



## Timing of Pinion – PAT TRAP®

**WARNING: NEVER STAND IN FRONT OF TRAP MACHINE. THE TRAP MACHINE MUST BE TURNED OFF AND MAIN SPRING RELEASED PRIOR TO ENTERING THE TRAP HOUSE. NEVER ATTEMPT TO MAKE ANY ADJUSTMENTS WHEN THE THROW ARM IS IN THE COCKED POSITION.**

The following are the instructions for re-timing the turret pinion assembly on the G-Series Pat-Trap® Machine:

1. Unload the targets from the machine's turret and lift the turret off of the king pin. (Note: It is easier to remove the turret if two people lift up on opposite sides of the turret, i.e., 180° apart)



Picture 1.

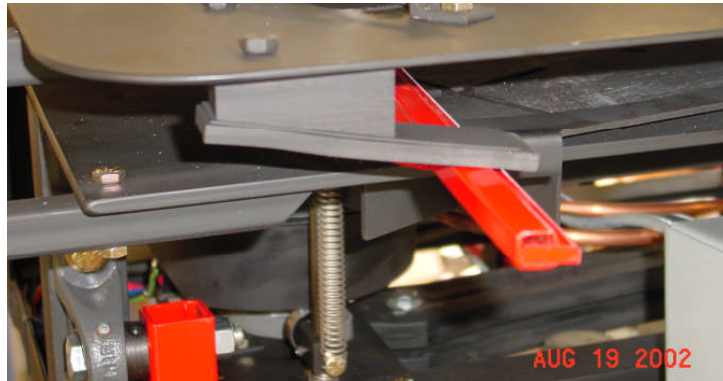
2. Turn the pump on. Allow it to warm up for ten minutes or more if the temperature is cold. The Pump switch is the right-hand switch in Picture 2 below.



Picture 2.

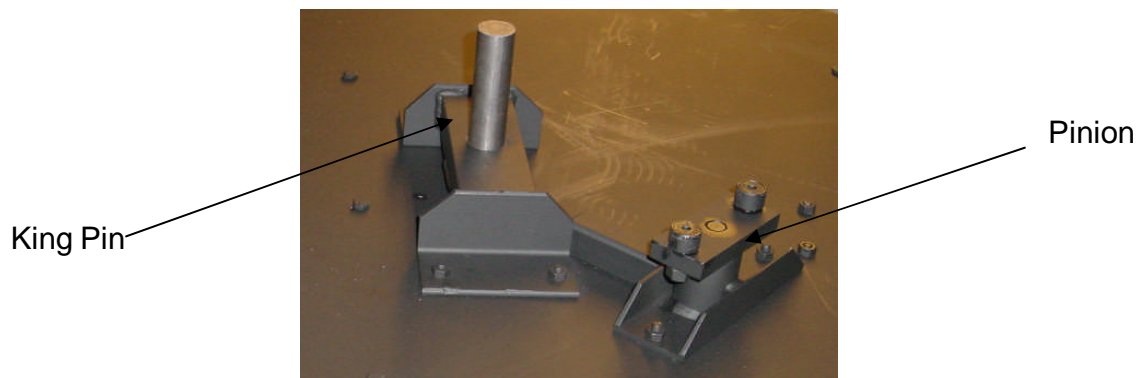


3. Turn the machine on. When the throw arm comes forward to the throw arm brake and stops, it is in the cocked position. (See picture 3 below)



Picture 3.

4. Turn off the trap machine (Left Switch in Picture 2 above). Release the trap manually by standing clear of the throw arm and pushing the throw arm off the brake.
5. Compare the position of the pinion block on your trap machine with Diagram 1. The diagram represents the top view of the pinion block in relation to its base. The measurement given is taken from the corner "A" of the pinion block to the outside edge "B" of the pinion base (steel channel). The distance between points "A" and "B" is approximately 3/16" when correctly timed.



Picture 4.



**PAT-TRAP, Inc.**

**\*Choice of the ATA\***

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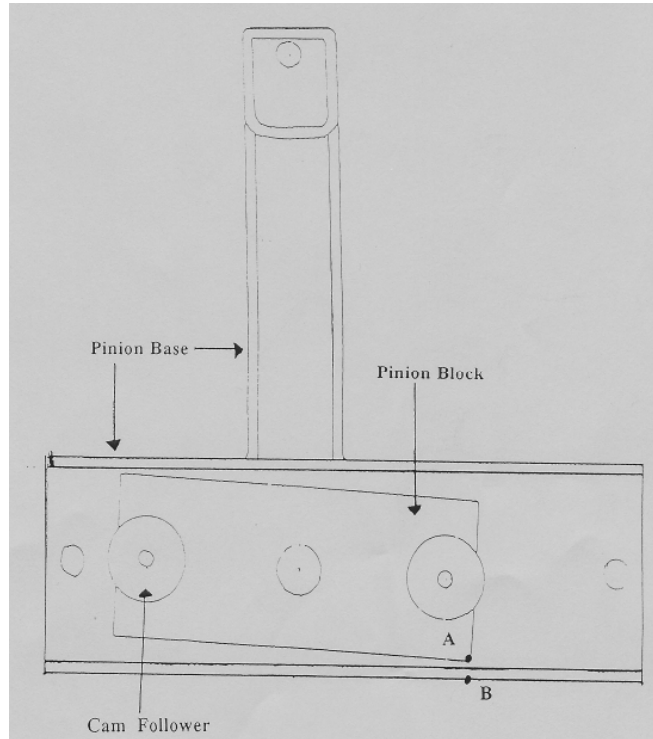
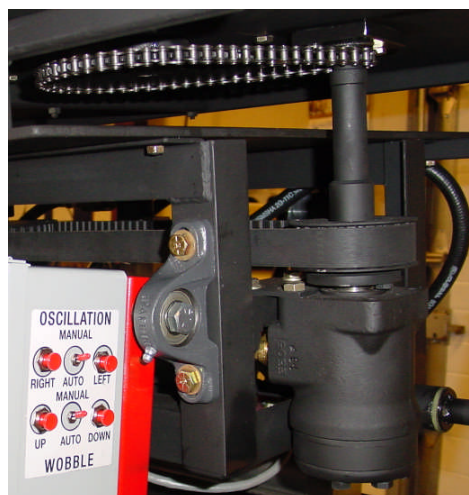


Diagram 1.

6. If the distance between points "A" and "B" is not close to the 3/16" spacing, then the timing can be corrected by disconnecting the drive chain to the pinion sprocket and rotating the pinion to the correct position and replacing the drive chain. See Picture 5.



Picture 5.

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7. Note: The connecting link is located on the chain between the large sprocket and the small sprocket. If you can not see it, you will have to turn the trap machine on again and cycle it (repeat steps 3 and 4 above) until the connecting link comes around to the position required to remove it. Be sure to stay clear of the throw arm and that the machine is off and that the throw arm is released before working on the chain. Use a small screwdriver to remove the keeper bale for the connecting chain link. Once chain is removed, position the pinion so that points "A" and "B" are at the 3/16" measurement, then replace chain and the connecting link.



Picture 6.

8. Please call if you have any questions (603) 428-3396.