

The Hyper Eagle PD and Gates synchronous drive belt tension check. (1 hour)

Call us for help. 801.352.8011

Step 1. Remove the top access cover four cap head screw bolts using a 5/16 hex wrench.

Step 2. Remove the casting center vent plug or brass vent to access the side and center of the belt.

Step 3. Check the belt tension with the belt gauge and a tape measure. Here is a simple recap of what you are going to do. **The function of the gauge is very simple, you push the belt through an opening on the side of the drive casting with the gauge, moving the belt 1/4" . Then you check the gauge to see how many pounds it took to move the belt the 1/4" .**

Used belt tension:

Vanguard 29, 31 and 35 (12-14 pounds)

Honda 24 (12-14 pounds)

All other engines (14-17pounds)

Follow these instructions: Set up the tensioning gauge, by sliding the gauge "O" ring upward toward the yellow ring on the gauge scale.



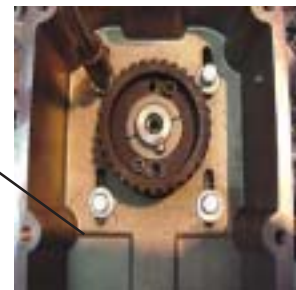
- Hold a tape measure even with the casting against the side and along the face of the belt. Press the belt in its center with the gauge in an even motion moving the belt 1/4", no more no less. Again, the tension gauge must be in the center of belt so that the tensioner pushes evenly on the belt. The casting is built for different belts and you may have to push at a slight angle. Do not twist the belt.



- Read the gauge. See above tension pound amounts for each motor.

If the belt needs tightening or loosening, follow these instructions:

Loosen the four engine face bolts, behind the top sprocket just enough so the casting can slide in the adjustment holes. Photo shows sprocket with belt off so you can see the bolts.



Loosen the rear four lower casting bolts, again just enough so the casting can slide. Loosen or tighten the rear vertical adjustment bolt. If loosening, squeeze the belt sides together after loosening the bolt a half turn. If tightening, a half turn will increase the belt tension 2 or more pounds, so do this incrementally. You do not want to over tension the belt in that it will place too much tension on the engine rear bearing.

Check the tension each time you tighten or loosen the belt adjustment bolt. When the belt reaches the desired tensioning, tighten all the bolts.



Caution: Use synthetic motor oil. Run the engine for 2 to 3 minutes in the level or slightly down position. If the engine drive squeals, stop the engine immediately and check the belt tension again, it is too tight. Do not run, it will damage the engine. Again, this is a very critical step with the Honda and large block Vanguard engines. Recheck the belt tension one more time to ensure it did not change significantly.

Step 15. Install the top access cover: Place a 1/8" bead of silicone on the main casting and a 3/8" bead along the bottom edge. Place loctite on the bolt threads and tighten to 130 inch pounds.

