



## **TROUBLE SHOOTING**

### **OSCILLATION PROBLEM for Standard Pat-Trap machine (Wobble machine)**

Stand to right and rear of the machine near the Electrical Enclosure Box. Turn the machine on. Put the Auto/Manual switch into the manual position. If the left and right push buttons work then the Hydraulic Solenoid valve is good. If the buttons do not work, check the fuse, (Page 59 of the manual). If the fuse is blown this usually indicates that the Soft Shift Valve (P/N 9061) is bad.

### **AUTO MODE #11 & #12 (11A & 12A) SWITCHES**

If the **#11 (11A) Switch** (N/C Right Angle Limit Reed Switch P/N 9223-G) is stuck “closed” then the machine will travel all of the way left (all the way down) as usual. Then it will travel all of the way to the right (up) and will not return to the left (down). This will cause the relief valve to the pump to engage and create a loud noise.

Switch to Manual Mode and use the manual push button to bring the machine back to center and replace the switch

If the **#12 (12A) Switch** (N/O Left Angle Limit Reed Switch P/N 9222-G) is stuck “open” then the machine will travel all of the way to the left (down) and will not return to the right (up). This will cause the relief valve in the pump to engage and create a load noise.

Switch to Manual Mode and use the manual push button to bring the machine back to center and replace the switch.

If the **#11 (11A) Switch** (N/C Right Angle Limit Reed Switch P/N 9223-G) is stuck “open” then the machine will travel all of the way to the left (all the way down) as usual. Then it will travel to the right (up) about 5/8” and then return left (down) and repeat the same travel pattern.

Switch to Manual Mode and use the manual push button to bring the machine back to center and replace the switch.

If the **#12 (12A) Switch** (N/O Left Angle Limit Reed Switch P/N 9222-G) is stuck “closed” then the machine will travel all of the way to the right (all the way up) and will not return to the left (down).

Switch to Manual Mode and use the manual push button to bring the machine back to center and replace the switch.



THE MACHINE DOES NOT OSCILLATE IN “MANUAL” MODE

Check the **Fuse**

If the Fuse is bad then the Oscillation Soft Shift Valve might be bad

Check the **Left** or **Right Push Button** for the fault

Check the **Auto/Manual Switch** for fault.

THE MACHINE DOES NOT OSCILLATE IN “AUTO” MODE

Check the **Fuse**

Replace the **Interrupter**

Replace the **#3 Switch**

Replace the **#2 Relay**

If the **Fuse** is bad then the **Oscillation Soft Shift Valve** might have a short.

Check the **Auto/Manual Switch** for a fault.

THE THROW ARM WILL NOT COCK

Check the **ON/OFF Release Switch** for fault.

Check the **#2 Switch**

Check the **Hydraulic Solenoid Valve**

THROW ARM WILL NOT RELEASE WITH PULL CORD, VOICE RELEASE, OR THE ON/OFF/RELEASE SWITCH IN THE POWER BOX

Check the plug ends at the pull cord or voice release connection

Replace the **#2 Switch**

Check the ON/OFF/RELEASE SWITCH with an OHM meter with the power unplugged.

THROW ARM DOES NOT STOP ON THE BRAKE (continually throws targets)

Disconnect the **Pull Cord** or **Voice Release System**

Check **Brake Assembly**

Check the **#2 Switch**: See “Cold Temperature Adjustment”

Check the **Hydraulic Solenoid Valve**



TARGETS BEGIN TO FALL SHORT OR THERE ARE AN UNUSUAL NUMBER OF TURNS ON THE CRANK HANDLE TO THROW A 50 YARD TARGET

Check for a broken **Uni-Band** (Main Spring)  
Grease the **Main Shaft Bearing** with a low viscosity grease.

TARGETS ARE BEING THROWN MORE TO THE RIGHT

See **Target Brush** section  
See **Throw Arm Maintenance** in **Maintenance** section

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 WHILE THE THROW ARM IS COCKED.

BROKEN TARGETS

Check the **Target Brush**  
Check the **O-rings**  
Check the **Elevator Springs**  
Check the **Roller Plate Spring** tension  
Check the **Throw Plate** surface for corrosion: Sand with 80 grit sand paper if needed.  
Check **Pinion Timing**  
If throwing Doubles, check the **Doubles Finger**: there will be a problem if the **Double finger** is bent upwards.  
Check the **Singles Finger** and **Doubles Finger** measurement. See Diagram 50