

# RIDGID PH-60C Swiv-L-Punch™ Head Instructions

## ⚠ WARNING



Read and understand these instructions, the electrical tool instructions, and the warnings and instructions for all equipment and material being used before operating this tool to reduce the risk of serious personal injury.

### SAVE THESE INSTRUCTIONS!

- Keep your fingers and hands away from the punch head during the punch cycle. Your fingers or hands can be crushed, fractured or amputated if they are caught between the punch dies or the components and any other object.
- Do not use on energized electrical lines to reduce the risk of electrical shock, severe injury and death. Tool is not insulated. Use appropriate work procedures and personal protective equipment when working near energized electrical lines.
- Large forces are generated during product use that can break or throw parts and cause injury. Stand clear during use and wear appropriate protective equipment, including eye protection.
- Do not handle punch head while punching. The punch head contains high pressure oil during punching. High pressure oil escaping from punch head can penetrate the skin and cause serious injury. If oil is injected under the skin, seek immediate medical attention.
- Never repair a damaged head. A head that has been welded, ground, drilled or modified in any manner can break during use. Only replace components as indicated in these instructions. Discard damaged heads to reduce the risk of injury.

## Description

The RIDGID® Swiv-L-Punch™ Head is designed for use with punches and dies (such as knockout punches) to punch holes through sheet materials such as mild or stainless steel.

The tool is available either as an interchangeable head (For RIDGID® RE 6/RE 60 or ILSCO Electrical Tool) or as part of a dedicated tool (RIDGID® RE-600 series tools).

The Punch Head can rotate and articulate 360 degrees for better access in tight areas.



Figure 1 – PH-60C Swiv-L-Punch Head (Interchangeable version)

## Specification

Material Thickness .....	Mild Steel – Up to 10 gauge (0.134", 3.4 mm) Stainless Steel – Up to 12 gauge (0.109", 2.8 mm)
Max. Punch Diameter .....	Up to 5" (120 mm) in 12 gauge mild steel and 14 gauge stainless steel Up to 2" (50,8 mm) in 10 gauge mild steel and 14 gauge stainless steel
Draw Stud Thread .....	3/4" – 16 UNF
QCS Coupling Type.....	6T QCS and 60kN QCS
Maximum Output Force.....	14,600 lbf (64 kN)
Interchangeable Head Weight.....	4.4 lb (2.0 kg)

Punching capacity depends on a variety of factors including punch size/configuration, material thickness, type, and hardness. Holes may not be able to be completed in all cases based on these and other variables.

## Inspection/Maintenance

Inspect the Punch Head before each use for issues that could affect safe use.

1. Remove battery from electrical tool.
2. Clean any oil, grease or dirt from the tool and head, including handles and controls. This aids inspection and helps prevent the machine from slipping from your grip.
3. Inspect the head for:
  - Proper assembly and completeness.
  - Wear, corrosion or other damage.
  - Oil Leaks. If the draw stud piston extends past the tool face (Figure 2), the oil is low. Have the punch head serviced – do not attempt to add oil.
  - Presence and readability of head markings.
  - See *electrical tool manual* for inspection and maintenance of the QCS coupling.

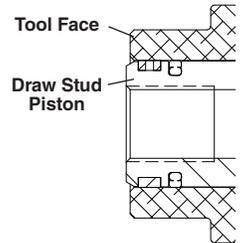


Figure 2 – Punch Head Oil Low

If any issues are found, do not use head until corrected.

4. Inspect the electrical tool and any other equipment being used as directed in their instructions. Make sure other knockout components are in good working condition.
5. Lubricate the head pivot points with a light weight general purpose lubricating oil. Wipe off any excess oil.

## Set Up/Operation

These instructions are generalized for many types of knockout punches and dies. Follow the specific instructions for the set up and operation of the knockout punch and die being used.

1. Determine the thickness and type of material to be punched. Make sure there is only a single thickness of material to be punched. Determine the hole size you wish to punch. Select the appropriate matched punch and die set per manufacturer's specifications.
2. Make sure all equipment is inspected and set up per manufacturer's instructions.
3. Mark the hole location and if needed drill a pilot hole 1/8" (3 mm) larger than the draw stud (E.g. for a 3/4" draw stud, drill a 7/8" (22 mm) pilot hole.)
4. Remove battery from electrical tool. Thread the draw stud completely into the Punch Head unit. The thread must be fully engaged to ensure proper operation, but does not need to be tight.
5. Place any needed spacer(s) over the draw stud, followed by the punch die. Place the cupped half of the die facing away from the tool.
6. Insert the draw stud through the pilot hole in the material to be punched.
7. Thread the matching punch half of the die onto the draw stud with the cutting edges toward the material. Tighten by hand until there are no gaps between the head, spacer(s), die, material and punch. If there are gaps between the parts, the dies will not be square to the material and could damage the equipment or cause injury.

A thread adapter is available for use with punches with 1/8" - 12 threads to convert for use with 3/4" - 16 UNF draw studs. Fully thread adapter into the punch as shown in Figure 3 inset.

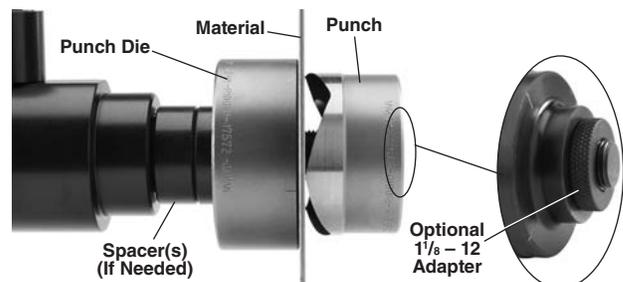


Figure 3 – Setting Up The Punch Head

Make sure that the punch is fully threaded onto the draw stud. Do not operate with the punch partially threaded onto the draw stud, this could damage the stud. If the punch will not fully thread onto the draw stud, a spacer may need to be removed.

8. Changing Heads with QCS Coupling – See *electrical tool manual*.

9. With dry hands install the tool battery.
10. With hands clear of the head and other moving parts, operate the electrical tool as per its operator's manual. As soon as the hole is complete release the run switch.

**NOTICE** Do not hold the run switch until the tool automatically retracts. This could cause the punch to bottom out in the die and damage the punch/die. Press the electrical tool pressure release button to retract the ram.

11. Turn the electrical tool OFF and remove the punch from the hole. Be careful of any sharp edges.

### Accessories

Catalog No.	Description
23478	Knockout Punch Die Set w/1/2", 3/4", 1", 1 1/4", 1 1/2", 2" and Case
23492	Knockout Punch Die Set w/2 1/2", 3", 3 1/2", 4" and Case
44133	Knockout Punch Die Set w/M 16, 20, 25, 32, 40, 2 draw bolts, 3 spacers and drill
52278	PH-60C Accessories Set w/Drawstuds, Step Bit Drill, Thread Adapter, and Spacers
52368	3/4 - 16 Draw Stud
52373	3/8 - 24 Draw Stud
52378	Step Bit Drill
52383	1 1/8 - 12 to 3/4 - 16 Thread Adapter
52388	Knockout Spacer Set



99 Washington Street  
Melrose, MA 02176  
Phone 781-665-1400  
Toll Free 1-800-517-8431

