

TIMING BELT

NOTE: On some models, engine is equipped with a timing belt and timing chain. Inspect timing chain when replacing timing belt.

Removal

1. Remove the engine cover. See [Fig. 1](#) .
2. Remove right front wheel.
3. Remove right side cover. See [Fig. 2](#) .

NOTE: Place wooden block between the jack and engine oil pan.

4. Set the jack to the engine oil pan. Remove the engine mount bracket. See [Fig. 3](#) . Remove the stay plate. See [Fig. 4](#) .
5. Temporarily loosen the water pump pulley bolts.
6. Remove alternator belt.
7. Remove air compressor belt.
8. Remove power steering belt.
9. Remove water pump pulley.
10. Remove timing belt upper cover. See [Fig. 5](#) .
11. Turn the crankshaft pulley, and align its groove with timing mark "T" on the timing belt cover. See [Fig. 6](#) .
12. Remove the crankshaft pulley bolt and crankshaft pulley. See [Fig. 7](#) .
13. Remove the crankshaft flange. See [Fig. 8](#) .
14. Remove the timing belt lower cover. See [Fig. 9](#) .

NOTE: If the timing belt is reused, make an arrow indicating the turning direction to make sure that the belt is reinstalled in the same direction as before.

15. Remove the timing belt tensioner and timing belt. See [Fig. 10](#) and [Fig. 11](#) .
16. Remove the bolt and timing belt idler. See [Fig. 12](#) .
17. Remove the crankshaft sprocket. See [Fig. 13](#) .
18. Remove the cylinder head cover.
 - Remove the spark plug cable.
 - Remove the accelerator cable from the cylinder head cover. See [Fig. 14](#) .
 - Remove the PCV hose and breather hose. See [Fig. 15](#) .
 - Remove the cylinder head cover. See [Fig. 16](#) .

CAUTION: Be careful not to damage the cylinder head and valve lifter with the

wrench.

19. Hold the hexagonal head wrench portion of the camshaft with a wrench, and remove the bolt and camshaft sprocket. See **Fig. 17** .

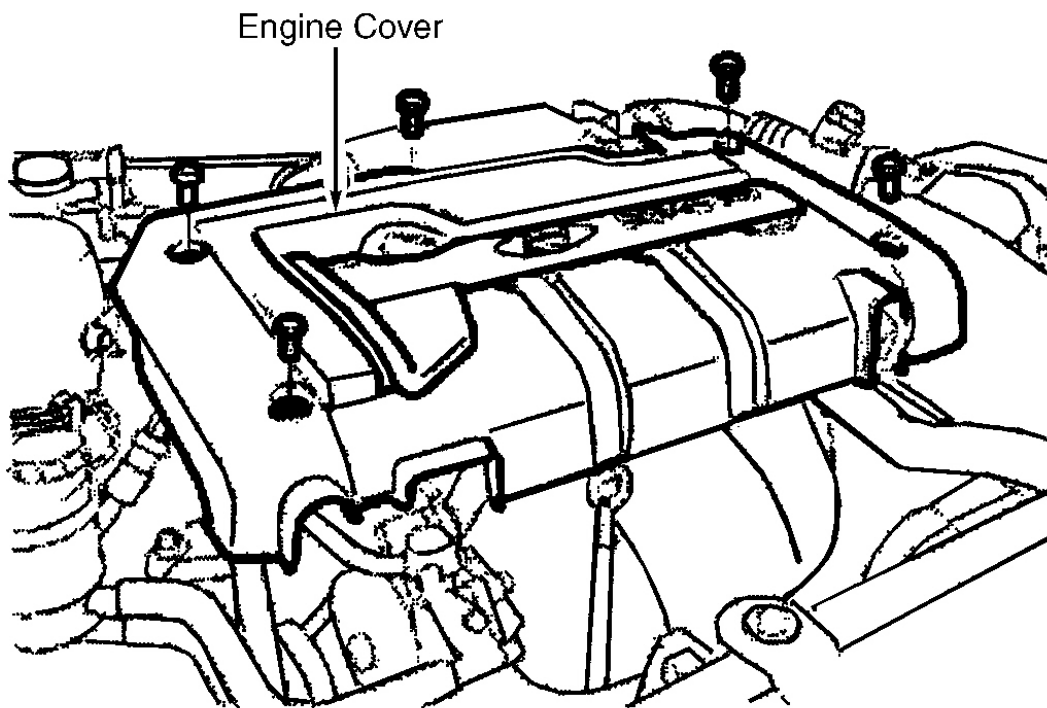
Inspection

Check belt teeth for cracks, damage, and oil contamination. Inspect all sprockets for damage. Check tensioner pulley and idler pulley for grease leakage and worn bearings. Replace components if damaged.

Installation

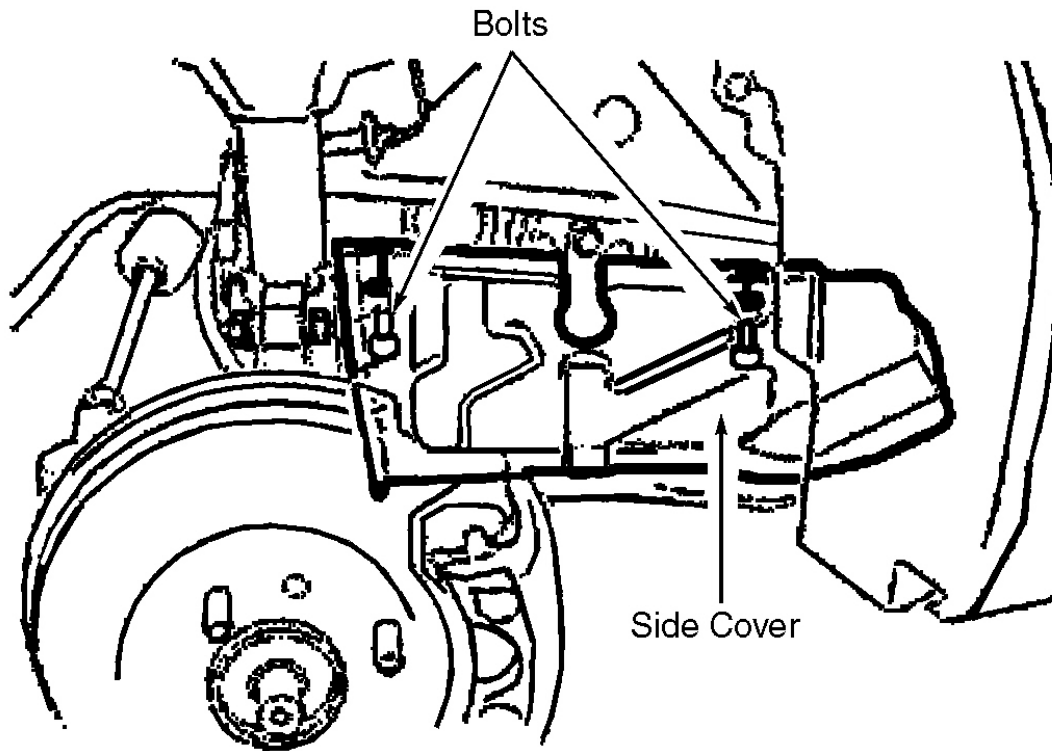
1. Install the camshaft sprocket and tighten the bolt to specification. See **TORQUE SPECIFICATIONS** . Temporarily install the camshaft sprocket bolt. Hold the hexagonal head wrench portion of the camshaft with a wrench, and tighten the camshaft sprocket bolt. See **Fig. 17** .
2. Install cylinder head cover. See **Fig. 16** . Install the PCV hose and breather hose. See **Fig. 15** . Install the accelerator cable to the cylinder head cover. See **Fig. 14** . Install the spark plug cable.
3. Install the crankshaft sprocket. See **Fig. 13** .
4. Align the timing marks of the camshaft sprocket and crankshaft sprocket with the No. 1 piston placed at top dead center and its compression stroke. See **Fig. 18** and **Fig. 19** .
5. Install the idler pulley and tighten the bolt to the specified torque. See **Fig. 12** . See **TORQUE SPECIFICATIONS** .
6. Temporarily install the timing belt tensioner with plain washer. See **Fig. 20** .
7. Install belt so as not to give slack at each center of shaft. Install timing belt starting with crankshaft sprocket, idler pulley, camshaft sprocket to timing belt tensioner. See **Fig. 21** .
8. Temporarily fasten tensioner pulley by center bolt to add force at belt.
9. Adjust timing belt tension.
 - Rotate crankshaft in regular direction (clockwise view from front) through angle equivalent to 2 teeth (18°) of camshaft sprocket. See **Fig. 22** .
 - Give tension to timing belt by rotating tensioner in arrow direction with tool and set timing belt not to give slack to tension side.
 - Tighten tensioner bolt.
 - Recheck the belt tension. See **Fig. 23** . When the tension side of timing belt is pushed horizontally with a moderate force of about 5 ft. lbs. (20 N.m), the timing belt cog end sags in 0.16-0.24" (4-6 mm).
10. Turn the crankshaft 2 turns in the operating direction (clockwise), and realign crankshaft sprocket and camshaft sprocket timing mark.
11. Install the timing belt lower cover. See **Fig. 9** . See **TORQUE SPECIFICATIONS** .
12. Install the flange and crankshaft pulley. See **Fig. 7** . See **TORQUE SPECIFICATIONS** . Make sure that crankshaft sprocket pin fits the small hole in the pulley.
13. Install the timing belt upper cover. See **Fig. 5** .
14. Install the coolant pump pulley.

15. Install power steering belt.
16. Install air compressor bolt.
17. Install alternator belt.
18. Install the stay plate. See [Fig. 4](#) . See **TORQUE SPECIFICATIONS** . Install engine mount bracket. See [Fig. 3](#) . See **TORQUE SPECIFICATIONS** .
19. Install right side cover. See [Fig. 2](#) .
20. Install right front wheel.
21. Install engine cover. See [Fig. 1](#) .



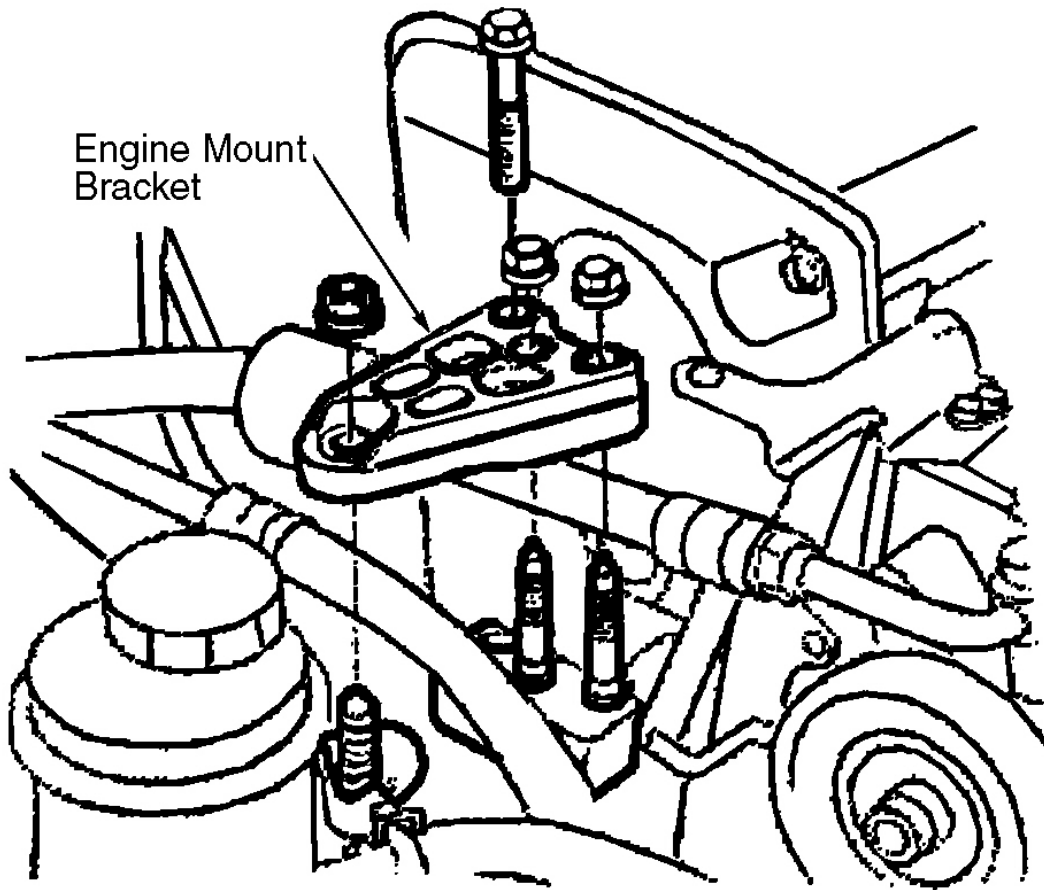
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Fig. 1: Removing & Installing Engine Cover
Courtesy of HYUNDAI MOTOR CO.



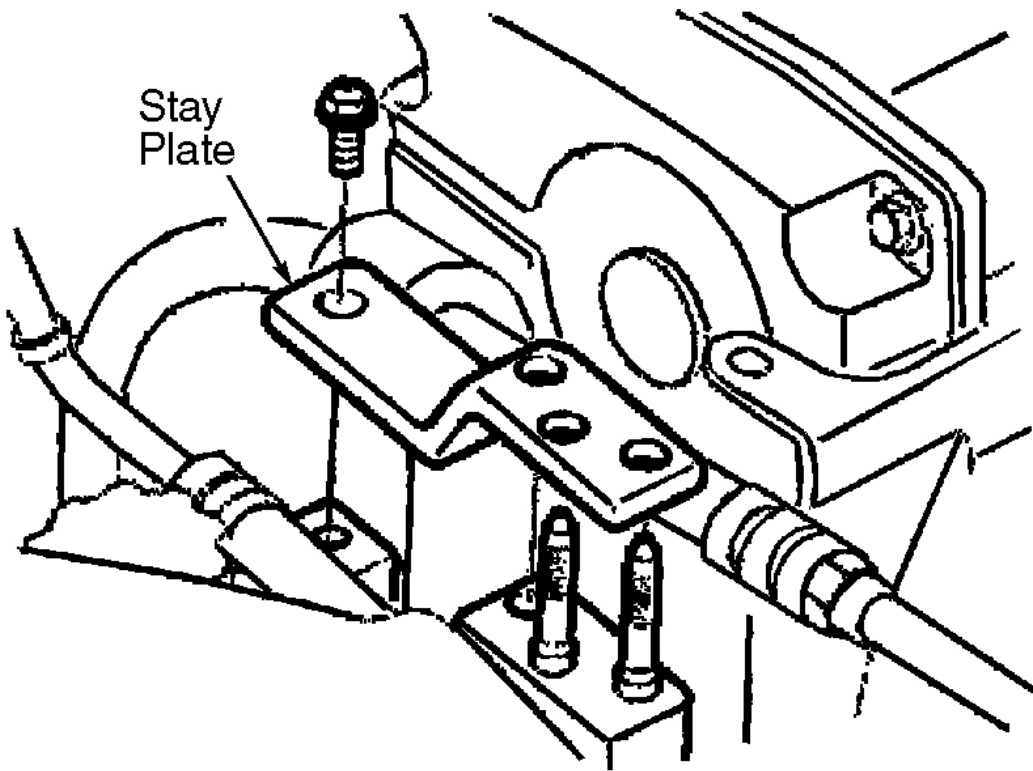
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Fig. 2: Removing & Installing Side Cover
Courtesy of HYUNDAI MOTOR CO.



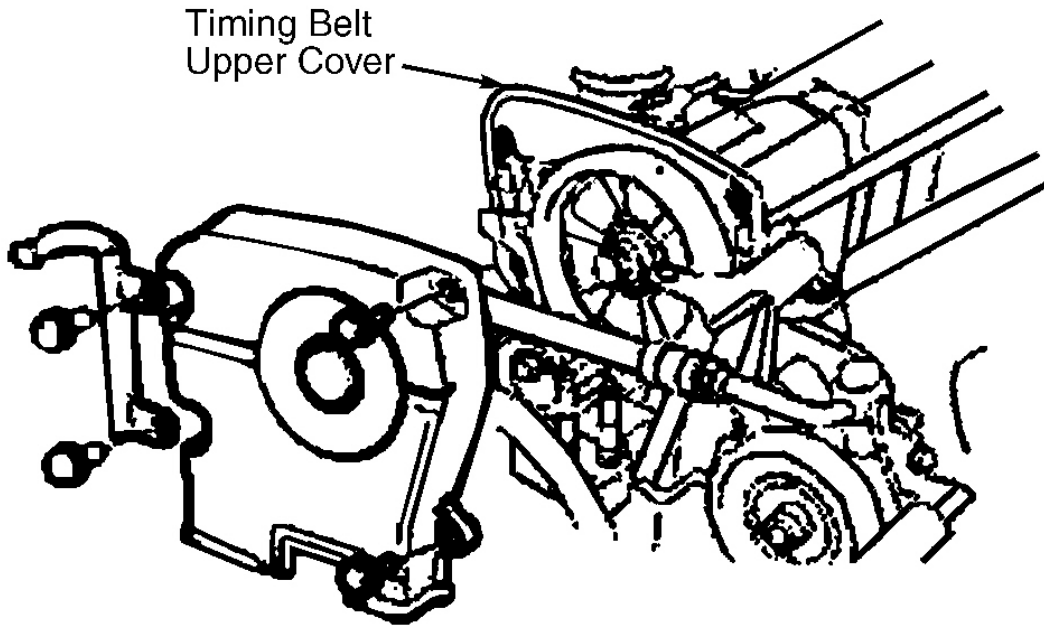
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Fig. 3: Removing & Installing Engine Mount Bracket
Courtesy of HYUNDAI MOTOR CO.



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Fig. 4: Removing & Installing Stay Plate
Courtesy of HYUNDAI MOTOR CO.



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Fig. 5: Removing & Installing Timing Belt Upper Cover
Courtesy of HYUNDAI MOTOR CO.