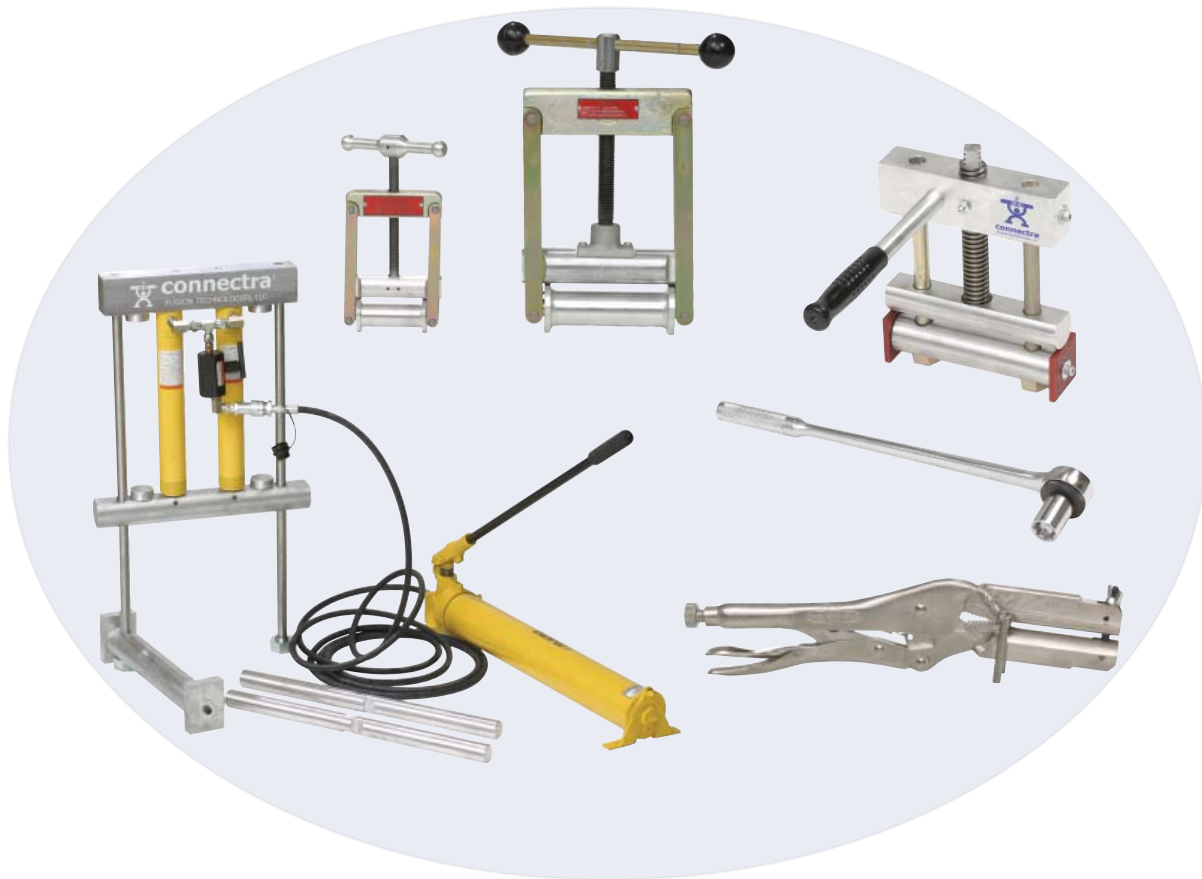


Service, Mechanical & Hydraulic Polysqueeze™

Operator's Manual



CONNECTRA
simply fusion
A Central Plastics Company

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Notice

Any operation involving work on pipe containing liquids or gases under pressure is potentially hazardous. It is necessary, therefore, that correct procedures be followed in the use of this equipment to maintain a safe working environment.

No person should use this equipment who is not fully trained in the procedures stated in this manual, and who is not fully aware of the potential hazards connected with work on pipe containing liquids or gases under pressure.

The purchaser of this equipment is responsible for the manner in which this equipment is used and the training and competence of the operators. Improper or inappropriate use of a squeeze tool can cause pipe failure. Please refer to ASTM standards F-1041, F-1734, and D-2513 for further information.

Should any difficulty arise at any time in the use of this equipment, please contact Connectra immediately.

For Parts & Service:
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Purpose

The purpose of this instruction manual is to provide information on operation of Connectra's Polysqueez mechanical and hydraulic squeeze tools for use on polyethylene pipe. Typical squeeze tools are shown below.

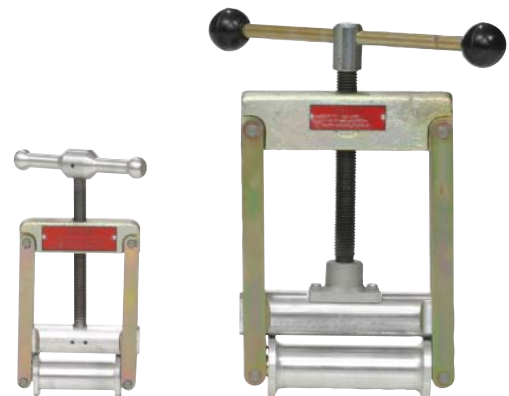
This instruction manual is applicable to Connectra's Service Line, Mid-Range, SLP2, SLP 4 (Mechanical), and SLP24, SLP46, SLP16D, SLP68, SLP68D, SLP1012, SLP1012D (Hydraulic) squeeze tool models.



Hydraulic SLP46 Squeeze Tool



Mechanical SLP2 Squeeze Tool



Service Line Squeeze Tools



Copy information listed on your Warranty Card for your records:

Model No. _____

Serial No. _____

Date Received _____

Distributor _____

Capability

Squeeze Tool Model	Size Range	Lbs/Force
Service Line	1/2" CTS - 1 1/4" CTS	
Mid-Range	1" IPS - 2" IPS	
SLP2	1/2" - 2"	
SLP4	2" - 4"	
SLP24	2" - 4"	40,000
SLP46	4" - 6"	40,000
SLP16DA	1 1/4" CTS - 6" IPS	47,124
SLP68	6" - 8"	60,000
SLP68D	6" - 8"	90,000
SLP1012	10" - 12"	90,000
SLP1012D	10" - 12"	120,000

Pipe Squeeze/Release Rate

Squeeze procedures are not uniform from one type of pipe to another, or one size of pipe to another. The rate of squeeze and release, using an adequately designed squeeze tool, must be slow enough to allow the PE material to change its shape at a rate comparable to the natural relaxation from any induced stress. To force or allow the plastic to move rapidly can cause crazing and pre-crack damage, possibly resulting in pipe wall cracking during its life cycle.

Before conducting a squeeze operation, Connectra recommends that the pipe manufacturer be contacted for recommended procedures for rate of squeeze and release, using a Connectra squeeze tool.

Stops

All Connectra squeeze tools use "stops" to ensure the pipe is not over-squeezed, causing damage to

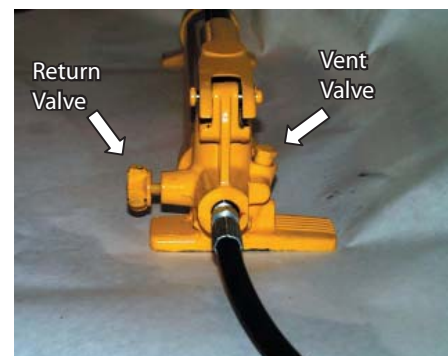
the pipe. Always ensure that you are using the correct stops for the pipe size and wall thickness.

Operations (Hydraulic Tools)

Make sure the pipe manufacturer's instructions relating to the squeezing of pipe are understood and followed.

Preparations for Squeezing

Connect hose from pump unit to the polysqueez unit using the quick disconnect coupling located at the top of the squeezer. Open vent valve on pump reservoir, as shown below.

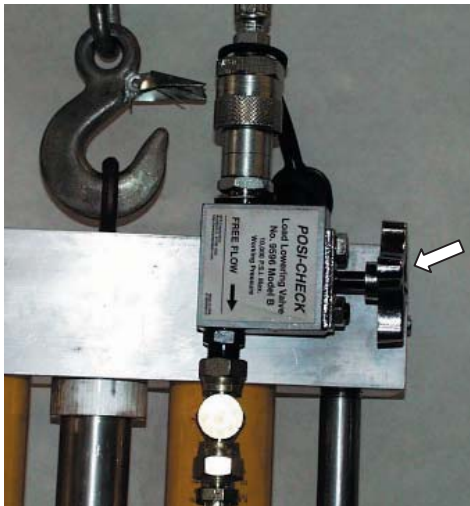


Install ground strap if one is to be used.

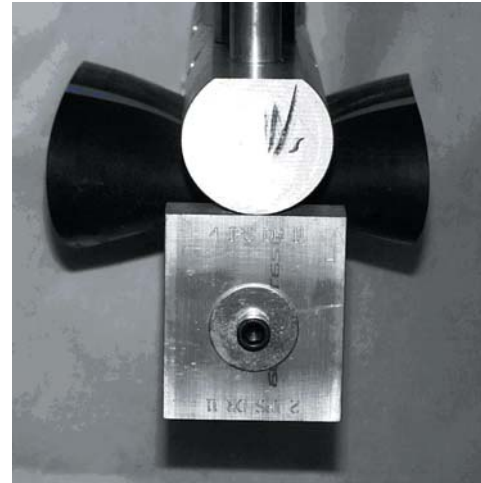
Warning: Static electricity during squeeze-off of polyethylene pipe can be a hazard if a spark discharge occurs in a proper air/gas mixture. Potential for ignition is present if:

- Gas flow is sufficient to cause excessive turbulence,
- Rust or foreign particles are present in the gas, and
- A combustible air/gas mixture is present during the static discharge.

Close the check valve on squeeze unit by turning clockwise shown below. An internal bypass allows the cylinders to extend and prevents accidental opening of the jaws. Valve will be opened to release pressure and open jaws when the squeeze operation is complete.



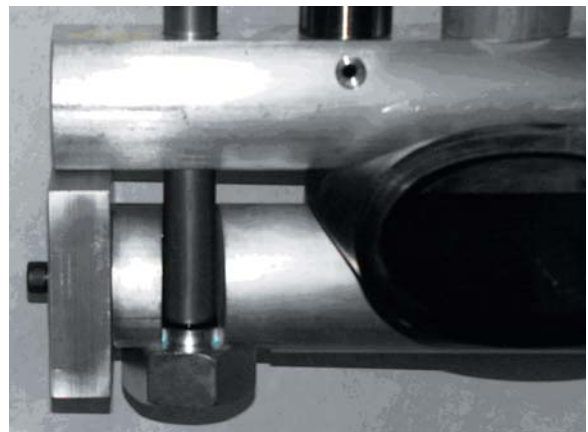
Rotate both stops to the correct pipe size and SDR/wall thickness position, as shown below. Stops are designed to limit the maximum squeeze, preventing over-squeezing or damage to the pipe.



Caution: Make sure the stops selected are those designated for the pipe size and SDR/wall thickness of pipe to be squeezed, and are set on each end. If not, the pipe could be damaged. If squeeze tool does not have stop markings that match the pipe being squeezed, contact factory before continuing.

Lift bottom jaw and swing it open to allow placement of squeeze unit over the pipe.

Swing the lower jaw back into position on the side bar and let it drop straight down over the shoulder nut as shown below. Make sure it latches firmly and will not swing away from the unit.



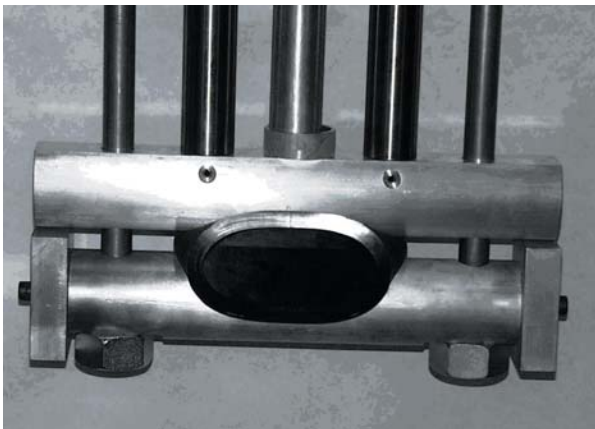
Squeezing the Pipe

Make sure the pump return valve is closed. Turn clockwise.

Using the pump, lower the top jaw into position on the pipe.

Center the pipe in the squeeze tool between the side bars.

Continue pumping until the pipe is squeezed, following squeeze-rate recommendations for the pipe manufacturer. Squeeze until the flow is reduced as desired, or until the bar is against the stops, as shown below.



Install telescoping safety rods between cups on top of upper jaw and top support bar. Extend rods firmly against cups to prevent retraction of hydraulic cylinders in case of unexpected loss of hydraulic pressure, as shown in the next picture.



Releasing the Squeeze

The following procedures should be used after the repair work on the polyethylene pipe is completed and the squeeze is to be released.

Remove telescoping safety rods.

Slowly open the return valve on the front of the pump unit to slowly release hose pressure.

Slightly open the check valve bypass, allowing the upper jaw to release slowly. Release the squeeze at the rate recommended by the pipe manufacturer.

After the top jaw has returned to the starting position, disconnect hydraulic hoses and replace dust caps. Lift lower jaw and swing it 90 degrees. Left the squeeze unit off of pipe.

Return the pump return valve to the closed position by turning clockwise.

Operations (Mechanical Tools)

A typical mechanical squeeze operation is shown below:



Preparations

Install ground strap if one is to be used.



Warning: Static electricity during squeeze-off of polyethylene pipe can be a hazard if a spark discharge occurs in a proper air/gas mixture. Potential for ignition is present if:

- Gas flow is sufficient to cause excessive turbulence,
- Rust or foreign particles are present in the gas, and
- A combustible air/gas mixture is present during the static discharge.

Rotate both stops to the correct pipe size and SDR/wall thickness position. Make sure both stops are set on the correct setting. Stops are designed to limit the maximum squeeze, preventing over-squeezing or damage to the pipe.

Lift bottom jaw and swing it open and place the squeeze unit over the pipe.

Swing lower jaw back into position on the side bar and let it drop straight down over the shoulder nut. Make sure it latches firmly and will not swing away from the unit.

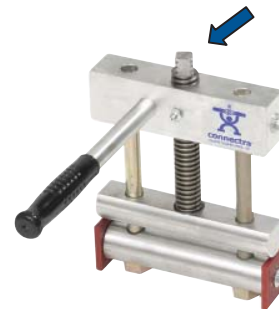
Squeezing the Pipe

Turn the handle clockwise to bring the squeeze bar in contact with the pipe. Center the pipe in the squeeze tool between the side bars.

Continue squeezing the pipe, following squeeze-rate recommendations of the pipe manufacturer. Squeeze until the flow is reduced as desired, or until the bar is against the stops.

Releasing the Squeeze

Slowly turn the handle counterclockwise, until the squeeze is released. Follow the release-rate recommendations of the pipe manufacturer.



Lift the lower jaw and swing it 90 degrees. Lift the squeeze unit off the pipe.

Operations (Vice Grip Tools)

A typical vice grip squeeze tool is shown below:



All instructions for a typical mechanical squeeze tool are the same for vice grip tools except that vice grip tools are made for one specific size (OD and wall thickness) of pipe and do not have changeable stops and; the squeeze force is applied manually by clutching the vice grip handle in one's hand and squeezing until the vice grips "lock" onto the pipe.

Statement of Warranty

Warranty/Disclaimers – Connectra Fusion Technologies, LLC (“Seller”) warrants for a period of three (3) years from the date of invoice that the products sold under the order invoiced (the “Products”) will be free from defects in materials and workmanship, except for items supplied to Seller by other vendors in connection with the order. The items to which the warranty does not extend (the “Excluded Items”) include, without limitation, electrical devices, pumps, controls, and similar items. Seller assigns to the buyer of the Products, without recourse, any warranty on the Excluded Items which is provided by manufacturer thereof.

The warranty provided hereby does not apply to any product or component that has been repaired or altered by anyone other than Seller, and does not cover any failure of the Products which Seller determines to have been caused due to abuse, misuse, negligence or normal wear and tear.

As a condition to the buyer's exercise of its rights under this warranty, the Products must be returned to Seller's dock, freight prepaid, in Gainesville, Texas, within ten (10) days of the date of failure, accompanied by a Return Goods Authorization (available from Seller) and information related to the claim. Buyer's REMEDIES UNDER THIS WARRANTY ARE LIMITED to, at Seller's sole option, the replacement or repair of the Products determined by Seller to be defective, or a refund of the purchase price, less an allowance for services rendered by the Product prior to the warranty claim. IN NO EVENT SHALL SELLER BE LIABLE FOR LOSS OF USE, DAMAGE TO OR LOSS OF PRODUCTS OR SERVICES, FAILURE TO REALIZE EXPECTED SAVINGS, FRUSTRATION OF ECONOMIC OR BUSINESS EXPECTATIONS, LOST REVENUE OR PROFITS, OR FOR ANY OTHER SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, EVEN IF THEY WERE FORESEEABLE OR SELLER WAS INFORMED OF THEIR POTENTIAL. Products repaired or replaced pursuant to this warranty will be delivered to buyer FOB Seller's dock in Gainesville, Texas.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED.

SELLER NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO MODIFY THESE TERMS AND CONDITIONS, WARRANT SPECIFIC APPLICATIONS, OR ASSUME FOR SELLER ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ANY SELLER'S PRODUCT OTHER THAN AS PROVIDED IN THIS WARRANTY.

Recommendations - Any recommendations and suggestions provided by Seller concerning its products and the use thereof are based on tests and data believed to be reliable but are not intended to be complete or exhaustive. The user is responsible for determining the applicability of governmental regulations relating to the use of the products and for all other aspects of the use of Seller's products.

Actual use of the products by others is beyond the control of Seller and Seller makes no warranty or other agreement, expressed or implied, regarding any aspect of such use. Seller shall have no liability arising from the use of Seller's products by a third party.

Modifications – Seller may improve or otherwise modify its products without any obligation to improve or otherwise modify in any way any products (including any parts or accessories) previously sold by Seller.

Distributors – Seller's products are sold through authorized distributors, who determine the price, terms and conditions of sale.

Other – No partial invalidity of this agreement shall affect the remainder. This agreement shall be governed and construed in accordance with the laws of Texas, excluding its laws relating to conflicts-of-law.

The sole purpose of the exclusive remedy contained in the limited Warranty shall be to provide repair or replacement of failed products, or to refund the purchase price of the failed product as explained above. This exclusive remedy shall not be deemed to have failed of its essential purpose so long as Seller agrees to repair or replace the failed product or to refund the purchase price as explained above.

