



Applies To: **2013 Odyssey** – From VIN 5FNRL5...DB057266 thru 5FNRL5...DB091670
2013 Pilot 2WD – From VIN 5FNYP3...DB014058 thru 5FNYP3...DB025447
2013 Pilot 4WD – From VIN 5FNYP4...DB025128 thru 5FNYP4...DB048530

August 5, 2014

MIL Comes On With One or More DTCs: P0301 thru P0304, P3400, or P3497 (Supersedes 13-055, dated July 19, 2013; see REVISION SUMMARY)

REVISION SUMMARY

2013 Odyssey vehicles were added.

SYMPTOM

The MIL comes on with one or more misfire DTC(s) P0301 thru P0304 (Number 1-4 cylinder misfire detected). DTC P3400 (rocker arm oil pressure switch B) and/or P3497 (rocker arm oil pressure switch C) may also be stored.

POSSIBLE CAUSE

During a cold start, the engine oil pump outputs high oil pressure. DTCs P3400 and P3497 are set because of the high oil pressure measured at the VCM spool valve. High oil pressure causes the VCM spool valves to activate, causing cylinders 1 through 4 to go into cylinder cut mode even though the ECU did not activate the VCM spool valve.

CORRECTIVE ACTION

Replace the relief valve spring.

PARTS INFORMATION

NOTE: To help clarify where new parts are used in the REPAIR PROCEDURE, the new part is listed in the applicable step with a ">" symbol.

Part Name	Part Number	Quantity
Relief Valve Spring	15232-R70-A01	1
Drain Plug Washer (14 mm)	94109-14000	1
Pre-chamber Gasket	18393-SDB-A00	1
Exhaust Pipe Gasket	18212-SA7-003	2
Self-locking Nut (10 mm)	90212-SA5-003	9

REQUIRED MATERIALS

Part Name	Part Number
Engine Oil (0W-20) (5 quarts required)	08798-9036

WARRANTY CLAIM INFORMATION

The normal warranty applies.

Model	Operation Number	Description	Flat Rate Time	Failed Part	Defect Code	Symptom Code	Template ID
Odyssey	1111AH	Replace the relief valve spring. (Includes diagnosis time)	2.6	15232-R70-A01	03001	03203	13-055A
Pilot	1111AH	Replace the relief valve spring. (Includes diagnosis time)	2.6	15232-R70-A01	03001	03203	13-055B

Skill Level: Repair Technician



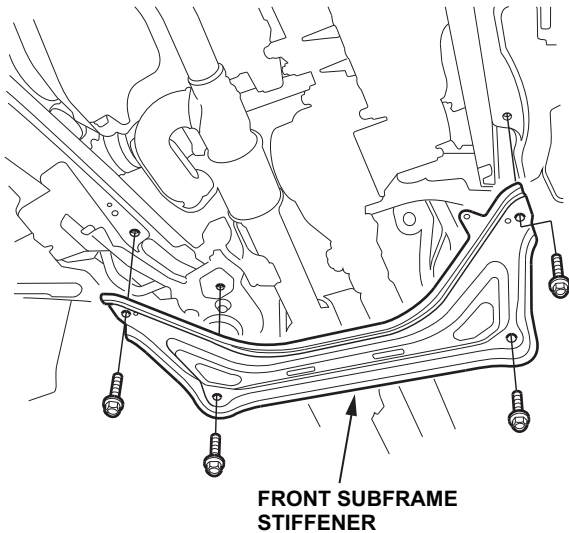
CUSTOMER INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

DIAGNOSIS

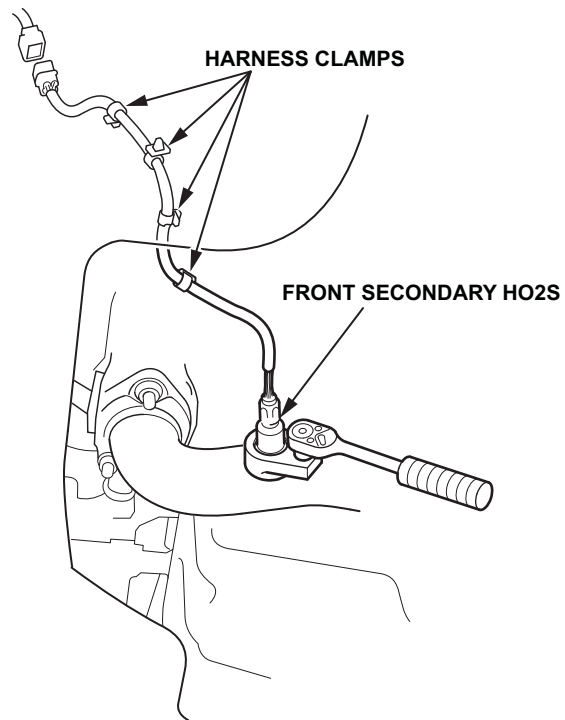
1. Connect the HDS, and check for any of these DTCs: P0301, P0302, P0303, P0304, P3400, and/or P3497.
 - If one or more DTCs are set, go to step 2.
 - If no DTCs are set, this bulletin does not apply. Continue with normal troubleshooting.
2. Check the on-board snapshot (at time 0) or the freeze frame data. Look at the **ROCKER ARM OIL PRESSURE** value.
 - If the value is greater than 92 psi, go to **REPAIR PROCEDURE**.
 - If the value is 92 psi or less, this bulletin does not apply. Continue with normal troubleshooting.

REPAIR PROCEDURE

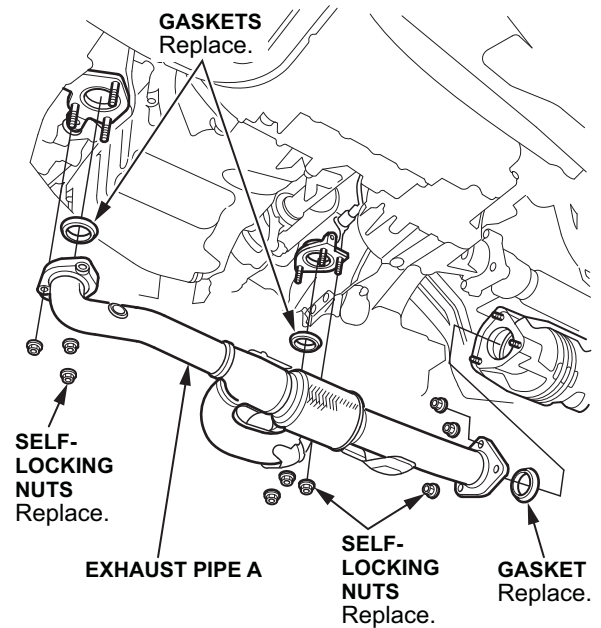
1. Raise the vehicle on a lift.
2. Drain the engine oil.
3. *Pilot Only:* Remove the front subframe stiffener.



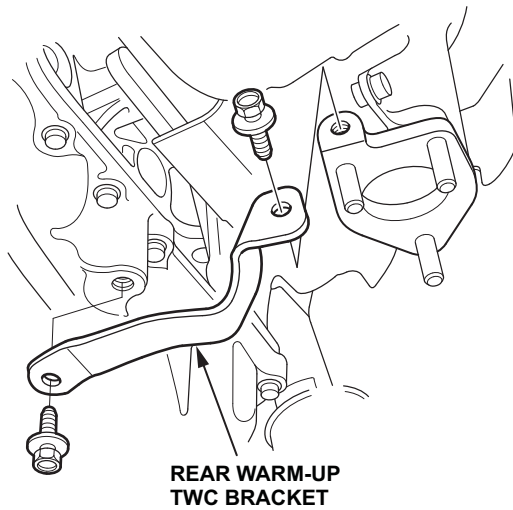
4. Remove the front secondary HO2S sensor from exhaust pipe A.



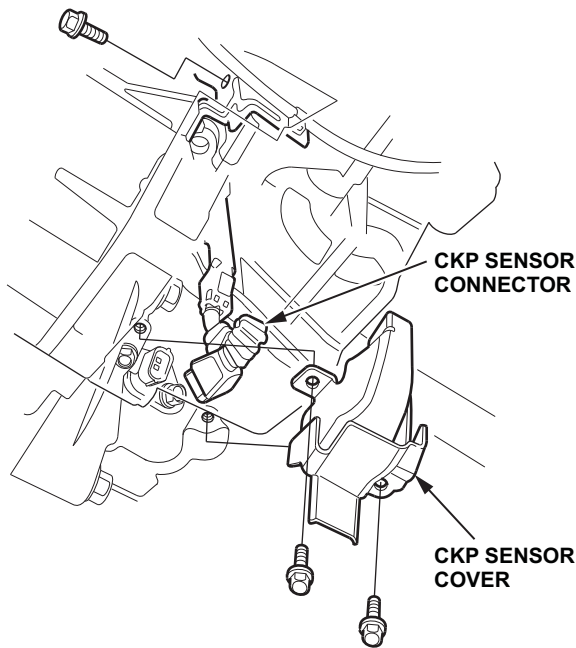
5. Remove all nine nuts from exhaust pipe A, then remove the pipe.



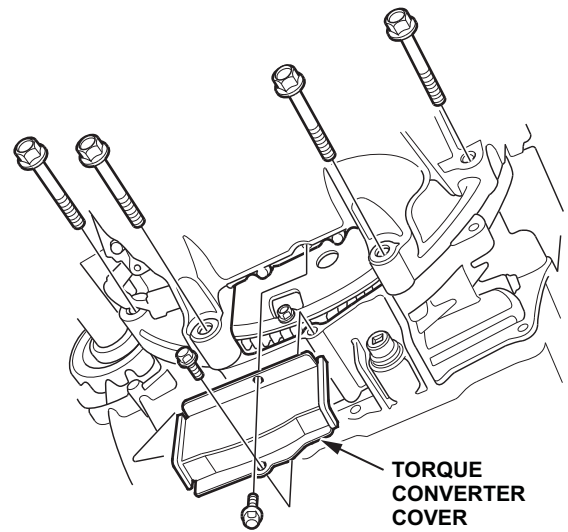
6. Remove the rear warm-up TWC bracket.



7. Remove the CKP sensor cover and the bolts, then disconnect the CKP sensor connector.

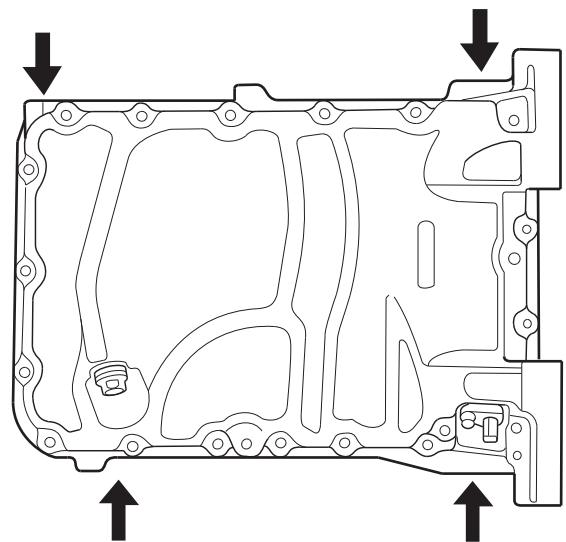


8. Remove the torque converter cover and the four transmission bolts.



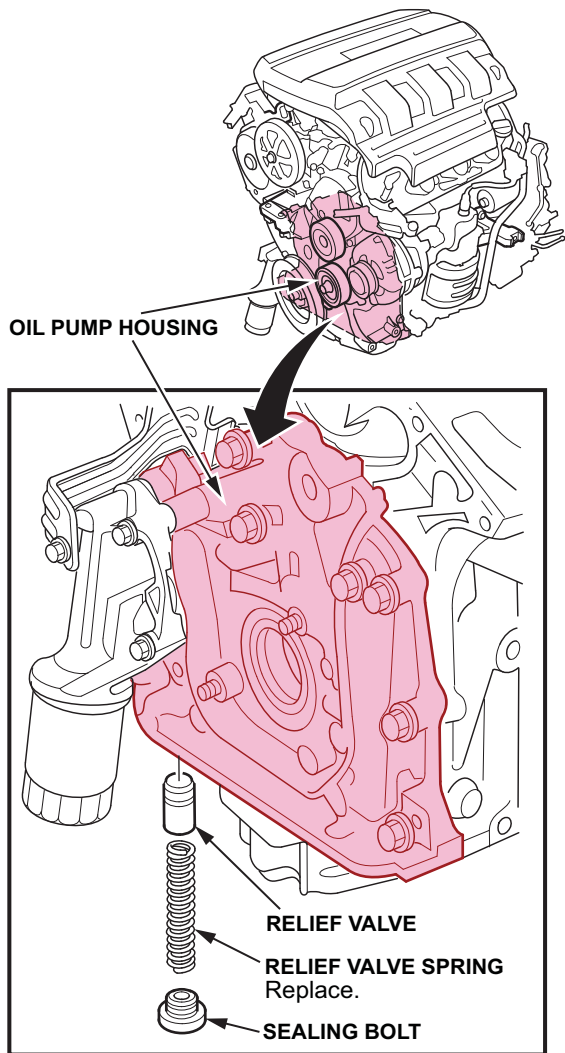
9. Remove the oil pan bolts.

10. Using a flat-blade screwdriver, separate the oil pan from the engine block at the points shown.



11. Remove the oil pan.

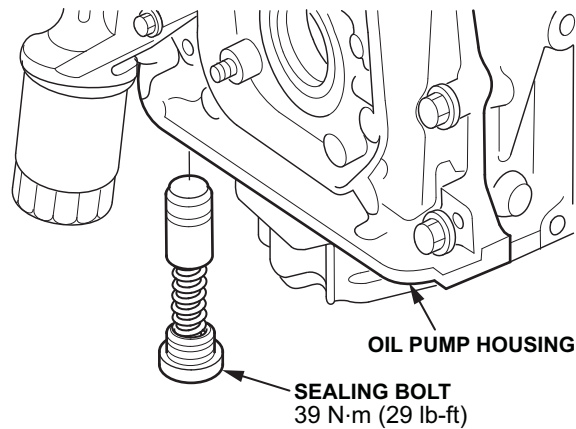
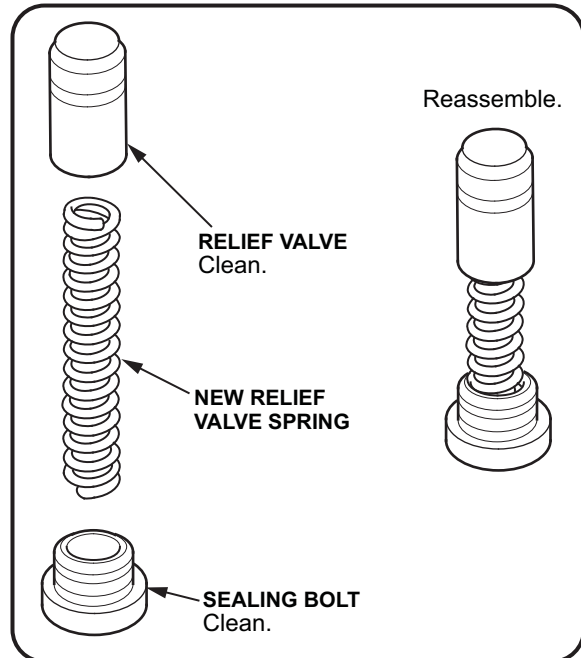
12. Remove the oil pump sealing bolt, the relief valve spring, and the relief valve.



13. Clean the sealing bolt and relief valve thoroughly.
NOTE: Apply Hondalock 2 to the threads.

14. Insert one end of the new relief valve spring into the valve and then the other end into the sealing bolt. Insert the three parts into the oil pump and then torque to **39 N•m (29 lb-ft)**.

> Relief valve spring



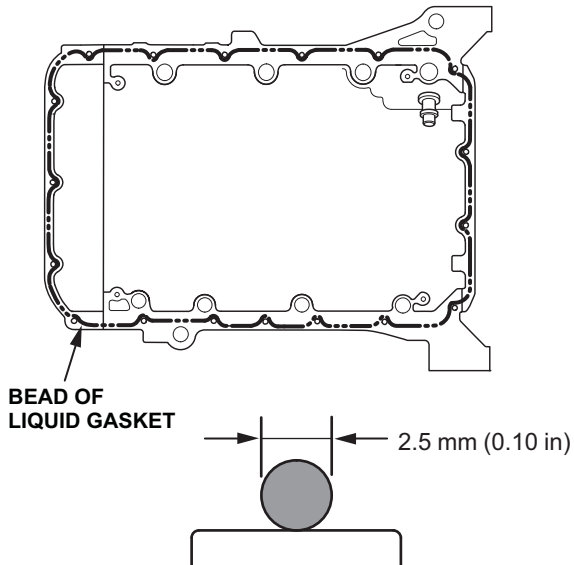
15. Remove all of the old liquid gasket from the oil pan mating surfaces, the bolts, and the bolt holes.

16. Clean and dry the oil pan mating surfaces.

17. Apply liquid gasket (P/N 08718-0009 [preferred] or P/N 08718-0004) to the oil pan mating surface of the engine block and to the inside edge of the threaded bolt holes. Install the oil pan within 5 minutes of applying the liquid gasket.

NOTE:

- Apply a 2.5 mm (0.10 in) diameter bead of liquid gasket along the broken line.
- If too much time has passed after applying liquid gasket, remove the old liquid gasket and residue, then reapply new liquid gasket.

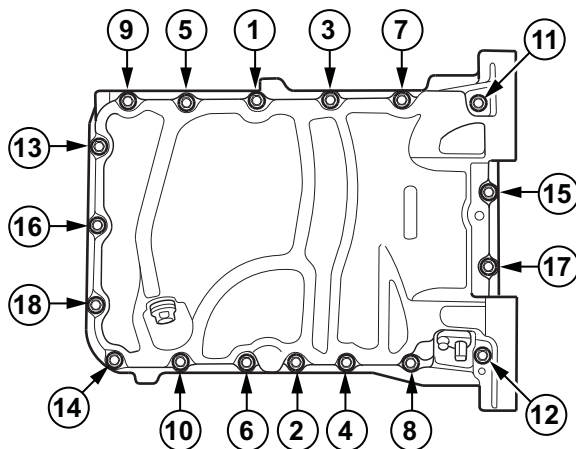


18. Install the oil pan on the engine block.

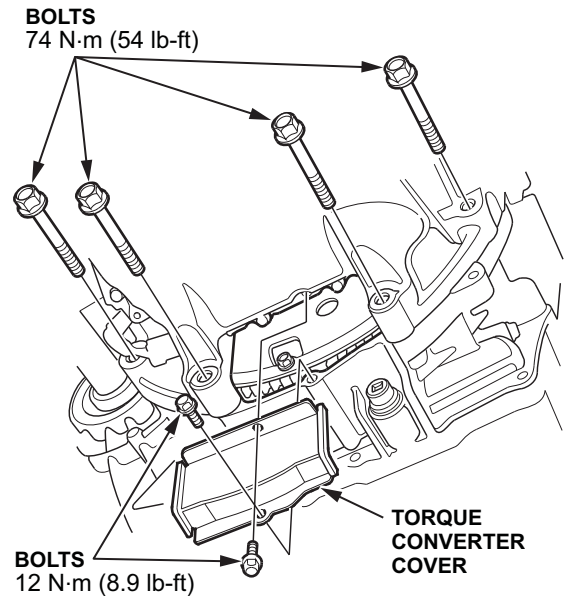
19. Tighten the bolts in three steps. In the final step, torque all bolts, in the sequence shown below, to **12 N•m (8.9 lb-ft)**.

NOTE:

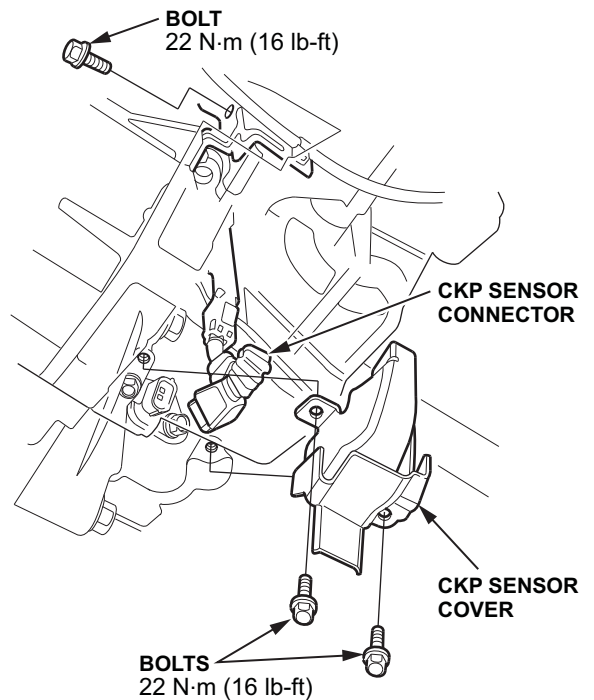
- Wait at least 30 minutes before filling the engine with oil.
- Do not run the engine for at least 3 hours after installing the oil pan.



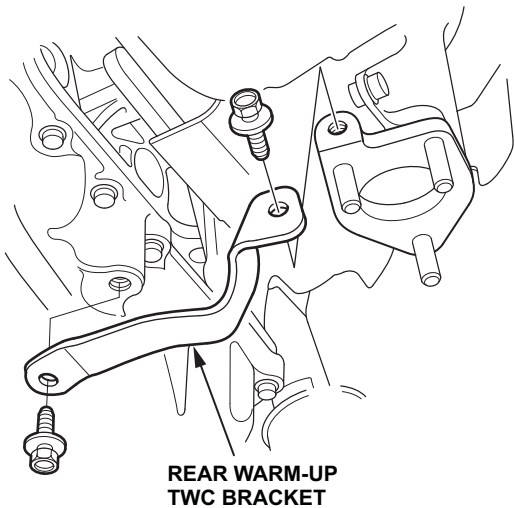
20. Install the four transmission bolts, and torque them to **74 N•m (54 lb-ft)**. Install the torque converter cover.



21. Connect the CKP sensor connector, then install the CKP sensor cover and the bolt. Torque the bolts to **22 N•m (16 lb-ft)**.

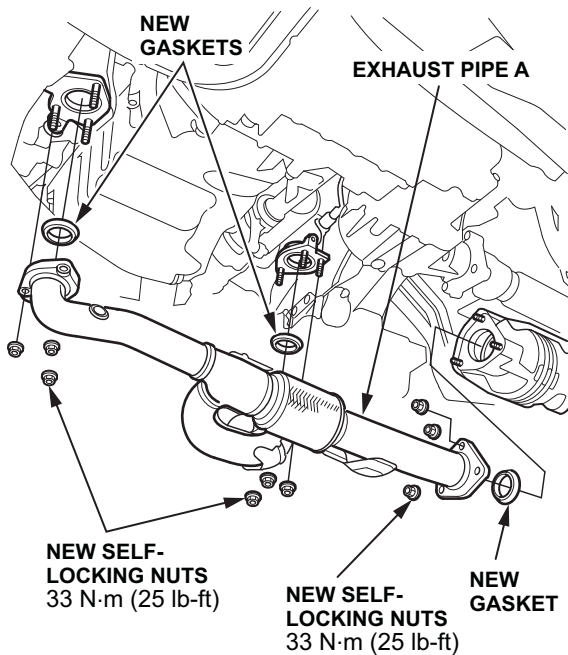


22. Install the rear warm-up TWC bracket. Torque the bolts to **22 N•m (16 lb-ft)**.

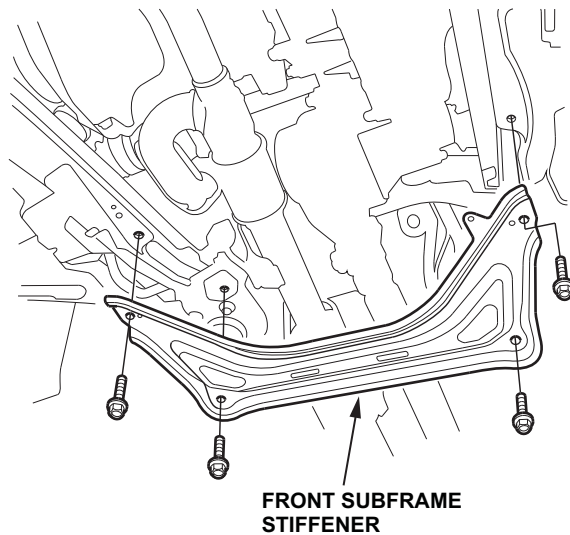


23. Install exhaust pipe A using new gaskets and new self-locking nuts. Torque the nuts to **33 N•m (25 lb-ft)**.

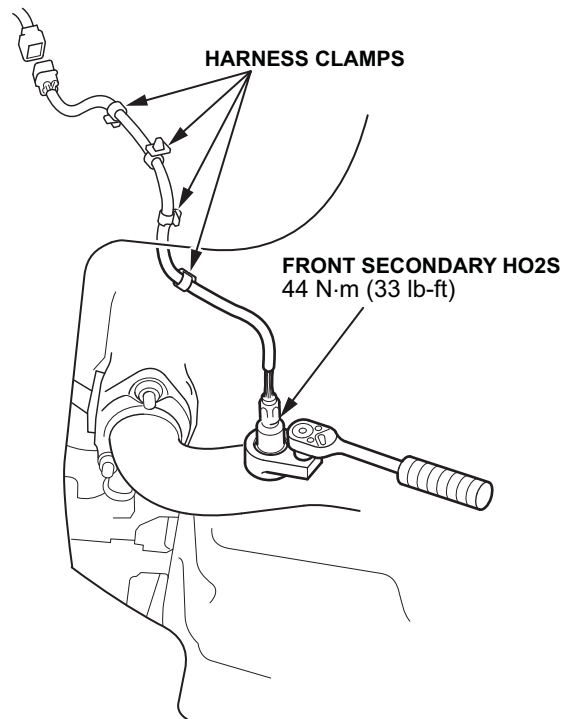
- > Self-locking nuts (9 required)
- > Exhaust pipe gaskets (2 required)



24. *Pilot Only:* Install the front subframe stiffener.



25. Reinstall the front secondary HO2S sensor into exhaust pipe A. Torque the bolt to **44 N•m (33 lb-ft)**.



26. Refill the engine with the recommended engine oil.

27. Run the engine for at least 3 minutes, then recheck the oil level and check for leaks.

28. Reset the Oil Life monitor.

- Connect the HDS.
- Turn the ignition switch to ON (II).
- Go to **BODY ELECTRICAL**, and select **GAUGES, ADJUSTMENT, MAINTENANCE MINDER, RESET, and RESETTNG THE ENGINE OIL LIFE**. Then follow the prompts.