



# Operating and Maintenance Instructions Manual

## PFT505 Pressfit Tool



### **⚠ WARNING**



Failure to follow Instructions and warnings can result in serious personal injury.

- When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury.
- Before installing, operating, or servicing the PFT505 tool read all instructions in this Manual and all warning labels on the tool.
- Before setting up and operating the Victaulic Pressfit tool, read "Victaulic Pressfit Product Assembly Instructions" (I-500).
- Always wear safety glasses and foot protection.
- Save this instruction manual.

If you need additional copies of the manual or instructions, or have any questions about the safe operation of this tool, contact Victaulic Tool Company, P.O. Box 31, Easton, PA 18044-0031, Phone: 610-559-3300.

# PFT505

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## Read this first – Hazard Identification

Definitions for identifying the various hazard levels shown on warning labels or to indicate proper safety procedures in this Manual are provided below.



This safety alert symbol indicates important safety messages on warning labels and in this manual. When you see this symbol be alert to the possibility of personal injury and carefully read and fully understand the message that follows.

### ! DANGER

The use of the word "DANGER" signifies an immediate hazard with a likelihood of serious personal injury or death if instructions, including recommended precautions, are not followed.

### ! WARNING

The use of the word "WARNING" signifies the presence of hazards or unsafe practices which could result in serious personal injury or death if instructions, including recommended precautions, are not followed.

### ! CAUTION

The use of the word "CAUTION" signifies possible hazards or unsafe practices which could result in personal injury, product or property damage if instructions, including precautions, are not followed.

### NOTICE

The use of the word "NOTICE" signifies special instructions which are important but not related to hazards.

**PFT505**

**OPERATOR SAFETY INSTRUCTIONS**

Using this tool requires dexterity and mechanical skills, as well as sound safety habits. Although this tool is manufactured for safe dependable operation, it is impossible to anticipate those combinations of circumstances which could result in an accident. The following instructions are recommended for safe operation of the tool. The operator is cautioned to always practice "Safety First" during each phase of use, including setup and maintenance of this unit.

**GENERAL**

- 1. Read this operating manual before operating, servicing or maintaining this tool.**  
Become familiar with the tool's operations, applications and limitations. Be particularly aware of its specific hazards. Store the operator's manual in a clean area and always at a readily available location. Additional copies are available at no charge upon request by calling or writing to Victaulic Tool Company.
- 2. Use only Victaulic replacement parts and accessories.** Use of improper parts and accessories may be hazardous.
- 3. Victaulic Pressfit System products are designed for use only with UL/ULC Listed and FM Approved Schedule 5 steel pipe or approved Victaulic stainless steel pipe.**  
Victaulic stainless steel pipe carries the label "Victaulic® Pressfit® Pipe, Certified For Use With Pressfit Products."  
**Do not use the tool for anything other than its intended purpose.**

**TOOL SET-UP**

- 1. Ground the Pressfit tool.** Be sure the Pressfit tool is connected to an internally grounded electrical system. 20 amps maximum.
- 2. Avoid dangerous environments.** Don't expose power tools to rain. Don't use the tool in damp or wet locations and avoid locations near flammable liquids and gaseous, explosive atmospheres.

**OPERATING TOOL**

- 1. Inspect the tool for any obstructions.** Be certain that all guards and tool parts are properly installed and secured.
- 2. Keep work area clean.** Cluttered areas, benches and slippery floors invite accidents.
- 3. Keep alert.** Do not operate tool if drowsy from medication or fatigue. Avoid horseplay around tool and keep bystanders a safe distance from tool. Don't operate tool when you are tired.
- 4. Wear safety glasses and footwear.**
- 5. Wear proper apparel.** Don't wear loose clothing (unbuttoned jackets or loose sleeve cuffs), loose gloves or jewelry that can get caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors.
- 6. Keep fingers and hands away from press jaws during pressing.**
- 7. Be sure you have adequate space to operate the tool.** Assembly of the Pressfit System products requires sufficient space to open the jaws and properly place them over the fittings.
- 8. Don't force the tool.** It will do the job better and safer at the rate for which it was designed.
- 9. Don't abuse cord.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, pinch points, and sharp edges.
- 10. Secure work.** Use clamps, vice or secure pipe hangers to hold work and free the hands of the operator.
- 11. Don't overreach.** Keep proper footing and balance at all times.
- 12. Disconnect power, when not in use, before servicing, and when changing press jaws.**
- 13. Avoid unintentional starting.** Don't carry plugged in tool with fingers on switch.
- 14. When tool is used outdoors, use only extension cords suitable for outdoor use.**
- 15. Use only Victaulic Pressfit System "press jaws", sizes 1/2, 3/4, 1, 1 1/4, 1 1/2, and 2".**
- 16. Store idle tools.** When not in use, tools should be stored in a dry, high or locked up place, out of reach of children.
- 17. Keep work area well lit.**
- 18. Guard against electric shock.** Prevent body contact with grounded surfaces. For example: Pipes, radiators, ranges, refrigerator enclosures.

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### TOOL MAINTENANCE

- 1. Disconnect the power cord prior to servicing.** Repair should only be attempted by authorized personnel.
- 2. Check for damaged parts.** Before further use of the tool or jaws, parts you suspect may be damaged should be carefully checked to determine that they will operate properly and perform their intended function. Check for alignment of moving parts, breakage of parts, mounting, and any other conditions that may affect tool or jaw operation. A part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on or off.
- 3. Clean tool periodically following the procedure in the maintenance section.**
- 4. Maintain tools with care.** Keep tools clean for best and safest performance. Follow instructions for lubricating and changing press jaws. Inspect tool cords periodically and, if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep tool dry, clean, and free from oil and grease.

### INTRODUCTION

Victaulic Pressfit System products are designed for use only with UL/ULC Listed and FM Approved Schedule 5 steel pipe or approved Victaulic stainless steel pipe. Victaulic stainless steel pipe carries the label "Victaulic® Pressfit® Pipe. Certified For Use With Pressfit Products."

The Pressfit System requires a Pressfit Tool designed for securing Pressfit products onto pipe. The tool must be equipped with the proper sized Victaulic press jaws that correspond with the size of the pipe and the Pressfit products being used. The Pressfit Tool package includes the actual pressing tool and any customer specified press jaws. Jaws are available separately for rental or purchase in 1/2, 3/4, 1, 1 1/4, 1 1/2 and 2" sizes. The PFT505 Pressfit Tools designed for industrial and trade use only.

### CAUTION

- Victaulic Pressfit System products are designed for use only with UL/ULC Listed and FM Approved Schedule 5 steel pipe or approved Victaulic stainless steel pipe. Victaulic stainless steel pipe carries the label "Victaulic® Pressfit® Pipe. Certified For Use With Pressfit Products."


Failure to use approved pipe may result in improper assembly and/or property damage.

**PFT505**

**POWER REQUIREMENTS**

The PFT505 is electrically powered and requires a 120v/60 cycle/6.0 amp AC current supply. Before operating the unit, make certain that the available voltage is the same as voltage shown on the nameplate.

**⚠ DANGER**

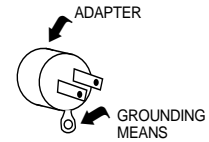
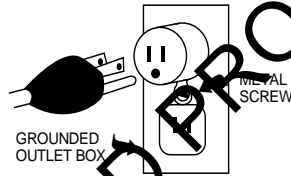
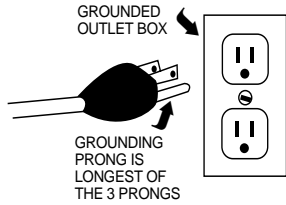


**To reduce the risk of electric shock, check the electrical source for proper grounding and follow the instructions below.**

- Connect to an electrical source with 20 amps maximum circuit protection.
- Before performing any repair or maintenance, disconnect the tool from the electrical source.
- Inspect cord for cuts, cracking and other external damage.

Failure to do so could result in serious personal injury or death. Refer to "Operator Safety Instructions" on page 3.

**GROUNDING**



This tool must be grounded while in use to protect the operator from electric shock. The tool is equipped with an approved three-conductor cord and three-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150 volts, it has a plug like that shown in Figure A. An adapter, Figures B and C, is available for connecting three-prong plugs to two-prong receptacles. The green-colored rigid ear, lug, etc. must be connected to permanent ground such as a properly grounded outlet box. Refer to "Tool Set Up" page 3.

**EXTENSION CORD REQUIREMENTS**

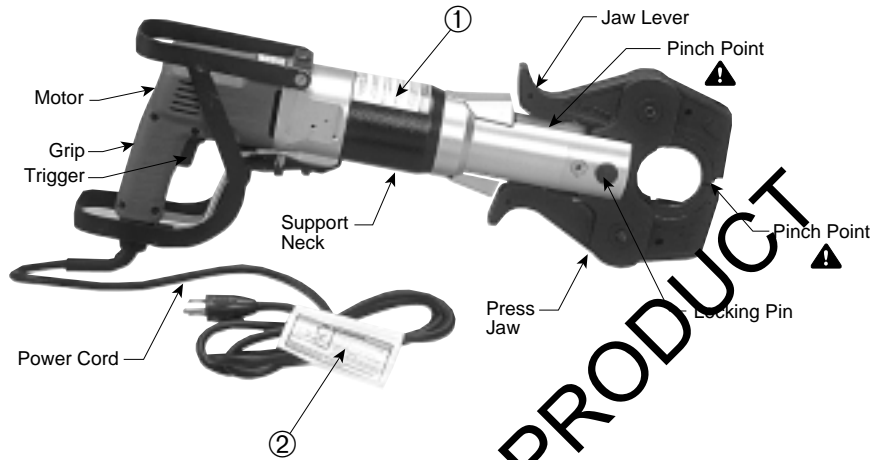
Use only 3-wire extension cords that have 3-prong grounding type plugs and 3-pole receptacles that accept the tool's plug. Replace or repair damaged cords.

1005-1A

Tool	Tool Rating Volt/Amps	Cord Length Gauge		
		25'	50'	100'
PFT505	120/6.0	18	16	14

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## TOOL NOMENCLATURE



**1**

**⚠ WARNING**

- Before installing Pressfit products, operating or servicing the Pressfit Tool, read the Product Assembly and Tool Operation Manual and all warning labels on the tool and tool box.
- Only connect tool to a grounded electrical source, 20 amp maximum.
- Always disconnect power before changing press jaws or servicing.
- Always wear safety glasses and foot protection.
- Keep fingers and hands away from pressing jaws when pressing.
- (1) Always mark the pipe. (2) Always fully insert pipe into the fitting. (3) Always properly position fitting in press jaw before pressing.

**Failure to follow these precautions can result in serious injury, improper assembly, joint leakage or joint failure and property damage.**

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**⚠ WARNING**

1. Always mark pipe using a Pressfit Pipe Marking Gauge or per the chart below.
2. Always fully insert pipe into fitting.
3. Always properly position fitting in press jaw before pressing.
4. Never use pipe shorter than the minimum lengths in the chart below.

**Failure to do so can result in serious injury, improper assembly, joint leakage or joint failure, and property damage.**

SIZE	INSERTION DEPTH	MINIMUM PIPE NIPLLE LENGTH REQUIRED
1/2"	3/8" inch	2 3/4"
3/4" & 1"	1 inch	2 3/4"
1 1/4"	1 1/4 inch	3 1/4"
1 1/2"	1 1/2 inch	3 1/2"
2"	1 7/8 inch	5"

**NOTE:** Line lengths shown above are actual sizes for use as a reference when marking pipe ends.

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**NOTICE**

**Label (as pictured above) not shown at full scale. DO NOT use this representation as a gauge or template to mark pipe.**

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**RECEIVING TOOL**

The Victaulic PFT505 is supplied with the following items:

1. Pressfit tool with detachable cord.
2. Jaws for 1/2, 3/4, 1, 1 1/4, 1 1/2 and 2" nominal IPS size pipe as ordered at the time of lease or purchase. Packaged separately. (See Accessories.)
3. "Victaulic Pressfit Product Assembly Instructions" (I-500)
4. "PFT505 Operating and Maintenance Instructions Manual"
5. Pressfit marking gauges and paint stick.
6. Wire cleaning brush.

Upon receipt of tools, check to be certain all necessary parts are included. Should containers not contain appropriate components, notify your Victaulic distributor or Victaulic representative.

**ACCESSORIES**

Pressfit Jaws	
Size	Jaw Model No.
1/2	PFJ 000
3/4	PFJ 075
1	PFJ 100
1 1/4	PFJ 125
1 1/2	PFJ 150
2 *	PFJ 200

\* In order to properly press 2" Style 570 stainless steel elbows, your press jaws must contain the following prefixes or suffixes.

- "RX Suffix" - Example - 20000781RX
- "PFY Prefix" - Example - PFY001
- "PFZ Prefix" - Example - PFZ002
- "3DC Prefix" - Example - 3DC007
- "2DC Prefix" - Example - 2DC20001

**TOOL SETUP**

**! WARNING**

- Do not connect power until instructed otherwise. Accidental start up of tool may result in serious personal injury.

**PRESS JAW INSTALLATION AND REMOVAL**

**PRESS JAW INSTALLATION**

A separate press jaw set is available for each pipe size 1/2, 3/4, 1, 1 1/4, 1 1/2 and 2". The proper size press jaw must be used for the size of fitting being installed. See Accessories.

Press jaws readily attach to the tool as follows:

1. Unplug the tool.



2. Place the proper size press jaw on a table or the floor. Slide the locking pin to its fully open position.



3. Align Pressfit Tool over the jaws, engaging the tool into the jaws being certain to check the jaw alignment. When in position push the locking pin into the tool until it clicks into the fully locked position.

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### PRESS JAW REMOVAL

1. Unplug the tool.
2. Position tool vertically with the press jaw resting on a table or the floor.



3. While holding the tool vertically, slide locking pin to its fully open position.



4. Lift tool from jaw.

### PRESSING OPERATION

#### WARNING



- Before setting up and operating the Victaulic Pressfit Tool, read "Victaulic Pressfit Product Assembly Instructions" (I-500) and all labels on the tool.
- Review all safety precautions on page 3 of this manual.

Failure to follow instructions and labels may result in serious personal injury, improper assembly, joint leakage or joint failure, or property damage.

#### CAUTION

- The Pressfit tool is designed to be used **ONLY** with Victaulic Pressfit products and designated pipe. Read the "Victaulic Pressfit Product Assembly Instructions" (I-500).
  - The proper size press jaw must be used for the size of fitting being installed.
- Failure to follow instructions may result in personal injury, product or property damage.

#### WARNING

- Inspect tool and jaws for loose, broken or damaged parts which may hinder operation.
- Failure to follow this instruction may cause serious personal injury, improper assembly, joint leakage, joint failure or property damage.

#### DANGER

- Inspect cord for cuts, cracking and other external damage.
- Failure to do so could result in serious personal injury or death.

1. Attach cord to tool and plug into an internally grounded electrical source. 20 amps maximum.



2. Pick up tool placing hands as shown.

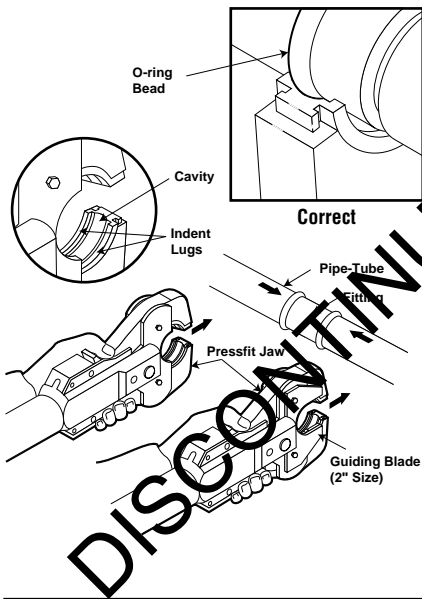


**PFT505**



**3.** Open the press jaws by pressing the jaw levers.

**4.** Slide the press jaws over the fitting with the press jaw cavity directly aligned with the O-ring pocket (raised area of the fitting).



**NOTICE**

- For the 2" size, the Guiding Blade of the Pressfit Tool jaws must be positioned to the outside of the fitting over the pipe.
- For smaller sizes, the Guiding Blade can be positioned over either the pipe or the fitting.



**5.** Release the jaw levers to close the jaws and move handle back to support neck of tool.

**! WARNING**

- Check to be certain that the o-ring pocket (raised area) of the Pressfit fitting is fully seated in the press jaw cavity and that the indent lugs are over the fitting.

Failure to fully seat press jaw cavity prior to pressing may cause serious personal injury, improper assembly, joint leakage or joint failure, and property damage.

**! WARNING**

Press jaws can crush or cut fingers and hands.

- Keep one hand on grip and the other on the support neck.
- Keep fingers and hands away from press jaws when pressing.

**6.** When the tool is properly positioned, fully press the switch and hold it down until the pressing cycle is complete.

## PFT505



### NOTICE

- The tool will run automatically once the jaws start pressing the fitting even if the switch is released. Should the need arise, the automatic run feature can be overridden by pressing the red button on the side of the tool. This will retract the jaws even if the switch is on.
- This tool is equipped with a variable speed switch. For quickest pressing, hold switch all the way in.

7. Release switch.

8. Release the jaws by pressing the jaw levers. Remove the tool from the pipe.

### NOTICE

The tool requires approximately six seconds to reset itself before another pressing cycle can be started.

## MAINTENANCE PROCEDURES

### ⚠ DANGER



- To reduce risk of electric shock, always unplug tool after use
- Always unplug tool before changing press jaws or servicing.

Failure to do so could result in serious personal injury or death.

### NOTICE

Remember that preventative maintenance during operation will pay for itself in repair and operating savings!

### CLEANING AND LUBRICATION

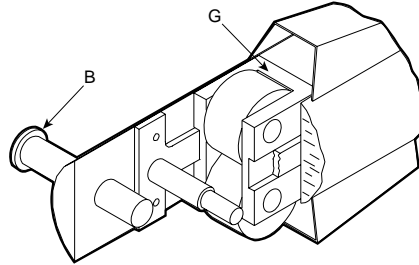
Unplug Pressfit Tool and remove press jaws prior to all repair and maintenance work.

#### PRESS JAWS



At frequent intervals, remove the jaws from the tool and remove any dirt from the pressing surfaces using the small wire brush provided with tool. After cleaning the jaws, lubricate the bolts, pins and sliding segment of the jaws with a commercial machine oil.

#### ROLLER DRIVE AND LOCKING PIN



On a daily basis, clean the guide bracket "G" and the holding pin "B" on the Pressfit tool. After cleaning, lubricate the holding pin "B" with a commercial machine oil. Lubricate the guide bracket "G" with a coating of NLGI Grade 2, lithium based lubricant with 3% molybdenum such as Sunoco® Contractor Grease #2 (Vic P/N N-M02-000-010). Severely worn or damaged surfaces must be replaced.

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**TROUBLESHOOTING**

Problem	Possible Cause	Solution
Tool will not operate.	Tool not plugged in.  Fuse blown or circuit breaker tripped.  Damaged power cord or plug.	Plug tool into appropriate grounded outlet or extension cord.  Replace fuse or reset circuit breaker.  Inspect, repair as necessary.
The motor runs but does not press.	Wrong size jaws in tool.  Attempting to press pipe other than UL/ULC Listed and FM Approved Schedule 5 steel pipe or approved Victaulic stainless steel pipe.  Attempting press cycle immediately following last press cycle.	Check the jaw size and replace with proper size. (See Accessories.)  Use only UL/ULC Listed and FM Approved Schedule 5 steel pipe or approved Victaulic stainless steel pipe.  There is a waiting time of approximately six seconds after each cycle before a new press cycle can be started; Longer if tool is very cold.
Jaws do not fully press the fitting.	Wrong size jaws in tool.  Jaws not positioned over fitting properly.  Attempting to press pipe other than UL/ULC Listed and FM Approved Schedule 5 steel pipe or approved Victaulic stainless steel pipe.  Extension cord too long or of wrong size.  Schedule 5 steel pipe harder than Rb70.  Jaws dirty.	Check jaw size and replace with proper size. (See Accessories.)  Check and ensure that O-ring bead on fitting is centered in jaw cavity.  Use only UL/ULC Listed and FM Approved Schedule 5 steel pipe or approved Victaulic stainless steel pipe.  Check extension cord.  Check pipe hardness.  Clean jaws according to maintenance procedures.
2" jaws will not fit over the fitting.	Jaw guiding blade is aligned with the fitting not the pipe.	Turn jaw or entire Pressfit tool around so that the guiding blade is on the pipe side.
In cold weather pressing cycle time is slow.	Normal for cold weather due to hydraulic oil thickening.	Run tool through 10 complete cycles without performing presses on Pressfit products. This warms up the hydraulic oil speeding cycle time.  The pressing cycle time may be slower in cold weather, however the pressing force is not reduced.



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