Continental
The Future in Motion

Perma-Crimp™ Hydraulic Hose Crimpers

PC150H Series Operators Manual

PC150H Safety Precautions

SAFETY PRECAUTIONS

- READ INSTRUCTIONS AND IDENTIFY ALL COMPONENT PARTS BEFORE USING CRIMPER.
- CRIMPER CAN PRODUCE 155 TONS OF FORCE. KEEP BOTH HANDS AWAY FROM PINCH POINTS.
- CONSULT THE CONTINENTAL CONTITECH CRIMP SPECIFICATION MANUAL FOR CORRECT CRIMPER SETTINGS AND CRIMP MEASUREMENTS.
- ALWAYS WEAR EYE PROTECTION.

Equipment Warning

Proper assembly of Continental ContiTech hose and fittings

Continental ContiTech hose, fittings and crimping equipment work together to provide an efficient and reliable hose connection. Continental ContiTech hose and fittings are part of an engineered system and are to be used in accordance with Continental ContiTech specifications. Using non-Continental ContiTech components may produce an assembly that does not meet rated performance. **Continental ContiTech does not warrant, expressly or by implication, hose assemblies that do not incorporate Continental ContiTech hose and fittings, or are not crimped in accordance with Continental ContiTech process specifications.**

Buyers may elect to attach additional or non-standard parts or equipment, or to use different manufacturing specifications as necessary to meet the requirements of the buyer or the customer's application. In such cases, the buyer has sole responsibility to qualify the hose for the applications as necessary to ensure performance capability.

For guidance in the assembly of Continental ContiTech hose and couplings, please refer to the Continental ContiTech Crimp Specifications Manual. Information in this manual is believed to be accurate, but is not warranted and is subject to change without prior notice. For the most current product information, check the Continental ContiTech website at www.contitech.us.

For technical assistance, call customer service at **1-800-235-4632.**

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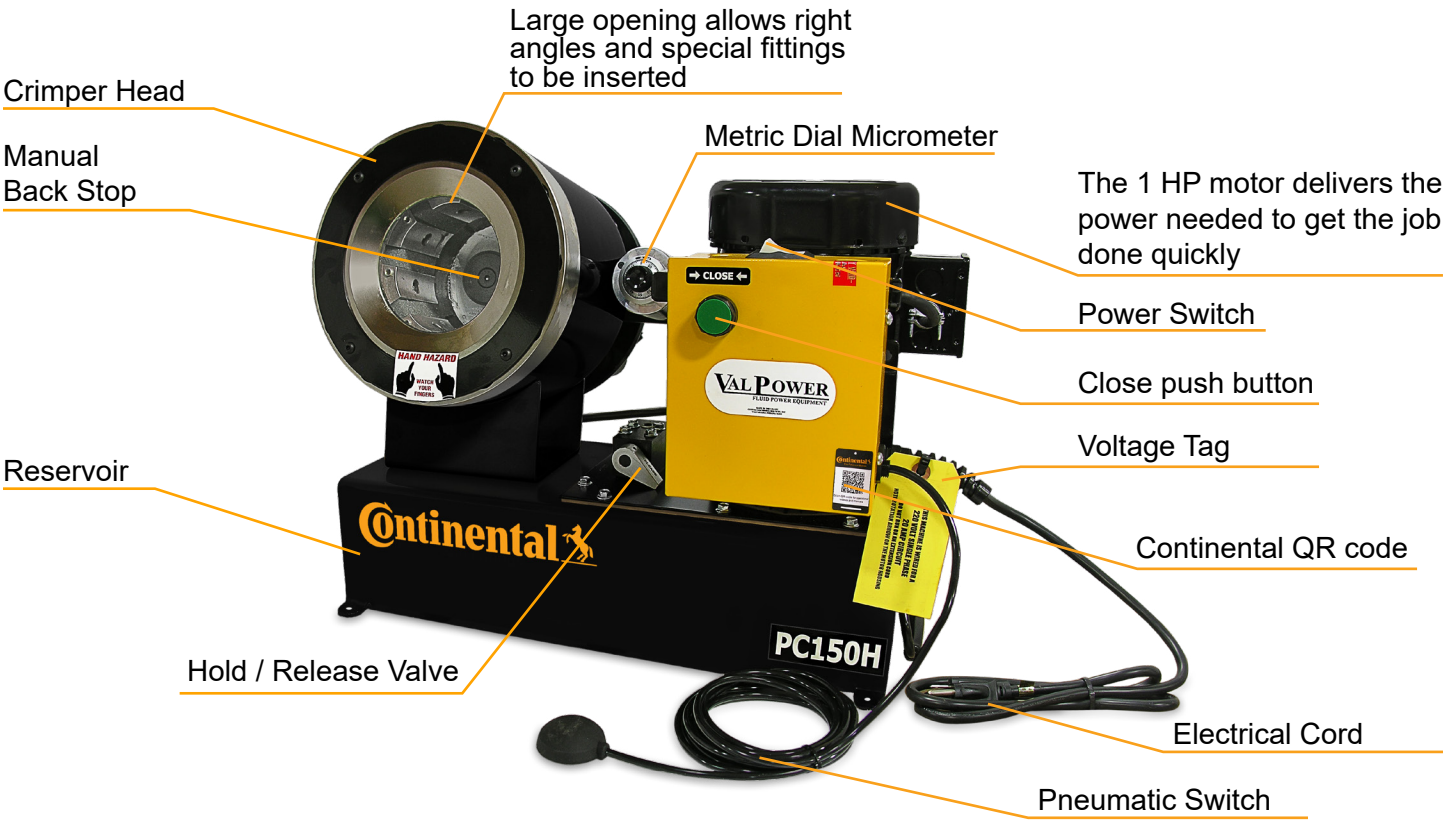
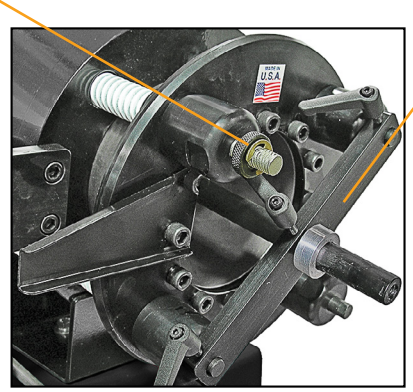
PC150H Component Identification



Retraction Stop:

• When making repetitive crimps, setting the Retraction Stop at a point where the hose and fitting can be conveniently withdrawn without allowing the cylinder to fully retract will greatly reduce the crimp cycle times.



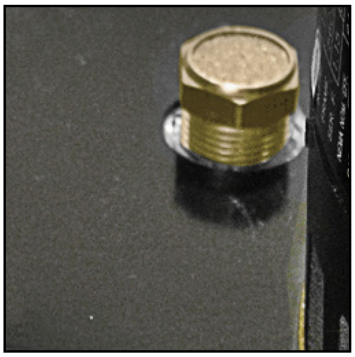
Back Stop:

• When making repetitive crimps, setting the Coupling Stop eliminates the need to visually align the couplings each time.

For repetitive crimps, position the hose and fitting in the correct position and bring the face of the coupling stop against the fitting. Tighten the coupling stop in the correct position.

8 Lubrication Fittings

Hold / Release Valve



Vent Plug
Oil fill

Tank Drain and
Oil Level Sight Glass

Do not operate the PC150H until you have read and fully understand this manual and the proper use of the crimper. This manual is applicable to the PC150H-1HP-1P and PC150H-2HP-1P crimpers. Crimpers are identical in component and crimping procedures. Note that the PC150H-1HP-1P and PC150H-2HP-1P require different electrical hookups as power requirements differ from 110V to 220V, respectively.

PC150H Crimper Specifications

Master Die Diameter----------84mm

Crimping Force----------155 Ton

Maximum Die Opening (Die Size Plus)----------38mm

Maximum Opening w/o Dies----------125mm

Length----------16"

Width----------23"

Height----------19"

Weight----------236 lb

Electrical Power Requirement (Std)----------110V

Electrical Power Requirement (Optional)----------220V 1 Ph

Pump HP - 110V ----------1 Hp

Pump HP - 220V Single Phase ----------2 Hp

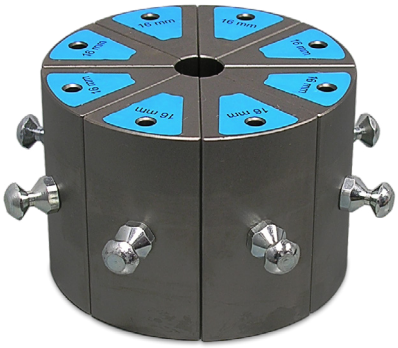
Oil Capacity----------13 Qt

Oil Type----------ISO Viscosity Grade 46

Manual/Automatic Crimping----------Manual Only

Inch/Metric Settings----------Metric Only

Standard Dies			
Part #	ID	Part #	ID
PC150H-8.5	8.5mm	PC150H-31	31mm
PC150H-12	12mm	PC150H-34	34MM
PC150H-14	14mm	PC150H-41	41MM
PC150H-16	16mm	PC150H-45	45MM
PC150H-19	19mm	PC150H-50	50MM
PC150H-23	23mm	PC150H-56	56MM
PC150H-27	27mm		



Miscellaneous Parts

PC150H-DCT
84mm Die Change Tool

PC150H-Rack
9 Station Die Storage Rack

PC150H Die Stud
Hydraulic Dies

PC150H Initial Crimper Setup

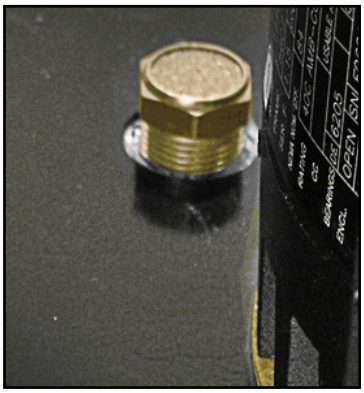
Follow these steps before using the crimper for the first time

Mount the crimper on a sturdy workbench in a well-lit area. The workbench should be able to support the crimper weight of 236 lbs.

The crimper should be mounted close enough to the edge of the work surface so that hose will not contact the bench or work surface while crimping. There must be enough clearance for the hose to align perpendicular with the cone base, or the dies will not seat properly and the crimps will not be accurate

Check the electrical circuit to be certain that it matches the crimper requirements shown on the voltage tag.

Caution: Do not run the PC150H crimper on an extension cord, as low voltage can damage the motor and / or electrical components.



Check to be certain that the shipping plug in the pump reservoir has been replaced with the vent plug shipped with the PC150H crimper.

Always check the oil level in the PC150H pump, when the cylinder is in the retracted position. It should be 1-½" below the vent plug and it should be visible in the sight glass window of the pump reservoir.

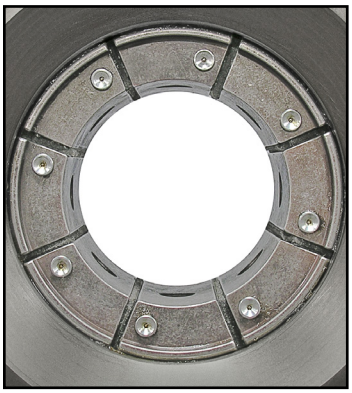
• If oil needs to be added use ISO 46 weight hydraulic oil.

• Oil can be drained from the rear oil port of the reservoir.

PC150H Lubrication Procedure

Step 1. To lubricate the master die use the provided CrimpX Die Lubricant 3 oz mini grease tube and a “flush type” grease coupling. (Mini grease gun is sold separately).

Step 2. Turn on the crimper, hold and press the green button or the pneumatic switch to close the crimper to the “0” position.



Step 3. Turn the valve in the “Hold” position, to keep the master dies closed.

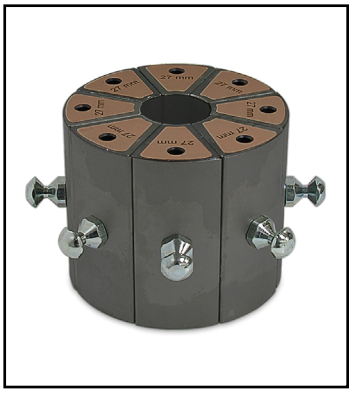
Step 4. Lubricate the master die through the 8 lubrication fittings.

Caution: Failure to lubricate this area may result in premature wear and damage. A molybdenum disulfide high pressure grease can be used as well.

PC150H Crimping Procedure

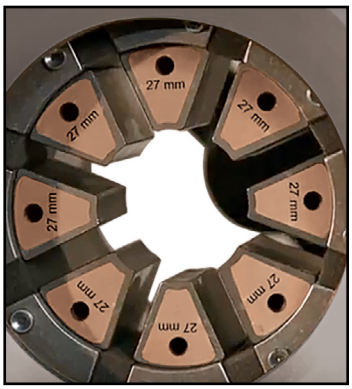
Caution: Follow the lubrication procedure prior to crimping, failure to do so may result in premature wear and possible damage to the master dies and piston surfaces.

Step 1. Set the dial micrometer at “0”, fully open the master die before installing the die set into your crimper, then turn the valve in the “hold” position.



Step 2. Select the correct die set for the combination of hose and fitting being crimped. The correct die set can be found in the Continental ContiTech Crimp Specification Manual.

Step 3. Use the quick-change tool, to place the die set into the crimper. Then slowly hold and press the green button or the pneumatic switch to close the crimper head, making sure that the retaining pins enter the location holes in the master die. The die will click into place when it is properly positioned. Withdraw the quick change tool when the head is fully close



Step 4. Then, turn the valve to the “Release” position. This will cause the master die to return to the fully open position.

PC150H Crimping Procedure

Step 5. Select the correct hose and fitting for your project.

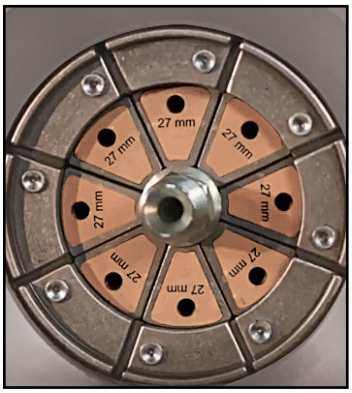
Note: Refer to the Continental ContiTech Crimp Specifications Manual.

Step 6. Set the dial micrometer to the setting as shown in the most current Continental ContiTech Crimp Specifications Manual for the combination of hose and fitting being crimped, then lock the micrometer.

Micrometer Setting Example:

Each 100 on the Micrometer represents 1 mm above the closed diameter of the die set. For example, with a 50mm die installed and the Micrometer set at 250 as shown, the finished crimp diameter would be 52.5 mm. (50mm + 2.5mm)

Step 7. With the valve in the “release” position, insert the hose assembly from either direction into the crimper, taking care not to disturb the die set. Hold the assembly in place until the crimp is complete.



- Activate the crimp cycle by pressing and holding the green close button or the pneumatic switch, until the crimp is complete.

- The pump will remain on after the crimp cycle is complete, and the die have retracted. If necessary, turn the valve to the “Release” position to retract the die and remove the hose assembly.

Step 8. Check the crimp diameter of the finished assembly with calipers or micrometers, to be certain that it is within the specifications as outlined in the Continental ContiTech Crimp Specifications Manual.

PC150H Calibration Check

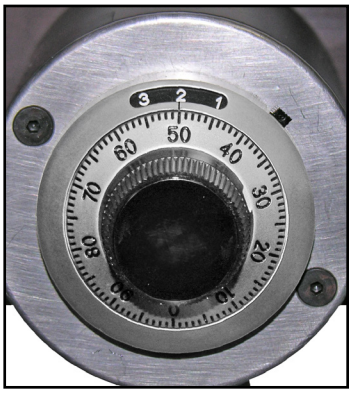
The PC150H Crimper is calibrated at factory using the correct hose, fitting, and die set outlined in the Continental ContiTech Crimp Specifications Manual.

Note: All settings are approximate, for minor adjustment adjust the dial as needed. Due to variations in hose and fitting tolerances, some “offset” may required to achieve the correct crimp diameter for specific hose and fitting combinations across the range of hose and fittings being crimped. If crimp diameters are consistently too large or consistently too small, the crimper should be recalibrated.

Step 1. Select the correct hose, fitting, and die set.

Note: Refer to the Continental ContiTech Crimp Specifications Manual.

Note: While the crimper can be calibrated using any recommended hose and fitting combination, using a hose and fitting combination close to the size most frequently crimped will minimize the offset required for other sizes and combinations of hose and fittings.



Step 2. Set the dial micrometer to the setting as shown in the most current Continental ContiTech Crimp Specifications Manual for the combination of hose and fitting being crimped.

Step 3. Check the crimp diameter of the finished assembly with calipers or micrometers, to be certain that it is within the specifications as outlined in the Continental ContiTech Crimp Specification Manual.

Note: If the above conditions are not met, the crimper requires recalibration.

• If necessary, the crimp size can be adjusted by making small adjustments on the unit’s micrometer. Each 100 on the micrometer represents 1 mm above the closed diameter of the die set.

• For example, with a 50mm die set installed and the Micrometer set at 250, the finished crimp diameter would be 52.5mm. (50mm + 2.5mm).

• Recheck calibration.

Troubleshooting

Problem: Crimper will not run at all.

› The white rocker switch is also a circuit breaker. Check to see that the circuit breaker has not been tripped.

› Check the wall outlet. Use of extension cords or outlets with inadequate power can damage the motor. Do not run the crimper from a portable power source.

Problem: Crimper is slow or non-functional.

› Check supply voltage to see that it matches the voltage specified on the tag attached to the crimper. Many problems of this type are associated with inadequate voltage or power. The voltage and power measurements must be made while the crimper is running and under load.

› Check motor rotation and be certain the motor rotates in the direction of the arrow on the motor housing.

Problem: Crimp diameter too large.

› Check crimper calibration and recalibrate if required.

› Incorrect setting of the micrometer. Check the Continental crimp specifications manual.

› Incorrect die being used. Each die has a range of approximately 3mm (.120 in) above the closed diameter of the die. The closed diameter is the die size stamped on the die face.

› Inadequate pump pressure. Check oil level in the pump. It should be 1-1/2 to 2 inches below the fill plug. Replenish with ISO Viscosity Grade 46 hydraulic oil if necessary.

› Check oil level. Position dies to the fully open position and check oil sight glass on the side of the machine. Be sure the oil level is in the middle of the sight glass. Use ISO 32 or 46 weight hydraulic oil.

Do Not adjust pump to produce in excess of 11,000 psi as damage to components or personal injury could result.

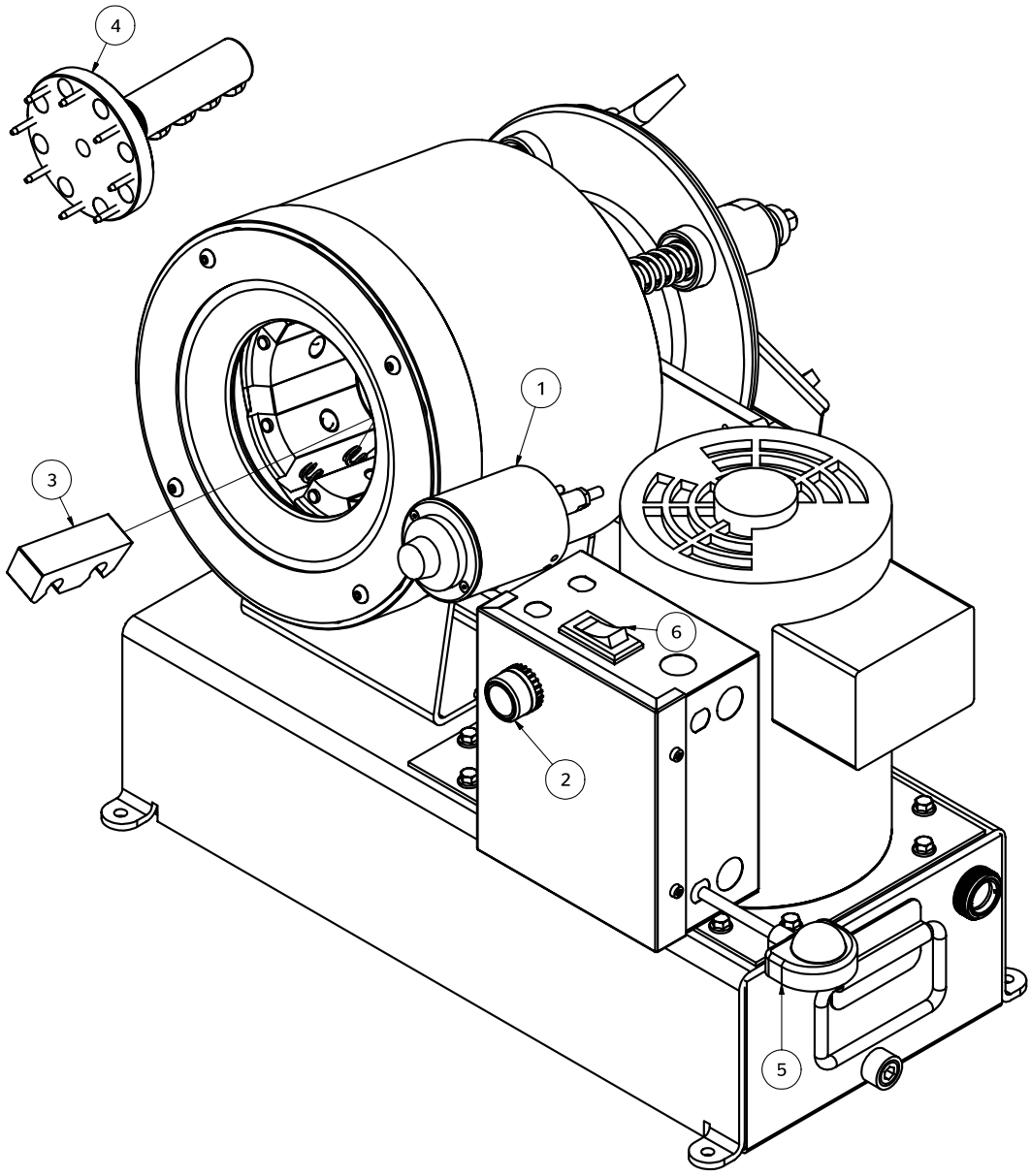
Problem: Crimp diameter too small.

› Check crimper calibration and recalibrate if required.

› Incorrect setting of the micrometer. Check the Continental crimp specifications manual.

If problem(s) persist, contact customer service for additional troubleshooting assistance.

PC150H Part Replacement Guide



PC150H part replacement guide

Item	Part #	Description	QT
1	PC150H-Micrometer	PC150H Micrometer	1
2	PC150H-Close button	PC150H Green close button	1
3	PC150H-Protection pad	PC150H Protection pad	8
4	PC150H-DCT	PC150H Die change tool	1
5	PC125/150-Switch	PC125/150 Pneumatic pendant switch	1
6	PC125/150 Breaker s witch	PC125/150 White breaker switch	1

Industrial Fluid Solutions

Market segment
Hydraulic Hose

Contact
ContiTech
703 S. Cleveland Massillon Road
Fairlawn, OH 44333-3023 U.S.A.
1-800-235-4632
www.contitech.us

Your local contact
www.contitech.de/contactlocator

Canada
1-888-275-4397

Mexico
1-800-439-7373

Continental. Smart Solutions Beyond Rubber

The ContiTech division of the Continental Corporation is one of the world's leading industry specialists. As a technology partner, our name is synonymous with expertise in development and materials for components made of natural rubber and plastics and also in combination with other materials such as metal, fabrics or silicone. By integrating electronic components, we are also generating solutions for the future.

Beyond products, systems and services, we also provide holistic solutions and have a formative influence on the industrial infrastructure. We see digitalization and current trends as an opportunity to work with our customers to add sustainable value – for both sides and for good.

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