



**Suggested Installation Instructions for Product Number:
319-904, 319-905, 319-924, 319-925, 319-926, 319-927
Serpentine Belt System**

Installation Instructions

The following items have been included in your kit:

- 1 Crank Pulley (either Sand Seal or Standard) (aluminum)
- 1 Alternator/Generator Pulley (aluminum)
- 1 4- Rib Belt (MasterPro or NAPA #040372)
- 1 High Speed Idler Bearing (5303-ZZ-C3)
- 1 Idler Bearing Adjustment Bracket (aluminum)
- 1 Idler Bearing Mounting Bracket (aluminum)
- 1 Bearing Shoulder Bolt (stainless steel)
- 1 7/16-20 x 1.0" long Idler Bracket Bolt w/ star lock washer
- 2 8mm x 1.25pitch x 40mm long hex head bolts w/ washers

Step 1: Remove existing belt, alternator/generator pulley and crank pulley from the engine. Be careful not to lose the 3mm and 8mm keys from the crankshaft and the generator shaft. Also, remove the two studs from the front of the generator stand.
(Please note: these are the two that are facing you). Clean shafts and generator stand area where you removed old items to prepare for installation.

Step 2: The Idler Bearing and Bracket has been partially pre-assembled for your convenience. The bolts are (NOT TIGHTENED AND READY FOR USE) and will need to be tightened per the instructions in Step 8 after installation on the engine.

Step 3: Facing the engine, place the Sub-Assembly described in Step 2 over the two holes where the studs used to be. Insert the (2) bolts with washers and leave them loose so the bracket assembly will still move freely for belt installation.

Step 4: Install and securely tighten the crank pulley to the crankshaft, making sure to align the key slot. The pulley should slide on easily with a minimum of force. It may be necessary to tap the pulley into position using a rubber mallet, but if it requires too much force, remove the pulley and lightly sand the inside diameter of the pulley to help it slide easier. It is also recommended that you use a light oil or lubricant when installing the crank pulley.

Step 5: Slide the generator pulley into position on the generator shaft following the same procedure as the crank pulley installation and make sure that it is pushed all the way in. Use a straight edge to lie across the face of the crank pulley and generator pulley to check alignment of pulleys together. A maximum of (1mm) deviation in the alignment of the pulleys is acceptable. Misalignment of the pulleys greater than 1mm will result in the belt tracking improperly and the unit will not function properly.

Step 6: Once the pulleys are aligned, tighten the generator pulley. Loosen the bolt holding the idler bearing adjustment bracket to the mounting bracket and install the belt. The belt should be around both pulleys and to the right side of the idler bearing. The belt and the idler sub-assembly should be floating freely at this point.

Step 7: Tighten the two bolts in the generator stand firmly using your best judgment of the belt alignment and idler bearing alignment. Rotate the idler bearing to place tension on the belt and using a 5/8" wrench form behind the bracket assembly, firmly tighten. **DO NOT OVER TENSION THE BELT!!!** Too much tension on the belt can cause damage to your generator shaft. Use the same amount of belt tension that you would normally require on any standard belt setup.

*******Tighten the Bearing Bolt to the idler bracket*******

We recommend using Thread-locker

Step 8: At this point you should see that the pulleys, belt and bearing are in alignment, tightened securely and ready for use. Clear all tools and possible obstructions out of your way and start the engine. If the belt begins to track out of the grooves and up the sidewall of the generator pulley, not the direction it is moving (to the front of the car; or to the back of the car) Shut off the engine!!! Follow Step 9 to correct the tracking problem. If the belt is tracking in the grooves properly, Step 9 is not required.

Step 9: Belt alignment and tracking. When the engine is running, the belt must track evenly through the generator pulley with the grooves aligned properly. If the belt is tracking improperly an-moving up the sidewall of the pulley or beginning to fold; first check to make sure the faces of the pulleys are in line and then, if necessary, adjust the position of the idler bearing bracket assembly. This is accomplished by loosening the (2) 8mm generator stand bolts slightly and using a small pry bar changing the alignment of the bearing. Re-tighten the assembly, re-start the engine and repeat this step until the belt is tracking evenly and properly.

***Careful and patient installation of this Serpentine Kit will give you many hours and many miles of outstanding performance. Please do not rush through the installation process. Missed or shortcut steps may cause damage to your engine. M & M Manufacturing, Motorsports Tulsa, LLC, or any of its subsidiaries, owners or representatives are not responsible for damage or injury caused by improper or careless installation.

Sample Pictures of Installed Assembly



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