

Changing the V-belts

Note: this checklist assumes that the alternator pulley update has been performed. This checklist is for the standard 3 V-belt setup, but with the fan belt tension sensor removed.

Parts

Fan belt	999-192-338-50	
Alternator belt	999-192-343-50	
A/C belt	999-192-363-50	
Fan pulley screws	900-119-026-02	(3)

Tools

24mm box-end wrench
3/8 breaker bar
magnetic pickup tool
5mm bit socket 3/8 drive
5mm bit socket 1/4 drive
10mm triple-square bit socket 3/8 drive (Snap-on)
8mm socket 1/4 drive
1/4 ratchet
3/8 ratchet
13mm socket 3/8 drive
3/8 extension
Polygon wrench (Porsche 999-571-052-02)
long flat-blade screwdriver
13mm extra deep offset box-end wrench (Stahlwille)
3/8 torque wrench (Hazet 5110-1CT)
1/4 torque wrench (Hazet 5108-2CT)
Krikit IV - belt tension gauge (Gates 91107)
Dremel with cutting/grinding accessories (if fan belt pulley screws round out)

Disassembly

1. Remove air filter cover
2. Remove the A/C belt
 - 8mm bolt on fan shroud
 - 13mm bolts on A/C compressor

3. Remove alternator shaft nut
10mm triple-square + breaker bar
24mm box-end
4. Remove alternator outer pulley half
Polygon wrench
5. Remove alternator belt
6. Remove alternator shims (2)
7. Remove alternator inner pulley half
Polygon wrench and long flat-blade screwdriver
8. Remove fan pulley screws (3) and shims (2)
5mm bit socket
9. Remove fan outer pulley half (but leave inner pulley half and shims (3))

Reassembly

1. Install fan belt (numbers facing rear)
2. Install fan outer pulley half
3. Install spare fan pulley shims (2) and 3 new screws. (just take slack up, not tight)
4. Remove DME relay
5. Turn over the engine a few times to seat the belt
6. Torque fan pulley screws to 10Nm
7. Install alternator inner pulley half
8. Install the alternator belt (numbers facing rear)
9. Install the 2 shims
10. Install the alternator outer pulley half
11. Install the alternator nut and take up the slack, not tight
12. Turn over the engine a few times to seat the belt

13. Torque alternator nut to 50Nm
14. Slacken A/C adjuster nut
15. Install A/C belt (numbers facing rear)
Drop in bolts in sequential order (LR-RR-RF-LF) and get each nut started before moving on to the next bolt. Apply leverage with long flat-blade screwdriver. Then tighten all down equally but just loose.
16. Adjust A/C belt tension to 30-35 Kg (or 1/2 turn if tight against stop already)
17. Tighten the 3 long bolts and 1 short bolt and the adjuster lock nut
18. Install 8mm bolt on fan shroud
19. Install air filter cover
20. Install DME relay
21. Start engine and check operation
22. Drive several miles and get engine hot
23. Next morning recheck A/C belt and readjust tension to 30 Kg.