

Service Bulletin

23-009

January 6, 2023 Version 1

Warranty Extension: Engine Does Not Auto Restart After Entering Auto Idle Stop

AFFECTED VEHICLES

| Year | Model | Trim | VIN Range | | |
|---------|----------------------|----------------------|--|--|--|
| 2019–21 | Passport (with 9AT) | ALL (with Idle Stop) | Check the iN VIN status for eligibility. | | |
| 2016–21 | Pilot (with 9AT) | ALL (with Idle Stop) | Check the iN VIN status for eligibility. | | |
| 2020–21 | Ridgeline (with 9AT) | ALL (with Idle Stop) | Check the iN VIN status for eligibility. | | |

BACKGROUND

Under certain circumstances, after coming to a stop and engaging idle stop, the vehicle may not restart automatically due to excessive cylinder pressure and/or low cranking torque. Typically, the customer can immediately restart the vehicle by selecting Park and pressing the ENGINE START/STOP button.

NOTE: If 23-008 Product Update: PGM-FI Idle Stop Software Update is applicable to the VIN, the PGM-FI software must be updated first before the warranty extension applies.

Honda is extending the warranty coverage for valve adjustment and starter replacement related to this condition to 10 years from the original date of purchase with no mileage limitation.

CUSTOMER NOTIFICATION

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

Do an iN VIN status inquiry to verify eligibility.

CORRECTIVE ACTION

Replace the starter assembly, starter relays and adjust the valves.

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

| Part Name | Part Number | Quantity |
|------------------------|---------------|----------|
| Intake Manifold Gasket | 17101-RLV-A01 | 6 |
| Throttle Body Gasket | 17102-RLV-A01 | 1 |
| EGR Seal | 17103-RLV-A01 | 2 |
| EGR Pipe Gasket A | 18716-RB0-G01 | 1 |
| Starter Motor Assembly | 31200-5J2-A53 | 1 |
| Flange Bolt (12x120) | 90051-5J4-000 | 1 |
| Flange Bolt (12x45) | 90165-SDA-A00 | 2 |
| Starter Cut Relay | 39794-T5A-J01 | 2 |

NOTE: If 23-008 Product Update: PGM-FI Idle Stop Software Update is applicable to the VIN, the PGM-FI software must be updated first before the warranty extension applies. Any warranty extension claims submitted prior to an approved Product Update will be debited.

REQUIRED MATERIALS

| Part Name | Part Number | Quantity |
|---|-------------|----------|
| Hondabond (one tube repairs 4 vehicles) | 08718-0004 | 1 |

TOOLS INFORMATION

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

WARRANTY CLAIM INFORMATION

Passport:

| Operation Number | Description | Flat Rate Time | Defect Code | Symptom Code | Template ID | Failed Part Number |
|---------------------|--|-------------------|----------------|-----------------|----------------|--------------------|
| 1181FF | Replace the starter, starter relays and adjust the valves. | 3.0 hr | 6T600 | XCT00 | A23009A | 31200-5J2-A53 |

Pilot:

| Operation Number | Description | Flat Rate Time | Defect Code | Symptom Code | Template ID | Failed Part Number |
|---------------------|--|-------------------|----------------|-----------------|----------------|--------------------|
| 1181FF | Replace the starter, starter relays and adjust the valves. | 2.8 hr | 6T600 | хстоо | A23009B | 31200-5J2-A53 |

Ridgeline:

| Operation Number | Description | Flat Rate Time | Defect Code | Symptom Code | Template ID | Failed Part Number |
|---------------------|--|-------------------|----------------|-----------------|----------------|--------------------|
| 1181FF | Replace the starter, starter relays and adjust the valves. | 2.9 hr | 6T600 | XCT00 | A23009C | 31200-5J2-A53 |

INSPECTION PROCEDURE

Does 23-008 Product Update: PGM-FI Idle Stop Software Update apply to the VIN?

Yes - Confirm 23-008 Product Update: PGM-FI Idle Stop Software Update is closed by checking the VIN inquiry.

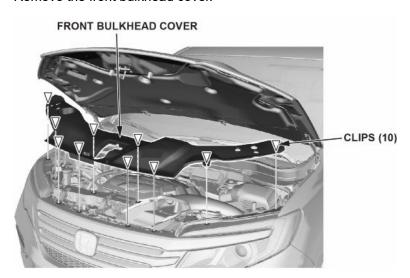
- If closed, verify the symptom, if present, proceed to the repair procedure.
- If open, do 23-008 Product Update: PGM-FI Idle Stop Software Update. The repair is complete.

No – Verify the symptom, if present, proceed to the repair procedure.

REPAIR PROCEDURE

Starter Removal and Installation

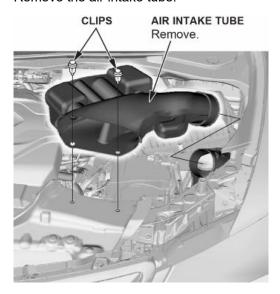
1. Remove the front bulkhead cover.



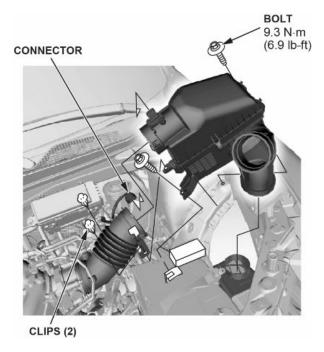
2. Remove the engine cover.



- 3. Remove the air intake duct.
- 4. Remove the air intake tube.

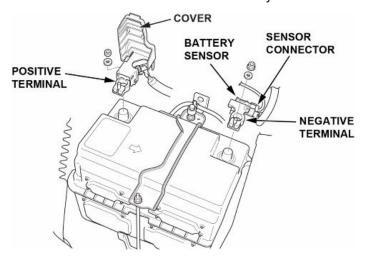


5. Remove the air cleaner.

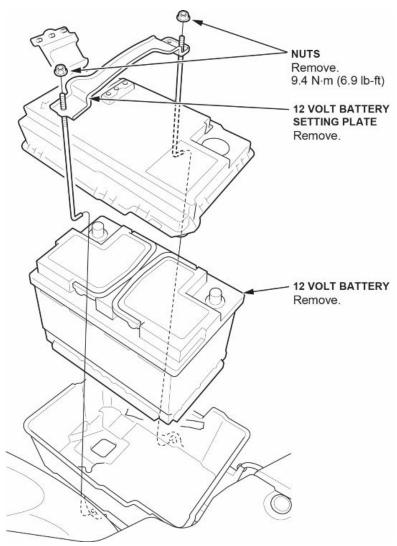


6. Disconnect the 12 volt battery.

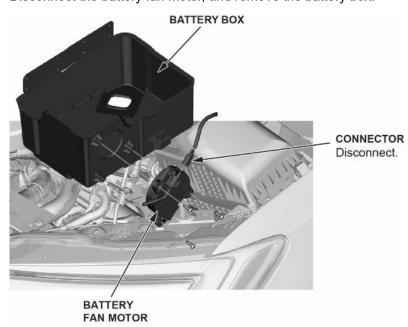
NOTE: Do not disconnect the 12 volt battery sensor from the negative terminal.



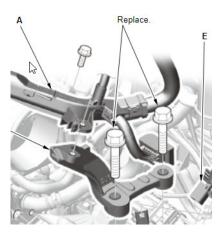
7. Remove the 12 volt battery setting plate, and the 12 volt battery.



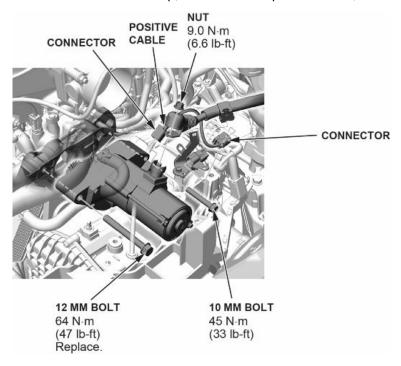
Disconnect the battery fan motor, and remove the battery box.



- 8. Remove the harness holder.
- 9. Remove the skid block.



10. Remove the harness clamp, disconnect the positive cable, cable connector, and starter.



11. Reinstall the parts in reverse order of removal.

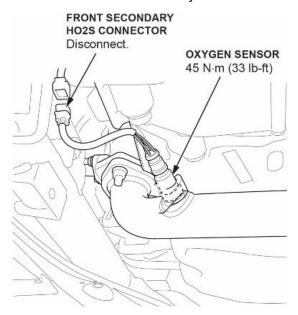
NOTE: Do not install the front bulkhead cover, engine cover, air intake tube, and air intake duct at this time.

- 12. Replace start cut relay 1 and starter cut relay 2.
- 13. Connect the HDS to the DLC.
- 14. Turn the vehicle to the ON mode.

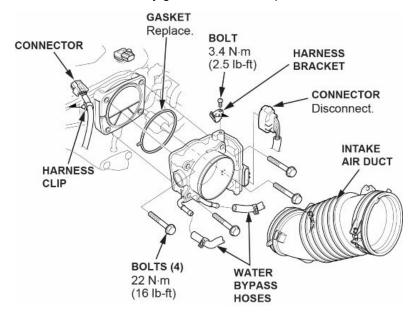
15. Make sure the HDS communicates with the vehicle, then select IDLE STOP STARTER COUNTER CLEAR in the ADJUSTMENT MENU with the HDS.

Valve Clearance Adjustment

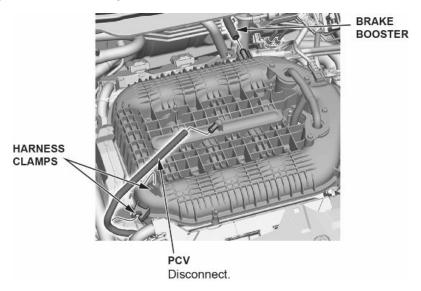
16. Disconnect the front secondary HO2S connector.



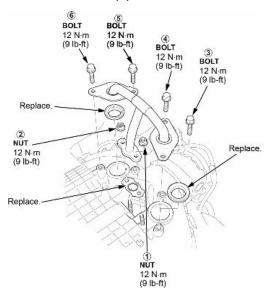
17. Disconnect the connectors and EVAP purge hose. Move the throttle body with the water bypass hoses connected. NOTE: The throttle body gasket is a must replace item.



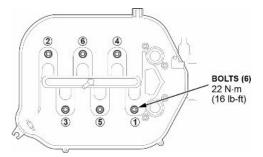
18. Disconnect the PCV hose and the brake booster vacuum hose.



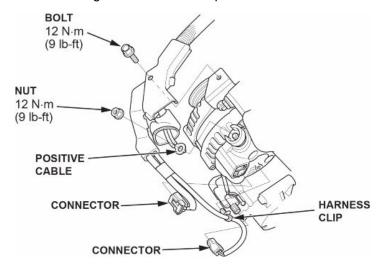
19. Remove the EGR pipe B.



20. Remove the upper cover mounting bolts and nuts sequentially in three steps. Remove the intake manifold.



21. Remove the ignition coils and the positive alternator cable.

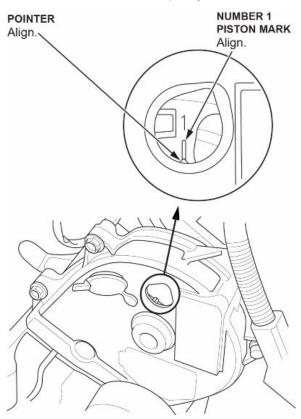


- 22. Disconnect the rocker arm oil pressure sensor.
- 23. Remove the harness holders on both cylinder heads.

24. Remove the cylinder head covers.

NOTE: Connect the HDS to the DLC and monitor ECT SENSOR 1. When the engine has cooled down and the coolant temperature is less than 100°F (38°C), adjust the valve clearance.

25. Set the No. 1 piston at top dead center (TDC). Align the pointer on the front upper cover with the No. 1 piston TDC mark on the front camshaft pulley.



26. Select the correct feeler gauge for the valve clearance you are going to check.

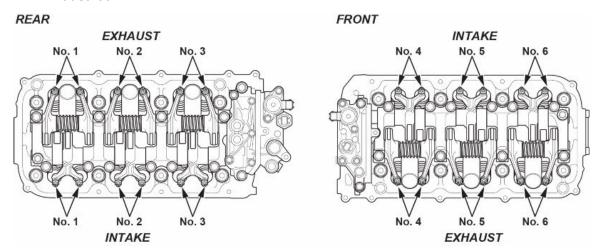
Valve Clearance Spec:

Intake: 0.20-0.24 mm (0.008-0.009 in)

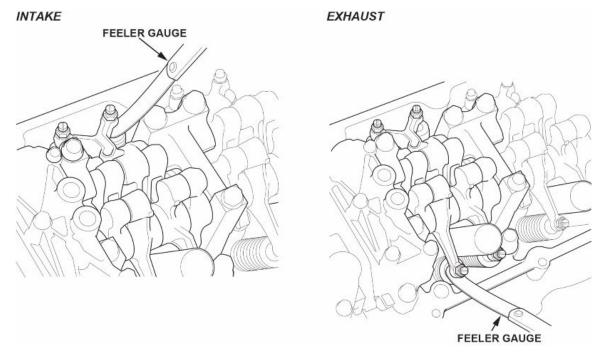
• Exhaust: 0.28-0.32 mm (0.011-0.012 in)

For this repair, you'll set the valve clearance to these specs:

- Intake .22 mm
- Exhaust .30 mm



27. Insert the feeler gauge between the adjusting screw and the end of the valve stem on the No. 1 cylinder and slide it back and forth; you should feel a slight amount of drag.



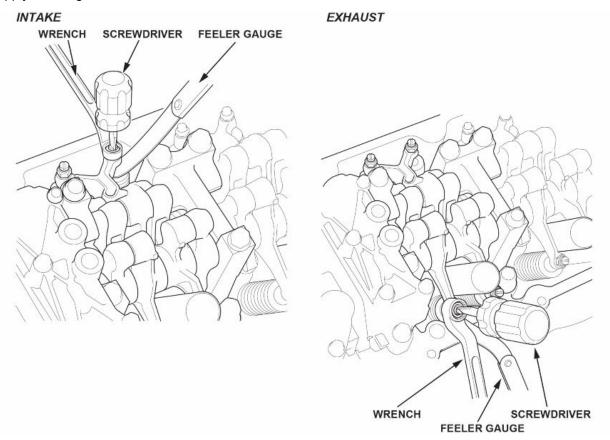
28. If you feel too much or too little drag, loosen the locknut, then turn the adjusting screw until the drag on the feeler gauge is correct.

29. While holding the adjusting screw with the screwdriver, tighten the locknut, then recheck the clearance. Repeat the adjustment, if necessary.

Specified Torque:

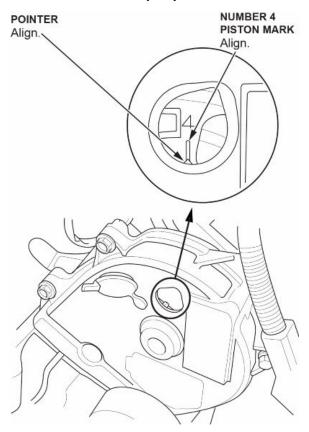
Intake: 20 N·m (15 lb-ft) Exhaust: 20 N·m (15 lb-ft)

Apply new engine oil to the nut threads.



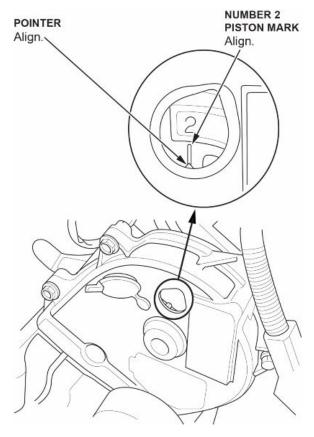
30. Rotate the crankshaft clockwise. Align the pointer on the front upper cover with the No. 4 piston TDC mark on the front camshaft pulley.

31. Check, and if necessary, adjust the valve clearance on the No. 4 cylinder.



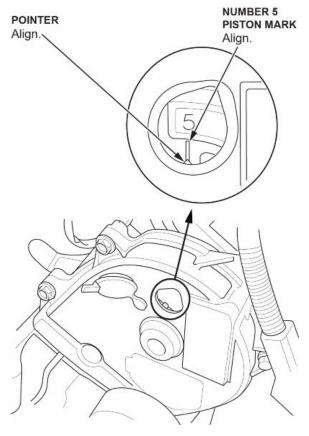
32. Rotate the crankshaft clockwise. Align the pointer on the front upper cover with the No. 2 piston TDC mark on the front camshaft pulley.

33. Check, and if necessary, adjust the valve clearance on the No. 2 cylinder.



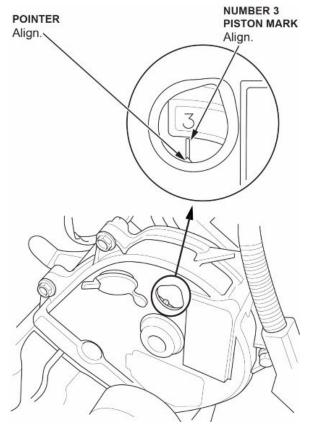
34. Rotate the crankshaft clockwise. Align the pointer on the front upper cover with the No. 5 piston TDC mark on the front camshaft pulley.

35. Check, and if necessary, adjust the valve clearance on the No. 5 cylinder.



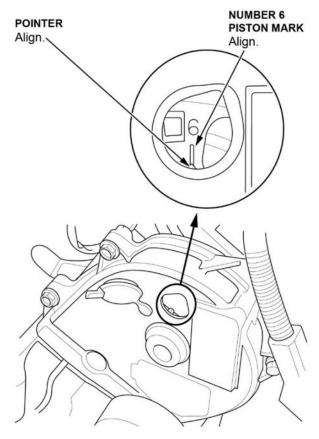
36. Rotate the crankshaft clockwise. Align the pointer on the front upper cover with the No. 3 piston TDC mark on the front camshaft pulley.

37. Check, and if necessary, adjust the valve clearance on the No. 3 cylinder.

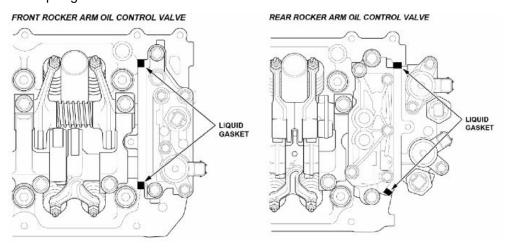


38. Rotate the crankshaft clockwise. Align the pointer on the front upper cover with the No. 6 piston TDC mark on the front camshaft pulley.

39. Check, and if necessary, adjust the valve clearance on the No. 6 cylinder.

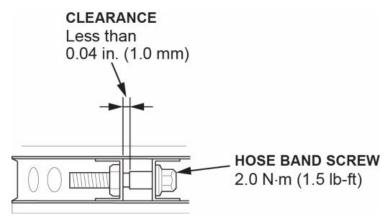


- 40. Check the spark plug seals for damage. If any seals are damaged, replace it.
- 41. Thoroughly clean the head cover gasket, and the groove of the cylinder head cover.
 - NOTE: Check and if necessary, replace the head cover gasket.
- 42. Install the head cover gasket in the groove of the cylinder head cover. Make sure the head cover gasket is seated securely.
- 43. Remove all of the old liquid gasket from the front, and rear rocker arm oil control valve mating surfaces then apply new liquid gasket.



44. Set the spark plug seals on the spark plug tubes, and install the front and rear cylinder head cover.

- 45. Inspect the spark plug seals for damage.
- 46. Reinstall the remaining parts in the reverse order of removal.
 - When installing the intake manifold, make sure to tighten the bolts/nuts in three steps.
 - When installing the throttle body, tighten in a cross pattern in three steps.
 - When installing the intake air duct do not over-tighten the hose band screw.



END