

Digging Chain

It's important to have a thorough understanding of the soil and ground conditions where you will be operating the trencher attachment.

- The soil conditions will determine the type of chain required
- Chain that is too light will wear fast or break
- Chain that is too heavy will increase the load and slow the trenchers speed
- Digging chain is rated by tensile strength.

Digging Chain



Standard Digging Chain

Standard digging chain will work well in most digging conditions. Due to its design, the standard chain teeth can rotate back (back-flex) when digging in hard and rocky ground. When back-flexing begins, the teeth do not remain at the correct digging angle and the trenching speed will be significantly reduced.

Anti Back-flex Chain

Anti back-flex chain is designed for hard digging applications. The side plates of each link are close together. As the chain leaves the sprocket, each link then comes together with the next and forms a solid digging channel. This helps to keep each digging tooth at the correct digging angle.

Chain Tension

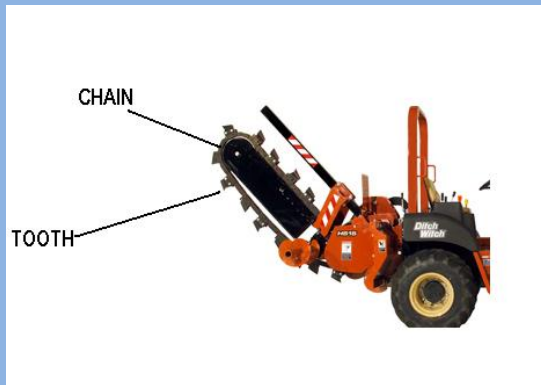
If you adjust the digging chain to tight or to loose, the digging chain efficiency of your trencher attachment will decrease and the wear of the parts will increase. It is important to note that when digging in extremely hard ground, you should remove all deflection from the chain.

Checking the Tension of Your Digging Chain

Consult your operator's manual for the required servicing of your chain. Most manufacturers will recommend that the tension for digging chain be checked every 10 Hours of operation, or each daily.

The operator's manual will also make recommendations on the distance between the boom and the chain. For example:

- Vermeer 2.0 to 3.0 Inches
- Ditch Witch 4.4 to 5.8 Inches
- Case 2.1 to 3.3 Inches



Trencher Operating Techniques

The unit can be used for various applications. The following is a guide for cutting a straight trench.

Cutting a Straight Trench

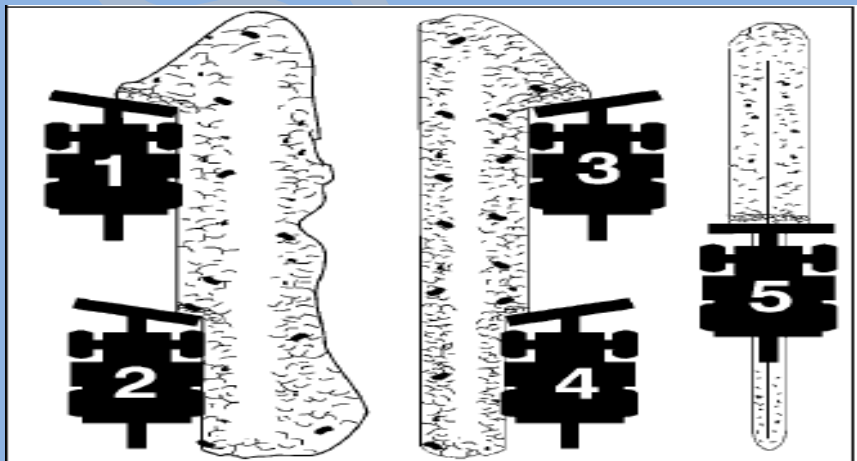
1. Stretch a string line parallel to the proposed trench line on the opposite side of the unit's auger.
2. Use the tire as a reference point on your unit and move the unit parallel to the string line.
3. Maintain an equal distance between the tire and the string line as you proceed forward and the trench will remain straight.

Backfilling

Backfilling a trench requires special attention. Its good practice to follow all of your employer's procedures for backfilling to ensure the job is done correctly and most importantly safely.

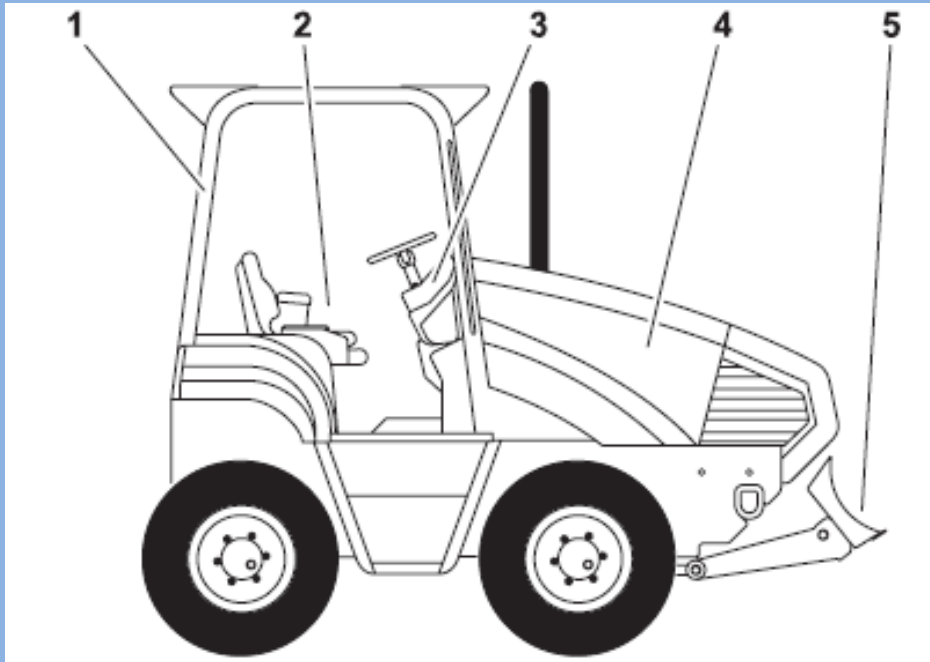
Make sure the ground surrounding the edges of the trench is strong enough to withstand the weight of your machine and load. Secondly, you must ensure that no one is working in the excavation. Once this has been confirmed you are clear to backfill. If you have any questions or concerns pertaining to backfilling, always consult your operator's manual or check with your Supervisor.

1. Position unit at end of trench, several feet from spoils
2. Aim blade at outer edge of spoils
3. Adjust blade to fit land contour
4. Push outer edge of spoils towards the trench. Take multiple passes at spoils rather than all at once.
5. Repeat procedure on opposite side
6. Use float control to make final pass over trench



Main Parts of the Tractor Unit

As an operator of powered mobile equipment it is your responsibility to have a thorough understanding of the overall machine components and parts. The following section provides an overview of the tractor.



1. ROPS
2. Operator Station
3. Control Console
4. Engine Compartment
5. Backfill Blade

Lifting

Consult your Operator's Manual for units lifting points

Use a crane capable of supporting the equipment's size and weight. Do not attempt to lift tractor with attachments installed. Follow proper rigging procedures as discussed earlier in this manual.

