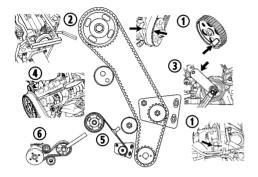


Timing



#### Warnings and recommendations

Unless otherwise advised by the manufacturer, the following procedures are recommended: Always fit a new timing belt after removal Check the tensioner and idler pulleys; renew if necessary Never turn the engine in the direction opposite to that of normal operation Inspect the belt(s) for cracks, fraying, wear and oil contamination Note: The engine must be cold before timing belt adjustment Note: Avoid bending, torsion or traction

## General

Check the timing marks before timing belt removal, Timing marks may vary. Check the specification Note: Be aware of security codes on radios

## Removal

Remove the lower engine cover, Remove the front bumper Remove the upper cross member Unscrew the radiator and pull it forward Remove the fan Remove the ancillary drive belt, Remove the ribbed belt tensioner Remove the valve cover Remove the timing belt upper covers Align the timing marks, fig 1





## Timing

Loosen the injection pump tensioner

Remove the camshaft gearwheel and injection pump timing belt together (use the special tool to keep the gearwheel in position), fig 6 Use the special tool to lock the camshaft, fig 2, 2065 A

Rotate the camshaft until the special tool touches the cylinder head

Measure the clearance on the other side

Fit a feeler gauge at both sides, half the thickness of the clearance

Check the timing marks again

Remove the crankshaft pulley

Fit the crankshaft locking tool, VAG 3256

Remove the timing belt lower cover

Loosen the tensioner

Remove the timing belt

#### Installation

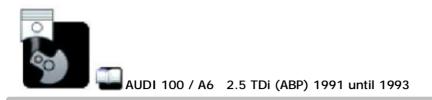
Loosen the camshaft gearwheel, fig 4 Fit the timing belt Turn the tensioner anti-clockwise to adjust the timing belt tension Check the tension with a tension gauge, fig 5, VW 210 The tension is set if the tension gauge indicates a value between:, 12 - 13 Fit the injection pump timing belt together with the camshaft gearwheel Check the timing marks again, Connect the spring to the tensioner to adjust the timing belt tension, fig 6 Tighten the camshaft gearwheel Refit all other parts in reverse order of removal

## **Torque settings**

Tensioner:, 45 Nm Camshaft gearwheel:, 30 Nm + 90°. Camshaft gearwheel at pump side:, 160 Nm Crankshaft pulley:, 160 Nm.+ 180°

## Special tools

Camshaft gearwheel locking tool (injection pump):, VAG 3036.



# Timing

Camshaft locking tool number 2065A, VAG 2065 A. Crankshaft pulley position tool:, VAG 3256. Tension gauge: VAG number 210, VAG 210.