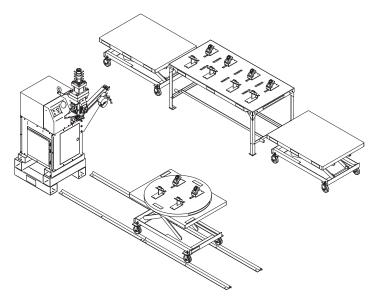
Series VAP131 Victaulic Lean Fabrication Cell

VAP131R VICTAULIC HYDRAULIC, ADJUSTABLE PIPE STAND VAP131F VICTAULIC HYDRAULIC POSITIONER VAP131T VICTAULIC ASSEMBLY TABLE





▲ WARNING



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

- Before operating or servicing Series VAP131 components and Victaulic pipe preparation tools, read all instructions in the operating and maintenance manuals and all warning labels on the product.
- Wear safety glasses, hardhat, foot protection, and hearing protection while working around pipe preparation tools.
- 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 pipe stand, contact Victaulic, P.O. Box 31, Easton, PA 18044-0031, Phone: 1-800-PICK VIC, E-Mail: pickvic@victaulic.com.



INDEX

Hazard Identification
Operator Safety Instructions 4
VAP131R Hydraulic, Adjustable Pipe Stand Nomenclature 5
VAP131F Hydraulic Positioner Nomenclature 6
VAP131T Assembly Table Nomenclature
Introduction
Load Ratings
Electrical Information 9
Extension Cord Requirements 9
Example of Fabrication Shop Layout 10
Receiving the Shipment
Contents of Victaulic Lean Fabrication Cell Option
Contents of Victaulic Hydraulic, Adjustable Pipe Stand Option
Contents of Victaulic Hydraulic Positioner and Assembly Table Option 11
Assembly of the VAP131R Hydraulic, Adjustable Pipe Stand
Assembly of the VAP131F Hydraulic Positioner
Assembly of the VAP131T
Assembly Table
Roll Grooving Tool and VAP131R Setup 13
Pipe Preparation
Initial Adjustments
Final Adjustments
VAP131R Hydraulic, Adjustable Pipe Stand Turnstile Procedure
Maintenance
Hydraulic Fluid Requirements
Parts Ordering Information
-
Troubleshooting
Pipe Ratings

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

Series VAP131 Hydraulic, Adjustable Pipe Stands: Adjustable Positioners; and Assembly Tables are designed only for supporting pipe to be roll grooved and for supporting grooved pipe, valves, and fittings during assembly. Use of this equipment requires dexterity and mechanical skills, as well as sound safety habits. Although this equipment 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 Series VAP131 components. 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 equipment to ensure that all operators read this manual and are fully trained to operate this equipment.

Read this manual and the hydraulic lift manufacturer's service manual before operating or servicing Series VAP131 components. Become familiar with the equipment'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.

- Avoid dangerous environments. Keep work area well lit. Allow sufficient space to operate Series VAP131 components, grooving tool, and accessories properly and for others to pass safely.
- Series VAP131 components are designed ONLY for supporting pipe to be roll grooved for pipe sizes, materials, and wall thicknesses listed in the "Pipe Ratings" section.
- Inspect the equipment. Before using Series VAP131 Hydraulic, Adjustable Pipe Stands; Adjustable Positioners; and Assembly Tables, check all moveable parts for any obstructions. Make sure all components are installed and secured properly.
- Wear proper apparel. Do not wear loose clothing, jewelry, or anything that can become entangled in moving parts.

- Wear protective items when working with tools. Always wear safety glasses, hardhat, foot protection, and hearing protection when working with pipe preparation tools.
- Stay alert. Do not operate pipe preparation tools if you are drowsy from medication or fatigue. Avoid horseplay around the equipment.
- Keep visitors away from the immediate work area. All visitors should be kept a safe distance from the equipment at all times.
- Keep work areas clean. Keep the work area around the equipment 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 pipe preparation tool or pipe.
- 10. Keep hands and tools away from the ball transfers while pipe is being loaded or positioned. Pipe rotation can crush fingers and hands if caught between the pipe and ball transfers.
- 11. Do not reach inside the pipe end during the grooving operation.
- 12. Maintain pipe preparation tools and accessories with care. Keep equipment clean at all times to ensure proper and safe performance. Follow the instructions for lubricating components.
- 13. 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.
- 14. Do not remove any labels from the pipe preparation tool or Series VAP131 components. Replace any damaged or worn labels.
- The VAP131 Assembly Table, the track system, and tool support must be leveled and fastened securely to the ground or floor to prevent movement.

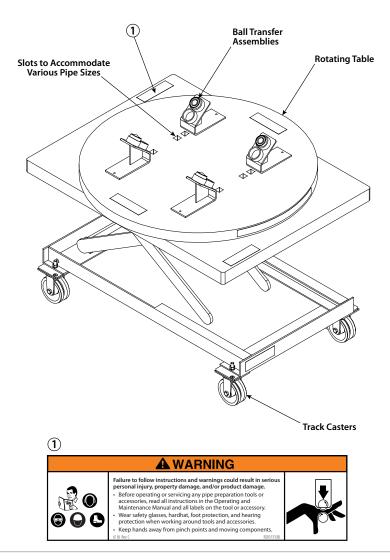
TM-VAP131 4 REV_[



VAP131R HYDRAULIC, ADJUSTABLE PIPE STAND NOMENCLATURE

NOTICE

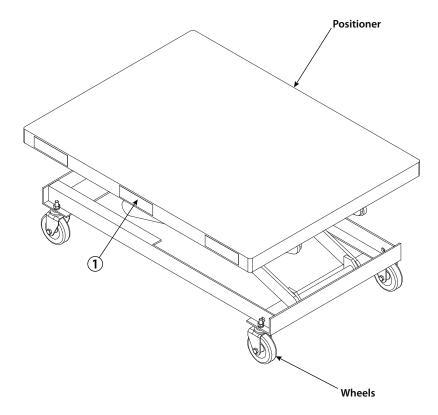
- . Drawings and/or pictures in this manual may be exaggerated for clarity.
- VAP131R Hydraulic, Adjustable Pipe Stands, along with this operating and maintenance instructions manual, contain trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic Company.



VAP131F HYDRAULIC POSITIONER NOMENCLATURE

NOTICE

- . Drawings and/or pictures in this manual may be exaggerated for clarity.
- VAP131F Hydraulic Positioners, along with this operating and maintenance instructions manual, contain trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic Company.





A 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 or accessories, read all instructions in the Operating and Maintenance Manual and all labels on the tool or accessory.
- Wear safety glasses, hardhat, foot protection, and hearing protection when working around tools and accessories.
 Keep bands away from pinch points and moving components.
- Keep hands away from pinch points and moving components.

 6136 Rev. C

 R2031



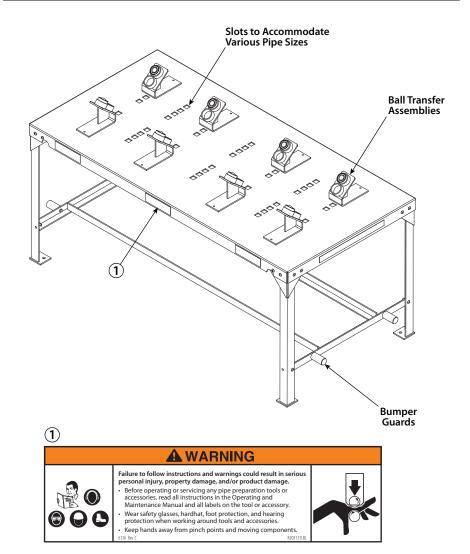
\ ictaulic*

TM-VAP131_6 REV_D

VAP131T ASSEMBLY TABLE NOMENCLATURE

NOTICE

- . Drawings and/or pictures in this manual may be exaggerated for clarity.
- VAP131T Assembly Tables, along with this operating and maintenance instructions manual, contain trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic Company.





INTRODUCTION

NOTICE

- Drawings and/or pictures in this manual may be exaggerated for clarity.
- Series VAP131 components, along with this operating and maintenance instructions manual, contain trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic Company.
- For the VAP131R and VAP131F, always refer to the hydraulic lift manufacturer's service manual, provided with the shipment, for complete operating and maintenance instructions.

A CAUTION

- Series VAP131 components must be used ONLY for supporting pipe designated in the "Pipe Ratings" section.
- Series VAP131 components are not designed to support fittings for roll grooving.
- DO NOT use VAP131 components outdoors.

Failure to follow these instructions could result in damage to the equipment.

VAP131R Hydraulic, Adjustable Pipe Stands are designed specifically for supporting pipe to be grooved with Victaulic Roll Grooving Tools. The VAP131R is a heavy-duty unit that permits ease of pipe rotation on ball transfers, which are mounted to permit the use of pipe slings. A slot system is incorporated into the rotating table of the VAP131R, which permits adaptation of the ball transfer assemblies for accommodating various pipe sizes. Refer to the "NOTE" in the following column.

The turnstile design of the VAP131R allows pipe to be spun around for grooving of both ends without dismounting the pipe. Casters are included with the VAP131R that are designed to engage with a special track system for ease of positioning the pipe onto the grooving tool's lower roll

VAP131F Hydraulic Positioners are heavy-duty units used in conjunction with the VAP131T to support grooved pipe, valves, and fittings during assembly. The VAP131F contains wheels that permit ease of transfer from one location to another.

The VAP131T Assembly Table is a heavy-duty, free-standing unit used in conjunction with the VAP131F for supporting grooved pipe, valves, and fittings during assembly. A slot system is incorporated into the VAP131T, which permits adaptation of the ball transfer assemblies for accommodating various pipe sizes. Refer to the "NOTE" below.

NOTE: For 1–3-inch/33.7–88.9-mm pipe sizes, friction slides and brakes (accessories sold separately) must be used in place of ball transfer assemblies on the VAP131R and VAP131T. All other pipe sizes are accommodated by using ball transfer assemblies. Refer to the graphics on page 12 for proper placement of friction slides/brakes and ball transfer assemblies.

ictaulic

TM-VAP131_8 REV_D

LOAD RATINGS

Series VAP131 components support pipe sizes 1–24 inches/25.4–610 mm ($1\frac{1}{2}$ -foot/ 0.5-meter to full, single 20-foot/6-meter random lengths).

The load rating for VAP131R Hydraulic, Adjustable Pipe Stands is 2000 pounds/ 907 kilograms.

The load rating for VAP131F Hydraulic Positioners is 1200 pounds/544 kilograms with the wheels installed. The load rating for VAP131F Hydraulic Positioners is 2000 pounds/907 kilograms without the wheels installed.

The load rating for VAP131T Assembly Tables is 8000 pounds/3629 kilograms.

Ball transfers have a 700-pound/318 kilogram load rating. Make sure an adequate number of ball transfers are used to support the entire length of pipe.

WARNING

 DO NOT exceed the load rating of Series VAP131 components.

Failure to follow this instruction could result in serious personal injury, property damage, and product damage.

ELECTRICAL INFORMATION

The VAP131R and VAP131F are available in 120 VAC/12 amp and 220-volt/6-amp, single-phase power.

EXTENSION CORD REQUIREMENTS

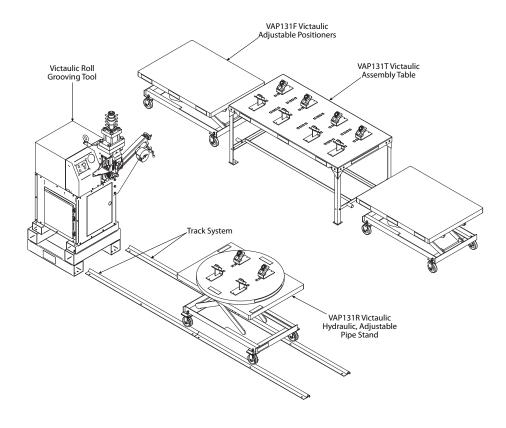
When pre-wired outlets are not available and an extension cord must be used, it is important to use the proper cord size (i.e. Conductor Size American Wire Gauge). Cord size selection is based upon product rating (amps) and cord length (feet). Use of a cord size (gauge) thinner than required will cause significant voltage drop at the VAP131R or VAP131F during operation. Voltage drops may cause damage to the VAP131R or VAP131F, resulting in improper 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 must be avoided.

Drive Motor	Cord Lengths					
Rating	feet/meters					
volts/	25	50	100			
amps	8	15	31			
110 12	12 gauge	12 gauge	10 gauge			
220 6	14 gauge	12 gauge	10 gauge			

EXAMPLE OF FABRICATION SHOP LAYOUT

The layout shown below is for reference only. Series VAP131 components accommodate a variety of fabrication shop layouts and can be configured in multiple positions. Contact Victaulic with questions regarding layout options. NOTE: VAP131F Hydraulic Positioners MUST be kept a minimum of 3 inches/76 mm away from the VAP131T Assembly Table during operation of the hydraulic lift.



TM-VAP131_10 REV_D

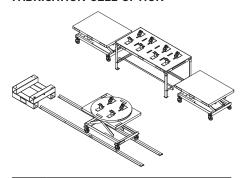
RECEIVING THE SHIPMENT

Series VAP131 components are partially assembled and are packaged in palletized containers.

- Net weight for the VAP131R is 500 pounds/227 kilograms.
- Net weight for the VAP131F is 400 pounds/181 kilograms
- Net weight for the VAP131T is 500 pounds/227 kilograms

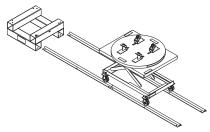
Upon receipt of the shipment, make sure all necessary parts are included. If any parts are missing, contact Victaulic.

CONTENTS OF VICTAULIC LEAN FABRICATION CELL OPTION



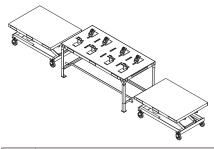
Qty.	Description
1	Tool Support and Hardware
1	VAP131R Hydraulic, Adjustable Pipe Stand with Track Casters and Mounting Hardware
4	Track (6–foot/1.8-meter Length)
2	VAP131F Hydraulic Positioner with Wheels and Mounting Hardware
1	VAP131T Assembly Table with Hardware for Legs and Shelf Bracket
12	Ball Transfers/Ball Transfer Supports
1	TM-VAP131 Operating and Maintenance Instructions Manual
1	Service Manual for the Hydraulic Lift

CONTENTS OF VICTAULIC HYDRAULIC, ADJUSTABLE PIPE STAND OPTION



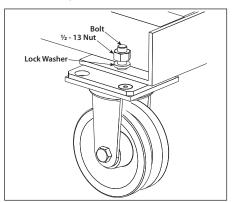
Qty.	Description
1	Tool Support and Hardware
1	VAP131R Hydraulic, Adjustable Pipe Stand with Track Casters and Mounting Hardware
4	Track (6-foot/1.8-meter Length)
4	Ball Transfers/Ball Transfer Supports
1	TM-VAP131 Operating and Maintenance Instructions Manual
1	Service Manual for the Hydraulic Lift

CONTENTS OF VICTAULIC HYDRAULIC POSITIONER AND ASSEMBLY TABLE OPTION



Qty.	Description
2	VAP131F Hydraulic Positioner with Wheels and Mounting Hardware
1	VAP131T Assembly Table with Hardware for Legs and Shelf Bracket
8	Ball Transfers/Ball Transfer Supports
1	TM-VAP131 Operating and Maintenance Instructions Manual
1	Service Manual for the Hydraulic Lift

ASSEMBLY OF THE VAP131R HYDRAULIC, ADJUSTABLE PIPE STAND



VAP131R Hydraulic, Adjustable Pipe Stands are shipped with the track casters removed. The track casters must be attached in order to engage with the track system. Refer to the drawing above.

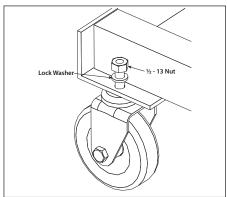
The VAP131R operates on 120-volt AC power (220 VAC as ordered) and is equipped with a hand-controller that must be plugged into the motor control base. Refer to the lift manufacturer's service manual, provided with the shipment, for complete information regarding power requirements and connections.

WARNING

- · Secure all electrical wiring.
- DO NOT attempt to roll the VAP131R over electrical cords.

Failure to follow this instruction could result in serious personal injury and product damage.

ASSEMBLY OF THE VAP131F HYDRAULIC POSITIONER



VAP131F Hydraulic Positioners are shipped with the wheels removed. The wheels can be attached to permit ease of transfer from one location to another. **NOTE:** Refer to the drawing above and the "Load Ratings" section for important information.

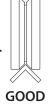
The VAP131F operates on 120-volt AC power (220 volt as ordered) and is equipped with a foot-controller that must be plugged into the motor control base. Refer to the lift manufacturer's service manual, provided with the shipment, for complete information regarding power requirements and connections.

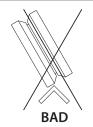
WARNING

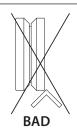
- · Secure all electrical wiring.
- DO NOT attempt to roll the VAP131F over electrical cords.

Failure to follow this instruction could result in serious personal injury and product damage.

VAP131R TRACK CASTER AND TRACK ENGAGEMENT



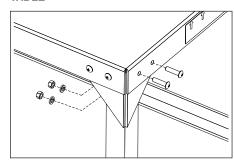


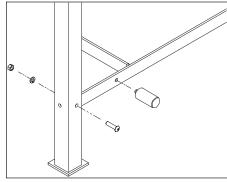


victaulic

TM-VAP131 12 REV_D

ASSEMBLY OF THE VAP131T ASSEMBLY TABLE

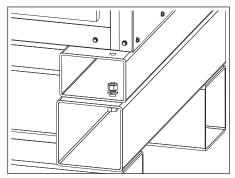




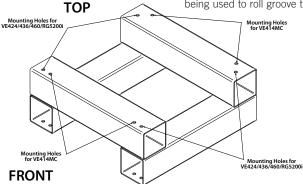
The VAP131T Assembly Table is shipped with the legs and shelf bracket removed. Refer to the drawings above for installation of the legs, bumper guards, and shelf bracket with the appropriate hardware provided.

ROLL GROOVING TOOL AND VAP131R SETUP

- When grooving pipe that is supported with a VAP131R Hydraulic, Adjustable Pipe Stand, select a location for the tool and VAP131R by taking into consideration the following factors:
- 1a. Adequate space to handle pipe lengths
- **1b.** A firm and level surface for the tool and VAP131R

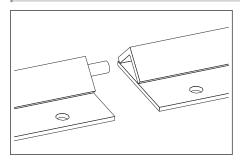


- **2a.** The roll grooving tool must be installed on the tool support that is provided with the Kit 1 and Kit 2 Options. Refer to the drawing above and below for installation of the tool onto the tool support with the hardware provided.
- 2b. Ensure that the roll grooving tool/tool support is LEVELED and FASTENED SECURELY to the ground or floor. Refer to the Operating and Maintenance Instructions Manual for the applicable tool being used to roll groove the pipe.

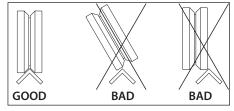


REV_D

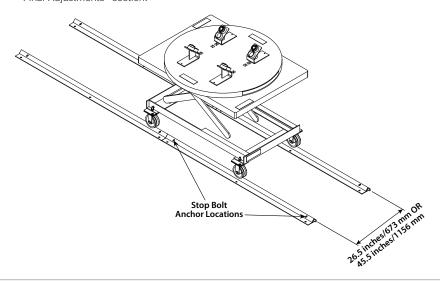
TM-VAP131 / Operating and Maintenance Instructions Manual



- Place the sections of track on the floor so that the VAP131R will be approximately in line with the tool's grooving rolls or slightly to the left or right to obtain the proper "tracking angle." Refer to the Operating and Maintenance Instructions Manual for the applicable tool being used to roll groove the pipe. NOTE: The track can be placed 26.5 inches/673 mm apart or 45.5 inches/ 1156 mm apart (refer to drawing below). Make sure the sections of track are parallel and level front to back and that the pin of one section engages with the next section (refer to drawing above). After the proper "tracking angle" is established, both sections of track should be anchored to the floor to prevent movement. Refer to the "Final Adjustments" section.
- **4a.** Position the VAP131R Hydraulic, Adjustable Pipe 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 applicable tool being used to roll groove the pipe.
- **4b.** Determine the length of pipe to be roll grooved.
- **4c.** Position the VAP131R at a distance slightly greater than half the pipe length from the tool (half the pipe length, plus 5%). Make sure the track casters are engaged with the track properly (refer to drawing below).



NOTE: A %-inch/10-mm hole is provided at both ends of each track for an optional stop bolt anchor. Adding a stop bolt anchor will limit travel of the VAP131R and will help prevent the stand from rolling off the end of the track.



<u>ictaulic</u>

TM-VAP131 14 REV_D

PIPE PREPARATION

Prepare pipe for roll grooving in accordance with the Operating and Maintenance Instructions Manual for the applicable tool being used to roll groove the pipe. In addition, inspect the pipe surface for dents or surface build-up where contact with the 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 supported with Series VAP131R Hydraulic, Adjustable Pipe Stands. 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 ½ inch/3 mm in height.

NOTICE

 Grooving pipe that contains external weld seams will shorten the life of the ball transfer units.

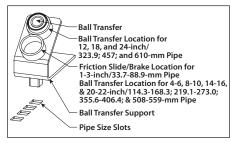
INITIAL ADJUSTMENTS

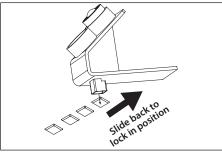
A CAUTION

- VAP131 components must be used ONLY for supporting pipe designated in the "Pipe Ratings" section of this manual.
- The ball transfers must be installed in the ball transfer supports.

Failure to follow these instructions could result in damage to the equipment.

1. Determine the pipe size to be roll grooved. Refer to the pipe size label affixed to the VAP131R and VAP131T (shown below). Pipe sizes listed on top correspond with the upper ball transfer location. Pipe sizes listed on the bottom correspond with the lower ball transfer location. Make sure the ball transfer is installed in the appropriate location on each ball transfer support.





 Install the ball transfer assemblies in the slots marked for the appropriate pipe size. Make sure the ball transfers are facing toward the inside of the table and that the ball transfer assemblies are locked into position in the slots.

NOTICE

- The ball transfer supports may be placed in the innermost slots to gain height clearance when assembling valves and fittings.
- Friction slides and brakes (accessory items sold separately) can be used in place of the ball transfer assemblies to minimize pipe movement. Friction slides create slight resistance, while the friction brakes prevent pipe from rotating freely.
- To accommodate varying pipe diameters, the ball transfers and ball transfer supports may be placed in alternate positions to ensure that the pipe moves freely and is supported properly.

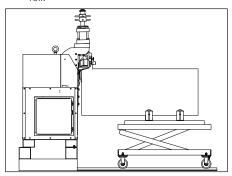




REV D

TM-VAP131 / Operating and Maintenance Instructions Manual

 Using the hand-held control switch, adjust the VAP131R 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.



4. Position the pipe on the VAP131R 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 VAP131R.

A CAUTION

 Remove any pipe lifting devices from the pipe before performing final adjustments.

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

FINAL ADJUSTMENTS

For final adjustment of the VAP131R, grooving of the pipe is required. Roll groove the pipe by referring to the Operating and Maintenance Instructions Manual for the applicable tool being used to roll groove the pipe.

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 VAP131R adjustments. To minimize flare:
- Make sure the roll grooving tool/tool support 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 on a spirit level). Pipe level should always be checked with pipe end to be grooved resting in position on the roll grooving tool's lower roll.
- 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 VAP131R tracking angle as close to 0° as possible, while ensuring adequate "tracking."

ictaulic

TM-VAP131_16 REV_D

VAP131R HYDRAULIC, ADJUSTABLE PIPE STAND TURNSTILE PROCEDURE

With the VAP131R positioned slightly beyond half the pipe length from the tool, it is possible to balance the pipe on the VAP131R 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 Adjustments" section of this manual.

A 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.

- Groove the pipe by referring to the Operating and Maintenance Instructions Manual for the applicable tool being used to roll groove the pipe.
- After the 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 VAP131R.

WARNING

- Ensure that the pipe is balanced before rotating the pipe.
- DO NOT leave the pipe unattended.

Failure to follow these instructions could result in serious personal injury or damage to the VAP131R.

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 Series VAP131 components in proper operating condition. Replacement parts must be ordered from Victaulic to ensure proper and safe operation. For the VAP131R and VAP131F, always refer to the hydraulic lift manufacturer's service manual for complete operating and maintenance information.

- Regular lubrication is required for VAP131R and VAP131T. 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.
- On a monthly basis, lubricate the grease fittings and inspect the hydraulic hoses and electrical lines on the VAP131R and VAP131F.
- On an annual basis, or as needed, change the hydraulic fluid for the VAP131R and VAP131F.

HYDRAULIC FLUID REQUIREMENTS

Weight	Fluid Temperature
SAE 10	0 to +150° F -18 to 66° C
SAE 10W30	+20 to +170° F -7 to 77° C
SAE 20	+20 to +170° F -7 to 77° C

PARTS ORDERING INFORMATION

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

- Model Number
- 2. Quantity, Part Number, and Description
- 3. Where to Send the Part(s)
- **4.** To Whose Attention to Send the Part(s)
- Purchase Order Number

TROUBLESHOOTING

Always refer to the hydraulic lift manufacturer's service manual for additional troubleshooting information.

Problem	Possible Cause	Solution			
Pipe flare is excessive	Pipe is "over tracking"				
	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	Insufficient pipe tracking angle	Refer to the Operating and Maintenance Instructions Manual for the applicable tool being used to roll groove the pipe.			
grooving tool	Pipe rotating in the wrong direction				
	Pipe not square cut				
	Back end of pipe is above 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			
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)	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 "Maintenance" section.			

TM-VAP131_18 REV_D

PIPE RATINGS

Pipe	Size	Nominal Wall Thickness Dimensions - inches/mm*							
Nominal Actual Pipe		Steel Pipe		Stainless Steel Pipe		Aluminum Pipe		PVC Pipe	
Size Outside		Wall Thickness		Wall Thickness		Wall Thickness		Wall Thickness	
inches or mm	Diameter inches/mm	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
1	1.315	0.065	0.133	0.065	0.133	0.065	0.133	0.133	0.179
	33.7	1.7	3.4	1.7	3.4	1.7	3.4	3.4	4.5
2	2.375	0.065	0.154	0.154	0.154	0.065	0.154	0.154	0.154
	60.3	1.7	3.9	3.9	3.9	1.7	3.9	3.9	3.9
21/2	2.875	0.083	0.203	0.203	0.203	0.083	0.203	0.203	0.276
	73.0	2.1	5.2	5.2	5.2	2.1	5.2	5.2	7.0
3	3.500	0.083	0.216	0.216	0.216	0.083	0.216	0.216	0.300
	88.9	2.1	5.5	5.5	5.5	2.1	5.5	5.5	7.6
31/2	4.000	0.083	0.226	0.226	0.226	0.083	0.226	0.226	0.318
	101.6	2.1	5.7	5.7	5.7	2.1	5.7	5.7	8.1
4	4.500	0.083	0.375	0.237	0.237	0.083	0.237	0.237	0.337
	114.3	2.1	9.5	6.0	6.0	2.1	6.0	6.0	8.6
4½	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	5.563	0.109	0.375	0.258	0.258	0.109	0.258	0.258	0.375
	141.3	2.8	9.5	6.6	6.6	2.8	6.6	6.6	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	6.625	0.109	0.375	0.280	0.280	0.109	0.280	0.280	0.432
	168.3	2.8	9.5	7.1	7.1	2.8	7.1	7.1	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	8.625	0.109	0.375	0.250	0.322	0.109	0.322	0.322	0.500
	219.1	2.8	9.5	6.4	8.2	2.8	8.2	8.2	12.7
10	10.750	0.134	0.375	0.250	0.365	0.134	0.250	0.365	0.593
	273.0	3.4	9.5	6.4	9.3	3.4	6.4	9.3	15.1
12	12.750	0.156	0.375	0.250	0.375	0.156	0.250	0.406	0.687
	323.9	4.0	9.5	6.4	9.5	4.0	6.4	10.3	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 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 – Brinell Hardness Number (BHN) of 180 BHN and less. **NOTE:** When roll grooving steel pipe at or near the maximum rated thickness, the pipe must not exceed the yield strength of API-5L Grade "B", ASTM Grade "B", 150 BHN maximum.

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 II (PVC 2116)

* All minimum and maximum wall thicknesses are nominal

Series VAP131 Victaulic Lean Fabrication Cell

VAP131R VICTAULIC HYDRAULIC, ADJUSTABLE PIPE STAND VAP131F VICTAULIC HYDRAULIC POSITIONER VAP131T VICTAULIC ASSEMBLY TABLE

