



December 2021

Dealer Service Instructions for:

Safety Recall Y94 / NHTSA 21V-949

Odometer

Remedy Available

2021 (JL) Jeep® Wrangler PHEV

NOTE: Some vehicles above may have been identified as not involved in this recall and therefore have been excluded from this recall.

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The odometer on about 2,900 vehicles, after reaching 13,342 miles will no longer display the magnitude of its sensed characteristic (mileage). The vehicle operator will notice that the odometer value is not displayed. If this warning is not heeded, a missing odometer reading may lead to missed or delayed critical vehicle maintenance. Potential failed components, due to a lack of maintenance, may lead to a vehicle crash without prior warning.

Repair

Update the Instrument Panel Cluster (IPC) software if the vehicle has less than 13,342 miles. Replace the IPC on vehicles with 13,342 miles or more.

Parts Information

NOTE: Cluster replacement is only necessary on vehicle with 13,342 miles or more.

<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
68499481AI	1	Instrument Panel Cluster (U.S. Market)

Parts Return

No parts return required for this campaign.

Special Tools

The following special tools are required to perform this repair:

- NPN wiTECH MicroPod II
- NPN Laptop Computer
- NPN wiTECH Software
- 2035100082 Covers, HEV Battery Terminal
- NPN Digital Multi-meter
- NPN Trim Stick

Service Procedure

A. Read vehicle mileage

Mileage greater or less than 13,342 miles.

- Less than 13,342 miles. Proceed to Section B Reprogram the IPC.
- 13,342 miles or more. Proceed to Section C Replace the IPC.

B. Reprogram the IPC

1. Open the hood and install a battery charger. Verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.

NOTE: Use an accurate stand-alone voltmeter. The battery charger volt meter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.

2. Connect the wiTECH micro pod II to the vehicle data link connector.
3. Place the ignition in the “**RUN**” position.
4. Open the wiTECH 2.0 website.
5. Enter your “**User id**” and “**Password**” and your “**Dealer Code**”, then select “**Sign In**” at the bottom of the screen. Click “**Accept**”.
6. From the “**Vehicle Selection**” screen, select the vehicle to be updated.

Service Procedure [Continued]

7. From the “**Action Items**” screen, select the “**Topology**” tab.
8. From the “**Topology**” tab, select the “**IPC**” icon.
9. From the “**Flash**” tab, compare the “**Current Electronic Control Unit (ECU) Part Number**” with the “**New ECU Part Number**” listed.
 - If the “**Current ECU part Number**” is the same as the “**New Part Number**”, proceed to **Step 14**.
 - If the “**Current ECU part Number**” is NOT the same as the “**New Part Number**”, continue with **Step 10**.
10. From the flash ECU agreement page, agree to terms by checking the box.
11. Select “**Flash ECU**” and then follow the wiTECH screen instructions to complete the flash.
12. Cycle the ignition “**OFF**” then back to “**RUN**” position.
13. Select “**View All DTCs**” then “**Clear All DTCs**” and select “**Close**”.
14. Place the ignition in the “**OFF**” position and then remove the wiTECH micro pod II device from the vehicle.
15. Remove the battery charger from the vehicle.
16. Close the vehicle hood and return the vehicle to the customer.

Service Procedure [Continued]**C. Replace the IPC**

Use wiTECH to obtain the vehicle mileage from PCM. This information is needed to order the replacement IPC.

WARNING: On vehicles equipped with the high voltage system, disconnecting the 12-volt battery negative cable alone will not power down the 12-volt system. You must perform the 12-volt Power Down procedure before proceeding. Failure to follow these instructions may result in possible serious or fatal injury.

NOTE: Cluster replacement is only necessary on vehicle with more the 13,342 miles.

NOTE: Disconnect any charging equipment. Do not plug in the EVSE Recharge Coupler when working on the vehicle.

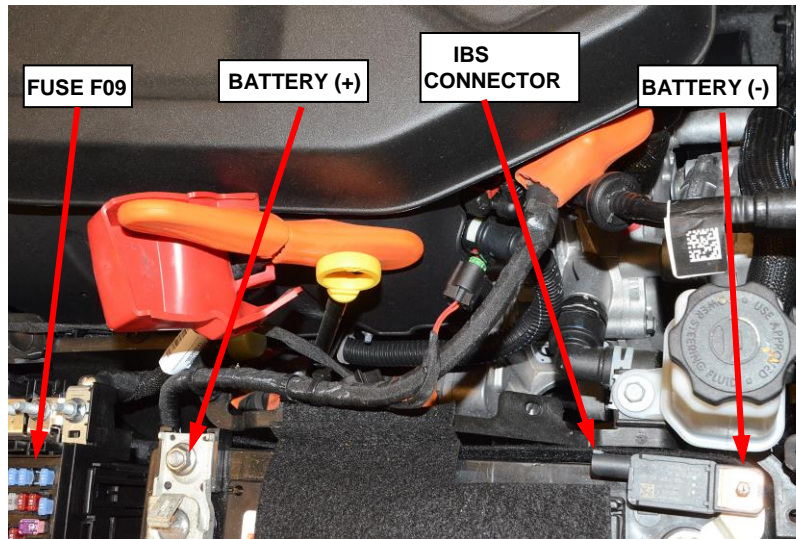
1. Turn the ignition to Off by pressing the stop button (1) and move keys at least 20 feet away from the vehicle. Wait five minutes to allow the high-voltage system to shut down without setting a fault code (Figure 1).



Figure 1 – Ignition Button

Service Procedure [Continued]

2. Remove the nut, disconnect the negative cable from the Intelligent Battery Sensor (IBS) and isolate the cable using covers from the Hybrid Electric Vehicle (HEV) Battery Terminal Kit 2035100082 (Figure 2).

**Figure 2 – Battery Connections**

3. Disconnect the IBS harness connector (Figure 2).
4. Disconnect positive battery cable and isolate the cable using covers from the HEV Battery Terminal Kit 2035100082 (Figure 2).
5. Locate and remove the F09 (5 amp) fuse from the Power Distribution Center (PDC) (Figure 2).

NOTE: This removes the fused B+ power supply to the IDCM. Disabling the IDCM stops the DC/DC conversion between the HV battery and the charging output to the low voltage side of the system.

6. Using a multi-meter, check for voltage at the PDC fused B+ terminal to verify the low voltage system is powered down. The 12-volt electrical system is now powered down. There should be no voltage present with the IDCM disabled and the 12-volt battery disconnected.

Service Procedure [Continued]

7. Using a trim stick, remove the Integrated Center Stack (ICS) trim assembly (Figure 3).



Figure 3 – ICS Trim Assembly

8. Disconnect the wire harness connectors for the Keyless Ignition Node (KIN) (1) and the ICS (2) (Figure 4).



Figure 4 – KIN and ICS Connectors

9. Remove the screws (1) then use a trim stick or equivalent to release the radio bezel (2) and remove (Figure 5).

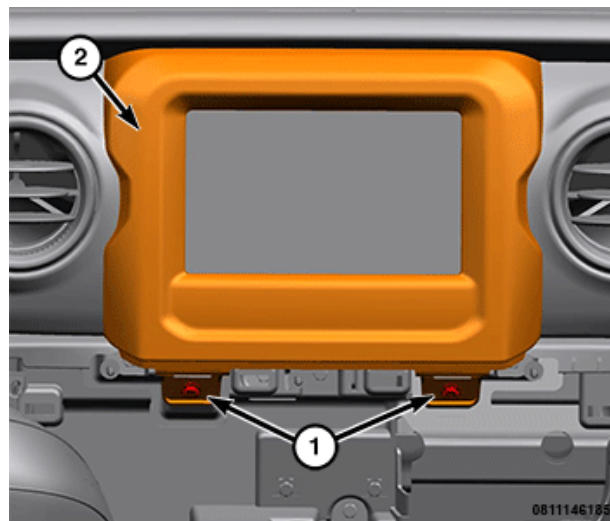
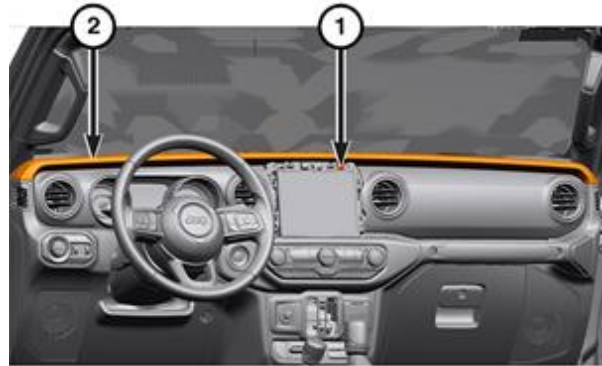


Figure 5 – Radio Bezel

Service Procedure [Continued]

10. Remove the screw (1) then use a trim stick or equivalent to release the retaining clips for the dash pad (2) and pull forward and out. Watch for clips that may stay in the instrument panel (Figure 6).

**Figure 6 – Dash Pad**

11. Remove the four screws (1) along the top of bezel (Figure 7).
12. Using a trim stick or equivalent, disengage bezel (2) from lower retaining clips and remove (Figure 7).

**Figure 7 – IPC Bezel Screws**

Service Procedure [Continued]

13. Using a trim stick, separate the steering column opening cover (1) from the IP and remove (Figure 8).



Figure 8 – Steering Column Opening Cover

14. Remove the lower gap hider screws (Figure 9).

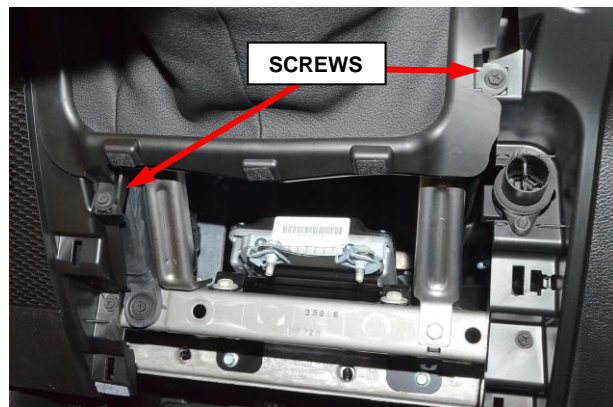


Figure 9 – Steering Column Gap Hider Screws

15. Using a trim stick or equivalent disengage gap hider retaining clips and position it to allow access to lower IPC fasteners (Figure 10).

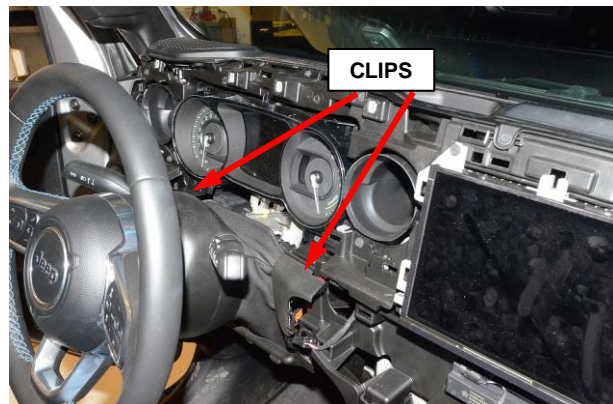


Figure 10 – Steering Column Gap Hider Clips

Service Procedure [Continued]

16. Remove the instrument cluster fasteners (Figure 11).

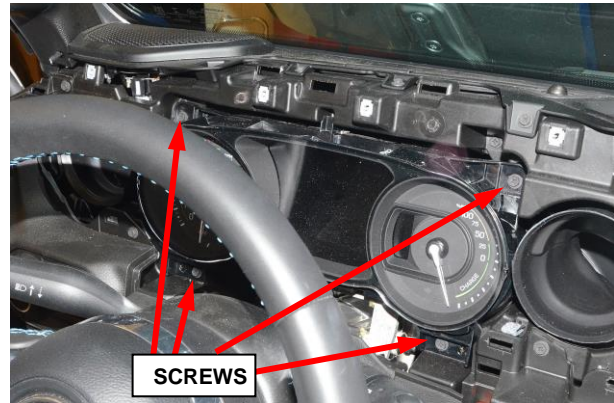


Figure 11 – IPC Fasteners

17. Pull the top of the instrument cluster rearward far enough to access and disconnect the instrument panel wire harness connectors from the back of the cluster housing (Figure 12).
18. Remove the instrument cluster from the instrument panel.

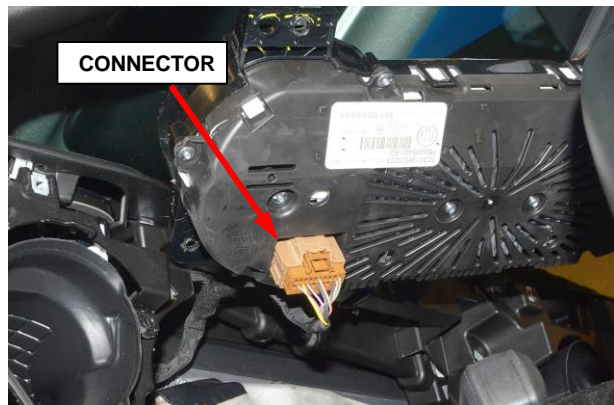


Figure 12 – IPC Electrical Connector

Service Procedure [Continued]

19. Position the instrument cluster close enough to the instrument panel and connect the wire harness connectors to the back of the cluster housing (Figure 12).
20. Place the IPC in position and install and securely tighten the instrument cluster fasteners (Figure 11).
21. Align the gap hider and engage the retaining clips into the instrument panel (Figure 10).
22. Install the lower gap hider screws and tighten securely (Figure 9).
23. Position the steering column opening cover to the IP and seat the retaining clips fully (Figure 8).
24. Position the instrument cluster bezel (2) and hand tap to engage the retaining clips (Figure 7).
25. Install the screws (1) along top of bezel and tighten securely (Figure 7).
26. Position dash pad (2) to the instrument panel and engage the retaining clips (Figure 6).
27. Install the screw (1) and tighten it securely (Figure 6).
28. Position radio bezel (2) into place and install the screws (1) and tighten securely (Figure 5).
29. Connect the wire harness connectors for the Keyless Ignition Node (KIN) (1) and the ICS (2) (Figure 4).
30. Position the ICS and upper instrument panel center trim to the instrument panel and seat the retaining clips. Be certain the clips are fully engaged (Figure 3).
31. Install the F09 (5 amp) IDCM fuse in the Power Distribution Center (PDC) (Figure 2).
32. Remove the cover, connect the Positive battery cable and tighten the fastener to 8 N·m (71 in. lbs.) (Figure 2).

Service Procedure [Continued]

33. Connect the IBS harness connector (Figure 2).
34. Remove the cover, connect the negative battery cable to the IBS and tighten the fastener to 10 N·m (7 ft. lbs.) (Figure 2).
35. Connect the wiTECH micro pod II to the vehicle data link connector.
36. Place the ignition in the “**RUN**” position.
37. Open the wiTECH 2.0 website.
38. Enter your “**User id**” and “**Password**” and your “**Dealer Code**”, then select “**Sign In**” at the bottom of the screen. Click “**Accept**”.
39. From the “**Vehicle Selection**” screen, select the vehicle to be updated.
40. From the “**Action Items**” screen, select the “**Topology**” tab.
41. From the “**Topology**” screen, select the “**All DTCs**” tab to view the DTCs.
42. Select “**Clear All DTCs**” and then select “**Close**”.
43. Place the ignition in the “**OFF**” position and then remove the wiTECH micro pod II device from the vehicle.
44. Close the vehicle hood and return the vehicle to the customer.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims paid will be used by FCA to record recall service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

	Labor Operation Number	Time Allowance
Inspect IPC software level	18-Y9-41-81	0.2 hours
Inspect and Reprogram IPC	18-Y9-41-82	0.6 hours
Inspect and Replace IPC	18-Y9-41-83	0.6 hours

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations
FCA US LLC