

## I am having drive-belt problems

Whether the problem is with the belt running from the PTO clutch to the mower deck or the snow blower, the issues are usually the same.

1. CHEAP BELTS Most new owners of a used Case or Ingersoll tractor suffer “sticker shock” when they are told the price for a new OEM belt. That’s an understandable reaction that often results in them running to the nearest store that sells V-belts and buying something that looks the same for a fraction of the price for the OEM belt. Then they install that belt on their tractor, fire it up and go back to cutting grass or blowing snow with a smug look on their face. They figure that they’ve just saved themselves quite a bit of money. All too often, that el cheapo belt begins to disintegrate and flips off the pulleys in as little as a half-hour after of running time and the owner is shocked.

What they do not realize is this. The el cheapo belt was a fractional HP belt designed to travel in one direction. The deck and snow blower belts must twist back and forth as they wind their way around the two pulleys on the mule bracket while on their way to the attachment and then twist back and forth again as they travel back to the PTO clutch. What other V-belt does this on any other piece of outdoor power equipment you own?

Yes, the OEM belts do cost more but they outlast any other belt out there. Why? Because they are the correct width, length and they are constructed with Kevlar. Cheaper belts often do not have Kevlar reinforcement. This fact allows the cheap belts to stretch, deform, roll over, shred and pop off the pulleys. High quality belts are also available from NAPA, TSC and many agricultural dealerships in your area. Either of the Ingersoll dealers who are members of this forum, will send OEM belts to you through the postal system. Most of the long-time owners will tell you that the cheapest belts are the OEM belts because they last longer than any other belt they have ever bought.

2. WRONG BELT – If you check our FAQ’s, you find charts that will help you find the correct belt for the tractor you own and the attachment you are trying to power. Case often uses 9/16” wide V-belts and those are nearly impossible to find anywhere else but at an Ingersoll or Case dealership. Let’s not kid ourselves; they did that for a reason. If you use 1/2” or 5/8” wide belts, then that affects where the belt sits in the groove of the pulley. A 1/2” belt will ride lower and therefore appear to be too long whereas a 5/8” belt will ride high than the OEM belt will and it may have to be forced on. This may cause the tensioning spring to be over-stretched.

3. BAD BEARINGS Whether you are trying to spin a mower deck or a snow blower, it has bearings in the mule pulleys, the blade spindles, the tensioning pulleys, the ends of the auger and the supports for the countershaft. All belts are rated to transmit a certain amount of horsepower. The bearings in attachments must be in excellent condition so that they rotate with a minimal amount of force. That allows the engine horsepower to be used to cut grass or blow snow instead of trying to overcome bearings that are on the verge of seizing up. The drive chain on the snow blower is another suspect as these can rust nearly solid in the off-season.

If you cannot keep a new belt from flipping off the pulleys, then careful inspection of the two mule pulleys is essential. If those bearings are sloppy, they can allow the pulley to not run true and that can cause a belt to flip off. You should not be able to wiggle those pulleys side to side. They should rotate smoothly and nearly silently.

4. BELT TENSION - This is an item that is often overlooked on decks and snow blowers. It is essential that the correct spring be used to tension the belt. In time, all springs lose tension and they often become stretched and deformed. A new spring is the only solution and it is best to choose an OEM spring. This also applies to the belt that connects the three blade spindles. It too, has a tensioning spring. It also has a tension pulley that is bolted to an arm that is supposed to pivot freely on a pin so that the tension spring can apply proper tension to the belt. If this pin is rusted solid, then the belt is not being tensioned and one or more blades may stall when heavy grass is encountered.

Blade stall will cause the belt to burn and ruin it. The bearing in that tensioning pulley must also run smooth and free with no excess play in it.

5. BELT ALIGNMENT – If you mow your lawn, you can make errors in judgment and smack the deck into immovable objects. While it might appear that nothing happened, the mule harness can often get bent badly as a result. If things get bent too far out of shape, this can cause belts to get spit off or it can cause premature wear and damage to belts, thus shortening their lives. Snow blowers are no different. Everything is covered in a blanket of snow and people end up ramming into hidden objects. That force is transmitted onto the mule mount. It is also transmitted onto the brackets that the mule clips onto initially before they are swung up to the Snap Fast pins and locked into place.

Aside from the issue of impact damage, there is also normal wear and tear of the mule bracket on the pins that the lower part clips onto. Sometimes those pins

just undo and fall off, leaving one side unsupported. Other times, the pin is worn so badly it won't do its job any more. The deck harness has several holes in it that can also become badly worn over time. The harness needs to be dismantled and the sloppy holes must be brought back to their original size and new pins must be installed. All of these worn items compound and cause misalignment issues for the belt that lead to ongoing belt problems. Your tractor may be 20 to 40 years old and now....YOU have to undo all the wear and tear that has take place over those years if you want to put an end to belt issues.

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