# **Hydraulic Crimping Tool Instructions**

## **Introduction:**

The YQK series hydraulic crimping tool is an efficient tool for crimping lugs, terminals, or conductors on a cable. Before using the tool, please read these instructions carefully. Mounting and/or disassembling the tool should be performed only by a trained professional.

## Warranty:

12 months from time of delivery under proper use.

## **Description:**



1. Body Vat	2. Piston	3. O-Ring
4. Mat	5. Spring	6. Magnet
7. Plug	8. Dies	9. Head
10. Stand	11. Handle Plug	12. Block
13. Cartridge	14. Movable handle	15. Turn Screw
16. Oil Return Plug	17. Fixed Handle	18. Spin Set
19. Oil Storage		

## **Operation:**

Select the appropriate crimping dies. Numbers stamped on the dies correspond to the cross sectional area (in mm<sup>2</sup>) of the wire to be crimped. For American Wire Gauge (AWG) sizes, use the chart below.

AWG Die Selection Chart			
AWG	Die		
4/0	120		
3/0	95		
2/0	70		
1/0	70		
1	50		
2	35		
3	25		
4	25		
5	16		
6	16		
7	10		
8	10		
9	8		
10	6		
11	4		

## **NEVER USE THE TOOL WITHOUT DIES!**

**NOTE:** Before crimping your connector, take a close look at the cross sectional area of the connector compared to the cross sectional area of the cable it will be crimped onto. If the two are nearly equal in size follow the procedure "Crimping a thin connector". If the connector area is significantly larger than the cable, follow the procedure "Crimping a terminal".

### Crimping a thin connector

Place the dies into the crimping head by inserting the rod protruding from the respective die into its hole in the crimping head. Upon insertion of the die into said hole, the magnet in the crimping head will position the die. Now place the cable and terminal in between the two dies. After ensuring that the handle is in the closed position (pushed towards the fixed handle) rotate the turn screw clockwise until it is tight. Pump the handle until the lower die just makes contact with the upper die. After crimping, rotate the turn screw counterclockwise to loosen the plunger and make the die retract to its original position. Tighten the turn screw upon removal of the crimp assembly to prevent leakage of the hydraulic piston.

#### Crimping a terminal

Place the lower die (the one on the hydraulic plunge) in its respective hole as outlined in the "Crimping a thin connector" procedure. Before inserting the upper die, however, loosen and remove the rod which protrudes from the die. **Failure to follow this crucial step will result in an inability to remove the crimped terminal from the crimping tool** (if the opposite end also has a terminal attached) without cutting the cable. Now place the cable and terminal in between the two dies. After ensuring that the handle is in the closed position (pushed towards the fixed handle) rotate the turn screw clockwise until it is tight. Pump the handle until the lower die just makes contact with the upper die. After crimping, rotate the turn screw counterclockwise to loosen the plunger and make the die retract to its original position. With larger terminals, the terminal will only come out of the crimping head if one die is removed with it. To remove the terminal, simply slide the upper die out with the terminal and cable. Tighten the turn screw upon removal of the crimp assembly to prevent leakage of the hydraulic piston.

### **CAUTION:**

- 1. While crimping, make sure to not crimp the dies together past the point of initial contact. Placing excessive pressure on the dies and hydraulic piston will damage the tool.
- 2. Do not drop or damage the crimp head.
- 3. Keep the tool away from gas, acid, or alkali.
- 4. Ensure the tool has sufficient hydraulic oil in the piston before operation. Use new oil.
- 5. Use the crimp tool in a clean working environment.
- 6. After crimping, apply a small amount of anti-rust grease on the crimp head.
- 7. Do not disassemble!
- 8. Only allow qualified personnel to use the tool.

Troubleshooting			
Problem	Solution		
Inner Leakage	Loosen turn screw, shake the movable handle slightly, then tighten the turn screw. Repeat as necessary.		
Outer Leakage	Loosen the turn screw and the Phillips head screw on it. Remove the turn screw, pull out the piston, and replace the O-ring.		
Piston Loose	Make sure there is no air in the valve seal.		
Piston won't retract	Examine the big spring and make sure it is not deformed, broken, or stuck.		
Piston plug leaks excessively	<ul><li>a. Expel the air in the piston.</li><li>b. Change piston plug</li></ul>		

Technical Parameters				
Model No.	YQK-70	YQK-120A		
Crimping Range (area)	4-70 mm <sup>2</sup> (12-2/0 AWG)	10-120 mm <sup>2</sup> (8-4/0 AWG)		
Maximum Stroke	10 mm (.393 in)	14 mm (.551 in)		
Weight	2.8 kg (6.2 lbs)	4.0/4.2 kg (8.9-9.3 lbs)		

Crimping dies (Hexagonal)	4,6,8,10,16, 25, 35, 70 (mm <sup>2</sup> )	10,16,25,35,50,70,95,120 (mm <sup>2</sup> )
Hydraulic Oil	Shell Tellus T 15	