

Remove/install timing belt

TOYOTA Avensis Estate (_T25_), 2.0 D-4D, 85 kW



WARNING

Electric radiator fan can start even with the engine cut!
Rotating components can result in cuts and squashing!
Disconnect plug connection on electric radiator fan.

NOTE

Rotate engine in the direction of rotation only by the crankshaft pulley. Crankshaft pulley and camshaft pulley must not be rotated completely with the toothed belt removed.

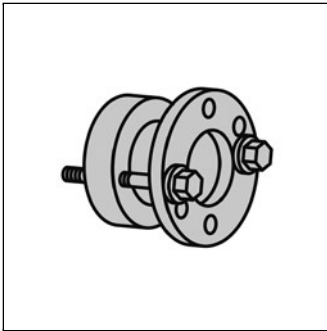
The toothed belt must not come into contact with oil or coolant!

Adjustment work on the toothed belt must only be carried out with a cold engine.

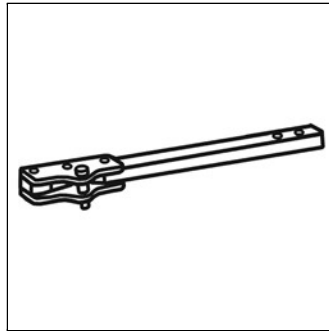
Note radio code. Disconnect battery (negative terminal).

It is advisable not to reuse the accessory drive belt(s) after removal, but always replace them!

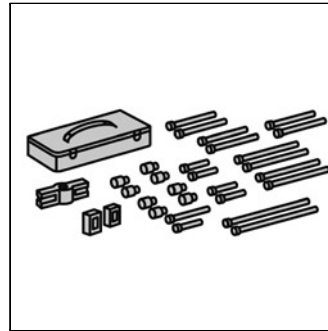
Required special tools



Crankshaft blocking tool
OE (09213-54015)



Counter support
OE (09330-00021)



Set of pull-off tools
OE (09950-50013)

Required Labour times/torques

Scheduled times

Replace toothed belt	1,90 h
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Tightening torques

Self-locking screws and nuts must always be replaced.

Engine mounting (6)	(see figure 1)	Screw(s) 52 Nm; Nut(s) 52 Nm
Engine bracket screw(s) (7)	(see figure 1)	M17 64 Nm; M14 37 Nm
Pulley screw(s) (1)	(see figure 2)	180 Nm
Tensioning roller screw(s) (3)	(see figure 2)	40 Nm
Toothed belt guard screw(s) (5)	(see figure 2)	7.5 Nm; with spacer 9 Nm
Distance washer(s) screw(s) (4)	(see figure 3)	7.5 Nm; with spacer 9 Nm
Tensioning device screw(s) (1)	(see figure 4)	21 Nm

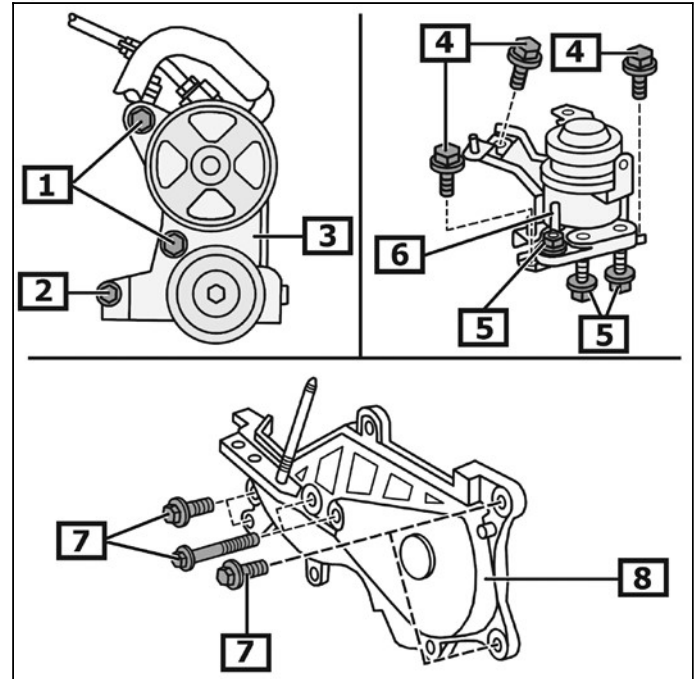
Remove

Remove the right front wheel.
 Remove underride guard.
 Remove lock carrier cover(s).
 Remove engine cover(s).
 Disconnect engine control unit plug. Remove control unit.

Remove accessory drive belt.

Unscrew screw(s). (1) (2)
 Dismantle servo steering and support. (3) (place aside)
Lines remain connected.
 Support engine.
 Unscrew engine mounting bolt(s). (4)
 Unscrew nut(s). (5)
 Remove engine mounting. (6)
 (see figure 1)

Figure 1

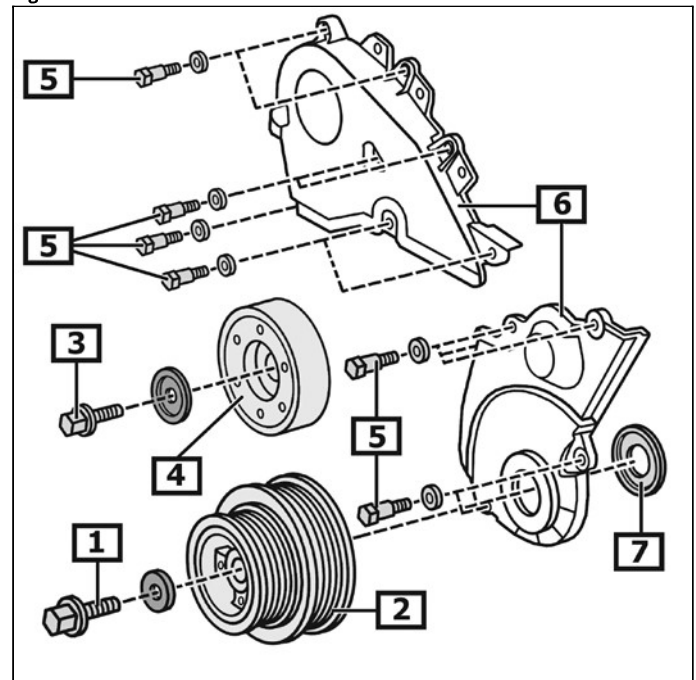


- | | |
|--------------------------------|---------------------------|
| 1 Holder screw(s) | 2 Holder screw(s) |
| 3 Holder - power steering pump | 4 Engine mounting bolt(s) |
| 5 Engine mounting nut(s) | 6 Engine mounting |
| 7 Engine bracket screw(s) | 8 Engine bracket |

Unscrew crankshaft pulley screw(s). (1)
Crankshaft blocking tool OE (09213-54015)
Counter support OE (09330-00021)
 Remove crankshaft pulley. (2)
Use puller. OE (09950-50013)
 Unscrew tensioning roller screw(s). (3)
 Remove tensioning roller. (4)
 Unscrew screw(s). (5)
 Remove toothed belt guard at the top. (6)
 Remove toothed belt guard at the bottom. (6)
 Remove toothed belt rail. (7)
 (see figure 2)

Unscrew engine bracket screw(s). (7)
 Remove engine bracket. (8)
 (see figure 1)

Figure 2

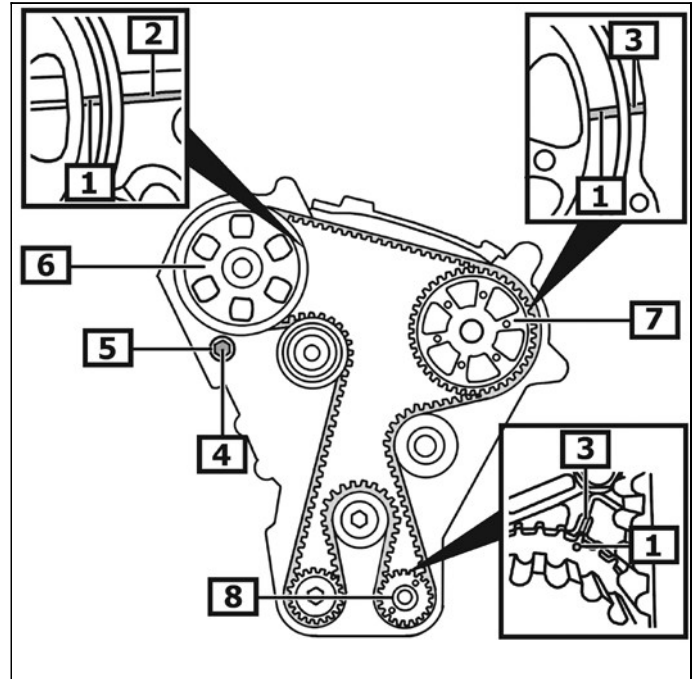


- | | |
|-------------------------------|--|
| 1 Pulley screw(s) | 2 Crankshaft pulley |
| 3 Tensioning roller screw(s) | 4 Accessory drive belt tensioning roller |
| 5 Toothed belt guard screw(s) | 6 Toothed belt guard |
| 7 Toothed belt guide | |

Screw in crankshaft pulley screw(s).
 Set engine to TDC cylinders 1. Marks must align. (1) (2) (3)
 Unscrew screw(s). (4)
 Remove spacer disc(s). (5)
 (see figure 3)

Rotate engine in the direction of rotation only by the crankshaft pulley.

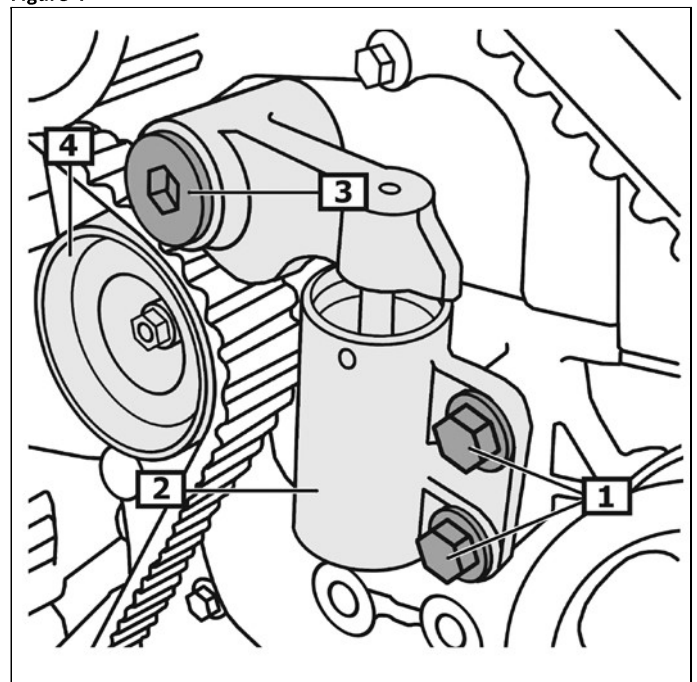
Figure 3



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|-----------------------------|-------------------------------|
| 1 TDC marking(s) | 2 Edge on cylinder head |
| 3 Reference mark(s) | 4 Distance washer(s) screw(s) |
| 5 Spacer disc(s) | 6 Camshaft timing gear |
| 7 High-pressure pump pulley | 8 Crankshaft pulley |

Unscrew screw(s). (1)
 Remove tensioning device. (2)
 Remove toothed belt.
 (see figure 4)

Figure 4



- | | |
|------------------------------|---------------------|
| 1 Tensioning device screw(s) | 2 Tensioning device |
| 3 Tensioning roller screw(s) | 4 Tensioning roller |

Install

Check tensioning roller for leaks and smooth running and replace, if required.

Check tensioning device for leaks and replace, if required. (1)

Push tappet downwards using press. (2)

Bores must be in alignment.

Insert Allen key. (3)

(see figure 5)

Relieve pressure of press.

TDC - Check markings, adjust if necessary. Marks must align. (1) (2) (3)

(see figure 3)

Fit toothed belt clockwise starting with camshaft pulley.

Push tensioning roller against toothed belt.

Fit tensioning device. (2)

Screw in screw(s). (1)

(see figure 4)

Remove Allen key. (3)

Toothed belt tightens itself.

(see figure 5)

Rotate engine two revolutions in the engine rotating direction.

Set engine to TDC cylinders 1.

Marks must align.

Unscrew crankshaft pulley screw(s).

Install toothed belt guide. (1)

Angled side must point outwards.

(see figure 6)

Continue assembly in reverse order of removal.

Install toothed belt guard.

Damaged seals must be replaced.

Fit accessory drive belt.

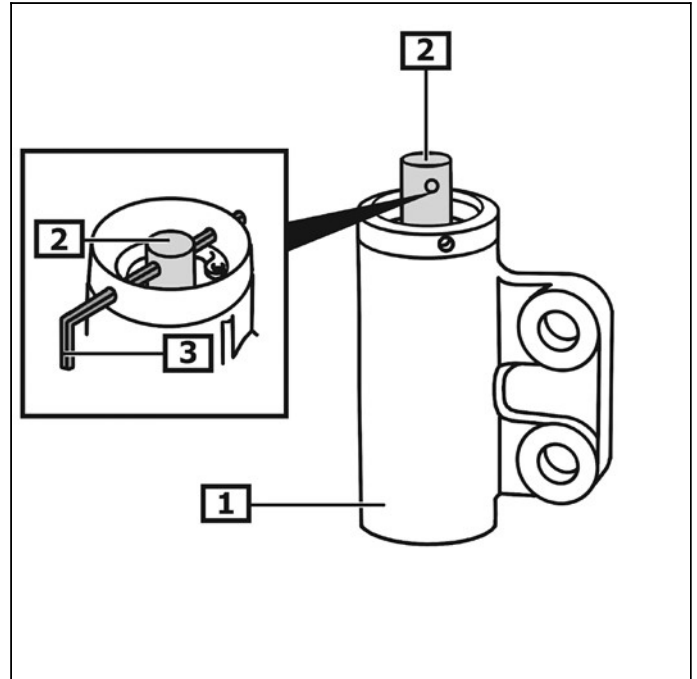
Decode radio, program volatile memories.

Start engine and check function.

Carry out a test drive.

Document toothed belt change.

Figure 5

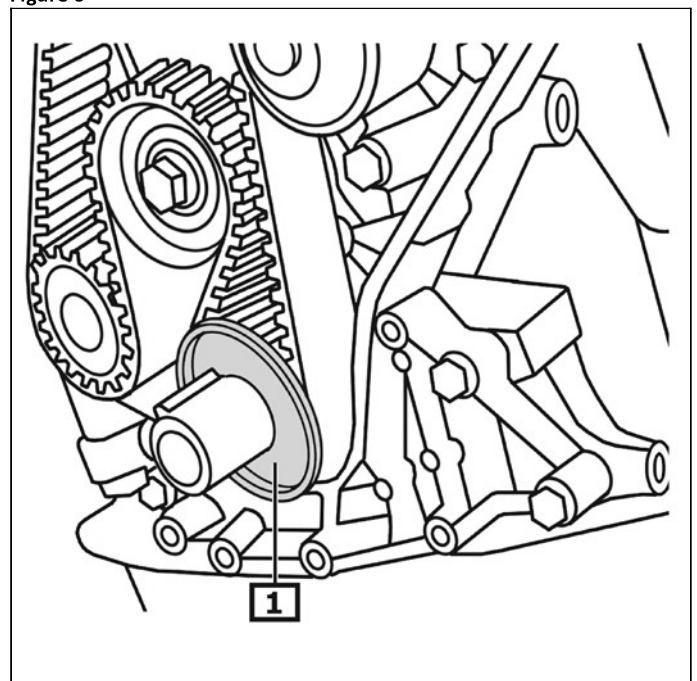


1 Tensioning device

2 Tappet

3 Allen key (1,27 mm)

Figure 6



1 Toothed belt guide

Repair/maintenance work have to be carried out by a specialist who has completed his training in the motor vehicle trade (e.g. car mechanic, car electrician, car mechatronics specialist). Alternatively, the repair can also be performed by a trained and experienced mechanic.