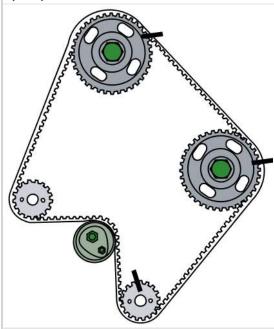
Timing belt: removal/installation

General

Before disconnecting the battery cable, check the audio system security code

Always check the timing marks before timing belt removal (6.00)



Removal

Remove the front seats

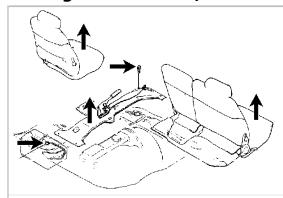
Disconnect the battery

Block the wheels; do not apply the parking brake

Disconnect the parking brake

(7.00)

Timing belt: removal/installation



Drain the coolant

Disconnect the upper radiator hose

Remove the upper cover

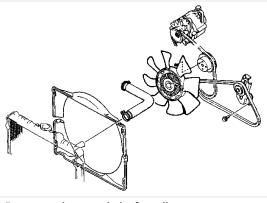
Remove the cooling fan

Remove the fan pulley

Remove the lower cover

Remove the air-conditioning belt and tensioners

Remove the alternator drive belt (5.00)



Remove the crankshaft pulley

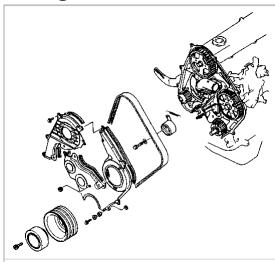
Remove the timing cover(s)

(3.00)

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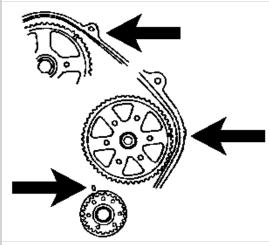
Kia Motors.

Timing belt: removal/installation



Turn the crankshaft to TDC for cylinder 1

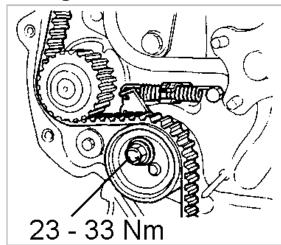
Align the timing marks (8.00)



Remove the timing belt tensioner

Remove the timing belt tensioner spring (12.00)

Timing belt: removal/installation



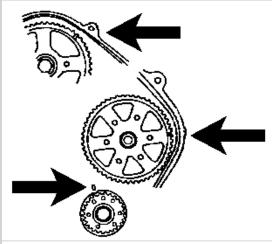
Remove the timing belt

Check the condition of the tensioner and idler pulley(s)

Note: Do not rotate the crankshaft

Installation

Align the timing marks (8.00)

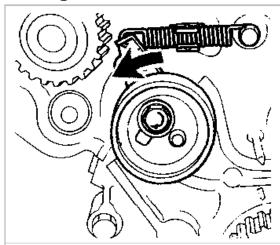


Fit the tensioner

Refit the timing belt tensioner spring

Lock the tensioner in extended position (11.00)

Timing belt: removal/installation



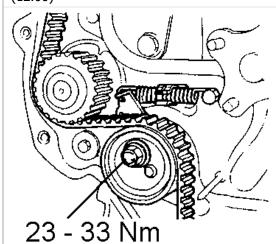
Fit the timing belt

Loosen the tensioner to tension the timing belt

Rotate the crankshaft clockwise by 2 turns

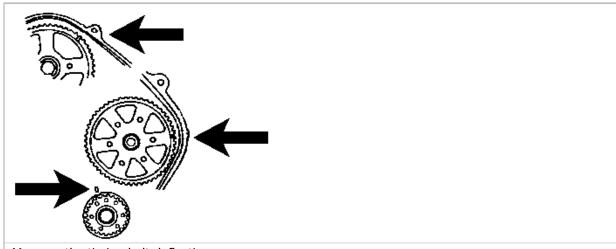
Tighten the tensioner (12.00)

(31 - 46 Nm)



Check the timing marks again (8.00)

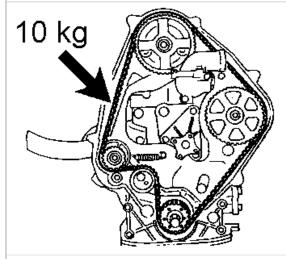
Timing belt: removal/installation



Measure the timing belt deflection

The tension is set at a deflection of: (10.00)

(10.8 - 12.9 mm / 10 Kg)

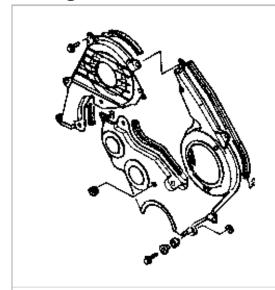


Refit the timing covers

(0.7 - 1.0 Nm)

(4.00)

Timing belt: removal/installation



Fit the crankshaft pulley (9.00)

(23 - 33 Nm)



Refit the alternator belt

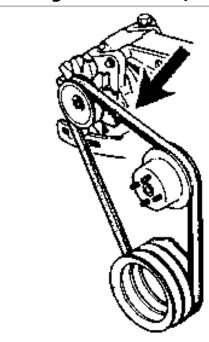
The tension is set at a deflection of:

New belt: (11 - 12 mm / 10 Kg)

Used belt: (12 - 14 mm / 10 Kg)

(2.00)

Timing belt: removal/installation



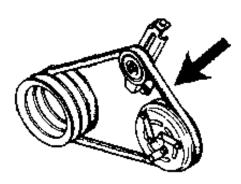
Refit the air-conditioning drive belt

The tension is set at a deflection of:

New belt: (4 - 5 mm / 10 kg)

Used belt: (5 - 6 mm / 10 kg)

(1.00)



Refit the lower cover

Fit the cooling fan pulley

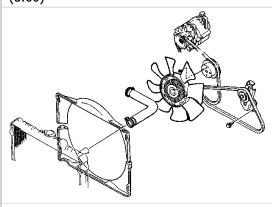
Timing belt: removal/installation

Fit the cooling fan

Refit the upper cover

Refit:

Upper radiator hose (5.00)

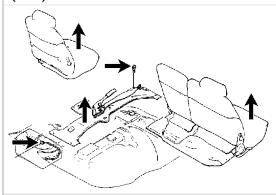


Refill the cooling system

Reconnect the parking brake

Reconnect the battery

Refit the front seats (7.00)



Torque settings

Timing belt tensioner: (31 - 46 Nm)

Timing cover (0.7 - 1.0 Nm)

Crankshaft pulley: (23 - 33 Nm)

Timing belt: removal/installation

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