

NOTE: Parts held with the pins are for laser marking purposes only. The pins are not intended to hold parts being machined.

**SHERLINE
PRODUCTS**
INCORPORATED 1974

Sherline Laser Pin Chuck Jaws

P/N 1140, P/N 11414L

P/N 1140 Shown for reference, chuck not included.

The Purpose of Pin Jaws

Sherline's pin jaws are intended for holding parts while they are marked with a laser, not for holding parts while they are being machined. Round parts can be held from the inside, or outside, with just finger-tight grip of the pins while the outside is laser marked (See Figure 1). Different length pins are provided depending on how far the part needs to be held from the chuck. The pins minimize the contact area with the part as well. They can also hold parts from the outside when they are being marked on the inside. The jaws can also be reversed in the chuck to hold larger objects.

You may purchase these jaws to fit an existing Sherline 3-Jaw Chuck, or you can order a new chuck with the jaws installed.

About the Standard Laser Pin Chuck Jaws

The P/N 1140 Pin Jaws are based on our standard jaws for our 3-jaw chucks, but they have a 1/8" diameter hole bored on the top tier of the jaws that hold hardened-steel pins. The pins come in 3/4", 1", and 1-1/4" lengths, all in sets of three. You can also use the tier levels on the jaws for holding parts. With the jaws mounted in their standard relationship (with the pins towards the center of the chuck), the smallest O.D. that can be held is .226".

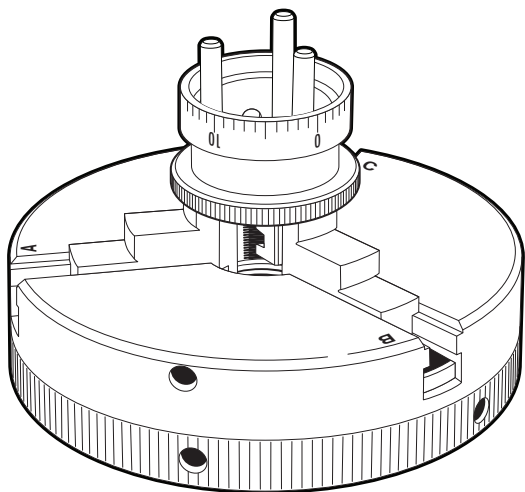


Figure 1—Round parts can be held by the pins from the inside so marks can be laser engraved all the way around the outside surface when the chuck is held on a Sherline CNC rotary table.

The smallest I.D. that can be held is .476". The T.I.R. of these pins is .006" or less.

These jaws can be reversed so the pins can be on the outside of the chuck. This allows for a larger clamping diameter range. To read about the procedure to install the jaws in the reversed position, see <https://sherline.com/wp-content/uploads/2015/01/1040inst.pdf>.

We recently improved the design of the pin jaws. The hole that holds the pin now goes all the way through each jaw so you can easily knock out any broken pins.

About the Short Laser Pin Chuck Jaws

If you need jaws to hold larger parts than the standard jaws can hold, our Short Laser Pin Chuck Jaws are for you (See Figure 2). The P/N 11414L Pin Jaws have three pin hole locations that allow for a larger clamping diameter range than the standard pin jaws, and they can hold round parts up to 3.7" (94mm) OD and as small as .54" (13.7mm) ID.

Each jaw has three hole locations that hold 3/16" hard-steel dowel pins. The thicker 3/16" pins are for heavier industrial usage. They come in 1" and 1-1/2" lengths, both in sets of three and with three hole locations. The top of the jaws are flat, which gives you a surface to locate your parts against. The pins, however, are not designed to hold parts for machining.

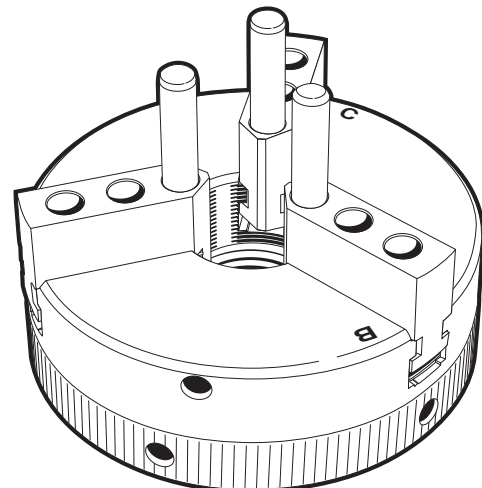


Figure 2—P/N 11414L Short Laser Pin Chuck Jaws, chuck not included.

A Note on the Fit of the Jaws

The width of the jaws are sized to fit chucks that have been produced since 2014. Chucks manufactured prior to 2014 will need to have each jaw custom ground to fit. Either send your chuck in, or measure the width of each jaw with micrometers. Then send a list of each jaw width (A, B, and C jaws).

Installing the Chuck Jaws in Your Existing 3-Jaw Chuck

If you are installing these jaws in a chuck that was previously purchased with standard jaws, turn the chuck scroll counter-clockwise until the jaws are pushed completely out of the chuck. Note that each of the new jaws has a different pattern of teeth on the bottom. One has an engagement tooth that is closest to the pointed end of the jaw, and one has a first tooth that is farthest from the pointed end. The one with the tooth closest to the pointed end is the first jaw to be inserted. It is generally installed in the chuck slot marked with a dot or the letter "A."

Turn the scroll until you can just see the beginning of the spiral tooth enter the "A" slot. Push the jaw into the slot and hold it while turning the scroll so the scroll tooth picks up the jaw tooth and begins pulling it into the chuck. Then continue to rotate the scroll until it just starts to enter the second slot. Now insert the middle jaw into that slot, push it in as far as it will go and turn the scroll to pull that jaw into the second slot. (You may have to push on the first jaw a little as well until it becomes aligned with its slot.)

Continue to turn the scroll until it comes to the third slot and do the same thing with the last jaw to get it started in the slot. You may need to wiggle the jaws a little and work the scroll back and forth a little while pushing the jaws squarely into their slots. Once you get them all going straight into their slots the scroll should begin to turn more easily.

NOTE: For instructions on how to insert new jaws into your chuck, please use the following links:

Written: <https://sherline.com/wp-content/uploads/2015/01/1040inst.pdf>

Video: <https://youtu.be/47DDvVB4f2M>

Other Laser Engraving Accessories

Many of our customers who have ordered these jaws have also ordered other Sherline accessories to aid them with their laser engraving challenges.

In order to laser engrave around the entire surface of your part you may find our CNC Rotary Table useful (P/N 8730 or 8700).

In order to laser engrave the inner surface of a ring or collar you may find our Tilting Angle Table useful (P/N 3750).

Our 3-Jaw Chucks are designed to mount easily and accurately to our Rotary Table and our Tilting Angle Table. Our Rotary Table can also be mounted to our Tilting Angle Table to give you a full range of angles along with 360 degree rotation.

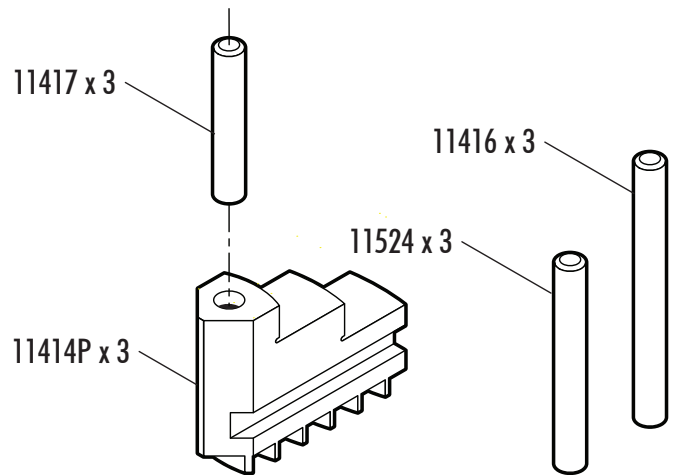
To see a video demonstration of the Pin Jaws being used in

conjunction with a laser engraver visit the Videos section of our website at www.sherline.com.

Thank you,
Sherline Products Inc.

1140 3-Jaw Chuck Pin Jaws Parts List

NO. REQ.	PART NO.	DESCRIPTION
3	11414P	3-Jaw Chuck "Pin Jaws"
3	11417	1/8" X 3/4" Hard Steel Dowel Pin
3	11524	1/8" X 1" Hard Steel Dowel Pin
3	11416	1/8" X 1-1/4" Hard Steel Dowel Pin



11414L Short Laser Pin Chuck Jaws Parts List

NO. REQ.	PART NO.	DESCRIPTION
3	11414	3-Jaw Chuck "Short Laser Pin Jaws"
3	37580	3/16" X 1" Hard Steel Dowel Pin
3	37581	3/16" X 1-1/2" Hard Steel Dowel Pin

