



# Perma-Crimp™ Hydraulic Hose Crimpers

## PC125PS Operators Manual



## SAFETY PRECAUTIONS



- READ INSTRUCTIONS AND IDENTIFY ALL COMPONENT PARTS BEFORE USING CRIMPER.
- CRIMPER CAN PRODUCE 60 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](http://www.contitech.us).

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

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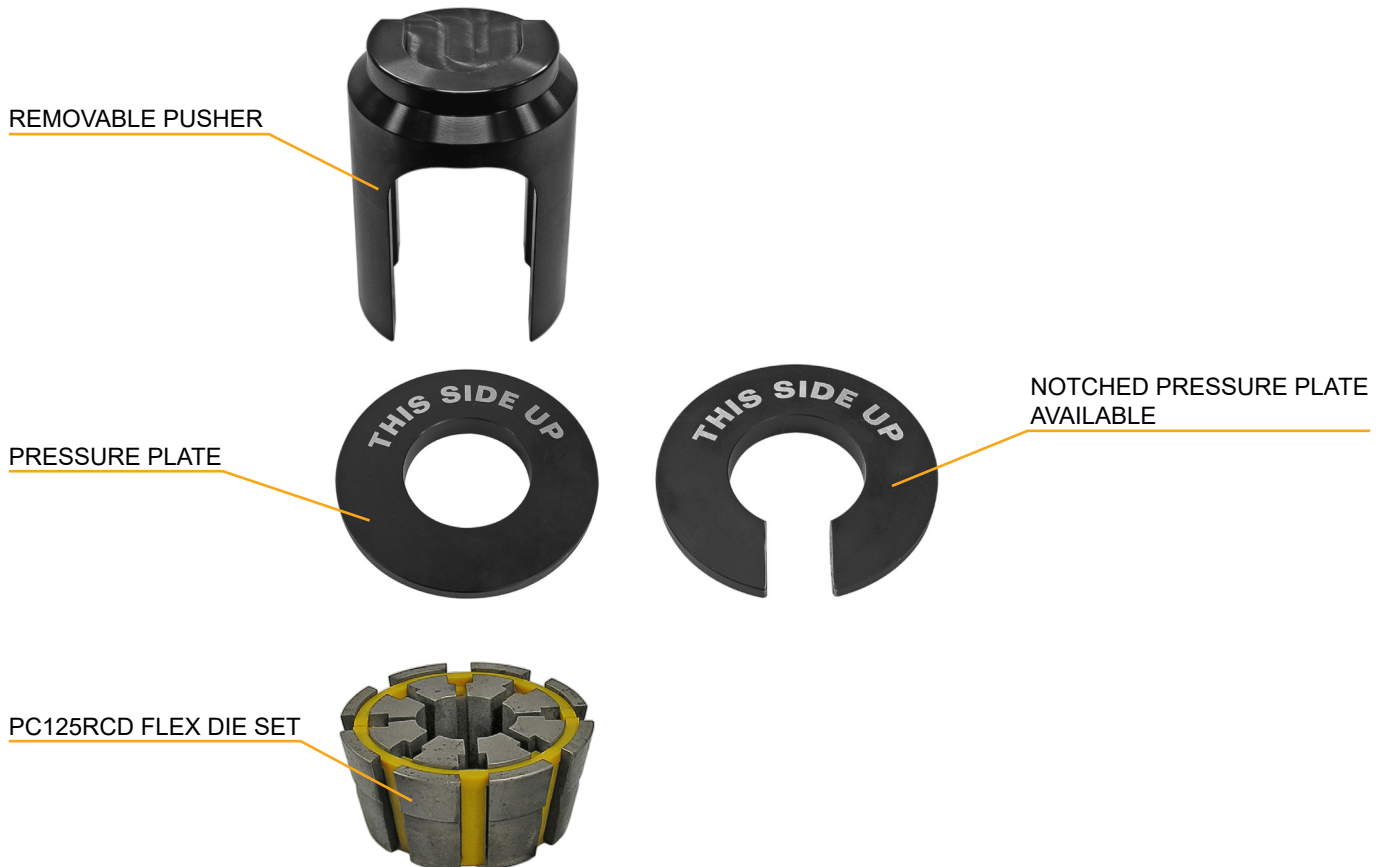
# PC125PS Specifications

Die Series-----	PC125RCD Series
Maximum Cylinder Force-----	60 Ton
Maximum Hose Diameter (2 Wire)-----	1 1/4 Inch
Maximum Hose Diameter (4 Wire)-----	1 1/4 Inch
Maximum Hose Diameter (6 Wire)-----	1 Inch
Crimper Depth-----	22.5 Inches
Crimper Width-----	13 Inches
Crimper Height-----	22.5 Inches
Weight-----	154 Lbs
Pump-----	Electric
Pump HP-----	1 HP (110V)
Reservoir Capacity-----	1 Gallon
Oil Type-----	ISO Viscosity Grade 46
Electric Power Requirement-----	110V-15 Amp



**PC125RCD Series Crimpers**

# PC125PS Component Identification



# Kit Description

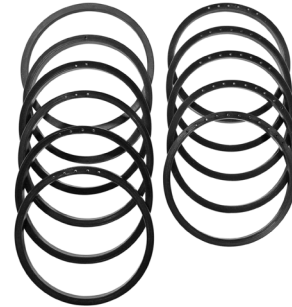
The PC125PS is a Positive Stop crimper capable of crimping 2-wire braid hose, and 4-wire spiral hose up through 1" ID. The crimp diameter is controlled through the use of specific die and spacer combinations. The PC125PS is packaged for shop service and includes the crimper and 1-HP, 110V electric pump on a common base; pressure plate; magnetized die pusher; stop/start remote pendant switch; adjustable coupling stop; and adjustable retraction stop.



PC125PS Crimper



PC125PS-Skit includes dies, spacers and die storage unit shown above.



11 Spacer Rings



Die Pusher



PC125RCD Die Series



Pressure Plate



Available PC125RCD Die Holder Stand

Material	Description	Material	Description
20815352	PC125-PS (Positive Stop, 1HP, 60TON)	20902035	PSW101-9 SPACER
20871410	PC125PS-SKit (7 dies/spacers)	20902036	PSW101-10 SPACER
20888687	PC125PS-SKit (7 dies/spacers) CDN	20902037	PSW101-11 SPACER
20244936	PC125-Cstop COUPLING STOP ASSEMBLY	20495490	PSW101-0.650 BLUE .65 IN DIE
20548179	PSW100 NOTCHED PUSHER PLATE	20495491	PSW101-0.785 GREEN .785 IN DIE
20495499	PSW100 PUSHER PLATE	20495492	PSW101-0.930 YELLOW .93 IN DIE
20524128	PSW101-0 SPACER	20495494	PSW101-1.120 BROWN 1.12 IN DIE
20495500	PSW101-1 SPACER	20495495	PSW101-1.260 SILVER 1.26 IN DIE
20495501	PSW101-2 SPACER	20559205	PSW101-1.410 PURPLE 1.41 IN DIE
20495502	PSW101-3 SPACER	20495496	PSW101-1.610 BLACK 1.61 IN DIE
20495503	PSW101-4 SPACER	20495498	PSW101-1.680 ORANGE 1.68 IN DIE
20495504	PSW101-5 SPACER	20491075	PSW100 Die Set Rack
20495505	PSW101-6 SPACER	20524129	PSW101 Anti Seize White Grease
20559204	PSW101-8 SPACER		

# PC125PS Features



60-tons of crimping force



Matched die and spacer crimp eliminates need to adjust settings



Removable pusher and rubber cage die sets for easy loading



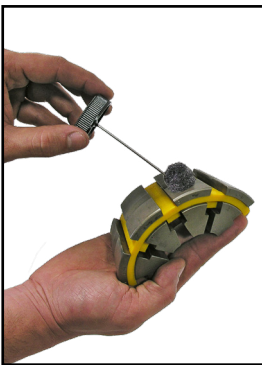
Open design with vertical feed for good operator visibility



Adjustable retractor stop limits ram retractions for quick repetitive crimps



Adjustable coupling stop for accurate, repetitive positioning of the assembly inside the dies



Two-piece, rubber-cage die design for easy lubrication



Color-coded die sets to speed die selection and set up



Common base for bench mounting

# PC125PS Initial Setup

Follow these steps before using the crimper for the first time.

- Mount the crimper on a sturdy workbench in a well-lit area. Workbench should be able to support the crimper weight of 154 lbs for PC125PS.

Note: The PC125PS series can be mounted on the PC125 Drawer/Stand and bolted onto the workbench. (See detailed instructions included with PC125 drawer/stand).

- 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.

- Always check oil level in the PC125PS pump, should be 1-1/2 to 2 inches below the vent plug when the cylinder is in the retracted position and 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.

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

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

- Plug the PC125PS crimper directly into a 110 volt, 15 amp wall outlet.



**CAUTION: DO NOT RUN THE CRIMPER ON AN EXTENSION CORD AS LOW VOLTAGE CAN DAMAGE THE MOTOR AND/OR ELECTRICAL COMPONENTS.**

# PC125PS Lubrication Procedure



## Grease Point # 1

Place a thin layer of CrimpX oil (supplied with crimper) or a high pressure molybdenum high pressure grease on the surface of the cone base (as shown in photo # 1).



Photo # 1

## Grease Point # 2

Before sliding the PC125PS pressure plate over the correct dies, place a thin layer of CrimpX oil (supplied with crimper) or a high pressure molybdenum high pressure grease on the entire area that dies come in contact with (as shown in photo # 2).



Photo # 2

**If Dies are sticking in the surface of the cone base:** Continue to lubricate / grease as explained above in addition to lubricating each die finger individually (as shown in photo # 3).

**Note:** Lubrication is not required before each crimp. Typical lubrication is after 100 crimps.

**Note:** The die fingers must be lubricated at both positions that come in contact with the PC125PS pressure plate and the cone base.

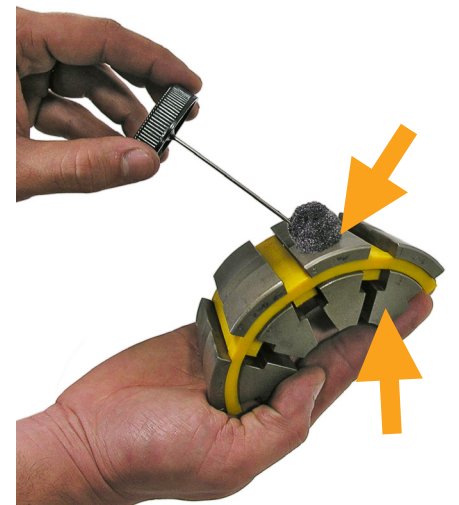


Photo # 3

# PC125PS Crimping With The PSW100 Standard Pressure Plate

- Follow lubrication procedure prior to crimping procedure.

**NOTE: FAILURE TO LUBRICATE THE DIE SET AND COMPRESSION CONE COULD RESULT IN THE DIE SET SEIZING IN THE BASE FLANGE.**

**Step 1:** Make certain that the cone base is clean and lubricated prior to inserting the die set.



**Step 2:** Select the correct spacer ring for the hose and fitting combination, and place it on top of the cone base.

**Note:** The correct spacer ring can be found in the Continental ContiTech Crimp Specifications Chart.

**Note:** On the spacer ring a zero indicates no holes, 1 indicates 1 hole etc.



**Step 3:** 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. Note that the number etched on the OD of the die ring represents the fully closed diameter of the die set in millimeters. In addition, die rubber cages are color-coded for easier identification.



**Next,** place the lubricated die set squarely in the cone base.,.

**Note:** Make sure the split of the die cages is facing the operator.



**Step 4:** Align the fitting in the die set according to the hose and fitting as explained in the ContiTech most current crimp specifications.



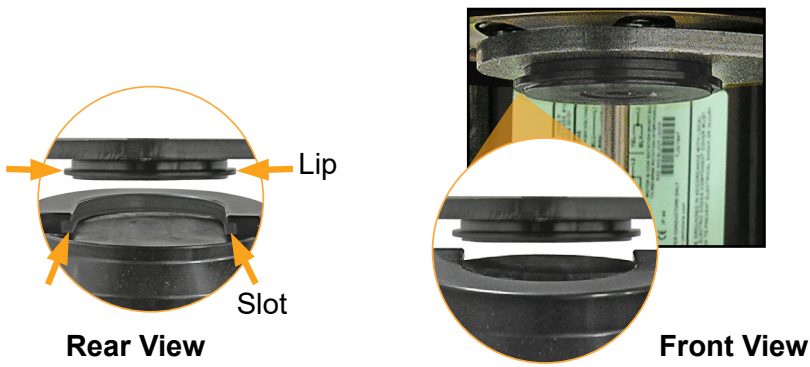
**Step 5:** Place the Pressure Plate over the die set and compress the die set by hand to hold the hose and fitting in place.

*Note the “THIS SIDE UP” notation.*

**Note:** Make sure that the pressure plate is lubricated on the entire area that dies come in contact with.

**Step 6:** Slide the Pusher onto the pusher retaining ring on the hydraulic cylinder. Make sure slot in pusher goes over lip on pusher retaining pin.

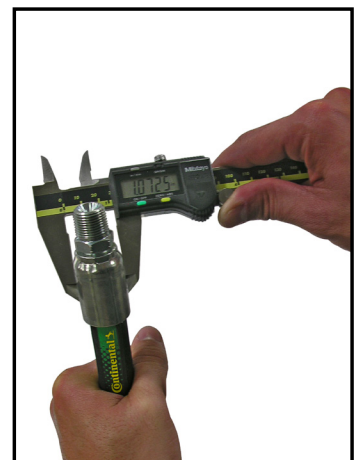
**CAUTION:** Damage to pusher and retaining pin can occur if misaligned.



**Step 7:** Press the start-stop switch to actuate the hydraulic pump and allow the pusher to fully contact the spacer ring.



**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 Specification Manual.



# PC125PS Crimping With The PSW100 Notched Pressure Plate

**Note:** When using the Notched Pressure Plate, for use with 90 degree fitting only, follow these procedures.

**Step 1:** Make certain that the cone base is clean and lubricated with PC125 CrimpX Oil furnished with the crimper prior to inserting the die set.



**Step 2:** Select the correct spacer ring for the hose and fitting combination, and place it on top of the cone base.

**Note:** The correct spacer ring can be found in the Continental ContiTech Crimp Specifications Chart.

**Note:** On the spacer ring a zero indicates no holes, 1 indicates 1 hole etc.

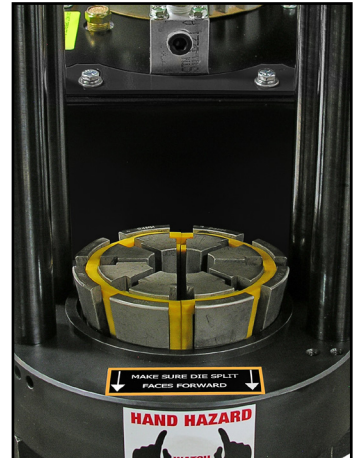


**Step 3:** Select the correct die set for the combination of hose and fitting being crimped. The correct die set can be found in the Continental ContiTech Crimp Specification Manual. Note that the number etched on the OD of the die ring represents the fully closed diameter of the die set in millimeters. In addition, die rubber cages are color-coded for easier identification.



**Next,** place the lubricated die set squarely in the cone base,.

**Note:** Make sure the split of the die cages is facing the operator.



**Step 4:** Align the fitting in the die set according to the hose and fitting as explained in the ContiTech most current crimp specifications.



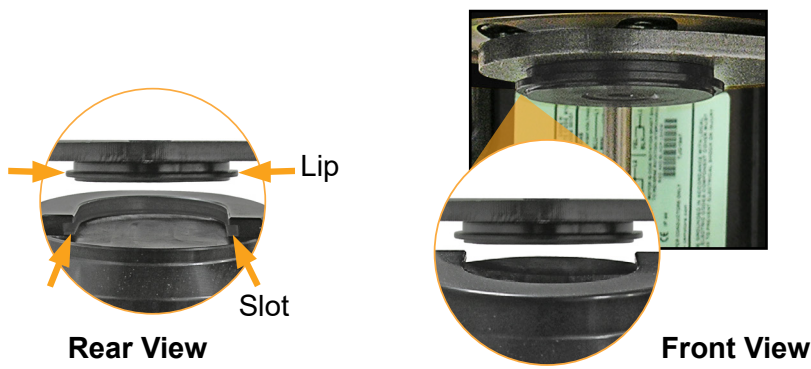
**Step 5:** Place the Notched Pressure Plate over the die set and compress the die set by hand to hold the hose and fitting in place.

*Note the “THIS SIDE UP” notation.*

**Note:** Make sure that the notched pressure plate is lubricated on the entire area that dies come in contact with.

**Step 6:** Slide the Pusher onto the pusher retaining ring on the hydraulic cylinder. Make sure slot in pusher goes over lip on pusher retaining pin.

**CAUTION:** Damage to pusher and retaining pin can occur if misaligned.



**Step 7:** Press the start-stop switch to actuate the hydraulic pump and allow the pusher to fully contact the spacer ring.



**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 Specification Manual.



**DO NOT MISALIGN NOTCHED PRESSURE PLATE OR DAMAGE WILL OCCUR.**

1. Die split must face operator.
2. Notched Pressure Plate needs to cover all 8 die fingers
3. Damage can occur to die fingers if parts aren't aligned properly.



Wrong Alignment



Broken Die Finger

# Crimp Specifications For PC125PS, PSW-100, & PSW-101 Series Crimpers

Hose Part #	Hose I.D. (INCH)	Fitting Family	Insertion Length (INCH)	Crimp Length (INCH, tol $\pm 1/32''$ )	Crimp Diameter (tol. $\pm 0.005''$ or $\pm 0.127\text{mm}$ )		Die Set		# of Holes in Spacer
					INCH	MM	INCH	MM	
SR1SN-04	1/4	B2-***-04**	.875	Full	0.665	16.90	0.650	16.51	1
SR1SN-6	3/8	B2-***-06**	.906	Full	0.811	20.60	0.785	19.40	2
SR1SN-08	1/2	B2-***-08**	1.096	Full	0.933	23.70	0.930	23.62	No Spacer
SR1SN-10	5/8	B2-***-10**	1.250	Full	1.122	28.50	1.120	28.45	No Spacer
SR1SN-12	3/4	B2-***-12**	1.305	Full	1.272	32.30	1.260	32.00	0
SR1SN-16	1	B2-***-16**	1.535	Full	1.701	43.20	1.680	42.67	0
SR2SN-04	1/4	B2-***-04**	.875	Full	0.697	17.70	0.650	16.51	4
SR2SN-06	3/8	B2-***-06**	.906	Full	0.846	21.50	0.785	19.40	5
SR2SN-08	1/2	B2-***-08**	1.096	Full	0.969	24.60	0.930	23.62	3
SR2SN-10	5/8	B2-***-10**	1.250	Full	1.138	28.90	1.120	28.45	0
SR2SN-12	3/4	B2-***-12**	1.305	Full	1.307	33.20	1.260	32.00	3
SR2SN-16	1	B2-***-16**	1.535	Full	1.736	44.10	1.680	42.67	3
SR16SC/XR16SC/A RC16SC-04	1/4	B2-***-04**	.875	Full	0.677	17.20	0.650	16.51	2
SR16SC/XR16SC/A RC16SC-06	3/8	B2-***-06**	.906	Full	0.811	20.60	0.785	19.40	2
SR16SC/XR16SC/A RC16SC-08	1/2	B2-***-08**	1.096	Full	0.945	24.00	0.930	23.62	0
SR16SC/XR16SC/A RC16SC-10	5/8	B2-***-10**	1.250	Full	1.122	28.50	1.120	28.45	No Spacer
SR16SC/XR16SC/A RC16SC-12	3/4	B2-***-12**	1.305	Full	1.272	32.30	1.260	32.00	0
SR16SC/XR16SC/A RC16SC-16	1	B2-***-16**	1.535	Full	1.705	43.30	1.680	42.67	0
<b>LR16SC-04</b>	1/4	B2-***-04**	.875	Full	0.677	17.20	0.650	16.51	2
<b>LR16SC-06</b>	3/8	B2-***-06**	.906	Full	0.811	20.60	0.785	19.40	2
<b>LR16SC-08</b>	1/2	B2-***-08**	1.096	Full	0.945	24.00	0.930	23.62	0
<b>DR16SC-04</b>	1/4	B2-***-04**	.875	Full	0.677	17.20	0.650	16.51	2
<b>DR16SC-06</b>	3/8	B2-***-06**	.906	Full	0.811	20.60	0.785	19.40	2
<b>DR16SC-08</b>	1/2	B2-***-08**	1.096	Full	0.945	24.00	0.930	23.62	0
<b>DR16SC-10</b>	5/8	B2-***-10**	1.250	Full	1.150	29.20	1.120	28.45	2
<b>DR16SC-12</b>	3/4	B2-***-12**	1.305	Full	1.272	32.30	1.260	32.00	0
<b>DR16SC-16</b>	1	B2-***-16**	1.535	Full	1.705	43.30	1.680	42.67	0
SCP3/XCP3-04	1/4	B2-***-04**	.875	Full	0.650	16.51	0.650	16.51	No Spacer
SCP3/XCP3-06	3/8	B2-***-06**	.906	Full	0.783	19.94	0.785	19.40	No Spacer
SCP3/XCP3-08	1/2	B2-***-08**	1.096	Full	0.933	23.70	0.930	23.62	No Spacer
SCP3/XCP3-10	5/8	B2-***-10**	1.250	Full	1.122	28.50	1.120	28.45	No Spacer
SCP3/XCP3-12	3/4	B2-***-12**	1.305	Full	1.272	32.30	1.260	32.00	0
SCP3/XCP3-16	1	B2-***-16**	1.535	Full	1.701	43.20	1.680	42.67	0
XCP4, ACP4	1/4	B2-***-04**	.875	Full	0.677	17.20	0.650	16.51	2
XCP4, ACP4	3/8	B2-***-06**	.906	Full	0.811	20.60	0.785	19.40	2
XCP4, ACP4	1/2	B2-***-08**	1.096	Full	0.945	24.00	0.930	23.62	0
XCP4, ACP4	5/8	B2-***-10**	1.250	Full	1.122	28.50	1.120	28.45	No Spacer
XCP4, ACP4	3/4	B2-***-12**	1.305	Full	1.299	33.00	1.260	32.00	3
FPII-04	1/4	B2-***-04**	.875	Full	0.665	16.900	0.650	16.51	1
FPII-06	3/8	B2-***-06**	.906	Full	0.799	20.30	0.785	19.40	1
FPII-08	1/2	B2-***-08**	1.096	Full	0.929	23.60	0.930	23.62	No Spacer
FPII-10	5/8	B2-***-10**	1.250	Full	1.118	28.40	1.120	28.45	No Spacer
FPII-12	3/4	B2-***-12**	1.305	Full	1.272	32.30	1.260	32.00	0
FPII-16	1	B2-***-16**	1.535	Full	1.689	42.90	1.610	40.89	6

# Crimp Specifications For PC125PS, PSW-100, & PSW-101 Series Crimpers

SR12/ARC12-06	3/8	SG-***-06**	.926	Full	1.047	26.60	<b>0.930</b>	<b>23.62</b>	10
SR12-08	1/2	S4-***-08**	1.140	Full	1.118	28.40	<b>1.120</b>	<b>28.45</b>	No Spacer
SR12/ARC12-08	1/2	SG-***-08**	1.140	Full	1.150	29.20	<b>1.120</b>	<b>28.45</b>	11
SR12-10	5/8	S4-***-10**	1.226	Full	1.276	32.40	<b>1.260</b>	<b>32.00</b>	0
SR12	5/8	SG-***-10**	1.226	Full	1.323	33.60	<b>1.260</b>	<b>32.00</b>	4
SR12/ARC12	3/4	<b>SG-***-12**</b>	1.563	<b>Full</b>	<b>1.425</b>	<b>36.20</b>	<b>1.410</b>	<b>35.81</b>	<b>9</b>
SR12-16	1	S4-***-16**	1.605	Full	1.728	43.9	<b>1.680</b>	<b>42.67</b>	8

XCP4S	3/8	SG-***-06**	.926	Full	1.047	26.6	<b>0.930</b>	<b>23.62</b>	10
XCP4S	1/2	SG-***-08**	1.140	Full	1.150	29.20	<b>1.120</b>	<b>28.45</b>	11
XCP4S	5/8	SG-***-10**	1.226	Full	1.323	33.6	<b>1.260</b>	<b>32.00</b>	4
XCP4S	3/4	<b>SG-***-12**</b>	1.563	<b>Full</b>	<b>1.425</b>	<b>36.20</b>	<b>1.410</b>	<b>35.81</b>	<b>9</b>

HR4-12 *OD: 1.093-1.123	3/4	UCF6-12	1.240	Full	1.270	32.30	<b>1.260</b>	<b>32.00</b>	1
HR4-12 *OD: 1.123-1.152	3/4	UCF6-12	1.240	Full	1.290	32.80	<b>1.260</b>	<b>32.00</b>	3
HR4-12 *OD: 1.152-1.182	3/4	UCF6-12	1.240	Full	1.310	33.30	<b>1.260</b>	<b>32.00</b>	5
HR4-16 *OD: 1.406-1.437	1	UCF6-16	1.464	Full	1.630	41.40	<b>1.610</b>	<b>40.89</b>	0
HR4-16 *OD: 1.437-1.469	1	UCF6-16	1.464	Full	1.655	42.00	<b>1.610</b>	<b>40.89</b>	3
HR4-16 *OD: 1.469-1.500	1	UCF6-16	1.464	Full	1.675	42.50	<b>1.610</b>	<b>40.89</b>	5

\* Measure hose OD before crimping. Match OD with range in crimp chart to select correct crimp OD.

Note: All fittings are non-skive

Rev. 8A 3-29-18

# 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. The crimper comes from the factory wired for a 115 volt single phase circuit. Use of extension cords or outlets with inadequate power can damage the motor. Do not run the crimper from a portable power source.
- › Check the pneumatically actuated switch in the electrical box mounted on the motor. This switch controls power to the motor and is actuated with air pressure from the pendant switch bulb.

## **PROBLEM: CRIMP DIAMETER TOO LARGE**

- › Incorrect spacer / die set. Check crimp specifications.
- › Incorrect die being used. Each die has a useable range of approximately 3mm (.120 in) above the closed diameter of the die. The closed diameter is the die size stamped on the die ring.
- › Inadequate pump pressure. Check oil level in the pump. It should be 1-1/2 to 2 inches below the fill plug and should be showing in the sight glass window. Fill with ISO 46 weight hydraulic oil if required.
- › Inadequate lubrication on the surface of the cone base, the dies and pressure plate causing the pump to work harder than normal to reach the required diameter. Use only CrimpX oil (supplied with crimper) or a high pressure molybdenum high pressure grease.
- › Inadequate pressure being generated by the pump. This is most likely if the crimper can crimp the smaller size hoses and not the larger hoses. When correctly adjusted, the pump should generate approximately 10,000 psi.

*Do Not adjust pump to produce in excess of 10,000 psi as damage to components or personal injury may result.*

- › No pressure being generated by the pump. There should be a definite change in pitch of the pump as it cycles into high pressure mode and begins to “work” harder.

## **PROBLEM: CRIMP DIAMETER TOO SMALL**

- › Incorrect spacer / die set. Check crimp specifications.
- › Incorrect die being used (See die range under Crimp Diameter too Large)

## **PROBLEM: DIES STICKING IN THE SURFACE OF THE CONE BASE**

- › Inadequate lubrication on the surface of the cone base, the pressure plate and die surfaces. Use only CrimpX oil (Supplied with crimper) or a high pressure molybdenum high pressure grease.

## 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](http://www.contitech.us)

Your local contact  
[www.contitech.de/contactlocator](http://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.

Rev: 08/13/2019