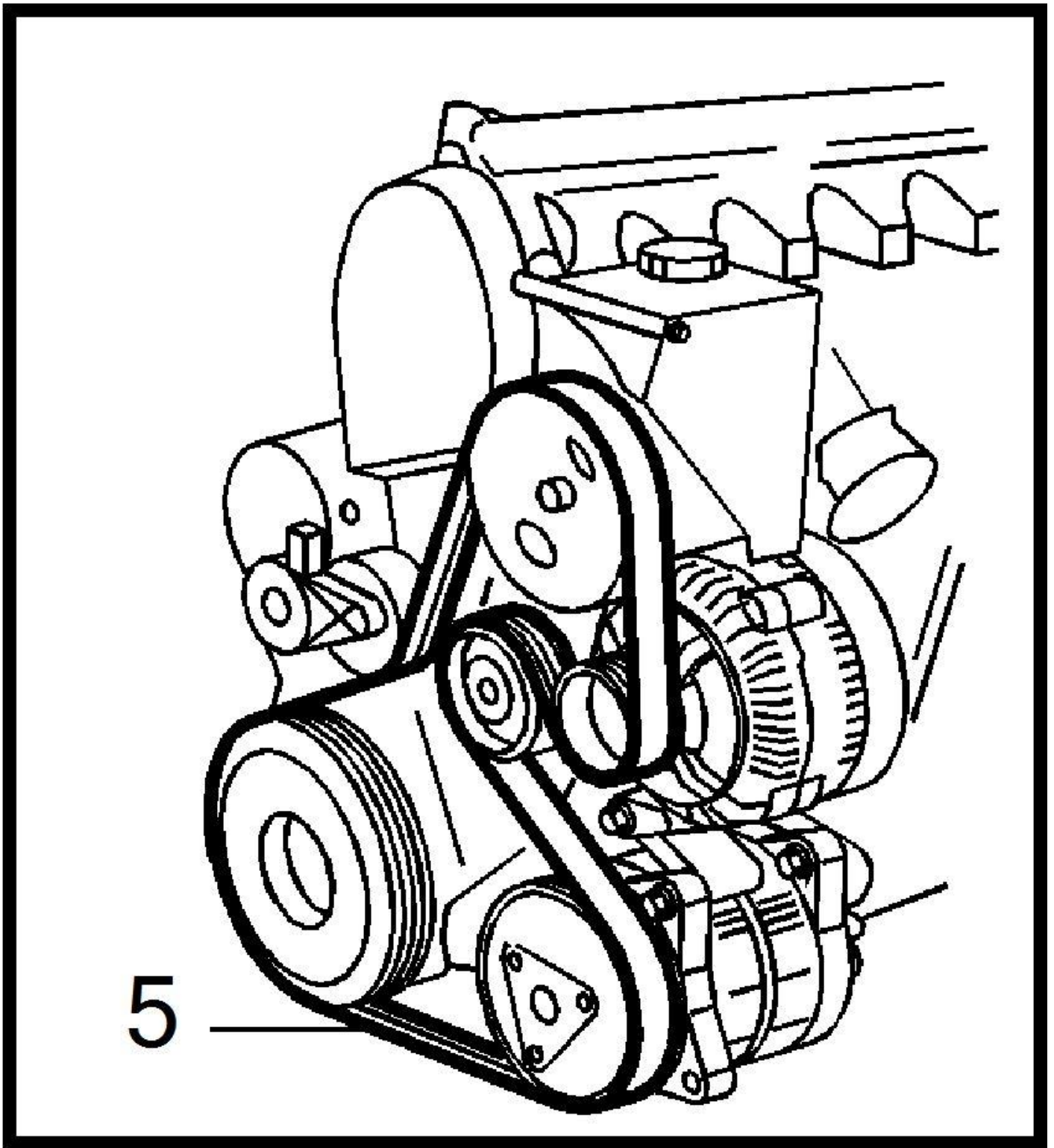


TIMING BELT

How to remove cam belt

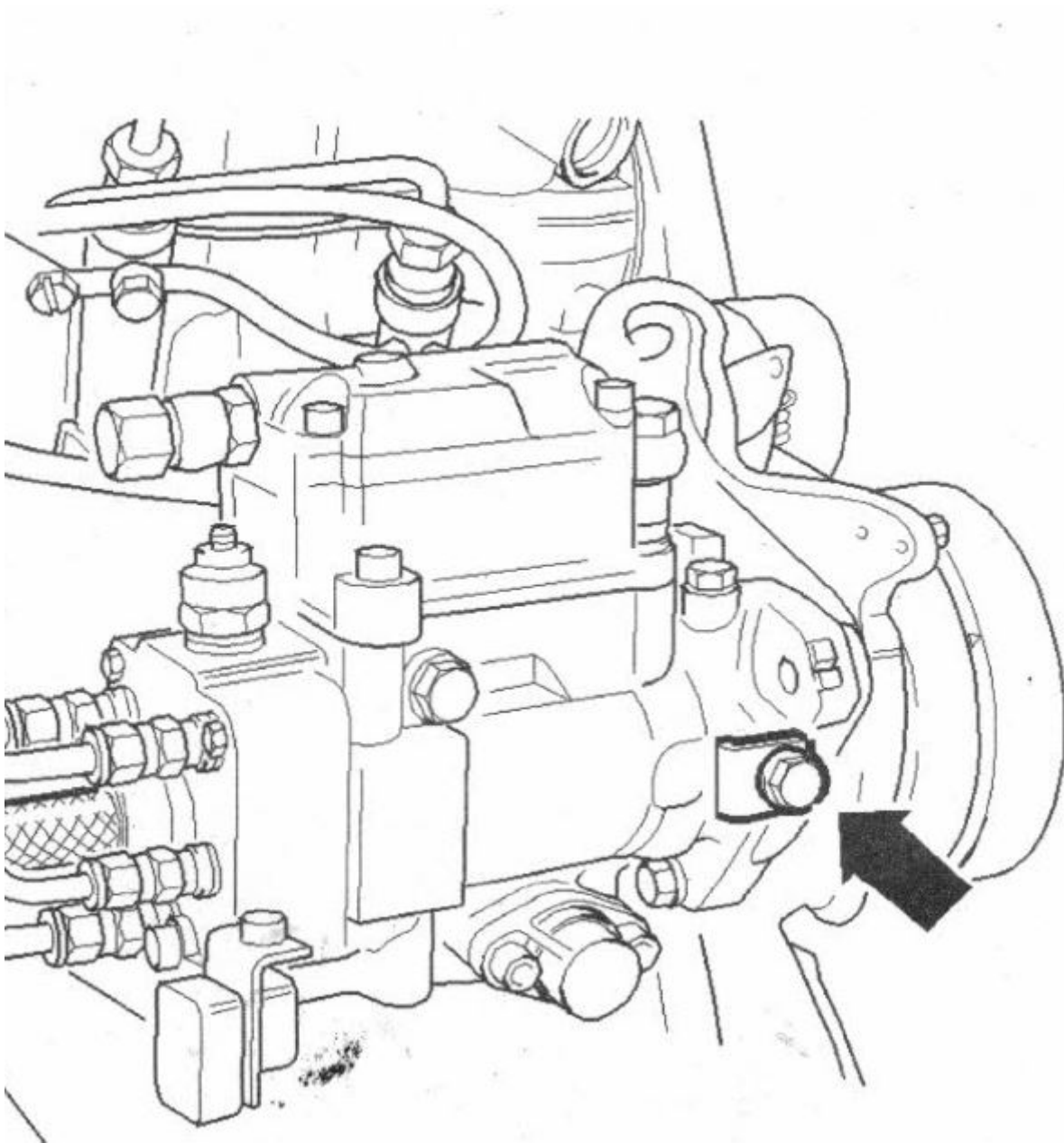
1. Set the flywheel to TDC using the mark at the bottom of the gearbox, the pointer should point to a "V" notch on the flywheel.
2. Remove the auxiliary belt and tensioner.



3. Install the Volvo locking tool on the vibration damper if the car is a TDC the tool with fit.



4. Lock the injection pump, remove the keeper and tighten bolt.



5. Using tool to hold the camshaft pulley on the injection pump side and loosen the camshaft bolt



6. Remove injection pump tensioner and remove injection pump belt.

7. Remove camshaft pulley on injection pump side

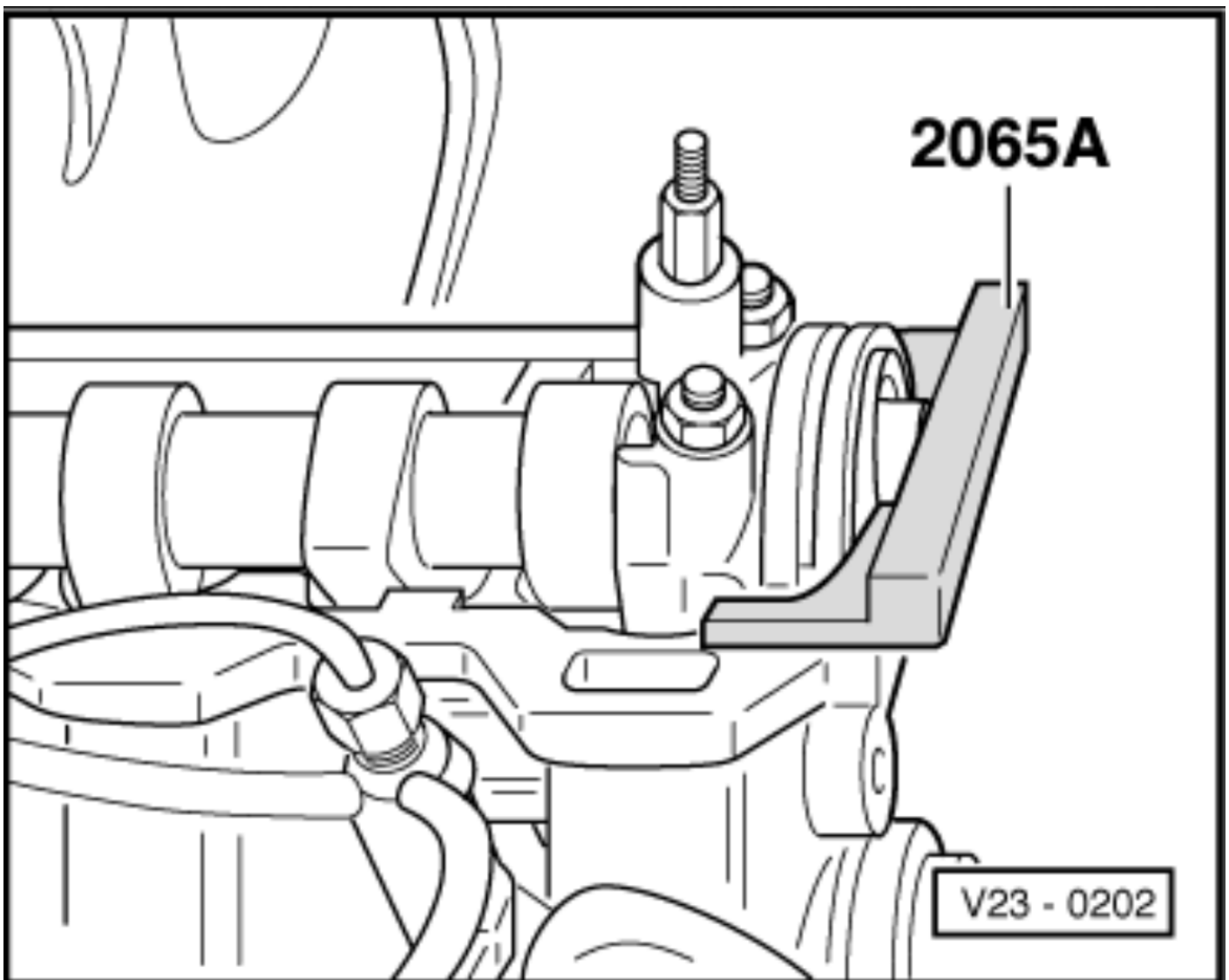
8. Injection pump side is done for now move over to cam belt side

9. Using a $\frac{3}{4}$ Breaker bar a $\frac{3}{4}$ 16" extension and an axle stand loosen the crankshaft bolt



10. Using a 6mm Hex loosen the 4 small bolts around the crank bolt.

11. Remove the vibration damper tool.
12. Remove the crank bolt and four small bolts
13. Remove the vibration damper, if it does not come off right away use soft hammer and hit round the edges to break free.
14. Remove metal cover over timing belt.
15. Remove timing belt tensioner and belt.
16. Place tool in end of camshaft injection pump side, you may need to use the camshaft pulley to move the cam but should only be a little, the more the slot does not match the more the timing was out.



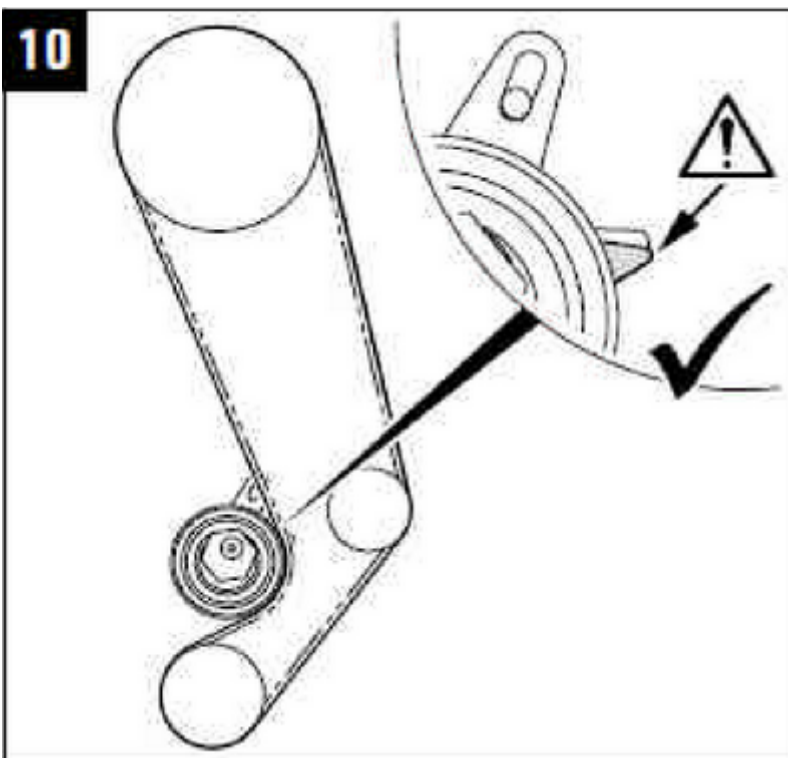
17. With this tool installed hold the camshaft using counterhold tool and loosen the camshaft bolt on the crank side.
18. Leave the cam pulley loose

19. At this point

- Cam shaft is at TDC
- Both timing belts are removed
- Check flywheel mark for crank TDC
- Get ready to install new timing belt.

How to install new timing belt

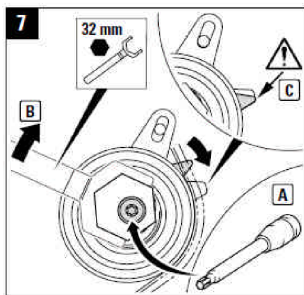
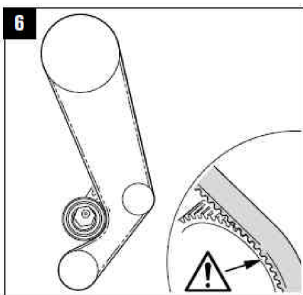
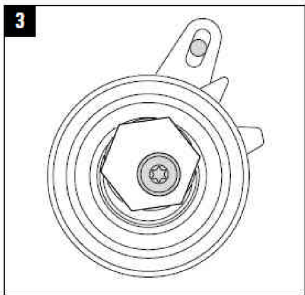
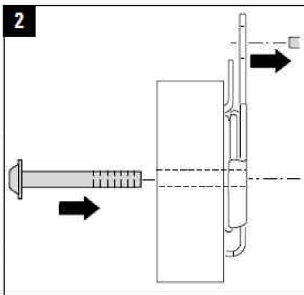
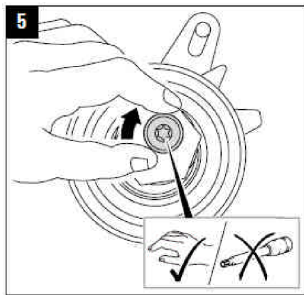
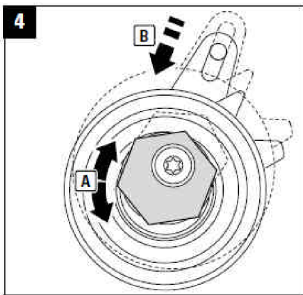
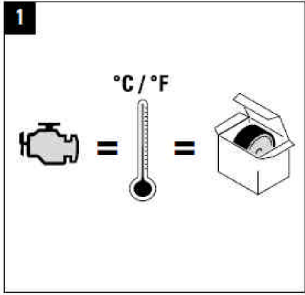
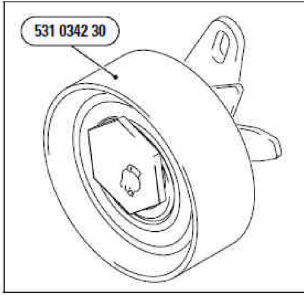
1. Check Flywheel is at TDC using mark
2. Check Camshaft is at TDC using tool
3. Finger tight the cam pulley on the crank side
4. Install timing belt tensioner and fit belt
5. Tension belt using [INA tension guide](#)
6. Counterhold campulley and torque to spec
7. Rotate engine twice using tool in cam pulley
8. Check Timing belt tensioner mark is still in position



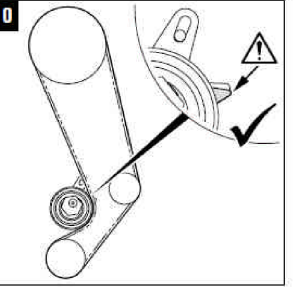
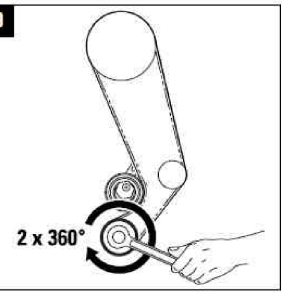
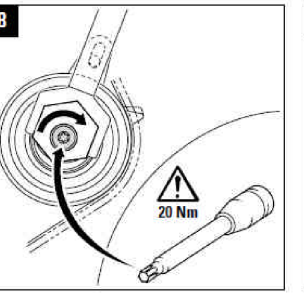
9. Check flywheel is at TDC
10. Check Camshaft is at TDC using tool in slot.
11. If camshaft, flywheel and tensioner marks are good continue if not go back and redo.
12. Fit metal cover
13. Fit vibration damper and install new crank bolt with diamond washer and four small bolts hand tighten.
14. Install vibration damper locking tool
15. Torque four small bolts
16. Torque crank bolt to 160Nm + 180 Degrees, use axle stand and big breaker bar for the angle torque
(Mark bolt with marker or use angle gauge to know how much angle you have put on bolt)
17. Remove vibration damper tool.
18. Install auxiliary belt tensioner and belt.
19. Crank shaft side done move over to injection pump side.

INA TENSION GUIDE

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