Timing Belt & Water Pump Replacement

The timing belt is a critical component, keeping the engine's pistons and valves in sync. The 1.8t engine uses a rubber belt - Volkswagen recommends replacement intervals of 105,000 miles. However, enough of the belts have snapped in the 65-75k range that the recommended interval can't be blindly trusted. Most of the early breaks occurred on '98-'99 models due to poor belt tensioner design. A new tensioner was introduced for 2000+ models, but it's still too early to tell if service life has increased.

If you're covered under the powertrain warranty, a broken belt just means a headache while the dealership replaces most of the valves (Audiworld has a nice dramatic view of what happens when a timing belt breaks in an interference engine). If you're out of warranty, it's sometimes cheaper to just get a new engine altogether (!).

For myself, it's not something that I want to deal with in case I'm out in the middle of nowhere, so I keep to a 60,000 miles/4 year replacement interval (check out some more subjective intervals here).

It's also a good idea to replace the accessory belts and water pump impeller at the same time - on my '98, the impeller at 61k miles had noticeably rougher and more sluggish rotation than the replacement. On my 2000, however, the impeller was replaced at 72k miles and there was essentially no difference between the old and new impeller. Looks like the new tensioner is having an effect.

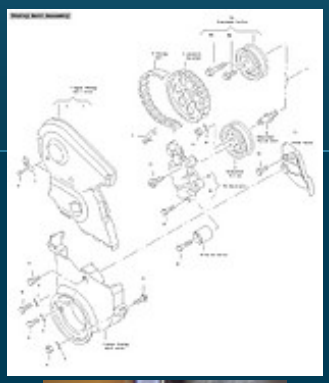
Should you replace your own timing belt? If you have some repair experience, the timing belt change is a straightforward (though long) procedure. If this is the first time you're looking at the engine bay...get ready to spend around $600-$800 to have the belt replaced at a dealership, or a bit less at a good VW shop.

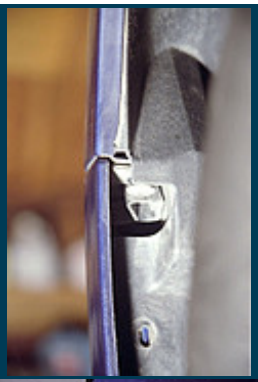
There are several writeups for the 1.8t timing belt available, so this guide is a little sparse (also because my notes and photos are two years old and I'm only now getting around to writing up the procedure :). The procedure used here is based off of the ELSA factory repair manual, streamlined (for example, there's really no need to completely remove the radiator).

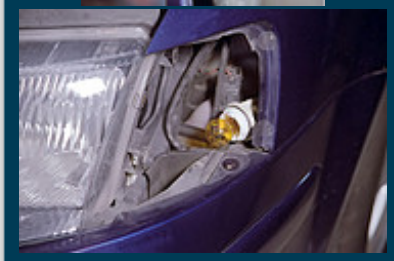
Audiworld - 1.8t timing belt replacement - Hardt
Audiworld - 1.8t timing belt replacement - AndyTN
ClubB5/PassatWorld - 1.8t timing belt replacement - Rusty
ClubB5/PassatWorld - 1.8t timing belt replacement - DaddyMatt
HermanH's Passat Site - Detailed front bumper removal

One last note - there is quite a bit of disassembly required, which means having lots of bolts and screws laying around. You can save yourself a huge headache by taking the time to organize each set of screws as you remove them and label each with their original location - I used envelopes (lots of them).

Part Information & Sources:







Note - always confirm part numbers by looking at the actual part mounted in the car! Mistakes will happen sometime, somewhere.

Parts:

ECS Tuning: Timing belt kit, $280	This is a complete kit with the timing belt, tensioner, rollers, accessory belts, and water pump impeller.
Coolant - 1 liter	The coolant is necessary if you'll be replacing the water pump impeller - the coolant needs to be drained and some of it will likely make its way to the floor instead of the catch container. This is also a good time to switch to another coolant, as I did. Check out some thoughts on appropriate coolants.

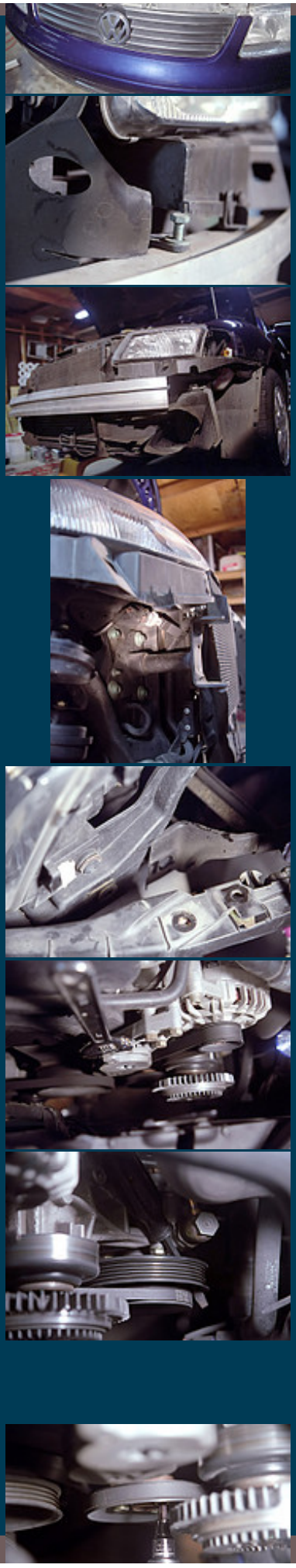
Tools:

- Torx drivers - T20, T25, T30, T45
- Sockets - 6mm, 10mm, 13mm, 14mm, 16mm, 19mm, 13/16"
- Hex (Allen) drivers - 5mm, 6mm, 8mm, 10mm, 14mm
- Torque wrench(es) - this isn't optional.

Time required: 5-12 hours

Bumper cover and bumper removal:

1. Prop up the car on ramps or jack stands.
2. Disconnect the ground connection from the battery (make sure you have your radio code handy first).
3. Remove the screws holding the front wheel well liner to the bumper cover - there are four torx T20 screws per side. Three are horizontal, one vertical. (illustration)
4. Climb under the car and remove the noise insulation panel (black plastic belly pan). This is a good time to check for oil leaks - most leaks will drip down to the panel and be easily visible.
5. While still under the car, find and remove the underside slot head screw securing the bumper cover to the frame (centered on the bumper cover).
6. Back to the engine bay - remove the three 10mm bolts holding the hood latch mechanism to the frame. Remove the release handle by pulling off its retaining clip. You should then be able to set aside the latch mechanism - I left the release cable attached and just pulled the cable out enough to set the latch near the ecu and battery.
7. Remove the air intake hose by removing the two philips head screws securing it to the bumper cover and pulling straight up.
8. Remove the turn signal lenses. They're held in place by a spring, which can be released by pulling on the attached ring behind the lens. Pull each lens forward until you can remove the bulbs by rotating the electrical connector.
9. With the turn signal lenses removed, you should have exposed two 10mm bolts (one per side) - remove these. (illustration)
10. Back to the top of the bumper cover. Remove the two rubber bump stops used to cushion the hood when closing (one philips head screw each).
11. Remove the three torx T25 screws around the hood latch area. (illustration)
12. You should be able to pull off the bumper cover now without difficulty. Work slowly when pulling it off to make sure you haven't forgotten a screw somewhere.
13. With the bumper cover removed you'll see the actual metal bumper. It's held in place by two long 13mm bolts - remove these and pull off the bumper. There is some plastic above the bolts that can be pushed to the back or side for full access to the bolts. (illustration)

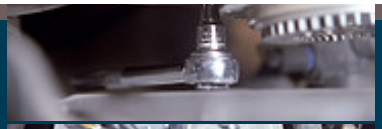


Getting the radiator in service position:

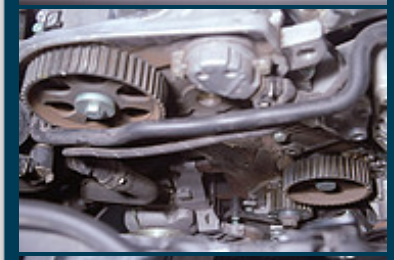
14. Remove the power steering oil cooler in front of the radiator (lower right side), held in place by two 10mm bolts. The outside air temperature sensor is clipped to the cooler line and can be removed as well.
15. Look to the left of the radiator near the bumper support - you'll see a wiring connector. Disconnect this. (illustration)
16. Back to the top of the bay - there are two torx T30 screws holding the radiator panel to the frame (one at each end of the panel). Remove these.
17. Remove the bumper supports. There are a total of seven torx T45 bolts and two 10mm nuts that need to be removed to pull off the supports. Note that one support only has three of the T45 bolts (no idea why). Start by removing the top bolts. Then thread in the long bumper bolts, one per side in the top outermost hole. Now remove the rest of the bolts. (illustration)
18. Look below the turn signal lens housing area - there are two side torx T30 screws to remove (one per side). The plastic runner here is also clipped to the frame - you should be able to free the runner by pulling on the clips. (illustration)
19. The radiator panel should be free to move now - try pulling it forward. The panel should slide along the long bumper bolts several inches, giving access to the front of the engine.

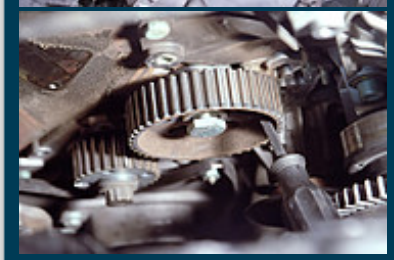
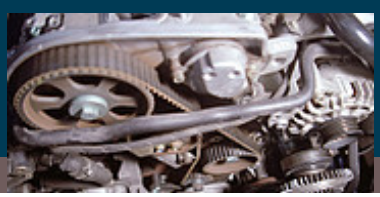
Timing belt removal:

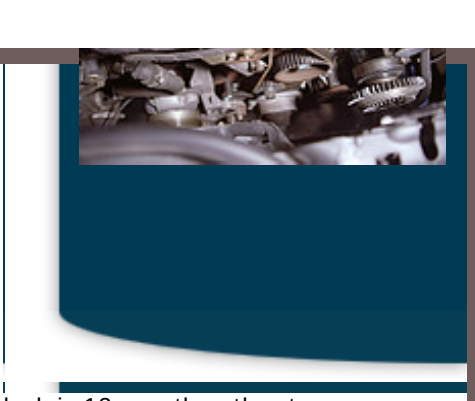
20. Remove the top plastic engine cover.
21. Remove the coilpacks, each held in place by two 5mm bolts - just pull straight up and flip them upside down.
22. Remove the spark plugs. With the spark plugs removed, you'll be able to rotate the cam/crankshafts fairly easily.
23. Remove the cooling fan - it's held in place by four 5mm bolts. You can simply grab the edge of the fan to keep it from moving while you unscrew the bolts.
24. Get under the car and look to the passenger side - you should see the A/C belt. It's tensioned by a pulley held to the engine by two 6mm bolts. Remove these and the you should be able to remove the tensioner and A/C belt.
25. Now to remove the long serpentine belt. Make a diagram of how the belt is positioned on each of the pulleys. It's tensioned by a spring tensioner - use an adjustable wrench to lock onto the tensioner's tab and pull the wrench clockwise. This will release the belt tension - you should then be able to slide the belt off completely. (illustration)
26. Remove the serpentine belt tensioner by removing its three 13mm bolts.
27. Next is the power steering/water pump belt. Insert a screwdriver or drift through the power steering pulley - this should lock it in place. Remove the three 6mm bolts securing the water pump pulley - you should be able to remove the belt and both halves of the water pump pulley. (illustration 1) (illustration 2)
28. Next, the timing belt covers. Start with the upper timing belt cover - pull the two hoses running in front of the plastic cover out of their clips. Then unclip and remove the upper cover. (illustration)
29. To get to the lower cover, you'll need to remove the crankshaft pulley. It's held in place by four 6mm bolts. To keep the pulley from moving, use a second wrench or breaker bar to lock onto the central 16mm bolt. Note - you don't want to actually loosen the center bolt, just use it for leverage. With the four bolts removed you can remove the pulley. Notice the weight of the pulley? Aside from being a pulley, it functions as a vibration dampener to keep down resonances that develop at certain crankshaft rotation speeds.
30. The lower timing belt cover has no less than four completely different fasteners holding it to the engine. Top of cover: 6mm bolt. Just above crankshaft bolt: 5mm bolt. Left of crankshaft bolt: 10mm bolt. Right side of cover: 10mm nut. Remove these and the lower timing belt cover can be pulled off. (illustration)
31. Time to get the cam/crankshaft set to TDC. Using a 13/16" socket on the crankshaft, rotate the crankshaft clockwise until the camshaft timing mark lines up with the mark on the valve cover. (illustration)
32. Once set to TDC, use whiteout to mark an arbitrary part of the timing belt edge to the camshaft and crankshaft sprocket. This is a backup to ensure proper placement of the new timing belt - you'll just need to place the new timing belt next to the old belt and copy over the









whiteout mark. When placing the new belt on, these marks should then line up perfectly with the marks made on both sprockets.

33. Release the belt tension. On the old style tensioner, you'll need to unscrew a 10mm bolt to release the belt tensioner. On the new style, an 8mm hex driver can be inserted into the tensioner pulley to rotate it and release tension.
34. With tension released, carefully remove the timing belt. Be sure to not move the camshaft or crankshaft sprockets - with the timing belt off, they can be moved out of sync (a bad thing).
35. When the belt is removed, make a new whiteout mark between the crankshaft sprocket and engine block - this will give you a reference point if the crankshaft is accidentally rotated out of position.
36. Remove the timing belt tensioner - it's held in place by three bolts. The rightmost bolt holding the idler wheel to the tensioner and engine block is 13mm, the other two are 10mm.
37. Remove the timing belt tensioner pulley by removing the 14mm bolt. Throw this bolt away. (illustration)

Water pump impeller replacement:

38. The coolant will need to be drained before the impeller can be removed. Start by opening the coolant tank cap.
39. Look to the lower right side of the radiator - you'll see a hose connector and a large red flow control screw. Attach a hose to the connector and route it to a clean container. Open the screw and let the coolant drain from the radiator - close the screw.
40. Now to drain coolant from the engine block. From under the car, look up at the water pump - you'll see a large 19mm bolt at the pump underside. Unscrew this bolt, and have a container below ready to catch draining coolant. If you're careful you should be able to save most of the coolant and refill the system later. Reinstall the bolt once the coolant has drained. Tighten to **22 ft-lbs/30 N-m**. (illustration)
41. Back to the front of the engine - lock the intermediate shaft sprocket with a screwdriver or drift (I'd like to take this moment to say that I love my craftsman screwdriver - I've put it under ridiculous stress and it's still perfectly straight). Use an adjustable wrench to lock onto the central bolt and unscrew it. Pull off the sprocket. This will give access to the water pump impeller bolts. (illustration)
42. You should be able to access eight of the 10mm bolts holding the impeller to the pump housing. Remove these.
43. To get to the last bolt (number nine), you'll need to get back under the car and unbolt the bracket near the water pump, held in place by a 13mm bolt. Move the bracket aside and you should be able to access the final 10mm pump bolt. Note that this bracket wasn't on my '98 B5 (probably a change with the ATW engine).
44. With all eight bolts removed, carefully pry the impeller from the housing - you should be able to pull off both the impeller and gasket.
45. Clean the pump interior and gasket sealing surfaces.
46. Install the new impeller and gasket. Tighten the eight bolts to **84 inch-lbs/10 N-m**.
47. Replace the lower bracket if present and tighten the bolt.
48. Replace the intermediate shaft sprocket, using a screwdriver/drift to lock it in place while you tighten the central bolt. Tighten to **60 ft-lbs/80 N-m**.

Timing belt installation:

49. Look over the front of the engine for signs of oil accumulation - an oil leak dripping around here can be problematic because oil tends to speed rubber's degradation. Give the area a cleaning while you're there.
50. Install the new timing belt tensioner, idler wheel, and pulley - for now, leave the locking pin in place. If you accidently pull out the pin, you should be able to use a bench vise to get it back in place (ask me how I know :). Tighten the idler wheel bolt (the 13mm) to **18 ft-lb/25 N-m**. Tighten the other two tensioner bolts to **84 inch-lbs/10 N-m**. Tighten the pulley bolt to **84 inch-lbs/10 N-m**.
51. Set the new timing belt next to the old belt and copy over the marks you made previously.
52. Check over the camshaft and crankshaft sprockets. Make sure that both are still in alignment - the camshaft with the valve cover mark, and the crankshaft with the mark you made on the engine block.
53. When you've confirmed that both are exactly where they should be, install the timing belt, matching the marks you made on the belt to the marks made on both sprockets. If you do this right, there shouldn't be any slack on the section of the belt running from the camshaft to the crankshaft (top -> bottom). All of the slack should be on the left side of the sprockets, which the tensioner will correct. The factory manual notes that you may need to turn the crankshaft sprocket back **slightly** if the alignment isn't perfect at first (counterclockwise).
54. Look over all of the alignment marks. If everything is in place, and there is little slack in the front run of the belt, go ahead and pull out the tensioner pin. With a new belt, the tensioner probably won't move much at all, but as the belt wears and stretches, the spring loaded tensioner will adjust automatically. (illustration)
55. Now move the crankshaft through a few rotations and get back to TDC - check over the alignment marks - everything should still be in alignment.

56. If it looks good (and it should be fine), install the lower timing belt cover. Tighten the top 6mm bolt to **15 ft-lb/20 N-m**, and the other bolts and nut to **84 inch-lbs/10 N-m**.
57. Install the crankshaft pulley. The pulley can only be installed in one position due to offset bolt holes. Tighten the four bolts to **84 inch-lbs/10 N-m** and then **turn each an additional 90°**.
58. Check alignment again. The crankshaft pulley has a mark that should line up to a (hard to see) arrow embossed on the lower timing belt cover when at TDC. (illustration)
59. Install the upper timing belt cover and reinsert the two hoses back into their clips.
60. Install the new power steering/water pump belt. Put half of the water pump pulley in place. Slip the new belt in place, and then put the other half of the pulley on. You'll need to rotate the belt and pulleys while you tighten the two halves of the water pump pulley together. When the pulleys are close together, place a screwdriver/drift into the power steering pulley as before and fully tighten the water pump pulley bolts. Tighten to **18 ft-lbs/25 N-m**.
61. Install the serpentine belt tensioner. Tighten bolts to **18 ft-lbs/25 N-m**.
62. Use an adjustable wrench to release the tensioner and install the new serpentine belt - use the diagram you made (if you made one) to route the new belt correctly.
63. Install the new A/C belt and tensioner. The tension is set by sliding the tensioner along the right side bolt. There are two ways to go about this. The factory method is to use a torque wrench set to **25 ft-lb/34 N-m** and attach it to the bolt on the tensioner between the two 6mm bolts. Pull the torque wrench clockwise until you hit the set torque - this sets the tension, and while holding the wrench in place, tighten both 6mm bolts to lock tension in place. Tighten these to **15 ft-lbs/20 N-m**. Haynes uses a trial and error method involving hanging weights from the belt - there's really no need.
64. Reinstall the cooling fan. Tighten to **84 inch-lbs/10 N-m**.
65. Reinstall the spark plugs, coil packs, and engine cover. Tighten the spark plugs to **22 ft-lbs/30 N-m**. Tighten the coil pack bolts to **84 inch-lbs/10 N-m**.

Radiator panel repositioning and bumper cover installation:

66. Push the radiator panel back into place, letting it slide along the long bumper bolts.
67. Once in place, reinstall the side plastic runners to their clips and the two side T30 screws.
68. Reinstall the bumper supports and remove the long bumper bolts. Tighten the torx T45 bolts to **37 ft-lbs/50 N-m**.
69. Reinstall the two top radiator panel torx T30 bolts.
70. Reconnect the left radiator side wiring harness.
71. Reconnect the outside air temperature sensor and power steering cooling line.
72. Place the bumper back in place with its two long 13mm bolts. Tighten to **15 ft-lbs/20 N-m**.
73. Place the bumper cover back in place.
74. Reinstall the wheel well screws (four per side), turn signal housing screws (one per side), hood bump stops (two), and screws around the hood latch area (three).
75. Reinstall the turn signal lights by reinserting the bulbs, sliding the lens into place, and securing it by pulling on the spring connector until it latches onto its mount.
76. Reinstall the air intake hose.
77. Bring the hood latch mechanism back into place, making sure the release cable is routed properly. Reconnect the latch release handle, and then install the three 10mm screws.
78. Reinstall the underside center bumper cover screw.

Coolant refill and final check:

79. The cooling system will need to be bled to let air out of the system. Locate the black plastic piece covering the coolant hoses running to the heater core (next to the battery). Pull down the plastic sheath to expose the hoses (this plastic piece is a pain to work with, but try to keep it intact). The left side hose has a white mark surrounding a hole in the hose. Unclamp this hose and pull the hose out of the connector until the hole is past the edge of the connector - this will allow air to leave the system while being filled. (illustration)
80. Pour the drained coolant back into the coolant expansion tank. When the system is full the coolant should being to seek out of the bleed hole. You may need to add additional coolant if some was spilled earlier. (illustration)
81. Push the hose back onto its connector fully and reclamp the hose. Replace the plastic sheath.
82. Check over the engine bay, removing any tools in the area. Make sure that you don't have any leftover screws or parts (aside from the parts that have been replaced).
83. When everything looks good, reconnect the battery ground cable. Hold your breath, and start the car. Be sure to heave a sigh of relief when the engine starts perfectly. :)
84. With the engine running, look into the front of the engine and check the belts - they should be running smoothly. Also check from below the car.
85. Set the heater control to max heat and let the engine run for a few minutes, keeping track of the coolant level. After the lower coolant hose becomes hot (thermostat has opened), shut down the engine and add more coolant if needed.
86. Reinstall the belly pan.

Done! Go out for a drive and treat yourself to something nice (don't forget to include those who put up with your crazy mechanic ambitions).

Comments:

- nice instruction set. I have done this on my 2000 jetta so I think I can do the b5 1.8.

  One thing I am trying to find is the location of the thermostat, which is the part that actually is failing. Thanks for a pic or info.

  marshall Peck - Dec 3, 2008 @ 5:49 pm

- Just replaced my Water Pump & Timing Belt, after a dodgey oil cooler incident. Anyone wishing to do this job should print out these directions & pictures as I couldn't have done the job without it !! My car is a 1.9 tdi so I had to make a few bits up as I went along but with the help of this guide & a few improvisations I managed to get the job done in 6 hours & saved myself a lot of money !!! A big thanks to you for this website...

  Will, UK - Oct 20, 2008 @ 4:51 am

- many thx for this knowelege i gone try change by my self thx for all

  Patryk b5 - Aug 27, 2008 @ 7:45 pm

- We weren't having any trouble with our 99 Passat, but went ahead and had a guy change the timing belt, water pump, and said the tensioners looked ok.
  Ran fine for about 1 mo. and took off on a slight upgrade last week, and it started shaking, and felt like it was running on 3 cylinders. I was about 4 miles from home, and got it there. It smelled really bad, like raw gas....and the engine light came on and started blinking.
  It is at the mechanics now...not heard anything yet about what it is.....any ideas?

  MICHELE - Aug 26, 2008 @ 10:29 pm

- Hi, i'm 18 and I've got a passat B5 1.8t ATW with 135 000k and I changed my timing belt, waterpump, thermostat and coolant yesterday with the help of my Bentley book, beer and your handy website. Thanks!

  David, Canada (Québec) - Jul 19, 2008 @ 2:16 am

- I have a 2000 1.8T with 120,000 miles and going for my first timing belt replacement. Great site!

  Jean (USA) - Jun 16, 2008 @ 10:38 am

- Do you have a detailed procedure for clutch replacement?

  Curran, San Diego, USA - May 3, 2008 @ 12:14 am

- I have a 98 Passat- changed the serpentine belt at 90K- now at 130K is showing small cracks like dryrot- normal or abnormal? shall I change the belt again?

  Geoffrey Soloven - Dec 8, 2007 @ 8:48 pm

- Excellent writeup!

  Here are some additional things I found out when I did mine:
  1. When transferring timing mark from old belt to new one, hold both belts in your hand side-by-side on the teeth of the intermediate gear which was removed earlier. This aligns the teeth of each belt perfectly. Then, use a carpenter's square to extend the mark from the old belt onto new belt straight across the surface to opposite side, which is where the corresponding mark on the cam gear is located.
  2. When installing the new timing belt, have the two tensioner mounting bolts loose and remove the upper one entirely to allow the tensioner to swing over to the side. This totally releases any tension on the belt by the tensioner pulley and the belt goes on all the sprockets like a dream. Then reposition the tensioner using hand pressure alone, install the upper bolt and torque both bolts to spec. This is easily done as the resistance against the belt is very light at this point in the assembly, since the tensioner pin has not been pulled out yet.
  3. When removing/re-installing the intermediate gear, instead of purchasing a 24mm ½″ socket (which was much larger than my largest metric ½″ drive socket), in order to use with my larger-range torque wrench on the re-install, I found that an SAE 15/16″ ½″ socket fits perfectly and was already in my SAE set.
  4. When reinstalling the water pump pulley, because the fasteners are a 'blind' install, I used the 'short' end of the largest Allen wrench that will fit through the pulley mounting holes to hold the 2 halves in place and keyed relative to the mounting holes in the pump flange. I held the 'long' end of the Allen wrench in position with my left hand as I threaded the first fastener by feel with my right.
  5. I found that in order to remove the serpentine belt from the crank pulley, I needed to remove the closest bolt on the AC belt tensioner, and I just let the tensioner hang loosely down during the entire procedure.
  6. Hydraulic fluid began to drip from the hard line cooler that was left hanging down after removal from its mounting on the radiator. This appeared to be from stress imposed by hanging at an angle from its own weight where the hose clamps onto the hard line. I ended up tying it up loosely to the bumper support with a cable tie.
  7. When installing the thermostat, I used RTV on the O-ring to hold it and the thermostat in place long enough to install the cover. I found it necessary to slide the lock carrier back in place temporarily to allow enough slack in the hose which is attached to the cover so I could position the two mounting holes on the thermostat cover to line up.

  David (USA) - Oct 24, 2007 @ 5:33 pm

- I cleaned the engine of my Passat 1.8T on Saturday with a high pressure hose. On Sunday I went for a drive when the oil pressure light came on. I stopped to check the oil level which was fine but it appeared that water had gotten into the engine. I parked the car, drained the oil, flushed the engine and ran it for for 25 minutes. I then drained the flushing oil and put new oil in after replacing the oil filter. I took the car for a 20 minute drive and the same happened. The oil light flashed for a while and then would switch

off only to start flashing again soon after. After further inspection I realised that the water pump belt is very slack and although the car did not tend to over heat, I am now of the opinion that water that flow through the pipes attached to the component above the oil filter is not cooling the oil off quick enough, or is that not what the purpose of the water in that area is meant to do? I must say the oil filter as well as the bottom of the engine is excessively hot. I do not believe that the car is equiped with any other form of oil cooler. Can you please advise why the oil would become so hot? I intend replacing the water pump.

Charles (UK) - Oct 16, 2007 @ 3:11 pm

- Excellent writeup. Took me 9 hours to do my first timing belt, waterpump, thermostat, and flush the coolant with your writeup. Could probably do it again in half the time.

  Michael, USA - Oct 13, 2007 @ 3:55 pm

- i found it in the trunk next to the spair tire friken germans!!!

  moke - Aug 5, 2007 @ 2:54 am

- where do i find out what engine code i have i have a 2000 passat 1.8 20v turbo with 76000 i was changing serpentine belt and valve cover gasket when i read this write up and now i want to do the timing belt asap befor its too late i wanted to make sure i orderd the right kit!!!

  mike camp hawaii - Jul 23, 2007 @ 2:47 am

- Just did the timing belt, tensioners, water pump and belts with ECS's Kit- $269 in parts, 7ish hours on a Saturday and this incredible write up and bingo! all is running great and I saved $1000 bucks !!! THANKS! Great job on the article!!!!!

  Jim- usa - Jul 22, 2007 @ 6:17 pm

- Great resource. Thank you. I would not have attempted this without your website and inspiration.

  Dan Hogan, San Jose, CA - Jul 21, 2007 @ 2:28 pm

- I just had my 2001 Passat fixed. The cam chain tensioner cost (only for the part) was 711.32 - is that normal?

  Thanks

  Dan USA - Jun 29, 2007 @ 2:16 pm

- Thanks for a great writeup!
  I did the procedure some months back. This website has pictures of my proceure.
  Took me 12 hours.

  Elmar NYC - Jan 21, 2007 @ 9:23 pm (website)

- Great write-ups on these procedures. Puts the manuals to shame. Q: What about the air bag system? Chilton splashes a lot of stern warnings around and offers this reactivation procedure: turn ignition on, connect battery, while keeping clear of the bags (I guess by laying on the driver's side floor and reaching up to the key?), turn off, turn on, turn off. If the bags haven't 'deployed' (read: exploded with a deafening bang), the system 'should' be safe. Oh joy.

  Craig (USA) - Dec 26, 2006 @ 12:44 am

- I have a 2001 GLX Passat, just over 170,100 miles. For the life of the car, all maintenance (except brakes) has been done by dealership. I could save $300 by going to a garage up the street to have timing belt replaced, but I'm so nervous. This is major work, don't know if I can trust strangers with my car. Any feedback is appreciated!

  Jennifer, IL USA - Oct 2, 2006 @ 8:47 pm

- very good running engine but..... very stupid design due to change timming belt !!

  never buy this car anymore. - Sep 21, 2006 @ 2:04 am

- thank you for this helpful and valuable information,i fix the 2003 jetta 1.8T of my older brother and we just bought the timing belt and water pump expecting no further failures, any way thanks

  angel mario gomez rubio (mexico city) - Jul 12, 2006 @ 9:55 am

- Excellent instructions!

  JP - Apr 30, 2006 @ 4:30 pm

- You too can do it! Work slow keep your eyes open, you may find a bolt or screw that needs to be removed that is not listed. Make lots of marks on the old belt and block before you remove the belt.

  CJ, USA - Apr 6, 2006 @ 9:15 am

- Thanks so much for the help. There are two things I would like to add.

  If you take about 10 extra minutes and remove the entire radiator you will save atleast 30 minutes of stress trying to reach between the engine and the radiator to install the belt. The unobstructed view you will have of the engine when the radiator is off is incredible.

  Also, if you are going to freespin the engine, make sure you only spin it the right way. I felt like an idiot when I realized I was doing it backwards

  Craig - Feb 4, 2006 @ 8:25 pm

- Thanks for the pictures and advise. I bought the timing belt kit from ECS Tuning, (water pump, thermostat, timing belt, tensioner, AC and serpentine belts) and 2 liters G12 coolant for my wife's 2003 Passat 1.8T, with 60K miles. I spent a Friday and Saturday doing the work. It is helpful to have an

assistant for certain tasks, like holding heavy items while you tighten bolts.

Jim - USA (South Carolina) - Nov 26, 2005 @ 11:08 am

- I just changed the timing belt on my 92 passat and now I have no compression what-so-ever.....is my timing wrong or is it something more serious....any ideas?

  Kevin Saskatoon Sk Can. - Nov 24, 2005 @ 10:54 pm

- I guess the timing slip happens even with new style tensioner. I have the new style tensioner that was installet around 90k miles, now the car has 115k miles and the motor doesn't want to turn over. I hope no damages are done to the valves.

  Tom I - Nov 21, 2005 @ 5:27 pm

- is there anyway to adjust the timing. I replaced the timing belt and tensioner and now the car runs rough.

  Ian - Sep 11, 2005 @ 10:51 pm

- Great write up. My ride is Y2K, B5 1.8T, tip, APU engine code. I'm replacing my timing belt in 2 weeks time. First was done at 75k km, it's now 161k km.

  WK, Malaysia - Aug 19, 2005 @ 1:47 am

- what would be the differences for AUG motor

  steve usa - Jul 22, 2005 @ 6:51 am

- No Joke about the 60000 mile interval, I have a 99 with 66000 miles, tensioner just let the belt slip and major damage. I saw this write up when I was recently changing my axles and decided to change when I could get the $$, Now I need to change the head too!!

  Aaron - Jul 15, 2005 @ 7:17 pm

- Is there a way to check the camshaft timing? My dealer replaced my belt and now there is no power - i think they got hte timing wrong.

  Andrew - Apr 26, 2005 @ 9:47 am

- After the new Timing Belt is in place I would freespin the engine by hand while the spark plugs are out to check for valve to piston interference prior to buttoning up the engine.

  ala - Mar 31, 2005 @ 11:55 am

- thanks

  slofizz - Feb 23, 2005 @ 3:22 am

- thanks for the information

  aom - Feb 10, 2005 @ 11:40 am

Add a comment:

name (and country would be nice to see)

email (optional, not shown publicly)

website (optional)

Add comment

Timing Belt Assembly