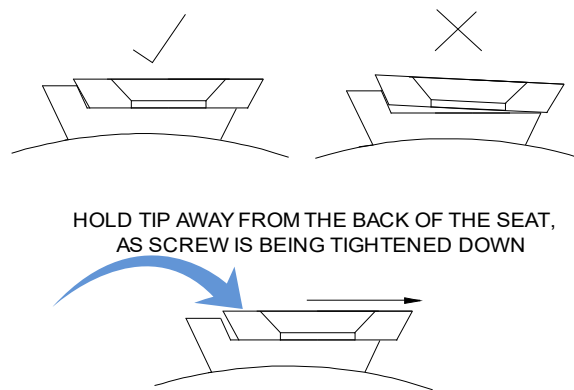


## BYRD TOOL

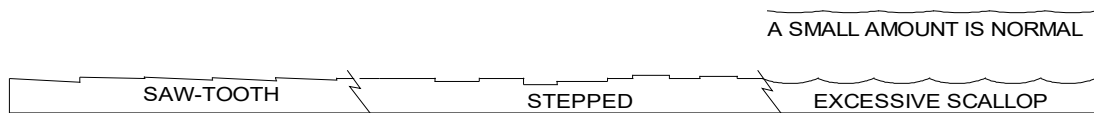
### SHELIX KNIFE REPLACEMENT OR ROTATING INSTRUCTIONS

Begin by removing the knife and screw and clean as necessary. When installing, move the knife back and forth a few times on the seat to make sure there's no burrs or dirt. Hold it away from the back of the seat (slightly pull toward yourself if facing the cutting edge) and let the screw pull the knife into position. Your thumb can also be used to press down and out at the back of the knife if that's easier. When it's fully seated the front of the screw should pull down against the tip. (a hard hand tightening is about 45 in lb) Using a 6" extension on the screwdriver will give you better control in seating the knives, and chocking the head to keep it from rotating will help too.

Don't try to place the knife directly over the screw hole, in doing so it can ride up on the back of the seat and cause it to not index properly; possibly cracking it. (a slight offset between the screw hole and the hole in the knife is normal) NOTE: if you've been having knives break, there could be some very small embedded pieces of carbide in the seat that could continue causing the replacement tips not to seat flat and also break. Bit used is a T25 torx plus.



### IF YOU EXPERIENCE THE FOLLOWING



- Saw-tooth = knives rotating, one side cutting deeper than the other, contact us
- Steps = leaving a ridge, knife is not fully seated, knife is locating slightly against the back of the seat, not flat to the seat. Leaving a groove, knife cutting too deep, may be lifting during the cut and also rotating, or debris under the knife.
- Excessive scallop = contact us for further information @ [byrdtoolcorp@gmail.com](mailto:byrdtoolcorp@gmail.com)
- Model, type of machine, markings that are on the knives and a picture are always helpful.

It may help to slightly tighten the screw, then back it off about  $\frac{3}{4}$  of a turn, then position the knife away from the back of the seat.

Run a test board through positioning against one of the bed guides for reference, mark the spots, then raise the carriage enough to slide the board back under the head in the position it was ran through. By removing the dust chute, and looking down from above, by rotating the head you can isolate exactly which knife/knives are causing the problem.

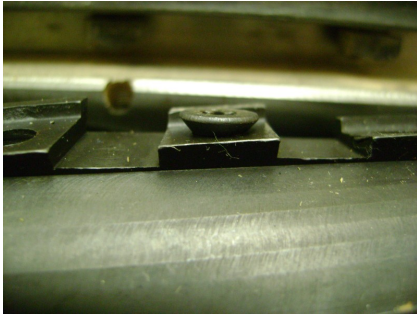
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#### POSSIBLE CAUSES FOR A BAD CUT OR KNIVES BREAKING

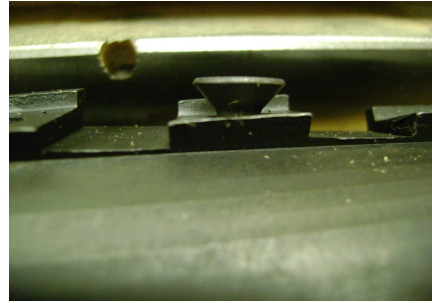
- 1 Not seated properly, re-seat per replacement instructions above  
( if most of the head is affected, try a few inch wide section and test the cut to see if it helped)
- 2 Screws bottoming out before knife is tight... milling chips in bottom of hole or the threads didn't get tapped deep enough (could be as little as a thread or two) shiny end threads on the screw or sawdust under the knife on the flat portion would indicate this.

When in the cut the knife will lift up and possible turn slightly.

Further checking can be done by remove a knife in the problem area, reinstall the screw and compare to the picture. If this is the case, those will need be slightly re tapped at the bottom.....use a 10-32 tap



CORRECT



NOT CORRECT