



This is not a very hard job, it's just a little tricky. With patience this can be achieved within an hour. As always, work safely and if you think this is above your skill set, please have a professional install it.

#### TOOLS NEEDED

10 MM SOCKET

12 MM SOCKET

22 MM SOCKET

3/4 INCH WRACHET/BREAKER BAR

TORQUE WRENCH

SUBARU CRANK PULLEY TOOL(not included)

REPLACEMENT BELTS (IF NEEDED)

BUNGE CORD (if required)

45 MINUTES OF YOUR TIME

\*\*\*First disconnect the battery\*\*\*

#### Removing the belt guard

-2 10mm bolts

-Remove bolts and guard and put aside

#### Removing the Alt belt

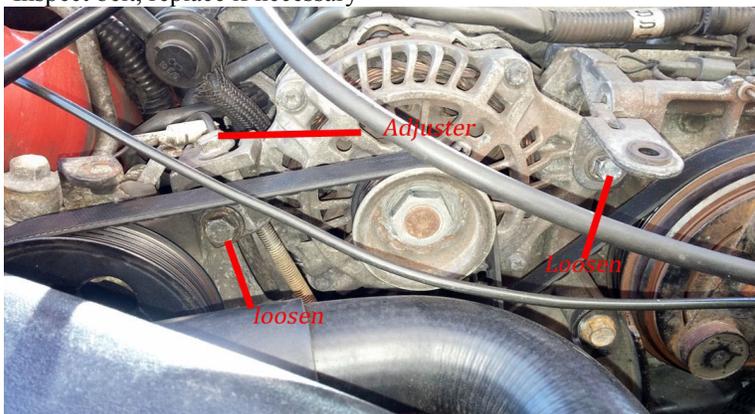
-3 bolts 12mm socket

-Loosen bolts

-You don't need to remove them completely, just loosen them.

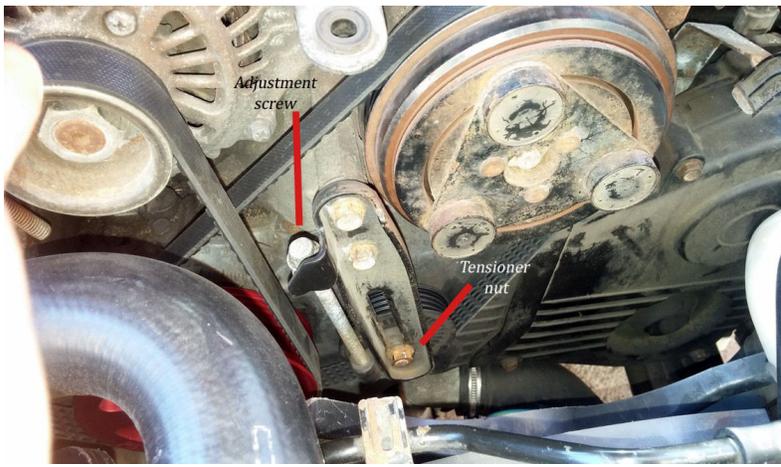
-The alternator should drop down, carefully remove belt, from the crank and alternator

-Inspect belt, replace if necessary



## Removing the ac belt

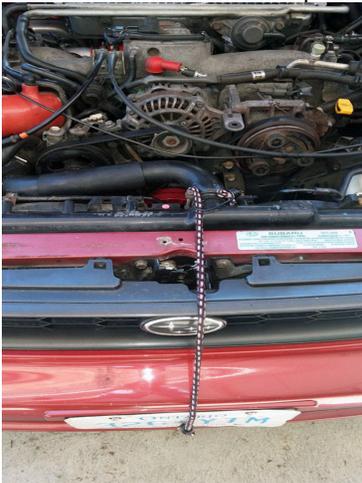
- loosen tensioner 12mm bolt. Do not remove it, just loosen it.
- loosen the adjustor bolt, allot.
- Remove belt from crank pulley and tensioner and then ac unit.
- Inspect belt, replace if necessary



\*\*\*\*\*TIP\*\*\*\*\*

-I remove the stock intake, top radiator supports. With a long bunge cord pull the rad back a bit, it should give you about an inch more to work with. I wrap the upper rad hose with the bunge cord and then attach it to the licence plate.

-Remove 2 12mm bolts and put aside with brackets



## Removing the stock pulley

-With a Subaru crank pulley tool (not included) insert appropriate bolts. (large or small)

\*\*\*\*\*TIP\*\*\*\*\*

- Keep the tools handle as close to vertical as you can.
- Insert ratchet / breaker bar with a 22mm socket through the crank tool and on the bolt.
- Make sure that you are on the bolt squarely. and the ratchet is in the off position.
- The bolt should be on there with about 133 flbs of torque. It's Tight!
- While holding the crank still, turn the bolt off
- Leverage is you friend, go slow.

\*\*\*\*\*Tip\*\*\*\*\*

-DO NOT ALLOW THE CRANK TO TURN COUNTER CLOCKWISE!!!  
TURNING CLOCKWISE IS OK

- Once the bolt is broken loose, it should be easy to turn by hand, it's a long thread.
- once the bolt is out remove the tools if you haven't already
- Wiggle the pulley, it should come off.

\*\*\*\*\*TIP\*\*\*\*\*

HANG ON TO THE STOCK PULLEY, IT'S SURPISINGLY HEAVY WHEN IT COMES OFF.

Congratulations, the job is half done!

## INSTALLING GNP's LWCP

- With a clean rag, clean the crank face (snout) and the spindle and bolt of any foreign matter, rust, grease, gently.
- With some clean motor oil rub a very light coating on the back side of the LWCP pulley and the in center and key area of the pulley



Photo: Crank snout and woodruff key

\*\*\*\*TRICKY PART NEXT\*\*\*\*

-Carefully locate the keyways and gently push on the LWCP. This may take some time, be patient. You don't want to damage anything.

\*\*\*DO NOT DROP THE PULLEY, THIS WILL DAMAGE IT\*\*\*\*\*

-MAKE SURE THE LWCP IS ON PROPPERLY, gently try to turn it clockwise with your hand. it should sit almost flush against the timing marks. Use the other pulleys as a sight guide to make sure.

-Insert crank bolt, spin it finger tight while pushing on the pulley to seat it

-While hanging on to the pulley with one hand, I like to snug up the crank pulley bolt a bit with the 22mm socket first.

-Screw in bolts from crank pulley tool to GNP's LWCP

-Try to keep handle vertical on crank pulley tool when re attaching it



-Insert torque wrench with 22mm socket squarely onto the crank bolt through crank tool.

-Torque to 133 flbs while holding the crank pulley still

-Reinstall the A/C belt (see above)

-Reinstall the Alt Power steering belt (see above)

-Check belt alignment of the belts by turning the crank CLOCKWISE ONLY!

-Re install the rad supports

-Re install stock intake

-check engine bay for loose tools

-Start car

-inspect belts for misalignment and pulley wobble. If either problem exists, please go back and check your installation.

-reinstall belt cover

-go for a test drive!

\*Always re-inspect installations at different intervals 50 kms, 150,400. Or if you suspect a problem.\*

**If there are any issues, please contact me and will do our best to correct the issue.**

**Thanks**

**Mike**

This product will enhance the performance of the car and change the handling dynamics. Always drive according to local laws. Some modifications are not recommended or permitted, you are responsible for the legality and safety of the vehicle you modify with these components.

