



# LHP-200

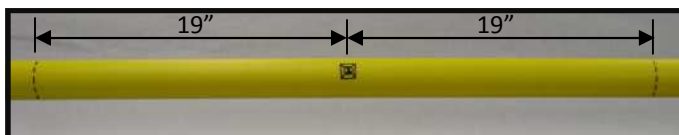
## LYCO<sup>®</sup> Hydraulic Press

### Installation Procedure For LYCOFIT<sup>®</sup> Repair Fittings

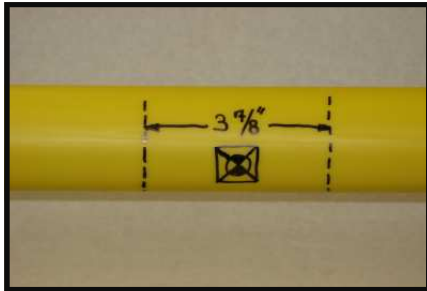
#### Important:

1. Lubricate **LHP-200** shafts with **non** synthetic lubricant (e.g. 3in1 oil) **ONLY**.
2. **DO NOT** apply lubricants to the fittings, spigots or sleeves.
3. When installing a fitting to repair a pressurized pipe, insure that the area of repair is isolated from the pressure supply before cutting the PE pipe.
4. The **LHP-200** is intended for installing **LYCOFIT<sup>®</sup>** fittings only.
5. **LYCOFIT<sup>®</sup>** fittings are designed to be installed only on O.D. controlled Polyethylene (PE) pipe made per ASTM D2513 & ASTM F2619. Examine the pipe print line and fitting labels and install fittings only to pipe with the correct size designation and wall thickness/DR.
6. If the installation is for use in Natural Gas pipe lines, pressure test each assembled joint in compliance with minimum requirements as specified in **D.O.T. CFR Title 49 Part 192, Sub Part J**.
7. The **LHP-200** requires a hydraulic source to operate. The AHP100 (ENERPAC<sup>™</sup> P142) is available through Lyall as a hand pump source for operating the **LHP-200**. Other hydraulic power sources (e.g. ENERPAC PA-133) with an output greater than 5500 psig may be used. The pump source should be limited to an output of 6500 psig to restrict the stress applied to the tool during installation of the fitting. (ENERPAC pump adjustment instructions are available by request from your customer service representative.)

#### Repair Clearance Requirements:

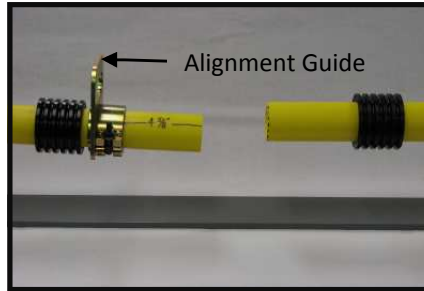


### 2 IPS



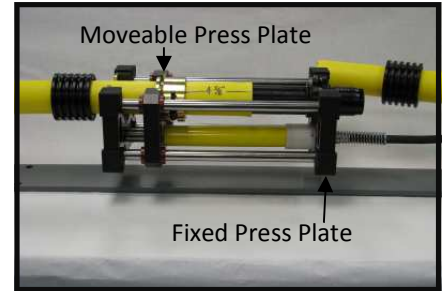
#### Step 1)

1. Mark and cut out the damaged PE pipe symmetric to the damage at a distance of 3-7/8 inches.



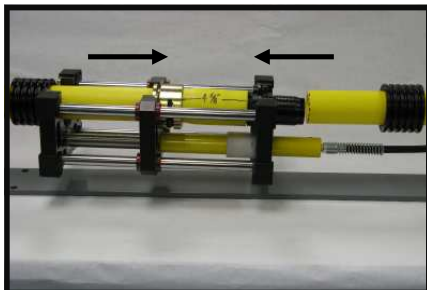
#### Step 2)

1. Slide the completion sleeves onto both ends of the PE pipe.
2. Make a mark 4-5/8 inches from the end of the pipe and align the clamp as shown with the groove on the clamp away from the pipe end.
3. With the alignment guide in place, tighten the clamp until both sides are in contact.



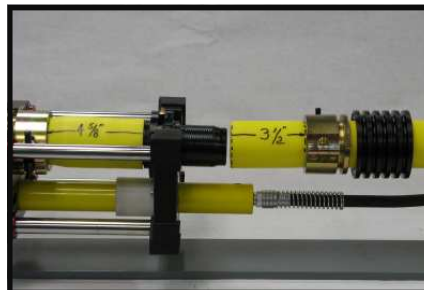
#### Step 3)

1. Fully open the tool and align one of the press plates (moveable press plate shown) with the groove in the clamp.
2. Align the other press plate with the flange groove in the fitting making sure the long side of the fitting is facing the clamped pipe.



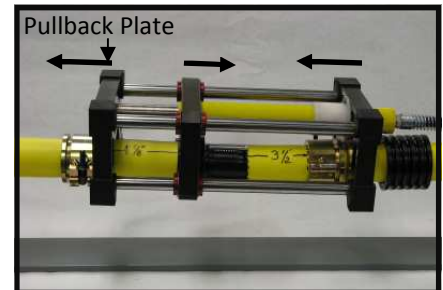
#### Step 4)

1. Operate the pump and draw the long side of the fitting into the PE pipe until the end of the pipe reaches the shoulder on the fitting.



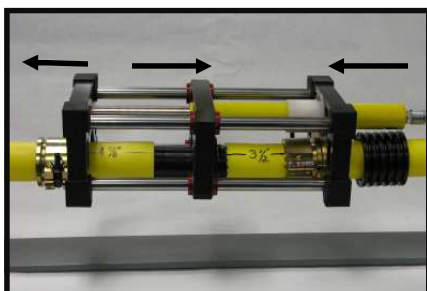
#### Step 5)

1. Make a mark 3-1/2 inches from the end of the pipe and align the clamp as shown with the groove on the clamp away from the pipe end.
2. Tighten the clamp until both sides are in contact.



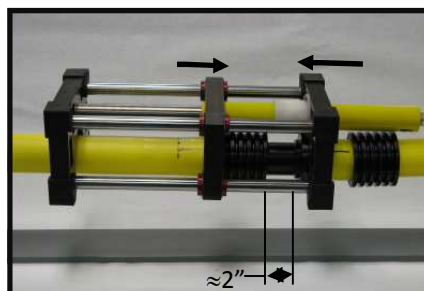
#### Step 6)

1. Neutralize the pressure on the assembly by opening the valve on the pump and then re-closing.
2. Move tool so that the moveable press plate is in the flange groove of the fitting.
3. Adjust the tool so that the pullback plate straddles the pipe between the fitting and the clamp as shown.



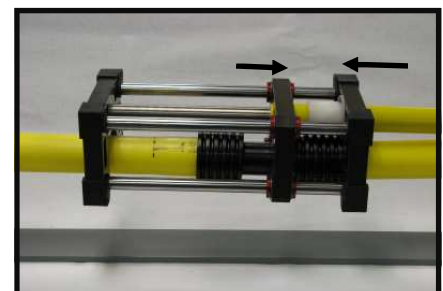
#### Step 7)

1. Operate the pump and draw the short side of the fitting into the PE pipe until the end of the pipe covers the last barb on the fitting.



#### Step 8)

1. Relieve the pressure to the tool and align the fixed press plate with the flange groove on the fitting.
2. Operate the pump and draw the completion sleeve toward the fitting flange until it aligns with the indicator rib on the spigot. Approximately 2 inches from the flange.



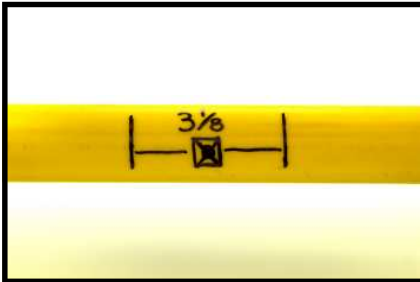
#### Step 9)

1. Relieve the pressure in the tool and move the tool so that the moveable press plate is in alignment with flange groove on the fitting
2. Operate the pump and draw the completion sleeve toward the fitting flange until it touches the flange face.
3. Relieve pressure and remove the tool.

# LHP-200

## Installation Procedure For LYCOFIT<sup>®</sup> Repair Fittings

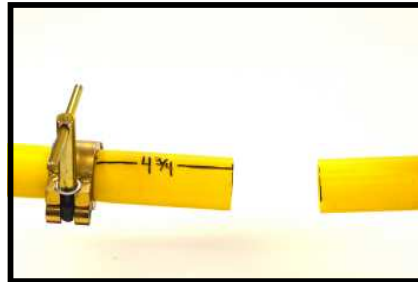
### 1-1/4 IPS



#### Step 1)

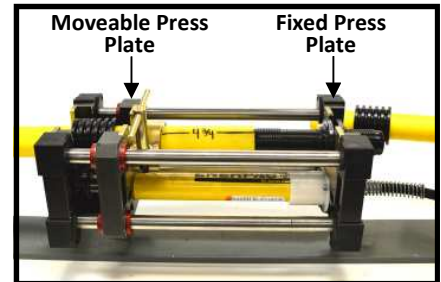
1. Mark and cut out the damaged PE pipe symmetric to the damage at a distance of 3-1/8 inches.

**Note:** Ensure at this point that the 1-1/4 IPS adapter plates have been installed into the moveable press plate and fixed press plate



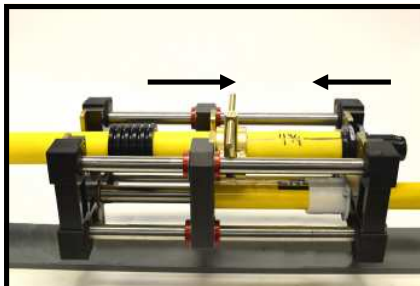
#### Step 2)

1. Slide the completion sleeves onto both ends of the PE pipe.
2. Make a mark 4-3/4 inches from the end of the pipe, align the clamp as shown and tighten the clamp until both sides are in contact.



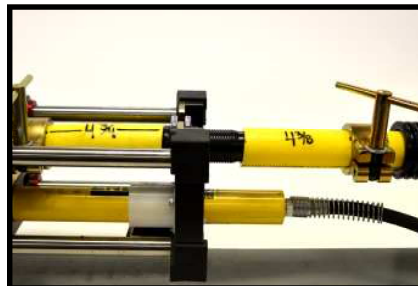
#### Step 3)

1. Fully open the tool and position one of the press plates (moveable press plate shown) directly behind the clamp.
2. Align the other press plate with the flange groove in the fitting making sure the long side of the fitting is facing the clamped pipe.



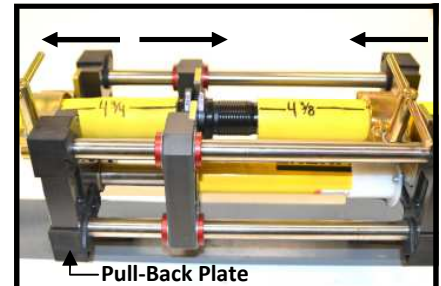
#### Step 4)

1. Operate the pump and draw the long side of the fitting into the PE pipe until the end of the pipe reaches the shoulder on the fitting.



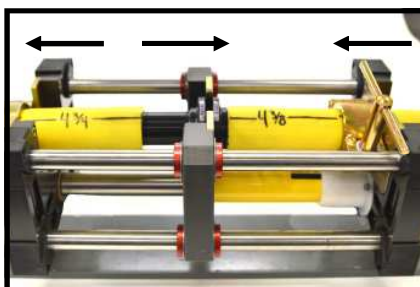
#### Step 5)

1. Make a mark 4-3/8 inches from the end of the pipe, align the clamp as show and tighten the clamp until both sides are in contact.



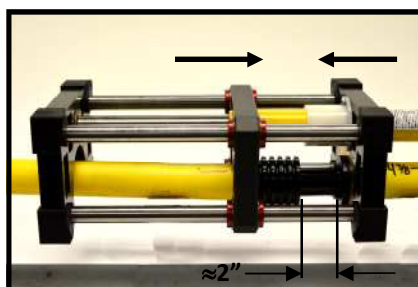
#### Step 6)

1. Neutralize the pressure on the assembly by opening the valve on the pump and then re-closing.
2. Move tool so that the moveable press plate is in the flange groove of the fitting.
3. Adjust the tool so that the pullback plate straddles the pipe between the fitting and the clamp as shown.



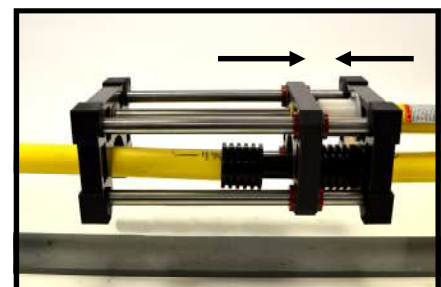
#### Step 7)

1. Operate the pump and draw the short side of the fitting into the PE pipe until the end of the pipe covers the last barb on the fitting.



#### Step 8)

1. Relieve the pressure to the tool and align the fixed press plate with the flange groove on the fitting.
2. Operate the pump and draw the completion sleeve toward the fitting flange until it aligns with the indicator rib on the spigot. Approximately 2 inches from the flange.



#### Step 9)

1. Relieve the pressure in the tool and move the tool so that the moveable press plate is in alignment with flange groove on the fitting
2. Operate the pump and draw the completion sleeve toward the fitting flange until it touches the flange face.
3. Relieve pressure and remove the tool.