

Pressing Attachments for: MegaPress® Fitting System



⚠ WARNING!

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

RIDGID

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



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



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



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 hands, fingers or other body parts being caught or wrapped in gears or other moving parts.



This symbol indicates the risk of electrical shock.

Specific Safety Information

⚠ WARNING

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

Read these precautions carefully before using the Press Tool Attachments to reduce the risk of serious personal injury.

SAVE THESE INSTRUCTIONS!

Keep this manual with the machine for use by the operator.

Pressing Tool Safety

- **Only use RIDGID® Pressing Tools with RIDGID pressing attachments.** Other uses or modifying the jaws for other applications may damage the pressing tool, damage the jaws and/or cause personal injury.
- **Keep your fingers and hands away from jaws, press rings and ring actuator during pressing cycle.** Your fingers or hands can be crushed, fractured or amputated if they become caught between the jaws, press rings or ring actuator or between these components and any other object.

- **Never attempt to repair a damaged jaw set, actuator or press ring.** A jaw, actuator or press ring that has been welded, ground, drilled or modified in any manner can shatter during pressing resulting in serious injury. Discard the entire damaged jaw set. Replace with a new jaw set. Never replace individual components except for damaged jaw return springs. Please call Ridge Tool Technical Service Department for availability.

- **Read and understand this manual, the tool operator's manual, the fitting manufacturer's installation instructions and the instructions for any other equipment used with this tool before operating.** Failure to follow all instructions may result in property damage and/or serious injury.

NOTICE Selection of appropriate materials and joining methods is the responsibility of the system designer and/or installer. Before any installation is attempted, careful evaluation of the specific service environment, including chemical environment and service temperature, should be completed.

If you have any question concerning this RIDGID® product:

- Contact your local RIDGID distributor.

- Visit RIDGID.com to find your local RIDGID contact point.
- Contact Ridge Tool Technical Service Department at rttechservices@emerson.com, or in the U.S. and Canada call (800) 519-3456.

Description and Specifications

Description

RIDGID Press Tool Attachments for MegaPress® and MegaPressG® Systems, when used with the appropriate RIDGID Press Tool, are designed to mechanically press MegaPress fittings onto pipe to create a permanent water or gas tight seal. MegaPress® is a registered trademark of Viega GmbH & Co. When the switch on the press tool is depressed, a motor powers a hydraulic pump which forces fluid into the press tool cylinder. This moves the tool rollers forward into contact with the attachment and applies thousands of pounds of force to the specially designed fitting.

The entire pressing cycle takes between 4 and 8 seconds starting from when the switch is pressed. Once the pressing tool starts to deform the fitting, the tool will automatically continue the press until complete.

MegaPress Jaw Sets

MegaPress Jaw Sets are designed to mechanically press MegaPress and MegaPressG fittings onto 1/2", 3/4" and 1" nominal pipe size (NPS) steel pipe. An individual jaw set is required for each pipe size. Jaw sets and press tools must be used perpendicular to the fitting/pipe being pressed.

Jaws sets are available in Standard Series (For use with RIDGID Standard Series Press Tools such as the CT-400, 320-E, RP 330 and RP 340) and in Compact Series (for use with RIDGID Compact Series press tools such as the 100-B, RP 210-B, RP 200-B, RP 240 or RP 241).

Standard Series MegaPress Jaw Sets

Catalog No.	Size	Weight
37958	1/2"	4.46 lbs. (2,02 kg)
37963	3/4"	4.71 lbs. (2,13 kg)
37968	1"	6.83 lbs. (3,10 kg)

Compact Series MegaPress Jaw Sets

Catalog No.	Size	Weight
48433	1/2"	3.2 lbs. (1,45 kg)
48438	3/4"	3.1 lbs. (1,41 kg)



Figure 1 – MegaPress Jaw (Standard Series Shown)

MegaPress Rings

MegaPress Rings are designed to mechanically press MegaPress and MegaPressG fittings onto 1/4", 1/2" and 2" pipe. An individual ring is required for each pipe size. 1/4" to 2" rings can only be actuated with the V2 actuator used with Standard Series Press Tools.

MegaPress XL Rings

MegaPress XL Rings are designed to press MegaPress XL fittings onto 2 1/2", 3" and 4" pipe. An individual ring is required for each pipe size. MegaPress XL rings can only be actuated with a RIDGID® Z3 Actuator (such as the Press Booster).

The MegaPress and MegaPress XL rings must be used perpendicular to the fitting and pipe being pressed but the ball pocket/tip feature on the rings and actuators allows the actuator and press tool to swivel up to 90 degrees in each direction. This may allow use in tighter quarters. The rings are marked to show the correct actuator for use with that ring.

Catalog No.	Description	Weight
37973	1 1/4" MegaPress Ring	5.99 lbs (2,72 kg)
37978	1 1/2" MegaPress Ring	6.46 lbs (2,93 kg)
37983	2" MegaPress Ring	5.77 lbs (2,62 kg)
21878	V2 Actuator	4.7 lbs (2,13 kg)

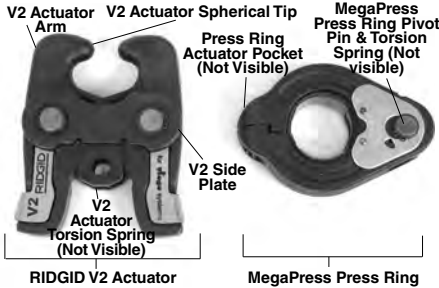


Figure 2 – MegaPress Ring and Actuator

Catalog No.	Description	Weight
60638	2 1/2" to 4" MegaPress Kit with Booster	52.5 lbs (23.8 kg)
60643	2 1/2" MegaPress Ring For Standard RIDGID Press Tool & Booster	5.9 lbs (2.7 kg)
60648	3" MegaPress Ring For Standard RIDGID Press Tool & Booster	7.1 lbs (3.2 kg)
60653	4" MegaPress Ring For Standard RIDGID Press Tool & Booster	9.9 lbs (4.5 kg)
60658	Press Booster For MegaPress XL	21.6 lbs (9.8 kg)

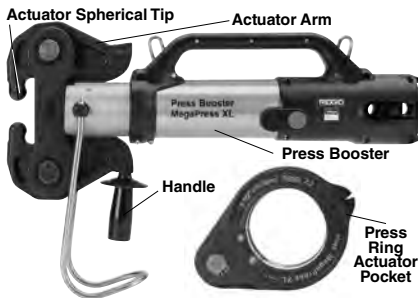


Figure 3 – MegaPress XL Ring and Press Booster/Z3 Actuator

⚠ WARNING Only use RIDGID Press Tools and RIDGID press tool attachments (jaw sets, rings, actuators, etc.) when specified by the fitting manufacturer for use with their system. Use of incorrect press tools and/or attachments for a system can cause system leaks, damage the press tool or attachment, void warranties or cause severe personal injury.

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

Contact Ridge Tool Technical Service Department at (800) 519-3456 or rttechservices@emerson.com for a list of press fitting system and valve manufacturers that specify RIDGID pressing tools and attachments for their systems.

Inspecting The Press Tool and Attachments

⚠ WARNING



Inspect your pressing tool and attachments daily and correct any problems to reduce the risk of serious injury from electric shock, tool and attachment failure and other causes and to prevent tool and property damage.

1. Inspect press tool according to the specific tool operator's manual.
2. Clean any oil, grease or dirt from the tool and attachments, especially the handles and controls. This reduces the risk of the tool or attachment slipping from your grip and makes inspection easier.
3. Closely inspect all pressing attachment components (jaw sets, rings, actuators, etc.) for any cracked, broken, worn, missing, mis-aligned or binding parts or any other sign of damage that may prevent proper and safe operation. Damaged parts can cause the attachment to make incorrect pressed connections or fail during use, and cause serious injury or property damage. If any damage is found, the attachment should be discarded and replaced.

⚠ WARNING Always discard the complete pressing attachment. Never replace individual components or exchange parts between assemblies. Failure to replace the entire assembly may result in component failure and serious injury.

Do not modify pressing attachments or use modified attachments. A pressing attachment component that has been welded, ground, drilled or modified in any manner can shatter during pressing, resulting in sharp flying objects, severe injury or death. Discard and replace damaged pressing attachments.

4. Inspect the attachment markings to make sure that it is clearly marked as to the system and size that it is appropriate for. Do not use an attachment that is not clearly marked.
5. Inspect the press profile of the attachment. If it is rusty, dirty or if there is a build up of fitting material, clean as described in the maintenance section. It is important to keep the press profile clean to prevent the formation of burrs during pressing process, prevent the attachment from sticking to the fitting and make sure that a proper press connection is made.
6. Make sure that springs are intact and bias the attachment in the proper direction (closed for rings, jaws and actuators). Attachment should cycle freely from the fully open to fully closed position. If needed, lubricate pivot points with a light lubricating oil. Wipe any excess oil from the attachment.

Tool and Work Area Set-Up

⚠ WARNING



Set up the press tool, attachment and work area according to these procedures to reduce the risk of injury from electric shock and other causes and to prevent property damage.

1. Inspect the work to be done and determine:
 - The system of fittings to be used
 - The sizes of fittings to be used.
 - The type of pipe to be used.
 - The amount of space available for the tool and attachments to make the pressed connections.
2. Determine the appropriate pressing tool and attachments for the application. See

the Description and Specification section. Information on clearance requirements for various attachments can be found at the back of the manual. Information on RIDGID Pressing Tools and other RIDGID press tool attachments can be found at RIDGID.com, or by contacting Ridge Tool Technical Service Department at (800) 519-3456 or rctechservices@emerson.com.

Only use RIDGID Press Tools and RIDGID press tool attachments (jaw sets, rings, actuators, etc.) when specified by the fitting manufacturer for use with their system. Be sure to use the correct actuator for the ring being used. Rings are marked to indicate the correct actuator for use with the ring. Use of incorrect press tools and/or attachments for a system can cause system leaks, damage the press tool and attachment or cause severe personal injury.

3. Make sure that the press tool and attachment have been inspected according to their respective manuals or instructions.
4. Follow tool set up procedure according to the specific press tool operator's manual.

Mounting Attachment Into Press Tool

1. Make sure that the press tool is unplugged or that the battery is removed from the tool.
2. Pull the attachment mounting pin on the press tool out. If there is already an attachment in the tool, slide it out of the pressing tool (See Figure 4).



Figure 4 – Sliding The Attachment Out of the Tool

3. Slide the attachment into the press tool and fully engage the attachment mounting pin. The press tool will not function unless the pin is fully engaged.

Calibrating The Pressing Tool For The Specific Pressing Attachment (320-E Pressing Tool Only)

The RIDGID 320-E Pressing Tool includes a feature to help insure that complete press connections are made. To use this feature, when a press attachment is installed on the 320-E, a calibration cycle is done. The 320-E then compares that calibration cycle to each press connection made. If the press connection does not match the calibration cycle, the 320-E alerts the user that a pressing error has occurred so that the operator can take appropriate action.

See the 320-E manual or contact Ridge Tool Technical Service if you have any questions regarding this feature.

Preparing The Connection

NOTICE These are generalized instructions. Always follow the fitting manufacturer's specific installation instructions. Failure to follow the fitting manufacturer's installation instructions may lead to an improper press connection and cause leaking connections and property damage.

Preparing the Pipe

1. If necessary, cut the desired length of the proper pipe for use with the fitting system. Use a pipe cutter or other method that provides a clean cut square to the axis of the pipe. If using a vise or other method to hold the pipe during cutting, make sure that the vise is far enough from the end of the pipe not to damage the section of pipe that is inserted into the fitting. Scratches on the outside diameter of the pipe and deformed pipe can cause leaks.
2. MegaPress and MegaPressG fittings require proper pipe end preparation to deburr and clean the pipe's outside diameter. Consult fitting manufacturer's instructions for appropriate pipe end preparation.
3. Failure to properly prepare the end of the pipe will result in leaking connections which can cause property damage.

Inserting the Pipe into the Fitting

1. Inspect the fitting per the manufacturer's

instructions to be sure all parts are present, in place and free of dirt and debris. If fitting parts are missing or dirty, this can cause improper connections, leaks and other property damage. See Figure 5.

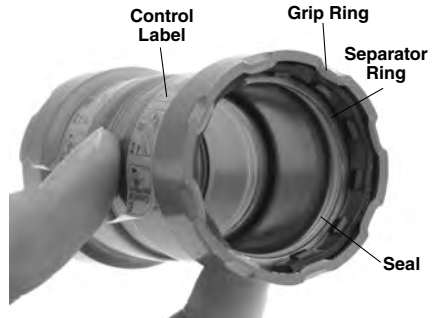


Figure 5 – Inspection of MegaPress Fitting Prior to Pipe Insertion

2. Check the fitting manufacturer's instructions and mark the pipe with a permanent marker at the appropriate distance from the pipe end. This gives a visual reference that the pipe has been fully inserted into the fitting prior to pressing the connection. See Figure 6.



Figure 6A – Marking the Pipe Before Inserting Into Fitting Using Tape Measure



Figure 6B – Marking the Pipe Before Inserting Into Fitting Using RIDGID® MegaPress® Pipe Inspection Gauge

3. Fully insert the pipe into the fitting. Most fittings have a stop that the pipe end contacts to indicate full insertion. Other fittings do not have a stop and will allow the pipe to fully pass through the fitting, and are typically used in repair applications. If there is no stop, insert the pipe so that the

mark made in the previous step is even with the end of the fitting. In some cases, a twisting motion during insertion makes the process easier. Never use any lubricant unless the fitting manufacturer specifically advises to. Lubricants can degrade the seal and cause leaks. Pipe that is difficult to insert may be out of round or have burrs on the pipe end, which can damage the seal and cause leaks.

4. Make sure that the pipe is fully inserted in the fitting and if not marked in previous steps, mark the pipe at the end of the fitting to give a visual reference that the pipe is fully inserted. See Figure 7.



Figure 7 – Marking the Pipe After Fully Inserting Pipe

Confirm that the tool and attachments have been properly set up.

Pressing the Connection with a Jaw Set

1. Squeeze the jaw arms to open the Jaw set and place the open jaws around the fitting. Allow the jaw set to close around the fitting, making sure to align the press profile of the Jaw set with the contour of the fitting (See Figure 8).



Figure 8 – Opening the MegaPress Jaw set and Placing Around Fitting

2. Confirm that the pipe is inserted to the proper depth in the fitting as specified in appropriate Fitting System instructions.
3. Make sure that the jaw set and pressing tool are square to the pipe and fitting (See Figure 9). Depress the press tool switch. Keep fingers and hands away from the jaw set to avoid crushing injuries in jaw set and between the jaw set and the surroundings.



Figure 9 – MegaPress Jaw Set Square To Fitting and Tubing

Operating Instructions

⚠ WARNING



Always wear eye protection to reduce the risk of eye injury.

Keep your fingers and hands away from the tool attachment during the pressing cycle. Your fingers or hands can be crushed, fractured or amputated in the attachment or tool or between the attachment, work piece and other objects.

Follow operating instructions to reduce the risk of injury from crushing and other causes and to prevent tool damage.

⚠ WARNING Only use RIDGID Press Tools and RIDGID press tool attachments (jaw sets, rings, actuators, etc.) when specified by the fitting manufacturer for use with their system. Use of incorrect press tools and/or attachments for a system can cause system leaks, damage the press tool or attachment, void warranties or cause severe personal injury.

The pressing cycle takes 4-8 seconds depending on the press tool. Once a press cycle begins and the rollers contact the Jaw set, the press tool will lock on and automatically complete the press cycle. Releasing the tool switch will not stop

the tool once the pressing process has begun. This ensures consistent, repeatable press connection integrity. If the tool should malfunction, refer to the specific press tool operator's manual.

4. Press the jaw set jaw arms to open the jaw set and remove from the fitting. Avoid any sharp edges that may have formed on fitting during pressing operation.

Pressing the Connection with a Ring and Actuator

1. Open the appropriate Press Ring and place squarely around the fitting. Allow the ring to close around the fitting, making sure to align the press profile with the contour of the fitting. If the ring is not properly aligned with the fitting, an improper press connection will be made and the press ring may be damaged. (See Figure 10.)



Figure 10 – Opening the MegaPress Ring and Placing Around Fitting

2. Confirm that the appropriate actuator for the ring to be pressed is in the pressing tool (the ring will be marked with the designation of the appropriate actuator). The correct actuator/ring combination must be used to prevent possible injury, ring and actuator damage, and improper press connections. If using the 320-E Pressing Tool, make sure that the tool and actuator have been calibrated. If not, see the calibration information in the Set Up section.
3. Squeeze the actuator arms to open the actuator tips, place tips in ring pockets and allow the actuator to close down and seat into the pockets. See Figures 12A-B. The actuator and its mating ring are designed to allow the actuator and tool to be rotated up to ninety degrees each way from perpendicular. Make sure that the actuator tips are fully engaged in the ring pockets.

NOTICE Misaligning actuator tip to ring pocket can damage the ring or actuator during pressing. Make sure that the actuator tips are fully engaged in the ring pockets. (See Figure 11.)



Figure 11 – Damaged Ring Pocket



Figure 12A – Placing Actuator Tips Into MegaPress Ring Pockets



Figure 12B – Placing Actuator Into MegaPress Ring Pockets At An Angle For Additional Clearance

Do not hang the actuator and tool from the ring. The tool and actuator could fall from the ring and cause serious injury or death.

4. Make sure that the ring is square to the pipe and fitting and depress the press tool switch. Keep fingers and hands away from the actuator and ring to avoid crushing injuries in the attachments and between the attachments and surroundings.

For 1¼", 1½" and 2" connections, the pressing cycle takes 4-8 seconds. For 2½", 3" and 4" connections, the pressing cycle takes 15-24 seconds. Once a press cycle begins and the rollers contact the

actuator, the press tool will lock on and automatically complete the press cycle. Releasing the tool switch will not stop the tool once the pressing process has begun. This ensures consistent, repeatable press connection integrity. If the tool should malfunction, refer to the specific press tool operator's manual.

The MegaPress and MegaPress XL rings are designed to fully close during the pressing process.

5. After the pressing operation is complete, squeeze the actuator arms to open the actuator tips and remove from the ring.
6. Remove the ring from the fitting. Avoid any sharp edges that may have formed on the fitting during the pressing operation.

Inspecting The Press Connection

1. Inspect the pressed fitting. If the fitting is supplied with a control label by the fitting manufacturer, remove it (*Refer to Figure 5*). Control labels are supplied by the manufacturer to indicate that the fitting has not yet been pressed. Removal of the control label indicates to others that the connection has been pressed.

Look for the following:

- Excessive misalignment of the pipes. Note that a slight amount of misalignment at the pressed connection is considered normal.
- Pipes that are not fully inserted into the fitting – double check the insertion marks made on the pipe to see that they are still aligned with the end of the fitting.
- Incorrect jaw or ring alignment with the fitting contour, distorted or deformed fitting.
- Any other issues per the fitting manufacturer.

If any problems are found, remove the fitting and replace with properly prepared and pressed fittings and pipe.

2. Test the system in accordance with the system supplier's instructions, normal practice and local codes. The system supplier may have specific system test procedures to confirm the integrity of the system.

Maintenance

⚠ WARNING

Press attachments should be removed from press tool before performing any maintenance.

A jaw, press ring or ring actuator component that has been welded, ground, drilled or modified in any manner can shatter during pressing, resulting in sharp flying objects, severe injury or death. Discard and replace damaged jaws, press rings or ring actuators.

1. Inspect the inside diameter of jaws and press rings daily (*Figure 13*). If rusty or dirty, clean with fine grade Scotch-Brite® (Scotch-Brite® is a registered trademark of 3M Company) metal polishing pads (or equivalent), steel wool or a steel bristle wire brush.

NOTICE Do not clean pressing profile with aggressive abrasive materials or methods, such as emery cloth, sandpaper, grinding wheels or rotary files. These methods may alter critical pressing profile dimensions and cause improper pressed connections that can lead to leaks and extensive property damage.

2. Inspect the segment area of the MegaPress jaws/rings daily for debris or damage that could prevent full closure and cause out of tolerance connections. While holding the jaw/ring open, clean the areas next to the segment with a brush. (*See Figure 13.*)



Figure 13 – Cleaning Segment Area of MegaPress Jaw

3. Pivot pins and moving points on jaws, press rings and actuators should be cleaned and lubricated at least once a month with a light weight general purpose lubricating oil.

- Check return springs in press jaws, rings and ring actuators with each use. Jaws and ring actuators should open and close freely with only moderate finger effort required.

Optional Equipment

⚠ WARNING

To reduce the risk of serious injury or incorrect pressed connections, only use accessories specifically designed and recommended for use with MegaPress® Fittings such as those listed.

MegaPress® System

MegaPress Kits and Accessories

Catalog No.	Description
48553	MegaPress Kit 1/2" - 2"
48558	MegaPress Kit 1/2" - 1"
48563	Carrying Case for Standard MegaPress Tool Kits.
37993	1/2" to 1" MegaPress Prep Tool
37988	1 1/4" to 2" MegaPress Prep Tool
38008	Abrasive Strips for 1/2" to 1" MegaPress Prep Tool (Pack of 10)
38003	Abrasive Strips for 1 1/4" to 2" MegaPress Prep Tool (Pack of 10)

Press Tools

Catalog No.	Description
43348	RP 340 Battery Press Tool Kit without Jaw Sets
43363	RP 340 Corded Press Tool Kit without Jaw Sets

Machine Storage

⚠ WARNING These tools and attachments must be kept indoors or well covered in inclement weather. Store in a locked area out of the reach of children and people unfamiliar with the tools. These tools can cause serious injury in the hands of untrained users.

Service and Repair

⚠ WARNING

Improper service or repair can make attachments unsafe to operate.

The "Maintenance Instructions" will take care of most of the service needs of this machine. Any problems not addressed by this section should only be handled by an authorized RIDGID service technician.

No Service parts are sold for these attachments. If parts are needed, the attachment should be discarded and a new unit purchased.

For information on your nearest RIDGID Independent Service Center or any service or repair questions:

- Contact your local RIDGID distributor.
- Visit RIDGID.com to find your local RIDGID contact point.
- Contact Ridge Tool Technical Service Department at rttechservices@emerson.com, or in the U.S. and Canada call (800) 519-3456.

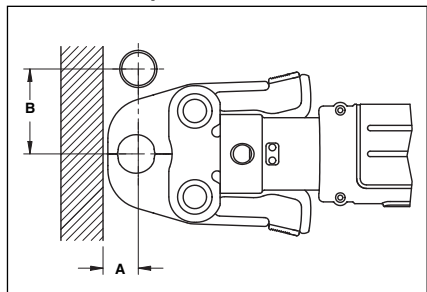
Disposal

Parts of the equipment contain valuable materials and can be recycled. There are companies that specialize in recycling that may be found locally. Dispose of the components in compliance with all applicable regulations. Contact your local waste management authority for more information.

Clearance Requirements

The following figures illustrate the clearance requirements for the jaws and fittings and the procedure for pressing fittings in tight quarters with rings.

Clearance Requirements



Standard Series MegaPress Jaw Sets

Pipe Dia.	A (min.)		B (min.)	
	Inches	mm	Inches	mm
1/2"	1	26	2 5/8	67
3/4"	1 1/4	32	3 1/8	79
1"	1 3/4	45	3 5/8	92

Compact Series MegaPress Jaw Sets

Pipe Dia.	A (min.)		B (min.)	
	Inches	mm	Inches	mm
1/2"	1 1/4	32	2 7/8	73
3/4"	1 1/8	29	3"	76