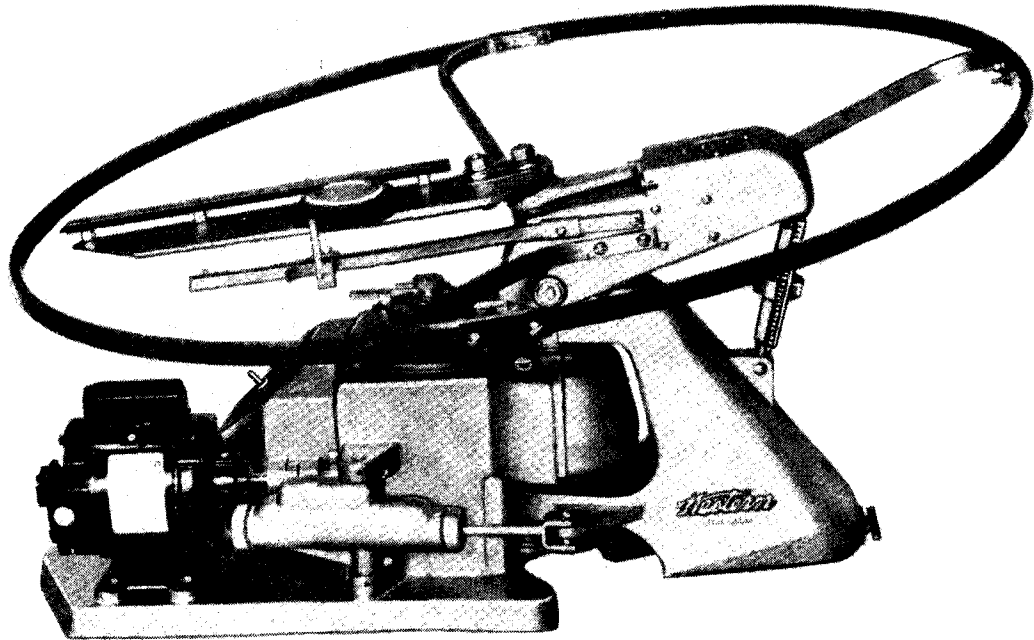


Western[®]

WHITE FLYER ELECTRIC TRAP V1524C1
(MODEL "X" — ILLUSTRATED)

MODIFIED CLAY PIGEON TRAP V1579C1
(MODEL "XS")

INTERNATIONAL CLAY PIGEON TRAP V1581C1
(MODEL "XE")



INSTALLATION

ADJUSTMENT

OPERATION

TROUBLESHOOTING

olin
WINCHESTER GROUP

OLIN CORPORATION

EAST ALTON, IL., U.S.A.

62024

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PART I INSTALLATION, ADJUSTMENT AND OPERATION

WARNING — THIS MACHINE CAN CAUSE SERIOUS INJURY!

READ INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING TO INSTALL OR OPERATE. Don't operate or stand near machine if you have any questions as to its operation. Read the following rules.

SAFETY FIRST

Master Switch X242 located on the rearwardly sloping surface of the trap base has three labeled operating positions: "ON", "OFF", and "FIRE". Be **sure** that this switch is in the center "OFF" position and trap is uncocked (fired) before installing trap, connecting power, or making any adjustments. If a power failure or other malfunction prevents the uncocking of the trap by normal methods move Master Switch to "OFF" position and uncock trap by manually rotating carrier arm **clockwise** approximately 30° to point where it continues rotating to fired position by itself (under influence of mainspring).

In the interest of safety the following rules should be **strictly enforced** and obeyed:

1. All personell required to operate any trap should first read and understand the instruction manual and subsequently be "checked out" with the trap machine by someone (e.g., club official) knowledgeable and experienced as to its safe operation.
2. Do not operate trap without the circular guard around the throwing arm illustrated in this booklet. Guard kits for all Western motorized traps are available from the factory.
3. Safety glasses must be worn by all trap operators and anyone else in the trap house to prevent injury from flying target fragments.
4. Due to frequently damp and hazardous locations, metal parts of traps must be electrically grounded to prevent possible serious injury from electrical shock. As shipped from factory, traps are equipped with an electrical plug which provides a ground connection. Do not alter. Electrical installations must be made in accordance with national electrical code and applicable local codes.
5. Do not leave trap cocked when not in use. Not only is practice very hazardous, the useful life of the mainspring will be shortened by the high stresses imposed.
6. Do not approach a cocked trap from front or right (motor) side. Both carrier arm and thrown targets are capable of causing serious injury.
7. Trap should not be operated when there is more than one person in trap house (except as necessary for instruction). Before placing Master Switch in "ON" position move to a safe loading position at rear of base on left side and insure that no one is in danger zone in front of trap house. Do not move from this position for any reason without firing trap and placing Master Switch in "OFF" position.
8. Always keep children away from trap machine and danger zone in front of trap house.
9. All trap help must have a flag or other warning device to warn shooters of the trap boy's exit from the trap house.

TRAP HOUSE

New trap houses should be built in accordance with Plate E after first reviewing current ATA rule book for compliance. Trap field layout details are shown on the rear cover of this manual. Where it is desired to use an existing trap house, it should be altered if necessary to conform to dimensions given in Plate E. Form EA 422 illustrates suggested lighting layouts for both trap and skeet fields.

INSTALLATION

Trap is shipped with mainspring disconnected and X5AW Carrier Assembly in cocked position. After unbolting and removing trap from crate bottom, rotate Carrier **clockwise** 180° to safe fired position. Assemble Mainspring, X42 Adjusting Screw and X43 Swivel. Tighten X42 until slack in linkage is removed and spring coils have just started to open.

Place trap on the 2"x12" hardwood trap plank which has previously been leveled on concrete pier. Locate trap with left side of its base parallel to plank and with front bolt holes 21" back of inside of trap house door as shown in drawings in Plate E. (Note that the rear bolt hole should be located off center ½" toward left side of plank.) Bore ½" holes in plank, spotted from the three holes in trap base, and insert Carriage Bolts X79 from under side of plank. Bolt plank securely to concrete and bolt trap securely to plank.

LUBRICATION

Always see that trap is uncocked, and electrical power disconnected before lubricating trap. (Refer to illustrations for location of points to be lubricated described below).

Trap is shipped with a supply of oil in the gear case. Check for proper level by removing X133 Level Gauge Plug on left side of trap base (upper plug). Add No. 20 SAE motor oil through X133 Filler Plug if necessary to bring to level of gauge plug.

Important: To avoid spillage in shipment, the Universal Joint Housing is not filled to its capacity of 3½ ounces. Before operating, squirt No. 20 SAE oil into housing through Oil Cup X158 in trunnion on right side of trap frame. Sufficient oil should be used to bring it up to the level of this cup. Add oil occasionally as needed to maintain this level.

At start of each shoot, place a few drops of oil on top of Mainspring Swivel X43 where it bears against the front end of Frame X3AW, and on contacting surfaces of Carrier Arm X6 and Sear X16BW. Push carrier to one side and place a few drops of oil in each of the four Ball Oilers X163 in top of Upper Frame X4BW. Also squirt about a teaspoon of oil into the X160 oil cup.

At end of first season, and each season thereafter, remove X241 Magnetic Drain Plug (lower plug on left side), drain oil, clean and replace plug. Remove filler plug and add about one pint SAE 20 motor oil to bring to level of gauge plug. Instructions for lubricating the XU129 Cocking Motor are printed on its label. All other rotating parts of the trap are equipped with oil impregnated bearings and will not require oiling.

The Recoil Snubber X135W has a sealed in supply of a special type oil which should suffice for the life of the trap. In the event of Snubber malfunction, return to factory for servicing. Trap owners should not attempt to service snubbers.

POWER SUPPLY

Refer to Plate E for trap wiring details. Note that non current carrying metal parts of trap are grounded by means of third (green) wire of X247A Power Cord which is terminated with an approved grounding-type connector cap. The connector cap, part No. X248, is of NEMA L5—15P configuration and will mate with an L5—15R two pole, three wire, grounding type receptacle. For safety reasons it is recom-

mended that receptacle be installed in area behind and to left of trap (viewed from rear).

Trap power requirements are shown on Switch Plate X115CW. Malfunctions may occur if supply voltage is not within 10% of rating.

Important: electrical installations must be made in accordance with National Electrical Code and applicable local codes!

CONNECTIONS

Make sure X242 Master Switch is in "OFF" position. Plug X248 Power Cord Connector Cap into receptacle and rotate to lock. Plug in X400 Release Assembly at rear of trap and rotate to lock.

OPERATION

Review SAFETY FIRST on page 1. To prevent trap from being fired unexpectedly and possibly causing injury, always bring button portion of X400 Release Assembly into trap house when setting up, making adjustments, etc.

After moving to the safe loading position at rear of trap base on left side of trap, push X242 Master Switch lever to the "ON" position. Carrier Arm will revolve counterclockwise approximately 180° to the "cocked" position. Firing the trap by depressing the button on the X400 Release Assembly will cause the X5AW Carrier Assembly to rapidly rotate counterclockwise under the influence of the mainspring. Carrier will continue in same direction, stopping in the "cocked" position. Note that release button must not be held depressed, but should be given only a quick press and release for each target to be thrown.

Trap can also be fired by moving Master Switch to "FIRE" position. This is a spring return position and switch will move to "OFF" when released. Note that trap will fire and not recock unless switch is again moved to the "ON" position.

Elevation Motor Switch X231W controls the Elevation Motor on traps so equipped. Note that switch has no effect unless Master Switch is in "ON" position.

Remember to always leave trap uncocked and all switches in "OFF" position before moving from the loading position at left rear of trap for any reason. After power is connected, always use Master Switch to uncock (fire) trap and shut off power before disconnecting it at any other point. This is necessary to

insure that trap will throw to the safe position before stopping.

As tested and shipped from factory, the trap will throw single targets but may require further adjustments depending upon prevailing wind conditions. Also, the trap frame is locked against oscillation, as it should remain until the following adjustments are checked.

ADJUSTMENT OF TRAP FOR SINGLE TARGETS

1. Be sure trap is uncocked (fired) and Master Switch X242 is in "OFF" position.
2. Always place Spread Adjusting Screw X32 in the central hole "D" of Angle Changing Disc X33 to lock frame in straightaway position before making the following adjustments.
3. See that Windage Adjustment Latch X30 is pointing directly to rear of trap. If not, lift and move to center notch.
4. See that the Target Stop Carrier X182 is located straddling the "S" (single target) mark on the Target Stop Guide Bar X187AW.
5. When in safe position at left rear of trap, turn on Master Switch X242 to cock trap.
6. Place target on the carrier in contact with the Rubber Rail N19W and with the Target Stop Finger X180A.
7. Fire trap by pushing button on X400 Release and note target flight. (Note that the release button should never be held down - just use a quick press and release.) The operator may use the Master Switch X242 to fire trap for set up purposes, although power to the motor will be cut each time trap is fired.
8. See that the target flight at a point 30 feet out from the front trap mounting bolts is about 9 feet above the level of shooting stations, and that the target reaches a point 50 yards from mounting bolts at same level. (See data on page 7 for V1579C1 and V1581C1 traps).
9. If correction is required, first uncock trap by moving Master Switch to "FIRE", then "OFF" position, while keeping clear of carrier. Then turn Elevation Adjustment Screw X22 in direction marked to raise or lower the target trajectory.
10. Turn Mainspring Adjusting Screw X42 a half turn at a time clockwise to increase distance, or counterclockwise to decrease distance. Always return Master Switch to "FIRE" and "OFF" positions before making further adjustments after

rechecking target flight.

11. Note levelness of target flight. If target leans to the left, correct by moving Target Stop Carrier X182 slightly toward outer end of Guide Bar X187AW. If target leans to the right, move the Stop Carrier slightly toward inner end of Guide Bar.
12. Now that target path is adjusted for proper height, distance, and levelness, it may be found to end to the right or left of the center of field due to side wind or other condition. Bring back to center by lifting the Windage Adjustment Latch X30, swinging it right or left as indicated, and relatching in one of the notches provided. (Each notch swings trap $2\frac{1}{2}^\circ$ beyond previous notch.) A finer intermediate adjustment may be made by slight movement of Target Stop Carrier X182.
13. Move Master Switch to "FIRE" and "OFF". Remove Spread Adjusting Screw X32 from the central hole "D" in Angle Changing Disc X33 and relocate in No. "3" hole which will cause extreme right and left targets to be thrown in line with shooting stations No. 1 and 5 under normal light wind conditions. Move trap frame or carrier by hand to line up desired holes for insertion of Spread Adjusting Screw X32 and be sure to tighten screw securely. If there is a heavy head wind tending to widen the field, place Screw X32 in the No. "2" or No. "1" hole. A strong tail wind may require locating Screw X32 in the No. "4" or "5" hole.
14. Do not attempt to adjust right and left extreme angles by moving Target Stop Carrier X182 as such action may upset the distribution of targets. Make adjustments only in sequence described above with Spread Adjusting Screw X32 in central hole "D" to hold trap frame against oscillation.

Important: To prolong service life of trap mainspring and other components, and minimize target breakage, do not adjust trap for throwing distance in excess of that specified by rules governing the game of Trap.

ADJUSTMENT OF TRAP FOR "DOUBLES"

1. Be sure trap is uncocked (fired) and Master Switch X242 is in "OFF" position.
2. Place Spread Adjusting Screw X32 in central hole "D" of Angle Changing Disc X33 to lock frame for "Doubles".

3. Raise elevation about 6 half turns or "notches."
4. Tighten Mainspring about 14 half turns or "clicks" from the setting normally used for "singles."
5. Move Target Stop Carrier X182 to straddle the "D" mark on Guide Bar X187AW.
6. Turn on Master Switch to cock trap.
7. Place one target against the Carrier Rail N19W and against Target Stop Finger X180A. Place second target in contact with the first target and against the carrier rail.
8. Fire trap and note relative heights of target paths. If the right target is lower, move Target Stop Carrier X182 slightly toward "S" mark on Guide Bar X187AW. If the left target is lower, move the stop slightly in opposite direction.
9. With both targets at same height, move Windage Adjusting Latch X30 a notch or two, right or left, as necessary to center the field.

10. Make any final distance adjustments by tightening or loosening the Mainspring a "click or two", after first uncocking trap by moving Master Switch to "FIRE" and "OFF".
11. Recheck height of targets and adjust elevation if necessary.

**WHEN RETURNING TO A SETTING FOR
SINGLE TARGETS**

1. Leave Spread Adjusting Screw X32 in central hole "D" until all adjustments are made.
2. Insure that trap is uncocked and Master Switch is in "OFF" position. Slack off Mainspring about 14 clicks, lower elevation about 6 notches, shift Windage Adjustment Latch to its center notch and move Target Stop Carrier X182 to "S" mark on Guide Bar.
3. Proceed as indicated under "Adjustment of Trap for Single Targets" on page 4.

PART II
INTERNATIONAL STYLE TRAPS V1579C1 AND V1581C1

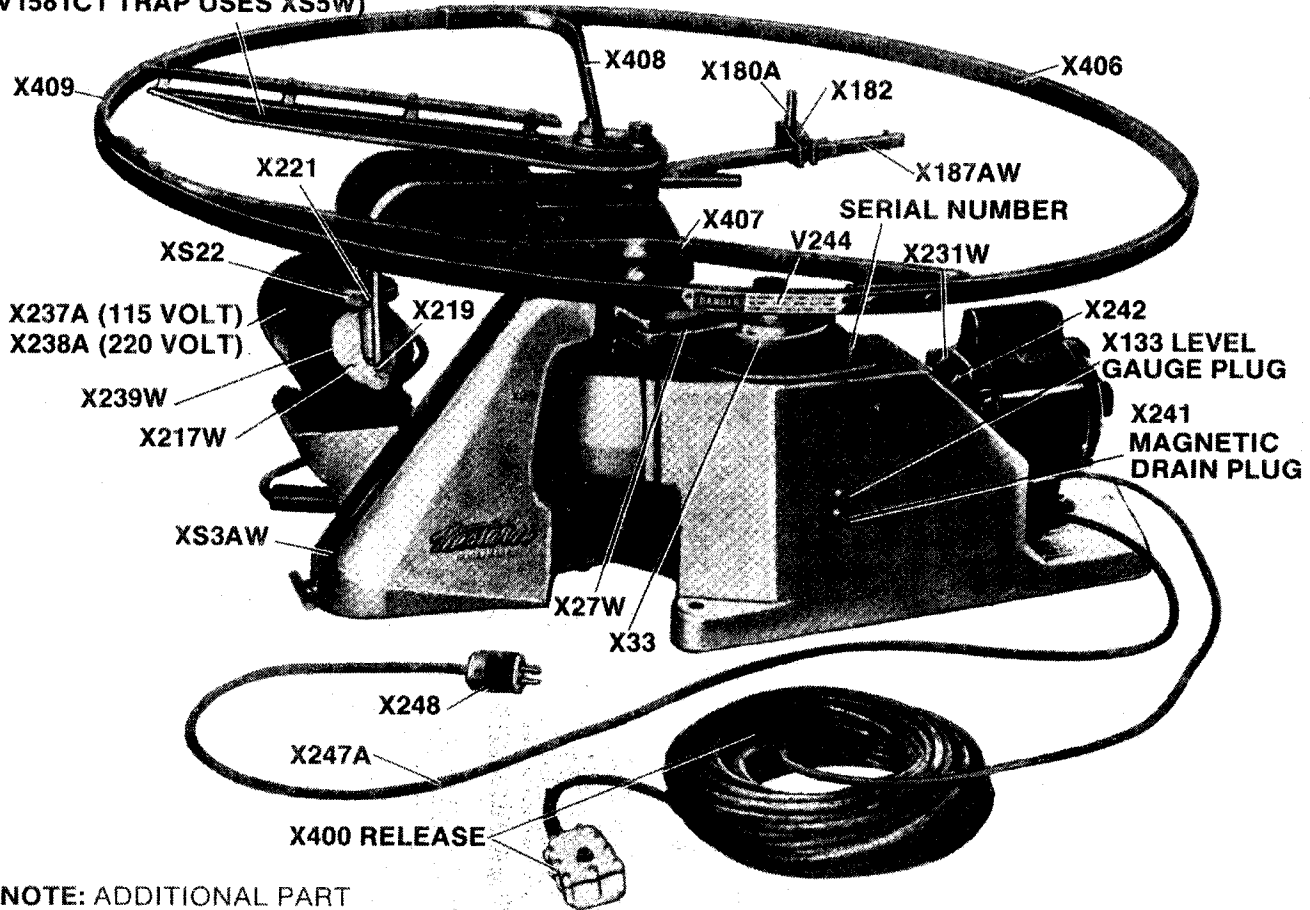
DESCRIPTION

These traps are similar to the V1524C1 except that they are equipped with elevation changing motors. In addition, the V1581C1 is equipped to operate on 220 volt 50 hertz power, and has a lighter perforated carrier to provide greater throwing distance. Note that it cannot be adjusted down to the

standard 50 yard domestic distance. Since the traps are otherwise similar, PART I of the instructions apply to all three. Special instructions for V1579C1 and V1581C1 traps are given below with reference to following illustration.

(Continued on page 7)

**X5AW CARRIER ASSEMBLY
(V1581C1 TRAP USES XS5W)**



**NOTE: ADDITIONAL PART
NUMBERS ARE SHOWN ON
PAGE 2.**

WESTERN MODIFIED CLAY PIGEON TRAP V1579C1 (MODEL XS)

PART II**INTERNATIONAL STYLE TRAPS V1579C1 AND V1581C1 (CON'T.)****SAFETY FIRST**

Follow instructions on Master Switch Plate at rear of trap. Read PART I "WARNING" and "SAFETY FIRST" before proceeding, with special emphasis on "SAFETY FIRST" on page 1.

ADJUSTMENT OF TRAP FOR SINGLE TARGETS

1. Follow instructions on page 4, except that target distance and height should be adjusted as follows, rather than as given at item 8 on page 4.
2. **Caution** — Improper elevation adjustment can damage elevation changing motor. Vertical motion of X4BW Upper Frame is limited by "STOP" on XS3AW Lower Frame Assembly (see illustration). Carefully "jog" elevation motor with switch to insure that X4BW will not contact "STOP" during operation. Lower the X4BW Upper Frame with Elevation Adjusting Nut XS22 if necessary for clearance. Always make elevation changes with XS22 after first stopping motor at position of highest elevation in order to check for "STOP" clearance after each adjustment. NOTE that Master Switch must be "ON", (causing trap to cock) before elevation motor will function. Avoid injury—always uncock trap before making adjustments to elevation mechanism, or any other part of trap.
3. **V1579C1 Trap** — If trap was previously set to throw 50 yards (single target) increase main spring tension approximately 4 full turns with Mainspring Adjusting Screw X42 to achieve 55

yard distance specified for "A.T.A. International" events. Depress Crank Disc Lock Plunger X219 with a nail or pencil and rotate Elevation Crank Disc X217W to permit plunger to snap into hole marked "N" which provides Normal elevation range. ("R" is used for Regulation Trap). Turn on Master and Elevation Motor switches (observing "Cautions" under 2 above) and stop elevation motor at point of maximum elevation. Adjust Elevation Adjusting Screw XS22 to provide a maximum target height of 12 feet (above level of shooting stations) at point 10 yards in front of trap. Height should vary between 12 and 4 feet. Check throwing distance and correct with X42 if necessary after lowering target height to 9 - 10 feet (at 10 yards) with elevation motor. Distances should be measured in still air over level ground.

4. **V1581C1 Trap** — Follow procedure under V1579C1 (above) except maximum target elevation should be set at 3.5 meters at a point 10 meters in front of trap. Height must be between 1 and 4 meters, and 1.5 to 3.5 meters is "normal". Throwing distance is to be 75±5 meters with elevation set at 2 meters at a point 10 meters in front of trap. I.S.U. (U.I.T.) rules state that requirements will be met in "calm weather" and distance will be measured "over level ground".
5. Elevation Crank Disc X217W has two additional adjusting holes. 'P' will provide a narrow range of elevations for Practice, and 'M' a Maximum range.

PART III**TROUBLESHOOTING****NOTE**

Avoid Injury — trap repairs should be referred to the factory or one of the authorized Western trap repair stations.

WARNING!

Make sure that trap is uncocked and electrical power disconnected before proceeding!

PROBLEM 1

Cocking Motor XU129 will not run.

- A. Check power supply to trap.

- B. Check Master Switch X242. Trap lightly on, off and on toggle — points may be stuck. If bad switch, replace.
- C. Press in red overload button on motor; overload may have shut motor off due to low voltage or trap being jammed.
- D. Revolve Motor Coupling X130B one or two turns to be sure motor revolves freely.
- E. Check wiring terminals on motor for voltage with meter.
- F. Check motor capacitor contained in dome shaped cover on top of motor.
- G. Check motor, may be burned out.