

# Soil Pipe Cutters Manual

# 206/226/246/276





Read this Operator's Manual carefully before using this tool. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.





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#### **Safety Symbols**

In this operator's manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and symbols.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

**A WARNING** WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



This symbol means read the operator's manual carefully before using the equipment. The operator's manual contains important information on the safe and proper operation of the equipment.



This symbol means always wear safety glasses with side shields or goggles when handling or using this equipment.



#### **General Safety Rules**

#### **A** WARNING

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

#### **SAVE THESE INSTRUCTIONS!**

#### **Work Area Safety**

- Keep your work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Tools can create sparks which may ignite the dust or fumes.
- Keep children and by-standers away while operating tools. Distractions can cause you to lose control.
- Keep floors dry and free of slippery materials such as oil. Slippery floors invite accidents.

#### **Personal Safety**

- Stay alert, watch what you are doing and use common sense when operating tools. Do not use tools while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

#### **Tool Use and Care**

- Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- Store idle tools out of the reach of children and do not allow persons unfamiliar with the tool or these instructions to operate the tool. Tools can be dangerous in the hands of untrained users.
- Maintain tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tool's operation. If damaged, have the tool repaired before use. Many accidents are caused by poorly maintained tools.
- Keep handles dry and clean; free from oil and grease. Allows for better control of the tool.

#### Service

 Have your tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the tool is maintained.

#### **Specific Safety Information**

#### **A** WARNING

This section contains important safety information that is specific to this tool.

Read these precautions carefully before using Soil Pipe Cutters to reduce the risk of serious personal injury.

#### **SAVE THESE INSTRUCTIONS!**

If you have any question concerning this Ridge Tool product

- Keep others out of work area while cutting. Stand clear of the pipe. Cutting can cause pieces of pipe to be thrown with considerable force. This can cause striking injuries, eye injuries, or other serious personal injury.
- Always wear Safety Glasses. Protects your eyes against dirt and other foreign objects.
- Do not exceed the recommended cutting capacity
  of the tool. Cutting pipe that is too large or the wrong
  type could overload the soil pipe cutter and cause
  tool failure and or serious personal injury. Do not extend
  the chain to cut soil pipe greater than 8" in diameter.
- Do not use handle extensions or power tools to activate the soil pipe cutter. Handle extensions (cheaters) can slip and cause serious injury. Extended handles or power tools can overload the soil pipe cutter and cause tool failure and or serious personal injury.

## **Description And Specifications Description**

RIDGID® Soil Pipe Cutters are used to cut a variety of cast iron soil pipe and can also be used on concrete and clay pipe. All RIDGID Soil Pipe Cutters use chains equipped with cutter wheels that are tightened around the pipe until the pipe breaks. The 226, 206 and 276 all use the same chain assembly, while the 246 is supplied with a larger chain. All tools come standard with enough chain to

cut pipe up to 6" nominal diameter, and with the addition of one chain extension can cut pipe up to 8" nominal diameter. See the Soil Pipe Cutter Capacity Chart for specific information on the types of material and sizes cut with each.

#### **Soil Pipe Cutter Capacity Chart**

Model				Material/Size			
226	206	276	246				
*(1)	*(1)	*(1)	*(1)	Clay pipe, 8"			
*	*	*	*	Service weight cast iron solid pipe, 8"			
*	*	*	*	No hub cast iron soil pipe, 8"			
•	•	•	•	Concrete pipe, 4" - 6"			
•	•	•	•	Clay pipe, 1½" - 6"			
			•	Class 22 water main, 4"			
			•	Extra heavy-duty cast iron soil pipe, 2" - 5"			
•	•	•	•	Service weight cast iron soil pipe, 1½" - 6"			
•	•	•	•	No hub cast iron soil pipe, 1½" - 6"			

<sup>•</sup> Standard Length Chain. \*Chain with One Chain Extension.
(1) Up to 15" Clay Pipe only can be cut with extended chain.

#### 226 In-Place Soil Pipe Cutter



Figure 1 - 226 Soil Pipe Cutter

The RIDGID 226 In-Place Soil Pipe Cutter is a compact tool (17" long) designed to cut hub and no-hub soil pipe, especially where space is limited. The handle is removable to allow use in tight spaces. The feedscrew is equipped with a hand knob for fast adjustment, and a 15" long 1/2" drive ratchet is supplied for operation. If needed, the 226 can also be operated with any 1/2" drive ratchet or 15/16" wrench. The 226 uses a unique hooking mechanism to make hooking the chain easier.

The 226 In-Place Soil Pipe Cutter is protected under various U.S. and International patents, including U.S. Patent 6,141,876.

#### 206 and 246 Soil Pipe Cutters



Figure 2 - 206/246 Soil Pipe Cutter

The RIDGID 206 and 246 Soil Pipe Cutters utilize an integral ratchet handle centered on the pipe. This is especially useful when cutting pipe in trenches, and helps keep the width of the trench to a minimum. Both use a unique hooking mechanism to make hooking the chain easier. The 206 uses the same chain as the 226 and 276, while the chain on the 246 is larger and allows it to cut 4" class 22 water main and 2" - 5" extra heavy duty soil pipe.

#### **276 Soil Pipe Cutter**



Figure 3 – 276 Soil Pipe Cutter

The RIDGID 276 Soil Pipe Cutter is designed to allow soil pipe to be cut in a single stroke. This allows repeated cuts to be made quickly.



#### **Specifications**

Catalog	Model No.	Description	Capacity		Weight		Sta.	Replmt. Chain
No.			in.	mm	lb.	kg	Pack	Cat #
68650	206	Soil Pipe Cutter No Hub	11/2-6	50-150	18	8.2	1	33670
69982	226	In-Place Soil Pipe Cutter	11/2-6	50-150	18	8.2	1	33670
32900	246	Soil Pipe Cutter	11/2-6	50-150	25	11.3	1	34575
74207	276	Soil Pipe Cutter	11/2-6	50-150	23³/4	11.7	1	33670
33665	206/226/276	Chain Extension Assy.*	-	_	1	3.5	1	_
34570	246	Chain Extension Assy.*	-	-	1	3.5	1	-
70437		226 Ratchet	_	-			1	

<sup>\*</sup> Do not use more than one chain extension except for use with clay pipe up to 15".

### Pre-Operation Inspection/Maintenance

#### **A** WARNING

Before each use, inspect and maintain your soil pipe cutter and correct any problems to reduce the risk of serious injury from striking or impact injuries and other causes and to prevent soil pipe cutter damage.

- Clean the soil pipe cutter and remove all dirt, oil, grease and debris. If needed, the chain can be cleaned with a wire brush. This aids in inspection and helps prevent the tool from slipping from your grip during use.
- 2. Inspect the soil pipe cutter for the following items:
  - · Proper assembly and completeness
  - Broken, cracked, missing, bent or binding parts
  - Excessive corrosion and wear
  - Smooth, free movement of ratchet, screws, chain and linkages
  - Presence and readability of warning labels
- 3. Inspect the chain for signs of overload or other damage. There should be no significant gaps between the plates of the chain. If there are large gaps between the links of the chain or other damage, the chain should be replaced. Check the cutter wheels for wear and damage. Worn and damaged cutter wheels increase cut force and can cause poor quality cuts.
- 4. On the 226 Soil Pipe Cutter, press the release button in the center of the ratchet head and place into the end of the feedscrew. The ratchet should lock firmly into place. This helps to prevent the ratchet from coming loose from the cutter when in use. If using a different ratchet or wrench, be aware that it could come loose during use.
- 5. If any problems are found, do not use the soil pipe cutter until corrected.
- 6. If needed, lubricate pivot points and the chain with a light lubricating oil. Wipe any excess oil off.

#### **Tool Set-Up and Operation**

#### **A** WARNING



Follow set up and operating instructions to reduce the risk of serious injury from striking or impact injuries and other causes and prevent machine damage.

Keep others out of work area while cutting. Stand clear of the pipe. Cutting can cause pieces of pipe to be thrown with considerable force. This can cause striking injuries, eye injuries, or other serious personal injury.

Always wear eye protection to protect your eyes against dirt and other foreign objects.

- Check work area for adequate lighting and a clear, level, stable place to work.
- Inspect the pipe to be cut. Determine the size and type of material. If cutting pipe that is already in service, determine the pipe contents.
- 3. Determine the correct pipe cutter for the application. Other pipe cutters can be found in the RIDGID Catalog
  - soil pipe cutters can be used for soil pipe up to a maximum of 8" diameter. See Specification Section.
- 4. Make sure that the soil pipe cutter has been properly inspected.
- 5. Prepare the pipe to be cut.
  - Take any appropriate steps required to drain the pipe and/or deal with any potential spillage.
  - Clean mud or corrosion off of the pipe. Excessive corrosion or mud can cause poor quality cuts and damage cutter wheels.
  - Make sure there is enough room to get the chain around the pipe. The 206/226 and 276 need approximately 1½" around the pipe for the chain to fit, the 246, about 2". If cutting loose pipe, to protect the cutter wheels from damage against concrete or other hard surfaces, place the pipe on short stands or wood block to get the pipe off the floor or work on a softer surface like a piece of plywood.
  - When cutting short sections of pipe, if possible, restrain the pipe to prevent it from being thrown when cut. This can be done by placing a smaller piece of pipe or lumber through the center of the pipe, or by other methods.

- 6. For all of the soil pipe cutters, the tool must be fully open and the chain snugly wrapped around the pipe before hooking the chain. If not, the wrong pin may be hooked and the cut may not be able to be completed. This can also cause the cutter to jam. If that happens, fully open the tool and move the chain to the next tighter chain pin and continue operation as described
- 7. Choose a spot to operate the cutter from. Keep in mind that when the pipe is cut, parts of it may be thrown. Make sure that the area is clear of others or objects that could be struck by pipe. Be aware that when the pipe is cut the soil pipe cutter and pipe could drop or fall.

#### 226 Set-Up and Operation

The handle of the 226 Soil Pipe Cutter can be removed for use in tight spaces. Remove the two bolts/nuts that retain the handle to the arms of the cutter and remove the handle. Re-install and firmly tighten the bolts/nuts in the arms of the cutter before use. The handle can be placed in any of four positions if needed.

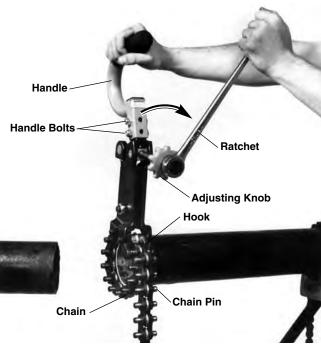


Figure 4 - Using the 226 Soil Pipe Cutter

- Grip the adjusting knob of the soil pipe cutter and fully open.
- Place the soil pipe cutter on the pipe so the cutter wheels line up with the desired cut point. Makes sure both hooks are lying on the pipe with the open side up.
- 3. Wrap the chain snugly around the pipe and place the nearest chain pin into the hooks.

- 4. Make sure that the cutter wheels are square to the pipe and at the desired location. Turn the adjusting knob to firmly tighten the chain around the pipe.
- 5. Press the release button in the center of the ratchet head and place into the end of the feedscrew. The ratchet should lock firmly into place. If using a different wrench, it may not lock in place and may come loose during operation. Make sure that the ratchet is set to tighten the feedscrew.
- 6. Assume a stable stance, and with a firm grip on the handle, tighten the feedscrew with the ratchet. Continue tightening until the pipe is cut.

#### 206/246 Set-Up and Operation

 Lift and turn the ratchet knob to the neutral position (pin out of the groove). Grip the adjusting knob of the soil pipe cutter and fully open.

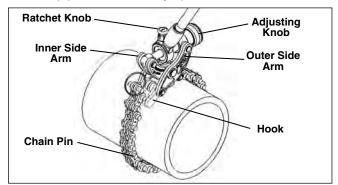


Figure 5 - 206/246 Soil Pipe Cutter

- 2. If possible, while straddling the longest section of the pipe, put the adjusting knob to your right. When cut, the short section of pipe will be away from you.
- Place the soil pipe cutter on the pipe so that the cutter wheels are lined up with the desired cut point. Makes sure both hooks are lying on the pipe with the open side up.
- 4. Wrap the chain snugly around the pipe and place the nearest chain pin into the hooks.
- 5. Make sure that the cutter wheels are square to the pipe and at the desired location. Turn the adjusting knob to firmly tighten the chain around the pipe. DO NOT try to use the adjusting knob to cut the pipe – this can damage the soil pipe cutter.
- Turn the ratchet knob in the close direction so that the arrow points to the word CUT on the ratchet housing.
- 7. Assume a stable stance, and with a firm grip on the handle, move the handle toward the pipe to tighten the chain. Continue ratcheting and tightening until the pipe is cut.



#### **IMPORTANT**

If the ratcheting action stops before the pipe is cut, the tool has been jammed. DO NOT FORCE the handle or adjusting knob. Lift and turn the ratchet knob so that the arrow points to the word OPEN on the ratchet housing. Hold the ratchet knob in this position while moving the handle in that direction to unjam the tool. Fully open the tool and move the chain to the next tighter chain pin and continue operation as described.

#### 276 Set-Up and Operation

Once the 276 Soil Pipe Cutter is adjusted for a given size of pipe, it usually requires no further adjustment for subsequent cuts.



Figure 6 – 276 Soil Pipe Cutter

- Place the jaws of the tool next to and square to the pipe, with the chain under or around the pipe. If cutting on ground, the adjusting screw should be up.
- 2. Open the handles to 90 degrees and support the upper handle with one hand.
- With the other hand, pull the chain tight around the pipe and insert the closest chain pin into the hook area of the jaw. Make sure that the excess chain is clear of the mechanism.
- 4. Make sure the chain is square to the pipe and in the proper location, and carefully close the jaws of the soil pipe making sure that the chain pin stays hooked. Using the adjusting screw, adjust so that the handles are approximately 45 to 70 degrees apart for cast iron pipe and 20 to 45 degrees apart for clay or concrete pipe. If you cannot get a proper angle using the adjusting screw, the chain must be disengaged from the hooks, the jaws opened further with the adjusting screw, and the chain hooked to the next pin.
- Assume a stable stance. If working with one handle on the ground, place one foot on the flat of the lower han-

dle. With a firm grip on the handle, exert even downward force until the pipe is cut.

#### **Cutting Tips**

Once the appropriate pin for a given size pipe has been determined; marking the pin can save time setting up subsequent cuts of the same size.

For cleaner cuts, instead of tightening the chain until the pipe is cut, tighten the chain enough to mark the pipe. Then loosen the chain and slightly rotate the pipe or the tool and make another set of marks. Do this several times to create marks all the way around the pipe, then tighten the chain and break the pipe.

When carrying your soil pipe cutter, do not drag the chain. This can wear and damage the cutter wheels, increasing cut force and cause poor cut quality.

### Lengthening Your Soil Pipe Cutter Chain

A WARNING Do not exceed the recommended cutting capacity of the tool. Cutting pipe that is too large or the wrong type could overload the soil pipe cutter and cause tool failure and or serious personal injury.

All RIDGID Soil Pipe Cutters come equipped with enough chain to cut 6" pipe. The addition of one Chain Extension Assembly (see specification table for catalog information) will increase your chain length enough to allow 8" soil pipe to be cut. If you are cutting clay pipe ONLY, you can extend your chain to allow up to 15" clay pipe to be cut. Do not cut types or sizes of pipes outside the range shown in the cutter capacity chart, as that could overload and damage the cutter or cause injury.

### To Add A Chain Extension Assembly To Your Chain

- 1. Remove the ring from the end of the chain.
- Place the outside links of the extension over the inside links of the chain, and place the cutter wheel between the inside links.
- Place the area of the chain to be linked in a press and properly support. Align the holes in the links and cutter wheel and place the pin in the hole.
- 4. Carefully press the pin in. Make sure to center the pin relative to the chain links.
- 5. Reattach the ring to the end of the extended chain.