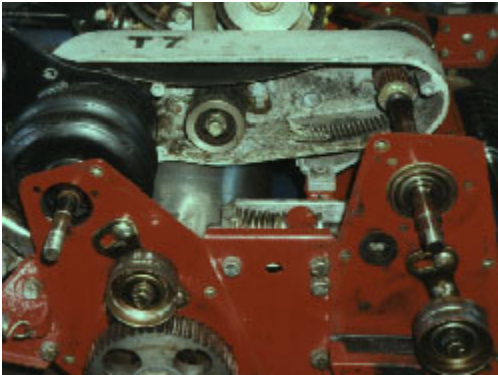




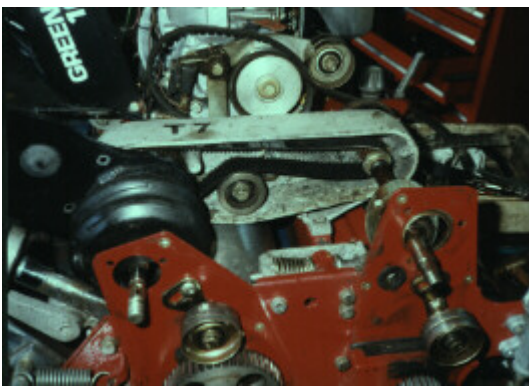
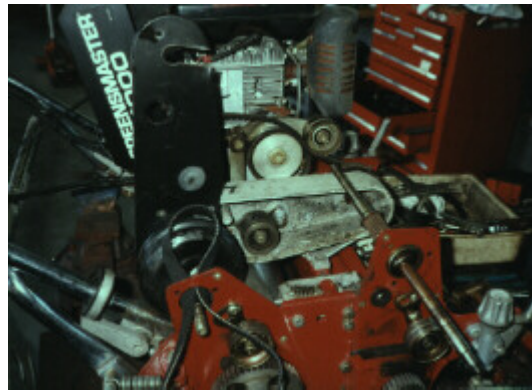
## Toro 1000 Differential Belt Replacement



1992 GM 1000's had a couple design glitches. The first was, differential pulleys susceptible to corrosion in southern coastal regions which can make the belt ride on top of the pulleys, shredding the cogs on the belt, weakening it till it breaks. The second, it was a nightmare to change the belt. To remedy this, Toro engineers changed the pulley material to eliminate the possibility of corrosion. In addition, they redesigned the frame side plates, incorporating a two piece design, which reduced belt replacement time to approximately ten minutes.

If you have the single side plate model, you might try the following technique. It can be done in about an hour with practice.

1. Take off both belt covers.
2. Remove both belts and belt drives. Leave all your belt tension adjusters loose.
3. Take the reel drive assy. off. Take the roller drive shaft bearing support/housing out. To get the bottom allen screw out we've cut a 3/16 Allen wrench to size. Lowering the handlebars also helps.



1. Take the driven pulley off the reel drive shaft. While doing this you'll have to take off both engine belts. Standing in front of the mower, take the belt on the right, wiggle it off the pulley, then pull it back out of the way. With the pulley/brake drum loose, wiggle the left belt off the left side of the drum.
2. Loosen the bearing locking collar next to the reel drive. When it's loose, pull the collar and the bearing toward the engine. This will give you enough free play to get on the side of the mower,

and gently pull the whole diff/reel drive shaft out of the diff housing. The belt

drive, bushings, and shaft keys are going to come off so you can get the shaft out of the belt cover.

3. At this stage you can either cut a notch (photo 2) in the belt cover so this whole process is easier, or you can leave it intact, it just takes a bit longer.
4. Now you take the new belt, and work it in through whole where the differential drive is. Remember, it has to go around the shaft. Work it around the shaft, bellows, and cover. It will fit.
5. I usually loosen the diff. belt idler assy., and take the roller completely off.
6. Work the belt around the diff. drive, make sure you don't skip a cog, it's hard to see. Now the belt is in the housing. With a notch in the belt cover, putting the reel drive shaft back in is a snap. Without the notch, it takes a bit longer because you have to reassemble the end of the shaft in limited space. It's not too bad.

1. If your engine belts need changing, now's the time to do it.
2. Put the double belt pulley on first, the hardest part of this is keeping the shaft key in place (a little locktite helps). Then put the belts on and tighten the pulley.
3. I usually leave tightening the locking collar on the reel drive shaft till last.
4. The rest is just reassembling everything.

