



OPERATION MANUAL DIAMOND TAP CUTTER



*****SAVE THIS MANUAL FOR REFERENCE IN THE FUTURE*****

WARRANTY

The Diamond Tap Cutter is warranted for one year from purchase against manufacturers defect.

GENERAL SAFETY RULES

!!Failure to read and follow these instructions may result in serious injury!!

- Dress properly – Do not wear loose clothing
- Always wear the proper eye protection
- Maintain the cutter with care. Keep the cutter clean or better and safe performance.
- Never use any grease, oil, gasoline, brake fluids, or any other solvent to clean or lubricate the cutter.
- Never operate a tool under the influence of alcohol, drugs or any other medication
- Use only recommended parts and accessories listed. The use of parts and accessories not listed may result in damage or personal injury

SPECIFIC SAFETY RULES

- ALWAYS remember to thoroughly clean the pipe prior to using the chain cutter. Remove all rocks, sand, dirt, and other debris as best as possible.
- ALWAYS make sure to check the cutter for any loose or missing parts prior to use.
- ALWAYS check the size of the pipe
- ALWAYS check the size for which the chain cutter is set up for, this includes the chain and skid.
- It is recommended that while operating the cutter, it be observed by sewer inspection cameras
- NEVER test the operation of the cutter outside of a properly closed pipe.
- ALWAYS make sure the cutter is fully inside of the pipe before turning on.

SPECIFIC SAFETY RULES

- ALWAYS reel the cutter back to the manhole while it is still spinning to avoid the chain getting hung up on an offset
- NEVER pull the cutter out of the pipe with the hose reel.

ATTACHING BARREL TO CHAIN CUTTER

1. Remove the front cutting piece which is either the slide thru chain retainer or cross cutter head. This is done by loosening the set screws at the base of the slide thru or in the cross cutter head itself. Turn the cutting piece counter clockwise while using an included punch in the chain retainer ring to hold the shaft.
2. Remove chain retainer ring and spacer only leaving the turbine (piece with fins).
3. Align the hole in the barrel to that of the shaft. It should easily slide onto the shaft and should sit flush or close to it with the top of the shaft (not including the threads). A spacer in front of the turbine maybe needed to achieve the correct position
4. After the barrel is in place use the threaded cap-nut included with the barrel and thread it on to the shaft. Use a socket and tighten down the cap as tight as you can while holding the barrel.
5. Once the cap has been tightened, use a drop of Blue Loctite on the threads of each set screw and tighten those as well.

ADJUSTING THE SIZE OF THE SKID

1. Place the chain cutter on its head so that it is vertical with the hose connection pointing towards the sky.
2. Insert the included punch into one of the predetermined holes towards the rear in the adjusting spindle
3. Hold the chain cutter with one hand and use the other to turn the punch either clockwise or counter-clockwise to expand or shrink the skids.

SIZING THE FLEXIBLE GUIDE SKID

1. Obtain the exact measurement but setting the chain cutter with one skid on a flat surface and measuring from the ground to the tip.
2. Double the measurement obtained in step 1 and that is the overall measurement the skid is set at. (Ex. 3.5" would mean the skid is set up for 7").
3. When using the barrel cutter on the front of the Turbo Flex, the barrel should be about an 1/8" off the ground.
4. After reaching the desired size for the skid, tighten the green bolt on the skid.

OPERATION

Applications include: Ductile Iron, Cast Iron, Clay, Concrete, PVC

1. Very important to double check the size of the pipe to make sure the cutter is set up appropriately.
2. Connect HP hose to the rear of the chain cutter at the swivel and tighten thoroughly.
3. Carefully lower the cutter into the **DOWNSTREAM** manhole so that the cutter moves against the flow of water
4. Use a hook rod to insert the cutter into the pipe
5. Turn the water pump on once the cutter is completely inside of the sewer pipe.
6. Increase the RPM's enough to enable the cutter to move up the line to the obstruction.
7. Listen carefully as the cutter will make a high pitch squeal, this indicates the cutter is spinning
8. Once the cutter has reached the obstruction increase the pressure up to 2000.
9. Ease the cutter into the tap, **NEVER RAM IT** into the obstruction
10. As the high pitch squeal bogs down to a hissing sound the cutter will need to be brought back towards the manhole enough for it to regain its momentum and continue to cut.
11. Continue step 10 until the obstruction is cut out.

OPERATION (cont)

- 12.** Stop the water pump when the cutter is about 5 – 8 feet away from the manhole.
- 13.** Pull the remaining hose and cutter completely out of the pipe by hand. Using the hydraulics from the truck will damage the skid.

REMOVING THE BARREL

- 1.** Loosen the set screws on the cap-nut
- 2.** Hold the barrel and loosen the cap-nut with a socket
- 3.** Thread the cap-nut off of the shaft and the barrel should slide off.