

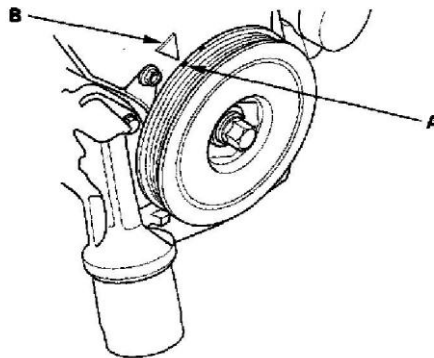


Timing Belt: Service and Repair Acura TL V6 3.2 2006

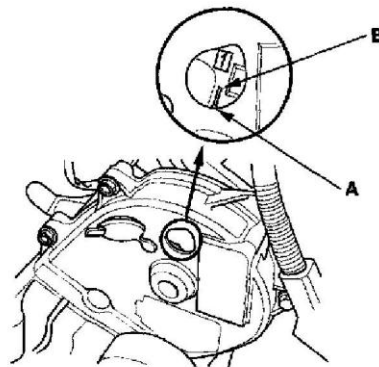
Timing Belt Removal

Timing Belt Removal

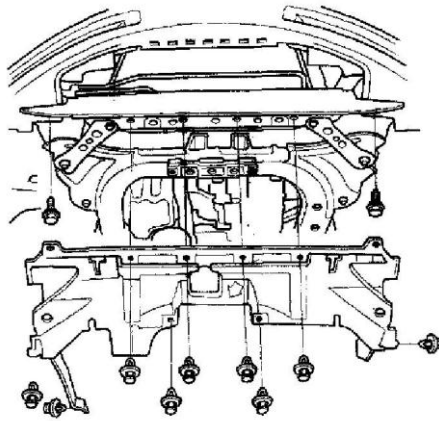
1. Remove the right side engine compartment cover.



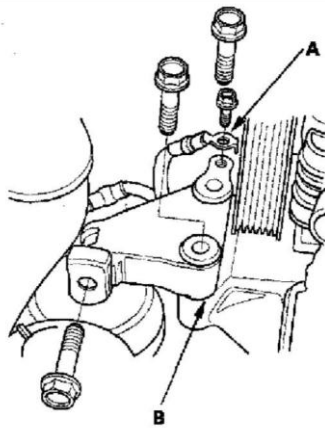
2. Turn the crankshaft so its white mark (A) on the crankshaft pulley lines up with the pointer (B).



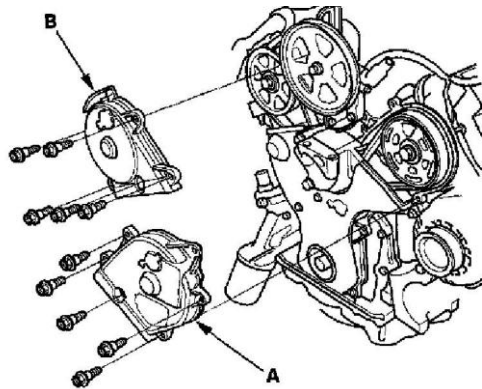
3. Check that the No. 1 piston top dead center (TDC) mark (A) on the front camshaft pulley and the pointer (B) on the front upper cover are aligned.
4. Remove the right front wheel.



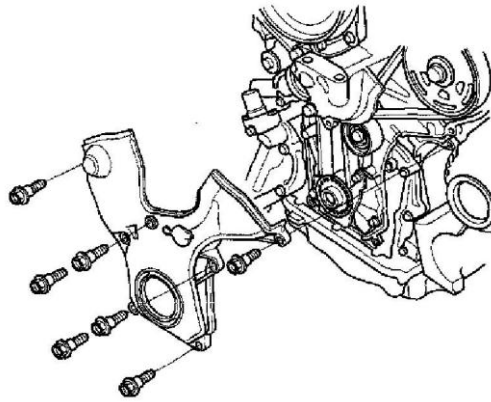
5. Remove the splash shield.
6. Remove the drive belt.
7. Support the engine with a jack and wood block under the oil pan.



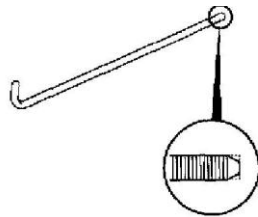
8. Remove the ground cable (A), then remove the upper half of the side engine mount bracket (B).
9. Remove the crankshaft pulley.



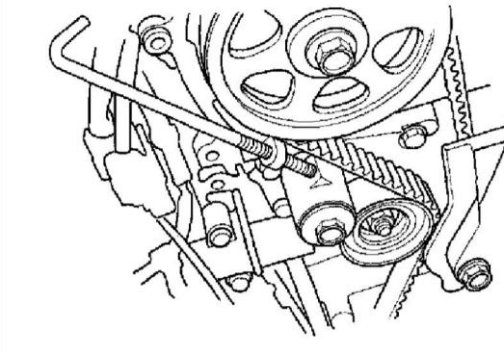
10. Remove the front upper cover (A) and rear upper cover (B).



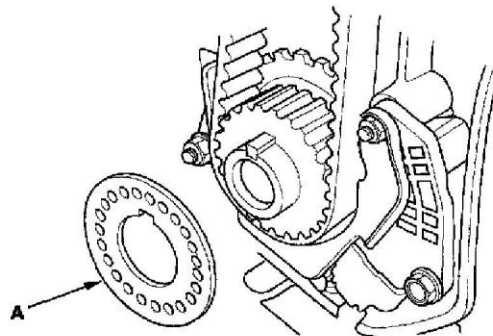
11. Remove the lower cover.



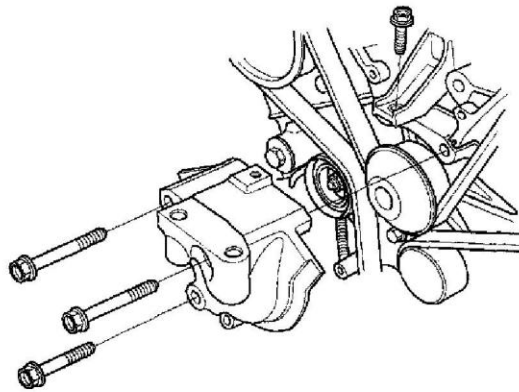
12. Remove one of the battery clamp bolts from the battery tray, and grind the end of it as shown.



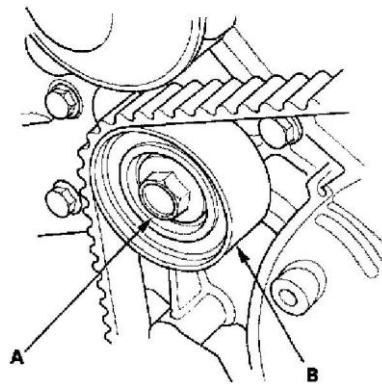
13. Screw the battery clamp bolt in as shown to hold the timing belt adjuster in its current position. Tighten it by hand; do not use a wrench.



14. Remove the timing belt guide plate (A).



15. Remove the lower half of the side engine mount bracket.
16. Remove the idler pulley bolt (A) and idler pulley (B), then remove the timing belt. Discard the idler pulley bolt.



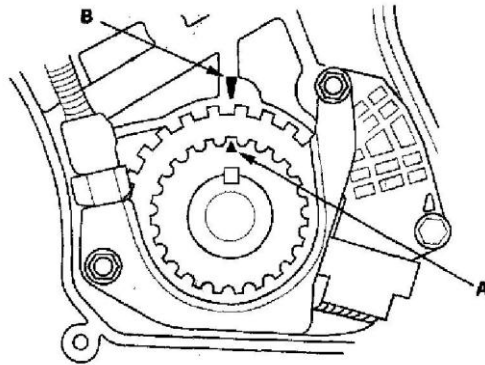
Timing Belt: Service and Repair

Timing Belt Installation

Timing Belt Installation

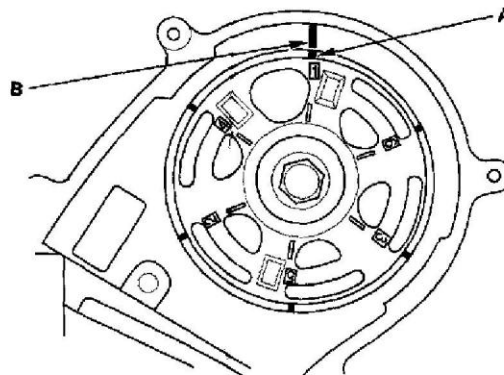
NOTE: The following procedure is for installing a used belt. If you are installing a new belt, refer to the timing belt replacement procedure.

1. Clean the timing belt pulleys, timing belt guide plate, and the upper and lower covers.

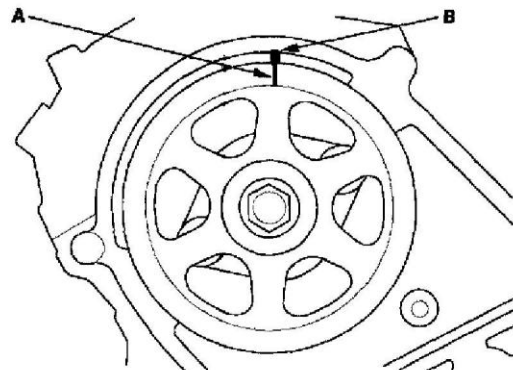


2. Set the timing belt drive pulley to top dead center (TDC) by aligning the TDC mark (A) on the tooth of the timing belt drive pulley with the pointer (B) on the oil pump.

FRONT:

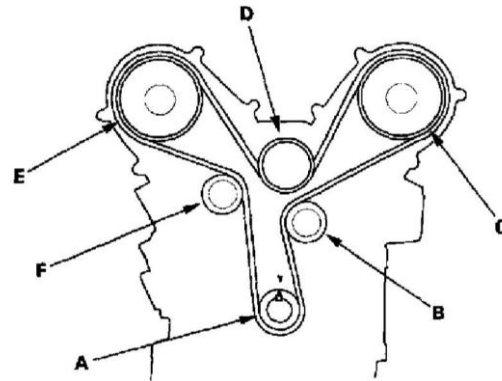


REAR:

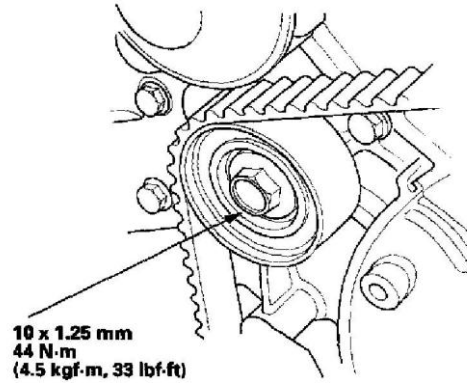


3. Set the camshaft pulleys to TDC by aligning the TDC marks (A) on the camshaft pulleys with the pointers (B) on the back covers.
4. Loosely install the idler pulley with a new idler pulley bolt so the pulley can move and does not come off.
5. If the auto-tensioner has extended and the timing belt cannot be installed, do the timing belt replacement procedure.

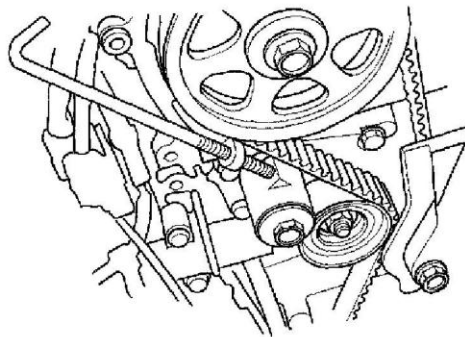
- 1 Drive pulley (A)
- 2 Idler pulley (B)
- 3 Front camshaft pulley (C)
- 4 Water pump pulley (D)
- 5 Rear camshaft pulley (E)
- 6 Adjusting pulley (F)



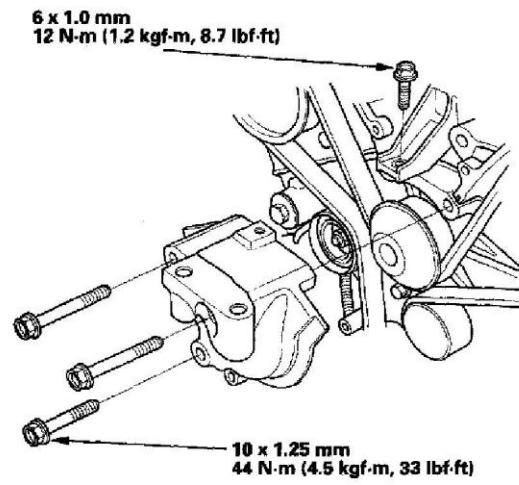
6. Install the timing belt in a counterclockwise sequence starting with the drive pulley. Take care not to damage the timing belt when installing it.



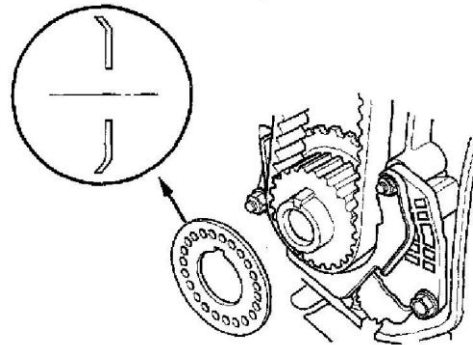
7. Tighten the idler pulley bolt.



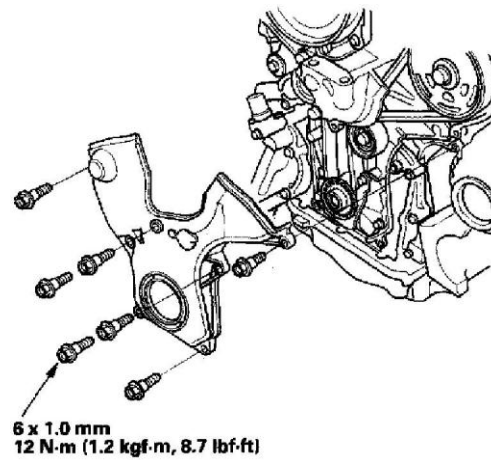
8. Remove the battery clamp bolt from the back cover.



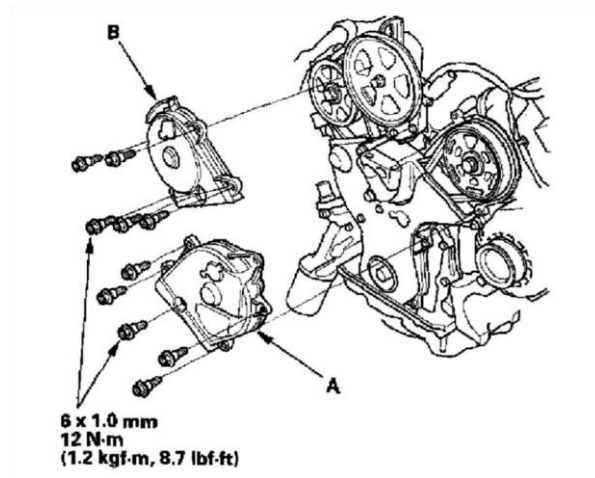
9. Install the lower half of the side engine mount bracket.



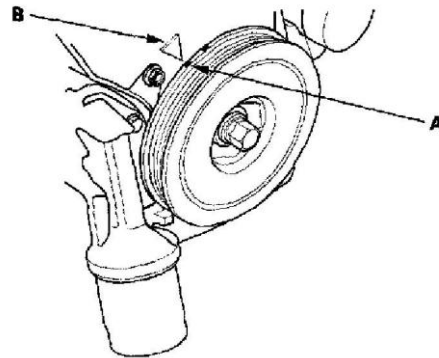
10. Install the timing belt guide plate as shown.



11. Install the lower cover.

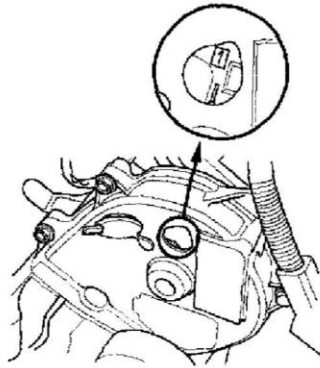


12. Install the front upper cover (A) and rear upper cover (B).
13. Install the crankshaft pulley.
14. Rotate the crankshaft pulley six turns clockwise so the timing belt positions itself on the pulleys.

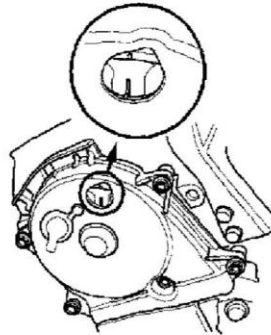


15. Turn the crankshaft pulley so its white mark (A) lines up with the pointer (B).

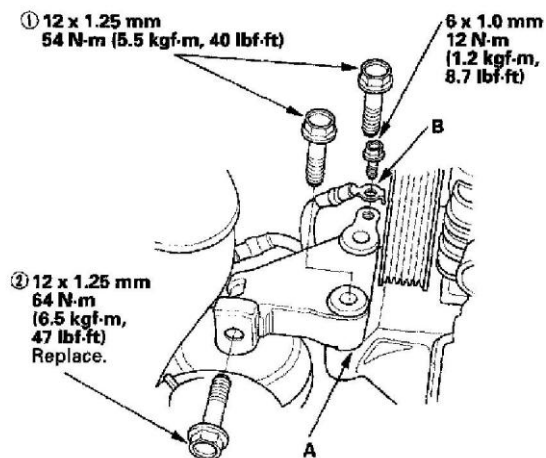
FRONT:



REAR:



16. Check the camshaft pulley marks.
 - ^ If the camshaft pulley marks are at TDC, go to step 17.
 - ^ If the camshaft pulley marks are not at TDC, remove the timing belt and repeat steps 2 through 16.



17. Install the upper half of the side engine mount bracket (A), and tighten the bolts in the numbered sequence shown.
18. Install the ground cable (B).
19. Install the drive belt.
20. Install the splash shield.
21. Install the right front wheel.

NOTE: On M/T model, be careful not to damage or chip the paint of the brake calipers when installing the wheel.

22. Do the crankshaft position (CKP) pattern clear/CKP pattern learn procedure.

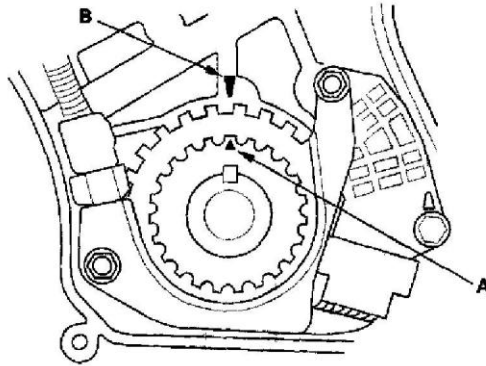
Timing Belt: Service and Repair

Timing Belt Replacement

Timing Belt Replacement

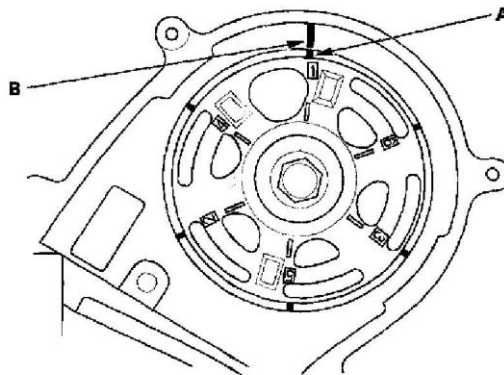
NOTE: The following procedure is for the installation of a new timing belt. If you are installing a used belt, refer to the timing belt installation procedure.

1. Remove the timing belt.
2. Clean the timing belt pulleys, timing belt guide plate, and the upper and lower covers.

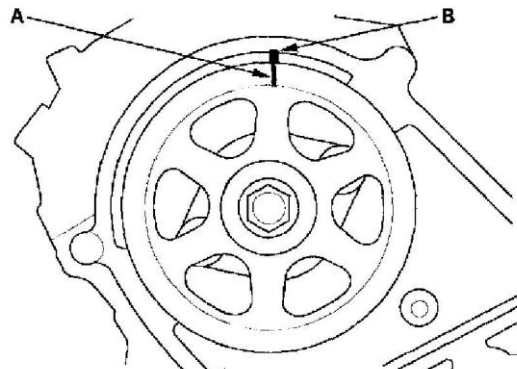


3. Set the timing belt drive pulley to top dead center (TDC) by aligning the TDC mark (A) on the tooth of the timing belt drive pulley with the pointer (B) on the oil pump.

FRONT:



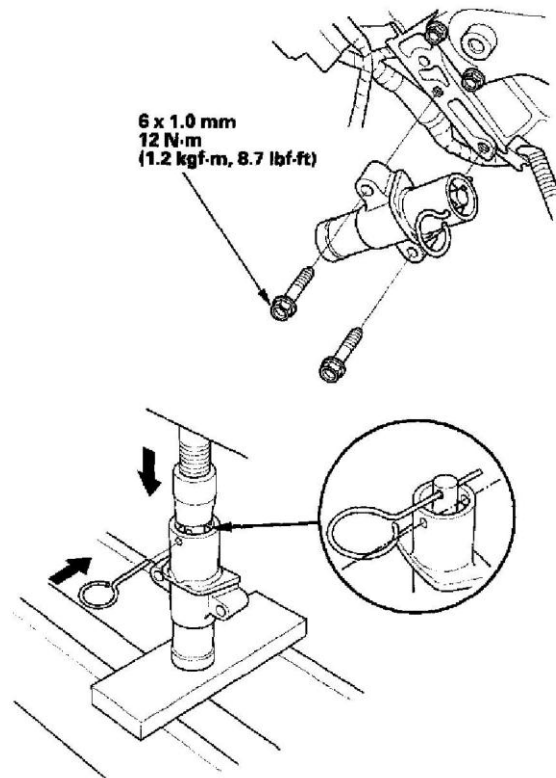
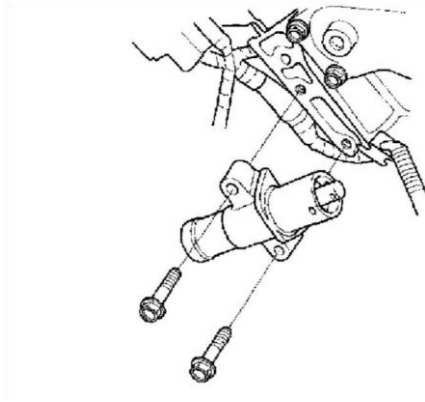
REAR:



4. Set the camshaft pulleys to TDC by aligning the TDC marks (A) on the camshaft pulleys with the pointers (B) on the back covers.

5. Remove the battery clamp bolt from the
6. Remove the auto-tensioner.

back cover.

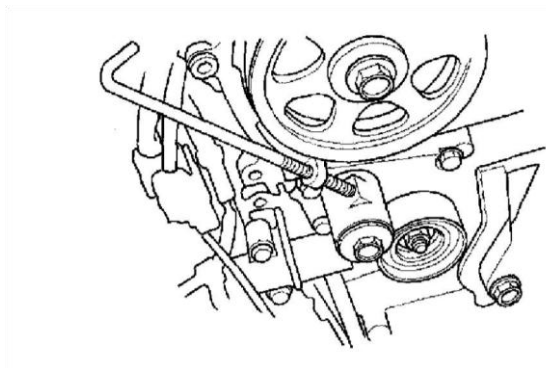


7. Align the holes on the rod and housing of the autotensioner.
8. Use a hydraulic press to slowly compress the auto tensioner. Insert a 2.0 mm (0.08 inch) pin through the housing and the rod.

NOTE: The compression pressure should not exceed
9,800 N (1,000 kgf, 2,200

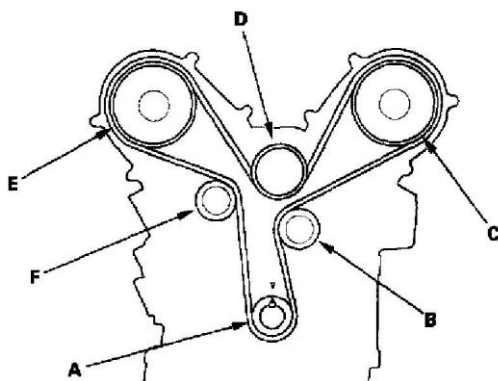
9. lbf) Install the auto-tensioner.

NOTE: Make sure the pin stays in place.

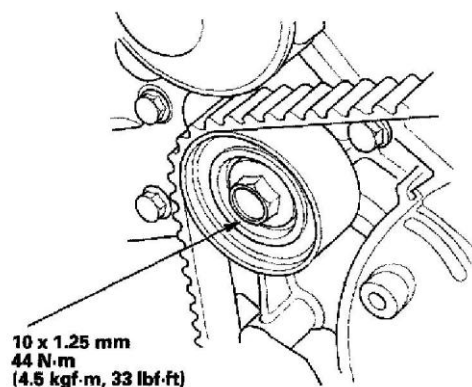


10. Screw the battery clamp bolt in as shown to hold the timing belt adjuster. Tighten it by hand, do not use a wrench.
11. Loosely install the idler pulley with a new idler pulley bolt so the pulley can move but does not come off.

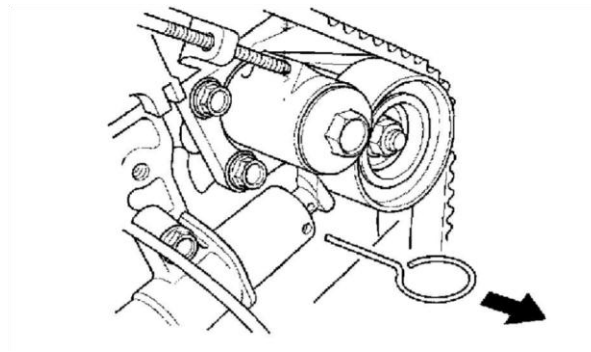
- 1 Drive pulley (A)
- 2 Idler pulley (B)
- 3 Front camshaft pulley (C)
- 4 Water pump pulley (D)
- 5 Rear camshaft pulley (E)
- 6 Adjusting pulley (F)



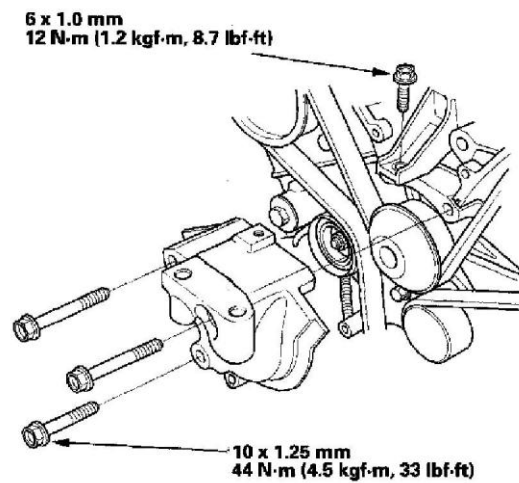
12. Install the timing belt in a counterclockwise sequence starting with the drive pulley. Take care not to damage the timing belt when installing it.



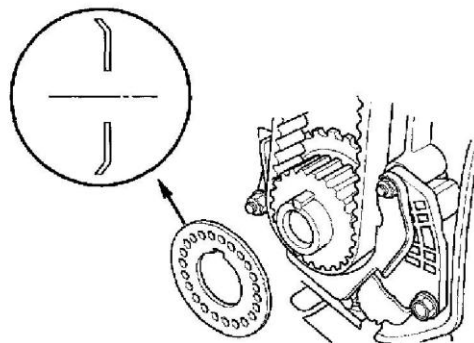
13. Tighten the idler pulley bolt.



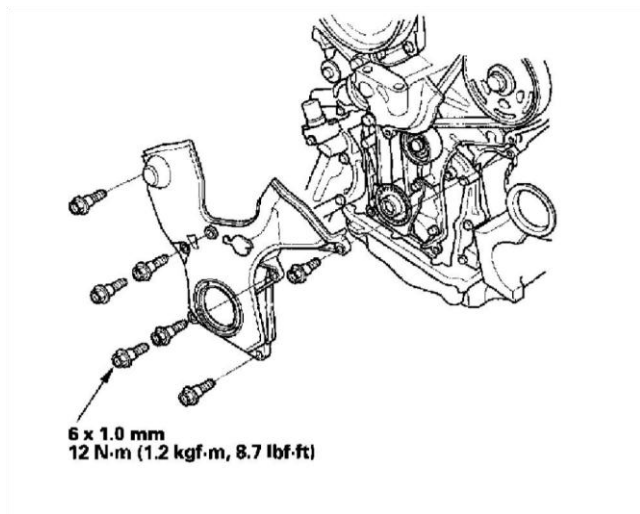
14. Remove the pin from the auto-tensioner.
15. Remove the battery clamp bolt from the back cover.



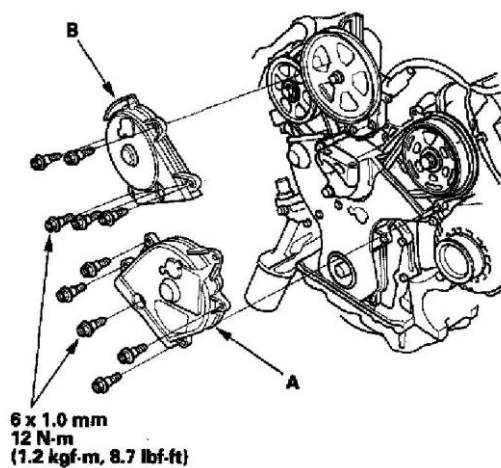
16. Install the lower half of the side engine mount bracket.



17. Install the timing belt guide plate as shown.



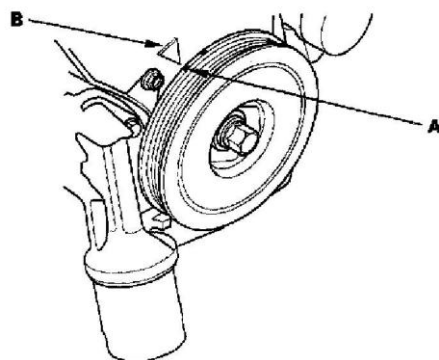
18. Install the lower cover.



19. Install the front upper cover (A) and rear upper cover (B).

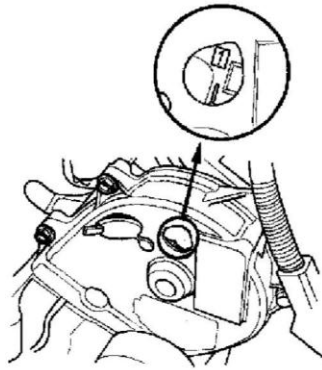
20. Install the crankshaft pulley.

21. Rotate the crankshaft pulley six turns clockwise so the timing belt positions itself on the pulleys.

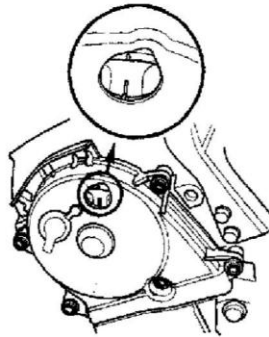


22. Turn the crankshaft pulley so its white mark (A) lines up with the pointer (B).

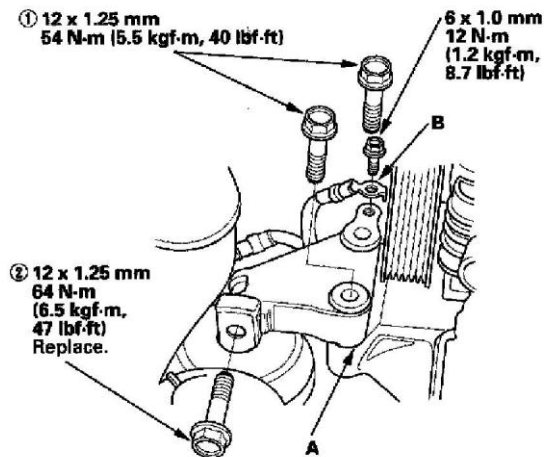
FRONT:



REAR:



23. Check the camshaft pulley marks.
- ^ If the camshaft pulley marks are at TDC, go to step 24.
 - ^ If the camshaft pulley marks are not at TDC, remove the timing belt and repeat steps 3 through 23.



24. Install the upper half of the side engine mount bracket (A), then tighten the bolts in the numbered sequence shown.
25. Install the ground cable (B).
26. Install the drive belt.
27. Install the splash shield.
28. Install the right front wheel.

NOTE: On M/T model, be careful not to damage or chip the paint of the brake calipers when installing the wheel.

29. Do the crankshaft position (CKP) pattern clear/CKP pattern learn procedure.