

Shim Adjustable Hydro Sleeve Mounting & Adjustment Instructions

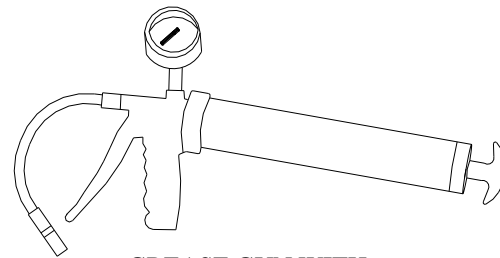
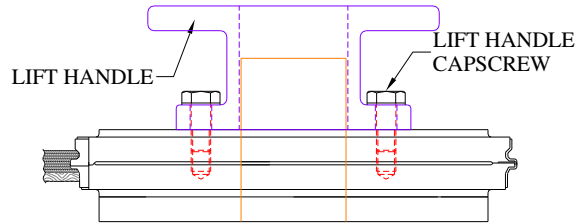
Note: Instructions are for a typical cutter. The cutter shown may not look identical to your cutter.

Great Lakes Custom Tool recommends the use of **safety glasses at all times**. When the cutter is mounted on the machine, be sure to **follow LockOut/TagOut procedures** and use all appropriate personal protection equipment.

Important: The Hydro Sleeve must not be pressurized without being mounted on a spindle! The hydro sleeve must be fully engaged the length of the bore with the spindle or damage to the bore will occur.

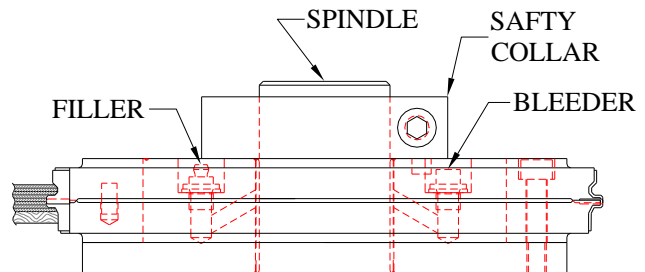
Mounting Instructions

1. Clean the spindle and bore of the Hydro Sleeve before assembly. Apply an anti-corrosion oil film on the spindle (e.g. WD40). Using the lifting handle position the Hydro Sleeve assembly onto the spindle. Remove the bolts and lifting handle from the cutter assembly. Use Grease gun (GLCT Part No. M06) with pressure gauge to pressurize the hydro sleeve assembly. **Pressurize to a working pressure of 400-450 bar (5800-6500 psi). It is recommended to check the pressure once a day before start up.** The hydro sleeve is a hydraulic clamping joint. It consists of two sleeves with a pressure medium (grease) between them. When pressurized the inner sleeve is forced to make contact with the spindle. This eliminates play between the tool and the spindle. The cutter assembly has been factory set to your cutting requirements.



GREASE GUN WITH
PRESSURE GAUGE

2. Place a safety collar with pins above the hydro expansion matcher assembly. Position the collar so the pins engage the holes of the hydro sleeve. Tighten the clamping screw in the collar using a hex key.



Safety Collar No.	Spindle Dia.
WNW-101719	1 13/16"
WNW-101720	2 1/8"

3. When it becomes necessary to remove the hydro sleeve assembly from the spindle, loosen the clamping screw in the safety collar and remove the collar. Using a hex key loosen the screw in the bleeder to release the pressure in the expansion sleeve. Bolt on the lift handle to remove the expansion matcher assembly from the spindle.

Adjustment Instructions

The hydro sleeve assembly is shim adjusted to widen or narrow the cut for the profile as required to maintain the proper part dimensions.

1. Determine the amount that the cutter assembly must be adjusted by measuring the profile of several samples just machined.
2. Remove the cutter assembly from the machine following the instructions from page 1.
3. Remove the cap screws that mount the cutters to the hydro sleeve.
4. Thread in (2) thumb screws (GLCT part number 82414558) into the top cutter to remove the top cutter from the bottom cutter.
5. Add or subtract brass shims as required to achieve the cutting dimension required. Shim kits can be ordered from GLCT. Make sure to clean and keep dust and dirt out from getting between the shims and cutters.
6. Reassemble cutter by reinstalling the cap screws. Re-apply anti-seize to the cap screws. **Remove the thumb screws.** Torque the cap screws to the torque value specified in *A00182 – Torque Specifications*.
7. Reinstall cutter onto spindle following the mounting instructions on page 1.

