



The Raven Auto Trap

MODEL: RAV1

INCLUDED PARTS



20

(2) Wheels, (4) Washers, and (2)



Trap Head Base with (4) M10X15 Bolts and (4) plastic washers to connect Trap Head to Base



Trap Head



(2) Safety Ring Arms and (4) M6X7 Allen Screws



Axle and Cart Handle Assembly



Main Spring and Spade Bolt



Stacker Poles (4) long and (4) short



Safety Ring



Foot Pedal



(2) Horseshoes and (4) 5mm Allen Screws



(4) M8x45 Hex Bolts with (8) Washers and (4) Nuts



(2) M8x10 Studs

And (2) M8x20 Hex Bolts with (4) Washers and (2) Nuts







Using the two 14mm M8x20 hex bolts, four M8 washers, and two M8 lock nuts, fasten the trap base to the axle as shown in the picture above. Insert a washer onto the bolt, push the bolt through the top of the trap base and align the holes to match the axle and place one washer and locknut on the end and tighten. Repeat for the opposite side.







Fasten the lower arm underneath the base assembly on either the right or left side as shown in the picture directly to the right. Using two 14mm M8x45 hex bolts, four M8 washers, and two M8 lock nuts, assemble by placing one washer onto the bolt, push through the first hole in the base and align the arm underneath, and place second washer onto bottom of bolt and tighten using the M8 locknut. Repeat for the other hole.



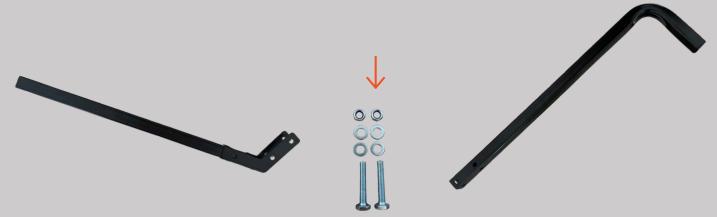






Slide one M12 washer over the axle, followed by the wheel, then one additional M12 washer on the outside, and fasten the M10 locking clip onto the wheel to hold the assembly in place. Repeat for the other side. NOTE: Before sliding the wheel onto the axle, verify the outside wheel is facing away from the axle before placing locking clip into place.





Fasten the upper handle with the angle pointing downward to the lower arm assembly using two 14mm M8x45 hex bolts, four M8 washers, and two M8 lock nuts as shown in the picture above.







Hold the trap head over the base assembly with the cord facing the cart handle. Slide the trap head inside of the base arms and push the four bolts through the base assembly, with the plastic washers between the base and the head and thread them into the head using a 17mm socket.





Position one safety ring arm over the two screw holes towards the front of the trap head. Use two of the 4mm allen screws and fasten the safety ring arm to the trap head. Repeat for the other side.





Screw in both M8x10 safety ring studs into the threaded holes towards the rear of the trap on both sides.

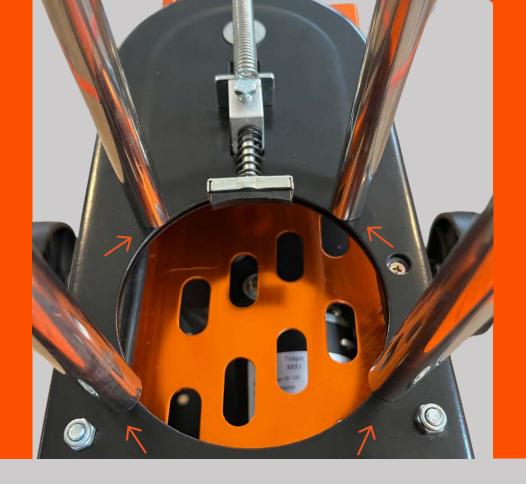








Slide the Safety Ring through the Safety Ring arms and connect to each of the M8X10 Studs towards the rear of the Trap.





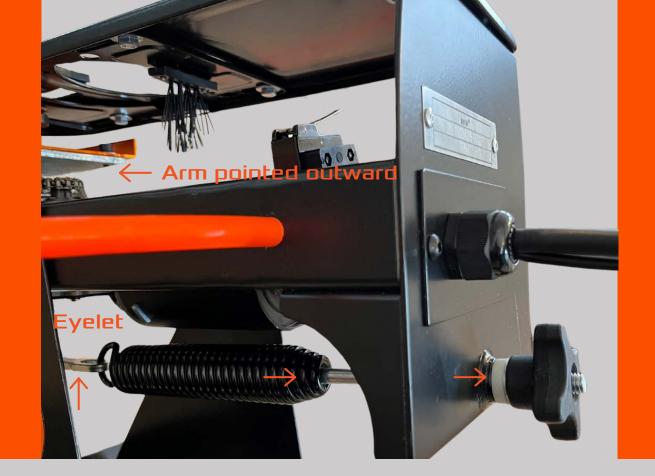


Remove the (4) rubber caps on top of the Trap Head, then slide each of the 4 longer Stacker Poles onto the now exposed mounts.





Place the first horseshoe with the opening facing the rear of the trap on top of the long stacker poles. Thread the shorter poles through the horseshoe into the long poles and tighten. Place the last horseshoe facing the rear of the trap on top of the tube setup and thread the 5mm allen screws through the horseshoe into the poles and tighten.







With the throwing arm facing 12 o'clock (straight forward), hook the spring to the eyelet underneath the front of the trap head. With the tension knob, washer and plastic grommet removed from the spade bolt, push the threaded end of the bolt inside the spring through the hole in the bottom of the rear of the trap head. Push the plastic grommet, followed by the washer, into the hole to support the bolt and tighten the knob until it is snug with the trap and there is no play in the spring.



THANK YOU

ONCE THE MAIN SPRING IS INSTALLED, THE TRAP IS
NOW LIVE AND CAN GO OFF IF LEFT IN THE COCKED
POSITION. PLEASE USE EXTREME CAUTION AND
ALWAYS REMOVE SPRING WHEN TRANSPORTING,
ADJUSTING, OR STORING THE TRAP.

Operation

- 1. Make sure deep cycle battery (not included) is fully charged. Before clamping trap alligator clips to battery, make sure the toggle switch on the trap is set to off. **NEVER CARRY TRAP BY THROWING ARM - THIS CAN BEND AND AFFECT PERFORMANCE!
 - 2. Connect foot pedal to the corded 3 prong plug coming out of the trap. **NEVER PLUG THIS INTO A WALL.
- 3. Connect red alligator clip to the positive battery post and the black alligator clip to the negative battery post.
- 4. Flip the toggle switch on the trap up to "disarm." Once arm moves to 12 o'clock position, turn the machine back off and load STANDARD SIZE CLAYS ONLY into the stacker tube assembly. Once the trap is loaded, you can flip the toggle switch down to "on." The arm will rotate counterclockwise and automatically load a clay onto the throwing arm. THE TRAP IS NOW COCKED.

 PLEASE USE EXTREME CAUTION.
- 5. ALWAYS set trap up pointing away from bystanders, trees, and animals with a recommended 400 meter open field/shot fall zone. Always look over the trap for damage and test throw a few clay pigeons before use to make sure the trap is operating properly. NEVER ADJUST TRAP WHEN COCKED AND IN FIRING POSITION!!!
- **6.** With the shooter/bystanders standing to the left or behind the trap, press the foot pedal to throw the clay!
- 7. When you are done shooting, switch the toggle switch to disarm, hold the foot pedal down until the throwing arm reaches 12 o'clock, and turn the toggle switch to off. The trap is now safe to unload/move.

Troubleshooting

ALWAYS REMOVE MAIN SPRING PRIOR TO TROUBLESHOOTING

MACHINE NOT TURNING ON

- 1. CHECK BATTERY CONNECTION. THE MACHINE DRAWS 16 AMPS TO WORK PROPERLY. WE RECOMMEND A DEEP CYCLE BATTERY WITH A MINIMUM OF 675 COLD CRANKING AMPS.
 - 2. CHECK THE 15A AUTOMOTIVE BLADE FUSE IN THE REAR OF THE TRAP HEAD.
 REMOVE THE COVER AND PULL THE FUSE OUT TO INSPECT. REPLACE AS NEEDED. SEE
 FIGURE 1 ON THE NEXT PAGE.
 - 3. CHECK RELAY. PLEASE EMAIL OR CALL CUSTOMER SERVICE IF ISSUES CONTINUE.

AUTO FIRING/NOT FIRING

- 1. IF THE TRAP CONTINUES TO FIRE, UNPLUG THE FOOT PEDAL. IF IT STOPS, THE SCREWS ON THE FOOT PEDAL NEED TO BE LOOSENED TO DEPRESS THE PEDAL DURING OPERATION.
 - 2. IF FOOT PEDAL ISSUES CONTINUE, PLEASE SEE OUR TROUBLESHOOTING PAGE ON OUR WEBSITE FOR TESTING YOUR FOOT PEDAL.
- 3. ONCE YOU HAVE ESTABLISHED YOUR FOOT PEDAL IS NOT THE ISSUE, MOVE ON TO THE LIMIT SWITCH. SEE FIGURE 2 ON THE NEXT PAGE FOR LOCATION. IF YOUR TRAP CONTINUES TO AUTO FIRE, USE A 2.5MM ALLEN WRENCH TO LOOSEN THE ALLEN SCREW AND ADJUST THE LIMIT SWITCH UP SO THE ARM WILL TRIGGER THE LIMIT SWITCH EARLIER TO STOP THE ARM FROM CONTINUOUS FIRING
 - 4. IF THE TRAP WILL NOT FIRE AND COINCIDES WITH THE LIMIT SWITCH, THIS MEANS THE ARM IS STOPPING TOO SOON. THE LIMIT SWITCH NEEDS TO BE ADJUSTED DOWN AND THEN RECHECKED TO ENSURE PROPER FIRING
 - 5. A GOOD RULE OF THUMB FOR ARM PLACEMENT WHEN LOADED IS TO MAKE SURE THE CLAY LOADS BETWEEN 1/2 AND 1 INCH FROM THE RUBBER STRIP. IF IT'S FARTHER, THE ARM IS STOPPING TOO SOON.

BREAKING CLAY PIGEONS

- 1. MAKE SURE THE STACKER TUBE HORSESHOE OPENING IS FACING THE REAR OF THE TRAP. IF IT IS FACING FORWARD, REMOVE THE CLAYS AND TURN IT AROUND SO THE OPENING FACES THE BACK OF TRAP AND THE ARM SHOULD ALWAYS BE IN THE 12 O'CLOCK POSITION WHEN LOADING CLAY PIGEONS.
- 2. IF TRAP IS "JUMPING" AROUND WHEN THE ARM SWINGS, THIS COULD BREAK CLAYS IN THE STACK OR WHILE LOADING ONTO ARM. THE TRAP SHOULD BE SECURED USING STAKES (NOT INCLUDED) OR BY MOUNTING TO A BOARD OR PIECE OF PLYWOOD FOR STABILITY.
 - 3. SOMETIMES WHEN THE STACK IS DOWN TO A FEW CLAYS, THE MOTION OF THE TRAP CAN THROW THE CLAY PIGEONS AROUND AND THEY BREAK. ONCE YOU GET DOWN TO 2-3 CLAYS LEFT, ADD MORE TO WEIGH DOWN THE STACK AND CONTINUE SHOOTING!
 - 4. CHECK TO SEE WHERE THE BASE OF FEEDER BRUSHES ARE TO THE TOP OF THE CLAY ARM. THE MOUNTING HARDWARE SHOULD NEVER TOUCH THE TOP OF THE BIRD. IF THIS IS HAPPENING, THE ARM OR CHASSIS IS BENT

OTHER

1. IF THE CLAY	IS FLYING WIT	H A WOBBLE,	, THE THROWII	NG ARM IS BE	NT AND WILL
NEED TO BE	BENT BACK OR	REPLACED.	NEVER CARRY	THE TRAP BY	THE ARM.

2. IF THE MAIN GEAR AND MOTOR ARE MOVING BUT THE THROWING ARM ISN'T THEN THERE MAY BE AN ISSUE WITH THE CLUTCH ASSEMBLY. PLEASE REFER TO THE CLUTCH TEST INSTRUCTIONS ON THE TROUBLESHOOTING PAGE ON OUR WEBSITE.

3. ALWAYS CHECK THE GREASE ON MAIN GEAR & MOTOR SPROCKET. ADD SILICONE GREASE WHEN NECESSARY TO KEEP GEARS IN PROPER WORKING ORDER

Warranty & Customer Service

Register your product online at www.doalloutdoors.com. Receipt is required for warranty registration. ONE YEAR PARTS WARRANTY.

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