# Knowledge Base: KB1017 – Collet Spindle Guide

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## Overview

The Newing-Hall Collet Spindle is the most versatile spindle offered in the industry. It provides the engraver and sign maker with broad range of cutter choices.

### Cutters Accepted

1. 11/64" top loading engravers cutter.
2. 1/4" top loading engravers cutters.
3. Bottom loading milling cutters with up to 1/4" shanks. Cutters and collets are available from Newing-Hall Inc. and machinist supply outlets.

## Included with the Collet Spindle

| NHI Part Number | Description |
|---|---|
| 1081056 | 1/8 x 2 dowel pin (black) |
| 1089764 | 1/2 combination box end wrench-short |
| 1516030 | 11/64 diameter 0.030 tip carbide cutter |
| 1500870 | 1/4 & collet chip removal sub assembly |
| 1089651 | 1/4" collet (harding size 1c) |
| 1089650 | 11/64" collet (harding size 1c) |
| 1501325 | 1/4" drawbar |
| 1501324 | 11/64" drawbar |
| 1500160-0d | 1/4" chip removal bowl |
| 1501301 | 1/4" chip removal nose |
| 1078517 | 10-32 allen nut (2) |
| 1064510 | 10-32 read knob (jcl-700)(2) |
| 1089300 | hex key short arm 3/16" hex, 2-27/32" long |

## Operation

***** A collet must be used for all applications. *****

### Top Loading

1. For top loading engraving cutters, place the required drawbar through the center of the spindle and thread it into the collet at the bottom of the spindle but do not tighten yet.
2. Next insert the top loading engraving cutter into the drawbar and tighten the collet until it firmly closes on the bottom of the cutter shaft.

### Bottom Loading

1. For bottom loading applications use a 1/4" drawbar and the collet of the appropriate size for your cutter shank.
2. Thread the drawbar into the collet.
3. Slip the cutter shank into the bottom of the collet.
4. Tighten the drawbar until the collet firmly grasps the cutter.

You may use the Newing-Hall, Inc chip removal systems with the top loading engraving cutters and bottom loading cutters. Contact Sales Supports for your specific needs.

*Note: With milling cutters it is best to use slow spindle speeds and slow feed rates.*