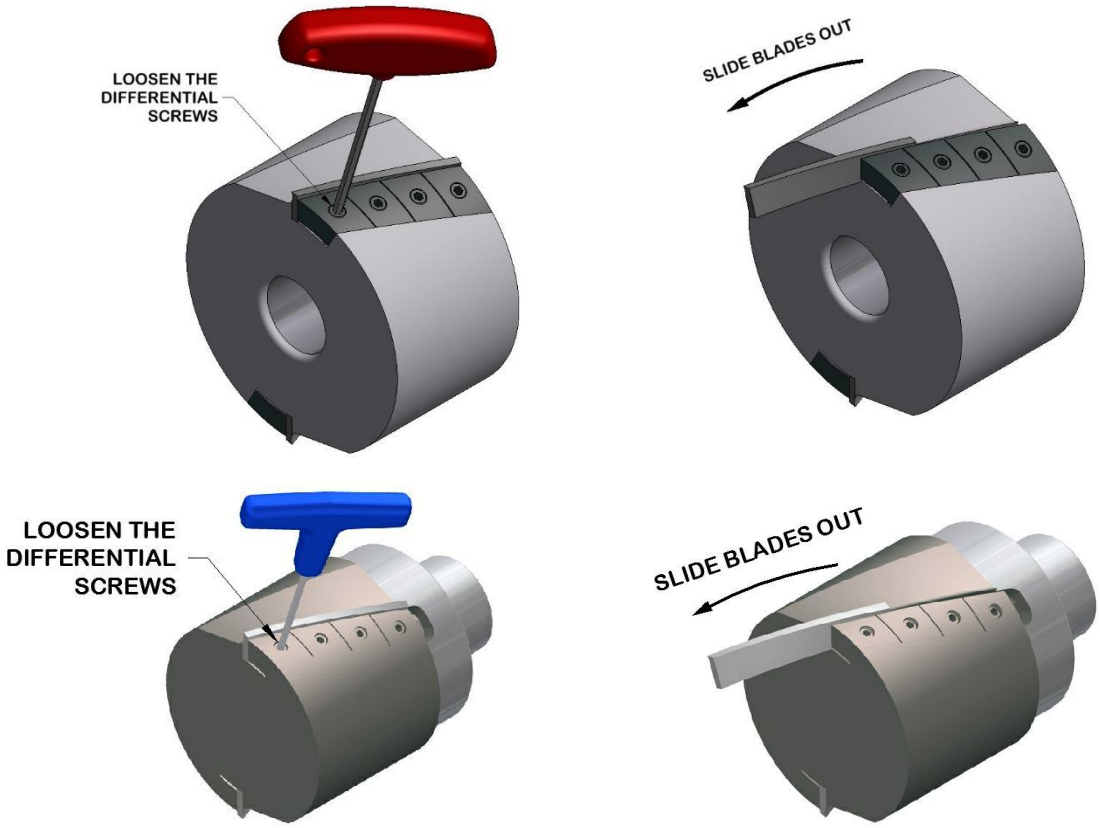
Great Lakes
Custom Tool Mfg., Inc.
Your American Cutting Tool Partner
Phone: 800-873-4528

Helicarb® Cutter Blade Replacement Instructions

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

Blade Removal

Loosen the differential screws in the wedges one turn. It is not necessary to remove the wedges and screws. With the screws and wedges loosened, slide the Helicarb® twisted blade out the end opposite the tool stand.



Clean the Tool

Once the Helicarb® blades are removed, clean the tool and insert slots with compressed air to remove any loose material. If more cleaning is necessary to remove build-up, use hot water or a cleaning solvent.

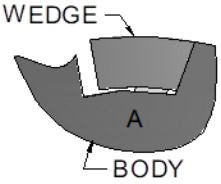
Differential Screw Maintenance

It is recommended to reapply anti-seize to the differential screws after every other blade replacement. Refer to **A00187 – Differential Screw Maintenance** on the removal and installation of differential screws.

Wedge Maintenance

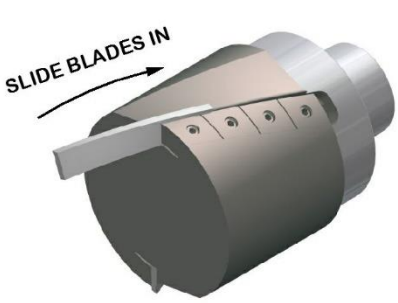
Helicarb® wedges are balanced to a weight constant, respective to the wedge part number, so they are interchangeable. Reinstall wedges matching the taper of the cutter body. If a wedge is damaged return the cutter to Great Lakes for inspection, refurbishing and rebalancing.

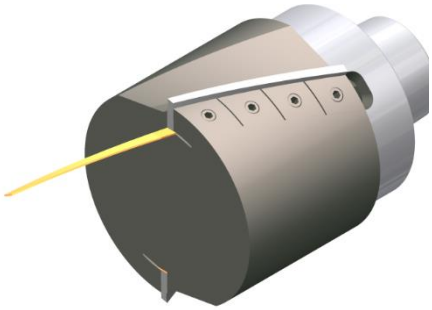
Wedges for 135 & 160 diameter cutters can be replaced in the field. All 100mm diameter cutters must be returned to GLCT for wedge replacement.

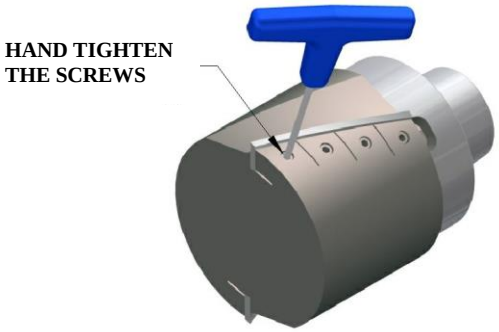


Blades 235mm Long & Less - Blade Installation

Slide the Helicarb® blade into the slot until it is flush with the end of the tool body. If shims are needed, lift up on the blade and slide the plastic shims in until they are flush with the other side of the tool body. Trim shims to size. **Note: only use HCS-KIT shims from GLCT. All wings must be shimmed the same amount. Never use more than one 0.030" thick shim per wing.** Once the blade is flush with the end of the tool body, hold the blade down to ensure the bottom of the blade is contacting the tool body and tighten the screws to hold the blade in place. Inspect the blade and tool to ensure the blade is seated properly. Torque the differential screws following the instructions below. **Note: Blades must be from the same set (order number) to ensure the tool will remain balanced. If blades were shimmed, blades must be ground on the outer diameter following *A00154* after the differential screws are properly torqued.**

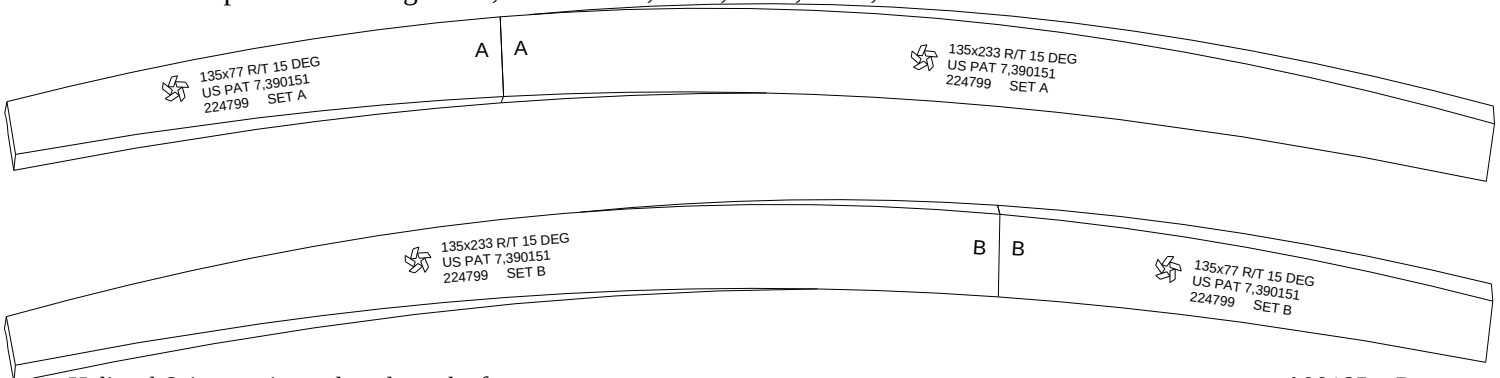






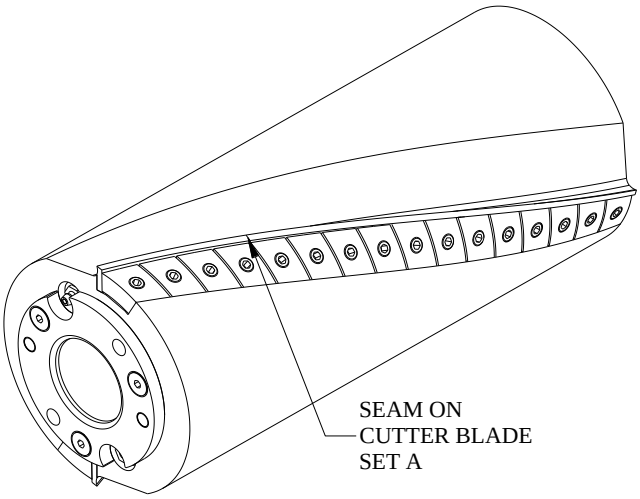
Blades 270mm & 310mm Long – Blade Installation

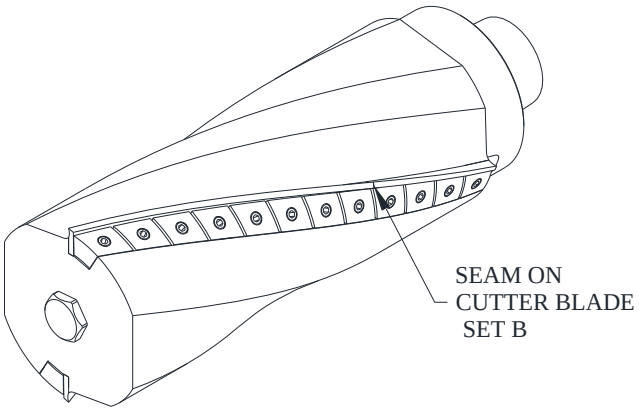
Helicarb® cutters **wider than 235mm** will have cutter blades that are a 2-piece blade. A 2-wing cutter will consist of cutter blade set A and cutter blade set B, this ensures that where the blades meet (the seams) are not in line. A 3-wing cutter will consist of cutter blade set A, set B and set C. A 4-wing cutter will consist of (2) set A and (2) set B blades. A 6-wing cutter will consist of (2) set A, (2) set B and (2) set C blades. An 8-wing cutter will consist of (4) set A and (4) set B. It is important to properly install these blades. Install blade sets in order when going around the cutter. Example: In a 6-wing cutter, install set A, set B, set C, set A, set B and then set C.



Continued - Blades 270mm & 310mm Long – Blade Installation

Slide the matching Helicarb® blades into the slot until they are flush with the ends of the tool body. With the blades flush with the ends of the tool body, hold the blades down to ensure the bottom each blade is contacting the tool body and tighten the screws to hold the blade in place. Inspect the blade and tool to ensure the blade is seated properly and that their seams are properly aligned. **Torque the differential screws following the instructions below. Note: Blades must be from the same set (order number) to ensure the tool will remain balanced. These blades cannot be shimmed.**





Helicarb Differential Screw Torquing Instructions

Use a torque wrench to tighten each screw to the correct torque value as listed in ***A00182 – Torque Specifications.*** **Note: Ensure you use the correct torque based on the cutter body material.** Tighten each screw a small amount at a time following the tightening sequence below. **Do not** tighten the screw directly to the torque value listed. Tightening each screw a small amount at a time applies equal pressure to the wedge and helps keep the blade precisely in place. (Note: The torque values listed are Anti-Seize lubricated torque values. Never torque a screw without Anti-Seize to this amount, false torque and/or failure could occur.)