Vic-Press Schedule 10S System Products for Schedules 5S and 10S Stainless Steel Pipe

Installation Instructions

Victaulic®

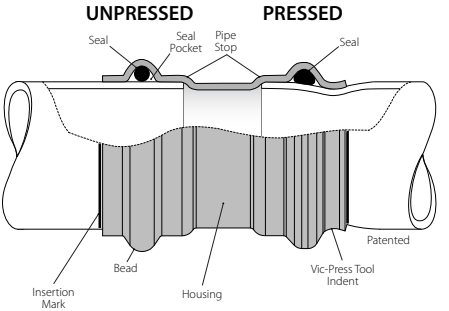
I-P500_13

INSTALLATION REQUIREMENTS

⚠ WARNING

- **Read and understand all instructions, including the operating and maintenance manual for the PFT510 Vic-Press Schedule 10S Tool, before attempting to install any Victaulic Vic-Press Schedule 10S System Products.**
- **Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.**
- **Wear safety glasses, hardhat, and foot protection.**

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



Exaggerated for Clarity

The following instructions contain important information regarding installation of Victaulic Vic-Press Schedule 10S System Products and must be followed to ensure proper joint performance.

Check the supplied seal to ensure it is suitable for the intended service. Refer to the "Seal Selection" section for details.

Read the operating and maintenance manual provided with the PFT510 Vic-Press Schedule 10S Tool.

Pipe dimensions must be within published tolerances; these tolerances are subject to specified standards for acceptability. Refer to the "Pipe Specifications" section for details.

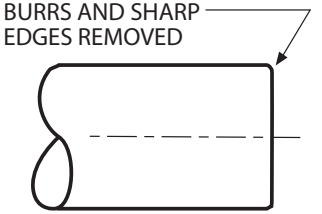
Always measure the insertion depth by using the Vic-Press Schedule 10S Marking Gauge or a ruler or tape measure. Place a mark at the proper insertion-depth measurement. This mark is a critical indicator for full insertion of the pipe end into the fitting. Refer to the "Marking the Pipe" section for requirements.

SEALS IN VIC-PRESS SCHEDULE 10S SYSTEM PRODUCTS MAY BE PRE-LUBRICATED. If product is shipped from the factory in bags, it is an indication that the seals are pre-lubricated. The shipping bag helps to keep the pre-lubrication intact. DO NOT remove product from the shipping bag until it is ready to be installed/pressed. If product is not shipped from the factory in a bag, the seals ARE NOT pre-lubricated. Refer to the "Important Lubrication Information" section for details.

Vic-Press Schedule 10S System Products have unique center-to-end or end-to-end dimensions. Threaded products with special features such as probes, escutcheon cups, etc., must be checked to ensure the thread standard and insertion length are compatible with threaded adapters. Failure to verify dimensional suitability may result in difficult and/or improper assembly.

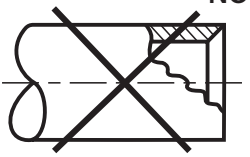
PIPE PREPARATION

ACCEPTABLE



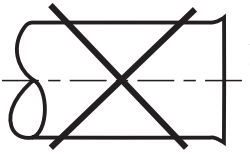
Pipe ends shall be square cut. The pipe OD shall not contain burrs, sharp edges, raised weld beads, axial score marks, scratches, and indentations.

NOT ACCEPTABLE



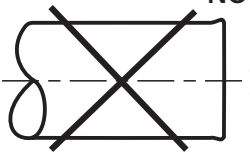
Excessive chamfer on the pipe ID will cut the seal during product assembly. Excessive chamfer is not acceptable.

NOT ACCEPTABLE

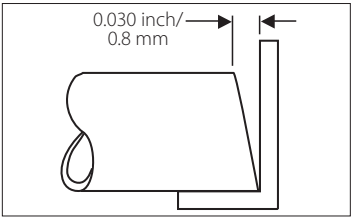


Abrasive wheels and saws will leave edges on pipe ends that are especially pronounced on one side. Burrs and sharp edges are not acceptable.

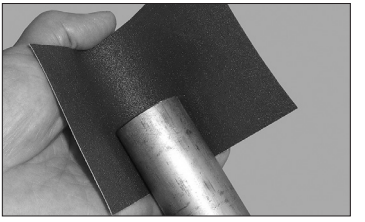
NOT ACCEPTABLE



Dull wheel cutters will push ridges up at the pipe OD, which will result in oversized pipe diameters. Oversized pipe diameters are not acceptable.



1. Pipe ends shall be square cut ("S" dimension shown above) within 0.030 inch/ 0.8 mm.



2. Clean and inspect the pipe ends. Make sure the pipe ends do not contain burrs, sharp edges, raised weld beads, axial score marks, scratches, and indentations a minimum of 2 inches/51 mm back from the pipe end.

MARKING THE PIPE

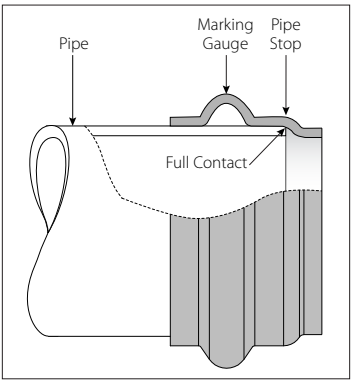
⚠ CAUTION

- **Insertion depth must be measured and marked on the pipe ends to provide visual confirmation that the pipe is inserted fully into the fitting.**

Failure to follow this instruction could cause improper product assembly, resulting in joint leakage and/or property damage.

Pipe insertion depth must be measured by using the Vic-Press Schedule 10S Marking Gauge or a ruler or tape measure. Refer to the instructions below, which provide detailed directions for measuring and marking pipe ends.

Vic-Press Schedule 10S Marking Gauge

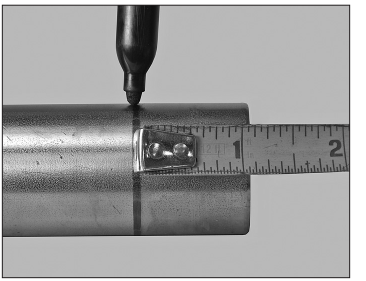


1. When using the Vic-Press Schedule 10S Marking Gauge, insert the pipe end into the correct size gauge. Make sure the pipe end contacts the pipe stop (refer to the sketch above).

2. While the pipe is inserted completely into the gauge, mark the pipe along the edge of the gauge with a marker or paint stick, as shown above.

3. Remove the gauge from the pipe.

Ruler or Tape Measure



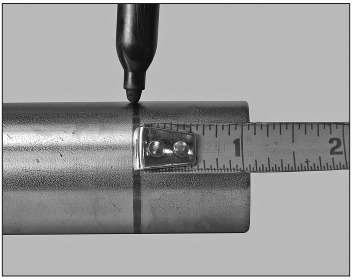
1. When using a ruler or tape measure, refer to the "Vic-Press Schedule 10S Insertion Depth Requirements" table below. Measure back from the pipe end. Place a mark around the pipe circumference with a marker or paint stick, as shown above.

Vic-Press Schedule 10S Insertion Depth Requirements

Nominal Diameter inches	Actual Pipe Outside Diameter inches/mm	Insertion Depth Requirements inches/mm
½	0.840 21.3	1 1⁄16 27
¾	1.050 26.9	1 1⁄16 27
1	1.315 33.7	1 3⁄16 30
1 ½	1.900 48.3	1 3⁄8 35
2	2.375 60.3	1 5⁄8 41

Vic-Press Schedule 10S Slip Couplings

Vic-Press Schedule 10S Slip Couplings do not contain a pipe stop so that insertion to various depths can be accommodated. For proper assembly, the pipe must be inserted into the fitting to the minimum depth listed in the "Vic-Press Schedule 10S Slip Coupling Minimum Insertion Depth Requirements" table below.



1. Refer to the "Vic-Press Schedule 10S Slip Coupling Minimum Insertion Depth Requirements" table below. Use a ruler or tape measure to measure back from the pipe end. Place a mark around the pipe circumference with a marker or paint stick, as shown above.

Vic-Press Schedule 10S Slip Coupling Minimum Insertion Depth Requirements

Nominal Diameter inches	Actual Pipe Outside Diameter inches/mm	Insertion Depth Requirements inches/mm
½	0.840 21.3	1 1⁄16 27
¾	1.050 26.9	1 1⁄16 27
1	1.315 33.7	1 3⁄16 30
1 ½	1.900 48.3	1 3⁄8 35
2	2.375 60.3	1 5⁄8 41

IMPORTANT LUBRICATION INFORMATION

Handling of Product That IS Pre-Lubricated

⚠ CAUTION

- **DO NOT remove the Vic-Press Schedule 10S System Product from the shipping bag until it is ready to be installed/pressed.**
- **Handling and storage of product that is pre-lubricated is critical for ensuring proper product performance.**

Failure to follow instructions could cause dirt or debris accumulation on the pre-lubricated seals, resulting in pinching or tearing of seals, joint leakage, and property damage.

If product is shipped from the factory in bags, it is an indication that the seals are pre-lubricated and do not require additional lubrication. The shipping bag helps to keep the pre-lubrication intact. DO NOT remove product from the shipping bag until it is ready to be installed/pressed.

However, in cases where product was removed from the shipping bag and stored outside for any length of time, the seals and fitting interior shall be inspected to ensure debris is not present. If the product is mishandled, or if any dirt or debris is present on the seals or inside the fitting, remove the seals from the seal pocket. Clean the seals and fitting with water, then apply a thin coat of Victaulic Lubricant to the entire surface of each seal. Replace the seals properly in the seal pocket.

If one side of the fitting is installed/pressed, and the other side will be unpressed or exposed to the environment for an extended time period, the exposed side should be covered to protect the seal from dirt or debris accumulation. If this instruction is not followed, the seal from the exposed side of the fitting may need to be removed, cleaned, and lubricated, as described above.

Handling of Product That IS NOT Pre-Lubricated

⚠ CAUTION

- **Seals for Vic-Press Schedule 10S System Products, that are not shipped from the factory in bags, must be lubricated.**

Failure to follow this instruction could cause pinching or tearing of seals, resulting in joint leakage and/or property damage.

IF PRODUCT IS NOT SHIPPED FROM THE FACTORY IN A BAG, THE SEALS ARE NOT PRE-LUBRICATED AND MUST BE LUBRICATED IN THE FOLLOWING MANNER. Lubrication is essential to prevent seals from being pinched during installation. Fittings should be dipped into a soapy water solution. **Make sure the seals are wetted thoroughly, and complete all pressing steps while the seals are still wet.**

PRODUCT ASSEMBLY

1. Check the openings of Vic-Press Schedule 10S System Products to make sure seals are seated properly inside the seal pocket. Verify that the seals are a material grade that is compatible with the intended service.

⚠ CAUTION

- **DO NOT force the pipe into the coupling or fitting.**
- **Insert the pipe into the coupling or fitting with a slight twisting action to ease insertion.**

Forcing the pipe into position may cause damage to the seal, resulting in joint leakage and/or property damage.

2. For Standard Couplings and Fittings: Insert the pipe into the coupling or fitting with a slight twisting action to ease insertion. The pipe must contact the pipe stop inside the coupling or fitting. Make sure the pipe is inserted fully up to the mark that was made in previous steps.

2a. For Slip Couplings: Insert the pipe into the slip coupling with a slight twisting action to ease insertion. Since slip couplings do not contain a pipe stop, make sure the pipe is inserted fully up to the mark that was made in the "Vic-Press Schedule 10S Slip Couplings" section.

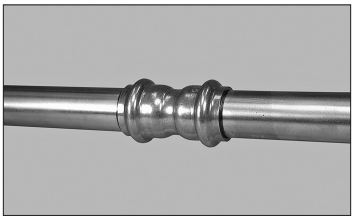
⚠ WARNING

- **Before operating the Victaulic PFT510 Vic-Press Schedule 10S Tool, read and understand the TM-PFT510 Operating and Maintenance Manual and all labels on the tool.**
- **DO NOT ALTER THE PFT510 VIC-PRESS SCHEDULE 10S TOOL OR JAWS IN ANY WAY. ALTERATIONS TO ANY TOOL COMPONENTS WILL VOID THE VICTAULIC WARRANTY.**

Failure to follow instructions may result in serious personal injury, improper tool operation, improper joint assembly, and property damage.

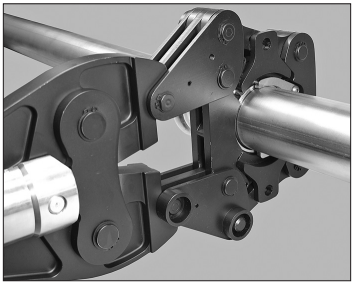
NOTICE

- **For Vic-Press Schedule 10S System Products with threaded connections, the outlet section of the fitting must be held rigid with a pipe wrench during tightening.**



Standard Vic-Press Jaw for ½-inch/21.3-mm, ¾-inch/26.9-mm, and 1-inch/33.7-mm Sizes

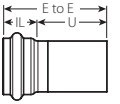
Press Ring/Vic-Press Adapter Jaw Assembly for 1½-inch/48.3-mm and 2-inch/60.3-mm Sizes



3. Align the pipe. Make sure the joint is straight and the pipe marks indicate full insertion into the coupling or fitting before performing the pressing operation. The PFT510 Vic-Press Schedule 10S Tool will not straighten a deflected joint during the pressing operation. Straight joints can be achieved through proper supports and careful tool handling. **NOTE:** For 1½-inch/48.3-mm and 2-inch/60.3-mm sizes, the press ring/Vic-Press adapter jaw assembly (shown above) must be utilized. Always refer to the TM-PFT510 Operating and Maintenance Manual for details on proper tool setup and operation.

VIC-PRESS SCHEDULE 10S SYSTEM FITTINGS

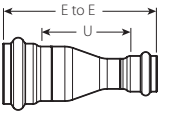
Style P561 – Weld Adapter (P x T)



STYLE P561

Size		Dimensions – inches/mm		
Nominal Size inches/mm	Actual Pipe Outside Diameter inches/mm	E to E	U Takeout	IL Insertion Length
½ 15	0.840 21.3	3.92 99.6	2.85 72.4	1.06 26.9
¾ 20	1.050 26.7	3.84 97.5	2.77 70.4	1.06 26.9
1 25	1.315 33.7	4.18 106.2	3.00 76.2	1.19 30.2
1 ½ 40	1.900 48.3	4.37 111.0	2.98 75.7	1.38 35.1
2 50	2.375 60.3	4.85 123.2	3.22 81.8	1.63 41.4

Styles P574 and P594 – Concentric Reducers (P x P)



STYLES P574 AND P594

Size			Dimensions – inches/mm	
Nominal Size inches/mm			E to E	U Takeout
¾ 20	×	½ 15	4.25 108.0	2.13 54.1
1 25	×	½ 15	4.92 125.0	2.67 67.8
		¾ 20	4.84 122.9	2.59 65.8
1 ½ 40	×	½ 15	5.57 414.5	3.13 79.5
		¾ 20	5.49 139.4	3.06 77.7
		1 25	5.66 143.8	3.09 78.5
2 50	×	½ 15	6.52 168.5	3.84 97.5
		¾ 20	6.44 163.6	3.76 95.5
		1 25	6.60 167.6	3.79 96.3
		1 ½ 40	6.75 171.5	3.76 95.5

Always refer to the current Victaulic submittal publication in the G-100 General Catalog or on the website www.victaulic.com for the most up-to-date dimensional information.