

## Mitchell Manufacturing



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## **Pinion Puller Kit Instructions**

(Refer to numbered illustrations)

- Pinion Puller Kit contents.
- 2. Position the push plate--using two short Allen screws--onto the banjo housing. Be sure that the bearing has clearance to slide.
- 3. To remove the outer nut, bend the fold-down washer away from the outside nut into the upright position, allowing you to remove the outside nut. Carefully remove washer without bending away from inside nut. Use a center punch to mark the inside nut at keyway.
- 4. After center punching, remove inside nut and washer from pinion.
- 5. (a, b, & c) Slide 3-bolt plate over shaft with inside bevel facing out. Thread the inside nut, which has the punch mark, back onto the pinion thread, being sure to tighten lightly. Run three bolts down in equal increments, pulling the pinion out of the banjo housing.
  - -- After removing pinion from banjo housing, remove puller --
- 6. Replace nuts and folding washer, being sure to line up punch mark with keyway on inside nut, thus setting your bearing back to the original preload. Folding washer will show you that you are in the correct position. It is very important that you have the nut facing in the original position. NOTE: If you are using new bearings, the bearing preload is 18-20 inch pounds.
  - -- Remove cotter key and nut from original shaft --
- 7. Slide aluminum plate down the shaft to protect pinion threads. Tip the shaft upright with threads resting on a soft piece of wood to protect threads. Use a piece of pipe or steel with a through-hole that will work as a slide hammer in order to loosen the pinion and remove.
  - 8. The pinion is now ready to install onto the new shaft.
- 9. Install pinion on new shaft, tightening nut and using cotter key. NOTE: Bend the cotter key ends toward the pinion gear, NOT over the end of the shaft.
- 10. Reinstall pinion on new shaft. Run the Allen screws through the 3-bolt ring into the banjo housing. Tighten equally until pinion is back into position. The shoulder in the banjo housing will prevent over-pressing. As you are tightening, rotate the shaft to be sure that the pinion is lining up with the ring gear. When finished, leave two of the Allen screws in place in order to help retain the gasket and to facilitate attachment of the torque tube.























