KERF CUTTER

PRODUCT INSTRUCTIONS

Kerf Cutter is a handheld, electric tool to repair broken valve boxes for municipal water and street departments.

The Kerf Kutter Features:

- Easy Valve Box Repair
- No Digging Required
- 10 Minutes Start-to-Finish

Read these instructions thoroughly before using the Kerf Kutter. For more information, call HydroVerge at (952) 484-8610 or email info@HydroVerge.com. This product is sold with the understanding that the purchaser agrees to thoroughly train all operators and maintenance personnel in the correct and safe assembly, operation, and maintenance of the product and to provide adequate supervision of personnel at all times. Retain these instructions for future reference. If this product is resold or otherwise conveyed, purchaser must pass on the instructions to the new user.

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Section 1: Safety

⚠ DANGER

The incorrect use of HydroVerge equipment may cause serious injury. Read these instructions in their entirety before using any HydroVerge products.

⚠ WARNING

Use caution when operating any power tool. Read and follow the operating and safety instructions in the product manual. Always wear safety goggles and other appropriate safety items for protection.

⚠ WARNING

MAKE SURE THE REACTION HANDLE IS PULLING AWAY FROM THE OPERATOR DURING USE. Misuse could lead to loss of operator balance and potential fall injury.

The Kerf Cutter is designed to produce an intense amount of torque.

PLEASE USE EXTREME CAUTION AT ALL TIMES.

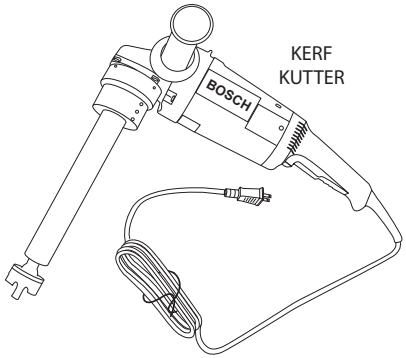
This tool has been designed to help operators repair broken valve boxes. The tool can create in excess of 450 static lb-ft of torque.

Are there Kerf Cutter specific warnings we need to add here?

Section 2: Product Specifications

Model Name	Kerf Cutter
Model Type	Corded
Width (in)	6.5”
Length (in)	26”
Height (in)	12” from output drive to top motor handle
Weight	22.5 lbs with socket and battery
Battery Capacity	Up to 20 hydrants / 10 gate valves
Battery Charge Time	65 minutes
Variable Speed	Up to 30 rpms
Torque	Up to 400 static lb-ft NOTE: This is lower then Section 1 states because this is the torque the tool starts out with. Once broken in, the tool will have less friction and more torque.

Section 3: Components

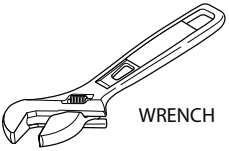


KERF
KUTTER

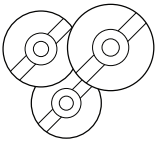
DEPTH
GAUGE

PENETRATING
OIL

STANDARD
SCREWDRIVER



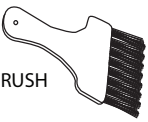
WRENCH



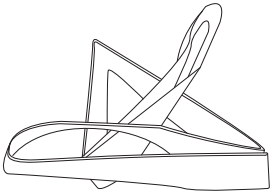
4.5", 5", and 6"
CUT OFF WHEELS

PRODUCT
INSTRUCTIONS

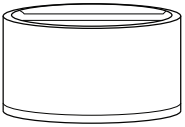
GRINDING WHEEL



BRUSH

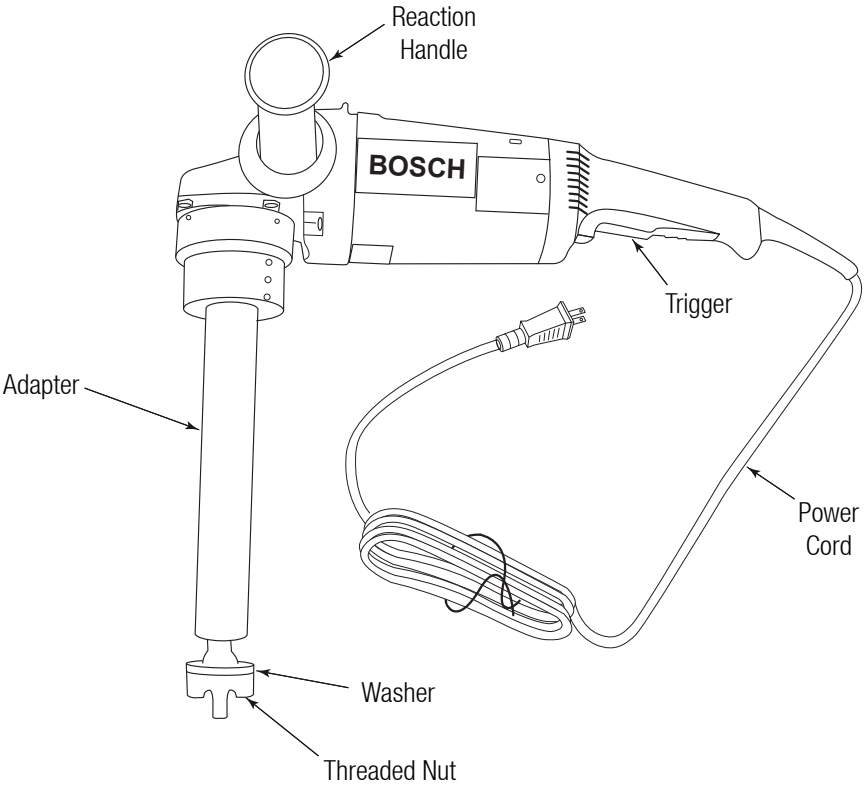


STRAP



PULLER
EXTRACTION TOOL

Section 4: Kerf Cutter Controls



Section 5: Operation

The Kerf Cutter is the latest innovation for municipal water and street departments to fix broken valve boxes. The Kerf Cutter is a handheld, electric tool with a circular blade on the end. It is inserted into the valve box and cuts off the top of the valve box. Once that is removed, a new top can be inserted and leveled with the pavement. The Kerf Cutter eliminates the need for closing busy streets for long periods of time, reducing traffic disruption and community frustration.

⚠ WARNING

MAKE SURE THE REACTION HANDLE IS PULLING AWAY FROM THE OPERATOR DURING USE. Misuse could lead to loss of operator balance and potential fall injury.

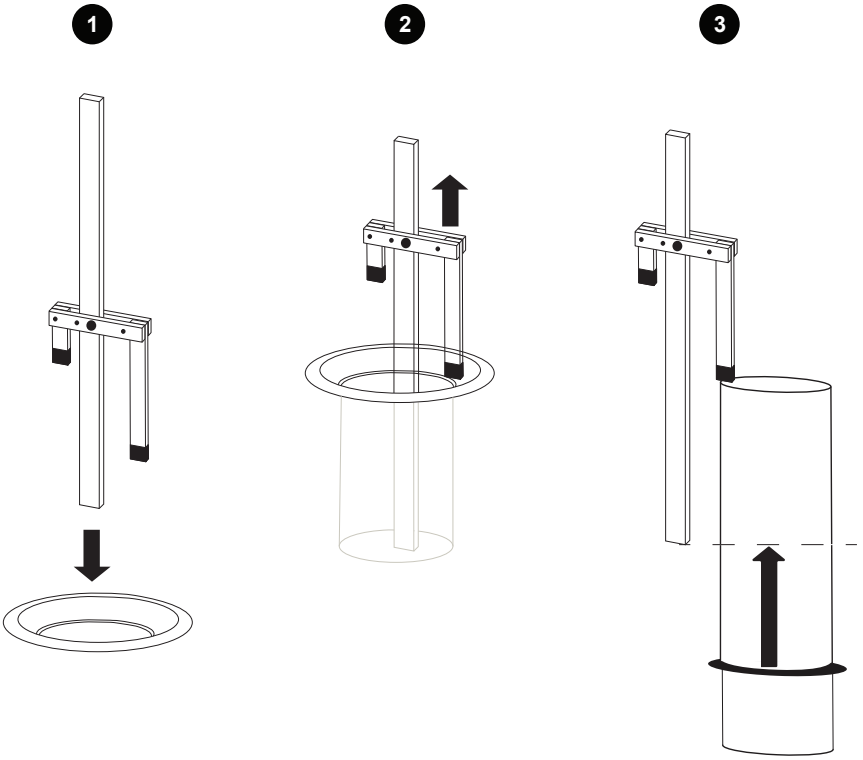
⚠ CAUTION

NEVER apply manual torque to the Kerf Cutter blade! Use only the reaction arm to apply resistance. Use only the trigger to apply power. ONLY USE MOTOR POWER TO CUT THE VALVE BOX, OTHERWISE, DAMAGE TO THE MOTOR MAY OCCUR.

Follow all Kerf Cutter procedures outlined in these Product Instructions. Failure to follow product usage instructions, including manually cutting the valve box, will invalidate the product warranty.

To watch a video on the Kerf Kutter in use, go to https://youtu.be/VB3qE5PdO9g.

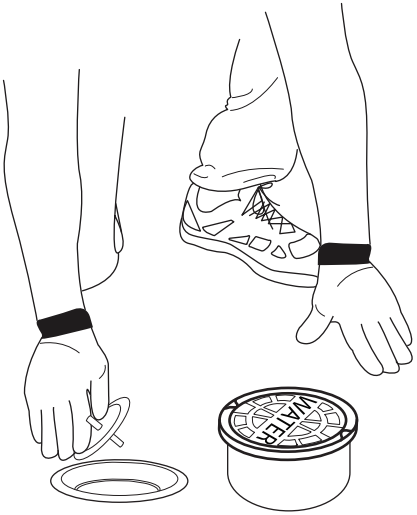
Measuring



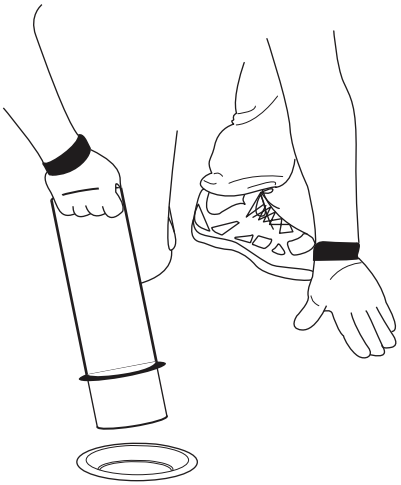
1. Place the depth gauge into the valve box with the adjustable slide on top of the interior mid-section.
2. Slide the handle until the short stub hits the surface. (The new insert will sit about 1/2” below wherever the short stub is measured.)
3. Lock the thumb screw and transfer the measurement to the basket and move the adjustment ring to the measured position.

Cutting

1. Place the cutting wheel onto the adapter, then the washer, and then the threaded nut and turn until hand-tight.



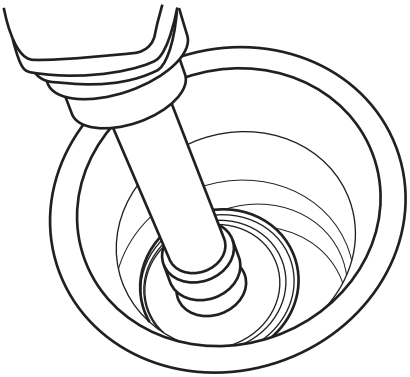
2. Once the cutting wheel is properly attached, place the basket into the hole.



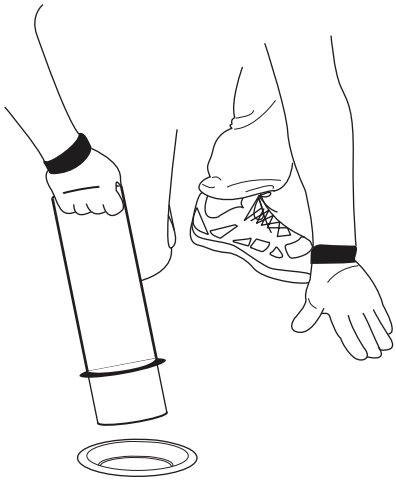
3. Insert the adapter into the spring-loaded shaft inside the basket and the Kerf Kutter onto the adapter making sure the keystone tab is aligned properly.

4. Plug in the Kerf Cutter and begin cutting the valve box by applying very little pressure and letting the tool do the work.
    - Cut the area where the blade passes over the thread of the valve box.

      NOTE: If this is not done properly you will break many blades as the cutter will want to follow the pitch of the thread making an uneven cut.
    - Make small u-shaped cuts following the path the blade has cut.
    - Once the paths connect keep cutting until you have plunged through the valve box.

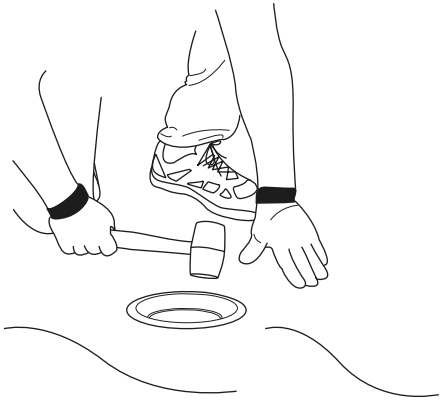


5. Remove the basket and cutting blade from the opening.

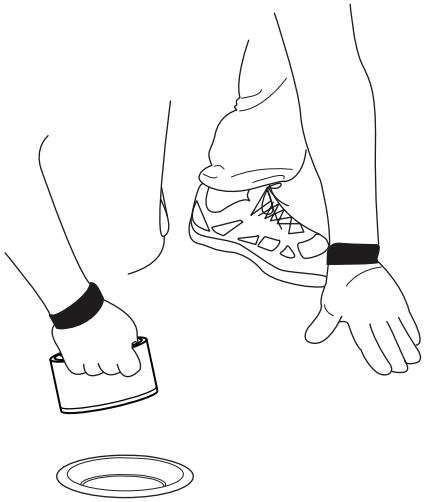


Extracting

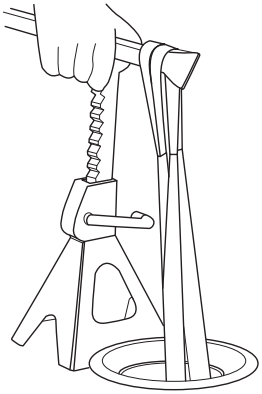
1. Once the valve box is cut completely tap the valve box with a hammer to loosen it up.



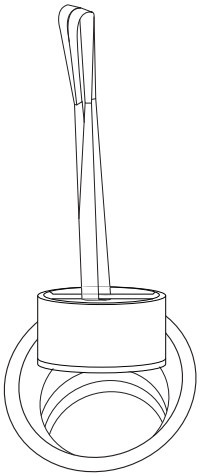
2. Thread the puller into the valve box making sure not to thread past the cut line in the valve box.
   NOTE: If no threads are visible pry the top from the exterior with a rock bar.



3. Use a pry bar and jack stand if the top does not come out by hand.



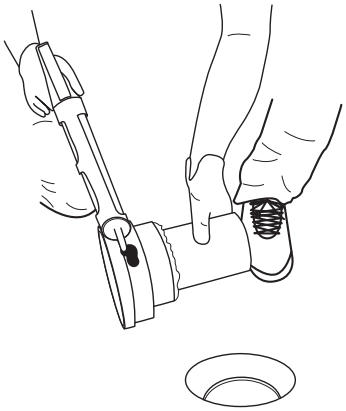
4. Lift out the old valve box.



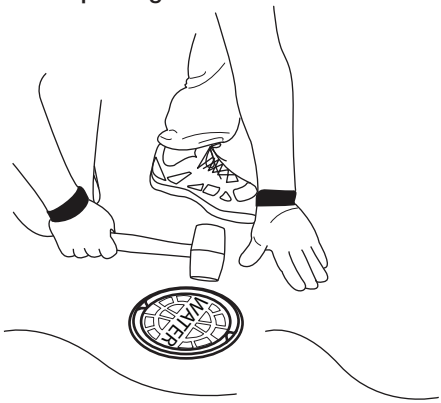
Inserting

1. Once the valve box has been cut and removed, clean up the area where you will insert the new valve box.

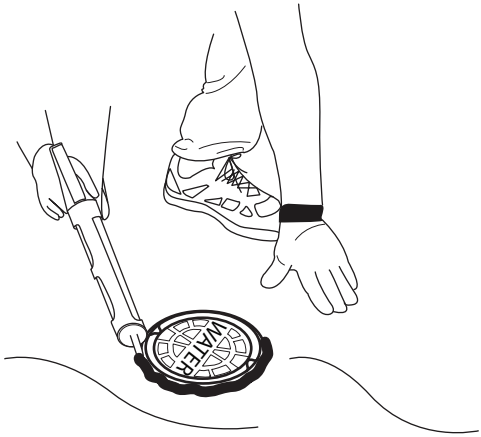
2. Try dry fitting the top into the hole. If the top does not fit properly attach grinding bit to the end of the tool and remove areas where it is binding the repair top.
3. Once the top fits, apply the gasket adhesive to the bottom of the valve box repair top to seal out debris.



4. Insert the lid onto the hole and, using a rubber mallet, seat the new valve box into the opening.



5. Apply a line of sealant around the exterior of the valve box.



Section 6: Other Products

Valve Box Repair Kit

Please verify kit contents and provide high-quality photos of individual pieces so these can be redrawn in line art format.

Operating Nut Adapter

Please verify kit contents and provide high-quality photos of individual pieces so these can be redrawn in line art format.

Section 7: Maintenance

1. Lubricate the threads and connecting parts with the lubricant included with the Valve Box Repair Kit.
2. Remove all the debris in the basket and adapter for the next use.

The Kerf Cutter has a 3-year parts and labor warranty. Ship the product to us or a local dealer with return postage paid and we will repair the tool free of charge.

Section 8: Troubleshooting

Problem	Remedy
Motor is loose and rotates freely	Tighten the lock handle nut slightly so when open it can be moved, but when closed the handle is tight.
Counter not counting	Ensure the magnet is properly located on the socket so the counter can catch each rotation.

Please call HydroVerge at 952-484-8610 at any time with questions. We are available and eager to answer your questions about the proper use of the Kerf Cutter, as well as, solve any problems you may have with the tool.

HYDROVERGE

Powerful Innovation

For the latest in Kerf Cutter product news and insights,
visit our website at www.HydroVerge.com. For more information,
call HydroVerge at (952) 484-8610 or email info@HydroVerge.com.

ACCIDENT FREE AWARD

KERF CUTTER PATENT??

Patent # 8671892