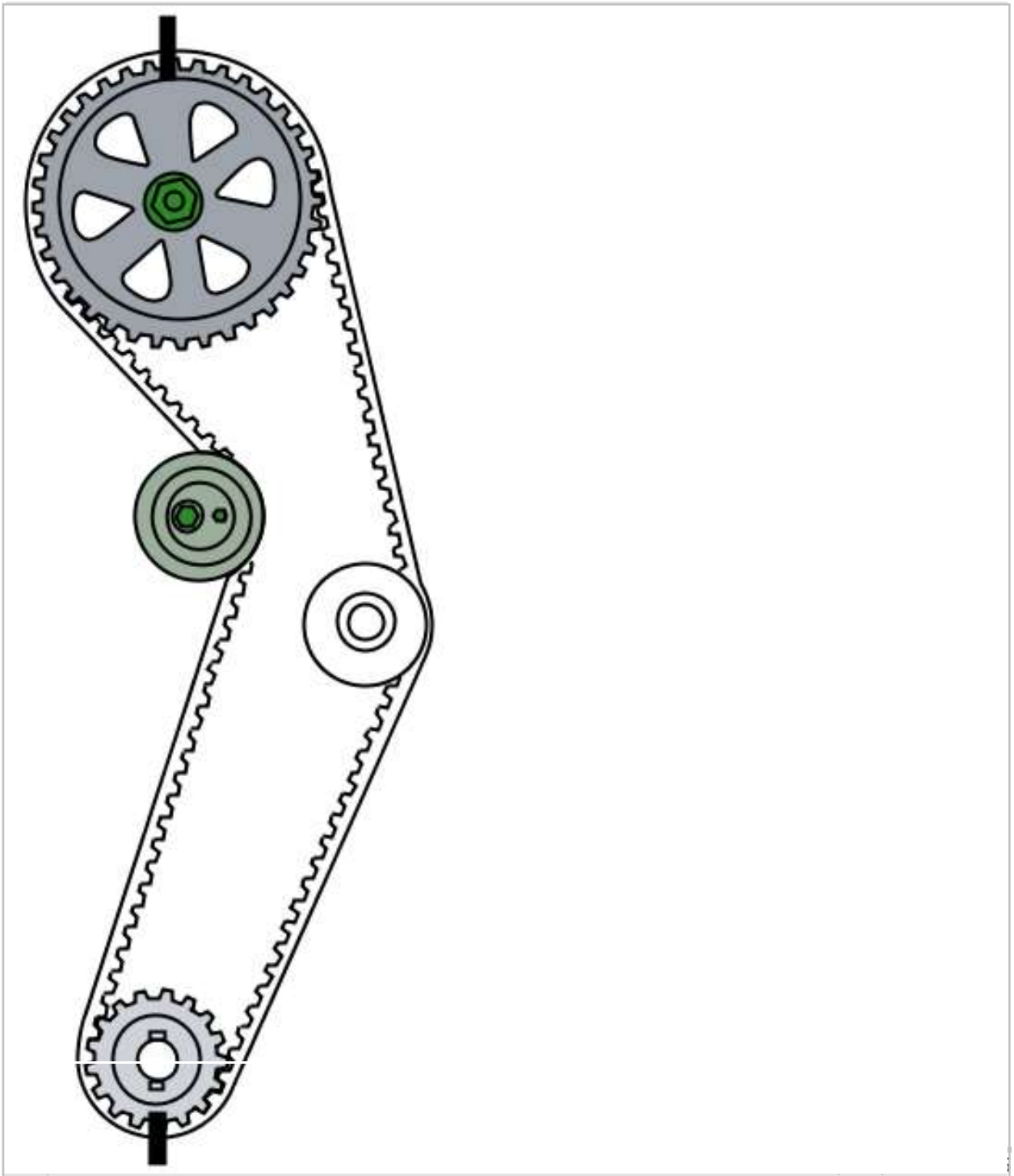
Renault Kangoo 1.6 8V K7M

Timing belt: removal/installation

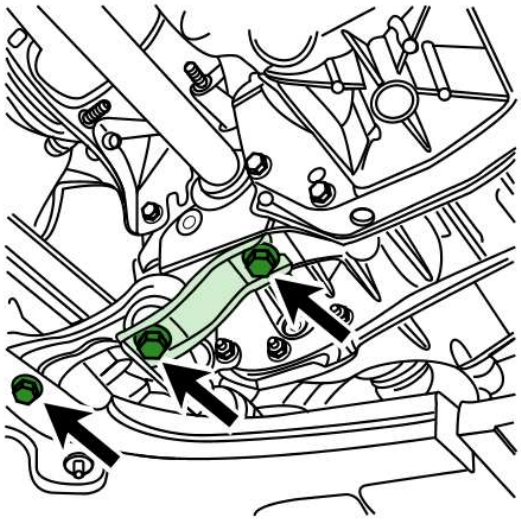
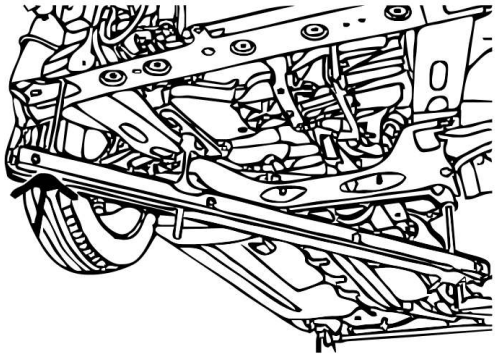
General
Always check the timing marks before timing belt removal

Timing belt: removal/installation

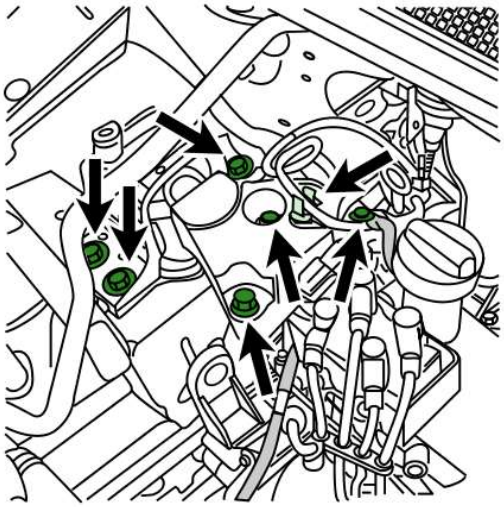
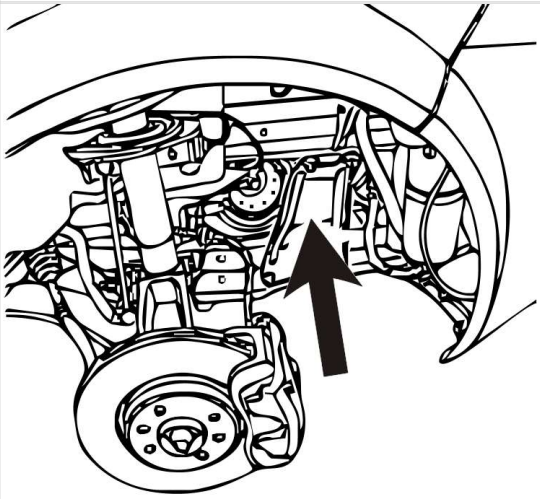


Before disconnecting the battery cable, check the audio system security code

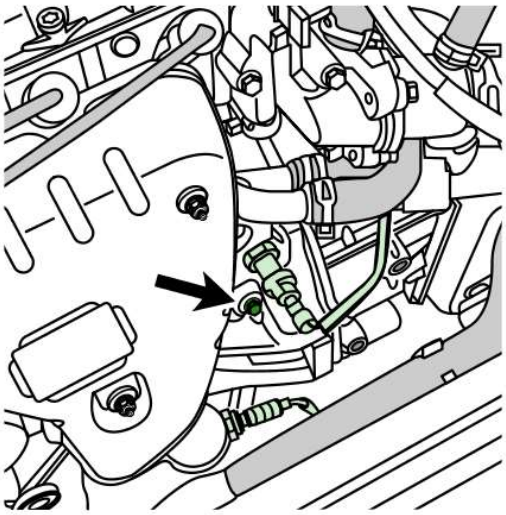
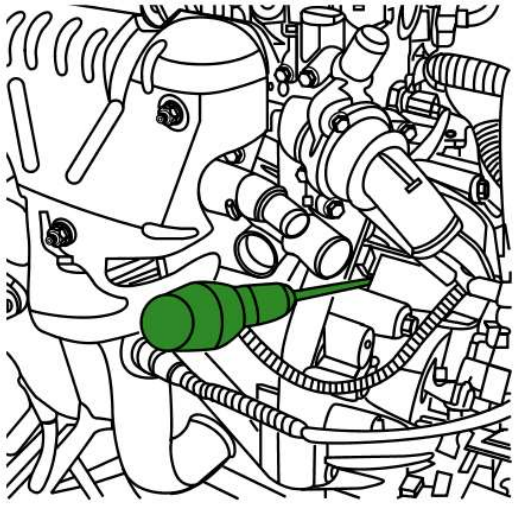
Timing belt: removal/installation

Removal
Raise the vehicle
Disconnect the battery
Remove the engine lower cover
Refit the front right wheel
Remove the right front splash guard
Remove the lower engine support

Remove the bolts from the subframe
Fit the special tool to support the engine (Mot. 1672)

Mark the position of the engine support before removal

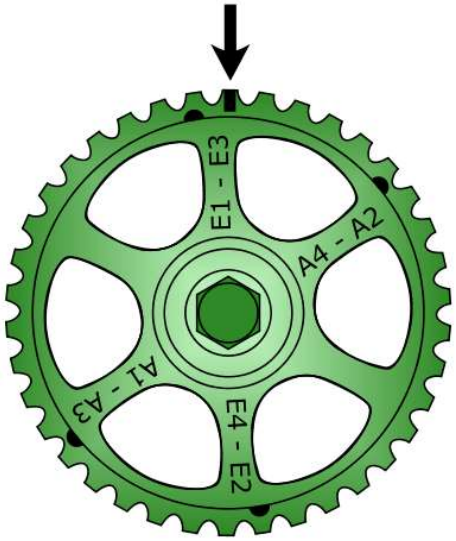
Timing belt: removal/installation

Disconnect the fuel feed line
Remove the right-hand engine support

Remove the reinforcement plate on the lower cross member

Remove the alternator shielding
Remove the air-conditioning belt
Loosen the alternator bolts

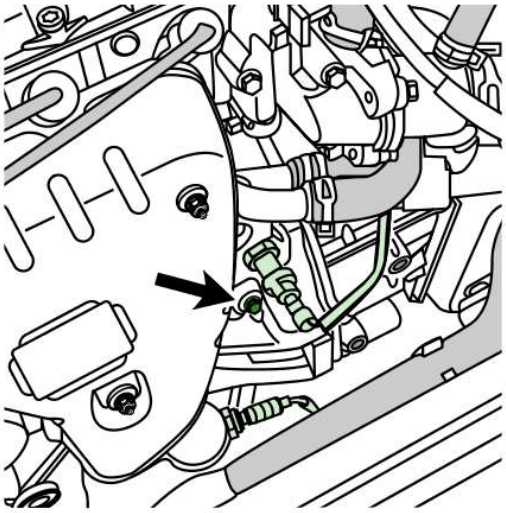
Timing belt: removal/installation

Remove the alternator belt
Remove the access plug

Lock the flywheel
Use a screwdriver

Remove the crankshaft pulley
Remove the screwdriver

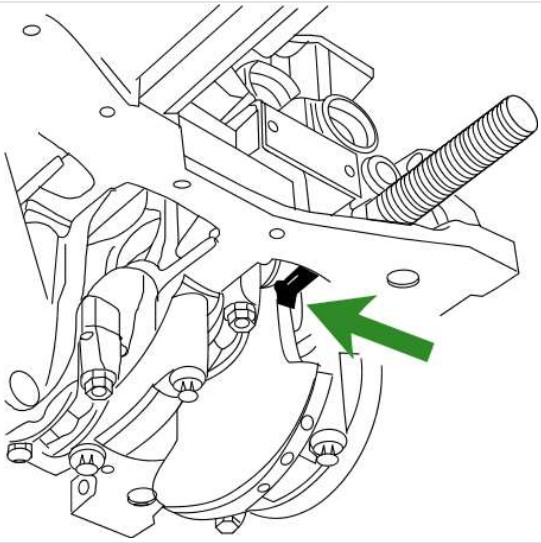
Timing belt: removal/installation

Remove the timing belt lower cover
Remove the timing belt upper cover
Temporarily fit the crankshaft pulley bolt and spacer
Note: Use a spacer to avoid damaging the crankshaft
Turn the crankshaft clockwise until just before TDC for cylinder 1

Fit the crankshaft TDC locking pin (Mot. 1489)

Timing belt: removal/installation



Turn the crankshaft until it touches the TDC locking pin



Loosen the tensioner pulley nut

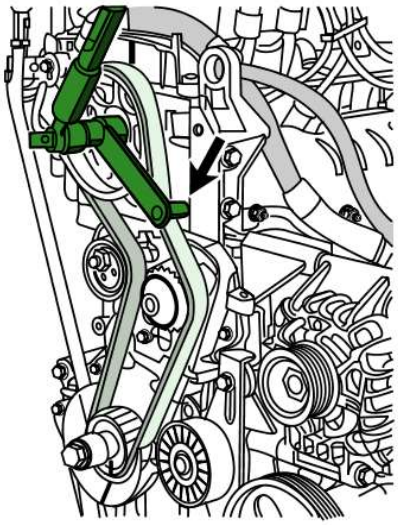
Remove the timing belt

Remove the tensioner pulley

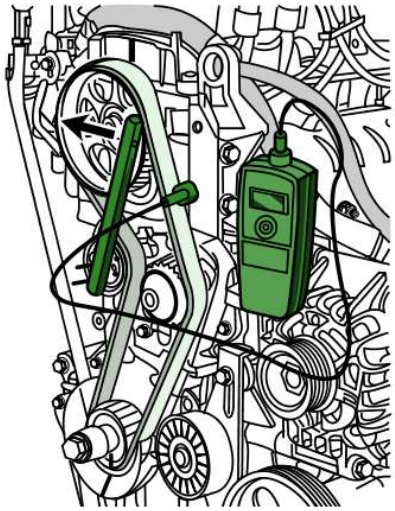
Installation

IMPORTANT: Degrease the crankshaft and crankshaft pulley mating faces

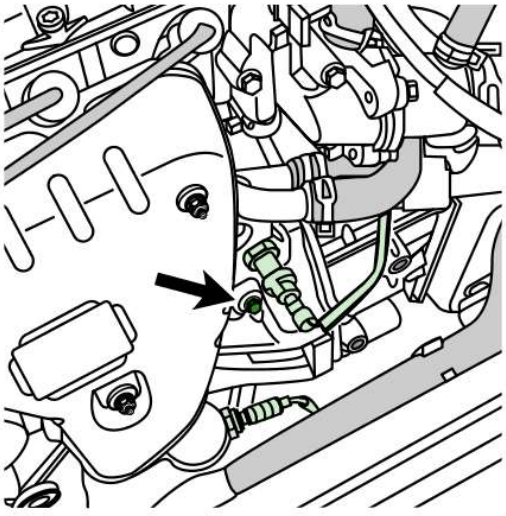
Timing belt: removal/installation

Fit the timing belt clockwise, starting at the crankshaft gearwheel
Align the timing marks on the timing belt with the marks on the camshaft and crankshaft gearwheels
Fit the tensioner pulley
Tighten the tensioner pulley nut finger-tight
Remove the crankshaft locking pin (mot. 1489)
Pre-tension the timing belt (:)
Fit the tensioning tool (mot. 1501)
Use a torque wrench to adjust the timing belt tension (10 Nm)

Remove the tensioning tool
Fit the tension gauge (mot. 1715)
Turn the tensioner pulley anti-clockwise
Use the special tool (mot. 1135-01)

Timing belt: removal/installation

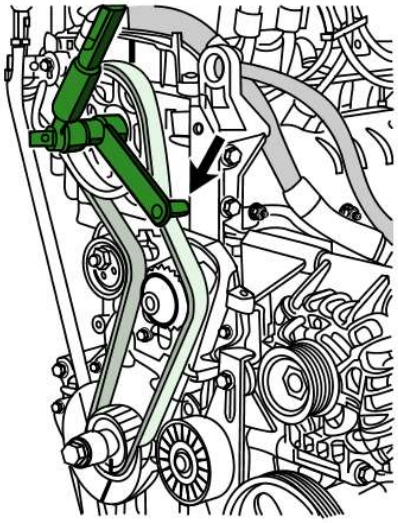


The tension is set when the tension gauge indicates a value of:	(160 ± 10 Hz)
Tighten the tensioner pulley nut	(50 Nm)
Turn the engine 2 rotations by hand	
Check that the locking pin can be inserted and removed	(mot. 1489)



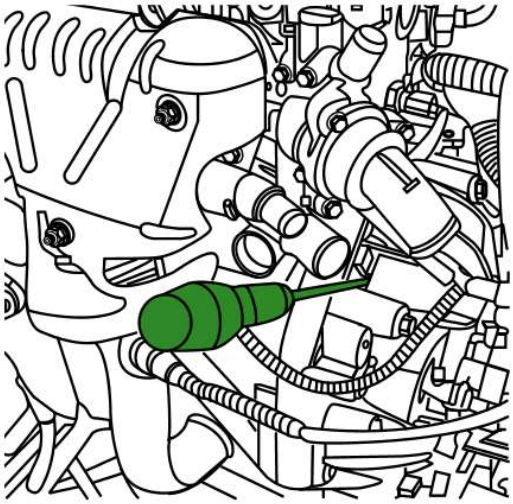
Fit the tensioning tool	(mot. 1501)
Use a torque wrench to adjust the timing belt tension	(10 Nm)

Timing belt: removal/installation



Remove the tensioning tool
Check the tension with a tension gauge (mot. 1715)
The tension is set when the tension gauge indicates a value of: (160 ± 10 Hz)
Repeat the procedure if required
Refit the timing belt upper cover
Refit the timing belt lower cover
Lock the flywheel
Use a screwdriver

Timing belt: removal/installation

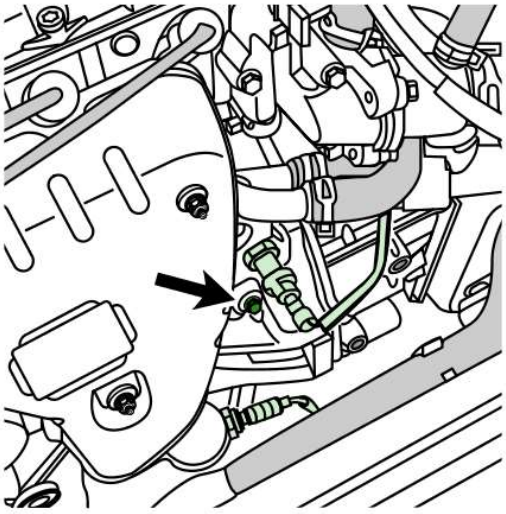


Fit the crankshaft pulley

Note: Use a new bolt (30 Nm + 100 ± 5°)

Remove the screwdriver

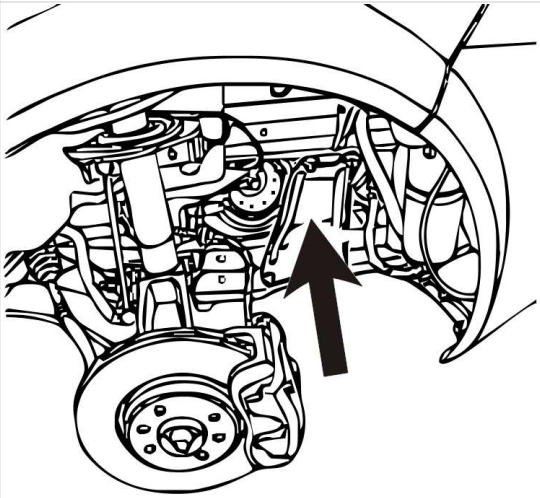
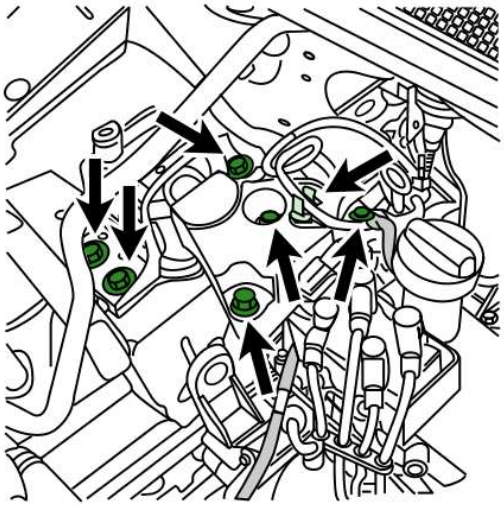
Refit the access plug (20 Nm)



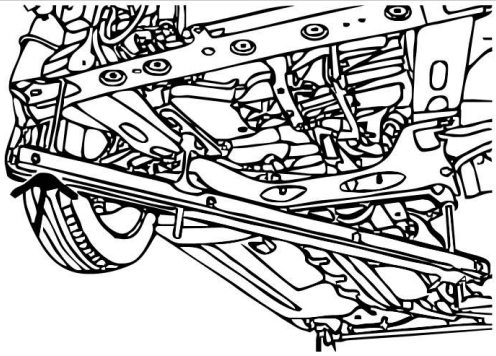
Refit the power steering pump belt

Fit the alternator belt

Timing belt: removal/installation

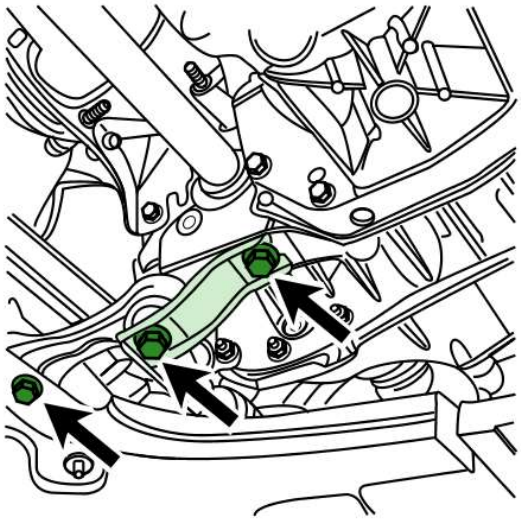
Tighten the alternator
Fit the air-conditioning belt
Refit the reinforcement plate on the lower cross member

Refit the right-hand engine support

Note: Align the engine support
Remove the engine support tool (Mot. 1672)

Timing belt: removal/installation



Fit the subframe bolts

Refit the lower engine support



Refit the front right splash guard

Refit the front right wheel

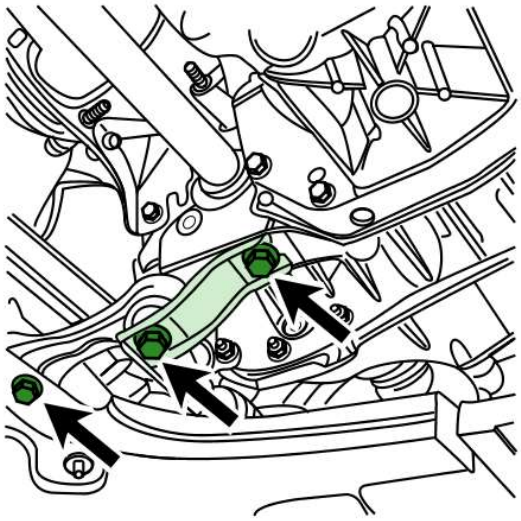
Refit the engine lower cover

Reconnect the battery

Torque settings	
Tensioner pulley nut:	(50 Nm)
Crankshaft pulley:	
Note: Use new bolts	(30 Nm + 100 ± 5°)

Timing belt: removal/installation

Alternator locking bolt:	(44 Nm)
Alternator adjuster bolt:	(21 Nm)
Lower/middle engine support fork to body:	(105 Nm)
Lower/middle engine support fork to engine:	(110 Nm)



Right-hand engine support:	(115 Nm)
Timing belt upper cover:	
M8:	(22 Nm)
M10:	(44 Nm)
Lower timing cover:	(8 Nm)
TDC plug:	(20 Nm)

Special tools

Tension gauge:	(mot. 1273)
Engine hoist:	(mot. 1453)