Safety Recall: 2013–16 Accord Battery Management Sensor

Supersedes 17-057 dated July 29, 2017, to revise the information highlighted in yellow

AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2013–16	Accord (except Hybrid)	ALL	Check the iN VIN status for eligibility

REVISION SUMMARY

A *Tech2Tech* video was added to INSPECTION PROCEDURE to demonstrate how to read resistance using an ohm meter.

BACKGROUND

The case for the battery sensor mounted at the top of the 12V battery may have been improperly manufactured with gaps that could allow for moisture entry. If moisture containing road salt, or other conductive substances, enters the battery sensor, it could result in an electrical short and, subsequently, a fire.

The repair quality of covered vehicles is extremely important to American Honda (AHM). To ensure the repair is done correctly, AHM recommends designating at least one technician (someone other than the person doing the repair) to verify the repair quality of every vehicle prior to delivering the vehicle back to the customer.

Make sure you take accurate resistance measurements so that the customer receives the correct repair to help ensure their safety.

Vehicles that receive the temporary repair as part of this campaign must return to have the battery management sensor replaced once parts are available later this year (2017).

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

Inspect the battery sensor and do one of the following:

- Apply Konishi Bond because the resistance check is good (temporary repair).
- Determine that the battery sensor is OK because it was previously replaced with a counter-measured part.
- Replace the sensor because DTC P154A (battery sensor internal failure) is stored (permanent repair).
- Replace the battery sensor because the resistance check (less than 5 000 Ω [5.0 kΩ]) is no good (permanent repair).

NOTE: Make sure you take accurate resistance measurements so that the customer receives the correct repair to help ensure their safety. Refer to page 5, **Reading the Meter** or to the Tech2Tech video, "Safety Recall: 2013-16 Accord Battery Management Sensor" for help in understanding the resistance values.

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.

REQUIRED MATERIALS

Part Name	Part Number	Quantity
Konishi Bond SL420HW NOTE: This Konishi Bond hardens when exposed to humidity. Make sure you squeeze out all the air when replacing the cap. This material was supplied specifically for this procedure. Do not use it for other applications.	070AZ-0010300	1 (1 tube repairs about 60 vehicles.)

PARTS INFORMATION

Part Name	Part Number	Quantity
Battery Sensor NOTE: Replace only if the original fails the resistance inspection (less than 5 000 Ω [5.0 kΩ]) or DTC P154A is stored.	38920-T2A-A04	1

TOOL INFORMATION

Tool Name	Tool Number	Quantity
Digital Volt-Ohm Meter (DVOM) NOTE: Refer to **Reading the Meter** for more information.	FLU88 FLU87VE2KIT (or equivalent)	1

WARRANTY CLAIM INFORMATION

NOTE:

- To avoid non-payment of warranty claims, the **two battery sensor resistance values (include the k or M, if applicable)** or **DTC P154A** must be entered into the DTC field of the warranty claim.
- Process claims as quickly as possible to help administer the permanent repair once parts are available.

Battery Sensor NOT Replaced

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
7105B2	Battery sensor is not replaced because resistance is GOOD and Konishi Bond was applied for temporary fix. - Enter the 2 resistance values in the DTC fields	0.6 hr	6XX00	KG000	17-057A	38920-T2A-A03
7105A9	Battery sensor is not replaced because sensor has a countermeasure mark. - Enter the 2 resistance values in the DTC fields	0.5 hr	6XX00	KG000	17-057B	38920-T2A-A03

Battery Sensor Replaced

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
7105B0	Battery sensor is replaced because DTC P154A is stored. - Enter DTC in DTC field	0.4 hr	6XX00	KG000	17-057C	38920-T2A-A03
7105B1	Battery sensor replaced because sensor resistance was NO GOOD. - Enter the 2 resistance values in the DTC fields	0.5 hr	6XX00	KG000	17-057D	38920-T2A-A03

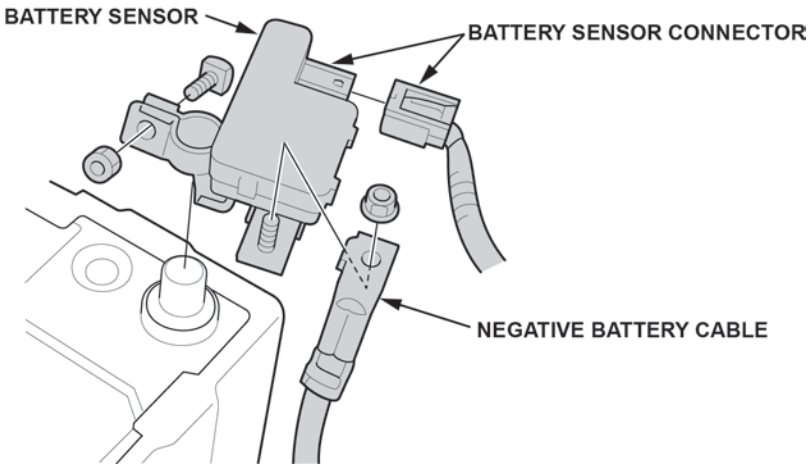
Skill Level: Repair Technician

INSPECTION PROCEDURE

NOTE:

- The repair quality of covered vehicles is extremely important to AHM. To ensure the repair is done correctly, AHM recommends designating at least one technician (someone other than the person doing the repair) to verify the repair quality of every vehicle prior to delivering the vehicle back to the customer.
- **Make sure you take accurate measurements so that the customer receives the correct repair to help ensure their safety**.
- Refer to your DVOM user guide to set the zero point initialization of the resistance measurement mode before doing the inspection.
- If your DVOM is not auto-ranging and you do not know how to manually set the range for this procedure, refer to either the DVOMs user guide or see AUTO RANGE SETTING.
- For more information about measuring resistance, refer to training module ELS31 – Measuring Resistance.

1. Connect the i-HDS and check if DTC P154A is indicated in PGM-FI.
   - If DTC P154A **is indicated**, replace the battery sensor. Make sure the DTC is recorded on the RO and entered in the warranty claim.
   - If DTC P154A **is not indicated**, go to step 2.
2. Make sure the ignition is turned to OFF.
3. Disconnect the battery sensor connector.



4. Disconnect the negative battery cable from the battery sensor.

   NOTE: To avoid damaging the battery sensor connector, do not touch it or press on it when removing the negative battery cable.
5. Remove the battery sensor from the battery negative post.

6. Check the battery sensor's internal resistance.

   For more information about measuring resistance, refer to the *Tech2Tech* video "Safety Recall: 2013-16 Accord Battery Management Sensor"

   NOTE:

   - **Before measuring the resistance**, refer to your DVOM user guide to set the zero point initialization for the resistance measurement mode.
   - **Do not use an insulating resistance tester** because you may damage the internal circuit.
   - Clean any dirt, grease, oil, water, etc. from the ground terminal before checking resistance. If you need to clean the terminal, do not apply any cleaner directly to the sensor. Apply the cleaner to a clean shop cloth, then use the cloth to clean the sensor.
   - Be careful not to damage the pins when probing them.
   - When placing the black test lead to take your measurement, make sure you place it on the solid metal of the bracket, not the bolt.
   - Since there is an internal capacitor, the readings may change. Make sure the reading has stabilized.

Reading the meter

Auto-Ranging Meter

- **Use an auto-ranging meter when possible**.
- The resistance value for a good sensor is usually hundreds of thousands or millions of ohms of resistance.
- When using an auto-ranging meter, look for a K (kilo) or M (mega) to indicate the full value of the reading.

Ω = 1
Example: 300 Ω = 300 Ω

k = Kilo (1000)
Multipy indicated value by 1,000
Example: 302 k Ω = 302,000 Ω

M = Mega (1,000,000)
Multipy indicated value by 1,000,000
Example: 2.996 M Ω = 2,996,000 Ω

Non-Auto Ranging Meter

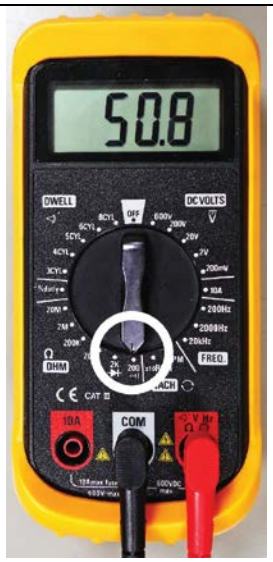
- The resistance value for a good sensor is usually hundreds of thousands or millions of ohms of resistance. If your meter's range value it set too low, you may see a 1 or OL. Additionally, if it is set too high, you may see a 0.
- When measuring resistance, set your meter's range at its highest setting and measure the resistance. If you do not see a value, turn your meter down one measurement value and measure resistance again. Continue lowering the measurement value until you see a measurement.

Start at the highest setting. If you see 0, the setting is too high. Turn down the setting dial until you see a value indicated.

Setting is too low and the value is much higher. Turn up the setting dial until you see a value indicated.

Setting is at correct level to read resistance value. See "Reading the meter value" to interpret this measurement.

Reading the Meter Value

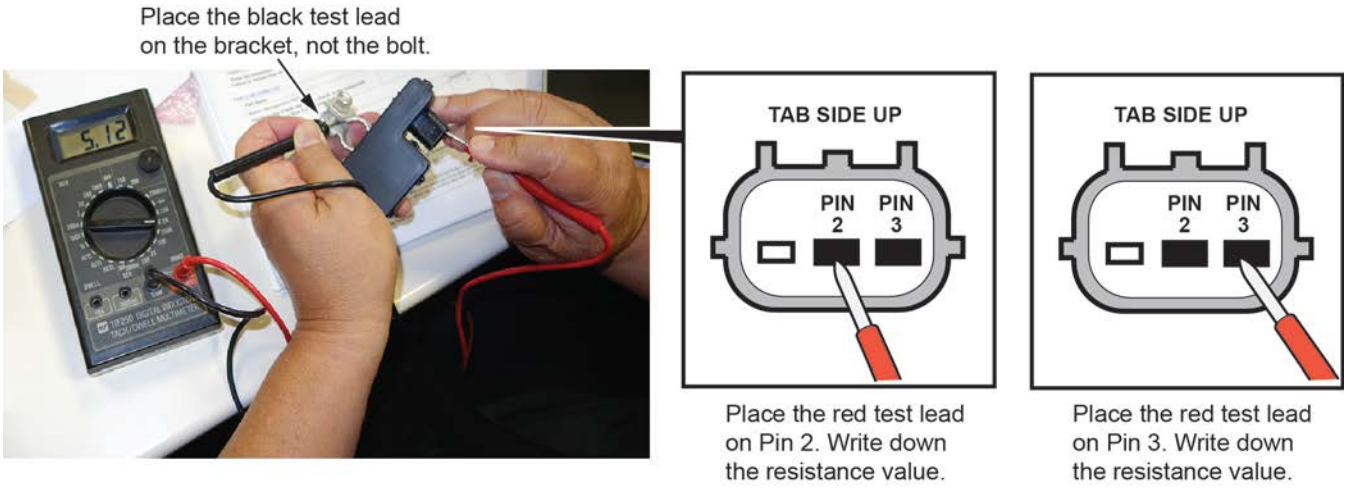
Meter Dial Setting	Understanding the Ohms (Ω) Setting	Meter Reading	How to Calculate Resistance Value
200	The value displayed is the measured value. No multiplication is required.		50 x 1Ω (setting at 200 Ω) = 50 Ω total
2k 20k 200k	k = 1 000. Multiply the meter reading by 1 000 for the resistance value.		5 x 1 000 Ω (setting at 20k Ω) = 5 000 Ω
2M 20M	M = 1 000 000 Multiply the meter reading by 1 000 000 for the resistance value.		5 x 1 000 000 (setting at 20M Ω) = 5 000 000 Ω

Examples:

Meter Reading	How to Interpret Reading	Total Ohms	Is the Sensor Good?
1.4 MΩ	1.4 x 1 000 000	1 400 000 Ω	GOOD
0.75 MΩ	0.75 x 1 000 000	750 000 Ω	GOOD
5.0 kΩ	5 x 1 000	5 000 Ω	GOOD
4.8 kΩ	4.8 x 1000	4 800 Ω	NO GOOD
330 Ω	330 x 1	332 Ω	NO GOOD

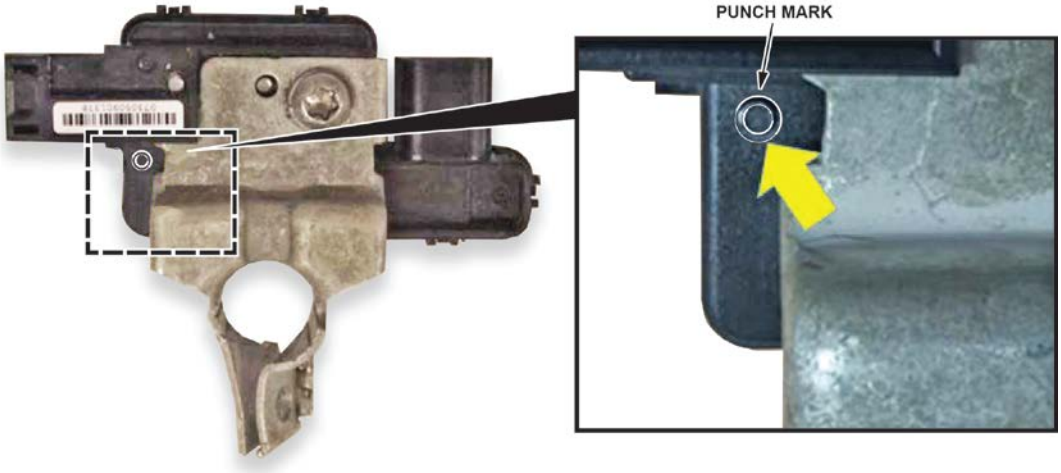
Measure the resistance between the bracket and pin 2, then between the bracket and pin 3. It may take a few seconds for the resistance reading to stabilize.

- **If the resistance is below 5,000 ohms (5.0K) on either pin**, the sensor is NO GOOD. Write down the **two resistance values** (make sure to include the k or M, if applicable) on the RO, and replace the battery sensor.
- **If the resistance is 5,000 ohms (5.0K) or higher on both pins**, the sensor is GOOD. Write down the **two resistance values** (make sure to include the k or M, if applicable) on the RO, and go to step 7 to determine the next steps.



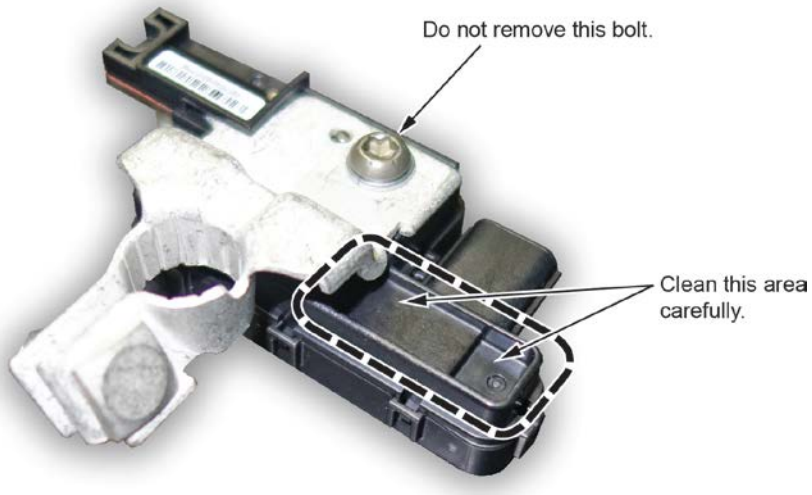
7. Check if the battery sensor has the punch mark as shown below.

- If the battery sensor has the punch mark, the battery sensor is a countermeasured part and is OK. Reinstall the battery sensor (refer to REPAIR PROCEDURE steps 5 thru 11) and return the vehicle to the customer.
- If the battery sensor does not have the punch mark, go to REPAIR PROCEDURE.



REPAIR PROCEDURE

1. Wipe off any dirt, grease, or oil from the indicated area on the battery sensor with a clean shop towel. Do not apply any cleaner.



2. Start applying the Konishi Bond in the area shown, then fill the rest of the sensor area.

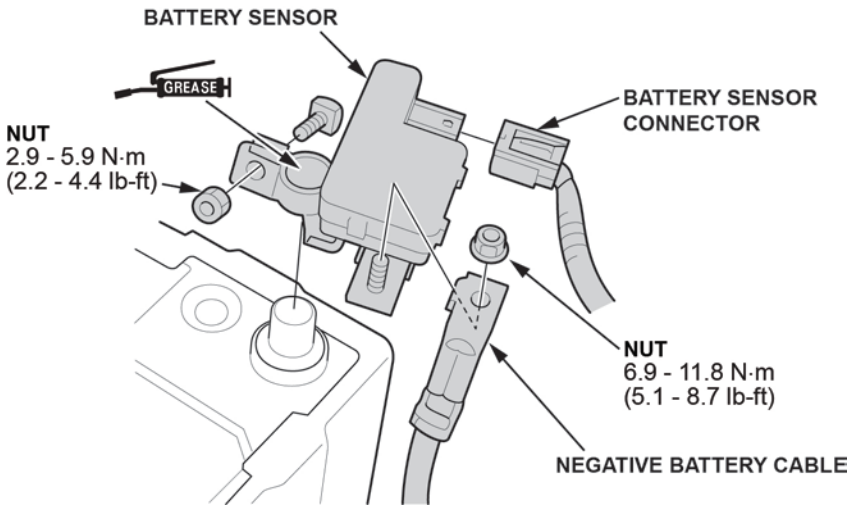
   NOTE: Make sure you fill the entire area. Do not leave any gaps or openings.

3. Using the included scraping tool (or equivalent), scrape off any extra Konishi Bond. If any Konishi Bond is on the pin area, make sure to clean it off.

4. Let the Konishi Bond harden for about 30 minutes. You do not have to oversee the drying process.

   NOTE: Do not try to accelerate the hardening process by applying heat because you can damage the battery sensor.

5. Check that the area between the negative battery post and battery sensor is clean, then apply multipurpose grease to the battery negative terminal to help prevent corrosion.



6. Without touching the area with the Konishi Bond, install the battery sensor onto the battery and torque the nut to **5.9 N·m (4.4 lb-ft)**.
7. Install the negative battery cable. Torque the nut to **11.8 N·m (8.7 lb-ft)**.
8. Connect the battery sensor connector.
9. Connect the i-HDS.
10. Turn the ignition to ON.
11. Clear any stored DTCs.

END