

## **INSTRUCTIONS FOR INSTALLING A GEAR BOX ASSEMBLY**

### **Item #P-511 REV A (11 feet per minute constant feed)**

Issue Date: April 19, 2018

Included: Gear Box Assembly; See Bill of Material for parts breakdown

### **Removal of Gear Box Assembly**

1. Disconnect power. Remove the chip deflector/chute assembly\* and raise head 4".
2. Loosen the (2) infeed pressure screw check nuts 54-51 and remove the 54-25 pressure screws, 54-26 pressure screw guides, and 54-24 Rev A springs from the infeed swing arm only. Remove the 54-16 rest screw from the infeed swing arm allowing it swing down from the head to ease the removal and reinstallation of the infeed chain.
3. Starting with the bolts on the chain guard, remove the (3) hex head bolts attaching the power unit to the head. Earlier models have (4) bolts.
4. Pull the gear box assembly off by removing the short infeed chain P-155 from the P-111 sprocket. Remove the long chain P-156 once unit is partially free of head. **NOTE: USE THE NEW CHAINS PROVIDED. IF YOU ARE REPLACING A (15FPM) GEARBOX THE SPROCKETS AND CHAINS ARE DIFFERENT!**

At this point, check the following:

- The P-117 fiber drive should be in the end of the arbor.
- Both roller sprockets P-111's should be on their axles (shafts), P-124 & P-224
- The infeed swing arm is dropped down without rest screw and pressure screw assemblies are removed. The outfeed swing arm is in place with both pressure screw assemblies in place.

\*The chip deflector was replaced to a chute assembly July 2010. The attached schematic shows the chute assembly.

**Installation**

5. The gear box assembly should be fully assembled with the nylon bushing P-213 on the primary shaft P-203 (shaft with the 1/8" wide slot) and the nylon washer P-214 up against the P-213.
6. Both 12 tooth sprockets P-150 should be on the drive shaft P-209 with the hubs facing toward the chain guard, leaving a 1/32" gap between the inner most sprocket and the chain guard. The second sprocket should be tight to the first sprocket.
7. Tighten the set screws 54-42 in each of the sprockets onto the flat on the drive shaft P-209.
8. Install the NEW long chain P-156 on the driving sprocket P-150 closest to the chain guard P-202. Droop the chain over and under the nylon bushing P-213, and against the nylon washer P-214. These nylon parts are to protect the chain for wear against rotating parts.
9. Install the NEW short chain P-155 over the remaining driving sprocket P-150 on the gear box assembly with the infeed sprocket P-111, engaged in the chain, with the hub of the sprocket facing the molder head casting.
10. Pick up the gear box assembly with its attaching bolts handy and engage the NEW long chain P-156 on the outfeed roller sprocket P-111.
11. Engage the infeed roller sprocket P-111 with the P-155 infeed chain. Insert the primary shaft P-203 into the end of the arbor. Install the (3) attaching bolts tightening only the longest bolt. Rotate infeed swing arm back in operating position and install the 54-16 rest screw with thread locker. Reinstall infeed pressure screw assemblies.

**Important: Check the following before using your molder**

- Check the oil level in the gear box and fill as needed.
- Attach the chip deflector/chute assembly.
- Check to see that all belt guards are in place.
- Make sure all is clear inside the arbor area and around the machine.
  
- Start the molder with the attaching bolt wrench ready to loosen the center bolt to make the final smooth running position check of the power feed unit.
- Move the unit around within the limits of the attaching bolt hole clearance and find the quiet est running position. This position will be when the primary shaft is most centrally located in the end of the arbor. When this best position is found, tighten all (3) or (4) attaching bolts starting with the two central ones.
- **Do not pin gear box assembly to the molder head.**

**BILL OF MATERIAL****P-511 Gear Box, Assembly, Complete**

P-114 Bushing, Bronze, 7/16" OD  
P-213 Bushing, Nylon  
P-214 Collar, Nylon  
P-116 Cup, Oil  
P-128 Gasket  
P-202 Guard, Chain, Original Model  
P-101 Housing, Gear Box, Painted  
P-143 Pin, Dowel, 1/8" x 1-3/4"  
P-115 Plug, Bushing  
P-118 Retainer, Ring  
P-218 Screw, Pan Phillips, 8-32 x 3/8"  
P-220 Screw, Socket Head Cap, 10-24 x 5/8"  
P-113 Seat, Bearing  
**P-504 Shaft, Drive, Assembly**  
**P-502 Shaft, Primary, Assembly**  
**P-503 Shaft, Secondary, Assembly**  
P-127 Spacer, .027 Length X 1/2 OD  
P-120 Spacer, .540 Length X 5/8 OD  
P-150 Sprocket, 12 Tooth  
P-242 Thread Locker  
P-219 Washer, Flat, #8 SAE  
P-155 Chain, #25, Short, Infeed, 30 Pitch  
P-156 Chain, #25, Long, Outfeed, 56 Pitch

**P-502 Shaft, Primary, Assembly**

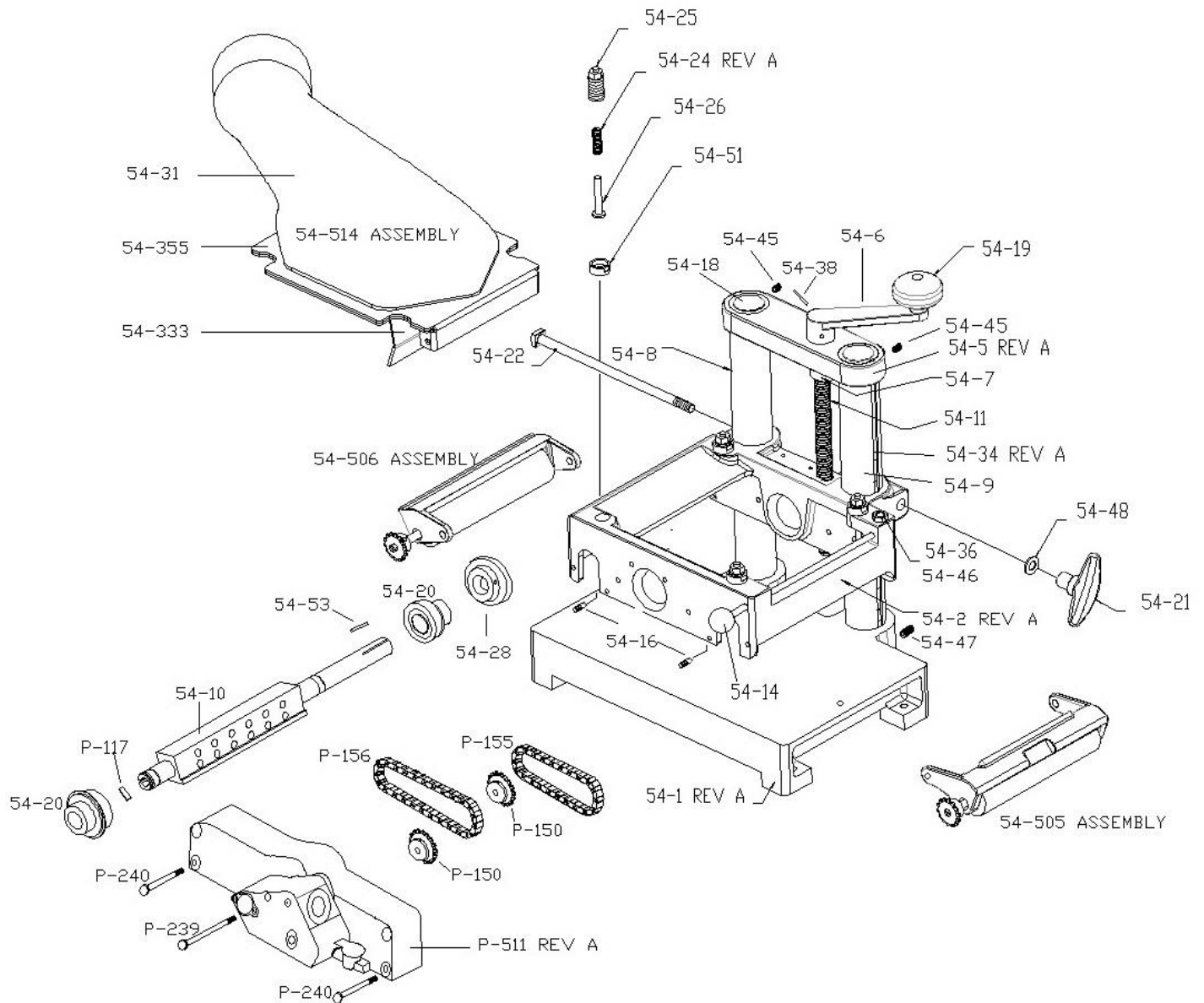
P-125 Bearing, Ball, .687 OD X .250 W X .187 ID  
P-126 Bearing, Ball, .687 OD X .250 W X .250 ID  
P-221 Pin, Roll, 3/32" x 1/2"  
P-203 Shaft, Primary  
P-104 Worm, Primary

**P-503 Shaft, Secondary, Assembly**

P-125 Bearing, Ball, .687 OD X .250 W X .187 ID  
P-105 Gear, Worm, Primary  
P-222 Pin, Roll, 3/32 x 5/8"  
P-221 Pin, Roll, 3/32" x 1/2"  
P-106 Shaft, Secondary  
P-127 Spacer, .027 Length X 1/2 OD  
P-131 Spacer, .223 Length x 1/2" OD  
P-107 Worm, Secondary

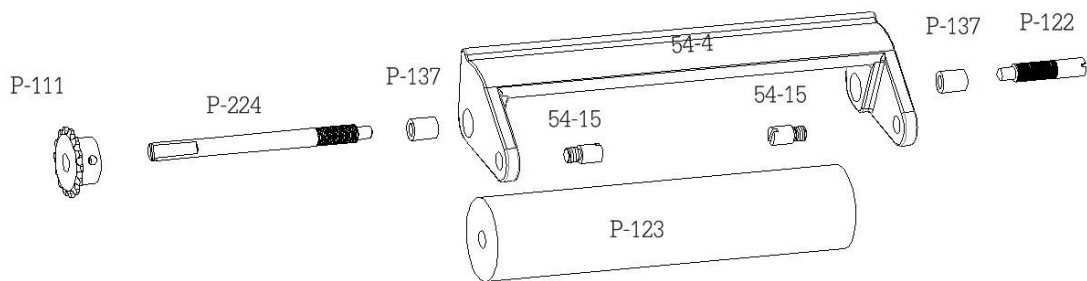
**P-504 Shaft, Drive, Assembly**

P-108 Gear, Worm, Secondary  
P-223 Pin, Roll, 1/8" x 5/8"  
P-209 Shaft, Drive

**MODEL 154CE SCHEMATIC**

## SWING ARM SCHEMATIC

### OUTFEED SWINGARM



### INFEEED SWINGARM

