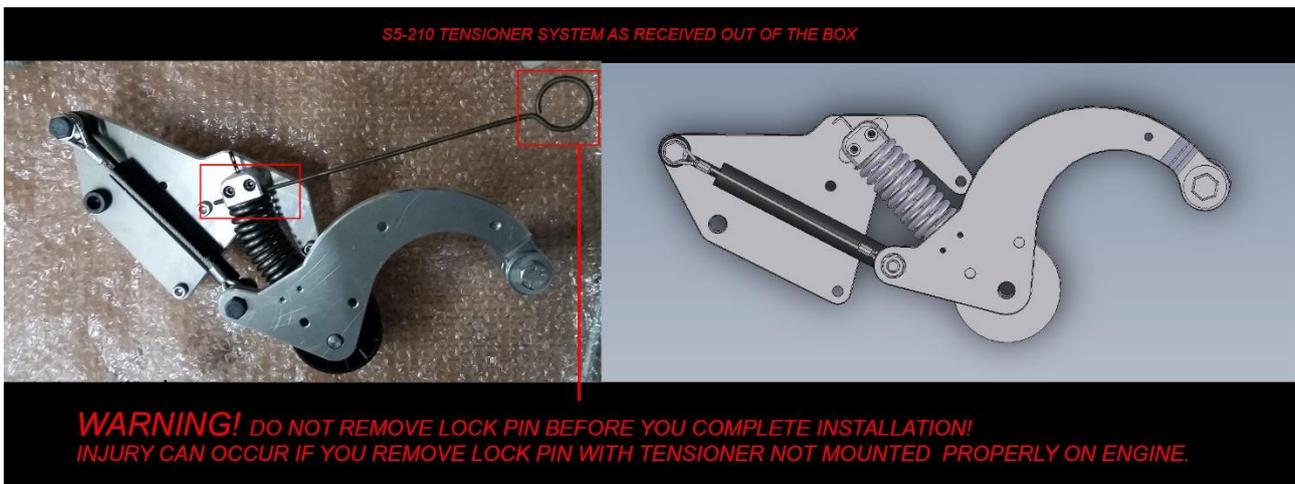


GPR SPRINTEX S5-210 TENSIONER SYSTEM V2 INSTALLATION INSTRUCTIONS

Thank you for choosing our product. It is important that a skilled mechanic proceeds with installation of tensioner system after he has read the instructions carefully.

WARNING DO NOT REMOVE security pin lock from tensioner until tensioner is installed properly on engine. Else there is great injury risk from tensed spring.

Bellow you can see a photo of the tensioner system as it is out of the box. Photos are for the Tensioner Assembly with New OEM Damper Option. Those who bought only the Tensioner Assembly or the Tensioner Assembly with Powerflex Bushings only will get the same unit but the OEM damper shown in the photos will be missing



Holding the tensioner reverse as photo bellow:



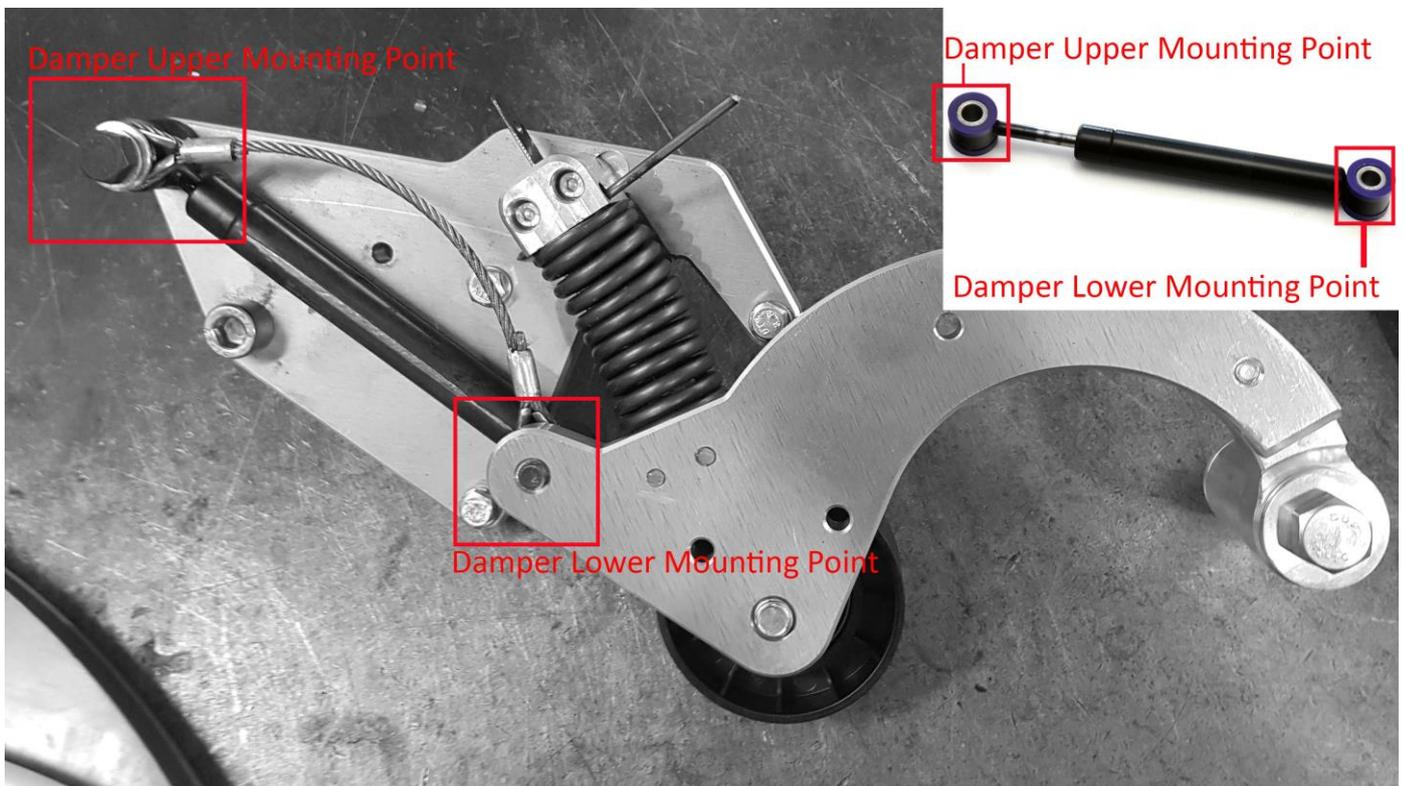
You can see all bolts safely secured with nuts so they can stay in place till installation time.

OEM Damper installation notes for those who bought only the Tensioner Assembly or the Tensioner Assembly with Powerflex Bushings

1. Remove the OEM damper from your OEM Eaton supercharger Tensioner. Inspect and make sure the damper is not damaged or leaking.

*For those who have bought the Powerflex bushing kit, install the powerflex bushing on the damper before installing the damper on the tensioner system.

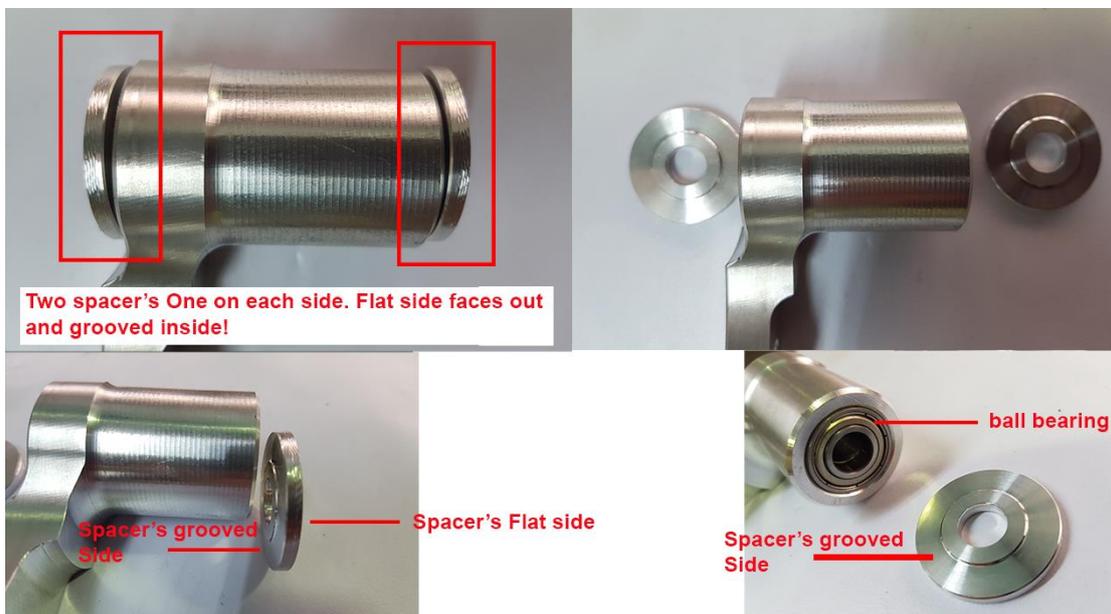
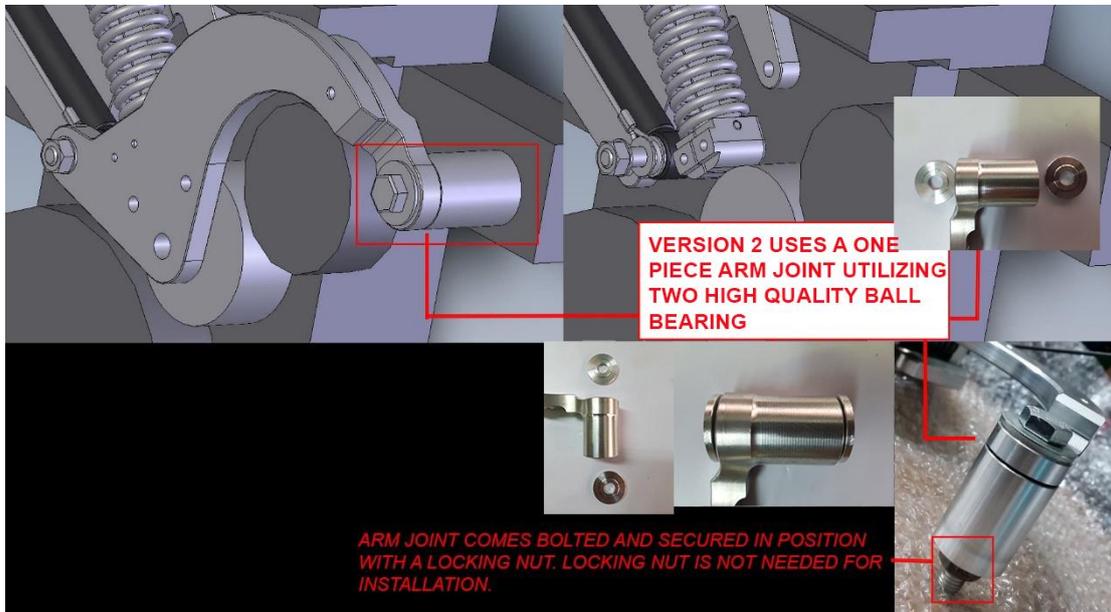
2. Install the OEM Damper as shown on the picture bellow using the bolts that are already on the tensioner holding the safety cable. Note that the fat part of the damper mounts on the lower mounting point and the thin part of the damper mounts on the upper mounting point. On the upper mounting point the damper goes first and then the safety cable with the spacer and lastly the bolt that holds these parts in place (use some Loctite on the edge of the thread). For the lower mounting point turn the tensioner system inside out and install the safety cable with the spacer and then the damper, on top put the bolt that holds these parts in place (use some Loctite on the edge of the thread).



Tensioner installation:

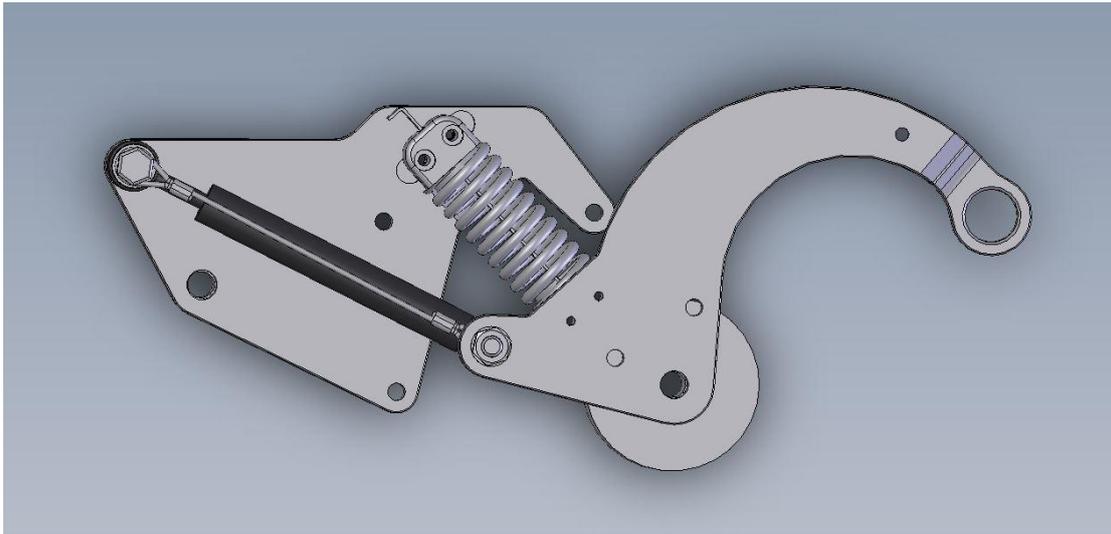
- Lift and secure the car, remove right wheel and it's wheel arc trim.
- Support the engine on the left side so you can safely remove the upper engine's mount supporting bracket.
- Safely remove belt and stock sprintex tensioner system
- Remove all nuts from the back side of your tensioner system making sure that you do not lose any bolts, washers or spacers.

As you can see on photo bellow, Arm joint on Version2 comes in one piece. It utilizes two high quality ball bearings (one on each side) which are NOT to be removed! In each end a grooved spacer is used. The grooved side should face towards the ball bearing while the flat side should face outwards. See photos bellow. DO NOT install the spacers reverse with the groove facing outwards since it will cause the system not to operate correctly and get damaged.



Having removed all nuts, bolts, washers and spacers tensioner should look like the photo bellow and it is now ready for installation (**Lock pin is still on tensioner**)

*On version 2 systems arm joint will be fixed on the tensioner.



Before you continue with installation check idler pulley, crank pulley, alternator and ac pulley for possible damage. Replace parts showing damage.

Push the tensioner from wheel side in and facing towards the back of the engine



Push the tensioner towards the back of the engine



Then lift the arm of the tensioner upwards



Pull it to the front and close to the sprintex.



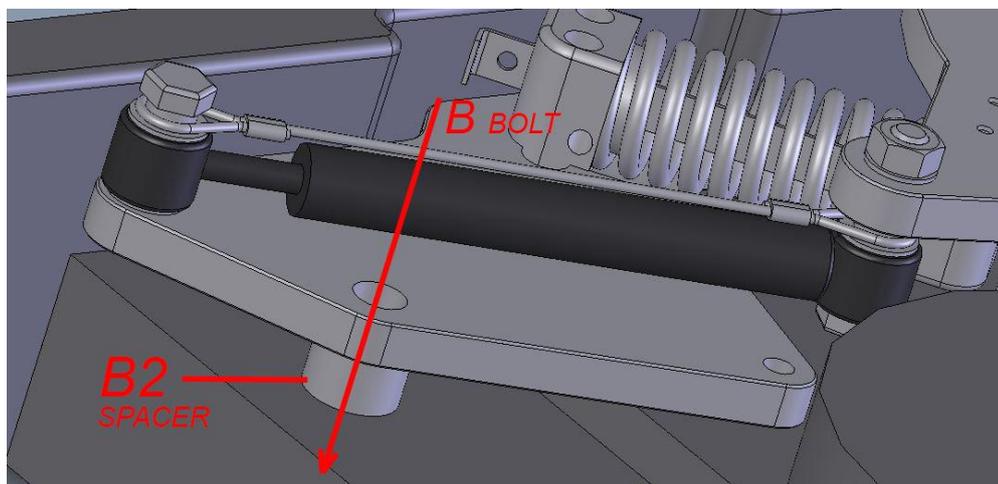
Since you have removed all nuts, washers, bolts and spacers previously you should have the following parts:



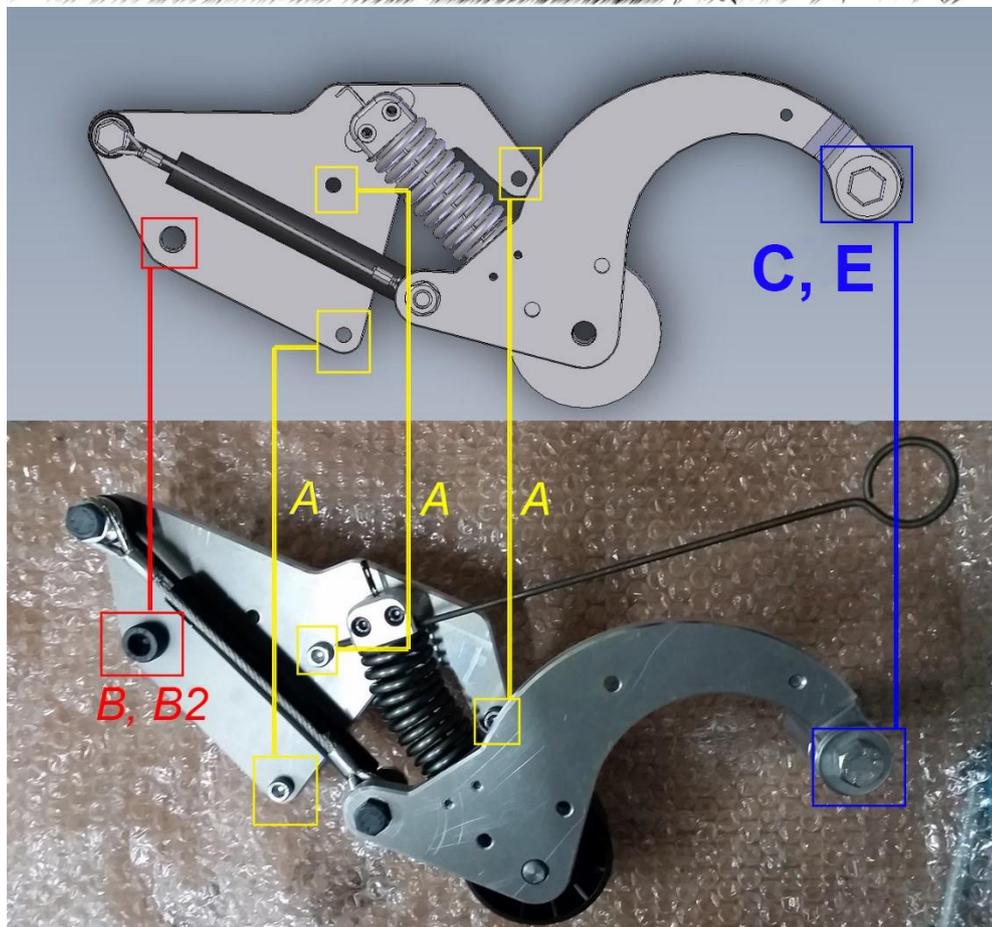
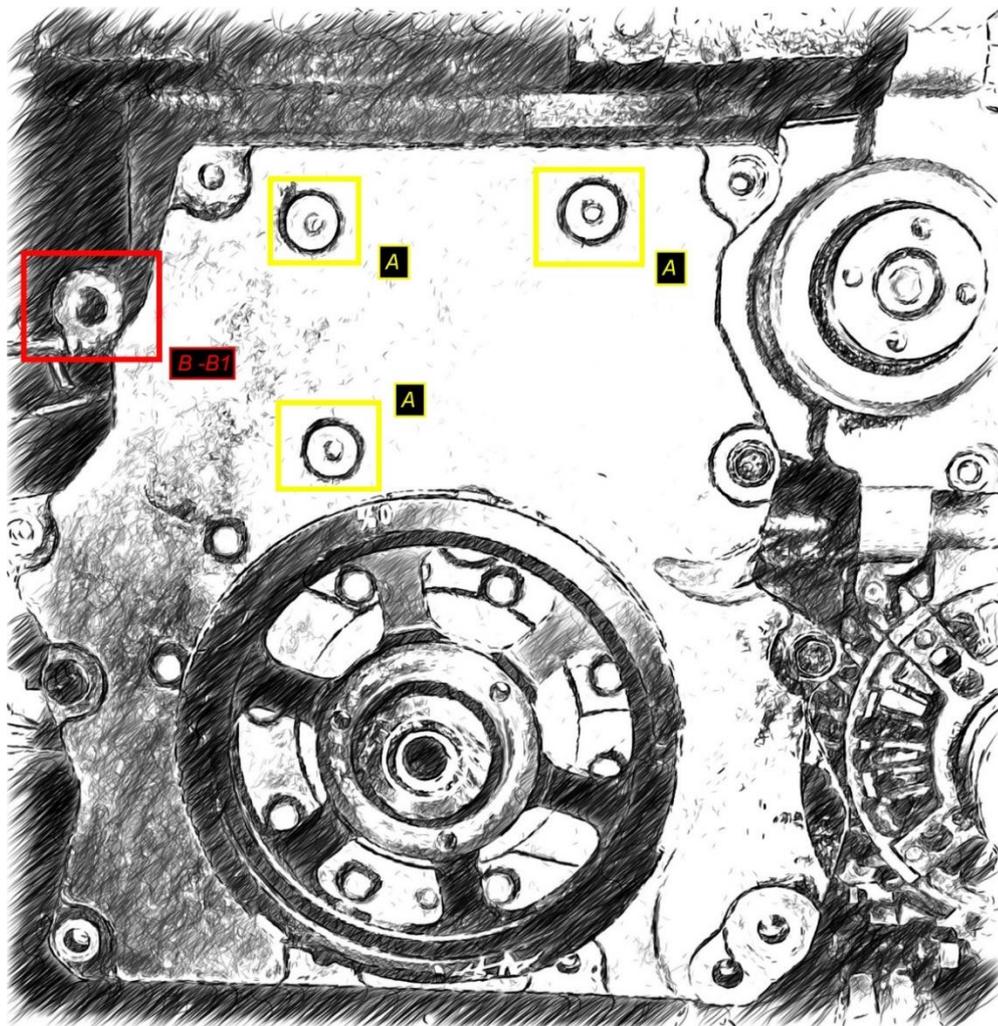
- A: 3x M6 BOLTS (HEXAGON HEAD)(washers included)
- B: 1x M10 BOLT (ALLEN HEAD)
- B2: 1x 12mm SPACER
- C: 1x M10 LONG BOLT (HEXAGON HEAD)
- C2: 1x WASHER (NOT SUPPLIED WITH THE VERSION 2)
- C3: 1x ARM JOINT SPACER (NOT SUPPLIED WITH THE VERSION 2)
- D: ENGINE MOUNT BRACKET BOLT IS NOT SUPPLIED YOU HAVE TO TRIM THE GUIDE LIKE ONE ON THE PHOTO.
- E: 2X GROOVED SPACERS SUPPLIED WITH VERSION 2 SYSTEMS.

Mount tensioner on engine side cover starting with bolt B.

You have to insert bolt B on tensioner plate then use the spacer B2 and then mount to engine block. Proceed with bolts A and finally bolt C. For bolt C you might need to lift engine a bit. Insert bolt C in washer E (washer's grooved side should face towards the ball bearing and the flat side outwards. See photos above) then through joint and on the other end install the second E grooved washer (make sure again the grooved side faces the ball bearing and the flat outwards to the supercharger. Proceed tightening to the supercharger.



ENGINE SIDE VIEW.



After you tighten all bolts install appropriate belt.

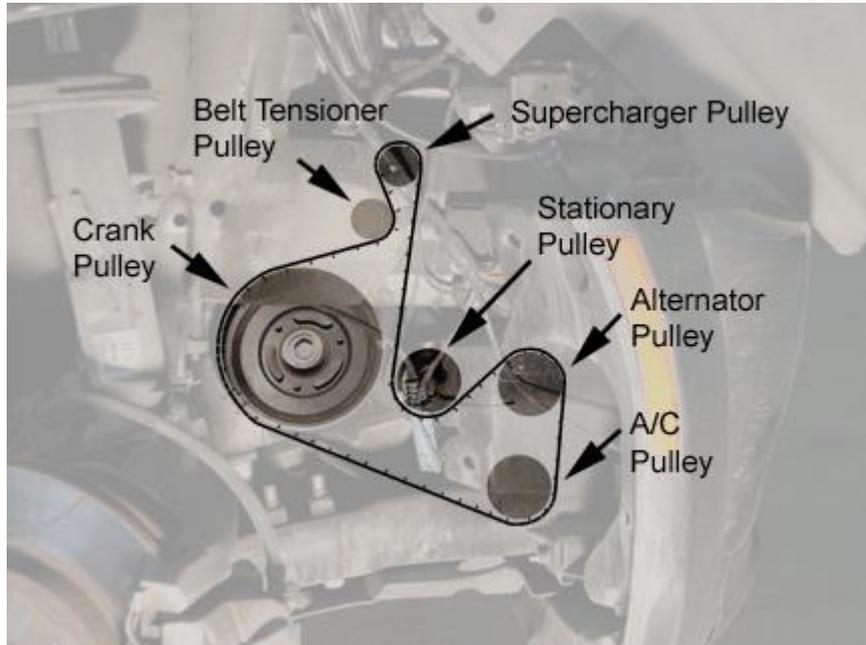
After testing with DAYCO BELTS appropriate sizes are as following:

69mm Supercharger pulley and stock crank: 6PK1398 / 6PK1400

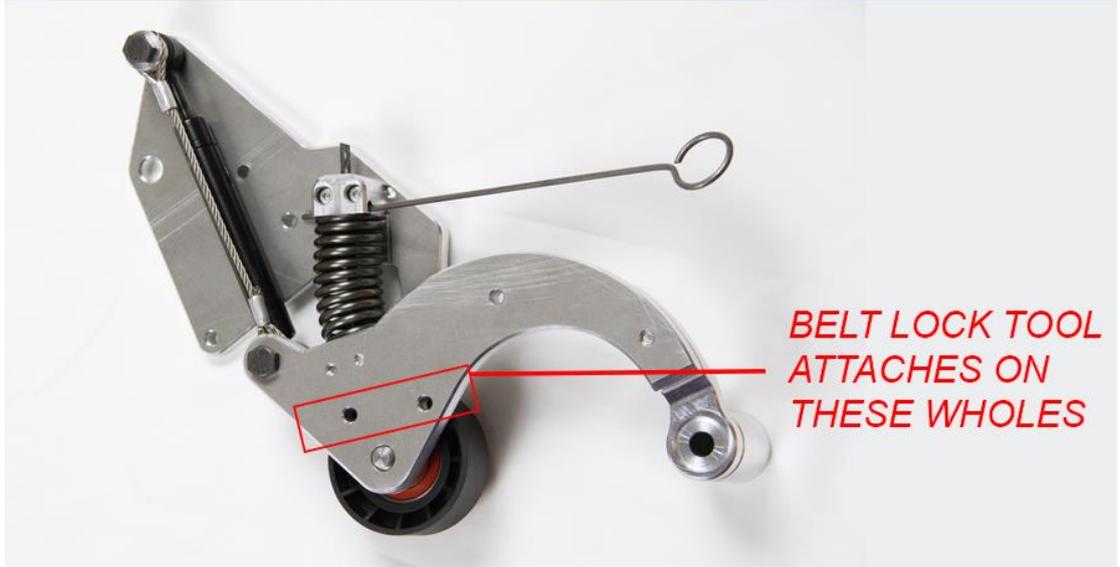
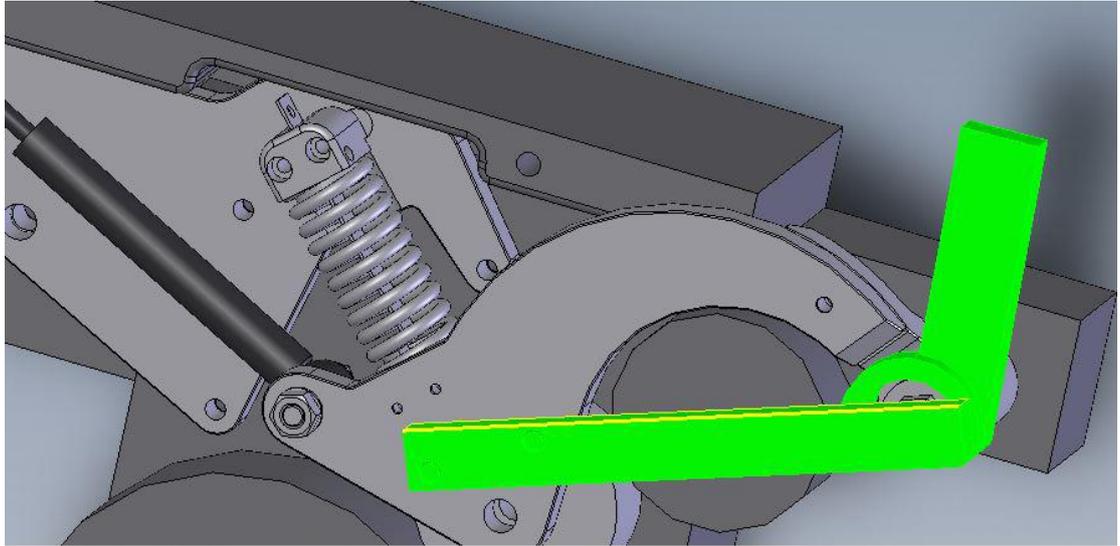
64mm Supercharger pulley and stock crank: 6PK1388

60mm Supercharger pulley and stock crank: 6PK1380

Belt route is as following:



Use BMW OEM belt tool to compress tensioner and remove lock pin.



*BELT LOCK TOOL
ATTACHES ON
THESE WHOLES*

Use tool as oem eaton m45 application. When you remove lock pin gently release the tensioner till it extends fully and applies pressure on belt.

Re install engine mount supporting bracket the rear left bolt with bolt D supplied.
*If bolt D is not supplied in your package you have to trim off the OEM bolt's guide tip or else the tip will push on the tensioner system.



Re install wheel arc trim and wheel. Tighten properly and lower the car.
Start the engine and let it idle. Inspect the belt rotating freely. DO NOT place your hands close to rotating pulleys or belt since that can cause serious injuries.

BELT Length / Wear indication:

The GPR SPRINTEX S5-210 TENSIONER SYSTEM utilizes a "belt gauge view" so you can confirm that the belt used is the appropriate length or that the belt is not worn.

As you can see on the photos bellow, on top of the tensioner system on the upper spring holding base there is a hole. Also on the metallic blade which is in the middle of the spring there are some holes as well. Two of these holes are big and one is smaller. The lower big hole is for the locking position used to change belt and transfer the tensioner system (you have to use the lock pin through this hole to secure). The small hole should be within the hole of the upper spring base when belt is correct. The small hole can be from the upper to the lower part of the spring base hole which sets a min and max. Within this range the secondary belt operating / wear indicator (the upper big hole) should be visible on the top of the upper spring base. The hole's lower side should almost attach to the spring base. If hole is too high or hole is not visible there is an issue and you should re check the primary belt operation / wear indicator

