" (links TCU to BCM)

4. Clear DTC(s).

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

5. Perform KAM reset.

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

6. Contact Hotline for additional technical support if needed.

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MAZDA CONNECT connected vehicle reception strength icon shows "X" or "\".

Mazda3, CX-30



CX-5, CX-9



1. Did the customer deactivate Connected Services (Opt-Out)?

**NOTE:** If deactivated, eMDCS Warranty Vehicle Inquiry will show Campaign **CSP04** Status Closed.

- **Yes:** No repair needed.
- **No:** Go to next step.

2. Check for DTCs.

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

- **Yes:** Go to MGSS for normal DTC diagnosis.
- **No:** Go to next step.

3. Disconnect battery terminal for 30 seconds, then move the vehicle. **Is the reception strength signal normal?**

- **Yes:** Repair complete.
- **No:** Go to next step.

4. Perform TCU activation. Go to [SA-004/21](#). **Is the reception strength signal normal?**

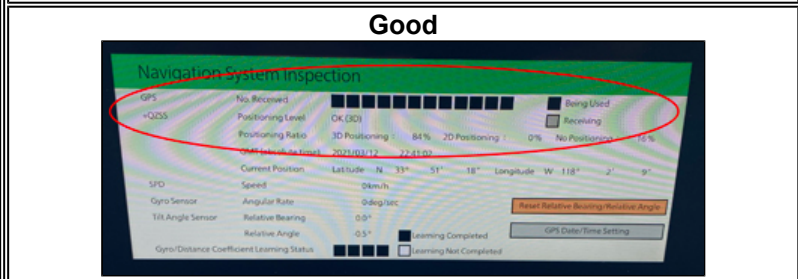
- **Yes:** Repair complete.
- **No:** Go to next step.

5. Compare Tel antenna No. 1 signal strength with good known vehicle near by.

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

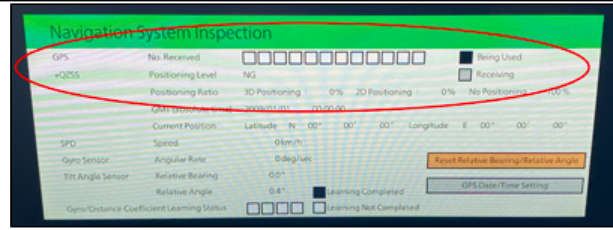
Functional Inspection / Adjustment -> Navigation System Inspection

**Example:**



**No Good**

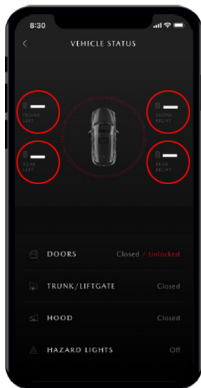
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- **Good:** Contact Hotline for technical support.
- **No Good:** Swap Tel antenna No. 1 with known good vehicle.

Except CX-5 and CX-9:

- MAZDA CONNECT and/or MyMazda APP displays incorrect tire pressures after battery disconnect and/or infotainment CMU software update.



Go to [SA-002/21](#).

2019 Mazda3 only:

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



Go to [CSP07 Repair instructions](#).

2020 Mazda3 only:

Go to [SSPC1](#).

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- 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-30 functions inoperative:

- Vehicle Status Alert
- Remote Engine Start / Stop
- Remote Door Lock / Unlock
- Remote Hazard Lights ON / OFF
- Vehicle Finder (vehicle location mapping function is available)

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



No dealer visit is required. Sleep Mode can be reset by starting the engine and idling or driving for 5 minutes or longer.

See [SA-005/21](#).

First remote control attempt fails, second attempt works fine.

- Engine Start / Stop
- Door Lock / Unlock
- Lights ON / OFF

Go to TSB [16-002/20](#).

Remote Engine Start inoperative due to:

1. Aftermarket Remote Engine Start accessory installed.
2. Mazda Remote Engine Start (BCKA-V7-620) accessory installed.

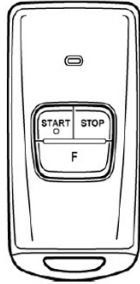
1. Remove the aftermarket accessory.
2. The customer can use either the Mazda Remote Engine Start accessory or the MyMazda app function. Cannot use both.

#### **Mazda Remote Engine Start (RES) Removal**

- a. Remove the Mazda Remote Engine Start (RES) accessory module.
- b. Deactivate and activate Advanced Key(s). Refer to MGSS [IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING \[\(US\)\]](#).

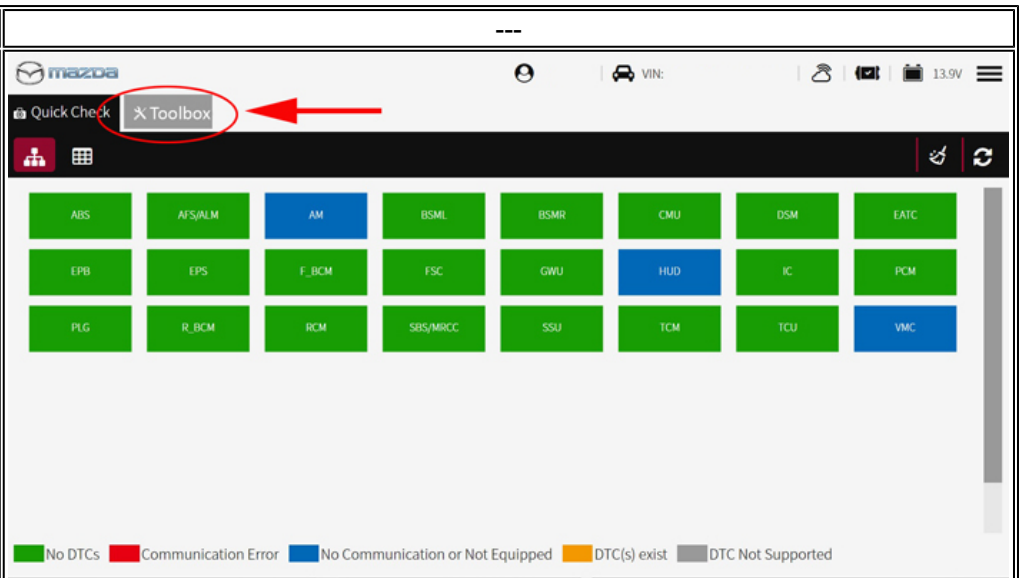
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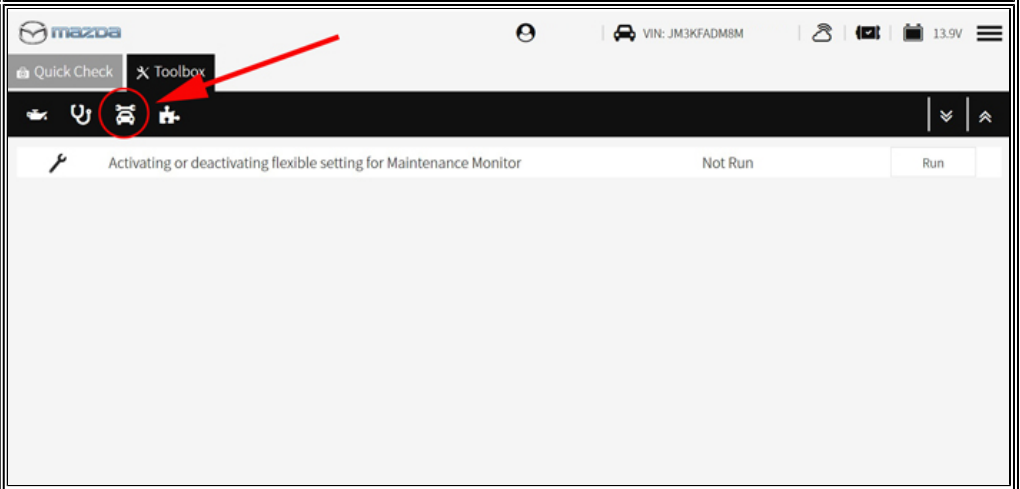
**ODR Data Collection Procedure**

1. ID the vehicle using MDARS



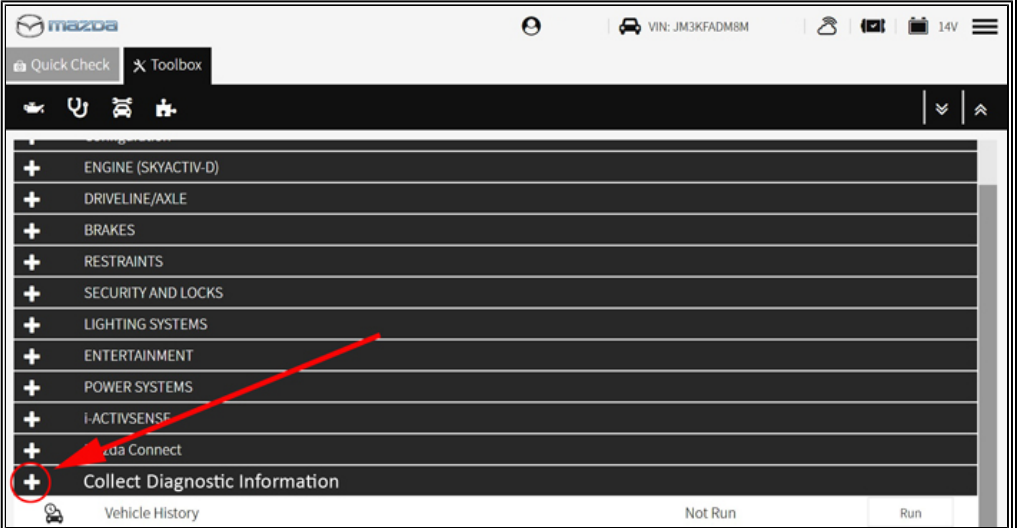
2. Select "Toolbox"

3. Select Vehicle Icon

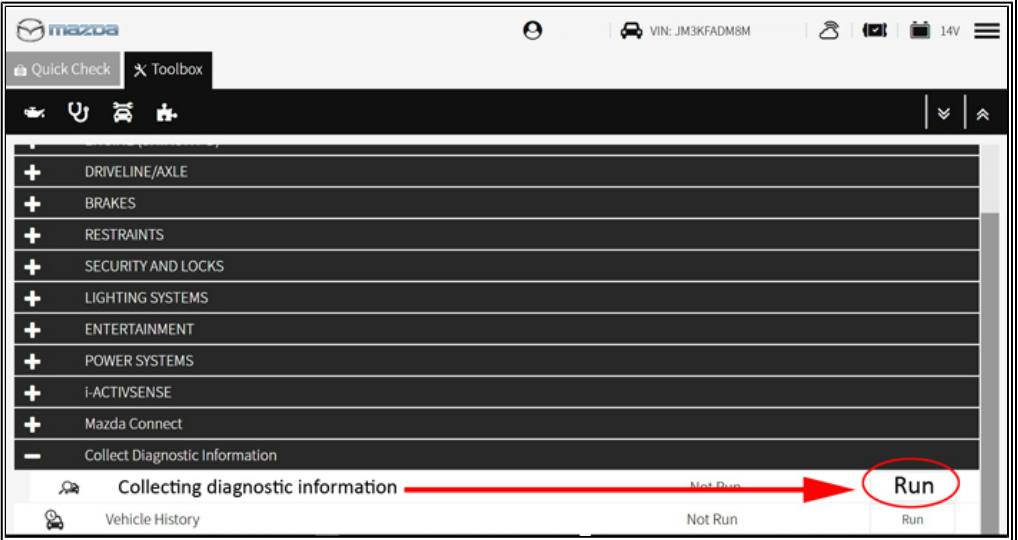


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4. Expand "Collect Diagnostic Information"

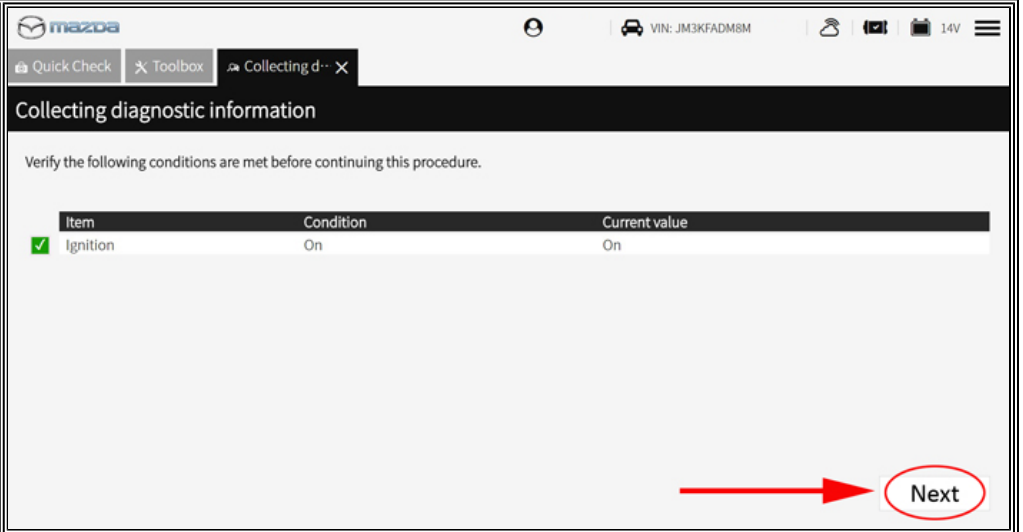


5. Select Collecting diagnostic information "Run".

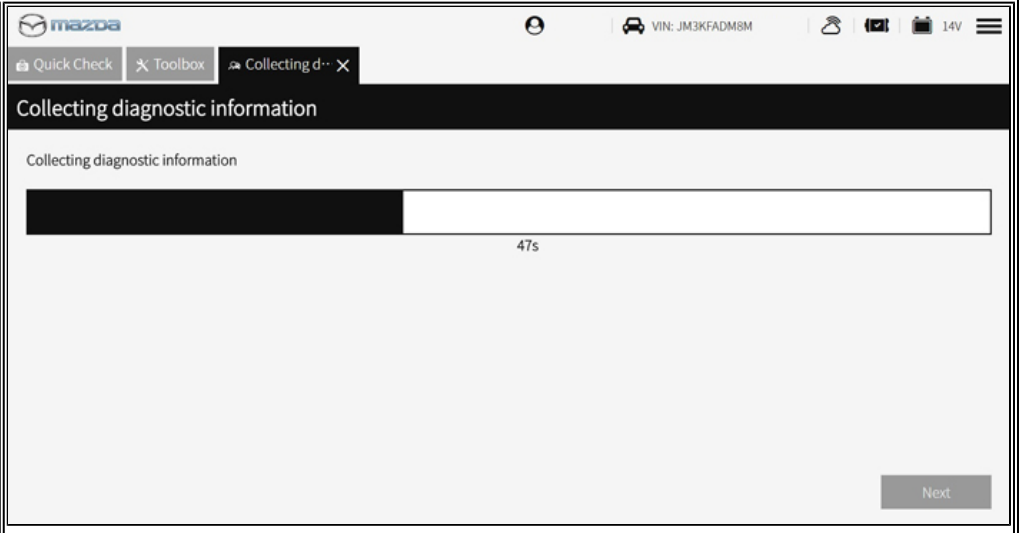


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6. Turn the ignition ON, then select "Next"

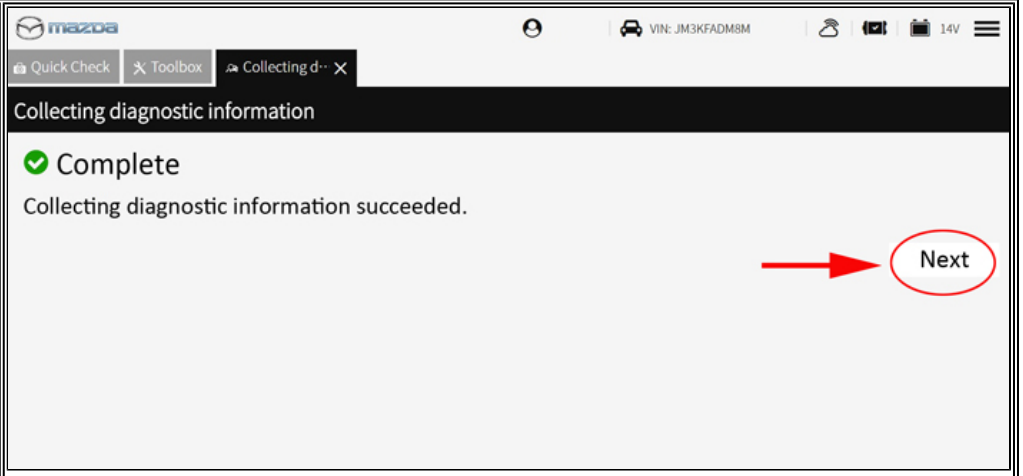


7. Wait for collection to complete.



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8. Confirm that the ODR collection has been successful. Select "Next" to exit.



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**Activating Remote Control by Smart Phone (links TCU to BCM)**

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

1. Connect MDARS.



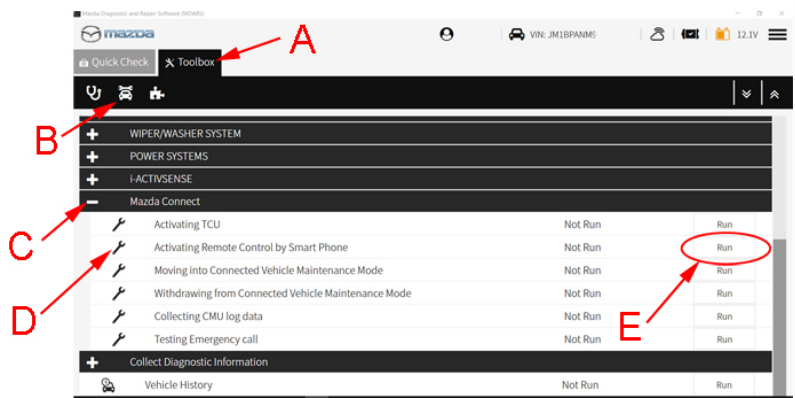
2. Use MDARS to verify if the Telematics Control Unit (TCU) is at the latest software level (Toolbox > Software Update > Run > TCU).

**Is the TCU at the latest software level?**

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

3. Select the following:

- Toolbox
- Repair icon
- MAZDA CONNECT
- Activating Remote Control by Smart Phone
- RUN.

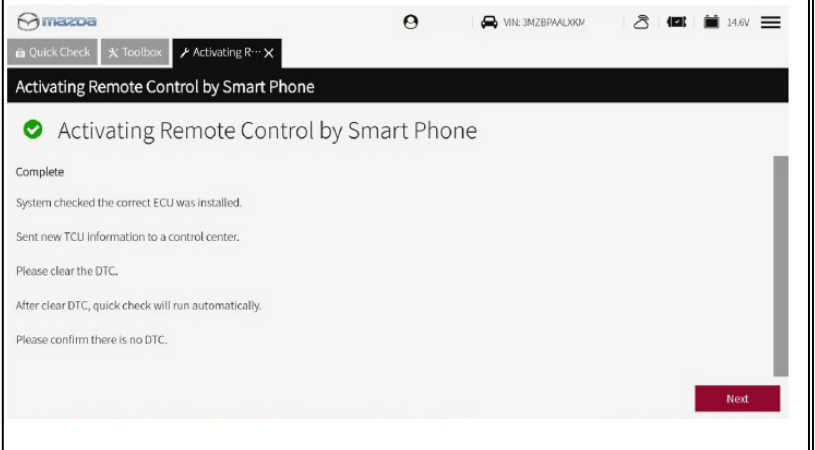
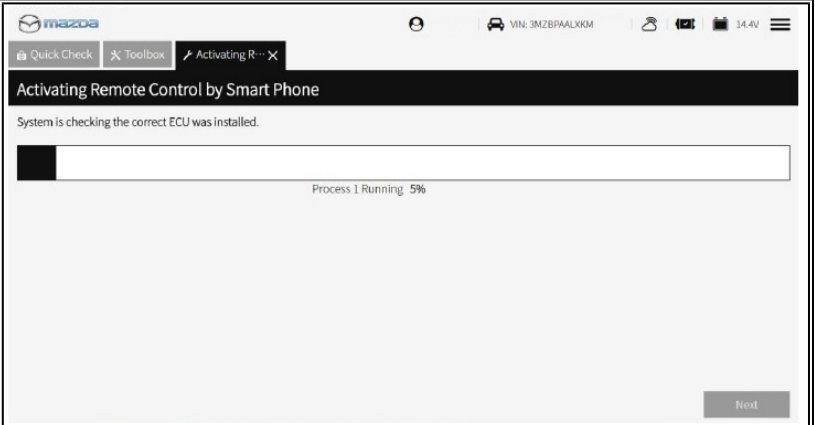


4. Follow the on-screen instructions and wait for process to complete.

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

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- 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.



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