VAPS224

PIPE STAND

WARNING

⚠ WARNING

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

- **Before operating or servicing the VAPS224 Pipe Stand, 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.**

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.

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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.

⚠ 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 VAPS224 is designed only for supporting pipe to be roll grooved. Use of this pipe stand requires dexterity and mechanical skills, as well as sound safety habits. Although this pipe stand is manufactured for safe, dependable operation, it is impossible to anticipate the combinations of circumstances that could result in an accident. The following instructions are recommended for safe operation of this pipe stand. The operator is cautioned to always practice "safety first" during each phase of use, including setup and maintenance. It is the responsibility of the owner, lessee, or user of this pipe stand to ensure that all operators read this manual and are fully trained to operate this pipe stand.

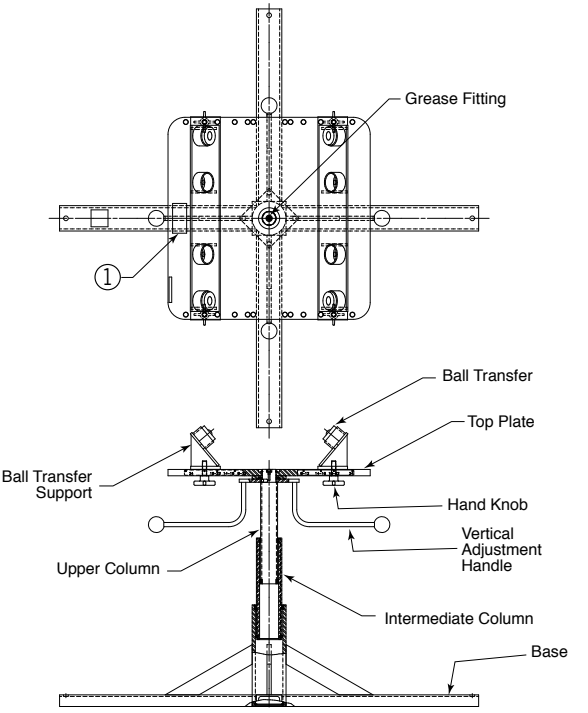
Read this manual before operating or servicing this pipe stand. Become familiar with the pipe stand's operations, applications, and limitations. Be particularly aware of its specific hazards. Store this manual in a clean area where it is always readily available.

1. **Avoid dangerous environments.** Keep work area well lit. Allow sufficient space to operate tool and accessories properly and for others to pass safely.
2. **This pipe stand is designed ONLY for supporting pipe to be roll grooved for pipe sizes, materials, and wall thicknesses listed in the "Pipe Stand Ratings" section.**
3. **Inspect the equipment.** Before using the pipe stand, check all moveable parts for any obstructions. Make sure all pipe stand components are installed and secured properly.
4. **Wear proper apparel.** Do not wear loose clothing, jewelry, or anything that can become entangled in moving parts.
5. **Wear protective items when working with tools.** Always wear safety glasses, hardhat, foot protection, and hearing protection when working with tools.
6. **Stay alert.** Do not operate the tool if you are drowsy from medication or fatigue. Avoid horseplay around the equipment.
7. **Keep visitors away from the immediate work area.** All visitors should be kept a safe distance from the equipment at all times. **When using the pipe stand at elevated locations, the area below must remain clear of other personnel.**
8. **Keep work areas clean.** Keep the work area around the pipe stand clear of any obstructions that could limit the movement of the operator. Clean up any oil or other spills.
9. **Do not overreach.** Maintain proper footing and balance at all times. Do not reach across the tool or pipe.
10. **Keep hands and tools away from grooving rolls during the grooving operation.** Grooving rolls can crush or cut fingers and hands.
11. **Do not reach inside the pipe end during tool operation.**
12. **Do not force the tool.** Do not force the tool or accessories to perform any functions beyond their capabilities. Do not overload the tool.
13. **Maintain tools with care.** Keep tools clean at all times to ensure proper and safe performance. Follow the instructions for lubricating tool components.
14. **When tools are not is use, store them in a dry, secure place.**
15. **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.
16. **Do not remove any labels from the pipe stand.** Replace any damaged or worn labels.

TOOL NOMENCLATURE

NOTICE

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



①

⚠ WARNING

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

- Before operating or servicing any pipe preparation tools, read all instructions in the Operating and Maintenance Instructions Manual and all labels on the tool.
- Wear safety glasses, hardhat, foot protection, and hearing protection when working around tools.

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

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INTRODUCTION

NOTICE

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⚠ CAUTION

- **This pipe stand must be used ONLY for supporting pipe designated in the "Pipe Stand Ratings" section of this manual.**
- **This pipe stand is not designed to support fittings for roll grooving.**

Failure to follow these instructions could cause damage to the pipe stand

The Victaulic VAPS224 pipe stand is designed specifically for supporting pipe to be grooved with Victaulic Roll Grooving Tools. The VAPS224 pipe stand is a heavy-duty unit that incorporates a free-standing base and permits ease of pipe rotation and traversing on ball transfers. Ball transfers are mounted to permit the use of pipe slings, and the turnstile design allows pipe to be spun around for grooving of both ends without dismounting the pipe from the stand.

The VAPS224 pipe stand supports pipe sizes 2 - 24 inches/60.3 - 610.0-mm up to 1800 pounds/817 kilograms in weight (1½-foot/0.5-meter to full, single 20-foot/6-meter random lengths).

RECEIVING THE PIPE STAND

The VAPS224 pipe stand is shipped completely assembled and is packaged in a palletized container. Net pipe stand weight is 310 pounds/140 kilograms.

Upon receipt of the pipe stand, make sure all necessary parts are included. If any parts are missing, notify Victaulic.

Qty.	Description
1	Base Assembly
1	Handle Assembly
4	Ball Transfers (Top Assembly)
2	TM-VAPS224 Operating and Maintenance Instructions Manual
2	RP-VAPS224 Repair Parts List

PIPE PREPARATION

Prepare pipe for roll grooving in accordance with the operating and maintenance instructions manual for the roll grooving tool. In addition, inspect the pipe surface for dents or surface build-up where contact with the pipe stand's ball transfers will occur. The pipe surface should be free of large dents, accumulations of dirt, rust, and grime that may interfere with smooth pipe rotation and/or traversing.

Pipe with external, axial weld seams can be grooved with the stand. However, the weld bead must be smooth and rounded and at least three times as wide as it is high. The weld bead must not exceed ⅛ inch/3 mm in height.

NOTICE

- **Grooving pipe that contains external weld seams will shorten the life of the pipe stand.**

TOOL AND PIPE STAND SETUP

1. When grooving pipe that is supported with a pipe stand, select a location for the tool and pipe stand by taking into consideration the following factors:

1a. Adequate space to handle pipe lengths

1b. A firm and level surface for the pipe stand

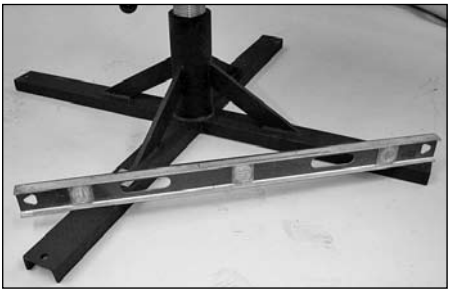
2. Make sure the roll grooving tool is **LEVELED** and **FASTENED SECURELY** to the ground or floor. Refer to the Operating and Maintenance Instructions Manual for the grooving tool.

3. Position the stand in an approximate operating location as follows. Always refer to the "Grooving Long Pipe Lengths" section in the Operating and Maintenance Instructions Manual for the grooving tool.

3a. Determine the length of the pipe to be roll grooved.

3b. Position the VAPS224 pipe stand at a distance slightly greater than half the pipe length from the tool (half the pipe length, plus 5%).

3c. Position the pipe stand approximately in line with the tool's grooving rolls or slightly to the left



3d. Make sure the base is level front to back, as shown above.

INITIAL PIPE STAND ADJUSTMENTS

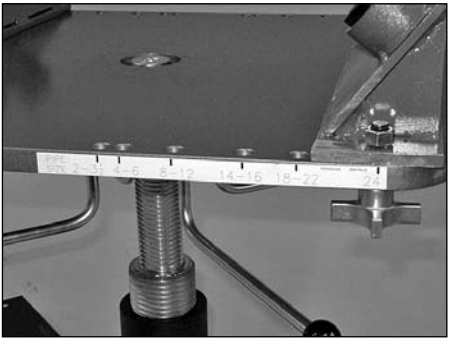
⚠ CAUTION

- **This pipe stand must be used ONLY for roll grooving pipe designated in the "Pipe Stand Ratings" section of this manual.**

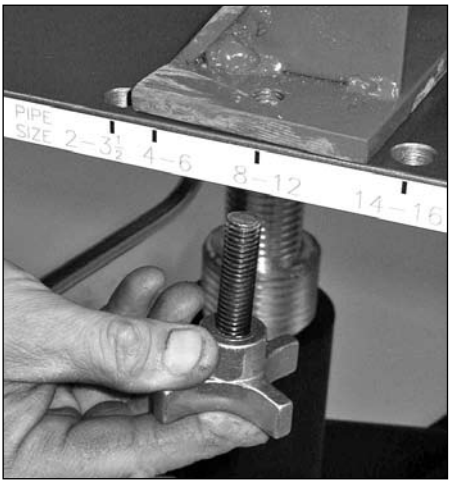
Failure to follow this instruction could cause damage to the pipe stand.

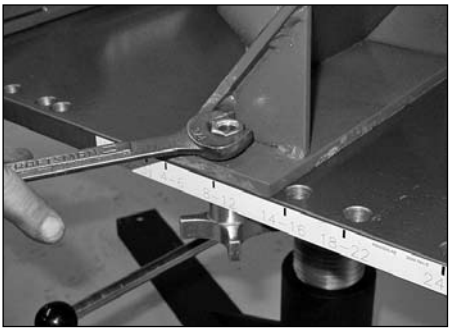
1. Determine the pipe size to be roll grooved.

2. Remove the four hand knobs and nuts that secure the wedge-shaped ball transfer supports to the top plate.

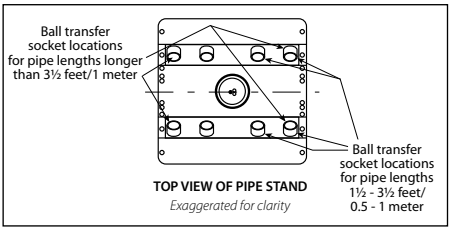


3. Slide both ball transfer supports to the positions marked for the pipe size to be grooved. Hand knob locations should line up with the pipe size marked on the edge of the top plate.

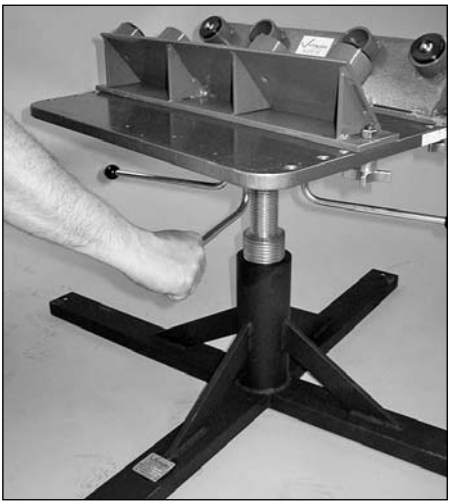




4. Install the four hand knobs, and tighten the nuts that were removed in Step 2.



5. For pipe lengths greater than 3½ feet/1 m, the four ball transfer units should be in the outermost sockets. For shorter pipe lengths (1½ - 3½ feet/0.5 - 1 m), the ball transfers should be installed in a set of sockets shifted toward one end, as shown in the drawing above.



6. Using the vertical adjustment handle, adjust the pipe stand height to a position that will support the pipe in an approximate level position when one end of the pipe is positioned on the roll grooving tool's lower roll. Turning the handle clockwise **INCREASES** pipe height.

7. Position the pipe in the pipe stand and onto the roll grooving tool's lower roll. If using a pipe sling, the sling can be positioned between the ball transfers when the pipe is positioned on the stand.

⚠ CAUTION

- **Remove any pipe lifting devices from the pipe before proceeding with the following steps.**

Failure to follow this instruction could cause damage to the pipe stand.

8. Slide the pipe stand right or left to obtain the proper "tracking angle." Refer to the operating and maintenance instructions manual for the roll grooving tool.

FINAL PIPE STAND ADJUSTMENTS

For final adjustment of the pipe stand, grooving of the pipe is required. Roll groove the pipe by referring to the operating and maintenance instructions manual for the roll grooving tool.

Examine the roll grooved pipe end for (A) excessive flare and/or (B) a scuffed pipe-end face.

A. If pipe is excessively flared, it may be due to the pipe stand adjustments. To minimize flare:

1. Make sure the roll grooving tool is **LEVEL** (especially front to back) and **SECURED** to the floor.
2. Make sure the pipe is **LEVEL** or that the back end of the pipe (end not being grooved) is slightly below level (¼ bubble maximum). Pipe level should always be checked with pipe end to be grooved resting in position on the roll grooving tool's lower roll.
3. Reduce "tracking angle" to be as close to 0° as possible, while still maintaining pipe "tracking."

B. If the pipe end has an excessively scuffed face, the usual causes are "over tracking" and/or an out-of-square pipe end. To minimize "over tracking," keep the pipe stand tracking angle as close to 0° as possible, while ensuring adequate "tracking."

TURNSTILE PROCEDURE

With the pipe stand positioned slightly beyond half the pipe length from the tool, as described in the "Tool Setup" section of this manual, it is possible to balance the pipe on the stand and measure the groove diameter and/or rotate the pipe to groove the opposite end. The ball transfer units must be installed in the proper sockets to utilize this feature. Refer to the "Initial Pipe Stand Adjustments" section of this manual.

⚠ CAUTION

- **Do not attempt to use the turnstile feature for pipe longer than standard 20-foot/6-meter random lengths.**

Failure to follow this instruction could cause damage to the pipe stand.

1. Groove the pipe by referring to the operating and maintenance instructions manual for the roll grooving tool.
2. After pipe and grooving rolls have stopped rotating, withdraw the grooved pipe from the roll grooving tool by sliding the pipe out of the tool **SLOWLY** to a point where it balances on the pipe stand.

⚠ WARNING

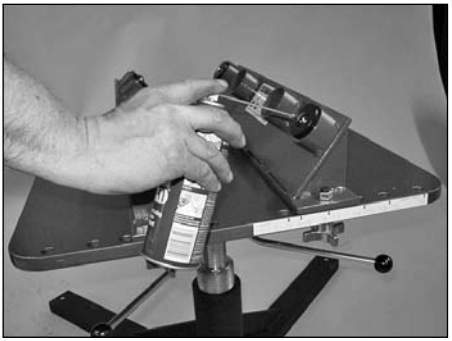
- **Make sure pipe is balanced before rotating the pipe.**
- **Do not leave balanced pipe unattended.**

Failure to follow these instructions could result in serious personal injury or damage to the pipe stand.

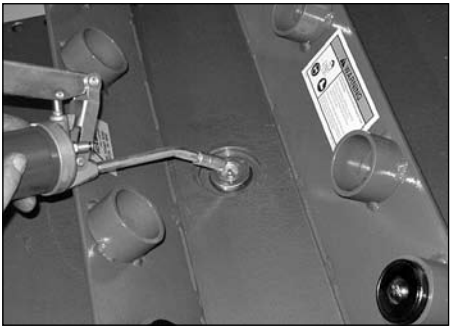
3. Measure groove diameter and/or rotate the pipe to position the opposite end for grooving. When rotating pipe, walk with the pipe to maintain proper pipe balance.

MAINTENANCE

This section provides information about maintaining the pipe stand in proper operating condition. Replacement parts must be ordered from Victaulic to ensure proper and safe operation of the pipe stand.



1. Regular lubrication is required for the VAPS224 pipe stand. On a weekly basis, apply a dry graphite spray in the ball transfer units. Work the dry graphite in by rotating the ball transfer units.



2. On a monthly basis, apply a #2EP Lithium-base grease to the grease fitting on top of the table, as shown above.

PARTS ORDERING INFORMATION

When ordering parts, the following information is required for the Victaulic to process the order and send the correct part(s). Refer to the RP-VAPS224 Repair Parts List for detailed drawings and parts listings. Order parts by calling 1-800-PICK VIC.

1. Tool Model Number and Serial Number
2. Quantity, Part Number, and Description
3. Where to Send the Part(s)
4. To Whose Attention to Send the Part(s)
5. Purchase Order Number

TROUBLESHOOTING

Problem	Possible Cause	Solution
Pipe flare is excessive	Pipe is "over tracking"	Refer to the Operating and Maintenance Instructions Manual for the grooving tool.
	Pipe height adjustment is too high	
	Roll grooving tool is tilted forward	
Pipe face is excessively scuffed	Pipe is "over tracking"	
Pipe will not stay in roll grooving tool	Insufficient pipe tracking angle	
	Pipe rotating in the wrong direction	
	Pipe not square cut	
	Pipe is below level	
	Roll grooving tool is tilted forward	
	Ball transfer(s) are jammed or sticking	Remove the ball transfer(s). With the ball side down, tap the ball transfer(s) on a hard surface to remove loose dirt and debris from inside the unit. Re-install the ball transfer(s) and lubricate with a dry graphite spray. Refer to the "Lubrication" section.
Pipe skids on one or more of the ball transfers	Ball transfer(s) are clogged or there is a lack of lubrication on the ball transfer(s)	

PIPE STAND RATINGS

PIPE SIZE		Nominal Wall Thickness Dimensions - Inches (mm) *							
		Steel Pipe Wall Thickness		Stainless Steel Pipe Wall Thickness		Aluminum Pipe Wall Thickness		PVC Pipe Wall Thickness	
Nominal Diameter inches/mm	Actual Outside Diameter inches/mm	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
2 50	2.375 60.3	0.065 1.7	0.154 3.9	0.154 3.9	0.154 3.9	0.065 1.7	0.154 3.9	0.154 3.9	0.154 3.9
2½ 65	2.875 73.0	0.083 2.1	0.203 5.2	0.203 5.2	0.203 5.2	0.083 2.1	0.203 5.2	0.203 5.2	0.276 7.0
3 80	3.500 88.9	0.083 2.1	0.216 5.5	0.216 5.5	0.216 5.5	0.083 2.1	0.216 5.5	0.216 5.5	0.300 7.6
3½ 90	4.000 101.6	0.083 2.1	0.226 5.7	0.226 5.7	0.226 5.7	0.083 2.1	0.226 5.7	0.226 5.7	0.318 8.1
4 100	4.500 114.3	0.083 2.1	0.375 9.5	0.237 6.0	0.237 6.0	0.083 2.1	0.237 6.0	0.237 6.0	0.337 8.6
4½ 120	5.000 127.0	0.095 2.4	0.375 9.5	0.237 6.0	0.237 6.0	0.095 2.4	0.237 6.0		
5 125	5.563 141.3	0.109 2.8	0.375 9.5	0.258 6.6	0.258 6.6	0.109 2.8	0.258 6.6	0.258 6.6	0.375 9.5
152.4 mm	6.000 152.4	0.109 2.8	0.375 9.5	0.258 6.6	0.258 6.6	0.109 2.8	0.258 6.6		
6 150	6.625 168.3	0.109 2.8	0.375 9.5	0.280 7.1	0.280 7.1	0.109 2.8	0.280 7.1	0.280 7.1	0.432 11.0
203.2 mm	8.000 203.2	0.109 2.8	0.375 9.5	0.250 6.4	0.322 8.2	0.109 2.8	0.322 8.2		
8 200	8.625 219.1	0.109 2.8	0.375 9.5	0.250 6.4	0.322 8.2	0.109 2.8	0.322 8.2	0.322 8.2	0.500 12.7
10 250	10.750 273.0	0.134 3.4	0.375 9.5	0.250 6.4	0.365 9.3	0.134 3.4	0.250 6.4	0.365 9.3	0.593 15.1
12 300	12.750 323.9	0.156 4.0	0.375 9.5	0.250 6.4	0.375 9.5	0.156 4.0	0.250 6.4	0.406 10.3	0.687 17.5
14 OD	14.000 355.6	0.156 4.0	0.375 9.5	0.312 7.9	0.375 9.5			0.438 11.1	0.438 11.1
16 OD	16.000 406.4	0.165 4.2	0.375 9.5	0.312 7.9	0.375 9.5			0.500 12.7	0.500 12.7
18 OD	18.000 457.0	0.165 4.2	0.375 9.5	0.375 9.5	0.375 9.5				
20 OD	20.000 508.0	0.183 4.7	0.375 9.5	0.375 9.5	0.375 9.5				
22 OD	22.000 559.0	0.188 4.8	0.375 9.5	0.375 9.5	0.375 9.5				
24 OD	24.000 610.0	0.218 5.5	0.375 9.5	0.375 9.5	0.375 9.5				

This pipe stand rating table is applicable only to ANSI piping and is based upon the following material grades. Refer to the appropriate international standard for other systems.

Steel – Brinnel Hardness Number (BHN) of 180 BHN and less
Stainless Steel – Types 304/304L and 316/316L
Aluminum – Grades 6061-T4 and 6063-T4
PVC Type I, Grade I (PVC 1120)
PVC Type I, Grade II (PVC 1220)
PVC Type II, Grade I (PVC 2116)

* All minimum and maximum wall thicknesses are nominal

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For complete contact information, visit www.victaulic.com

TM-VAPS224 0149 REV C UPDATED 08/2009 RM0VAPS224