



# HULK TUBING ROLLER INSTALLATION INSTRUCTIONS

**NOTE:** The HULK Tubing Roller is shipped 90% complete to mitigate the risk of damage to some components while shipping.

Tools required for installation:

- ✓ Allen Wrench Set
- ✓ Wrenches: 7/16", 1/2", 9/16" and 3/4"

## STEP 1:

Please verify that you have all the items shown below. Double check all the fasteners on the machine are tight, they may have come loose during shipping. Note that the dies and the optional Electric Drive components are shipped separately.



## Hardware

- 5/16-18 X 1-3/8 CAP SCREW - 4
- 5/16 FLAT WASHER - 2
- 5/16 X 18 LOCK NUT - 4
- 5/16-18 X 1 FLAT HEAD CAP SCREW - 2
- 1/2 FLAT WASHER - 2
- 10-24 X 1/2 BUTTON HEAD CAP SCREW - 2
- 10-24 LOCK NUT - 2
- 1/2-13 LOCK NUT - 1



**STEP 2: Crank Handle Assembly:**



- Using the provided 1/2" nut, install the revolving handle on to the end of the green arm.
- Orientate the machined key slot in the drive axle so that it is pointed down towards the handle, then attach the axle to the handle using the four supplied 5/16 bolts and nuts.

**STEP 3: DRO Assembly**

Only the items circled in red below will be used for the tubing roller. The rest of the items can be saved for future personal projects or disposed of.



Install the supplied aluminum plate to the back side of the DRO slider using the four Philips head fasteners from the DRO kit as shown below. The 5/16" diameter hole in the aluminum slider plate should face the same direction as the wires sticking out of the slider.



**STEP 4: Die Assembly**

Install the bearings into the bearing pockets of the non-drive dies as shown below. On some of the wider non-drive dies, a ball nosed allen wrench will be needed to secure the shaft collar as it may be slightly inset into the die. Be sure to center the dies on their shaft.

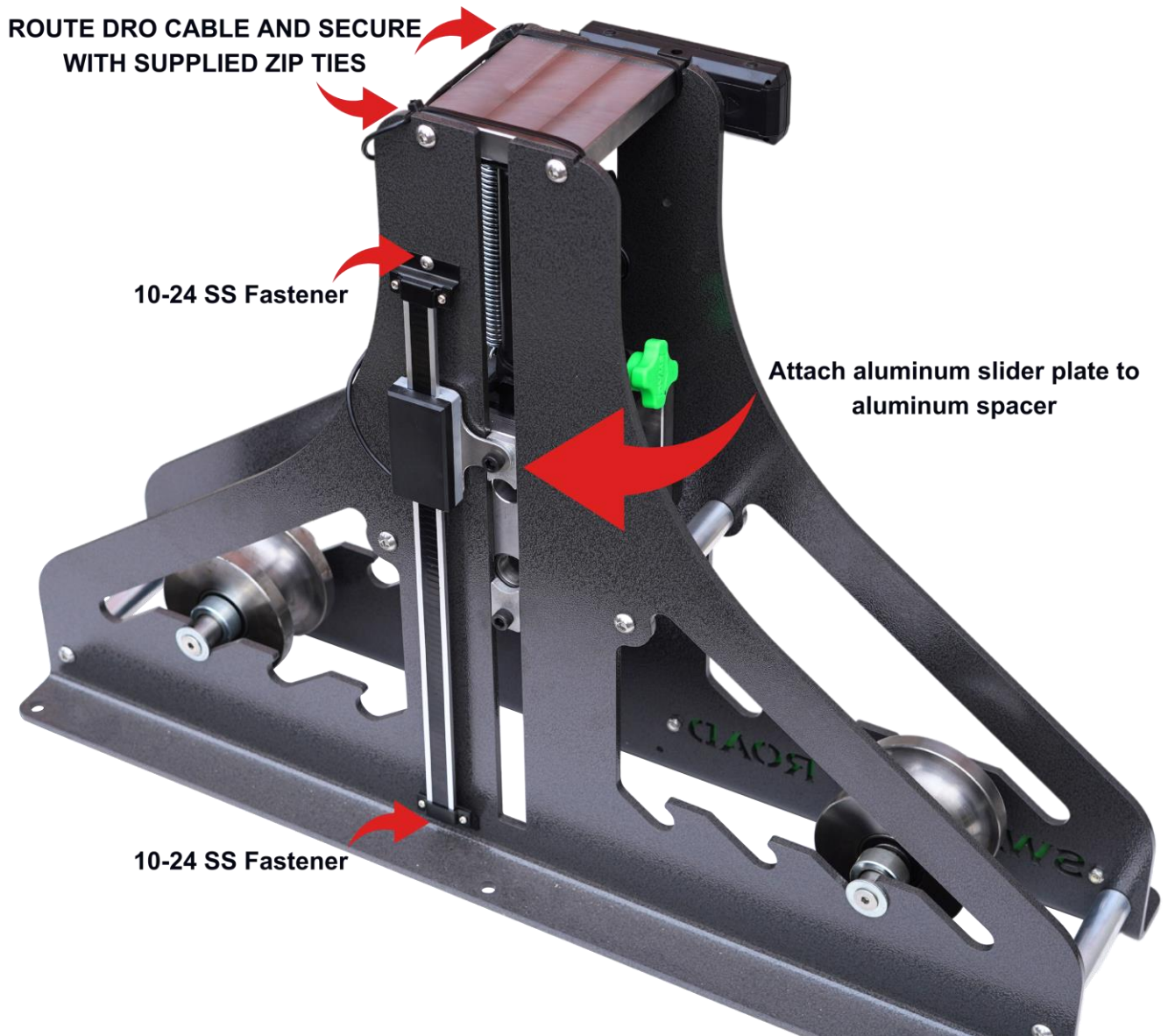


**STEP 5: DRO Installation**

Using the provided 10/24" stainless nuts and bolts, install the digital read out to the back side of the tubing roller as shown below. Route the digital read out cable over the top of the tubing roller and secure with the supplied zip ties. Remove the bolt from the top aluminum spacer and use it to attach the aluminum slider plate, being sure to add the two provided 5/16" washers between the slider plate and the aluminum spacer.

**Note:**

Tuck the excess cable behind the top section of the DRO slide to help prevent it from getting damaged. Coil the cable and hold it together with the wire twist tie.



### **STEP 6: Drive Axle Installation**

Install the key stock inside the center drive die and hold the die so the key stock is in the 6 o' clock position. Slide the drive die into the center yoke of the roller and line up the axle holes in the die and the yoke. With your other hand install the tubing roller handle assembly. The first few times it will be a tight fit. After a few uses, the machined slot in the drive axle will loosen up and make installation easier.

### **NOTE:**

Apply axle grease to the drive axle where it passes through both sides of the frame to reduce premature wear and cut down on friction.

### **STEP 7:**

Install the batteries in the DRO and double check that the excess wires from the digital read out are out of harm's way.

### **STEP 8: Final assembly and helpful tips & tricks.**

Slide the two bottle jack crank tubes together. Wrap some tape around the smaller tube until it is a press fit into the larger tube to prevent the two tubes from coming apart. This will give the user a more responsive feel when operating the bottle jack.

The digital read out does not turn off by itself. The user will need to turn this unit on and off every time. We have included a 2<sup>nd</sup> set of batteries...just in case.

Slow and steady wins the race. The key to rolling tube and making the components last is a slow and steady pace as well as ample lubricant on the center drive die. People run into trouble when they try to do too much, too fast. Pressing too hard with the bottle jack or rotating the crank handle too quickly will bend the drive axle, destroy the bearings and/or chew up the dies. **Use axle grease on the center drive die where it contacts the material to cut down on friction! WD-40 is NOT an adequate replacement for grease in this application.**

The further out you have the non-drive dies, the easier it will be on you and the machine. You only need to move the non-drive dies towards the center if you are rolling a circle that will be ~3 feet in diameter or smaller. Start on the outermost hole location every time regardless of the ultimate desired radius.

The non-drive dies only see half as much pressure as the drive die, as a result the drive die will always be the first to let you know that you are doing something wrong. If the drive die starts to get chewed up, stop immediately and use a hand-held grinder to polish up all the dies with emery cloth or a flap disk. If you fail to do so, this problem will only get worse until the dies and your material are rendered useless. Only use clean material in the tubing roller & **Use axle grease on the center drive die where it contacts the material to cut down on friction! Do NOT use WD-40.**

## SWAG TUBING ROLLER DIES AND SPECIAL NOTES:

\*When you are installing the drive die, you will first need to install the keyway into the die before sliding in the drive axle.

\*When using the tubing roller, only use new, clean materials. Failure to do so will quickly destroy the dies and material.

\* **Axle grease must be used on the OUTSIDE OF THE DIES to cut down on friction and reduce the wear on the dies! Failure to do so will quickly destroy the dies and the material you are rolling. Do not use WD-40!**

\*When rolling square material, pay special attention to the downward pressure from the bottle jack and use a much slower feed rate. Going too quickly or using too much force will cause the sides of the square tubing to expand until they are forced into the sides of the dies. This will cause excess pressure against the dies and has the potential to destroy the center drive die or fuse your material to the die rendering both items useless.

\*Use the die that matches the material you are rolling. Failure to do so has the potential to damage both the dies and your material.

\*Applying too much downward pressure on the center drive die will bend the drive axle/or destroy the roller bearings, it will also force your material to deform. Start with ~1/4 pump of the bottle jack per pass.

\*Rolling tube, unlike bending tube, is more of an art form. It will take a while to learn your machine. Go slow, especially at first. Doing too much, too fast will lead to premature wear.

\***Without a doubt, when rolling tube, slow and steady wins the race every time.**

\***There is no warranty associated with any of the dies.**

**Tired of cranking your roller by hand? Check out our Electric Drive Upgrade kits available now!**

*THANKS FOR YOUR ORDER AND BE SURE TO SEND US A FEW PICTURES OF **HULK** IN YOUR SHOP AND A FEW OF THE PROJECTS IT HAS HELPED YOU CREATE!!*

