

## Basic instructions

### Recommended installation

The products may only be used for the intended purpose and under safe and fault-free conditions.

- Correct usage also covers observance of this instruction manual.
- Any use not in accordance with the prescribed usage shall be regarded as incorrect usage, and may lead to product failure.
- For proper installation of Oetiker PEX series clamps, use calibrated genuine Oetiker installation tools.
- For ratchet pincer maintenance, care and calibration, reference the complete Calibration Procedures supplied with Tool or reference sections 3.1, 3.2 and 3.3 of this instruction manual.

1. **3-Handle Ratchet Pincer** (Fig. 1)  
**Sargent Tools #9253 SCP**

- Includes GO/NO-GO gauge
- Can be calibrated
- Lightweight for easy handling
- Heavy-duty professional grade tool
- Single handed installation

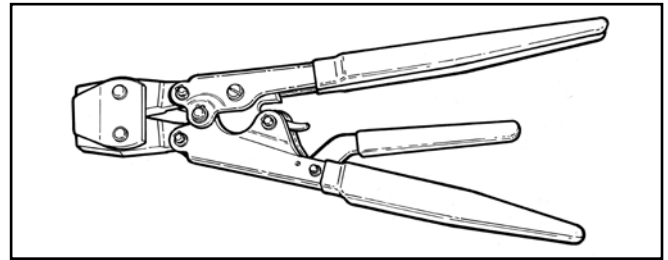


Fig. 1: 9253 SCP

2. **2-Handle Ratchet Pincer** (Fig. 2)  
**Sargent Tools #9252 SCP**

- Includes GO/NO-GO Gauge
- Can be calibrated
- Lightweight for easy handling
- Heavy-duty professional grade tool

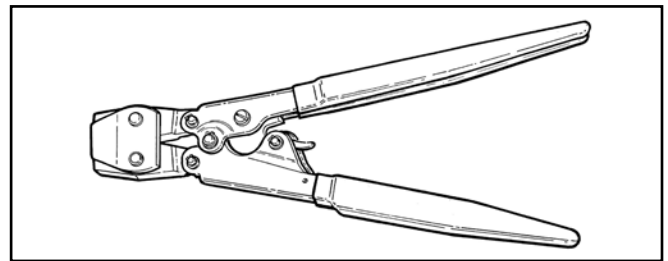


Fig. 2: 9252 SCP

3. **DIY Economy 2-Handle Ratchet Pincer** (Fig. 3)  
**Sargent Tools #9251 SCP**

- Includes NO-GO Gauge Pin
- Cannot be calibrated, tool is not adjustable
- Lightweight for easy handling
- Tool must be disposed of when out of calibration
- Light-duty tool

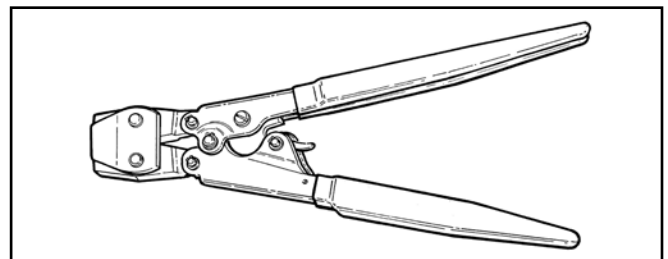


Fig. 3: 9251 SCP

Pincer Tools for Oetiker StepLess® Ear Clamps 167 for PEX

## Clamp installation instructions

1. Per ASTM F2098, insert fitting into tubing until shoulder or tube stop contacts end of tubing. Position clamp within 1/8" to 1/4" (3.2 to 6.4 mm) of tube end. (Fig. 4)

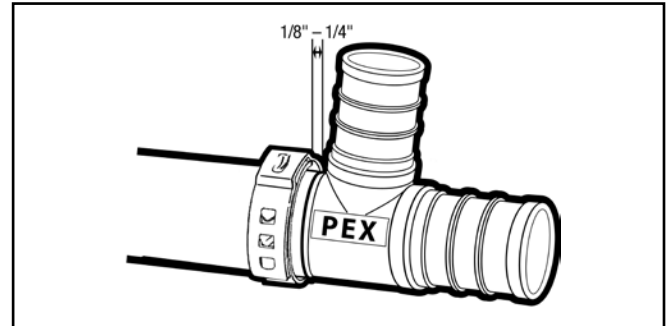


Fig. 4: Insert fitting/position clamp

2. Close clamp ear with tool, tool will not release until clamp is fully closed. (Fig. 5)

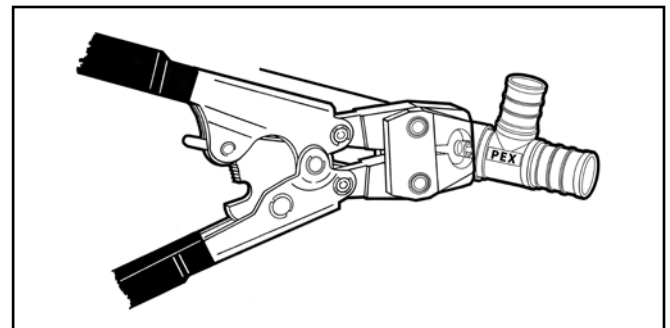


Fig. 5: Close clamp ear with tool

3. IMPORTANT: For proper installation of Oetiker PEX series clamps, full ear closure is required. Visually inspect clamp for correct closed ear form. (Fig. 6)

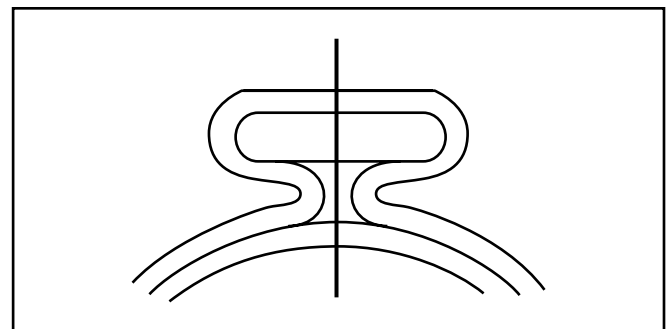


Fig. 6: Full ear closure required

## Assembly notice

### NOTICE

- ▶ For the correct assembly of Oetiker StepLess® 167 PEX clamps, the clamps must be completely closed.
- ▶ Genuine Oetiker Hand Installation Pincers with ratchet mechanism will release only when clamp has fully closed.

## Warning notice: clamp installations

### WARNING

- ▶ In high chloride water conditions, use only plastic fittings.
- ▶ Do not install in contact with concrete
- ▶ Use only ASTM F1807 or F2159 insert fittings with OETIKER clamps.
- ▶ Failure to observe the above warnings may result in property damage.

## International standards

- Clamps conform to ASTM<sup>1</sup> F2098 for use with ASTM F1807 and F2159 insert fittings and ASTM F876 PEX<sup>2</sup> tubing. For additional information, please refer to ASTM International Standards Worldwide.
- Complies with NSF<sup>3</sup> product listing cNSFus-PW. For additional information, please refer to the NSF organization.

<sup>1</sup> ASTM = American Society for Testing and Materials

<sup>2</sup> PEX = Polyethylene cross-linked

<sup>3</sup> NSF = National Sanitation Foundation

## Ratchet pincer calibration procedures

### Checking the tool calibration for: Tools nos. 9253 SCP and 9252 SCP

Calibration instructions on this page are specific for Ratchet Pincer Tool nos. 9253 SCP and 9252 SCP

1. Close handles of manual pincer to stop point (Fig. 7).

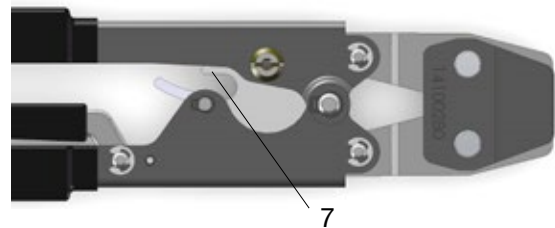


Fig. 7: Stop Point

2. Insert GO/NO-GO Gauge into jaw gap (Fig. 8 and Fig. 9).

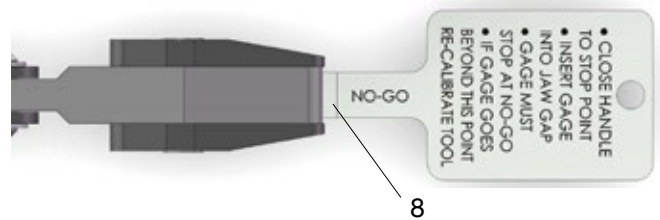


Fig. 8: Insert Gauge

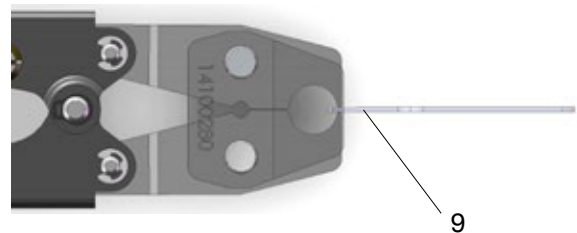


Fig. 9: Insert Gauge (side view)

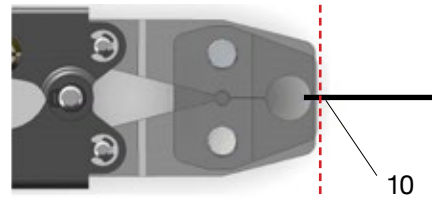
3. GO/NO-GO Gauge must stop at NO-GO shoulder.
4. If GO/NO-GO Gauge stops after the NO-GO point, then the tool must be “re-calibrated” (see section 3.3).
5. Check tool calibration daily.

## Pincer Tools for Oetiker StepLess® Ear Clamps 167 for PEX

### 3.2 Checking the tool calibration for: Tool no. 9251 SCP

Calibration instructions on this page are specific for Ratchet Pincer Tool no. 9251 SCP

1. A NO-GO Gauge “Pin” (.062 dia.) is provided to determine if the tool is in calibration and is capable of providing crimps that conform to industry standards.
2. Grasp the handles and close the tool until the ratchet is released. Hold the handles in the closed position and attempt to insert the NO-GO Gauge “Pin” into the jaw tips.
3. If the “Pin” passes into the opening beyond the jaw tips (Fig. 10), the tool is no longer useable! It will not make crimps that conform to the specification and must be discarded.
4. Check tool calibration daily.



*Fig. 10: NO-GO Gauge Pin “must not” pass jaw tips. Discard tool if NO-GO gauge pin passes.*

### Calibration and spare parts notice

#### NOTICE

- ▶ DIY Economy 2-Handle Ratchet Pincer (Tool no. 9251 SCP): tool is not adjustable, dispose of tool once it is out of calibration.
- ▶ No spare parts are available for the DIY Economy 2-Handle Ratchet Pincer (Tool no. 9251 SCP).

## Pincer Tools for Oetiker StepLess® Ear Clamps 167 for PEX

### Re-calibrating tools for: Tools nos. 9253 SCP and 9252 SCP

Re-calibration instructions on this page are specific for Ratchet Pincer Tool nos. 9253 SCP and 9252 SCP

1. Using a straight blade screw driver, loosen adjustment nut (Fig. 11).
2. Close handles to stop point and place GO/NO-GO Gauge into jaw gap.
3. Using a straight blade screwdriver, rotate eccentric stud (Fig. 12) counter-clockwise until jaws contact the GO/NO-GO Gauge before the NO-GO area of the Gauge.
4. Using a straight blade screwdriver, tighten the adjustment nut (Fig. 13).
5. Check tool calibration daily.

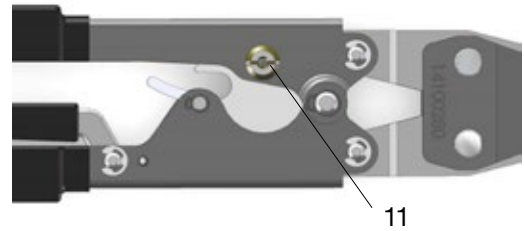


Fig. 11: Adjustment nut

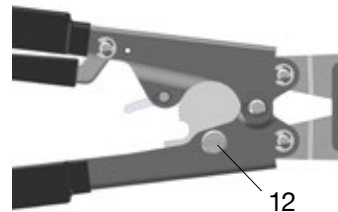


Fig. 12: Eccentric Stud

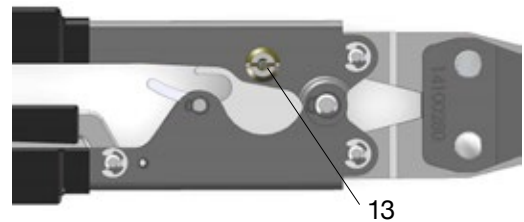


Fig. 13: Adjustment nut

### Tool maintenance

- Do not use the Ratchet Tools for any purpose other than to assemble clamps. Use other than intended may damage the tool and void warranty.
- Lubricate the tool head, spring and ratchet mechanism once per every 30 days with a light lubricating oil (if tool operation becomes sluggish at any time lubricate prior to further use).
- Clean tool periodically to remove rust and dirt. Rust or dirt build-up will interfere with tool operation and void warranty coverage. Lubricate all parts after cleaning to provide a light protective coating of oil.

### Tool warranty

When properly maintained and used as intended the Ratchet Tools are warranted against materials and manufacturing defects for a period of one year from date of purchase. This warranty does not cover defects or damage arising from improper storage or handling, ordinary wear and tear, misuse, abuse, accident or use with unauthorized product or parts. Liability is limited to repair or replacement of product or component part which is determined defective as covered by this warranty.