AGBELT
A DIVISION OF APACHE

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Baler Belt Direction of Travel

Do baler belts have a direction of travel?

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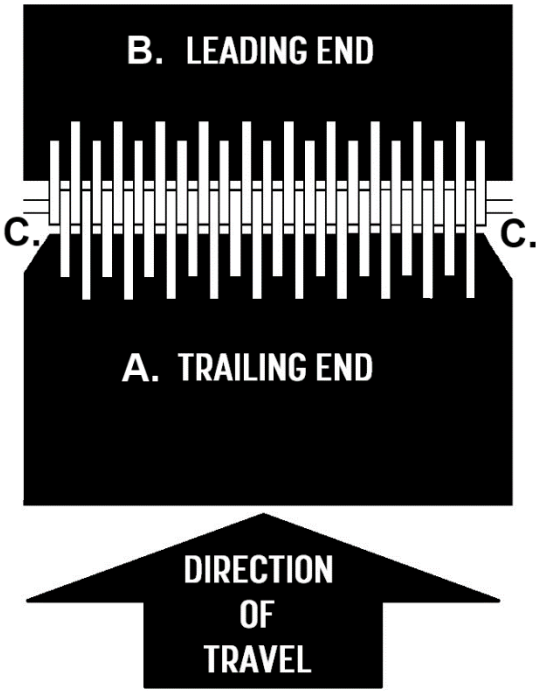
The answer to that question is "it depends". But before we detail the factors involved in determining if a belt has a direction of travel, we should first define some commonly used terms:

- Splice - The strict definition is that a splice is a method for joining the ends of belting together without using a mechanical fastener. Note that AG Belt uses the term *splice* more broadly to include all joined belt ends, including mechanically fastened belt ends.
- Direction of Travel - the longitudinal direction that a belt travels in a system
- Leading End - the belt end within a splice that travels over a roller or pulley first
- Trailing end - the belt end within a splice that travels over a roller or pulley second

The terms *leading end* and *trailing end* are a somewhat counter-intuitive. Because the leading end of the belt faces *away* from the direction of travel, we tend to think of it like the caboose on a train. It faces away from the direction that the train is traveling therefore *trails* the engine up front that is *leading*. However, since the leading and trailing ends are more about the *splice* (the joined belt ends) rather than the belt itself, it is useful to think of only the spliced area of the belt. As the belt travels over the roller, the first belt end to travel across the roller *leads*. That leading belt end faces away from the direction of travel. The other belt end, which is facing toward the direction of travel, travels across the roller second, making it the *trailing* end. The trailing end is the belt end most likely to catch on something as the splice travels through your baler.

How do we reduce the chances of the trailing end catching on something and causing damage?

Again, it depends on the type of belt and fastener system being used. Most baler belts do not have a direction of travel based on the belt alone. However, some factors might create a recommended direction of travel. For example, belts that have the corners notched only on one end would then have a recommended direction of travel. Notched corners (C) reduces the ability of the belt edge to catch on belt guides. Notching both ends would make the belts bi-directional again.



Belts using Clipper® Wire Hook fasteners do have a recommended direction of travel because of the nature of the splice. One belt end should have fewer hooks (A) than the other (B). Therefore, the lace is wider on one belt end than the other. The belt end with fewer hooks would be less likely to catch on a guide. Because of this, it would be recommended to notch the corners on the belt end with fewer hooks and make that your trailing end. While you can run the belt the other way, you increase the risk that the outside hooks will catch if you make the belt end with more hooks your trailing end.

Belts using Mato or Alligator® Rivet fasteners have matching offsets. When the ends are paired, the fastener systems are equally spaced as a whole across the width of the belt. Basically this means that you could notch both ends and run the belt either way you choose.

Alligator® Rivet Low Profile Fasteners

The new AG Belt™ Spliceless™ Baler Belt does not use mechanical fasteners, has no ends to notch, and does not contain a splice at all. Nonetheless, it does have a direction of travel. Because the cords in the belt carcass are wound in the same direction on either side of the belt's longitudinal centerline, they both terminate in the same direction on the belt edges. The protective molded edges of the patented Spliceless belt shields the cords from damage, however it is still recommended to run the belts so that the cords terminate while facing away from the direction of travel. This will ensure that the cords will not catch on anything should the molded edge be compromised. The Spliceless™ baler belts are marked to make it easy to identify the correct direction of travel.