

Fig. Fig. 5: Check timing belt deflection by applying pressure at the point shown, and measuring the deflection

20. Apply approximately 22 lbs. pressure to the timing belt on the side opposite the tensioner, at a point midway between the sprockets. The belt should deflect 0.43-0.51 in. (11-13mm). If the tension is not as specified, repeat Steps 14-17 or, if necessary, replace the tensioner spring.
21. Install the spark plugs and connect the spark plug wires.
22. Install the upper and lower timing belt covers. Tighten the bolts to 95 inch lbs. (11 Nm).
23. Install the crankshaft pulley boss and tighten the lockbolt to 123 ft. lbs. (21 Nm), while holding the pulley boss with a suitable tool.
24. Install the crankshaft pulley and baffle plate.
25. Install the undercover or side cover. Connect the negative battery cable.
26. Start the engine and check for proper operation. Check the ignition timing.

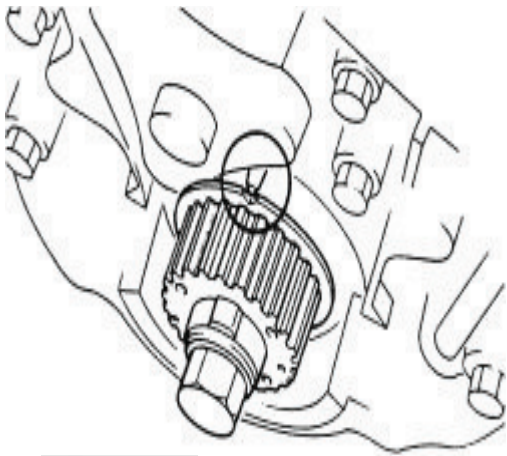
DOHC ENGINES

See Figures 6, 7, 8, 9 and 10

1. Disconnect the negative battery cable. Remove the engine undercover.
2. Remove the accessory drive belts.
3. Remove the crankshaft pulley bolts and remove the crankshaft pulley.
4. Remove the outer timing belt guide plate. Remove the inner timing belt guide plate if so equipped.
5. Tag and disconnect the spark plug wires. Remove the spark plugs.

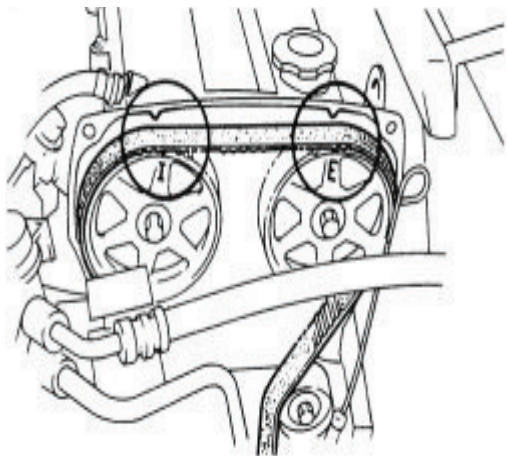
Spark plugs are removed to make it easier to rotate the engine.

6. Remove the engine oil dipstick.
7. Remove the upper, middle and lower timing belt covers.



ENLARGE

Fig. Fig. 6: Crankshaft sprocket timing marks for the 1990-94 1.8L DOHC engine



ENLARGE

Fig. Fig. 7: Camshaft sprocket timing marks for the 1990-94 1.8L DOHC engine

8. Turn the crankshaft until the timing marks on the crankshaft and camshaft sprockets are aligned. On 1993-94 vehicles, the pin on the pulley boss must face upward.
9. On 1993-94 vehicles, hold the crankshaft pulley boss with a suitable tool and remove the pulley lockbolt, being careful not to rotate the crankshaft. Remove the crankshaft pulley boss.
10. Mark the direction of rotation on the timing belt. Loosen the tensioner lockbolt and pry the tensioner outward. Tighten the lockbolt with the tensioner spring fully extended. Remove the timing belt.

Protect the tensioner with a shop towel before prying on it. Do not rotate the crankshaft after the timing belt has been removed.

11. Remove the tensioner and spring. If necessary, remove the idler pulley.
12. Inspect the belt for wear, peeling, cracking, hardening or signs of oil contamination. Inspect the tensioner for free and smooth rotation. Check the tensioner spring free length; it should not exceed 2.315 in. (58.8mm). Inspect the sprocket teeth for wear or damage. Replace parts, as necessary.

To install:

13. If removed, install the idler pulley and tighten the bolt to 38 ft. lbs. (52 Nm).
14. Install the tensioner and tensioner spring. Pry the tensioner outward and temporarily tighten the tensioner lockbolt with the tensioner spring fully extended.

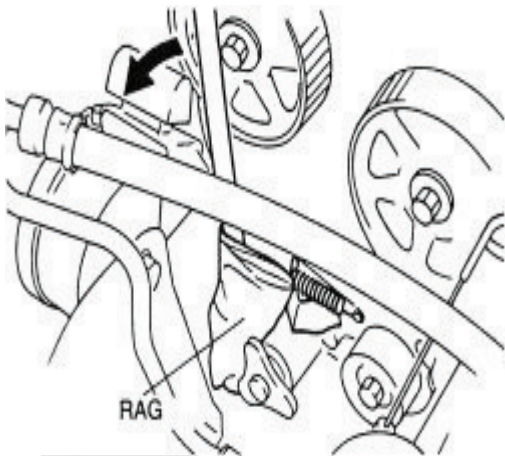


Fig. Fig. 8: Pry the tensioner pulley (protect it with a rag) outward to fully extend the spring, then tighten the bolt to hold it in position

15. Make sure the crankshaft sprocket timing mark is aligned with the mark on the oil pump housing and the camshaft sprocket timing marks are aligned with the marks on the seal plate.
16. Install the timing belt so there is no looseness at the idler pulley side or between the camshaft sprockets. If reusing the old belt, make sure it is installed in the same direction of rotation.
17. On 1993-94 vehicles, temporarily install the pulley boss and lockbolt.
18. Turn the crankshaft 2 turns clockwise and align the crankshaft sprocket timing mark. On 1993-94 vehicles, face the pin on the pulley boss upright. Make sure the camshaft sprocket timing marks are aligned. If they are not, repeat Steps 15-19.

19. Turn the crankshaft $1 \frac{5}{6}$ turns clockwise and align the crankshaft sprocket timing mark with the tension set mark for proper belt tension adjustment. On 1992-94 vehicles, remove the lockbolt and pulley boss.

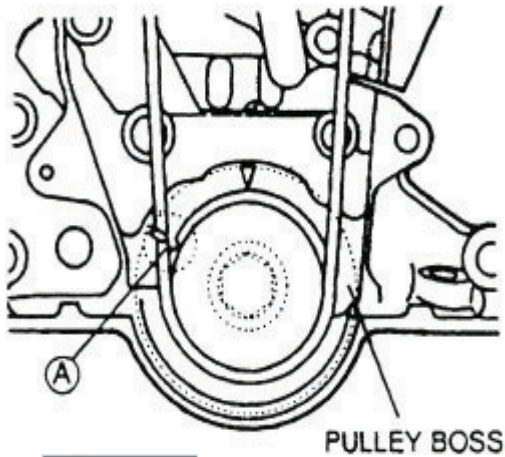


Fig. Fig. 9: To properly set tension on the belt, turn the crankshaft $1 \frac{5}{6}$ turns and align the tension set mark with the crankshaft sprocket

20. Make sure the crankshaft sprocket timing mark is aligned with the tension set mark. Loosen the tensioner lockbolt and allow the spring to apply tension to the belt. Tighten the tensioner lockbolt to 38 ft. lbs. (52 Nm).
21. On 1993-94 vehicles, install the pulley boss and lockbolt.
22. Turn the crankshaft $2 \frac{1}{6}$ turns clockwise and make sure the timing marks are correctly aligned.

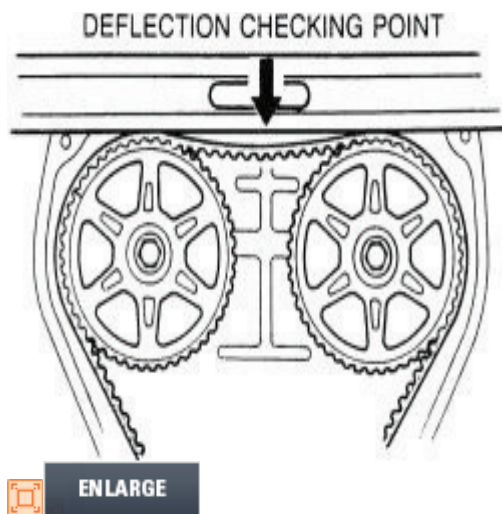


Fig. Fig. 10: Check the deflection of the timing belt to ensure proper tension has been set on the belt

23. Apply approximately 22 lbs. pressure to the timing belt at a point midway between the camshaft sprockets. The belt should deflect 0.35-0.45 in. (9.0-11.5mm). If the deflection is not correct, repeat Steps 21-24.
24. On 1993-94 vehicles, hold the pulley boss with a suitable tool and tighten the lockbolt to 123 ft. lbs. (21 Nm).
25. Install the timing belt covers and tighten the bolts to 95 inch lbs. (11 Nm). Install the engine oil dipstick.
26. Install the spark plugs and connect the spark plug wires.
27. Install the timing belt inner guide plate, if equipped. Make sure the dished side of the plate faces away from the timing belt. Install the outer guide plate, if equipped.
28. Install the crankshaft pulley and tighten the bolts to 13 ft. lbs. (17 Nm).
29. Install the water pump pulley and the accessory drive belts. Adjust the belt tension.
30. Install the engine side or undercover, as necessary. Connect the negative battery cable.
31. Start the engine and check for proper operation. Check the ignition timing.

1995 1.6L, 1995-98 1.5L and 1.8L (except K8) DOHC Engines

See Figures 9, 11, 12, 13, 14, 15 and 16

1. Disconnect the negative battery cable.
2. Remove the timing belt covers.