

Instructions for installation of a spiral head on a 15" or 20" "4 post" thickness planer

- A. Be sure the machine is disconnected from the power source.
- B. Keep the protective wrap on the spiral head!
- 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!

NOTE: ALL HEX AND ALLEN BOLTS ARE METRIC

1. Start by removing the side belt guard roll off the belts. (releasing the belt tension is not necessary)



2. Remove pulley bolt, rotate the cutterhead until the key is in the upright position, then remove the pulley and key.



3. Remove the top cover/collector shield and the handle. (whether you have the side or top mounted handle, the key will usually fall free)



4. Before removing the side gear cover, remove the guard located on it's back side at each lower corner.



5. Loosen the idler spring, and move the idler up out of the way.



6. Remove the three bolts from the gears to expose the keys. It should be possible to rotate the cutter head enough to align the keys in an upward position.



7. Pull all three gears off at the same time keeping the chain in tact and then lay it aside.



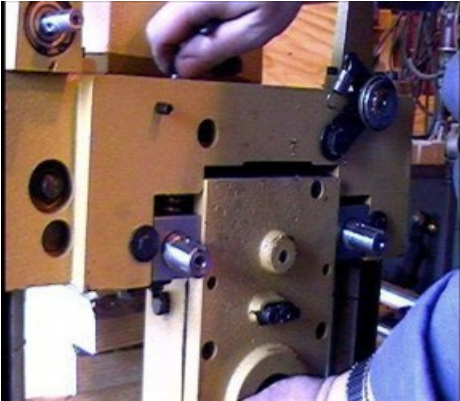
8. Insert six 2 X 4 blocks between the cutterhead and the table, then reinstall the hand and the key. Position to the cutterhead to let it rest on the blocks.



9. Loosen four bolts holding the gear box.



10. Raise or lower the table enough for the head to clear the casting, then remove the bolts.



11. Keeping the blocks in place, drive the head out from the pulley end.



12. Remove the head and gearbox together.



13. The bearing will normally stay on the journal.



14. If your machine has an outfeed roller assembly, the head and gearbox can lay across them for a convenient work area.



15. Drain the gear oil into a clean container.



16. Loosen the five bolts on the gearbox. Separate it by tapping at the seam toward the outside of the gearbox taking care not to damage the thin rubber seal.



17. Remove the bolts and completely separate it.



18. Shows gear #8



19. Remove the bolt inside the helical gear and remove them both.



20. Before driving the cutterhead from the bearing and housing, reinsert a spare M6 screw back into the journal end. If you use the original screw, it will probably be damaged.

21. Supporting the box, remove the cutterhead by tapping on the screw.



22. It may also be necessary to tap on the back of the box using a block of wood and a hammer.



INSTALLING THE NEW SPIRAL HEAD

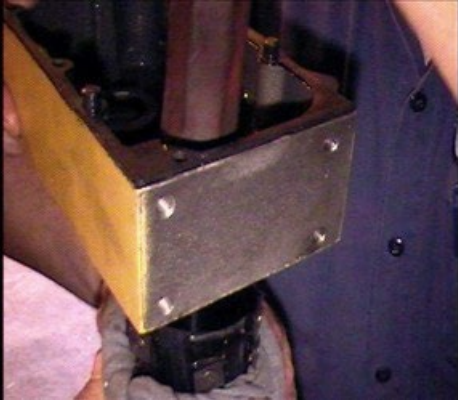
23. If a new bearing is to be used in the gearbox, remove the washer and screw. Carefully remove the oil seal from the back side and press out the bearing.



24. At this time, install the bearing on the pulley end of the new head (snug press fit). The pulley can be used to seat the bearing. With the outside of the pulley (large OD) against the bearing, tap it into place.



25. Installing the head in the gearbox by pressing it in the new bearing. Reinstall the oil seal.



26. Start the journal end through the back of the bearing, using a socket against the face of the bearing, ensuring it only makes contact with the inner or outer race and not the rubber seal, the use of a washer with the same ID and OD of the bearing is recommended to protect the seal. The end of the bearing and Journal should be flush.

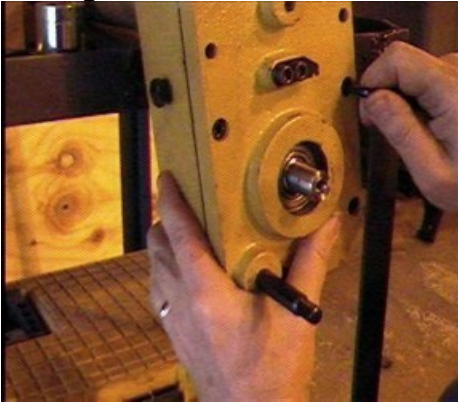


27. Reinstall the washer, screw, helical gear, and bolt.

28. Install the gasket and reassemble the gearbox taking note of the gear placements using the previous drawings and pictures, tapping it into position.



29. Tighten all of the screws in an alternating sequence.



30. Refill the gearbox with the 50 weight oil that was removed.



31. With the blocks still in place, install the head. Make sure the protective wrap is still on the head until it is firmly in.



32. Tap the gearbox to seat bearing into place.



33. It may be necessary to turn the handle in order to align and start the bolts, then tighten them.



34. Reinstall the keys and gear/chain assembly, Tension roller spring, side cover, and the handle with it's key.



35. Install the key and the motor pulley. Make sure the pulley is flush or extends slightly past the journal end. Install the washer and bolt. Roll the belts back on and replace the guard.



36 The protective wrap can now be removed by slitting it longways between two rows of knives. Rotate the head while rolling off the wrap.

37. Reinstall any remaining covers or guards.

FINAL ADJUSTMENTS

The bedrollers need to be kept clean and normally as low as possible.

Outfeed roller and chip breaker are factory set at approximately .040 inches below the cutting circle.