

Timing belt change

Put 2 new Gates T275 timing belts on today. Tensioner drilled smooth and tight with less than 16,000 miles on her decided not to change the tensioners just the belts. You'll need some Allen wrenches, 3/4" socket, 10 mm socket, 12 mm socket, blue loctite, never seize and some RVT silicone for 1 bolt.

Got the timing belts from Rock Auto for \$14 each plus shipping under \$35 total.

Comments in the pics add your tips and tricks in the comments.

Thanks

Timing belt cover is the big shiny thing under the radiator



Timing belt change



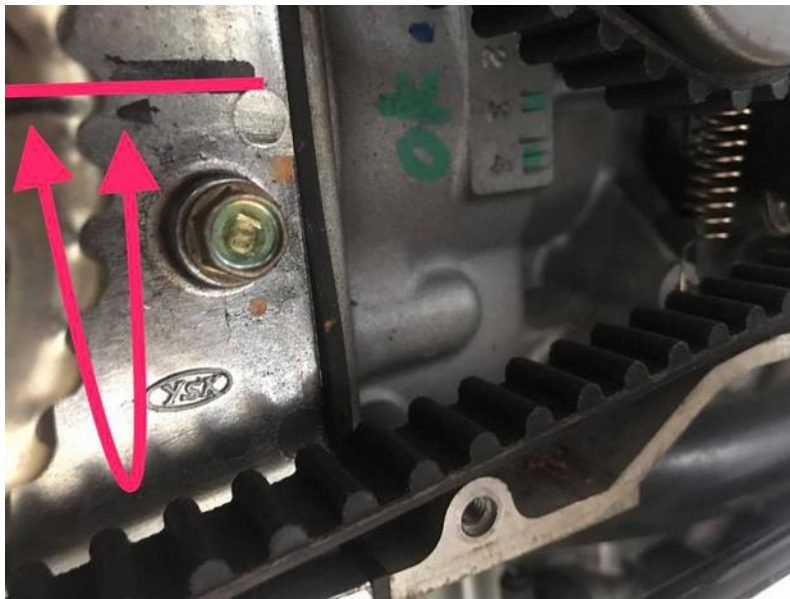
I didn't look to see what size Allen wrench it was so you'll have to make as many trips back and forth to the tool box as I did. 😅
Gotta take em all out. Normally it's easier if you Warm the motor up it expands the holes and lets the bolts come out easier but these came out easy for me



Once you get all the bolts out pull the cover out from behind the radiator hose and put to the right



Very important to get all these marks lined up perfectly. I will put a drawing of all the marks at the end of this post. This is the crankshaft marks.
The T1.2 mark on the pulley



On the inside of the cam pulleys these marks must line up also. It's easier to move them if you remove the spark plugs so it has no compression to fight. I put a socket on the crankshaft bolt and turned it clockwise until all the marks lined up. The crankshaft turns 2 complete revolutions for every 1 revolution the cam pulleys turn.



Release the spring tensioner off the peg it's on and remove the 2 tensioner bolts to remove the tensioner

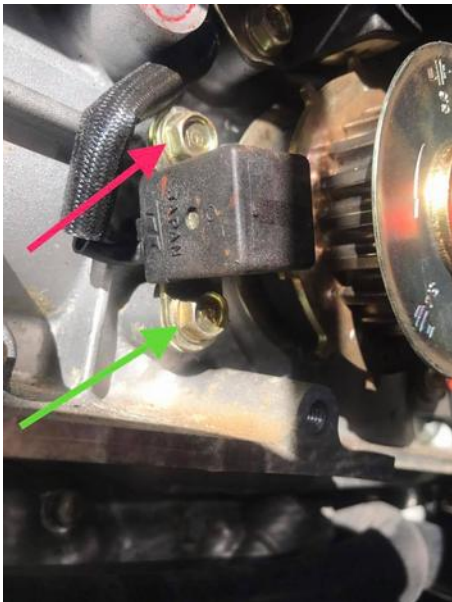


Pull the right side belt off the cam pulley



Then remove it from the crankshaft pulley

See the 2 black boxes, those are the pickup coils for the timing wheel. Called pulse generators. These send signals to the ECU to fire the spark plugs.



Next remove the bolt with the red arrow and loosen the one with the green arrow

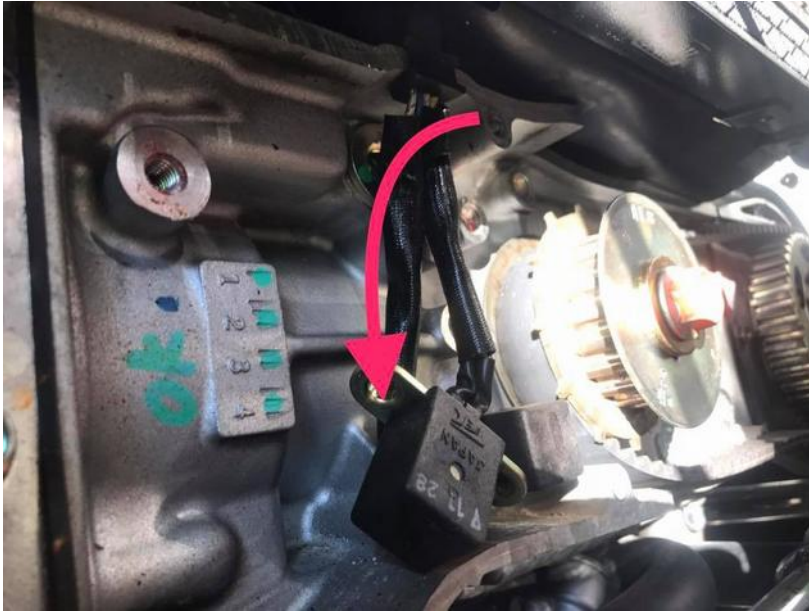


Swing the pulse generator down out of the way



Pulse generator

Remove both bolts from the top pulse generator



Swing it down out of the way also.



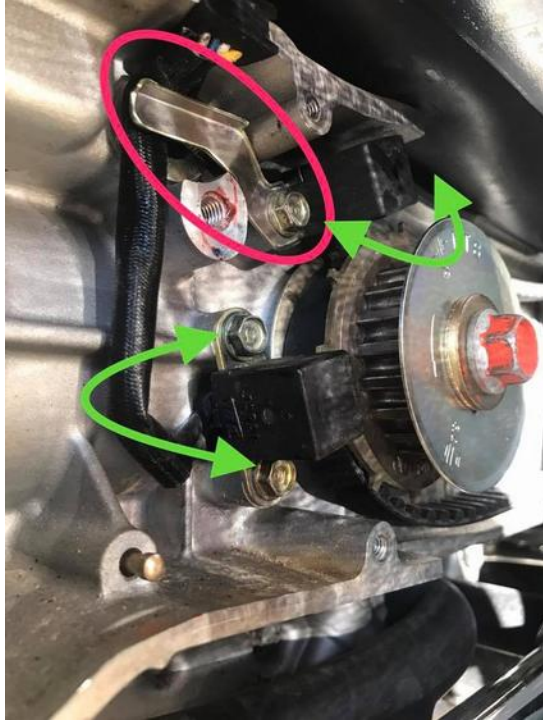
Remove the other spring and tensioner from the left side and pull the belt off the cam pulley



2 brand new Gates T275 belts



Place the new belt on the back crankshaft pulley and keep the top slack out of it and start it onto the cam pulley working it around so the slack will be on the bottom. Be careful not to turn any of the pulleys and make sure they stay on the marks as you install the tensioner. Use blue loctite on the tensioner bolts and pulse generator bolts



Install the 2 pulse generators back in place and the bracket to hold the wires from hitting the belts



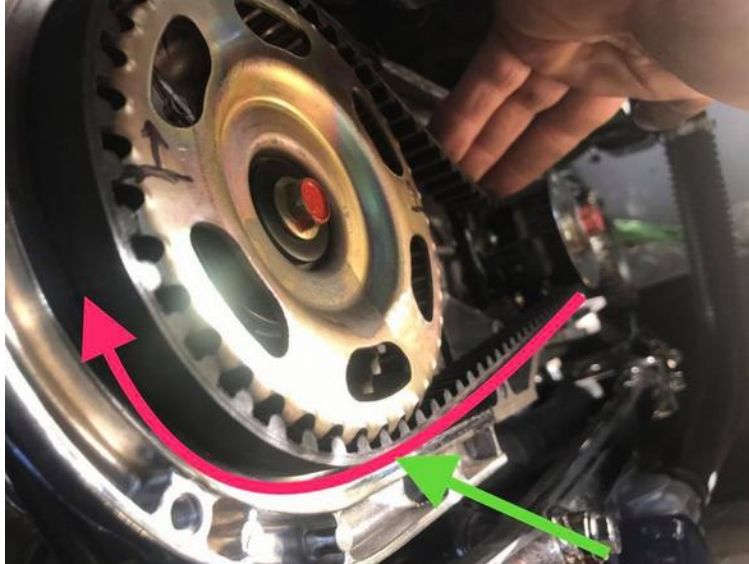
This is the loctite I used for the tensioner and pulse generator bolts. Don't use it on the outside case bolts just the inside of the case bolts



Little blue service removable loctite to keep them from coming loose and losing a tensioner.



Next put the new right side belt on the outside crankshaft pulley and keep the bottom of this belt from having slack as you work it around onto the camshaft pulley



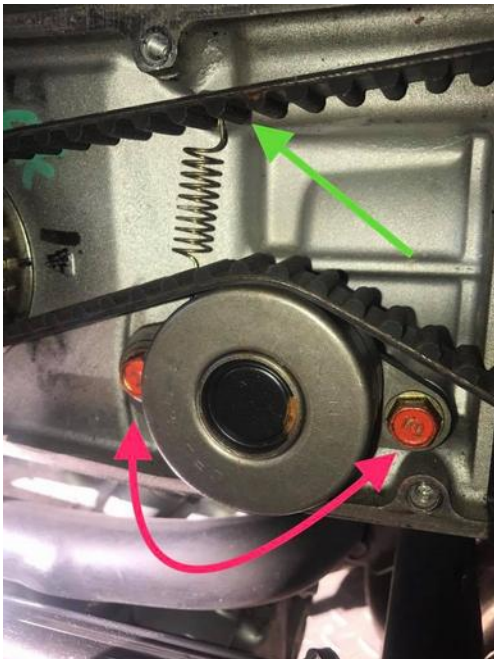
Make sure the belt teeth go into the gaps as you work it around and install the tensioner and spring. Double check all the marks several times. Can't check them enough, can't be off even one tooth



Well my pictures aren't in sequence again, this should have been up before we put the new belts on. I cleaned and checked the tensioners for side play and smoothness when spinning them. These were nice and tight but had some rubber residue on them. I cleaned them off with brake cleaner and steel wool

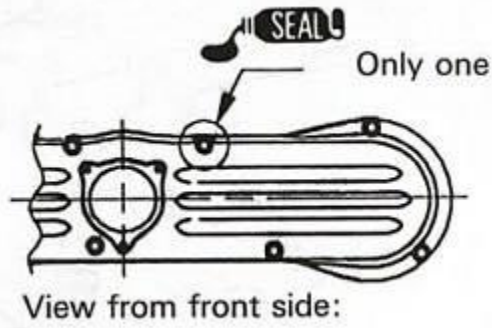


When you install the tensioners leave the bolts a little loose and then hook the spring up. Push down on the tensioner to make the belt tight and release it then tighten and check you slack on the long span of the belt

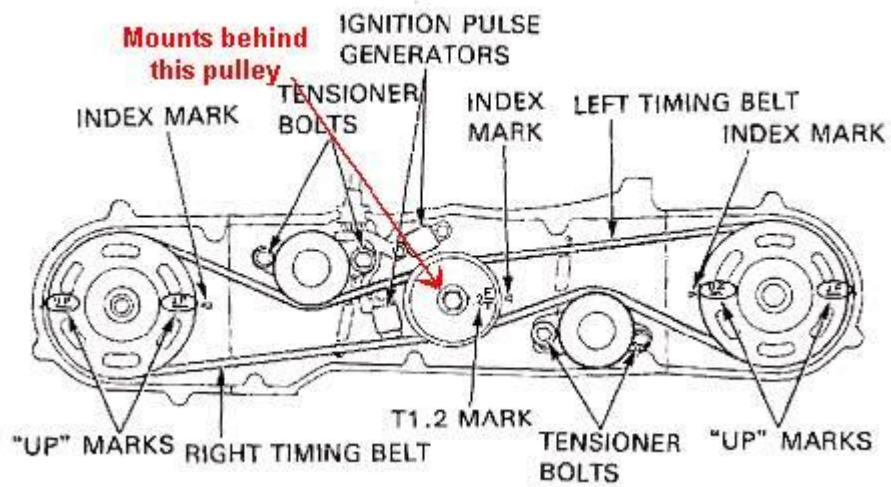


Do the other side the same way and then check all the marks again to be sure they are all on. Then rotate the crankshaft 2 complete revolutions and check the marks again to see if they stayed on point after going around

Check the slack at the long span of the belt on the opposite side of the tensioner. I really like about 3/8" movement on these otherwise they are noisy and wear the bearing harder.



When you put the cover back on this one bolt gets some thread sealer or RVT silicon on it, just the one and the other I put some never seize on them. Don't overtighten them it's only to keep the dirt off the belts just snug em up good. 1/4 grunt maybe



Here's a diagram of all the marks the way they need to line up. Very important they all are exact.



So if you want to remember when you changed your belts last you can write it on the inside off the cover.

