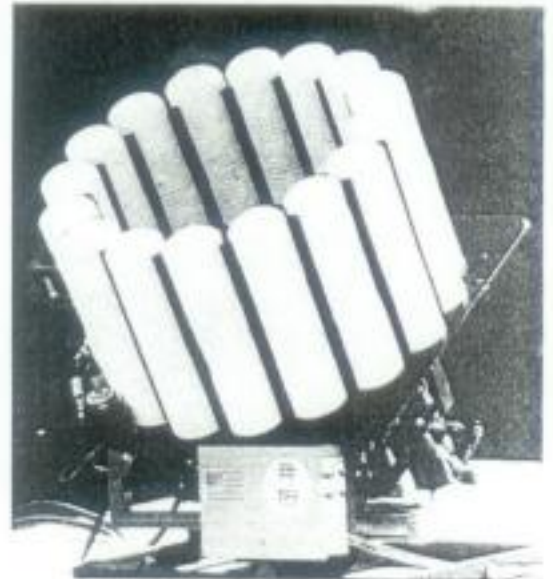
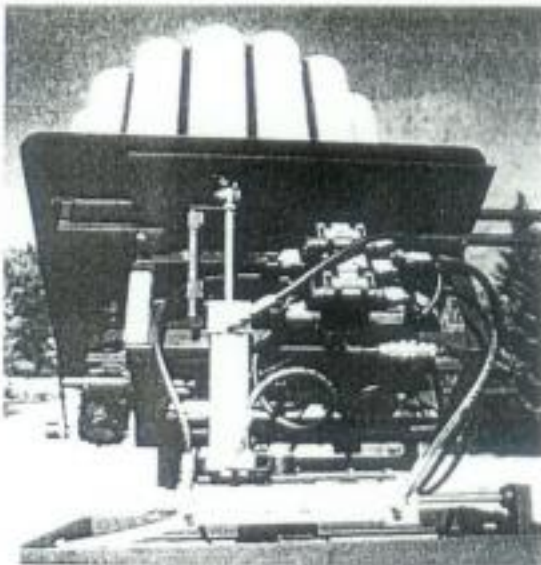


Pat-Trap® w/Wobble

Pat-Trap®

Stuart
Patenaude



SETTING DISTANCE/SPEED

Clockwise rotation of the crank *increases* the spring tension thus increasing the speed of the target and the distance it travels.

Counter-clockwise rotation of the crank *decreases* the spring tension. Continued counter-clockwise rotation will remove the tension from the crank and the spring tension lock-nut will hold. The elastic lock-nut holds the spring at the set minimum tension.

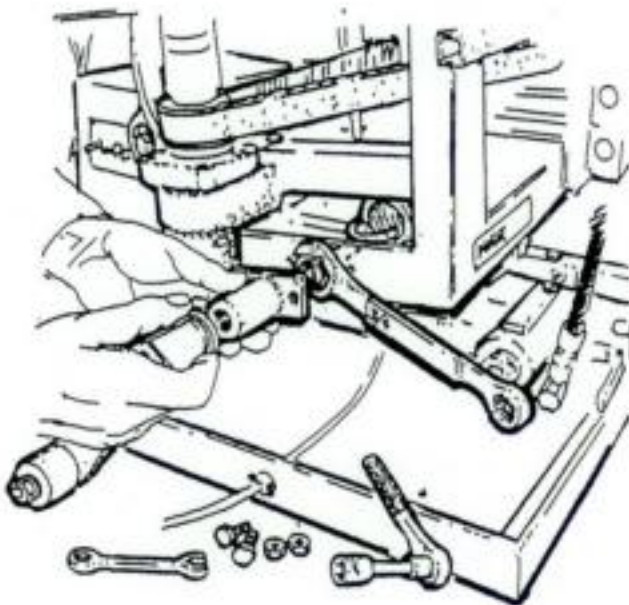
The standard minimum tension should be set so that the spring tension for a Singles target is as follows:

1. Remove the crank by rotating counter clockwise.
2. Remove the nylon washer,
3. Remove two (2) $\frac{1}{4}$ " bolts from the stand off collar.
4. Remove the stand off collar.
5. See the elastic lock-nut. Use a $\frac{3}{4}$ " wrench on this nut to adjust the distance/speed.
6. When the proper distance/speed is achieved, back off the elastic lock-nut three (3) turns.
7. Re-assemble the parts.
8. When the crank becomes snug, continue to turn three (3) more times for proper setting.

Whenever a SINGLES distance is to be set, back off the crank to neutral, crank back to snug, then give another three (3) turns for proper setting.

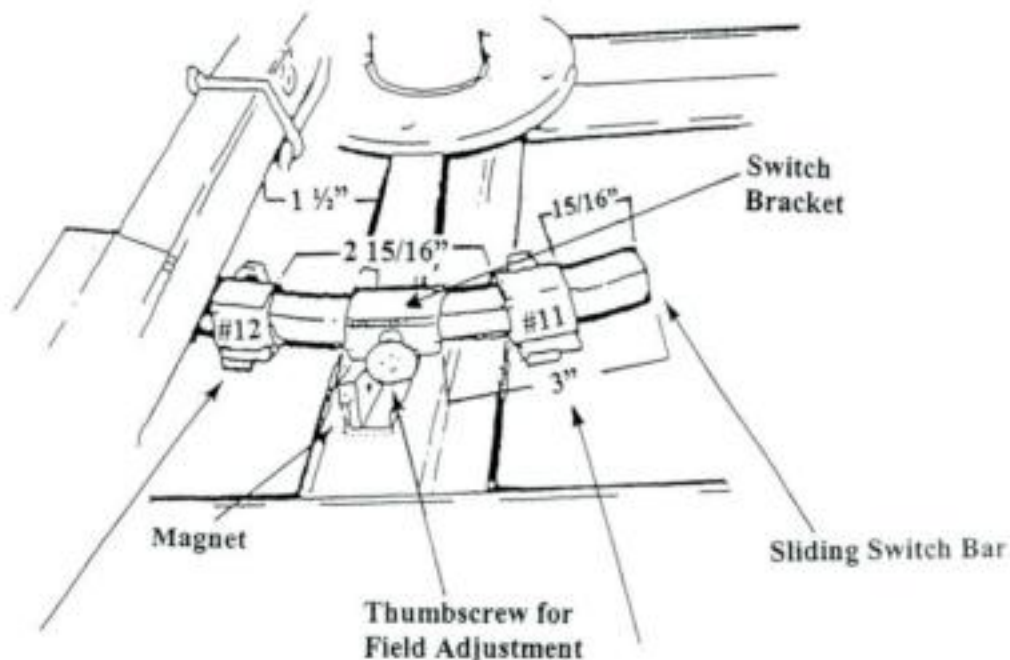
NOTE: SINGLES are always set first, then follow the procedures described for DOUBLES.

(Diagram 21)



FIELD-ANGLE ADJUSTMENT (Sliding Switch Bar Style)

(Diagram 66)



Left-Angle Limit Proximity Switch #12 (N.O.) Red Wire	Loosen Thumbscrew(s) to Adjust	Right-Angle Limit Proximity Switch #11 (N.C.) Black Wire
-------------------------------------------------------------	--------------------------------------	----------------------------------------------------------------

The measurements in the above diagram are for 2-hole targets. The $2 \frac{15}{16}$ " spread between the switch holders allows $5 \frac{7}{8}$ " of total cylinder rod travel --- which equals a 2-hole target. 7" of travel equals a 3-hole target.

If the flight-paths of both the right and left targets are too far to the left, slide the switch bar to the right. $\frac{1}{8}$ " will make a significant difference.

IMPORTANT: NEVER STAND IN FRONT OF A TRAP MACHINE. THE TRAP MACHINE MUST BE TURNED OFF AND THE SPRING RELEASED BEFORE ENTERING THE TRAP HOUSE. NEVER ATTEMPT TO MADE ANY ADJUSTMENT WHEN THE THROW ARM IS COCKED.

ADJUSTING HEIGHT OF TARGETS

IMPORTANT: NEVER STAND IN FRONT OF A TRAP MACHINE. THE TRAP MACHINE MUST BE TURNED OFF AND THE SPRING RELEASED BEFORE ENTERING THE TRAP HOUSE. NEVER ATTEMPT TO MAKE ANY ADJUSTMENT WHEN THE THROW ARM IS COCKED.

Tilt the table by pushing up on the front of the machine. The elevation cog can be positioned up or down. The elevation cog can be roughly adjusted by loosening the assembly and sliding it up or down. See Diagram 22

ANGLE ADJUSTMENTS

RELEASE THE TARGET BEFORE ENTERING THE TRAP HOUSE. NEVER ATTEMPT TO MAKE ANY ADJUSTMENT WHEN THE ARM IS COCKED. NEVER STAND IN FRONT OF A COCKED TRAP MACHINE.

First, set the STRAIGHT-AWAY target; then follow the procedure for the right and left angle adjustment for 2-hole targets.

STRAIGHT-AWAY TARGETS

Set the toggle switch to the MANUAL position. Use the right and left buttons to achieve STRAIGHT-AWAY TARGETS. See Diagram 13

2-HOLE TARGETS

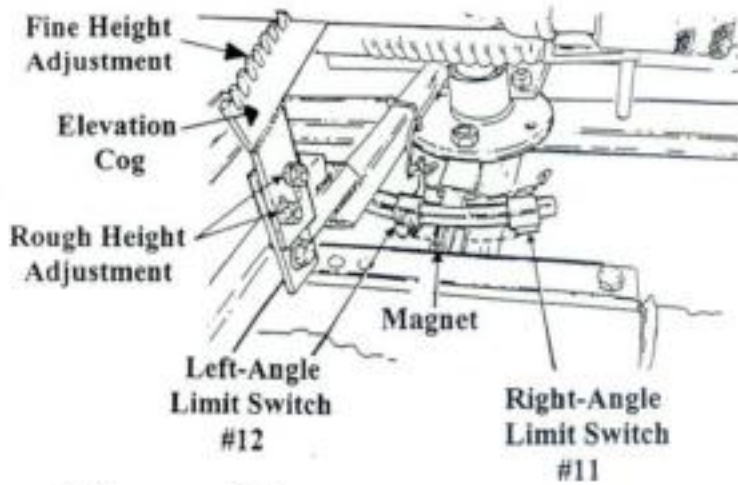
Loosen the thumbscrews. Slide the angle switch *toward the "magnet" to decrease the angle*. Slide the angle switch *away from the "magnet" to increase the angle*. See Diagram 67

Measure and set the switch approximately $1 \frac{3}{4}$ " from the "magnet" to the front edge of the right-angle limit switch. Re-tighten the thumbscrew to hold the switch in place. See Diagram 68

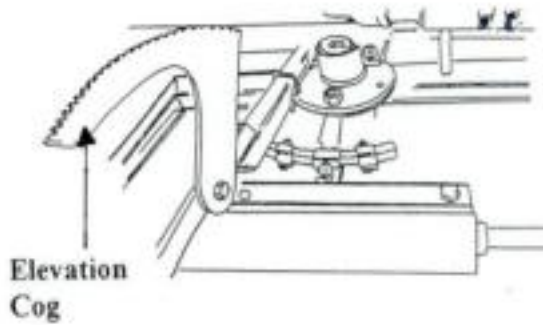
Do the same for the left-angle switch. The total travel path of the oscillating cylinder rod is $5 \frac{7}{8}$ ". $2 \frac{15}{16}$ " left of center and $2 \frac{15}{16}$ " right of center.

IMPORTANT: NEVER INCREASE THE LIMIT SWITCHES BEYOND THE TRAVEL PATH OF THE CYLINDER. THIS MAY CAUSE THE HYDRAULIC CYLINDER TO "BOTTOM OUT" AND DAMAGE THE CYLINDER.

"OLD STYLE" SWITCH ADJUSTMENT

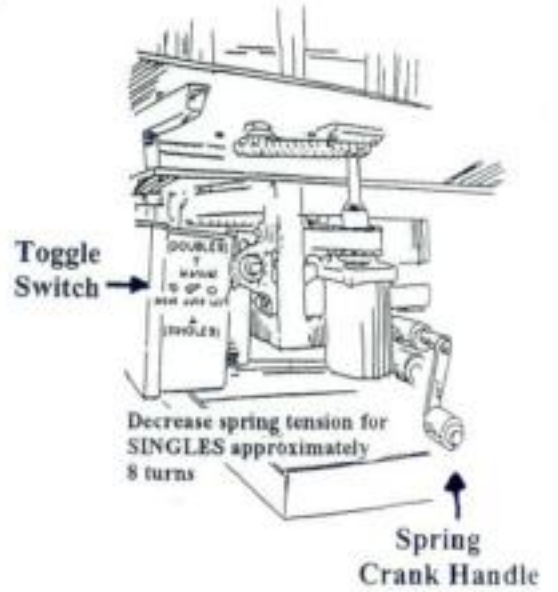


(Diagram 67)

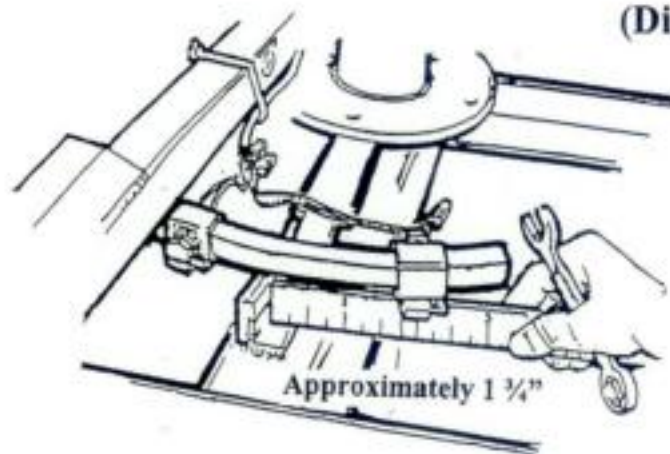


(Diagram 22)

(Diagram 13)



(Diagram 68)



INSTALLING PLASTIC PINION BACKSTOP, SPRING and #4 SWITCH BRACKET (Proximity Switch Style)

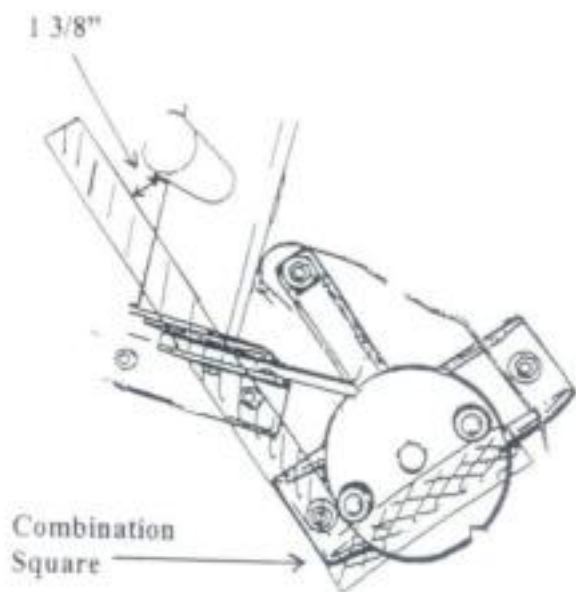
1. Remove the turret being careful not to loose the spacer washer between the kingpin base and the turret (most traps do not have a spacer washer).
2. Using the $\frac{1}{4}$ - 28 x 1 $\frac{1}{8}$ " bolt, install the backing, plastic and spring on to the kingpin base. See Diagram 70. To "time the turret" properly, use a combination square so that the pinion wheel's cam followers are up against the square and are at 90 degrees, at 1- $\frac{3}{8}$ " from the kingpin. See Diagram 69. Now, slide the plastic all the way into the notch. Tighten the bolt. Check to make sure the end of the spring is even with the end of the plastic.
3. Place the switch bracket on the kingpin base with the washer and nut. See Diagram 70. Set the switch so that the spring is as close to the switch as possible, because when the plastic backstop is out of the notch, the spring will bend in and move closer to the magnet. Use two $\frac{7}{16}$ " wrenches to tighten the nut, hold the head of the bolt so that the bolt doesn't spin when tightening the nut.

ADJUSTING SWITCH #4 (Proximity Switch Style)

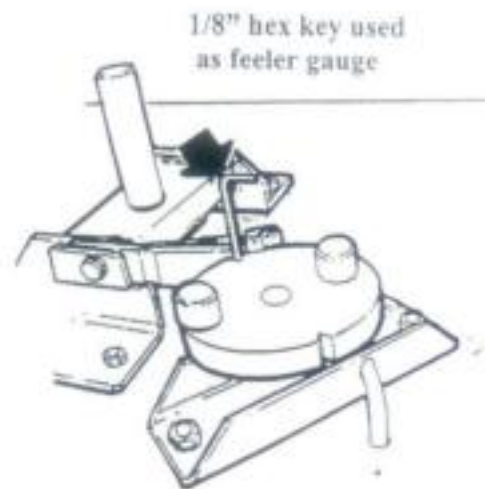
Turn the power off to the machine. Disconnect the power wires to the proximity switch*. Use an ohm meter (or continuity tester) to check when the switch is activated. Rotate the pinion wheel by turning the clutch by hand. The gap between the end of the plastic and the notch in the pinion wheel *must be* $\frac{1}{8}$ " when the switch is activated (when the switch closes). Use a $\frac{1}{8}$ " hex key as a feeler gauge to set the gap. See Diagram 26.

The correct setting is found by trail and error. Adjust the bracket by bending as necessary or use an adjusting screw. For example: If the turret does not stop indexing the gap is too little. Adjust by bending the bracket toward the front of the trap. See Diagram 26.

***NOTE: BE SURE TO DISCONNECT THE POWER WIRES; OR YOU MUST BLOCK THE ELEVATOR SWITCH BY PUTTING A STEEL RULER OR PUTTY KNIFE BETWEEN THE MAGNET AND THE PROXIMITY SWITCH.**

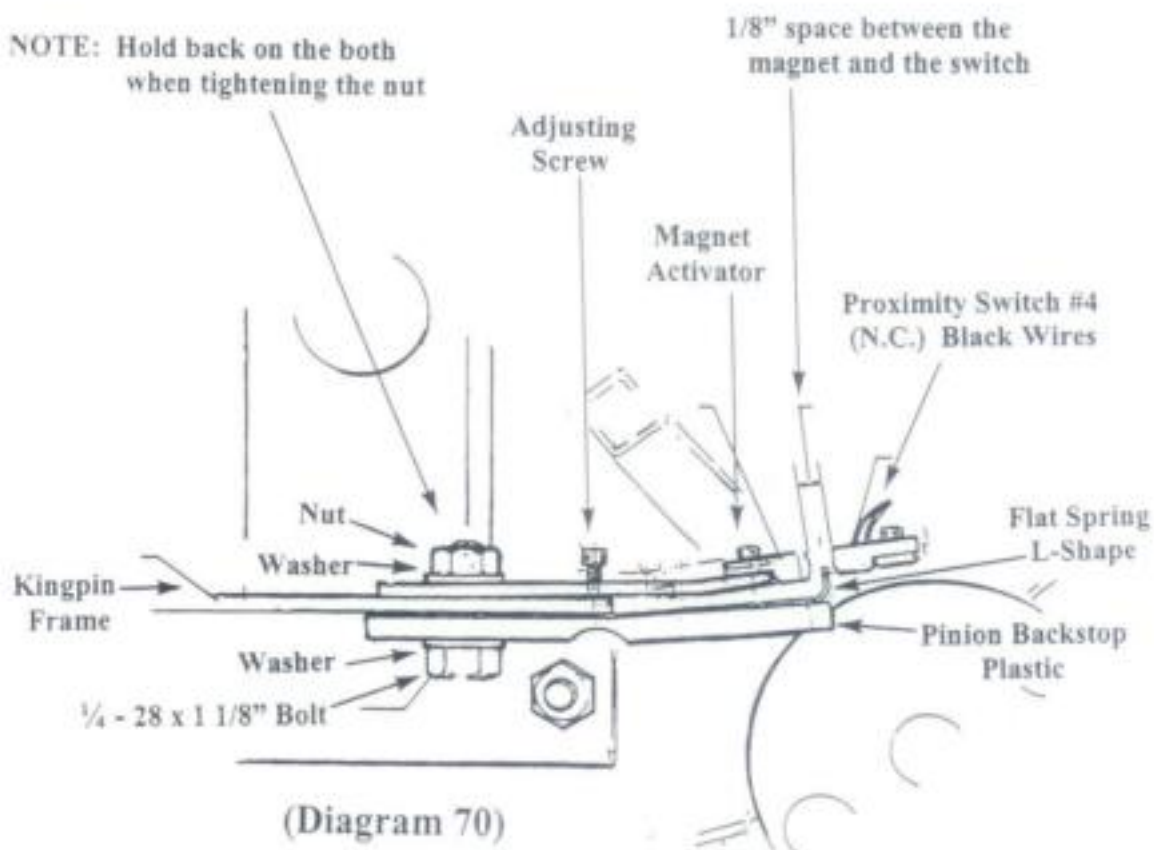


(Diagram 69)



(Diagram 26)

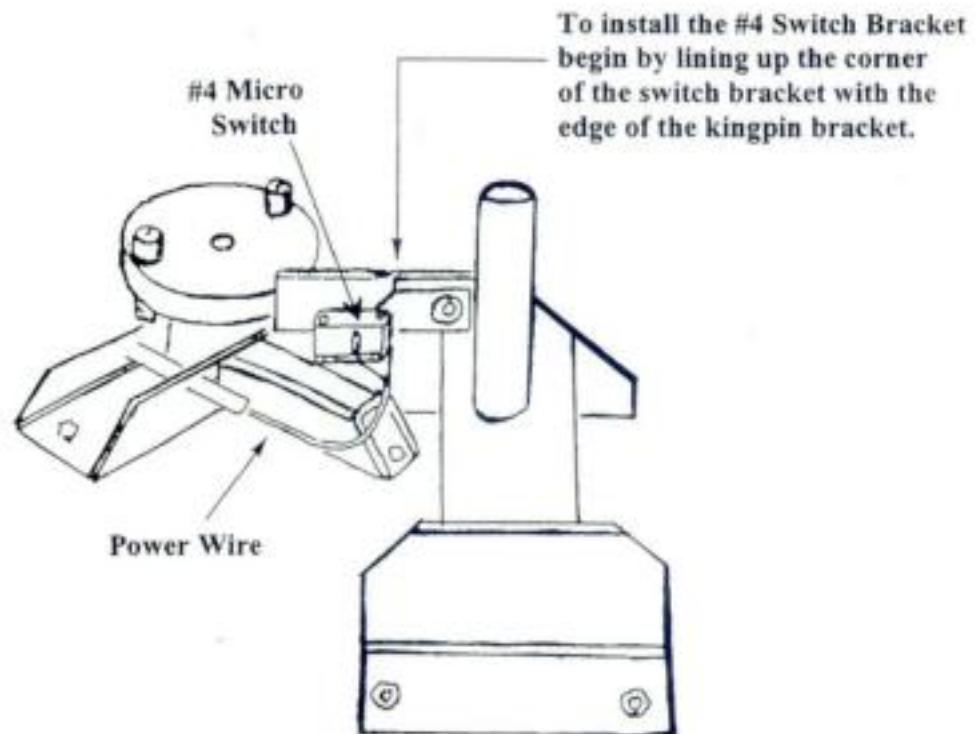
NOTE: Hold back on the both when tightening the nut



(Diagram 70)

INSTALLING PLASTIC PINION BACKSTOP, SPRING and #4 SWITCH BRACKET (#4 Micro Switch Style)

1. Remove the turret being careful not to loose the spacer washer between the kingpin base and the turret (most traps do not have a spacer washer).
2. Using the $\frac{1}{4}$ - 28 x 1-1/8" bolt, install the backing, plastic and spring on to the kingpin base. See Diagram 72. To "time the turret" properly, use a combination square so that the pinion wheel's cam followers are up against the square and are at a 90 degree angle, at 1 3/8" from the kingpin. See Diagram 69. Now, slide the plastic all the way into the notch. Tighten the bolt.
3. Place the switch bracket on the kingpin base with the washer and nut. See Diagrams 72 and 73. Use two 7/16" wrenches to tighten the nut, hold the head of the bolt so that the bolt doesn't spin when tightening the nut.



(Diagram 73)