



Technical Service Bulletin

GROUP

RECALL

NUMBER

22-01-062H

DATE

July 2022

MODEL(S)

NEXO (FE)

SUBJECT:

HYDROGEN LEAK DETECTION SENSOR REPLACEMENT
(RECALL 225)

* IMPORTANT

*** Retail Vehicles ***

Vehicle repairs related to safety recalls are critically important and must be performed properly in accordance with TSB procedures. Review this bulletin in its entirety prior to beginning any repair work.

As required by federal law, dealer must not deliver new vehicles for sale or for lease to customers until all open recalls have been performed. Dealers must also perform all open recalls on used vehicles, demo, and rental vehicles prior to placing them into customer use and whenever an affected vehicle is in the shop for any maintenance or repair.

Access the "Vehicle Information" screen (VIS) via WEBDCS to identify open recalls.

Description: Certain 2019-2021MY NEXO (FE) vehicles may exhibit degradation in performance of the Hydrogen leak detection sensor caused by contamination of the sensor during manufacturing. This bulletin outlines the procedure to replace the Hydrogen Leak Detection Sensor located at the Fuel Processing System (FPS), the Fuel Stack Housing, and the Hydrogen Storage Tanks.



STUI



This TSB includes STUI pictures as a requirement. Where indicated, please include a copy of the RO or last 6 digits of the VIN and date of repair on a piece of paper. Ensure the VIN and date of repair are clearly visible. Finally, please ensure all captured pictures are completed according to the steps in this TSB and uploaded to STUI. **All claims submitted that have illegible, incomplete, missing, or incorrect picture(s) are subject to debit.**

Applicable Vehicles: Certain 2019-2021MY NEXO (FE) vehicles produced from 08/10/18 – 06/28/21

Parts Information:

PART NAME				FIGURE / PART NUMBER		REMARKS	
HYDROGEN SENSOR							
				Sensing Unit FRONT			
				REAR			
				35905-M5000QQH		1 order includes a quantity of 3	

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

SUBJECT:

HYDROGEN LEAK DETECTION SENSOR REPLACEMENT (RECALL 225)

Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
NEXO (FE)	21D044R0	Hydrogen sensor replacement	0.7 M/H	35905-M5000QQH	I11	ZZ3

NOTE 1: Submit claim on Campaign Claim Entry Screen.

NOTE 2: If a part that is not covered by this recall is in need of replacement while performing this recall, and the affected part is still under warranty, submit a separate claim using the same repair order. If the part is out of warranty, submit a prior approval request for goodwill consideration prior to the work.

NOTE 3: The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the parts are not returned.**

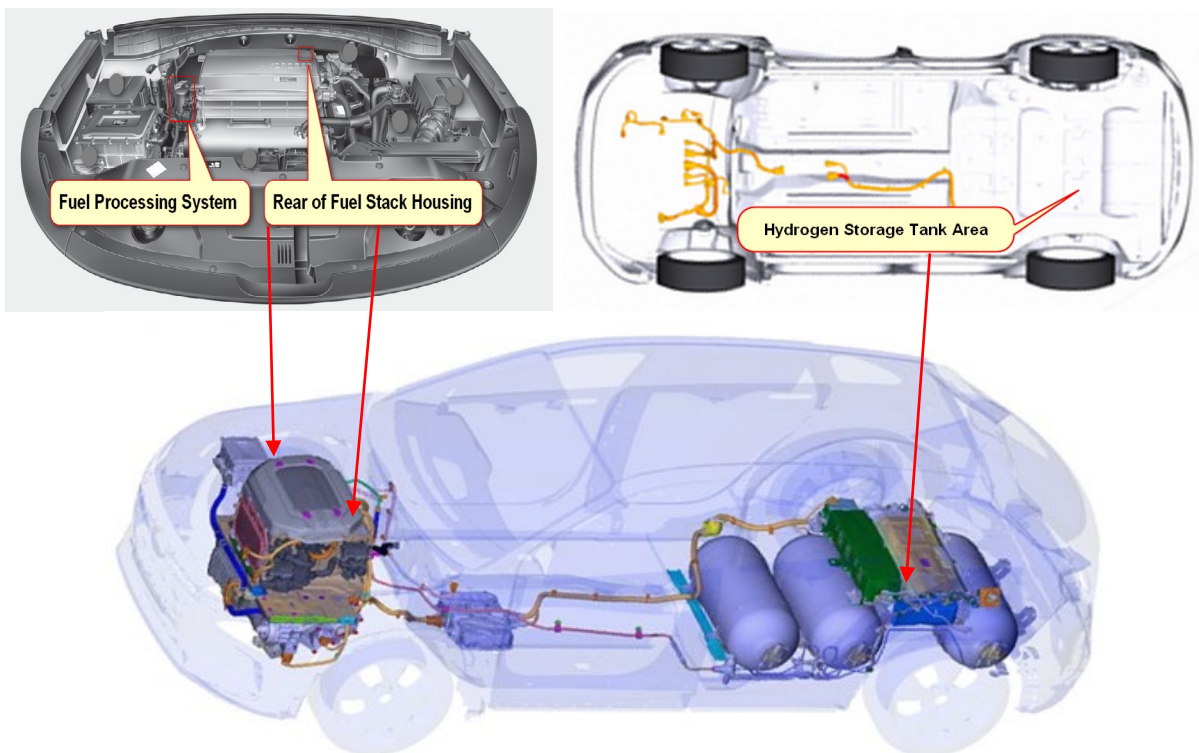
NOTE 4: Each sensor replacement requires two (2) STUI pictures: 1) With the sensor serial numbers clearly visible, 2) With parts installed along with a piece of paper displaying the last 6 digits of the VIN, location of sensor, and date of the repair. **Claim is subject to debit if STUI pictures are illegible, missing, incomplete, or incorrect.**

Service Procedure:
NOTE:

Replace all three Hydrogen Leak Detection sensors.

One sensor is mounted at each of the following locations:

- *One sensor at the Fuel Processing System (FPS) – page 4.*
- *One sensor at the rear of the Fuel Stack Housing – page 5.*
- *One sensor above the Hydrogen storage tanks – page 6.*


Preparation for all three Hydrogen sensors replacement

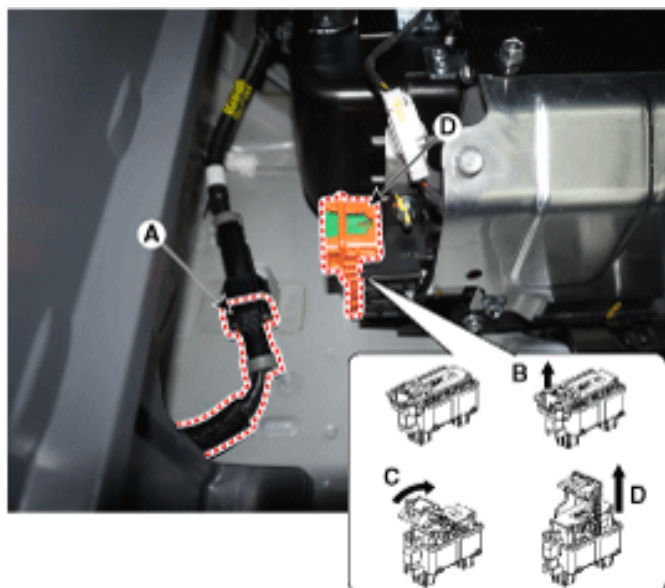
Disconnect the high voltage safety plug (D) and the 12-volt auxiliary battery (A).

Ensure Personal Protective Equipment (PPE) is in proper working order and is used.

⚠ WARNING

Refer to the shop manual - Battery Control System > High Voltage Battery Handling Guide and follow the High Voltage Shut-off Procedure.

Ensure proper Personal Protection Equipment (PPE) is worn to prevent injury. Verify PPE is not expired and in proper working condition.



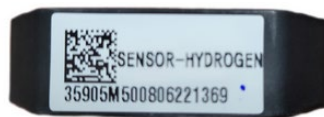
Hydrogen sensor mounted at Fuel Processing System (FPS)

1.

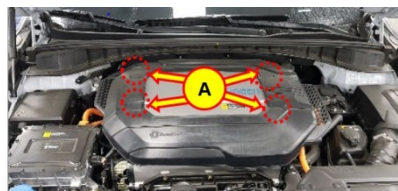
STUI

Using STUI, take one photograph of the label before mounting the sensor. Make sure the serial number is clear.

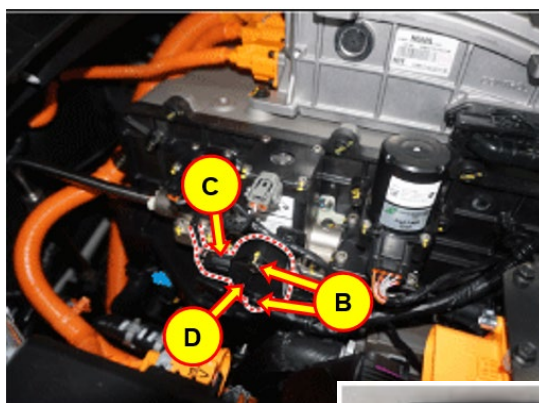
Upload photo to STUI.



2. Open the hood of the vehicle, remove the four fasteners (A) at the Fuel Cell trim cover and remove the trim cover.



3. Loosen the two Hydrogen sensor bolts (B), remove the Hydrogen sensor connector (C), and remove the Hydrogen sensor (D).

**Notes:**

- Remove connector after loosening bolts.
- Be careful not to drop parts.

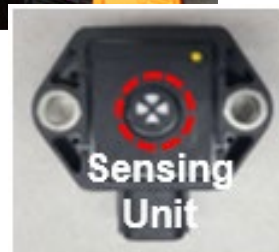
4. Install the new Hydrogen sensor (D) in the reverse order of removal. When installing the connector, be sure a “click” sound is heard.

Tightening Torque:

7.8 N.m (0.8 kgf.m, 5.8 lb-ft)

NOTICE

Be sure to install the sensing unit facing the FPS valve assembly.

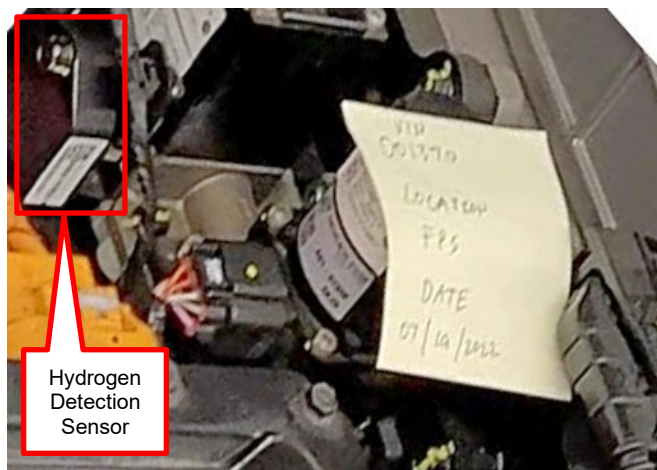


5. Using STUI, photograph the installed Hydrogen leak detection sensor with attached note (as shown in the picture to the right).

STUI

Using STUI, take one photo of the installed Hydrogen leak detection sensor that includes the sensor and a piece of paper containing the last 6 digits of the VIN or the RO #, the location of sensor, and date of repair.

Upload photo to STUI.



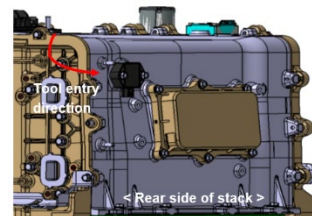
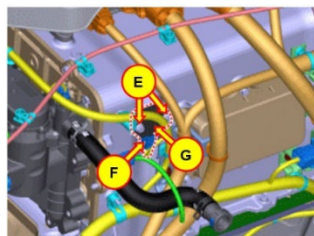
Hydrogen sensor mounted at Fuel Stack Housing

1.

STUI


Using STUI, take one photograph of the label before mounting the sensor. Make sure the serial number is clear.

Upload photo to STUI.



2. Loosen the 2 Hydrogen sensor bolts (E) using a socket wrench.

- Be careful not to drop parts.

3. Remove the Hydrogen sensor connector (F) from the hydrogen sensor (G).

Note

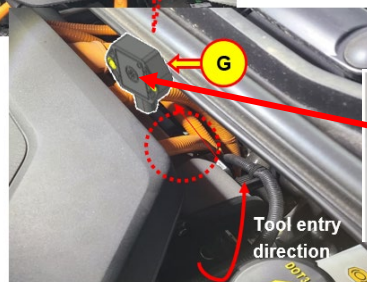
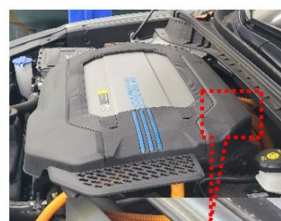
- Remove the connector after loosening the bolts.

- Be careful not to drop parts.

4. Install the new Hydrogen sensor (G) in the reverse order of removal. When installing the connector, be sure a “click” sound is heard.

Tightening Torque:

7.8 N.m (0.8 kgf.m, 5.8 lb-ft)



NOTICE

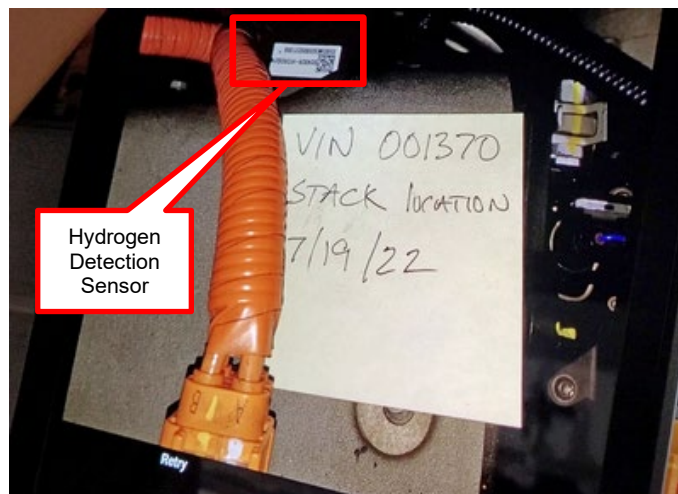
Be sure the sensing unit is facing into the fuel stack housing.

5. Using STUI, photograph the installed Hydrogen leak detection sensor with attached note (as shown in the picture to the right).

STUI


Using STUI, take one photo of the installed Hydrogen leak detection sensor that includes the sensor and a piece of paper containing the last 6 digits of the VIN or the RO #, the location of sensor, and date of repair.

Upload photo to STUI.



Hydrogen sensor mounted at Hydrogen Storage Tanks

1.

STUI

Using STUI, take one photograph of the label before mounting the sensor. Make sure the serial number is clear.

Upload photo to STUI.

2. Raise the vehicle using a lift.
3. Insert a socket wrench with a suitable extension into the tool space (opening) between the exhaust pipe and rear tank cover and loosen the two hydrogen sensor nuts (H).
4. Remove the hydrogen sensor connector (I) through the tool entry space.
5. Install the new Hydrogen sensor (J) in the reverse order of removal. When installing the connector, be sure a "click" sound is heard.

Tightening Torque:

7.8 N.m (0.8 kgf.m, 5.8 lb-ft)

NOTICE

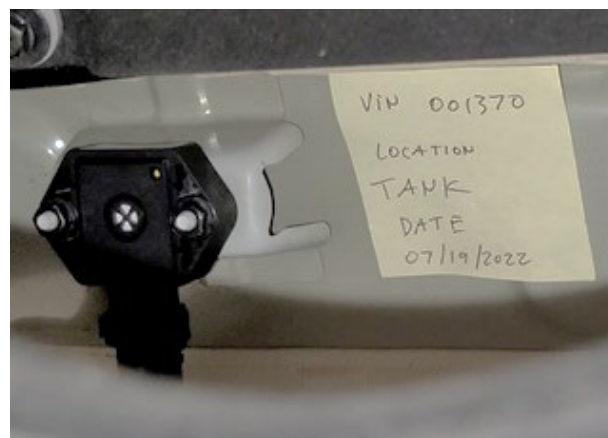
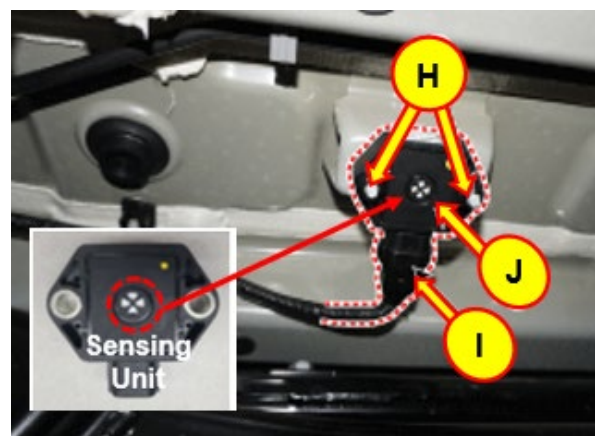
Be sure the sensing unit is facing toward the tanks (away from the body sheet metal).

6. Using STUI, photograph the installed Hydrogen leak detection sensor with attached note (as shown in the picture to the right).

STUI

Using STUI, take one photo of the installed Hydrogen leak detection sensor that includes the sensor and a piece of paper containing the last 6 digits of the VIN or the RO #, the location of sensor, and date of repair.

Upload photo to STUI.



7. Reconnect the high voltage safety plug (D) and the 12-volt auxiliary battery (A).

⚠ WARNING

Refer to the shop manual - Battery Control System > High Voltage Battery Handling Guide and follow the High Voltage Shut-off Procedure.

Ensure proper Personal Protection Equipment (PPE) is worn to prevent injury. Verify PPE is not expired and in proper working condition.

8

