

CHAMPION[®]

Traps & Targets

EASYBIRD AUTO-FEED TRAP – 12VDC

Part No. 40910 / 40917



Instruction Manual



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



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I. Introduction

The EasyBird Auto-Feed Trap is designed for the active sporting clays, trap, and skeet shooter looking for an automatic, lightweight, and portable machine for practice/fun shooting.

Features and benefits of the Easy Bird Auto-Feed Trap:

Safety

- On-Off-Safe Release switch provides safe method to uncock arm.
- Arm safety ring provides visual indication of throwing arm path for safety.
- 30 amp circuit breaker protects electrical wires and motor.

Convenience

- Lightweight and portable - approximately 45 lbs.
- Detachable magazine holds 50 targets.
- Throws standard 108 mm or 110mm international clay targets.
- 50 ft. release cord with foot pedal release.
- Easily mounts to Champion Trap Taxi 40261 (sold separately).

Performance

- Fast, 1-second cycle time.
- Adjustable throwing range from 55 to 65 yards.
- Runs off 12 volt battery (deep cycle type recommended).
- Three legged stand provides stable launch platform.
- Balanced throwing arm with replaceable flight rail

II. Safety



WARNING: THIS MACHINE CAN CAUSE SERIOUS INJURY OR DEATH !!!!

THOROUGHLY READ INSTRUCTIONS BEFORE INSTALLING OR OPERATING TRAP!

DO NOT STAND IN FRONT OF THE TRAP WHEN IT IS IN THE COCKED POSITION. SERIOUS INJURY OR DEATH CAN RESULT.

THIS TRAP IS CAPABLE OF THROWING TARGETS A DISTANCE OF 65 YARDS. USE ONLY IN AREAS WHERE THERE IS NO RISK OF CAUSING DAMAGE, OR HITTING A PERSON WITH A TARGET.

Caution: The Easybird Auto-Feed Trap must have ample clearance around the trap. The on/off/safe release switch for the trap is located on the rear of the trap and allows the trap to be uncocked before approaching it.



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

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.

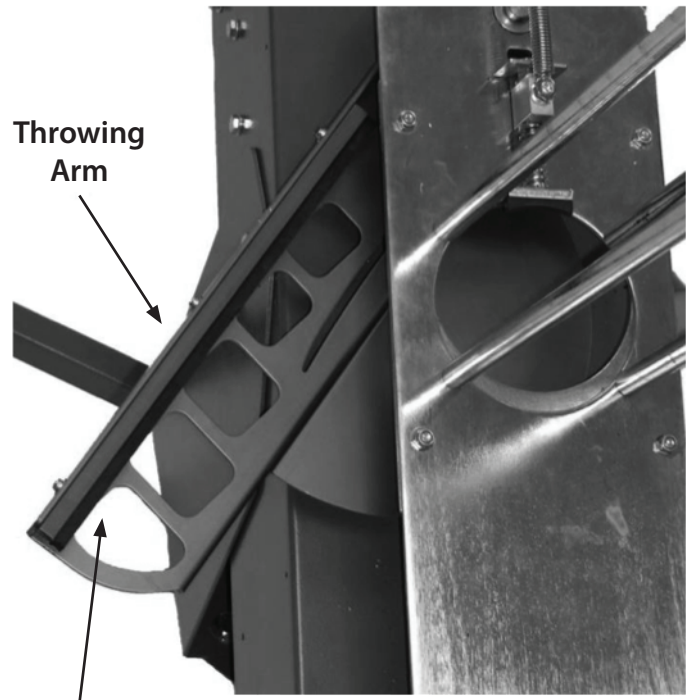


WARNING: BEFORE PERFORMING ANY REPAIR, MAINTENANCE, OR ASSEMBLY, MAKE SURE THE THROWING ARM IS IN THE UNCOCKED POSITION (SEE PHOTO BELOW), THE ON/OFF/SAFE RELEASE SWITCH LOCATED ON THE REAR OF THE TRAP IS IN THE 'OFF' POSITION (SEE PHOTO BELOW), AND THE BATTERY IS DISCONNECTED FROM THE TRAP.

1. 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 fire the throwing arm. After the arm 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



Throwing Arm
Flight Rail
Uncocked Arm Position



On/Off/Safe Release Switch

Circuit Breaker

2. All personnel operating the trap should be thoroughly familiar with the operating instructions and the safety issues relating to the trap.
3. Do not leave trap in the cocked position. Not only is this potentially dangerous, but it puts undue stress on the mainspring.
4. Always load the trap magazine from the rear of the trap.
5. Keep hands and body outside the trap and throwing arm path indicator areas while the trap is operating. This ring shows the throwing arm's path when throwing a target, and should always be attached to the trap when it is in use.
6. 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.
7. Always wear eye and hearing protection when shooting.



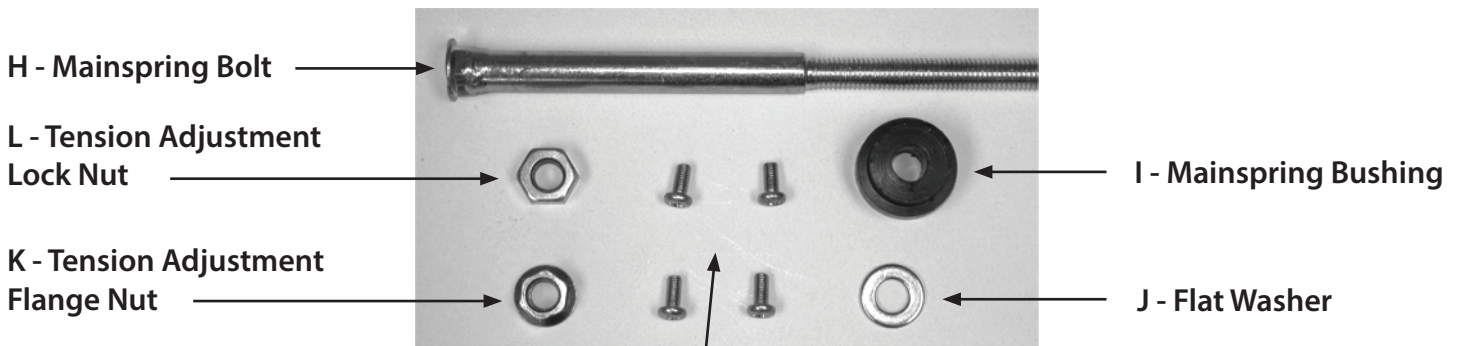
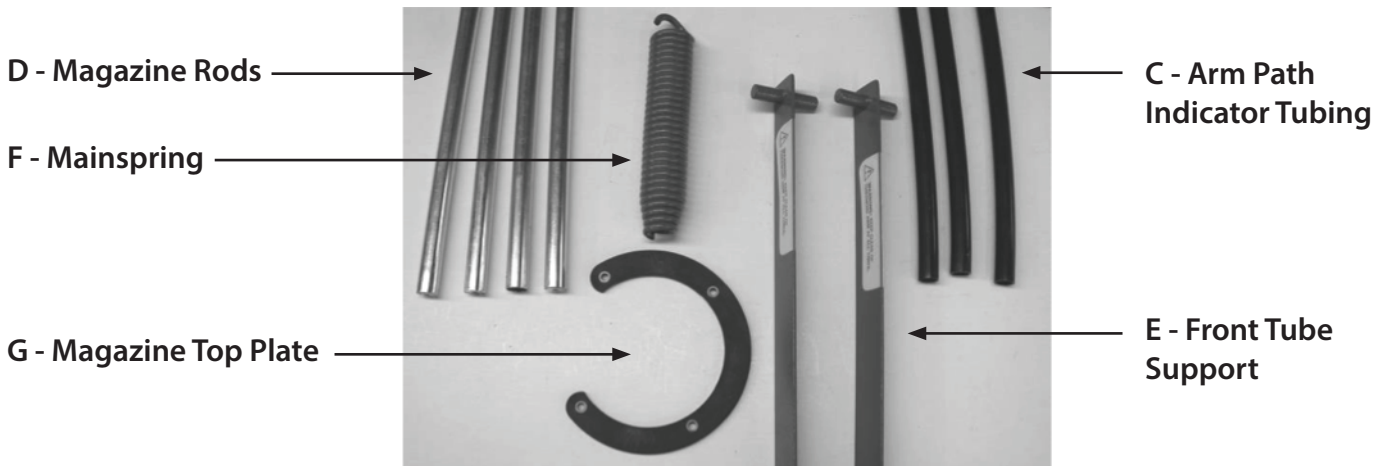
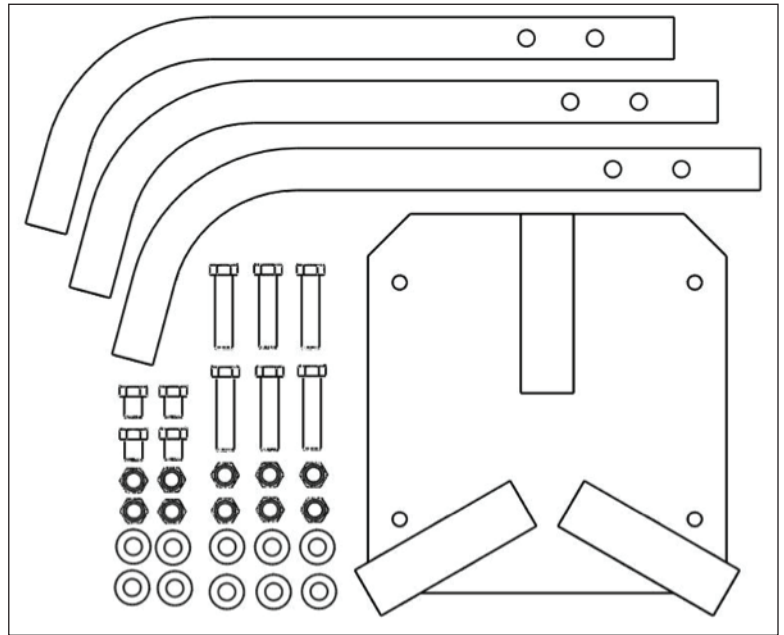
WARNING: FAILURE TO FOLLOW SAFETY RULES CAN RESULT IN SERIOUS INJURY OR DEATH!

III. Assembly and Installation

1. Contents of Trap Box

ITEM	DESCRIPTION
A.	EASYBIRD AUTO-FEED TRAP
B.	Instruction Manual
C.	Arm Path Indicator Tubing - 3 ea
D.	Magazine Rod - 4 ea.
E.	Front Tube Support - 2 ea.
F.	Mainspring
G.	Magazine Top Plate
H.	Mainspring Bolt
I.	Mainspring Bushing
J.	Flat Washer
K.	Tension Adjusting Flange Nut
L.	Tension Adjusting Lock Nut
M.	Magazine Top Plate Screws - 4 ea.
N.	Three Legged Stand Box

N-Contents of Three Legged Stand Box



M - Magazine Top Plate Screws

2. 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. Check that all parts were included in shipping box. If any parts are missing, call the CHAMPION Customer Service Department at (800) 635-7656 to obtain replacement parts.
3. Carefully remove trap and all other components from cardboard shipping box.
4. Remove the carriage bolts, large washers, lock washers, and wing nuts that secure the trap to the shipping board. Save these for mounting the trap.
5. Save all packing material and box if trap should ever need to be returned for service or replacement.
6. Refer to the following installation instructions prior to assembling the trap.

3. Mounting the Trap

Caution: The Easybird Auto-Feed Trap must be bolted down to a flat, solid surface, the three legged stand, or the Trap Taxi trailer to minimize movement of the trap while operating. Failure to do so may damage the machine and void warranty.

Provide ample clearance around the trap.

The on/off/safe release switch for the trap is located on the rear of the trap and allows the trap to be uncocked before approaching it.

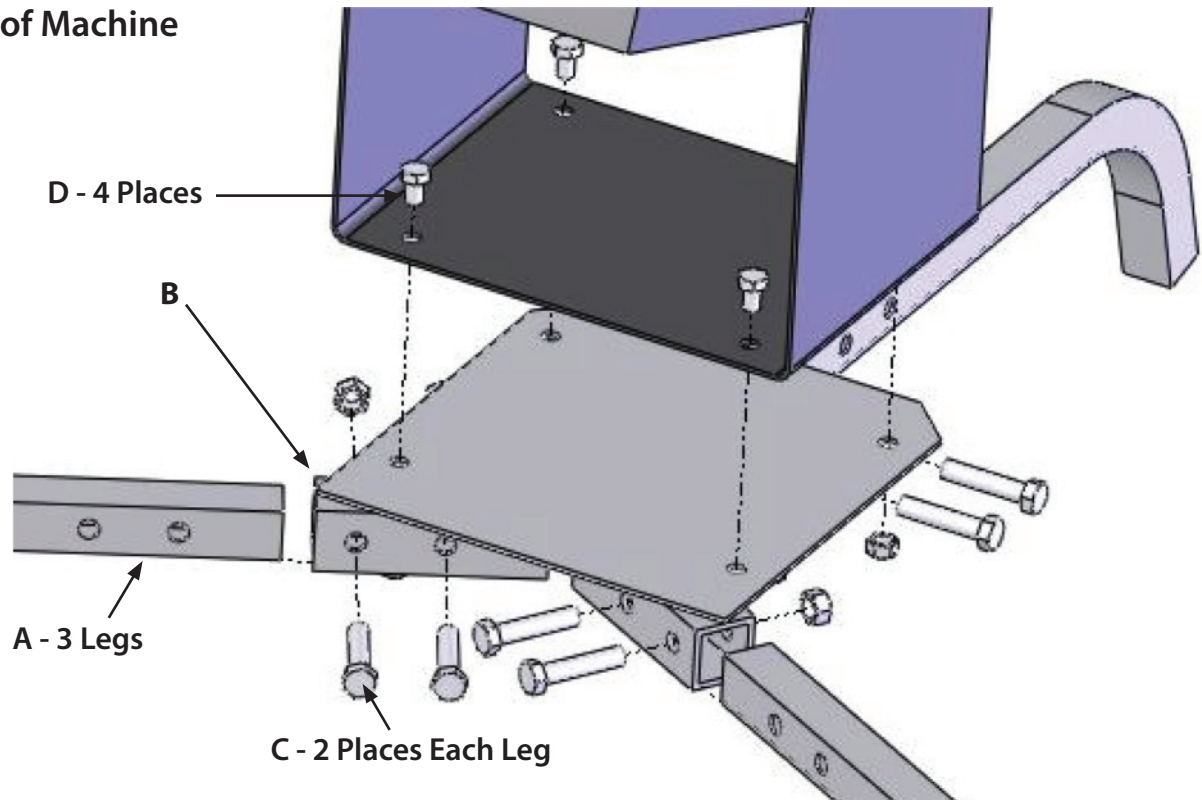


WARNING: IF THERE IS A TARGET ON THE THROWING ARM, SAFE RELEASING THE ARM WILL THROW THE TARGET. DO NOT STAND IN FRONT OF THE TRAP WHILE SAFE RELEASING THE THROWING ARM.

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. The trap may be mounted to any suitable platform or surface, providing it is sturdy and provides a means to bolt the trap down in at least two places. Carefully lift the trap and place it on the mounting surface. Install using bolts, washers, and nuts provided to securely fasten trap to mounting surface. Add additional bolts and nuts if necessary.

Front of Machine



2. To assemble and mount the trap to the three legged stand:

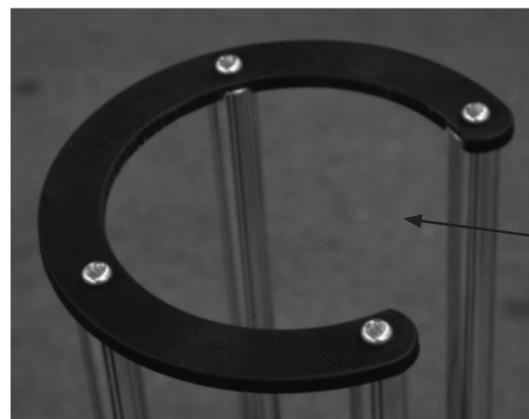
Slide each leg (A) into frame plate tube (B) as shown. Attach each leg with (C) 50mm long hex head bolts, washers, and lock nuts. Attach trap to frame plate with (D) 20mm long hex head bolts, washers, and lock nuts. Tighten all nuts and bolts securely.

4. Mounting the Magazine Assembly

The four (4) Magazine Rods (D) are attached to the trap by slipping them over the studs mounted to the trap top plate. Attach the Magazine Top Plate (G) with the four (4) Magazine Top Plate Screws (M) keeping the opening of the Magazine Top Plate toward the rear of the machine.



Magazine Rods



Rear of Machine

Magazine Top Plate

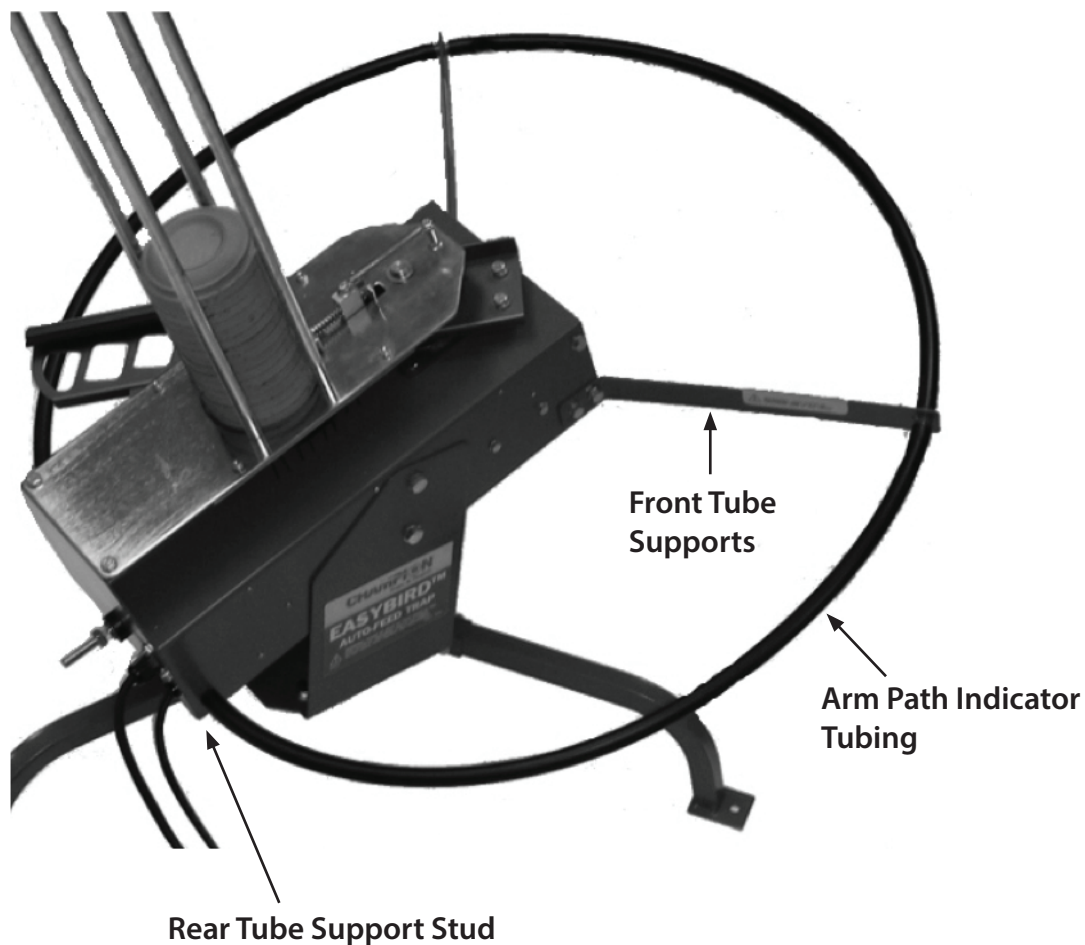
5. Mounting the Throwing Arm Path Indicator

1. Attach the two (2) Front Tube Supports (E) to front sides of trap body using the four (4) bolts in the lower front body (two on each side). Make sure that warning labels are upright. Tighten all four (4) bolts on Front Tube Supports securely.
2. Slide three (3) pieces of Arm Path Indicator Tubing (C) over ends of Front Tube Supports and Rear Tube Support Studs at rear of trap body. This ring indicates the approximate path of the Throwing Arm.



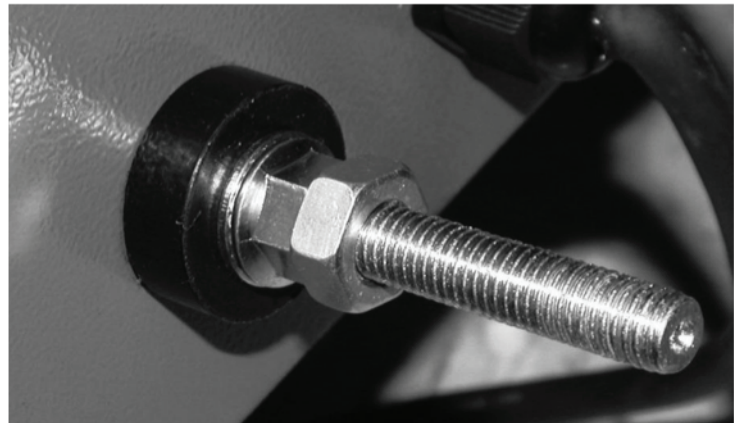
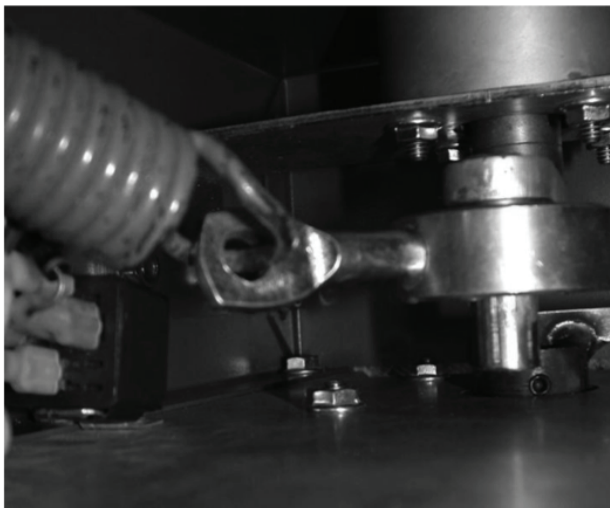
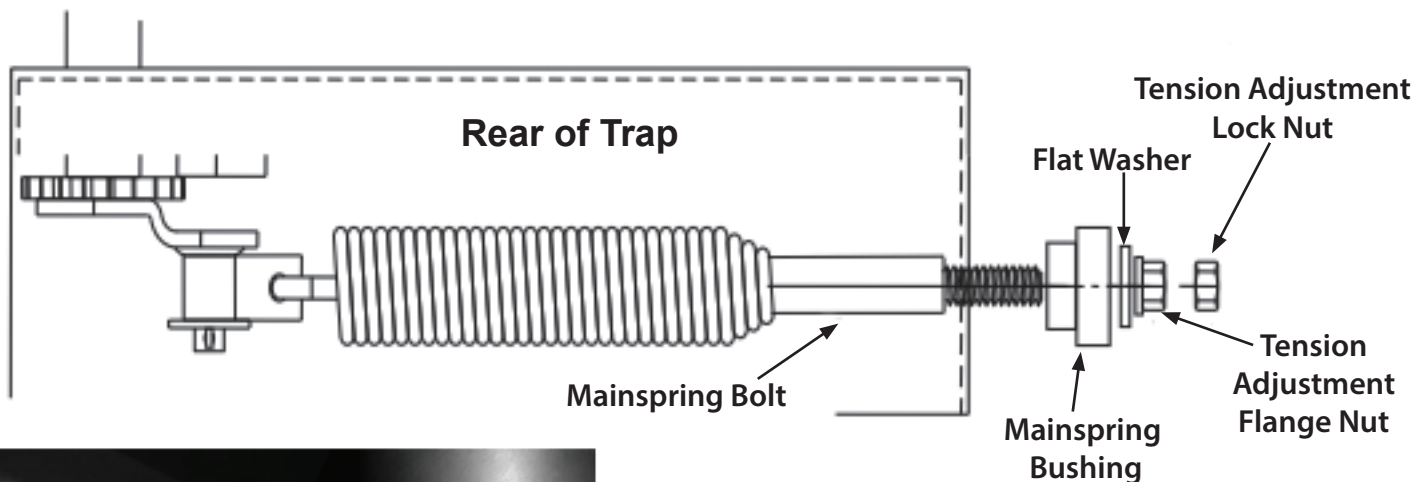
WARNING: FAILURE TO KEEP HANDS AND BODY OUTSIDE THE THROWING ARM PATH INDICATOR AREA CAN RESULT IN SERIOUS INJURY OR DEATH FROM BEING STRUCK BY THE THROWING ARM DURING USE.

Caution: Do not lift trap by throwing arm path indicator, or front tube supports, these were not designed to be a lifting point.



6. Installing the Mainspring

1. Remove the plastic tie holding the arm in place and rotate the arm counter clockwise 180° so it is facing forward of the trap in the 12 o'clock position. (If arm cannot be rotated to 180° position, connect the trap to a battery as shown in step 7 and briefly push and release the safe release switch, this will move the drive bar out of the way and allow the arm to be moved forward, REMOVE BATTERY CONNECTIONS after arm is in 180° - 12 o'clock position)
2. Remove Mainspring (F) and all remaining hardware from shipping cartons and bags.
3. Mainspring Hex Bolt (H) should be assembled into Mainspring (F) through largest opening with the threaded end of mainspring bolt showing.
4. Attach the hook end of the mainspring through the crankshaft eyebolt located inside of trap body (eyebolt should be pointing toward rear of trap)
5. Push threaded end of Mainspring Bolt through hole in rear of body.
6. Slide Mainspring Bushing (I) over Mainspring Hex Bolt so small end fits into trap body
7. Attach Flat Washer (J) and Tension Adjustment Flange Nut (K)
8. With the throwing arm still facing forward of the trap, tighten the Tension Adjustment Flange Nut until all the slack is taken up in the spring and bolt. This is the minimum spring tension point and operating the trap at any less tension will cause "spring slap" that can damage the machine. Add the Tension Adjustment Lock Nut (L) and tighten against 1st nut.
9. The throwing arm is now in the uncocked position and is under minimum tension.

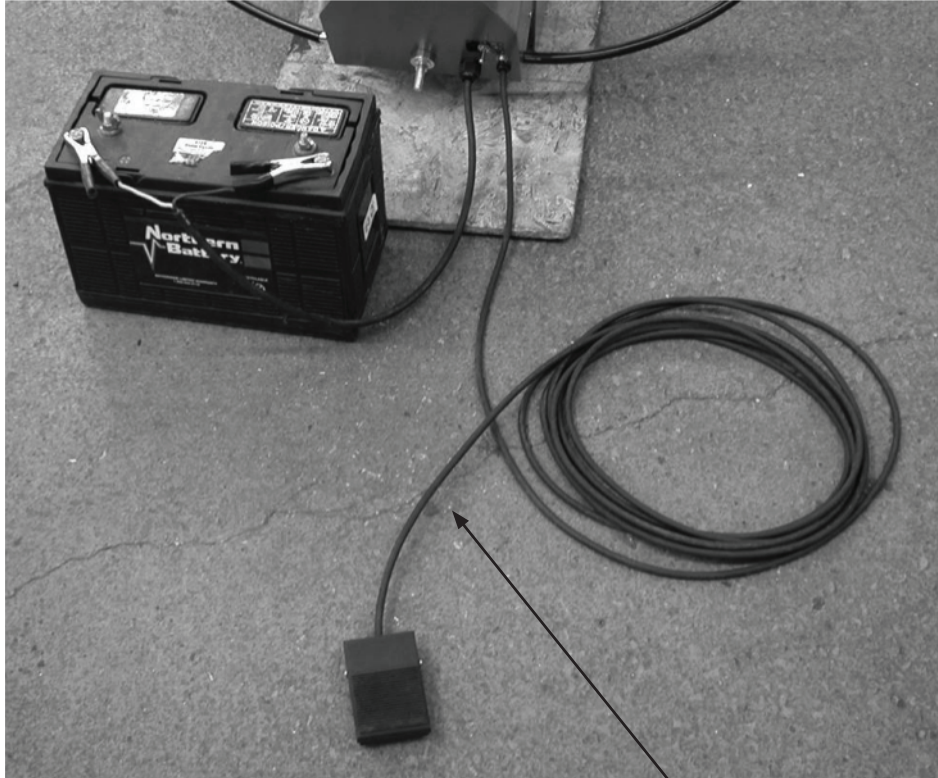


7. Power Supply and Release Cord Installation



WARNING: MAKE SURE THAT THE "ON-OFF-SAFE RELEASE" SWITCH IS SET TO THE "OFF" POSITION BEFORE CONNECTING POWER TO THE TRAP.

1. Connect the red battery lead to the positive (+) terminal and the black battery lead to the negative (-) terminal of an adequately charged deep cycle 12V battery.



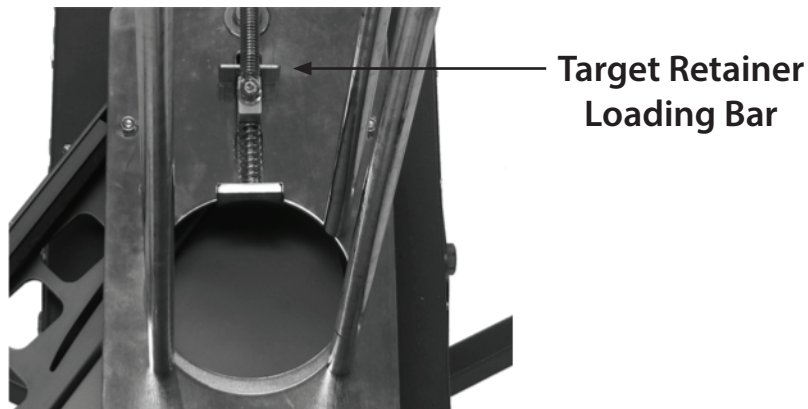
Remote
Release Cord

IV. 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 provides 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 four (4) targets into magazine and hold them flat. Pull back on Target Retainer Loading Bar if it interferes with the targets.



5. Release the Target Retainer 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. Make sure that there is an adequately charged 12VDC battery connected to the trap and that the remote release cord is safely away from and behind the trap.
7. Turn 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 Remote Release "fire" button and the EasyBird Auto-Feed Trap will release the throwing arm (launching the target), re-cock the throwing arm and deliver another target to the throwing arm.



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

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.

V. Adjustments

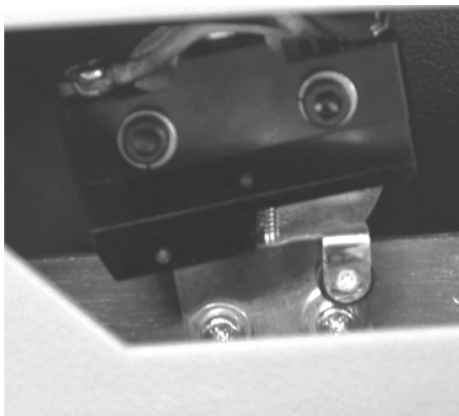
1. Throwing Arm Limit Switch



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.

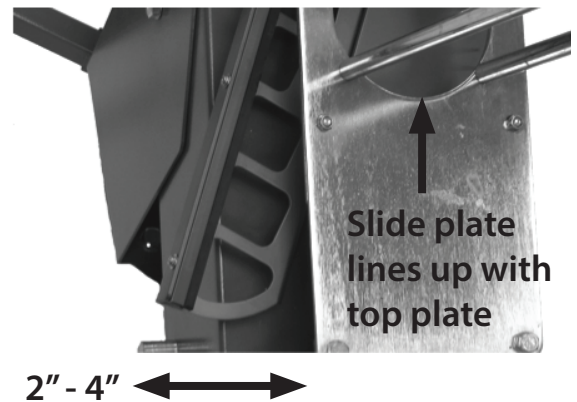
The machine is set at the factory. Only make adjustments to the limit switch if a target doesn't drop onto the throwing arm as the throwing arm is cocking, or the throwing arm continuously fires. **TEST MACHINE FIRST WITHOUT ANY TARGETS.**

1. The limit switch controls the stop position of the throwing arm during the traps cocking cycle. The limit switch is located under the trap near the front. Adjustments to the limit switch are made by loosening the two mounting screws and moving the switch slightly. Move the switch towards the center of the trap for the arm to stop further away from the edge of the main body. Move the switch towards the end of the trap for the arm to stop closer to the edge of the main body. Re-tighten the mounting screws after adjusting the switch.



↑ Move switch this direction to stop arm closer to edge of top plate

↓ Move switch this direction to stop arm further from edge of top plate



2. Adjust arm so that a target drops onto the throwing arm as the arm is cocking. The tip of the arm should stop within 2" to 4" 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.

Caution: Adjusting the arm to stop at a point too far away from the spring's over-center point can result in a delayed release or improper loading and targets breaking.



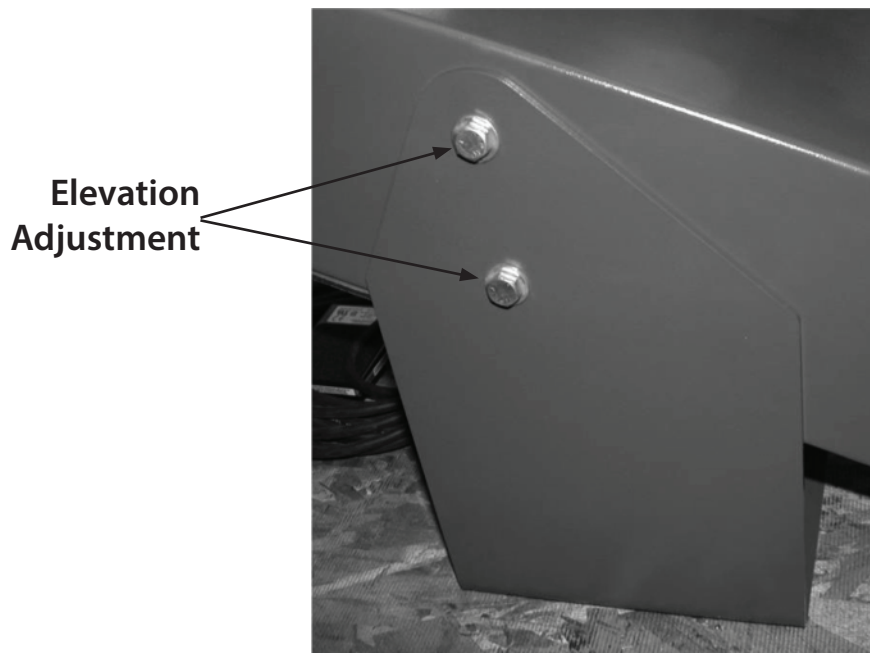
WARNING: ADJUSTING THE ARM TO STOP AT A POINT TOO CLOSE TO THE SPRING'S OVER-CENTER POINT CAN RESULT IN THE ARM CONTINUOUSLY FIRING AND CAUSING POTENTIAL INJURY FROM BEING STRUCK BY THE ARM.

2. 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.

1. To adjust the elevation, slightly loosen the four nuts--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 nuts to secure the trap in the new position.



3. Distance Adjustment

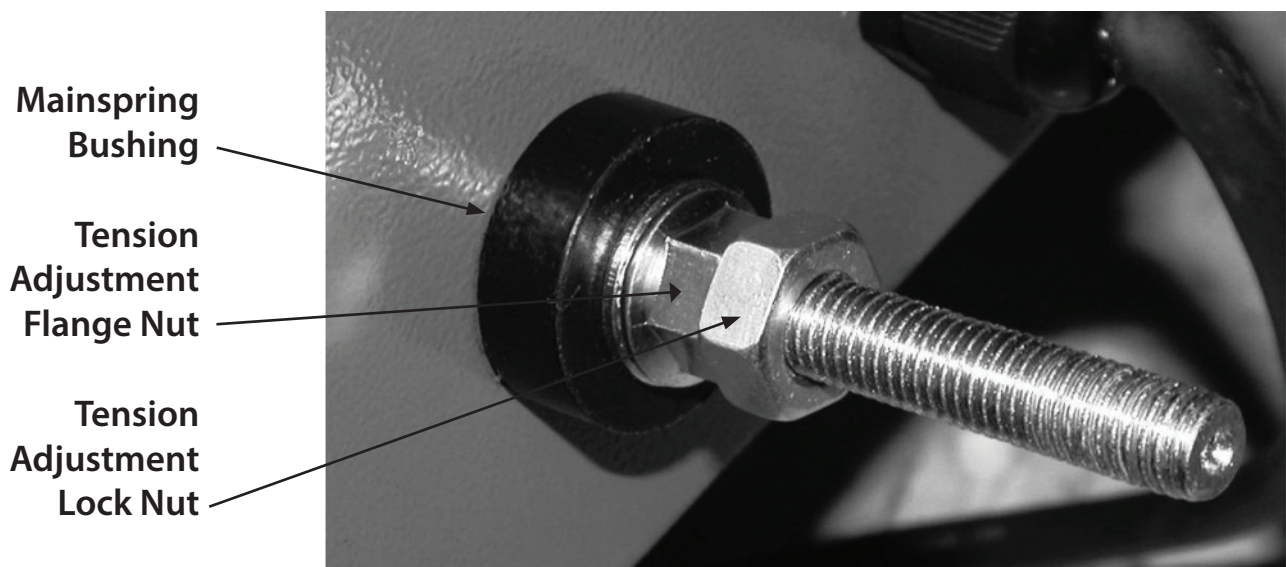


WARNING: BEFORE MAKING ANY ADJUSTMENTS, MAKE SURE THE THROWING ARM IS IN THE UNCOCKED POSITION, THE ON/OFF/SAFE RELEASE SWITCH IS IN THE "OFF" POSITION, AND THE BATTERY IS DISCONNECTED FROM THE TRAP.

THIS TRAP IS CAPABLE OF THROWING TARGETS A MAXIMUM DISTANCE OF 65 YARDS. USE ONLY IN AREAS WHERE THERE IS NO RISK OF CAUSING DAMAGE, OR HITTING A PERSON WITH A TARGET.

The trap has an adjustable throwing range of approximately 55 to 65 yards. Adjustments to throwing distance are made by adjusting the mainspring tension.

1. Loosen the Tension Adjustment Lock Nut. Turn the Tension Adjustment Flange Nut clockwise to increase spring tension and target distance, or counter-clockwise to decrease spring tension and target distance.
2. Maximum spring tension is set when the Mainspring Bushing contacts the shoulder in the mainspring bolt and the Tension Adjustment Flange Nut cannot be turned any farther. **DO NOT EXCEED THIS AMOUNT.**
3. Make sure the spring tension is not reduced to the point that there is slack in the spring when the arm is in the twelve o'clock position (straight out in front). Take up any slack in the spring when the arm is in this position. This is the minimum tension point to ensure that damaging spring slap does not occur.
4. After adjusting the spring to the desired tension, tighten the Tension Adjustment Lock Nut against the Tension Adjustment Flange Nut to lock the setting in place.



VI. Troubleshooting

I. 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.

II. THE MOTOR STARTS, BUT DOES NOT COCK THROWING ARM

1. Battery is inadequately charged - recharge battery.
2. Drive plate broken on motor

III. 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 remote fire button or wireless release system is damaged.

IV. THE THROWING ARM STOPS, BUT A TARGET DOESN'T DROP

1. The throwing arm limit switch is damaged or out of adjustment.
2. Adjust limit switch so arm stops closer to the edge of the top plate

V. 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. Remote release system fire button stuck in the "on" position.
4. Remote release system cord wires are shorted together.

VI. 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 no slack in the spring when throwing arm is at 12 o'clock position.

VII. Maintenance



WARNING: BEFORE PERFORMING ANY MAINTENANCE ON THE EASYBIRD AUTO-FEED TRAP MAKE SURE THAT THE THROWING ARM IS IN THE UNCOCKED POSITION, THE ON/OFF/SAFE RELEASE SWITCH ON THE EASYBIRD AUTO-FEED TRAP IS IN THE "OFF" POSITION AND THE BATTERY HAS BEEN DISCONNECTED FROM THE EASYBIRD AUTO-FEED TRAP.

Preventive Maintenance Action	Frequency
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 Teflon based lubricating oil such as OUTERS Tri-Lube	Every month or 8,000 cycles
Disconnect Battery	After every use

VIII. Replacement Parts

Replacement parts are available by calling Champion Traps & Targets Customer Service Department at (800) 379-1732.

PART NUMBER	DESCRIPTION
45305	Mainspring (see page 5)
40226	Flight Rail (see page 3)



IX. Warranty Card (Please fill out completely & return with a copy of the receipt)

Owner's Name : _____	
Owner's Signature : _____	
Address : _____	Ph # : _____
City : _____	State : _____ Zip : _____
Date of Purchase : _____	
Business where Trap was purchased (Retailer) : _____	

WARRANTY CERTIFICATE

Congratulations on the purchase of your new **CHAMPION EASYBIRD AUTO-FEED** trap machine. Your new **EASYBIRD AUTO-FEED** is warranted to be free from defects in material or workmanship for a period of six (6) months from the date of purchase. This warranty is extended only to the original consumer purchaser. Should you believe that your **CHAMPION EASYBIRD AUTO-FEED** is defective in material or workmanship, you should contact the **CHAMPION TRAPS & TARGETS** Customer Service Department via phone at 800-379-1732. In the event a warranty repair is required, all parts will be provided at no charge. THIS WARRANTY DOES NOT COVER DEFECTS OR DAMAGE RESULTING FROM: CARELESSNESS, MISUSE, IMPROPER INSTALLATION, MODIFICATION, OR NORMAL WEAR AND TEAR.

IN ORDER FOR THIS WARRANTY TO BE IN EFFECT, **YOU MUST FILL OUT THIS WARRANTY CARD AND RETURN IT TO CHAMPION TRAPS & TARGETS WITHIN 30 DAYS OF PURCHASE.** THE ATTACHED WARRANTY CARD MUST BE FILLED OUT COMPLETELY AND SIGNED BY THE OWNER IN ORDER TO BE VALID. WARRANTY SERVICES CANNOT BE PROVIDED WITHOUT MEETING THE ABOVE REQUIREMENT. RETAIN THIS WARRANTY CERTIFICATE FOR FUTURE REFERENCE. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY.

CHAMPION TRAPS AND TARGETS IS NOT LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT AND UNDER NO CIRCUMSTANCES SHALL **CHAMPION TRAPS AND TARGETS** BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. HOWEVER, SOME STATES DO NOT ALLOW LIMITATIONS ON INCIDENTAL, OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

The above warranty provides the sole and exclusive warranty available to the customer in the event of a defect in material or workmanship in the **CHAMPION EASYBIRD AUTO-FEED**. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

CHAMPION TRAPS AND TARGETS
1 VISTA WAY
ANOKA, MN 55303
1-800-379-1732
www.championtarget.com

X. CONTACT INFORMATION



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Internet: www.championtarget.com
Email: tech.expert@vistaoutdoor.com