Most woodworkers know that a shear cut is far better than a straight cut. They also know that a staggered cut is much better than just a single straight knife and is quieter and a lot easier on your dust collection system. If you just happen to plane a nail or staple, it is not necessary to replace expensive knives the full length of your planer head! Replace the 2 or 3 small inexpensive knives and you're ready to go! You might expect to pay a small fortune for a journal head with these features. Here at Byrd Tool Corp we can manufacture a journal head to your specifications for typically a fraction of the cost you might expect. Don't be fooled by a head that looks like it is helical when the knives are square with the cut! This is common practice, but our heads are anything but common, and they have been proven to be the best!

GETTING STARTED

A - Be sure the machine is disconnected from the power source

B - Be very careful not to damage the carbide knives while assembling the head into the machine.

C - Always use a rubber mallet, dead blow hammer, or a block of wood with a regular hammer when tapping the cast housing.

D - Brush or blow off the chips from the machine and clean the floor around the machine. If a bolt or washer is dropped, it is so much easier to find on a clean floor!
ASSEMBLY
1. Take the top cover off after removing the 4 screws with the supplied hex wrench.

2. Remove the 3 red thumb screws from the inside of the top, then remove the inside dust cover. Doing this will expose the cutterhead.

3. Remove the 3 Blades from the cutterhead by completely taking off the screws and clamp bar.

4. Remove the cutter rotate lock plate by removing the two Phillips head screws. Be careful to catch the spring that is underneath the bracket.
5. Remove the handle.

6. Remove the 4 screws and cover. This will expose the feed chain and pulley.

7. Unhook the tension spring.

8. Remove the screws on the end of each shaft.

9. Remove the chain and sprockets together.
10. Rotate the poly-V belt from the head pulley.

11. Remove the nut and washer from the end of the head.

12. Slide the pulley off taking care not to lose the key.

13. Remove the snap ring from inside the bearing housing.

14. Remove the 4 screws and cover from the opposite side.
15. Remove the snap ring from each of the 2 shafts.

16. Disconnect the spring from the tensioner.

17. Remove the chain and sprockets together.

18. Remove the washer that was behind the sprocket on the right shaft.
19. Remove the 3 socket head screws that hold the gear box in place.

20. Pull the gear box back but DON'T completely disconnect it from the machine.

21. From the side opposite of where the pulley was, tap the head out using a piece of hardwood.

22. After the head is removed by sliding it through the bearing housing, unscrew the helical gear from the end of the head.
23. Install the bearings on each end of the new SHELIX®. Install the key and screw the helical gear onto the end of the head.

24. Carefully slide the new head through the bearing housing. Be careful of alignment so as not to bind the carbide knives and chip or break them.

25. Carefully tap the head into position making sure the bearings are fully seated in the housings.

26. Assembly should be done in reverse order of disassembly taking care not to forget snap rings, tension spring connection, or washers.

27. Make sure the head spins freely before the pulley is installed.

28. Be sure the poly-V belt is entirely on the bottom and top pulleys. (It's hard to see the top pulley)

29. It will be a LONG time before you need to open up the top of the machine to rotate knives, so don't lose the hex wrench!