

Snowmobile Belt Installation Tips

The belt on your snowmobile is an integral part of the drive system and can dramatically affect how the sled performs and feels. The belt drive system is designed to balance off-the-line performance with top speed, while optimizing backshifting and upshifting. Proper installation of the belt will help accomplish the best transfer of horsepower from the engine to the ground. By following the recommendations below you will achieve maximum performance and extend the life of your belt.

1. Select the proper belt. A belt that is too long or too short robs the drive system of efficiency. A short belt causes damaging stress on the drive system. A belt that is too long won't allow the clutches to work as they should.
2. If you are not planning to use your belt right away or if you're putting your sled in storage, be sure to store your belt properly. Keep it in a cool, dry environment.
3. Proper clutch alignment is a must. Clutches that are not aligned properly due to worn engine mounts, misaligned shafts or worn out drive components will cause problems and can shred your belt quickly. Remember, there is only one proper center-to-center distance for any given driver, driven and belt layout. Make sure yours is correct.
4. Install the belt making sure it sits within the sheaves correctly. The cord is the backbone of the belt. The cord line should be set at the outside circumference of the secondary (driven) clutch. As your belt wears you need to readjust so that it stays in this position. This will give you the maximum RPM range and ensure that your sled does not lose top end performance as the belt "seats".
5. Belt noise is usually a sign of improper belt installation. If you have a constant squeal, the tension may be too tight. You can fix this by lowering the belt in the secondary. If you have a chirping noise your belt may be too loose. Raising the belt in the secondary should remedy this problem.
6. Every new belt needs to be seated to the clutch faces. To accomplish this, Carlisle recommends that you run your sled for the first 30 miles at half throttle or less. This will allow the belt to conform to the angle of the sheaves, producing more surface contact thus enabling the belt to transfer the most horsepower at the highest efficiency.
7. If for any reason you have to take the belt off your machine, put it back on with the same rotation direction it was going when you removed it. An easy way to remember this is to always put the belt on so you can read the label on the belt.
8. Inspect your belt and drive system at regular intervals. Your belt and clutches will talk to you if you take the time to listen. You will be able to see where the belt rides on the sheaves to make sure there is not excessive ride-out in the primary. Also, the belt surface should not appear glazed or overly worn in any particular area. The belt should be uniform and smooth with no broken cords or cracks.
9. Glazing on the belt sidewall is usually caused by slipping. Even a properly installed belt can slip. Acetone and brake cleaning fluids are used to clean the clutch faces, but should NOT be put on the belt. These chemicals will break down the compounds used in the construction of your belt and result in shortened belt life. For this reason, Carlisle recommends against the use of any belt dressings.
10. Allow the sled's engine to warm up so the belt gets warm before riding. Also, don't try to move your sled if you think the track may be frozen to the ground. Break the sled free or run it on a stand before riding.

Following these simple steps will allow you to spend more time on the trails and less time in the shop.