

April 12, 2019

Version 1

Safety Recall: 3.5L V6 Timing Belt

AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2018-19	MDX	ALL	Check the iN VIN status for eligibility.
2019	RLX	ALL	Check the iN VIN status for eligibility.
2019	RLX Sport Hybrid	ALL	Check the iN VIN status for eligibility.
2019	TLX	ALL V6	Check the iN VIN status for eligibility.

BACKGROUND

During production, a supplier produced some timing belts that do not meet specification. These timing belts may shred or slip, causing the cam shafts to fall out of timing. Camshafts that are out of timing will set *DTC P0341: CMP Sensor and CKP Sensor Incorrect Phase Detected* and/or *DTC P0369: CMP Sensor Circuit Intermittent Interruption* and the engine will run rough. Additionally, shredded timing belts may cause the vehicle to stall and not be able to restart, which increases the risk of a crash.

CLIENT 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 client 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 timing belt and, if necessary, replace the timing belt. In some cases, a cylinder leak down test may be required and, based on those results, further repairs may be required.

NOTE

Only a small percentage of vehicles are expected to have timing belts that are out of specification. Only order replacement parts after you have identified an out-of-spec timing belt.

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.

PARTS INFORMATION

NOTES

- Parts are applicable to all models unless otherwise noted.
- Only a small percentage of vehicles are expected to have timing belts that are out of specification. Only order replacement parts after you have identified an out-of-spec timing belt.
- Order the engine block and the applicable cylinder head(s) after a damaged engine is identified by completing a cylinder leak-down test.

Timing Belt Replacement

Part Name	Part Number	Quantity
Timing Belt	14400-R9P-A01	1
Timing Belt Idler Bolt	14551-RCA-A01	1
Flange Bolt (10 x 85)	90002-R70-A00	1
Flange Bolt (10 x 30) (For MDX only)	90103-SV4-013	1
Flange Bolt (10 x 60)	90168-TA1-A00	2
Flange Bolt (10 x 105) (All except RLX Sport Hybrid)	95801-10105-08	2

Add for RLX Sport Hybrid

Part Name	Part Number	Quantity
Flange Bolt (12 x 45)	90161-SDA-A01	1
Flange Bolt (12 x 30)	90176-SKN-000	3
Flange Bolt (10 x 75)	90002-R8A-A00	3
Oil Filter Base/Oil Cooler Gasket	15302-5G0-A00	1
Self-Locking Nut (10 mm)	90212-SA5-003	3
Pre-Chamber Gasket	18393-SJA-A01	1
Flange Bolt (10 x 35)	90163-SDA-A01	2
Flange Bolt 10 x 35)	90161-T2A-A00	2
Flange Bolt (10 x 60)	90164-TY3-A01	2
Flange Nut (10 mm)	90371-SEF-000	4

Engine Block and Cylinder Head Replacement - MDX

Part Name	Part Number	Quantity
Cylinder Block Assembly	10002-5J6-A12	1
Front Cylinder Head Assembly	10004-5J6-A11	1
Rear Cylinder Head Assembly	10005-5J6-H11	1
Self-Locking Nut (10 mm)	90212-SA5-003	6
Exhaust Pipe Gasket	18212-SA7-003	2
Pre-Chamber Gasket	18393-SDB-A00	2
Flange Bolt (12 x 30)	90161-SHJ-A00	8
Flange Bolt (14 x 125)	90165-TK8-A00	2
Flange Bolt (10 x 25)	90167-SAA-010	4
Self-locking Nut (8 mm)	90212-RCA-A01	8
Front Cylinder Head Gasket Kit	06110-5J6-000	1
Rear Cylinder Head Gasket Kit	06120-5J6-000	1
Cylinder Block Gasket Kit	06111-5J6-000	1
Washer Bolt (12 x 163)	90005-PAA-A01	12
Washer Bolt (12 x 188)	90005-5G0-A01	4
EGR Gasket Pipe A	18716-R70-A01	1
EGR Gasket Pipe B	18719-R70-A01	1
Exhaust Chamber Gasket (NIPPON LEAKLESS)	18115-5G0-A01	2
O-Ring (5/8")	80871-SN7-003	1
O-Ring (8 mm)	80873-ST7-000	1
Castle Nut (14 mm)	90365-STX-A00	2
Split Pin (M14)	90701-S3V-A01	2
Flange Nut (12 mm)	90362-SZA-A00	2
Split Pin (3.0 x 22)	94201-30220	2
Flange Nut (12 mm)	90362-SZA-A00	2
Flange Bolt (10 x 35)	90163-SDA-A01	2
Flange Nut (12 mm)	90371-SAA-010	4
Flange Bolt (10 x 30)	90163-SDB-A00	3
Flange Bolt (12 x 75)	90163-TA0-A00	4
Fuel Joint Pipe Set	16012-R9P-315	1

Engine Block and Cylinder Head Replacement - MDX (cont.)

Part Name	Part Number	Quantity
O-Ring	91311-5A2-A01	1
Injector Clip	16451-5A2-A01	6
Injector Seal Set	16453-R9P-A00	2

Engine Block and Cylinder Head Replacement - RLX and RLX Hybrid

Part Name	Part Number	Quantity
Cylinder Block Assembly	10002-R9P-A11	1
Front Cylinder Head Assembly	10004-R9P-A10	1
Rear Cylinder Head Assembly	10005-R9P-A10	1
Self-Locking Nut (10 mm)	90212-SA5-003	6
Exhaust Pipe Gasket	18212-SA7-003	2
Pre-Chamber Gasket	18393-SJA-A01	2
Flange Bolt (14 x 150)	90176-SEF-010	4
Flange Bolt (10 x 45)	90167-SP0-000	2
Flange Bolt (12 x 25)	90396-S5A-010	2
Flange Bolt (12 x 75)	90396-S5A-010	2
Self-locking Nut (8 mm)	90212-RCA-A01	8
Front Cylinder Head Gasket Kit	06110-R9P-000	1
Rear Cylinder Head Gasket Kit	06120-R9P-000	1
Cylinder Block Gasket Kit	06111-5J6-000	1
Washer Bolt (12 x 163)	90005-PAA-A01	12
Washer Bolt (12 x 188)	90005-5G0-A01	4
EGR Gasket Pipe A	18716-R70-A01	1
EGR Gasket Pipe B	18719-R70-A01	1
Exhaust Chamber Gasket (NIPPON LEAKLESS)	18115-5G0-A01	2
O-Ring (5/8") (RLX Only)	80871-SN7-003	1
O-Ring (8 mm)	80873-ST7-000	1
Castle Nut (12 mm)	90362-SZ3-010	2
Arm Clip (Upper)	90701-SX0-003	2
Hex Nut (12 mm)	94030-12280	2
Split Pin (3.0 x 22)	94201-30220	2
Flange Bolt (10 x 35)	90163-SDA-A01	2
Flange Nut (12 mm)	90371-SAA-010	4
Flange Bolt (10 x 30)	90163-SDB-A00	3
Flange Bolt (12 x 56)	90170-TA1-A00	4
Fuel Joint Pipe Set	16012-R9P-315	1

Engine Block and Cylinder Head Replacement - RLX and RLX Hybrid (cont.)

Part Name	Part Number	Quantity
O-Ring	91311-5A2-A01	1
Injector Clip	16451-5A2-A01	6
Injector Seal Set	16453-R9P-A00	2

Engine Block and Cylinder Head Replacement - TLX

Part Name	Part Number	Quantity
Cylinder Block Assembly	10002-5J2-A00	1
Front Cylinder Head Assembly	10004-R9P-A10	1
Rear Cylinder Head Assembly	10005-5J6-A00	1
Self-Locking Nut (10 mm)	90212-SA5-003	6
Exhaust Pipe Gasket	18212-SA7-003	2
Pre-Chamber Gasket	18393-SDB-A00	2
Flange Bolt (12 x 25)	90396-S5A-010	2
Flange Bolt (14 x 135)	90176-SDA-A00	4
Flange Bolt (10 x 24)	90166-TZ7-A01	2
Flange Bolt (12 x 33)	90186-SDA-A00	2
Flange Bolt (14 x 150)	90177-TZ3-A00	2
Bolt Washer (8 x 16)	90101-SWA-A00	6
Self-locking Nut (8 mm)	90212-RCA-A01	8
Front Cylinder Head Gasket Kit	06110-5J2-A00	1
Rear Cylinder Head Gasket Kit	06120-5J2-A00	1
Cylinder Block Gasket Kit	06111-5J6-000	1
Washer Bolt (12 x 163)	90005-PAA-A01	12
Washer Bolt (12 x 188)	90005-5G0-A01	4
EGR Gasket Pipe A	18716-R70-A01	1
EGR Gasket Pipe B	18719-R70-A01	1
Exhaust Chamber Gasket (NIPPON LEAKLESS)	18115-5G0-A01	2
Castle Nut (14 mm)	90363-S3V-A01	2
Split Pin (M14)	90701-S3V-A01	2
Flange Nut (12 mm)	90362-SZA-A00	2
Split Pin (3.0 x 22)	94201-30220	2
Flange Nut (12 mm)	90362-SZA-A00	2
Flange Bolt (10 x 35)	90163-SDA-A01	2
Flange Nut (12 mm)	90371-SAA-010	4
Flange Bolt (10 x 30)	90163-SDB-A00	3
Flange Bolt (12 x 56)	90170-TZ3-A00	4

Engine Block and Cylinder Head Replacement - TLX (cont.)

Part Name	Part Number	Quantity
Fuel Joint Pipe Set	16012-R9P-315	1
O-Ring	91311-5A2-A01	1
Injector Clip	16451-5A2-A01	6
Injector Seal Set	16453-R9P-A00	2

REQUIRED TOOLS

Tool Name	Part Number	Quantity
Holder Handle	07JAB-001020B	1
50 mm Offset Holder Attachment	07MAB-PY3010A	1
19 mm Socket	07JAA-001020A	1
Cylinder Leak Down Tester	Commercially available	1

REQUIRED MATERIALS

Material Name	Part Number	Quantity
Acura Long-Life Antifreeze/Coolant Type 2	OL999-9011	3
Acura Genuine Motor Oil 0W-20	08798-9041	6
Hondabond HT (1 tube repairs 4 vehicles)	08718-0004	1

WARRANTY CLAIM INFORMATION

Timing Belt Inspection

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1105C3	MDX	0.5 hr	6CX00	Z4L00	B19026A	14400-R9P-A01
1105C3	RLX	0.5 hr	6CX00	Z4L00	B19026B	14400-R9P-A01
1105C8	RLX Sport Hybrid	0.9 hr	6CX00	Z4L00	B19026C	14400-R9P-A01
1105C3	TLX	0.5 hr	6CX00	Z4L00	B19026D	14400-R9P-A01

Timing Belt Inspection, Replacement, Diagnosis (Cylinder Leak Down and Valve Timing), and Verify Valve Timing

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1105C5	MDX	3.2 hr	6CX00	Z4L00	B19026E	14400-R9P-A01
1105C5	RLX	2.9 hr	6CX00	Z4L00	B19026F	14400-R9P-A01
1105D0	RLX Sport Hybrid	5.1 hr	6CX00	Z4L00	B19026G	14400-R9P-A01
1105C5	TLX	3.2 hr	6CX00	Z4L00	B19026H	14400-R9P-A01

Timing Belt Inspection, Diagnosis, and Replace the Engine Block and One Cylinder Head

NOTE

For MDX, the FRT includes time for evacuating and recharging the A/C system.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1105C6	MDX 2WD	12.5 hr	6CX00	Z4L00	B19026I	14400-R9P-A01
1105C6	MDX AWD	12.5 hr			B19026J	14400-R9P-A01
A	Add for AWD	0.4 hr				
1105C6	RLX	13.4 hr	6CX00	Z4L00	B19026K	14400-R9P-A01
1105D1	RLX Sport Hybrid	13.8 hr	6CX00	Z4L00	B19026L	14400-R9P-A01
1105C6	TLX 2WD	12.0 hr	6CX00	Z4L00	B19026M	14400-R9P-A01
1105C6	TLX AWD	12.0 hr			B19026N	14400-R9P-A01
A	Add for AWD	0.4 hr				

Timing Belt Inspection, Diagnosis, and Replace the Engine Block and Two Cylinder Heads

NOTE

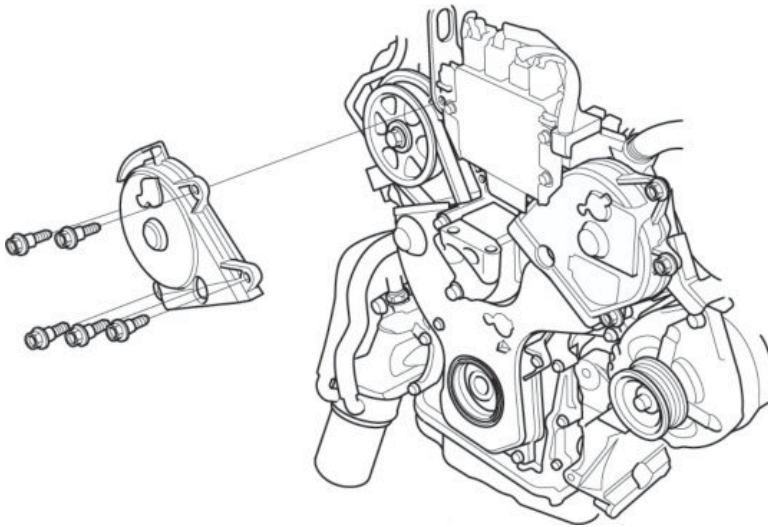
For MDX, the FRT includes time for evacuating and recharging the A/C system.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1105C7	MDX 2WD	12.7 hr	6CX00	Z4L00	B19026O	14400-R9P-A01
1105C7	MDX AWD	12.7 hr			B19026P	14400-R9P-A01
A	Add for AWD	0.4 hr				
1105C7	RLX	13.6 hr	6CX00	Z4L00	B19026Q	14400-R9P-A01
1105D2	RLX Sport Hybrid	14.0 hr	6CX00	Z4L00	B19026R	14400-R9P-A01
1105C7	TLX 2WD	12.3 hr	6CX00	Z4L00	B19026S	14400-R9P-A01
1105C7	TLX AWD	12.3 hr			B19026T	14400-R9P-A01
A	Add for AWD	0.4 hr				

Skill Level: Repair Technician

INSPECTION

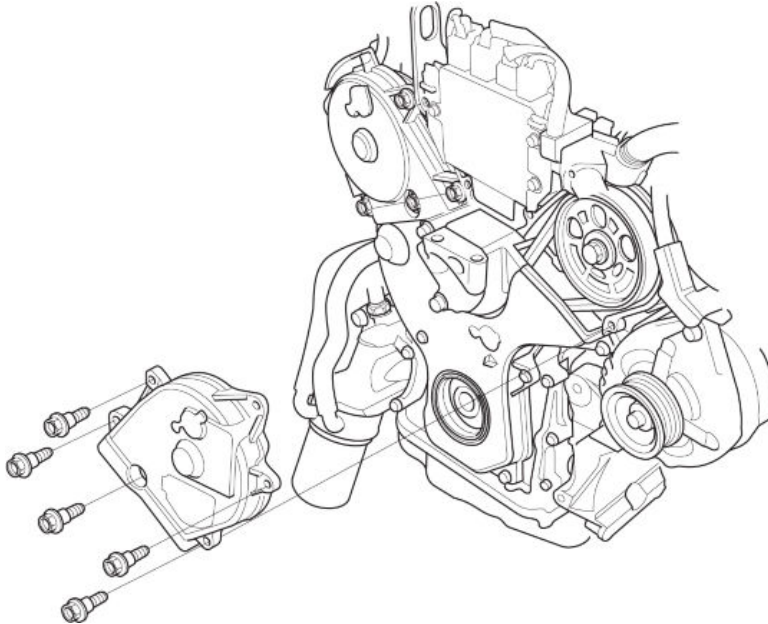
1. Place the vehicle on a lift, and remove the right front wheel.
2. Remove the top engine cover.
3. Remove the rear upper timing belt cover.
 - 3.1. Remove the 5 bolts.



- 3.2. Remove the rear upper timing belt cover.

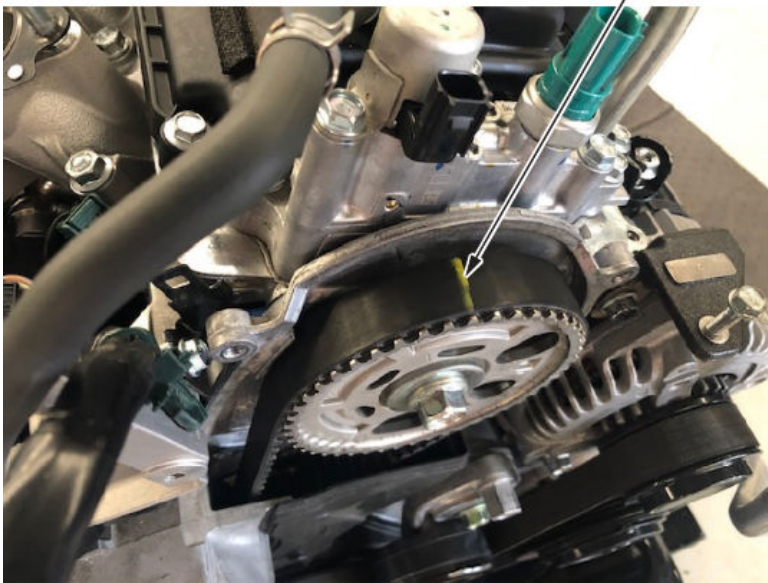
For RLX Sport Hybrid only:

- 3.1. Remove the fuel injector control unit (FICU).
 - 3.2. Remove the cable clips.
 - 3.3. Remove the 5 bolts securing the front timing belt cover.



4. Mark the side of the timing belt as shown with a grease pen or marker.

GREASE PENCIL MARK



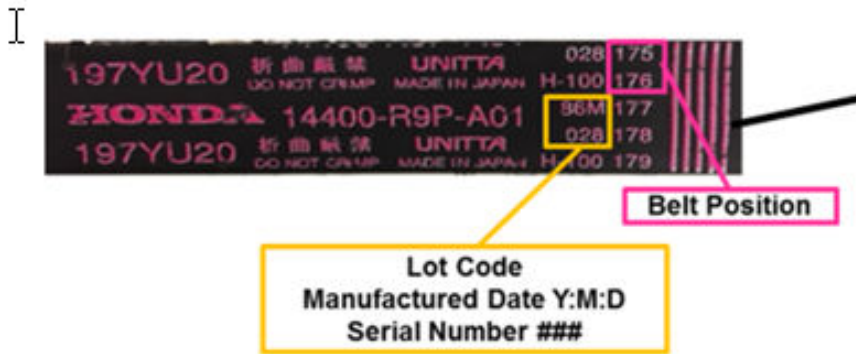
5. Rotate the engine clockwise until you see the timing belt manufacturing information or until the mark you made on the timing belt is visible again.

NOTES

You may need to rotate the engine several times before either the manufacturing information or the mark you made is visible.

- If the lot code information is visible, go to step 6.
- If the lot code is not visible, go to step 8.

6. Check the Lot Code.

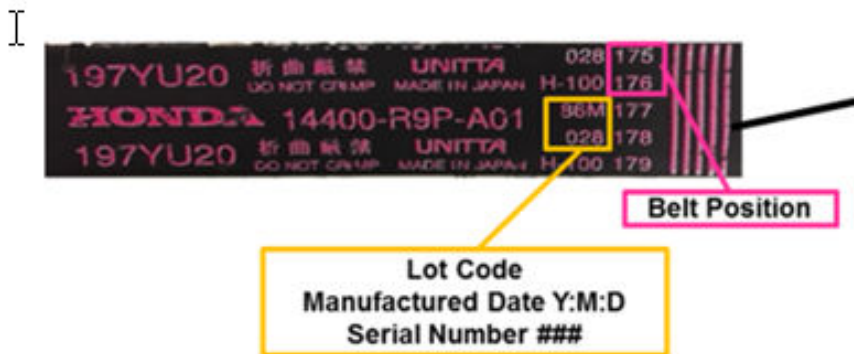


- If the Lot Code is listed in the table, go to step 7.

- If the Lot Code is not listed in the table, the timing belt is okay, and the inspection is complete. Reassemble the vehicle in the reverse order of removal.

85B001	85B013	85E013	85E021	85E029	85E033	85E037	85E041	85F006	85F017
85F021	85F037	85F045	85F053	85G012	85G024	85G032	85G036	85G043	85G054
85H004	85H012	85H024	85H052	85I017	85I032	85I037	85I040	85I044	85L013
85L017	85L021	85L025	85L029	85L037	85L045	85M005	85M009	85M013	85M021
85N029	85N045	868039	868052	86B003	86B007	86B026	86B034	86C018	86C044
86C048	86I004	86I010	86I014	86J001	86J045	86J049	86J053	86K005	86K009
86K013	86K025	86K029	86K033	86K039	86L016	86L028	86L032	86L040	86L044
86L056	86M028	86M044	86M048	86M052	86M056	86P028	86P044	86R003	86R019
86R043	86R051	86S054	86T064	876006	876039	87A038	87B007	87B015	

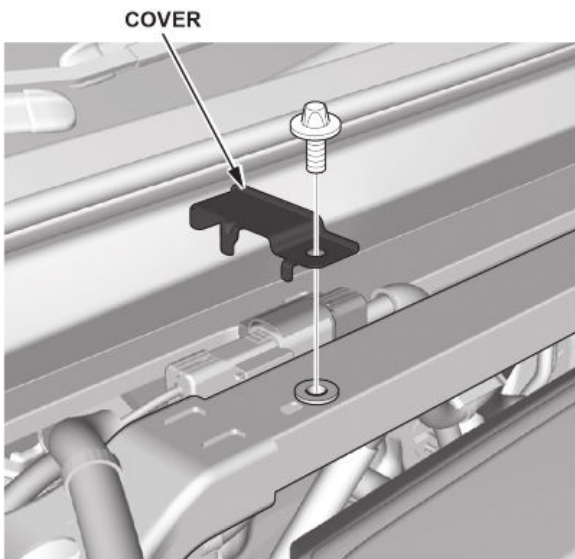
7. Check the belt position code.



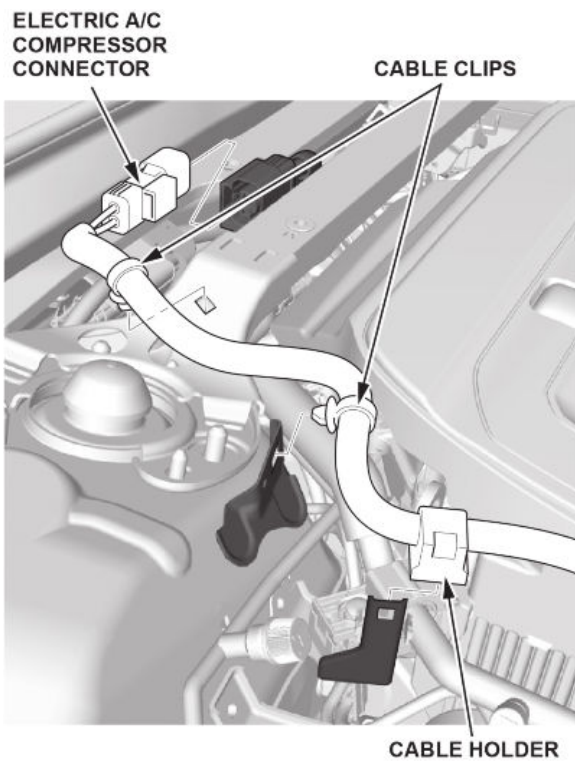
- If **all of the belt position values are less than 170**, the timing belt is okay. Reassemble the vehicle in the reverse order of removal.
- If **any of the belt position values are 170 or more**, go to TIMING BELT REPLACEMENT.

TIMING BELT REPLACEMENT

1. **For RLX Sport Hybrid Only:** Disconnect the 12-volt negative battery cable.
2. **For RLX Sport Hybrid Only:** Turn off the service plug.
3. **For RLX Sport Hybrid Only:** Disconnect the electric A/C compressor.
 - 3.1. Remove the cover.

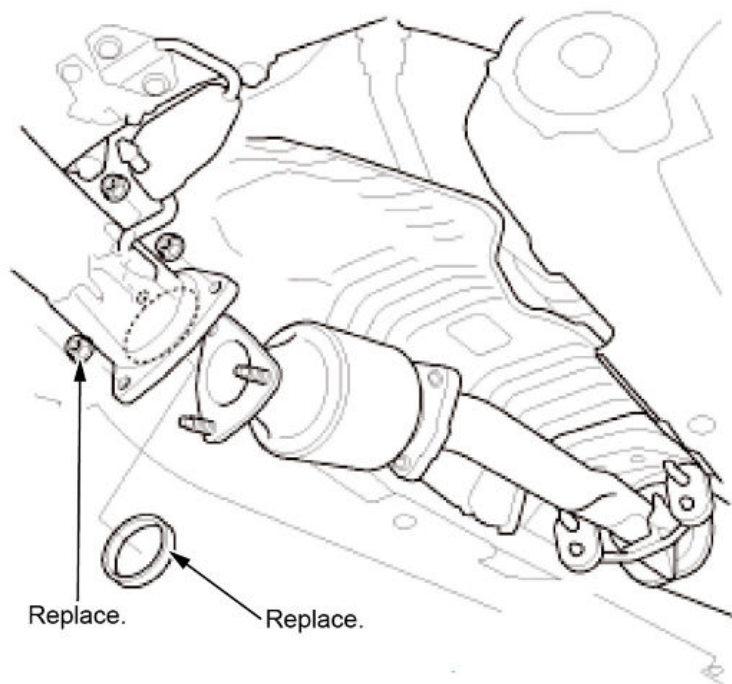


- 3.2. Remove the cable holder.



- 3.3. Remove the cable clips.
- 3.4. Disconnect the electric A/C compressor connector.
4. **For RLX Sport Hybrid Only:** Remove the air cleaner.

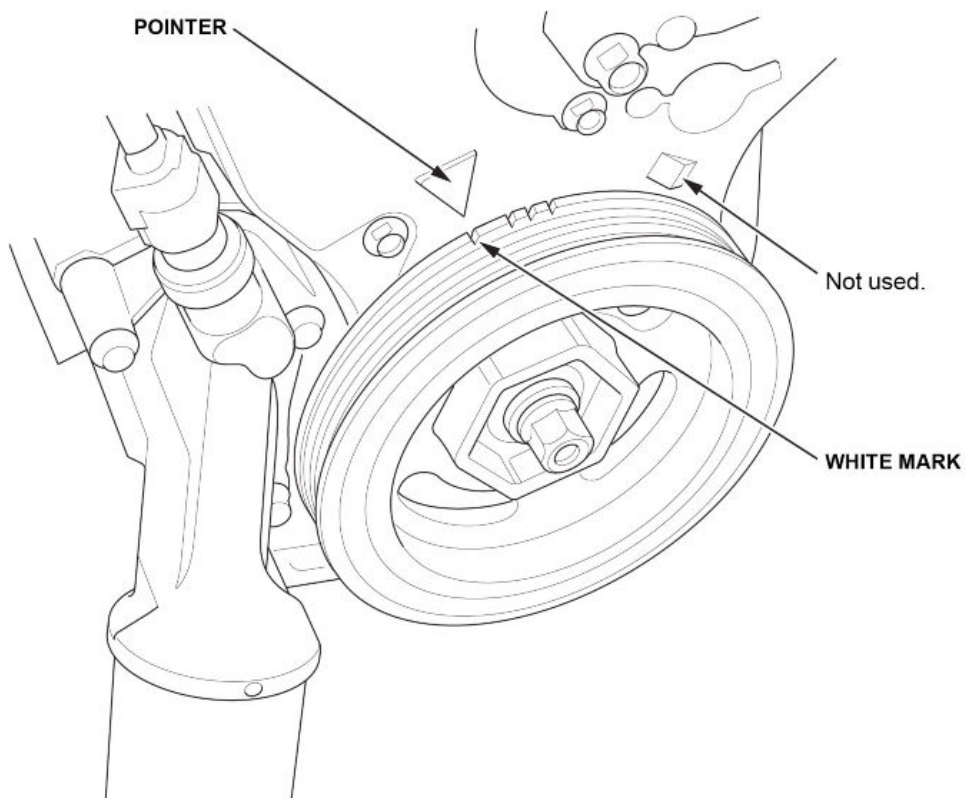
5. **For RLX Sport Hybrid Only:** Disconnect exhaust pipe A.



6. Turn the crankshaft so its white mark on the crankshaft pulley lines up with the pointer.

NOTE

The other pointer is not used.



7. Install the timing belt cover, and check that the No. 1 piston top dead center (TDC) mark on the front camshaft pulley and the pointer on the front upper covers are aligned.

NOTES

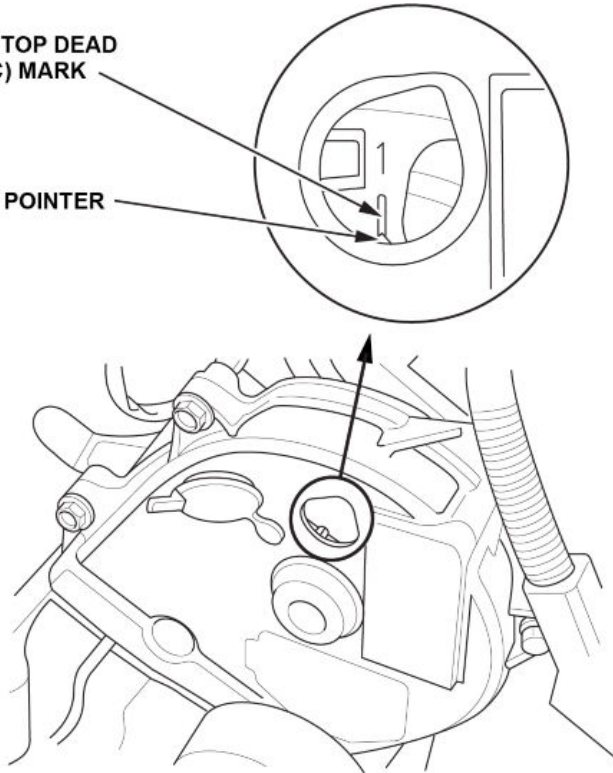
- If the marks are not aligned, rotate the crankshaft 360 degrees, and recheck the camshaft pulley mark.
- If the marks still do not align, remove the original timing belt, install the new timing belt, then check the alignment again.

Front

***Non-Hybrid shown. Hybrid cover will be removed.**

NO. 1 PISTON TOP DEAD CENTER (TDC) MARK

OTHER POINTER

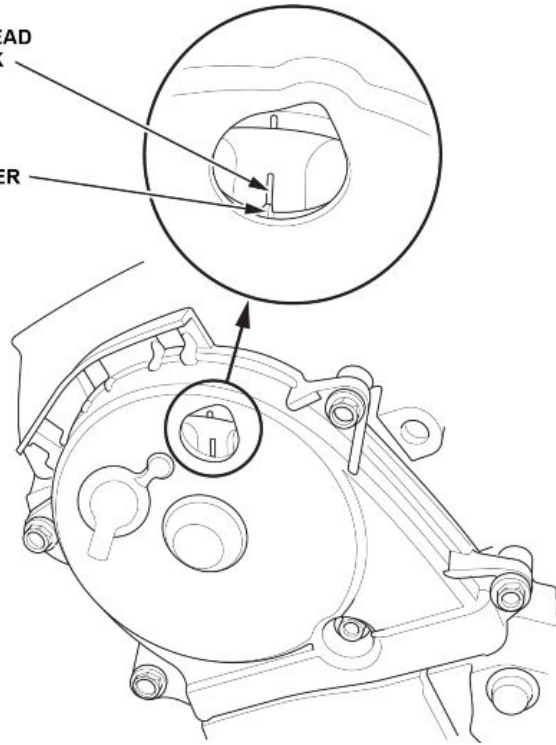


Rear

***Hybrid shown. Non-Hybrid cover will be removed.**

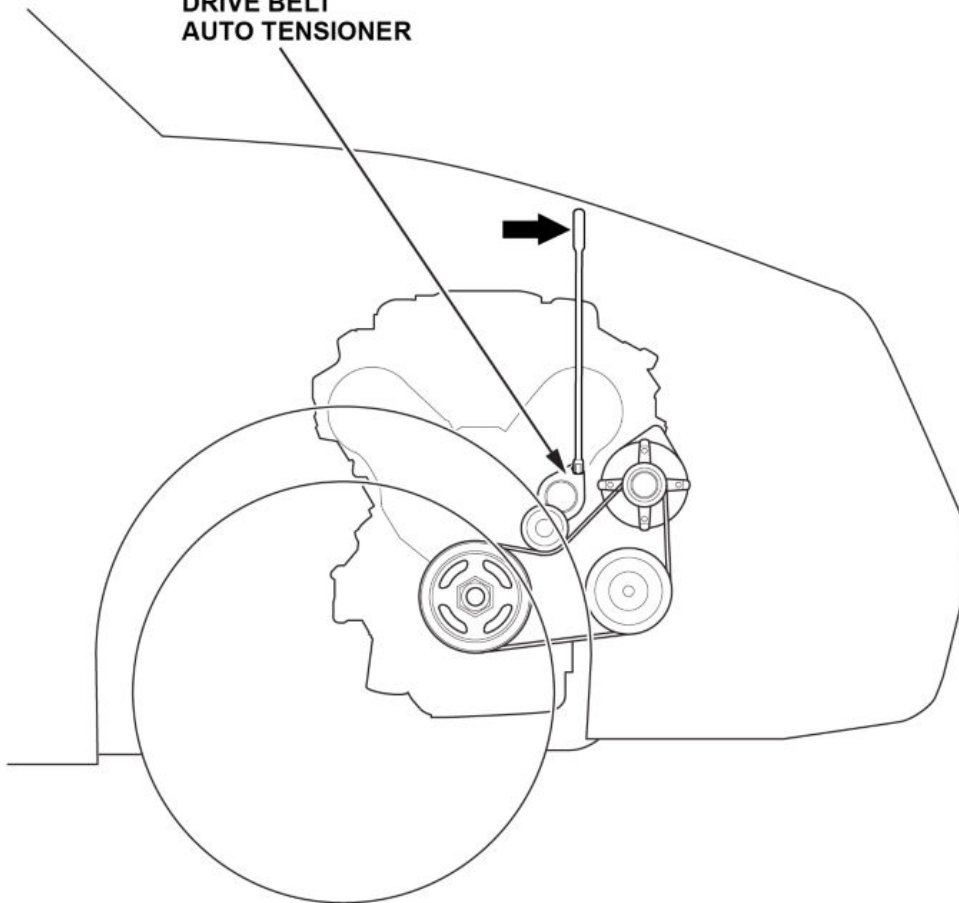
**NO. 1 PISTON TOP DEAD
CENTER (TDC) MARK**

OTHER POINTER

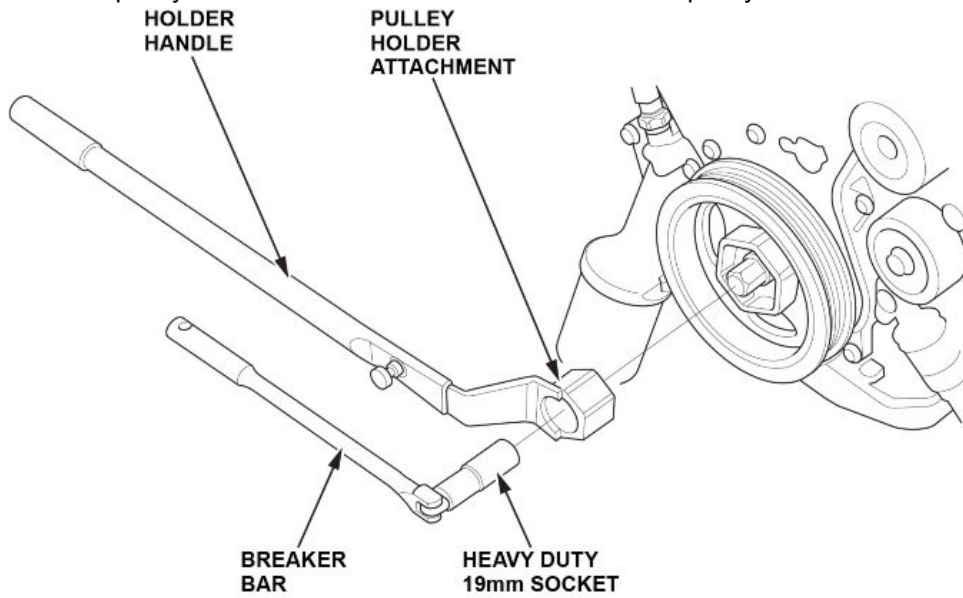


8. Remove the drive belt.

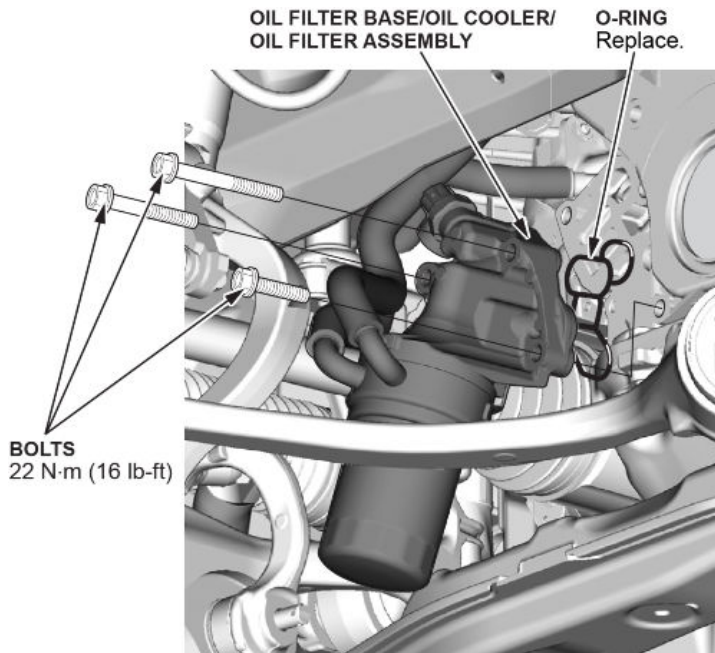
**DRIVE BELT
AUTO TENSIONER**



9. Partially remove the right side splash shield to gain access to the lower half of the engine.
10. Remove the crankshaft pulley.
 - 10.1. Hold the pulley with the holder handle and the crankshaft pulley holder attachment.

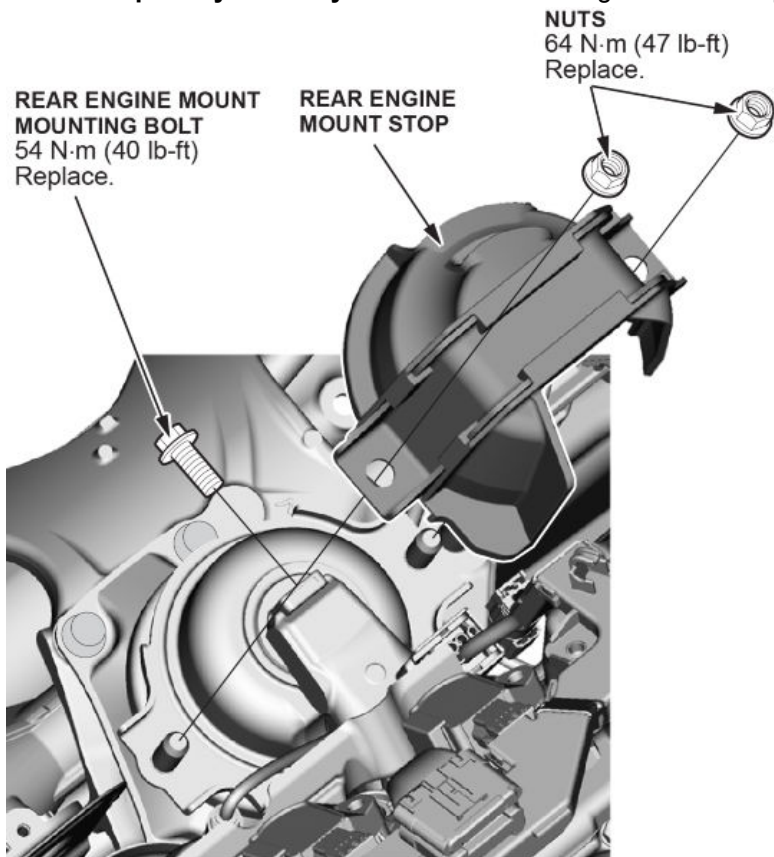


- 10.2. Remove the bolt with a heavy duty 19 mm socket and a breaker bar, then remove the crankshaft pulley.
11. **For RLX Sport Hybrid Only:** Remove the oil filter base, oil cooler, oil filter assembly without disconnecting the water hoses.



12. **TLX and RLX:** Remove the engine cover.
13. Lift and support the engine with a jack and a wood block under the oil pan.

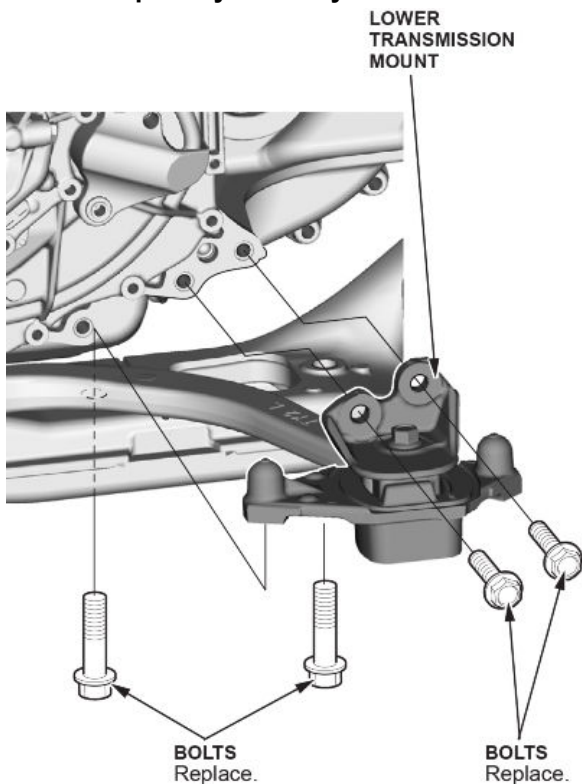
14. **For RLX Sport Hybrid Only:** Remove the rear engine mount stop and the rear engine mount mounting bolt.



14.1. Remove the rear engine mount stop.

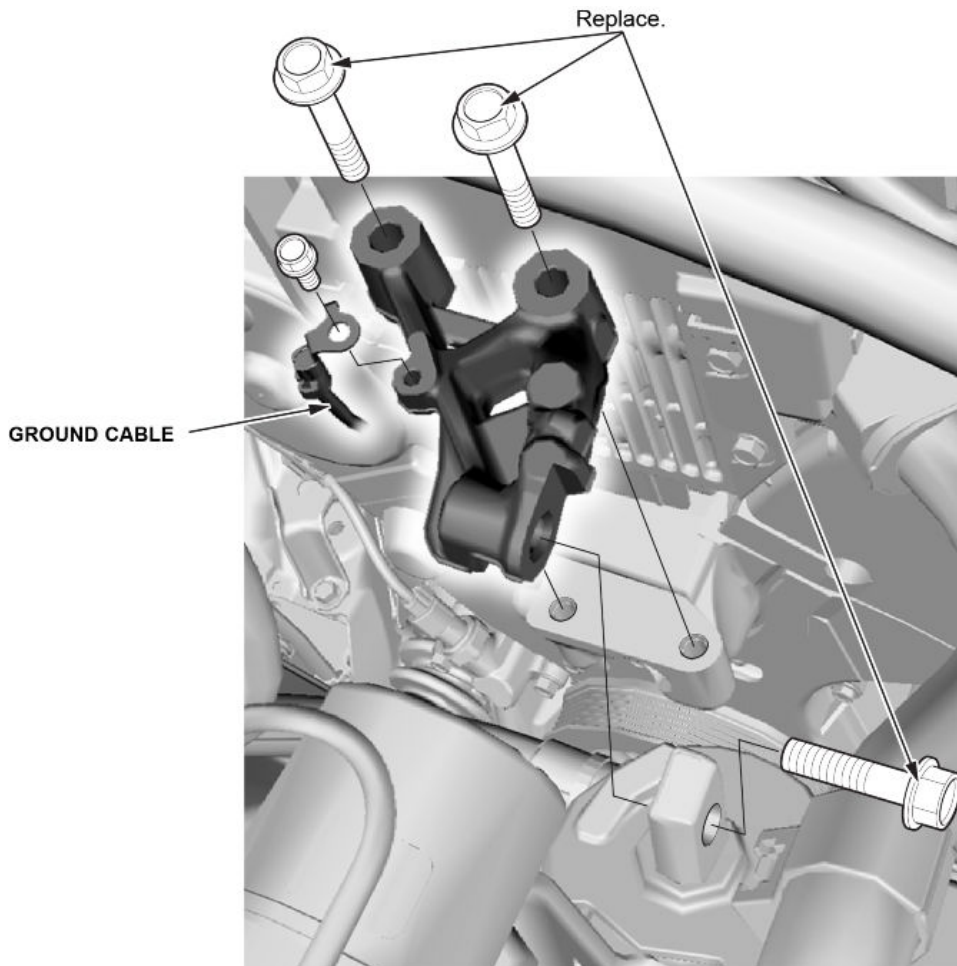
14.2. Remove the rear engine mount mounting bolt.

15. **For RLX Sport Hybrid Only:** Remove the lower transmission mount.



- 15.1. Remove the lower transmission mount bracket mounting bolts and the lower transmission mount mounting bolts.
- 15.2. Remove the lower transmission mount.
16. Remove the upper part of the side engine mount.
 - 16.1. Disconnect the ground cable.
 - 16.2. Remove the harness clamp bracket and the upper half of side engine mount bracket.

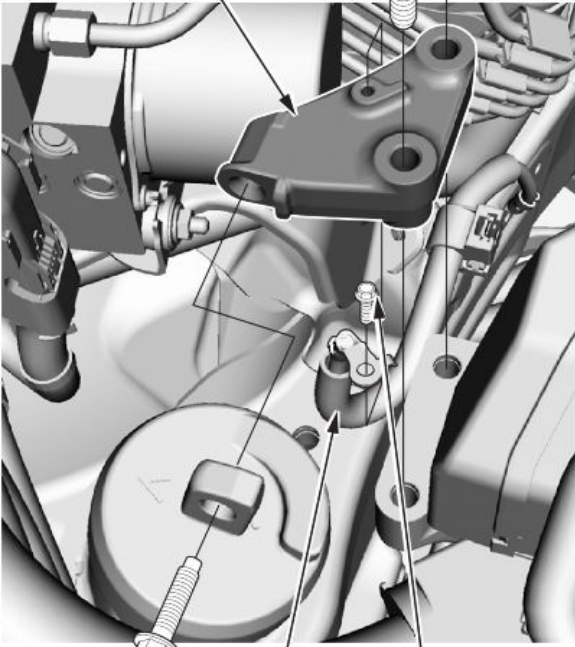
MDX



RLX and TLX

**UPPER HALF
SIDE ENGINE
MOUNT BRACKET**

① BOLTS
44 N·m (32 lb-ft)
Replace.

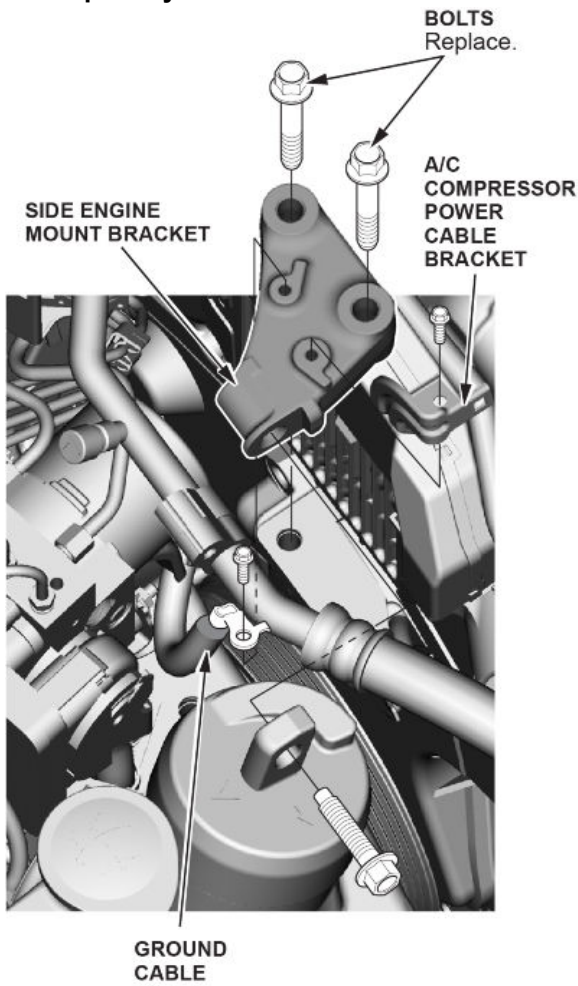


② BOLT
64 N·m (47 lb-ft)
Replace.

**GROUND
CABLE**
Disconnect.

BOLT
10 N·m (7 lb-ft)
Replace.

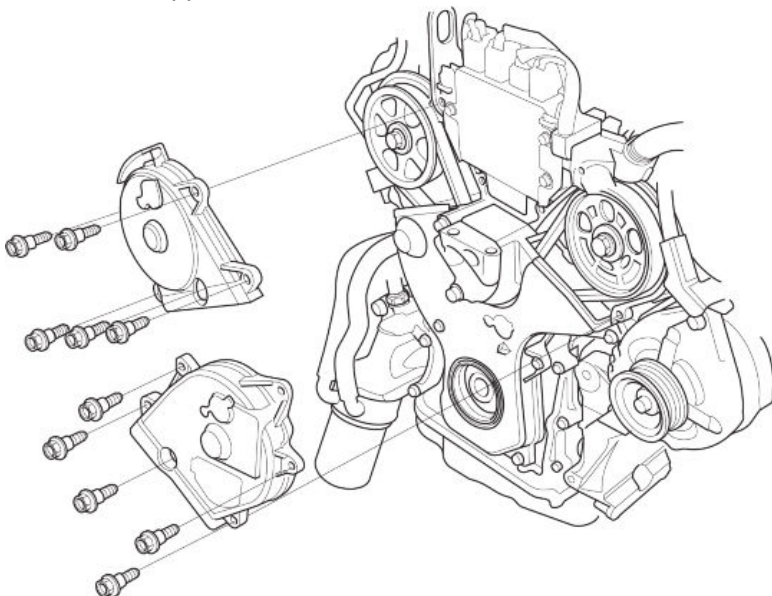
RLX Sport Hybrid



NOTE

You do not need to move the VSA modulator control unit.

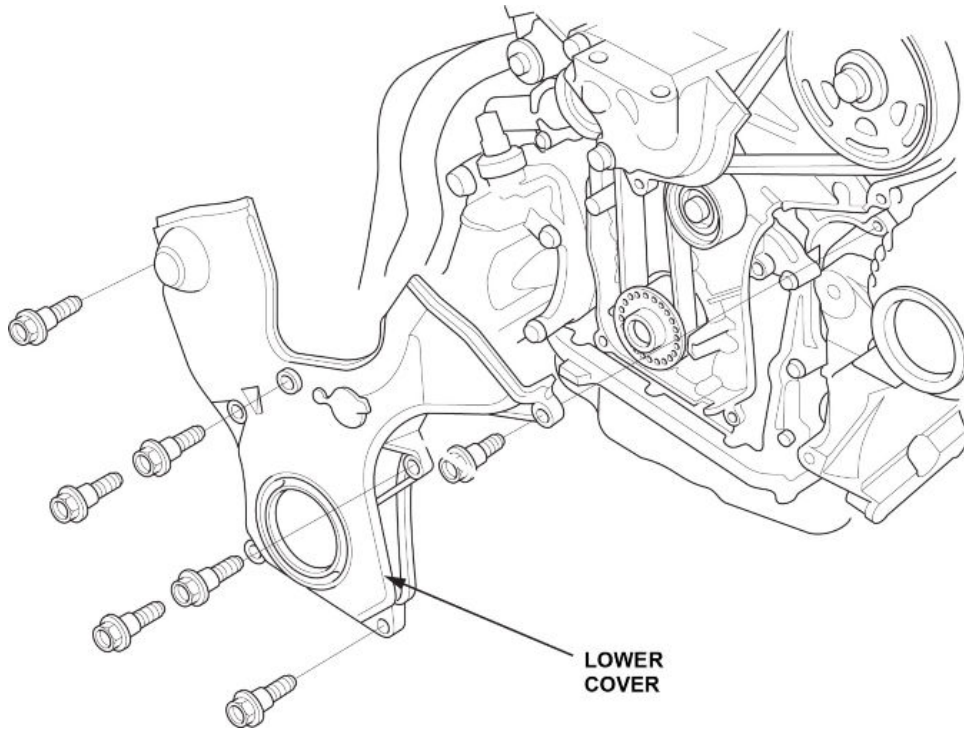
17. **For RLX Sport Hybrid Only:** Raise the engine about 35 mm.
18. Remove the upper covers.



19. Remove the lower cover.

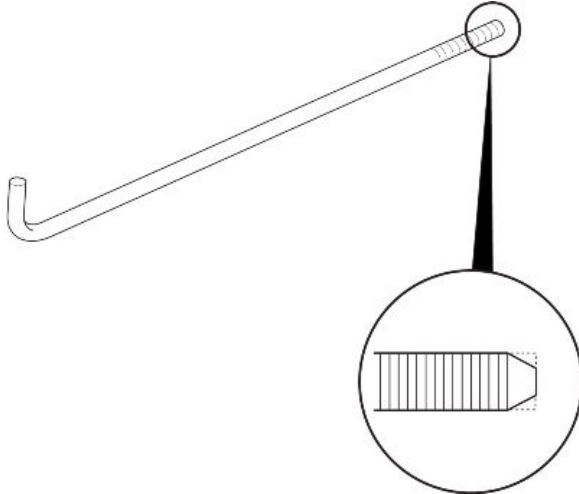
NOTE

For RLX Sport Hybrid only, remove the lower cover after removing the lower half of the side engine mount bracket.



20. Hold the timing belt adjuster.

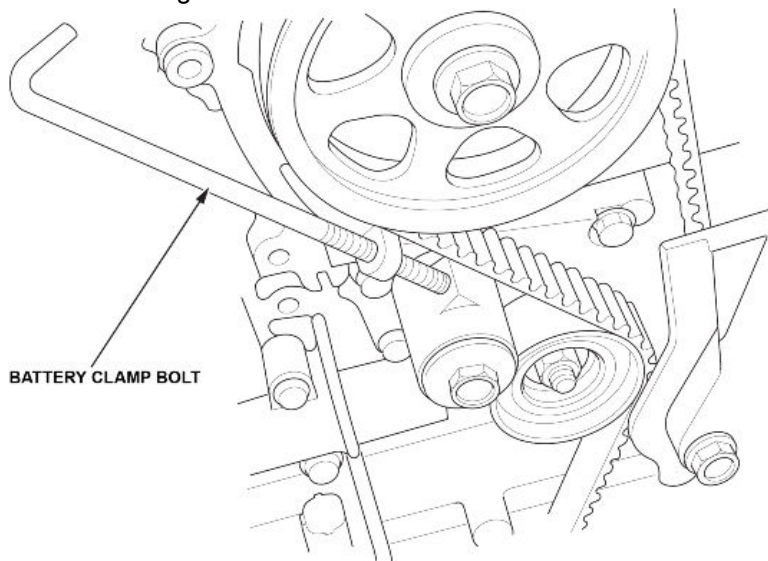
20.1. Remove one of the battery clamp bolts from the battery tray, and grind the end of it as shown.



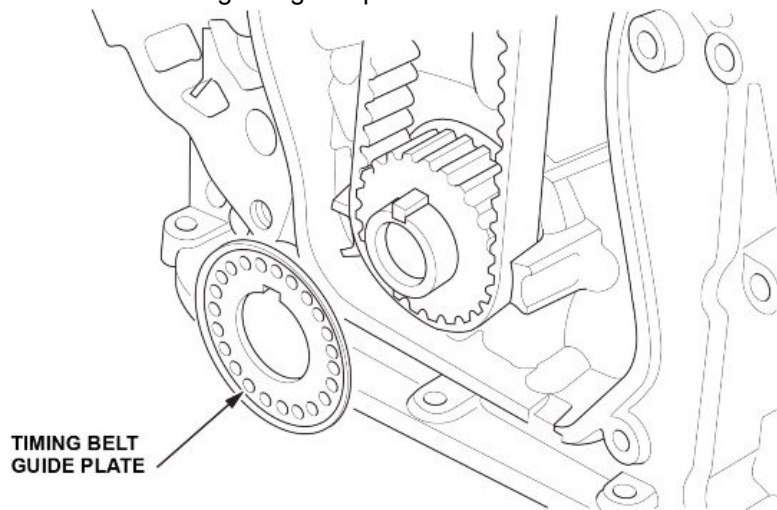
20.2. Thread the battery clamp bolt in as shown to hold the timing belt adjuster in its current position. Tighten it by hand.

NOTICE

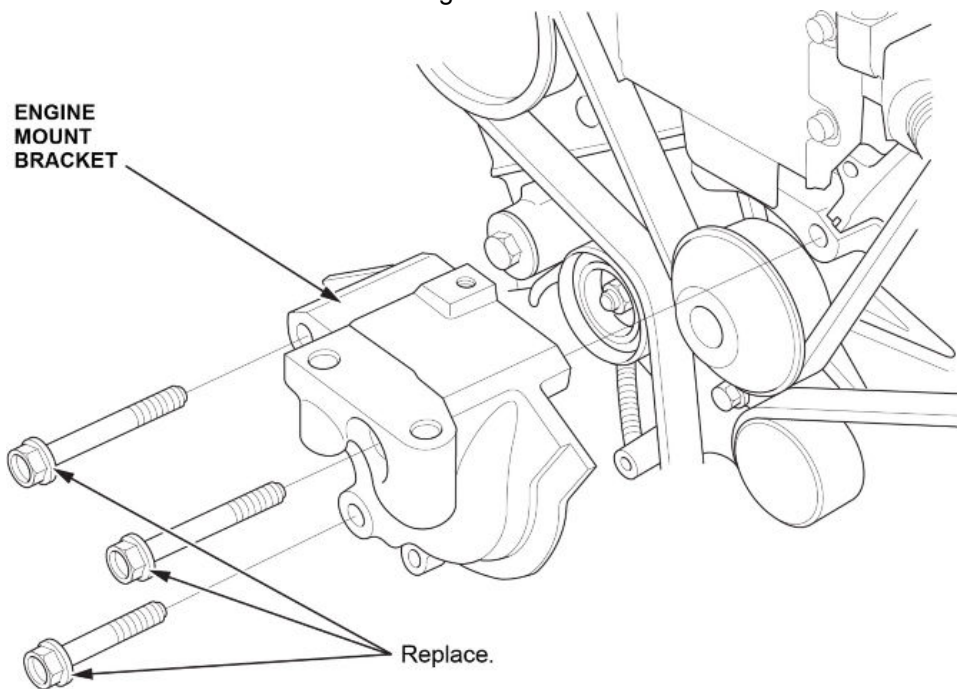
Do not tighten the bolt with a wrench.



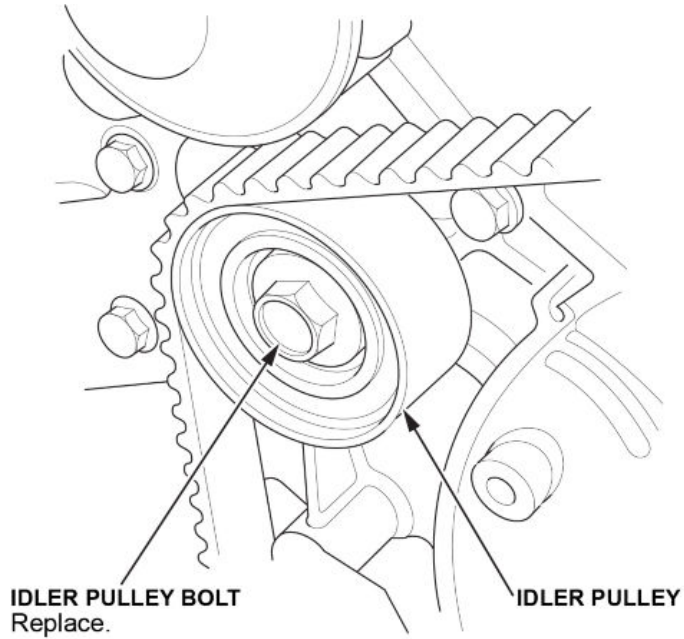
21. Remove the timing belt guide plate.



22. Remove the lower half of the side engine mount bracket.

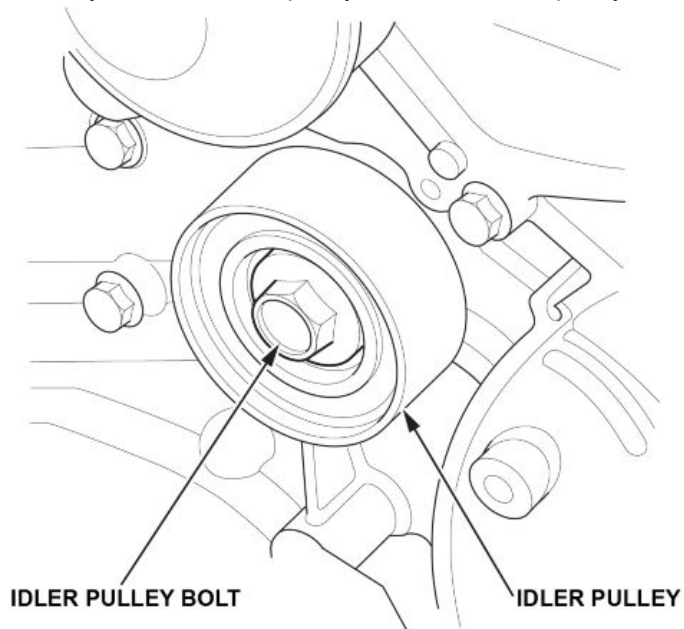


23. Remove the idler pulley bolt and the idler pulley, then remove the timing belt.

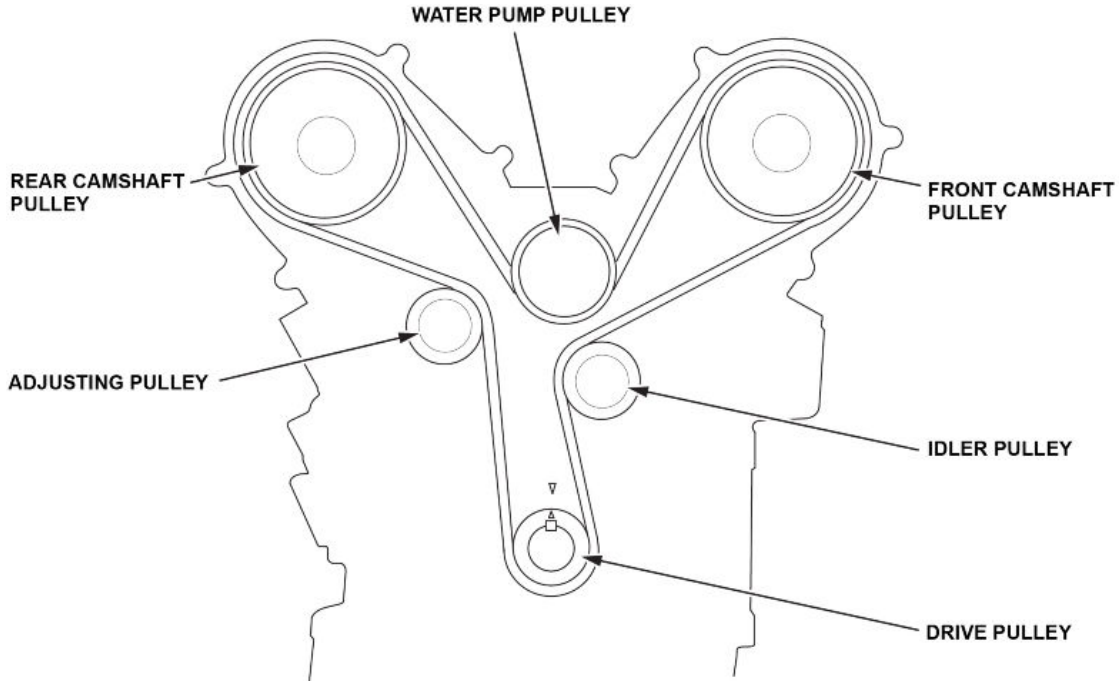


24. Check the timing marks are still in the proper position as mentioned in step 1.

25. Loosely install the idler pulley with a new idler pulley bolt so the pulley can move, but does not come off.



26. Install the timing belt in a counter-clockwise sequence starting with the drive pulley:

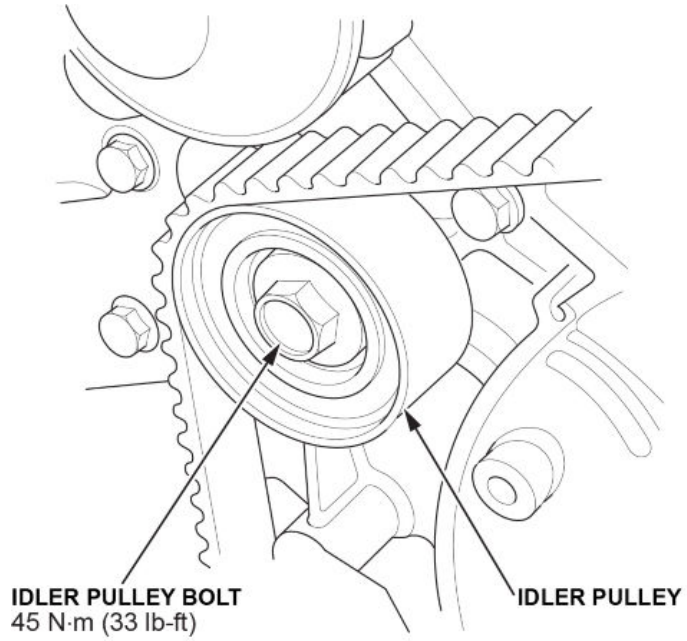


- 26.1. Drive Pulley
- 26.2. Idler Pulley
- 26.3. Front Camshaft Pulley
- 26.4. Water Pump Pulley
- 26.5. Rear Camshaft Pulley
- 26.6. Adjusting Pulley

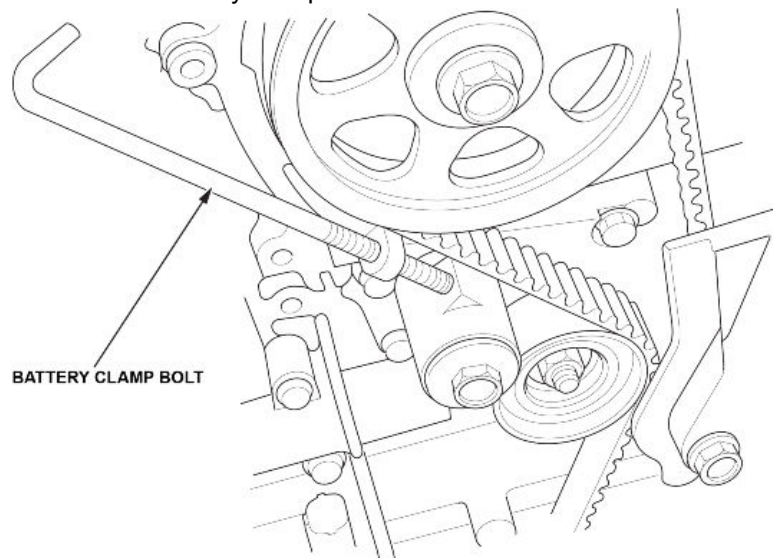
NOTE

If the timing belt auto-tensioner has extended and the timing belt cannot be installed, do the timing belt auto-tensioner installation procedure. Refer to the service information.

27. Torque the idler pulley bolt to **45 N·m (33 lb-f)**.



28. Remove the battery clamp bolt.



29. Check the cam timing and do a cylinder leak down test.

NOTE

The following steps will determine if there was any valve to piston contact requiring the replacement of the cylinder block and one or both cylinder heads.

29.1. Remove all the spark plugs.

29.2. Do the cylinder leak down test. For information about the cylinder leak down test, refer to the following:

- See the Tech2Tech video titled Cylinder Leak Down Testing
- See the Online University Self-Study Module ENC10 Pump Theory and Cylinder Performance Testing

NOTES

- Rotate the engine only in a clockwise direction.
- Confirm each cylinder is tested at TDC.
- A good cylinder should have less than 10% cylinder leakage.

29.3. If the cylinder leak down test results show that all six cylinders have a **leak down rate of 10% or less**, go to the next step and finish installing the timing belt.

29.4. If the cylinder leak down test results show that at least one cylinder has a **leak down rate that is more than 10%**, and the leak is from the intake or exhaust valves, replace the short block and the cylinder head(s) where the leak is coming from. Refer to the service information.

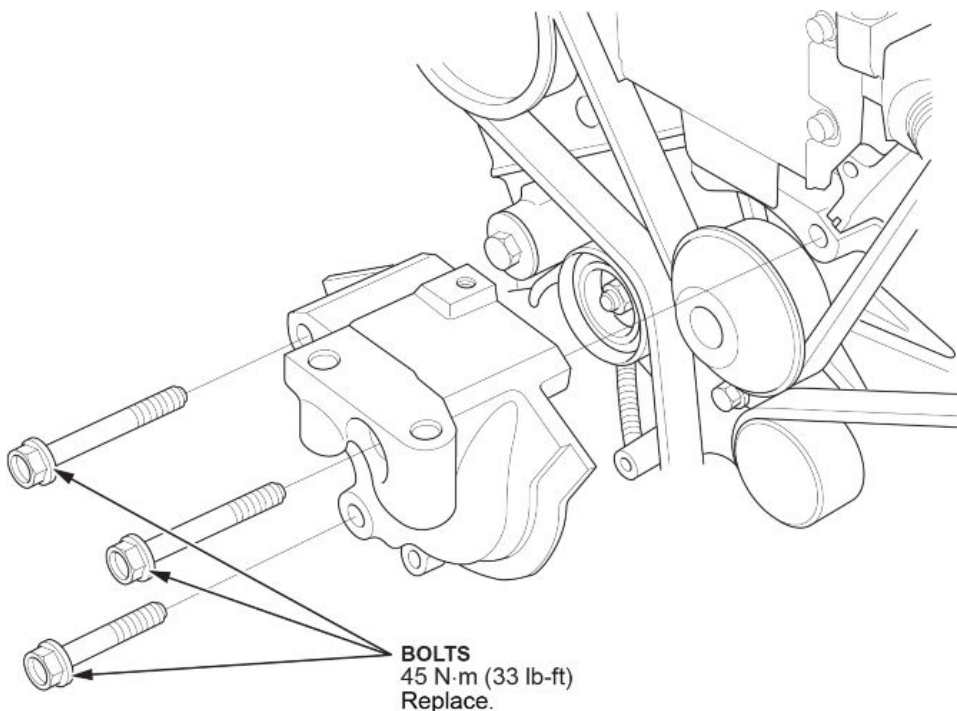
NOTE

If the leak is coming through the crankcase, this bulletin does not apply. Continue with normal troubleshooting.

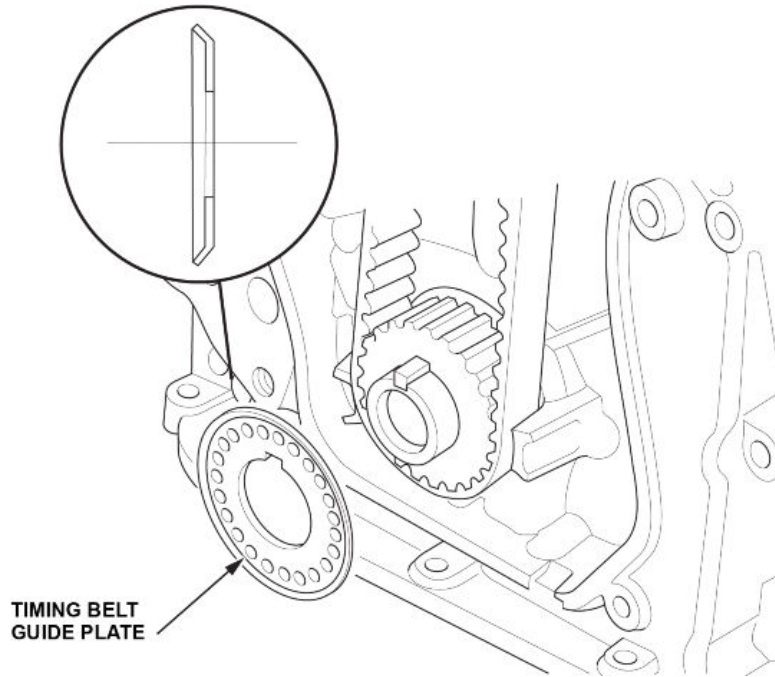
30. Install the lower half of the side engine mount bracket using new bolts. Torque the bolts to **45 N·m (33 lb-f)**.

NOTES

- **For RLX Sport Hybrid only:** Make sure to position the lower cover before installing the side engine mount bracket.
- Make sure the lower half of the side engine mount bracket is installed and the new bolts are torqued to specification before installing the upper half of the engine mount.

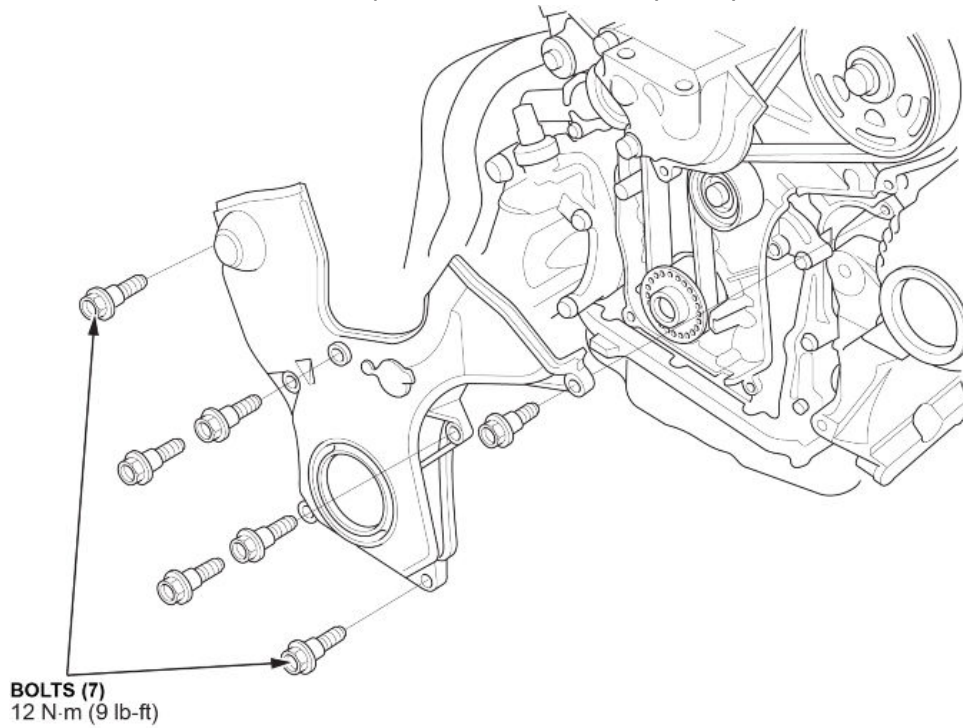


31. Install the timing belt guide plate as shown.

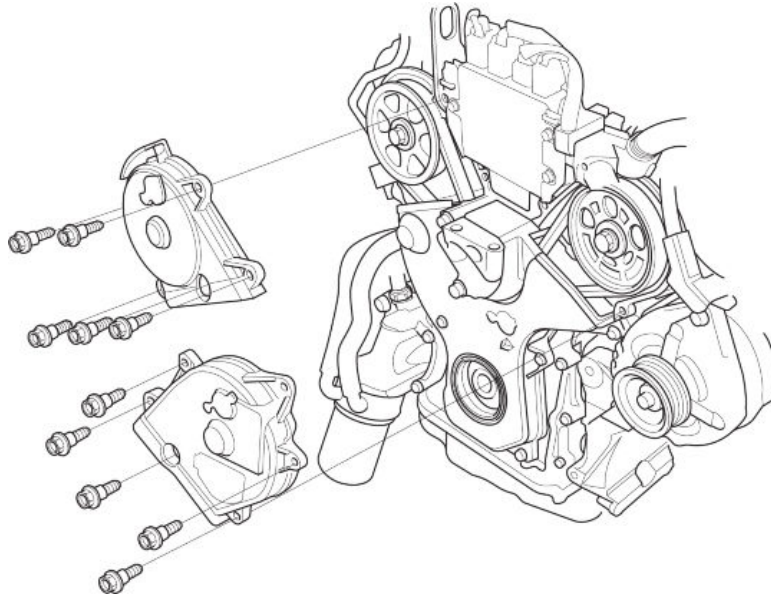


32. Install the timing belt covers:

32.1. Install the lower cover, and torque the bolts to **12 N·m (9 lb-ft)**.



32.2. Install the upper covers, and torque the bolts to **12 N·m (9 lb-ft)**.



33. **For RLX Sport Hybrid Only:** Lower the engine 35 mm.

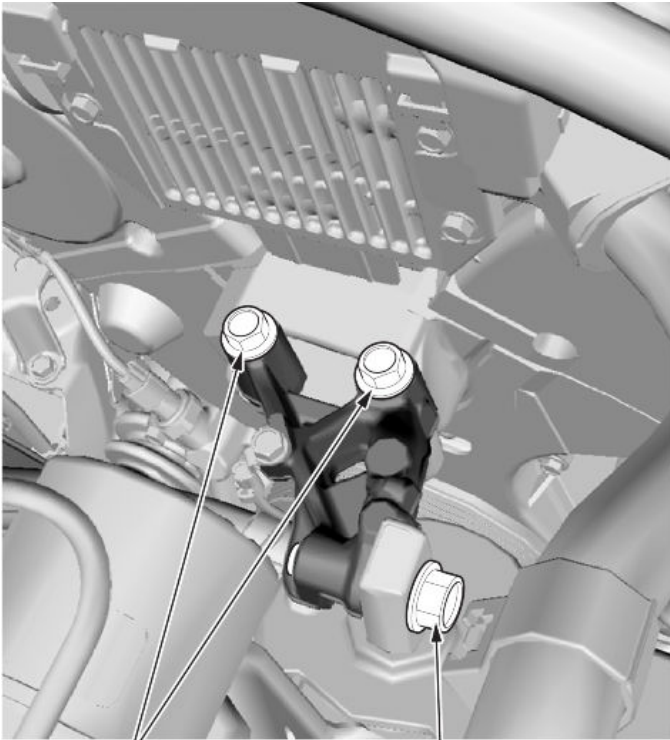
34. Install the upper half of the side engine mount bracket using new bolts:

34.1. Loosely install the upper half of the side engine mount bracket using new bolts.

NOTE

For RLX Sport Hybrid, install the upper half of the bracket in step 41.

MDX



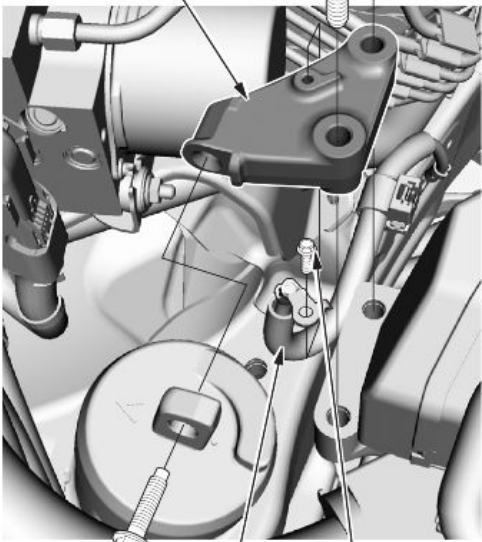
BOLTS
45 N·m (33 lb-ft)

BOLT
64 N·m (47 lb-ft)

RLX and TLX

**UPPER HALF
SIDE ENGINE
MOUNT BRACKET**

① BOLTS
44 N·m (32 lb-ft)
Replace.



② BOLT
64 N·m (47 lb-ft)
Replace.

**GROUND
CABLE**
Disconnect.

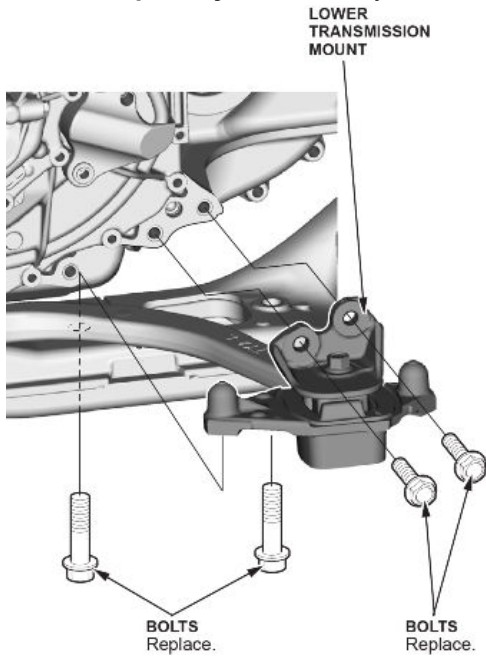
BOLT
10 N·m (7 lb-ft)
Replace.

34.2. Connect the ground cable.

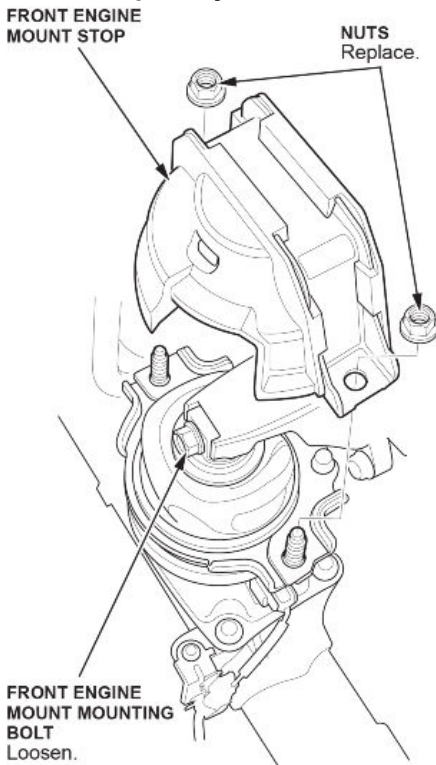
34.3. Remove the jack and wood block.

34.4. Tighten the side engine mount bracket mounting bolts in the sequence shown.

35. **For RLX Sport Hybrid:** Loosely Install the lower transmission mount.



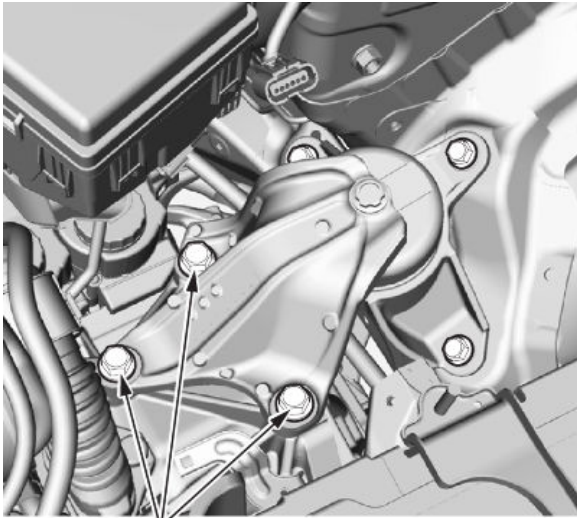
36. **For RLX Sport Hybrid:** Loosen the front engine mount mounting bolt.



36.1. Remove the front engine mount stop.

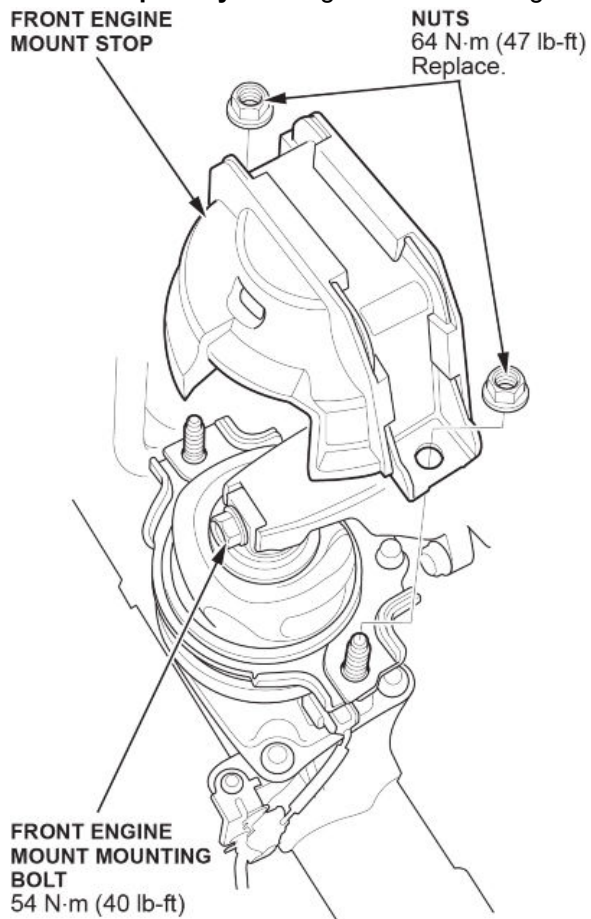
36.2. Loosen the front engine mount mounting bolt.

37. **For RLX Sport Hybrid:** Loosen the transmission mount bracket mounting bolt.



BOLTS
Loosen.

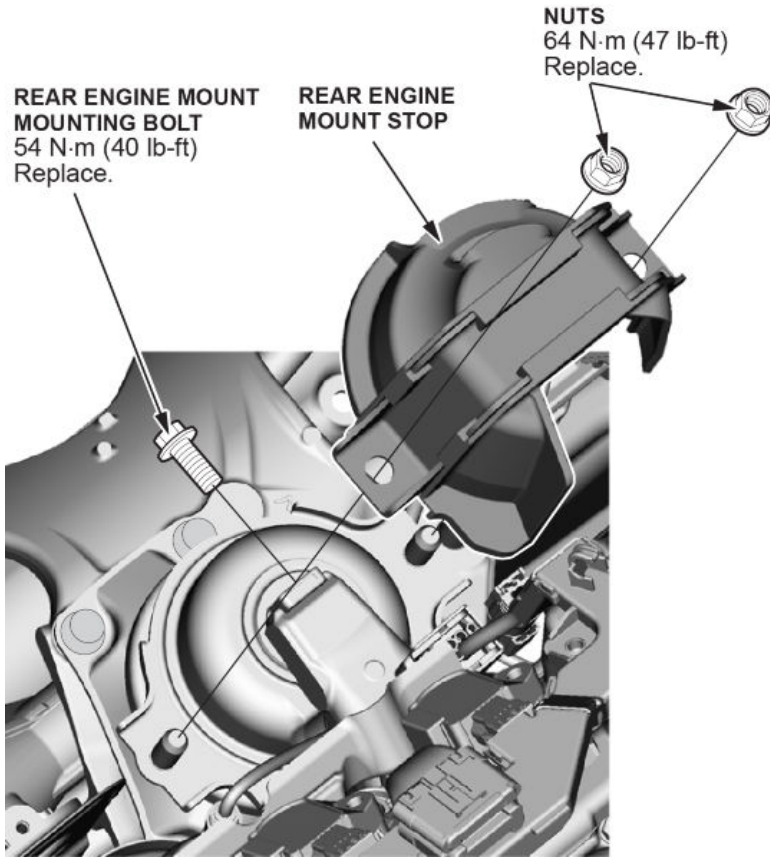
38. **For RLX Sport Hybrid:** Tighten the front engine mount stop and front engine mount mounting bolt.



38.1. Tighten the front engine mounting bolt.

38.2. Install the front engine mount stop using new nuts.

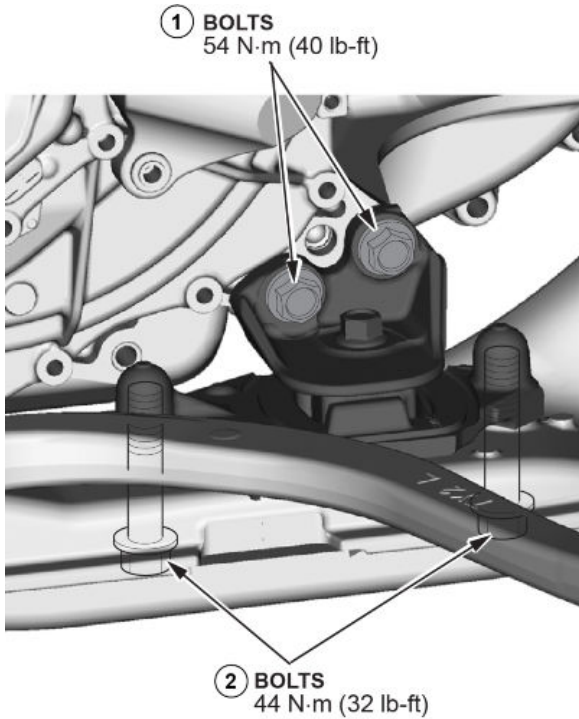
39. **For RLX Sport Hybrid:** Install the rear engine mount stop and engine mount mounting bolt.



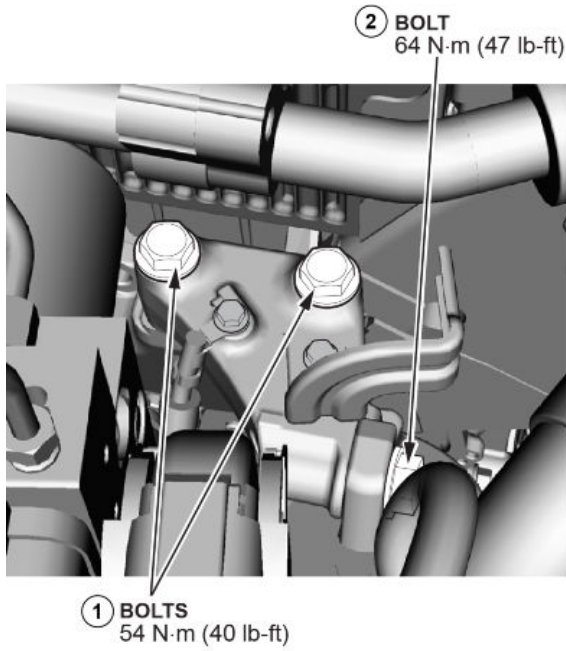
39.1. Install the new rear engine mount mounting bolt.

39.2. Install the rear engine mount stop using new nuts.

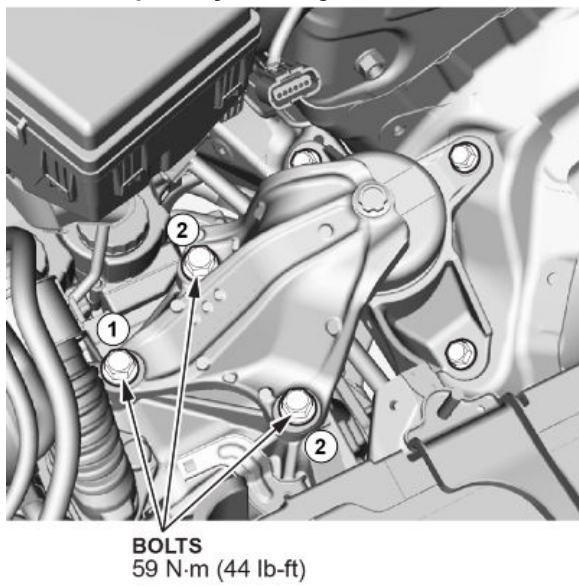
40. **For RLX Sport Hybrid:** Tighten the lower transmission mount bracket mounting bolts and the lower transmission mount mounting bolts in the numbered sequence shown.



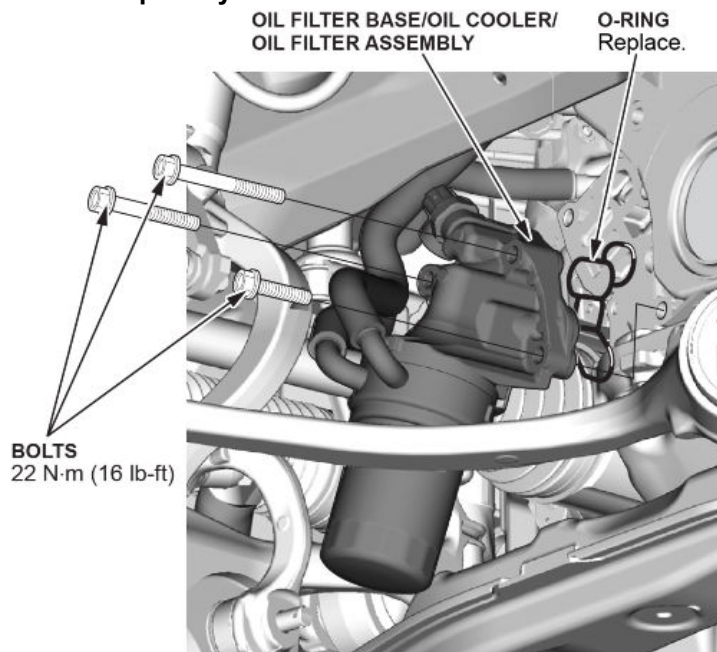
41. For RLX Sport Hybrid: Tighten the side engine mount bracket mounting bolts in the numbered sequence shown.



42. For RLX Sport Hybrid: Tighten the transmission mount bracket mounting bolts in the numbered sequence shown.



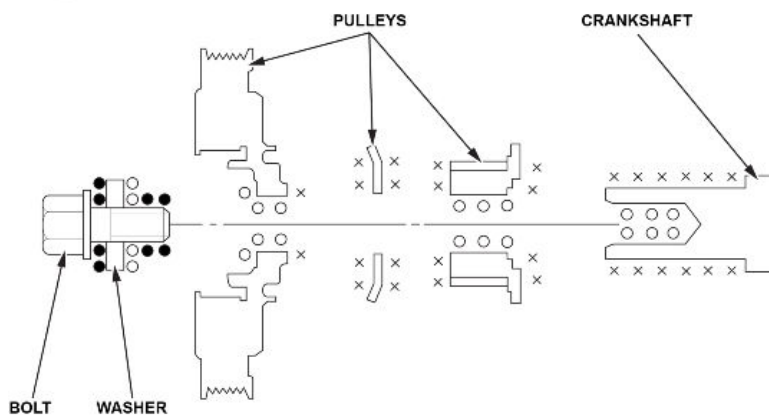
43. For RLX Sport Hybrid: Install the oil filter base/oil cooler/oil filter assembly with a new O-ring.



44. Install the crankshaft pulley.

44.1. Remove any oil and clean the pulleys, the crankshaft, the bolt, and the washer. Lubricate with new engine oil as shown.

- ✕ Remove any oil.
- Clean.
- Lubricate with new engine oil.

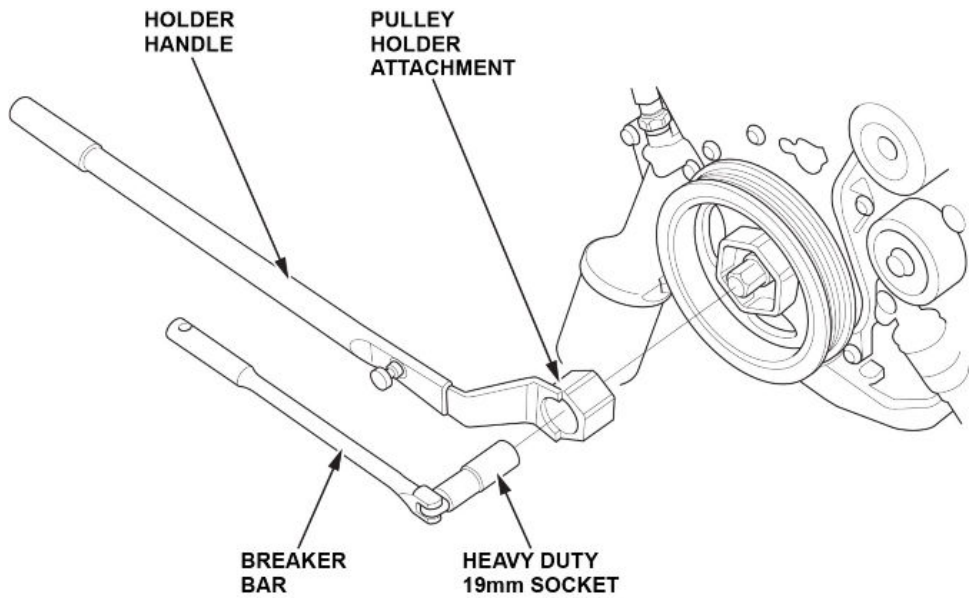
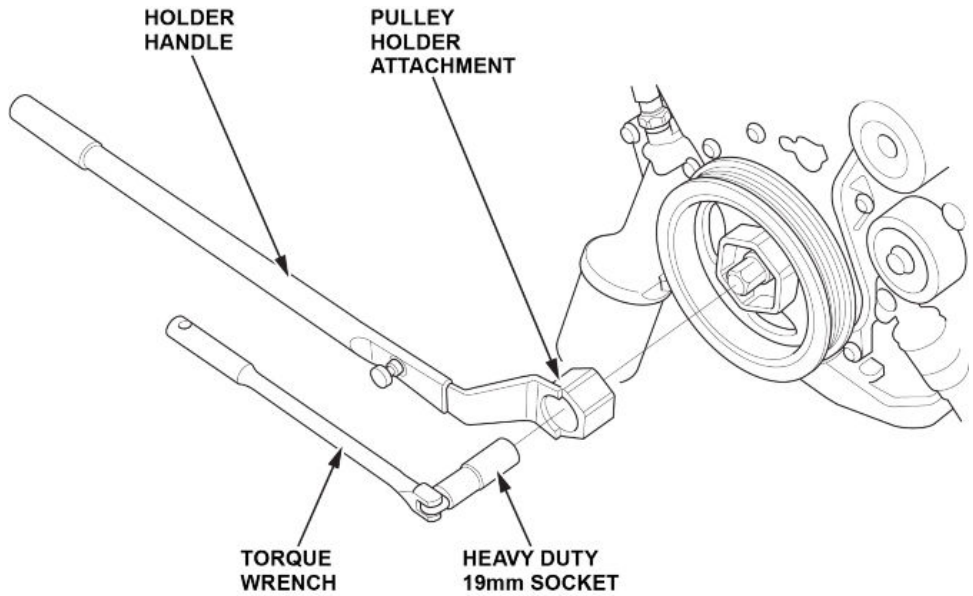


44.2. Install the crankshaft pulley.

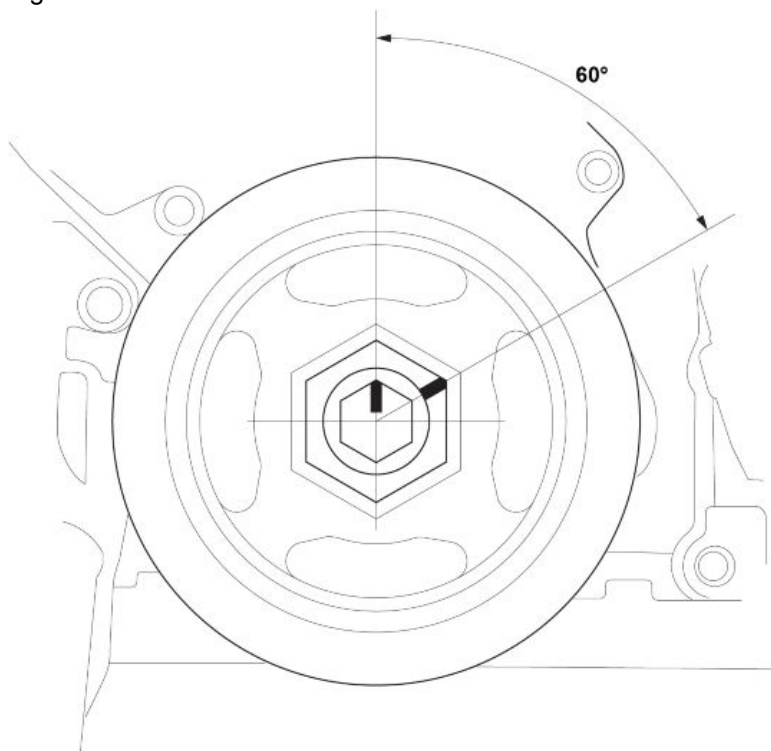
44.3. Hold the pulley with the holder handle and the pulley holder attachment (50 mm offset). Torque the bolt to **65 N·m (48 lb-ft)**.

NOTE

Do not use an impact wrench.



44.4. Tighten the bolt an additional 60°.



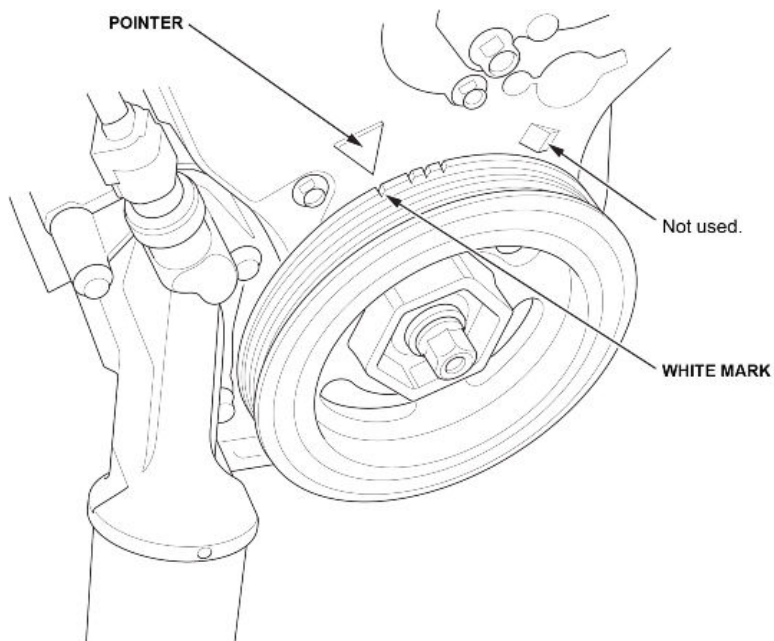
45. Check the camshaft timing.

45.1. Rotate the crankshaft pulley about 6 turns clockwise so the timing belt positions itself on the pulleys.

45.2. Turn the crankshaft pulley so the white mark lines up with the pointer.

NOTE

The other pointer is not used.



45.3. Check the camshaft pulley marks.

NOTES

If the marks are not aligned, rotate the crankshaft one full turn and recheck the camshaft pulley mark.

- If the camshaft pulley marks are at TDC, go to the next step.
- If the camshaft pulley marks are not at TDC, remove the timing belt and restart the installation procedure at step 26.

46. **For RLX Sport Hybrid:** Connect exhaust pipe A.

47. **For RLX Sport Hybrid:** Install the air cleaner.

48. **For RLX Sport Hybrid:** Turn on the service plug.

49. **For RLX Sport Hybrid:** Connect the 12-volt negative battery cable.

50. Install the drive belt tensioner.

51. Install the splash shield.

52. **TLX and RLX:** Install the engine cover.

53. Install the passenger's side front wheel and torque the nuts to **127 N·m (94 lb-ft)**.

54. Do the CKP learn procedure.

54.1. Connect the HDS/i-HDS.

54.2. Select CRANK PATTERN in the ADJUSTMENT MENU with the HDS.

54.3. Select CRANK PATTERN CLEAR with the HDS, and clear the CKP pattern.

54.4. Select CRANK PATTERN LEARNING with the HDS, and follow the screen prompts.

END