

SDCE LS1 Spring Tensioner Installation and Operating Instructions 4 Daisy St West Warwick, RI 02893 P/F 401.826.4400 sdconcepts@yahoo.com www.sd-concepts.com



*Your bracket and tensioner system are shipped assembled. When unpacking your setup, remove the tensioner and all hardware from the bracket prior to assembly. The adjustable idler can stay on. Follow ATI instructions to install the new 8 rib blower pulley with SDCE supplied .045" shim.

Step 1. Install your LS1 bracket on your car and roughly route the belt through the brackets.



Step 2. Remove black dust plug from tensioner and save for reinstallation in a later step.



Step 3. Install the SDCE tensioner on your bracket. Using the SDCE tensioner installation tool set some preload against the stop. Preload should be between 5-10. The belt should not be on the crank pulley.



Step 4. Position the adjustable idler all the way down in the slot allowing as much clearance as possible so the tensioner can swing by the idler bolt. NOTE: picture is for reference only to show idler position.



Step 5. Install your blower and all support braces. The arrow in the first picture shows where one end of the SDCE supplied support brace mounts on the ATI head unit. The second picture shows the support brace mounted on the head unit. The third picture shows the other end of the support brace mounted to an oil pan bolt hole. NOTE: It usually takes .250" shims to space the blower out to line up with the SDCE 8 rib tensioner. We have supplied eight .125" shims and four .062" shims. Two .125 shims under each standoff and the support brace will give you the required .250. The .062 shims are for adding or subtracting .062 from the total measurement. ALWAYS MEASURE to be sure the pulleys line up with the crank as each kit and engine are slightly different.



Step 6. Check alignment with a straight edge. You'll then need to install the correct amount of shims to properly align the crank pulley with the blower pulley375" is the standard that most 6-rib systems need to be shimmed. Each system may vary slightly.
Step 7. Install your belt. Belt must be installed and properly routed. Belt routing can be viewed in picture at left. Make sure the tensioner is at least 3/8" away from the stop to ensure proper length belt is being used. NOTE: it is not advised that you remove the stop! Before removing the stop you need to go back and assure that the directions are being followed properly or call SDCE for assistance. 401.826.4400 email sdconcepts@yahoo.com
Step 8. Pull the tensioner back to finish installing the belt around the crank pulley; carefully let the tensioner go. After the belt is routed and installed properly, look at the tension - it should be right around the 15 mark (highlighted with red or yellow paint) on the tensioner. If not at the 15 mark, it is recommended that you take the belt off and repeat steps #3 thru #7 to set preload higher.
Step 9. Install black dust plug back in tensioner.
Step 10. Start the car, whack the throttle a few times and see if anything moves/changes. If everything looks good, then drive it like you stole it and hang on for the ride!!