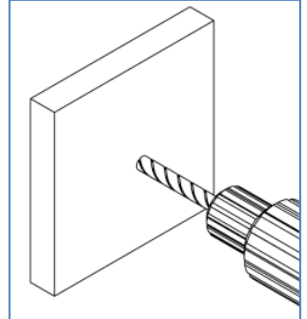


# 502.601 Hydraulic Punch Instructions

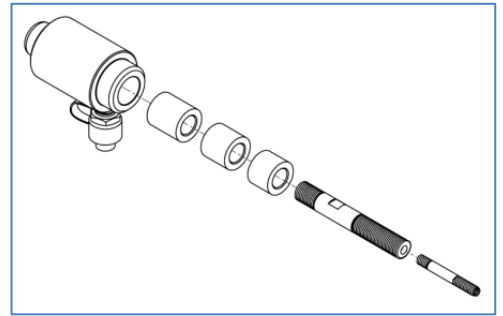
## Operating Instructions

- Several parts will be needed to complete the punching process. Use the chart below to select the correct punch, die, draw stud and spacers.

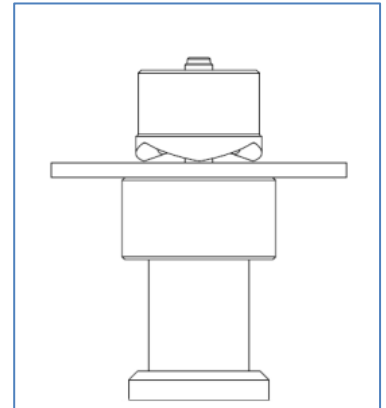


- Drill an 11mm wide leading hole through the steel plate at the desired punch point.

- Screw the 3/4" draw stud into the puncher head. Put the appropriate spacer and female die into place. Note: if using the 3/8" draw stud, then both draw studs and all three spaces must be used together.



- Insert the draw stud through the lead hole. Screw the male die end of the draw stud until the steel plate is secure between both dies. (see illustration)



- Open the release valve on the pump by turning the knob counter-clockwise. Connect the pump hose to the puncher and secure the couplers firmly.

Punch Dies	Ø hole (mm)	Step 1			Step 2			
		Primary Perforation			Draw Stud	Spacer		
		Drill	Punch	Setting Thread		L	M	S
1/2"	21.8	Ø 11mm	1/2"	3/8"	3/8"	○	○	○
3/4"	27.3					○		
1"	34.1					○		
1-1 1/4"	42.7					○	-	-
1-1 1/2"	48.7					○		
2"	60.5							○

## Maintenance

- Always keep the product clean. Routine application of rust preventative old to the product is required
- Sands mixed in the pump oil will be carried into the product. It might cause malfunctions or even damages to the product. Routine renewal of pump oil is required
- DO NOT keep the product in places with high temperature, high humidity, or direct sunlight
- Refer to the cutting capacity of this tool, please select the correct plate for your applications
- Inform ITC in case of any abnormalities or malfunctions of the product. Receipt and warranty card are required for warranty services
- Suggested working temperatures: -10 to -40°C
- Pump oil temperatures over 65°C might cause severe damage
- To keep the product in best working conditions, DO NOT slam it on the ground
- DO NOT disassemble/repair or attempt to disassemble/repair the product

## Trouble-Shooting

- **Punching operation cannot be implemented:**
  - A. Applied plate is over-specification
  - B. Connecting pump is without sufficient hydraulic fluid
  - C. Worn or damaged punch dies
  - D. Leakages of hydraulic oil
  - E. Draw stud and punch dies are not set correctly
- **Insufficient operating pressure (<590 bar):**
  - A. Leak in the pump: contact ITC
  - B. Leak in the tool: contact ITC
  - C. Couplers are not attached firmly
  - D. Coupler damage is causing the oil flow to be obstructed
- **Punch dies cannot be set in place or removed:**
  - A. Use adjustable pliers to loosen the 3/4" draw stud from the 3/8" draw stud and to loosen the dies

**DO NOT attempt to disassemble or repair the product**

## Limited Warranty

- Limited warranty of ITC goods are valid for a period of ONE year from the date of purchase
- This warranty is subject to the exclusions and limitations described below:
  1. This warranty does not cover damages of products which are NOT installed, operated, used and maintained in accordance with written instructions
  2. This warranty does not cover damages resulted from disassembly or attempted disassembly by parties other than ITC
  3. This warranty does not cover damages caused by improper storage of the product, use of components not manufactured or authorized by ITC, acts of God, accidents, use in manner for which they are not intended or use which is contrary to instructions for the products
  4. This warranty does not cover ordinary wear and tear, which cannot be imputed to defects in material and workmanship.
- ITC liability in all cases is limited to, and shall not exceed, the purchase price paid.
- All revisions in warranty policy and product information will be included in new versions of handbooks. Individual notification will NOT be issued.