

April 20, 2023

Version 2

## Engine Does Not Crank

Supersedes 23-009, dated March 1, 2023.

### AFFECTED VEHICLES

| Year    | Model | Trim                | VIN Range |
|---------|-------|---------------------|-----------|
| 2016–20 | MDX   | ALL (except Hybrid) | ALL       |
| 2022–23 | MDX   | ALL (except Type S) | ALL       |
| 2015–20 | TLX   | V6                  | ALL       |

### REVISION SUMMARY

This service bulletin has been extensively revised. American Honda recommends reviewing the entire bulletin.

### SYMPTOM

The engine will not crank on the initial startup attempt after the vehicle has been exposed to precipitation and then freezing temperatures.

### POSSIBLE CAUSE

Water can enter the starter motor. In cold temperatures the water can freeze, preventing the starter motor from cranking the engine.

### CORRECTIVE ACTION

Replace the starter motor assembly if needed.

### PARTS INFORMATION

#### MDX 2016–20

| Part Name              | Part Number   | Quantity |
|------------------------|---------------|----------|
| Starter Motor Assembly | 31200-5J2-305 | 1        |
| Flange Bolt (12x45)    | 90165-SDA-A00 | 2        |
| Flange Bolt (12x120)   | 90051-5J4-000 | 1        |
| Power Relay Assembly   | 39794-SDA-A03 | 2        |

**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.

**MDX 2022-23**

| Part Name              | Part Number   | Quantity |
|------------------------|---------------|----------|
| Starter Motor Assembly | 31200-5MR-305 | 1        |
| Flange Bolt (12x45)    | 90165-SDA-A00 | 2        |
| Flange Bolt (12x120)   | 90051-5J4-000 | 1        |
| Relay Module Assembly  | 38280-TYA-A11 | 1        |

**TLX 2015-20**

| Part Name              | Part Number   | Quantity |
|------------------------|---------------|----------|
| Starter Motor Assembly | 31200-5J2-305 | 1        |
| Flange Bolt (12x120)   | 90051-5J4-000 | 1        |
| Power Relay Assembly   | 39794-T5A-J01 | 2        |

**TOOLS INFORMATION**

| Part Name    | Part Number   | Quantity |
|--------------|---------------|----------|
| Relay Puller | 07AAC-000A2A1 | 1        |

**WARRANTY CLAIM INFORMATION**

The normal warranty applies.

**MDX 2016-20**

| Operation Number | Description   | Flat Rate Time | Defect Code | Symptom Code | Template ID | Failed Part Number |
|------------------|---|----------------|-------------|--------------|-------------|--------------------|
| 1161J0           | Replace Starter motor assembly and relays (includes inspection) | 0.9 hr         | 01601       | 03217        | B23009A     | 31200-5J2-A53      |

**MDX 2022-23**

| Operation Number | Description   | Flat Rate Time | Defect Code | Symptom Code | Template ID | Failed Part Number |
|------------------|---|----------------|-------------|--------------|-------------|--------------------|
| 1161J0           | Replace Starter motor assembly and relays (includes inspection) | 0.7 hr         | 01601       | 03217        | B23009B     | 31200-5J2-A53      |

**TLX 2015-20**

| Operation Number | Description   | Flat Rate Time | Defect Code | Symptom Code | Template ID | Failed Part Number |
|------------------|---|----------------|-------------|--------------|-------------|--------------------|
| 1161J0           | Replace Starter motor assembly and relays (includes inspection) | 0.6 hr         | 01601       | 03217        | B23009C     | 31200-5J2-A53      |

## INSPECTION PROCEDURE

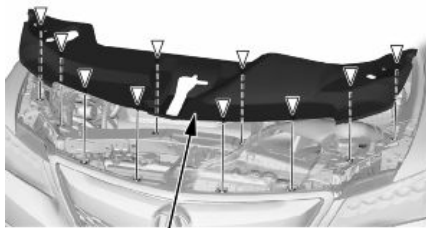
1. Confirm that the engine does not crank.
2. Inspect the starter motor for signs of icing. If icing is found, warm up the starter motor either by gently applying heat or allowing the vehicle to thaw inside the shop environment.
3. After the thawing period, attempt to crank/start the engine.
  - If the engine starts, go to REPAIR PROCEDURE.
  - If the engine doesn't crank/start, continue with normal troubleshooting.

## REPAIR PROCEDURE

### MDX 2016–20

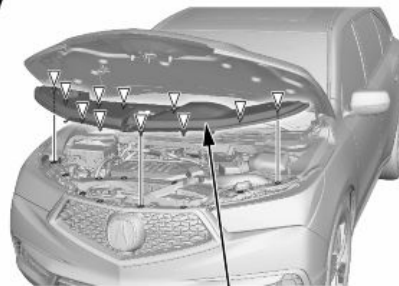
1. Open the hood.
2. Remove the front bulkhead cover.

2014-2016 MY



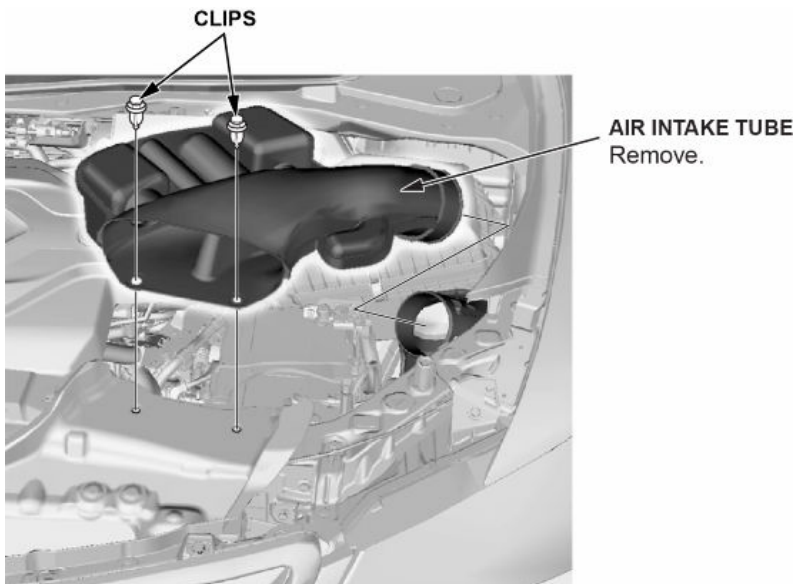
FRONT BULKHEAD COVER

2017-2020 MY



FRONT BULKHEAD COVER

3. Remove the air intake tube.



4. Disconnect the 12 volt battery.

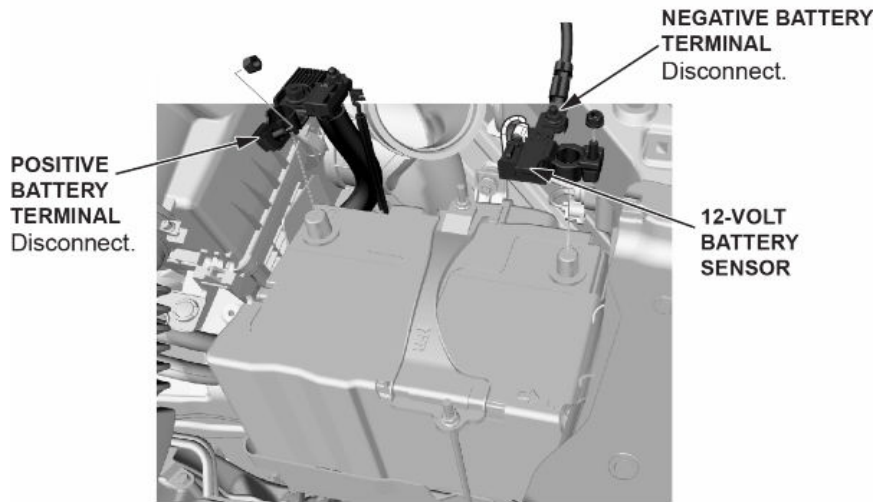
4.1. Make sure the vehicle is in the OFF (LOCK) mode.

4.2. Disconnect and isolate the negative cable with the 12 volt battery sensor from the 12 volt battery.

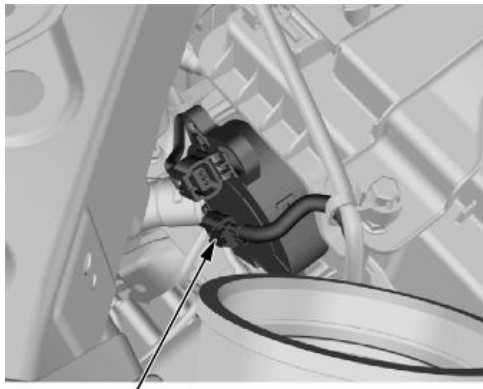
NOTE:

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

4.3. Disconnect the positive cable from the battery.

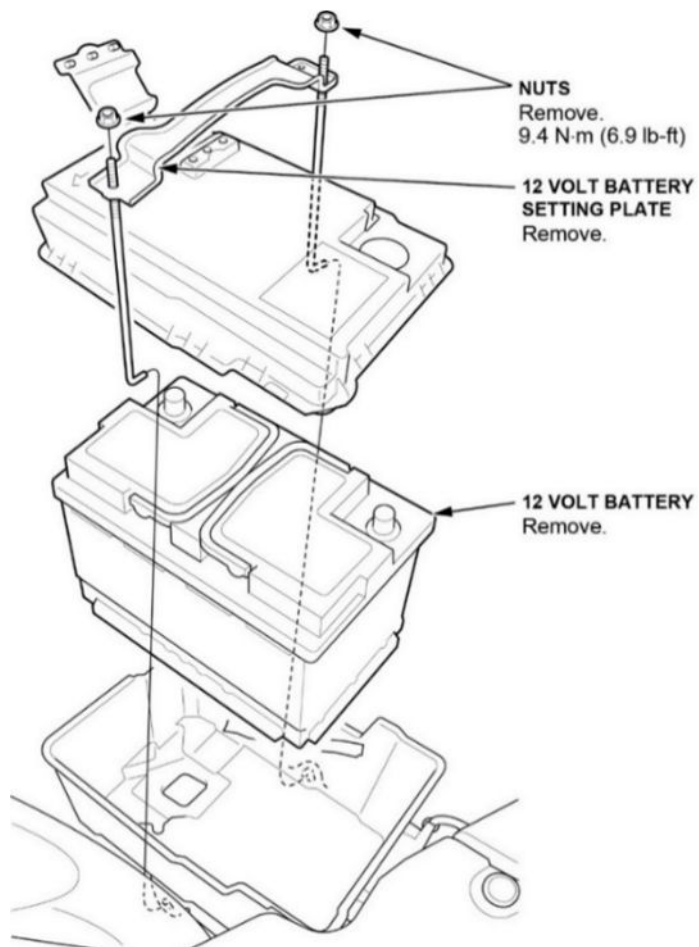


5. Disconnect the battery fan.

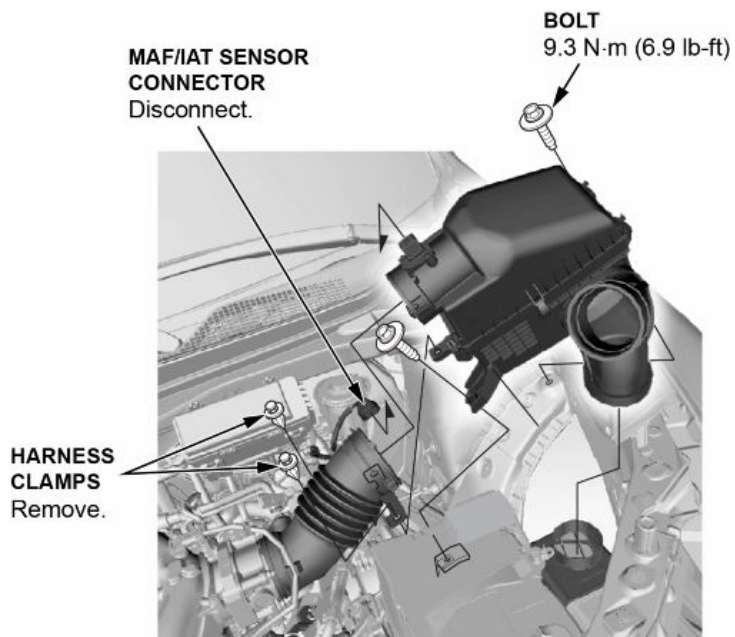


CONNECTOR  
Disconnect.

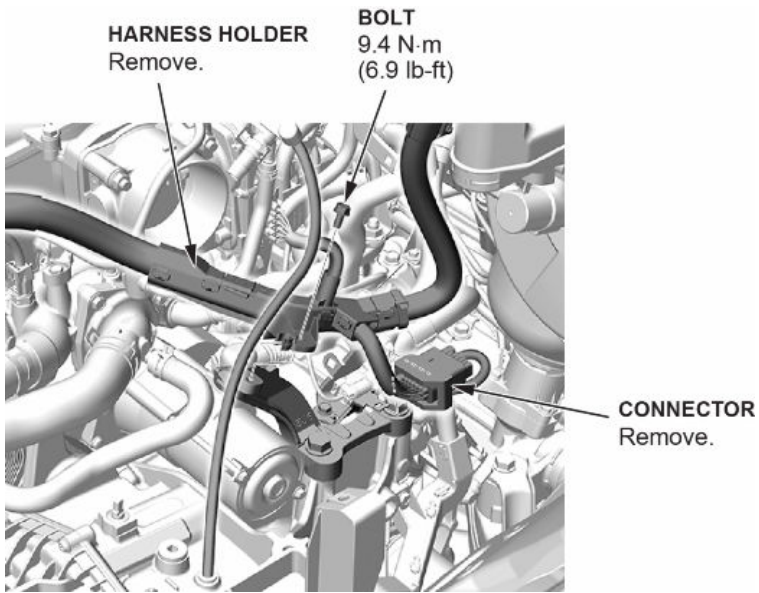
6. Remove the 12 volt battery.



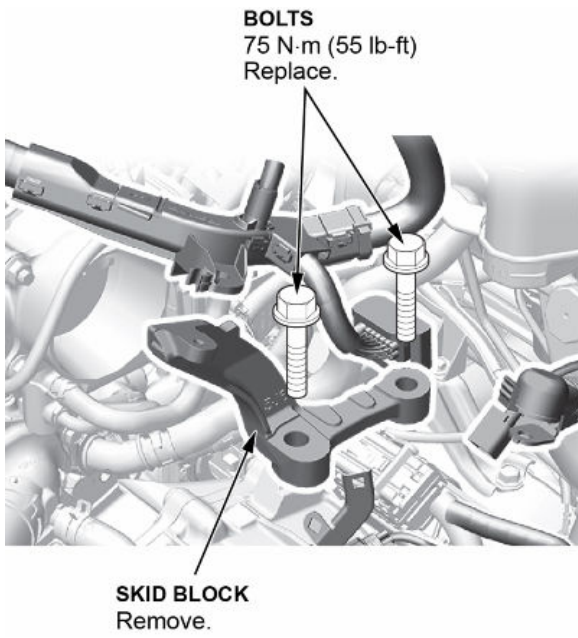
7. Remove the air cleaner.



8. Disconnect the connector, then remove the harness holder.

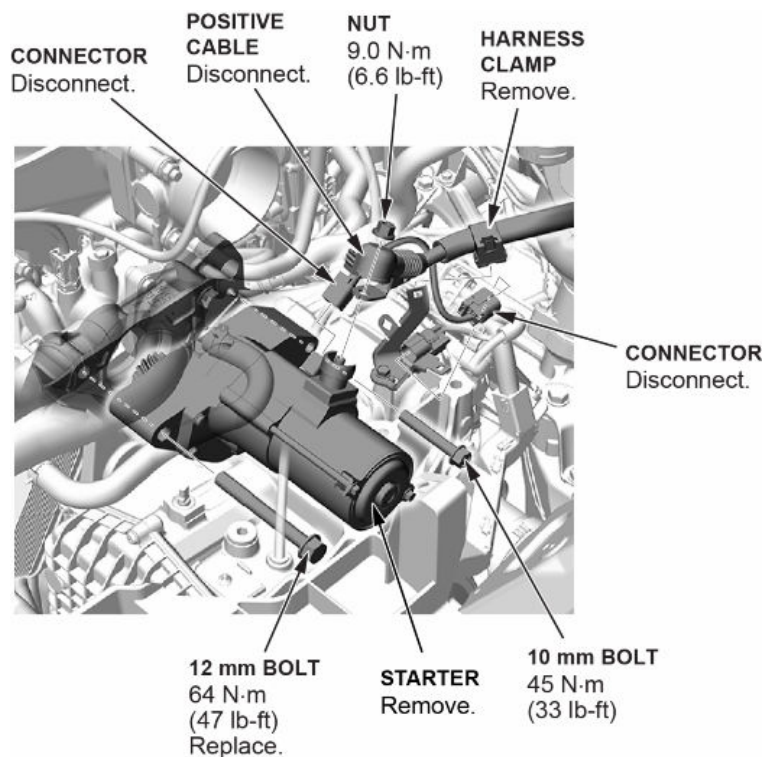


9. Remove the skid block.



10. Disconnect the positive starter cable and connector, remove the harness connector and clamps, and then remove the starter.

NOTE: Make sure the crimped side of the ring terminal faces away from the starter when you connect the positive starter cable.



11. Install the new starter assembly.
12. Install all remaining parts in the reverse order of removal
13. Replace starter cut relay 1 and starter cut relay 2.
14. Connect the HDS to the DLC.  
NOTE: Make sure the HDS is loaded with the latest software version.
15. Turn the vehicle to the ON mode.
16. Make sure the HDS communicates with the vehicle, then select **Idle Stop Starter Counter Clear** in the **ADJUSTMENT MENU** with the HDS.

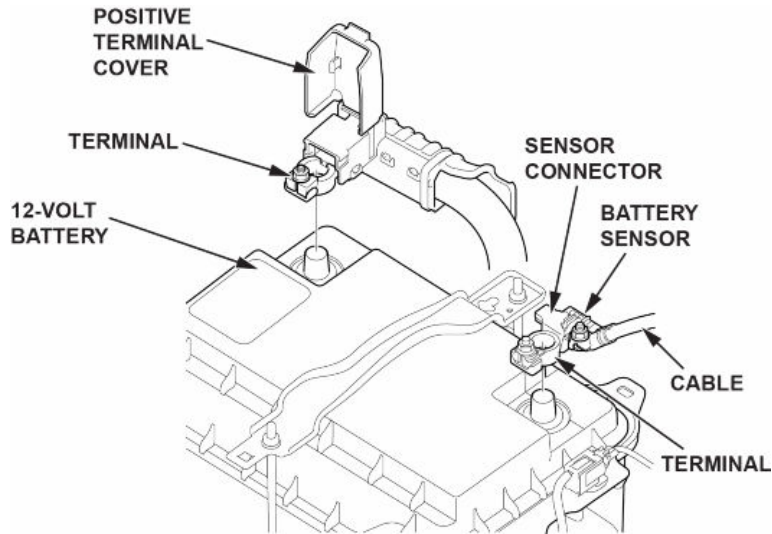
**MDX 2022-23**

1. Disconnect the 12 volt battery.
  - 1.1. Make sure the vehicle is in the OFF (LOCK) mode.
  - 1.2. Disconnect and isolate the negative cable with the 12 volt battery sensor from the 12 volt battery.

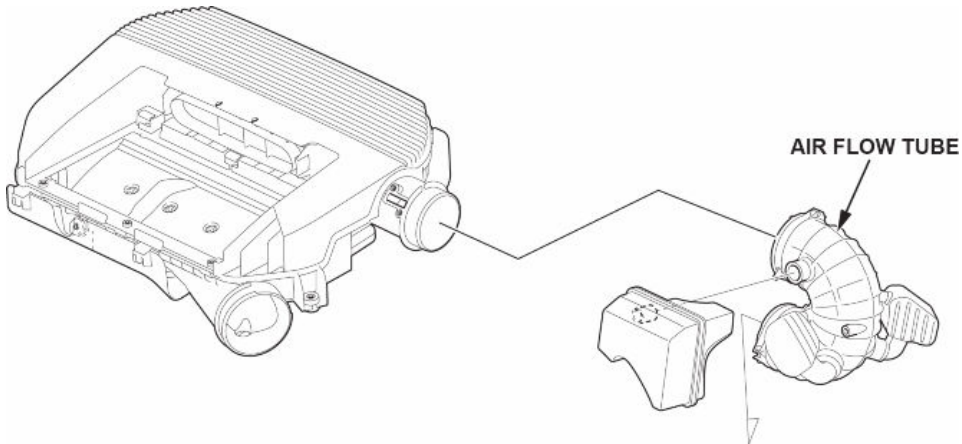
NOTE:

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

- 1.3. Disconnect the positive cable from the battery.

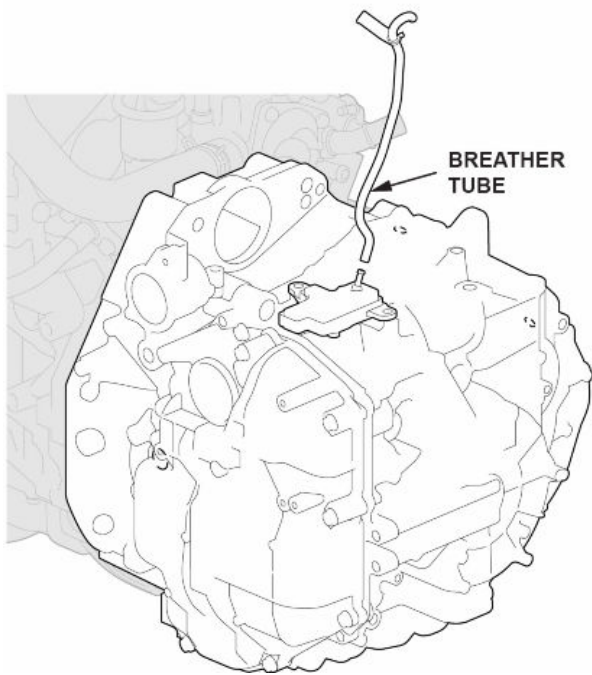


2. Remove the air flow tube.

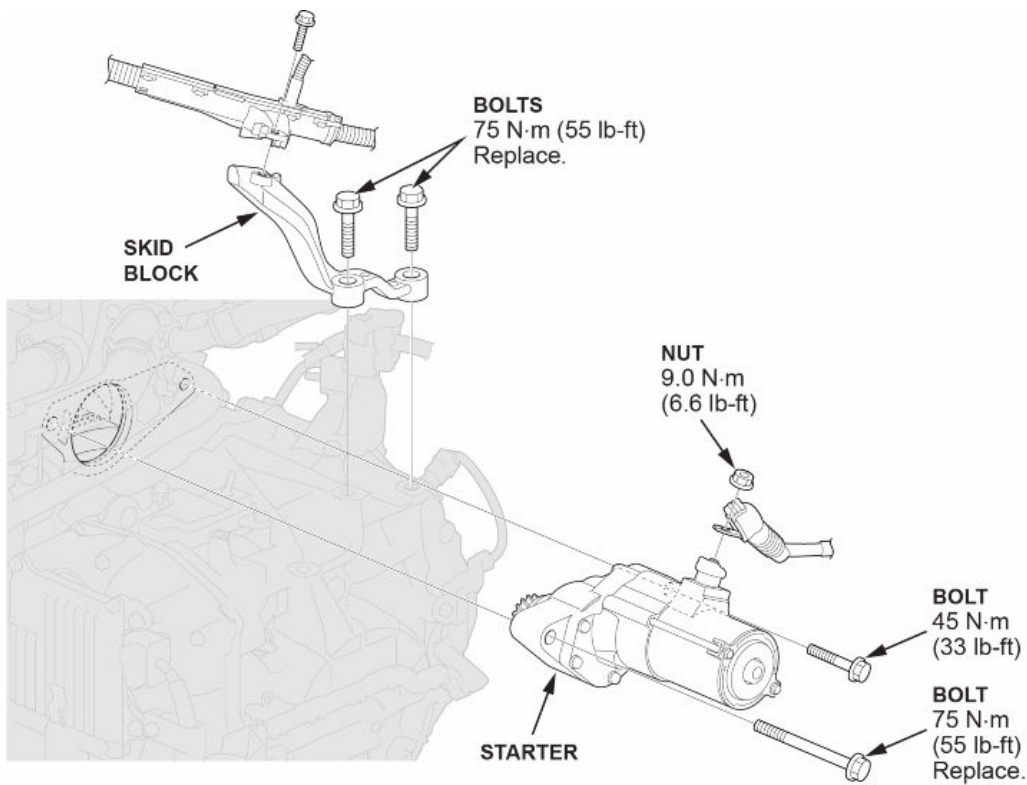




3. Remove the breather tube.



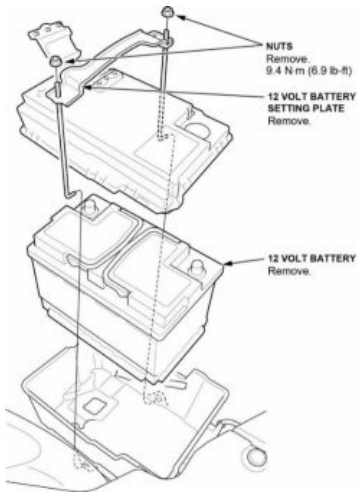
4. Remove the skid block and starter.



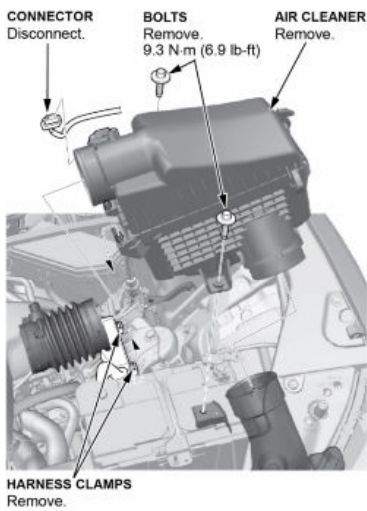
5. Install the new starter assembly.
6. Reinstall skid block with new bolts.
7. Install remaining parts in the reverse order of removal.
8. Replace the relay circuit board.
9. Connect the HDS to the DLC.  
NOTE: Make sure the HDS is loaded with the latest software version.
10. Turn the vehicle to the ON mode.
11. Make sure the HDS communicates with the vehicle, then select **Idle Stop Starter Counter Clear** in the **ADJUSTMENT MENU** with the HDS.

**TLX 2015-20**

1. Disconnect 12 volt battery.
2. Remove the 12 volt battery setting plate and the 12 volt battery.

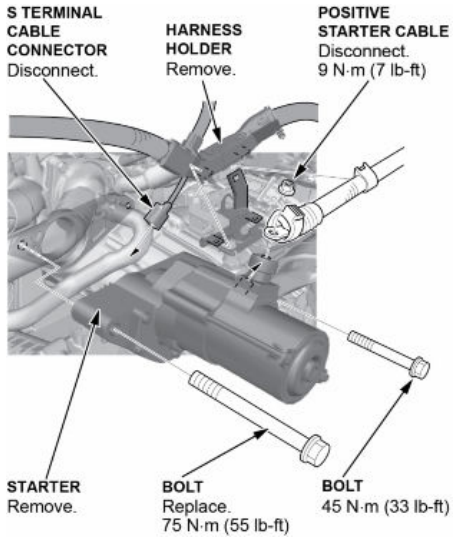


3. Disconnect the connector from the air cleaner, then remove the harness clamps and remove the air cleaner assembly.



4. Remove the harness holder from the starter.

5. Disconnect the positive starter cable and the connector, then remove the starter.



6. Install the new starter assembly.
7. Reinstall the parts in the reverse order of removal.
8. Replace starter cut relay 1 and starter cut relay 2.
9. Connect the HDS to the DLC  
NOTE: Make sure the HDS is loaded with the latest software version.
10. Turn the vehicle to the ON mode.
11. Make sure the HDS communicates with the vehicle, then select **Idle Stop Starter Counter Clear** in the **ADJUSTMENT MENU** with the HDS.

END