

Quality Replacement Parts

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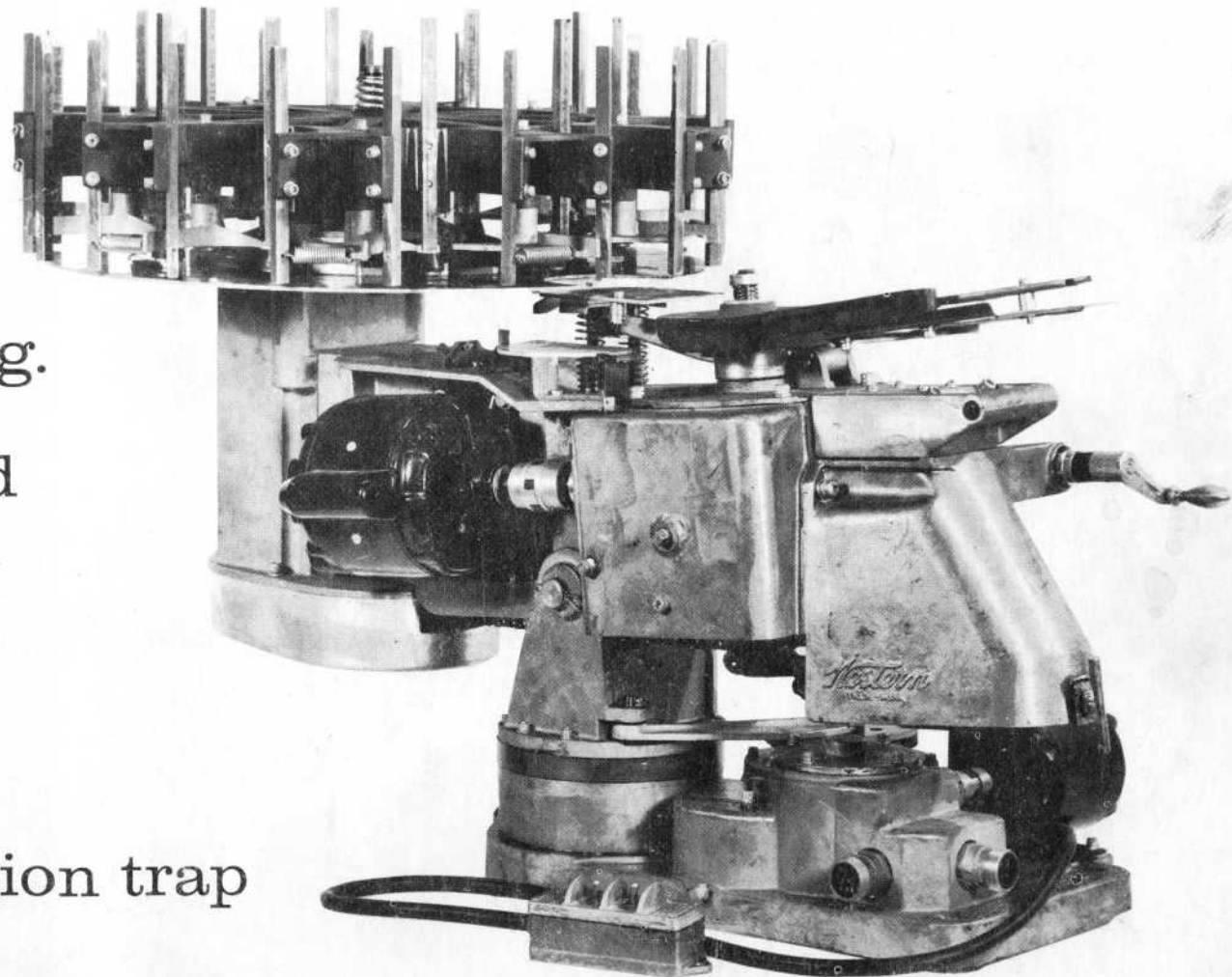
1-800-742-0425

216-674-0200

trouble shooting.
target flight
adjustment and
maintenance
manual

Western®

self loading
electric regulation trap
model V1577A



WINCHESTER-WESTERN DIVISION

V-1577-A AUTO-LOADING REGULATION TRAP

GENERAL

- CAUTION A: Before loading magazine or making any adjustments, and at end of shoot always move switch lever (U-257) in control unit to side marked "Stop Swing", and switch lever (U-256) in control unit to side marked "Fire Safe", and release immediately. This will cause trap to fire and remain in fired position.
- CAUTION B: When a target is thrown from this trap with power off, the carrier will throw the target, then start to back up. If switch lever (U-256) in control unit is moved to side marked "Cock & Run" while carrier is in its rearward motion, the motor will reverse itself and pull the carrier backward, damaging target stop finger (U-143) and target feed finger (U-149).
- CAUTION C: When operating the off and on switches in the control unit for any reason, always be sure the carrier is completely stopped before turning switches to the "On" position.
- CAUTION D: It should be made a strict rule that the control unit shall never be operated inside trap house if more than one person is present, nor from outside house when anyone is inside.
- CAUTION E: When shooting doubles, have trap boy seated at left rear of trap (the side nearest #1 station), and with control switch within easy reach. DO NOT ENTER OR LEAVE TRAP HOUSE UNTIL TRAP HAS BEEN TURNED OFF AND CARRIER IS IN FIRED POSITION.
- CAUTION F: When changing position of carrier rail on carrier to take curve out of target flight (Page 25, Item G), always support carrier underneath with one hand when loosening or tightening screws. This will prevent springing carrier.
- CAUTION G: Do not remove targets from cartons until ready to load magazine. Check for broken or cracked targets when loading magazine.
- CAUTION H: Do not load targets in magazine higher than bevel on magazine outer guide rails as targets will fall from magazine when trap indexes (maximum targets 16 per stack).
- CAUTION I: Once a month, check to be sure bolts holding trap to plank and plank to base are tight.

WINCHESTER-WESTERN DIVISION

V-1577-A AUTO-LOADING REGULATION TRAP

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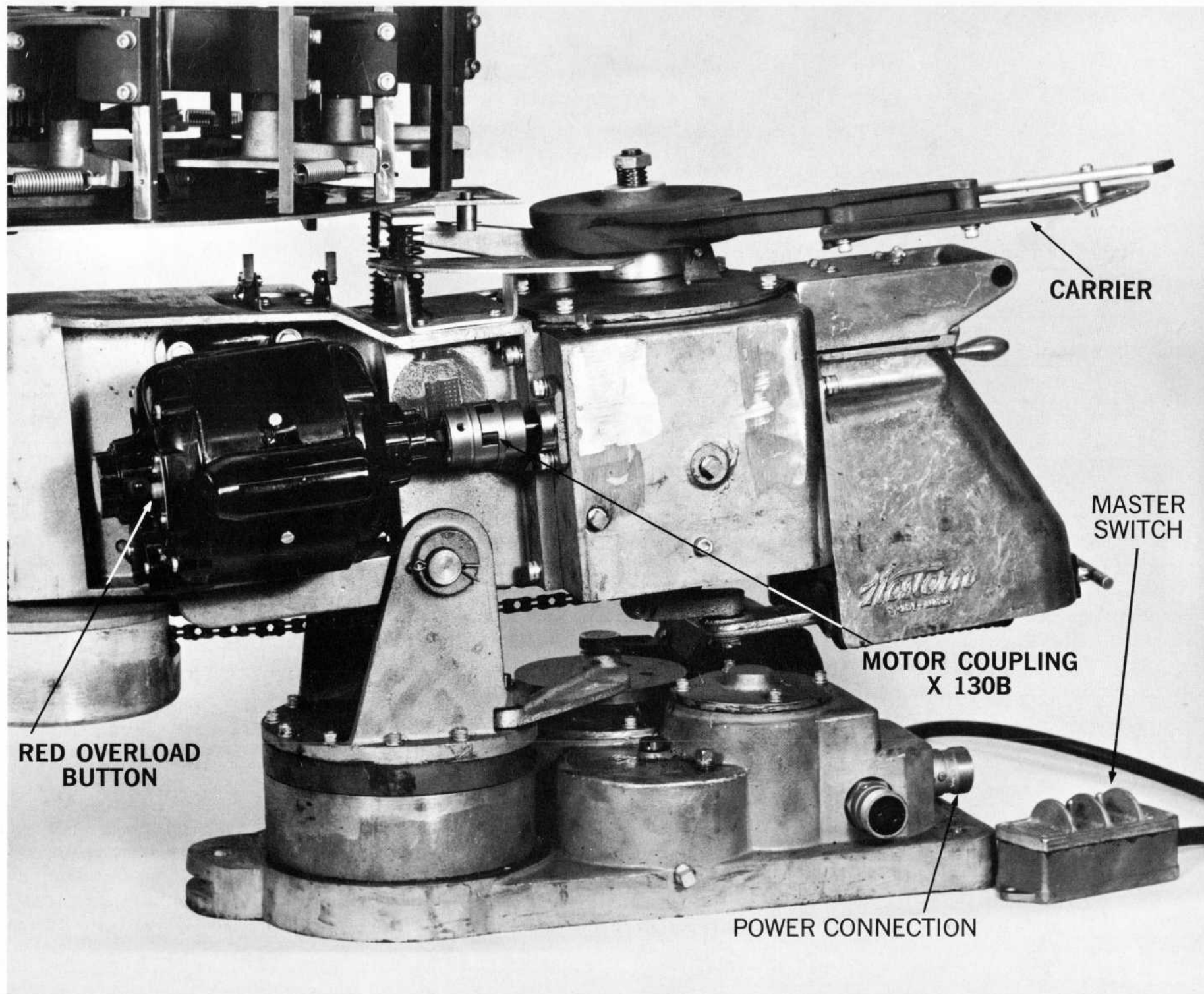
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V-1577-A AUTO-LOADING REGULATION TRAP

SECTION I - TROUBLE SHOOTING

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RED OVERLOAD
BUTTON

CARRIER

MASTER
SWITCH

MOTOR COUPLING
X 130B

POWER CONNECTION

WINCHESTER WESTERN DIVISION

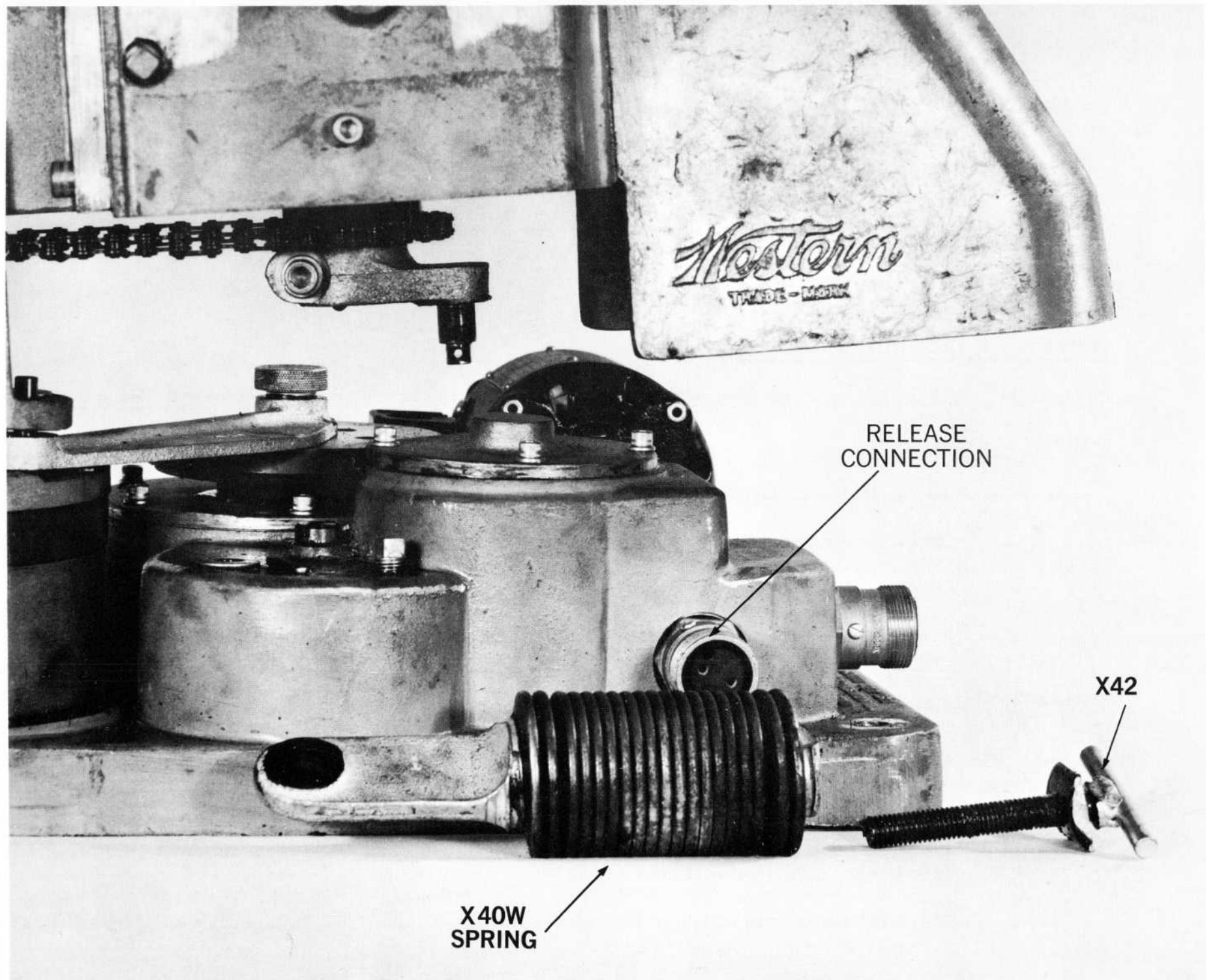
V-1577-A AUTO-LOADING REGULATION TRAP

SECTION I - TROUBLE SHOOTING

PROBLEM 1. Trap fails to cock when master switch (U-256) is turned on to side marked "Cock and Run".

CORRECTION:

1. Check to see if motor on right hand side of trap is running. If motor is NOT RUNNING:
 - A. Check power supply to trap house.
 - B. Check to see if power connection into front of trap is screwed up tight.
 - C. Press in on red overload button on motor; overload may have shut motor off due to low voltage or trap being jammed.
 - D. Revolve motor coupling (X-130-B) one or two turns to be sure motor revolves freely.
2. Check to see if motor on right hand side of trap is running. If motor IS RUNNING:
 - A. Check to see if carrier is in its neutral position (just to right of forward position). If it is, turn motor off, move carrier to forward position (counter clockwise) by hand. DO NOT attempt to completely cock trap by hand; just move carrier to most forward position, turn switch on, and motor will cock trap.
 - B. Check for failure or slippage of motor coupling (X-130-B). Tighten or replace as indicated.



RELEASE
CONNECTION

X42

X40W
SPRING

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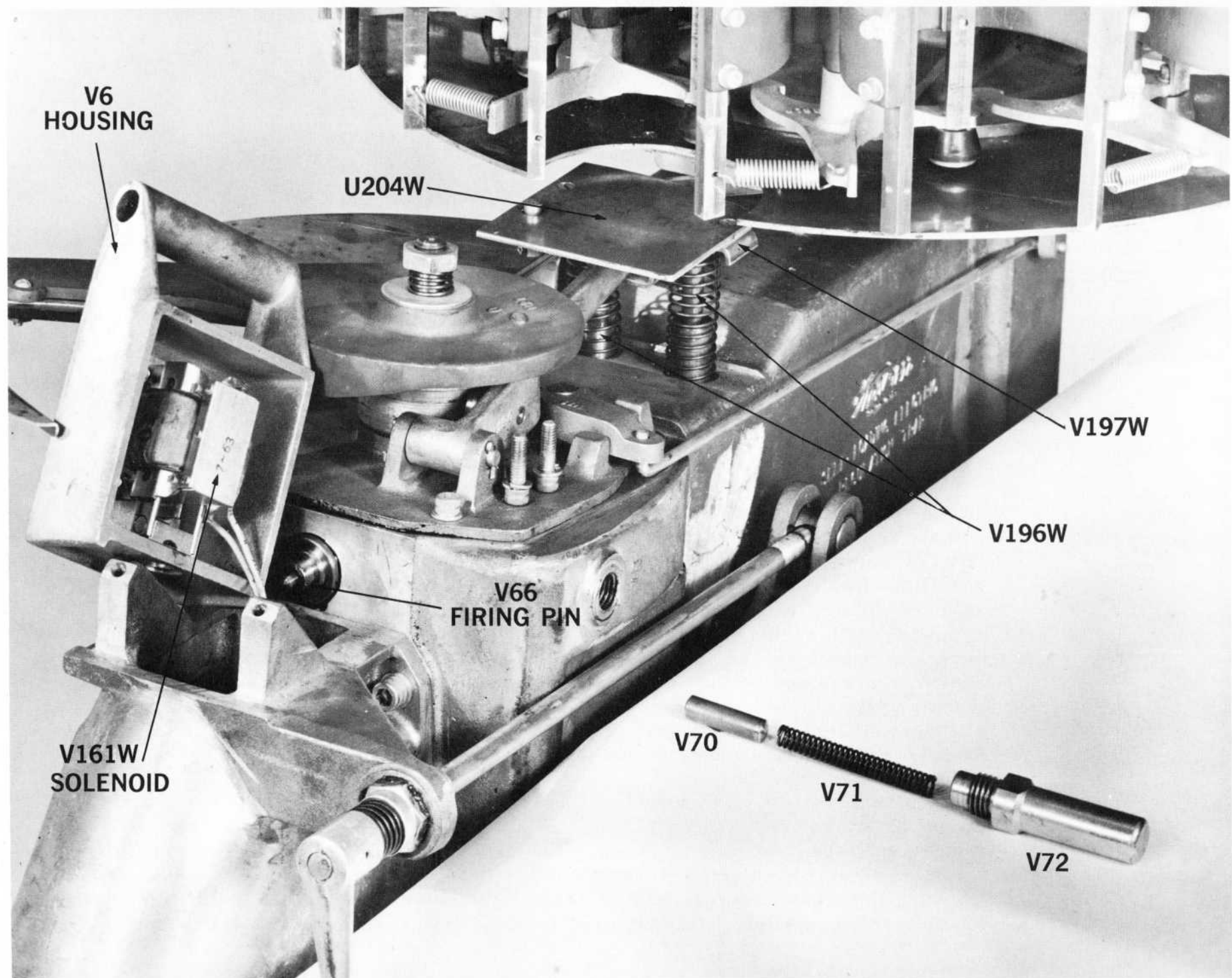
V-1577-A AUTO-LOADING REGULATION TRAP

SECTION 1 - TROUBLE SHOOTING

PROBLEM 2. Trap cocks but fails to release when release button is pressed.

CORRECTION:

1. Release trap by pulling on mechanical release trigger (V-57) located at left rear of trap. IF TRAP RELEASES MECHANICALLY:
 - A. Check for broken wire in release cord. Check release cord and button by trying release on another field. Replace cord and button, if indicated.
 - B. Check to see if release cord connection on right hand side of trap is screwed up tight.
 - C. Check release solenoid (X-127) by turning master switch off and releasing carrier by using release trigger (V-57); remove two screws (V-161-W) just in back of carrying handle at front of trap. Lift solenoid housing (V-6) away from trap (see photo page 8) and observe condition of solenoid. A burned out solenoid will normally show a burned condition. If solenoid appears to be in good condition it can be further checked by replacing (V-6) housing, removing main spring adjusting screw (X-42), turn master switch on, causing carrier to cock and remain cocked. Remove (V-6) housing, lift away from trap and with master switch on press and release electrical release button. If solenoid is not activated by release button, replace solenoid. To replace (X-42) main spring adjusting screw, turn master switch off, lift up on mechanical release trigger (V-57), manually position carrier in forward position and replace screw.
2. Trap does not release either with release button or trigger (V-57).
 - A. Check for broken mainspring (X-40-W) by reaching under housing at front of trap or by turning mainspring adjusting screw (X-42). (If screw turns loosely, spring is broken.) If spring is broken, remove broken parts, then release carrier by pulling up on trigger (V-57), and manually positioning carrier in forward position. Install new spring.



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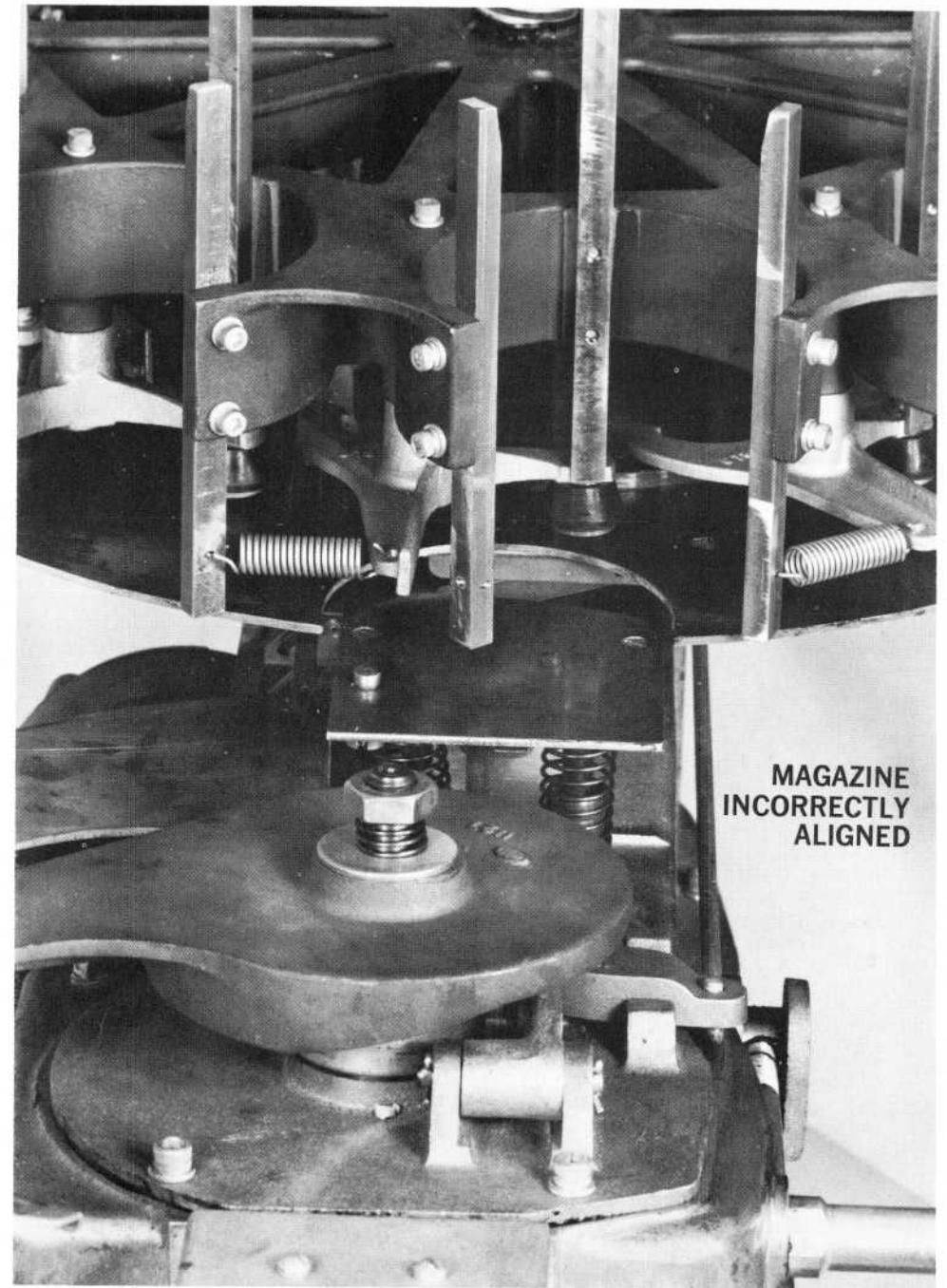
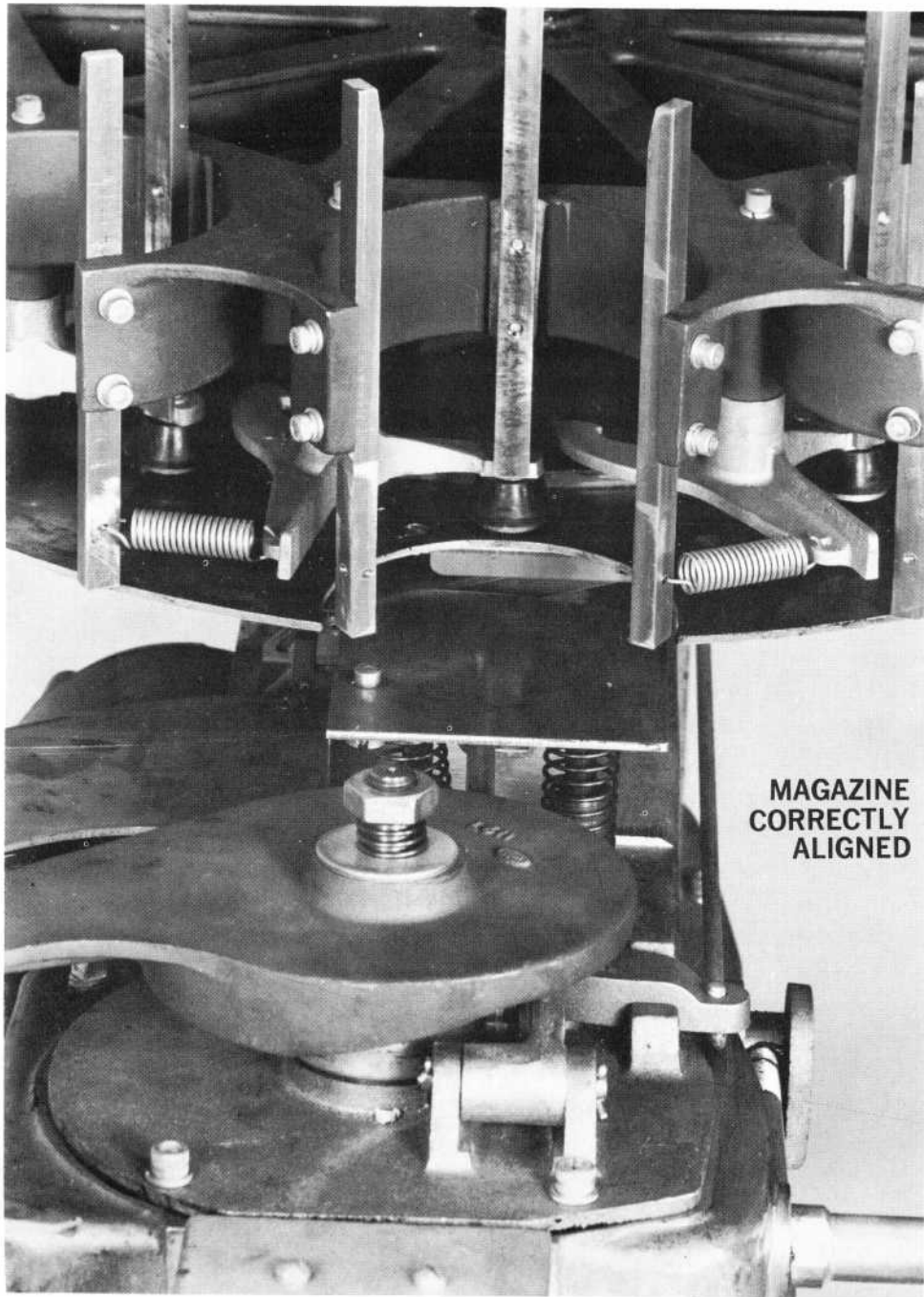
V-1577-A AUTO-LOADING REGULATION TRAP

SECTION I - TROUBLE SHOOTING

PROBLEM 3. Carrier continues to revolve without stopping in cocked position.

CORRECTION:

- A. Check to be certain that person pressing release button is not holding button depressed after target has been thrown.
- B. Turn off master switch and unload targets from magazine; disconnect release cord from right side of trap; turn master switch on; if trap now works properly by using mechanical release trigger (V-57), check for electrical short in release cord or button. A simple way to check cord and button is to try cord on another field.
- C. Check release solenoid (X-127) by turning master switch off and releasing carrier by using release trigger (V-57); remove two screws (V-161-W) just in back of carrying handle at front of trap. Lift solenoid housing (V-6) away from trap (see photo page 8) and observe condition of solenoid. A burned out solenoid will normally show a burned condition. If solenoid appears to be in good condition it can be further checked by replacing (V-6) housing, removing main spring adjusting screw (X-42), turn master switch on, causing carrier to cock and remain cocked. Remove (V-6) housing, lift away from trap and with master switch on press and release electrical release button. If solenoid is not activated by release button, replace solenoid. Before replacing solenoid housing (V-6), check for free movement of firing pin (V-66). This is the pin that is pressed by solenoid when trap is released. To replace (X-42) main spring adjusting screw, turn master switch off, lift up on mechanical release trigger (V-57), manually position carrier in forward position and replace screw.
- D. Remove sear plunger bushing (V-72) on left front of gear box (being careful not to drop sear plunger (V-70) inside gear housing), and check for broken spring (V-71).
- E. Check for flat on end of (V-70) sear plunger that bears against (V-68) firing bar. (The end that was inside gear box). If a flat is worn on that end reverse pin or replace. A worn pin may be repaired by putting in lathe and polishing flat out.



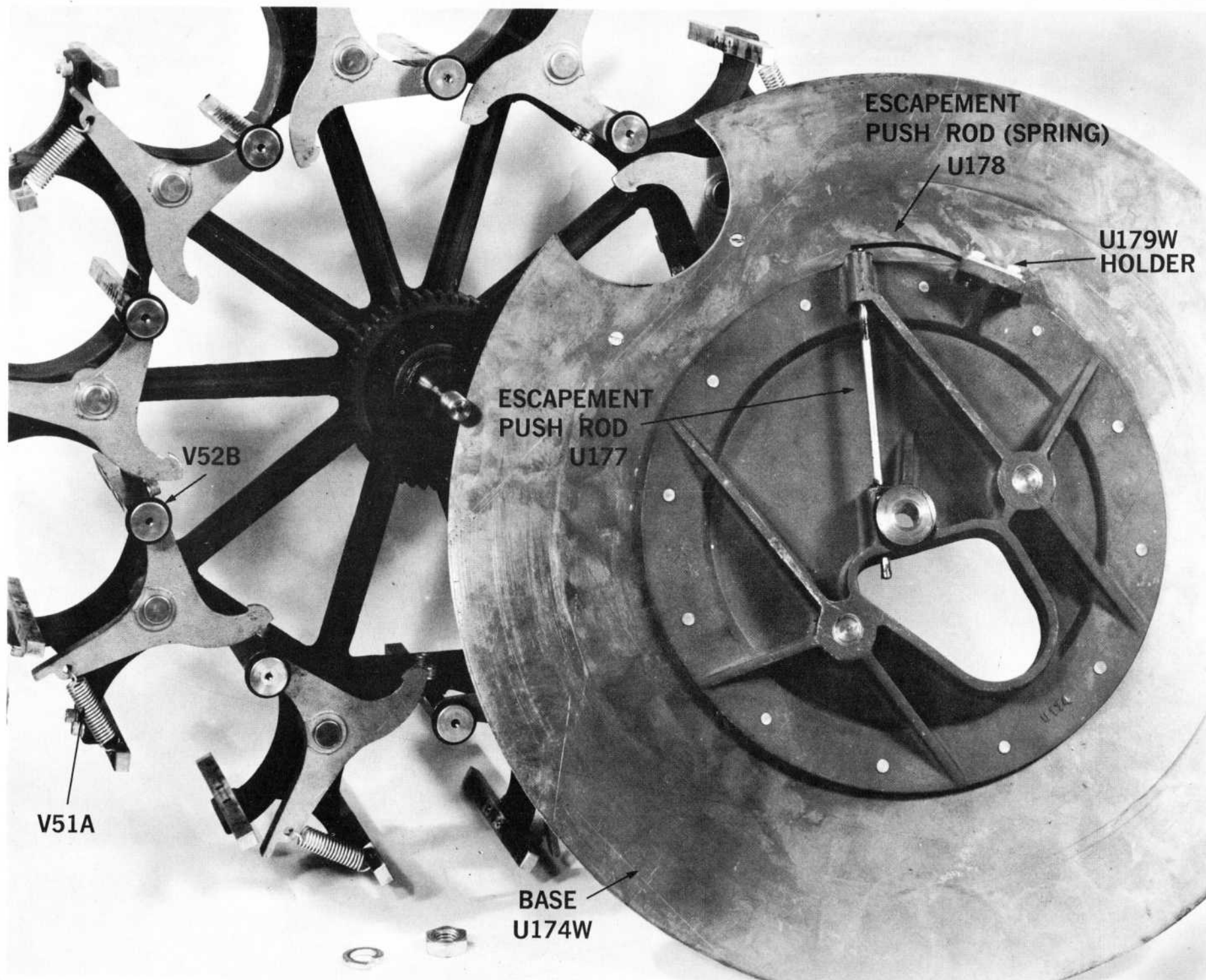
WINCHESTER-WESTERN DIVISION

V-1577-A AUTO-LOADING REGULATION TRAP

SECTION I - TROUBLE SHOOTING

PROBLEM 4. Target fails to drop from magazine onto target feed shelf (U-204-W).

- A. Check magazine for bent or broken escapement push rod (U-177). (See photo, page 12).
- B. Check magazine for broken escapement push rod spring (U-178). This is the flat spring at the end of the escapement push rod. (See photo, page 12).
- C. If magazine has previously been removed, check to be sure that target pocket is in line with large opening in loading disc, also that magazine is all the way down.
- D. Check escapement assembly for broken roll pins, by removing magazine, and index gear housing (U-222) (photo page 18). With one hand grasp escapement push rod operator (U-209) (photo page 26) and with other hand, grasp escapement roller arm (U-211-W) (photo page 18) and check for broken pins by twisting. Play of parts (U-211-W) or (U-209) (photo page 26) on shaft indicate broken roll pin (X-90).
- E. Check face of escapement push rod operator (U-209) (photo page 26) where it contacts escapement push rod (U-177). If badly worn, replace.



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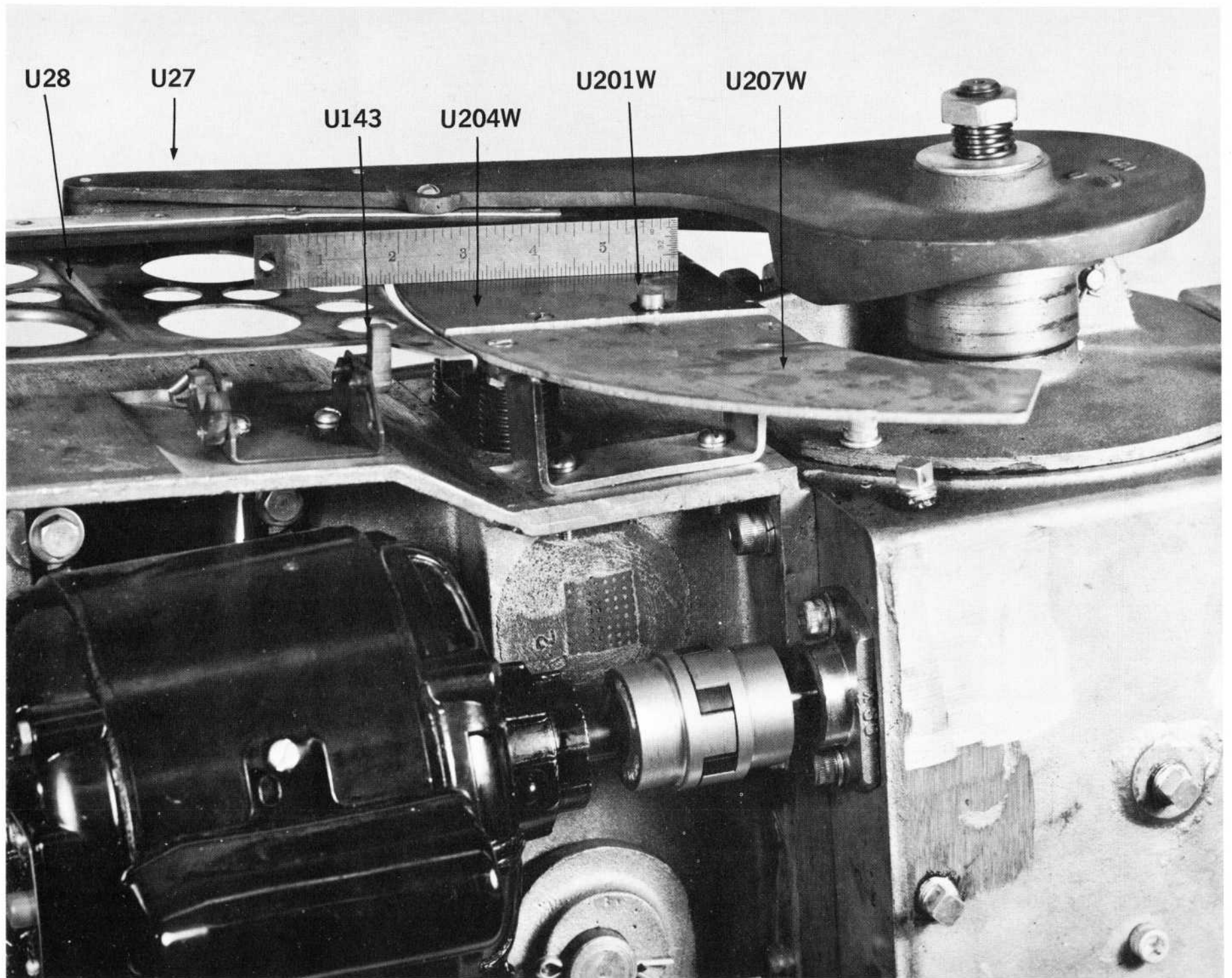
V-1577-A AUTO-LOADING REGULATION TRAP

SECTION I - TROUBLE SHOOTING

PROBLEM 5. Targets double feed (more than one target drops from magazine onto trap feed shelf (U-204-W) causing broken targets when carrier is released).

CORRECTION:

- A. Release one or more targets from each magazine position and note which position is double feeding.
- B. Check for broken escapement lever spring (V-51-A) on position that is double feeding.
- C. Check for worn (rubber) escapement cushions (V-52-B). On position that is double feeding, turn cushion to present a new surface in contact with targets or replace if badly worn.
- D. Check for free movement of escapement push rod (U-177), by unloading magazine. Remove from trap, and check movement of rod. If rod does not move freely, unscrew and remove magazine base (U-174-W), push rod spring holder (U-179-W), and escapement push rod spring (U-178). Remove escapement push rod, polish with emery cloth, check for free movement, oil and reassemble. If rod is bent or badly rusted, replace with new rod.
- E. Check to be sure bolts holding trap to plank are tight; also, that bolts holding plank to concrete are tight.
- F. With carrier in fired (forward) position, check for sluggish movement of target feed shelf (U-204-W) by pressing down on top of shelf and releasing rapidly. If upward movement is sluggish, check for broken feed shelf lifting springs (V-196-W); also, clean and oil rods of feed shelf operating bracket assembly (V-197-W) and recheck. (photo page 8).



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SECTION I - TROUBLE SHOOTING

PROBLEM 6. Trap throws continuous broken targets.

CORRECTION:

- A. Check for broken front target stop finger (U-143). When replacing or adjusting stop finger, it should project $7/32$ " (one third height of target rim) above and almost touching carrier when carrier is in cocked (rear) position. To do this, loosen bolts in stop bracket and tap bracket to proper position, about $1/32$ " from edge of carrier and retighten bolts. When adjusting finger be sure master switch is off and carrier released.

NOTE: When stop finger is properly adjusted, target is not held rigid when resting on target feed shelf (U-204-W), but can be moved slightly.

- B. Check for broken spring on front target stop finger.
- C. Check to be sure that the front target stop finger (U-143) is in its upper position. If not, place in upper position, clean around finger, and be sure finger moves up and down freely.
- D. Check for broken target feed finger (U-149) on underside of magazine. Also check to be sure finger moves up and down freely.
- E. Check for targets double feeding. See previous instructions for correction.
- F. Check for incorrect adjustment of target stop finger (U-143). See item "A" above for proper adjustment.
- G. Check to see that target stop plunger (U-201-W) located in target feed shelf (U-204-W), is in up position. If not, push plunger slightly lower, turn its handle (located on bottom end) $1/4$ turn, allowing it to return to its upper position.
- H. Check for loose screws in target feed shelf (U-204-W) or target guide shelf (U-207-W) which, if loose, will project above feed shelf breaking target when released. (Continued on next page).

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V-1577-A AUTO-LOADING REGULATION TRAP

SECTION I - TROUBLE SHOOTING

PROBLEM 6. (Continued)

CORRECTION: (Continued)

- I. Check for correct relationship of carrier plate (U-28), target feed shelf (U-204-W), and target guide shelf (U-207-W). Properly adjusted with carrier in cocked (rear) position, the target feed shelf (U-204-W) should be the same height or slightly lower than carrier plate (U-28), and the flat portion of target guide shelf (U-207-W) the same level as target feed shelf (U-204-W). Under normal wear conditions, the target feed shelf (U-204-W) will gradually get higher and require removal of one of the shims (V-206) from under the feed shelf. When all shims have been removed, and feed shelf is still high, replace target feed arm assembly (U-190-W) and target feed cam roll assembly (V-192-W). The height of target guide shelf (U-207-W) will normally not require adjustment, but can be adjusted by removal or addition of shims.

NOTE: Before adjusting target feed shelf (U-204-W), check for bent carrier plate (U-28). This plate should be level or slightly lower on the leading edge. If bent, it may be straightened by releasing carrier and supporting carrier arm (U-27) with one hand while moving leading edge of carrier plate (U-28) up or down. If carrier plate is badly bent, replace.

CAUTION: Before making above adjustments, turn off trap; and with carrier in the fired (forward) position, unscrew and remove mainspring adjusting screw (X-42). Turn on control switch to move carrier to cocked position. When carrier stops, turn switch off and move carrier remainder of way by hand. To move carrier to fired position when mainspring is disconnected, lift up on trigger (V-57) and move carrier by hand.

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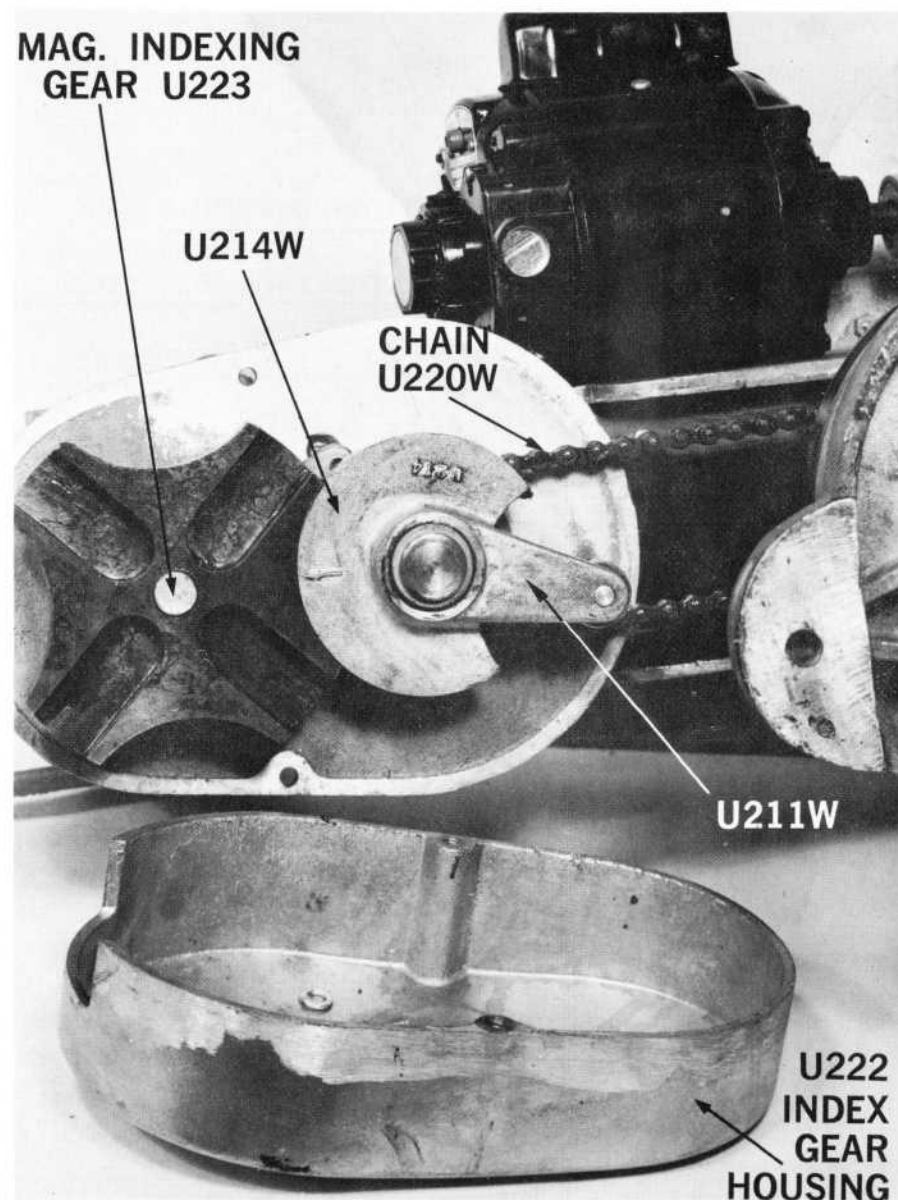
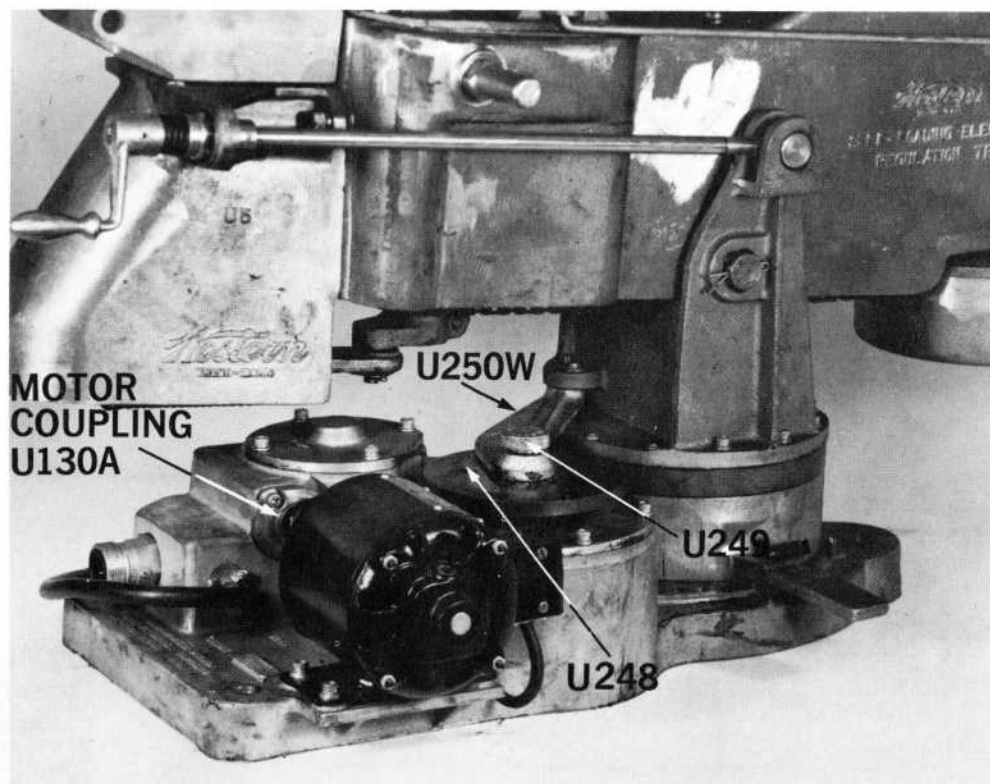
V-1577-A AUTO-LOADING REGULATION TRAP

SECTION I - TROUBLE SHOOTING

PROBLEM 7. Trap throws large percentage of broken targets.

CORRECTION:

- A. Check targets being loaded into magazine for cracks or breaks. Instruct people handling cartons of targets of the necessity for careful handling.
- B. Check to be sure pick up birds are not being used.
- C. Check position of target feed shelf (U-204-W) with carrier plate (U-28). When carrier is in cocked (rear) position, the top of feed shelf should be about the same level as surface of the carrier plate. See Problem 6, item I, for detailed adjustment.
- D. Check for double feeding; this condition may only exist in one or two magazine positions. Check by throwing one or more targets from each magazine position. Correct as described under Problem 5.
- E. Check for badly worn carrier rail (U-32-AW). This carrier rail is not straight, and, when replacing, be sure to install with side marked "top" up.



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SECTION I - TROUBLE SHOOTING

PROBLEM 8. Trap operates but magazine does not index.

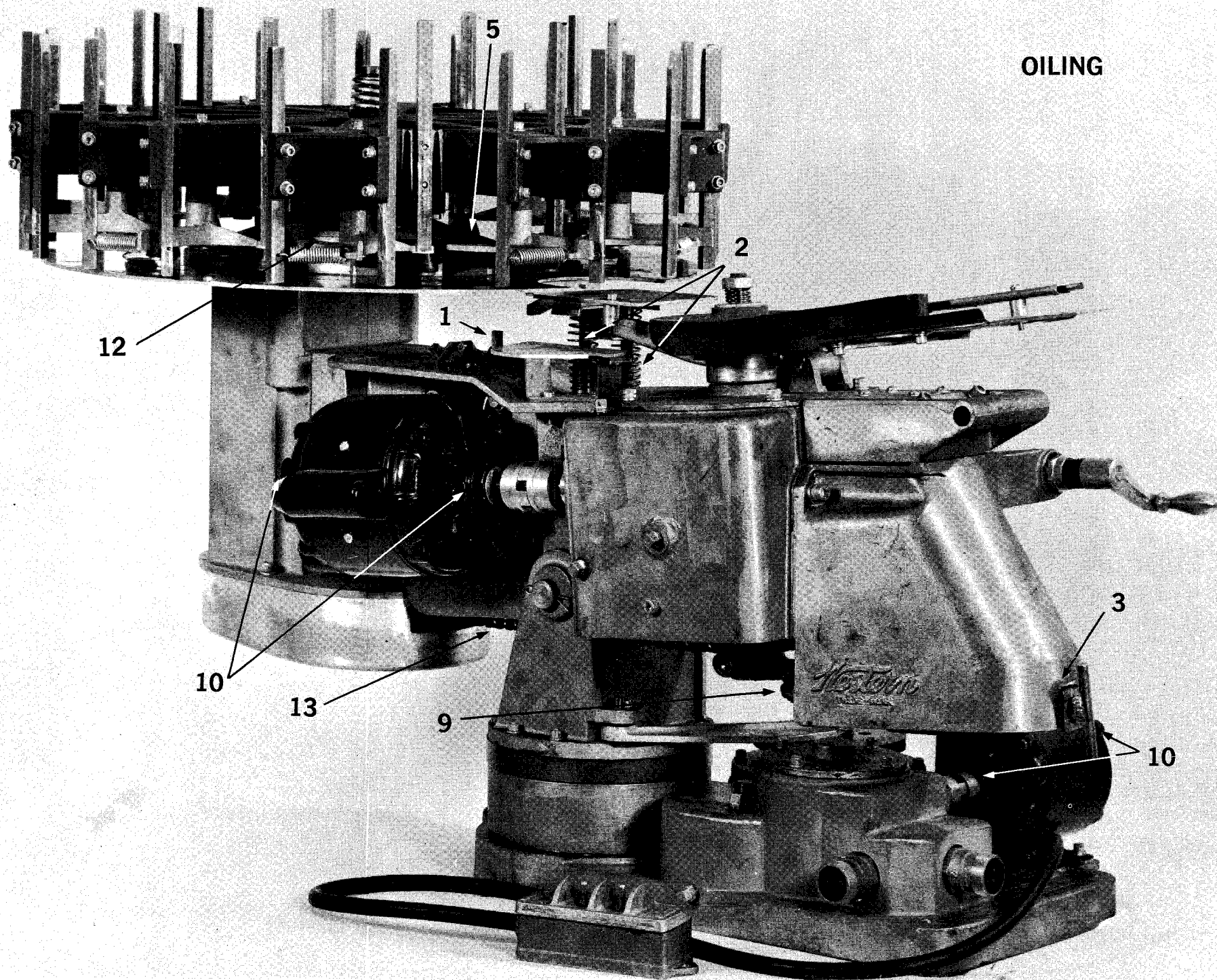
CORRECTION:

- A. Check for sheared pin in magazine drive pinion (U-225) (see photo, page 28) by grasping (U-225) and turning back and forth, noting if there is any play either in shaft or gears. If play is noted replace (U-85) roll pins.
- B. Check for broken index chain (U-220-W). Have trap in fired position, reach under trap and check for broken chain. The index chain should have reasonable amount of slack; when strands are squeezed at midpoint, a measurement of no more than 2-5/8" nor less than 1-5/8" is normal. If chain is broken, remove index gear housing (U-222). Disconnect power cord from front of trap, remove magazine, unbolt trap, and turn trap on its left side. With carrier in fired position, as held by mainspring, and with chain disconnected, turn index gear driver (U-214-W) until the arrow on its underside is pointed directly toward center of the magazine index gear (U-223), then assemble chain without moving sprockets.

PROBLEM 9. Trap operates but angle does not change.

CORRECTION:

- A. Check to be sure motor is running. If motor IS RUNNING, but angle changing disc (U-248-W) IS NOT TURNING, check for loose or broken angle changing motor coupling (U-130-A).
- B. Check to be sure spread adjusting screw (U-249) is screwed in one of the numbered holes, and not in center hole marked "D".
- C. Check for broken angle changing link assembly (U-250-W).



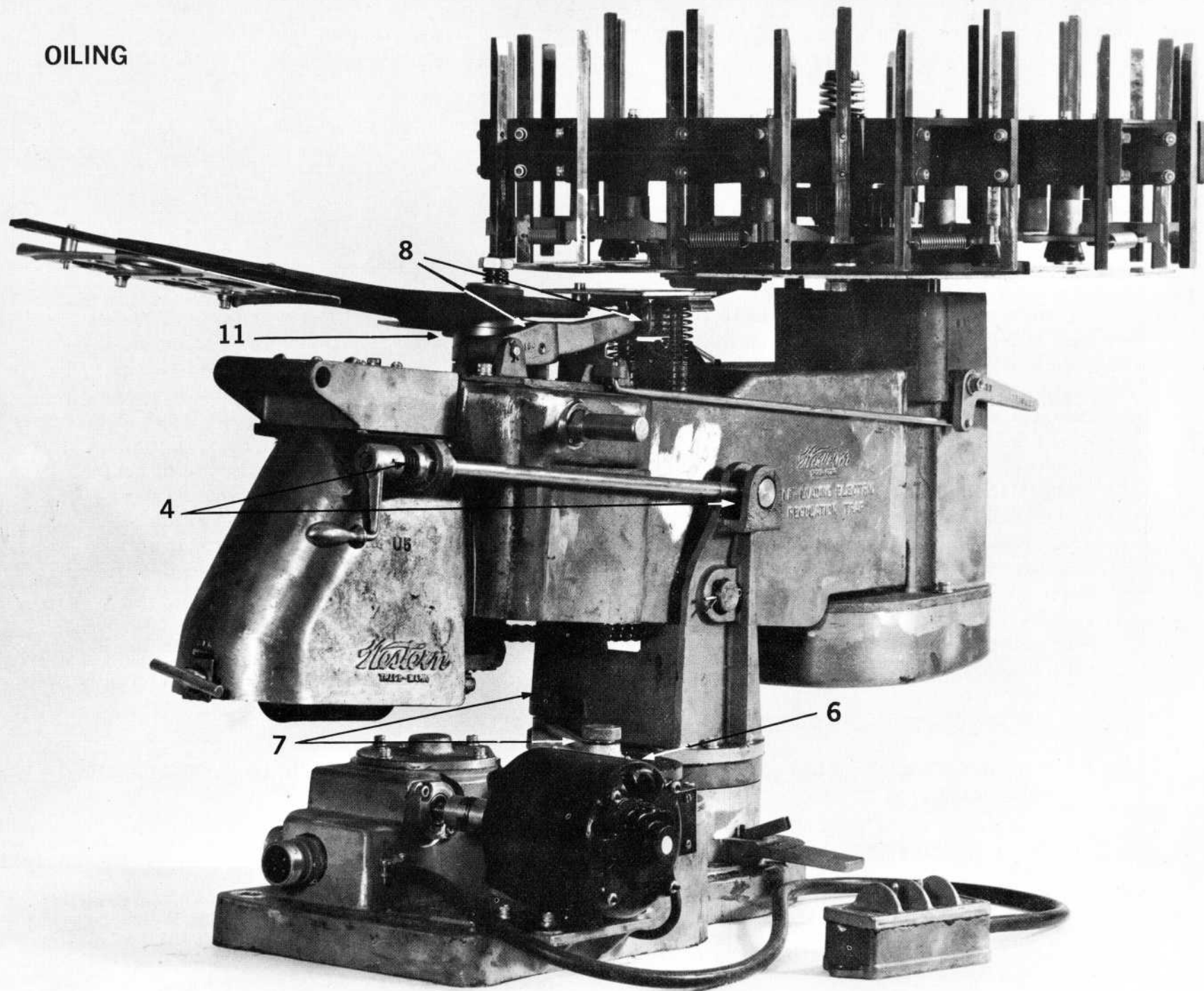
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V-1577-A AUTO-LOADING REGULATION TRAP

SECTION II - OILING

- A. At time of installation, trap base (U-255-W) was filled to top, and gear housing (V-3-W) was filled with one quart of automatic transmission fluid, type A. Each three months, check oil level of gear housing (V-3-W) by removing level gage plug from raised pad on right side of housing (this is the upper plug on the side of housing). Add automatic transmission fluid, type A (obtainable from automobile service stations) to bring oil level to this opening. Note oil is added by removing filling plug (X-133) from top right rear corner of housing and pouring in. Also, remove filling plug (X-133) from top on right side of trap base (U-255-W) and add oil to fill to top. This fluid is compounded for year-round use, and should not require changing. However, drain plugs are provided on lower right side of trap base, and at lower rear on right side of gear housing, for use in event that either housing is to be drained for repairs. Use care to prevent entrance of dirt when any of these plugs are removed.
- B. Periodically (about once a month, when in constant use) squirt a few drops of oil on the following:
1. On the upper edges of target stop finger bracket (U-142).
 2. On the feed shelf guide rods (V-198). These are the two rods under target feed shelf (U-204-W).
 3. On the mainspring housing (U-5), just above the mainspring swivel (X-43).
 4. On the rear threaded end of elevation adjusting screw (U-137-W) and the front, crank end, at both ends of the elevation screw bushing (U-140).

OILING



WINCHESTER- WESTERN DIVISION

V-1577-A AUTO-LOADING REGULATION TRAP

SECTION II - OILING

(Continued)

5. On both bearings of the escapement push rod (U-177). (See Photo, Page 12)
6. On the top of the angle changing disc assembly (U-248-W).
7. On both ends of angle changing link assembly (U-250-W).
8. On the target feed cam roll assembly (V-192-W) of target feed arm assembly (U-190-W).
9. On the bearing at rear end of mainspring (X-40-W).
10. Once each year (or each 2,000 hours of operation), add 30 to 70 drops of No. 20 SAE motor oil to oil cups on motors.
11. A little cup grease should be applied to the bottom surface of target feed cam assembly (U-189-W).
12. A little cup grease should be applied to the ends of the ten target escapement levers (U-185-W) where they are contacted by the escapement push rod spring (U-178).
13. The magazine indexing chain and associated mechanism normally receives adequate lubrication from the gear housing. However, if this chain is found dry, both it and the mechanism inside of the index gear housing (U-222) should be oiled.

NOTE: When oiling, do not use an excessive amount of oil, as it will collect dust and dirt from targets. Oil sparingly and wipe off any excess. Under certain very dusty or sand conditions, it may be advisable to use a dry lubricant in place of oil.

WINCHESTER-WESTERN DIVISION

V-1577-A AUTO-LOADING REGULATION TRAP

SECTION III - TARGET FLIGHT AND ADJUSTMENT OF TRAP FOR SINGLE TARGETS

1. Target flights and angles (singles).

- A. Targets should be thrown not less than 48 yards nor more than 52 yards (measured on level ground in still air).
- B. Targets should be thrown between 8 and 12 feet high (recommended height, 9 feet), at a point 30 feet in front of trap. The height at a point 30 feet from the trap is height above an imaginary horizontal line drawn through the firing point and the trap.
- C. In singles shooting, the trap should be adjusted so that the right angle will not be less than a straightway from station 1, and the left angle will not be less than a straightway from station 5.

2. Target flight adjustments for singles.

- A. Place spread adjusting screw (U-249) in the center hole marked "D" of angle changing disc (U-248) to lock trap in straightway position.
- B. See that the forward target stop finger (U-143) is in its upper position, also that the stop plunger (U-201-W) is in raised position above surface of feed shelf.
- C. Have suitable height marker (A 12' piece of lumber 2" x 3" or similar) held in upright position at a point 30 feet in front of trap and in line with center of trap house and station 3.
- D. Turn trap on to cock and run and while standing at station 3 shooting position, release target and note flight. Adjust direction of target flight so it will fly over the height marker by pressing windage latch release (U-24) and moving trap right or left as marked. Being sure that the latch plunger (U-23) is seated to hold windage adjusting base in the new position. Be sure trap is turned off and carrier is in fired position before making adjustments.

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V-1577-A AUTO-LOADING REGULATION TRAP

SECTION III - TARGET FLIGHT AND ADJUSTMENT OF TRAP FOR SINGLE TARGETS

(Continued)

- E. Correct elevation of target (recommended height, 9 feet) by turning control switch to fire and safe (while keeping safely away from trap house opening). Then turn elevation crank (V-139) clockwise to raise elevation, or counter clockwise to lower. One turn of crank changes target elevation about 5" at 30 feet.
- F. To obtain correct flight distance (recommended distance, 50 yards), turn mainspring, adjusting screw (X-42) a half turn at a time, clockwise to increase distance, or counter clockwise to decrease distance. Be sure trap is turned off and carrier is in fired position before making adjustments.
- G. If targets lean or curve to the right, loosen the screws at each end of carrier rail assembly (U-32-AW), move outer end of rail about 1/8" toward leading edge of carrier, and retighten screws while supporting carrier with one hand to prevent springing. If targets lean or curve left, move rail in opposite direction. Recheck direction of flight and correct, if necessary, as described under "D".
- H. Now that target path is adjusted for direction, height, distance, and levelness, push control switch to fire safe. Remove spread adjusting screw (U-249) from the central hole "D" in angle changing disc (U-248-W), and relocate in the No. 3 hold, which will cause extreme right and left targets to be thrown in line with shooting stations 1 and 5 under normal light wind conditions. Be sure to tighten spread adjusting screw securely. If there is a heavy head wind tending to widen the field, place screw (U-249) in the No. 2 or No. 1 hole. A strong tail wind may require locating screw (U-249) in the No. 4 or No. 5 hole.

V139
2 TURNS
CLOCKWISE

X42
20 HALF TURNS
CLOCKWISE

TRAP SET FOR DOUBLES

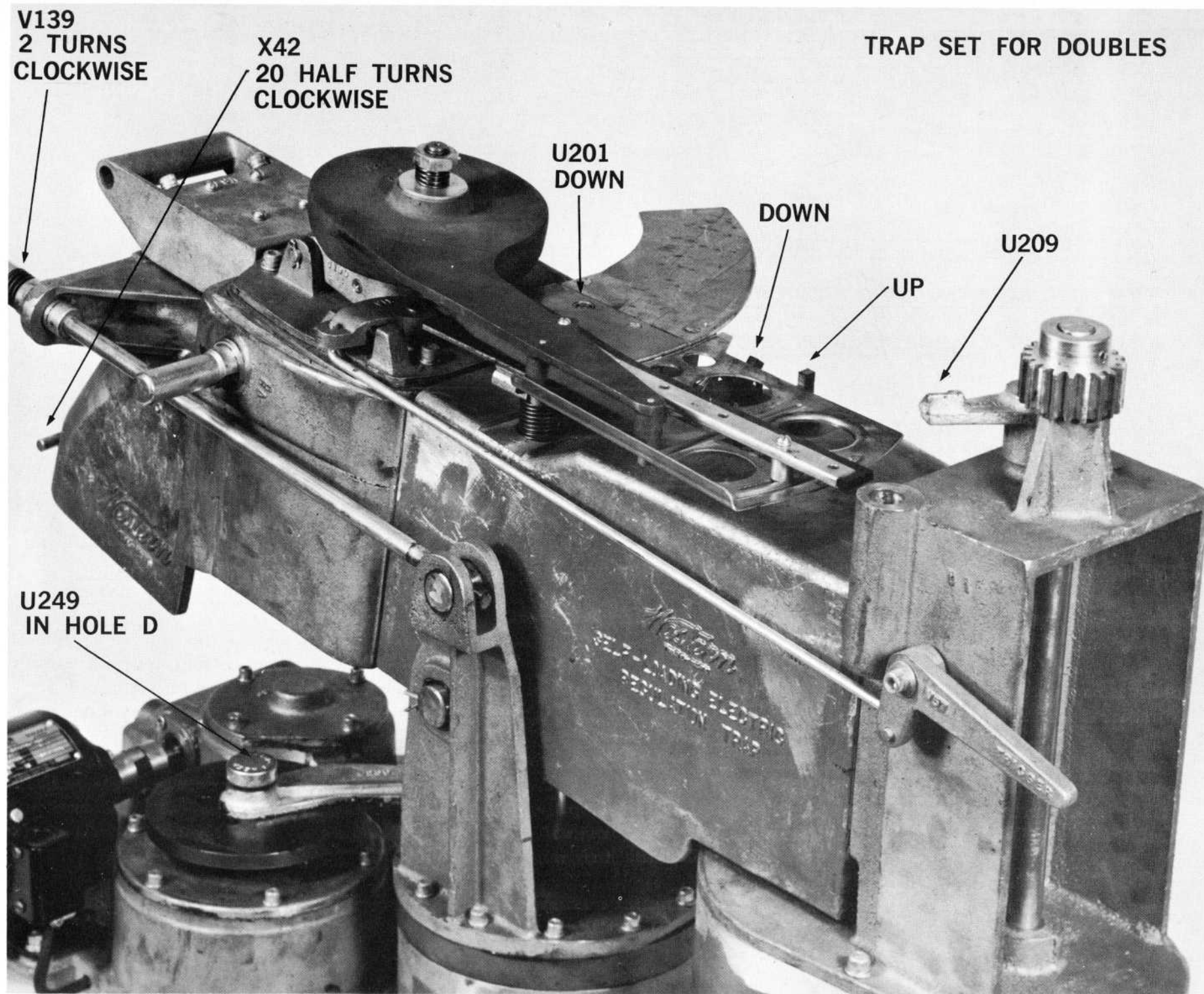
U201
DOWN

DOWN

UP

U209

U249
IN HOLE D



WINCHESTER-WESTERN DIVISION

V-1577-A AUTO-LOADING REGULATION TRAP

SECTION IV - TARGET FLIGHT AND ADJUSTMENT OF TRAP FOR DOUBLE TARGETS

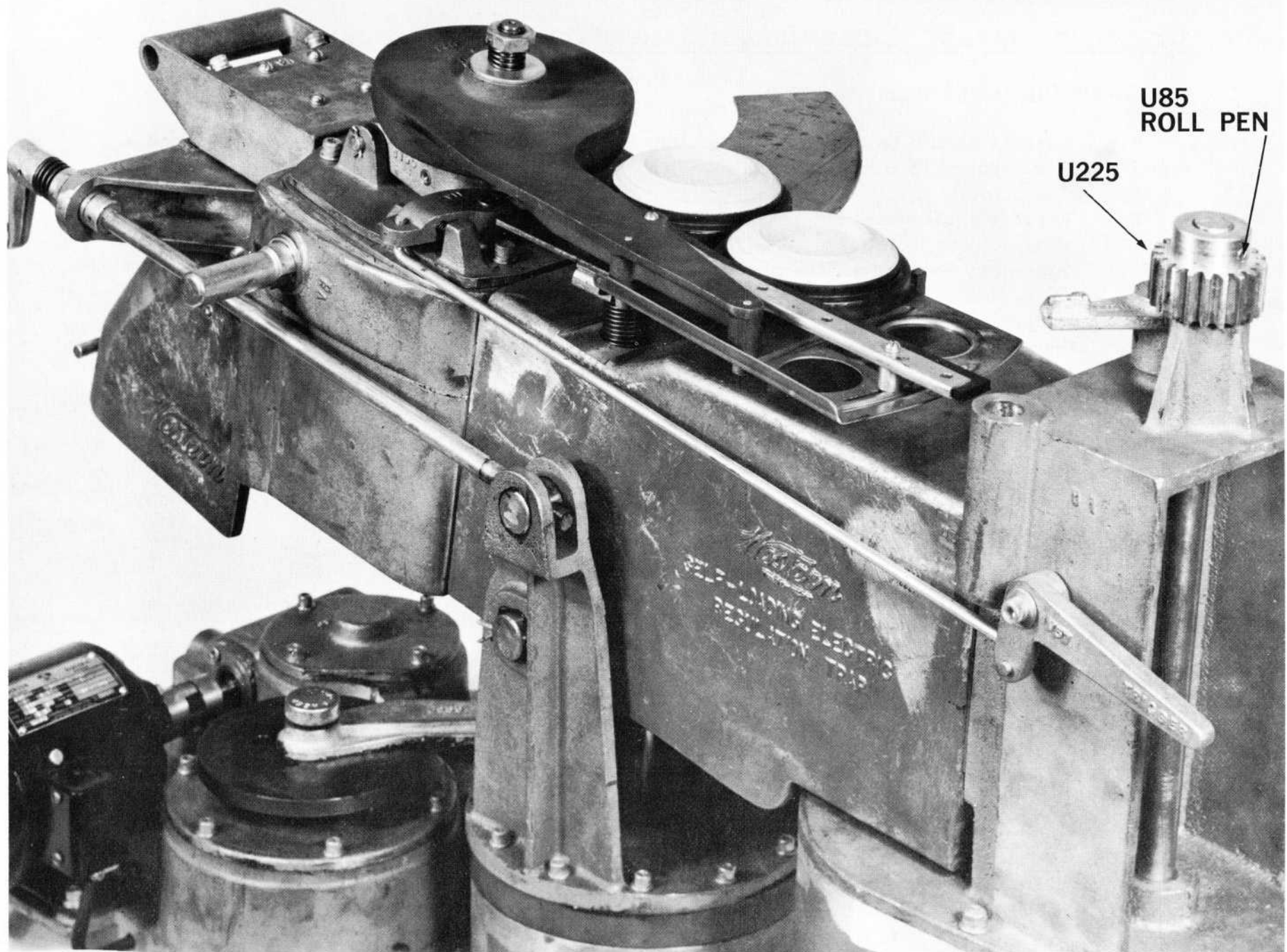
1. Target flights and angles (doubles):

- A. Targets should be thrown not less than 48 yards nor more than 52 yards measured on level ground in still air.
- B. Targets shall be thrown between 8 and 12 feet high (recommended height: 9 feet) at a point 30 feet from trap. The height at a point 30 feet from trap is height above an imaginary horizontal line drawn through the firing points and the trap.
- C. In doubles shooting, the recommended method of throwing targets should be such that the right hand target will be approximately straightway from firing point #1, and the left hand target shall be an approximate straightway from firing point #5.

2. Target flight adjustments for doubles:

- A. Be sure trap is turned off and carrier is in fired position. Place spread adjusting screw (U-249) in central hole "D" of angle changing disc (U-248-W) to lock trap for doubles.
- B. Unload and remove magazine from trap.
- C. Raise elevation by turning elevation crank (V-139) about two clockwise turns.
- D. Tighten mainspring adjusting screw (X-42) by turning 20 half turns or clicks clockwise from the setting normally used for singles.
- E. Push the forward (singles) target stop finger (U-143) to its lower latched position. Unlatch the rear (doubles) stop finger and allow it to assume its upper position.
- F. Push the target stop plunger (U-201-W) to below flush in feed shelf (U-204-W) and turn handle on its lower end 1/4 turn to lock in lower position.
- G. While in safe loading position at left rear of trap, move handle of control switch to "Cock and Run" position.

TRAP LOADED FOR DOUBLES



WINCHESTER-WESTERN DIVISION

V-1577-A AUTO-LOADING REGULATION TRAP

SECTION IV - TARGET FLIGHT AND ADJUSTMENT OF TRAP FOR DOUBLE TARGETS

(Continued)

- H. Place one target against the carrier rail (U-132-AW) and against front corner of rear target stop finger (U-143). Place second target in contact with first target and against the carrier rail.
 - I. Fire trap by lifting and quickly releasing trigger (V-57) left rear of trap. Have person at No. 3 shooting station to note relative height of target paths. Before adjusting be sure trap is turned off and carrier in fired position.
 - J. If the right target is lower, loosen the screws at each end of carrier rail (U-32-AW), and move rail $1/8$ " toward leading edge of carrier. If left target is lower, move in opposite direction. Support carrier with one hand to prevent springing while tightening screws.
 - K. With both targets at same height, center the field by pressing windage latch release (U-24), and moving handle to right or left as needed and relatch.
 - L. Make any final adjustment of distance by tightening or loosening the mainspring, a click or two, after first turning trap off and with carrier in fired position.
 - M. Check elevation of targets (recommended height, 9 feet) by turning control switch to fire and safe. Then obtain correct height by turning elevation crank (U-139).
3. How to return trap setting from doubles to singles.
- A. Leave spread adjusting screw (U-249) in central hole "D" until all adjustments are made.
 - B. Turn trap off and have carrier in fired position. Slack off mainspring 20 half turns counter clockwise, and lower elevation two turns.
 - C. Push target stop plunger (U-201-W) slightly lower, turn its handle $1/4$ turn and allow it to return to its upper position. Lower and latch rear stop finger (U-143) and release forward stop finger permitting it to assume its upper position.
 - D. Reinstall the magazine and check target flight as described under "Adjustment of traps single targets".

WINCHESTER-WESTERN DIVISIONV-1577-A AUTO-LOADING REGULATION TRAPSECTION V - PARTS

<u>Cat. No.</u>		<u>Cat. No.</u>		<u>Cat. No.</u>	
U-1-W	Magazine Support Bracket Assembly	U-15	Supporting Bearing Race for Swivel Base	U-25	Spring for Windage Latch and Target Stop Plungers
U-2-W	Frame Assembly	U-16	Adjustable Bearing Race for Swivel Base	U-27	Carrier Arm
V-3-W	Gear Housing Assembly	U-17	Adjustable Bearing Race Shim	U-28	Carrier Plate
U-4-W	Gear Housing Cover and Feed Cam Assembly	U-18-W	Swivel Base Bearing Ball (Set of 37)	U-29-W	Carrier Plate Screws (Set)
U-5	Mainspring Housing	U-19-W	Screws for Swivel Base Outer Bearing Race, Magazine Guide Rails, etc. (Set of 12)	U-30-W	Carrier Rail Bolts (Set)
V-6	Solenoid Housing			U-32-AW	Formed Carrier Rail Assembly
V-7	Cocking Pawl			V-34	Carrier Rail Support
V-8	Hold-back Pawl	U-20-W	Screws for Swivel Base Adjustable Bearing Race (Set of 12 Screws with Lockwashers and Reinforcing Nuts) (Not Shown)	X-36-W	Worm Shaft Gland Assembly
V-9-W	Control Cam Assembly			V-36-W	Trap Grounding Bolt (Not Shown)
V-10-W	Sear Assembly			X-37	Washer for Crank Stud
V-11-W	Trigger Arm Assembly	U-21-W	Windage Adjusting Base Assembly	X-39-W	Mainspring Crank Assembly
U-13-W	Swivel Base Assembly	U-22-W	Windage Adjusting Base Pivot Assembly	X-40-W	Mainspring Assembly *
U-14	Outer Bearing Race for Swivel Base	U-23	Windage Latch Plunger	X-42	Mainspring Adjusting Screw
		U-24	Windage Latch Release	X-43	Mainspring Swivel

*A used X-40-W Mainspring Assembly may be returned to the factory for reconditioning with new spring and bushing.

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Western Self-Loading *Electric* Regulation Trap Parts



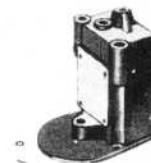
U5



V3W



U2W



U1W



U4W



V6



V7



V8



V9W



V10W



V11W



U13W



U14



U15



U16



U17



U18W



U19W



U21W



U22W



U23



U24



U25



U28



U27



U29W



U30W



U32AW



V34



X36W



X37



X39W



X40W



X43



X42

WINCHESTER-WESTERN DIVISIONV-1577-A AUTO-LOADING REGULATION TRAPSECTION V - PARTS

<u>Cat. No.</u>		<u>Cat. No.</u>		<u>Cat. No.</u>	
U-45	Main Shaft	V-62	Shaft for Sear and Hold-back Pawl	X-87-W	Screws for Gear Housing Cover or Cocking Worm Gland (Also used to pull V-62 Shafts from V-3 Housing) (Set of 4)
U-46	Nut for Main Shaft, Windage Base Pivot, and Spider Mounting Stud	V-63-W	Pawl Holding Magnet Assembly	X-88-W	Clamp Screw Assembly for Mainspring Crank
V-47-W	Escapement Cam Roll Assembly	X-65	Cocking Pawl Spring	V-93-W	Gear Housing Mounting Screws (Set of 4)
U-49	Carrier Hold-down Spring	V-66	Firing Pin	X-94	Key for Mainspring Crank
U-50	Carrier Hold-down Washer	V-67	Firing Pin Guide	V-105-W	Main Shaft Oil Seal and Lower Bearing Assembly
V-51-A	Escapement Lever Spring	V-68	Firing Bar	X-106	Worm Shaft Oil Seal
V-52-B	Escapement Cushion	V-70	Sear Plunger	V-107	Cocking Worm
U-53	Escapement Cushion Holder	V-71	Sear Spring	V-108-W	Worm Gear Assembly
U-56	Trigger Pull Rod	V-72	Sear Plunger Bushing	V-110-W	Planet Gear Assembly
V-57	Trigger	X-76-W	Cable Anchor Clip Assembly	V-111	Cocking Ring Gear and Ratchet
X-58	Spring for Trigger Arm and Push Rod Operator	X-79-W	Base Bolts (Set of 3)	U-116-A*	Control Cable
V-59-W	Trigger Mounting Bolt Assembly	V-82-W	Stop Finger Bracket and Guide Shelf Bracket Bolts (Set of 2 Bolts with Extra Lock Washers)	X-117-A*	Power Cord Assembly
V-60	Trigger Bushing	X-82-W	Solenoid Mounting Bolts (Set of 4 Bolts with Lock Washers)	U-119*	Power Receptacle
		U-85	Roll Pin for U-225 (Not Shown)	U-120*	Release Outlet Receptacle

Cat. No.

X-125-A*	Release Switch Assembly
X-125-AX	Release Switch Only (Not Shown)
V-126-W	Outlet Box Assembly
X-127	Release Solenoid
V-128	Cable Connector
U-129	Cocking Motor
X-130-B	Cocking Motor Coupling
U-130-A	Angle Changing Motor Coupling
U-131-W	Angle Changing Motor Assembly
X-132	Worm Thrust Bearing
X-133	Oil Filler, Drain and Level Gage Plugs, each
U-134-W	Assorted Cotter Pins (Not Shown)
U-135-W	Elevation Pivot Assembly

NOTE: Parts indicated thus (*) are used only on traps starting with Serial No. U-277, which are provided with plug-in type electrical grounding and waterproof release units. These earlier traps cannot use above parts (*) unless sent in to factory for conversion

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Western Self-Loading *Electric* Regulation Trap Parts



WINCHESTER-WESTERN DIVISIONV-1577-A AUTO-LOADING REGULATION TRAPSECTION V - PARTS

<u>Cat. No.</u>		<u>Cat. No.</u>		<u>Cat. No.</u>	
U-136	Elevation Screw Swivel	V-152	Gear Case Oil, per quart (Not Shown)	U-180-W	Magazine Spider Assembly
U-137-AW	Elevation Adjusting Screw Assembly	U-155	Magazine Support Bracket Shim	U-181	Magazine Inner Guide Rail
V-141-W	Tool for Guiding Main Shaft thru Oil Seal	U-156-W	Magazine Support Bracket Mounting Screws (Set of 4)	U-182	Magazine Outer Guide Rail
U-142	Target Stop Finger Bracket	V-161-W	Solenoid and Indexing Gear Housing Screws	U-183-W	Magazine Mounting Stud Assembly
U-142-W	Target Stop Finger Bracket Assembly	V-163-W	Trap Motor Mounting Bolts (Set of 4)	U-184	Magazine Thrust Bearing
U-143	Target Stop Finger	U-165-W	Angle Change Motor Mounting Screws (Set of 4)	U-185-W	Escapement Lever Assembly
U-144	Stop Finger Retaining Collar	V-173-W	Trap Motor Support Screw (Set of 2)	U-186	Escapement Lever Stud
U-145-W	Stop Finger Guide Pin (Also used for Items U-24, U-149, and U-178) (Set of 4)	U-174-W	Magazine Base Assembly	U-187-W	Escapement Lever Stud Screw Assembly
U-146	Stop Finger Spring	X-175	Ground Rod (Not Shown)	U-189-W	Target Feed Cam Assembly
U-149	Target Feed Finger	X-176	Ground Rod Clamp (Not Shown)	U-190-W	Target Feed Arm Assembly
U-150	Target Feed Finger Bracket	U-177	Escapement Push Rod	V-191-W	Target Feed Arm Pivot Assembly
U-150-W	Target Feed Finger Bracket Assembly	U-178	Escapement Push Rod Spring	V-192-W	Target Feed Cam and Indexing Gear Drive Roll Assembly
U-151-W	Feed Finger Bracket Bolts (Set of 2)	U-179-W	Push Rod Spring Holder Assembly	V-194-W	Feed Shelf Operating Roll Assembly
				V-196-W	Feed Shelf Lifting Spring (Set of 2)

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Western Self-Loading *Electric* Regulation Trap Parts



U136



U137W



V141W



U142



U142W



U143



U144



U145W



U146



U149



U150



U150W



U151W



U155



U156W



V161W



V163W



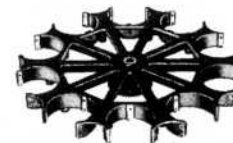
U165W



U174W



V173W



U180W



U177



U178



U179W



U181



U182



U183W



U184



U185W



U186



U187W



U189W



U190W



V191W



V192W



V194W



V196W

WINCHESTER-WESTERN DIVISIONV-1577-A AUTO-LOADING REGULATION TRAPSECTION V - PARTS

<u>Cat. No.</u>		<u>Cat. No.</u>		<u>Cat. No.</u>	
V-197-W	Feed Shelf Operating Bracket Assembly	U-216-W	Indexing Driver Shaft Assembly	U-229-W	Angle Change Worm Shaft Gland Assembly
U-201-W	Target Stop Plunger Assembly	U-217	Thrust Bearing for Indexing Driver and Gear Shafts	U-230-W	Angle Change Worm Gear Cover Assembly
U-204-W	Target Feed Shelf Assembly	U-218	Main Shaft Sprocket	U-231	Angle Change Worm
V-205-W	Target Feed and Guide Shelf Bolts (Set of 2)	U-219	Key for Main Shaft Sprocket	U-232	Angle Change Worm Gear
V-206	Feed Shelf Shim	U-220-W	Indexing Chain Assembly, with Connecting Link	U-233-W	Worm Gear Shaft Assembly
U-207-W	Target Guide Shelf Assembly	U-221	Chain Connecting Link	U-234	Key for Angle Change Worm Gear Shaft
U-208-W	Guide Shelf Bracket Assembly	U-222	Indexing Gear Housing	U-235	Angle Change Drive Pinion
U-209	Escapement Push Rod Operator	U-223	Magazine Indexing Gear	U-236-W	Angle Change Idle Gear Assembly
U-210-W	Escapement Operator Shaft Assembly	U-224-W	Indexing Gear Shaft Assembly	U-238	Idle Gear Shaft
U-211-W	Escapement Roller Arm Assembly (See V-47-W for Roller)	U-225	Magazine Drive Pinion	U-240-W	Angle Change Control Hub and Gear Assembly
U-212	Target Escapement Cam	U-226	Magazine Drive Gear	U-241	Angle Changing Control Gear
U-213	Indexing Gear Sprocket	U-227	Key for Magazine Drive Gear	U-242-W	Angle Change Control Link Assembly
U-214-W	Indexing Gear Driver Assembly	U-228-W	Angle Change Worm Shaft Assembly	U-245-W	Angle Change Output Gear Cover Assembly
				U-248-W	Angle Changing Disc Assembly
				U-249	Spread Adjusting Screw

Cat. No.

- U-250-W Angle Changing Link Assembly
- U-251 Angle Changing Link Pin
- U-252-W Angle Link Pin Retainer Assembly
- U-253 Angle Change Link Support Washer
- U-255-W Trap Base Assembly
- U-256 Trap Control Switch
- U-257 Angle Change Switch
- U-258 Control Unit Cover
- U-259-W Control Unit Cover Screw (Set of 4)
- U-260 Control Unit Housing
- U-261 Control Unit Liner
- U-262-W Control Cable Clamp Body Assembly
- U-263 Control Cable Clamp Body Seal
- U-264 Clamp Body Nut
- U-265-W Control Cable Clamp Bushing with Seal and Washer

Western Self-Loading *Electric* Regulation Trap Parts

