PTO Shaft Cutting Guide

IMPORTANT

READ BEFORE FIRST USE

NOTICE:

PTO SHAFTS THAT ATTACH TO TRACTORS ARE SUPPLIED LONG ENOUGH TO FIT TRACTORS OF ALL SIZES.

BECAUSE THE LENGTH OF 3 POINT HITCH ARMS ON DIFFERENT TRACTORS VARY GREATLY, IT IS LIKELY YOU WILL HAVE TO REMOVE EXCESS LENGTH FROM YOUR NEW PTO SHAFT TO FIT YOUR PARTICULAR TRACTOR.

HOW DO I KNOW IF I NEED TO CUT MY PTO SHAFT?

The following are all indicators that you must shorten the PTO shaft:

- It is impossible to fit the PTO shaft between the tractor and implement.
- The PTO shaft can be installed, but it is an extremely tight fit due to the length. Once installed, there is less than 2 inches of the inner PTO plastic tube showing.
- The implement is a type that attaches to the 3 point hitch, and you cannot install the PTO shaft without lifting the implement to its highest point of travel.

THE FIT IS TIGHT BUT I CAN INSTALL THE SHAFT. WHY MIGHT I STILL HAVE TO CUT IT?

A PTO shaft uses telescoping steel tubes which naturally slide in and out as the distance from the implement changes in operation. If the tubes are too long, they can bottom out at certain angles and cause damage to the tractor or to the implement.

HOW WILL I CUT THE STEEL TUBES?

The inner steel tubes can be cut with any appropriate tool with a blade that can cut metal. Common tools that are used for this purpose include:

- Hacksaw
- Reciprocating saw (“Sawzall”)
- Metal cutting bandsaw
- Grinder or other tool with a metal-cutting wheel
- Any other tool that is fitted with a blade suitable to cut steel

HOW MUCH DO I CUT?

To determine how much of the shaft to cut, first attach the implement to the tractor's 3 point hitch, without the shaft installed. Adjust the 3 point hitch so that the PTO splines on the tractor and the implement are at the same height from the ground. Separate the PTO shaft into two parts and attach both ends (see Figure 1). Orient the shafts so that they are parallel to each other.

Figure 1

Align a straight edge to the end of the plastic tube section of one half of the shaft as shown in Figure 2 and make a mark on the other plastic tube.

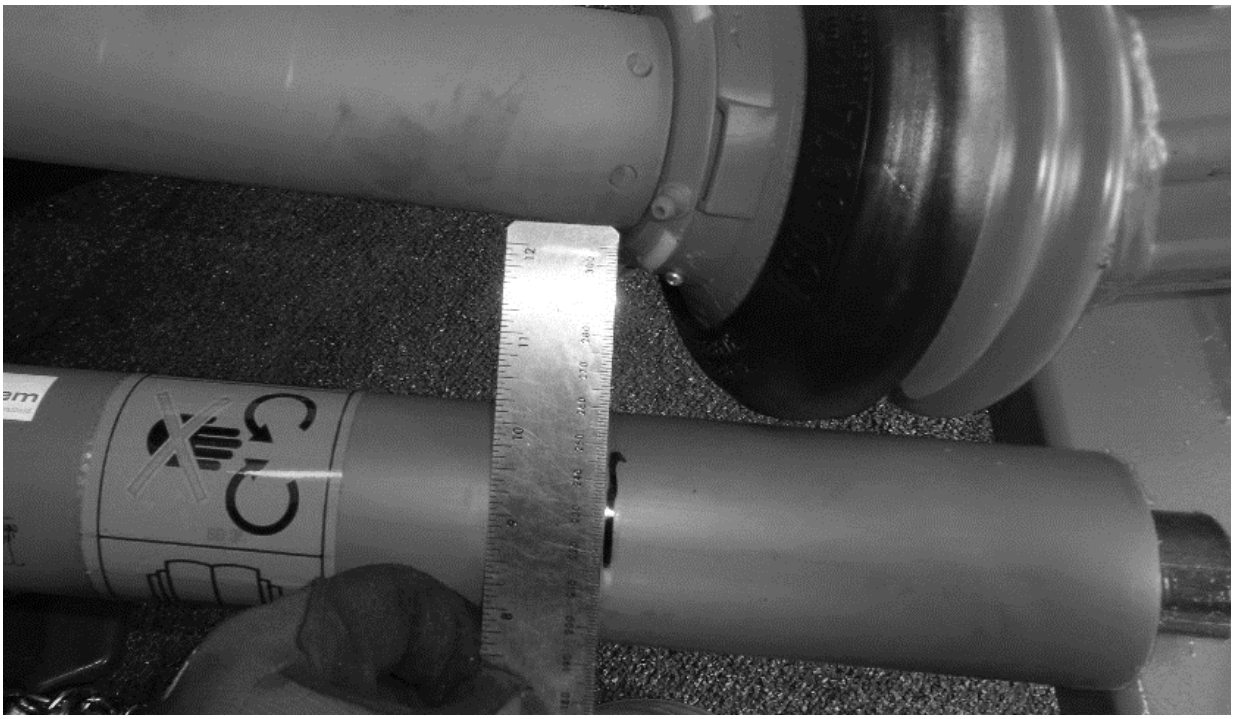

Figure 2

Add an inch and a half to the original mark and make a new mark. This will be your final cut point.

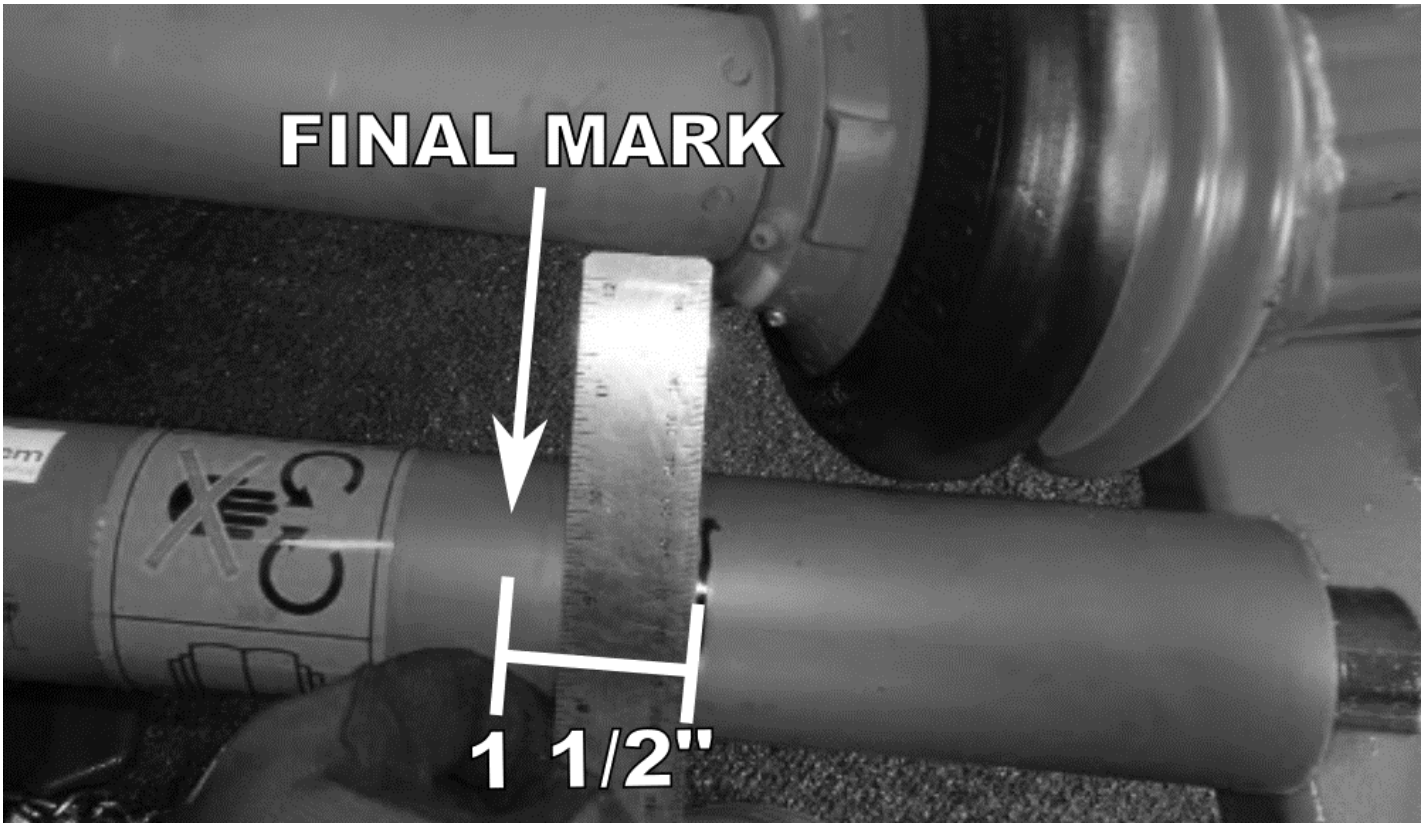

Figure 3

Cut the plastic tube at the final mark. Do not cut the inner metal shaft yet. Measurements shown in Figure 4 are just for illustrative purposes and should be ignored.

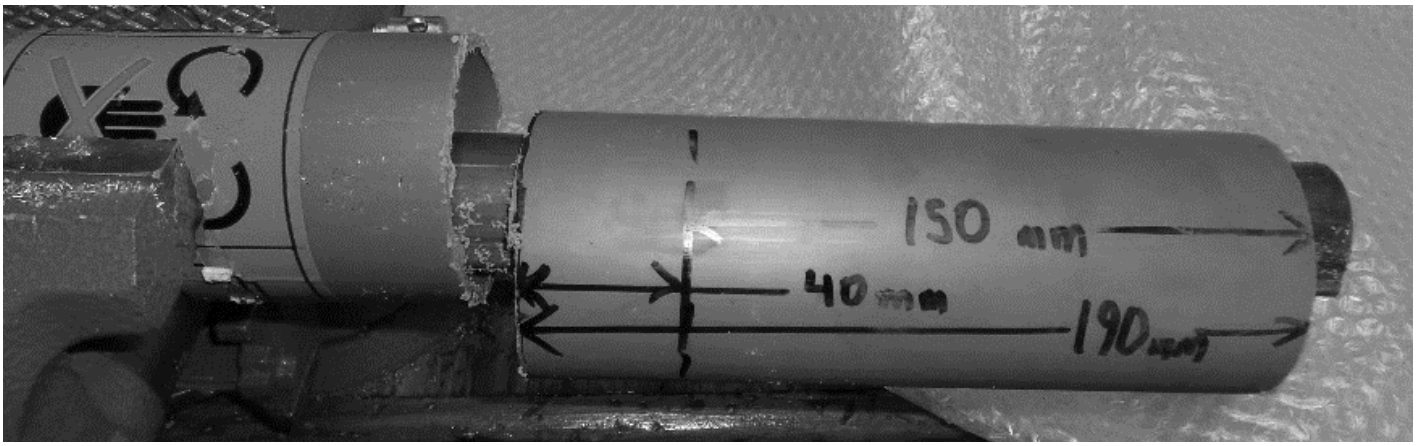

Figure 4

You can then use the plastic piece that was just removed to mark the location of all the other cuts.

HOW DO I DO THE REST?

First align the plastic cutoff with the end of the metal shaft as shown in Figure 5.

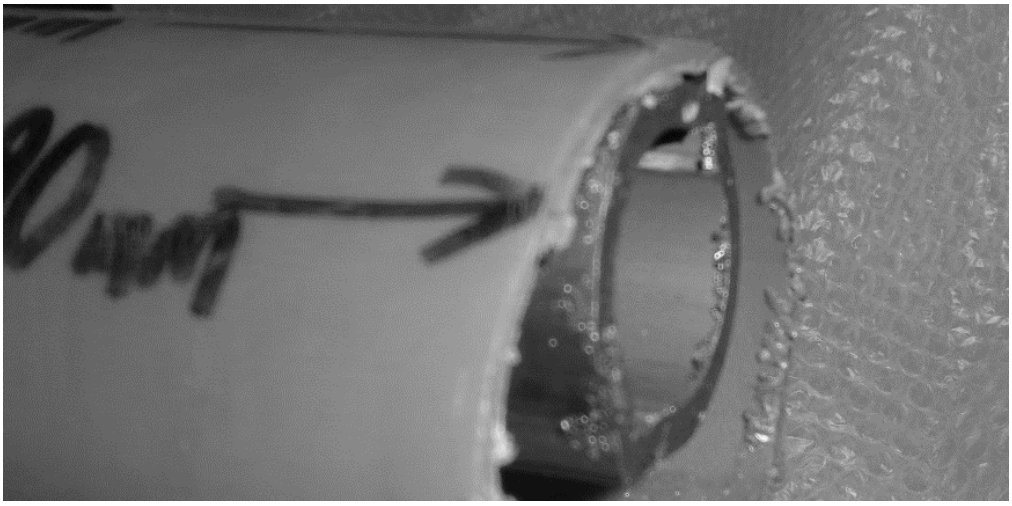

Figure 5

Make a mark where this piece aligns with the metal shaft as shown in Figure 6.

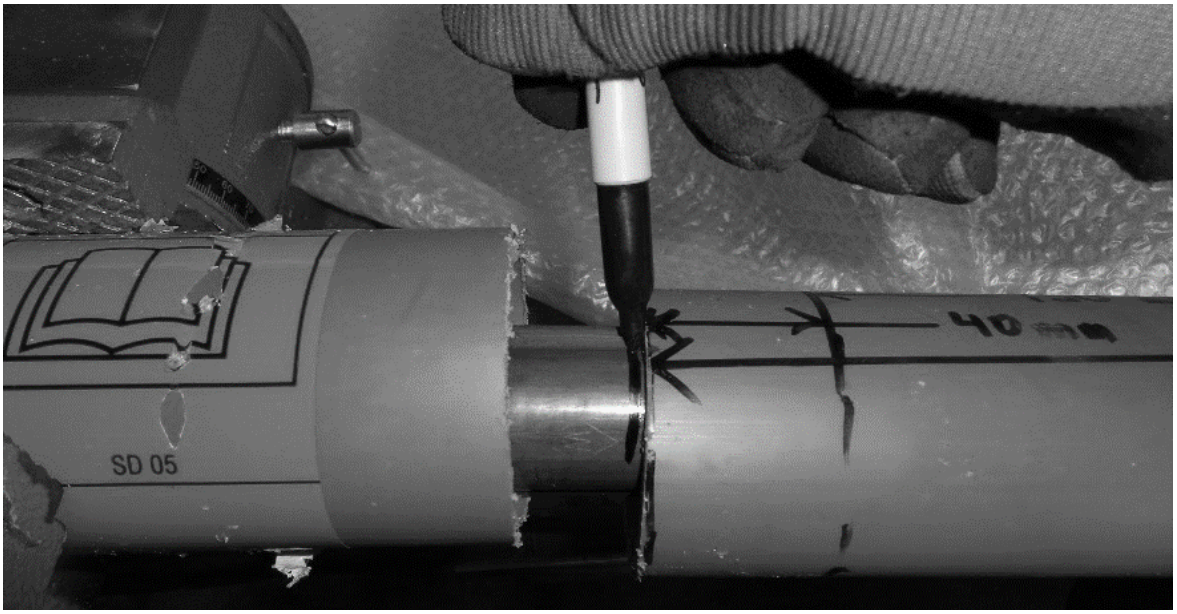

Figure 6

Cut the steel shaft at this mark.

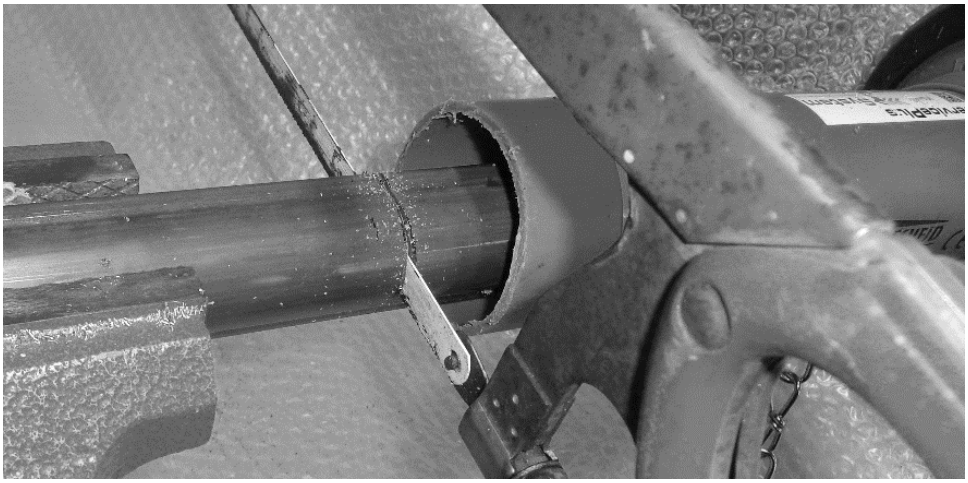

Figure 7

Repeat this process so that both steel shaft halves and both plastic tubes have had the same length removed.

NOTICE: DO NOT cut the steel shafts flush with the ends of the plastic tubes. The steel tubes should protrude from the plastic tubes the same amount as they did prior to any cutting.

After cutting there will be shavings and burrs on the cut ends of all tubes that must be removed. Remove the filings using a metal file, sandpaper, wire wheel, or other appropriate method. Filing an angled edge on the corners is optional and will help to make insertion of the telescoping pieces easier. Wear protective gloves to prevent splinters and use a rag or paper towel to clean out any shavings from the interior and exterior of the steel tube before reassembling.

Apply a thin coat of grease to the mating surfaces of both metal tubes and re-assemble the shaft.