

MegaPress[®] Pipe Preparation Tool



⚠ WARNING!

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

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Lifetime Warranty Back Cover


*Original Instructions - English


Safety Symbols


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


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


 **DANGER** DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.


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

 **CAUTION** CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

 **NOTICE** NOTICE indicates information that relates to the protection of property.

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

 This symbol means always wear safety glasses with side shields or goggles when handling or using this equipment to reduce the risk of eye injury.

 This symbol indicates the risk of fingers, legs, clothes and other objects catching and/or wrapping on rotating shafts causing crushing or striking injuries.

Specific Safety Section

⚠ WARNING

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

Read these precautions carefully before using the MegaPress® Pipe End Preparation Tools to reduce the risk of serious personal injury.

SAVE THESE INSTRUCTIONS!

- **Use personal protective equipment.** Always wear eye protection. Protective equipment such as dust mask, respirator, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will help reduce the risk of personal injury.
- **Keep hands away from rotating pipe and parts.** To prevent entanglement, crushing or striking injuries, allow equipment to come to a complete stop before touching the pipe or equipment.
- **Only use RIDGID® Press Tools, attachments and preparation tools when specified by the fitting manufacturer for use with their system.** Use of incorrect equipment for a system can cause system leaks, damage the equipment, void warranties or cause severe personal injury.
- **Read and understand these instructions and the warnings and instructions for all equipment and products being used with this tool before operating.** Failure to follow all warnings and instructions may result in property damage and/or serious personal injury.
- **Avoid breathing of dust created from pipe cleaning and deburring.** Some dust created may contain chemicals known to cause cancer, birth defects or other serious personal injury. Consider the pipe material and coatings when determining appropriate respiratory protection, including things such as lead based paint.

Your risk from these exposures varies, depending on how often you do this type of work and the concentration of dust. To reduce your exposure to these chemicals, work in a well ventilated area, and use respiratory protection selected based on appropriate regulations and standards, such as ANSI Z88.2 and OSHA.

If you have any questions concerning this RIDGID® product:

- Contact your local RIDGID distributor.
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Description

The RIDGID® MegaPress® and MegaPressG® (registered trademarks of Viega GmbH & Co.) Pipe Preparation (Prep) Tool is used to prepare the end of schedule 5 to 40 black steel pipe for use with Viega MegaPress fittings. The pipe preparation tool is powered by a user supplied 1/2" drill (1,200 to 4,000 rpm operating range), cleans the outside of the pipe and deburrs the pipe end outside diameter. The pipe preparation tool can be used with stationary or rotating pipe. Two pipe preparation tools are available: one for the 1/2" to 1" pipe size range and one for the 1 1/4" to 2" pipe size range.

The RIDGID MegaPress Pipe Prep Tools are not approved for use with galvanized or epoxy coated pipe. Please see the fitting manufacturers instructions for proper preparation techniques for these types of pipe.



Figure 1 – MegaPress Pipe Preparation Tool

Abrasive Strip Information

NOTICE Contact the fitting manufacturer for specific information on their system, including compatible pipe, installation instructions, minimum distance between fittings, seal material, inspection, testing, etc. Incorrect installation can cause system leaks and extensive property damage.

Catalog No.	Description
38008	Abrasive Strips, 1/2" to 1" (Pack of 10)
38003	Abrasive Strips, 1 1/4" to 2" (Pack of 10)

Pre-Operation Inspection/Maintenance

⚠ WARNING

Before each use inspect and maintain your pipe prep tool and correct any problems to reduce the risk of serious injury, prep tool damage and improper press connections.

1. If mounted in a drill, make sure that the drill is unplugged or the battery removed.
2. Clean any oil, grease or dirt from all equipment, including the handles and controls. This aids inspection and helps prevent the machine or control from slipping from your grip. If needed, clean any debris from the abrasive pad and the interior of the prep tool. The area can be vacuumed, or gently tap on the housing with the open end facing down into a trash can.
3. Inspect the Prep Tool for the following:
 - Proper assembly and completeness with no loose or missing parts.
 - Broken, worn, misaligned or binding parts. Make sure there is no cracking or breakage of the housing. Confirm that the rollers turn freely. If necessary, lubricate the rollers with a light lubricating oil. Wipe off any excess oil.
 - Readability of product markings and safety information (see Figure 2).



Figure 2 – Prep Tool Product Markings and Safety Information

4. Inspect the abrasive strip in the Prep Tool. If needed, remove the strip and replace with a new one. The strip is held in by hook and loop backing. To remove, carefully peel the abrasive strip away from the backing strip. Confirm that the foam strip is in good condition with no ex-

cessive tears and that is properly adhered to the housing bore. Always use the correct abrasive strip for the Prep Tool being used. The wrong abrasive strip can improperly prepare the surface, causing leaks and other issues.

The abrasive strips include a pin in one end to help ensure proper alignment. Insert the pin into the hole in the Prep Tool housing and wrap the strip around the inside of the housing (see Figures 3 & 4). Make sure the strip is aligned with the hook and loop backing, is secure and the ends lay flat and do not overlap.

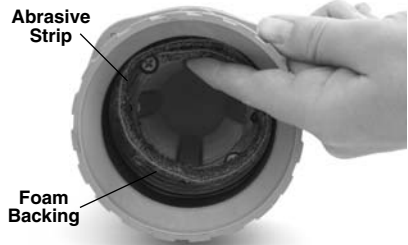


Figure 3 – Installing Abrasive Strip

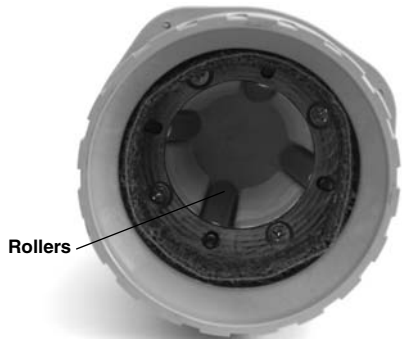
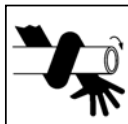


Figure 4 – Inspection of Abrasive Strip, Foam Backing & Rollers

5. Inspect the drill to be used with the prep tool per its instructions. Make sure that the drill is in good operating condition and the switch controls drill operation. Confirm that the drill turns between 1,200 and 4,000 rpm. If provided by drill manufacturer, confirm drill auxiliary handle is securely installed.
6. Inspect any other equipment to be used with the prep tool per its instructions.
7. If any issues are found, do not use the prep tool until those issues have been repaired.

Tool Set-Up and Operation

⚠ WARNING



Follow setup and operating instructions to reduce the risk of serious injury, prep tool damage and improper press connections.

Keep hands away from rotating pipe and parts. To prevent entanglement, crushing or striking injuries, allow equipment to come to a complete stop before touching the pipe or equipment.

Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, respirator, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will help reduce the risk of personal injury.

1. Inspect the work to be done and confirm that the MegaPress system is appropriate for use. The RIDGID MegaPress Prep tools are for use with black steel pipe only. Do not use with galvanized or epoxy coated pipe. This can cause inhalation hazards or damage the prep tool.
2. Make sure that all equipment to be used has been properly inspected.
3. Make sure the drill is unplugged or the battery has been removed. If needed, fully insert the shank of the correct prep tool for the pipe to be prepared into the chuck. Confirm that the prep tool is firmly and squarely secured in the drill chuck. If the drill includes torque settings, set to either the “drill” setting or the highest torque rating. If using a hammer drill, confirm that the drill is set to the drilling mode operating position. If the drill has multiple speed settings, set to the highest speed range between 1,200 and 4,000 rpm. Do not use the prep tool at higher speeds, this could cause prep tool failure and serious injury (see Figure 5).



Figure 5 – MegaPress Prep Tool Installed In Drill

4. With dry hands, plug in or insert the battery into the drill.
5. Firmly grip the drill in both hands, and hold away from your body. Squeeze the switch trigger and slowly bring the prep tool up to full speed and hold at full speed for fifteen seconds. If any vibration or other issues are noticed, immediately release trigger switch, allow to stop and do not use until the issue has been properly resolved.

The MegaPress Prep Tool can be used with the pipe stationary (as in a vise) or with the pipe rotating (as with a RIDGID 300 Power Drive).

Deburring and Cleaning with the Pipe Stationary

1. Make sure the pipe to be prepared is securely mounted. The pipe must be able to support its weight and the force required for preparation. Pipe end must extend at least 5" (127 mm) from support and have at least 4" (76 mm) clearance all the way around (see Figure 6). Do not use if there are any obstacles that may interfere with the prep tool. Do not grip the pipe in the area to be cleaned, this could damage the pipe surface and cause leaks. Make sure there is enough room to hold and operate the drill and prep tool.



Figure 6 – Pipe In Vise, Inspecting For Adequate Prep Tool Clearance

- Remove any inside diameter (ID) burr which could obstruct pipe flow. Use a pipe reamer, file or similar tool.
- Firmly grip the drill in both hands. Place the prep tool over the end of the pipe, with the pipe end seated in the roller area of the prep tool. *See Figure 7A*. Make sure that the end of the prep tool sufficiently clears the vise and any other obstacles. Squeeze the trigger switch to start the prep tool turning. Firmly press the prep tool into the end of the pipe for approximately 5-10 seconds while the rotating rollers deburr the pipe.

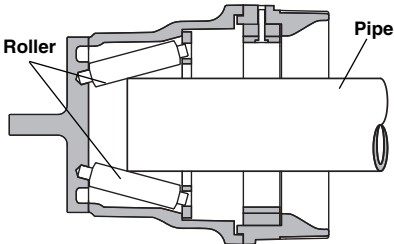


Figure 7A – Pipe OD Deburr Position

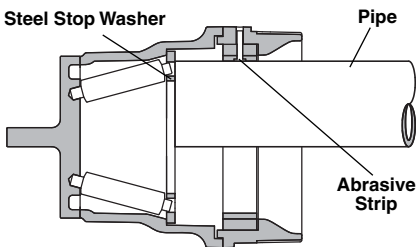


Figure 7B – Pipe OD Cleaning Position

- While maintaining a firm grip of the drill, pull the prep tool into the cleaning position (*Figure 7B*). The end of the pipe should be against the steel stop washer and the abrasive strip should touch the outside of the pipe. Hold the drill parallel to the pipe, apply sideways force, and move the prep tool around the pipe in an orbiting motion until the seal area is appropriately cleaned. If the drill is not parallel to the pipe, the cleaned area will not be square to the end of the pipe. For fastest cleaning, the orbiting motion of the drill should be in the opposite direction as the rotation of the drill chuck rotation (i.e. for clockwise forward rotation of drill chuck, orbit drill in a counterclockwise direction). This typically takes approximately 15 seconds

(*See Figure 8*). As needed, clean or change the abrasive strip.

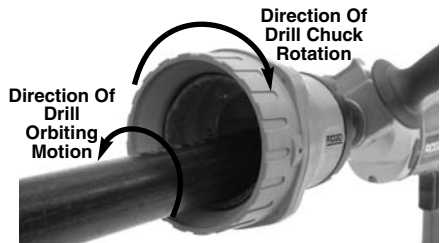


Figure 8 – Cleaning the O.D. of Stationary Pipe

- Release the trigger switch and turn the drill OFF. Allow the prep tool to come to a complete stop before setting down.

Deburring and Cleaning with the Pipe Rotating

- Set up the 300 Power Drive per its instructions.
- If equipped, place the cutter, reamer and diehead in the up (away from the operator) position, and move the carriage toward the chuck.
- Insert the pipe to be prepared into the power drive per the instructions and with at least 5" (127 mm) extending from the chuck or carriage (if equipped), firmly gripping the pipe (*see Figure 9*). Do not grip the pipe in the area to be cleaned, this could damage the pipe surface and cause leaks. Make sure there is enough room to hold and operate the drill and prep tool. Using a pipe reamer, file or similar tool, remove any inside diameter (ID) burr which could obstruct pipe flow.



Figure 9 – Pipe in 300 Power Drive, Inspecting for Prep Tool Adequate Clearance

- Place the foot switch to allow operation while standing in front of the chuck. Make sure that both the power drive and drill are set for forward rotation (FOR switch position on power drive, drill set as for drilling a hole).

- Firmly grip the drill in both hands.
- Carefully place the prep tool over the end of the pipe. Depress the power drive foot switch to start the pipe turning (see *Figure 10*).
- Squeeze the trigger switch to start the prep tool turning. Make sure to stay clear of rotating pipe and parts. Firmly press the prep tool into the end of the pipe for approximately 10 seconds while the rotating rollers deburr the pipe.

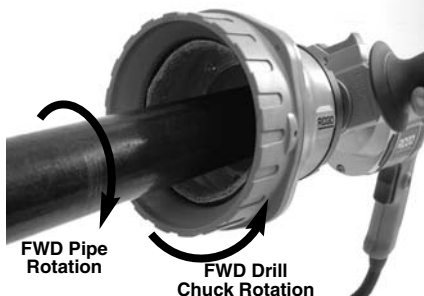


Figure 10 – Proper Use of Prep Tool to Remove Pipe OD Burr With Rotating Pipe



Figure 11 – Proper Use of Prep Tool to Remove Pipe OD Coating With Rotating Pipe

- While maintaining a firm grip of the drill, pull the prep tool into the cleaning position (see *Figure 11*). The end of the pipe should be against the steel washer and the abrasive strip should touch the outside of the pipe. Hold the drill stationary and parallel to the pipe and press downward to clean the outside of the pipe until the seal area is appropriately cleaned. Do not orbit the drill while the pipe rotates. Cleaning typically takes approximately 10 seconds. As needed, clean or change the abrasive strip.
- Remove the prep tool from the end of the pipe. Step off the power drive foot

switch and release the drill trigger switch. Allow the prep tool to come to a complete stop before setting down and do not touch the pipe until it stops rotating.

- Inspect the preparation of the pipe end. If needed, the process can be repeated.

Inspecting The Pipe Preparation

- Check the pipe outside diameter at the end for burrs, etc. that could cut and damage the fitting seal (see *Figure 12*). See the fitting manufacturer's instructions for specific information on acceptable pipe deburring.

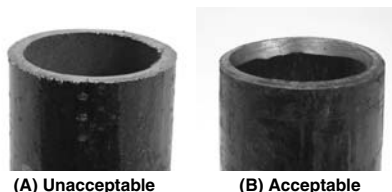


Figure 12 – Cleaning the O.D. of Stationary Pipe

- Check the cleaned area on the outside of the pipe. Determine if it is in the proper location. For $\frac{1}{2}$ " to 1" pipes, the cleaned area should extend from $\frac{9}{16}$ " (14 mm) to $\frac{1}{16}$ " (27 mm) from the end of the pipe. For $1\frac{1}{4}$ " to 2" pipes, the cleaned area should extend from $1\frac{3}{16}$ " (30 mm) to $\frac{1}{16}$ " (43 mm) from the end of the pipe. This can be measured with a tape measure or with a cleaning gauge (see *Figure 13*).

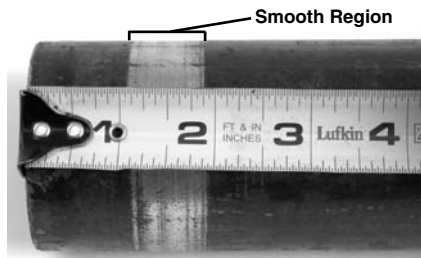


Figure 13 – Checking Proper Cleaning Location on Pipe

- Inspect the cleaned area to determine if it is acceptable for fitting sealing. See the fitting manufacturer's instructions for specific information on acceptable pipe cleaning. In general, in the cleaned area there should be no loose pipe coating, and the

overall surface should be smooth. Depressions (scratches, grooves, pits, etc.) in the cleaned area of the pipe which are not smooth could allow leakage past the fitting seal. If the factory applied pipe coating (black paint, lacquer, etc) completely fills the depression, is securely adhered and is smooth from preparation, it may be acceptable to use. Do not apply any coatings to fill depressions. (see Figure 14).

4. If any issues are found, either repeat the deburr and cleaning process or discard the pipe and prepare a new end so that the preparation meets the fitting manufacturers requirements (see Figure 14). Improper pipe end preparation could allow the press connection to leak.

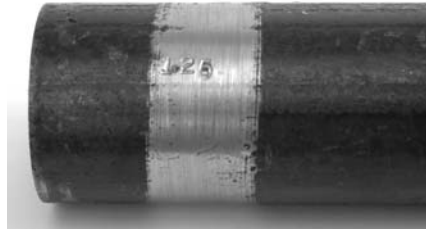


Figure 14D – Pipe Engraving in Prep Area

5. Once system is installed, test in accordance with normal practice and local codes.

Common Unacceptable Conditions Found In Pipe End Preps



Figure 14A – Pipe Wrench Jaw Marks in Prep Area



Figure 14B – 300 PD Chuck Marks in Prep Area



Figure 14C – Prep Area Not Square with End of Pipe