

# Service Bulletin

20-042

Version 4

## Safety Recall: 2019-20 Insight Fuel Pump Motor

Supersedes 20-042, dated July 30, 2021, to revise the information highlighted in yellow

#### **AFFECTED VEHICLES**

September 30, 2022

Year	Model	Trim Level	VIN Range
2019-20	Insight	ALL	Check the iN VIN status for eligibility.

#### **REVISION SUMMARY**

Under REPAIR PROCEDURE, step 10.4 was revised.

#### **BACKGROUND**

Due to swelling of the fuel pump motor impeller, the fuel pump may seize and stop working. If this occurs, the engine may not start, or the engine could stall while driving, increasing the risk of a crash.

#### **CUSTOMER NOTIFICATION**

Owners of affected vehicles will be sent a notification of this campaign.

Do an iN VIN status inquiry to make sure the vehicle is shown as eligible.

Some vehicles affected by this campaign may be in your new or used vehicle inventory.

Failure to repair a vehicle subject to a recall or campaign may subject your dealership to claims or lawsuits from the customer or anyone else harmed as a result of such failure. To see if a vehicle in inventory is affected by this safety recall, do a VIN status inquiry before selling it.

#### **CORRECTIVE ACTION**

Replace the fuel pump motor.

**CUSTOMER INFORMATION:** The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

## **PARTS INFORMATION**

NOTE: Due to limited supply, this will be a controlled part and will require a valid VIN when ordering.

Part Name	Part Number	Quantity
Fuel Pump Motor Kit	06170-TXM-305	1

For dealers experiencing a strong fuel smell from storing a fuel pump motor replaced under this service bulletin, the fuel pump motor may be disposed of immediately in accordance with local regulations. This only applies to the fuel pump motor replaced under this service bulletin. The published retention policy remains in effect for all other parts. If you have any questions about this exception or other parts retention issues, contact the WPI Administrative Office at 937-642-2737.

#### **TOOL INFORMATION**

Part Name	Tool Number	Quantity
Fuel Sender Wrench	070AA-TLA0100	1

#### **WARRANTY CLAIM INFORMATION**

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
3101HK	Replace the fuel pump motor.	1.1 hr	6FE00	W7F00	A20042A	17045-TXM-A00

#### **REPAIR PROCEDURE**

## **A WARNING**

Fuel pump motor removal exposes fuel, which can ignite, causing a fire or explosion.

This can cause serious injury or death.

Always work in a well-ventilated area and keep sparks or open flames away.

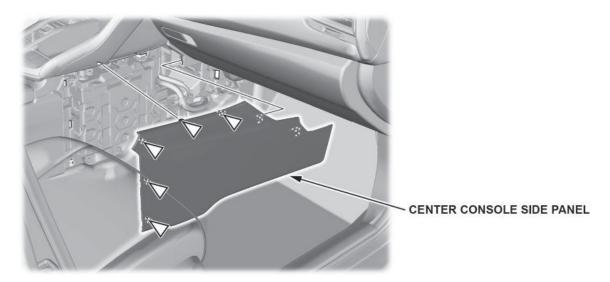
- 1. Relieve the fuel pressure.
  - 1.1. Remove the fuel fill cap to relieve the pressure in the fuel tank.
  - 1.2. Connect an i-HDS to the vehicle.
  - 1.3. Turn the ignition to ON.
  - 1.4. Select **PGM-FI** system on the i-HDS.
  - 1.5. Select FUEL PUMP OFF from the Function Test menu.
  - 1.6. When prompted, enter the maintenance mode.

NOTE: Do the following procedure within 60 seconds to start the engine in the maintenance mode.

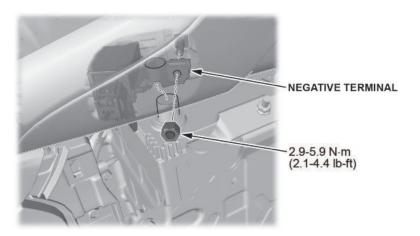
- While in the P position, press the accelerator pedal to the floor twice, then release it.
- Press the brake pedal and shift the transmission to the N position, then press the accelerator pedal to the floor twice, then release it.
- Press the brake pedal, and shift the transmission to the P position, then press the accelerator pedal to the floor twice, then release it.
- Press the engine start/stop button while pressing down on the brake pedal. The vehicle is now in the maintenance mode and the engine will start.
- Maintenance Mode will be displayed on the MID.
- 1.7. Follow the i-HDS screen prompts to stall the engine.
- 1.8. When the engine stalls, immediately turn the ignition to OFF.

- The engine may start again momentarily and stall if you do not turn the ignition to OFF.
- Do not turn the ignition to ON after turning if OFF.

- 2. Disconnect the 12-volt battery negative terminal.
  - 2.1. Remove the center console side panel.



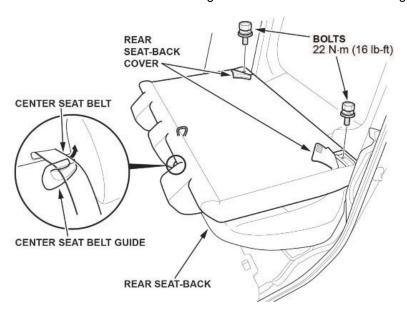
2.2. Disconnect the 12-volt battery negative terminal.



3. Remove the rear seat-back.

## Rear Seat-Back (Fold-Down Seat)

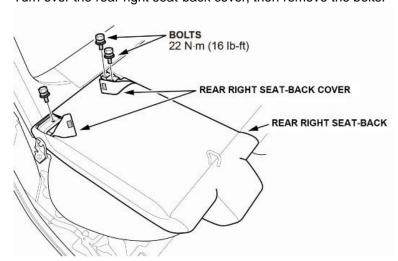
3.1. Pull out the center seat belt through the slit in the center seat belt guide.



- 3.2. Fold down the rear seat-back.
- 3.3. Turn over the rear seat-back cover, then remove the bolts.
- 3.4. Remove the rear seat-back.

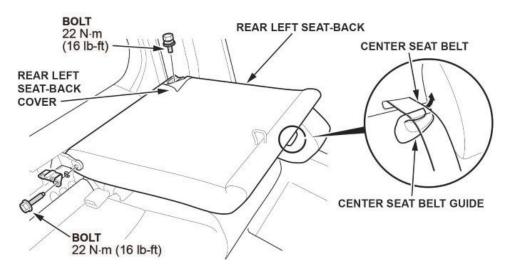
## Rear Seat-Back (Split Fold-Down Seat)

- 3.1. Fold down the rear right seat-back.
- 3.2. Turn over the rear right seat-back cover, then remove the bolts.

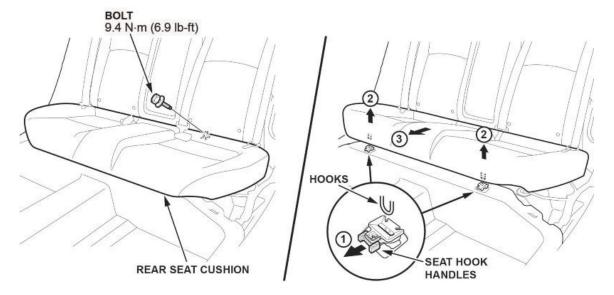


3.3. Remove the rear right seat-back.

3.4. Pull out the center seat belt through the slit in the center seat belt guide.

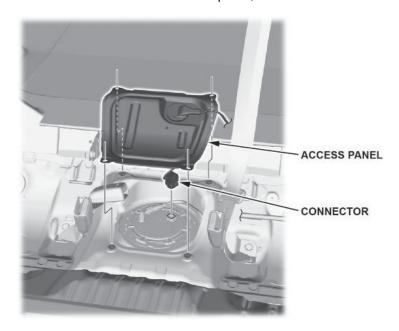


- 3.5. Fold down the rear left seat-back.
- 3.6. Turn over the rear left seat-back cover, then remove the bolts.
- 3.7. Remove the rear left seat-back.
- 4. Remove the rear seat cushion.
  - 4.1. Remove the bolt.

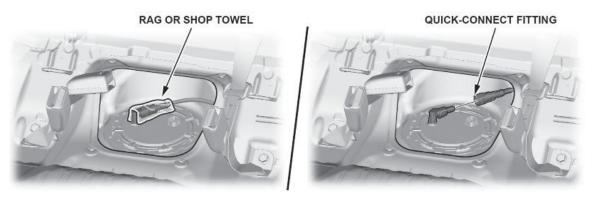


- 4.2. While pushing down on the seat cushion, pull the seat hook handles to release the hooks.
- 4.3. Remove the rear seat cushion.

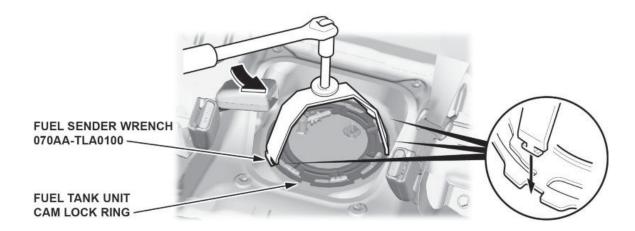
5. Remove the fuel tank unit access panel, and disconnect the connector.



6. Place a rag or shop towel over the quick-connect fitting, and disconnect it.



- 7. Unlock the fuel tank unit cam lock ring using the fuel sender wrench (070AA-TLA0100).
  - 7.1. Set the fuel sender wrench as shown.



7.2. Turn the fuel tank unit cam lock ring counterclockwise.

## NOTE:

- After unlocking the fuel tank unit cam lock ring, clean the top of the fuel pump flange and adjacent areas to make sure it's free of dirt, dust, and debris.
- Keep the fuel sender wrench from floating
- 8. Remove the fuel tank unit.

NOTE: Make sure not to bend or twist the fuel level sensor arm excessively.

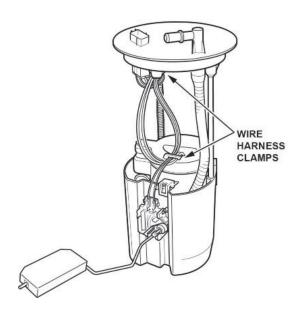


- 9. Disassemble the fuel tank unit.
  - 9.1. Prepare the fuel pump and parts to be replaced.

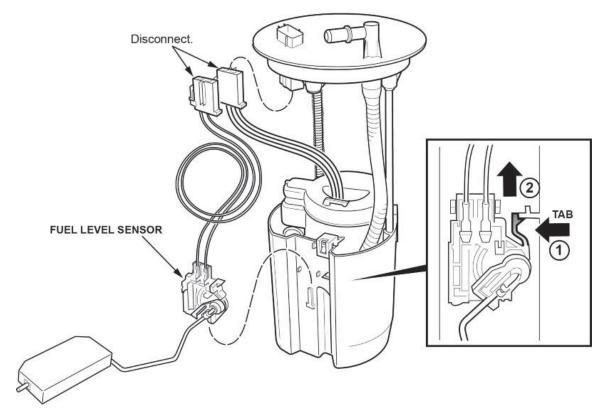
NOTE: Take a photo of the fuel tube and wire harness, and note their routing for assembly. There are various types of routing.

9.2. Spread the wire harness clamps, and remove the wire harness.

- Make sure not to damage the wire harness.
- Do not spread the clamps too wide. Spreading the clamps too wide may damage them.

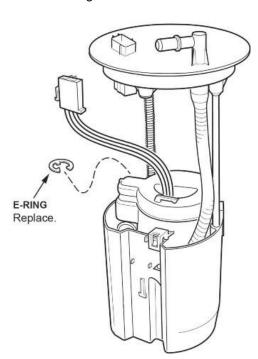


- 9.3. Remove the fuel level sensor.
  - Disconnect the harnesses.



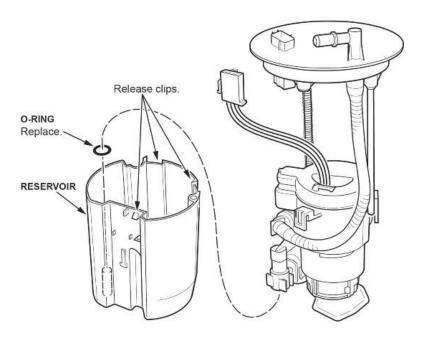
- Press the tab to release the lock (1). Then, push up on the fuel gauge sending unit (2).
- Remove the fuel level sensor from the fuel tank unit.
- 9.4. Remove the E-ring, and throw it away. Do not use it again.



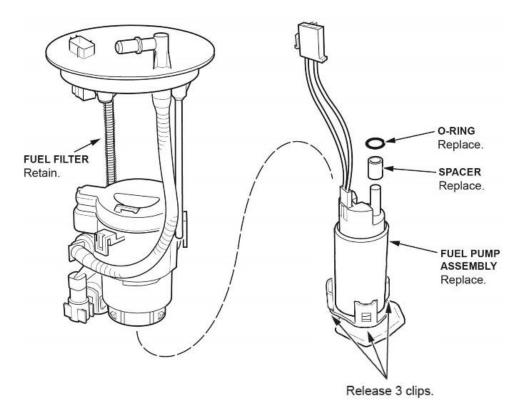


9.5. Remove the fuel filter assembly from the reservoir by releasing the three clips.

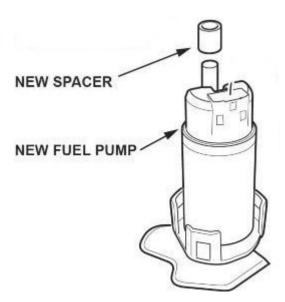
- Do not spread the clips too wide. Spreading them too wide may damage them.
- If the O-ring remains on the fuel filter, use a flat-tip screwdriver wrapped in protective tape to remove it. Take care not to damage the O-ring seat section.
- The spring may slide off the sliding shaft. Retain this spring. It will be used during assembly.



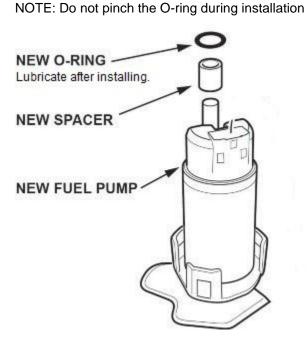
- 9.6. Remove the fuel pump assembly from the fuel filter.
  - Release the three clips at the base of the fuel pump assembly.
  - Pull the fuel pump assembly out of the fuel filter.
  - If the O-ring remains on the fuel filter, use a flat-tip screwdriver wrapped in protective tape to remove it. Make sure not to damage the O-ring seat section.



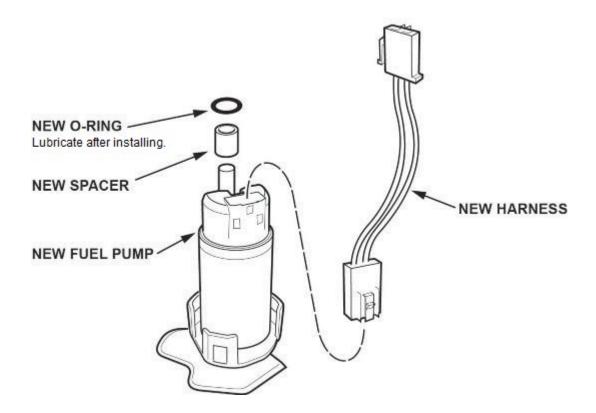
- 10. Assemble the fuel tank unit.
  - 10.1. Install the new spacer on the new fuel pump motor.



10.2. Install the new O-ring, then lubricate the outside edge of it, using only clean engine oil.



10.3. Install the new harness and make sure the connection is secure and the connectors are firmly locked into place.



- 10.4. Install the fuel pump into the fuel filter.
  - Be careful inserting the suction filter so it does not break. Use the palm of your hand to push in the entire surface of the suction filter into the module.
  - After installing the fuel pump to the strainer, move the lock part of the suction filter back and forth to make sure there is no rattling.
  - If installation with a single push is not accompanied by a click, remove all parts, reset the O-ring, then assemble again.
  - The O-ring cannot be reused once assembled. Replace it with a new one, then reassemble.
  - Take care that the flange does not hit other items because this may lead to a fuel leak.





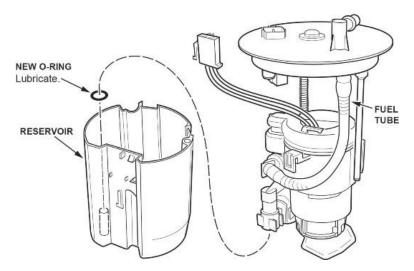


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- 10.5. Install the fuel filter assembly to the reservoir.
  - Insert the spring to the sliding shaft and make sure it is aligned when installing the fuel filter.

#### NOTE:

- Make sure the fuel tube is routed **exactly** as shown in the photo taken before disassembly.
- · Make sure the three clips are fully engaged.



## 10.6. Install the new E-ring.

NOTE: After installation, make sure the E-ring can be rotated with your finger. If it cannot be rotated, the E-ring may not be fully seated or may be incorrectly installed.

10.7. Install the fuel level sensor to the reservoir. Make sure the lock is engaged.

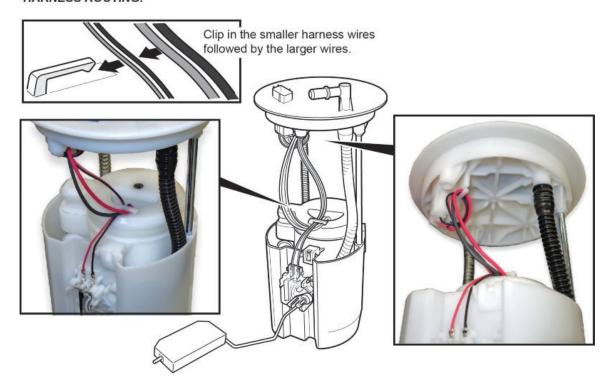
NOTE: When installing the fuel level sensor, make sure the connection is secure and the connector is firmly locked into place. Be careful not to bend or twist it excessively.

10.8. Install the wiring harness to the clamps.

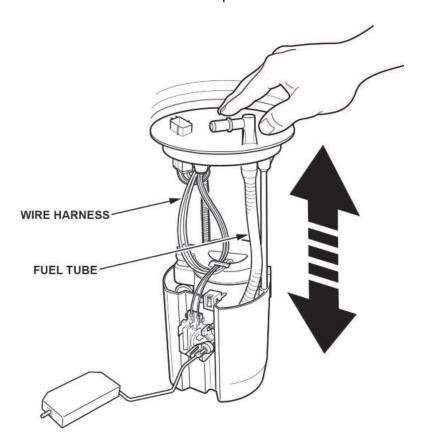
## NOTE:

- Clip in the smaller harness wires followed by the larger wires.
- Make sure not to damage the wire harness.
- Make sure the wire harness is routed **exactly** as shown in the photo taken before disassembly.
- Do not spread the clamps too wide. Spreading them too wide may damage them.

## HARNESS ROUTING:



- 10.9. While compressing the fuel tank unit, make sure the movement is smooth and the fuel tube and wiring harness do not pinch or bind.
  - Make sure the wire harness is not stretched.
  - Make sure the fuel tube is not pinched.



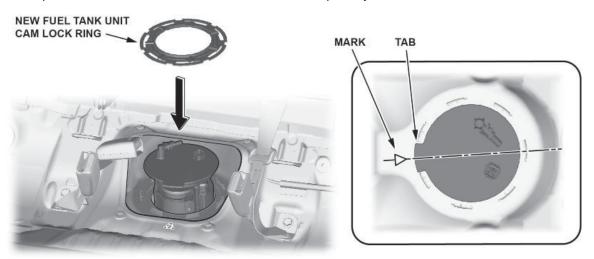
- 11. Install the fuel tank unit.
  - 11.1. Partially insert the fuel tank unit into the fuel tank with a new O-ring.

## NOTE:

- Before installing the new O-ring, clean the fuel tank around the fuel pump opening where the O-ring will seat. The tank opening must be free of dirt, dust, and debris.
- Be careful not to damage the new O-ring.
- Do not coat the O-ring with any oil.



11.2. Line up the tab of the fuel tank unit as shown, and temporarily insert the new fuel tank unit cam lock ring.



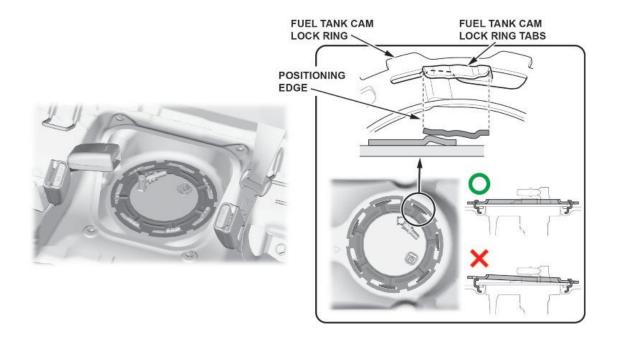
12. Lock the fuel tank unit cam lock ring.

NOTICE

If the cam lock ring is not properly installed, the fuel tank can be damaged and will require replacement.

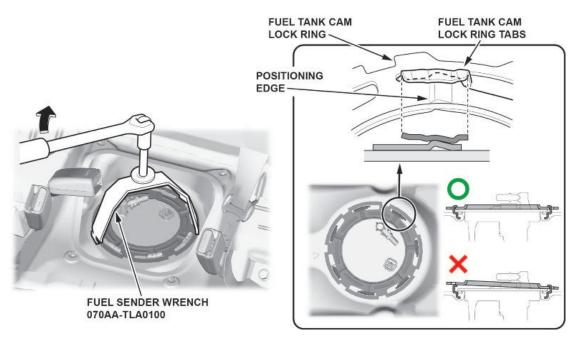
12.1. Rotate the fuel tank unit cam lock ring, and slide the fuel tank unit cam lock tabs to the positioning edge as shown, by hand.

NOTE: Make sure the fuel tank unit cam lock ring is not floating.



12.2. Turn the fuel tank unit cam lock ring clockwise using the fuel sender wrench.

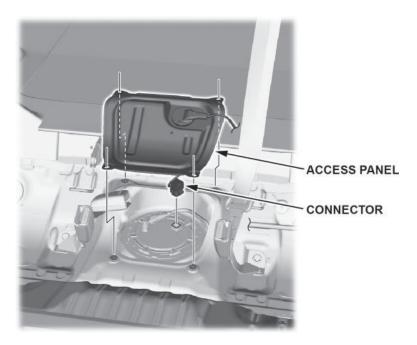
- Keep the fuel sender wrench from floating.
- Securely set the positioning edge of the fuel tank at the fuel tank unit cam lock ring tabs on the fuel tank unit cam lock ring as shown.



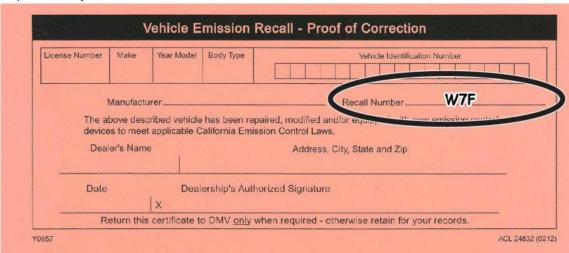
- 13. Install the new retainer to the quick-connect fitting.
- 14. Connect the fuel line quick-connect fitting.



15. Connect the fuel tank unit connector.



- 16. Check for fuel leaks.
  - 16.1. Turn the ignition to ON, but do not turn to the READY TO DRIVE mode. After the fuel pump runs for about **2 seconds**, the fuel line will be pressurized. Repeat this two or three times, then make sure there is no fuel leakage.
- 17. Install the fuel tank unit access panel.
- 18. Install the remaining parts in the reverse order of removal.
- 19. Clear all DTCs using an i-HDS.
- 20. Do the VSA Sensor Neutral Position Memorization procedure.
- 21. California residents only: Fill out a Vehicle Emissions Recall Proof of Correction certificate, and use **W7F** as the recall number. Have the service advisor give the certificate to your customer, and advise him or her to keep it as proof that the recall was completed. Your customer will need to submit this certificate to the DMV only if the DMV requests it. If you need more certificates, use reorder number **Y0657**.



**END**