PC3110 Cut and Mark Tool



WARNING



WARNING



Failure to follow instructions and warnings could result in death, serious personal injury, property damage, and/or product damage.

- Before operating or servicing any pipe preparation tools, read all instructions in this manual and all warning labels on the tool.
- Wear safety glasses, hardhat, foot protection, and hearing protection while working around this tool.
- Save this operating and maintenance manual in a place accessible to all operators of the tool.

If you need additional copies of any literature, or if you have questions concerning the safe and proper operation of this tool, contact Victaulic, P.O. Box 31, Easton, PA 18044-0031, Phone: 1-800-PICK VIC, E-Mail: pickvic@victaulic.com.

Original Instructions



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HAZARD IDENTIFICATION

Definitions for identifying the various hazard levels are provided below.



This safety alert symbol indicates important safety messages. When you see this symbol, be alert to the possibility of personal injury.

Carefully read and fully understand the message that follows.

DANGER

 The use of the word "DANGER" identifies an immediate hazard with a likelihood of death or serious personal injury if instructions, including recommended precautions, are not followed.

WARNING

 The use of the word "WARNING" identifies the presence of hazards or unsafe practices that could result in death or serious personal injury if instructions, including recommended precautions, are not followed.

CAUTION

 The use of the word "CAUTION" identifies possible hazards or unsafe practices that could result in personal injury and product or property damage if instructions, including recommended precautions, are not followed.

NOTICE

 The use of the word "NOTICE" identifies special instructions that are important but not related to hazards.

OPERATOR SAFETY INSTRUCTIONS

The PC3110 Cut and Mark Tool is designed to be used, in conjunction with a power drive, for the sole purpose of preparing plain-end pipe for joining. These instructions, in addition to the instructions provided by the power drive manufacturer, shall be read and understood by each operator PRIOR to working with the tool. These instructions describe safe operation of the tool, including set up and maintenance. Each operator shall become familiar with the tool's operations, applications, and limitations. Particular care shall be given to reading and understanding the dangers, warnings, and cautions described throughout these operating instructions.

Use of this tool requires dexterity and mechanical skills, as well as sound safety habits. Although these tools are designed and manufactured for safe, dependable operation, it is difficult to anticipate all combinations of circumstances that could result in an accident. The following instructions are recommended for safe operation of this tool. The operator is cautioned to always practice "safety first" during each phase of use, including set up and maintenance. It is the responsibility of the lessee or user of this tool to ensure that all operators read this manual and fully understand the operation of this tool.

Store this manual in a clean, dry area where it is always readily available. Additional copies of this manual are available upon request through Victaulic, or can be downloaded at victaulic.com.

DANGER

1. Avoid using the tool in potentially dangerous environments. Do not expose the tool to rain, and do not use the tool in damp or wet locations. Do not use the tool on sloped or uneven surfaces. Keep the work area well lit. Allow sufficient space to operate the tool properly.

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- Ground the power drive to protect the operator from electric shock. Verify that the power drive is connected to an internally grounded electrical source.
- 3. Disconnect the power cord from the electrical source before servicing the tool. Only authorized personnel shall perform maintenance on the tool. Always disconnect the power cord from the electrical source before servicing or adjusting the tool.

A WARNING

- Prevent back injury. Always use proper lifting techniques when handling tool components.
- 2. Wear proper apparel. Do not wear loose clothing, gloves, jewelry, or anything that can become entangled in moving parts.
- Wear protective items when working with tools. Always wear safety glasses, hardhat, and foot protection.
- Keep hands and tools away from the power drive chuck and carriage edges during operation. Rotation of the power drive can pinch or entangle fingers and hands.
- Do not reach inside pipe ends during tool operation. Pipe edges can be sharp and can snag hands and shirt sleeves.
- 6. Operate the tool only with a safety foot switch. The power drive shall be operated with a safety foot switch that is located for easy operator access. Never reach across moving parts.
- Do not over-reach. Maintain proper balance at all times. Verify that the safety foot switch is easily accessible to the operator.
- Do not make any modifications to the tool. Do not remove any safety guarding or any components that would affect tool performance.

A CAUTION

- The PC3110 tool is designed ONLY for preparing pipe sizes, materials, and wall thicknesses as designated.
- 2. Inspect the equipment. Before using the tool, check moveable parts for obstructions. Verify that tool components are installed and adjusted in accordance with setup instructions. Verify that tool components are stable and secure.
- **3. Stay alert.** Do not operate the tool if you are drowsy from medication or fatigue.
- 4. Keep visitors, trainees, and observers away from the immediate work area. All visitors shall be kept a safe distance from the equipment at all times.
- 5. Keep work areas clean. Keep the work area around the tool clear of any obstructions that could limit movement of the operator. Clean up any spills on the floor to prevent slips or falls.
- Secure the work, tool, and accessories.
 Verify that the tool is stable. Refer to the "Tool Setup" section.
- **7. Support the work.** Support long pipe lengths with a pipe stand.
- 8. Do not force the tool. Do not force the tool or accessories to perform any functions beyond the capabilities described in these instructions. Do not overload the tool.
- Maintain tool with care. Keep the tool clean to ensure proper and safe performance. Follow the instructions for matching and lubricating tool components, if applicable.
- 10. Use only Victaulic replacement parts and accessories. Use of any other parts may result in a voided warranty, improper operation, and hazardous situations. Refer to the "Parts Ordering Information" section.
- **11. Do not remove any labels from the tool.** Replace any damaged or worn labels.

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INTRODUCTION

NOTICE

- Drawings and/or pictures in this manual may be exaggerated for clarity.
- The tool, along with this operating and maintenance instructions manual, contains trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic Company.

The PC3110 is a portable tool used in conjunction with a power drive for preparing plain-end pipe to be joined with Victaulic QuickVic[™] SD Installation-Ready[™] products. The PC3110 is designed to cut, mark, and chamfer Schedules 5-80 carbon steel pipe (150 Brinell Hardness Number [BHN] maximum) and Schedule 40 aluminum (6061-T6) pipe in $\frac{1}{2}$ – 2-inch sizes.



 The PC3110 shall be used ONLY for preparing pipe with specifications that fall within the designated parameters.

Failure to follow this instruction could overload the tool, resulting in reduced tool life, tool damage, or personal injury.

RECEIVING THE TOOL

The PC3110 is packed individually in a cardboard box. Upon receipt, verify that all necessary parts are included. If any parts are missing, contact Victaulic.

CONTAINER CONTENTS



Qty.	Description		
1	PC3110 Cut and Mark Tool		
1	Hinge Pin		
5	Replacement Cutting Wheels		
2	Operating and Maintenance Instructions Manual		

RETURNING THE TOOL

Prepare the PC3110 for shipment as received. Contact Victaulic with questions.

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POWER REQUIREMENTS

DANGER

- To reduce the risk of electric shock, check the electrical source for proper grounding.
- Before performing any maintenance, disconnect the power drive's power cord from the electrical source.

Failure to follow these instructions could result in death or serious personal injury.

POWER DRIVE REQUIREMENTS

The PC3110 is designed for operation with a power drive. Read and understand the operation of the power drive by referring to the manual provided by the manufacturer.

Power shall be supplied to the drive motor through a safety foot switch to ensure safe operation. Verify that the power drive is grounded properly in accordance with Article 250 of the National Electrical Code and all applicable local electrical codes.

If an extension cord is required, refer to the "Extension Cord Requirements" section that follows for cord sizes.

EXTENSION CORD REQUIREMENTS

When pre-wired outlets are not available and an extension cord shall be used, it is important to use the proper cord size (i.e. Conductor Size American Wire Gauge). Cord size selection is based upon power drive rating (amps) and cord length (feet). Use of a cord size (gauge) thinner than required will cause significant voltage drop at the drive motor while the power drive is operating. Voltage drops may cause damage to the drive motor and can result in improper power drive operation. **NOTE:** It is acceptable to use a cord size that is thicker than required.

The required cord sizes for cord lengths up to and including 100 ft/31 m are listed in the table below. Use of extension cords longer than 100 ft/31 m shall be avoided.

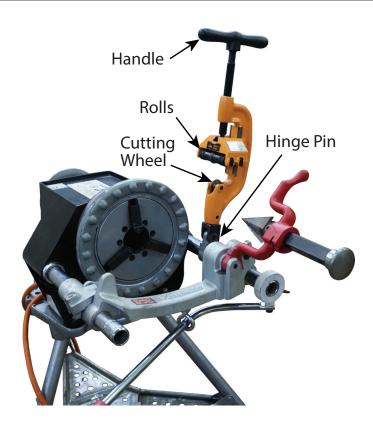
Drive Motor	Cord Lengths			
Rating	feet/meters			
volts/amps	25	50	100	
	8	15	31	
115 15	12 gauge	12 gauge	10 gauge	

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TOOL NOMENCLATURE

NOTICE

- . Drawings and/or pictures in this manual may be exaggerated for clarity.
- The tool, along with this operating and maintenance instructions manual, contains trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic.



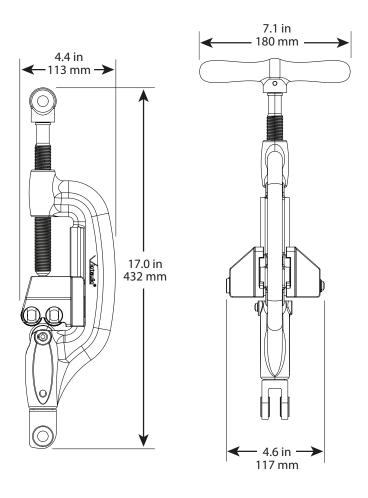
IMPORTANT INFORMATION LABELS PROVIDED ON THE TOOL





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TOOL DIMENSIONS AND SPECIFICATIONS



PC3110 weight is 10.3 pounds/4.7 kilograms. This weight applies only to the assembly depicted in the drawings above.

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PIPE SETUP

For proper PC3110 operation and production of pipe ends that are within Victaulic specifications, the following instructions shall be followed.



- 1. Pipe shall be square cut to within 0.030 inch/ 0.8 mm ("S" dimension shown above). NOTE: If a roller pipe cutter is used, the outside diameter "OD" of the pipe shall be measured to verify that it is still within the specifications listed on page 24.
- 2. Raised external weld beads, seams, and burrs shall be ground flush with the pipe surface 2 inches/50 mm back from the pipe ends.
- **3.** All coarse scale, dirt, and other foreign material shall be removed from the interior and exterior surfaces of the pipe ends.

CAUTION

 For maximum cutting wheel and knurled roll life, remove foreign material from the interior and exterior surfaces of the pipe ends.

Failure to follow this instruction could result in bad pipe preparation, reduced tool life, damage to the tool, or personal injury.

4. Place pipe stands at locations appropriate for the length of pipe to be cut.

NOTICE

- The pipe shall extend a minimum of 5 inches/127 mm from the front of the chuck for proper PC3110 operation.
- When cutting pipe long enough to extend into the rear chuck of the power drive, tighten the rear chuck to center the pipe length.
- When cutting pipe 3 feet/0.9 meters or longer, a pipe stand shall be used to support the pipe.



5. Insert the pipe into the power drive and tighten the chuck at the proper pipe length.

While holding the pipe with one hand, use the other hand to firmly pull the power drive hand wheel in a counterclockwise motion until the chuck securely grips the pipe.

Keep foot away from safety foot switch until pipe setup is complete. Do not engage power drive until both hands are clear.

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POWER DRIVE SETUP



- 1. Plug the power drive cord into a safety foot switch, as shown above. Refer to the power drive manufacturer's operating manual for additional information.
- 2. Place the safety foot switch on the same side as the power drive switch, with adequate clearance for ease of use and to avoid a tripping hazard.

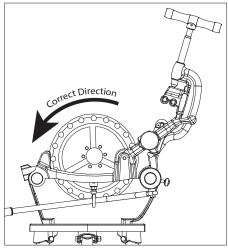
WARNING

 The power drive shall be operated with a safety foot switch.

Operating the power drive without a safety foot switch could result in serious personal injury.

3. Turn the switch on the side of the power drive to create counterclockwise rotation.





4. Depress the safety foot switch. Verify that the pipe rotates counterclockwise when viewed from the front power drive chuck. Remove foot from the safety foot switch.

If the pipe rotates clockwise when viewed from the front power drive chuck, return to the previous step and verify the direction of the power drive.

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REV_C

TOOL SETUP

▲ WARNING



 Always use proper lifting techniques when handling any tool components.

Failure to follow this instruction could result in personal injury.



1. Place the PC3110 over the bracket on the carriage assembly.



2. Insert the hinge pin into the bracket slot.



3. Using a hammer or mallet, tap the hinge pin into the bracket slot until it is secure. Do not force the hinge pin farther into the slot than is necessary to secure the PC3110.

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CUTTING OPERATION

DANGER



- To reduce the risk of electric shock, check the electrical source for proper grounding.
- Before operating the power drive, review the "Operator Safety Instructions" section of this manual.

Failure to follow these instructions could result in death or serious personal injury.

A CAUTION

 The PC3110 shall be used ONLY for preparing pipe as designated.

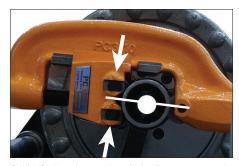
Failure to follow this instruction could result in reduced tool life, damage to the tool, or personal injury.

Before proceeding, Verify that all instructions in the previous sections of this manual have been followed.

Prepare for pipe ends and cut lengths of pipe to fall during the cutting operation. Verify that these cuttings do not interfere with operator movement.



1. Using the handle, bring the PC3110 down over the pipe end.



2. Verify that the two knurled rolls are centered on the pipe.

CAUTION

 DO NOT exceed the feed rate listed below for the applicable pipe schedule.

Failure to follow this instruction will cause an unacceptable pipe end condition, improper product installation, and joint leakage.



3a. Depress the safety foot switch to start the power drive.

- FOR SCHEDULE 5 PIPE: Turn the handle
 of the PC3110 in a steady motion at a feed
 rate of a quarter turn per pipe revolution.
 DO NOT exceed a feed rate of a quarter
 turn per pipe revolution.
- FOR ALL OTHER PIPE SCHEDULES:
 Turn the handle of the PC3110 in a steady motion at a feed rate of a half turn per pipe revolution. DO NOT exceed a feed rate of a half turn per pipe revolution.

3b. When the pipe end is cut and falls off, remove foot from the safety foot switch.

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4. Using the handle, lift the PC3110 back to its storage position.



5. Inspect the finished pipe end. Verify that the edge is smooth and free of burrs around the entire outside diameter "OD" of the pipe. Follow the "Additional Pipe Preparation Requirements" section.

TOOL STORAGE

If the PC3110 will be stored on the carriage assembly when not in use, it can be rotated to provide additional room for alternate carriage accessories.



1. To turn the PC3110 for carriage storage, lift the body of the PC3110 away from the shaft.



2. Twist the body of the PC3110 90 degrees counterclockwise so that the knurled rolls face the front of the carriage, then lower the body of the PC3110 back down towards the shaft.

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ADDITIONAL PIPE PREPARATION REQUIREMENTS



- . Read and understand all instructions before attempting to install any Victaulic products.
- . Wear safety glasses, hardhat, and foot protection.
- Wear tight-fitting, cut-resistant gloves when preparing pipe for use with Victaulic[®] QuickVic[™] SD Installation-Ready[™] System Products.

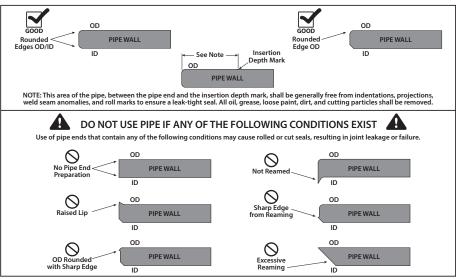
Failure to follow these instructions could result in serious personal injury and property damage.

 Burrs and sharp edges shall be removed from the pipe ends in accordance with the instructions listed in this section.

Failure to remove burrs and sharp edges from the pipe ends will result in joint leakage or failure and property damage.

INTRODUCTION

Regardless of the method chosen for cutting the pipe to length, there are two methods to prepare pipe ends for use with Victaulic QuickVic SD Installation-Ready System Products: power drive pipe preparation method and manual pipe preparation method. The end result shall comply with the "GOOD" pipe end images shown below. **NOTE:** If a roller pipe cutter is used, the outside diameter "OD" of the pipe shall be measured to verify that it is still within the specifications listed on page 20.



OD = Outside Diameter of Pipe End ID = Inside Diameter of Pipe End

MAINTENANCE



 Before performing any maintenance, disconnect the power drive's power cord from

the electrical source.

DANGER

Failure to follow this instruction could result in death or serious personal injury.

This section provides information about keeping the PC3110 in proper operating condition. Replacement parts shall be ordered from Victaulic to ensure proper and safe operation of the PC3110. Refer the "Accessories" section for replacement part kits.

The PC3110 shall be cleaned after use to remove dust and debris from all components. Pay particular attention to the knurled rolls, where debris can build up and interfere with pipe marking. If any debris is visible on the knurled rolls, clear away the material with a wire brush.

When pipe cut-off becomes difficult, or when the knurling is not clearly defined and is not consistent around the entire outside diameter "OD" of the pipe, refer to the following sections for replacing the cutting wheel and/or knurled rolls

CUTTING WHEEL REPLACEMENT

NOTE: A cutting wheel kit can be ordered, which includes a replacement cutting wheel and cutting wheel shaft, or a set of five spare cutting wheels (without new cutting wheel shaft) can be ordered. Refer to the "Accessories" section for additional information.





1. Using a hammer and punch, tap the cutting wheel shaft out of the tool body. Remove and discard the worn-out cutting wheel.



2. Install the new cutting wheel and insert the cutting wheel shaft (use the new cutting wheel shaft if the cutting wheel kit was ordered).



3. Tap the cutting wheel shaft into the tool body to secure the new cutting wheel.

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CHAMFERING ROLLS REPLACEMENT

NOTE: A chamfering rolls kit can be ordered, which includes two replacement rolls and roll shafts. Refer to the "Accessories" section for additional information.





1. Using a hammer and punch, tap each roll shaft out of the tool body. Remove and discard each worn-out roll and roll shaft.

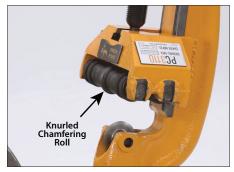


2. Install the new flattening roll at the back of the tool body, as shown, then insert the new flattening roll shaft from the kit. Tap the new flattening roll shaft into the tool body to secure the new flattening roll.





3. Install the new chamfering roll at the front of the tool body, as shown, then insert the new chamfering roll shaft from the kit. Tap the new chamfering roll shaft into the tool body to secure the new chamfering roll.



4. Always verify that the chamfering roll is installed at the front of the tool body, as shown above.

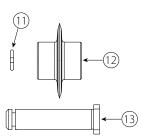
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PARTS ORDERING INFORMATION

When ordering parts, the following information is required for Victaulic to process the order and send the correct part(s). Parts can be ordered by calling 1-800-PICK-VIC.

- 1. Tool Model Number
- 2. Tool Serial Number
- **3.** Quantity, Item Number, Part Number, and Description
- **4.** Where to send the part(s) Company Name and Address
- **5.** To whose attention to send the part(s) Person's Name
- 6. Purchase Order Number
- 7. Billing Address

CUTTING WHEEL KIT

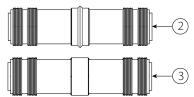


Item No.	Part No.	Qty.	Description
11		1	C Clip
12	R000311CWL	1	Cutting Wheel
13		1	Cutting Wheel Shaft

ACCESSORIES

CHAMFERING ROLLS KIT







Item No.	Part No.	Qty.	Description
1		2	C Clip
2	Doggodd CDI	1	Chamfering Roll Assembly
3	R000311CRL	1	Flattening Roll Assembly
4		2	Roll Shaft

SPARE CUTTING WHEELS

Iter No	-	Qty.	Description
1 40	R000311WHI	l -	Cutting Wheel

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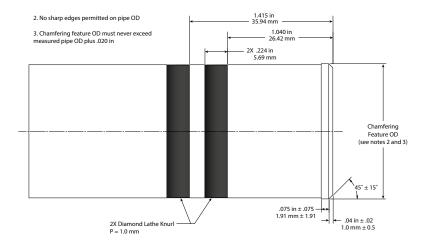
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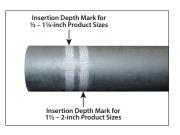
TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION	
Pipe stops rotating during pipe	Pipe is slipping in the power drive chuck.	Securely tighten the power drive chuck.	
preparation.	The circuit breaker/GFI has tripped or a fuse has blown out on the electrical circuit that supplies the power drive.	Test/reset the jobsite GFI/breaker, or replace the fuse. Upon restoration of power, resume pipe preparation.	
	Facility has lost power.	Upon restoration of facility power, resume pipe preparation.	
PC3110 will not cut pipe.	PC3110 is not fully pushed onto the pipe.	Push the PC3110 all the way onto the pipe.	
	Pipe does not extend far enough out of the chuck.	Rechuck pipe so that the end to be prepared extends a minimum of 5 inches/127 mm past the edge of the chuck.	
	Knurled rolls are not centered on pipe.	Center knurled rolls on the pipe.	
	Cutting wheel is dull.	Replace cutting wheel.	
PC3110 will not chamfer pipe.	Knurled rolls are installed backwards.	Remove and reinstall knurled rolls. See the "Knurled Rolls Replacement" section.	
	Knurled rolls are worn.	Replace knurled rolls.	
Pipe markings are not clearly	Knurling on rolls is filled with debris.	Clean knurling surface with a wire brush.	
defined.	Knurled rolls are worn.	Replace knurled rolls.	

In the event of malfunction outside the scope of the troubleshooting section, contact Victaulic for assistance.

KNURLING/MARKING SPECIFICATIONS





The mark closest to the pipe end indicates the required insertion depth for $\frac{1}{2} - \frac{1}{4}$ -inch product sizes, as shown.

The second mark indicates the required insertion depth for $1\frac{1}{2}-2$ -inch product sizes, as shown.

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ALLOWABLE PIPE OUTSIDE DIAMETER DIMENSIONS FOR QUICKVIC™ SD INSTALLATION-READY™ PRODUCTS

		Allowable Pipe Outside Diameter Dimensions inches/mm				
Nominal Diameter inches	Actual Pipe Outside Diameter inches/mm	Maximum for Carbon Steel and Aluminum Pipe	Minimum for Carbon Steel Pipe	Minimum for Aluminum Pipe		
1/2	0.840	0.855	0.825	0.809		
	21.3	21.7	21.0	20.5		
3/4	1.050	1.065	1.035	1.019		
	26.9	27.1	26.3	25.9		
1	1.315	1.330	1.300	1.284		
	33.7	33.8	33.0	32.6		
1 1/4	1.660	1.675	1.645	1.629		
	42.4	42.5	41.8	41.4		
1 ½	1.900	1.915	1.885	1.869		
	48.3	48.6	47.9	47.5		
2	2.375	2.406	2.344	2.344		
	60.3	61.1	59.5	59.5		

EC DECLARATION OF INCORPORATION

In Accordance with the Machinery Directive 2006/42/EC

Victaulic Company, headquartered at 4901 Kesslersville Road, Easton, PA 18040, USA, hereby declares that the machinery listed below complies with the essential safety requirements of the Machinery Directive, 2006/42/EC.

Product Model: PC3110

Serial No.: Refer to Machinery Nameplate

Product Description: Portable pipe cutting and marking tool

Conformity Assessment: 2006/42/EC, Annex I

Technical Documentation: The relevant technical documentation prepared in

accordance with Annex VII (B) of the Machinery Directive 2006/42/EC, will be made available upon request to the

governing authorities.

Compatible Power Drives: When installed with the following power drive unit,

having an appropriate EC Declaration of Conformity in accordance with Annex II (A) of the Directive 2006/42/EC, the PC3110 model listed above may be

commissioned for the full intended purpose:

Ridgid 300

Authorized Representative: Victaulic Company

c/o Victaulic Europe BVBA

Prijkelstraat 36 9810, Nazareth Belgium

Signed for and on behalf of Victaulic Company,

Mr. Len R. Swantek

Director – Global Regulatory Compliance Machinery Manufacturer Representative

LIR. Al

Place of Issue: Easton, Pennsylvania, USA

Date of Issue: April 24, 2018

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PC3110 Cut and Mark Tool

