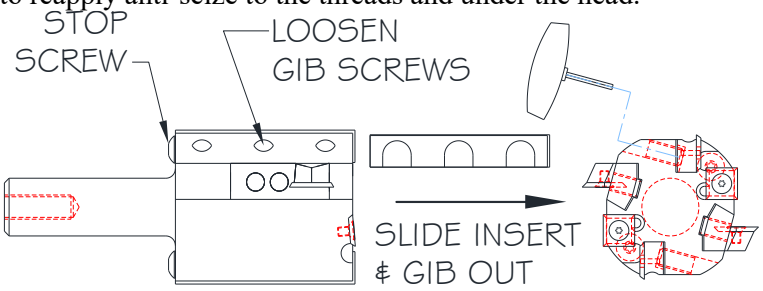
Great Lakes
Custom Tool Mfg., Inc.
Your American Cutting Tool Partner
Phone: 800-873-4528

Tenon Router Bit -
Insert Replacement and Adjustment Instructions

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

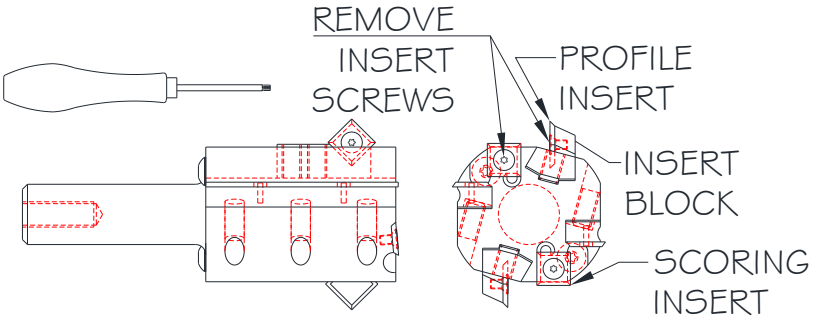
Planing Insert Removal

Loosen the screws one revolution. Slide the insert and Gib out. It is recommended to remove the screws every other insert replacement to reapply anti-seize to the threads and under the head.



Profile & Scoring Insert Removal

Remove the insert screws and the inserts.

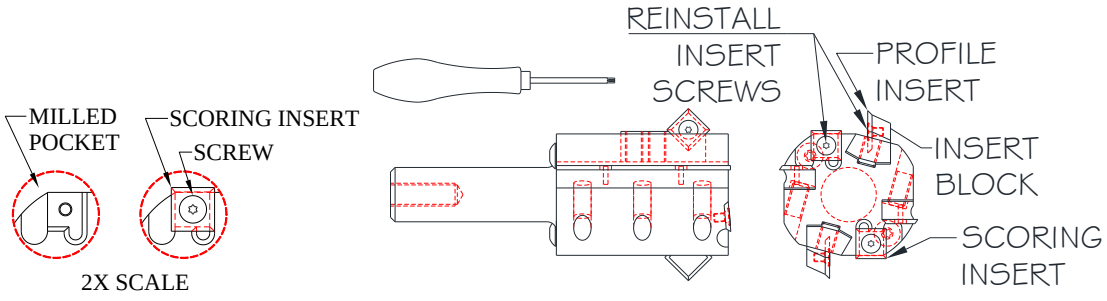


Clean the Tool & Inserts

Once inserts are removed, clean the tool and inserts with compressed air. If more cleaning is necessary to remove build-up, use hot water or a cleaning solvent. Once clean, visually inspect the insert seats in the tool body and the inserts themselves for damage on the seating surfaces. If inserts are damaged, it may be necessary for them to be replaced. If the seats in the tool body is damaged, it may be necessary to replace it.

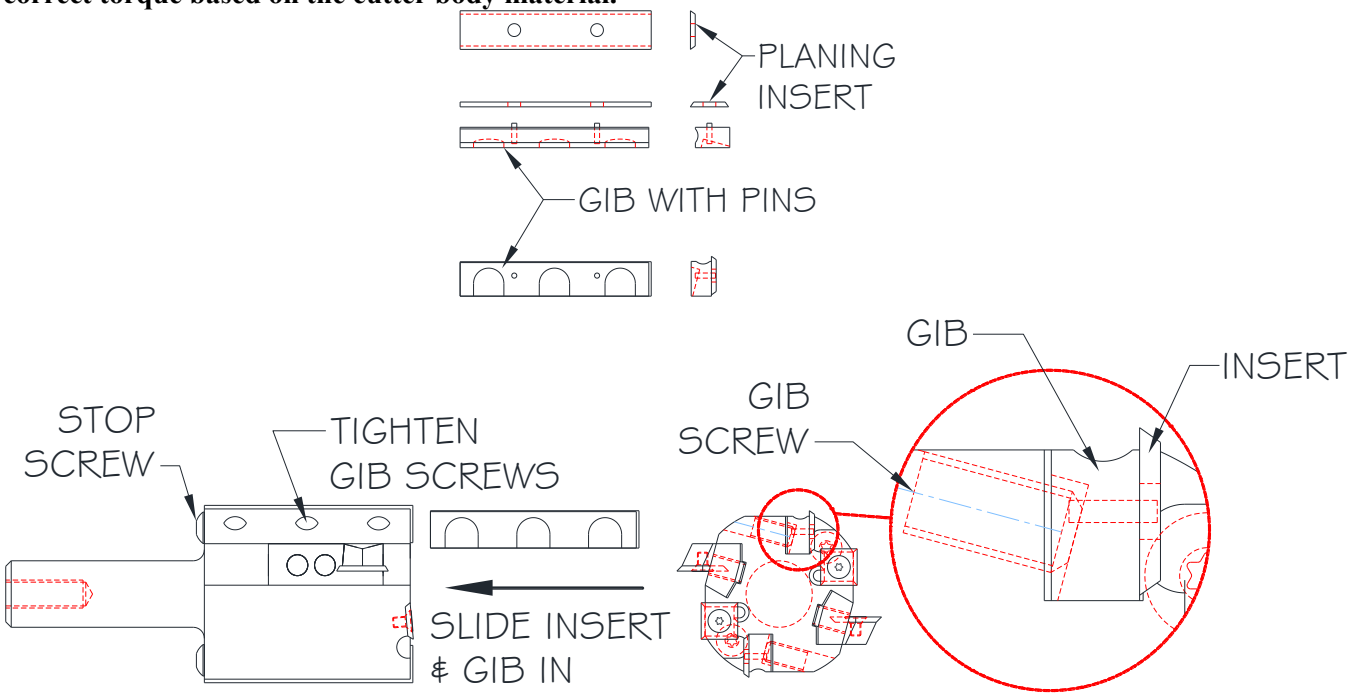
Profile & Scoring Insert Installation

The square inserts have 4 cutting edges, so it is possible to rotate the insert 3 times after the initial cutter setup. It is recommended to work with one insert at a time. Apply anti-seize to the threads and under the head of the screw. Place insert into seat making sure a new cutting edge is into the cut and hold the insert against the locating surface(s). Install screw to hold insert in-place and visually inspect to ensure the insert is seated properly. Use a torque screwdriver to torque the screws to the required amount specified in ***A00182 – Torque Specifications***.
Note: Ensure you use the correct torque based on the cutter body material.



Planing Insert Installation

The planing insert that was removed can be flipped 180° (end over end) to use the second cutting surface of the insert. The insert cannot be used if the worn (used) cutting edge is damaged, such that the insert will not seat properly. Remove any burrs on the angled surface. Replace with a new insert if damaged. Place the insert with holes over the dowel pins in the gib. Slide the insert and gib in from the end of the cutter. **Be careful the insert is sharp and can cut you.** Slide the insert in against the stop screw. Applying pressure to hold the insert down and against the stop screw, tighten the gib screws only enough to hold the insert in place. Using a torque wrench, tighten each screw to the correct amount specified in ***A00182 – Torque Specifications***. **Note: Ensure you use the correct torque based on the cutter body material.**



Profile Insert Block Adjustment

The chamfer insert blocks can be relocated along the length of the router bit. To change the position of the block, loosen the 2 setscrews in the block. Slide the block in the groove in the router bit to the new location. Position the insert and block in the proper location using a depth micrometer or optical comparator. Hand tighten to hold blocks in position. Using a torque wrench with a hex bit, tighten the set screws to the correct amount specified in ***A00182 – Torque Specifications***. **Note: Ensure you use the correct torque based on the cutter body material.**