Design

Specialty Model Train Tools
Paul D. Evagash
Machinist & Tool Maker
TCA # 00-51938
www.pedesignmanuf.com
EBay: PE_Design
Facebook: PE Design
Custom made small parts and tools

"If we don't make it yet, Lets us know & we will"

Armature Pinion Puller & Press Set - Ver 2
- This tool was designed to pull & replace stripped or worn out pinion gears on the armature used in many Lionel Trains.

- Can be used in an Arbor Press.

- The tool is machined out of solid aluminum Shaft Block & Pinion Press, Steel Crossbar & Lower Jaws

- Shaft Block has (3) 1/8" hole at 3/16", 3/8" & 1/2" depths. Used for holding shaft at 90 degrees when pressing pinion gear on w/o pressing on the commutator. Also when pressing in a new shaft, it will fully support the commutator.

- See drawing for max gear sizes

Kit includes:
Pinion Puller
Shaft block (Updated)
Pinion Press
Lower Jaw for small Pinions
Lower Jaw for large Pinion (New)
Direction

1. **Removing Pinion Gear**: Before pulling gear off measure the offset of the gear to the end of the shaft & press gear back to that same offset.

2. Slide the Armature into the puller.

3. Tight the screw so the pin presses straight on the end of the shaft. Continue tighten the screw until shaft is pressed out of pinion gear.

4. **Install Pinion Gear**: Place the armature shaft with the commutator side down into the Shaft Block. There are two holes at different depths. You want to use the hole that will NOT let the commutator touch the shaft block, you don't want to move the fields on the shaft.

5. Start the pinion gear on the shaft by hand.

6. **Place Shaft Block, Armature & gear on a Arbor Press**

7. Place the Pinion Press over the end of the shaft and VERY CAREFULLY & SLOWLY start to press the gear down the shaft. Do very little amounts and check often and set back to the offset you measure in step 1. Be carefully you can press gear to far on easily.