



TAPER NOSE SPINDLE

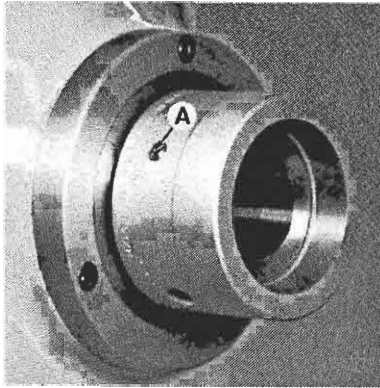


Figure 1

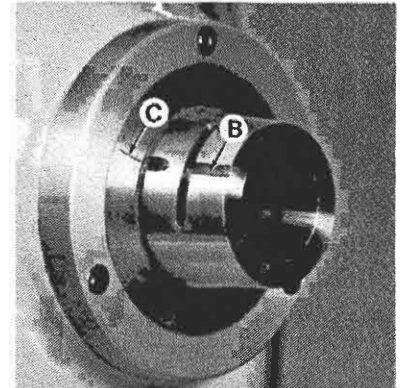


Figure 2

The Hardinge taper nose spindle construction is time-proven for accuracy, durability and fast, easy application and removal of spindle nose tooling. The Super-Precision® ground taper holds and aligns the tooling with extreme accuracy.

NOTE: Use only spindle nose tooling manufactured or approved by Hardinge.

DO NOT USE TOOLING if lock pin "A", Figure 1, is broken or worn. Replace a damaged or worn lock pin with a genuine Hardinge replacement part. Failure to do so can result in the locking mechanism becoming ineffective and making further use a potential safety hazard.

DO NOT USE SPINDLE NOSE TOOLING in applications where cutting loads are to be applied in both directions.

To Apply Taper Nose Spindle Tooling:

MAKE CERTAIN BOTH SPINDLE NOSE AND TOOLING TAPERS ARE ABSOLUTELY CLEAN.

1. Engage spindle lock pin.
2. Align key "A", Figure 1, with bayonet slot "B", Figure 2, and slide tooling on spindle nose.
3. Rotate tooling in opposite direction of intended spindle rotation.
 - (a) Spindle forward - rotate tooling clockwise to lock.
 - (b) Spindle reverse - rotate tooling counterclockwise to lock.

Once securely drawn up, the spindle nose tooling is actually driven by the locking action of the taper surfaces. Final tightening should be done with a standard pin type spanner wrench. **DO NOT USE A HAMMER AND PUNCH.**

To remove taper nose spindle tooling, turn tooling with spanner wrench until key "A", Figure 1, is aligned with reference mark "C", Figure 2, on the spindle. **DO NOT REMOVE KEY "A", FIGURE 1, TO REMOVE SPINDLE NOSE TOOLING.**