311 East Third Street Tulsa, OK 74120 PH # 918-582-9984 Fax # 918-582-9989

Timing Model O, #1 & #2 Beveling Machine

Saddle Type Machine

Timing a saddle type beveling machine refers to the two # 9 pinion gears turning in unison and properly orientated to engage the ring gear assembly. This allows the ring gear assembly to smoothly transition from one #9 pinion gear to the other while jumping the open spot in the ring gear assembly. This facilitates a seamless 360 degree rotation of the ring gear assembly during the cutting process.

When the #9 Pinions are not turning in unison the rotation of the ring gear can be interrupted due to the #9 pinion gear hitting tooth to tooth on the ring gear. This stops the ring gear from turning and interrupts the cutting process

<u>Prior to performing this procedure please locate and print the</u> appropriate parts break down for your machine

The following procedure can be used to re-time a machine in the field:

1 Check part # 12A top roller chain to see if it is loose, if so proceed to loosen and then snug the three bolts securing part #17 single bearing bracket. Two bolts on the # 17 single bearing bracket and one that secures the lifting handle. Loosening and then slightly tightening these bolts will allow you to take a rawhide hammer and bump the single bearing bracket until the top roller chain is tight. Once this has been accomplished tighten bolts and proceed with step 2. Note: Top roller chain should have the same tightness on both top and bottom portions of the chain.

2 Hand crank the ring gear part # 2A3&4 in a counter clockwise motion until it no longer is engaging the #9 pinion gear located on the #17 single bearing bracket. Once this is done locate the chain sprocket part # 14 on the opposite side of the #9 pinion gear (Note: The #9 pinion gear and the #14 sprocket share the same gear axle). The sprocket has two set screws securing it to the gear axle. By loosing the two set screws, the #9 pinion and gear axle can be rotated. A pair of pliers may be required to rotate the #9 pinion and gear axle. If so cover the #9 pinion with a rag to protect against damaging the #9 pinion gear. slowly hand crank the ring gear in a clockwise motion towards # 9 pinion, manually lining up the teeth on part # 9 pinion gear with the teeth on ring gear assembly. The machine is now timed. Tighten the set screws on the #14 sprocket and check the machine for smooth operation. Note: Check to make sure the #9 pinion gear is not bottomed out in the teeth of the ring gear. If so you will need to raise #17 single bearing bracket up slightly and then tighten the 12A chain by reversing the above procedure and bumping the #18 double bearing bracket to tighten the 12A chain and then return to the #17 and re-time if necessary.

Note: In some cases part # 12A top roller chain may stretch over time and need to be replaced prior to performing this procedure