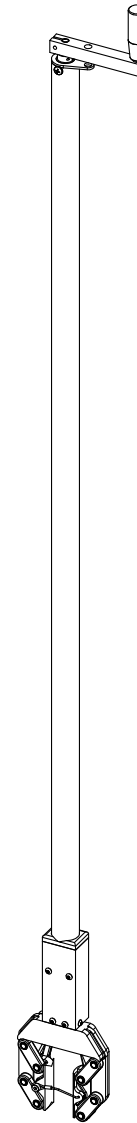




**TIMBERLINE**  
**TOOL®**

## INSTRUCTION MANUAL

### MODEL TR170 TOPREACH CLAMP



**TOPREACH**  
TOP • REACH • CLAMP



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For your personal safety  
READ and UNDERSTAND  
instructions before using tools.



SAVE these instructions  
for future reference.

**SPECIFICATIONS**



**NOTE**

*Table 1 : Squeeze-off Tool for 1/2" to 1" IPS (15mm - 25mm) and 1/2" to 1 1/4" CTS (15mm - 31.75mm) PE Pipe \**

Length:	70.0 in	177.8 cm
Width:	5.3 in (at yoke) 6.0 in (at handle)	13.5 cm 15.3 cm
Thickness:	1.5 in	3.81 cm
Weight:	10.5 lb	4.77 kg

*Table 2 : Rate of Closure*

Pipe Size	# of Revolutions to Close	Maximum # of Revolutions per minute to Close per ASTM Specifications	Revolutions per second
1/4" CTS	42	168	2.8
1/2" CTS	42	84	1.4
1/2" IPS	42	84	1.4
1/2" SIDR	42	84	1.4
3/4" CTS	42	56	.9
3/4" IPS	42	56	.9
3/4" SIDR	42	56	.9
1" CTS	42	42	.7
1" IPS	42	42	.7
1" SIDR	42	42	.7
1-1/4" CTS	42	33	.5

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\* Manufacturer reserves the right to change specifications without notice.

## TIMBERLINE LIMITED WARRANTY

### *Warranty Policy*

Every product manufactured by Timberline Tool is thoroughly inspected and tested before leaving the factory. Our products are warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop with our tools, handles, or accessories during this one-year period please call 800.735.6845 to obtain return authorization for repair. If inspection shows the trouble is caused by defective workmanship or material, Timberline Tool will repair or, at our option, replace the product without charge.

This Warranty does not apply where:

- Repairs have been made or attempted by others.
- Repairs are required because of normal wear and tear.
- The tool has been abused, misused, or improperly maintained.
- Alterations have been made to the tool.

IN NO EVENT SHALL TIMBERLINE TOOL BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

TIMBERLINE TOOL DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

## INTRODUCTION

Timberline squeeze-off tools are designed to temporarily stop the pressurized flow of liquid or gas in polyethylene (PE) pipe.

Squeeze-off is a technique used to control the flow of gas or liquid in polyethylene pipe by compressing the pipe between parallel bars until the inside surfaces make contact. The flexibility and toughness of most polyethylene pipes allow the pipe to recover from a properly made squeeze-off without a measurable loss in service life. Squeeze-off is useful for making installation tie-ins and emergency repairs.

Timberline squeeze-off tools are made from high strength aluminum for superior durability and will not bend or break under normal use. However, care must be taken to ensure that the pipe is free of foreign material and the slap on jaw matches the diameter and wall thickness / SDR of the pipe to be squeezed. \*

Please read the following suggested procedure for squeezing off polyethylene plastic pipe using Timberline Squeeze-off Tools.

## GENERAL SAFETY RULES

### *For all Tools*

READ and UNDERSTAND all instructions. Failure to follow all instructions listed below may result in serious personal injury and/or damage to the tool.

The following ASTM standards provide guidance and requirements for squeeze-off tools, operating procedures, and qualification procedures.


- ASTM F1041, "Standard Guide for Squeeze-off of Polyolefin Gas Pressure Pipe and Tubing"
- ASTM F1563, "Standard Specification for Tools to Squeeze-Off Polyethylene (PE) Gas Pipe or Tubing"
- ASTM F1734, "Standard Practice for Qualification of a Combination of Squeeze Tool, Pipe, and Squeeze-Off Procedures to Avoid Long-Term Damage in Polyethylene (PE) Gas Pipe"

\* The SDR is the ratio of pipe diameter to wall thickness. SDR can be expressed as  $SDR = D/s$  where  $D$  = pipe outside diameter and  $s$  = pipe wall thickness.

## SAFETY INSTRUCTIONS


SAVE THESE FOR FUTURE REFERENCE

### Static Electricity Safety

 **WARNING** Use a proper grounding rod at all times to insure personal safety. PE pipe is a relatively low conductor of electricity. As a result PE pipe does build up a static charge when it is in gas service due to the gas flow on the inside of the pipe. During squeeze-off a larger amount of static charge builds up.

In addition to the potential for pipe damage due to static discharge, the build up of a static charge represents an ignition source. Timberline Tool recommends that you follow all of your company grounding techniques and that all personnel involved in squeeze-off operations receive training on those grounding procedures so that they understand the hazards involved.


### Workplace Safety

 **CAUTION** Prior to using any squeeze-off tool, consult ASTM Standards F1041-02, F1563-01 and F1734-03. Always follow applicable company and OSHA safety procedures.

Observe pipe manufacturers' recommendations and precautions for squeeze-off of polyethylene pipe, exercising particular caution when leaking gas is present.

Safety first. Timberline squeeze-off tools must be used by qualified, trained personnel only and must never be left on the pipe unattended. Refer to pipe manufacturers' recommendations for locating squeeze-off distances from fittings and joints.

### Personal Safety

 **WARNING** Stay Alert, watch what you are doing, and do not use tools while tired or under the influence of narcotics, alcohol, or medication. Use proper clothing, eye protection, and safety equipment when using squeeze-tools.

A moment of inattention while operating squeeze-off tools may result in personal injury.

Store idle tools out of reach of children and other untrained persons.

## SERVICE

1. Clean the tool with a mild detergent after each use.
2. Lubricate the pins and bushings with light oil if the tool is difficult to open and close. (Fig 8 & 9)
3. Keep the Rotating Handles free of debris to avoid interference during assembly.
4. Test and calibrate the tool at least once a year by measuring the gap of the tool, measuring the tips of the yoke, and or performing a test squeeze on a piece of pipe.



Fig 8




Fig 9



**NOTE** If you have questions, please feel free to contact our customer service representatives at 1-800-735-6845 or by email at [service@timberlinetool.com](mailto:service@timberlinetool.com).

## ACCESSORIES

 **WARNING** Any accessories or attachments recommended for use with your Timberline Tool are specified in this manual. The use of any other accessories or attachments might present the risk of injury. Only use accessories or attachments for their stated purpose.

1. Lower the TR170 onto the pipe until the cable is resting on the pipe. The cable keeps the pipe centered in the jaws. It is best if the tool is perpendicular. (Fig 5)



Fig 5



2. Turn the **Rotating Handle** (A1) clockwise to squeezed-off at a rate of 5 revolutions/minute. (Fig 6)



Fig 6

3. A padlock for lock-out/tag-out may be placed through the **Handle** and tab to prevent accidental release. (Fig 7)



Fig 7

4. Once it is safe to release the tool, remove any lock-out/tag-out devices.



5. To remove the tool from the pipe turn the **Rotating Handle** counter clockwise at half the closing rate until the cables are taught or the tool hits its' mechanical stops, per ASTM specifications.

### Specific Tool Safety



If you have used other Timberline products please be aware that the operation of this tool may differ from others and that you may need to follow different rules. Always consult the manual to insure you are following the correct safety instructions to avoid personal injury.

### Tool Usage Safety

Do not force the tool to perform a squeeze-off. The tool will operate safer and better if the rate of squeeze in these instructions is followed.

Maintain the tool with care. A properly maintained tool will be less likely to cause damage and is easier to control.

Check for misalignment, binding of parts, breakage of parts, and other conditions that might affect the operation of the tool. Accidents may be caused by improperly maintained tools.

Use only the accessories, slap-on jaws, or extension handles that correspond to your product. Accessories specific for one tool may be hazardous if used on a different tool.

Failure to use the TR170 in the manner specified in this manual may result in injury and/or permanent damage to the tool.

This tool complies with ASTM F1563-01.



Always make sure to use the slap-on jaw that corresponds to the pipe size and SDR or wall thickness of the pipe to be squeezed-off. Use of the correct slap on jaw ensures that the pipe will not be damaged during squeeze-off.

### Tool Service Safety

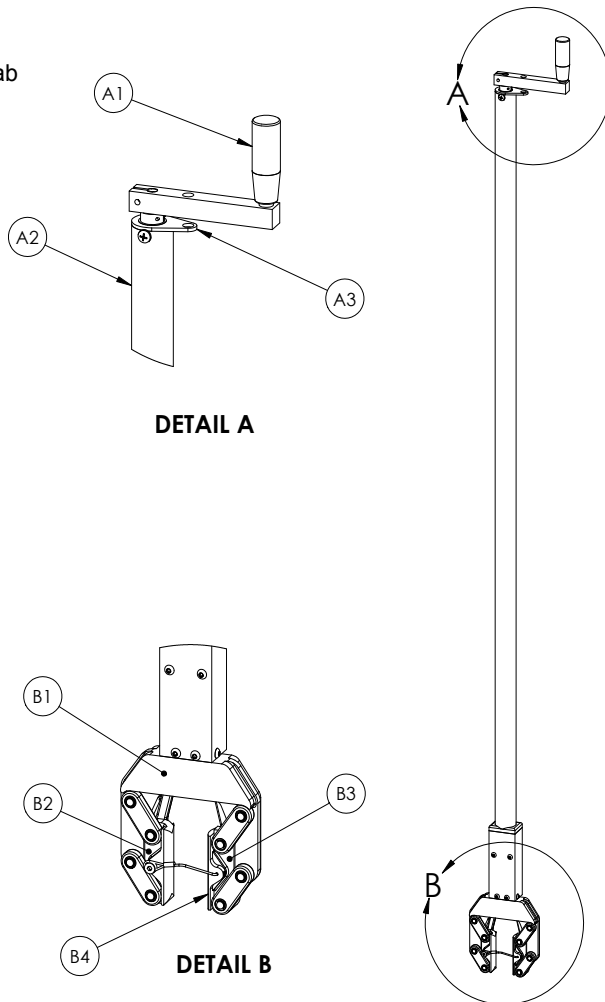


Tool service must only be performed by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

## TR170 DIAGRAM

A1 – Handle  
 A2 – Outer Tube  
 A3 – Lock Out/Tag Out Tab

B1 – Bearing House  
 B2 – Fixed Jaw  
 B3 – Slap-On Jaw Post  
 B4 – Slap-On Jaw



## ASSEMBLY PROCEDURE

1. Remove the **Slap-On Jaw** (B4) from the case. (Fig 1)
2. Turn the **Handle** counterclockwise to open the tool until it stops. (Fig 2)
3. Attach the **Slap-On Jaw** (B4) to the **Slap-On Jaw Post** (B3). (Fig 3)
4. Attach the cable to the **Fixed Jaw Post** (B2). (Fig 4)



Fig 1



Fig 2



Fig 3



Fig 4

## OPERATING PROCEDURE



**NOTE**

Remember this is only a recommended procedure for a safe and effective squeeze-off. Always follow your specific company safety rules when working around natural gas.



**WARNING**

- If the cables are tight and the clamp is dropped on the pipe the cables will break.
- Make sure the pipe is clear of any debris, rock, dirt, etc.



Familiarize yourself with all parts, names, and numbers. Refer to this diagram for the assembly and operation procedures that follow.