

## Removing the main shaft & main gear – Model MCW

- 1 Remove the motor by removing the 3 mounting bolts. See instructions for replacing the motor.
- 2 Remove the two set screws # 25 on the hub of the main gear # 16.
- 3 The relative position of the bearing cap # 17 is usually marked by prick punch marks both on the outside diameter of the bearing cap and on the gear case. If you cannot find any marks make your own so that the bearing cap can be reinstalled in the same relative position. Remove the lower bearing cap. Three bolts hold it in place. There is no gasket between the bearing cap and the gear case, Permatex or similar is used to seal. If you find a small plastic shim that looks like a gasket retain it as it is a shim, or spacer not a gasket. Be careful to use the shim when reassembling or the fit will be too tight and the shaft will not turn.
- 4 Slide the shaft down until you can remove the key # 24. You may have to knock it down with a small hammer. Protect the shaft if you use a hammer. File any dimple marks left in the shaft by the points of the set screws.
- 5 Remove the main shaft up through the top. Remove the main gear.
- 6 Check that the new gear will fit on the shaft. Place the gear inside the gear box with the hub facing down.
- 7 Slide the shaft down through the gear far enough to place the main key in the keyway of the shaft. Then slide the shaft & key up into the gear.
- 8 Clean off all the old Permatex from the bearing cap and gear case. Coat both with Permatex and replace the bottom bearing cap being careful to line up your marks so that it ends up in the same relative position. Use a small amount of Permatex on the threads of the bearing cap bolts and bolt into place.
- 9 Set the main shaft so that the bottom of the drive pin hole # 21 is 5 1/16" from the top of the bearing cap. Lock the set screws in place. Be sure to use Loctite or similar on the threads of the set screws. Turn the main shaft by hand. It should turn easily.
- 10 If you have removed the expansion plug # 26 you will need to install a new one. Coat the outside diameter of the expansion plug with Permatex, drive into place using a pipe about the same diameter as the plug. Once in place hit the center of the plug with a hammer slightly, flattening it out and completing the seal.
- 11 See replacing the motor instructions to install the motor.
- 12 Don't forget to fill the gear case with 90 wt gear oil up to the level of the pipe plug on the gear box.