



# WHEELYBIRD 3.0™ AUTO-FEED TRAP

Part No. 40927



## Instruction Manual



**WARNING:** THIS MACHINE CAN CAUSE SERIOUS INJURY OR DEATH!  
THOROUGHLY READ INSTRUCTIONS BEFORE INSTALLING OR OPERATING TRAP!





# Table of Contents

<u>Section</u>	<u>Page</u>
<b>I. Introduction</b>	<b>4</b>
<b>II. Safety</b>	<b>5</b>
<b>III. Tools Required for Assembly</b>	<b>7</b>
<b>IV. Assembly and Installation</b>	<b>7</b>
<i>(A) Unpacking</i>	7
<i>(B) Contents</i>	8
<i>(C) Assembly</i>	11
Assemble Frame	11
Attach Trap to Frame	12
Attach Throwing Arm Path Indicator	13
Attach Magazine Assembly	14
Install Mainspring	14
Setup	15
<b>V. Operation</b>	<b>16</b>
<b>VI. Adjustments</b>	<b>17</b>
<i>(A) Throwing Arm Limit Switch</i>	17
<i>(B) Elevation Adjustment</i>	19
<i>(C) Distance Adjustment</i>	20
<b>VII. Transportation and Storage</b>	<b>21</b>
<b>VIII. Troubleshooting</b>	<b>22</b>
<i>(A) Diagnosing Issues</i>	23
<i>(B) Wiring Diagram</i>	25
<b>IX. Maintenance</b>	<b>26</b>
<b>X. Replacement Parts</b>	<b>26</b>
<b>XI. Contact Information</b>	<b>27</b>

# I. Introduction

The WHEELYBIRD 3.0™ Auto-Feed Trap is designed for the active sporting clays, trap, and skeet shooter looking for an automatic, lightweight, and portable machine to enhance their experience.

Features and benefits of the WHEELYBIRD 3.0™ Auto-Feed Trap:

## Safety

- ON-OFF-SAFE RELEASE switch provides safe method to uncock throwing arm
- Arm path indicator tube provides visual indication of throwing arm path for safety
- 20 amp circuit breaker protects electrical wires and motor

## Convenience

- Lightweight and portable - approximately 50 lbs
- Detachable magazine holds 60 targets
- Throws standard 108 mm or 110mm international clay targets
- Foot pedal release with 25 ft. cord
- Two-wheeled frame with solid tires and molded handle for easy movement
- Built-in cord wrap and battery tray
- Increased thrower height
- Replaceable flight rail for the throwing arm
- Compatible with Wobble Bird Base #40924 (sold separately)
- Compatible with Wireless Remote and Receiver #40923 (sold separately)

## Performance

- 1.5 second cycle time
- Throwing range of up to 75 yards
- Requires 12V, 30 AH (Amp Hours) battery, deep cycle type is recommended
- Launch angle of 0 - 30 degrees (0-degree angle used mainly for storage)

## II. Safety



**WARNING: THOROUGHLY READ ALL INSTRUCTIONS, WARNINGS, CAUTIONS AND SAFETY INFORMATION BEFORE INSTALLING OR OPERATING THE TRAP. FAILURE TO READ AND FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.**

**DO NOT STAND IN FRONT OF THE TRAP WHEN IT IS IN THE COCKED POSITION. SERIOUS INJURY OR DEATH CAN RESULT. TO AVOID POTENTIAL INJURY, NEVER STAND TO THE SIDE OF THE TRAP, ALWAYS STAND BEHIND THE TRAP.**

**THIS TRAP IS CAPABLE OF THROWING TARGETS A DISTANCE OF UP TO 75 YARDS. USE ONLY IN AREAS WHERE THERE IS NO RISK OF CAUSING INJURY TO ANOTHER PERSON OR CAUSING OTHER DAMAGE.**

**KNOW YOUR BACKSTOP. ENSURE THERE IS A SAFE PERIMETER THROUGHOUT TARGET FLIGHT PATH SUFFICIENT FOR AMMUNITION USED.**



**WARNING: IF THERE IS A TARGET ON THE THROWING ARM, PERFORMING A SAFE RELEASE WILL THROW THE TARGET. DO NOT STAND IN FRONT OR TO THE SIDES OF THE TRAP WHILE SAFE RELEASING THE THROWING ARM.**



**CAUTION: MAINTAIN AMPLE CLEARANCE AROUND THE TRAP AT ALL TIMES. THE ON/OFF/SAFE RELEASE SWITCH IS LOCATED ON THE REAR OF THE TRAP, ALLOWING THE TRAP TO BE UNCOCKED FROM A SAFE POSITION.**

**DO NOT INSTALL THE TRAP IN AN AREA THAT DOES NOT ALLOW SAFE (REAR) ACCESS TO THE TRAP AND THE ON/OFF/SAFE RELEASE SWITCH DURING LOADING AND USE.**

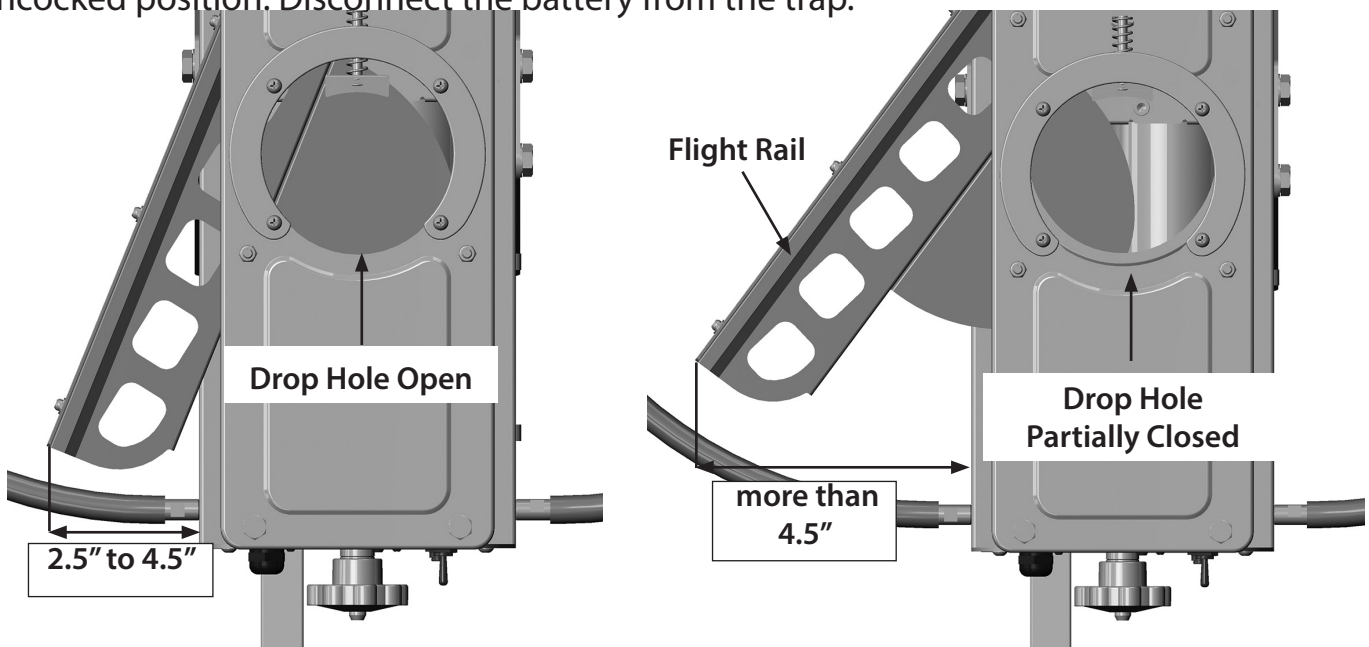
1. All personnel operating the trap should be thoroughly familiar with the operating instructions and the safety issues relating to the trap. ALWAYS FOLLOW THE RULES OF FIREARM SAFETY.
2. Do not leave trap in the cocked position. Not only is this potentially dangerous, but it puts undue stress on the mainspring.
3. Always load and operate the trap from the rear (switch end).
4. Keep hands and body outside the trap and throwing arm path indicator areas while the trap is operating. The **throwing arm path indicator** shows the throwing arm's path when throwing a target, and should always be attached to the trap when it is in use.
5. Be aware that a cracked or broken target thrown from the trap will sometimes scatter pieces out the right side of the machine as the arm throws. These pieces may hit nearby unsuspecting bystanders. To avoid potential injury NEVER stand to the side of the trap, always stand behind the trap.

6. Always wear eye and hearing protection when shooting.



**WARNING: BEFORE PERFORMING ANY REPAIR, MAINTENANCE, OR ASSEMBLY, MAKE SURE THE THROWING ARM IS IN THE UNCOCKED POSITION (SEE BELOW), THE ON/OFF/SAFE RELEASE SWITCH LOCATED ON THE REAR OF THE TRAP IS IN THE 'OFF' POSITION (SEE BELOW), THE BATTERY IS DISCONNECTED FROM THE TRAP AND THE MAIN SPRING IS DISENGAGED.**

(Following completion of assembly) If the throwing arm is in the cocked arm position (see photo below), uncock the throwing arm by first connecting the red battery lead to the positive (+) terminal and the black battery lead to the negative (-) terminal on the battery. Momentarily press the on/off/safe release switch to the "SAFE RELEASE" position to release the throwing arm while standing in a safe position. After the trap fires, release the ON/OFF/SAFE RELEASE switch allowing it to return to the "OFF" position. The throwing arm should now be in the uncocked position. Disconnect the battery from the trap.



**Cocked Arm Position  
(Ready to Launch Target)**

**Uncocked Arm Position  
(Ready to Load Targets)**



ON/OFF/SAFE RELEASE Switch  
(shown in OFF Position)

Circuit Breaker



**WARNING: FAILURE TO FOLLOW SAFETY RULES CAN RESULT IN SERIOUS INJURY OR DEATH!**

### **III. Tools Required for Assembly**

- 5mm allen wrench
- 12mm open-ended wrench
- 13mm socket wrench and open-ended wrench
- 16mm socket wrench
- 17mm socket wrench
- #2 Phillips screwdriver

### **IV. Assembly and Installation**

#### ***(A) Unpacking***

1. Carefully inspect the carton and trap machine to be sure that damage hasn't occurred during shipping. Report any damage found immediately to the shipper.
2. Carefully remove trap assembly and all other components from cardboard shipping box and other smaller boxes. Remove all hardware from bags.
3. Check that all parts were included. If any parts are missing, call the CHAMPION Customer Service Department at (800) 533-5000 to obtain replacement parts.
4. Save all packing material and box for reuse if trap should ever need to be returned for service or replacement.

## (B) Contents

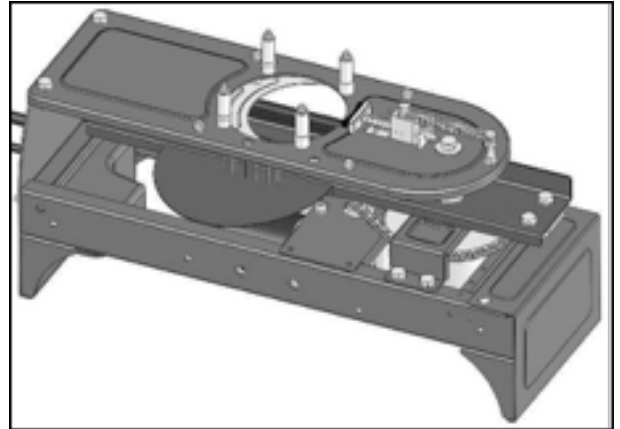
### Foot Pedal



### Stake



### Trap Assembly



### Frame Parts (*not shown to scale*)

F1 - Front Frame

F2 - Back Frame

F3 - Handle Support Bar

F4 - Handle

F5 - Axle

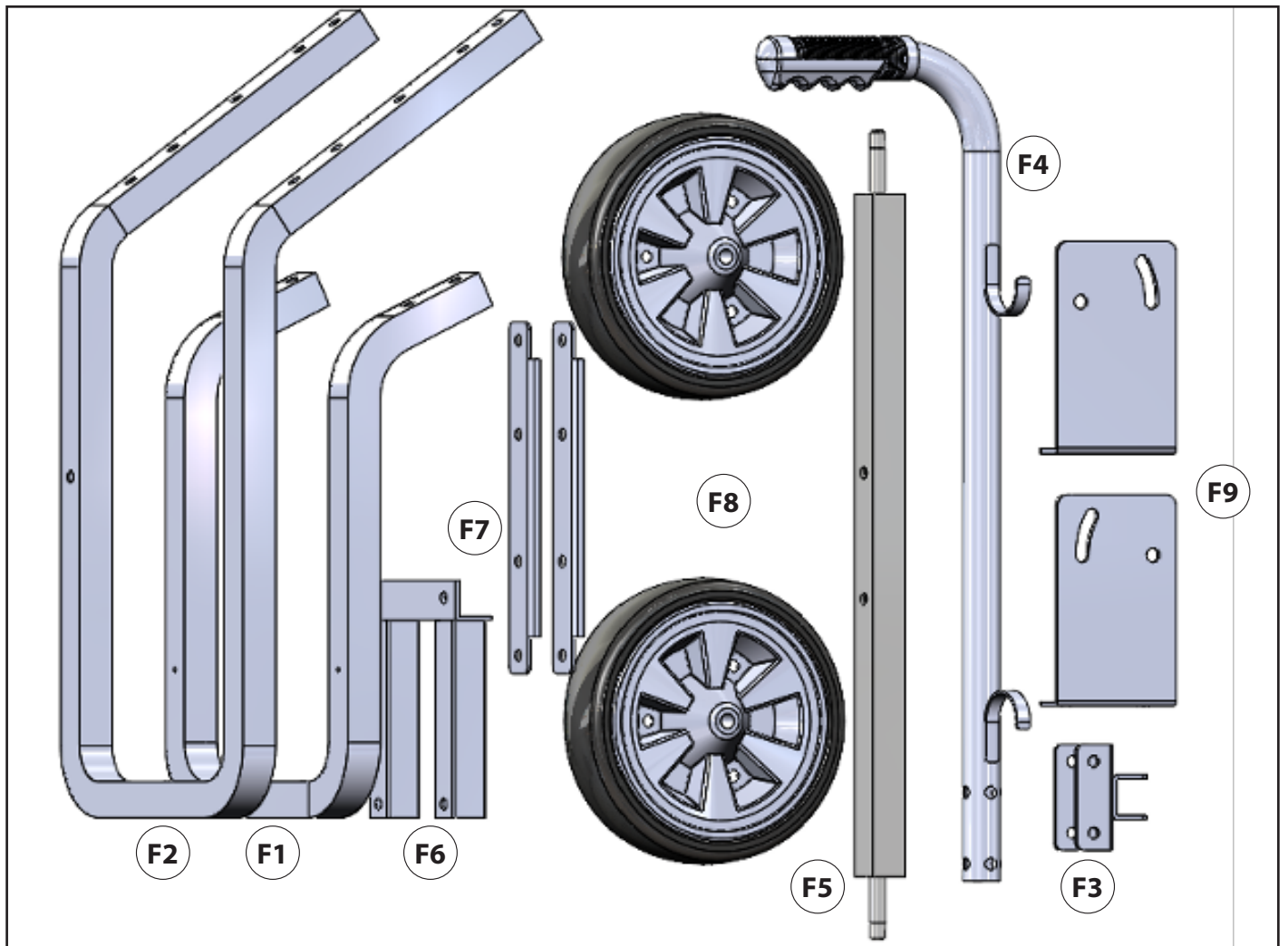
F6 - Battery Tray

F7 - Front Plate (2)

F8 - Wheel (2)

F9 - Mounting Bracket (2)

### Battery Strap





**(B) Contents (cont.)**

**Frame and Trap Hardware**

**F10 - 8mm x 65mm Bolt (4)**

**F11 - 8mm x 45mm Bolt (5)**

**F12 - 8mm x 40mm Bolt (6)**

**F13 - 8mm Washer (32)**

**F14 - 8mm Lock Nut (17)**

**F15 - 10mm Lock Nut (2)**

**F16 - 1.8mm Washer (4)**

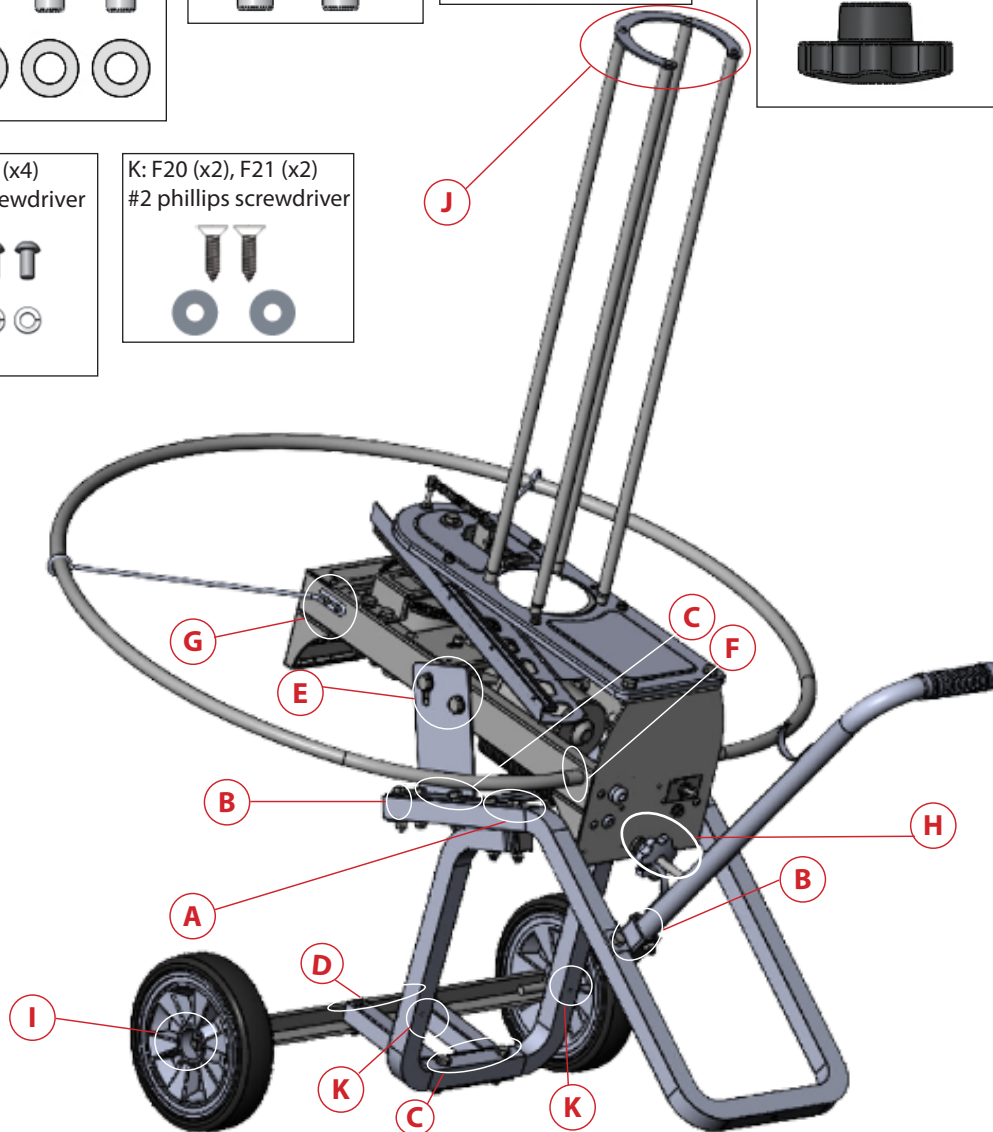
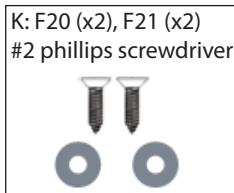
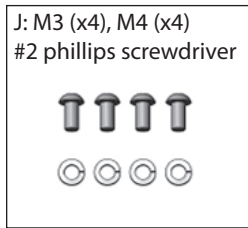
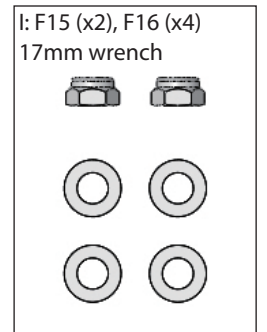
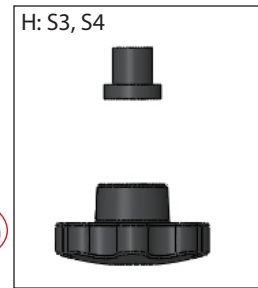
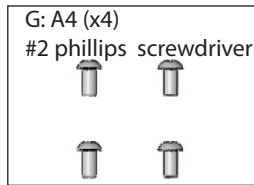
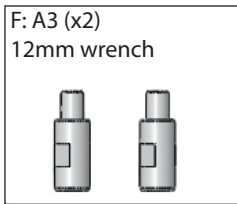
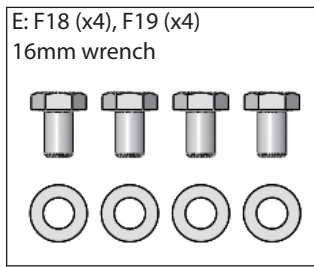
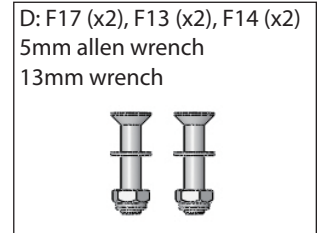
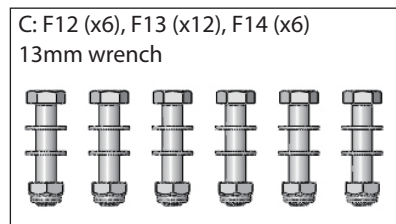
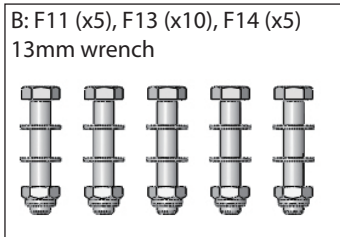
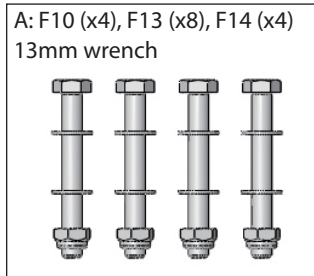
**F17 - 8mm x 40mm Bolt (2)**

**F18 - 10mm x 16mm Bolt (4)**

**F19 - 1.2mm Washer (4)**

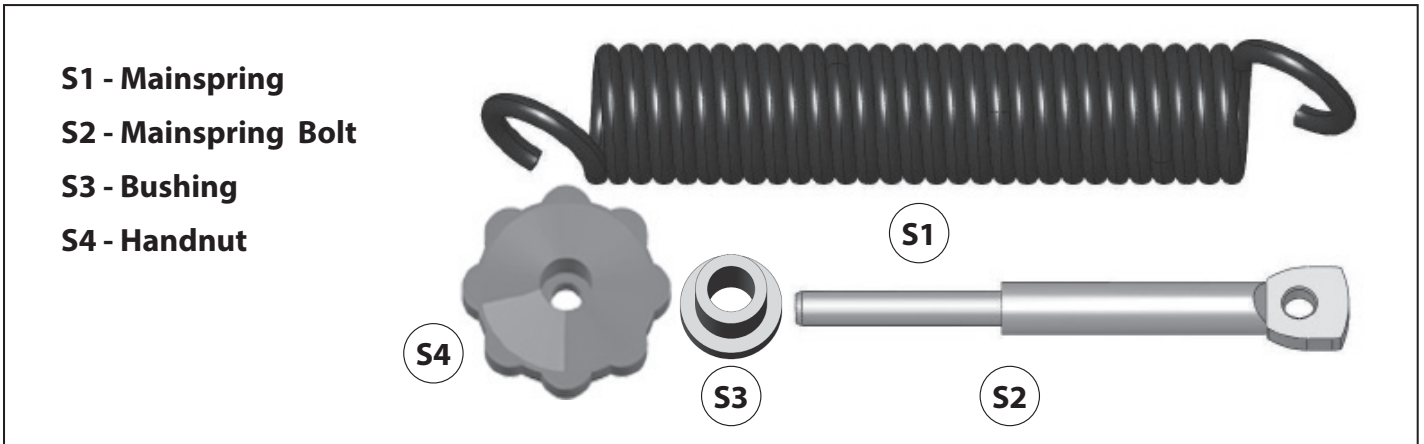
**F20 - 4mm x 20mm Screws (2)**

**F21 - 4mm Washer (2)**



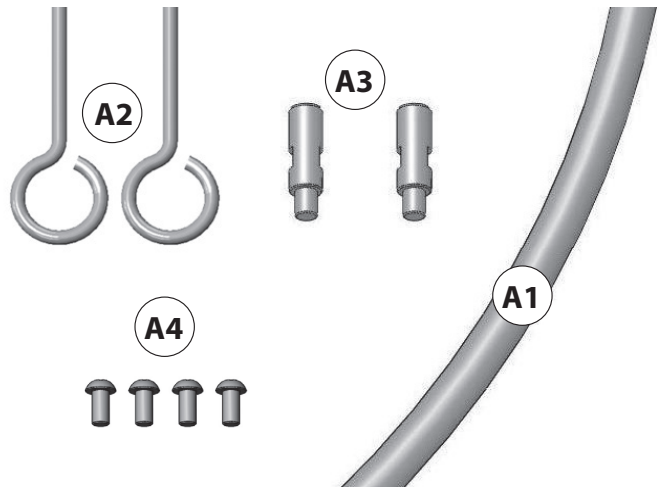
*(B) Contents (con't)*

## Mainspring Assembly

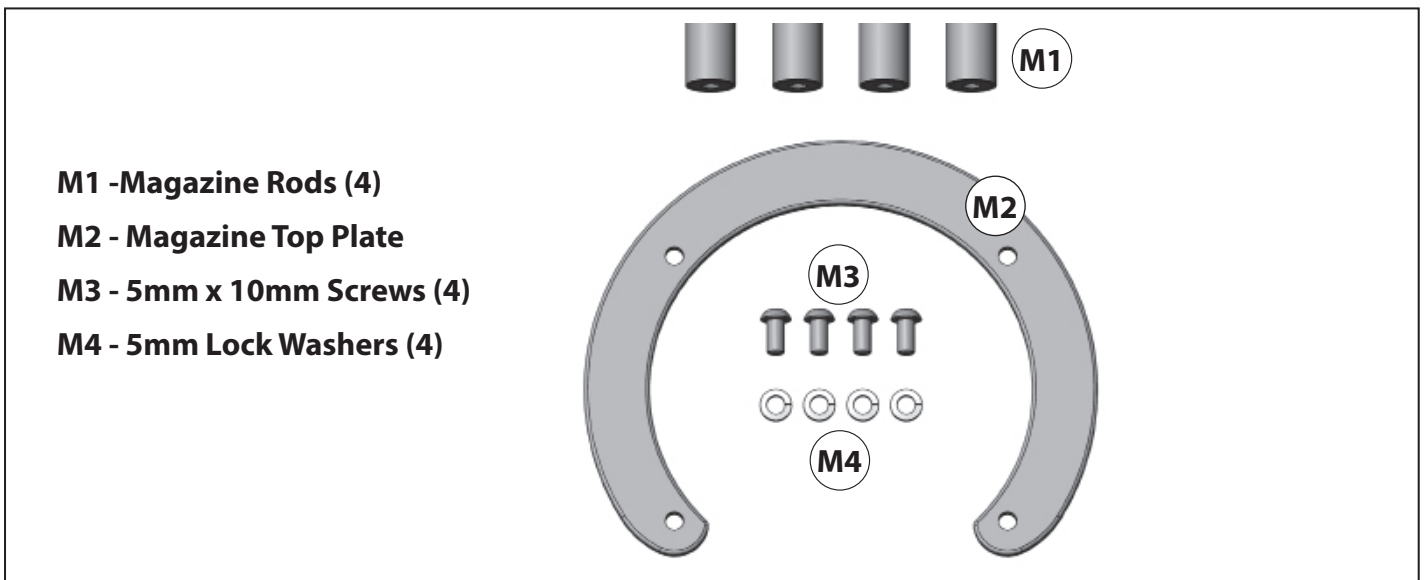


## Throwing Arm Path Tubing Parts

- A1 - Throwing Arm Path Tubing**  
**A2 - Throwing Arm Path Tube Support (2)**  
**A3 - Throwing Arm Path Tube Stud (2)**  
**A4 - 5mm x 10mm Screws (4)**



## Magazine Parts



## (C) Assembly

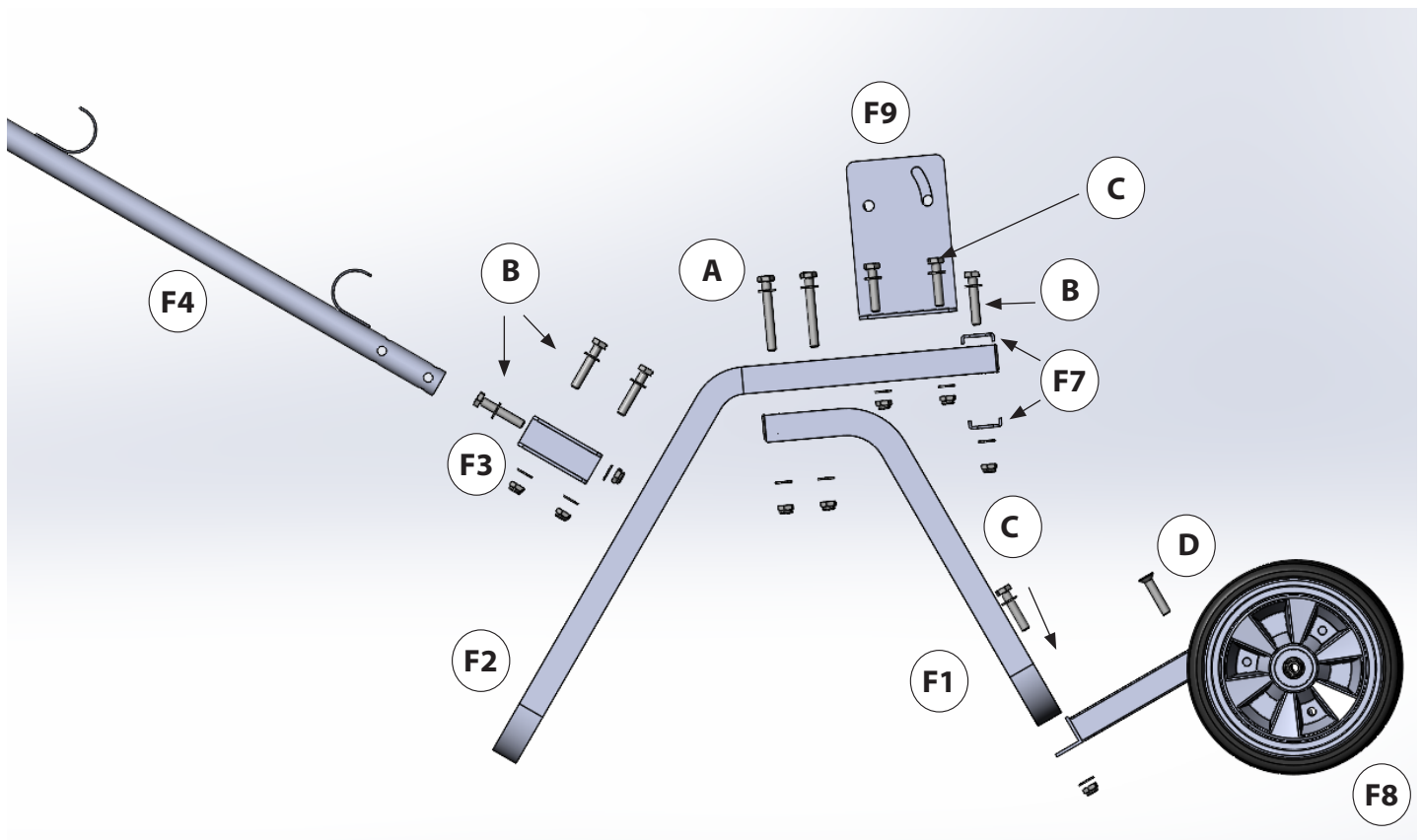


**CAUTION: PROVIDE AMPLE CLEARANCE AROUND THE TRAP.**

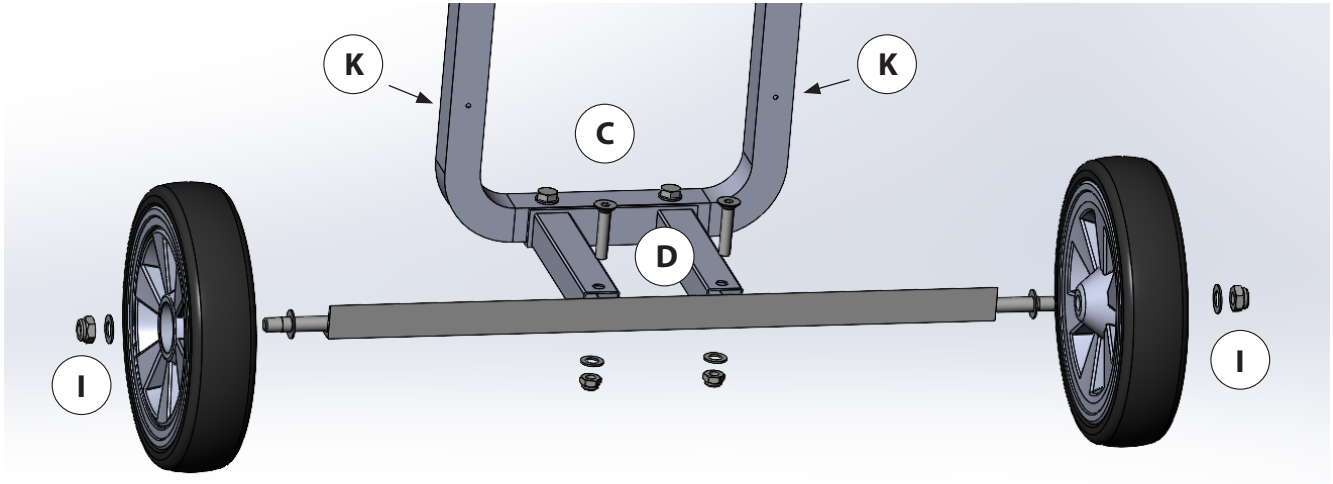
**DO NOT OPERATE THE TRAP IN AN AREA THAT DOES NOT ALLOW SAFE (REAR) ACCESS TO THE TRAP AND THE ON/OFF/SAFE RELEASE SWITCH DURING LOADING AND USE.**

### Assemble Frame

1. Assemble Mounting Brackets (F9) to Back Frame (F2) using 4 bolts in Box C. Leave bolts slightly loose to allow for play when inserting trap assembly later.
2. Attach Front Frame (F1) to Back Frame (F2) using all hardware from Box A. Leave bolts slightly loose to allow for play when inserting trap assembly later. Sandwich the ends of Back Frame (F2) with the Front Plates (F7) using 2 bolts from Box B.
3. Secure the Battery Tray (F6) to the Front Frame (F1) using the 2 remaining hardware from Box C.
4. Connect the Battery Tray (F6) to the Axle (F5) using the hardware from Box D. Attach wheels (F8) using the hardware from Box I. Do not overtighten or wheels won't rotate.
5. Attach the Handle Support Bar (F3) to the Back Frame (F2), and then the Handle (F4) to the Handle Support Bar (F3). To do this, use the remaining hardware in Box B. For easier access to the trap, add the handle at the end of assembly.

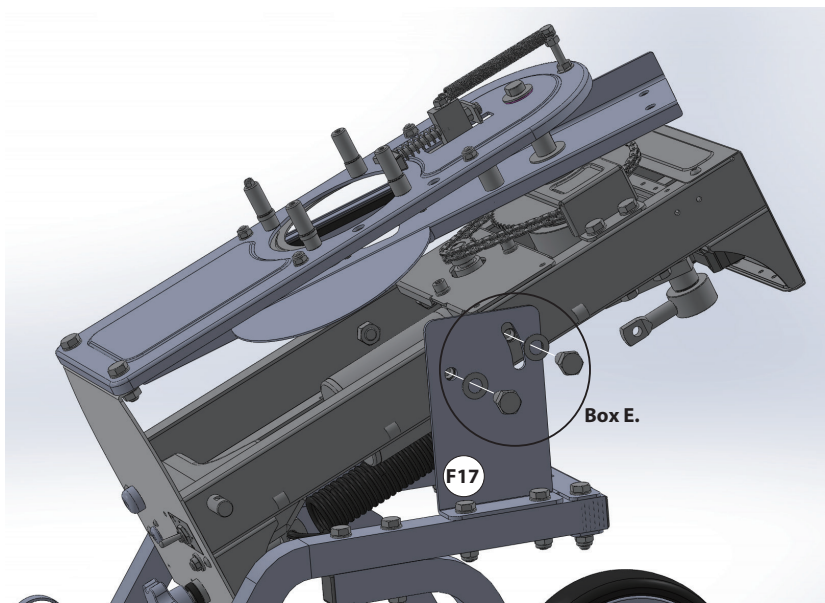


## C) Assembly (con't)



### Attach Trap to Frame

1. Two people are recommended for attaching the Trap Assembly to the Frame. Insert Trap Assembly between the Mounting Brackets (F17).
2. Attach Mounting Bracket (F17) to the Trap Assembly the hardware in Box E. Thread in by hand to start to ensure you do not cross thread the bolts and brackets.
3. The angle of the trap can be adjusted now. When the desired angle is achieved, tighten



all loose bolts on Mounting Brackets (F17), Front Frame (F1), and Back Frame (F2).

### (C) Assembly (con't)

#### Attach Throwing Arm Path Indicator

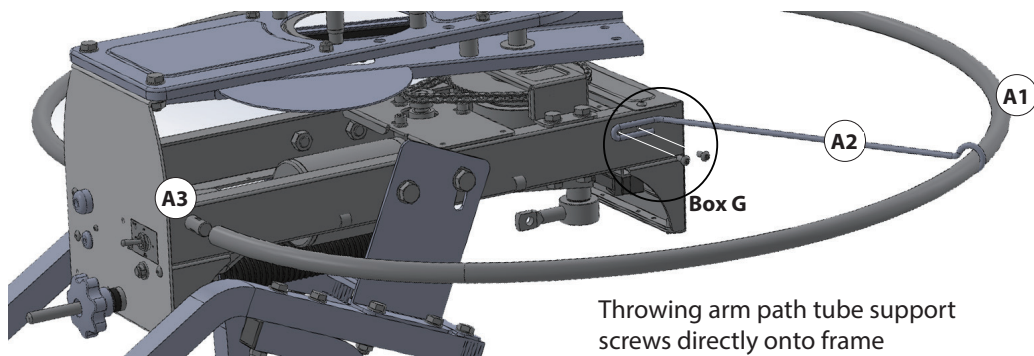
1. Secure Throwing Arm Path Tube Supports (A2) to each front side of trap using the screws in Box G, as seen in the graphic below.
2. Thread Throwing Arm Path Tube Stud (A3) into each rear tapped side hole of trap and tighten securely.
3. Unwind Throwing Arm Path Tubing (A1) and insert through each Throwing Arm Path Tube Support (A2) and connect each end to Throwing Arm Path Tube Studs (A3).



**WARNING: FAILURE TO KEEP HANDS AND BODY OUTSIDE THE THROWING ARM PATH INDICATOR AREA CAN RESULT IN SERIOUS INJURY OR DEATH FROM BEING STRUCK BY THE THROWING ARM DURING USE.**

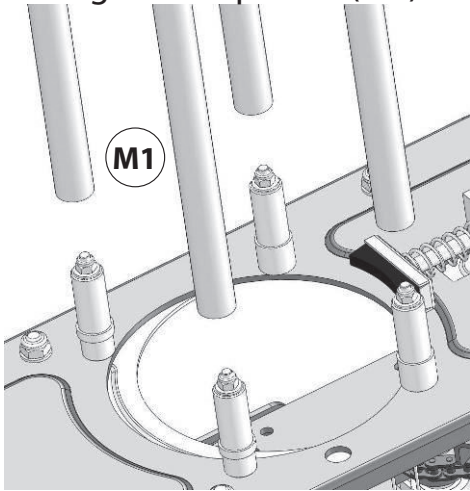


**CAUTION: DO NOT LIFT TRAP BY THROWING ARM PATH TUBING, OR THROWING ARM PATH TUBE SUPPORTS. THESE WERE NOT DESIGNED TO BE A LIFTING POINT.**

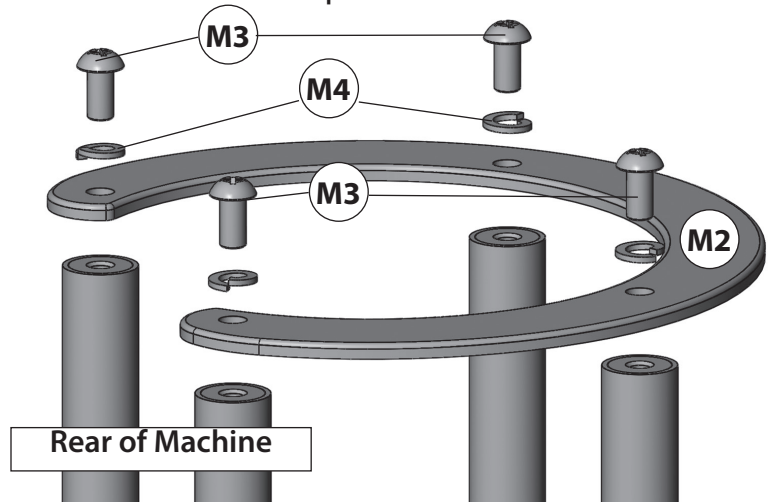


## Attach Magazine Assembly

1. Slide Magazine Rod (M1) over each magazine stud as shown.
2. Attach Magazine Top Plate (M2) using the screws and washers in Box J. The opening of Magazine Top Plate (M2) should be toward rear of trap.



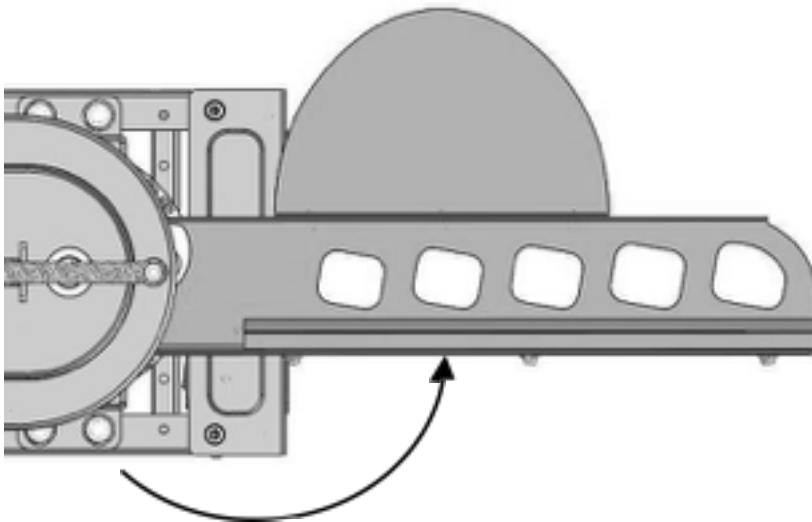
Magazine Rods



Magazine Top Plate

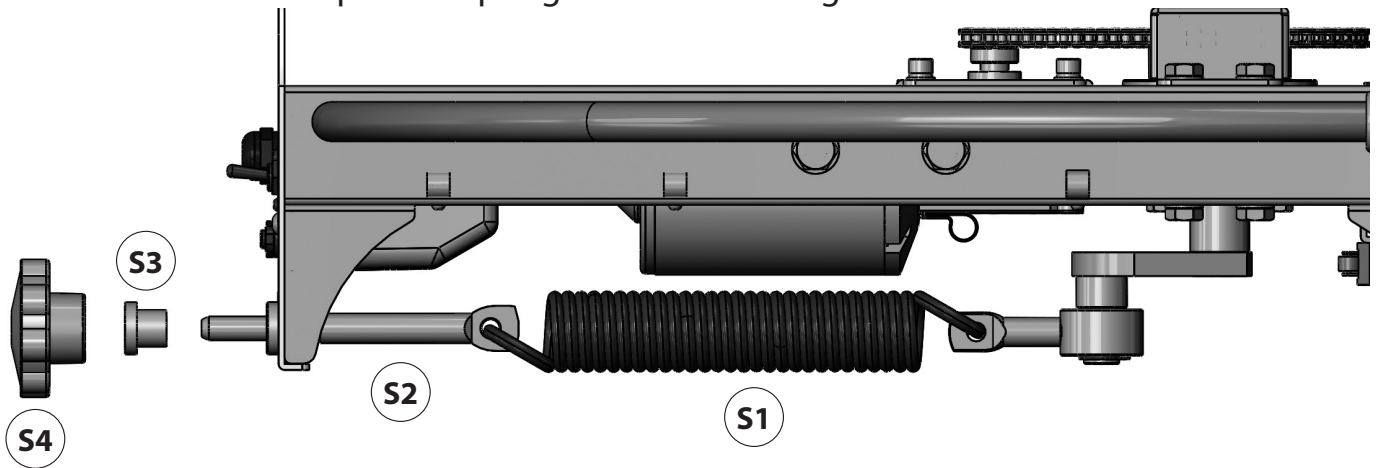
## Install Mainspring

1. Remove the plastic tie holding the throwing arm in place and rotate the arm counter clockwise 180° so it is facing forward from the trap in the 12 o'clock position, as seen below.



2. Attach the hook on one end of the Mainspring (S1) to Mainspring Bolt (S2).
3. Push threaded end of Mainspring Bolt (S2) through hole in rear of trap.
4. Attach Mainspring (S1) to crankshaft as seen in image on following page.

5. Attach the Bushing (S3) and Handnut (S4) in Box H to the Mainspring Bolt (S2).
6. With the throwing arm still facing forward of the trap, tighten the Handnut (S4) until all the slack is taken up in the spring and the bolt is tight.



## Setup



**WARNING: MAKE SURE THAT THE “ON-OFF-SAFE RELEASE” SWITCH IS SET TO THE “OFF” POSITION BEFORE CONNECTING POWER TO THE TRAP. AN UNINTENTIONAL DISCHARGE OF THE TRAP COULD CAUSE SERIOUS INJURY OR DEATH.**

**DO NOT OPERATE THE TRAP IN AN AREA THAT DOES NOT ALLOW SAFE (REAR) ACCESS TO THE TRAP AND THE ON/OFF/SAFE RELEASE SWITCH DURING LOADING AND USE.**

1. Connect the red battery lead to the positive (+) terminal and the black battery lead to the negative (-) terminal of a charged deep cycle 12V battery.
2. Remove wire ties from foot pedal release cable and attach plug end to plug on trap. Place foot pedal switch on firm ground.
3. Before loading targets into the trap, turn the On/Off/Safe Release switch to the “ON” position and check the function of the trap by depressing the foot pedal. If the trap does not cock and throw, see section VI. ADJUSTMENTS on page 17.
4. Perform a Safe Release to prepare the trap for loading clays.

**Note: It is acceptable to dry fire the trap (firing the trap without launching a target). This will not damage the trap.**

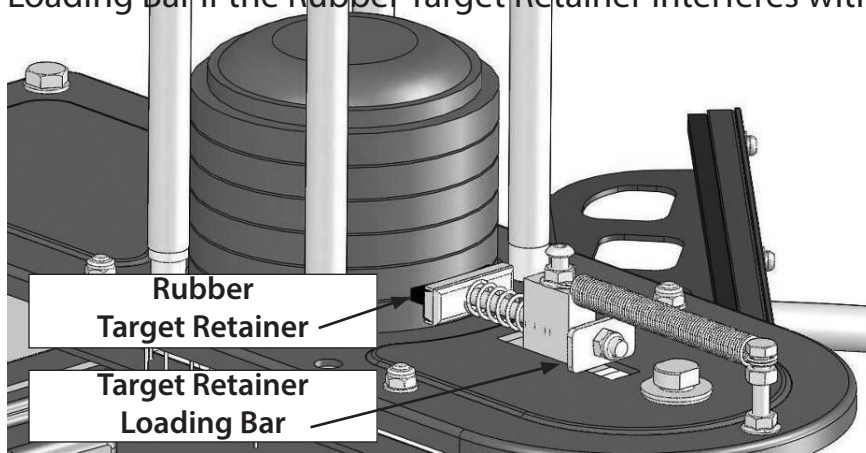
5. For additional stability of trap, insert the stake through rear hole of the Back Frame (F2) and drive into the ground.

## V. Operation



**WARNING: DO NOT STAND IN FRONT OF TRAP OR IN THE PATH OF THE THROWING ARM! SERIOUS INJURY OR DEATH MAY RESULT!**

1. The throwing arm path indicator must be mounted properly before using trap.
2. Make sure that the trap is located to allow ample clearance around machine and provide safe access to the rear of the trap during operation. The trap must be located so that the user has safe access to the rear to operate the On/Off/Safe Release switch and reload the trap.
3. Make sure that the On/Off/Safe Release switch is in the "OFF" position, and the arm is in the uncocked position (page 3).
4. Place six (6) targets into magazine and hold them flat. Pull back on Target Retainer Loading Bar if the Rubber Target Retainer interferes with the targets.



5. Release the Target Retainer Loading Bar if it was being held. The rubber target retainer should be pressing on the 2nd target. Release the targets. Continue to load targets into the magazine column.
6. After the targets are loaded, connect the trap to a fully charged 12V battery, ensuring the cord is safely away from and behind the trap.
7. Toggle the On/Off/Safe Release switch to the "ON" position.
8. The trap should cock the throwing arm and at the same time drop one target onto the throwing arm as it is cocking.
9. Activate the Foot Pedal Switch and the WHEELYBIRD 3.0™ Trap will release the throwing arm (launching the target), re-cock the throwing arm and deliver another target to the throwing arm.
10. When reloading the trap, first move the ON/OFF/SAFE RELEASE switch on the trap to the "SAFE RELEASE" position momentarily to uncock the throwing arm. Allow the switch to return to the "OFF" position. The trap magazine can then be safely reloaded with targets from the rear of the trap.



**WARNING: IF THERE IS A TARGET ON THE THROWING ARM, SAFE RELEASING THE THROWING ARM WILL THROW THE TARGET. DO NOT STAND IN FRONT OR**



TO EITHER SIDE OF THE TRAP

## VI. Adjustments

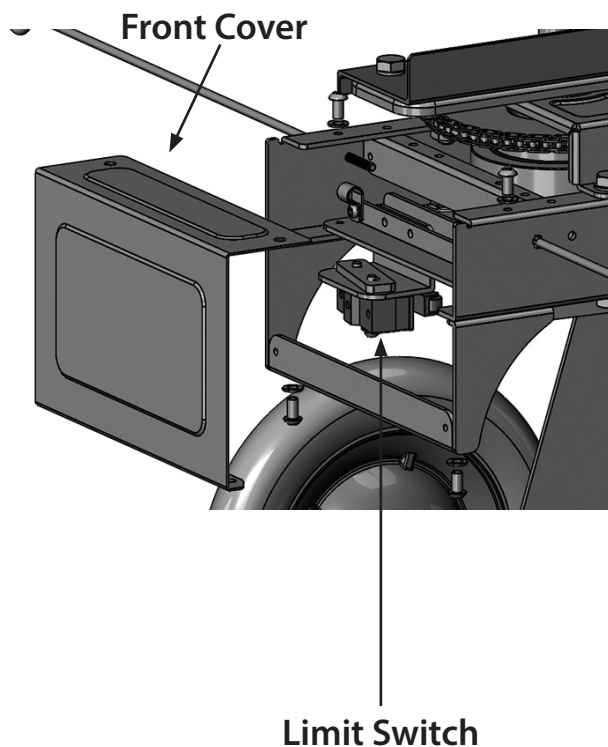
### (A) Throwing Arm Limit Switch



**WARNING: BEFORE MAKING ANY ADJUSTMENTS, MAKE SURE THE THROWING ARM IS IN THE UNCOCKED POSITION, THE ON/OFF/SAFE RELEASE SWITCH IS IN THE "OFF" POSITION, AND THE BATTERY IS DISCONNECTED FROM THE TRAP! DO NOT MANUALLY FORCE THE THROWING ARM THROUGH THE UNCOCKED POSITION AS THE MAIN SPRING WILL ENGAGE AND FIRE THE TRAP, POTENTIALLY CAUSING SERIOUS INJURY OR DEATH.**

The switch is set at the factory, but can loosen during shipment. Only make adjustments to the limit switch if a target doesn't drop onto the throwing arm as the throwing arm is cocking, or the throwing arm continuously fires. TEST MACHINE FIRST WITHOUT ANY TARGETS.

The limit switch controls the stop position of the throwing arm during the traps cocking cycle. The limit switch is located under the trap cover near the front of the trap. The front cover can be removed to gain easier access to the switch. Replace cover after adjusting switch.



Adjustments to the limit switch are made by loosening the two mounting screws and moving the switch slightly (small movements will make a big difference):

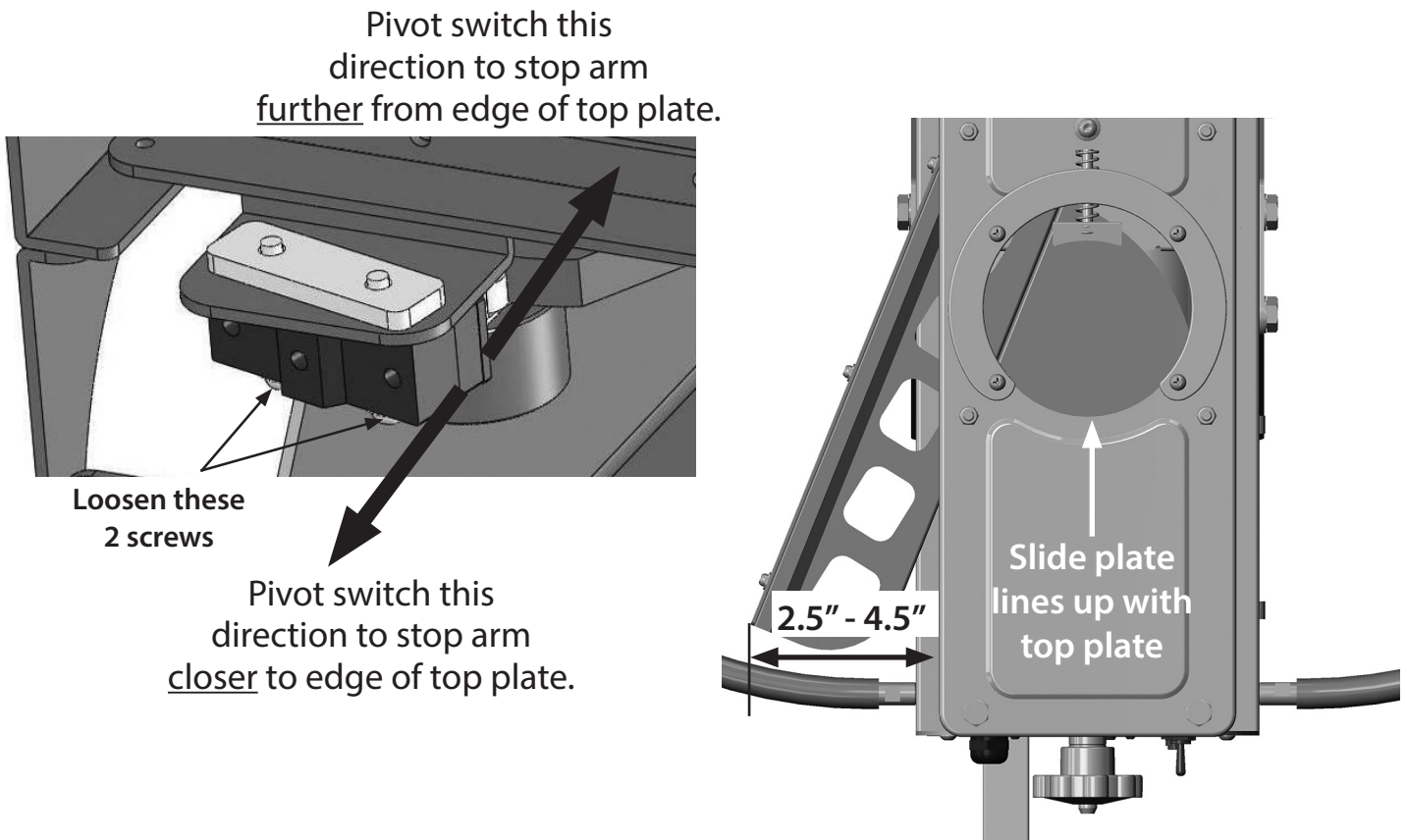
1. Pivot the switch slightly towards the rear of the trap to make the arm stop further away from the edge of the main body.
2. Pivot the switch slightly towards the front of the trap to make the arm stop closer to the edge of the main body.
3. Retighten the mounting screws after adjusting the switch.
4. Adjust the switch so that a target drops onto the throwing arm as the arm is cocking. With the on/off/safe release switch set to the "On" position, the tip of the arm should stop within 2.5" to 4.5" from the edge of the top plate of the trap. The opening in the sliding plate should line up with the opening in the top plate and allow a target to drop.



**WARNING: ADJUSTING THE ARM TO STOP AT A POINT TOO FAR AWAY FROM THE TRAP BODY CAN RESULT IN A DELAYED RELEASE, IMPROPER LOADING, AND TARGETS BREAKING. THIS COULD RESULT IN PERSONAL INJURY OR DEATH FROM THE THROWING ARM.**



**WARNING: ADJUSTING THE ARM TO STOP AT A POINT TOO CLOSE TO THE TRAP BODY CAN RESULT IN THE ARM CONTINUOUSLY FIRING OR FIRING UNEXPECTEDLY WHICH COULD RESULT IN PERSONAL INJURY OR DEATH FROM THE THROWING ARM.**

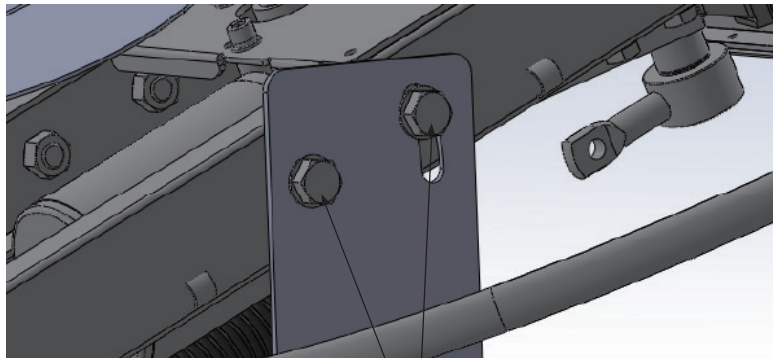


## *(B) Elevation Adjustment*



**WARNING: BEFORE MAKING ANY ADJUSTMENTS, MAKE SURE THE THROWING ARM IS IN THE UNCOCKED POSITION, THE ON/OFF/SAFE RELEASE SWITCH IS IN THE “OFF” POSITION, AND THE BATTERY IS DISCONNECTED FROM THE TRAP. DO NOT MANUALLY FORCE THE THROWING ARM THROUGH THE UNCOCKED POSITION AS THE MAIN SPRING WILL ENGAGE AND FIRE THE TRAP, POTENTIALLY CAUSING SERIOUS INJURY OR DEATH.**

1. To adjust the elevation, slightly loosen the four bolts (two on each side of the trap).
2. Change the elevation by grasping the trap main body and pivoting the trap to the desired position.
3. Re-tighten the four bolts to secure the trap in the new position.



**Loosen Bolts and  
Adjust Elevation**

### (C) Distance Adjustment



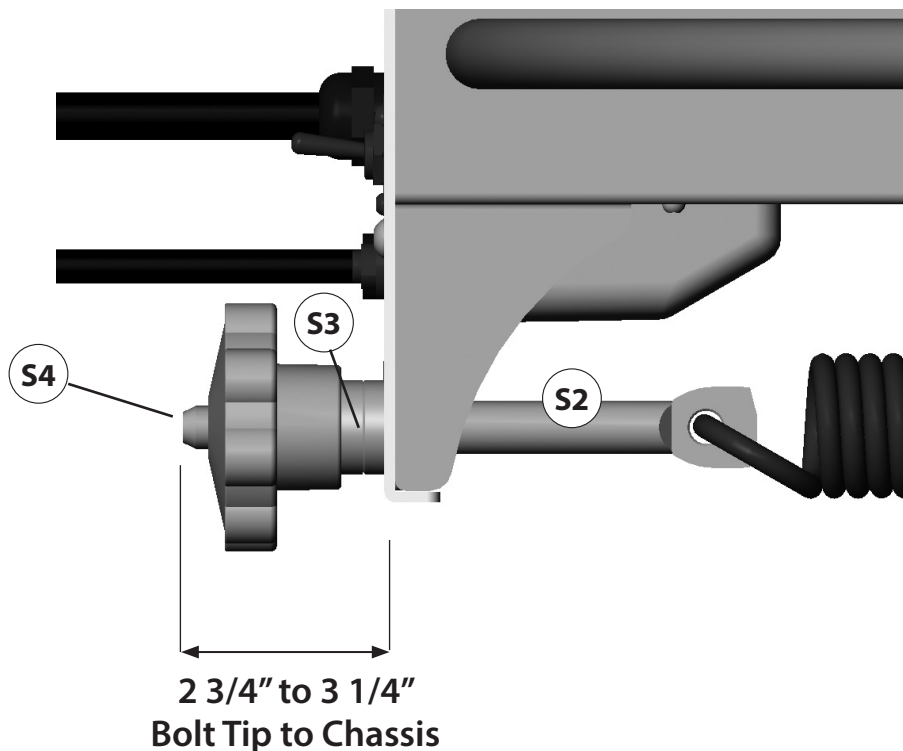
**WARNING:** BEFORE MAKING ANY ADJUSTMENTS, MAKE SURE THE THROWING ARM IS IN THE UNCOCKED POSITION, THE ON/OFF/SAFE RELEASE SWITCH IS IN THE “OFF” POSITION, AND THE BATTERY IS DISCONNECTED FROM THE TRAP. THIS TRAP IS CAPABLE OF THROWING TARGETS A DISTANCE OF UP TO 75 YARDS. USE ONLY IN AREAS WHERE THERE IS NO RISK OF INJURY TO ANOTHER PERSON OR CAUSING OTHER DAMAGE.



**WARNING:** DO NOT MANUALLY FORCE THE THROWING ARM THROUGH THE UNCOCKED POSITION AS THE MAIN SPRING WILL TAKE OVER AND FIRE THE TRAP, POTENTIALLY CAUSING SERIOUS INJURY OR DEATH.

Adjustment to throwing distance is made by adjusting the mainspring tension.

1. When the Handnut (S4) is adjusted correctly to ensure the Mainspring Bolt (S2) extends approximately 3 1/4" from the chassis of the trap, the mainspring is under standard tension. This setting achieves maximum throwing distance.
2. If reduced throwing distance is desired, mainspring tension can be adjusted to reduce the throwing distance. Loosen the Handnut (S4) up to 1/2" on the Mainspring Bolt (S2), leaving the bolt protruding 2 3/4" from the chassis of the trap. **DO NOT EXCEED THIS AMOUNT-DAMAGE OR PREMATURE WEAR COULD RESULT.**
3. Check Handnut (S4) every 200 throws to ensure correct setting is maintained.



## VII. Transportation and Storage



**WARNING: BEFORE MAKING ANY ADJUSTMENTS, MAKE SURE THE THROWING ARM IS IN THE UNCOCKED POSITION, THE ON/OFF/SAFE RELEASE SWITCH IS IN THE “OFF” POSITION, AND THE BATTERY IS DISCONNECTED FROM THE TRAP. UNINTENTIONAL FIRING OF THE TRAP CAN CAUSE INJURY OR DEATH FROM BEING STRUCK BY THE THROWING ARM.**



**WARNING: DO NOT TRANSPORT OR STORE TRAP WITH MAIN SPRING INSTALLED OR BATTERY ATTACHED. UNINTENTIONAL FIRING OF THE TRAP CAN CAUSE SERIOUS INJURY OR DEATH FROM BEING STRUCK BY THE THROWING ARM.**



**WARNING: NEVER REMOVE THROWING ARM PATH INDICATOR UNLESS MAIN SPRING HAS BEEN REMOVED FIRST. NEVER OPERATE TRAP WITHOUT THROWING ARM PATH INDICATOR IN PLACE. SERIOUS INJURY OR DEATH CAN RESULT.**



**WARNING: DO NOT MANUALLY FORCE THE THROWING ARM THROUGH THE UNCOCKED POSITION AS THE MAIN SPRING WILL TAKE OVER AND FIRE THE TRAP, POTENTIALLY CAUSING SERIOUS INJURY OR DEATH.**

1. Make sure the throwing arm is in the uncocked position, the on/off/safe release switch is in the “off” position, and the battery is disconnected from the trap.
2. Carefully release spring tension by removing the Handnut (S4).
3. Remove the Mainspring (S1).
4. To prevent lost parts, reattach Handnut (S4) and Bushing (S3) to Mainspring Bolt (S2) for transportation.
5. Once the Mainspring (S1) is removed, manually rotate the throwing arm to the 6 o'clock position where it will be protected and is as compact as possible.
6. Remove magazine assembly by sliding the magazine rods off the magazine studs.
7. If necessary, detach Throwing Arm Path Indicator Tubing (A1) from both Throwing Arm Path Indicator Tube Studs (A3) and both Throwing Arm Path Indicator Tube Supports (A2).
8. If necessary, unscrew both Throwing Arm Path Tube Supports (A2) from trap.
9. Store trap indoors away from the elements and out of children's reach.

## **VIII. Troubleshooting**

### **THE MOTOR WILL NOT START**

1. The "ON-OFF-SAFE RELEASE" switch on the trap is in the "OFF" position.
2. Circuit breaker on rear of trap is tripped - determine cause before resetting.
3. Battery is inadequately charged - recharge battery.
4. Electrical connections are loose or damaged.
5. The motor is hooked up incorrectly – check battery wires for correct polarity.
6. The motor is burned out.
7. The throwing arm is blocked from rotating.
8. The "ON-OFF-SAFE RELEASE" switch is broken.
9. The relay is burned out.

### **THE MOTOR RUNS, BUT DOES NOT COCK THROWING ARM**

1. Battery is inadequately charged - recharge battery.
2. Drive chain broken.

### **THE TRAP COCKS, BUT DOES NOT FIRE**

1. The "ON-OFF-SAFE RELEASE" switch is in the "OFF" position.
2. Electrical connections are loose or damaged.
3. The foot pedal switch is damaged.

### **THE THROWING ARM STOPS, BUT A TARGET DOESN'T DROP**

1. Ensure the trap elevation is angled back allowing the clays to contact the back (2) magazine rods.
2. The throwing arm limit switch is damaged or out of adjustment.
3. Adjust limit switch so arm stops closer to the edge of the top plate.
4. Test with a different brand or shipment of targets.

### **THE THROWING ARM DOES NOT STOP AND CONTINUES FIRING**

1. The throwing arm limit switch is damaged or out of adjustment.
2. Adjust limit switch so arm stops farther away from the edge of the top plate.
3. Foot pedal switch stuck.
4. Foot pedal switch cord wires are shorted together.
5. The relay is burned out.

### **EXCESSIVE TRAP NOISE OR VIBRATION**

1. Check all bolts to make sure they are tight.
2. The mainspring is loose causing "spring slap". Check to make sure there is a minimum of 2 3/4" of the Mainspring Bolt (S2) left exposed from the main thrower chassis.

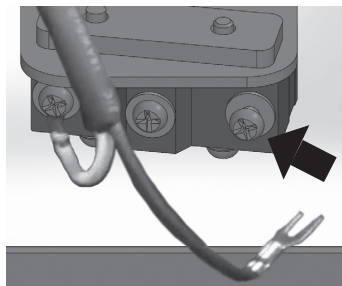
## A) Diagnosing Issues

### THE TRAP ISN'T FIRING

1. Bad or dead battery: With the battery lead hooked up and the toggle switch in the "on" position the arm of the trap will not move at all. Be sure the battery is fully charged and in good working condition. Your local automotive store can usually test your battery for free. You can also hook the trap up to your running car battery to see if the issue lies with the battery. We recommend the Duracell Ultra 12V 35AH Deep Cycle, SLADC12-35J (a 12V battery that can provide at least 30AH is necessary).
2. Foot pedal malfunction: With the trap in the "on" position, the arm comes into the cocked position, but pressing the foot pedal doesn't engage the trap. Follow the troubleshooting video found on [www.youtube.com/@championtarget](http://www.youtube.com/@championtarget).
3. On/Off Switch malfunction:
  - a. With the trap in the "on" position, the arm doesn't move but you can hold the toggle switch down (manual fire mode) to perform a Safe Release. Refer to the wiring diagram (page 25) and check for loose or bad wires. A new toggle switch can be sent to you from Champion. If there's no movement of the arm with the toggle switch up or down, then it could be a loose/bad wire or a bad relay.
  - b. With the trap in the "on" position, the arm doesn't move with the toggle switch up or down. It could be a loose/bad wire or a bad relay. Refer to the wiring diagram (page 25) for details on the electrical. If a new relay is needed, you can get this from Champion.

### THERE'S CONSTANT FIRING IN THE "ON" POSITION

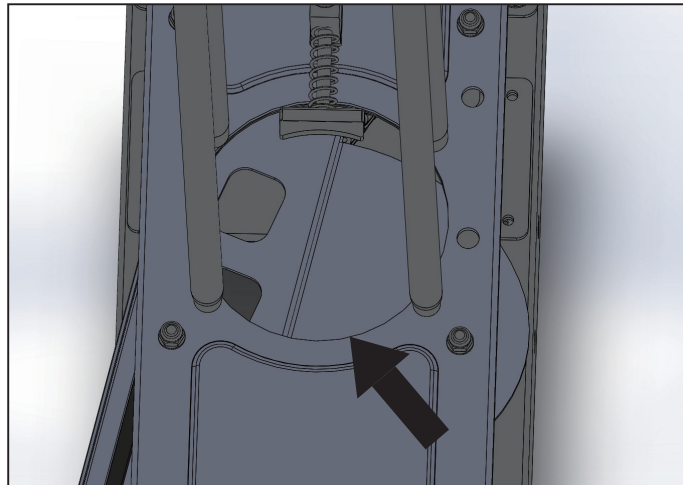
1. The limit switch is out of adjustment: Perform a Safe Release on the thrower and disconnect one of the battery leads. Go to the front of the machine and remove the front panel to access the Limit Switch. Loosen one screw on the Limit Switch and remove one of the wires as shown in the photo below. Reattach the battery lead and turn on the machine. If the thrower doesn't keep throwing, that's an indicator that the Limit Switch needs to be adjusted or it's no longer good. Refer to the video on how to adjust the Limit Switch at [www.youtube.com/@championtarget](http://www.youtube.com/@championtarget).



2. The foot pedal is malfunctioning: Follow the troubleshooting video found at [www.youtube.com/@championtarget](http://www.youtube.com/@championtarget).
3. The "on"/"off" switch is wired incorrectly: It's possible the switch is always sending power to the motor. Refer to the wiring diagram below (page 25). To test if it's the toggle switch, follow the same steps above for disconnecting the limit switch wire. Reattach the battery lead and try to perform a safe release. If the safe release doesn't work, the wiring for the toggle switch may be incorrect or a wire may have come loose or gone bad. If you find it is incorrect, please contact Champion for a replacement part.

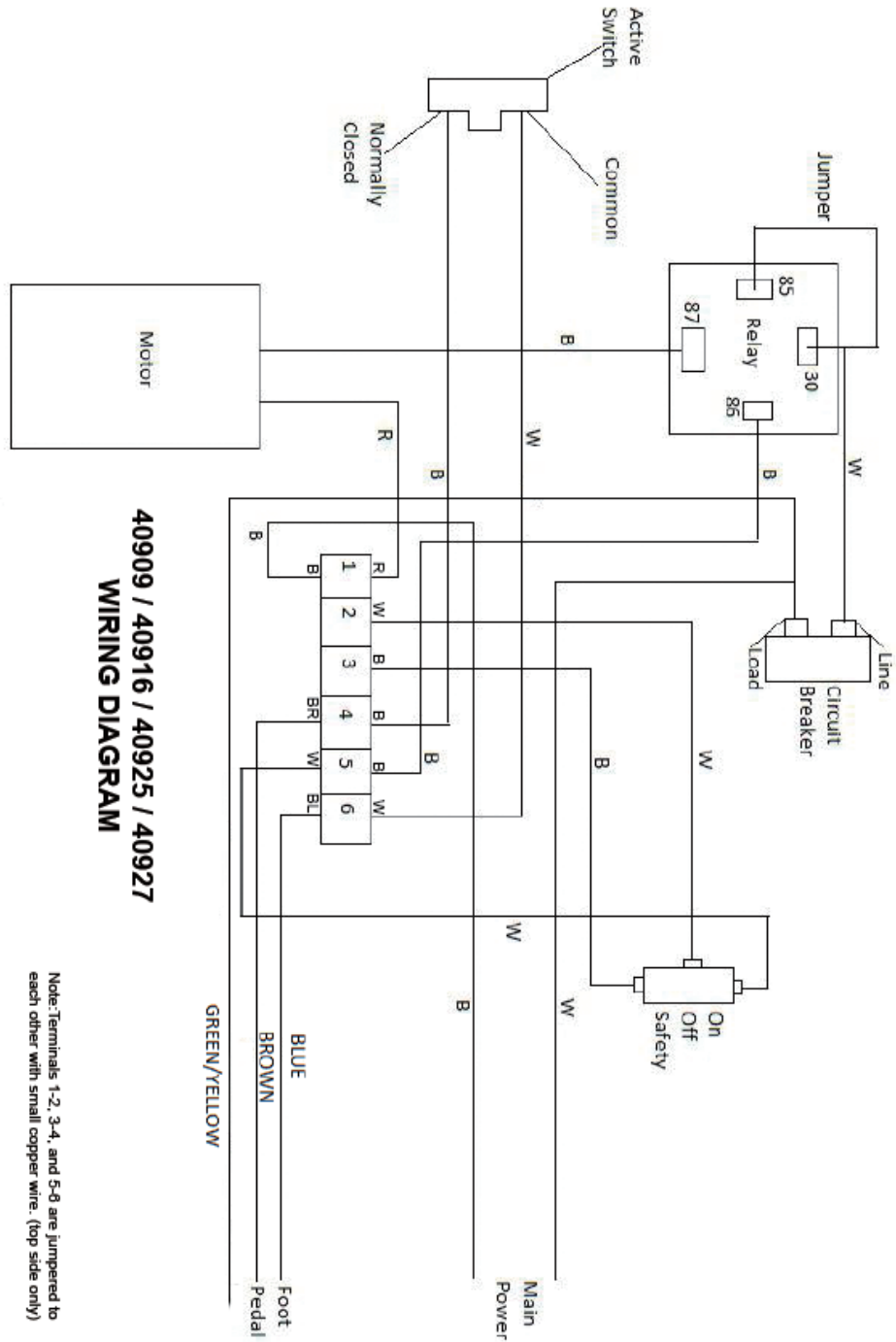
## THE TRAP KEEPS BREAKING CLAYS

1. Damaged flight rail: The rubber strip or whiskers may be damaged, or the arm may be bent. Contact Champion for replacement parts.
2. Slide Plate malfunction: The Slide Plate is exposed at the bottom, not allowing the clays to fall properly or at all. Perform a Safe Release (the plate will be sticking out) and then push the toggle up into the on position so the arm is now cocked. This should reset the Slide Plate so it's no longer visible. If this isn't the case (as in the plate is still visible), proceed to adjusting the Limit Switch
3. Limit Switch adjustment: The Limit Switch is out of adjustment causing the clays to break or not allowing the clays to drop onto the arm. A good indication that the Limit Switch is adjusted properly is the location of the slide plate. A properly positioned Slide Plate is shown in the photo below. Refer to the video on how to adjust the limit switch at [www.youtube.com/@championtarget](http://www.youtube.com/@championtarget).





## B) Wiring Diagram



## IX. Maintenance



**WARNING: BEFORE PERFORMING ANY MAINTENANCE ON THE TRAP, MAKE SURE THAT THE THROWING ARM IS IN THE UNCOCKED POSITION, THE ON/OFF/SAFE RELEASE SWITCH ON THE TRAP IS IN THE "OFF" POSITION, AND THE BATTERY HAS BEEN DISCONNECTED. DO NOT MANUALLY FORCE THE THROWING ARM THROUGH THE UNCOCKED POSITION AS THE MAIN SPRING WILL ENGAGE AND FIRE THE TRAP, POTENTIALLY CAUSING SERIOUS INJURY OR DEATH.**

<b>Preventive Maintenance Action</b>	<b>Frequency</b>
Remove dust, dirt, and target debris with soft brush	Before every use
Check mounting bolts to insure they remain tight	Every month or 8,000 cycles
Lubricate moving parts with a good quality lubricating oil such as HOPPE'S® Black Gun Grease	Every month or 8,000 cycles
Disconnect Battery	After every use



**WARNING: ALWAYS CHECK THAT THE WIRING, THROWING MECHANISM, AND SAFETY FEATURES ARE IN GOOD CONDITION AND THAT THE TRAP IS FREE OF DEBRIS BEFORE EVERY USE. FAILURE TO PROPERLY MAINTAIN THIS PRODUCT COULD INCREASE RISK OF DEATH OR SERIOUS INJURY.**

## X. Replacement Parts

Parts are available by calling Champion Customer Service Department at (800) 533-5000.



## **XI. Contact Information**

**Champion Traps and Targets  
9200 Cody St.  
Overland Park, KS 66214**

**To reach us, please call our toll free number at (800) 533-5000. Our hours are Monday - Thursday from 7AM to 3PM PST. Otherwise, please fill out the "Contact Us" form on our website, [www.championtarget.com](http://www.championtarget.com)**

**Champion Traps and Targets  
9200 Cody St.  
Overland Park, KS 66214  
Toll Free: (800) 533-5000  
[www.championtarget.com](http://www.championtarget.com)  
Email: Fill out the "Contact Us" page at [championtarget.com](http://championtarget.com)**

