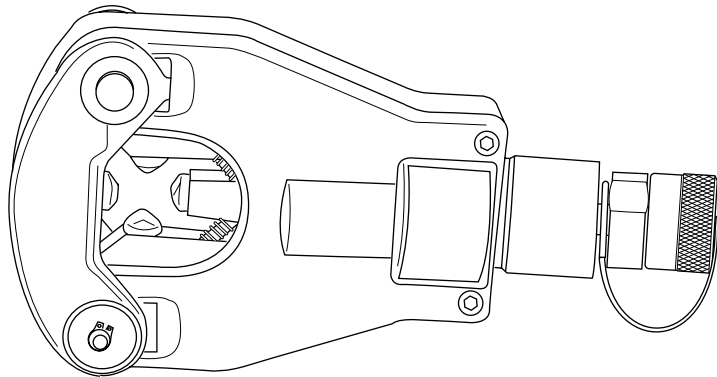


INSTRUCTION MANUAL

ILSCO



IDT-6H

Hydraulic Crimping Tool



Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

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Description

The IDT-6H Hydraulic Crimping Tool is a dieless crimping tool intended to crimp aluminum and copper connectors onto electrical cable.

This crimping tool requires an external 700 bar (10,000 psi) hydraulic power source, such as the IlSCO 5ACR.

Safety

Safety is essential in the use and maintenance of IlSCO tools and equipment. This manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all of the safety information provided.

Purpose of this Manual

This manual is intended to familiarize all personnel with the safe operation and maintenance procedures for the following IlSCO tool:

IDT-6H Hydraulic Crimping Tool

Keep this manual available to all personnel.

Replacement manuals are available upon request at no charge.

Warranty and Service

ILSCO warrants this tool to the original purchaser for a period of one year from the date of purchase, provided the tool is operated, maintained and used in accordance with ILSCO's written instructions. Ordinary wear and tear, damage from abuse, neglect or alterations are not covered by this warranty. This warranty is null and void if instructions and operating procedures are not followed. Contact ILSCO for all warranty and service issues at 800-776-9775.

KEEP THIS MANUAL

IMPORTANT SAFETY INFORMATION



SAFETY ALERT SYMBOL

This symbol is used to call your attention to hazards or unsafe practices which could result in an injury or property damage. The signal word, defined below, indicates the severity of the hazard. The message after the signal word provides information for preventing or avoiding the hazard.

⚠ DANGER

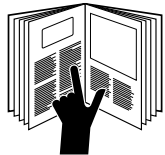
Immediate hazards which, if not avoided, WILL result in severe injury or death.

⚠ WARNING

Hazards which, if not avoided, COULD result in severe injury or death.

⚠ CAUTION

Hazards or unsafe practices which, if not avoided, MAY result in injury or property damage.



⚠ DANGER

Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

Failure to observe this warning will result in severe injury or death.

⚠ DANGER

Do not use this crimping tool with any hydraulic hoses or other hydraulic components rated at less than 700 bar (10,000 psi).

Failure to observe this warning will result in severe injury or death.

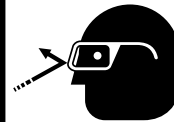


⚠ WARNING

Electric shock hazard:

This tool is not insulated. When using this unit on or near energized electrical lines, use proper personal protective equipment.

Failure to observe this warning can result in severe injury or death.



⚠ WARNING

Wear eye protection when operating or servicing this tool.

Failure to wear eye protection can result in serious eye injury from flying debris or hydraulic oil.



⚠ WARNING

Skin injection hazard:

Oil under pressure easily punctures skin causing serious injury, gangrene, or death. If you are injured by escaping oil, seek medical attention immediately.

- Hand-tighten all couplers completely before operating the pump. Do not use tools.
- Do not use hands to check for leaks.
- Do not hold the hose or couplers while the hydraulic system is pressurized.
- Depressurize the hydraulic system before servicing.

IMPORTANT SAFETY INFORMATION

⚠ WARNING

An incomplete crimp can cause a fire.

- Use proper connector and cable combinations. Improper combinations can result in an incomplete crimp.
- Crimp until the pump has reached relief pressure. If you do not achieve relief pressure, you will have an incomplete crimp.

Failure to observe these warnings can result in severe injury or death.

⚠ WARNING

Inspect tool before use. Replace any worn or damaged parts. A damaged or improperly assembled tool can break and strike nearby personnel.

Failure to observe this warning can result in severe injury or death.



⚠ WARNING

Keep hands away from the crimping tool head when crimping.

Failure to observe this warning can result in severe injury or death.

⚠ WARNING

Follow the instructions and safety information supplied with the pump.

Failure to observe this warning can result in severe injury or death.

⚠ WARNING

Use only IlSCO supplied hoses and couplers. Other manufacturers' components may fail.

Failure to observe this warning can result in severe injury or death.

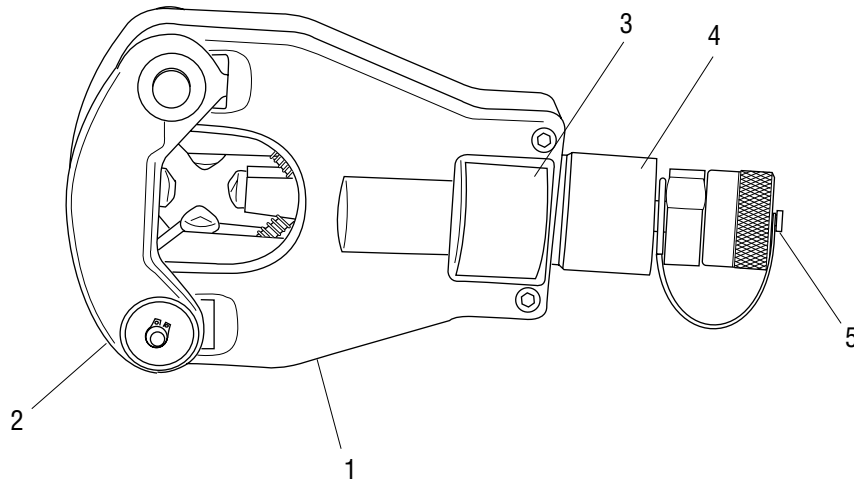
⚠ CAUTION

Do not operate the tool without a connector in place. Damage to the ram or crimping tool head can result.

Failure to observe this precaution can result in injury and property damage.

Note: Keep all decals clean and legible, and replace when necessary.

Identification



IDT-6H

- | | |
|------------------|------------|
| 1. Crimping Head | 4. Decal |
| 2. Flip Top | 5. Coupler |
| 3. Decal | |

Specifications


Crimping Tool

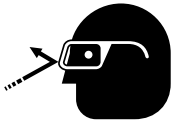
Length	269.7 mm (10.62")
Width	133.4 mm (5.25")
Height	63.5 mm (2.5")
Mass/Weight	2.7 kg (5 lb 15 oz)


Crimping Capacities

Crimping Range	#6 to 750 Kcmil (Al and Cu)
Crimping Force	55 kN (6.2 tons)


Operation

	⚠ WARNING
	<p>Electric shock hazard:</p> <p>This tool is not insulated. When using this unit on or near energized electrical lines, use proper personal protective equipment.</p> <p>Failure to observe this warning can result in severe injury or death.</p>

	⚠ WARNING
	<p>Wear eye protection when operating or servicing this tool.</p> <p>Failure to wear eye protection can result in serious eye injury from flying debris or hydraulic oil.</p>

	⚠ WARNING
	<p>Skin injection hazard:</p> <p>Oil under pressure easily punctures skin causing serious injury, gangrene, or death. If you are injured by escaping oil, seek medical attention immediately.</p> <ul style="list-style-type: none"> • Hand-tighten all couplers completely before operating the pump. Do not use tools. • Do not use hands to check for leaks. • Do not hold the hose or couplers while the hydraulic system is pressurized. • Depressurize the hydraulic system before servicing.

⚠ WARNING
<p>An incomplete crimp can cause a fire.</p> <ul style="list-style-type: none"> • Use proper connector and cable combinations. Improper combinations can result in an incomplete crimp. • Crimp until the pump has reached relief pressure. If you do not achieve relief pressure, you will have an incomplete crimp. <p>Failure to observe these warnings can result in severe injury or death.</p>

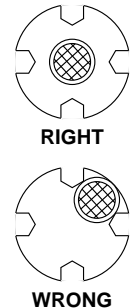
	⚠ WARNING
	<p>Keep hands away from the crimping tool head when crimping.</p> <p>Failure to observe this warning can result in severe injury or death.</p>

⚠ WARNING
<p>Follow the instructions and safety information supplied with the pump.</p> <p>Failure to observe this warning can result in severe injury or death.</p>

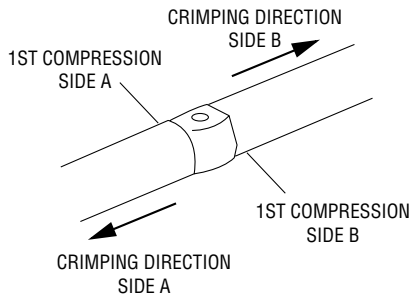
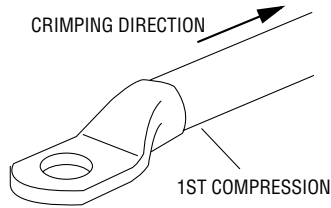
1. Follow the lug instructions in the IlSCO stuffer sheet for appropriate cable strip length and surface preparation.
2. Insert cable fully into connector.
3. Pull the latch pin and open the latch. Insert the connector with cable into the crimping head. Close the latch and push the pin completely into the latch.

⚠ CAUTION
<p>Do not operate the crimping tool unless the latch is completely closed and secured with the latch pin.</p> <p>Failure to observe this precaution can result in injury and property damage.</p>

4. Center the connector between the nibs.

	IMPORTANT
	<p>Small connectors may become wedged between the nibs of the tool. Center the connector between the four nibs before crimping.</p> <p>Failure to observe this precaution can cause property damage.</p>

Operation (cont'd)



5. Using the sequence illustrated here, activate the pump to advance the nibs. Continue crimping until the pressure relief valve activates.
6. After achieving pressure relief, release the hydraulic pressure at the pump. The ram automatically returns to the start position and the nibs retract.
7. Complete the number of crimps specified in the IlSCO stuffer sheet.

Periodic Pressure Relief Valve Check

Test the crimping tool periodically to ensure that the pressure relief valve activates at the proper pressure.

Testing the Crimping Tool

1. Center a test slug between the nibs.
2. Close the latch and push the pin completely into the latch.

CAUTION

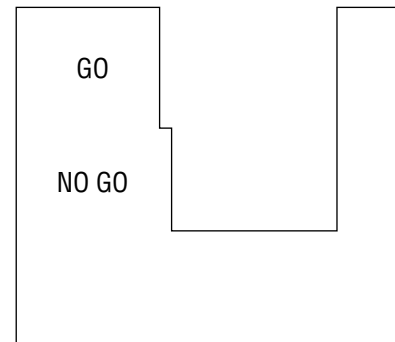
Do not operate the crimping tool unless the latch is completely closed and secured with the latch pin.

Failure to observe this precaution can result in injury and property damage.

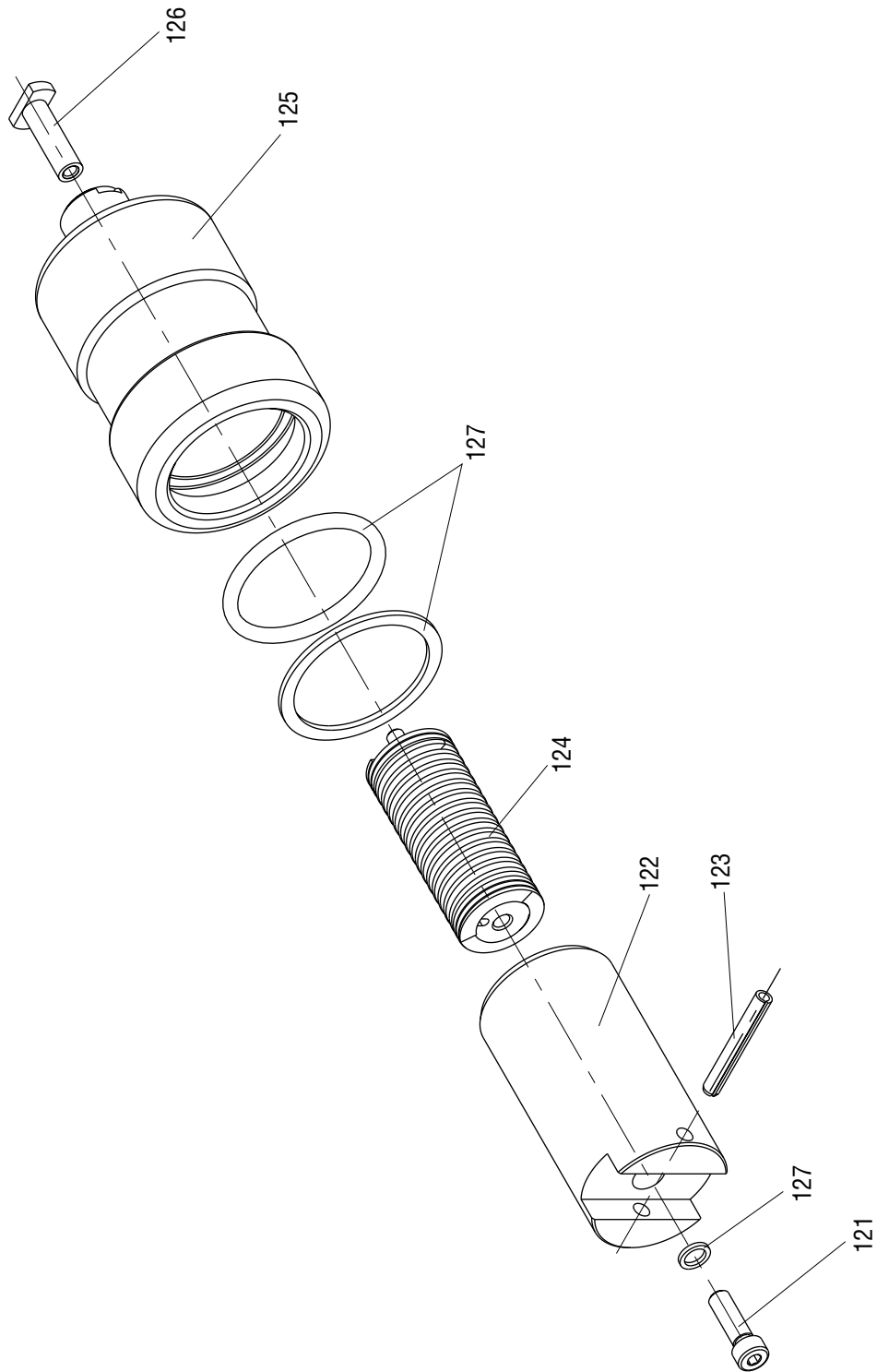
3. Activate the pump to advance the nibs. Continue crimping until the pressure relief valve activates.
4. After achieving pressure relief, release the hydraulic pressure at the pump. The ram automatically returns to the start position and the nibs retract.
5. Evaluate the test slug as follows:
 - If the test slug does not fit into the GO slot, the pressure relief valve is set too high. Refer to the pump instructions for adjusting the relief valve.
 - If the test slug fits into the GO slot, the pressure relief valve is set correctly.
 - If the test slug fits into the NO GO slot, the pressure relief valve is set too low. Refer to the pump instructions for adjusting the relief valve.

IMPORTANT

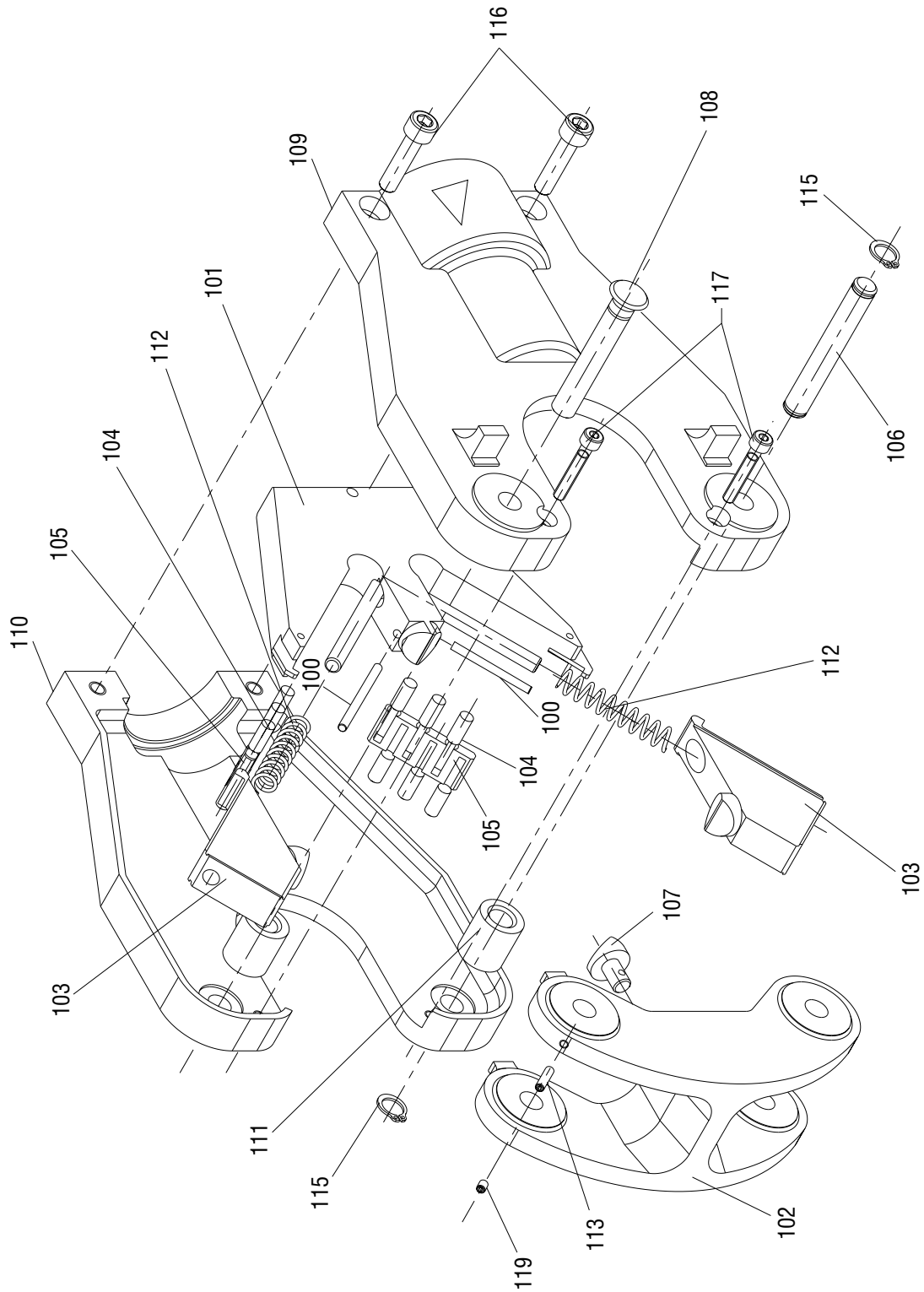
Relief valve adjustments must be performed according to the instructions provided with the hydraulic power source.



Illustration



Illustration



Parts List

Key	Part No.	Description	Qty
	500 1722.5	Quad point flip-top head assembly (includes items 100–119)	
100	500 1727.6	Pin, spring	2
101	500 1723.3	Cam yoke assembly	1
102	500 6117.8	Latch	1
103	500 6127.5	Moving side jaw	2
104	500 6089.8	Roller bearings	12
105	500 6088.0	Bearing retainers	2
106	500 6121.6	Latch mounting pin	1
107	500 6118.6	Latch nib	1
108	500 6124.0	Lock pin	1
109	500 1726.8	Head cover (LH)	1
110	500 1725.0	Head cover (RH)	1
111	500 6116.0	Side jaw roller	2
112	500 6091.0	Compression spring	2
113	500 6096.1	Ball screw	1
115	500 6122.4	Snap ring	2
116	500 6100.3	Socket head cap screw	2
117	500 6103.8	Socket head cap screw	2
119	500 8366.0	Set screw	1
121	500 6097.0	Socket head cap screw, 10–32 x .62	1
122	500 6105.4	Piston master cylinder	1
123	500 6104.6	Tension pin	1
124	500 6094.5	Main ram return spring	1
125	500 6106.2	Master cylinder	1
126	500 6112.7	Spring anchor	1
127	500 6128.3	Seal Kit	1
128	905 0823.8	Coupler with dust cap (not shown)	1
	500 1456.0	Steel case	1
	500 1462.5	Decal, ID	1
	500 1476.5	Decal, case	1
	500 6214.0	Decal, pinch hazard	1

Kits

500 6129.1	Bearing/retainer kit (includes items 104 and 105)
500 6308.1	10 test slugs
500 6309.0	Test gage
500 6130.5	10 slugs with 10,000 psi gage
500 6126.7	Head cover set



U.S. TECHNICAL SUPPORT
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