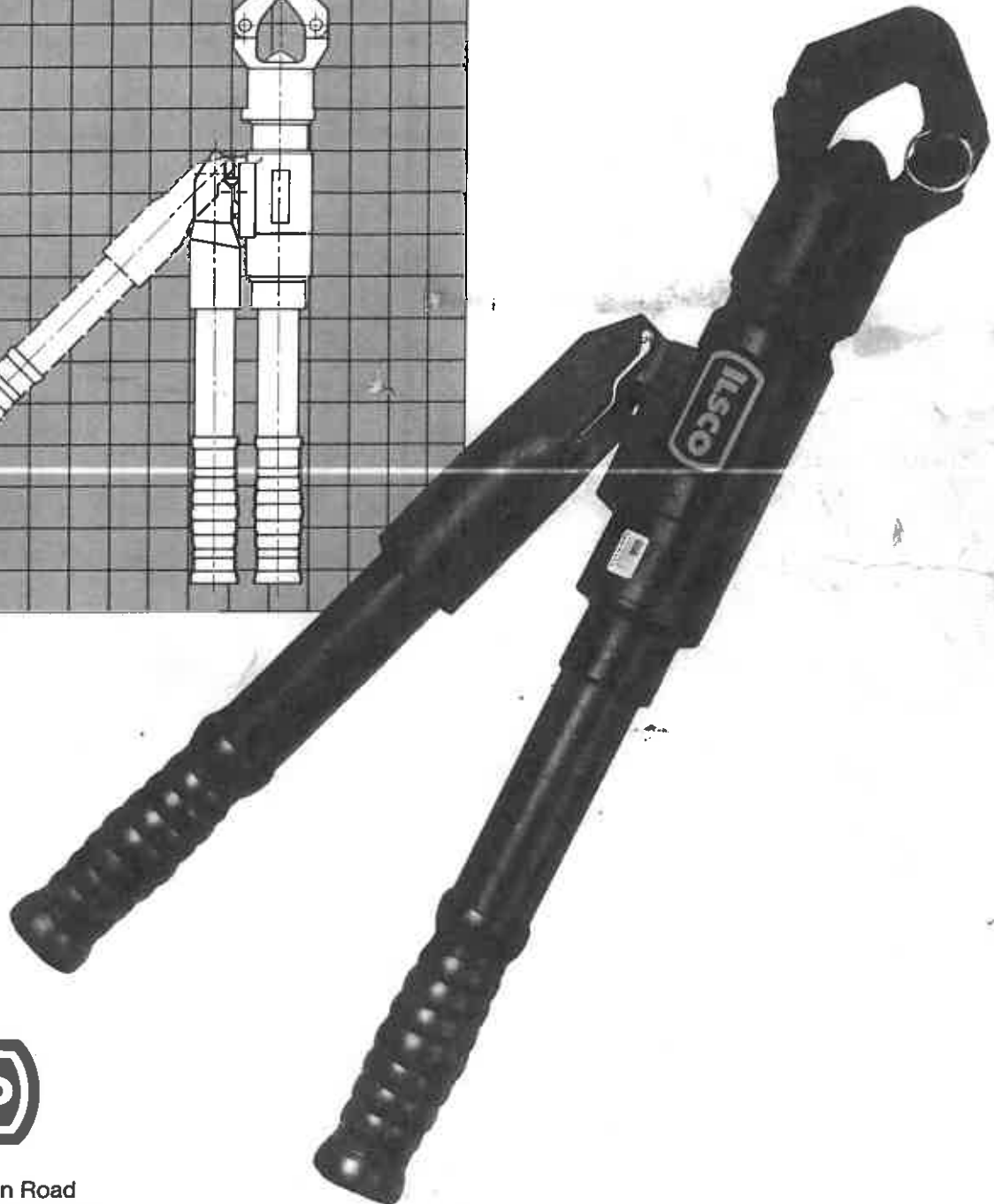
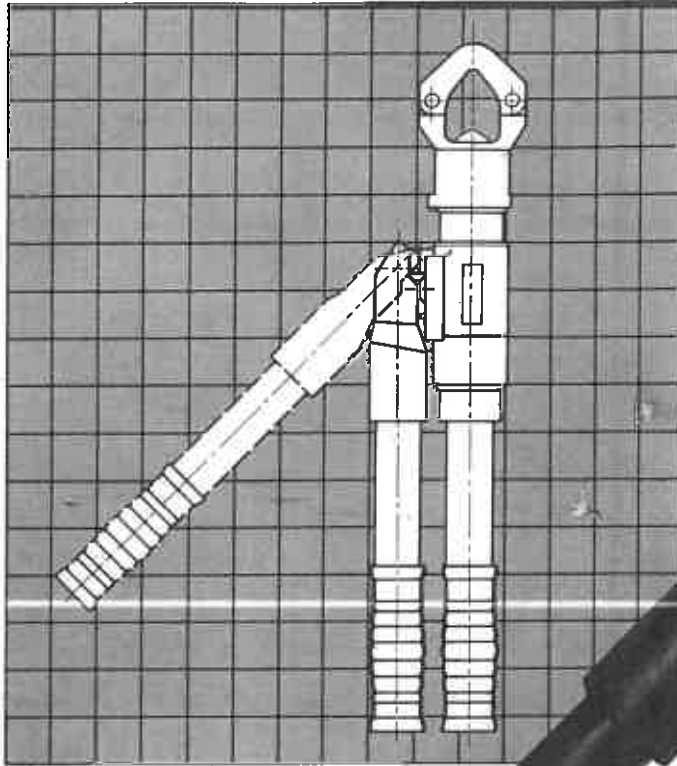


**OPERATING &
MAINTENANCE
INSTRUCTIONS**

**IDT-12
DIELESS
TOOL**



4730 Madison Road
Cincinnati, Ohio 45227

IN CANADA:
ILSCO of Canada LTD.
1050 Lakeshore Rd., East
Mississauga, Ontario L5E1E4



TABLE OF CONTENTS

Warranty & Repairs	1
Introduction	2
Specifications & Benefits	2
Usage	3
Maintenance	4 & 5
Operation	6
Die Insertion & Removal.....	7
Exploded View.....	8 & 9
Parts List	10 & 11

WARRANTY

The ILSCO IDT-12 DIELESS TOOL is warranted to be free of defects in materials and workmanship for a period of 2 years from the date of purchase, except in the case of abuse or misuse.

Any defect which shows up within that 2-year period will be repaired or the tool will be replaced free of charge at ILSCO's option.

After 2 years, units will be repaired and billing will be based on a sliding scale on the basis of how long they have been in service.

Any IDT-12 DIELESS TOOL being returned for repair, must be sent *prepaid to ILSCO, 4730 Madison Road, Cincinnati, Ohio 45227*. On your packing slip, indicate nature of repair required (or describe the problem) and refer to purchase order requesting service.



INTRODUCTION

The ILSCO IDT-12 DIELESS TOOL is a hand-operated, hydraulic crimping tool with an infinitely rotating head for virtually all dieless compression applications. The tool weighs only 15 pounds, yet delivers 11 tons of force.

The head which rotates unimpeded a full 360-degrees relative to the handle, is mated to a rapid advance, 2-stage pump. The result is easy tapping, splicing, and terminating of de-energized lines.

The body and handles of the IDT-12 are covered with insulating-grade rubber protecting the operator and tool from accidental brush contact with energized lines.

The IDT-12 DIELESS TOOL crimps connectors for use on conductor ranges of #6 — 1000 Kcmil AL/CU. The ILSCO IDT-12 DIELESS TOOL is made in the United States and represents the latest advancements for this kind of tool.

Specifications

Force developed	11 tons
Operating Pressure	8,800 psi
Weight (Tool only)	15 lbs.
Overall Length	25.39"
Head Width	3.93"

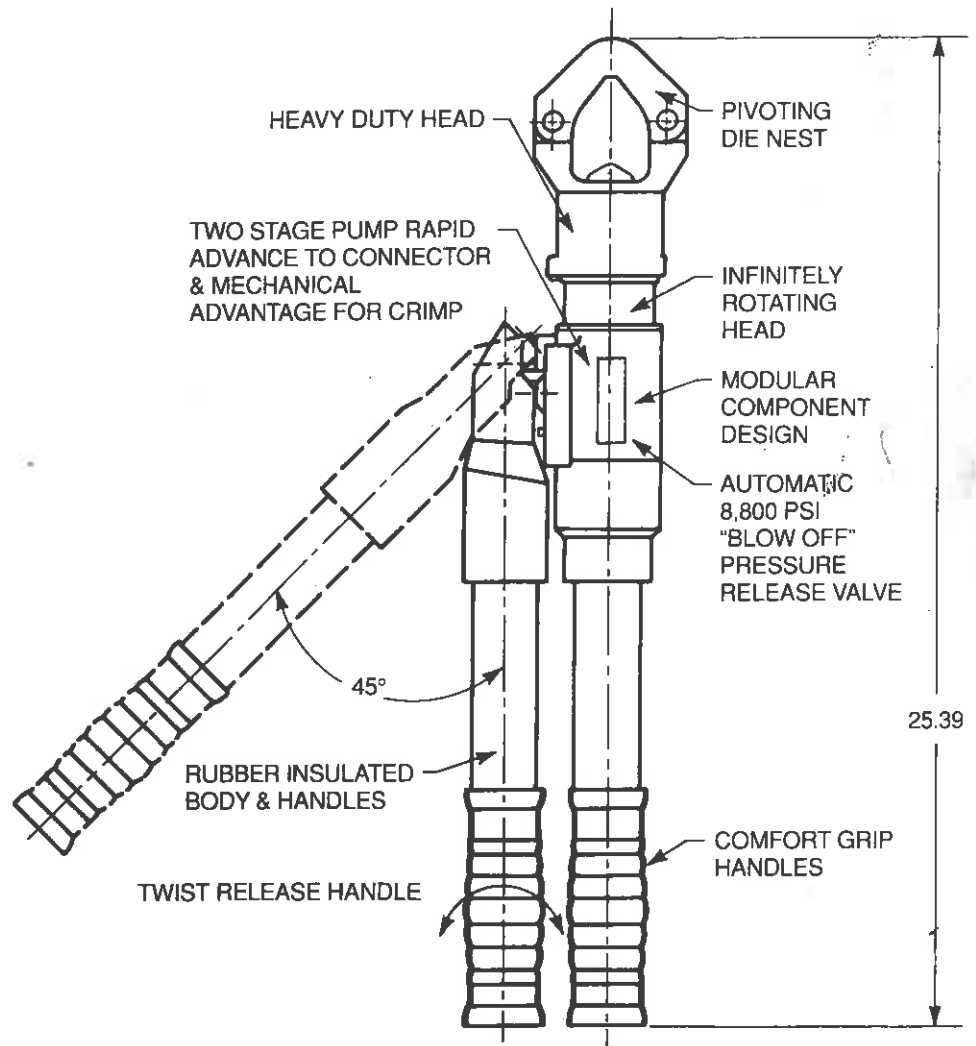
Benefits

- Covers a wide range of applications with a light weight, self-contained system and provides easy tool removal from continuous conductors with its pivoting die nest.
- Dieless system, eliminates the need to purchase and maintain dies.
- Easy tool positioning with its infinitely rotational head.
- Long life expectancy.
- Quality assurance is provided with automatic 8,800 psi "blow off" pressure relief valve.
- Two-speed pump rapidly advances the ram to contact the connector and automatically switches over to lower handle force for crimping.
- Comfort grip handles help ease fatigue with continuous use.
- Rubber covers over the pump body and handles.
- Combination blow/off manual release valve easily replaceable from the exterior of the tool (no tear down necessary).
- Twist release — no trigger to break.
- Strongest warranty in the electrical tooling industry. Two full years.



For Use On:

- Taps
Aluminum.....#6-250 Kcmil
- Terminals & Splices
Aluminium.....#6-1000 Kcmil
Copper.....#6-1000 Kcmil





MAINTENANCE

Simple, normal maintenance will extend the service life of your IDT-12.

1. Keep moving parts free of dirt and grit – ram and pump handle. Debris in the ram or head can score the cylinder and ruin hydraulic seals. To clean, advance the ram and wash with a good-grade commercial solvent.
2. Wipe rubber covering with clean, dry cloth.
3. Periodically check fluid level in tool. Refill tool if “dead strokes” are encountered or if full pressurization cannot be achieved (relief valve will not “blow off”).
4. Periodically check for air in system and bleed air.

To Refill Reservoir

Place tool head upside down in vise. Operate pump handle once leaving handle in open position.

Loosen Allen screw and remove handle.

Support bladder at end.

Remove bladder plug as shown.

Top off reservoir using HYDRAULIC FLUID. No winterization required.

BE SURE TO REMOVE PARTICLES FROM MAGNET BEFORE REPLACING.

Replace plug. Replace handle and tighten Allen screw.



To Bleed Air:

Position tool head down.

Advance ram with rapid strokes until ram butts against die nest.

Rotate pump handle and close, depressing release button until ram returns to original position. (To return ram to original position, twist pump handle, squeeze handles which will depress release button).

Repeat several times.

Remove handle and bladder plug and top off tool as described in "To Refill Reservoir" section.





OPERATION

Step 1.

Place connector in die nest and operate pump handle by squeezing until ram advances and holds connector in place. (Two speed pump rapidly advances the ram to contact with the connector and automatically switches over to lower handle force for crimping). Be sure die nest detent pin is fully inserted.

Step 2.

Insert cable. Continue squeezing pump handle until the tool's built-in relief valve "blows off" or automatically releases.

Step 3.

Rotate pump handle counter clockwise and squeeze handles together to release pressure. Hold handles together until ram retracts. Remove tool. (If splicing, open die nest by pulling on detent pin and rotating nest).



DIE INSERTION & REMOVAL

For Making H-Crimp Connections:

Step 1a

Select appropriate die (O or D3) as labeled on connector. Unscrew thumb screw.

Step 2a

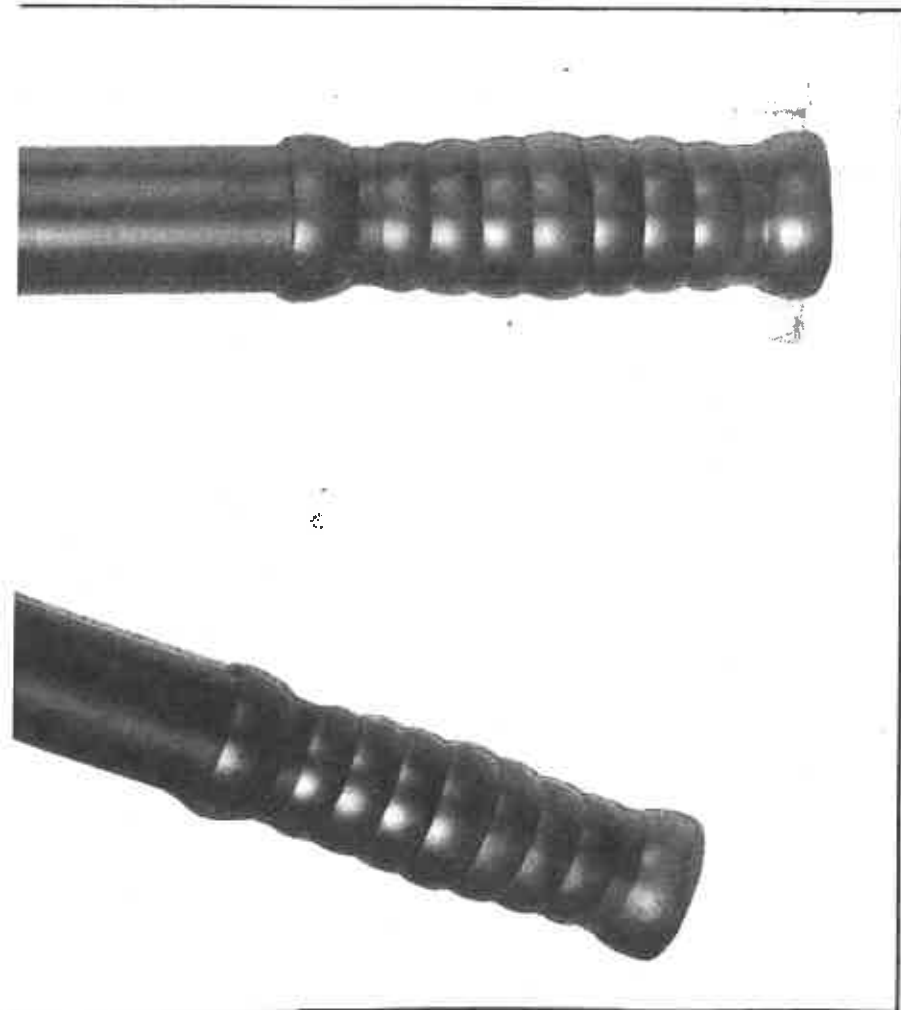
Position die such that color dots line up. Rotate die onto piston such that pin on die slips into hole. Screw thumb screw to lock into place. To ease installation, advance ram and open die nest.

Step 3a

Place matching connector in die nest and operate pump handle as above. Follow steps 2 and 3 as indicated in **OPERATION.**

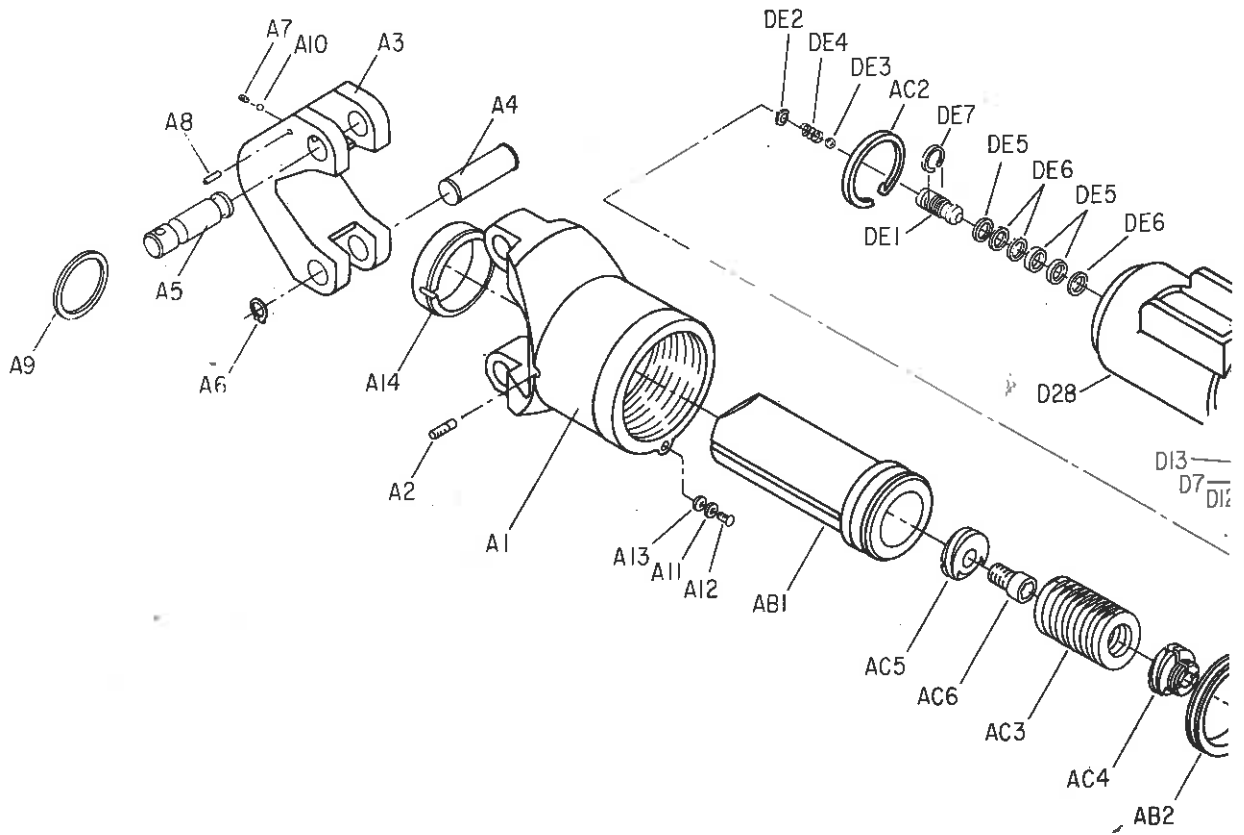
Step 4a

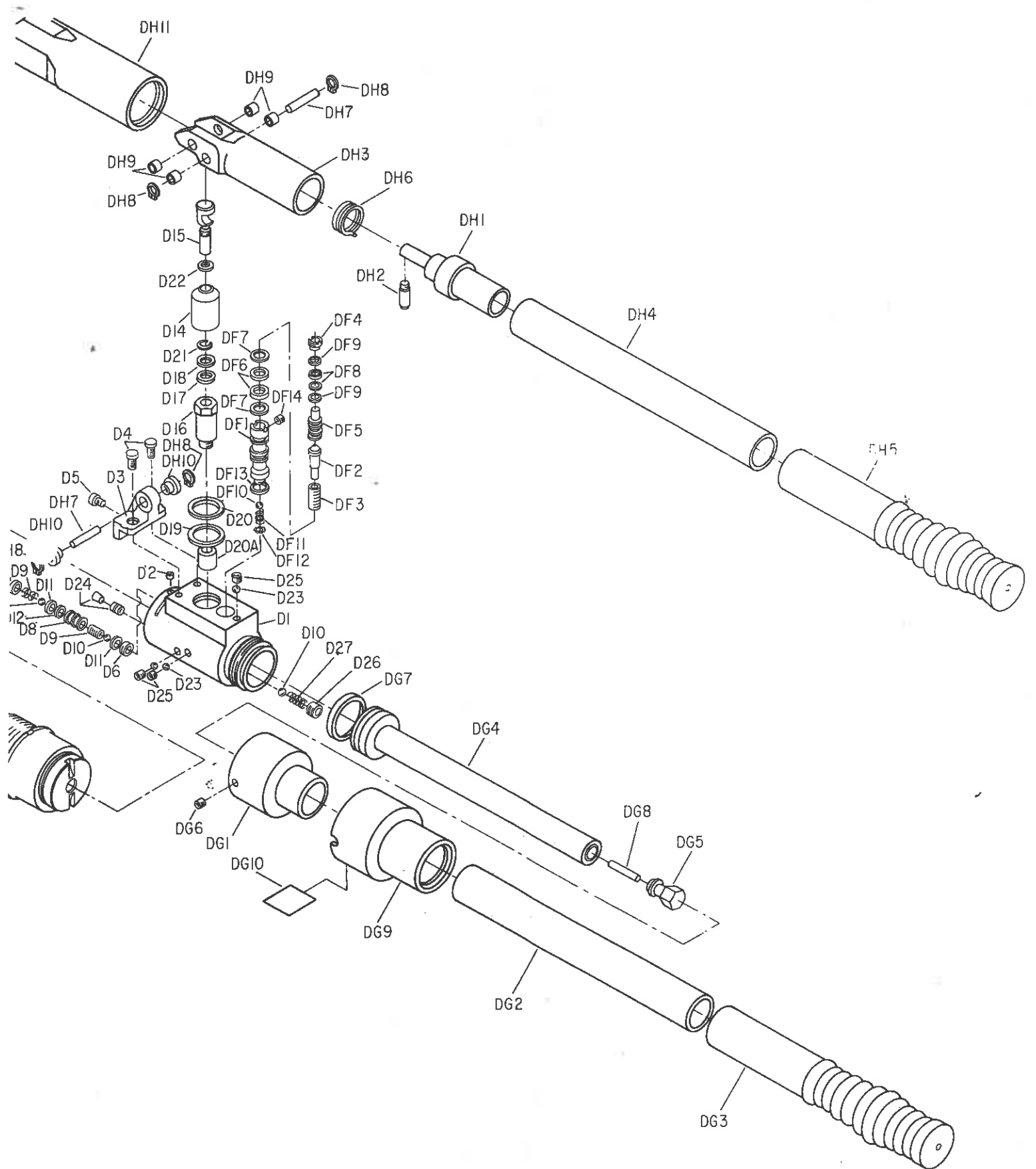
For D3 die, move tool to next crimp position and operate pump handle as above.





IDT-12 DIELESS TOOL™







PARTS LIST

IDT-12 DIELESS TOOL BILL OF MATERIAL

Sub Assembly	No.	Description	Qty.	Cat. No.
A Head Assy. IDT-12 PT30536 Die Nest Assy. PT30535	A1	Head	1	PT30549
	A2	Key	1	PT30544
	A3	Die Nest	1	PT30548
	A4	Pivot Pin	1	PT17346
	A5	Detent Pin	1	PT17387
	A6	Retaining Ring	1	PT17388
	A7	Detent Spring	1	PT17386
	A8	3/32" x 3/8" Lg. Std. Roll Pin	1	094x38RLPN
	A9	Pull Ring	1	PT17393
	A10	1/8" Dia Steel Ball	1	BALL-12
	A11	Screw Spacer	1	PT15449
	A12	10-24x1/2 BTN Hd. Cap Screw	1	10-24x50BHSCS
	A13	#10 Int. Tooth Lock Washer	1	10INTTLW
	A14	Guide Bearing	1	PT30545
B Piston Assy. PT30531	AB1	Piston	1	PT30547
	AB2	GT Ring	1	PT10177
C Cylinder Assy. PT30530 Ret. Spring PT30529	AC1	Cylinder Body	1	PT30456
	AC2	Locking Wire	1	PT23443
	AC3	Extension Spring	1	PT30538
	AC4	Lower Spring Holder	1	PT23410
	AC5	Upper Spring Holder	1	PT23415
	AC6	Spring Stud	1	31FX75SHCS
D Pump Assembly PT 23468	D1	Pump Body	1	PT23431
	D2	8-32 x 1/8 Lg. Soc. Hd. Set Screw	1	8-32x12SHSS
E Interface Port Assy. PT23469	DE1	Interface Port	1	PT23424
	DE2	Internal Retaining Ring	1	PT23472
	DE3	.188 Steel Ball	1	Ball-19
	DE4	Spring	1	PT23448
	DE5	O-Ring (Poly-U)	3	PT11154-U
	DE6	Back Up Ring	3	PT23451
	DE7	Retaining Ring	1	PT23473
	D3	Handle Bracket	1	PT23483
	D4	1/4-28 x 3/4 Lg. Low Hd. Soc. Hd. Cap Screw	2	25FX75LHSCS
	D5	1/4-28 x 3/8 Lg. Low Hd. Soc. Hd. Cap Screw	1	25FX38LHSCS
	D6	Low Pressure Ball Seat	1	PT23427
	D7	High Pressure Inlet Cap	1	PT23429
	D8	High Pressure Housing	1	PT23428
	D9	Inlet Spring	2	PT23441
	D10	.219 Steel Ball	2	BALL-22
	D11	O-Ring	3	PT11154-4
D12	Back Up Ring	2	PT23451	
D13	1/2-20 x 1/2 Soc. Hd. Set Screw	1	50-20X50SHSS	
D14	Large Piston	1	PT23421	
D15	Small Piston	1	PT23422	
D16	Small Cylinder	1	PT23423	

**PARTS LIST****IDT-12 DIELESS TOOL BILL OF MATERIAL**

Sub Assembly	No.	Description	Qty.	Cat. No.
E (cont.)	D17	O-Ring	1	PT11154-U
	D18	Back Up ring	1	PT23451
	D19	O-Ring	1	PT11141-V
	D20	Back Up ring	1	PT23456
	D20A	Guide Bushing	1	PT23610
	D21	Retaining Ring	1	PT23474
	D22	O-Ring	1	PT23457
	D23	.188 Steel Ball	4	BALL-19
	D24	Lee Plug	1	PT23475
	D25	1/4-28 x 1/4 Lg Soc. Hd Set Screw	3	25-28X25SHSS
	D26	5/16-24 Soc. Hd. Jam Scr.	1	31224X25SHIS
	D27	Bypass Spring	1	PT23450
	D28	Rubber Cover Pump Body	1	PT23481
	F Relief Valve Assy. PT30528	DF1	Relief Valve Housing	1
DF2		Plunger Valve	1	PT23404
DF3		Relief Valve Spring	1	PT23405
DF4		Spring Adjusting Screw	1	PT23409
DF5		Relief Valve Plunger	1	PT23445
DF6		O-Ring	2	PT23458
DF7		Back Up Ring	2	PT23459
DF8		O-Ring	2	PT11140-V
DF9		Back Up Ring	2	PT23461
DF10		.219 Steel Ball	1	BALL-22
DF11		Drain Spring	1	PT23449
DF12		Internal Retaining Ring	1	PT23472
DF13		Copper Washer	1	PT23413
DF14		8-32 x 1/8 Lb. Soc. Hd. Set Screw	1	8-32X25SHSS
G Reservoir Handle Assy. PT23470	DG1	Handle Adaptor	1	PT23433
	DG2	Handle (Fiberglass)	1	PT23434
	DG3	Handle Grip (Rubber)	1	PT23487
	DG4	Handle Reservoir (Bladder)	1	PT23420
	DG5	Reservoir Plug	1	PT23432
	DG6	8-32 x 1/4 Lg. Soc. Hd. Set. Scr.	1	8-32X25SHSS
	DG7	O-Ring	1	PT23462
	DG8	Magnet	1	PT23446
	DG9	Rubber Cover Handle Adaptor	1	PT23479
	DG10	Label	1	PT30537
H Pump Handle Assembly PT23471	DH1	Pump Handle Adaptor	1	PT23440
	DH2	Pump Handle Plunger	1	PT23437
	DH3	Pump Handle Interface	1	PT23482
	DH4	Handle (Fiberglass)	1	PT23434
	DH5	Handle Grip (Rubber)	1	PT23487
	DH6	Torsion Spring	1	PT23439
	DH7	Dowel Pin .312 x 1 5/8 Lg.	2	PT23486
	DH8	External Retaining Ring	4	PT23491
	DH9	Bushing (.312 I.D.) Straight	4	PT23478
	DH10	Bushing (.312 I.D.) Flanged	2	PT23485
	DH11	Rubber Cover-P/H Interface	1	PT23480
	Misc	Carrying case	1	PT30539
	O-Die	1	PT30541	
	D3-Die	1	PT30540	



4730 Madison Road
Cincinnati, Ohio 45227
Phone (513) 533-6200
Fax (513) 871-4084

IN CANADA:
ILSCO of Canada LTD.
1050 Lakeshore Rd., East
Mississauga, Ontario L5E1E4
Phone (416) 274-2341
Fax (416) 274-2689