

20-026

# September 30, 2022

Version 5

# Safety Recall: 2019 RDX Fuel Pump Motor

Supersedes 20-026, dated August 6, 2021, to revise the information highlighted in yellow.

#### **AFFECTED VEHICLES**

Year	Model	Trim Level	VIN Range
2019	RDX	ALL	Check the iN VIN status for eligibility.

#### **REVISION SUMMARY**

Under REPAIR PROCEDURE, step 16.4 was revised and an image was added.

#### 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.

#### **CLIENT 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 client 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.

**CLIENT 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 Acura automobile dealer.

#### PARTS INFORMATION

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

Part Name	Part Number	Quantity
Fuel Pump Motor Kit	06170-TJB-306	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.	1.2 hr	6FE00	S7D00	B20026A	17045-TJB-A03

# **REPAIR PROCEDURE**

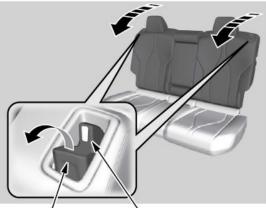
# A WARNING

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

This can cause serious injury or death.

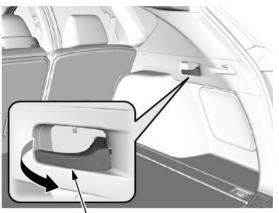
Always work in a well-ventilated area and keep sparks or open flames away.

1. Fold down the passenger-rear seat back.

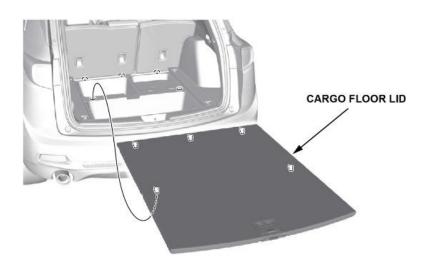


RELEASE LEVER RED TAB

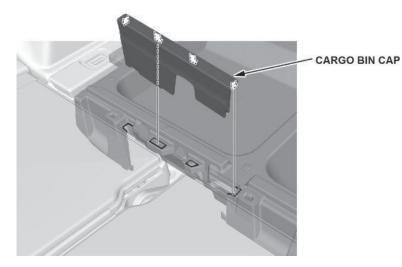
2. Remove the cargo floor lid.



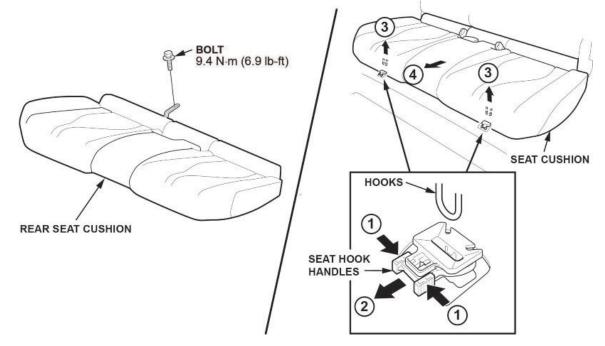
LEVER



3. Remove the cargo bin cap.

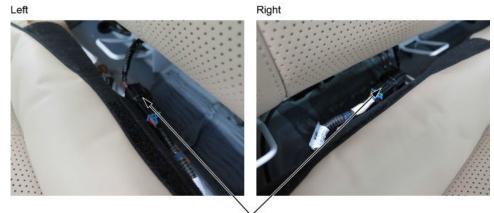


- 4. Remove the rear seat cushion.
  - 4.1. Remove the bolt.



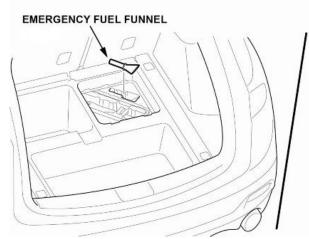
- 4.2. Fold up the passenger-rear seat back to the upright position.
- 4.3. While pushing down on the rear seat cushion, pull the seat hook handles to release the hooks.
- 4.4. Pull back the seat cushion to pull off the seat belt buckles from the slits in the seat cushion.

4.5. With rear seat heaters: Disconnect the connectors.



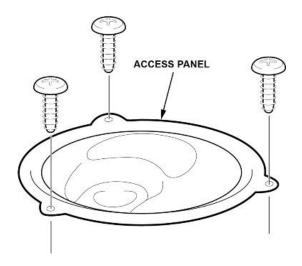


- 4.6. Remove the rear seat cushion.
- Insert the emergency fuel funnel into the fuel filler neck to relieve the pressure in the fuel tank.
  NOTE: The emergency fuel funnel is in the cargo tool box.

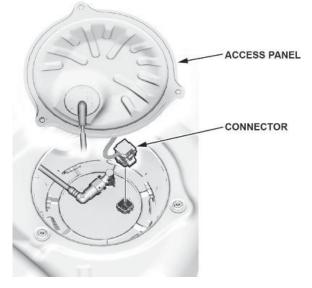




6. Remove the fuel tank unit access panel.

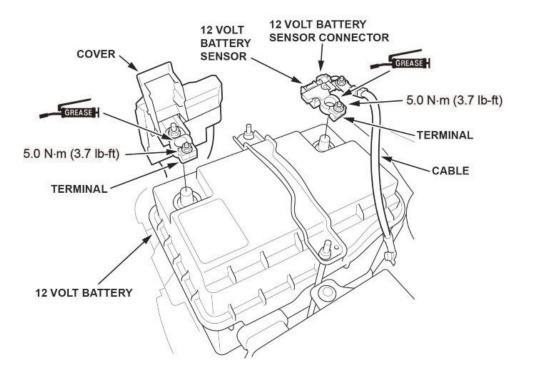


## 7. Disconnect the fuel tank unit connector.

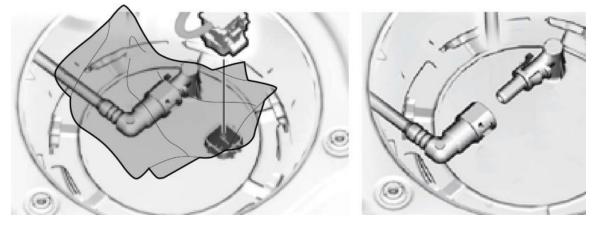


- 8. Start the engine, and let it idle until it stalls.
- 9. Turn the ignition to OFF.
- 10. Disconnect the 12-volt battery terminals.
  - 10.1. Make sure the ignition is turned to OFF.
  - 10.2. Disconnect and isolate the 12-volt battery sensor with the cable attached, from the 12-volt battery.

- Always disconnect the negative terminal first.
- To protect the terminal connector from damage, do not hold it when removing the terminal.
- Do not disconnect the 12-volt battery sensor from the cable.

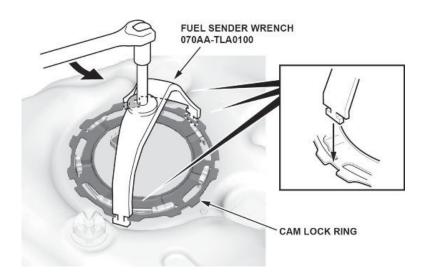


- 10.3. Open the cover. If necessary, remove the cover.
- 10.4. Disconnect the positive terminal from the 12-volt battery.
- 11. Place a rag or shop towel over the quick-connect fitting, and disconnect it.



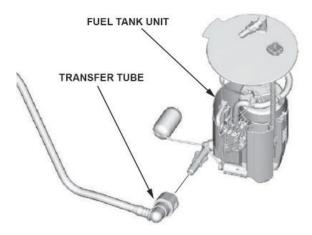
12. Remove the fuel tank unit cam lock ring using the fuel sender wrench (T/N 070AA-TLA0100).

- 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.

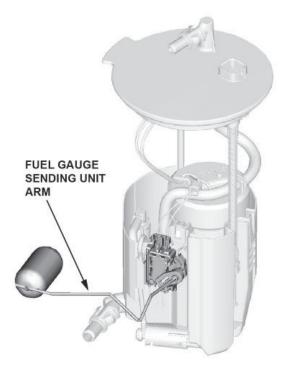


13. Slightly pull up and tilt the fuel tank unit, then disconnect the transfer tube.

NOTE: The gasoline in the fuel tank unit will drain out once the transfer tube is disconnected. Make sure it pours back into the tank.



- 14. Remove the fuel tank unit.
  - NOTE: Be careful not to bend or twist the fuel gauge sending unit arm excessively.

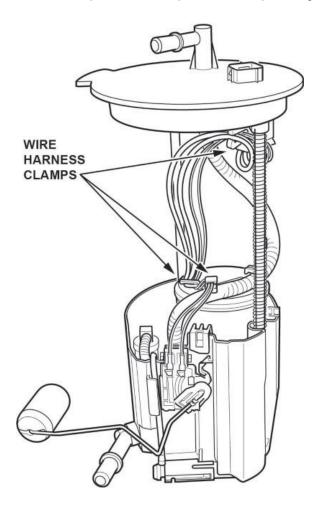


- 15. Disassemble the fuel tank unit.
  - 15.1. Prepare the fuel pump and parts to be replaced.

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

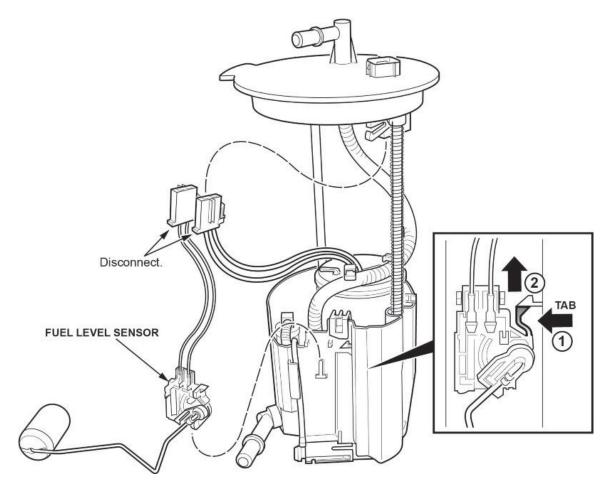
15.2. Spread the wire harness clamps, and remove the wire harness.

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



15.3. Remove the fuel level sensor.

• Disconnect the harnesses.

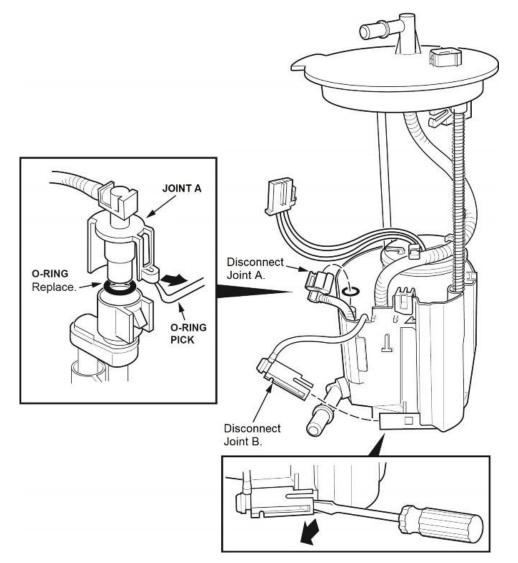


- Press the tab to release the lock (1). Then, push up on the fuel gauge sending unit (2).
- Remove the fuel level sensor from the fuel tank unit.

15.4. Remove the E-rings, and throw them away. Do not use them again.

15.5. Use an O-ring pick to disconnect Joint A inside the reservoir.

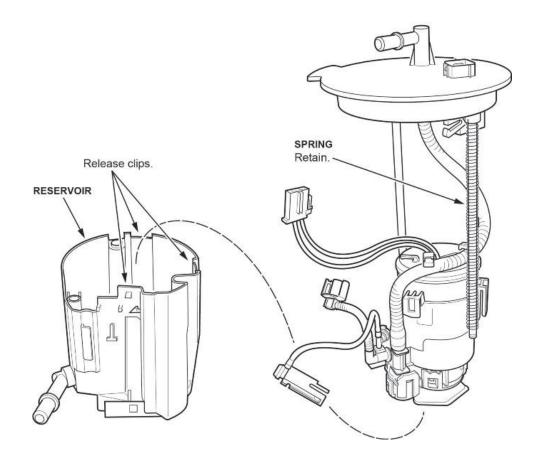
NOTE: If the O-ring remains inside the joint, use a flathead screwdriver wrapped in protective tape to remove it. Take care not to damage the O-ring seat section.



15.6. Disconnect Joint B from the bottom of the reservoir.

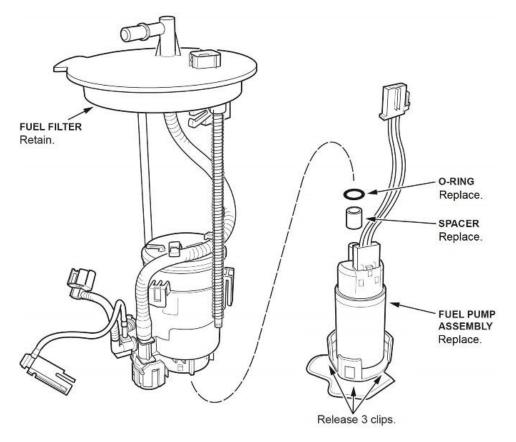
15.7. Remove the fuel filter assembly from the reservoir by releasing the three clips.

- Do not spread the clips too wide. Spreading them too wide may damage them.
- The spring may slide off the sliding shaft. Retain this spring. It will be used during assembly.

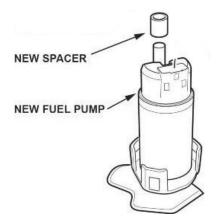


15.8. Remove the fuel pump assembly from the fuel filter.

- 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. Take care not to damage the O-ring seat section.

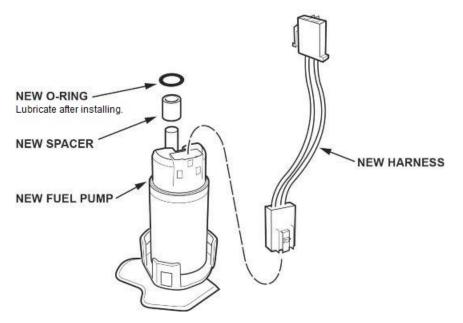


- 16. Assemble the fuel tank unit.
  - 16.1. Install the new spacer on the new fuel pump motor.



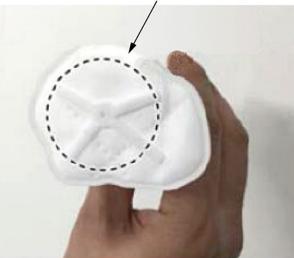
16.2. Install the new O-ring, then lubricate the outside edge of it, using only clean engine oil.

NOTE: Do not pinch the O-ring during installation.



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

- 16.4. Install the fuel pump into the fuel filter.
  - Be careful inserting the suction filter so it doesn't 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 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 it again.
  - The O-ring cannot be reused once assembled. Replace it with a new one, then reassemble.
  - Be careful that the flange does not hit any other items because this may lead to a fuel leak.





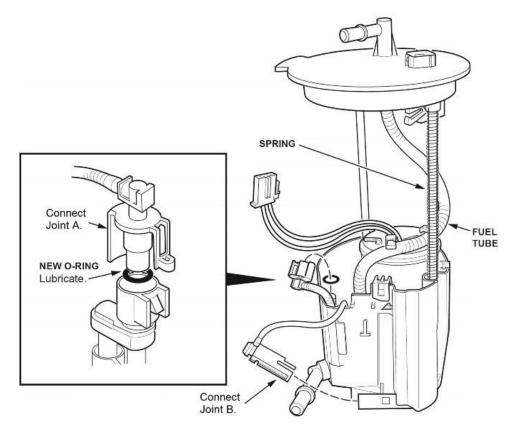


16.5. Install the fuel filter assembly to the reservoir.

- Install a new O-ring on Joint A before connecting it.
- Coat the O-ring with clean engine oil; do not use any other oil or fluid.
- Do not pinch the O-ring during installation.
- 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.



- 16.6. Connect joint B.
- 16.7. Install the new E-rings.

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

16.8. 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.

16.9. Install the wiring harness to the clamps.

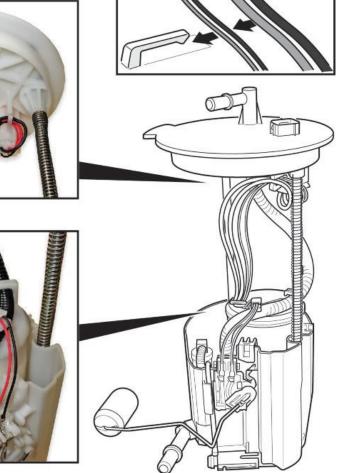
NOTE:

- 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 picture taken before disassembly.
- Do not spread the clamps too wide. Spreading them too wide may damage them.

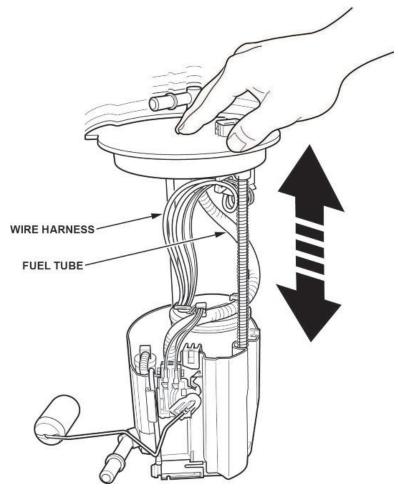
HARNESS ROUTING:



Clip in the smaller harness wires followed by the larger wires.



- 16.10. 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.



17. Install a new O-ring onto the fuel tank unit.

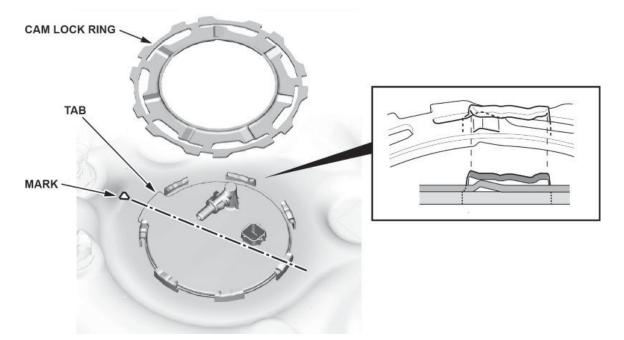
- Before installing the new O-ring, clean the fuel tank around the fuel pump opening where the O-ring will seat. The tank opening must be free of dirt, dust, and debris.
- Be careful not to damage the new O-ring.
- Do not coat the O-ring with any oil.
- 18. Install the new retainer to the transfer tube and partially install the fuel tank unit as necessary to connect it.

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

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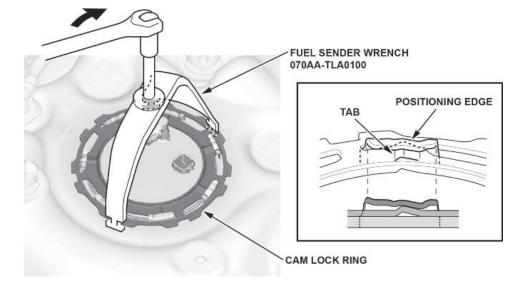
If the cam lock ring is not properly installed, the fuel tank can be damaged and will require replacement.

NOTE: Make sure the fuel tank unit cam lock ring is seated correctly on the fuel tank unit with all tabs fully engaged.

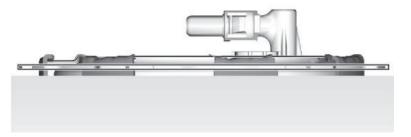


20. Turn the fuel tank unit cam lock ring clockwise using the fuel sender wrench.

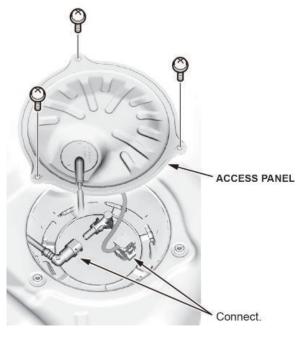
- Make sure the fuel sender wrench is not floating.
- Securely set the fuel tank positioning edge to the tab of the fuel tank unit cam lock ring.



• Make sure the fuel tank unit cam lock ring is seated correctly on the fuel tank unit with all tabs fully engaged.



- 21. Install the new retainer to the quick-connecting fitting.
- 22. Connect the fuel tank connector and the quick-connecting fitting.



- 23. Check for fuel leaks.
  - 23.1. Turn the ignition to ON, but do not turn the engine on. 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.
- 24. Install the fuel tank unit access panel.
- 25. Install the remaining parts in the reverse order of removal.
- 26. Clear all DTCs using an i-HDS.
- 27. Do the VSA Sensor Neutral Position Memorization procedure.

28. California residents only: Fill out a Vehicle Emissions Recall – Proof of Correction certificate, and use S7D 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.

			Type Vehicle Identification Number
N	Anufacture	ir	Recall Number S7D
device			Deen repaired, modified and/or equip, and the new emission control taws. Address, City, State and Zip
Date	1:	Dealership X	o's Authorized Signature

END