



Operating and Maintenance Instructions Manual

VAPS224 Pipe Stand



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 pipe stand.
- Wear safety glasses, hardhat, foot protection, and hearing protection.
- 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 pipe stand, contact Victaulic Tool Company, 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.

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 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. Additional copies of this manual are available upon request through the Victaulic Tool Company.

GENERAL

- 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 "Tool Ratings" section on page 11.**
- 3. Inspect the equipment.** Before using the pipe stand, check all moveable parts for any obstructions. Make sure all guards and 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.

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. Keep your 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 in 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 on page 9.

16. Do not remove any labels from the pipe stand. Replace any damaged or worn labels.

INTRODUCTION

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.

The Victaulic VAPS224 pipe stand is designed specifically for supporting pipe to be roll grooved (1½' long to full single 20' random). The VAPS224 pipe stand is a self-standing heavy duty unit that permits free pipe rotation and traversing on ball transfers. Ball transfers are mounted in a manner permitting use of pipe slings. Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting pipe from the stand.



CAUTION

- This stand is not designed to support fittings for roll grooving.
Failure to follow this instruction could cause damage to the pipe stand.

The VAPS224 pipe stand supports pipe sizes 2 - 24" up to 1800 lbs. (816,5 kg) in weight. It is designed for direct use with Vic-Easy roll grooving tools.



CAUTION

- This pipe stand must be used ONLY for supporting pipe designated in the "Tool Rating" section of this manual.
Failure to follow this instruction could cause damage to the pipe stand.

RECEIVING THE PIPE STAND

The VAPS224 pipe stand is shipped completely assembled and packed in a palletized container. Net pipe stand weight is 310 lbs.

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

VAPS224 CONTAINER CONTENTS

Qty.	Description
1	Base Assembly
1	Handle Assembly
4	Ball Transfers (Top Assembly)
2	Operating and Maintenance Instructions Manual

PRE-OPERATION

PIPE PREPARATION

Prepare pipe for roll grooving in accordance with the roll grooving tool's Operating Instructions. In addition to the pipe preparation required for roll grooving, inspect the pipe surface where it will contact the stand's ball transfers for dents or surface build-ups. The pipe surface should be free of large dents, accumulations of dirt, rust or grime that may interfere with smooth pipe rotation and/or traversing.



CAUTION

- **This stand is not designed to support fittings for roll grooving.**

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

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. It must not exceed $\frac{1}{8}$ " (3,2 mm) in height.

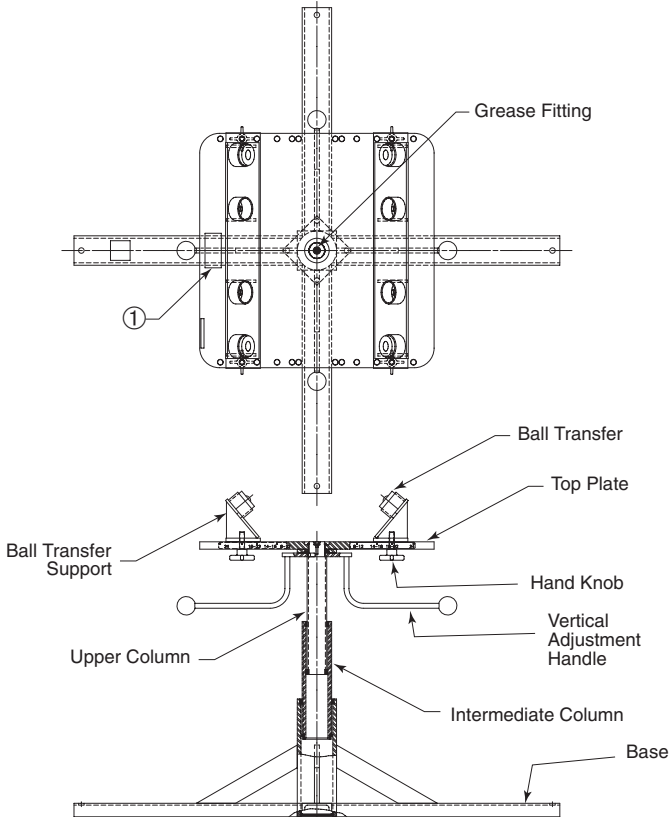
NOTICE

- **Grooving of pipe with external weld seams will shorten stand life.**

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	
	<p>Failure to follow instructions and warnings can result in serious injury, property damage, or faulty installation.</p> <ul style="list-style-type: none">• Before installing, operating, or servicing this tool, read and understand the Operating Instructions and all warning labels on this tool.• Always wear safety glasses and foot protection. <p><small>If you have any questions about the safe operation of this tool, contact Victaulic Tool Company, P.O. Box 31, Easton, PA 18044-0031, 610-559-3300.</small></p>
	
	

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TOOL AND PIPE STAND SETUP

The VAPS224 pipe stand is designed specifically for supporting pipe to be roll grooved.

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

PIPE STAND SETUP

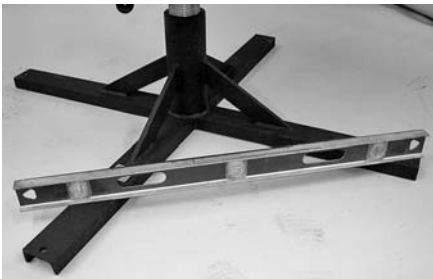
1. When grooving pipe that is supported with a pipe stand, select a location for the tool and pipe stand by taking into consideration the following factors:

- 1a.** Adequate space to handle pipe lengths
- 1b.** A firm and level surface for the pipe stand

TOOL SETUP

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

- 1a.** Determine the length of the pipe to be roll grooved.
- 1b.** Position the VAPS224 pipe stand at a distance slightly greater than half the pipe length from the tool ($\frac{1}{2}$ pipe length plus 5%).
- 1c.** Position the stand approximately in line with the tool's grooving rolls or slightly to the left.



- 1d.** Make sure the base is level front to back, as shown above.

GROOVING OPERATION

for Initial Stand Adjustments

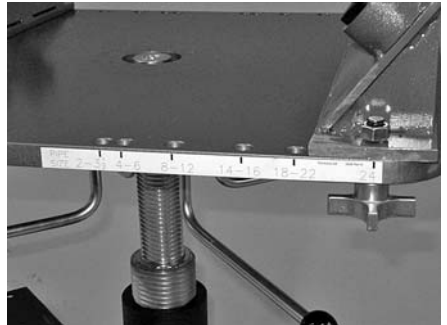
CAUTION

- This pipe stand must be used **ONLY** for roll grooving pipe designated in the "Tool Ratings" section of this manual.
Failure to follow this instruction could cause damage to the pipe stand.

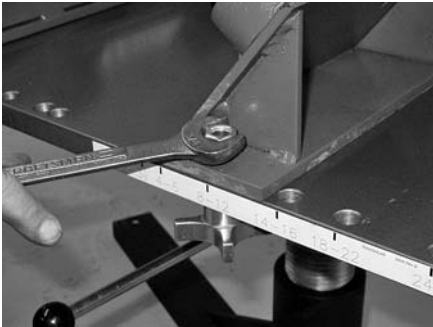
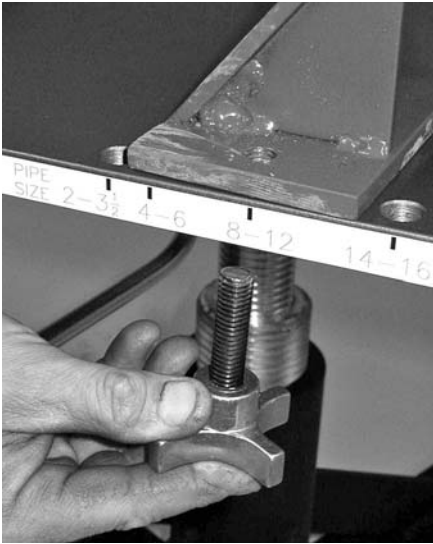
1. Determine the pipe size to be roll grooved.



2. Remove the four hand knobs and nuts securing the wedge shaped ball transfer supports to the stand 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 pipe size marked on edge of top plate.



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

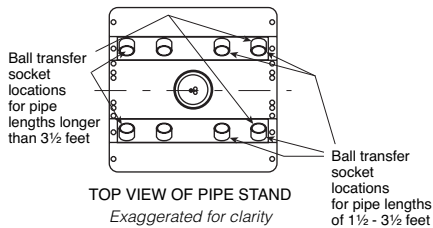


Figure 1

5. For pipe lengths greater than 3½' (1.07 m), the four ball transfer units should be in the outermost sockets. For shorter pipe lengths (1½ - 3½' / 0.46 - 1.07 m), the ball transfers should be installed in a set of sockets shifted toward one end, as illustrated in Figure 1.



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 in position on the roll grooving tool's lower (inner) roll. Turning the handle clockwise INCREASES pipe height.



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

! CAUTION

- Remove any pipe lifting devices from the pipe before proceeding further.
- 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 grooving tool's Operating and Maintenance Instructions Manual.

FINAL STAND ADJUSTMENTS

For final adjustment of the pipe stand, grooving of the pipe is required. Roll a groove in the pipe by referring to the Operating and Maintenance Instructions Manual for the grooving tool.

1. Examine the freshly rolled 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 that the roll grooving tool is LEVEL (especially front to back) and SECURED to the floor.
2. Make sure that the pipe is LEVEL or that the back end of the pipe (end not being grooved) is slightly below level ($\frac{1}{4}$ bubble maximum). Pipe levelness 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 $\frac{1}{2}$ 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 position the opposite end for grooving. The ball transfer units must be in proper sockets to utilize this feature. See the Initial Stand Adjustments section of this manual.

CAUTION

- Do not attempt to use this feature for pipe longer than standard 20' random lengths. Failure to follow this instruction could cause damage to the pipe stand and grooving tool.

1. Groove the pipe by referring to the Operating and Maintenance Instructions Manual for the 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.
- Do not leave balanced pipe unattended. Failure to follow this instruction 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, maintaining proper pipe balance.

WARNING

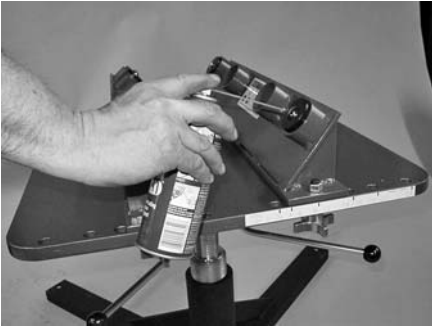
- Do not release and spin the pipe around. Failure to follow this instruction could result in serious personal injury or damage to the pipe stand.

MAINTENANCE

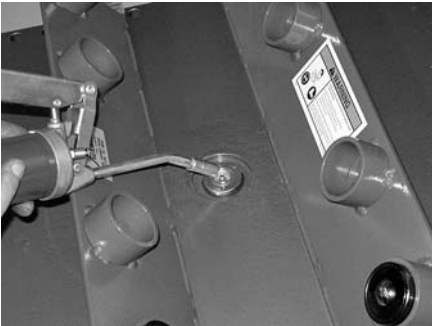
This section provides information about keeping the pipe stand in proper operating condition and guidance for making repairs when it becomes necessary. Preventive maintenance during operation will pay for itself in repair and operating savings.

Replacement parts must be ordered from Victaulic Tool Company to ensure proper and safe operation of the tool.

LUBRICATION



1. Regular lubrication is required for the VAPS224 pipe stand. On a weekly basis, apply a few drops of light oil to the ball transfer units. Work the oil in by rotating the units.



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

PARTS ORDERING INFORMATION

When ordering parts, the following information is required for the Victaulic Tool Company to process the order and send the correct part(s). Request the RP-VAPS224 Repair Parts List for detailed drawings and parts listings.

- 1.** Tool Model Number – VAPS224
- 2.** Tool Serial Number – The serial number is stamped onto a plate located on the ball transfer support.
- 3.** Quantity, Part Number, and Description – For example: (1), NM28000002, Ball Transfer
- 4.** Where to Send the Part(s) – Company name and address
- 5.** To Whose Attention to Send the Part(s)
- 6.** Purchase Order Number

Order parts by calling 1-800-PICKVIC.

TROUBLESHOOTING

GENERAL

Problem	Possible Cause	Solution
Pipe flare is excessive.	Pipe is "over tracking". Pipe height adjustment is too high. Roll grooving tool is tilted forward.	Refer to the Operating and Maintenance Instructions Manual for the grooving tool. Refer to the Operating and Maintenance Instructions Manual for the grooving tool. Refer to the Operating and Maintenance Instructions Manual for the grooving tool.
Pipe face is excessively scuffed.	Pipe is "over tracking".	Refer to the Operating and Maintenance Instructions Manual for the grooving tool.
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 transfers are jammed or sticking.	Refer to the Operating and Maintenance Instructions Manual for the grooving tool. Refer to the Operating and Maintenance Instructions Manual for the grooving tool. Cut the pipe end squarely. Refer to the Operating and Maintenance Instructions Manual for the grooving tool. Refer to the Operating and Maintenance Instructions Manual for the grooving tool. Refer to the Operating and Maintenance Instructions Manual for the grooving tool. Clean and lubricate the ball transfers.

TOOL RATINGS

VAPS224

PIPE SIZE		Nominal Wall Thickness Dimensions – inches (mm) *							
Nominal Diameter inches	Actual Outside Diameter inches (mm)	Steel Pipe Wall Thickness		Stainless Steel Pipe Wall Thickness		Aluminum Pipe Wall Thickness		PVC Plastic Pipe Wall Thickness	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
2	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	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	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	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	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	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	5.563 141,3	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	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	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	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	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 O.D.	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 O.D.	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 O.D.	18.000 457,0	0.165 4,2	0.375 9,5	0.375 9,5	0.375 9,5	– –	– –	– –	– –
20 O.D.	20.000 508,0	0.183 4,7	0.375 9,5	0.375 9,5	0.375 9,5	– –	– –	– –	– –
22 O.D.	22.000 559,0	0.188 4,8	0.375 9,5	0.375 9,5	0.375 9,5	– –	– –	– –	– –
24 O.D.	24.000 610,0	0.218 5,5	0.375 9,5	0.375 9,5	0.375 9,5	– –	– –	– –	– –

This tool 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 – Brinell 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

VICTAULIC GLOBAL LOCATIONS

VICTAULIC TOOL COMPANY

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Easton, PA 18044-0031
1-610-559-3300
1-610-923-3090 (fax)
victools@victaulic.com

TOOL SHIPMENTS

1326 Tatamy Road
Easton, PA 18045-7400

SALES AND LEASE PAYMENTS

P.O. Box 8538-244
Philadelphia, PA 19171-0244

WORLD HEADQUARTERS

P. O. Box 31
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4901 Kesslersville Road
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