

SERVICE BULLETIN

SUPERCHARGER BELT TENSION

Background:

The rubber in a v-belt supplies the friction surface. The power transmission in a belt is supplied by the cords imbedded in the rubber. The cords in a v-belt will continue to stretch throughout its useful life and therefore requires re-tensioning for maximum belt life.

Belt slippage:

Below 3.8 pounds of tension a belt may begin to slip at higher engine RPMs. A slipping belt will fail prematurely. Signs of a slipping belt are:

- less than full take-off power but full cruise power. (belt is slipping at full RPM but not cruise RPM)
- soot around the cowling even after the belt is well broke in.

For maximum belt life:

- Tension a new belt until a 9.0 lb. pull at the center of the lower portion of the belt results in a .25 inch of belt deflection. Tighten a used belt until a 8.0 to 9.0 lb. pull at the same spot results in a .25 inch deflection.
- Re-tension a new belt after 2-5 hours. The belt will stretch the most during the initial run in.
- Check belt tension whenever the upper cowling is off, but at least every 100 hours.
- Use only approved belts. They have the most cord reinforcement and will give better service life.
- Use a scale to measure belt tension. There is no other way to correctly tension belts.

Contact FAT for technical assistance.

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