# **Snowmobile Safety and Belt Installation Tips**

From your friends at Ultimax Belts by Timken



The belt on your snowmobile is an integral part of the drive system and can dramatically affect how the sled performs and feels. Have fun and be safe by following the guidelines of the sled manufacturer and the tips below.

### Before you ride

Before heading out on the trail, be sure your snowmobile is running properly. Follow all of the manufacturer's safety recommendations, procedures and maintenance schedule. Before every ride, check fuel and oil levels, battery, brakes, skis, throttle, handlebars, headlights, taillights and drive belt.



## Inspect belt

Inspect your belt and drive system. Your belt and clutches will "talk" to you if you look and listen. You'll 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. Thin spots, layer separation, missing cogs or cord pop-out are all reasons to replace the belt.

## **Clutch alignment**

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 new belt quickly.

#### Clean the clutch faces

Acetone and brake cleaning fluids are used to clean the clutch faces but should NOT be put on the belt. Allow the clutches to dry completely before reinstalling the belt. These chemicals will break down the compounds in the belt and result in shortened belt life. For this reason, do not use belt dressings.



### 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. Find the right Ultimax belt part number for your sled at: <a href="http://www.ultimaxbelts.com/belt-finder">http://www.ultimaxbelts.com/belt-finder</a>

## Carry a spare

As part of your repair kit, carry a spare drive belt. The kit should contain tools, spark plugs, duct tape, tow rope, pry bar, emergency starter rope, vise grips, siphon hose, baling wire and spare belt. Break in your spare belt before you need to use it. This ensures you'll get maximum performance and reliability out of your spare when you need it.

### Store the belt properly

If you are not planning to use the belt right away, be sure to store the belt properly. Keep it in a cool, dry environment out of direct sunlight. Don't crimp the belt or turn it inside out.



#### **Drive belt installation**

Proper installation of the belt will help accomplish the best transfer of horsepower from the engine to the ground. Follow the manufacturer's safety recommendations, installation procedures and specifications to achieve maximum performance and extend the life of the belt.

Install the belt making sure it sits within the sheaves correctly. Check your vehicle manufacturer's spec for belt deflection. If there is no recommendation from the manufacturer, ½ inch of deflection at the span center is usually a good target. Adjusting the deflection too tight can cause the sled to creep. Too much deflection results in poor engagement. If the deflection is over 1 inch, you're probably using the wrong belt part number.

Belts are not directional but if you have to take the belt off the sled, put it back on with the same rotation direction. An easy way to remember this is to always put the belt on so you can read the label on the belt.

#### **Belt Noise**

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.

#### Belt Break-In

Every new belt needs to be "seated" to the clutch faces. Take it easy for the first 20 miles varying the speed at half throttle or less. This allows the new belt to conform to the angle of the sheaves, producing more surface contact and enabling the belt to transfer the most horsepower at the highest efficiency.



## Warm up sled

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 tips will allow you to safely spend more time on the trails and less time in the shop.