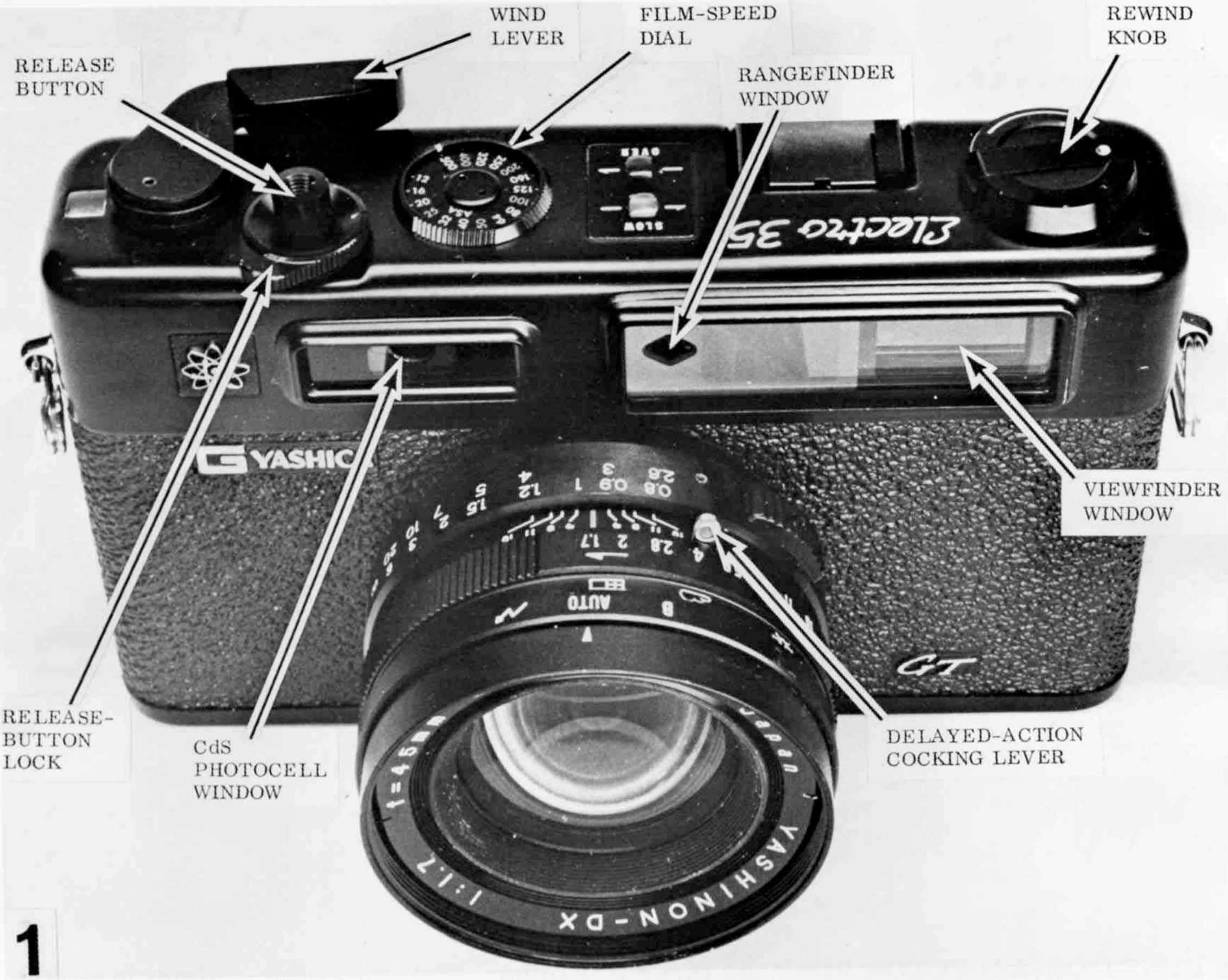
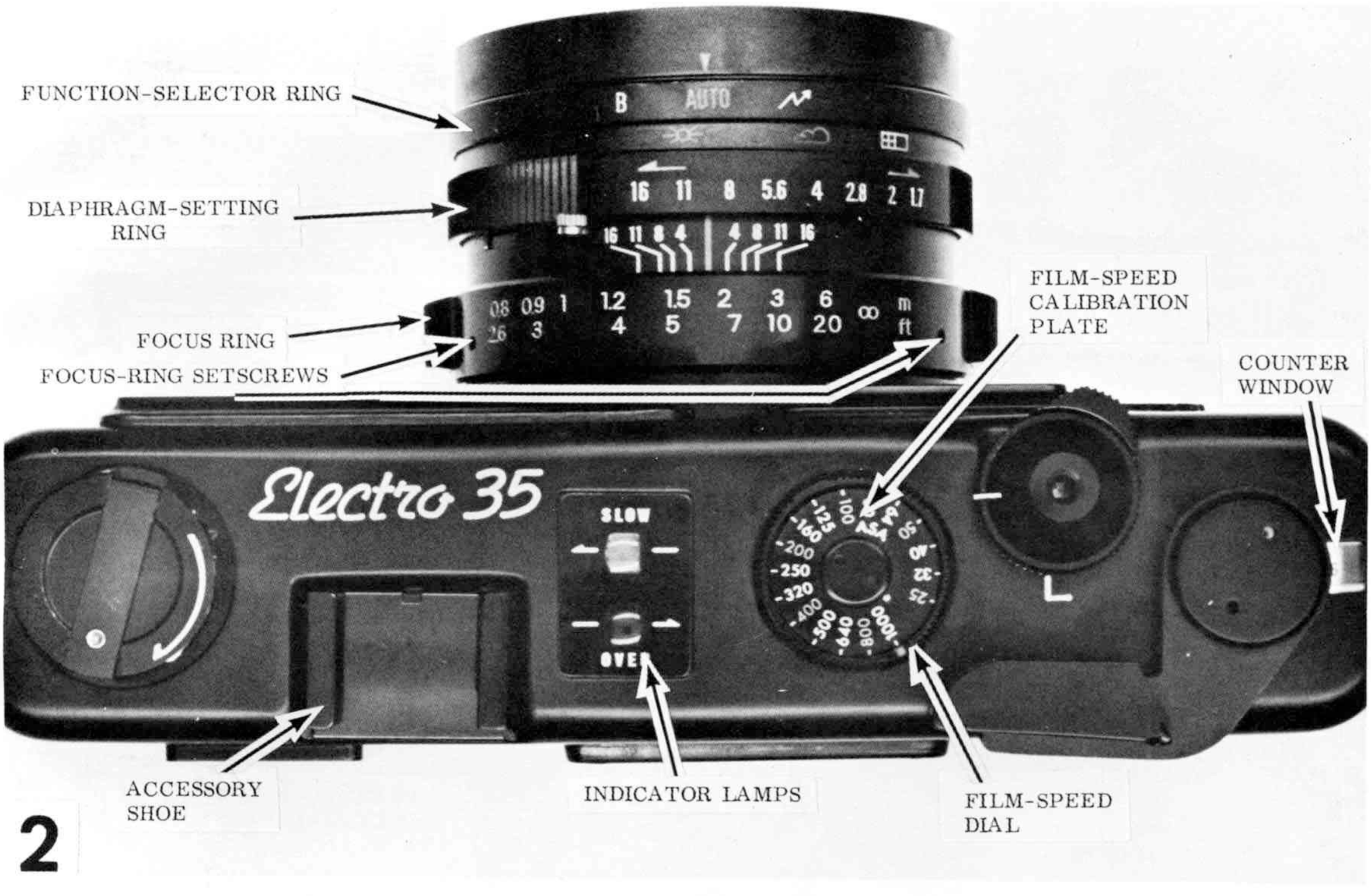
YASHICA

Electro 35



1

Select the film speed by turning the FILM-SPEED DIAL. Notice that this moves a pair of masks in front of the CdS photocell. The faster the film speed selected, the larger the aperture between the masks.

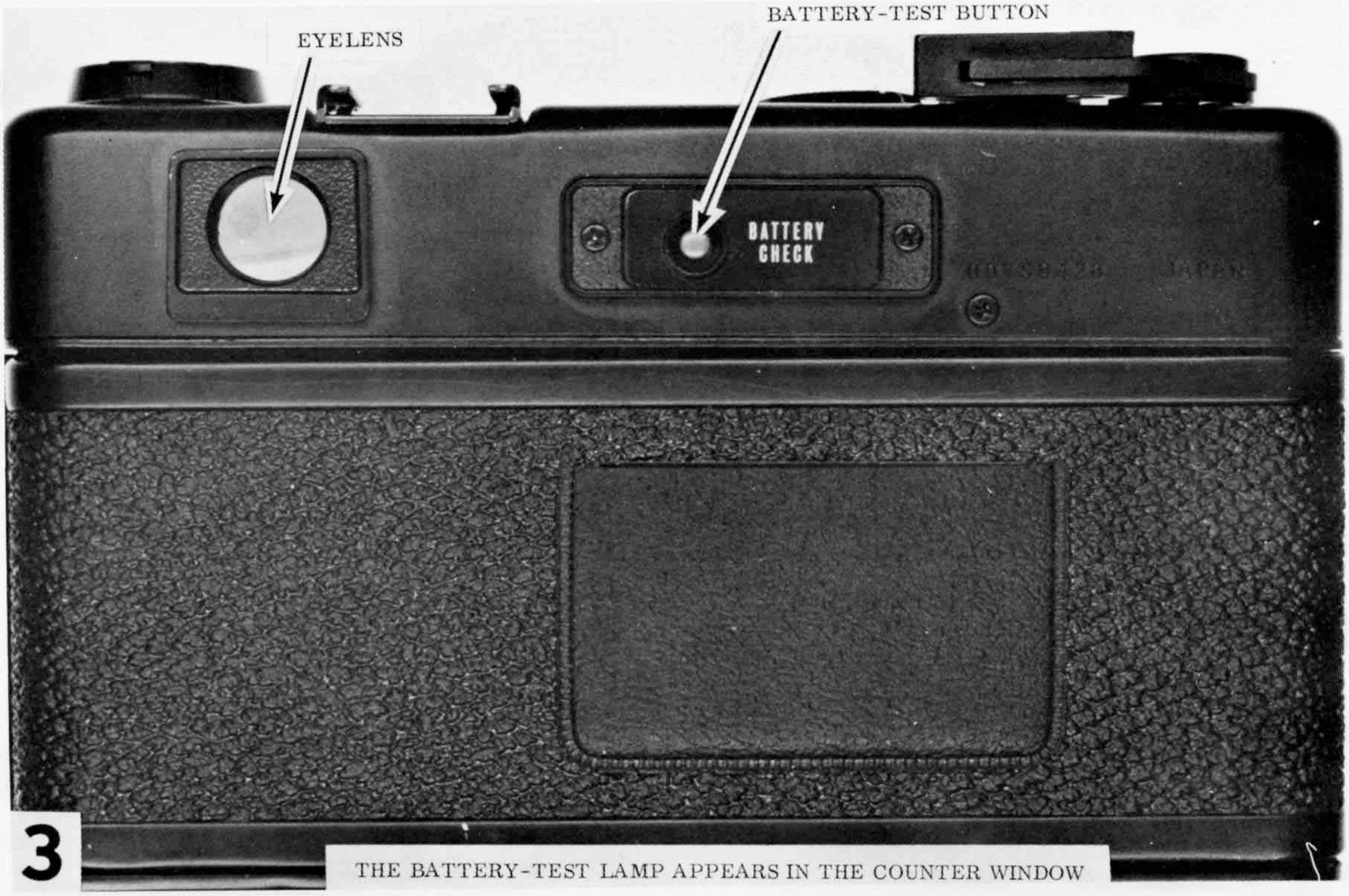


The FUNCTION-SELECTOR RING has three positions: "B" (for bulb), a lightning-flash symbol (for using flash), and "AUTO." At the "AUTO" position, the shutter-speed control is fully automatic.

Selecting the diaphragm setting moves the diaphragm leaves to the desired f/stop. At the same time, the diaphragm-setting ring selects a value of resistance for the exposure-control circuit. The shutter then automatically programs the shutter speed according to the amount of light striking the CdS cell, the diaphragm setting, and the film-speed setting.

The fastest speed the camera can deliver is 1/500 second. As you start depressing the release button, watch the indicator lamps on the top cover. If the red (overexposure) lamp comes on, you know that the fastest shutter speed of 1/500 second is too slow for the proper exposure. You must then set a smaller f/stop.

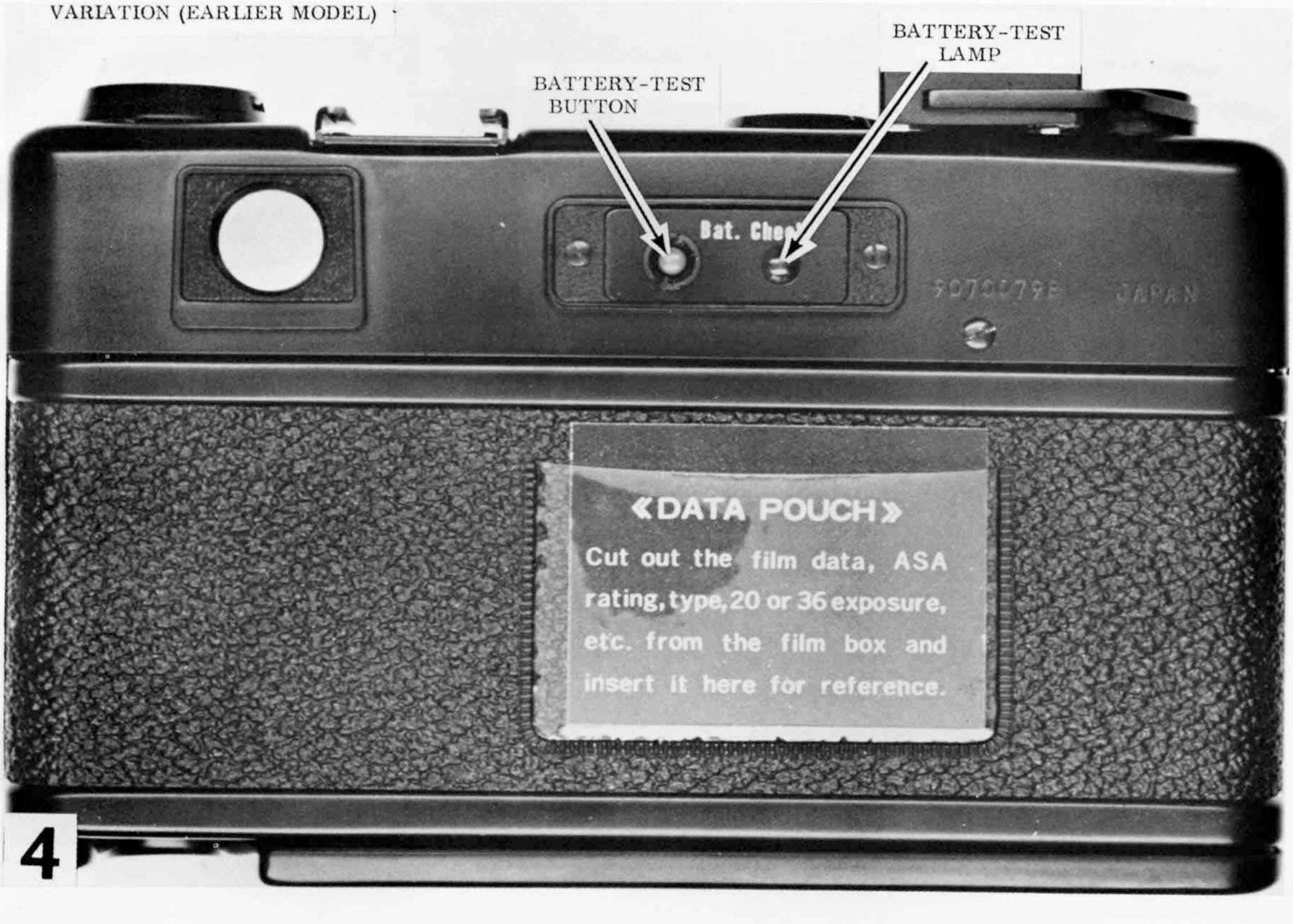
If the yellow (slow) lamp comes on, the required shutter speed is too slow for a hand-held exposure (slower than 1/30 second). The yellow-lamp warning tells you to use a larger f/stop, a flash attachment, or a tripod.

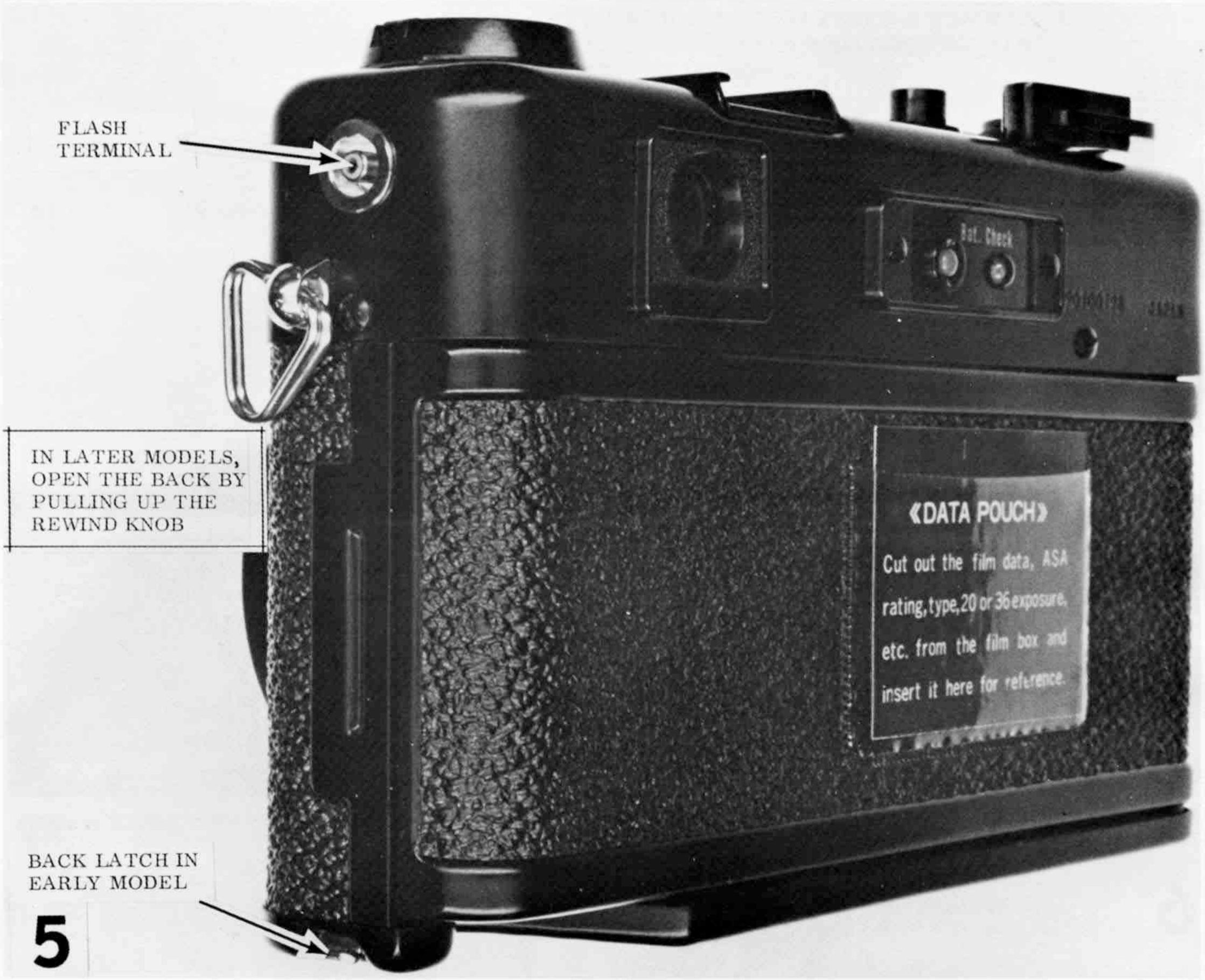


3 THE BATTERY-TEST LAMP APPEARS IN THE COUNTER WINDOW

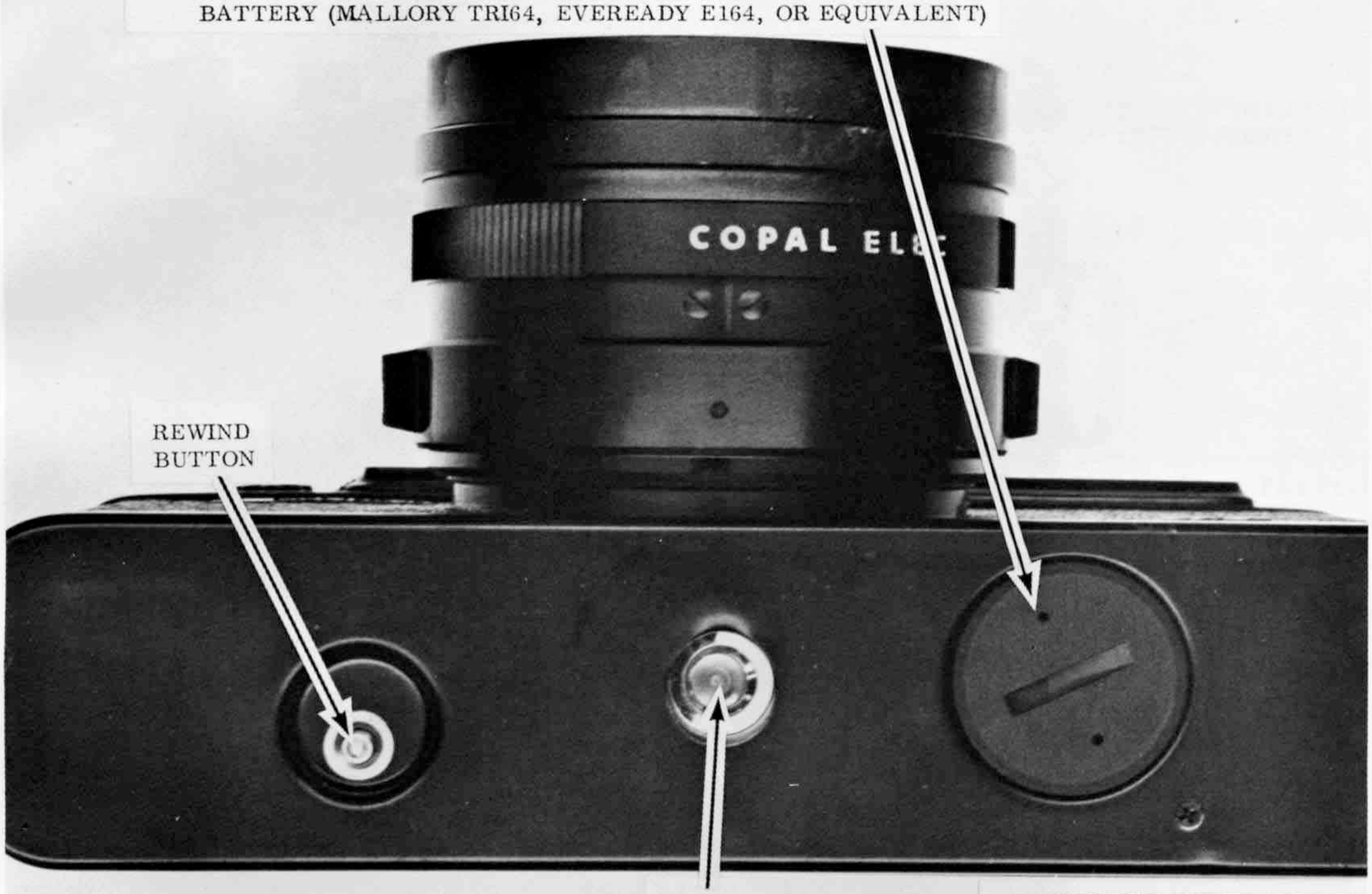
You'll find the battery-test lamp in one of two positions, according to the camera model. In current models, the battery-test lamp appears in the counter window when you depress the battery-test button. Here, the battery-test lamp serves a second function -- it illuminates the counter dial, making the calibrations visible at night. In earlier models, the battery-test lamp is next to the battery-test button, Fig. 4.

VARIATION (EARLIER MODEL)



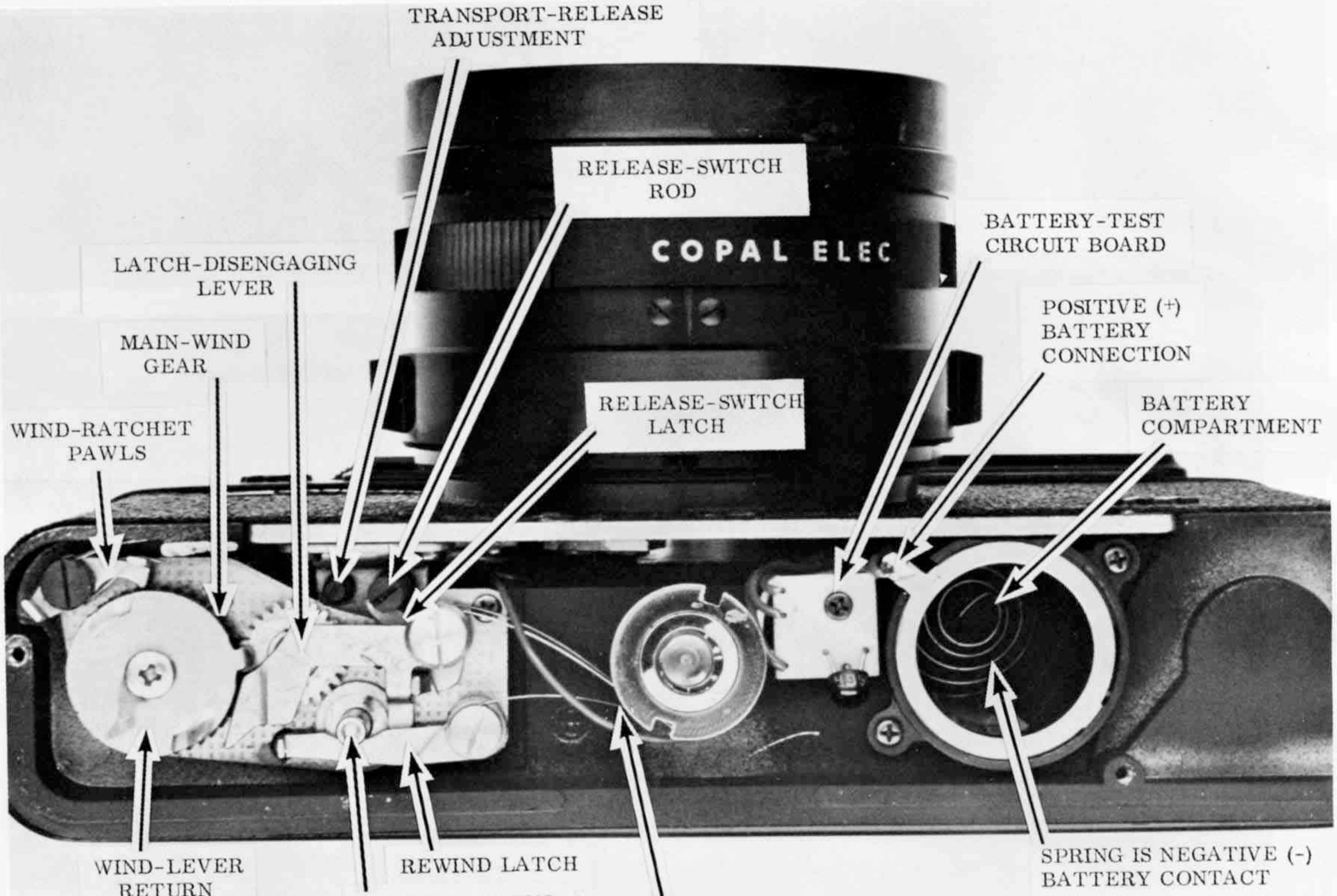

FLASH
TERMINAL
IN LATER MODELS,
OPEN THE BACK BY
PULLING UP THE
REWIND KNOB
Bat. Check
«DATA POUCH»
Cut out the film data, ASA
rating, type, 20 or 36 exposure,
etc. from the film box and
insert it here for reference.
BACK LATCH IN
EARLY MODEL

1. UNSCREW BATTERY COVER AND REMOVE THE 5.2-VOLT BATTERY (MALLORY TRI64, EVEREADY E164, OR EQUIVALENT)

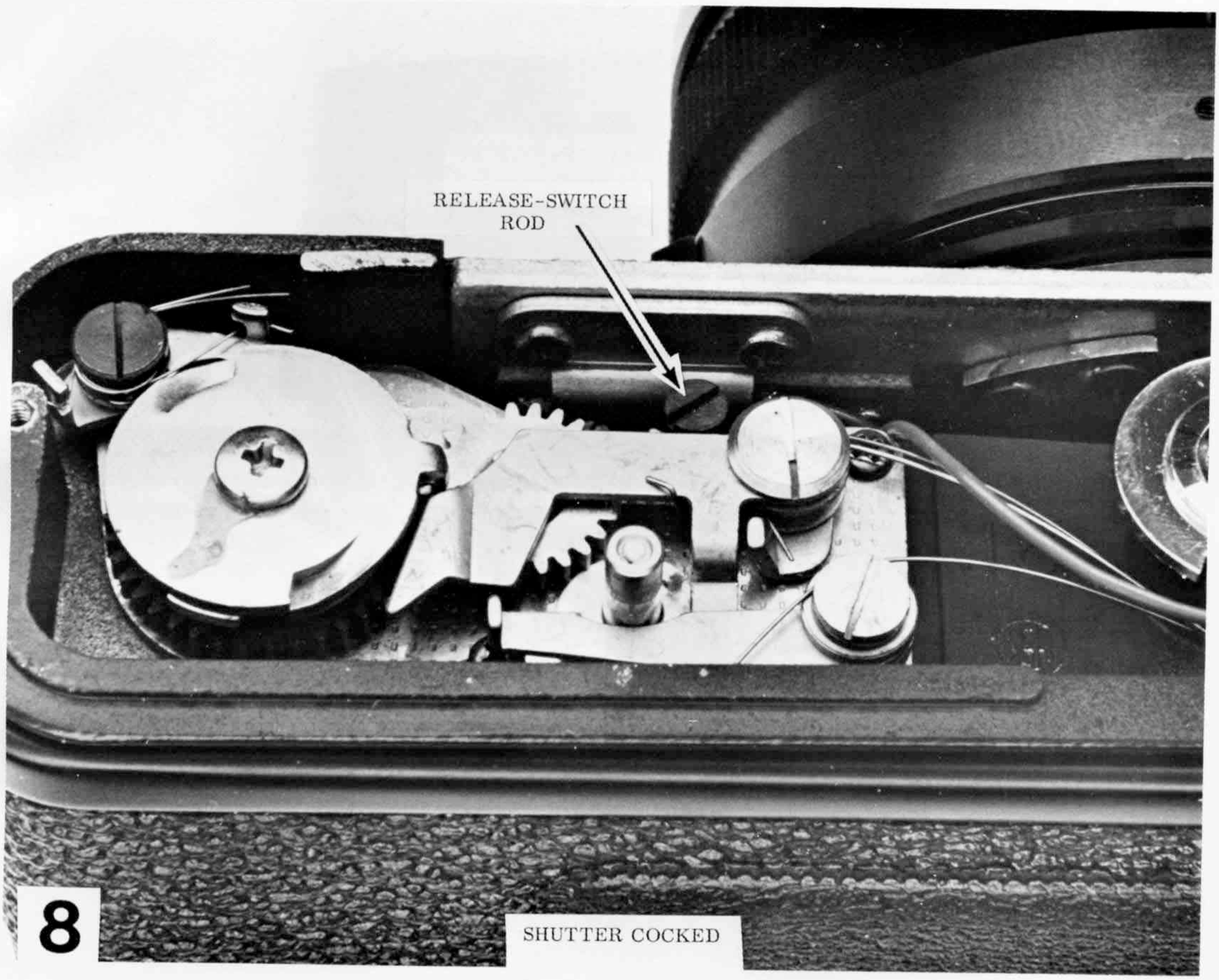


2. REMOVE THREE SCREWS AND LIFT OFF BOTTOM PLATE

Removing the bottom plate in earlier models requires some manipulation to clear the back latch.

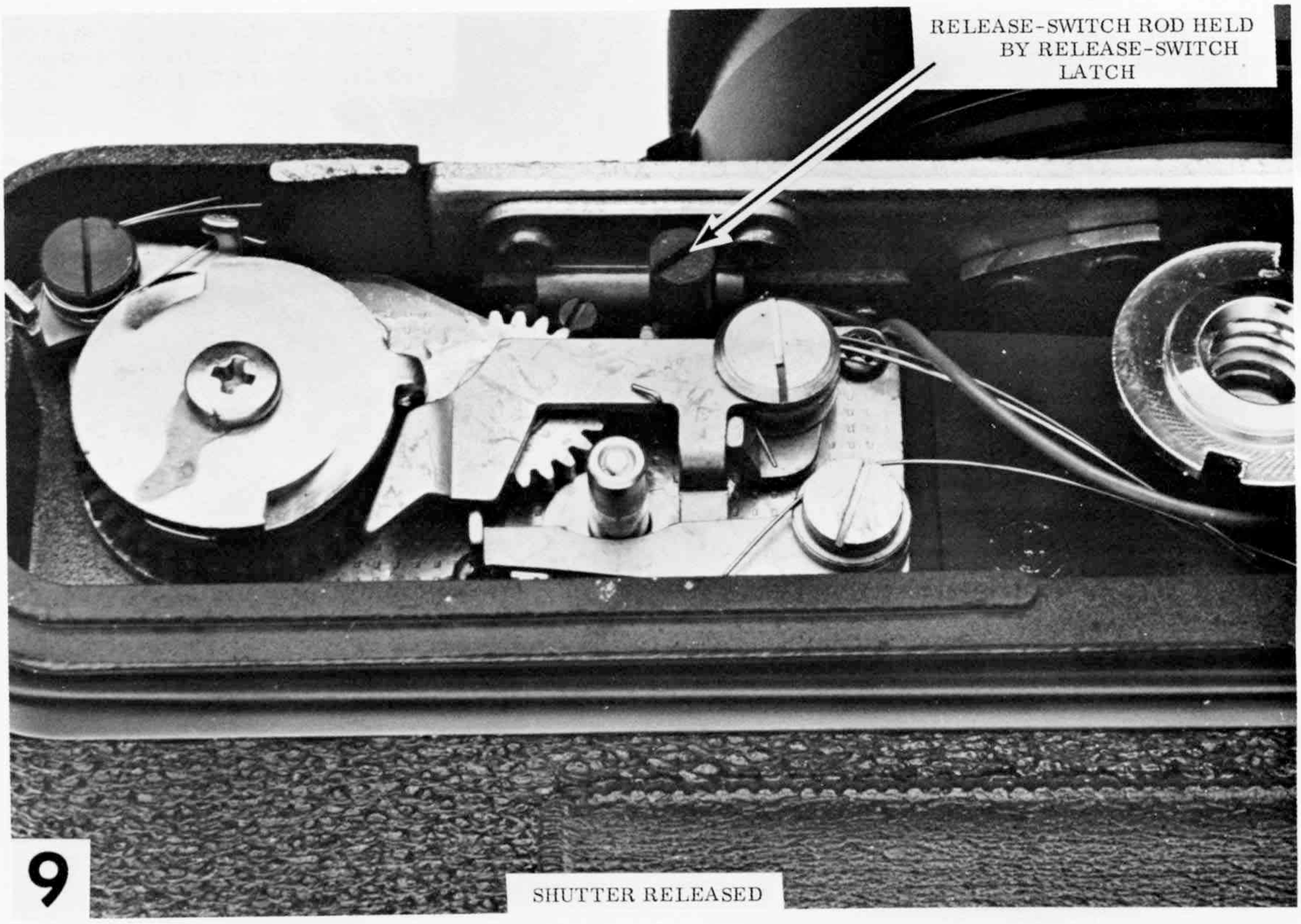


The transport-release adjustment is accessible from the bottom of the camera. Yet you can make the same adjustment from the top of the camera after removing the top cover plate. This adjustment will be described later, when the parts controlled by the adjustment are visible.



8

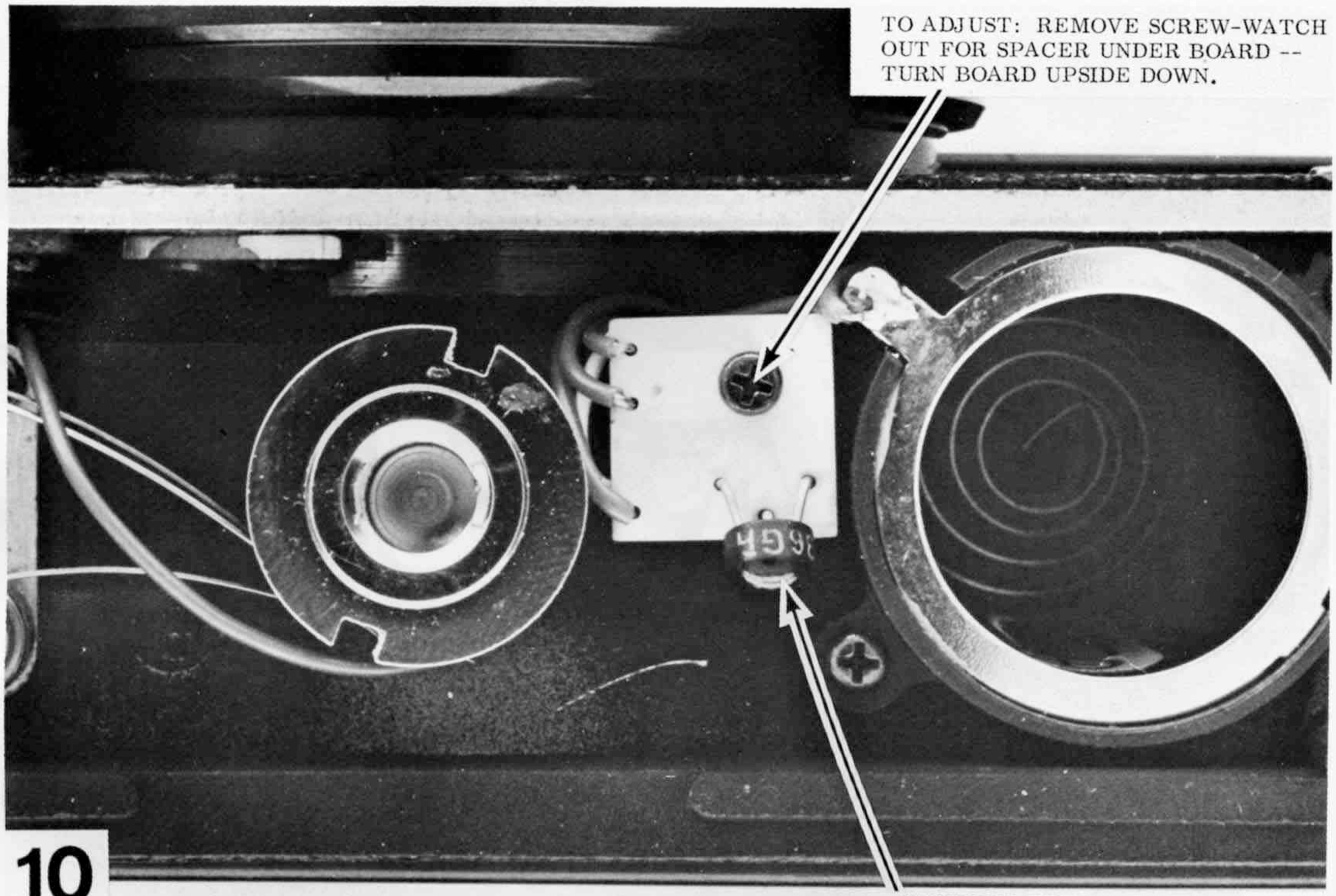
SHUTTER COCKED

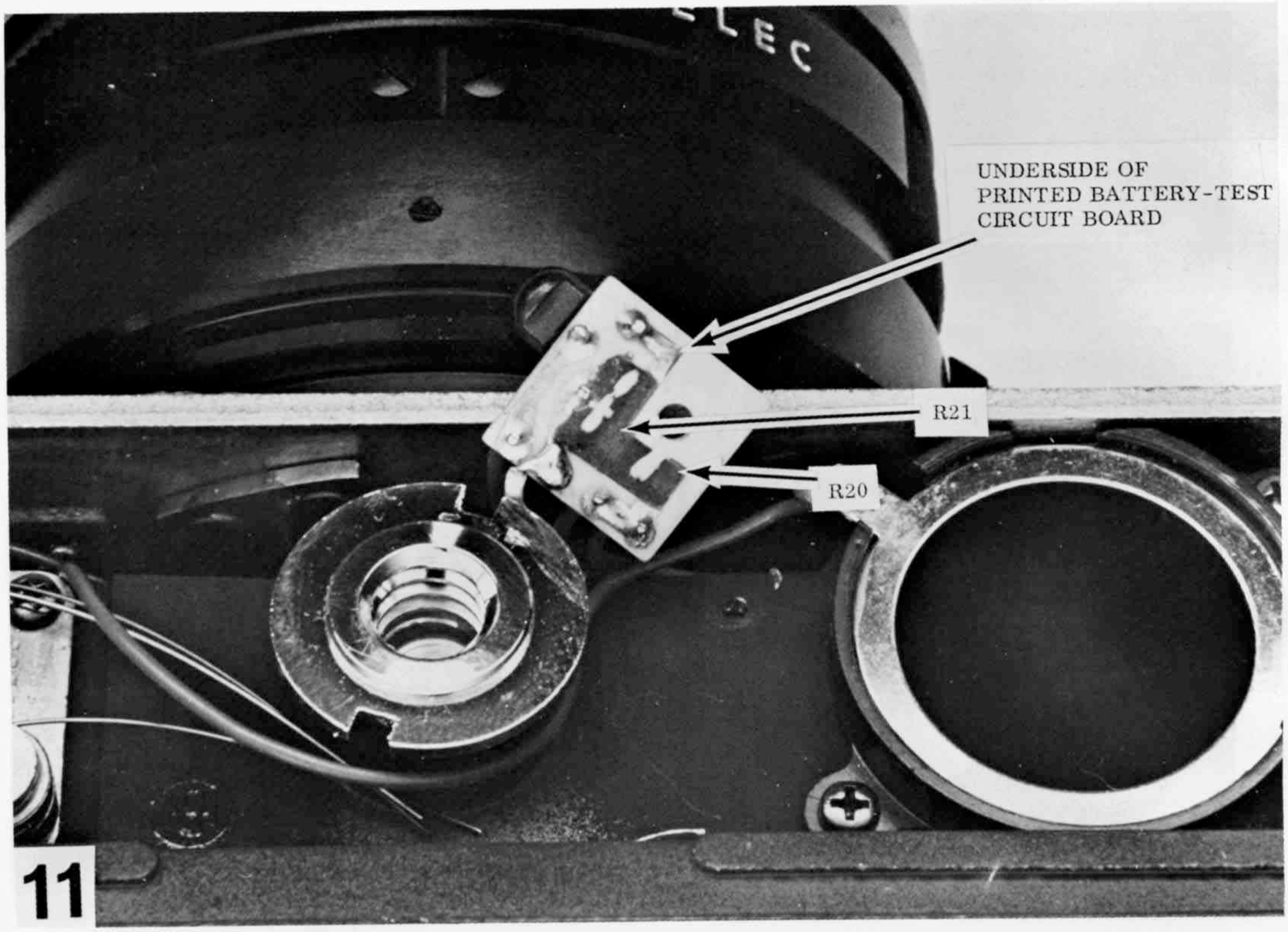


9 SHUTTER RELEASED

Notice that the end of the release-switch rod moves toward the bottom of the camera as you depress the release button. The release-switch latch then drops into a groove in the release-switch rod -- that holds the release-switch rod in the depressed position until you cock the shutter for the next exposure. This latching arrangement assures that the exposure-control circuit remains connected -- even though you allow the release button to return to its rest position.

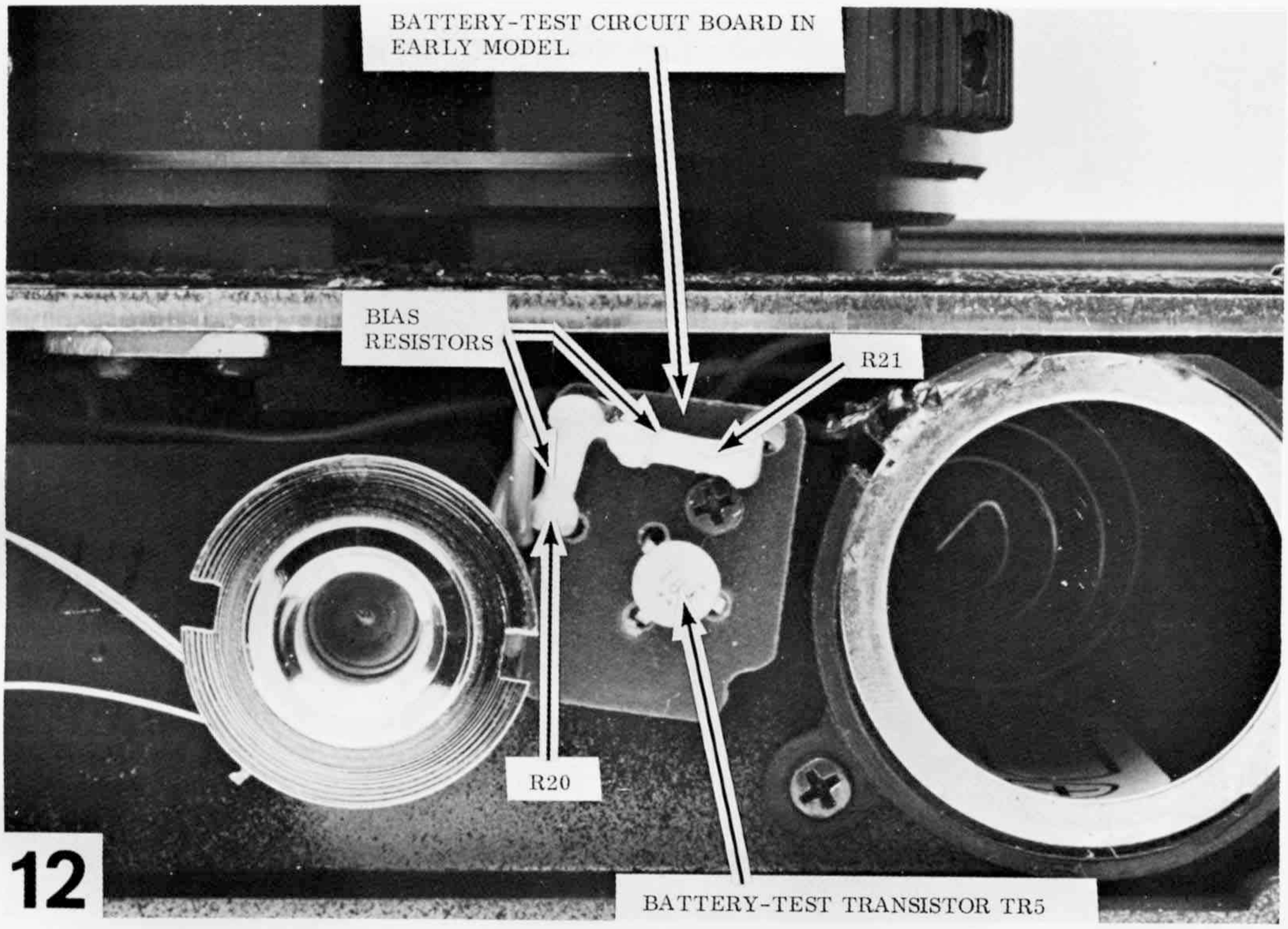
Turning the screwdriver-slotted end of the release-switch rod controls the point at which the release-switch latch drops into engagement. Check to see that the release-switch latch engages the slot in the release-switch rod at the same moment that the shutter releases. The adjustment may be disturbed when you replace the front plate of the camera.


TO ADJUST: REMOVE SCREW-WATCH OUT FOR SPACER UNDER BOARD -- TURN BOARD UPSIDE DOWN.
BATTERY-TEST TRANSISTOR TR5

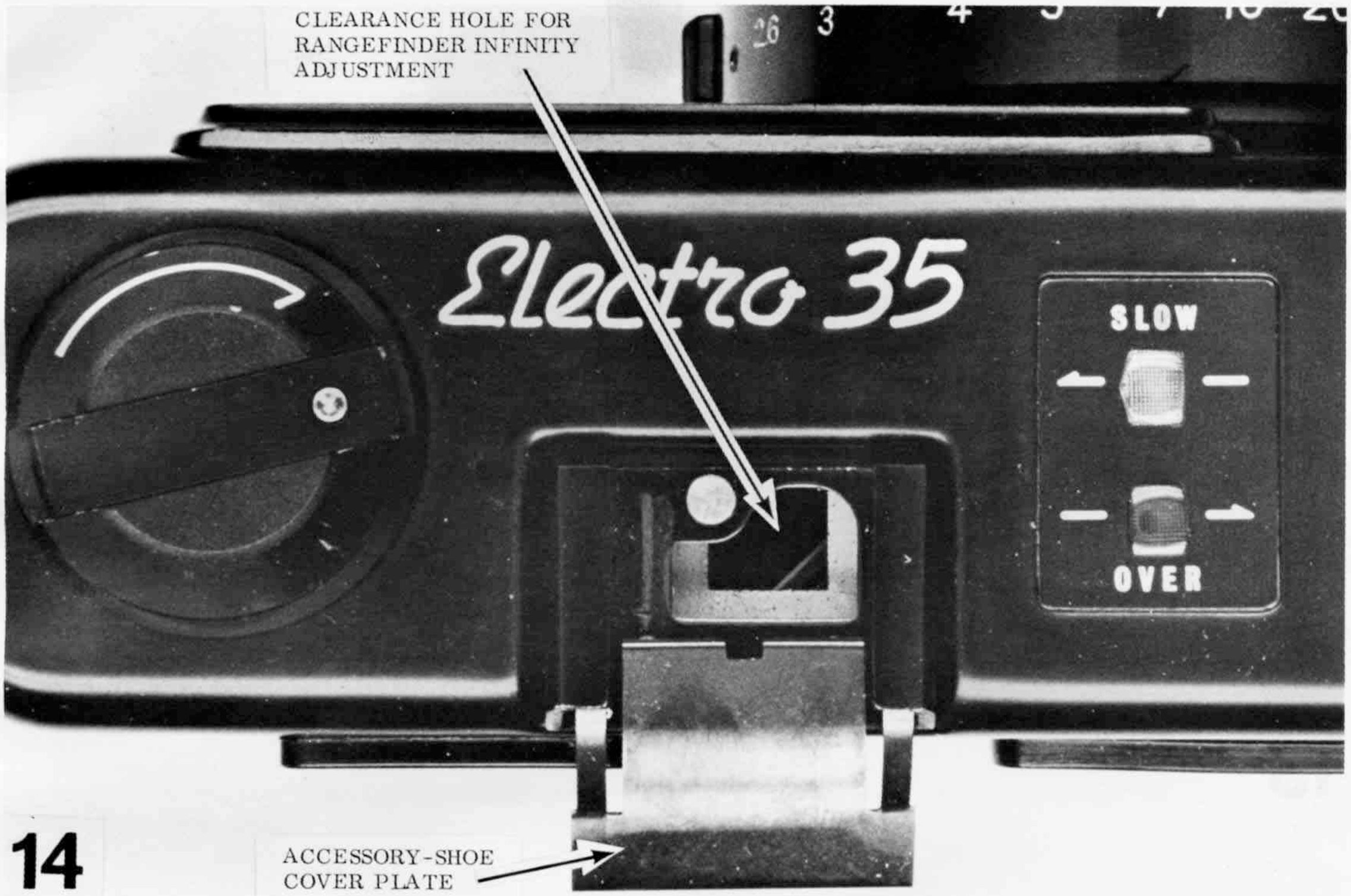


11

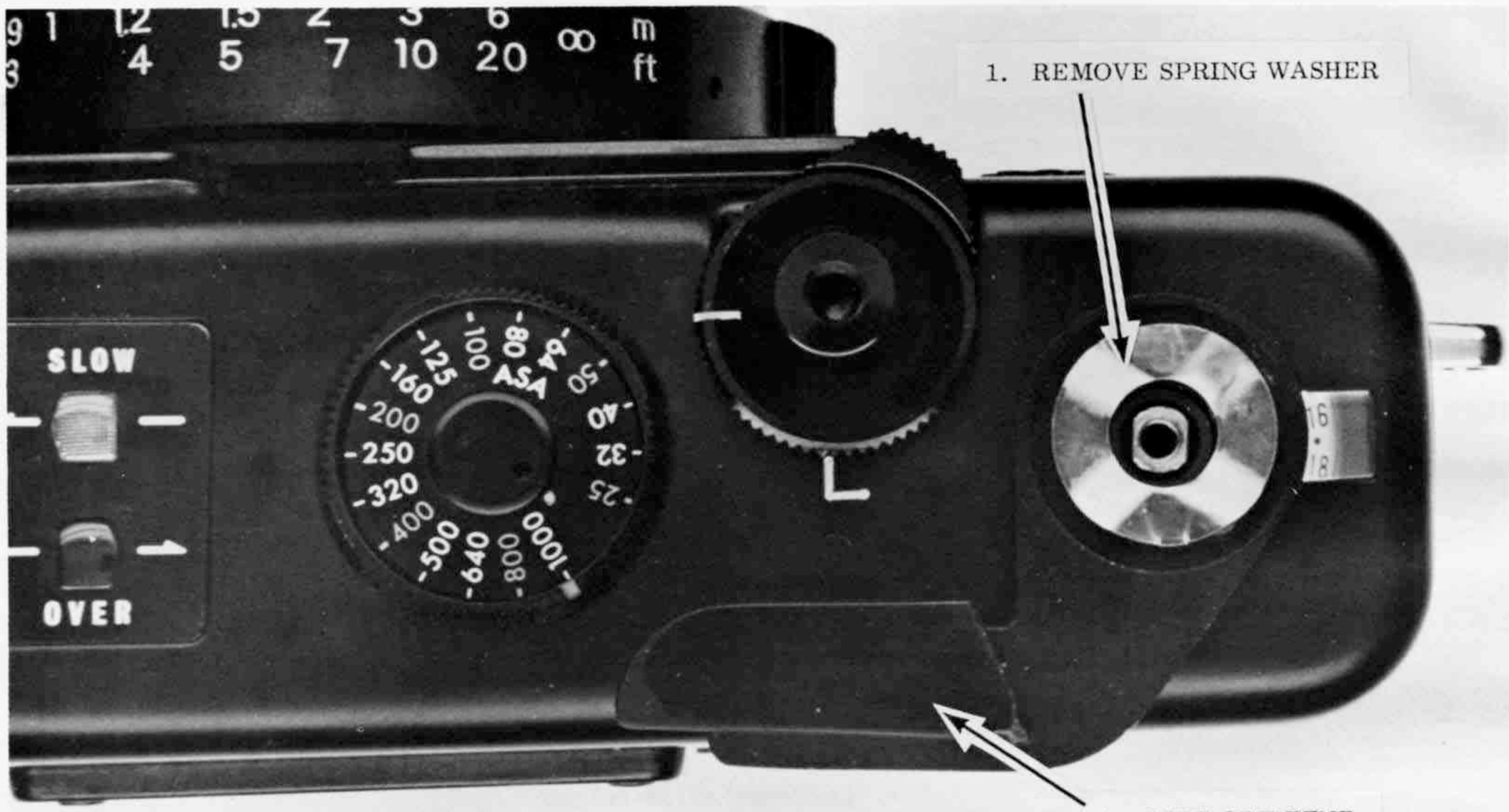
The battery-test lamp should turn on with 3.9 volts supplied to the battery terminals; it should turn off with 3.5 volts supplied. Adjustment in the earlier models (figure 12) is by changing the values of the fixed resistors; adjustment in the current models is by scratching the surface of the printed resistors to increase the resistance.

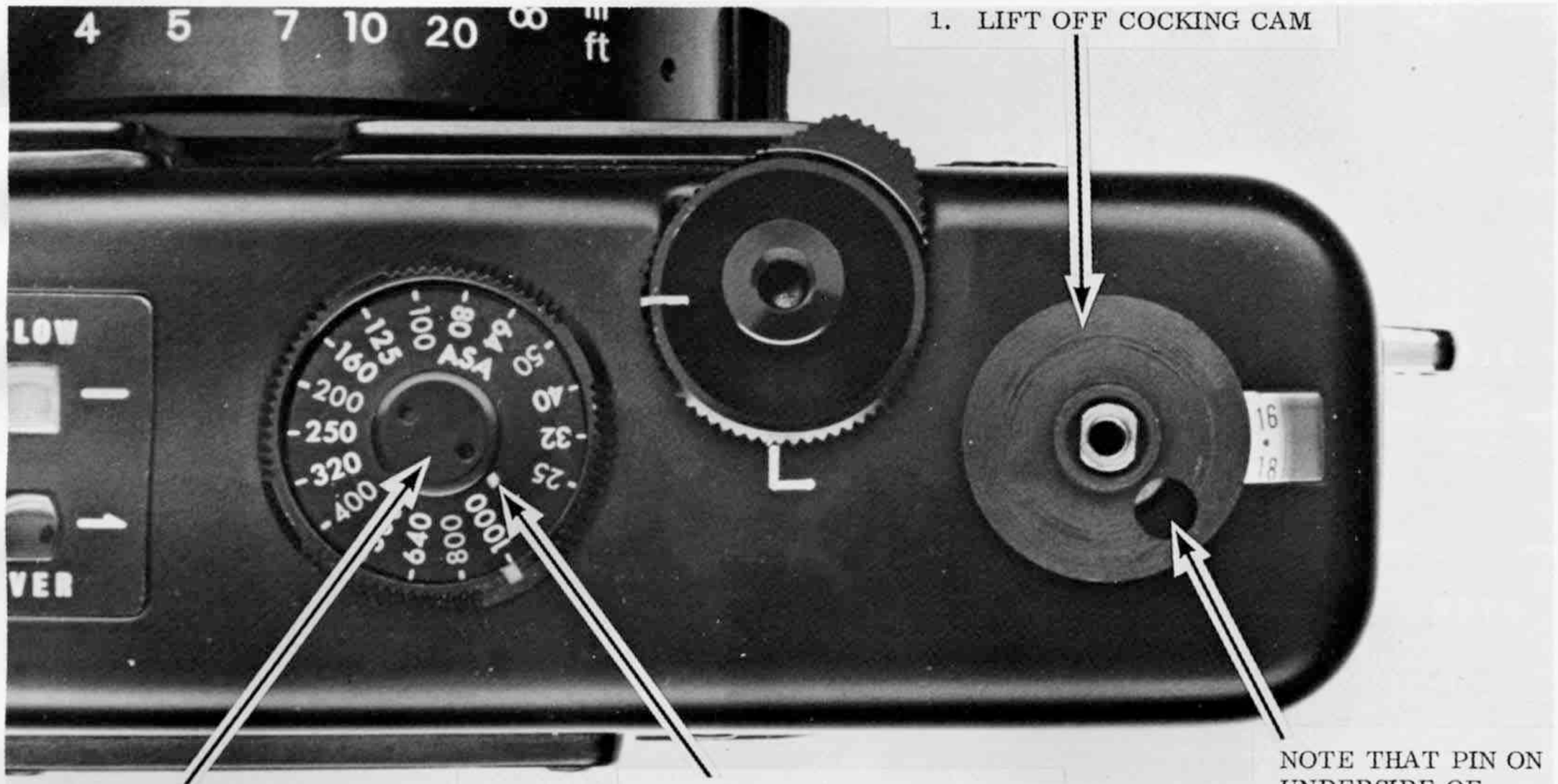

BATTERY-TEST CIRCUIT BOARD IN EARLY MODEL
BIAS RESISTORS
R21
R20
BATTERY-TEST TRANSISTOR TR5


B AUTO
16 11 8 5.6 4 2.8 2 1.7
16 11 8 4 4 8 11 16
0.8 0.9 1 1.2 1.5 2 3 6 ∞
2.6 3 4 5 7 10 20 ft
Electra 35
SLOW
OVER
ASA
UNSCREW WIND-LEVER COVER SCREW
ACCESSORY-SHOE COVER PLATE

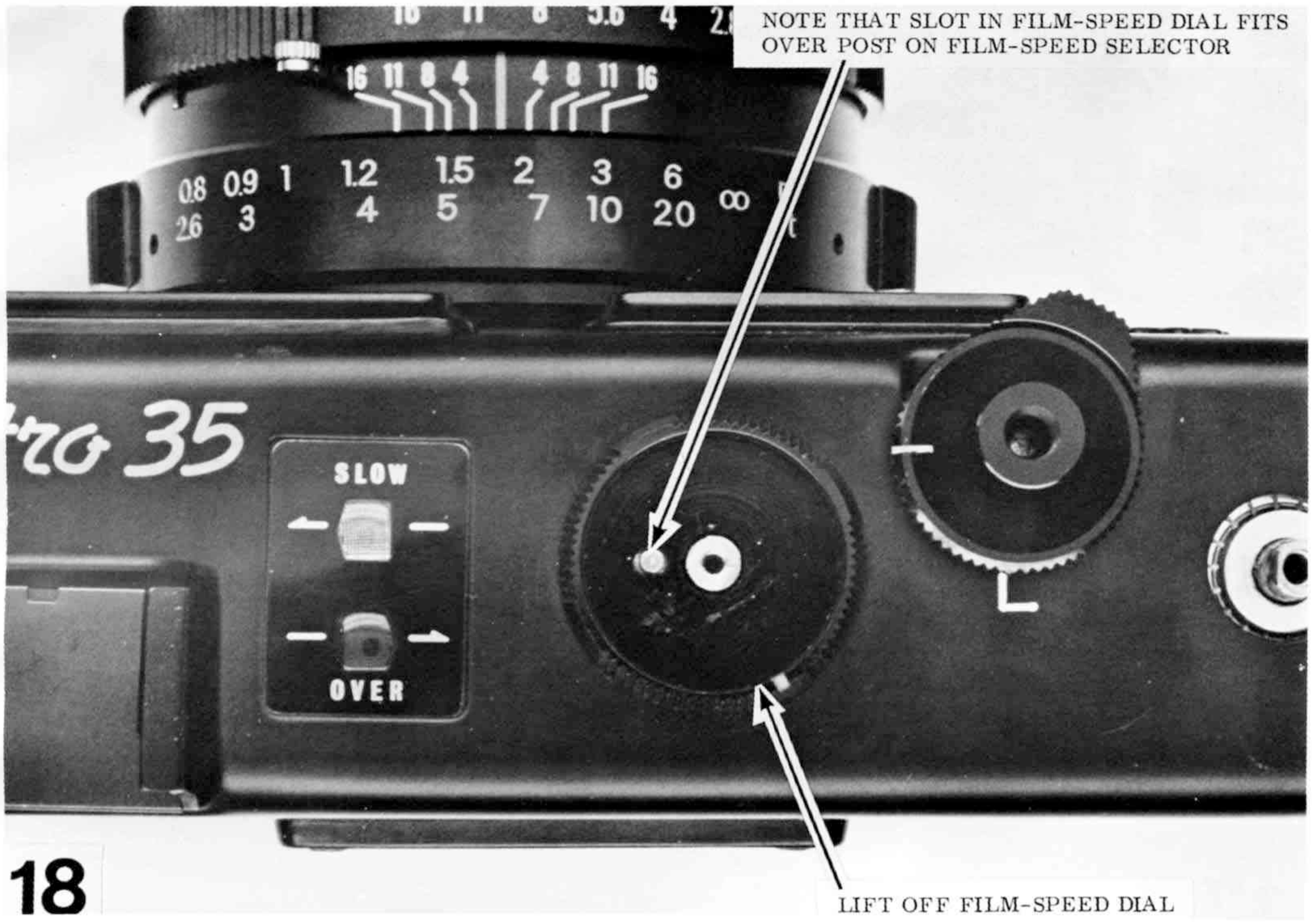


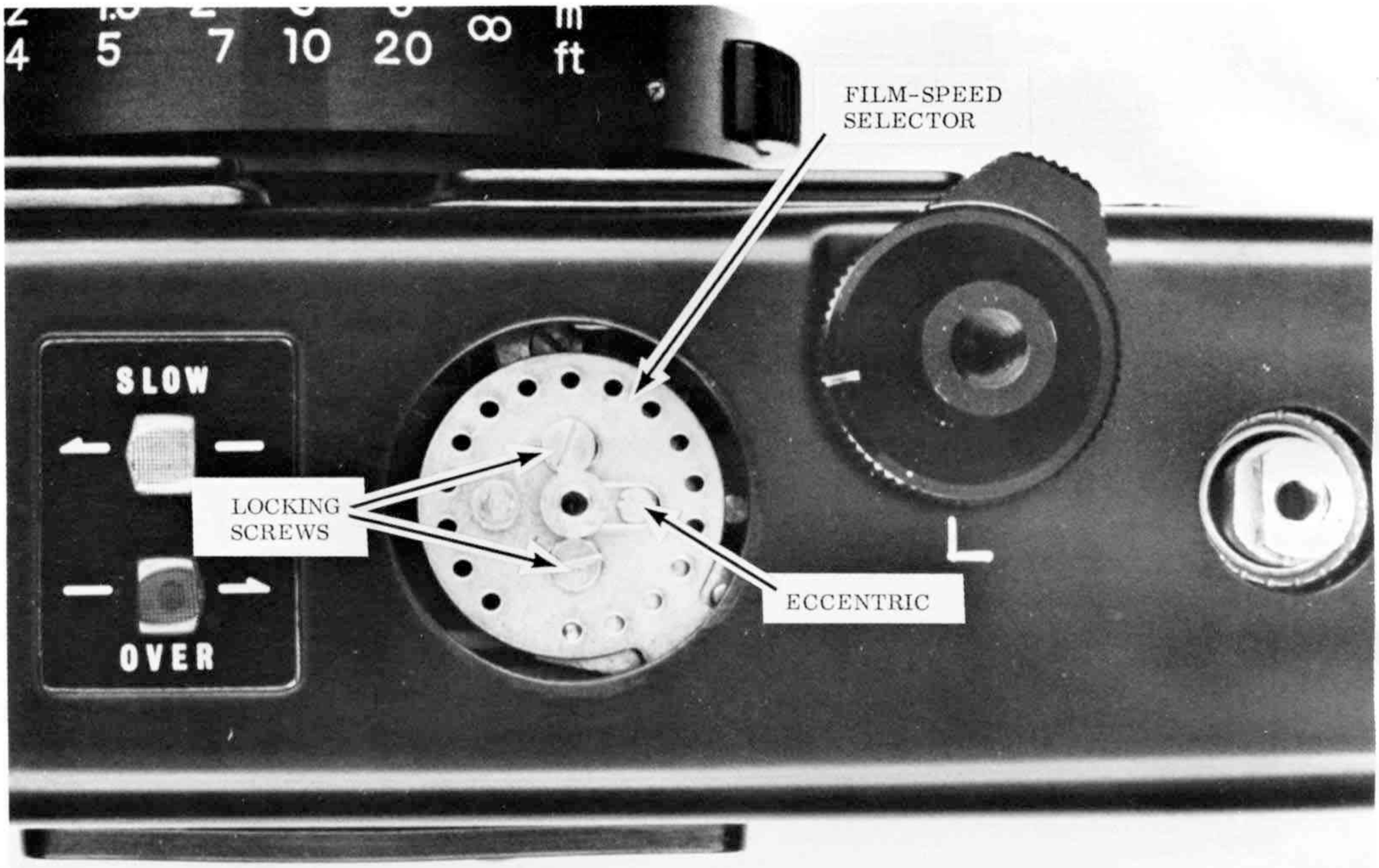
You can reach the rangefinder infinity adjustment without removing the top cover plate. Just lift the edge of the accessory-shoe cover plate that faces the front of the camera -- then, slide the accessory-shoe cover plate toward the back of the camera. You can now see the clearance hole for the infinity adjustment.


1. REMOVE SPRING WASHER
2. LIFT OFF WIND LEVER
SLOW
OVER
ASA
9 1 1.2 1.5 2 3 6 ∞ m
3 4 5 7 10 20 ft

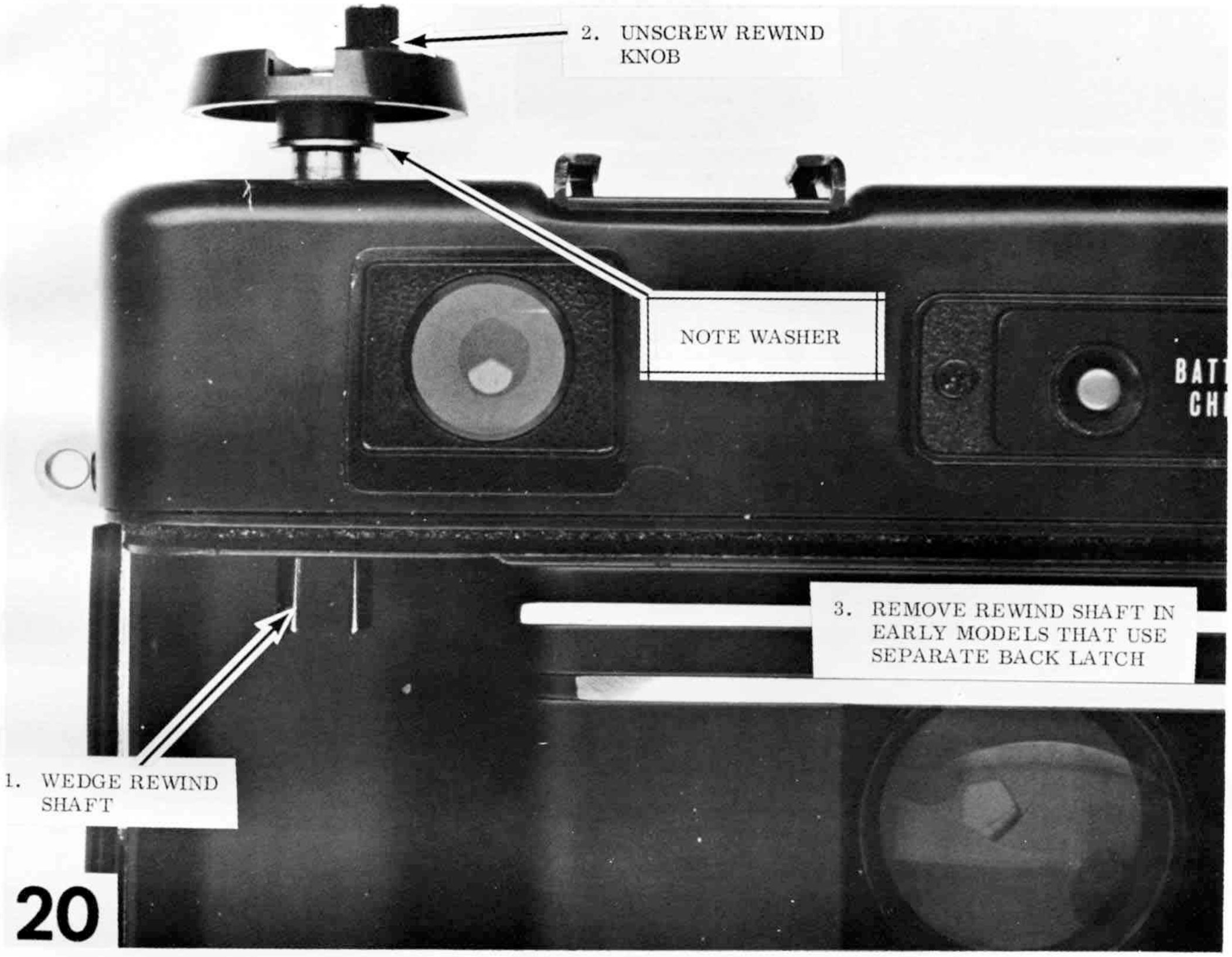

4 5 7 10 20 ∞ ft
LOW
VER
ASA
1. LIFT OFF COCKING CAM
2. UNSCREW RETAINING SCREW
3. LIFT OFF FILM-SPEED CALIBRATION PLATE
NOTE THAT PIN ON UNDERSIDE OF WIND LEVER FITS INTO HOLE IN COCKING CAM

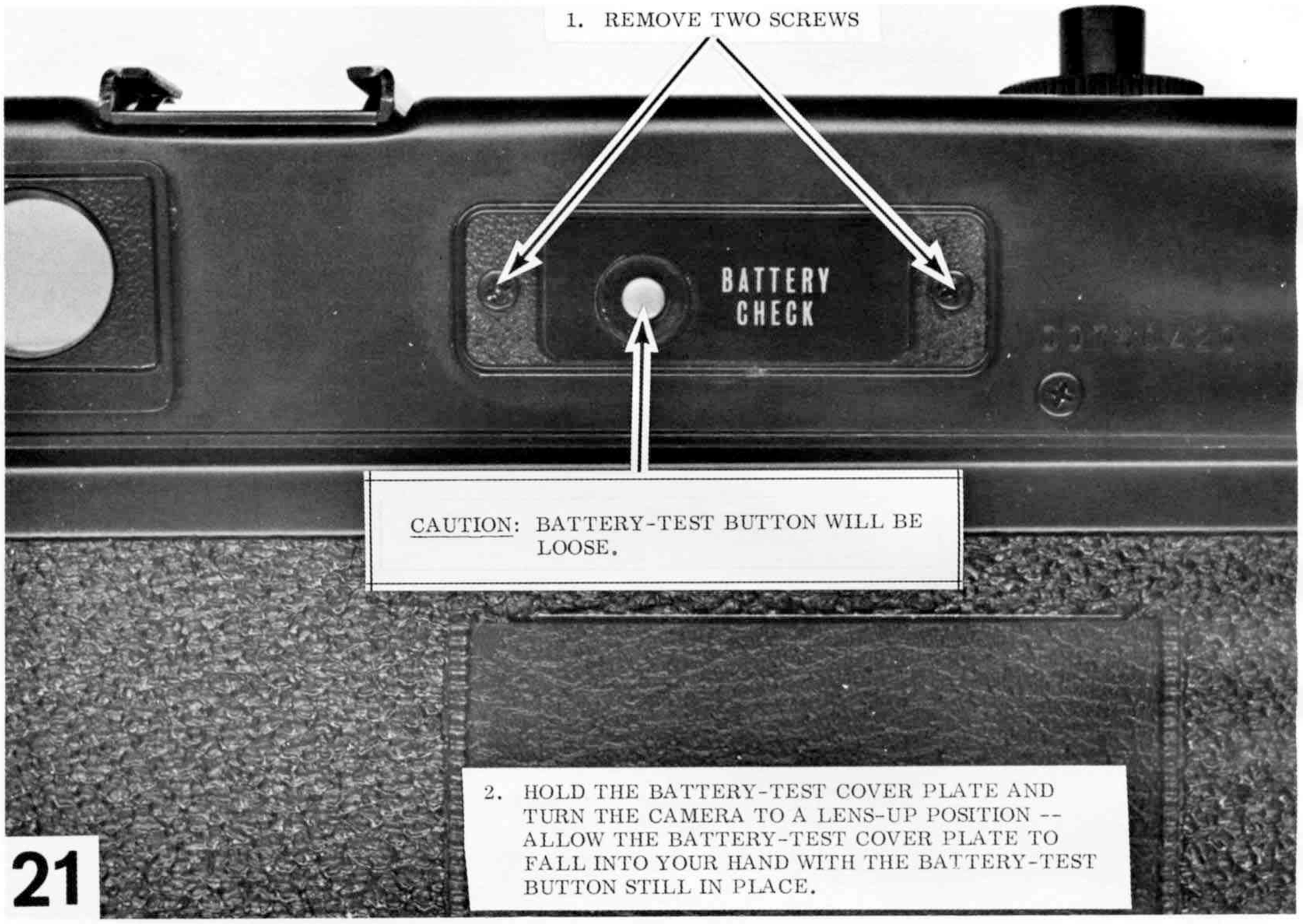

16 11 8 4 4 8 11 16
0.8 0.9 1 1.2 1.5 2 3 6 ∞ m
2.6 3 4 5 7 10 20 ft
SLOW
OVER
LIFT OFF SPRING WASHER

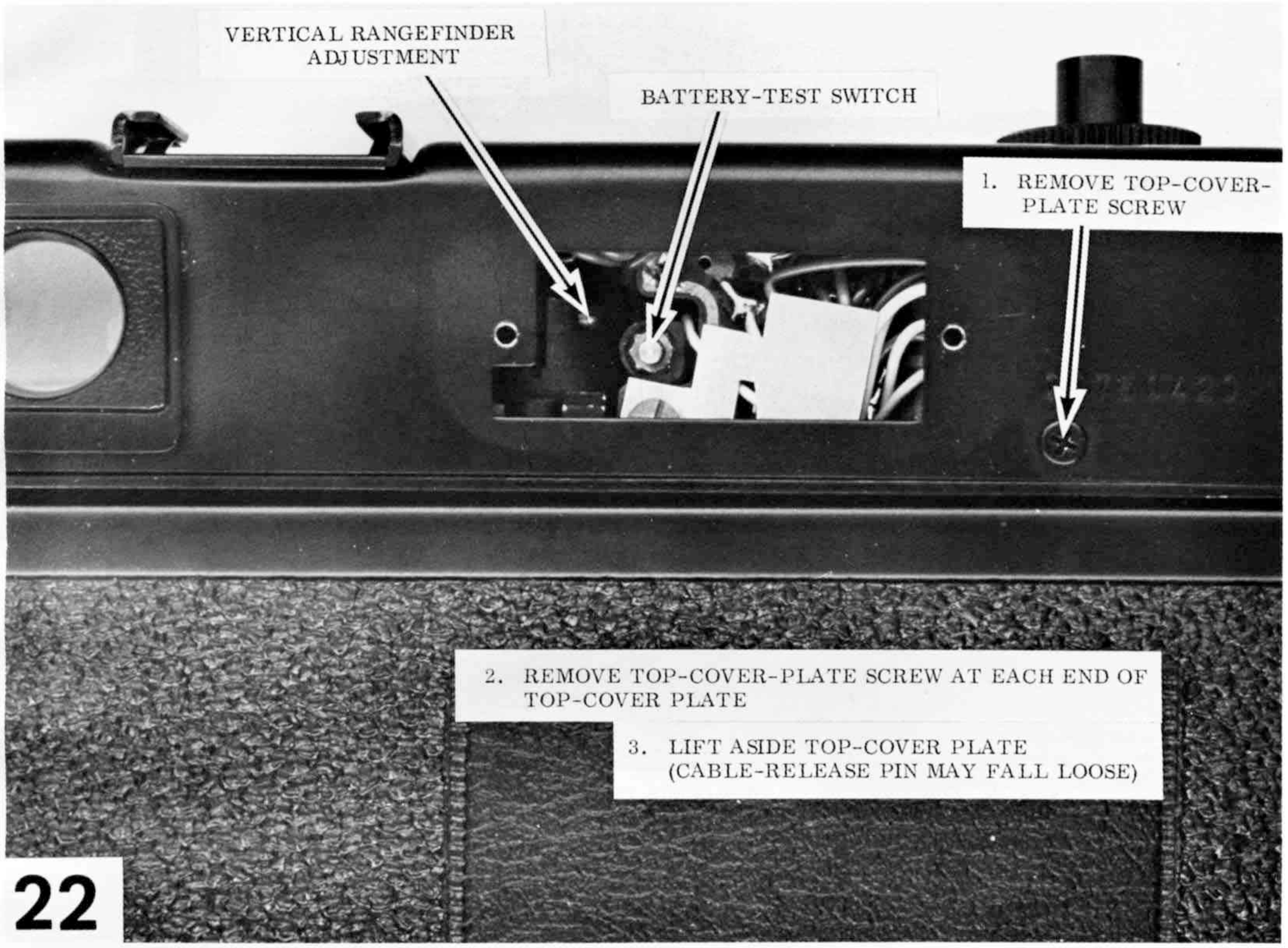

NOTE THAT SLOT IN FILM-SPEED DIAL FITS OVER POST ON FILM-SPEED SELECTOR
16 11 8 4
4 8 11 16
0.8 0.9 1 1.2 1.5 2 3 6
2.6 3 4 5 7 10 20 ∞
SLOW
OVER
LIFT OFF FILM-SPEED DIAL



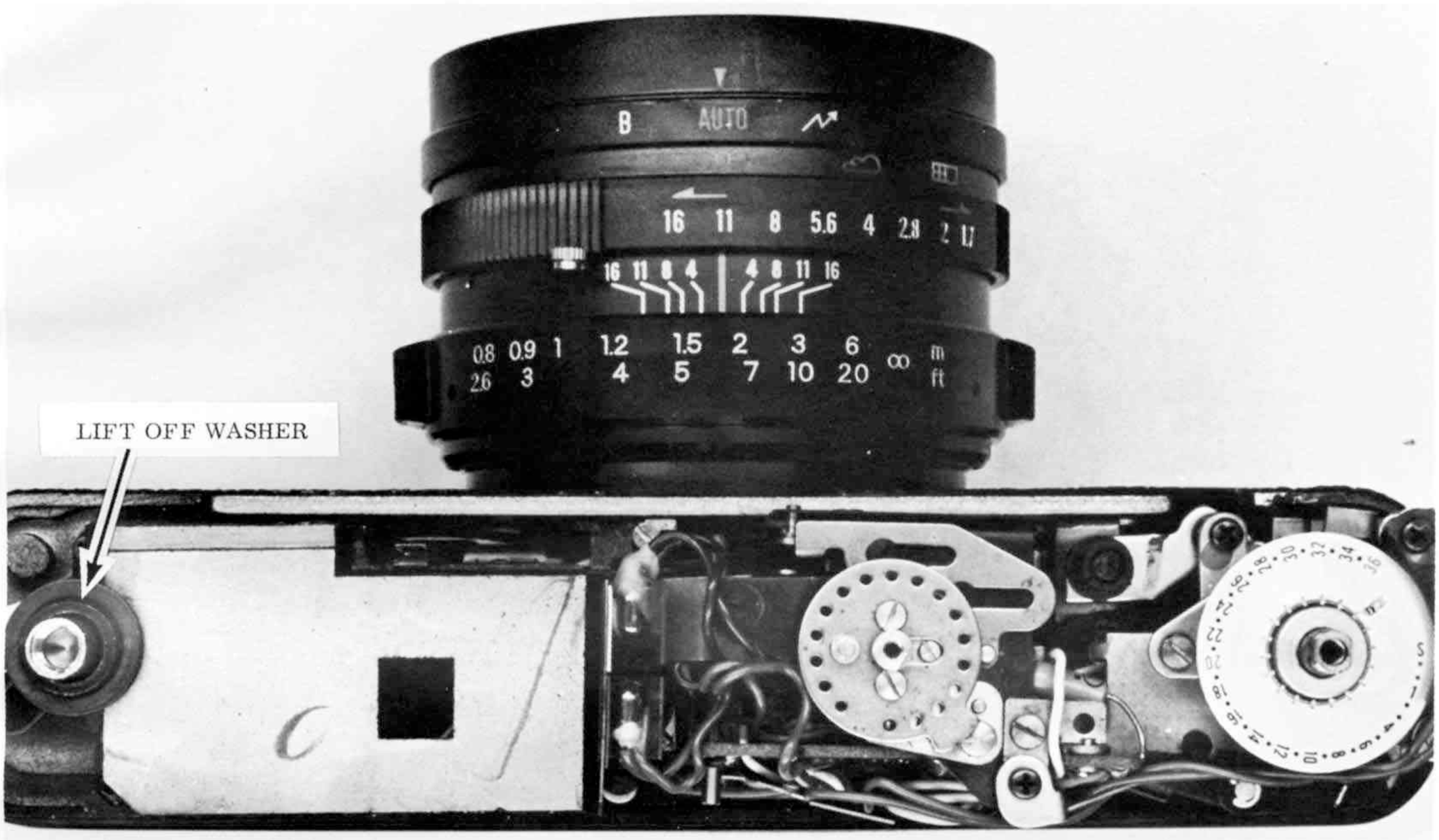
Removing the film-speed dial exposes one of the exposure adjustment points. By loosening the two locking screws on the film-speed selector, you can turn the eccentric. This adjustment changes the size of the opening between the two masks over the photocell. The range of adjustment possible is around 1/3 f/stop.

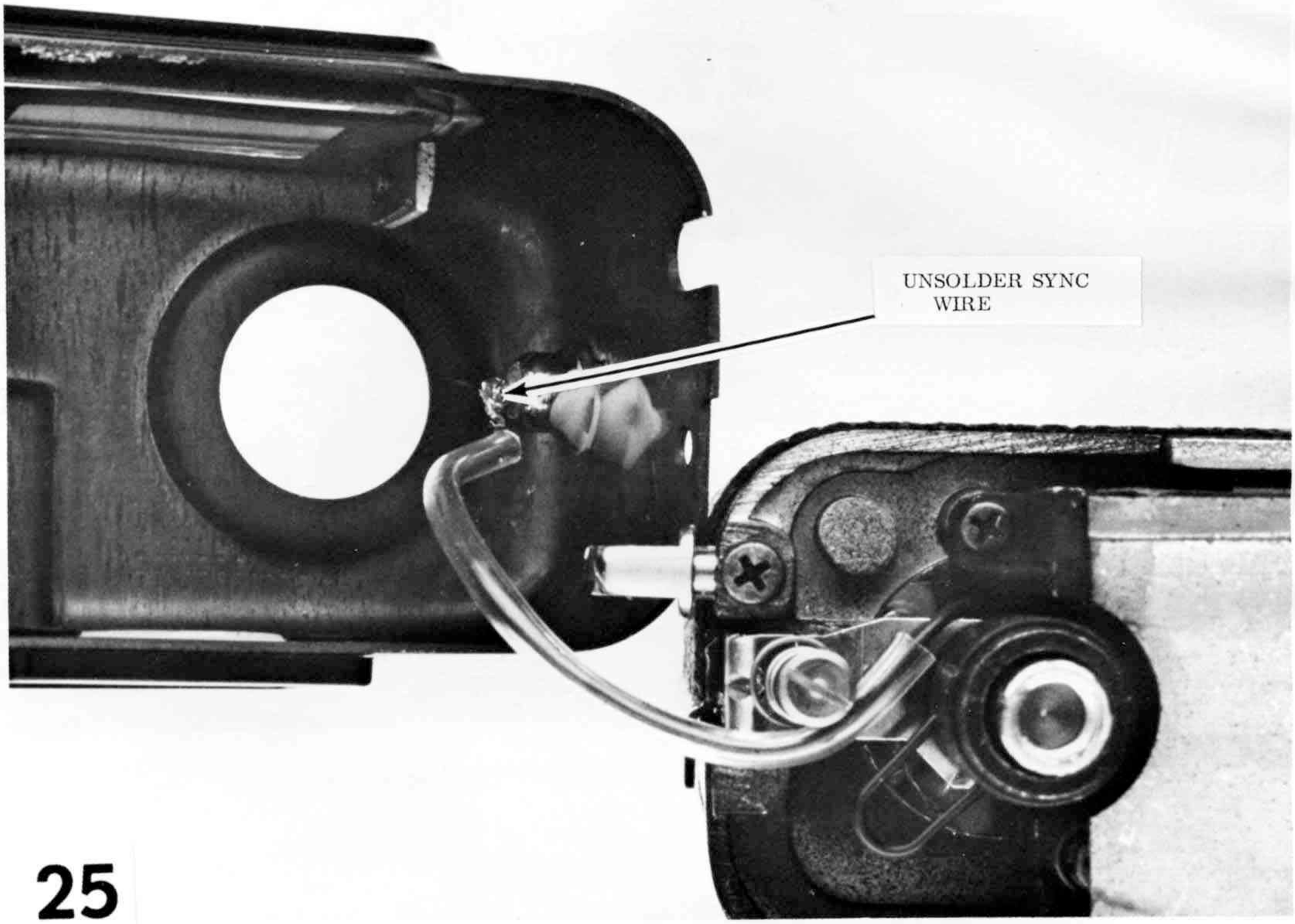

2. UNSCREW REWIND KNOB
NOTE WASHER
3. REMOVE REWIND SHAFT IN EARLY MODELS THAT USE SEPARATE BACK LATCH
1. WEDGE REWIND SHAFT

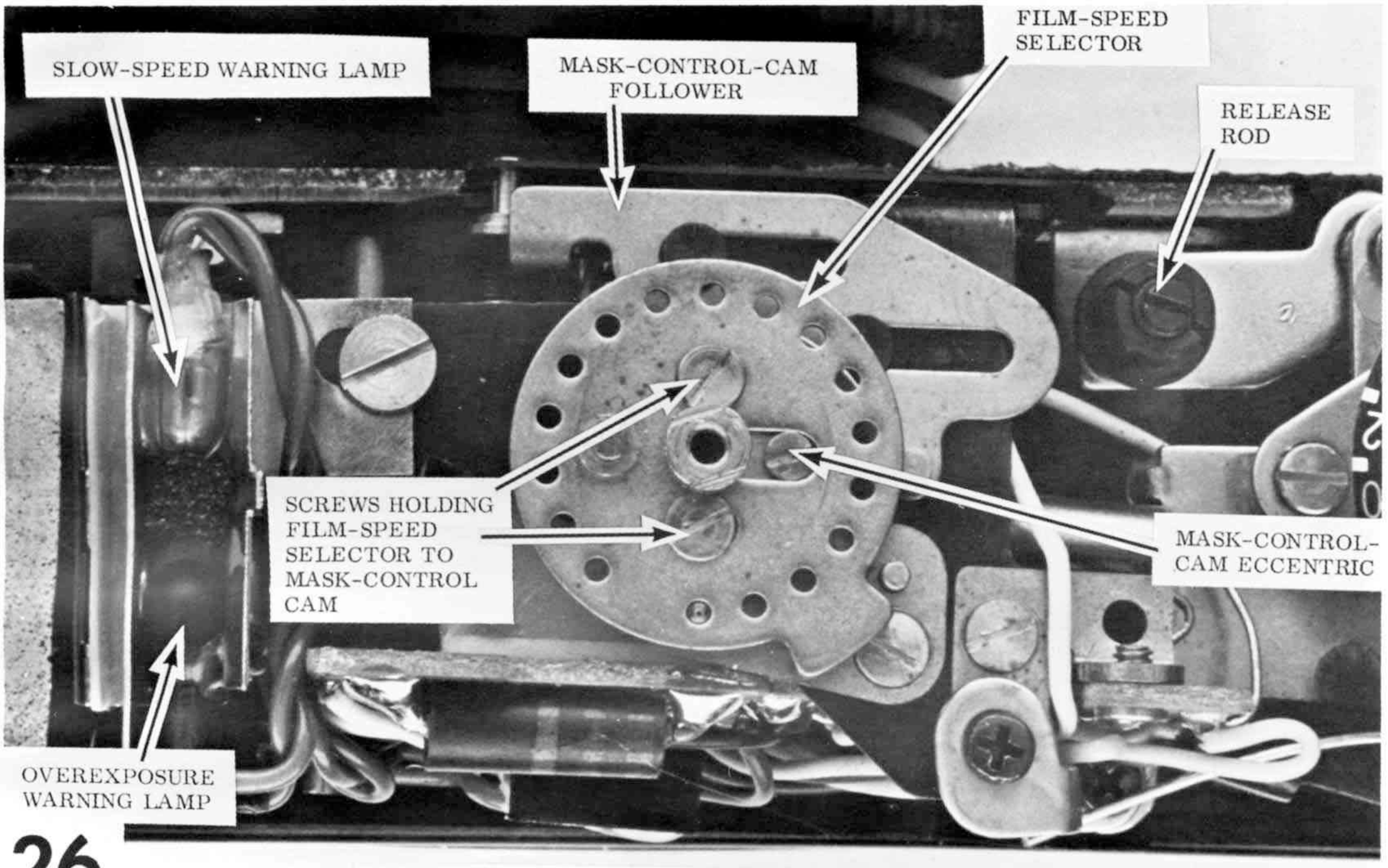

1. REMOVE TWO SCREWS
BATTERY CHECK
CAUTION: BATTERY-TEST BUTTON WILL BE LOOSE.
2. HOLD THE BATTERY-TEST COVER PLATE AND TURN THE CAMERA TO A LENS-UP POSITION -- ALLOW THE BATTERY-TEST COVER PLATE TO FALL INTO YOUR HAND WITH THE BATTERY-TEST BUTTON STILL IN PLACE.


VERTICAL RANGEFINDER ADJUSTMENT
BATTERY-TEST SWITCH
1. REMOVE TOP-COVER-PLATE SCREW
2. REMOVE TOP-COVER-PLATE SCREW AT EACH END OF TOP-COVER PLATE
3. LIFT ASIDE TOP-COVER PLATE (CABLE-RELEASE PIN MAY FALL LOOSE)

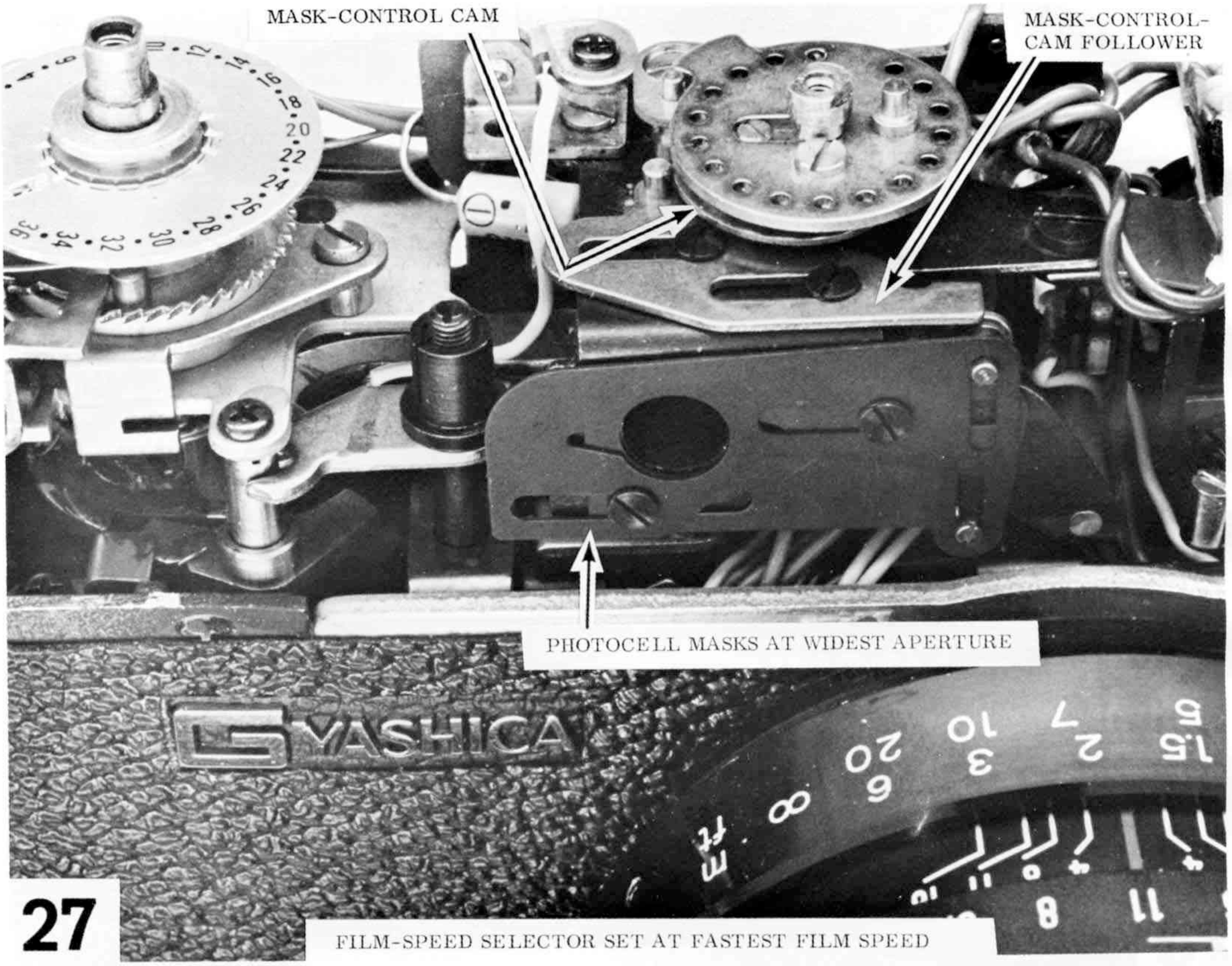

B AUTO
16 11 8 5.6 4 2.8 2 1.7
16 11 8 4 4 8 11 16
0.8 0.9 1 1.2 1.5 2 3 6 ∞ m
2.6 3 4 5 7 10 20 ft
LIFT OFF
POROUS-PLASTIC
DUST SEAL


B AUTO
16 11 8 5.6 4 2.8 2 1.7
16 11 8 4 4 8 11 16
0.8 0.9 1 1.2 1.5 2 3 6 ∞ m
2.6 3 4 5 7 10 20 ft
LIFT OFF WASHER

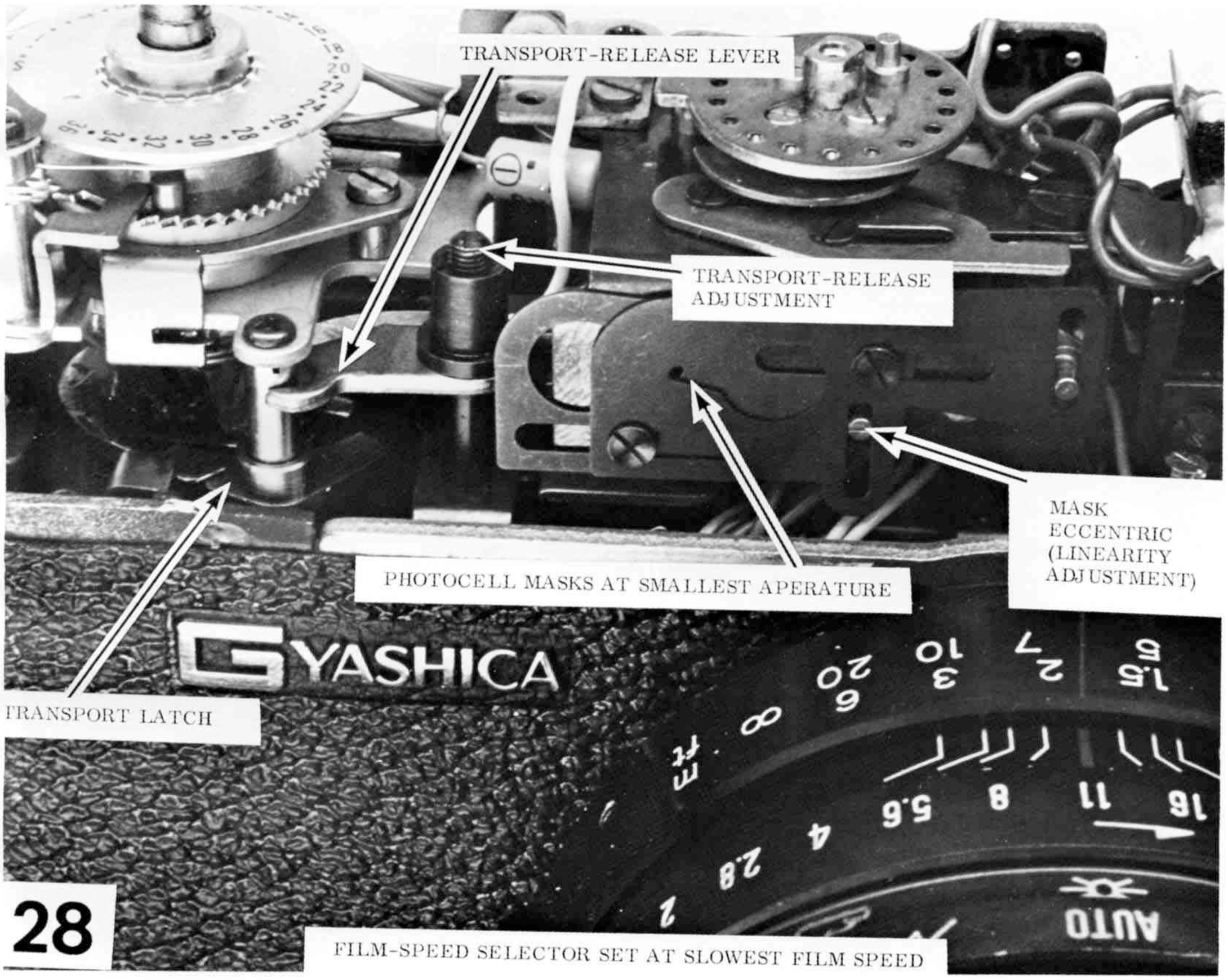

UNSOLDER SYNC
WIRE



FILM-SPEED SELECTOR SET AT FASTEST FILM SPEED



FILM-SPEED SELECTOR SET AT FASTEST FILM SPEED

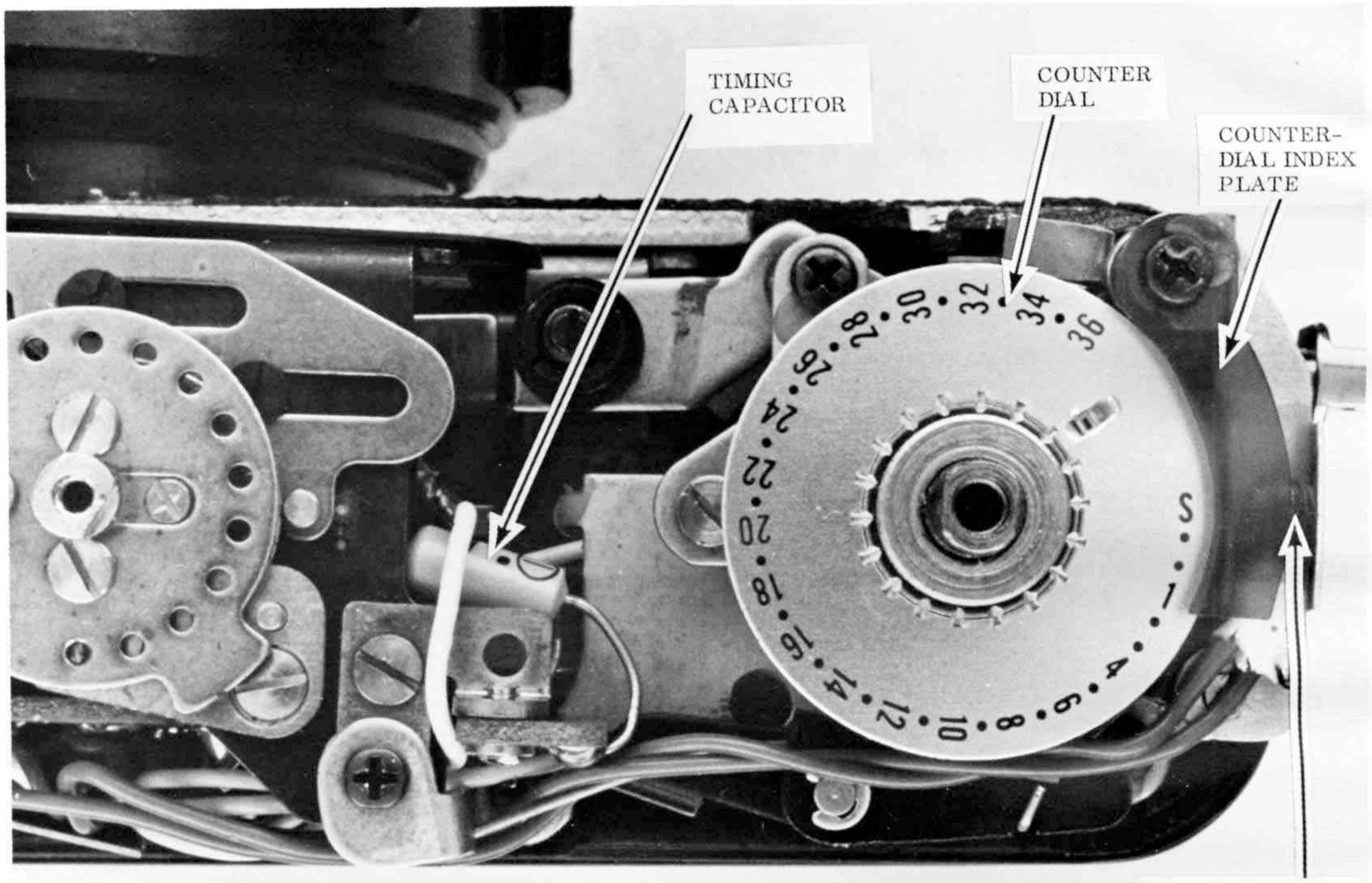


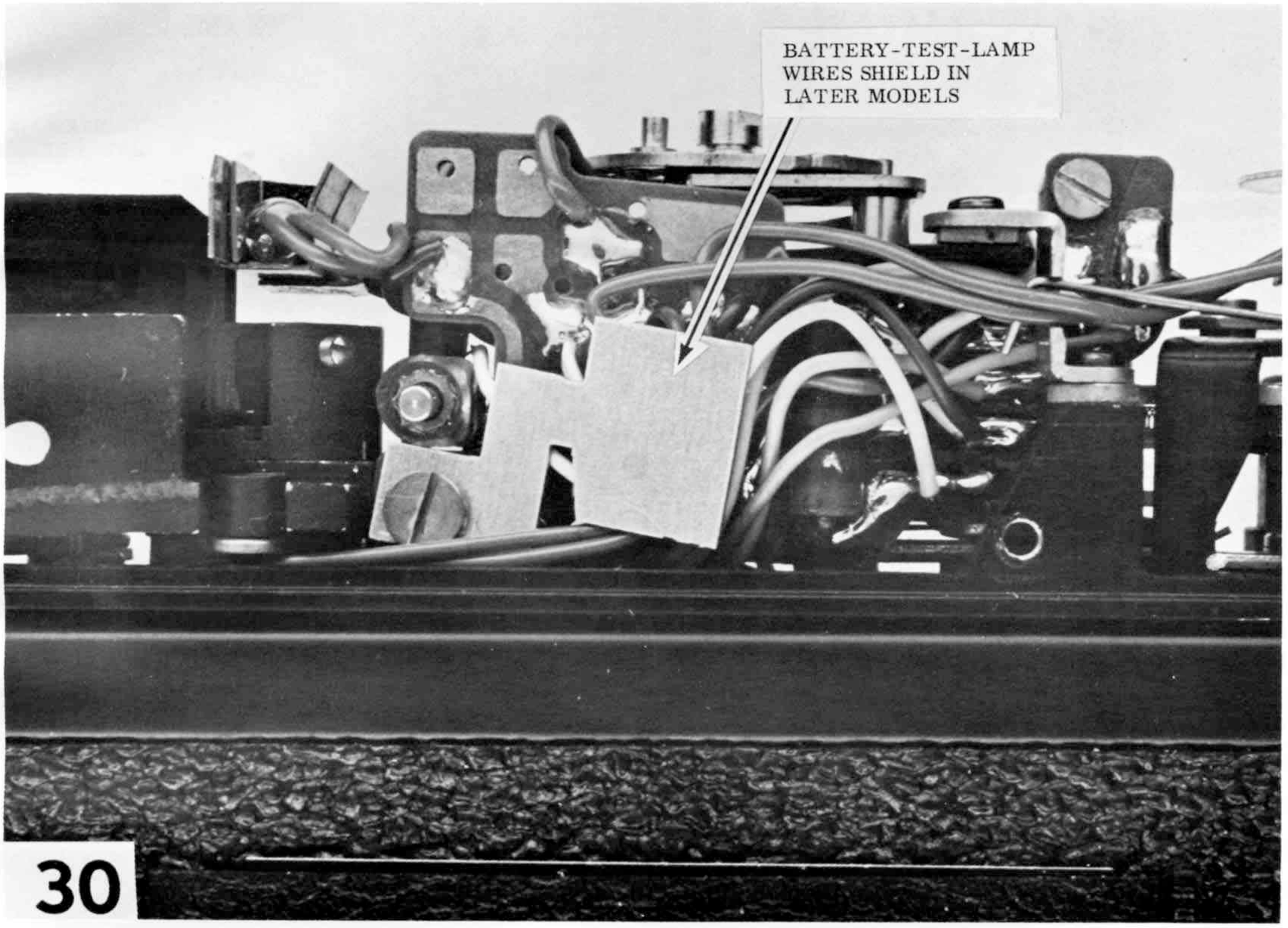
28

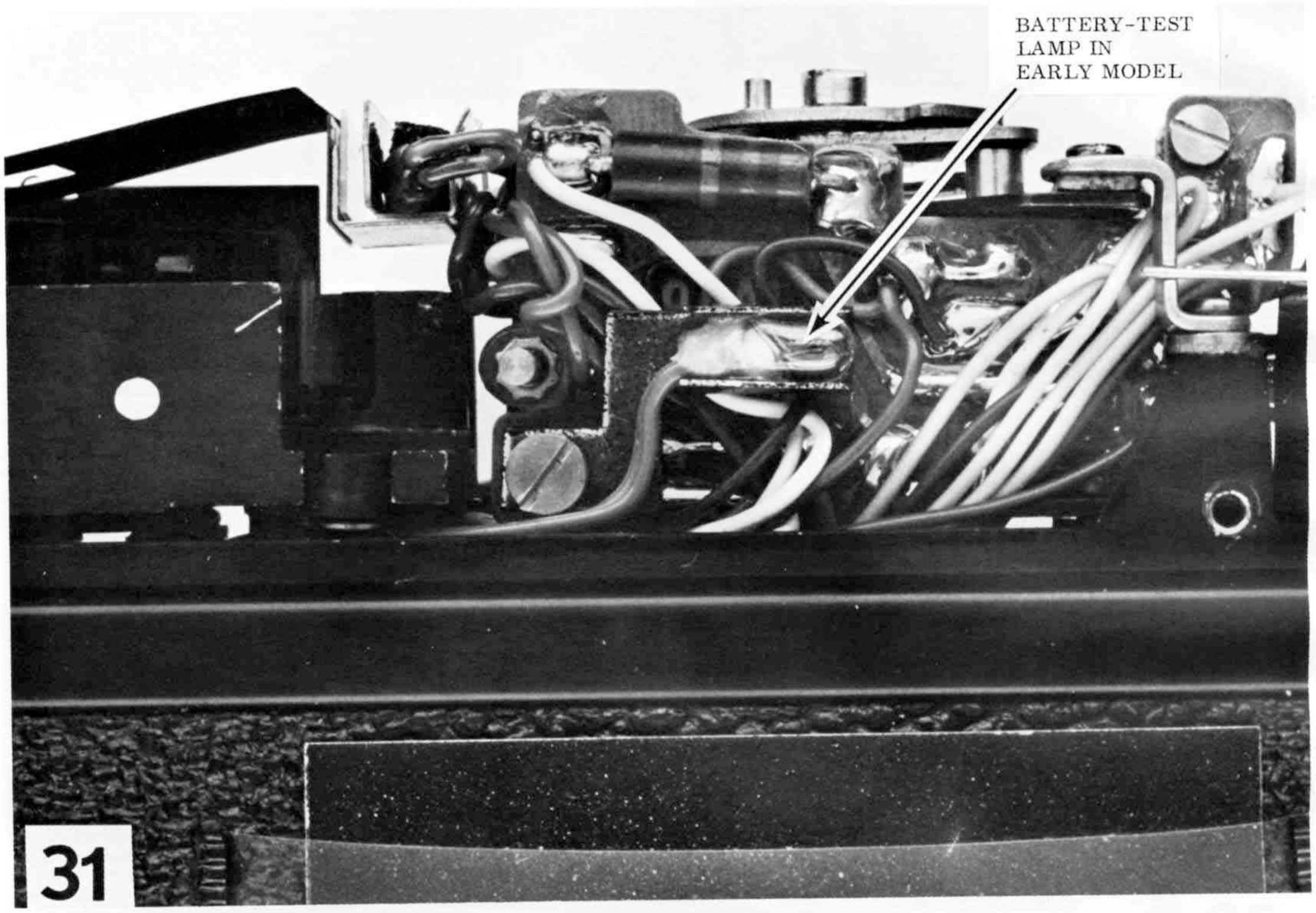
FILM-SPEED SELECTOR SET AT SLOWEST FILM SPEED

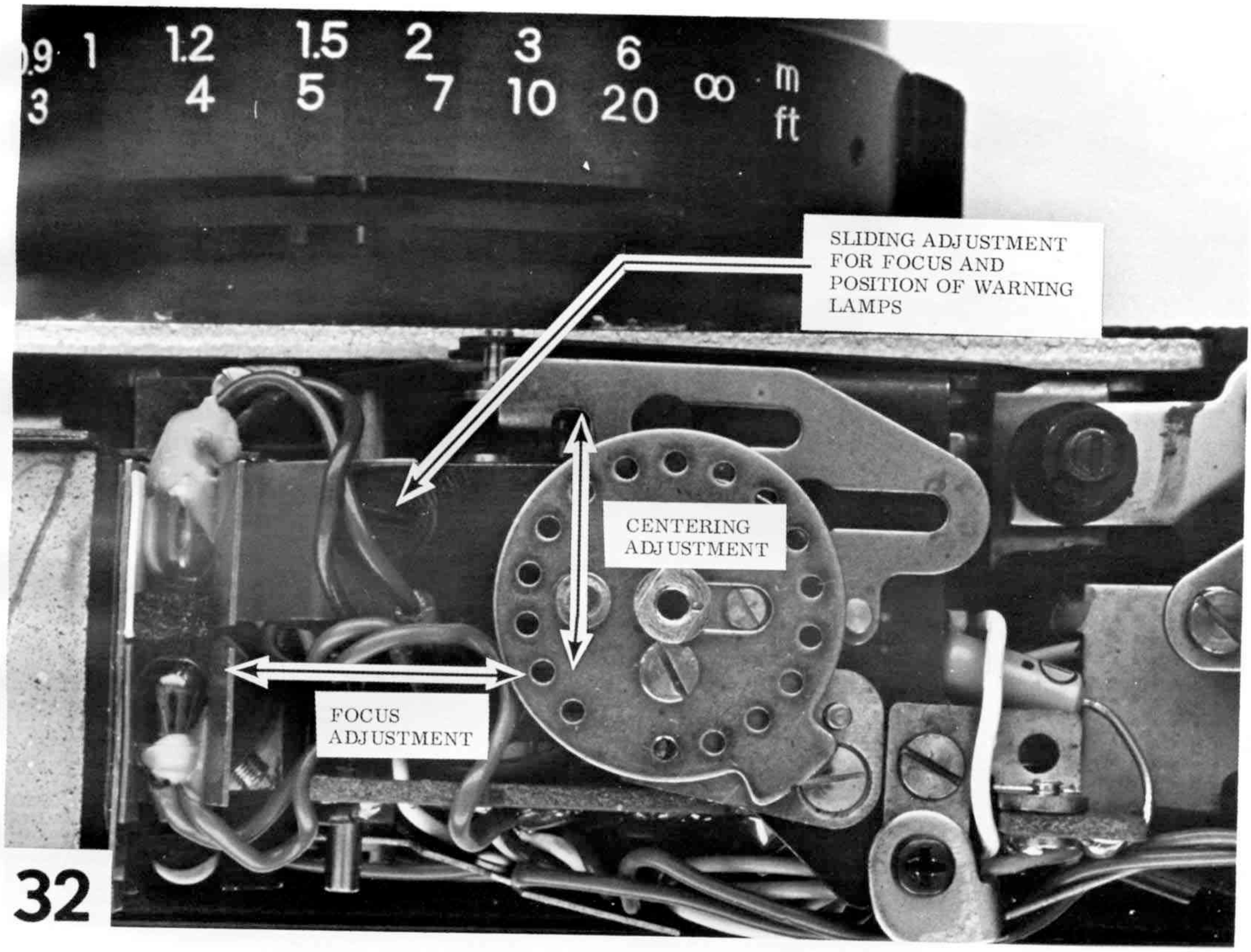
As you depress the release button, the transport-release lever pushes down the transport latch. The transport-release lever should push the transport latch out of engagement with the transport cam just before the shutter releases.

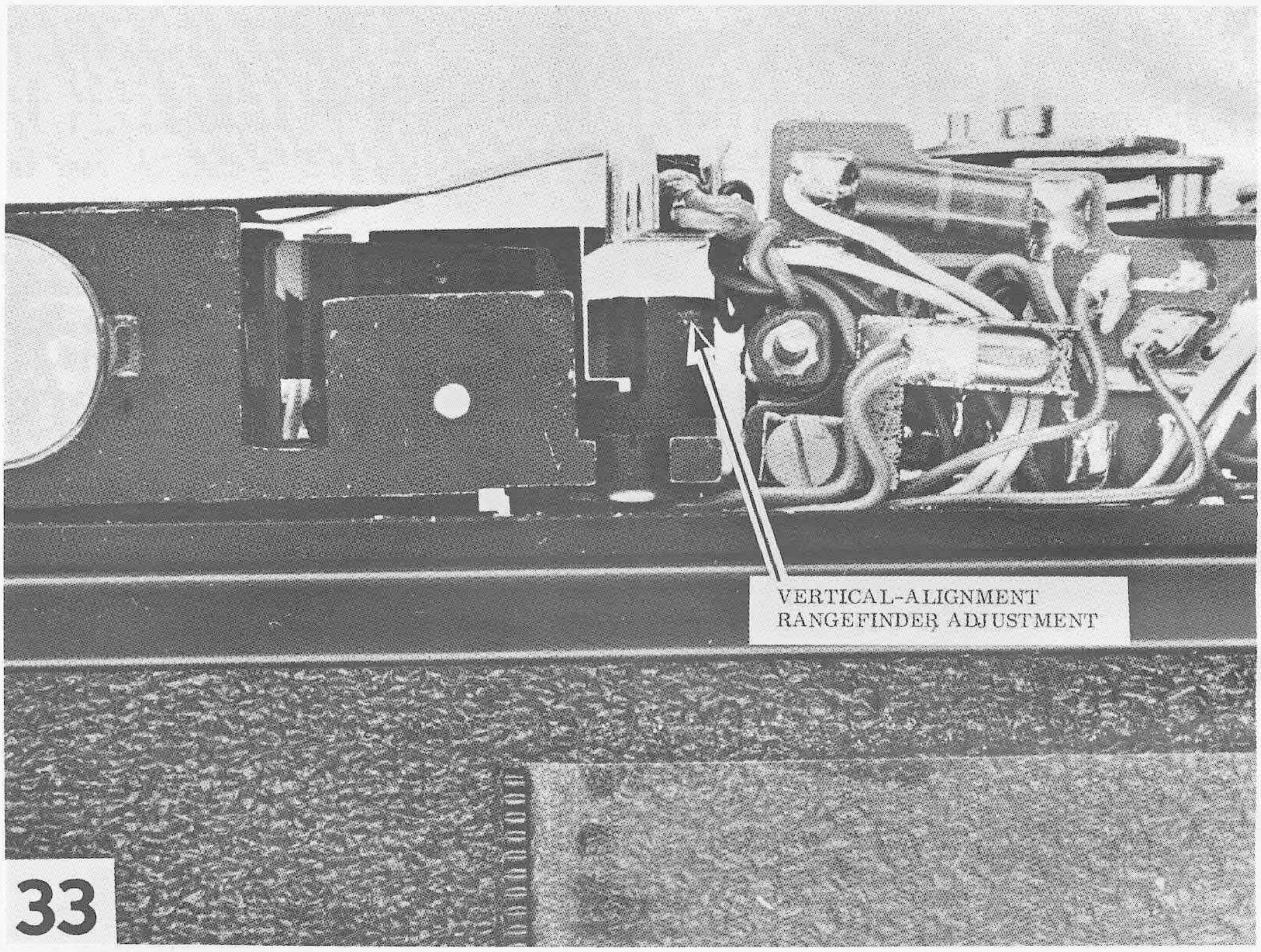
You can make the transport-release adjustment at either one of two places -- at the top of the release rod or at the bottom. (Figure 28 or Figure 7.) Both screwdriver-slotted adjustments affect the position of the transport-release lever. And the position of the transport-release lever determines the point at which the transport latch disengages during the downward stroke of the release rod.

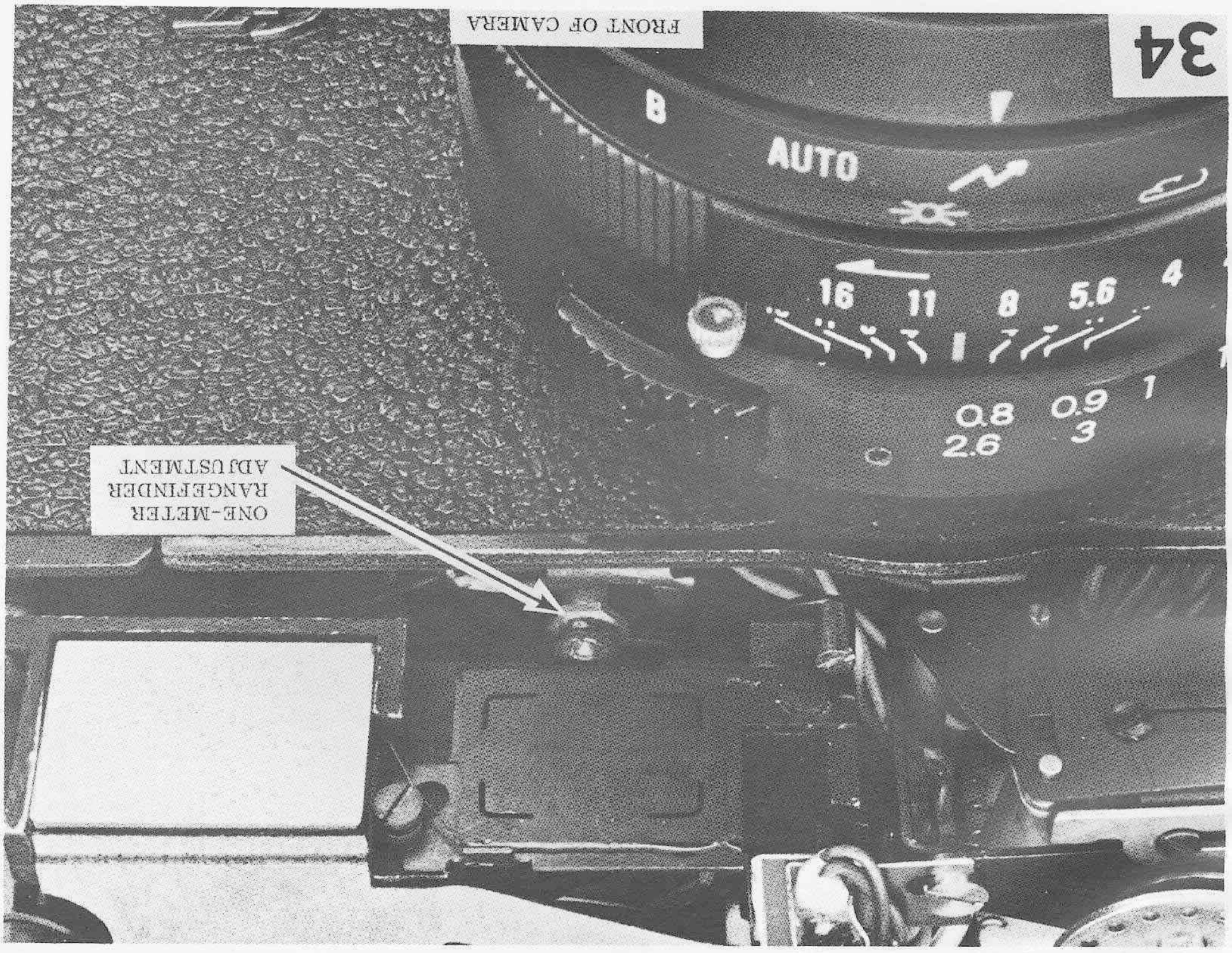

TIMING CAPACITOR
COUNTER DIAL
COUNTER-DIAL INDEX PLATE
BATTERY-TEST LAMP
S
1
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36

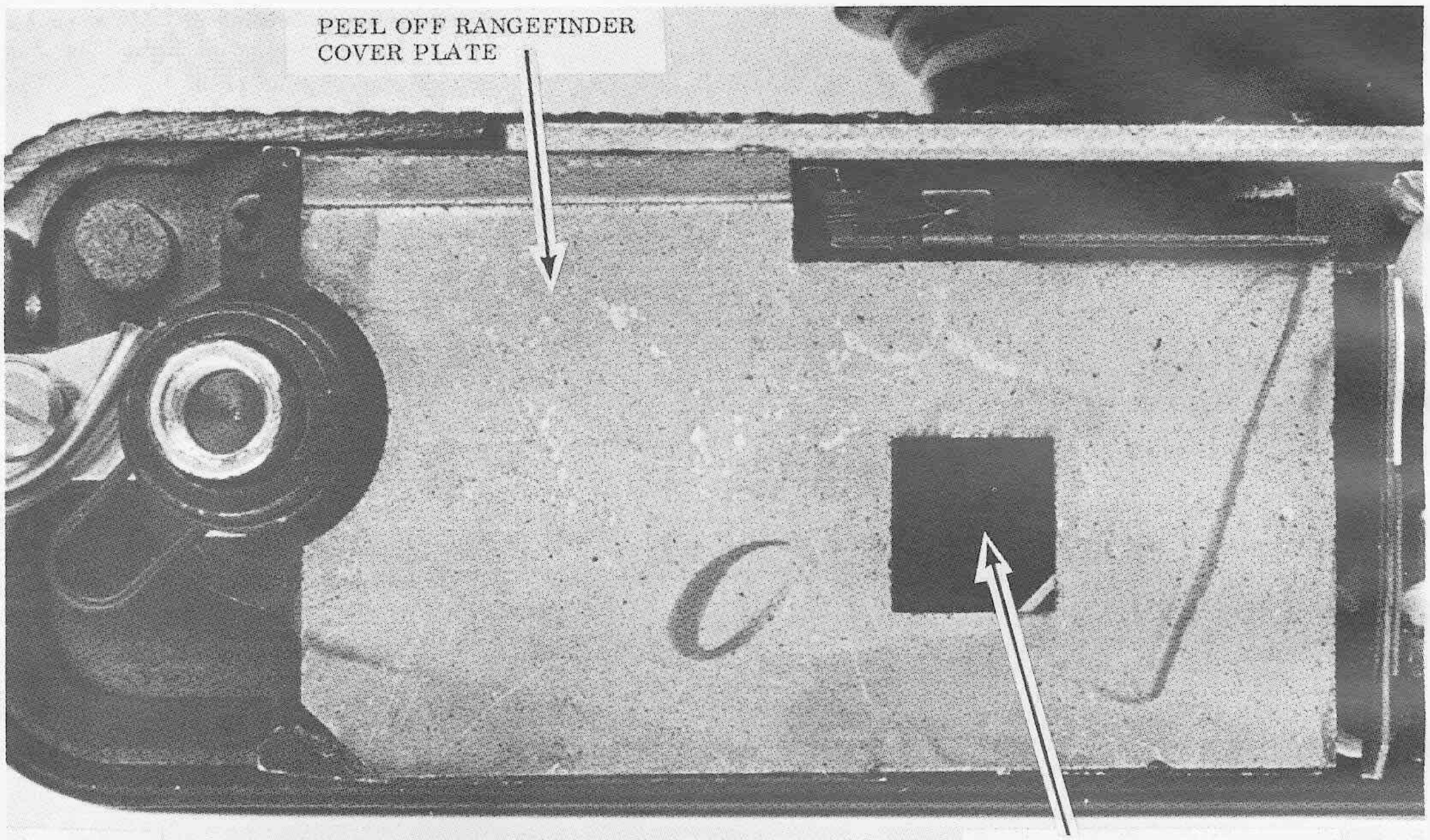

BATTERY-TEST-LAMP
WIRES SHIELD IN
LATER MODELS

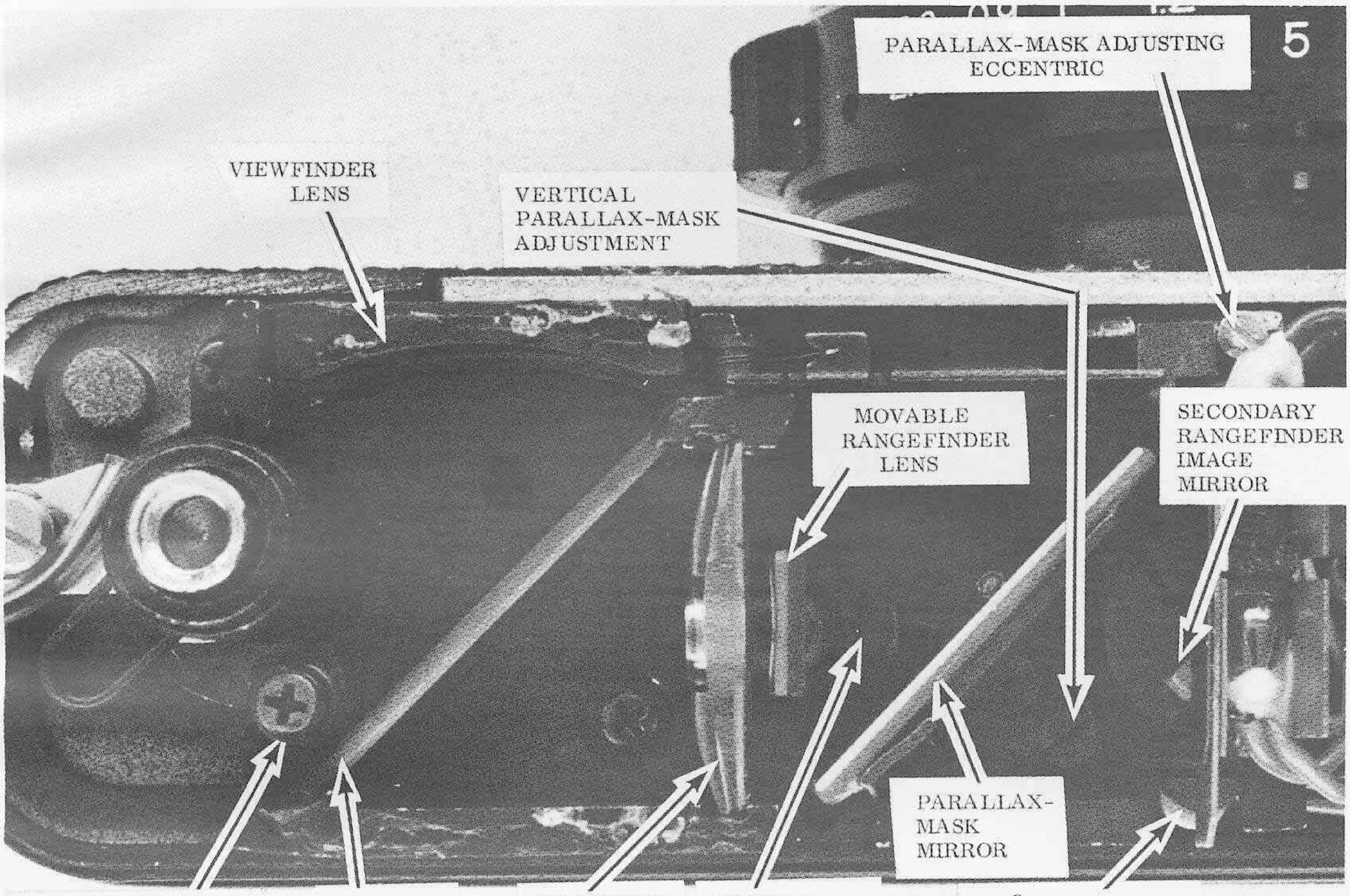

BATTERY-TEST
LAMP IN
EARLY MODEL


0.9 1 1.2 1.5 2 3 6
3 4 5 7 10 20 ∞
m
ft
SLIDING ADJUSTMENT FOR FOCUS AND POSITION OF WARNING LAMPS
CENTERING ADJUSTMENT
FOCUS ADJUSTMENT

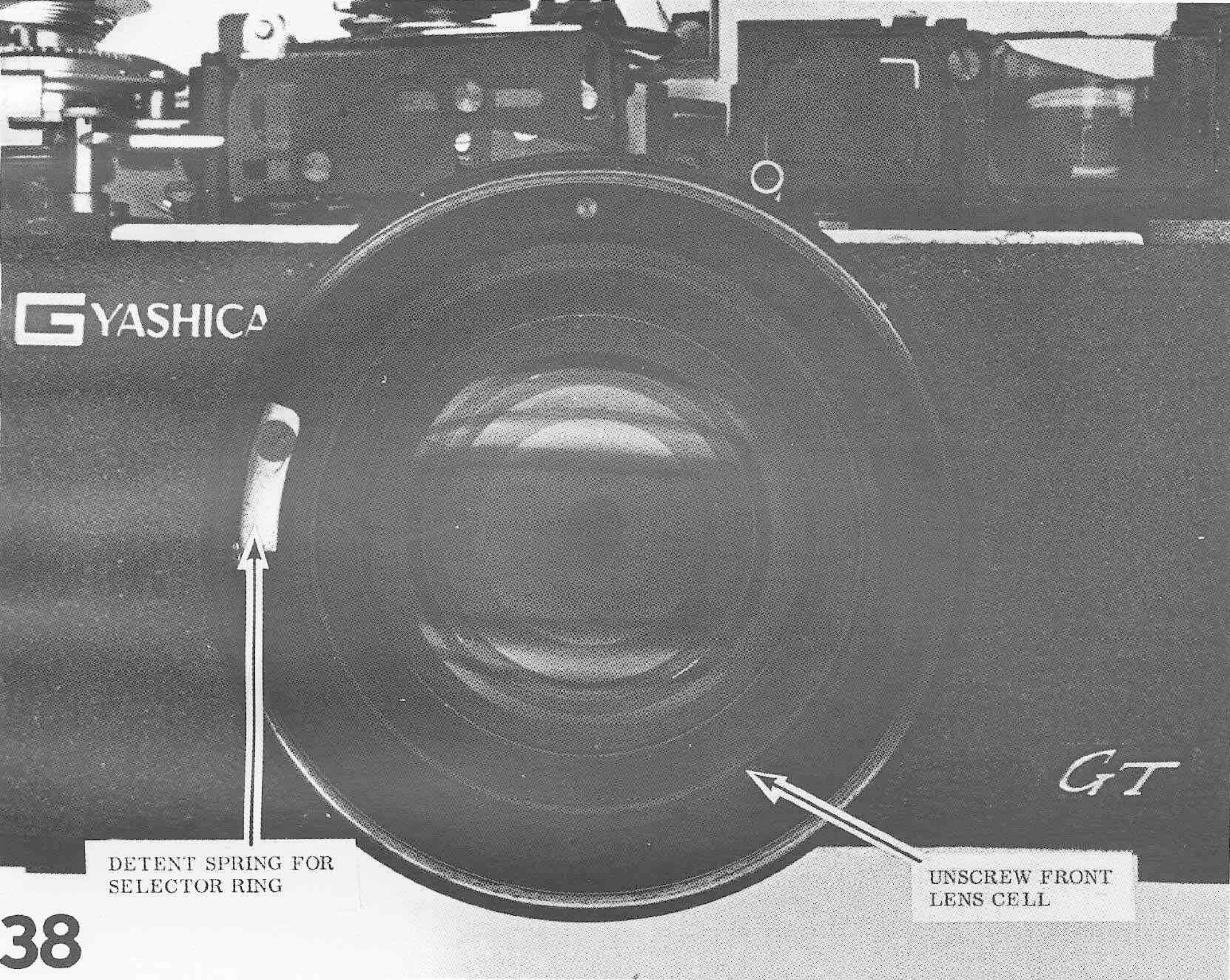

VERTICAL-ALIGNMENT
RANGEFINDER ADJUSTMENT

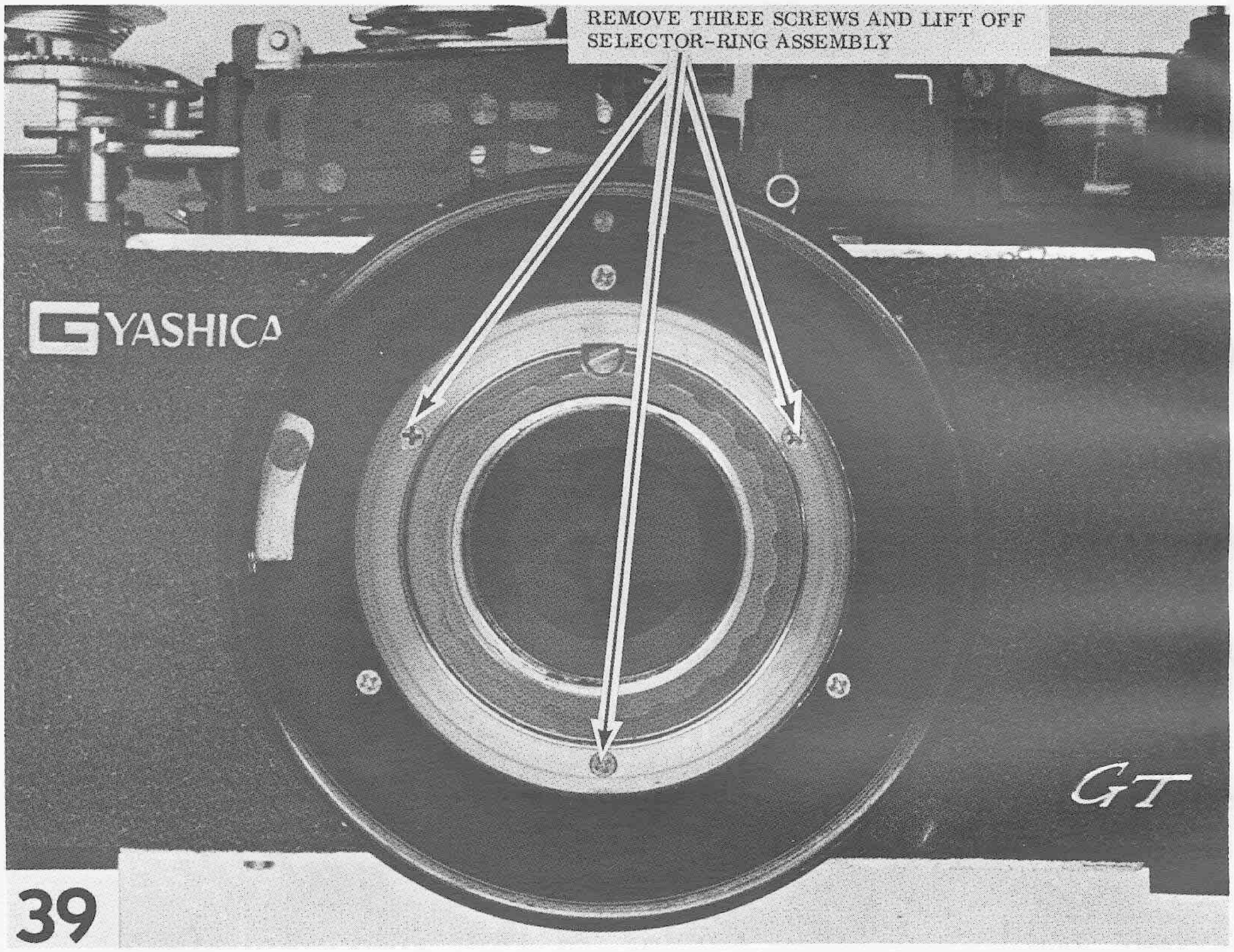

34
FRONT OF CAMERA
B
AUTO
16
11
8
5.6
4
0.8
2.6
0.9
3
1
ONE-METER
RANGEFINDER
ADJUSTMENT

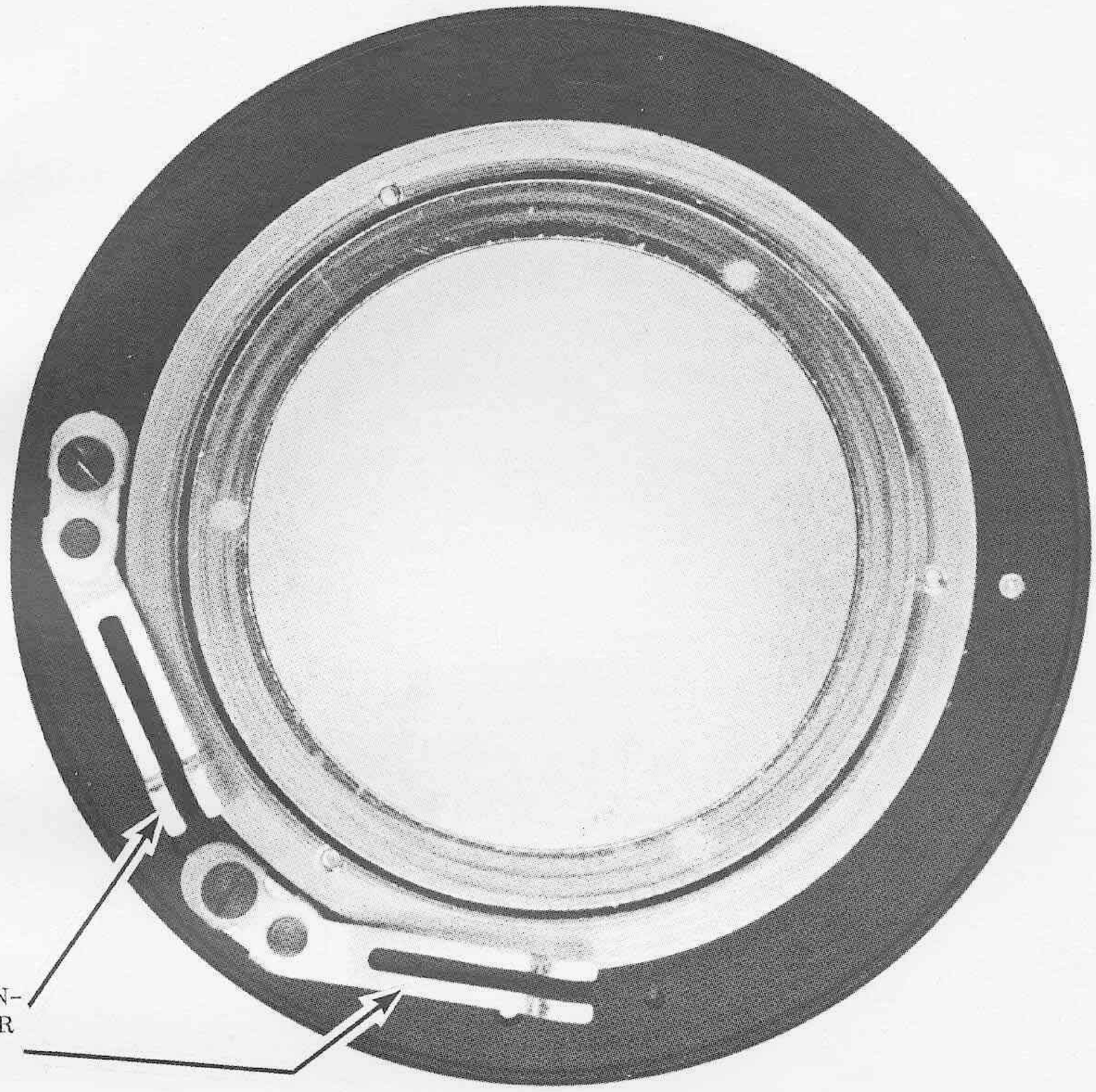

PEEL OFF RANGEFINDER
COVER PLATE
INFINITY ADJUSTMENT


5
PARALLAX-MASK ADJUSTING ECCENTRIC
VIEWFINDER LENS
VERTICAL PARALLAX-MASK ADJUSTMENT
MOVABLE RANGEFINDER LENS
SECONDARY RANGEFINDER IMAGE MIRROR
PARALLAX-MASK MIRROR
RANGEFINDER CONTROL LEVER SPRING
BEAM SPLITTER
CONDENSER LENS
INFINITY ADJUSTMENT
45° ADJUSTMENT

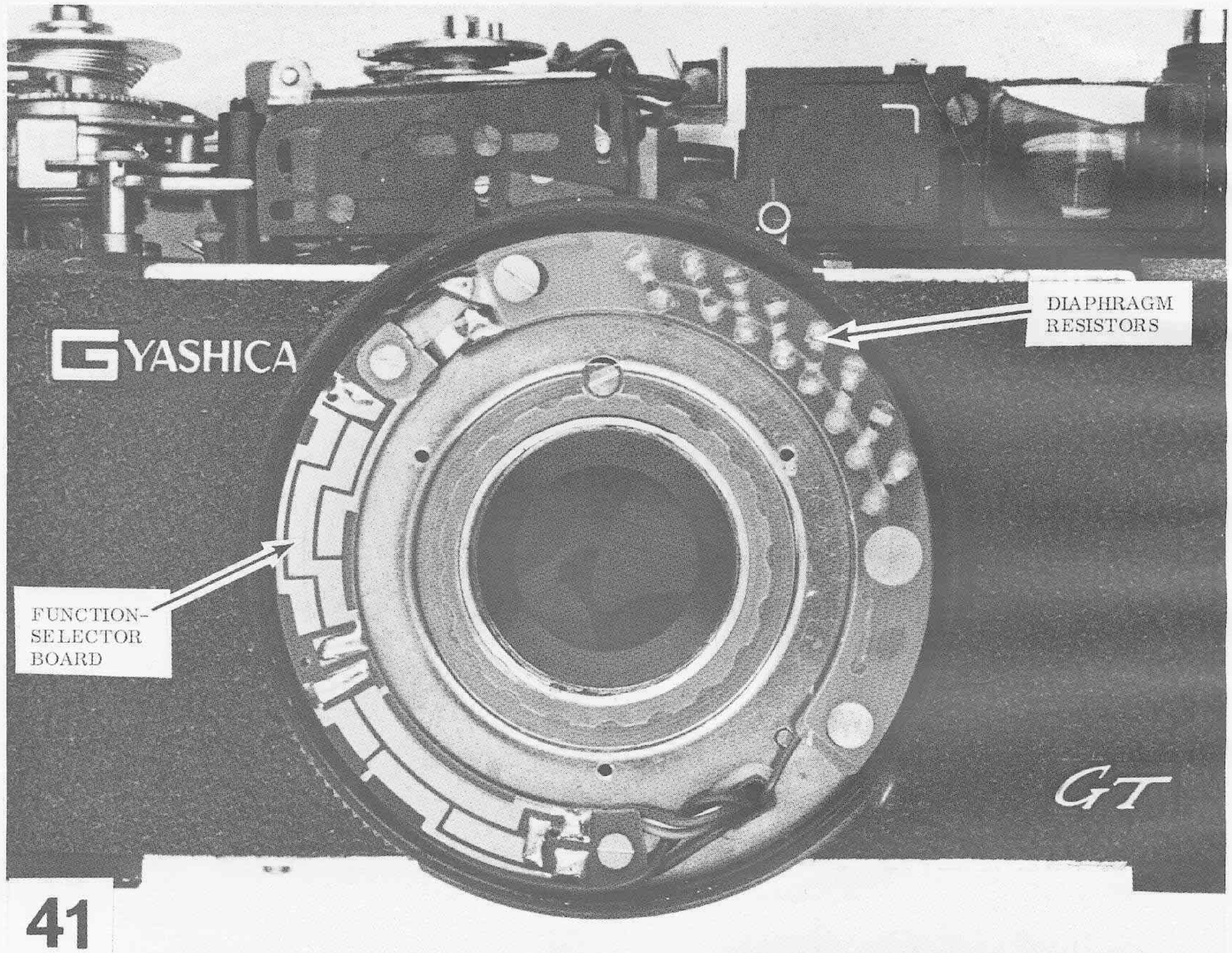

YASHICA
f=45mm
1:1.7
Yashica
Japan
COLOR-YASHINON DX
UNSCREW LENS
IDENTIFICATION
RING
GT

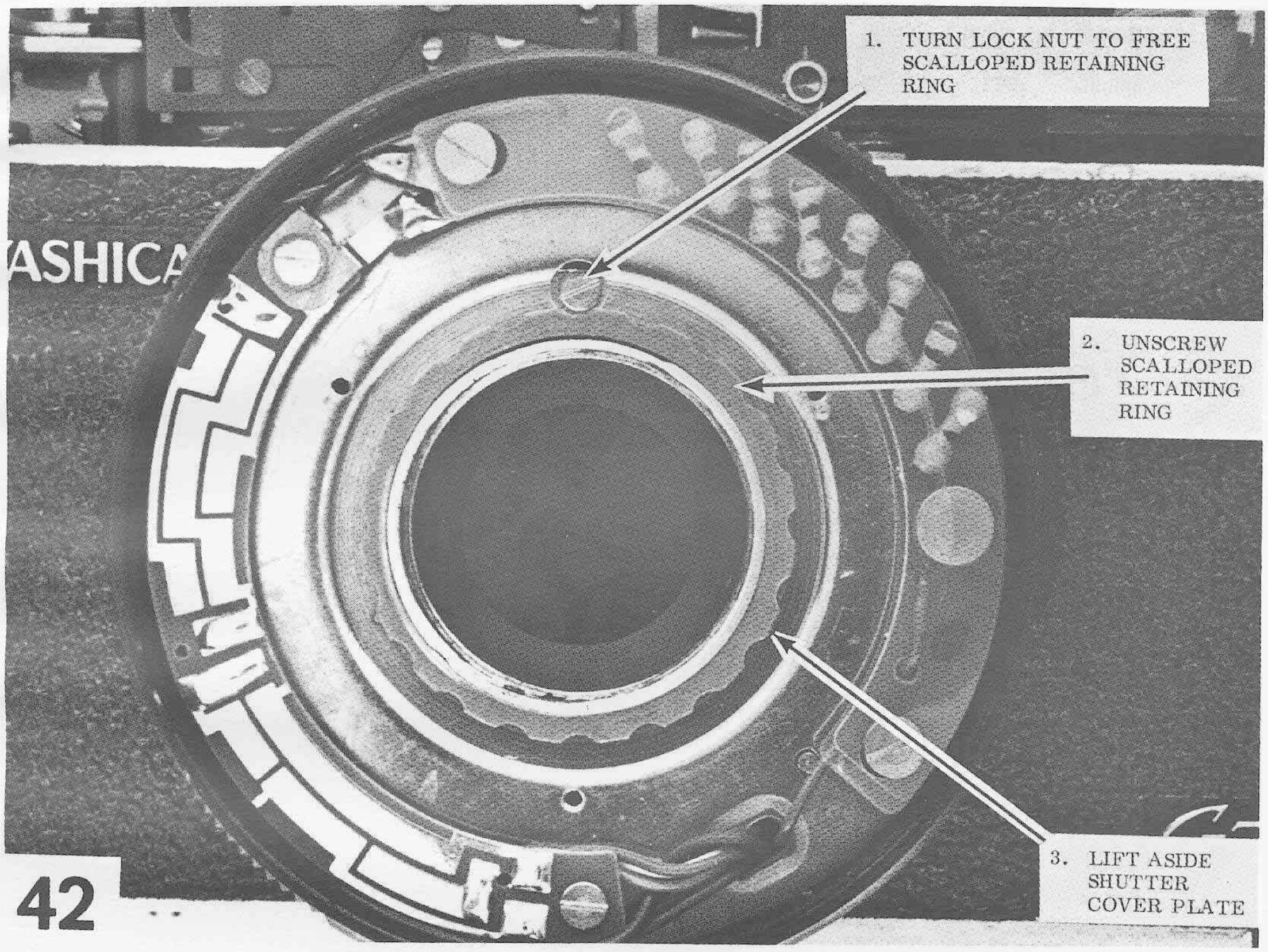

YASHICA
GT
DETENT SPRING FOR
SELECTOR RING
UNSCREW FRONT
LENS CELL

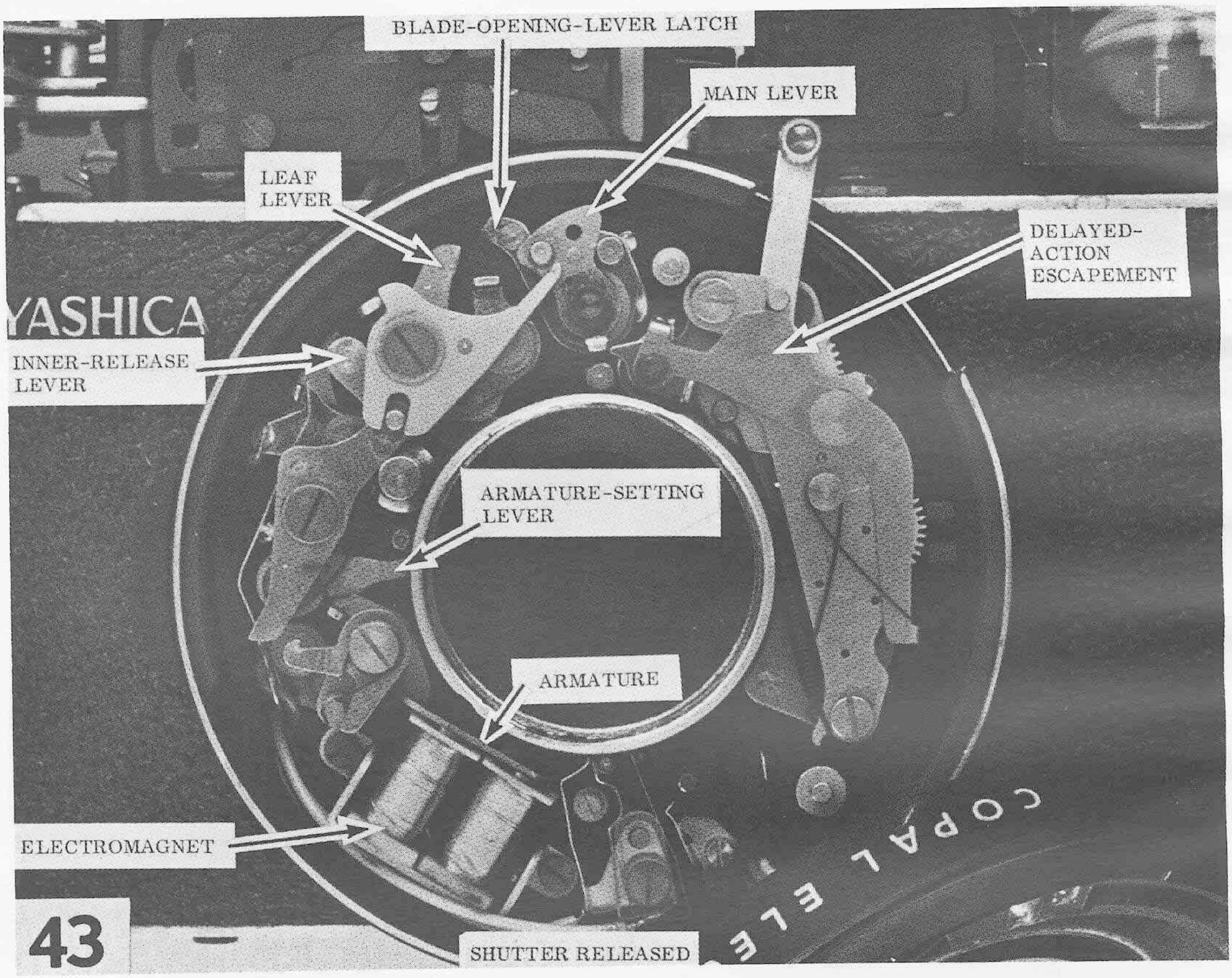

REMOVE THREE SCREWS AND LIFT OFF
SELECTOR-RING ASSEMBLY
YASHICA
GT

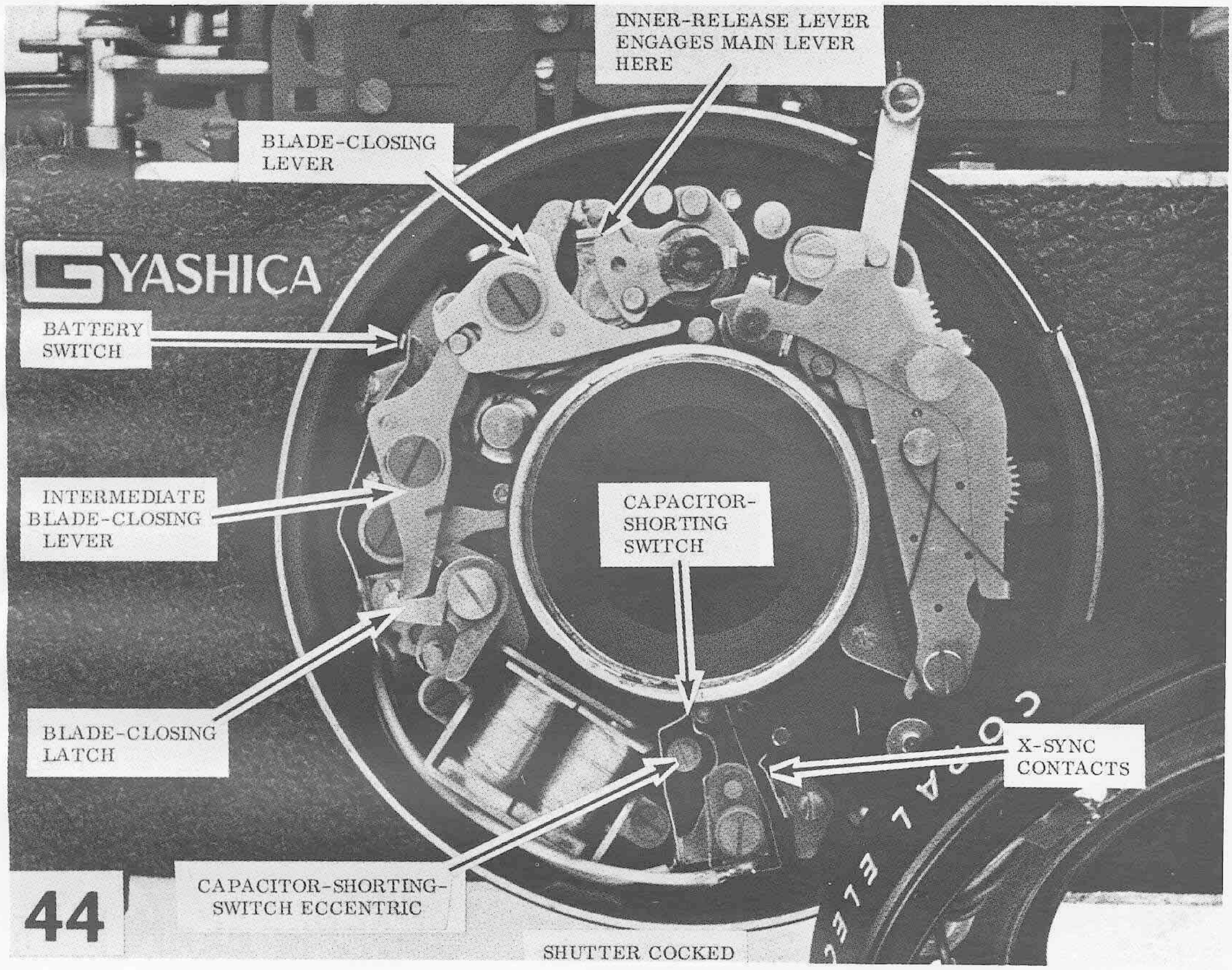


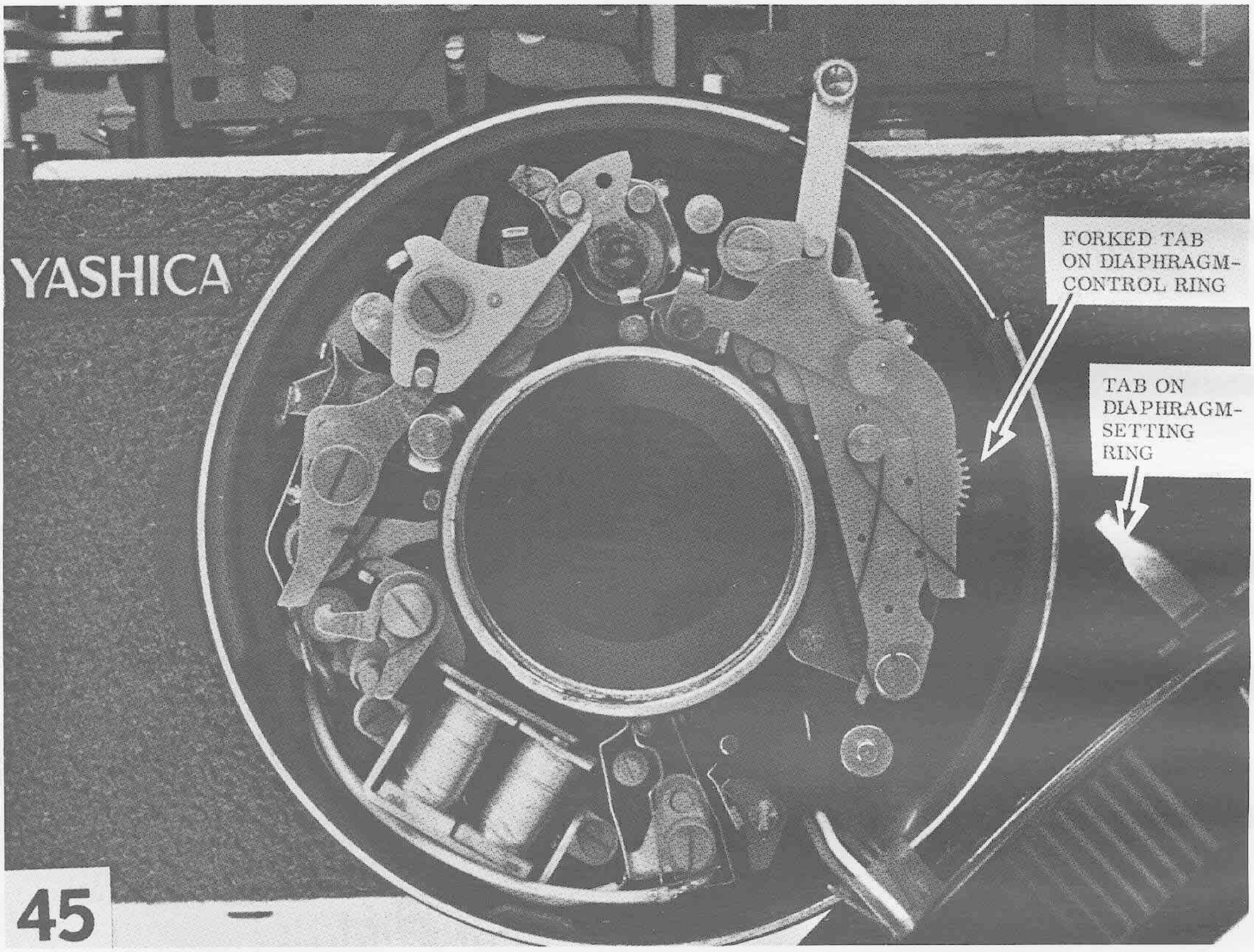
BACK OF SELECTOR-RING ASSEMBLY


YASHICA
DIAPHRAGM RESISTORS
FUNCTION-SELECTOR BOARD
GT

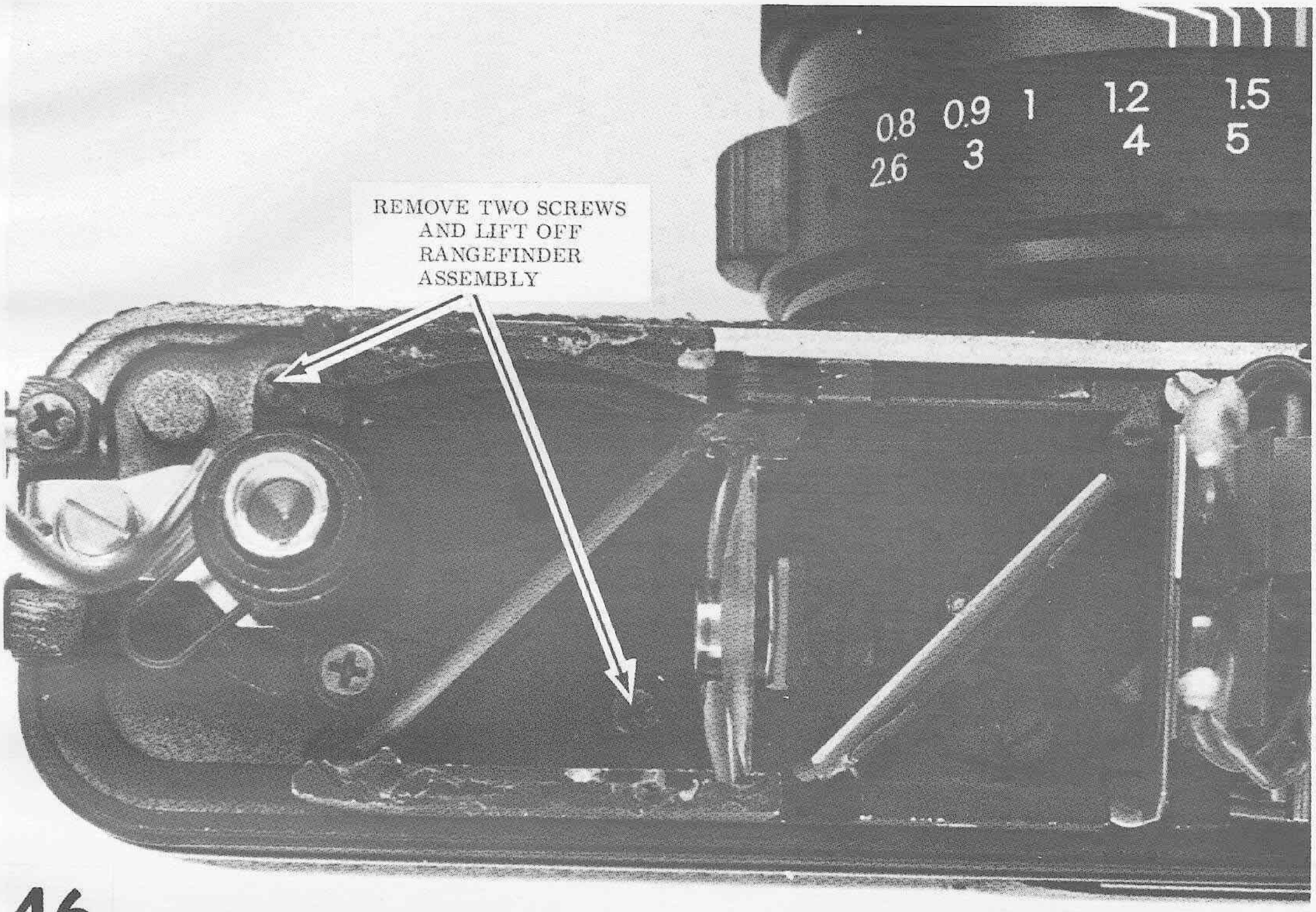

1. TURN LOCK NUT TO FREE SCALLOPED RETAINING RING
2. UNSCREW SCALLOPED RETAINING RING
3. LIFT ASIDE SHUTTER COVER PLATE

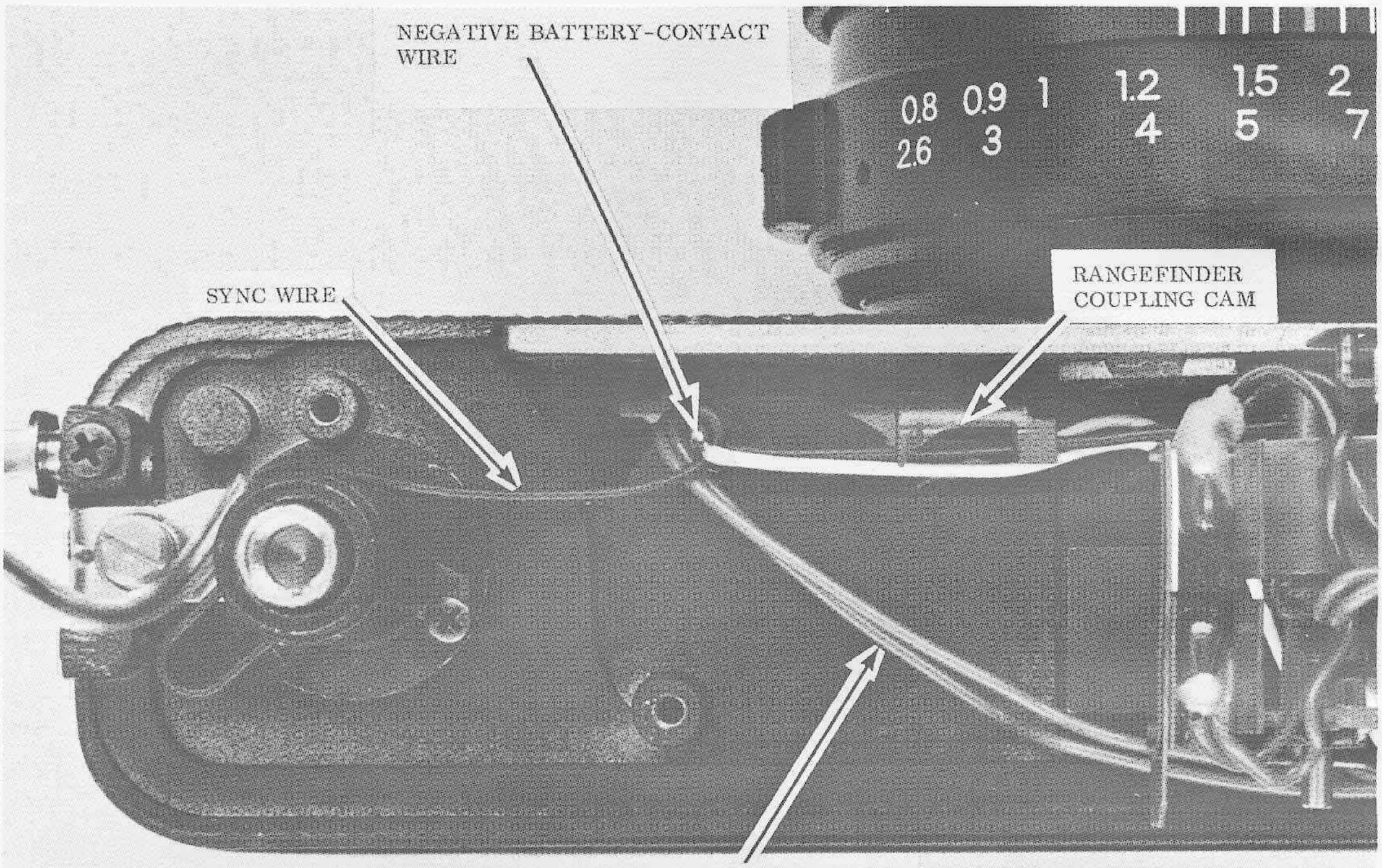

BLADE-OPENING-LEVER LATCH
MAIN LEVER
LEAF LEVER
DELAYED-ACTION ESCAPEMENT
YASHICA
INNER-RELEASE LEVER
ARMATURE-SETTING LEVER
ARMATURE
ELECTROMAGNET
SHUTTER RELEASED
COPAL ELE

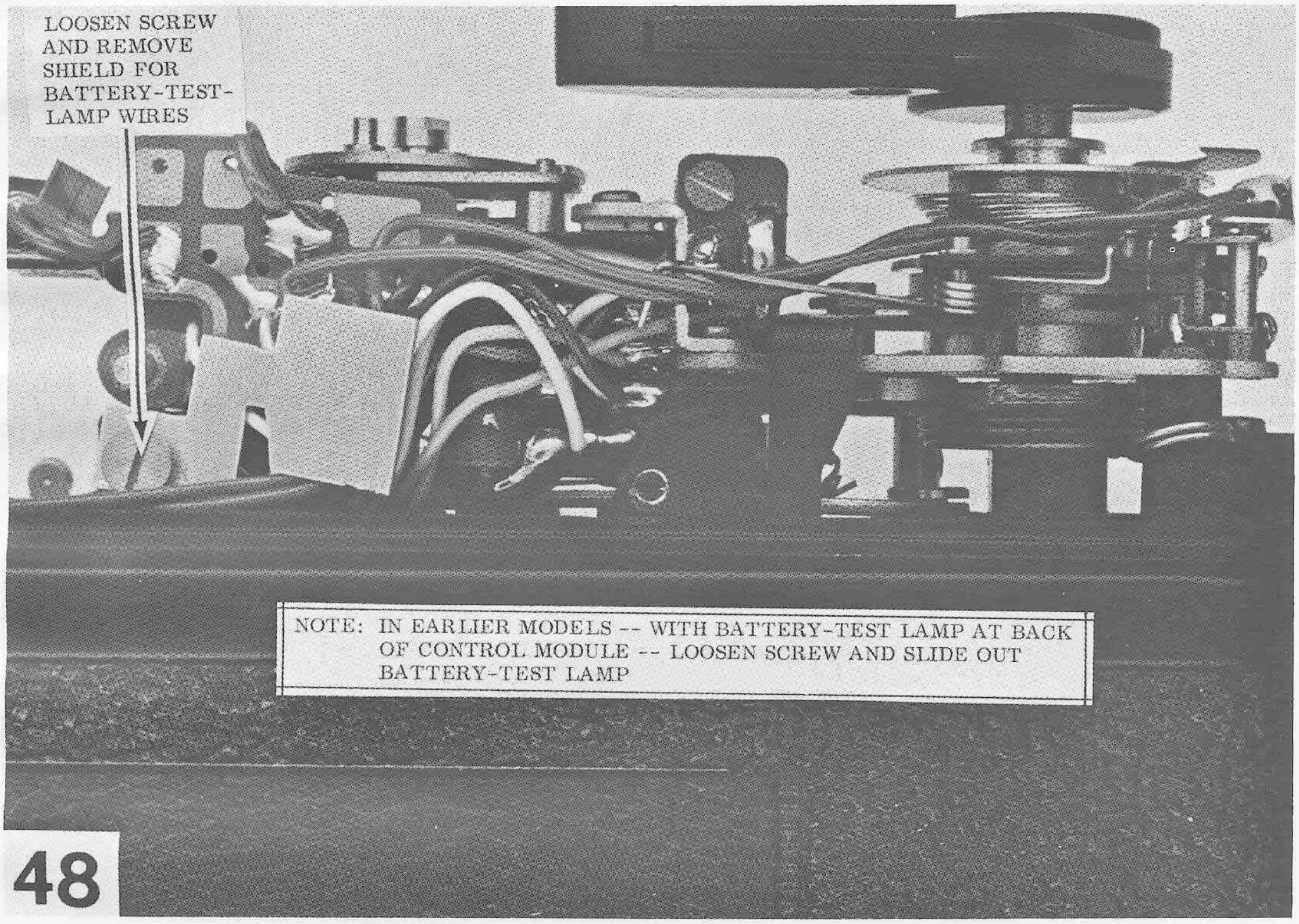

INNER-RELEASE LEVER ENGAGES MAIN LEVER HERE
BLADE-CLOSING LEVER
YASHICA
BATTERY SWITCH
INTERMEDIATE BLADE-CLOSING LEVER
CAPACITOR-SHORTING SWITCH
BLADE-CLOSING LATCH
X-SYNC CONTACTS
CAPACITOR-SHORTING-SWITCH ECCENTRIC
SHUTTER COCKED



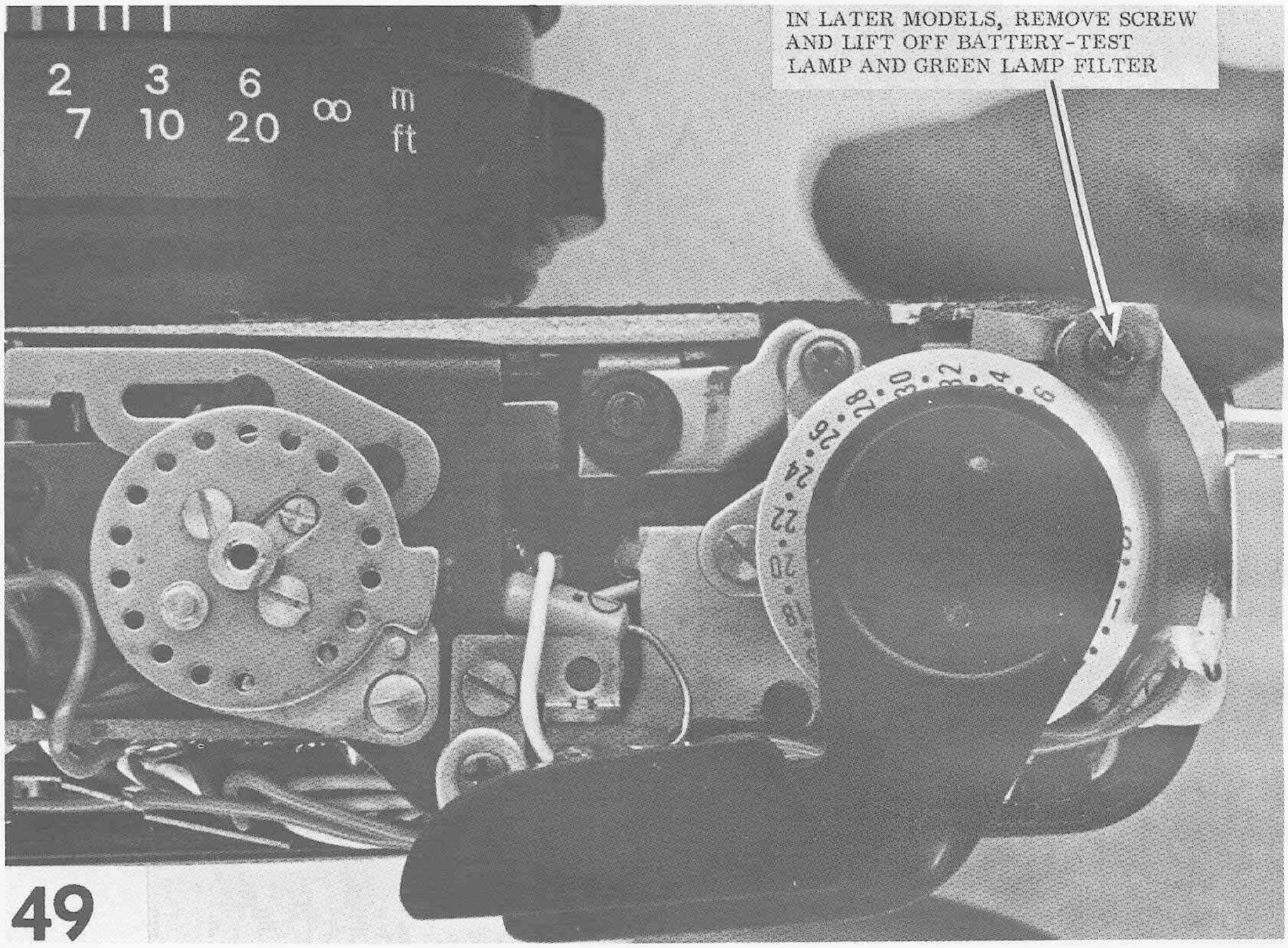
On reassembly, the tab on the diaphragm-setting ring must pass through the fork in the diaphragm-control ring. Turn both the diaphragm-setting ring and the diaphragm-control ring to one of their two extreme positions -- the smallest aperture or the largest aperture. To set the diaphragm-control ring to the largest aperture, turn its forked tab all the way clockwise.

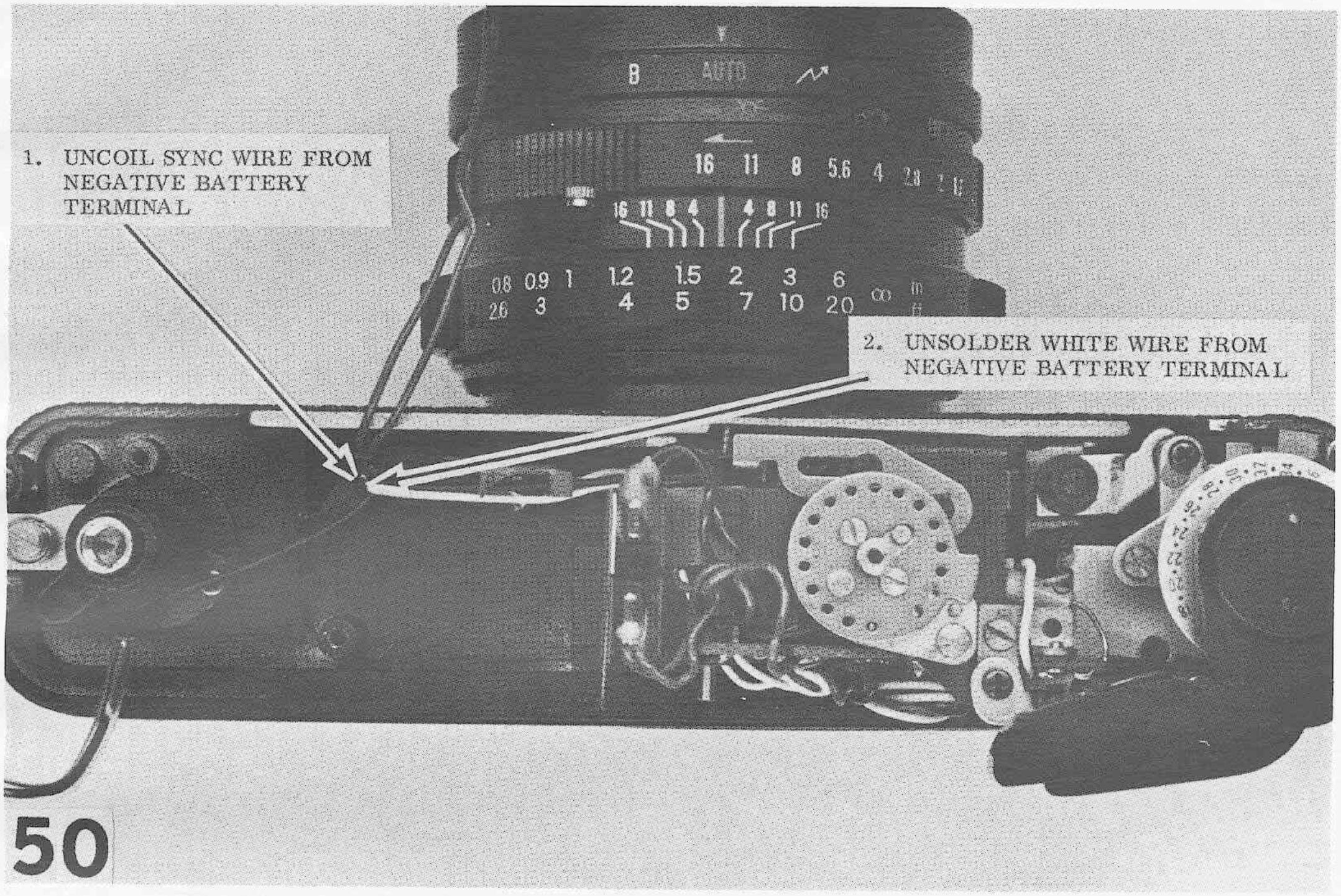

0.8 0.9 1 1.2 1.5
2.6 3 4 5
REMOVE TWO SCREWS
AND LIFT OFF
RANGEFINDER
ASSEMBLY

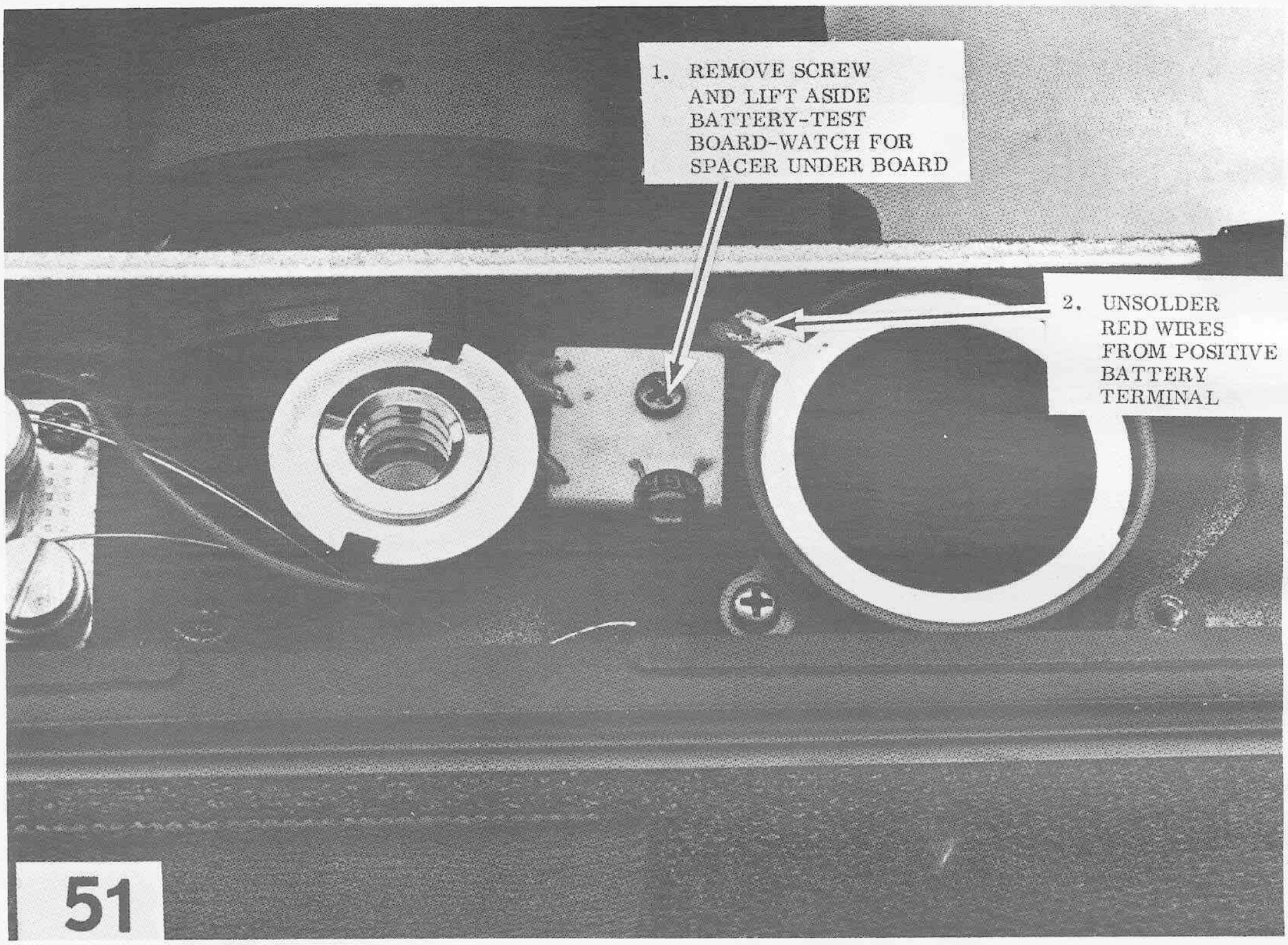

NEGATIVE BATTERY-CONTACT WIRE
SYNC WIRE
RANGEFINDER COUPLING CAM
0.8
0.9
1
1.2
1.5
2
2.6
3
4
5
7
BATTERY-TEST-LAMP WIRES

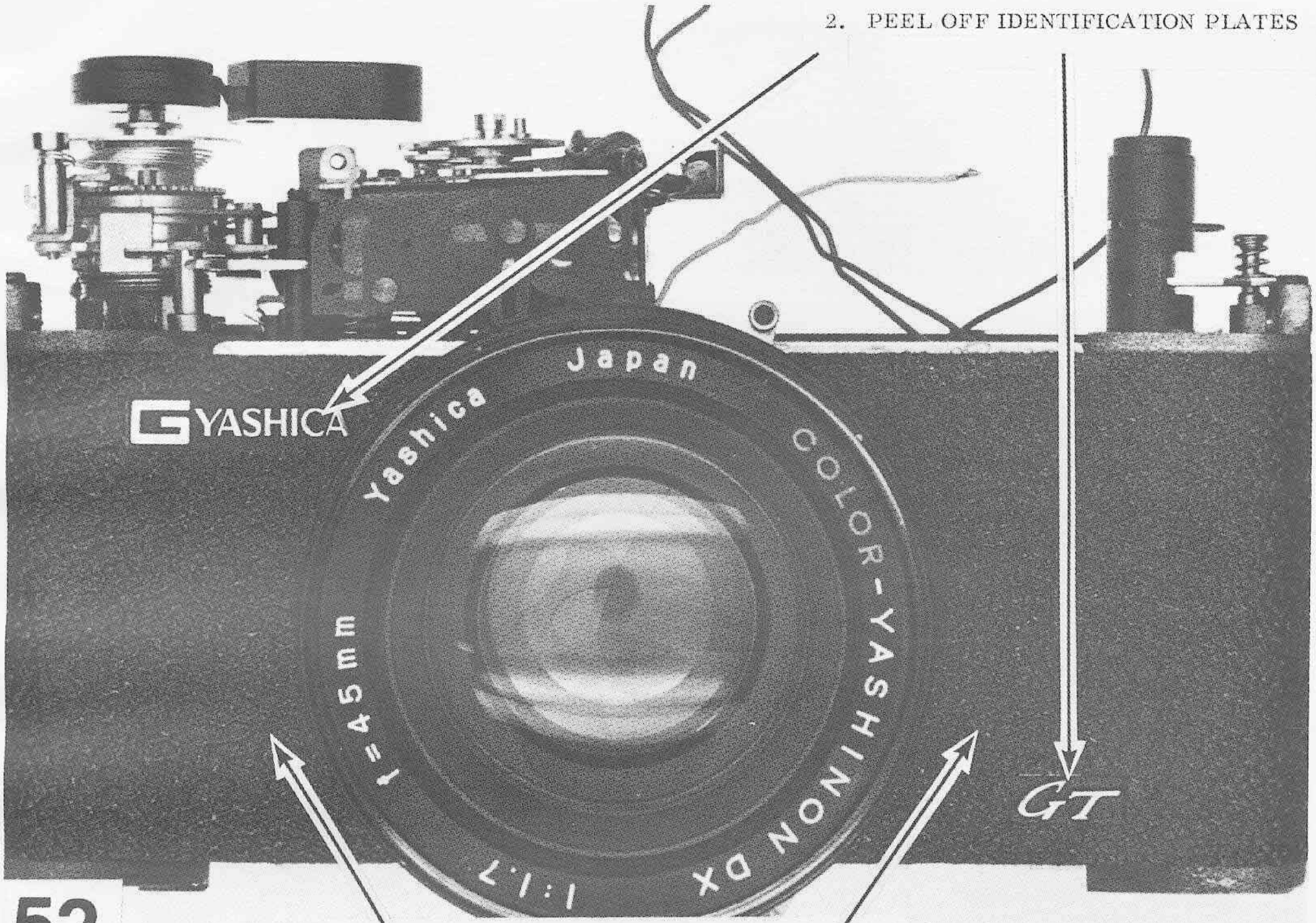


NOTE: IN EARLIER MODELS -- WITH BATTERY-TEST LAMP AT BACK OF CONTROL MODULE -- LOOSEN SCREW AND SLIDE OUT BATTERY-TEST LAMP


IN LATER MODELS, REMOVE SCREW AND LIFT OFF BATTERY-TEST LAMP AND GREEN LAMP FILTER
2 3 6 ∞ m
7 10 20 ft

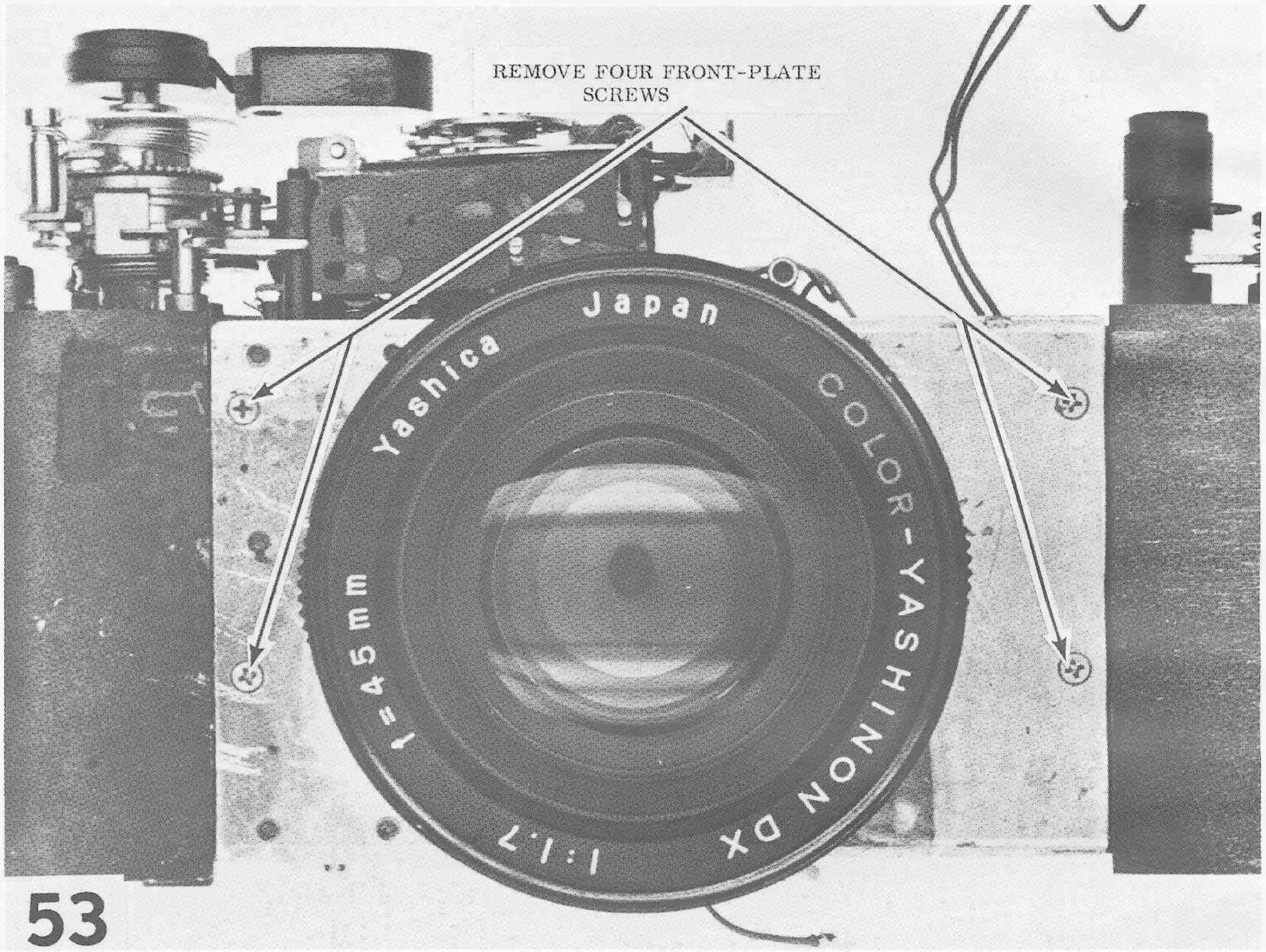

1. UNCOIL SYNC WIRE FROM NEGATIVE BATTERY TERMINAL
2. UNSOLDER WHITE WIRE FROM NEGATIVE BATTERY TERMINAL
8 AUTO
16 11 8 5.6 4
16 11 8 4 4 8 11 16
0.8 0.9 1 1.2 1.5 2 3 6 ∞
2.6 3 4 5 7 10 20

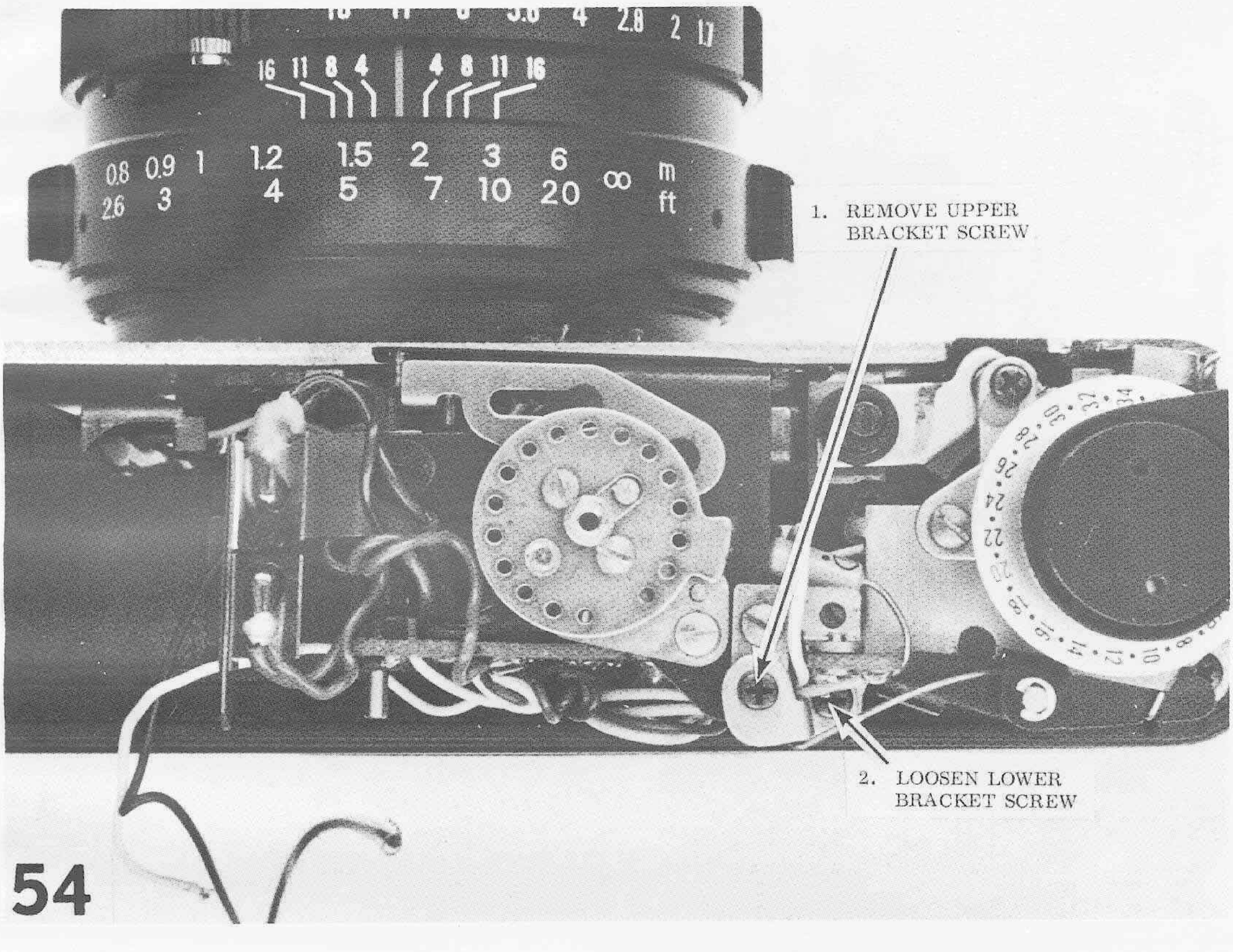

1. REMOVE SCREW AND LIFT ASIDE BATTERY-TEST BOARD-WATCH FOR SPACER UNDER BOARD
2. UNSOLDER RED WIRES FROM POSITIVE BATTERY TERMINAL

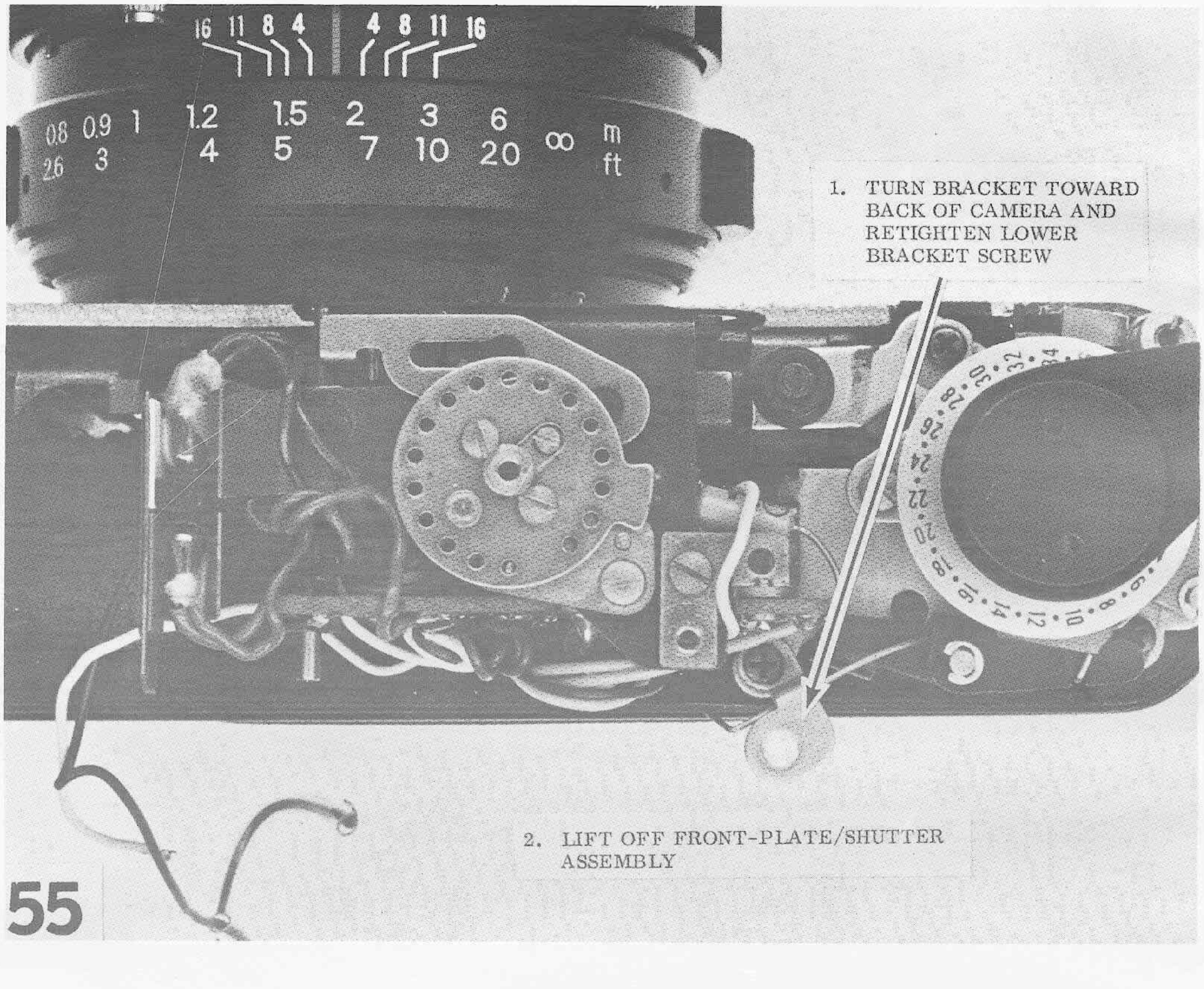


2. PEEL OFF IDENTIFICATION PLATES

1. PEEL BACK LEATHERETTE ON EACH SIDE OF LENS STANDARD

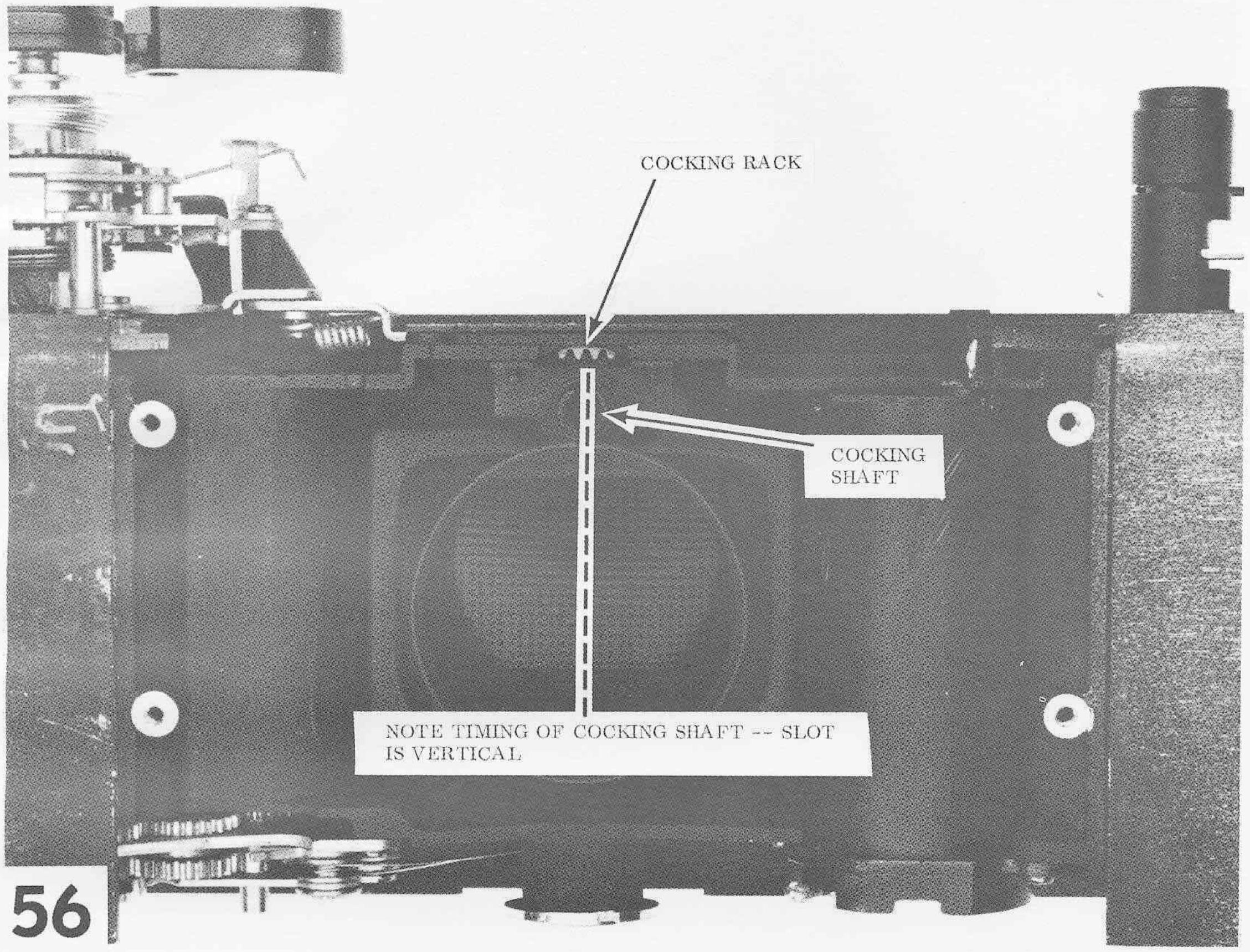

REMOVE FOUR FRONT-PLATE SCREWS
Yashica Japan
COLOR-YASHINON DX
f=45mm
1:1.7

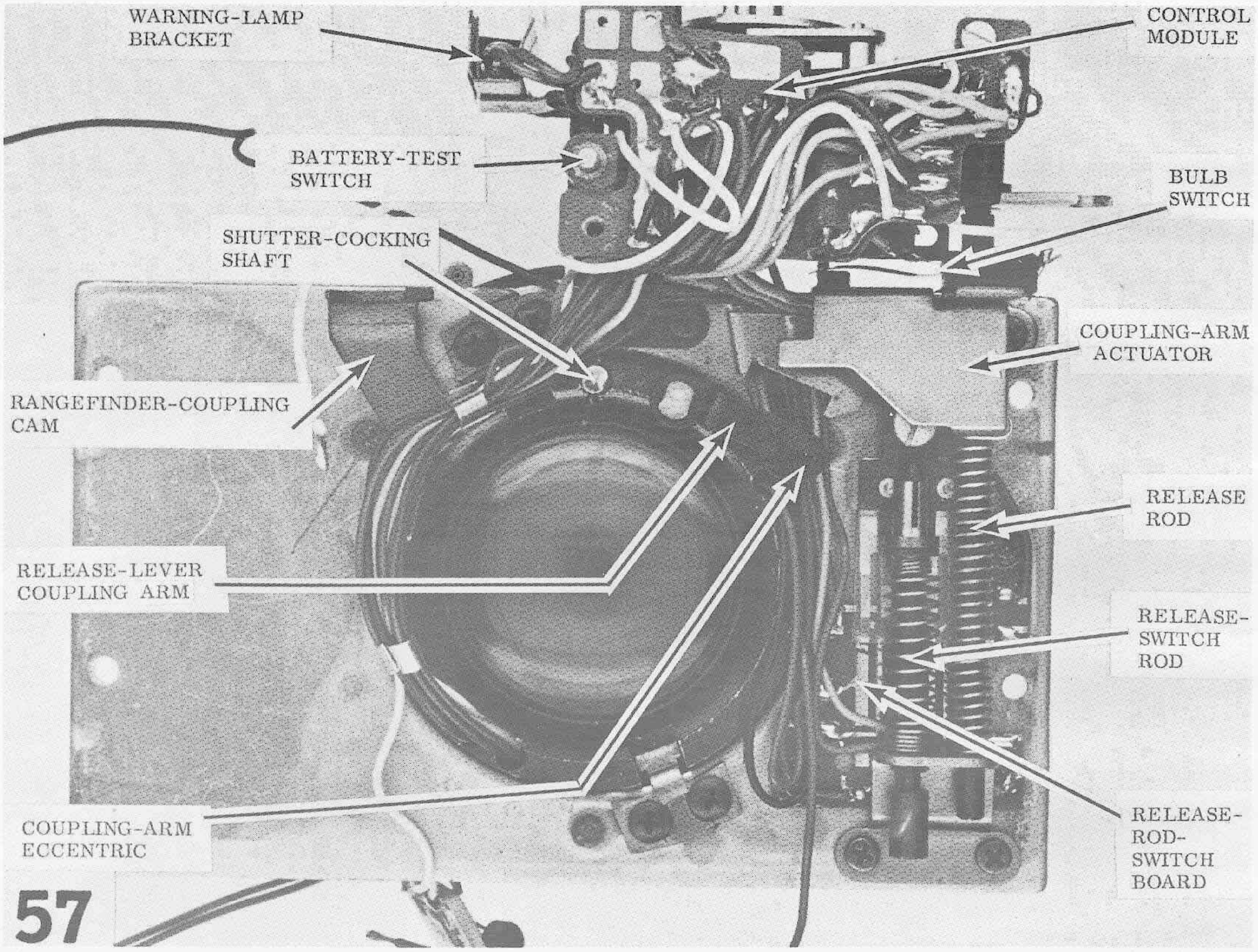

16 11 8 4
4 8 11 16
0.8 0.9 1 1.2 1.5 2 3 6 ∞ m
2.6 3 4 5 7 10 20 ft
1. REMOVE UPPER BRACKET SCREW
2. LOOSEN LOWER BRACKET SCREW

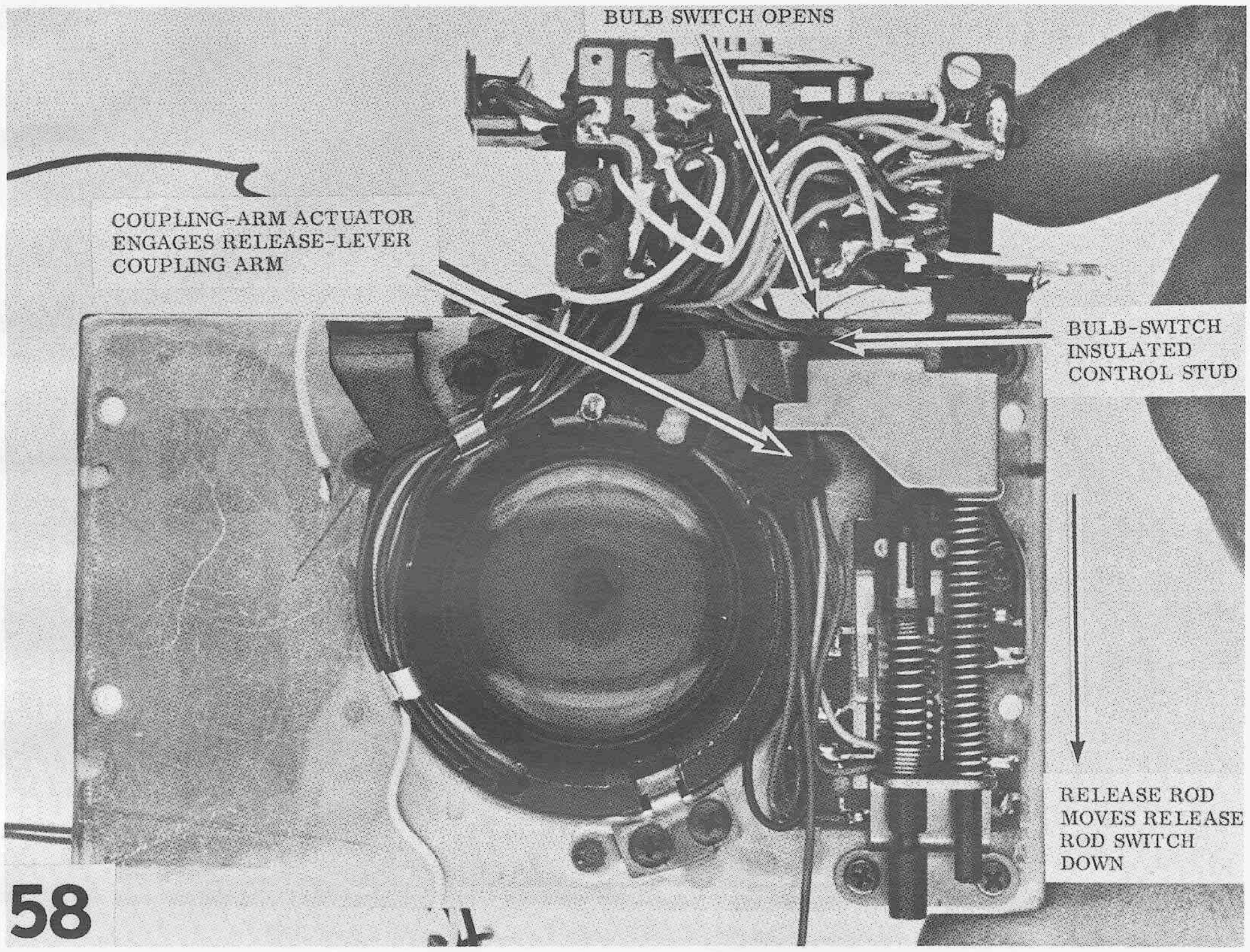


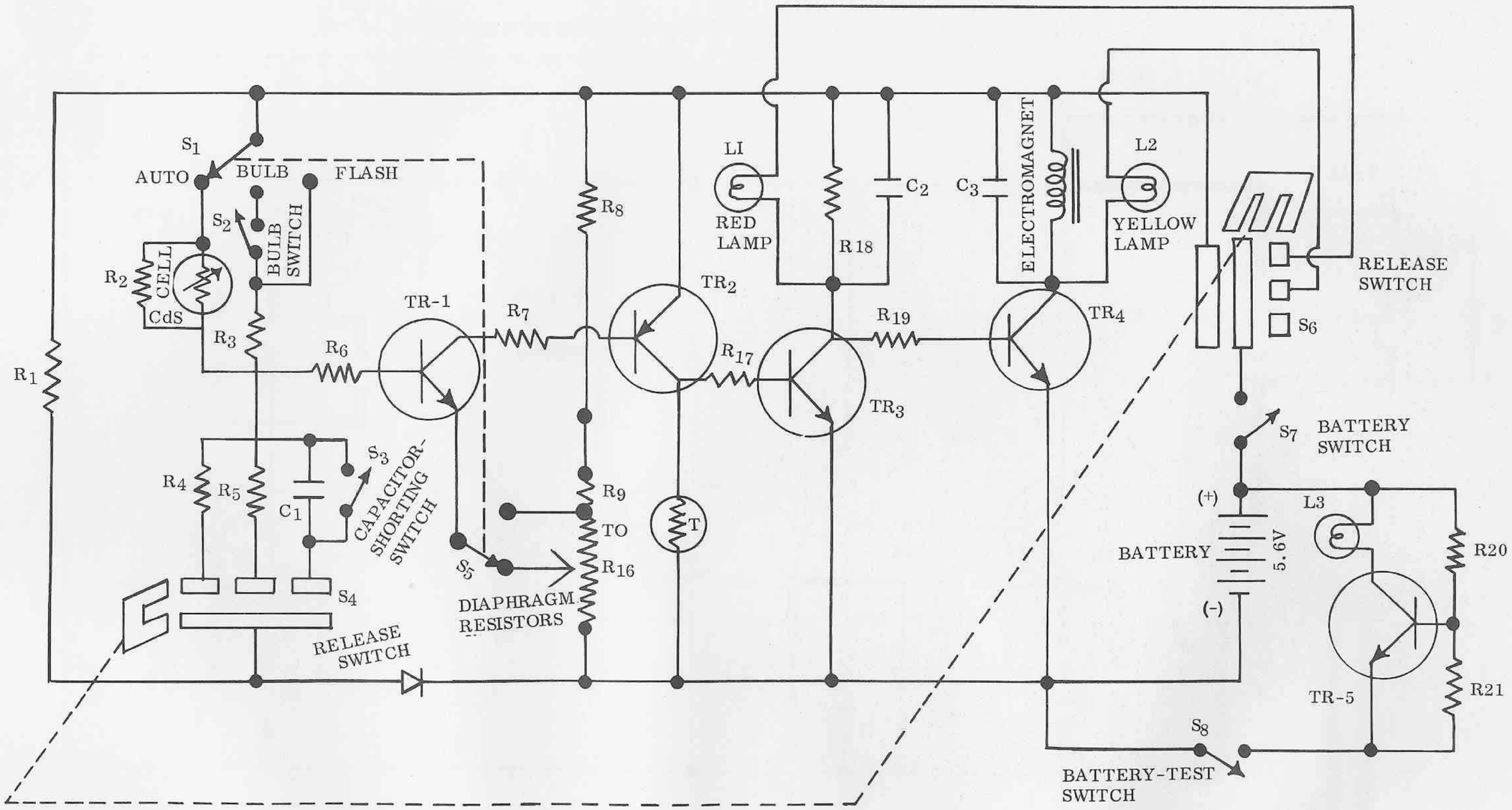
1. TURN BRACKET TOWARD BACK OF CAMERA AND RETIGHTEN LOWER BRACKET SCREW

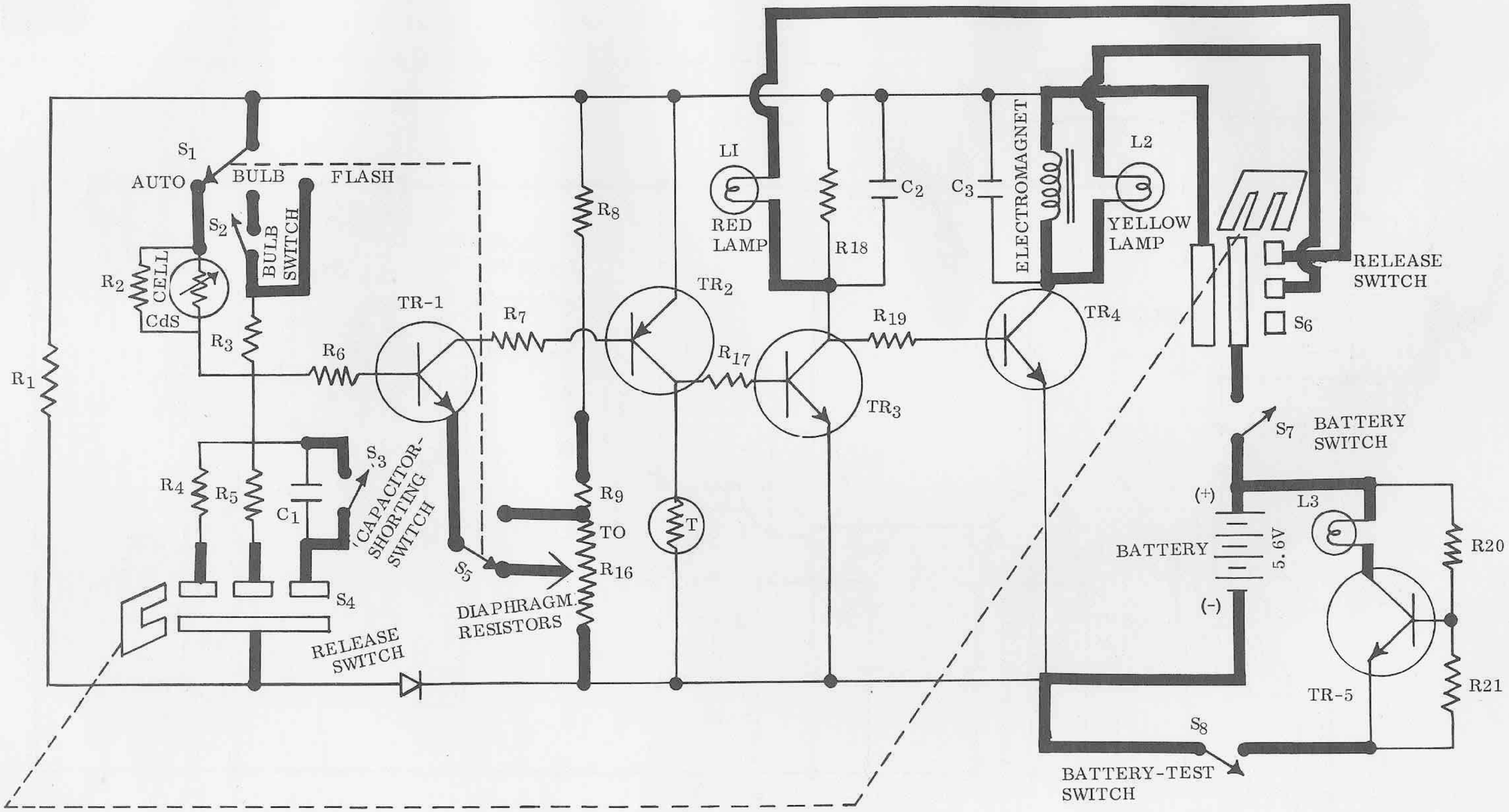
2. LIFT OFF FRONT-PLATE/SHUTTER ASSEMBLY


COCKING RACK
COCKING SHAFT
NOTE TIMING OF COCKING SHAFT -- SLOT IS VERTICAL

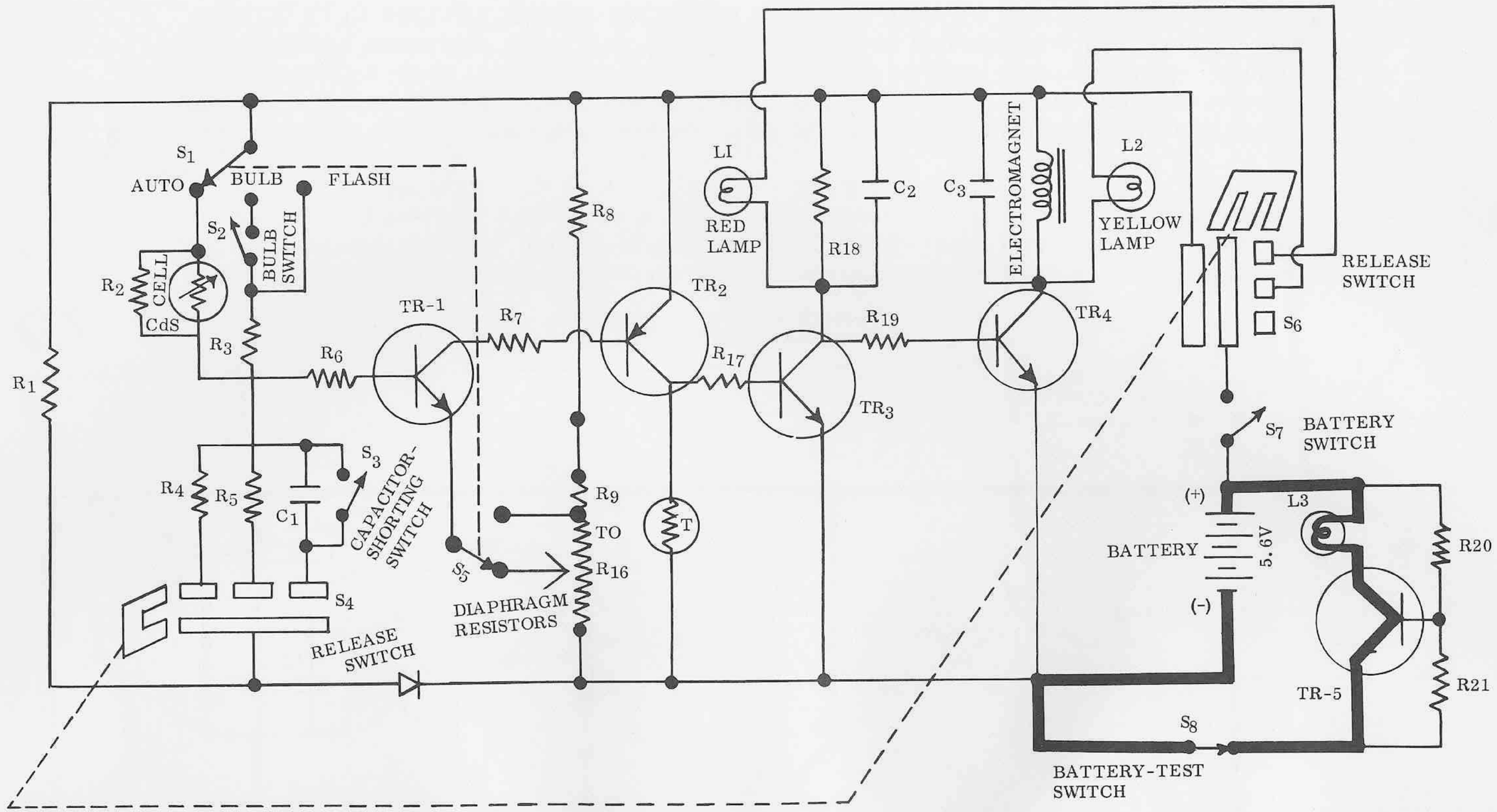

WARNING-LAMP BRACKET
CONTROL MODULE
BATTERY-TEST SWITCH
BULB SWITCH
SHUTTER-COCKING SHAFT
COUPLING-ARM ACTUATOR
RANGEFINDER-COUPLING CAM
RELEASE ROD
RELEASE-LEVER COUPLING ARM
RELEASE-SWITCH ROD
COUPLING-ARM ECCENTRIC
RELEASE-ROD-SWITCH BOARD


BULB SWITCH OPENS
COUPLING-ARM ACTUATOR ENGAGES RELEASE-LEVER COUPLING ARM
BULB-SWITCH INSULATED CONTROL STUD
RELEASE ROD MOVES RELEASE ROD SWITCH DOWN


S1
AUTO
BULB
FLASH
S2
BULB SWITCH
R2
CELL
CdS
R3
R1
R6
TR-1
R7
R8
TR2
LI
RED LAMP
R18
C2
C3
ELECTROMAGNET
L2
YELLOW LAMP
RELEASE SWITCH
S6
R19
TR4
R17
TR3
S7
BATTERY SWITCH
(+)
L3
BATTERY
5.6V
(-)
R20
R4
R5
C1
S3
CAPACITOR-SHORTING SWITCH
S5
R9
TO
R16
T
S4
RELEASE SWITCH
DIAPHRAGM RESISTORS
TR-5
R21
S8
BATTERY-TEST SWITCH



HEAVY LINES INDICATE WIRES -- LIGHT LINES INDICATE PRINTED CIRCUIT PATHS



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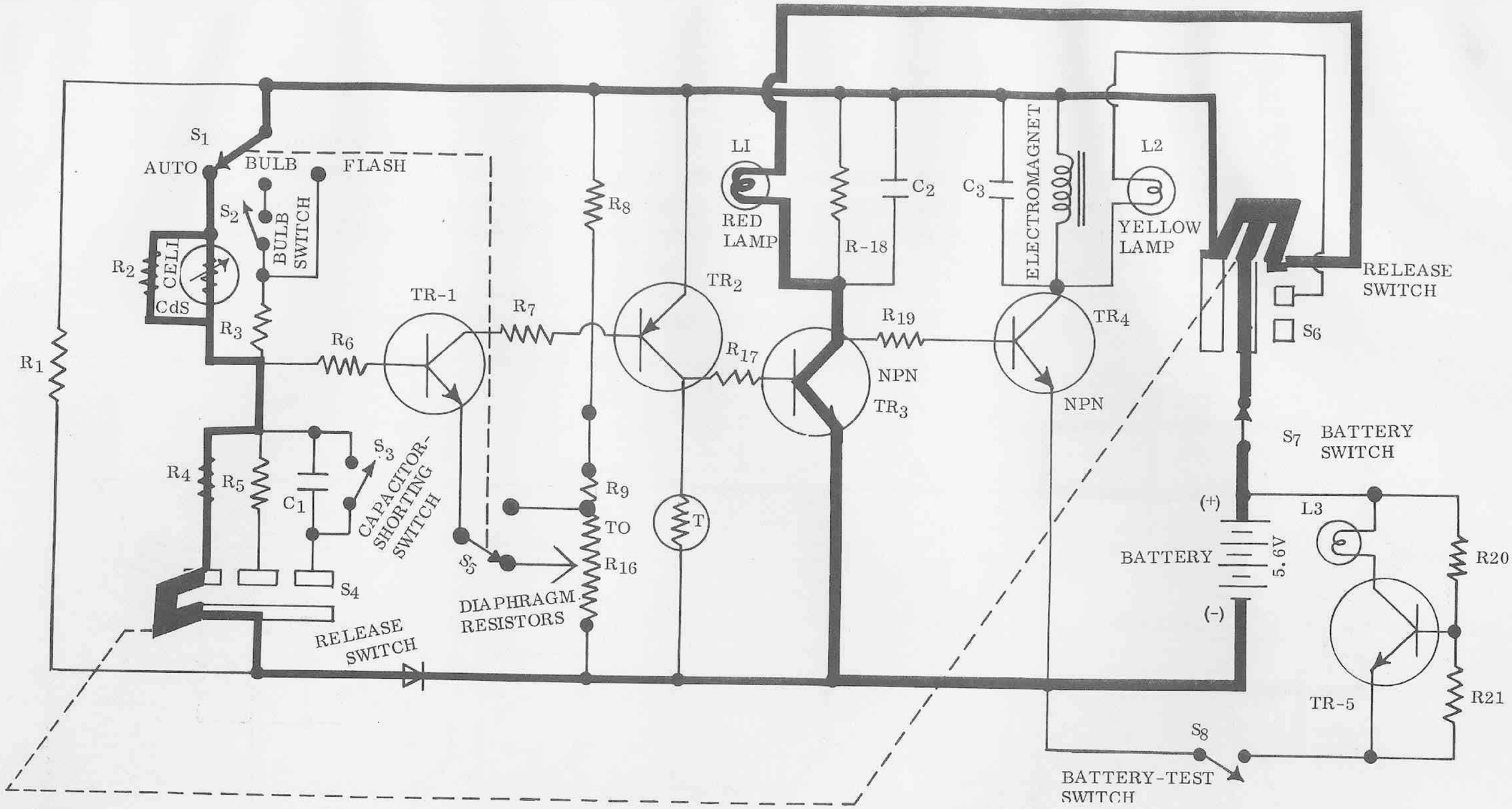
HEAVY LINES INDICATE CURRENT PATH FOR BATTERY-TEST LAMP

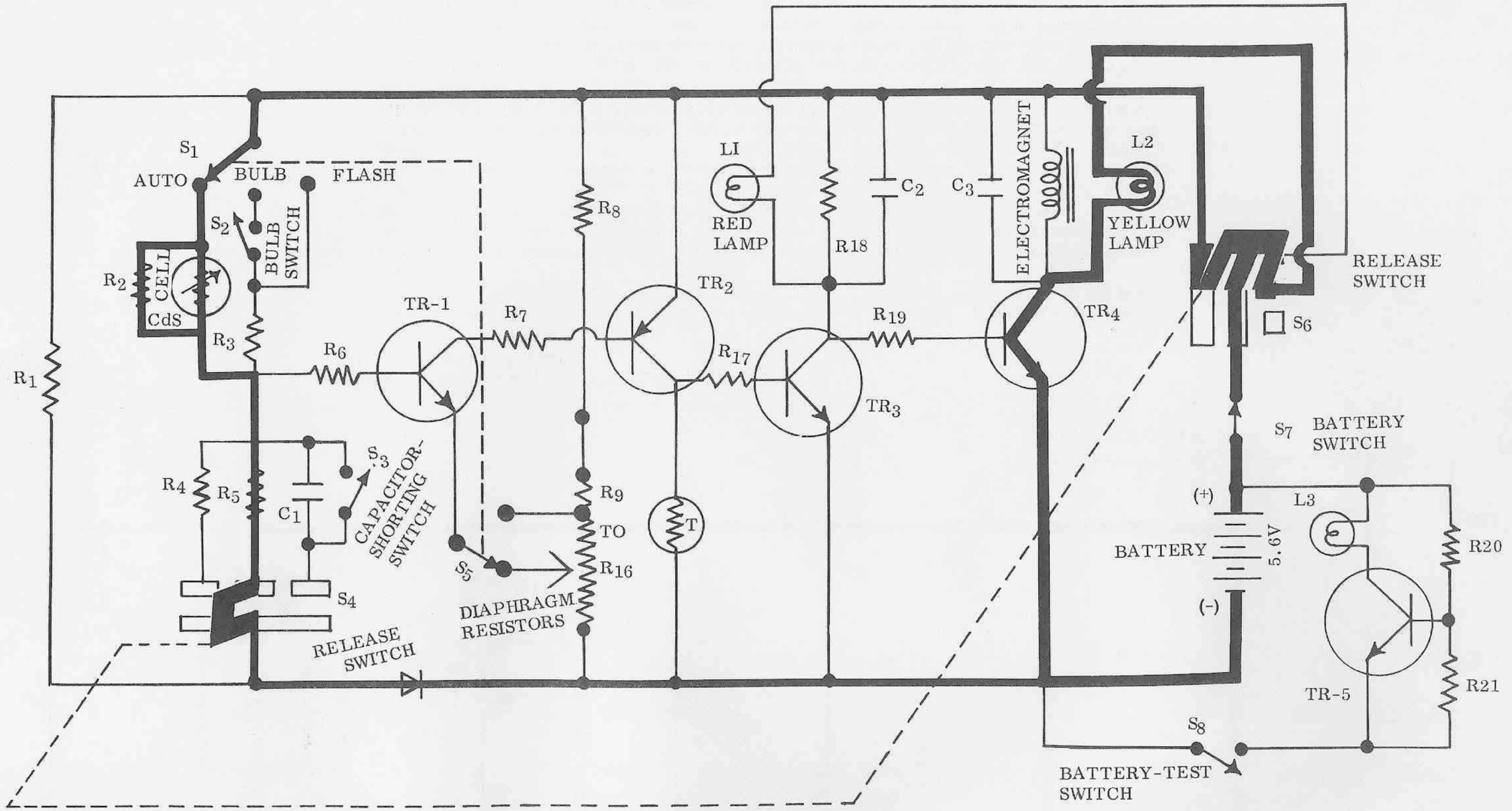
Depressing the battery-test button closes the battery-test switch S_8. Battery current then flows through resistors R21 and R20. A sufficient voltage drop across R21 turns on transistor TR5. So current flows through the transistor and through the battery-test lamp L_3.



HEAVY LINES INDICATE CURRENT PATH FOR RED (OVEREXPOSURE) WARNING LAMP L_1

As you start depressing the release button, the shutter-release switch connects the red lamp L_1 into the circuit. But L_1 can turn on only if transistor TR3 conducts. And the triggering of transistor TR3 depends on the resistance of the CdS cell, as established by the light conditions.

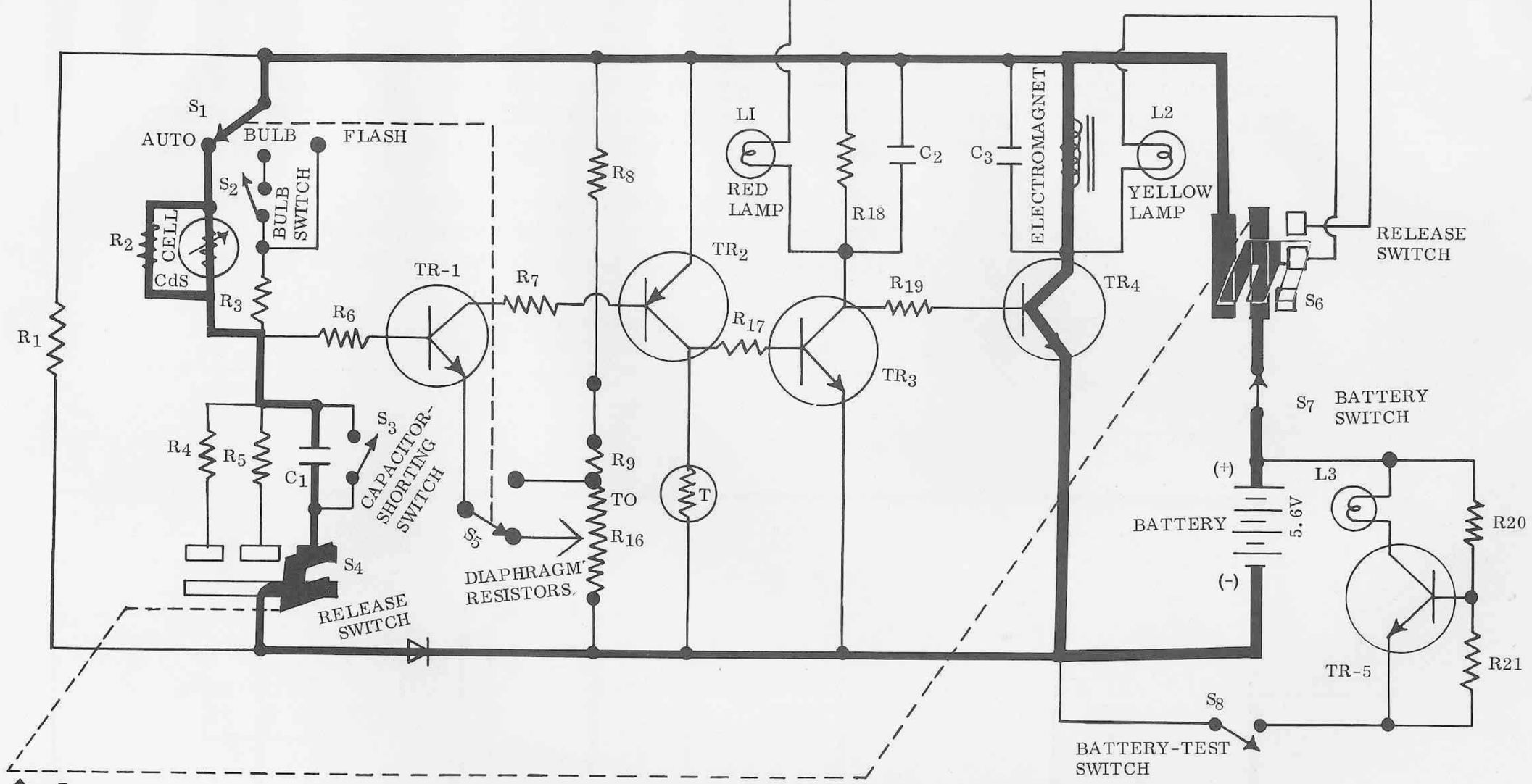
Consider that the light conditions are so bright that a shutter speed faster than 1/500 second is required. The resistance of the CdS cell is then low. Consequently, enough of the battery voltage is dropped across resistor R_4 to trigger transistor TR1. Transistor TR1 triggers transistor TR2. And TR2 triggers TR3 to turn on lamp L_1. You can turn off lamp L_1 by setting a smaller diaphragm opening -- that changes the resistance in the emitter circuit of TR1.



HEAVY LINES INDICATE CURRENT PATH
FOR YELLOW (SLOW) WARNING LAMP L_2

Depressing the release button a little further connects the yellow lamp L_2. Lamp L_2 turns on when the light conditions are so dim that a shutter speed slower than 1/30 second is required. The resistance of the CdS cell is then high.

The high resistance of the CdS cell keeps transistor TR1 turned off -- the voltage dropped across R_5 is too low to trigger the transistor. Consequently, transistors TR2 and TR3 are also turned off. As long as transistor TR3 is turned off, transistor TR4 conducts. And the current flowing through transistor TR4 also flows through the yellow lamp L_2.



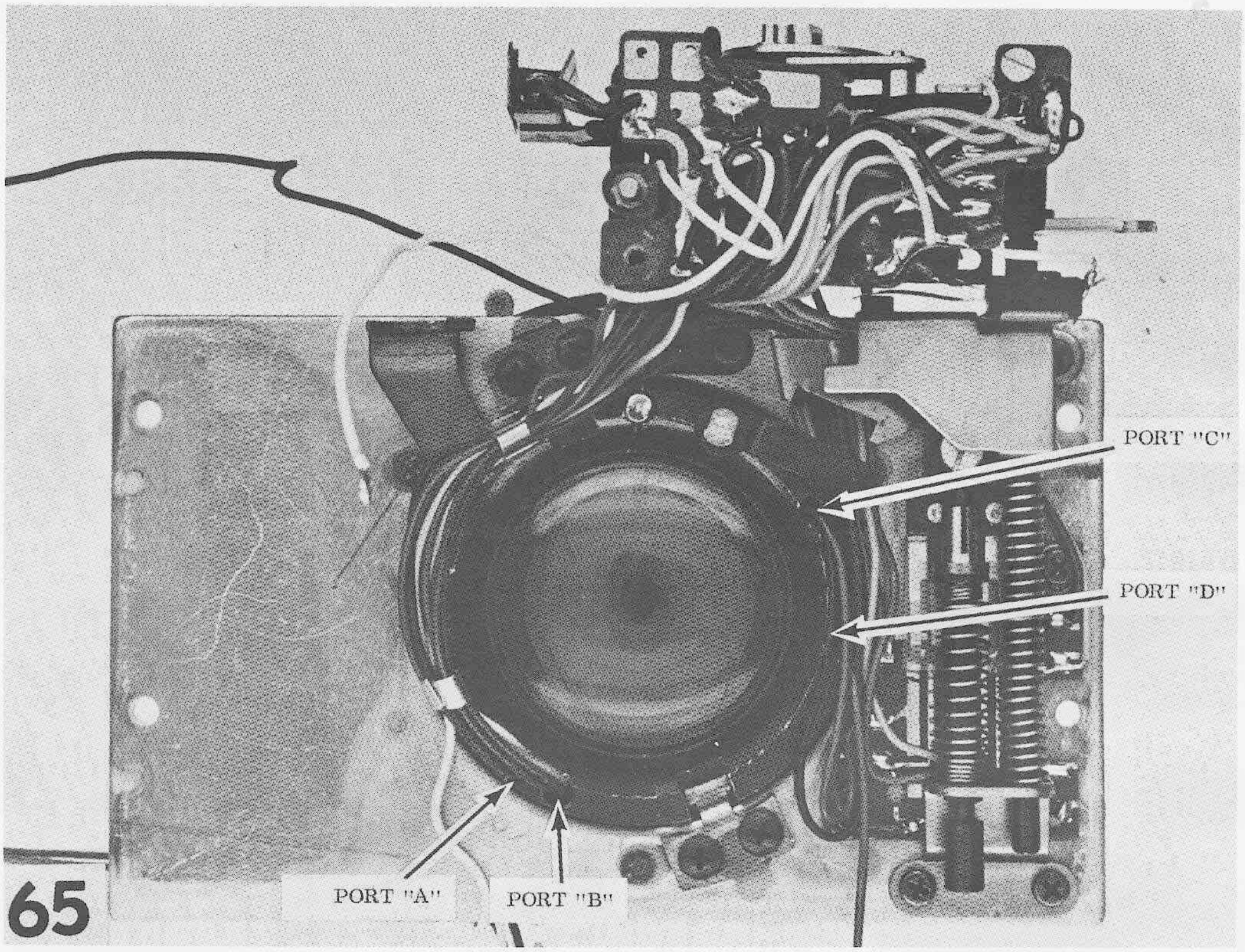
HEAVY LINES INDICATE CURRENT PATH
FOR EXPOSURE CYCLE

When the shutter-release switch reaches the bottom of its stroke, it connects the timing capacitor C_1 to the circuit. Also, the shutter releases and the blades move to the open position.

Transistor TR1 remains turned off while the timing capacitor charges to the required voltage. Consequently, transistor TR4 conducts current through the electromagnet. The electromagnet holds its armature to keep the blades in the open position.

The time it takes for the timing capacitor to charge depends on the resistance of the CdS cell. When the timing capacitor reaches a sufficient charge, the voltage on its positive plate turns on transistor TR1 -- this trigger voltage depends on the diaphragm setting which determines the resistance in the emitter circuit of TR1. TR1 turns on TR2, and TR2 turns on TR3. Now, TR3 robs transistor TR4 of the base current it needs to conduct. TR4 shuts off, depriving the electromagnet of current.

As the blades close, the blade-operating ring closes the capacitor-shorting switch S_3. S_3 opens as the blades open and closes as the blades close. So the time that S_3 opens determines when the timing capacitor can start accepting a charge. The eccentric adjustment on S_3 is your high-speed adjustment point.

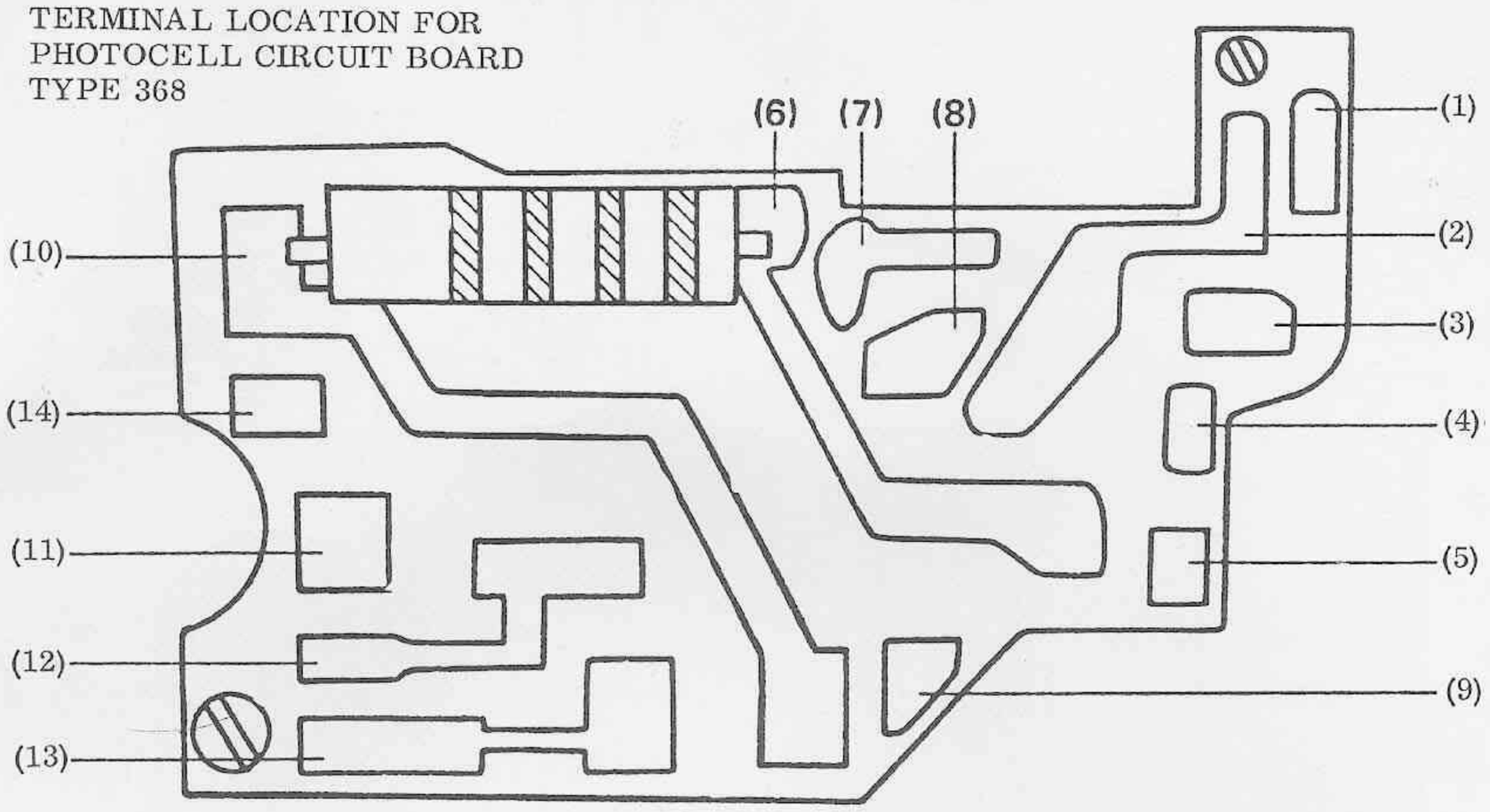


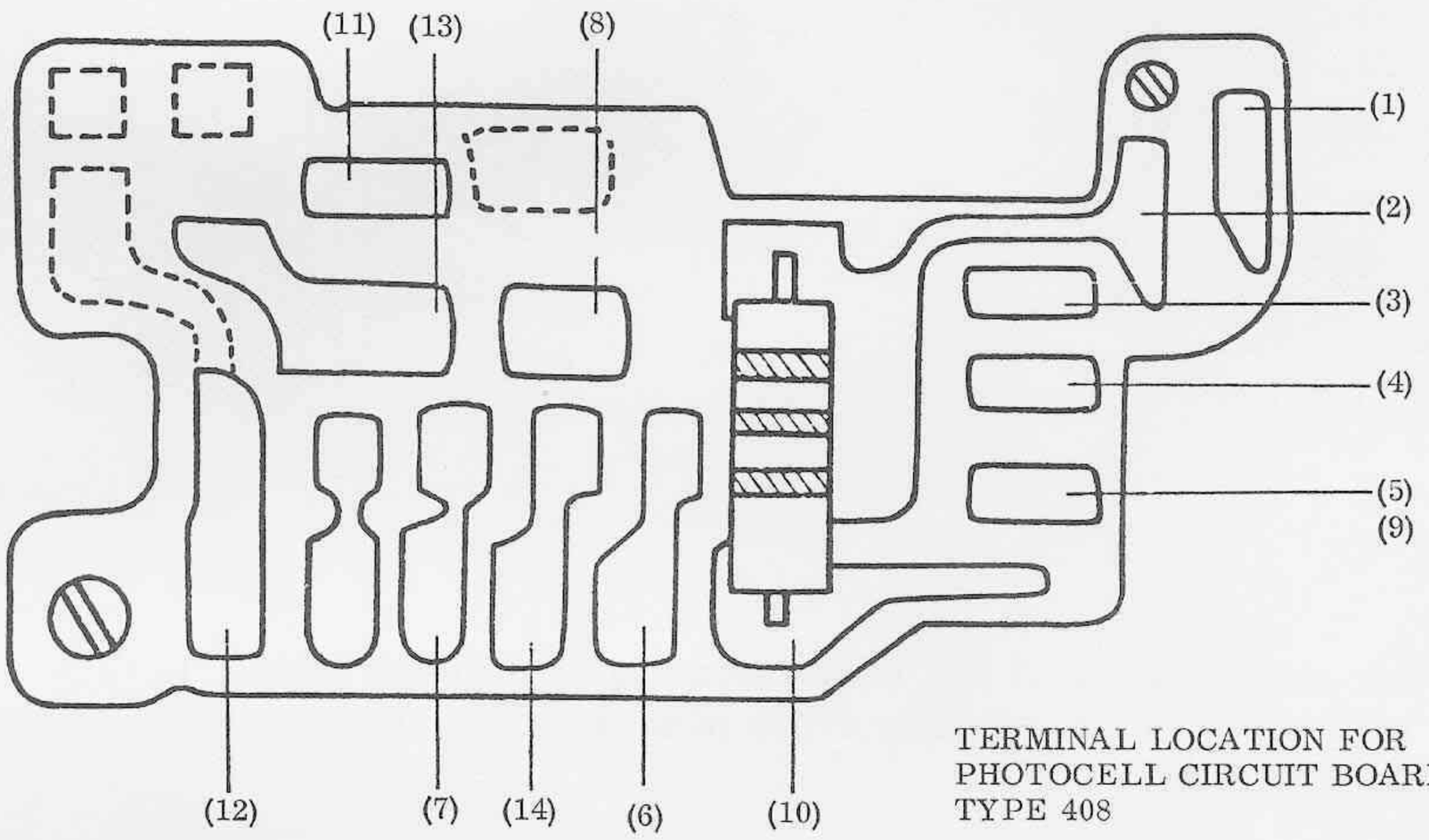
Note the color coding of the wires coming from each port. In different cameras, the color codes may vary slightly from port to port. But they're generally consistent from side to side.

Here's the normal color coding of the wires from each port:

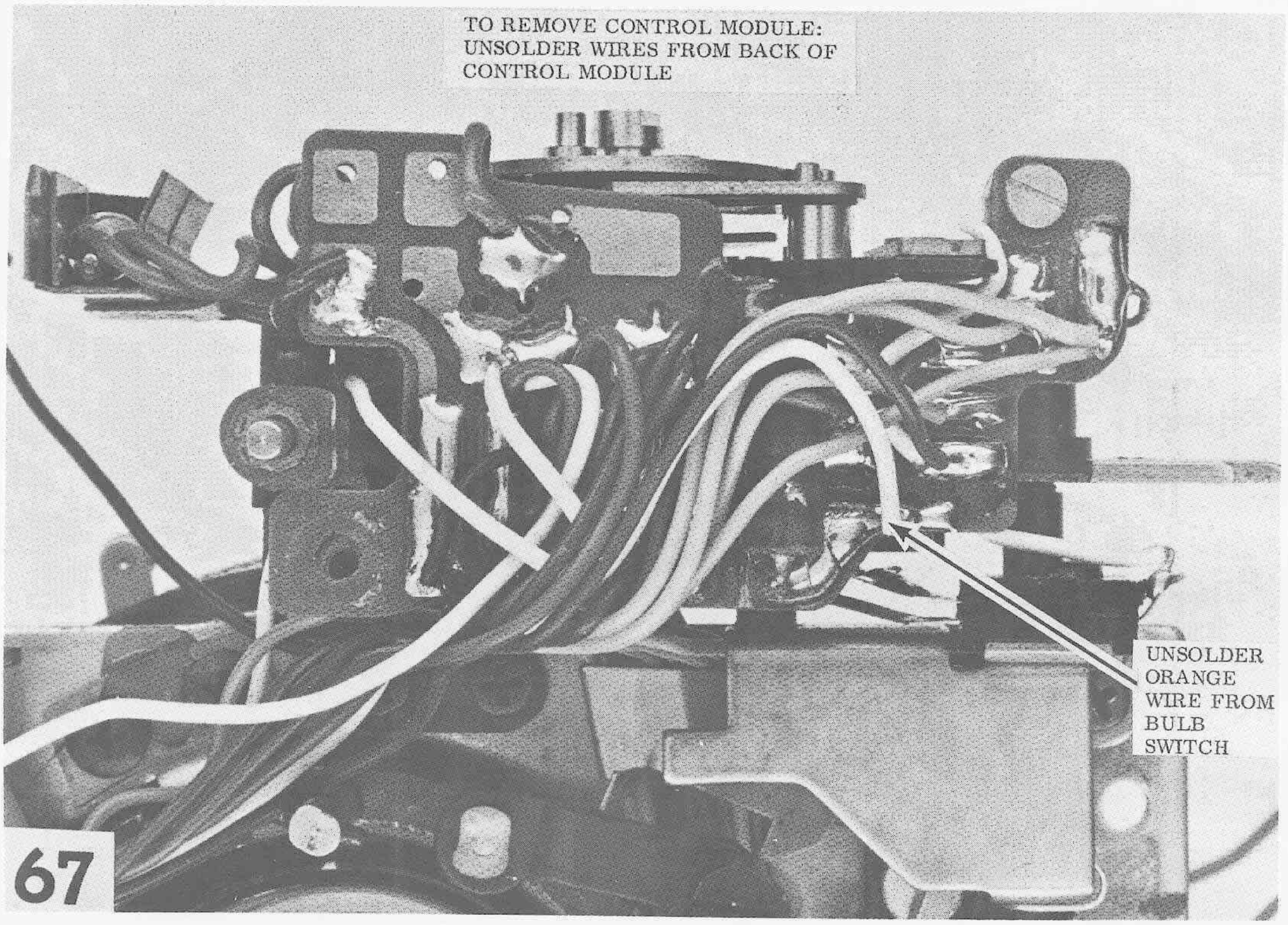
PORT A -- green, dark blue, orange, and brown
PORT B -- red, white, and purple
PORT C -- yellow, yellow, red, and black
PORT D -- red, black, and brown

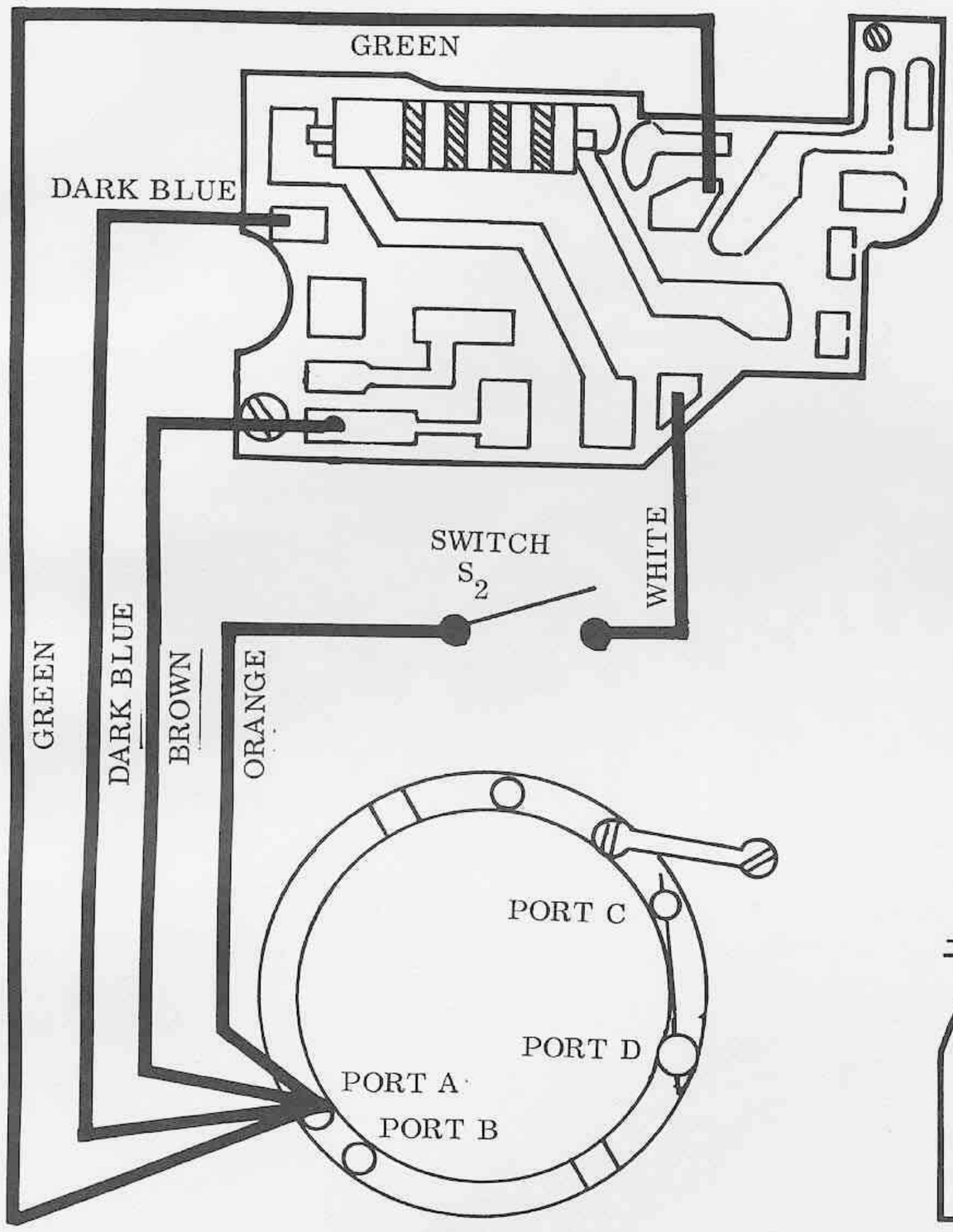
TERMINAL LOCATION FOR
PHOTOCELL CIRCUIT BOARD
TYPE 368



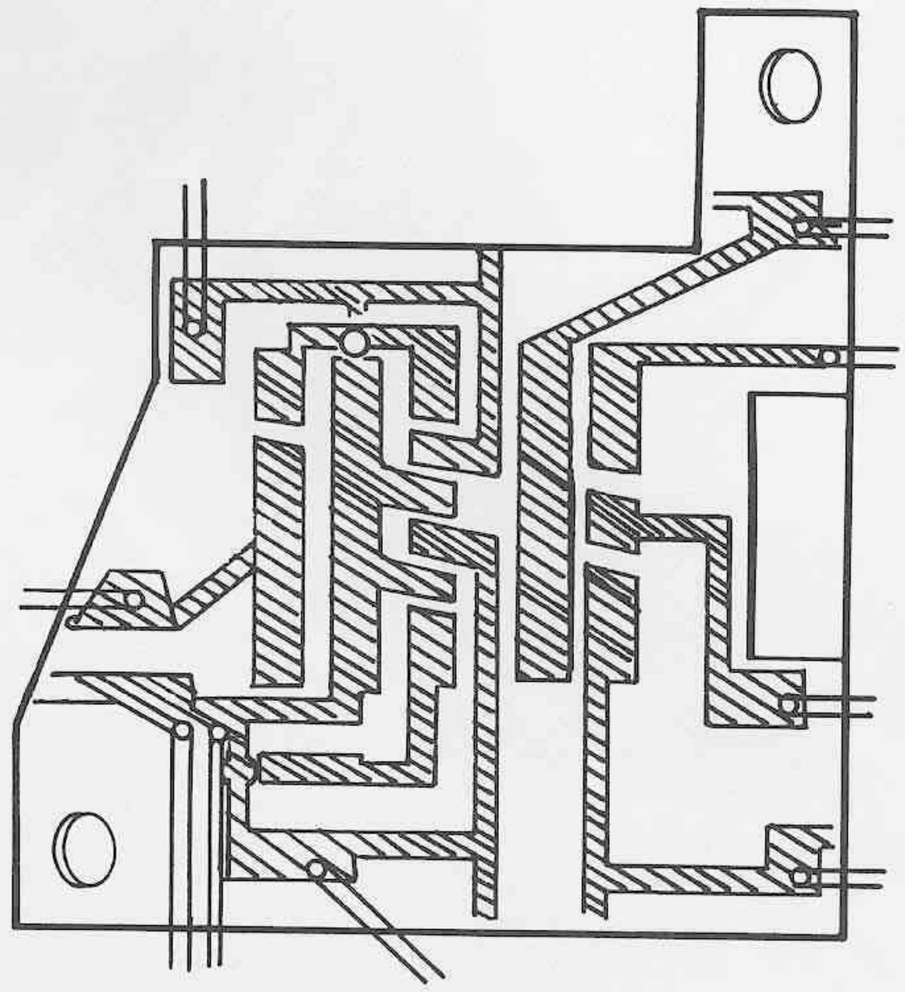


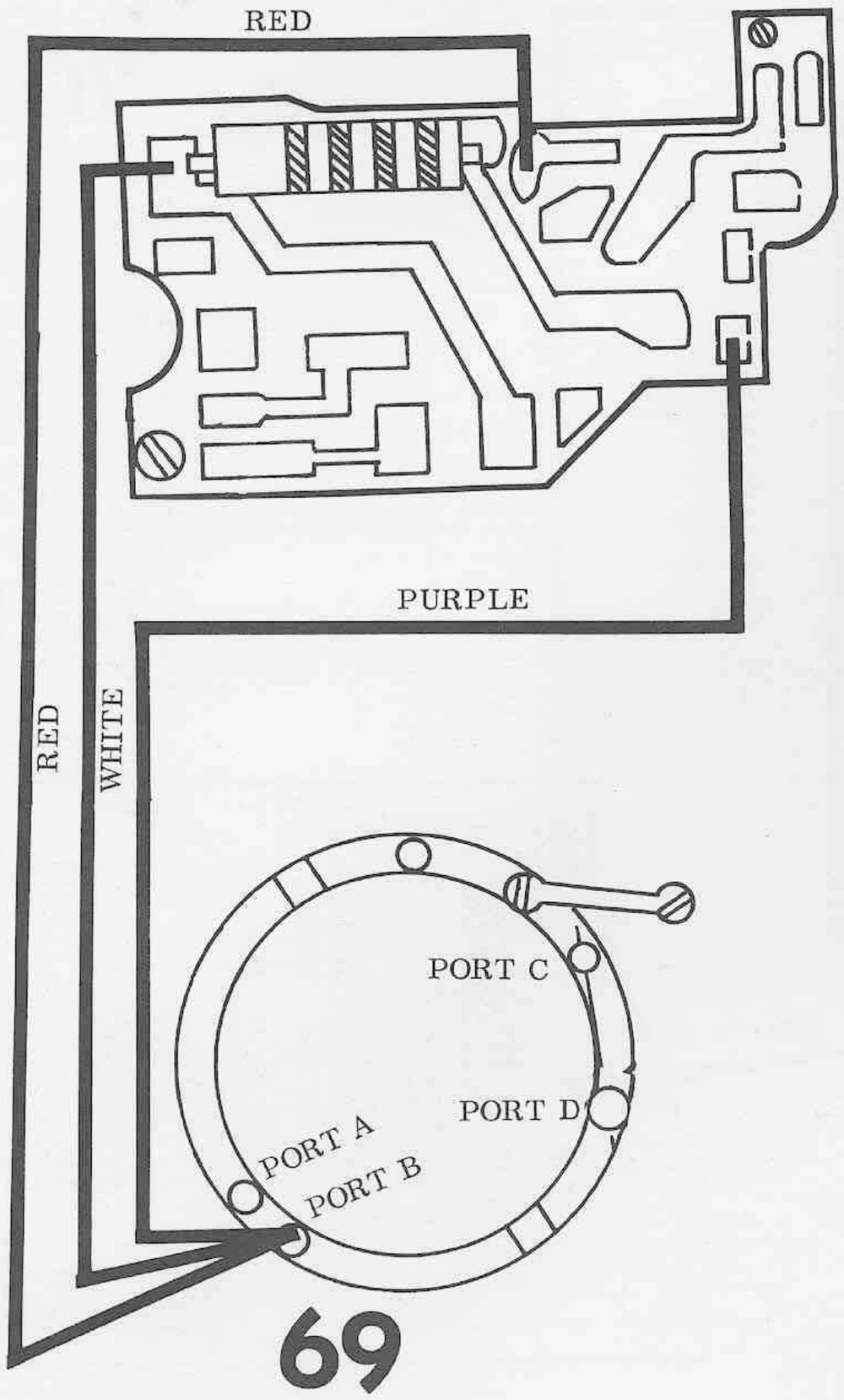
TERMINAL LOCATION FOR
PHOTOCELL CIRCUIT BOARD
TYPE 408


TO REMOVE CONTROL MODULE:
UNSOLDER WIRES FROM BACK OF
CONTROL MODULE
UNSOLDER
ORANGE
WIRE FROM
BULB
SWITCH

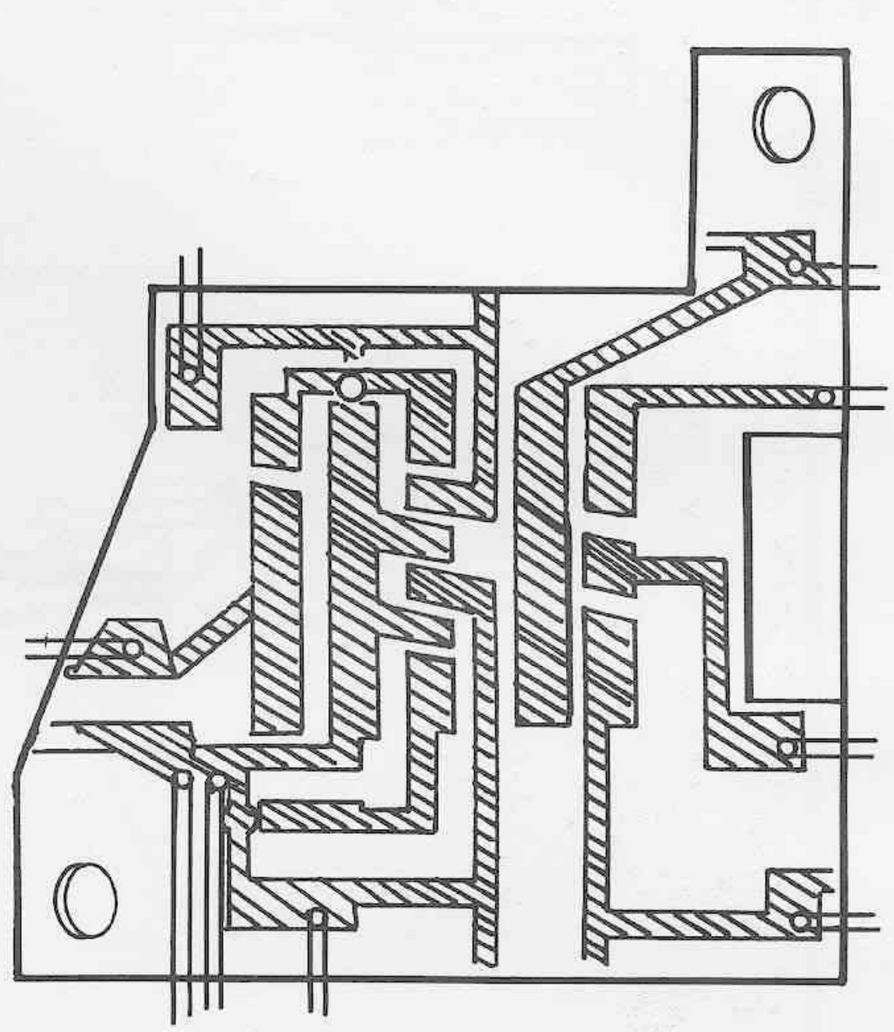


WIRING FROM PORT A

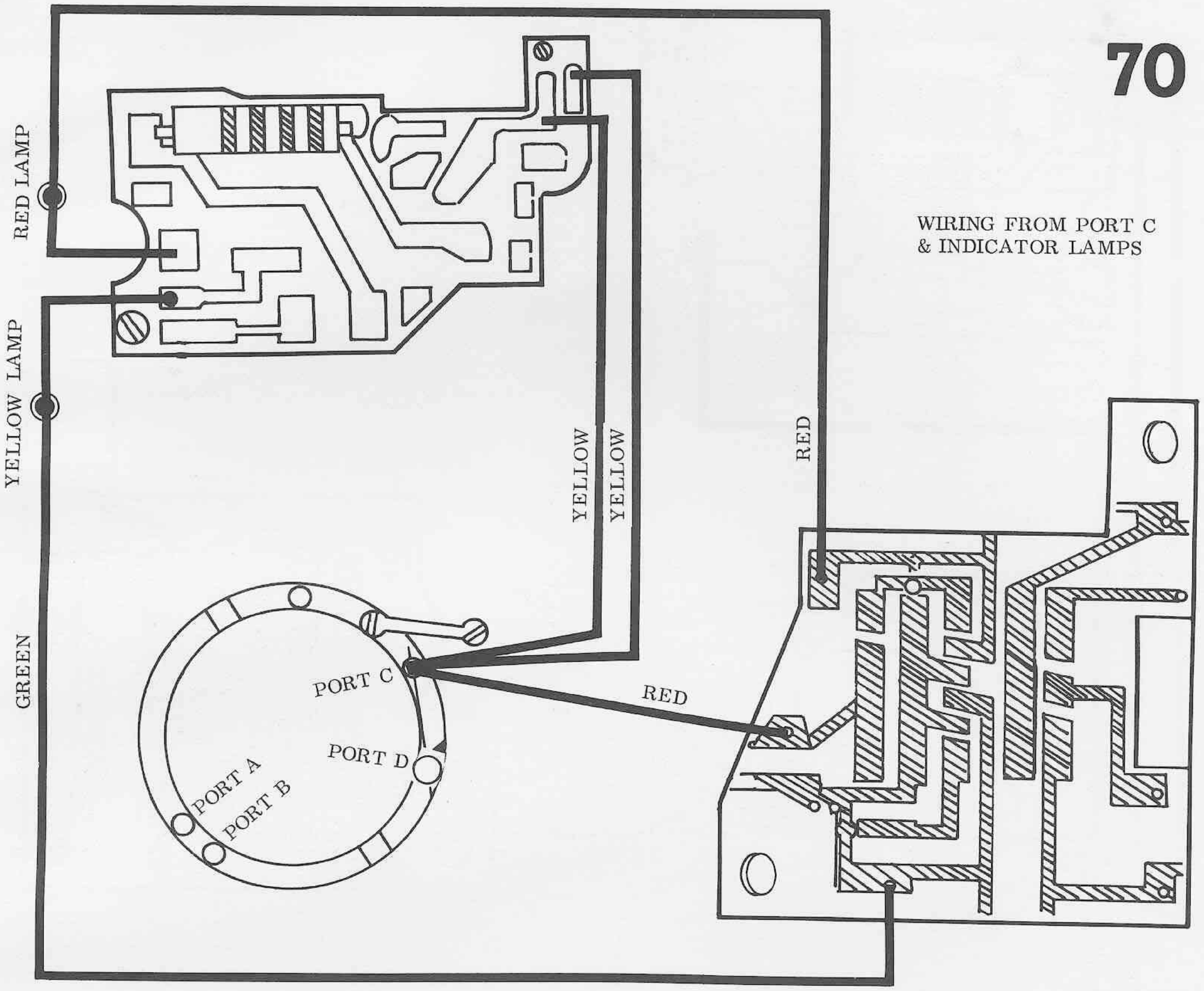


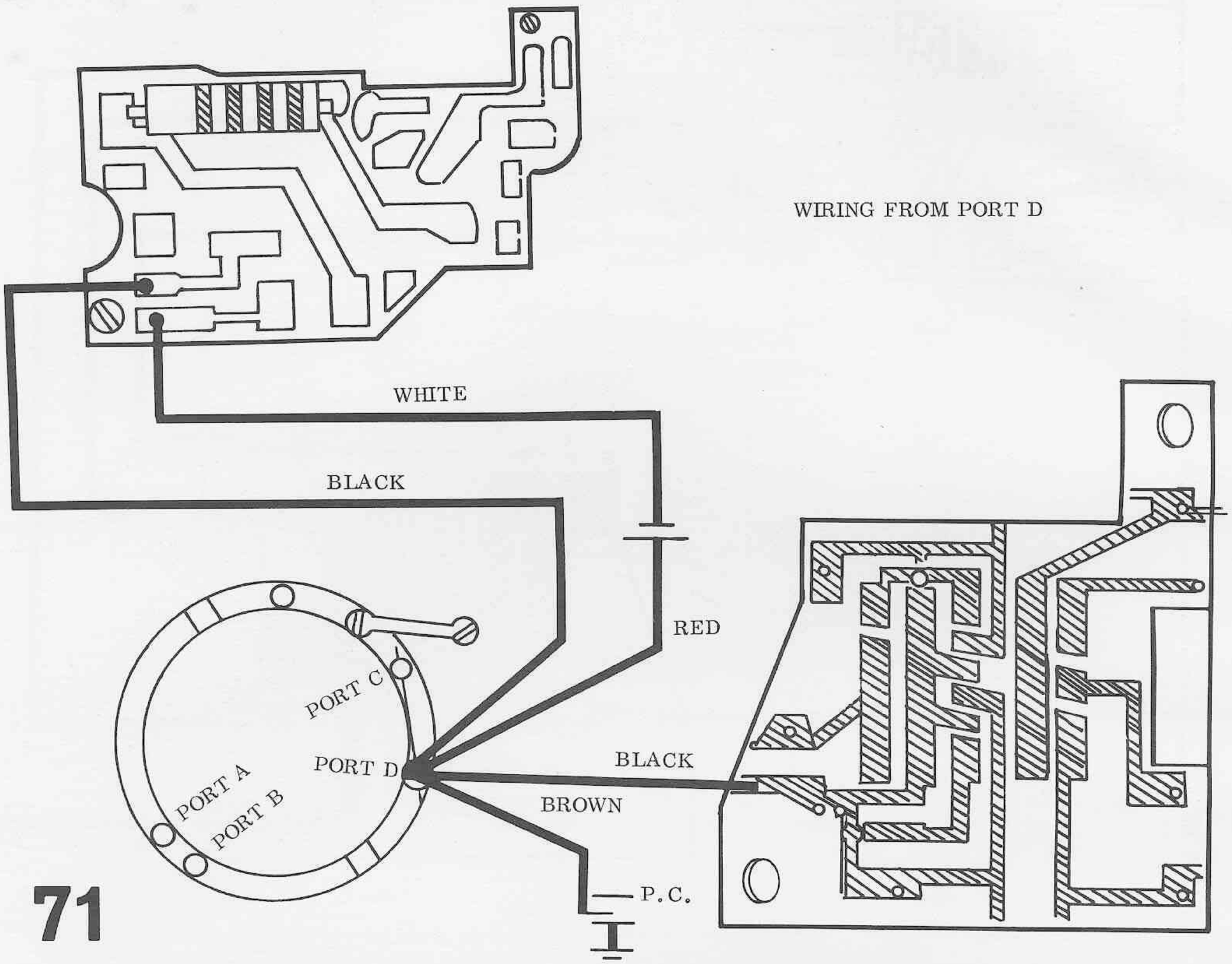


WIRING FROM PORT B

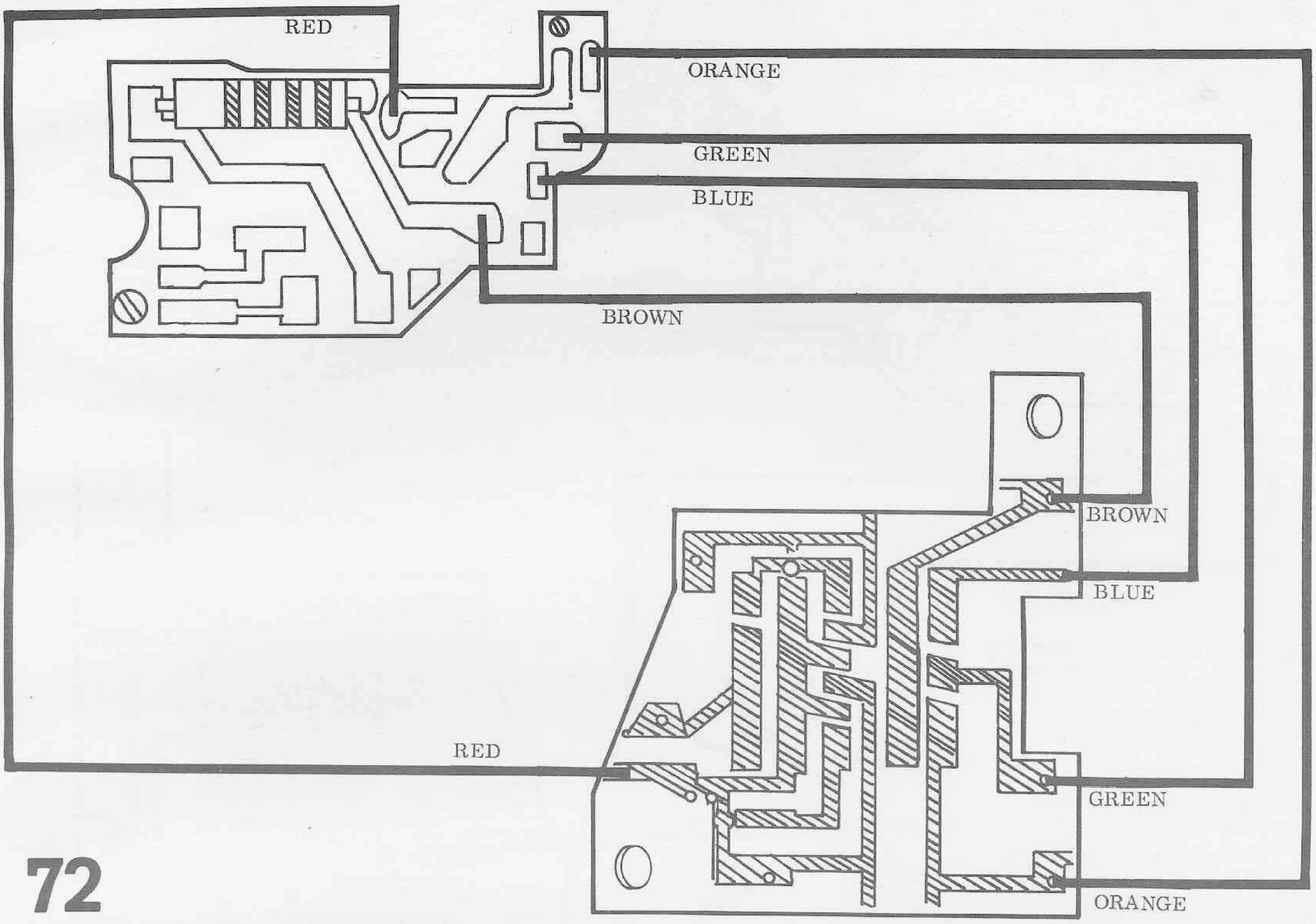


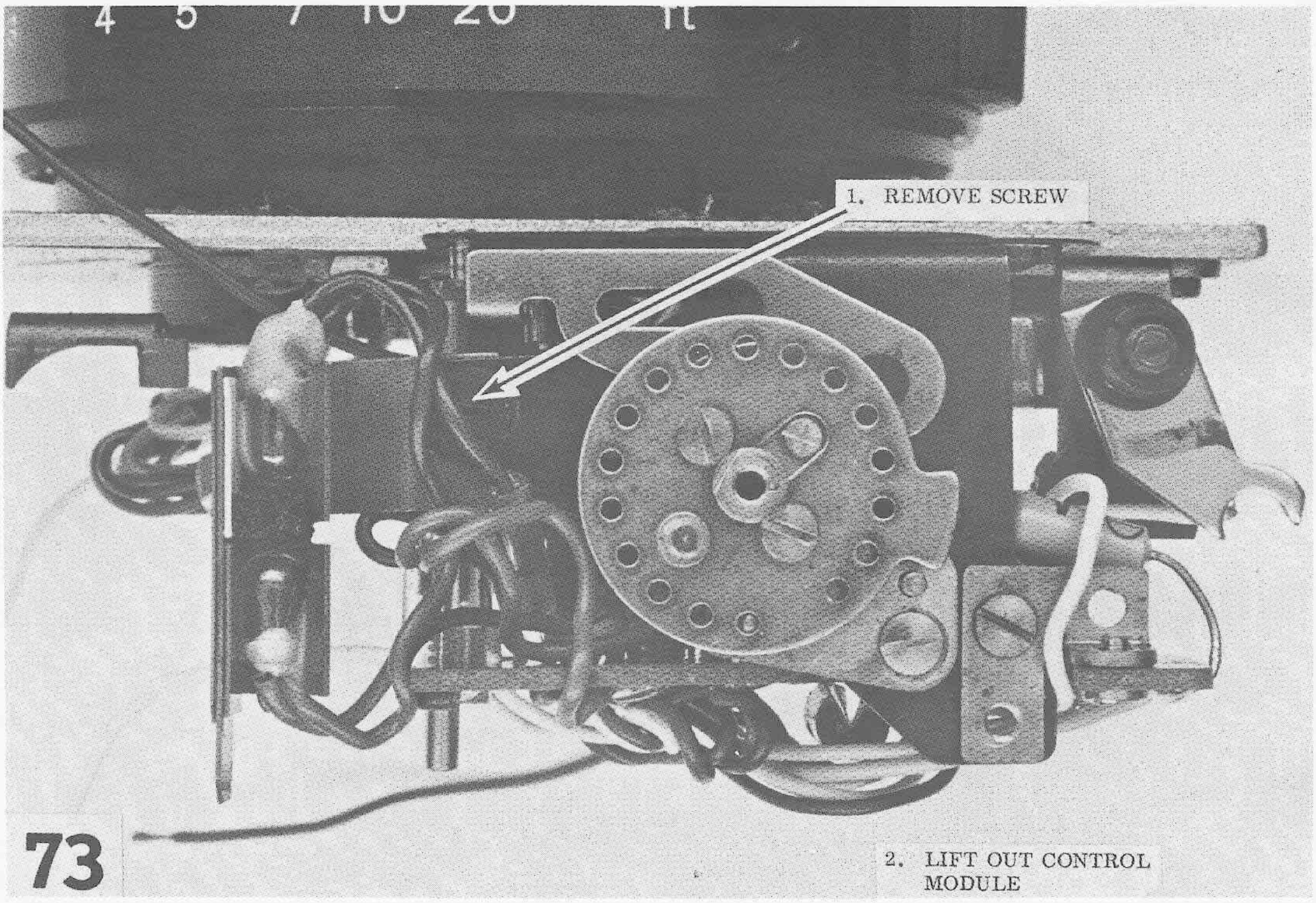
WIRING FROM PORT C
& INDICATOR LAMPS

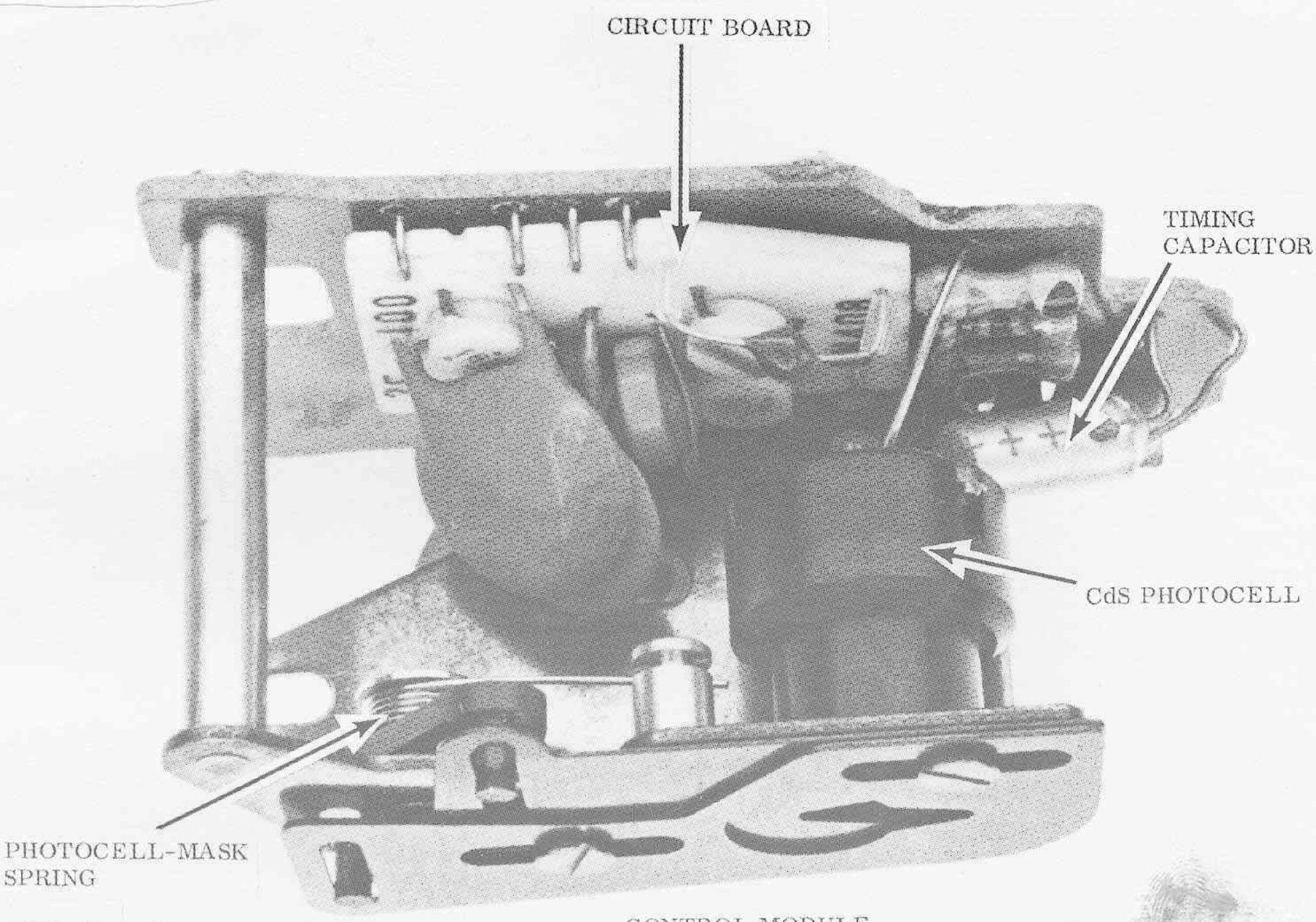



WIRING FROM PORT D
WHITE
BLACK
RED
BLACK
BROWN
P.C.
PORT C
PORT D
PORT A
PORT B

DIRECT WIRING OF SWITCH BASE PLATE TO PHOTOCELL ASSEMBLY

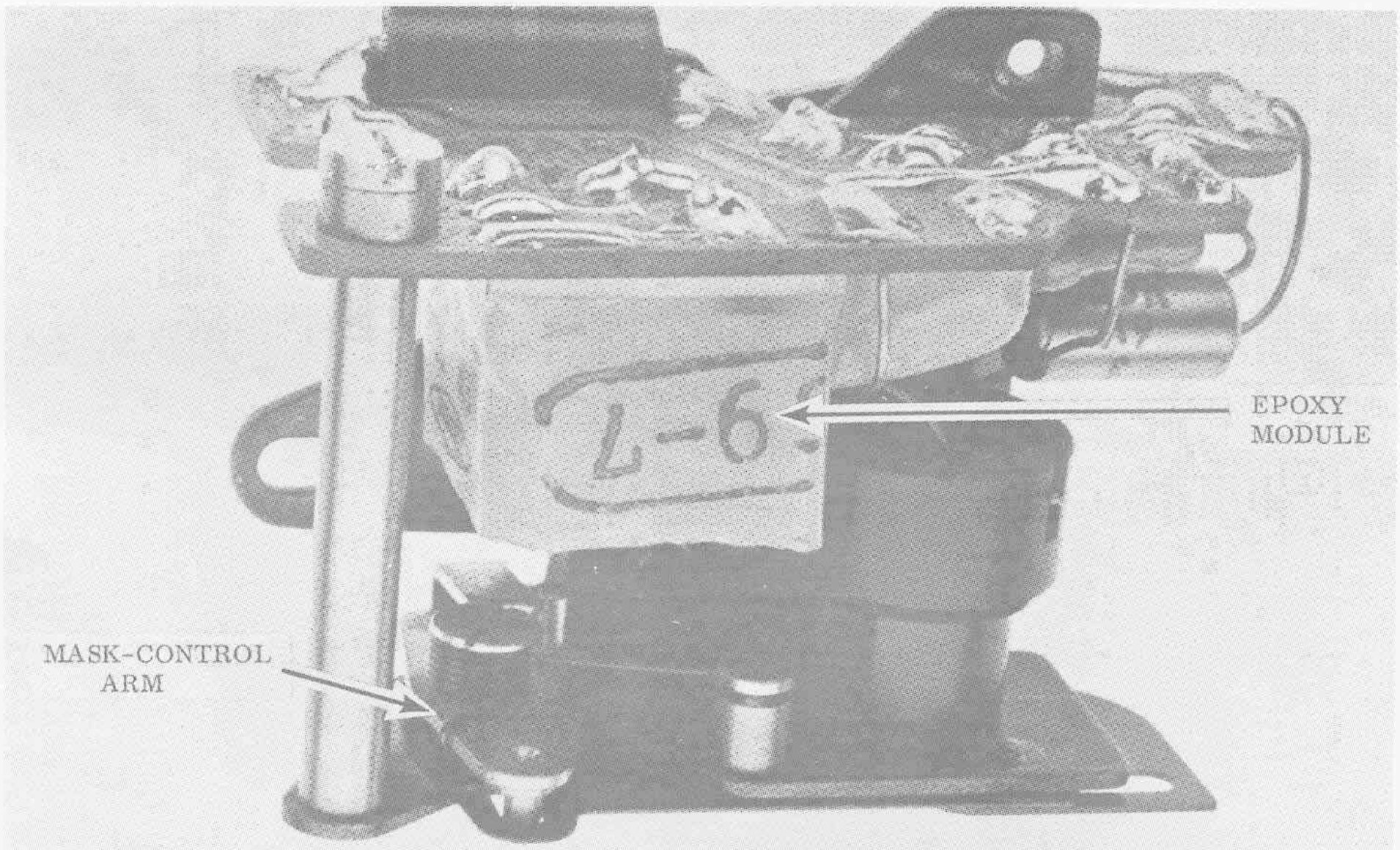



1. REMOVE SCREW
2. LIFT OUT CONTROL MODULE



CONTROL MODULE
TYPE 408

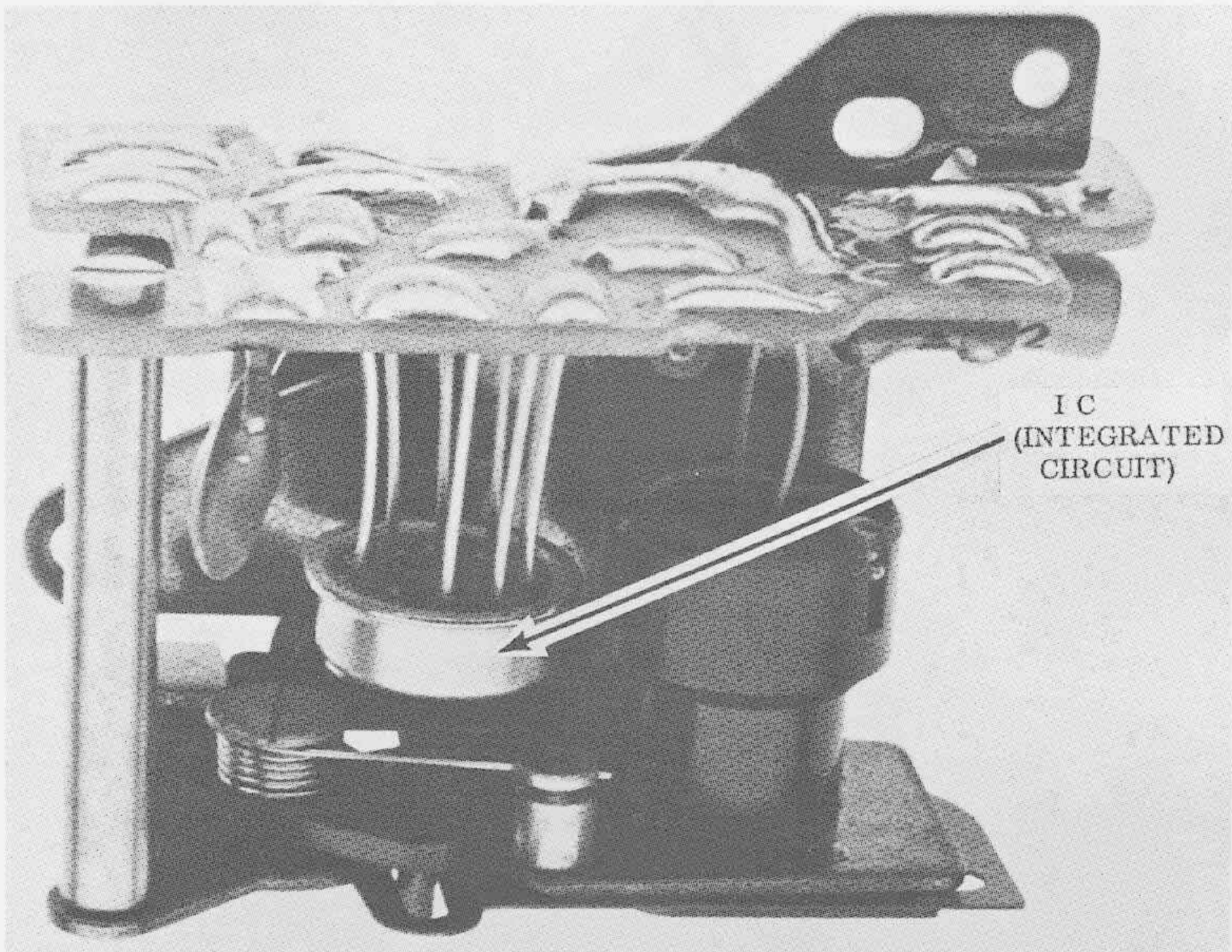
74 A



EARLY MODEL CONTROL MODULE (NO LONGER AVAILABLE AS A REPLACEMENT PART)

TYPE 368

74 B



LATEST MODEL OF CONTROL MODULE TYPE 415

If you're installing the new-style control module in an older camera, you must also replace the diaphragm-resistor board. Use the new-style diaphragm-resistor board for shutter EB-413 with a total resistance of 10K.

The mounting system for the Type 415 control module is also a little different. You'll have to replace the bracket shown in figure 54 with a threaded post (part #31751200).

There's another variation in the color coding of one wire, as shown in the diagram. The pink wire running to the Type 415 control module replaces the blue wire in the other styles. This pink wire goes to the diaphragm-resistor board.

WIRING DIAGRAM

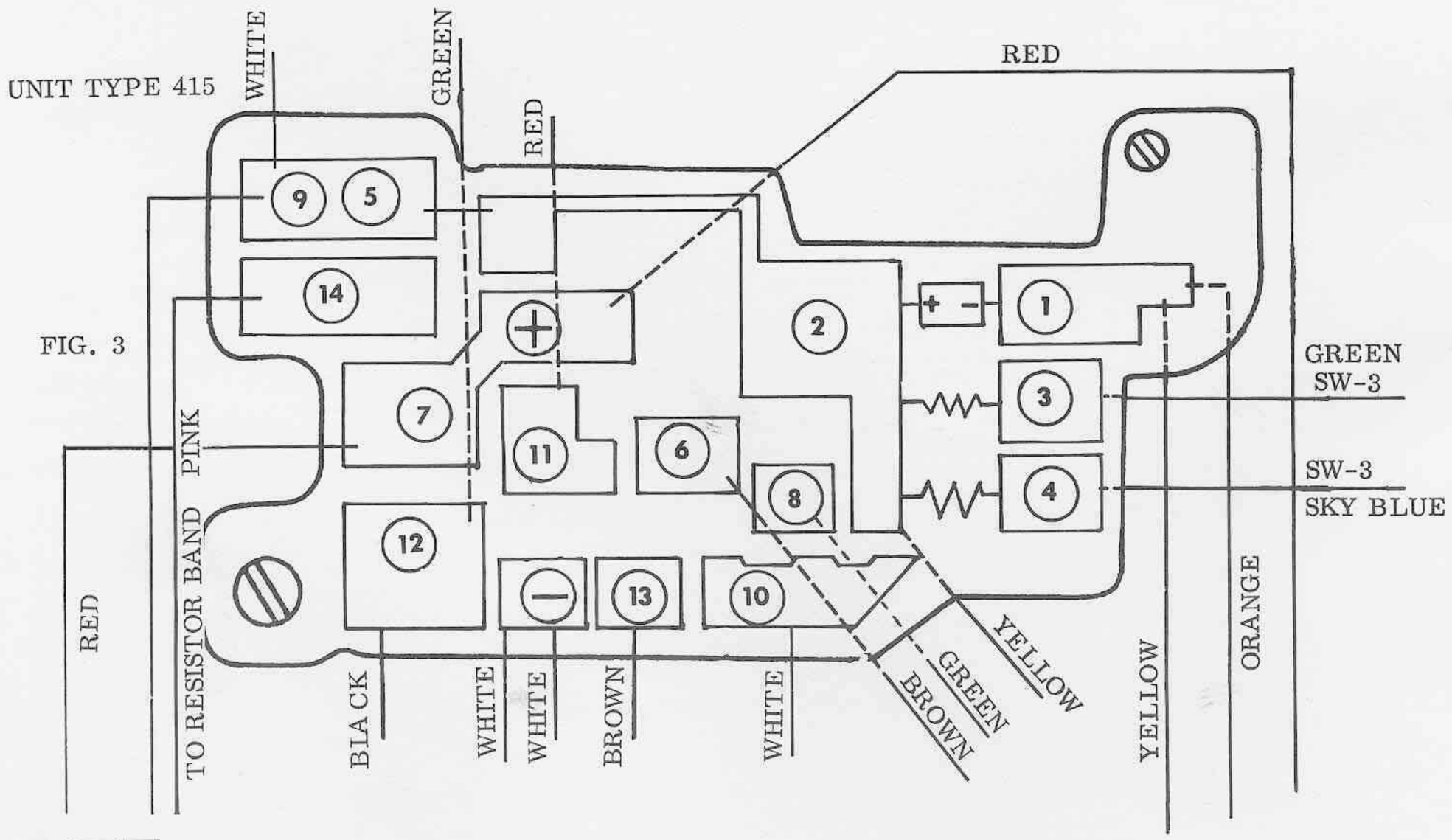
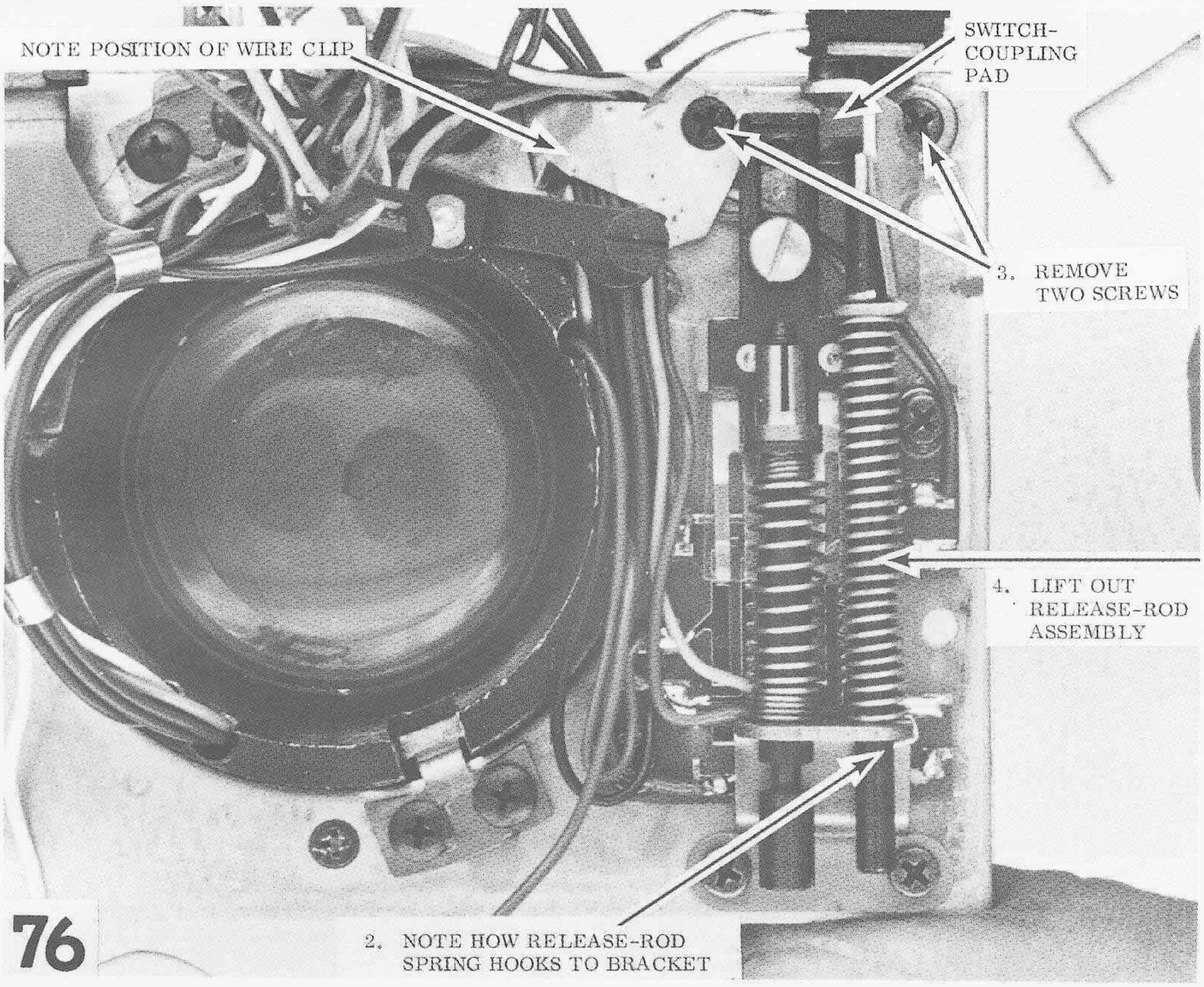
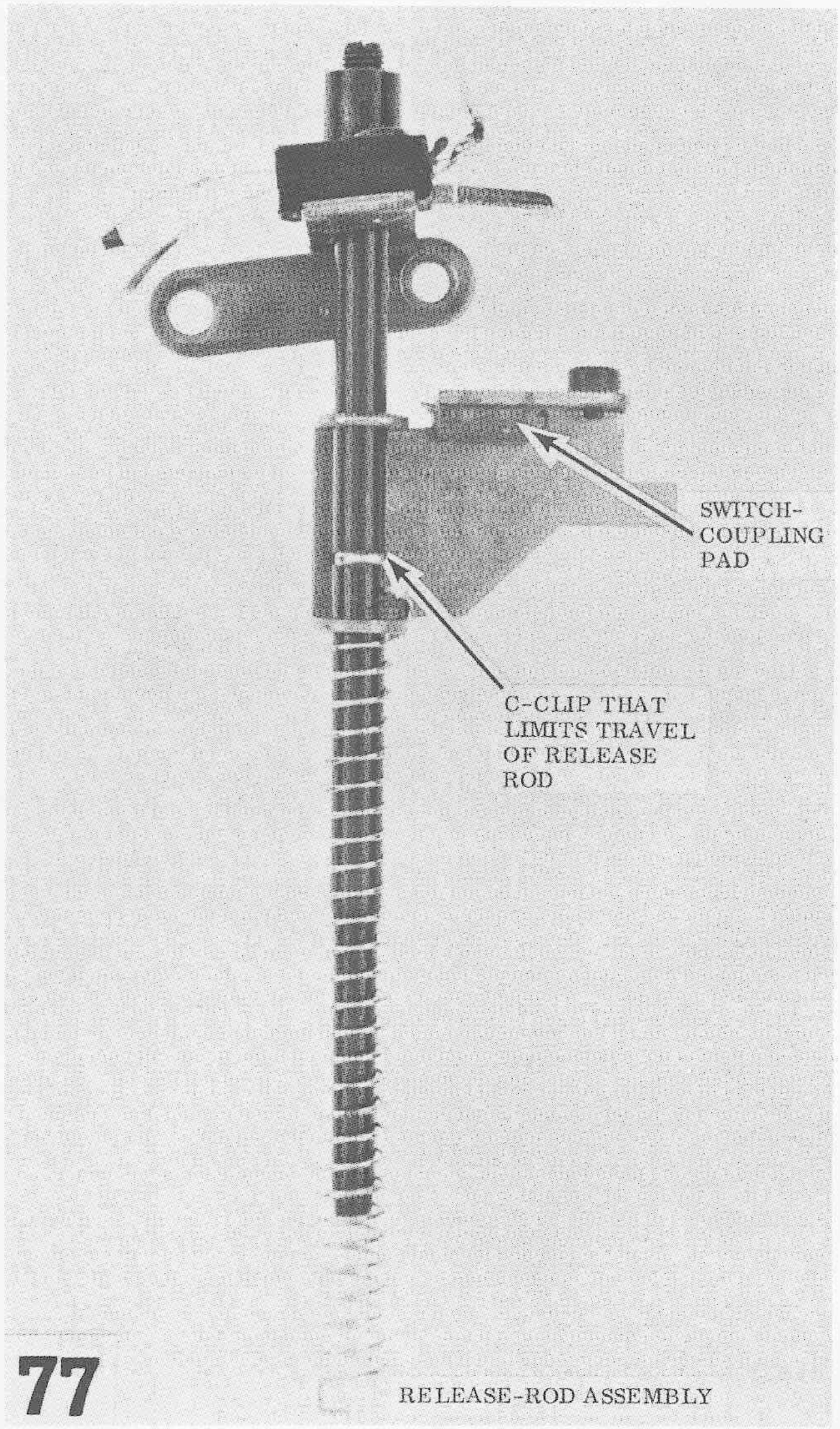


FIG. 3


NOTE POSITION OF WIRE CLIP
SWITCH-COUPLING PAD
3. REMOVE TWO SCREWS
4. LIFT OUT RELEASE-ROD ASSEMBLY
2. NOTE HOW RELEASE-ROD SPRING HOOKS TO BRACKET



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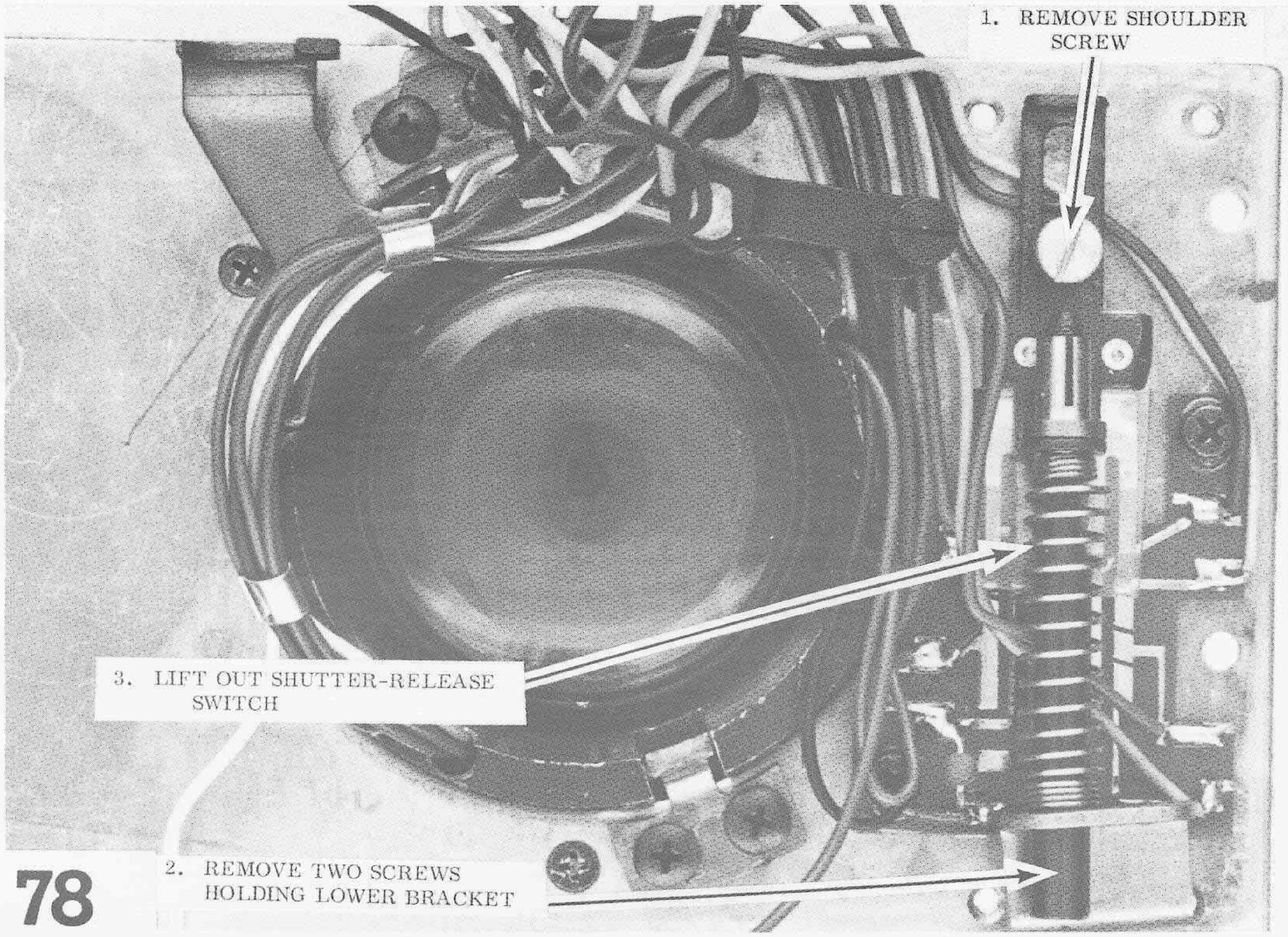
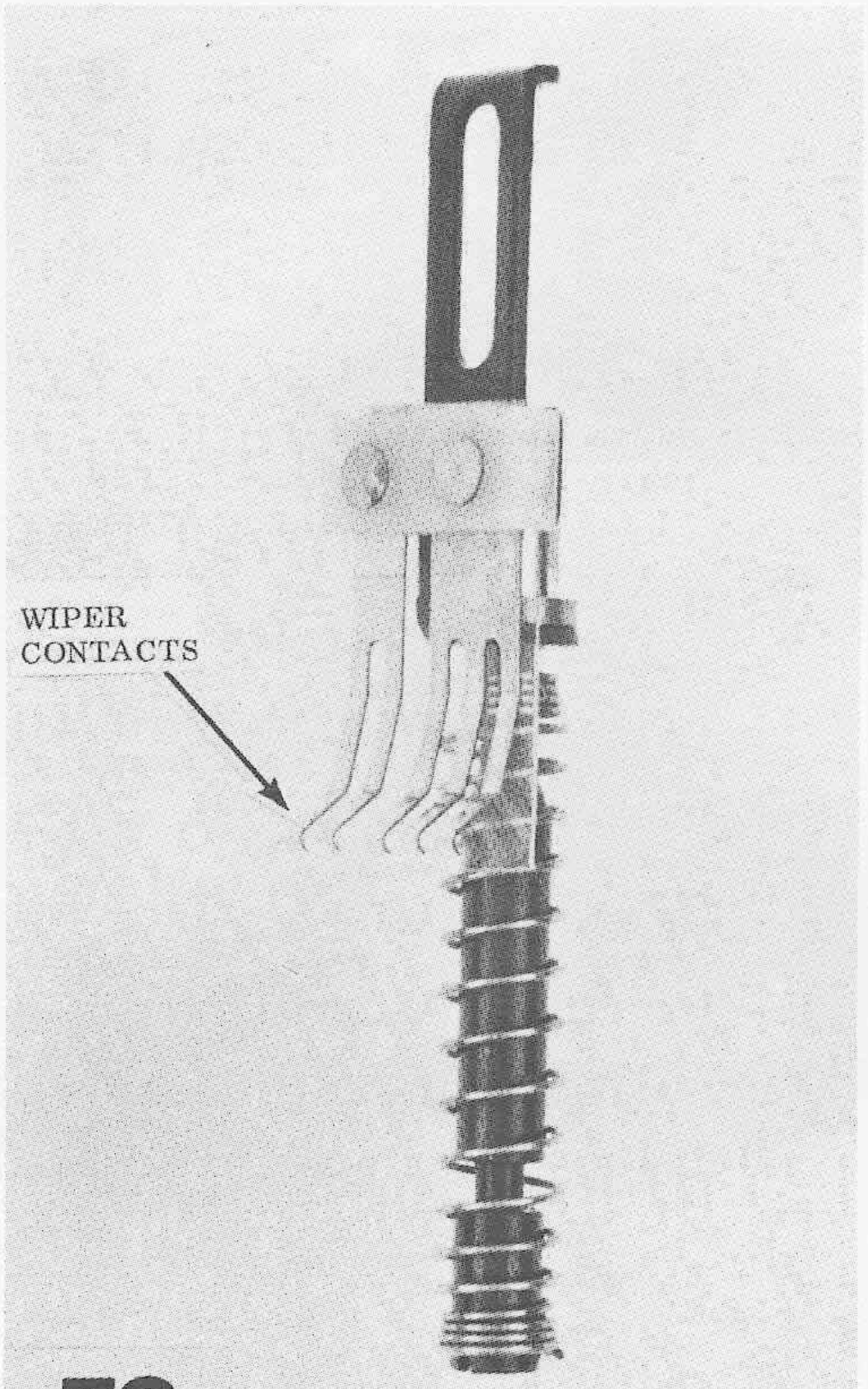
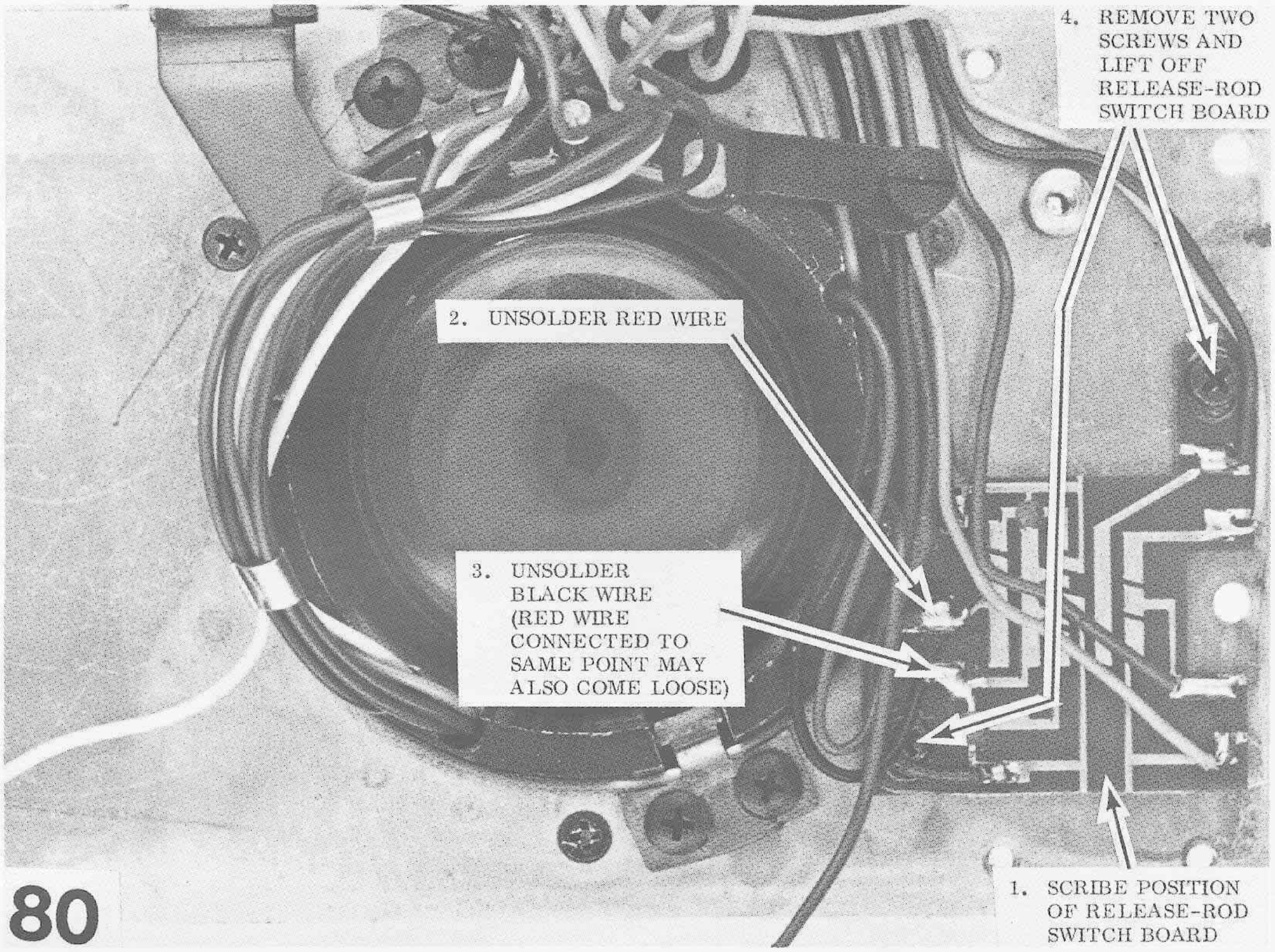
RELEASE-ROD ASSEMBLY


1. REMOVE SHOULDER SCREW
3. LIFT OUT SHUTTER-RELEASE SWITCH
2. REMOVE TWO SCREWS HOLDING LOWER BRACKET

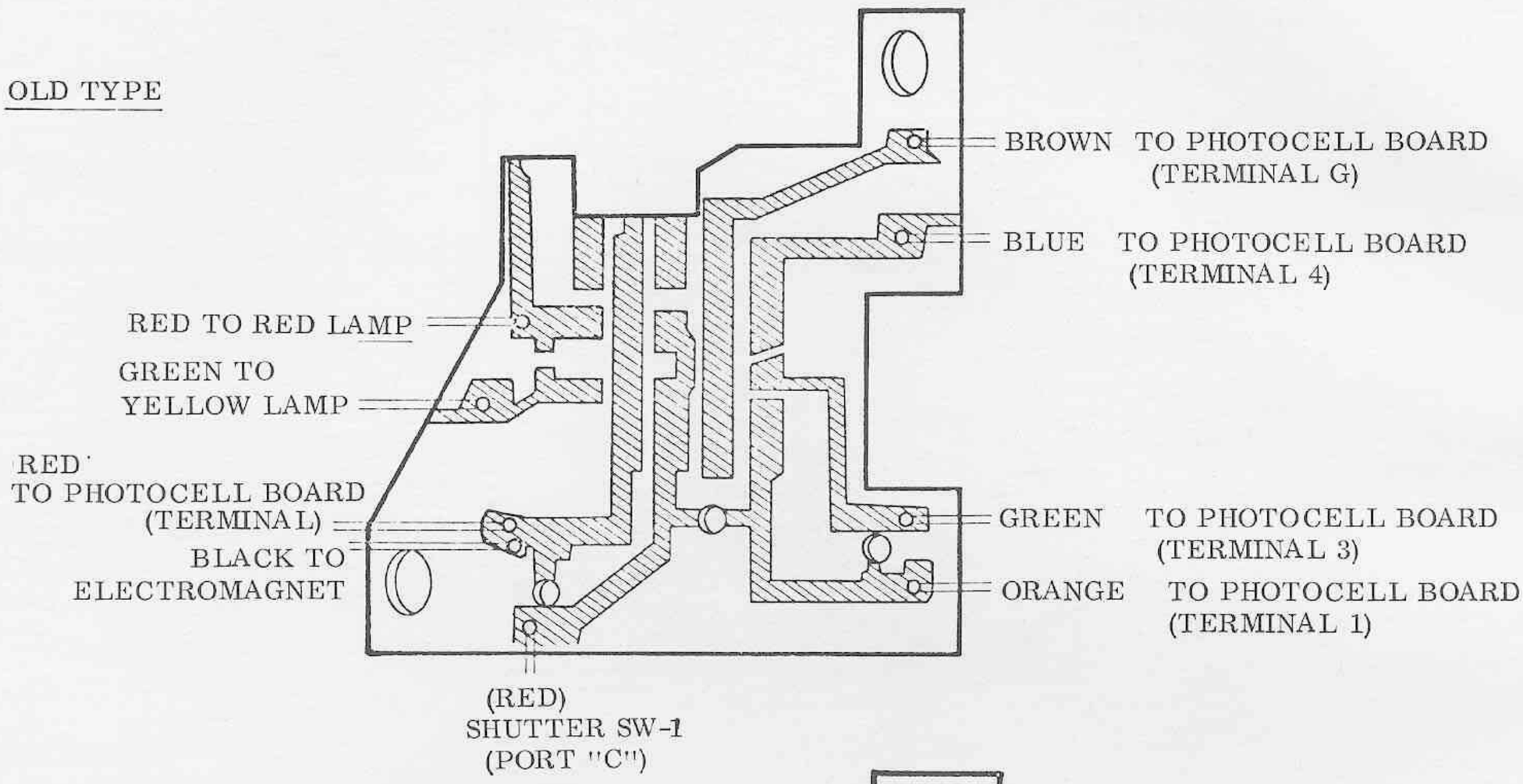


79 SHUTTER-RELEASE SWITCH

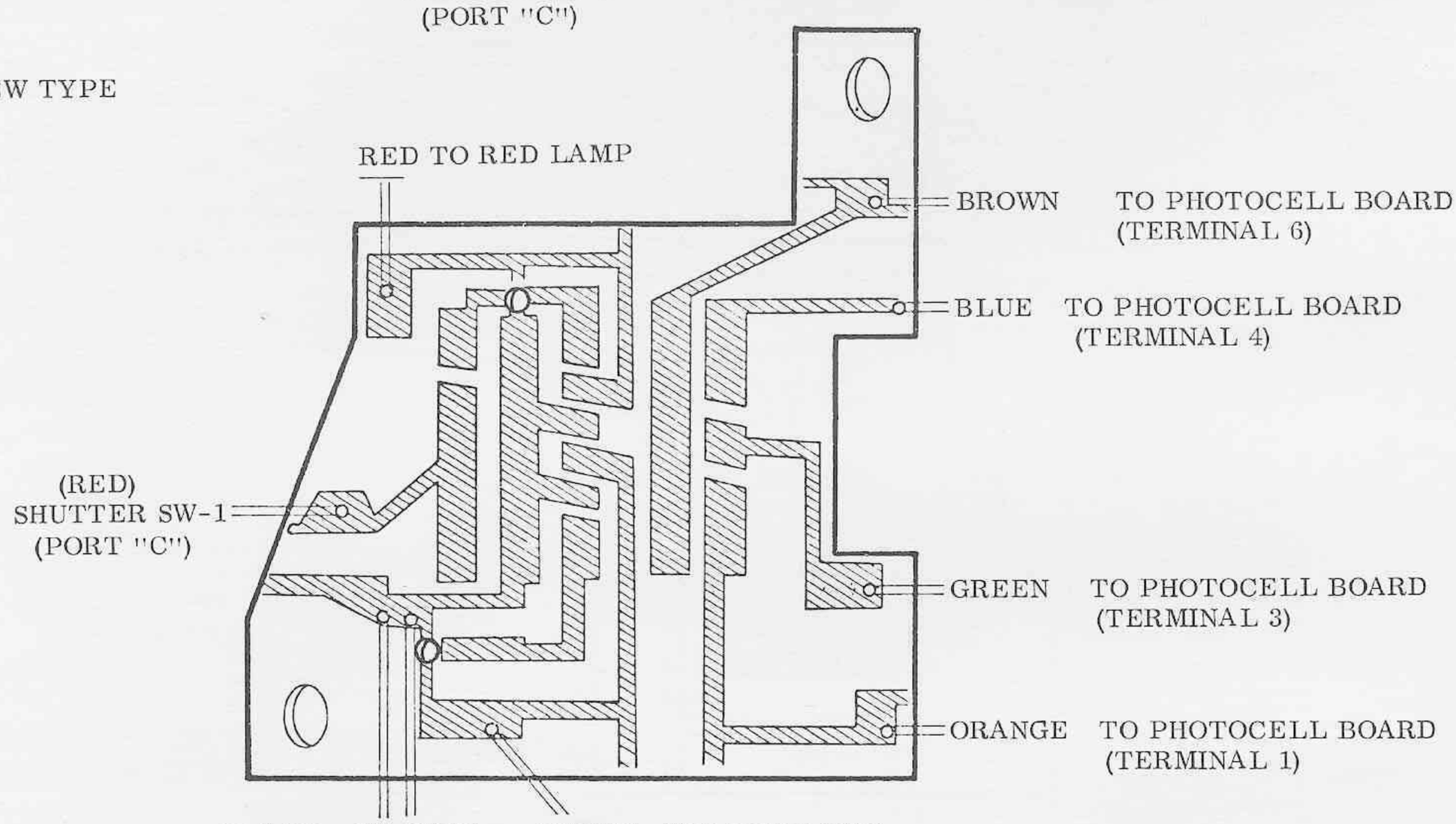

4. REMOVE TWO SCREWS AND LIFT OFF RELEASE-ROD SWITCH BOARD
2. UNSOLDER RED WIRE
3. UNSOLDER BLACK WIRE (RED WIRE CONNECTED TO SAME POINT MAY ALSO COME LOOSE)
1. SCRIBE POSITION OF RELEASE-ROD SWITCH BOARD

SWITCH BASE PLATES

OLD TYPE



NEW TYPE



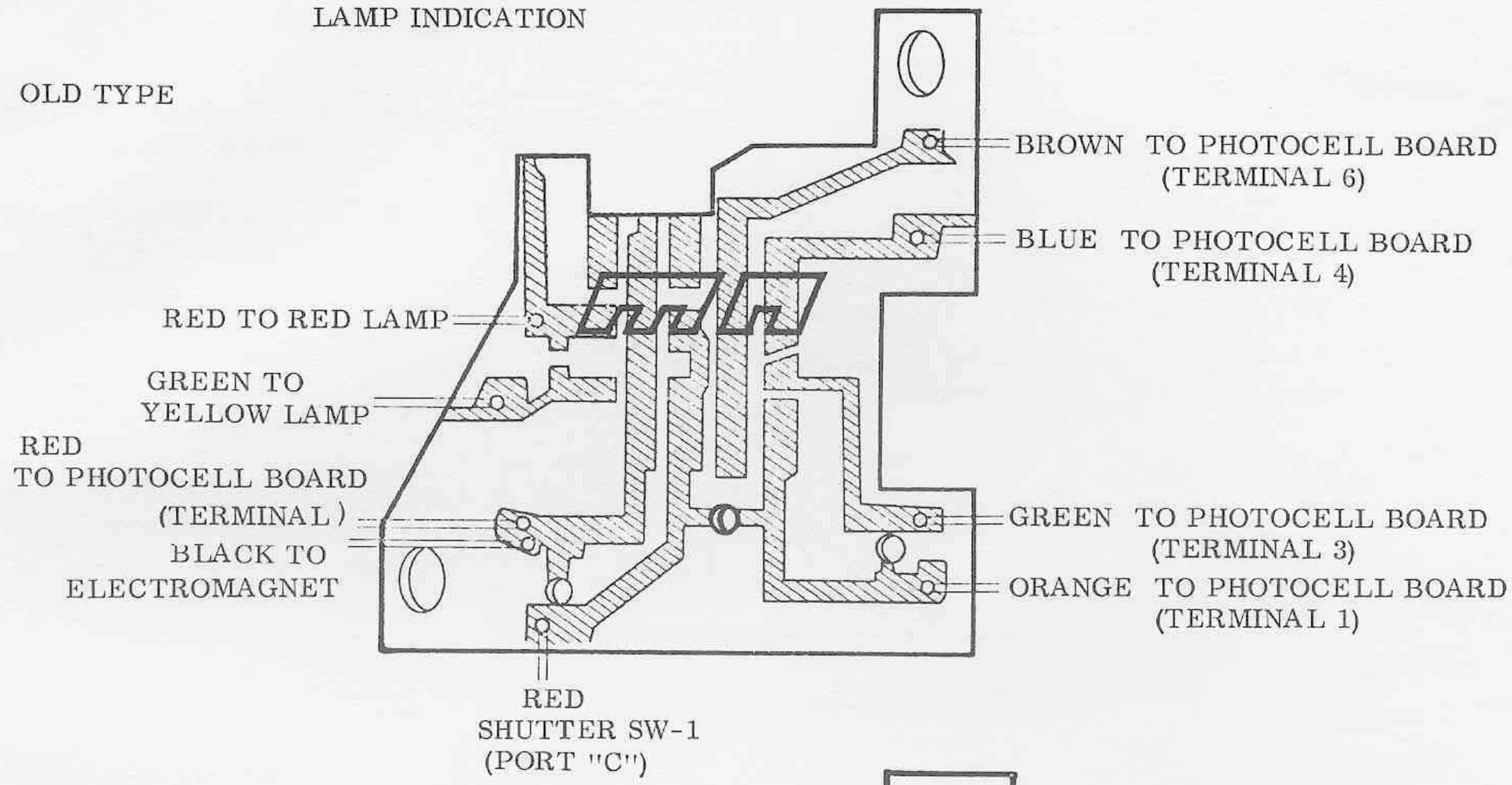
NOTE: SOLDERING POSITIONS OF:

1. GREEN YELLOW LAMP
2. RED SHUTTER SW-1

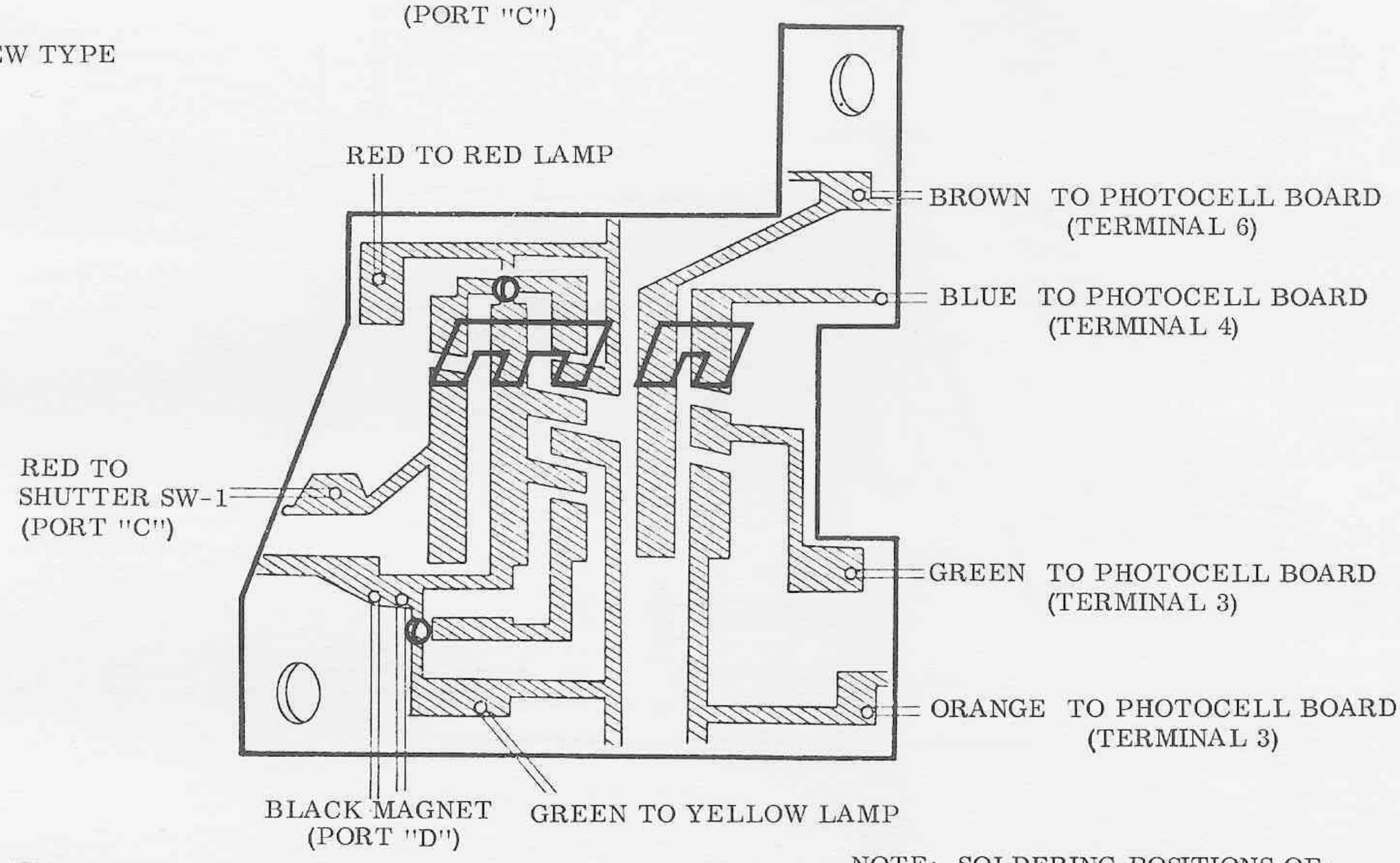
SWITCH BASE PLATES

SWITCH POSITION FOR RED LAMP INDICATION

OLD TYPE



NEW TYPE

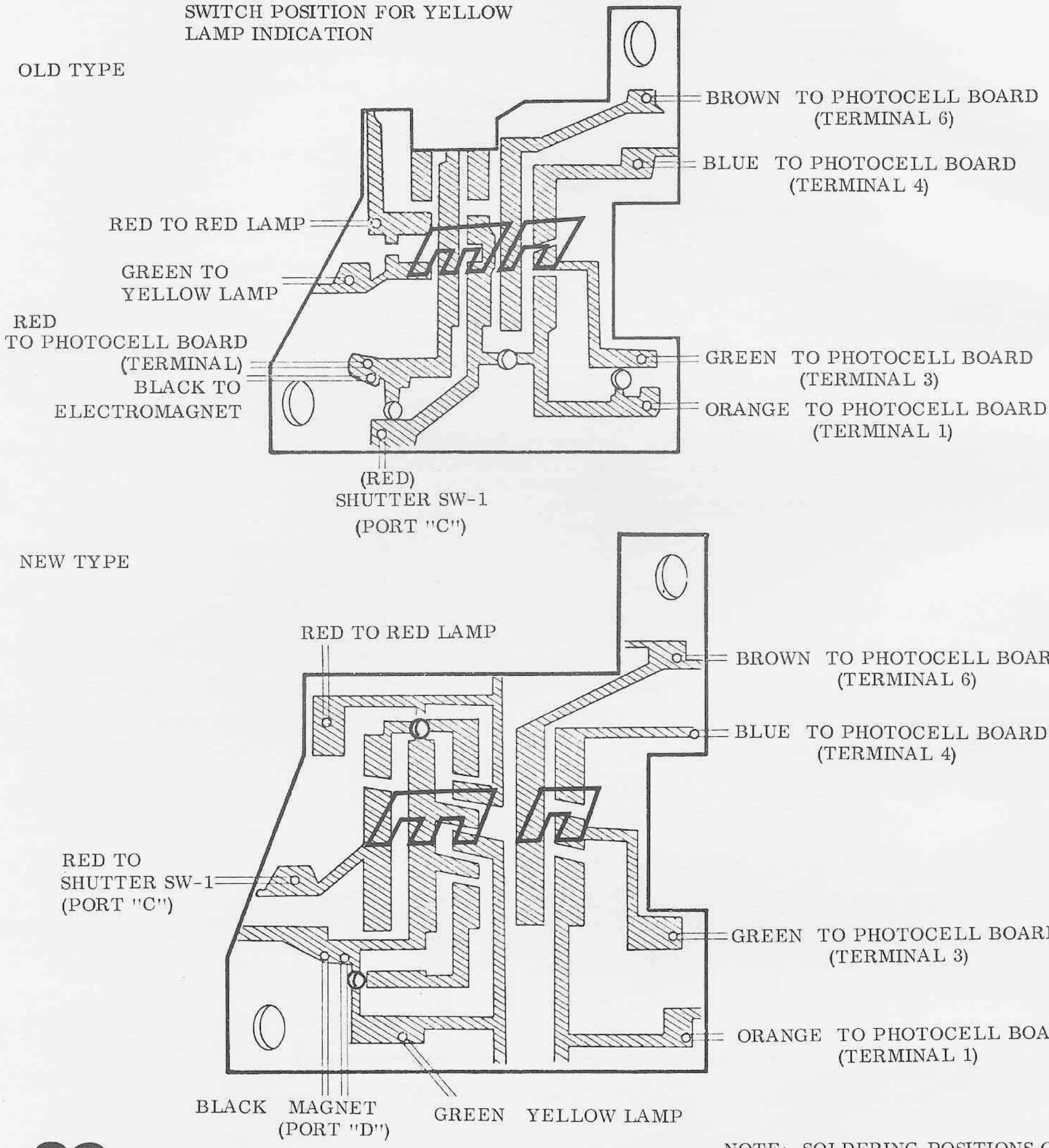


RED TO PHOTOCELL BOARD (TERMINAL 7)

NOTE: SOLDERING POSITIONS OF:

1. GREEN YELLOW LAMP
2. RED SHUTTER SW-1

SWITCH BASE PLATES

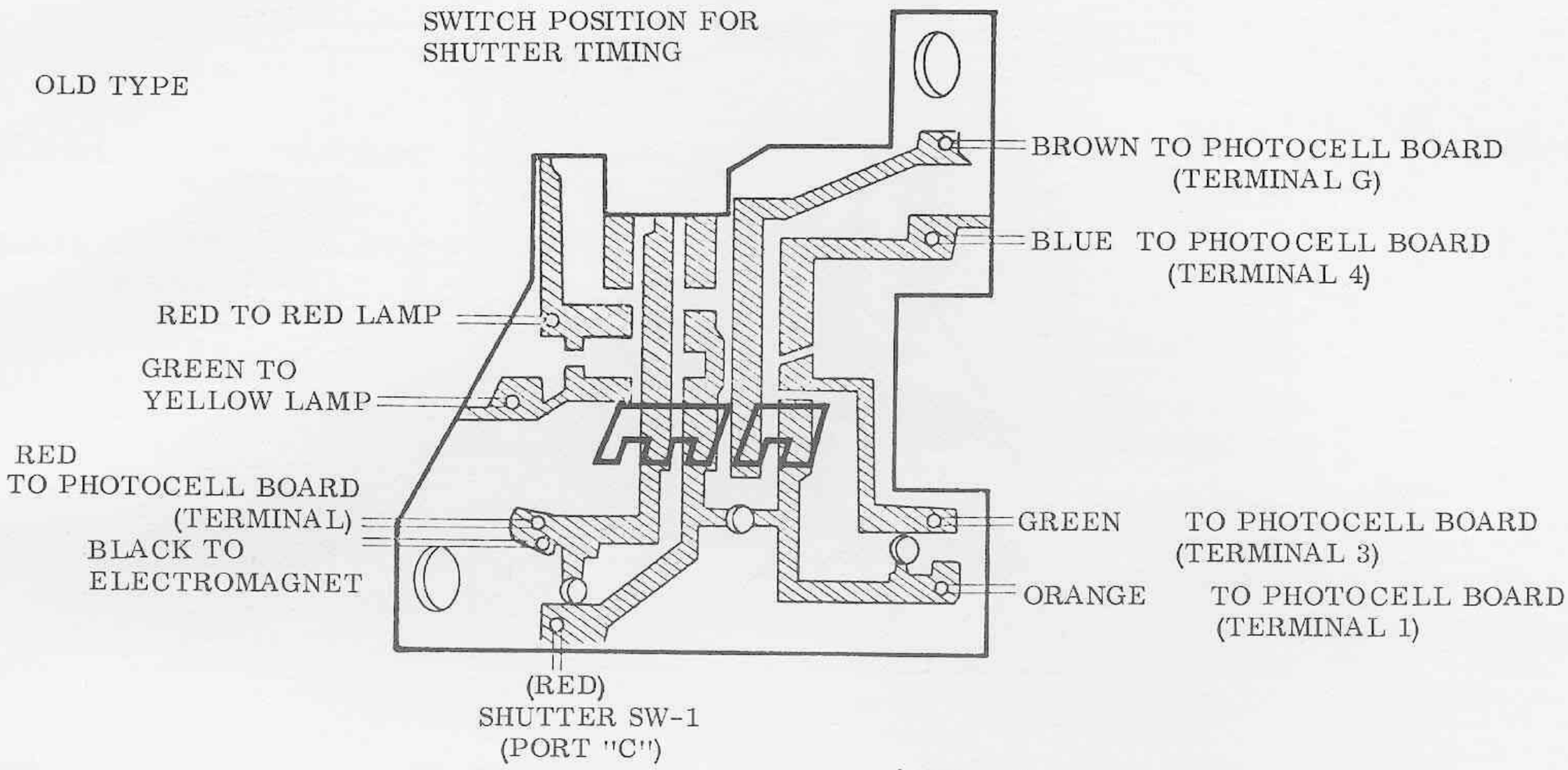


NOTE: SOLDERING POSITIONS OF:
1. GREEN YELLOW LAMP
2. RED SHUTTER SW-1

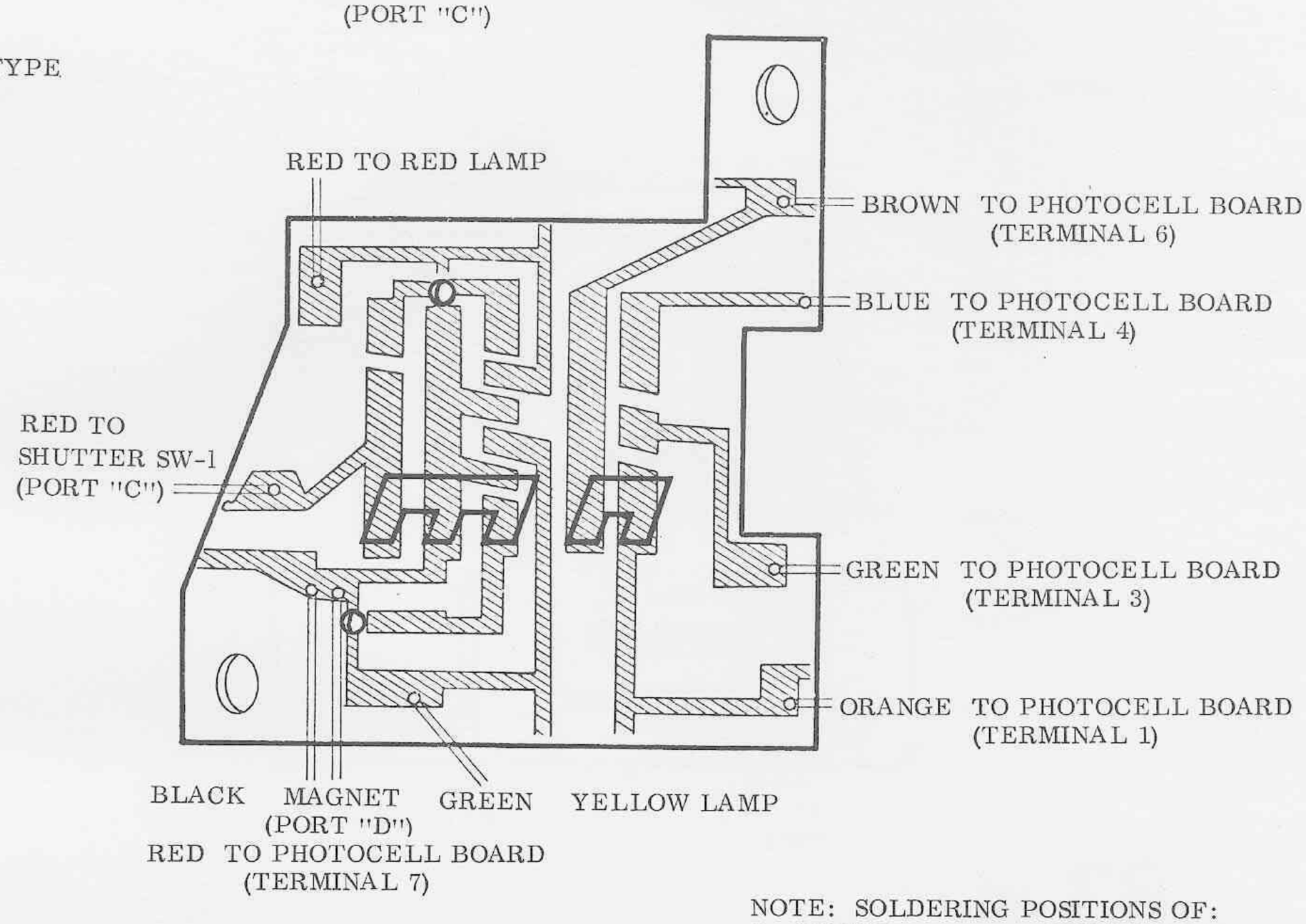
RED TO PHOTOCELL BOARD (TERMINAL 6)

SWITCH BASE PLATES

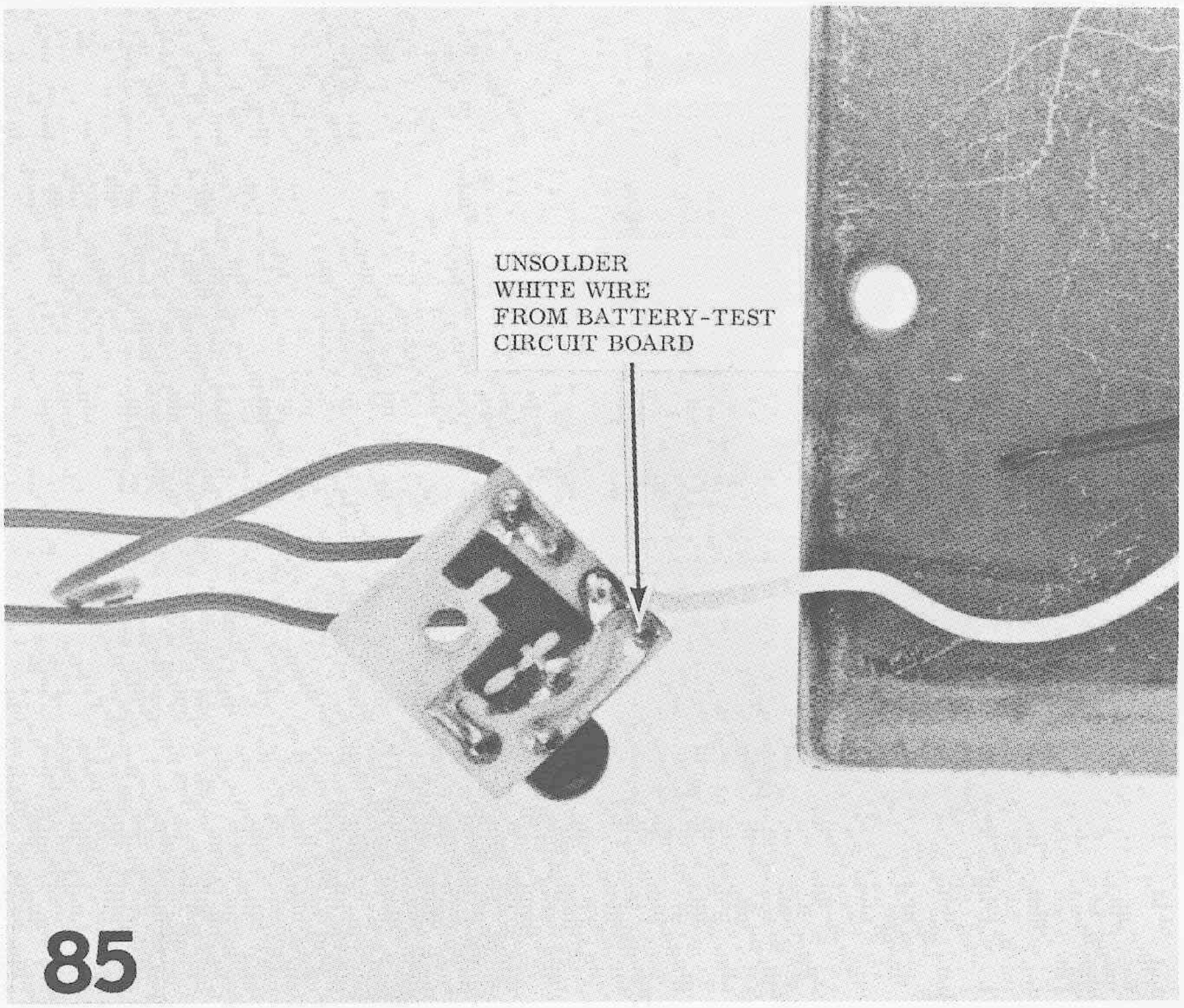
OLD TYPE

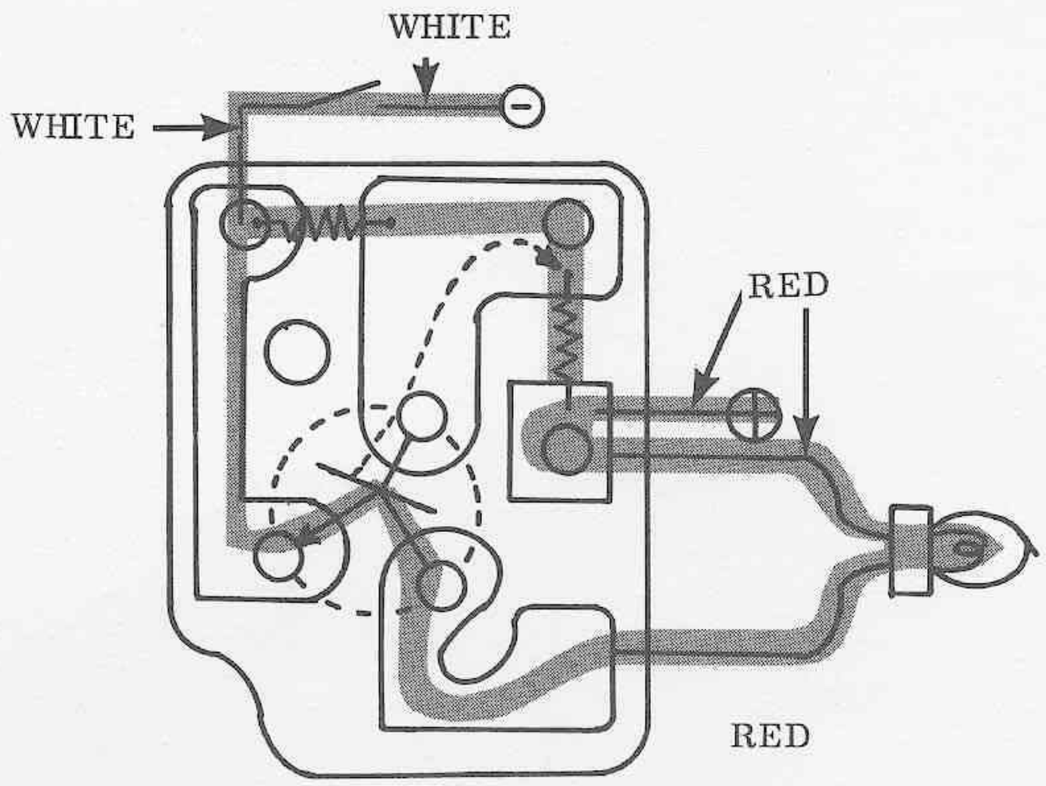


NEW TYPE

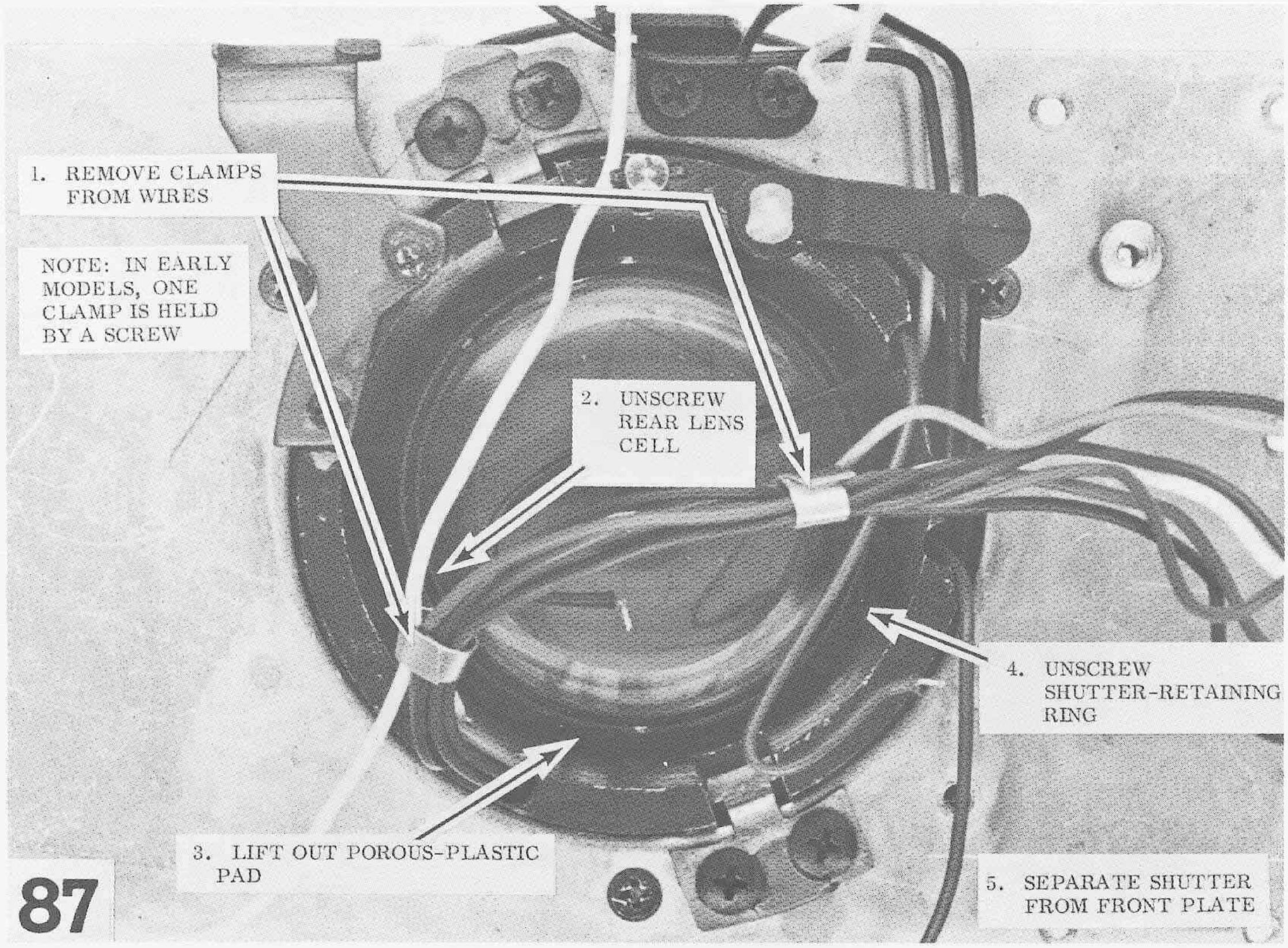


NOTE: SOLDERING POSITIONS OF:
1. GREEN YELLOW LAMP
2. RED SHUTTER SW-1


UNSOLDER
WHITE WIRE
FROM BATTERY-TEST
CIRCUIT BOARD

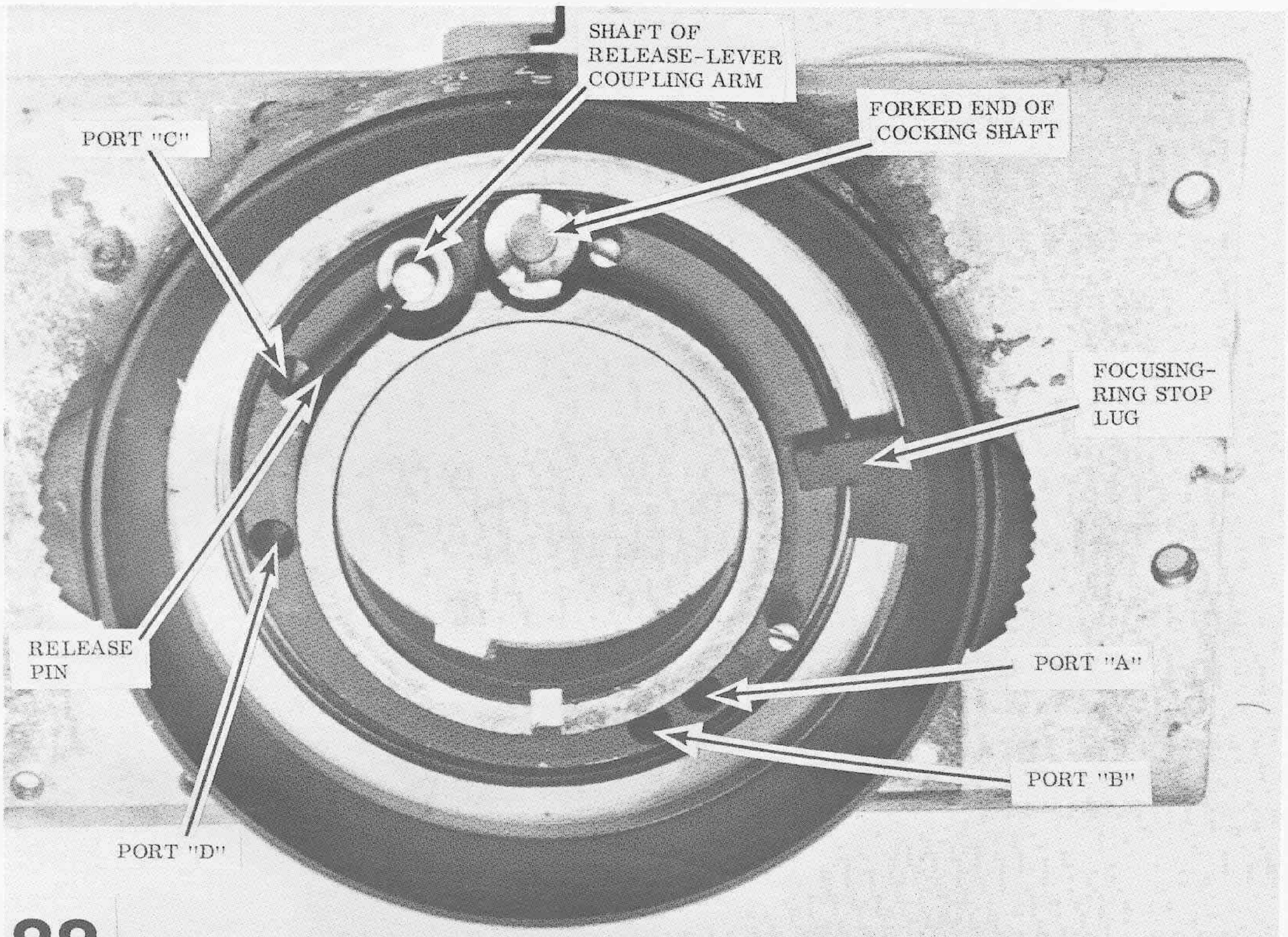


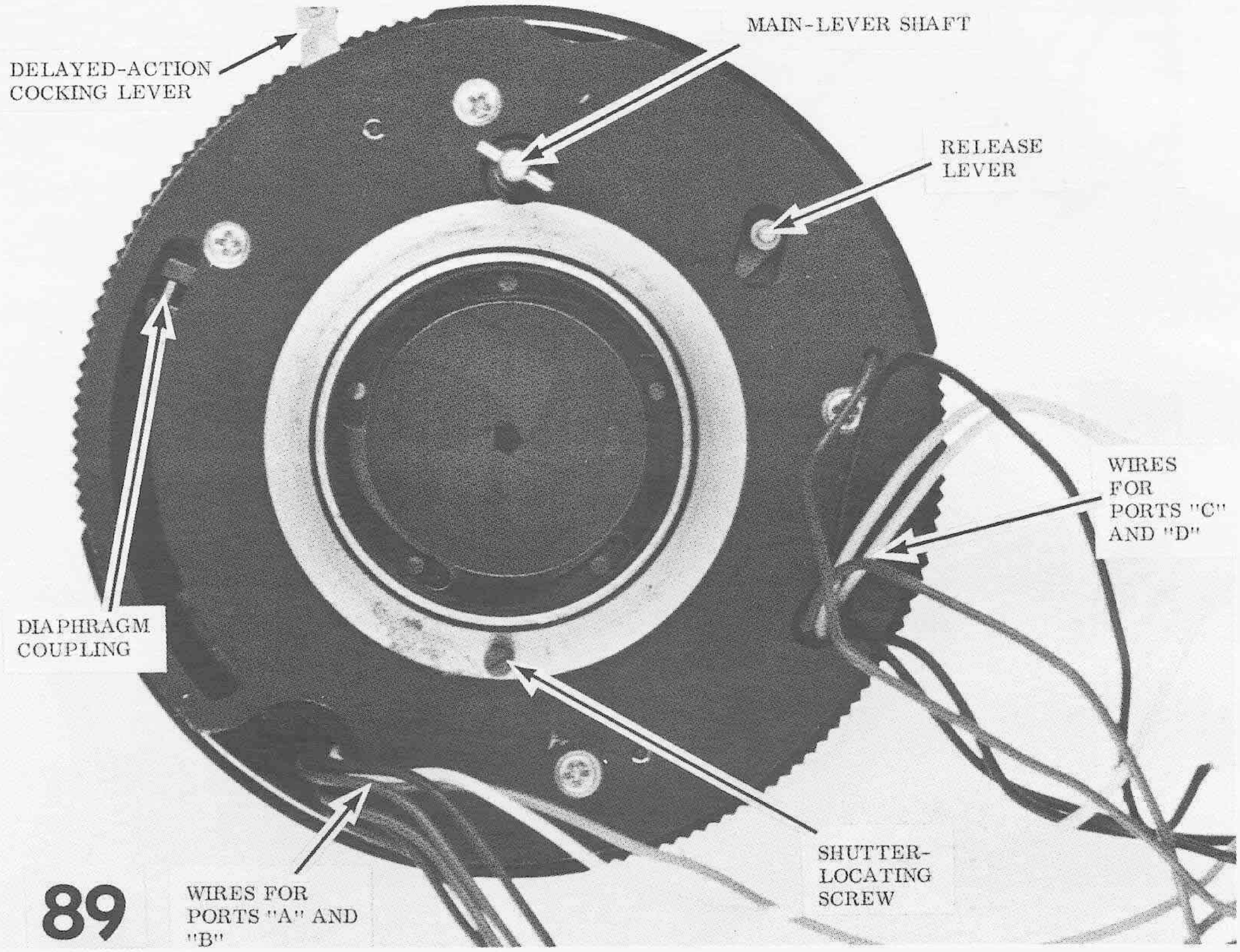
CHECKER BASE

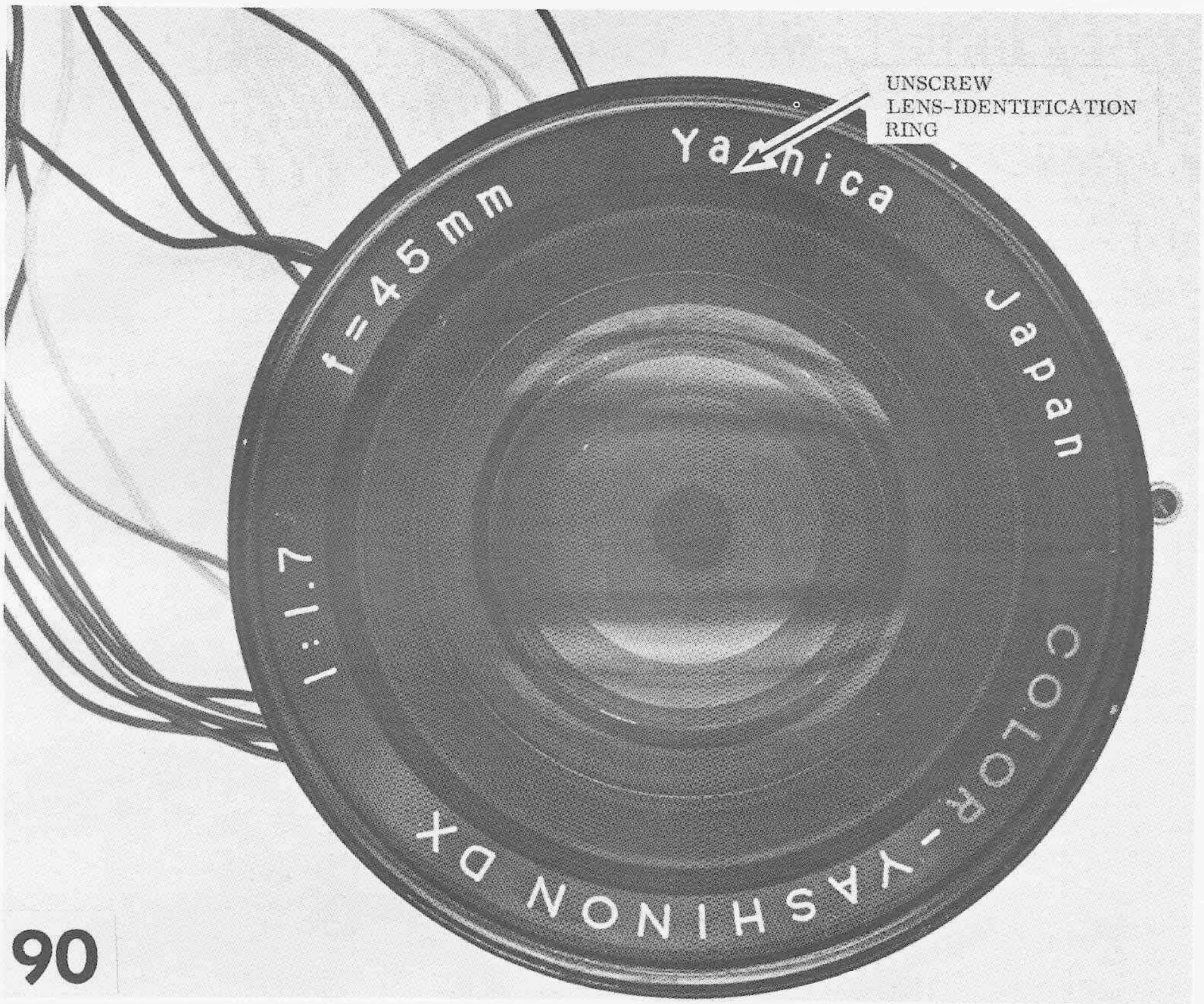


PORT A -- green, dark blue, orange, and brown
PORT B -- red, white, and purple
PORT C -- yellow, yellow, red, and black
PORT D -- red, black, and brown

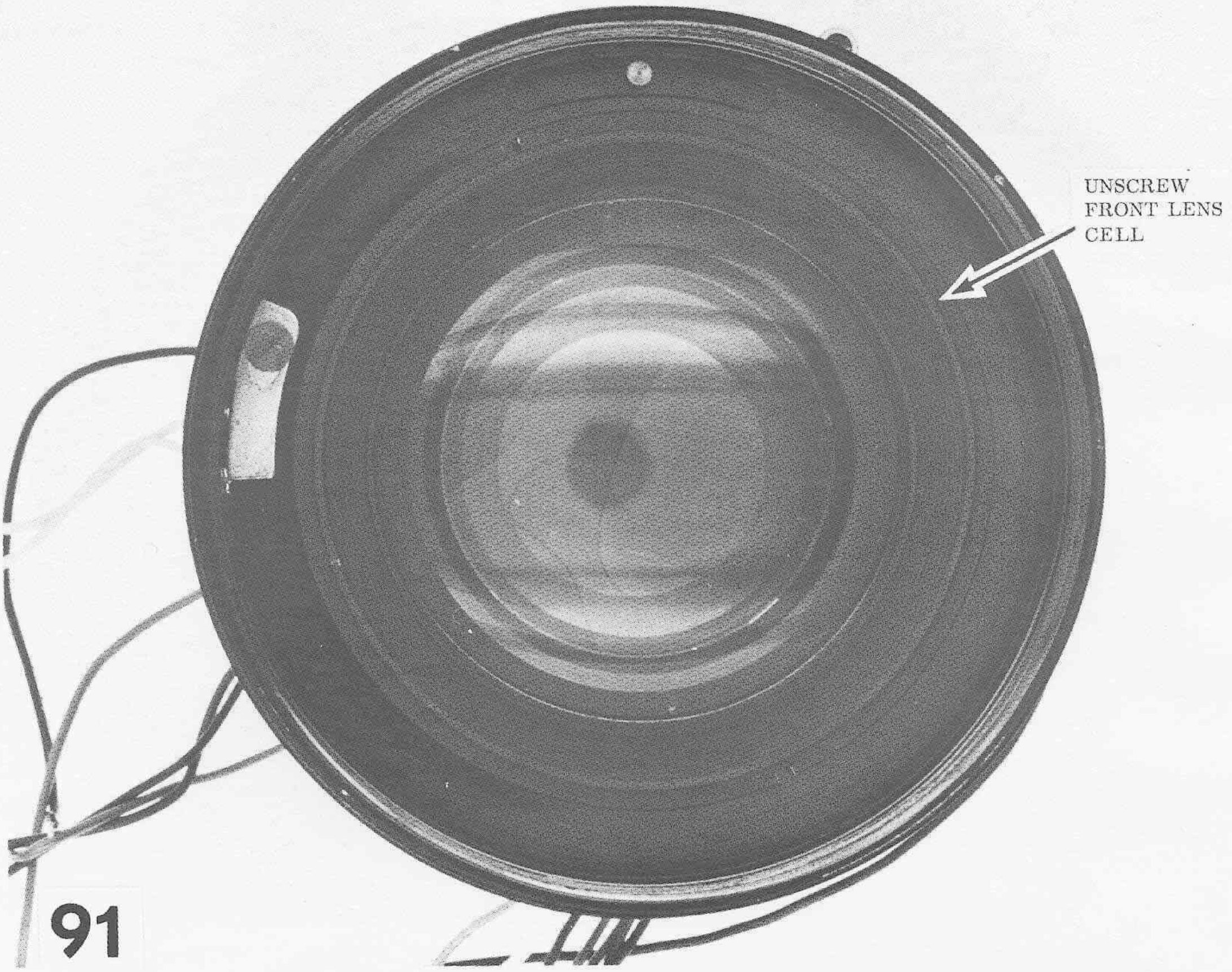
(NOTE VARIATIONS IN YOUR PARTICULAR CAMERA)

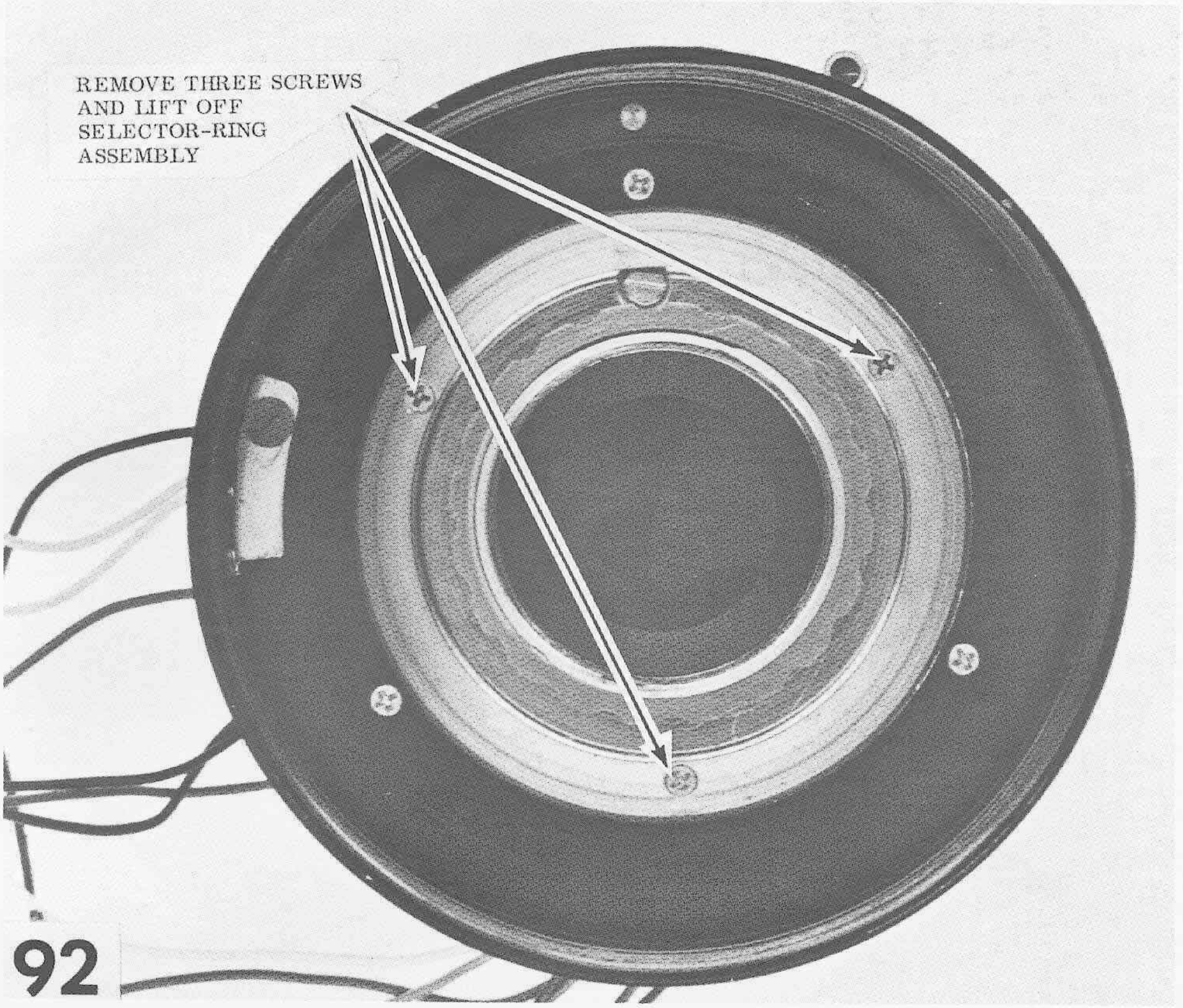

SHAFT OF
RELEASE-LEVER
COUPLING ARM
FORKED END OF
COCKING SHAFT
PORT "C"
FOCUSING-
RING STOP
LUG
RELEASE
PIN
PORT "A"
PORT "B"
PORT "D"

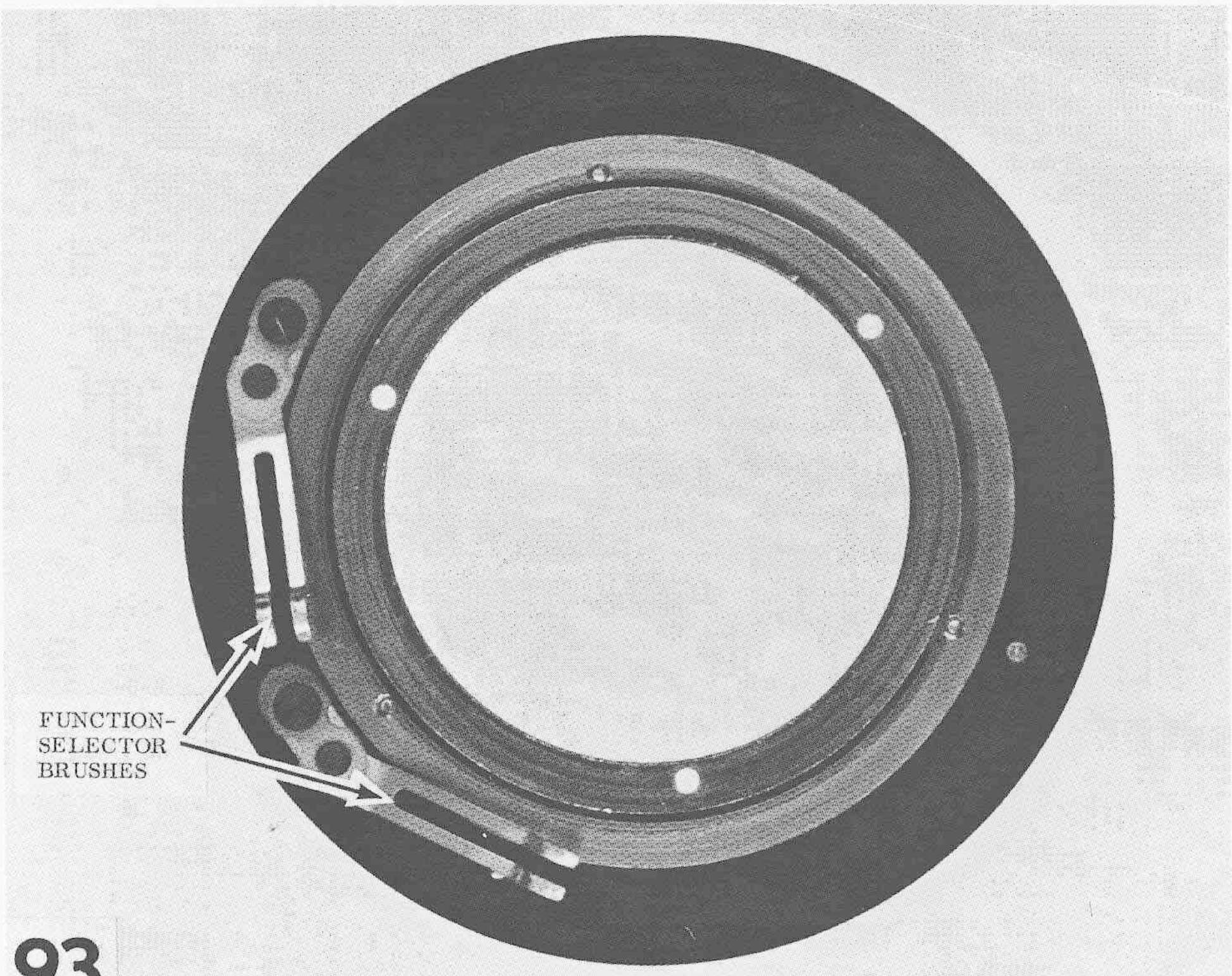

DELAYED-ACTION
COCKING LEVER
MAIN-LEVER SHAFT
RELEASE
LEVER
WIRES
FOR
PORTS "C"
AND "D"
DIAPHRAGM
COUPLING
SHUTTER-
LOCATING
SCREW
WIRES FOR
PORTS "A" AND
"B"

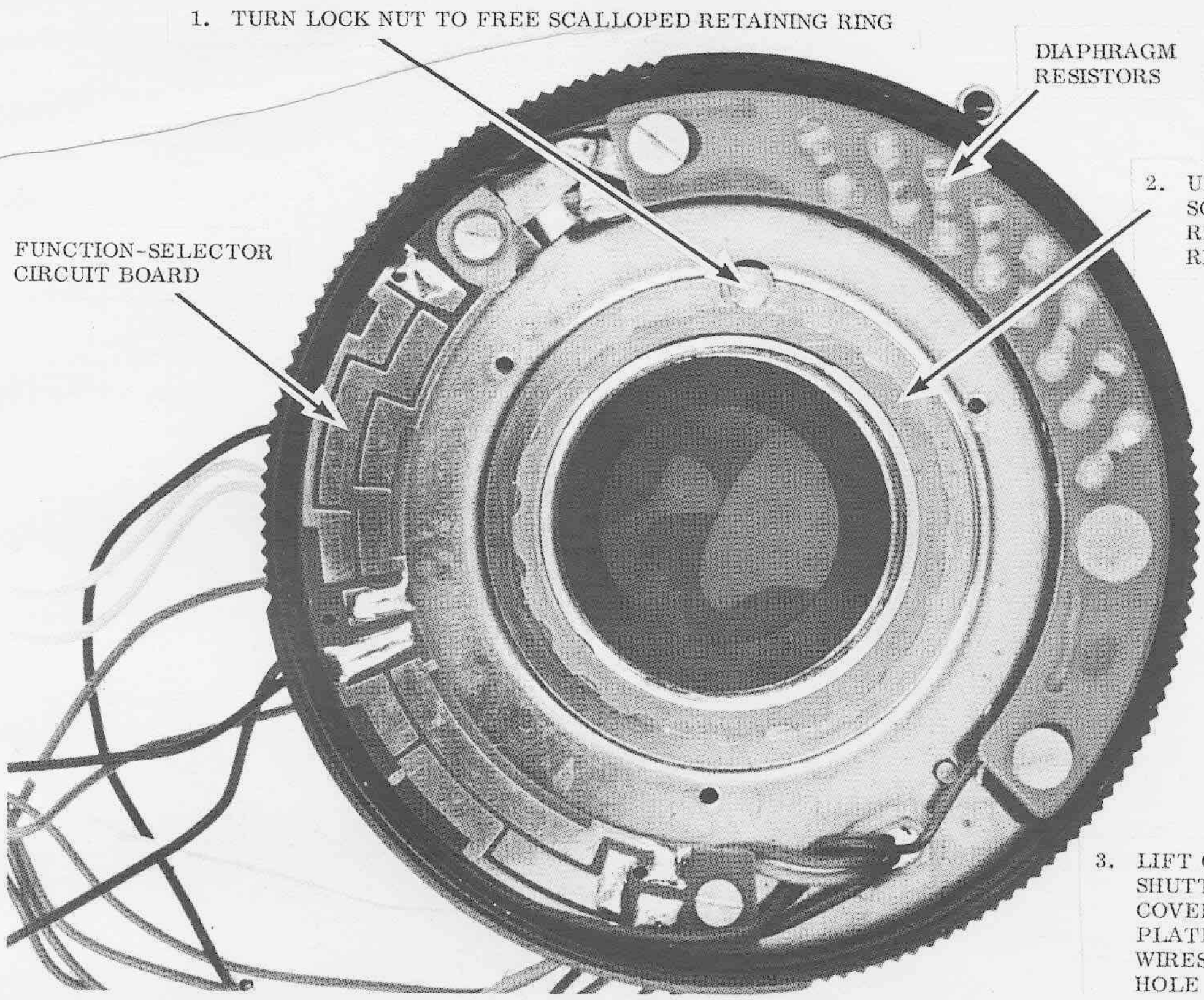

UNSCREW
LENS-IDENTIFICATION
RING
f=45mm
Yashica
Japan
1:1.7
COLOR-YASHINON DX

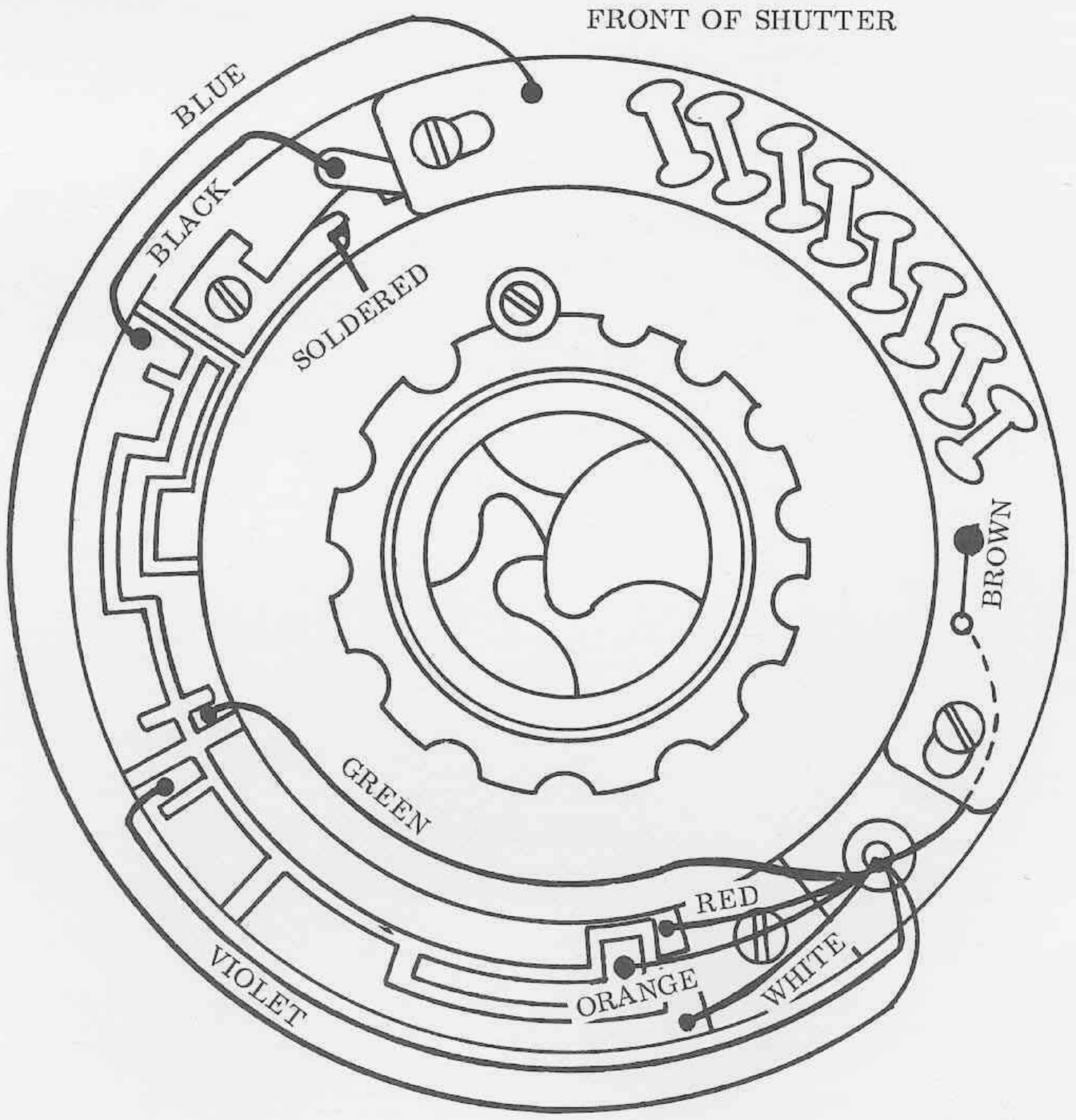
90

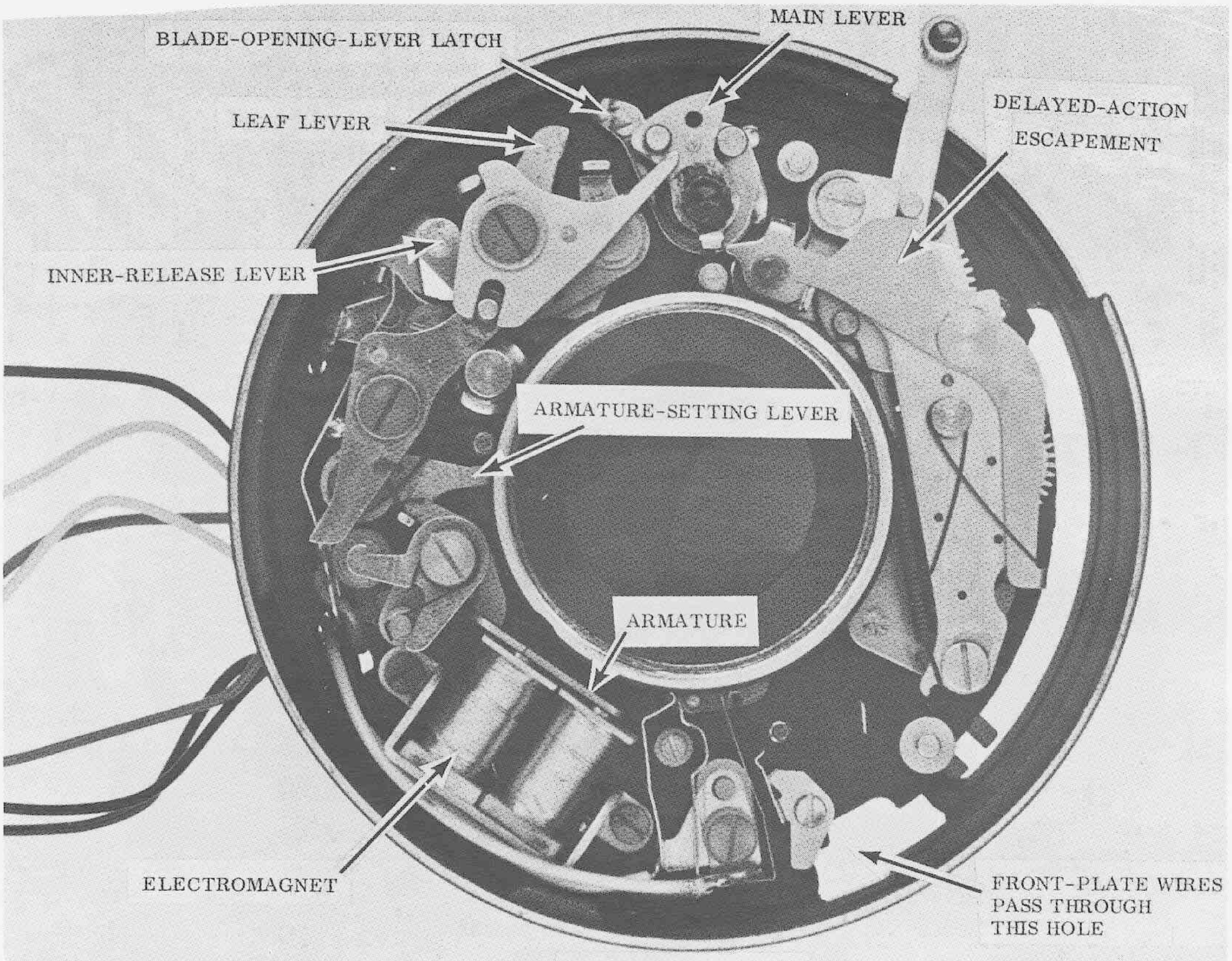

UNSCREW
FRONT LENS
CELL


REMOVE THREE SCREWS
AND LIFT OFF
SELECTOR-RING
ASSEMBLY


FUNCTION-
SELECTOR
BRUSHES

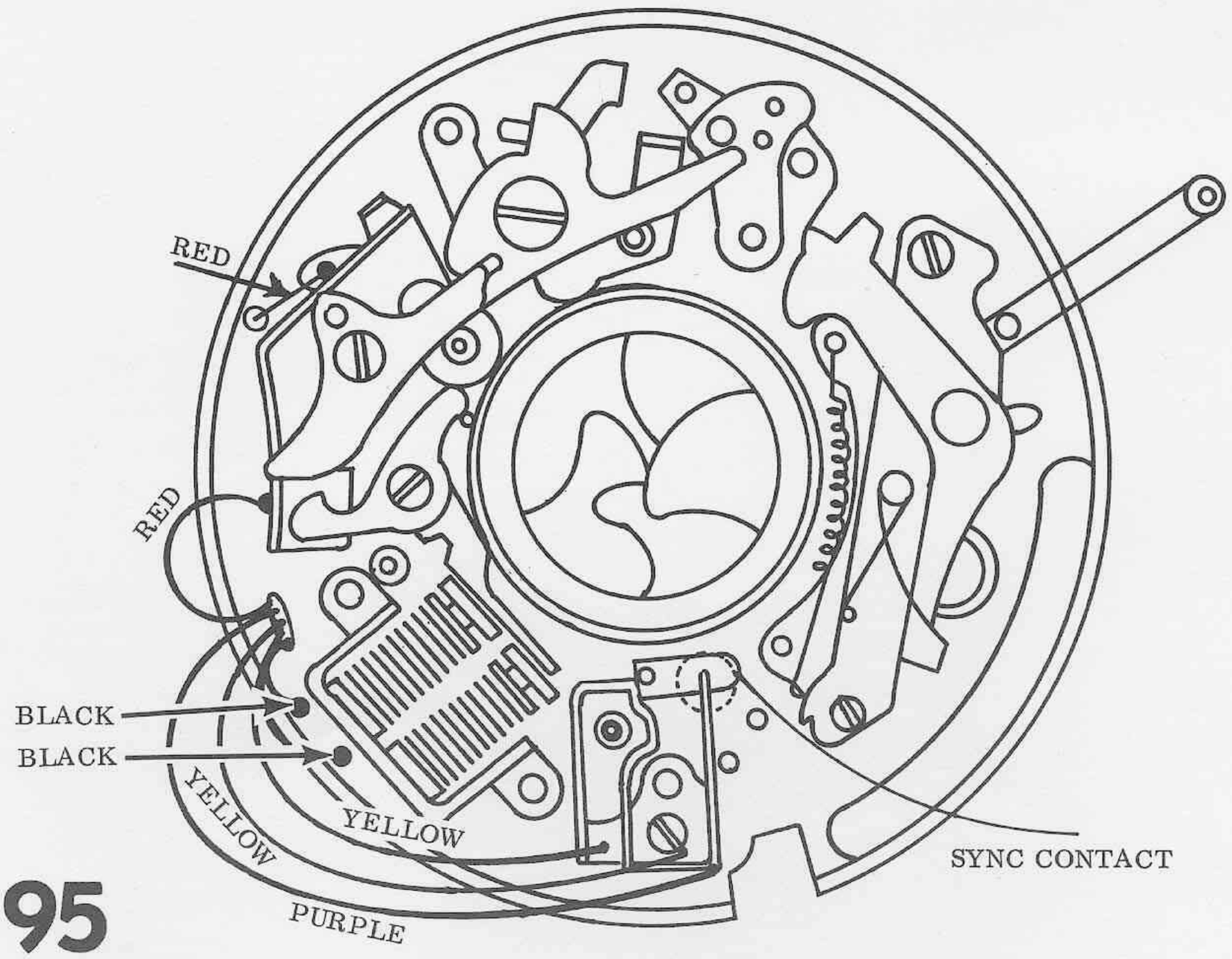

1. TURN LOCK NUT TO FREE SCALLOPED RETAINING RING
DIAPHRAGM RESISTORS
2. UNSCREW SCALLOPED RETAINING RING
FUNCTION-SELECTOR CIRCUIT BOARD
3. LIFT OFF SHUTTER-COVER PLATE -- PULL WIRES THROUGH HOLE IN SHUTTER

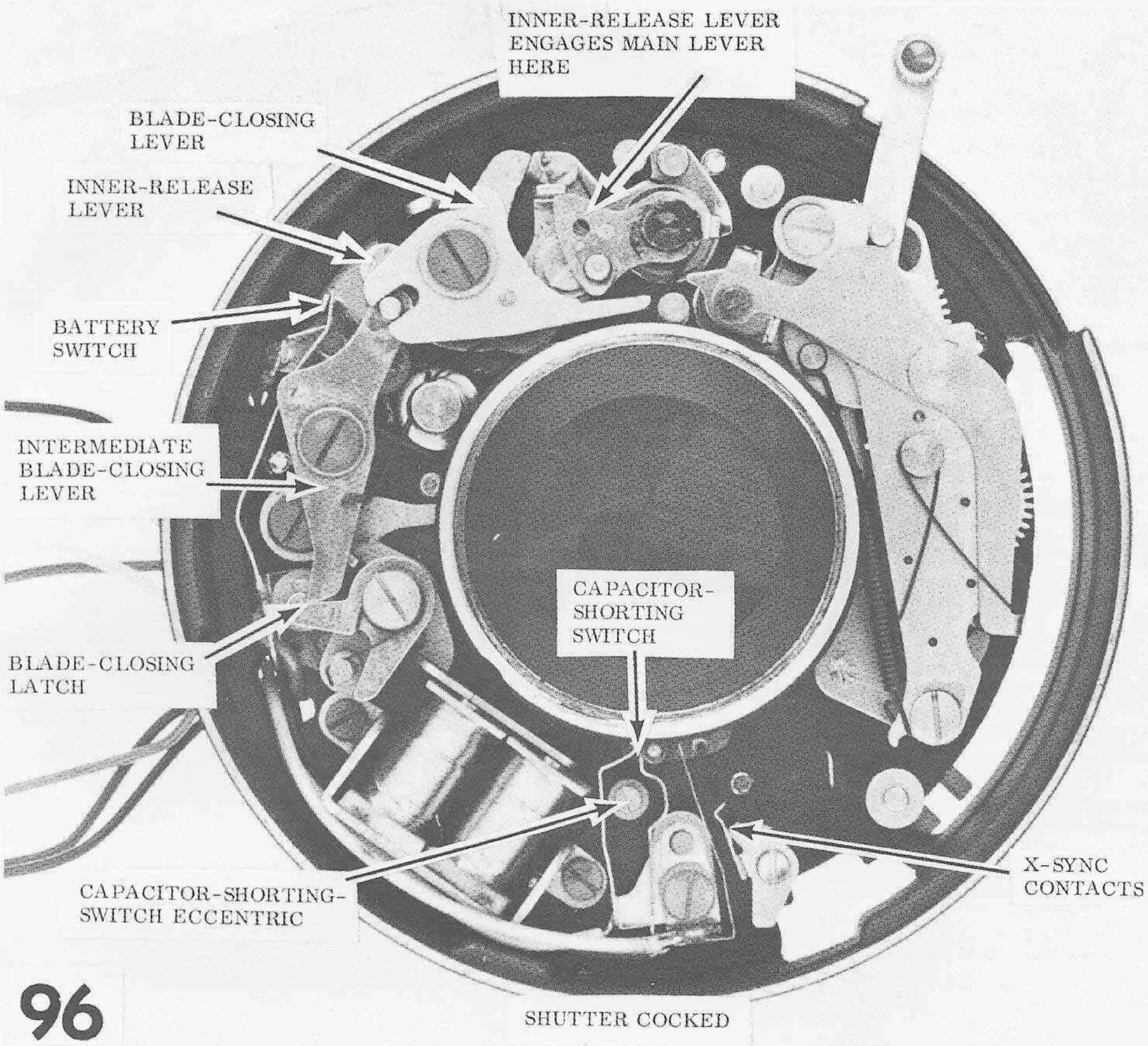

FRONT OF SHUTTER
BLUE
BLACK
SOLDERED
BROWN
GREEN
RED
ORANGE
WHITE
VIOLET

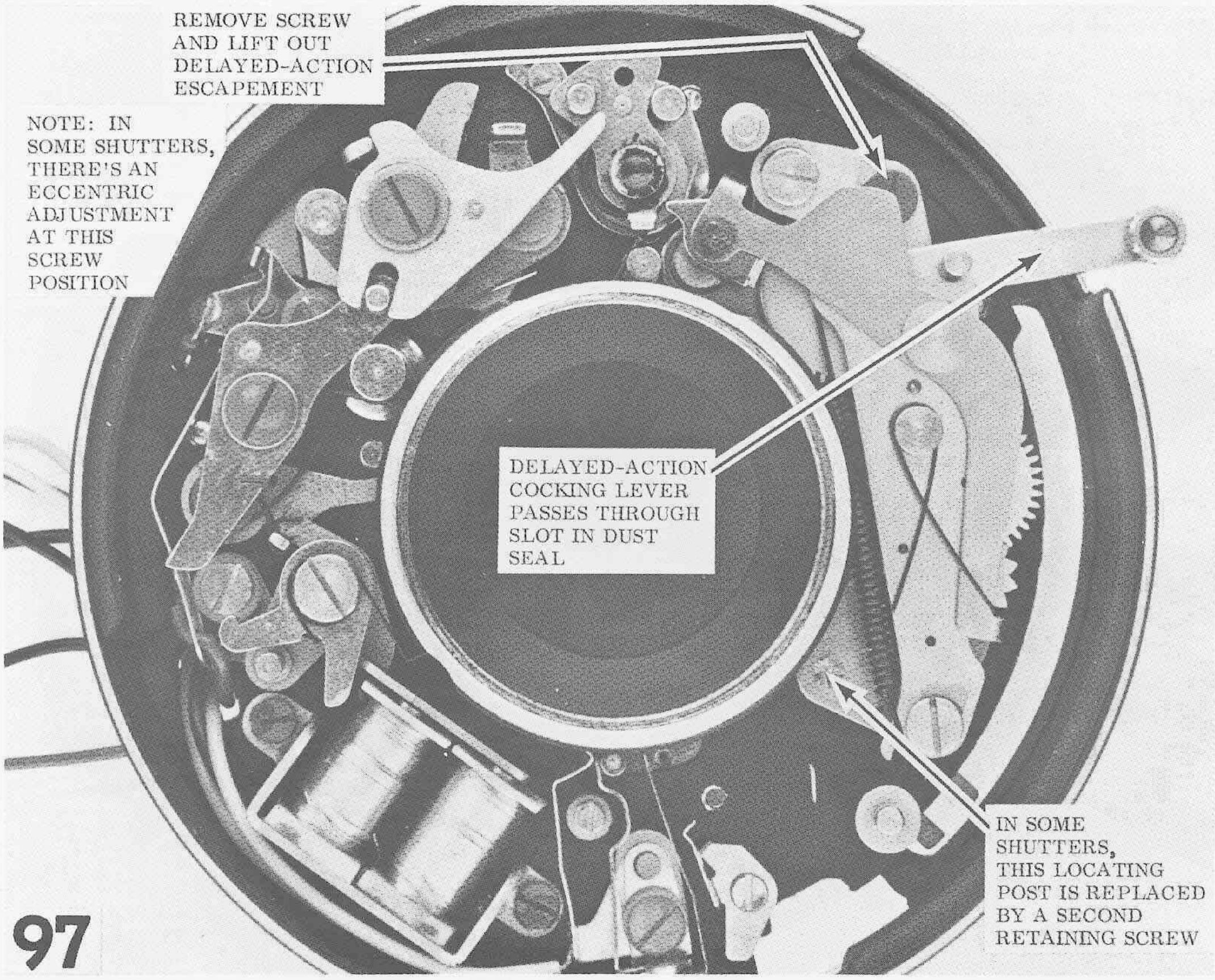


SHUTTER RELEASED

INSIDE SHUTTER

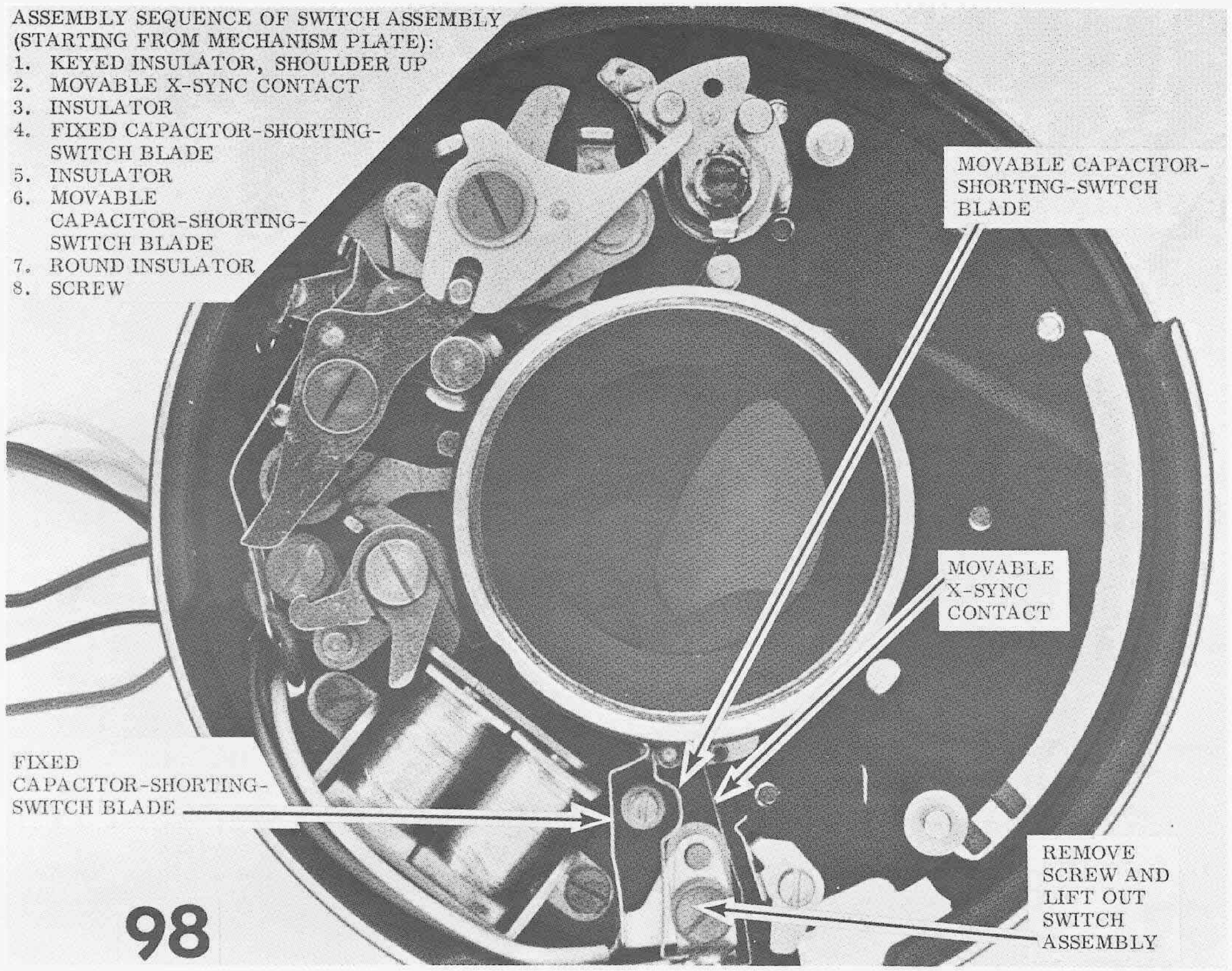


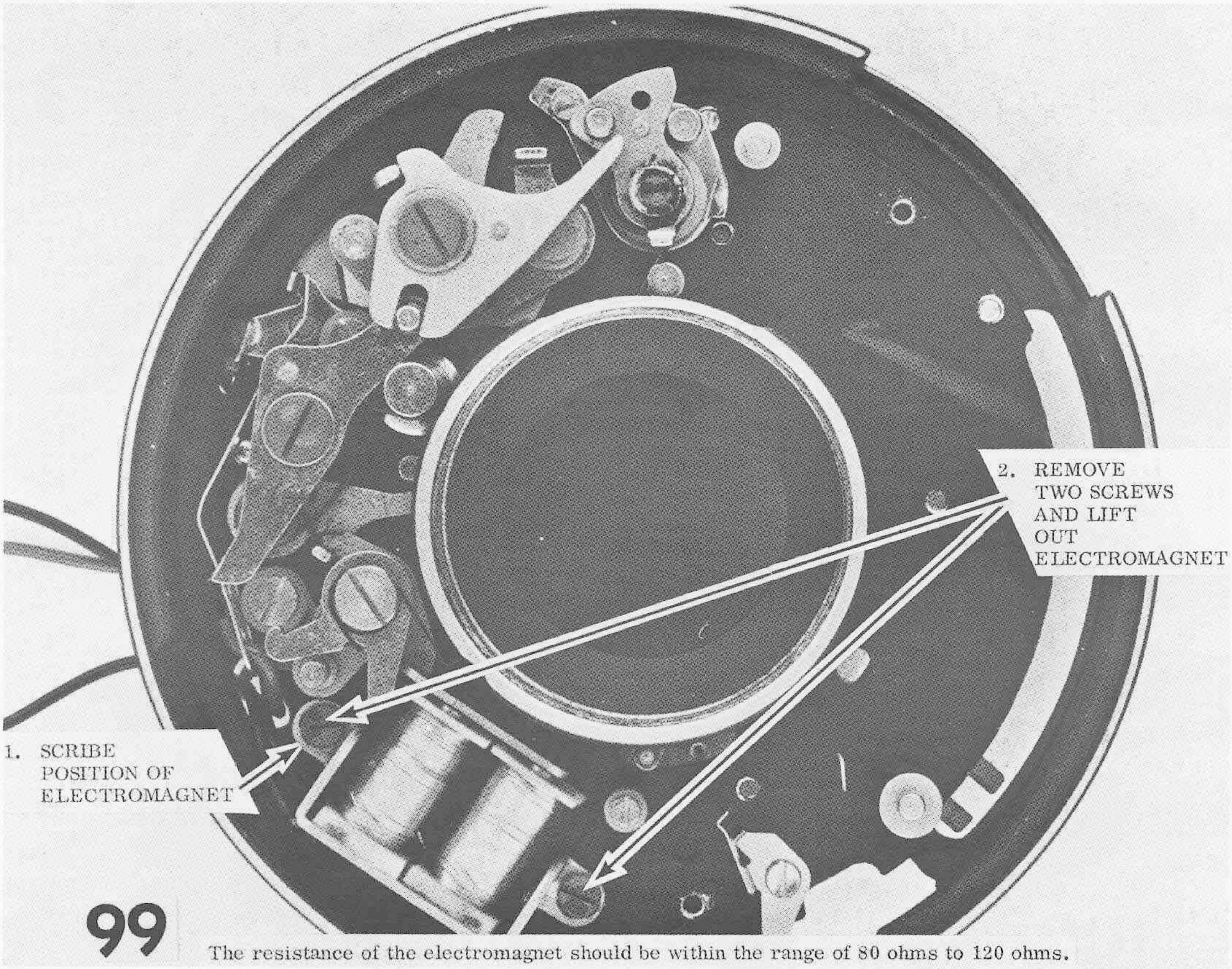

INNER-RELEASE LEVER ENGAGES MAIN LEVER HERE
BLADE-CLOSING LEVER
INNER-RELEASE LEVER
BATTERY SWITCH
INTERMEDIATE BLADE-CLOSING LEVER
BLADE-CLOSING LATCH
CAPACITOR-SHORTING SWITCH
CAPACITOR-SHORTING-SWITCH ECCENTRIC
X-SYNC CONTACTS
SHUTTER COCKED


REMOVE SCREW AND LIFT OUT DELAYED-ACTION ESCAPEMENT
NOTE: IN SOME SHUTTERS, THERE'S AN ECCENTRIC ADJUSTMENT AT THIS SCREW POSITION
DELAYED-ACTION COCKING LEVER PASSES THROUGH SLOT IN DUST SEAL
IN SOME SHUTTERS, THIS LOCATING POST IS REPLACED BY A SECOND RETAINING SCREW

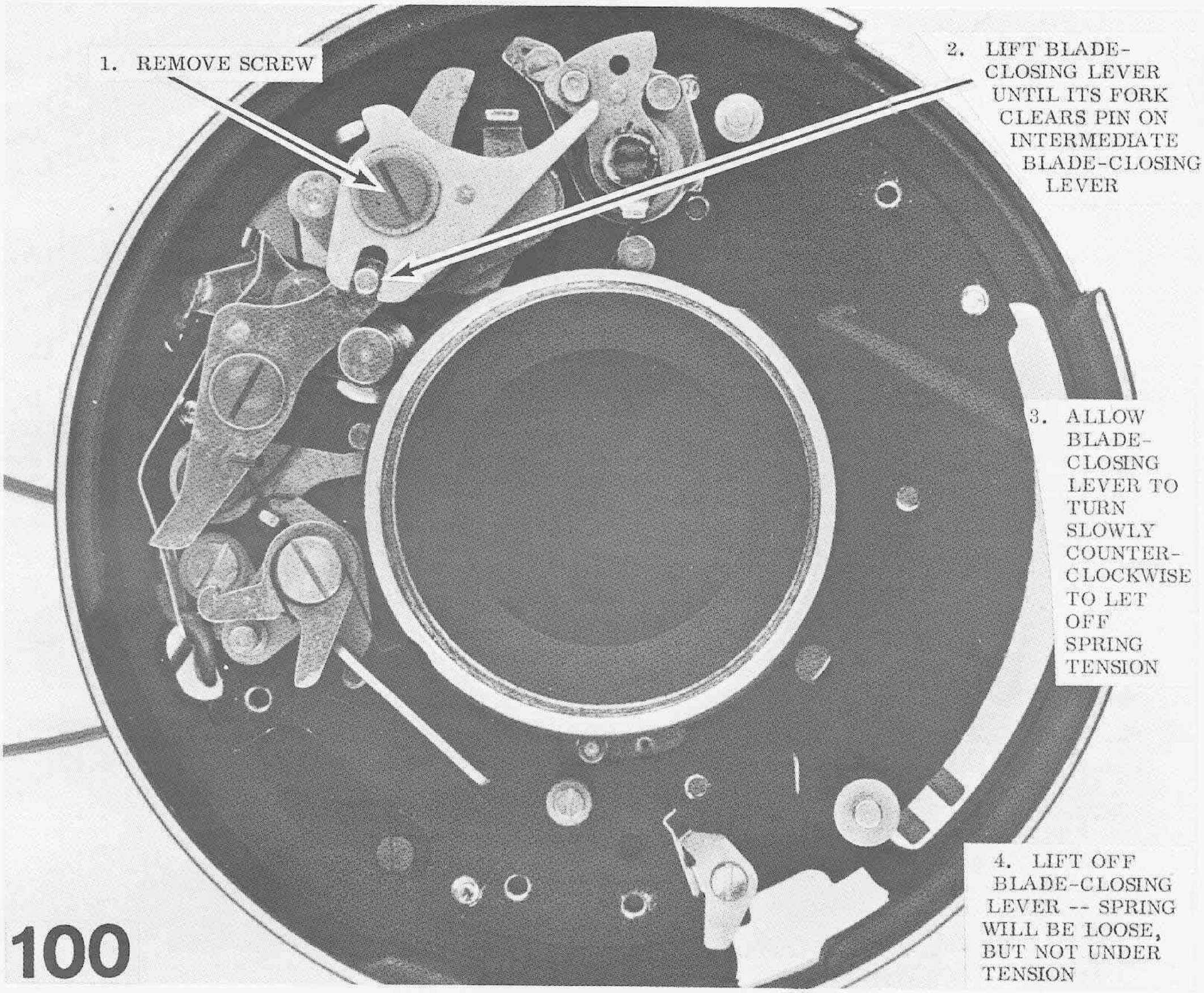
ASSEMBLY SEQUENCE OF SWITCH ASSEMBLY (STARTING FROM MECHANISM PLATE):

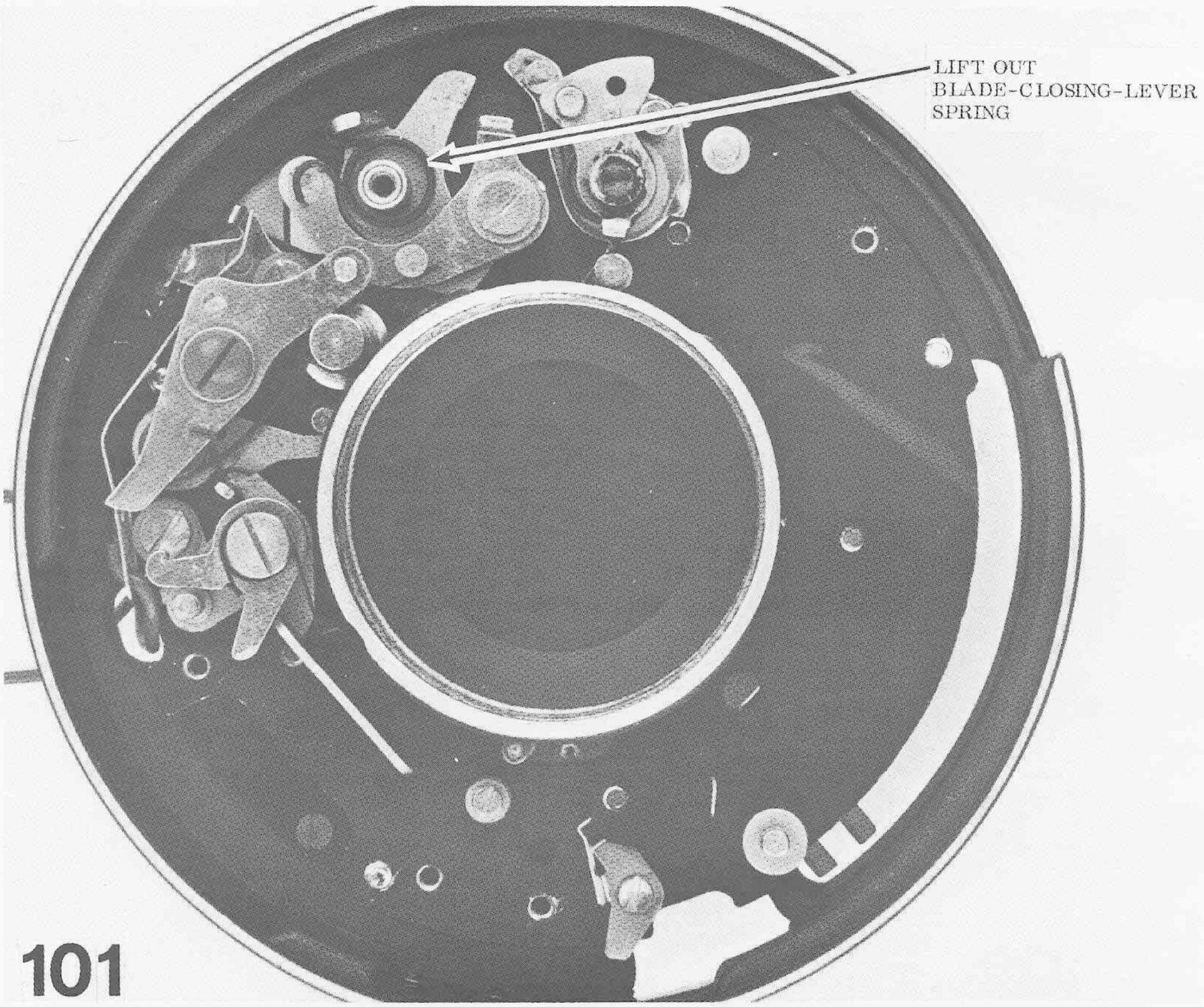
1. KEYED INSULATOR, SHOULDER UP
2. MOVABLE X-SYNC CONTACT
3. INSULATOR
4. FIXED CAPACITOR-SHORTING-SWITCH BLADE
5. INSULATOR
6. MOVABLE CAPACITOR-SHORTING-SWITCH BLADE
7. ROUND INSULATOR
8. SCREW



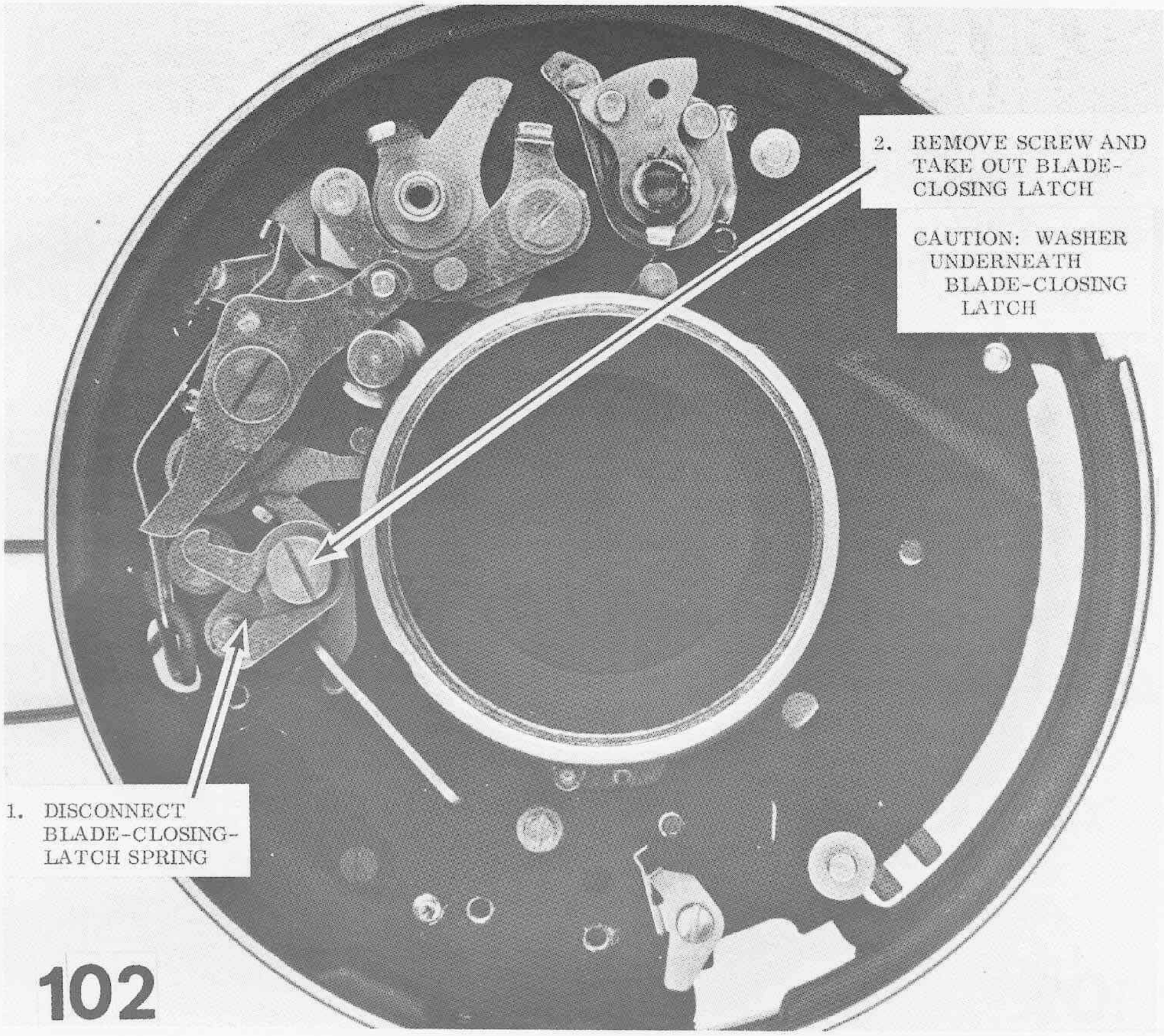


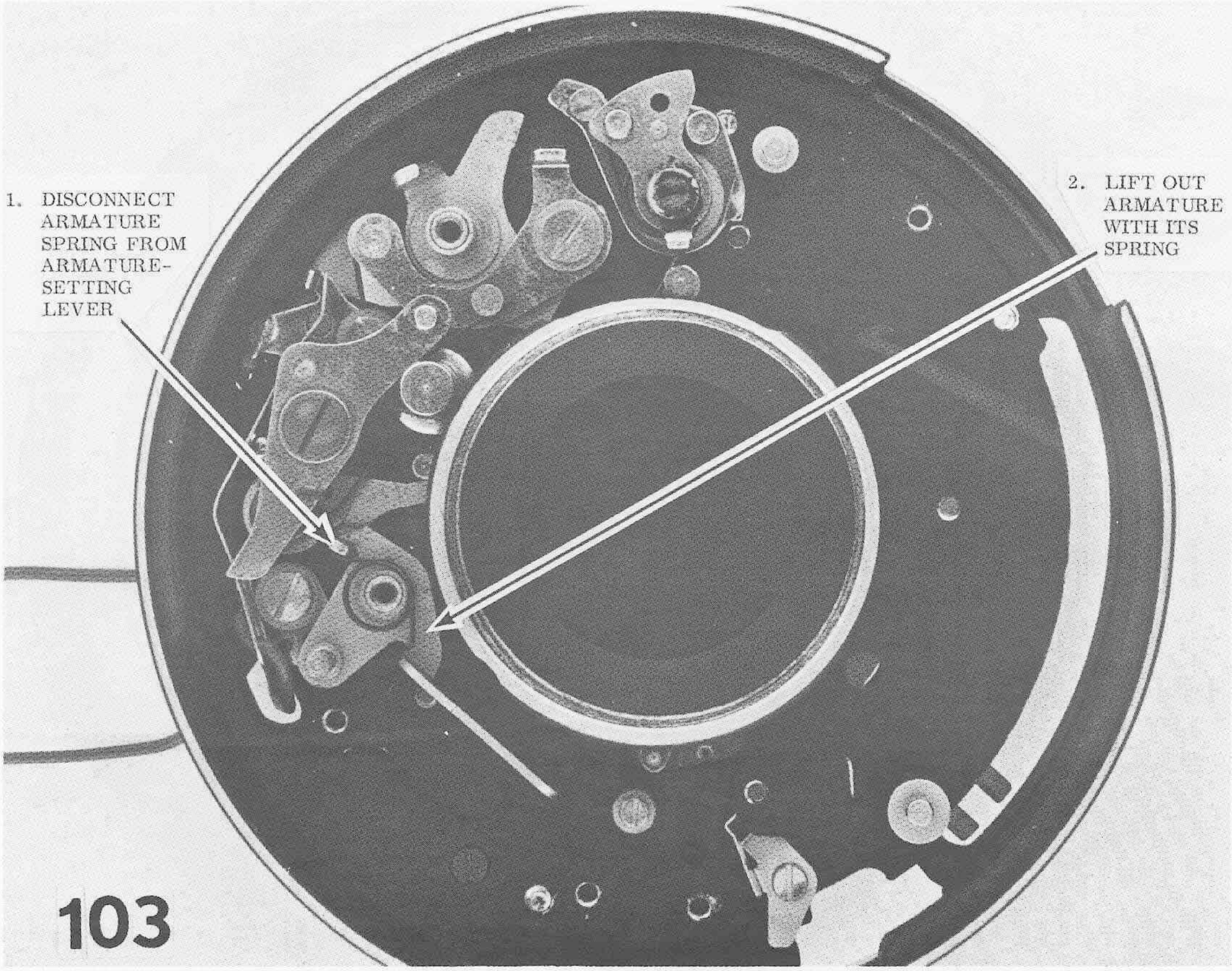
The resistance of the electromagnet should be within the range of 80 ohms to 120 ohms.

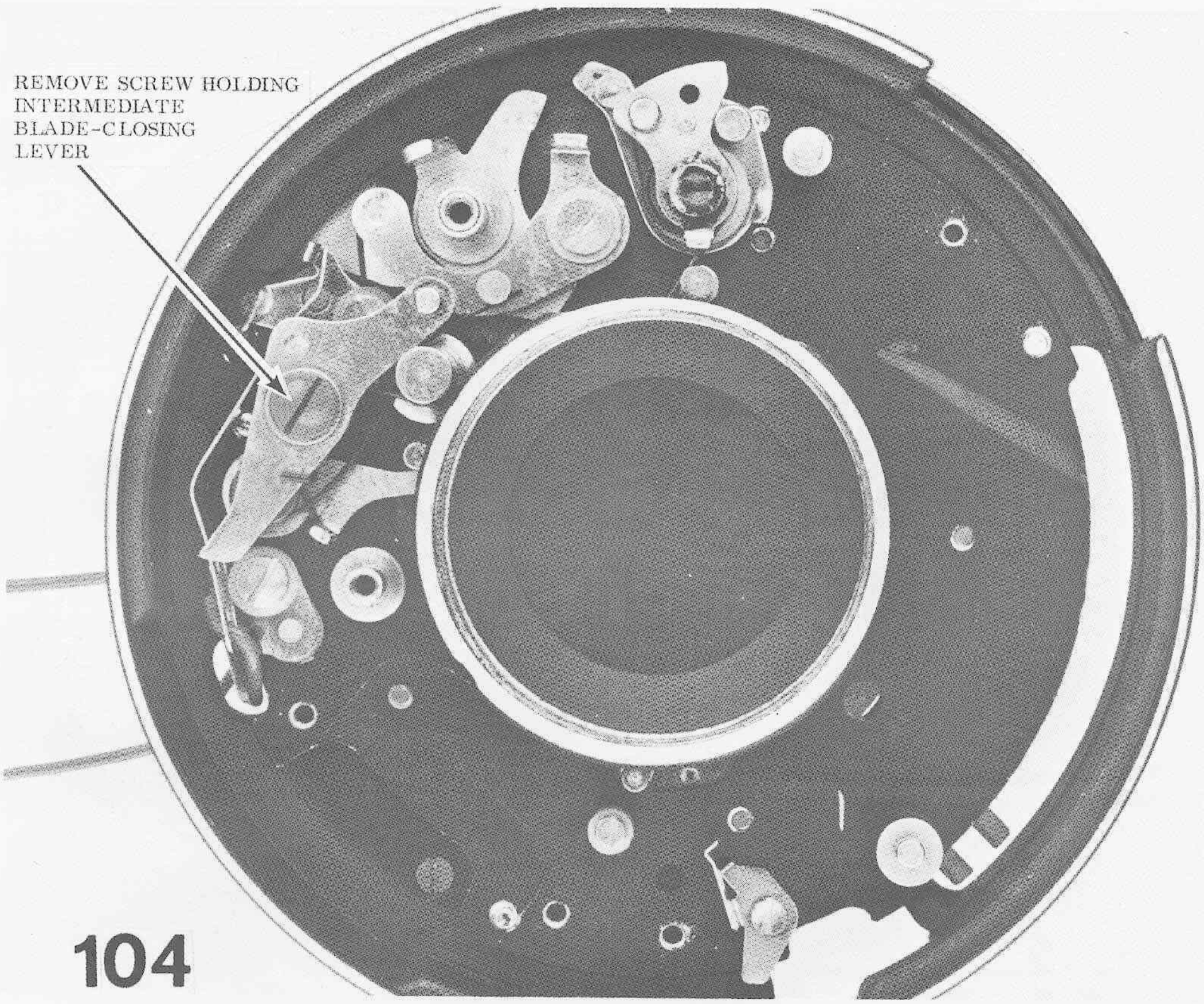

1. REMOVE SCREW
2. LIFT BLADE-CLOSING LEVER UNTIL ITS FORK CLEARS PIN ON INTERMEDIATE BLADE-CLOSING LEVER
3. ALLOW BLADE-CLOSING LEVER TO TURN SLOWLY COUNTER-CLOCKWISE TO LET OFF SPRING TENSION
4. LIFT OFF BLADE-CLOSING LEVER -- SPRING WILL BE LOOSE, BUT NOT UNDER TENSION



101


2. REMOVE SCREW AND TAKE OUT BLADE-CLOSING LATCH
CAUTION: WASHER UNDERNEATH BLADE-CLOSING LATCH
1. DISCONNECT BLADE-CLOSING-LATCH SPRING

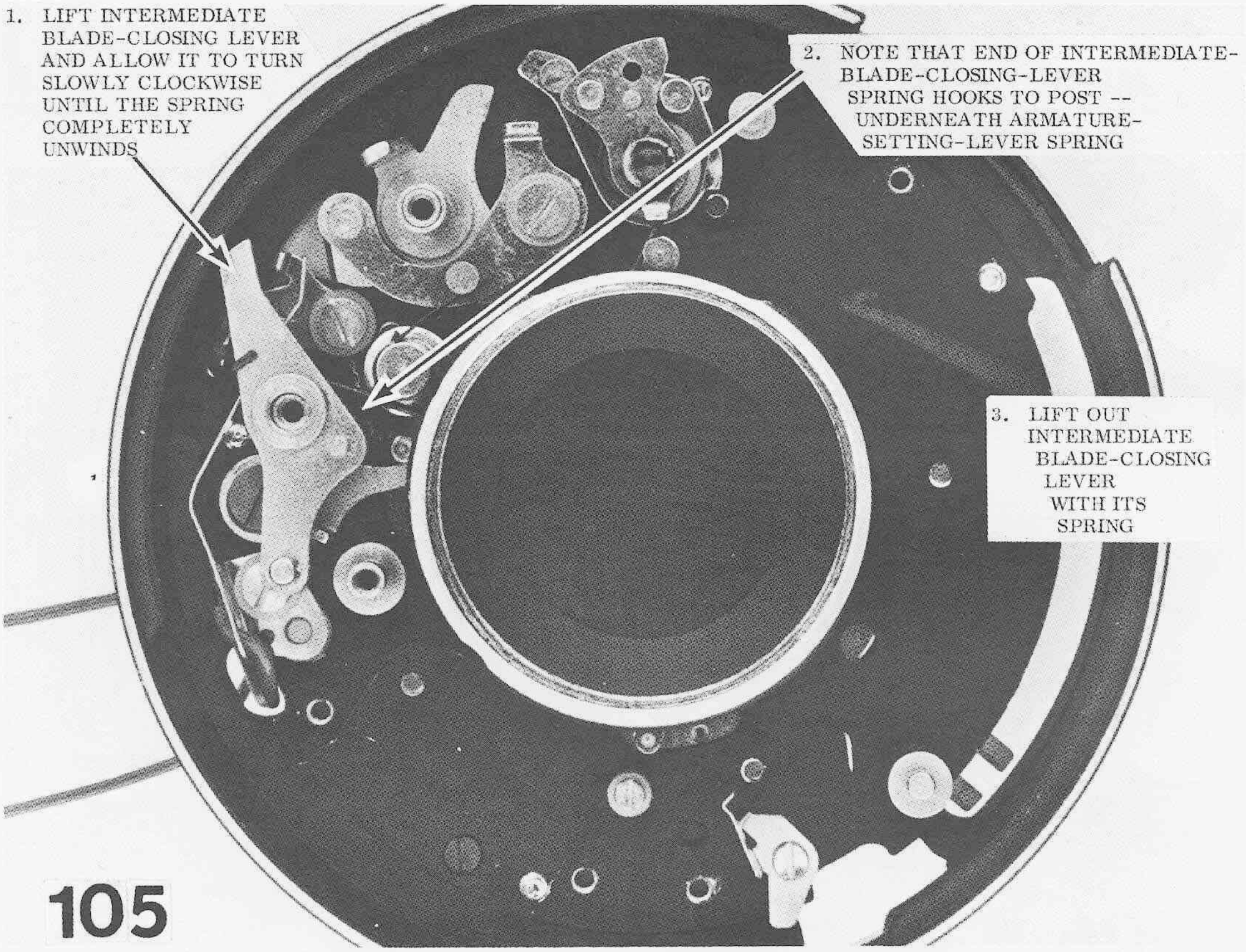

1. DISCONNECT ARMATURE SPRING FROM ARMATURE-SETTING LEVER
2. LIFT OUT ARMATURE WITH ITS SPRING

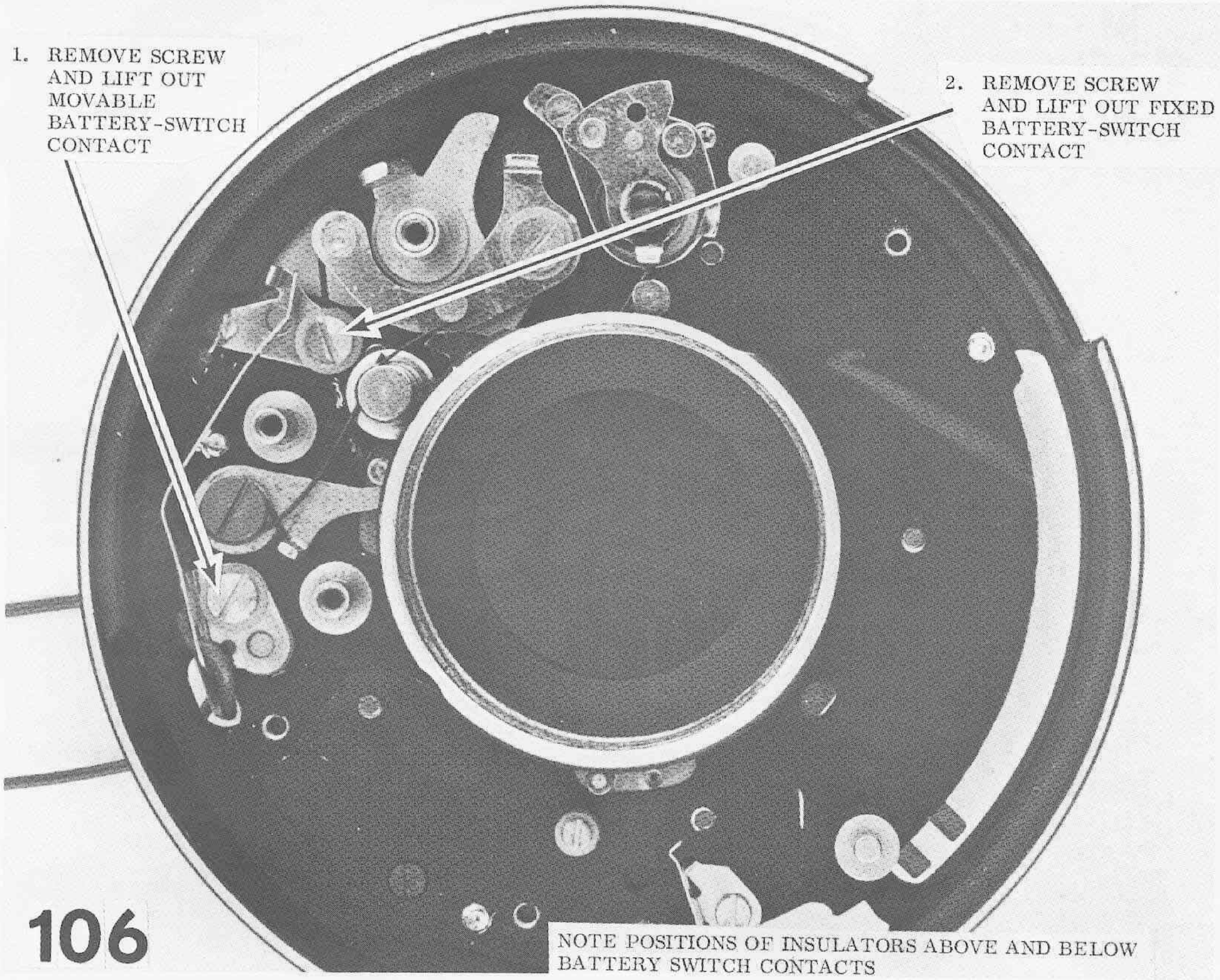

REMOVE SCREW HOLDING
INTERMEDIATE
BLADE-CLOSING
LEVER

1. LIFT INTERMEDIATE BLADE-CLOSING LEVER AND ALLOW IT TO TURN SLOWLY CLOCKWISE UNTIL THE SPRING COMPLETELY UNWINDS

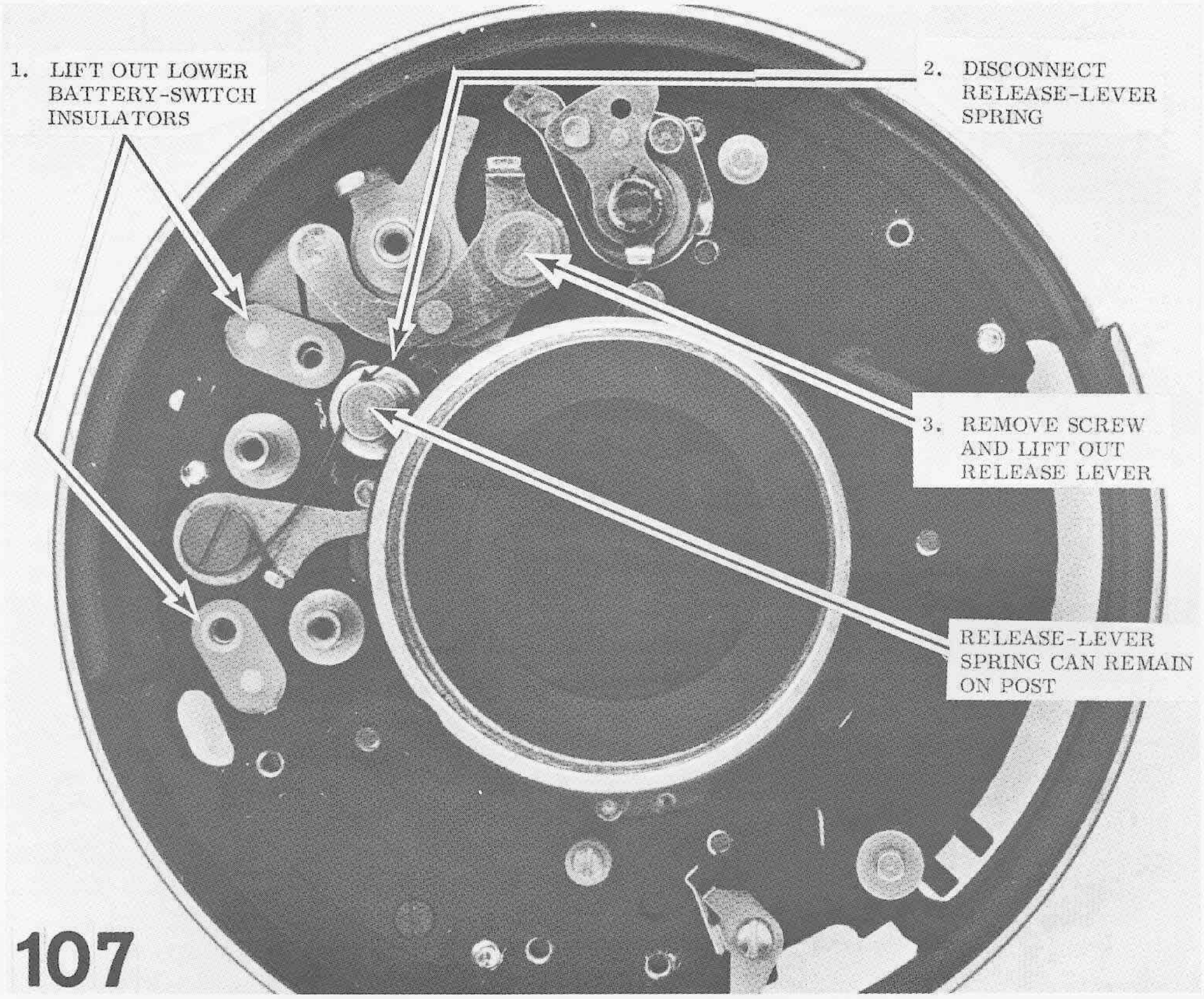
2. NOTE THAT END OF INTERMEDIATE-BLADE-CLOSING-LEVER SPRING HOOKS TO POST -- UNDERNEATH ARMATURE-SETTING-LEVER SPRING

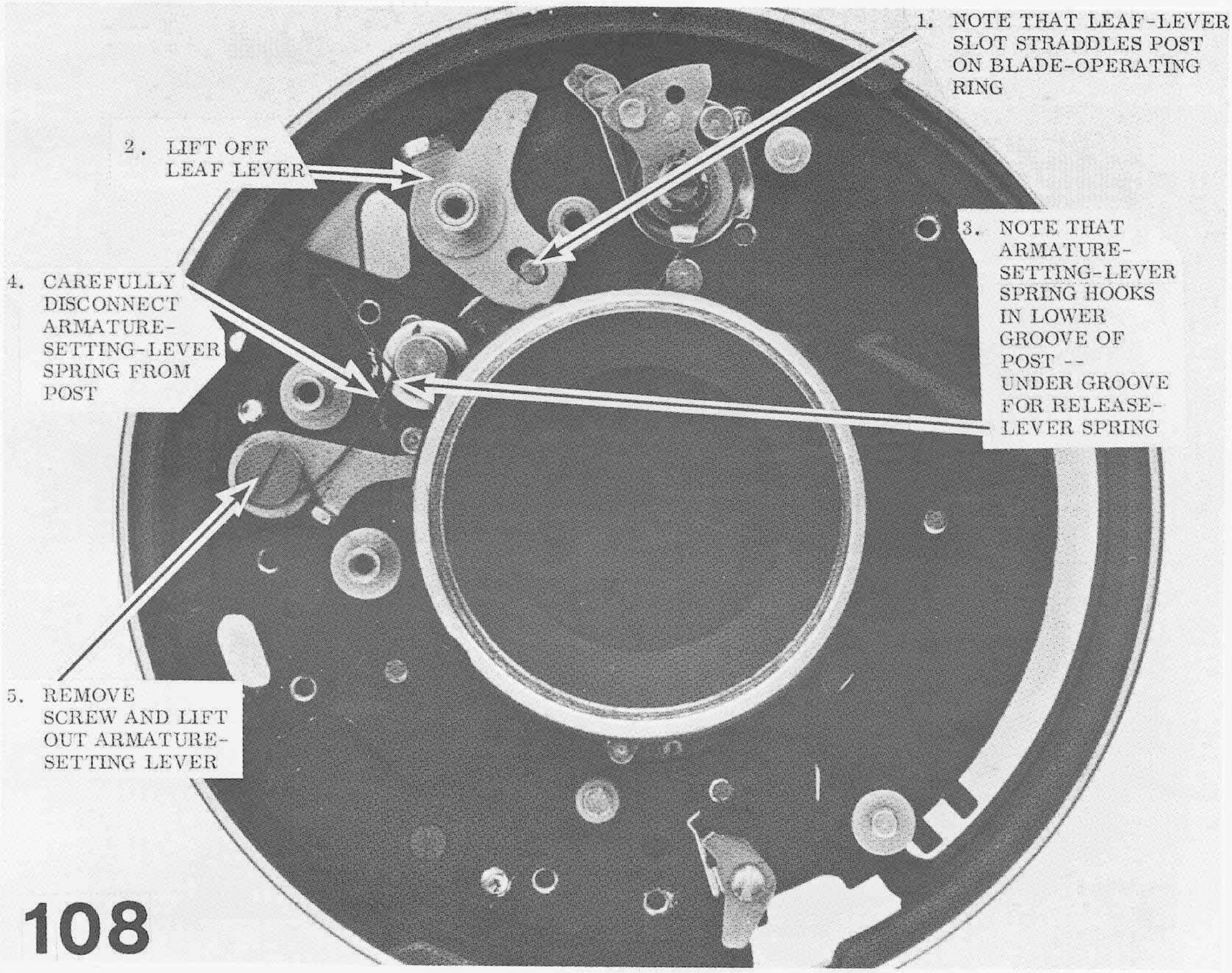
3. LIFT OUT INTERMEDIATE BLADE-CLOSING LEVER WITH ITS SPRING

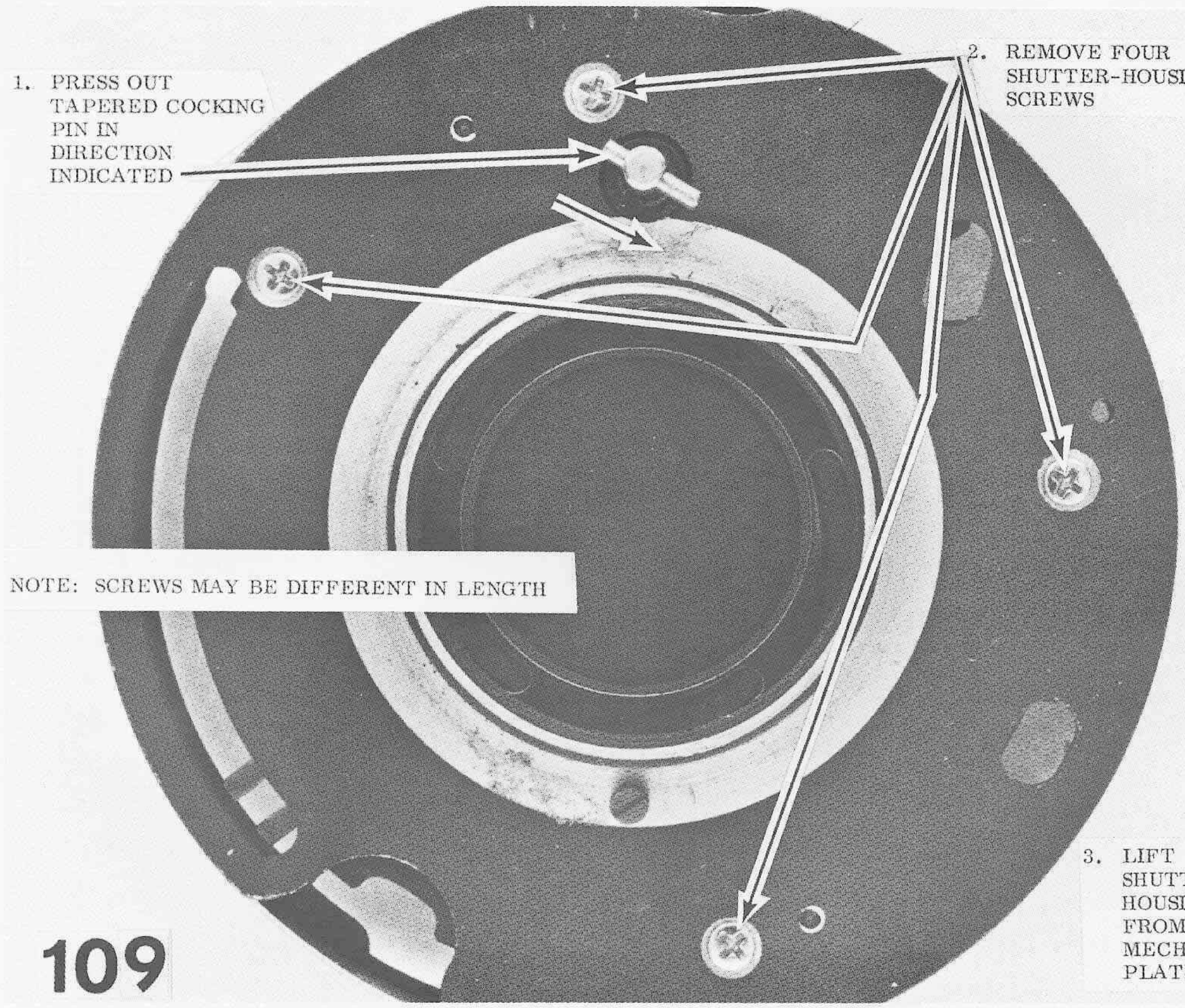




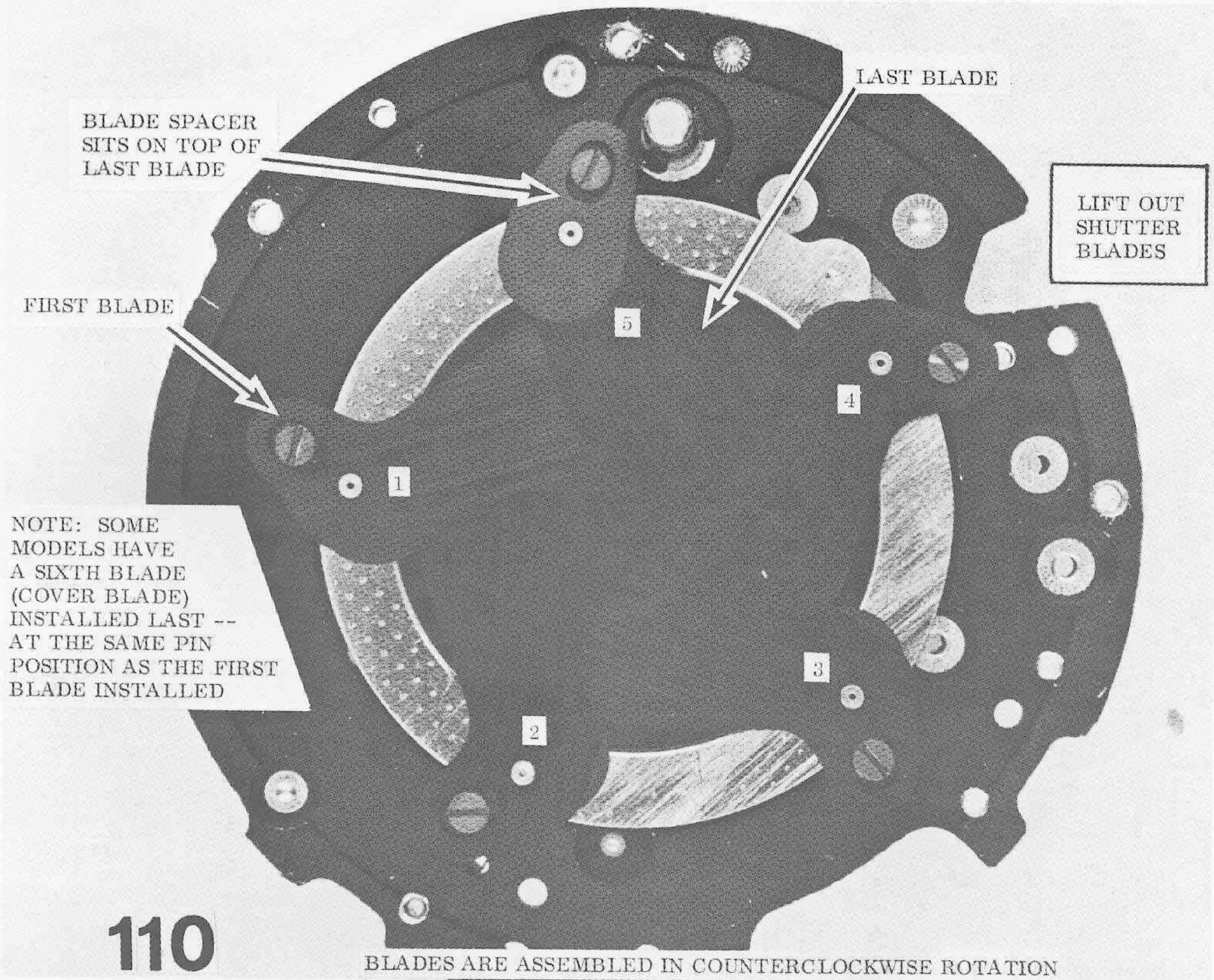
NOTE POSITIONS OF INSULATORS ABOVE AND BELOW BATTERY SWITCH CONTACTS


1. LIFT OUT LOWER BATTERY-SWITCH INSULATORS
2. DISCONNECT RELEASE-LEVER SPRING
3. REMOVE SCREW AND LIFT OUT RELEASE LEVER
RELEASE-LEVER SPRING CAN REMAIN ON POST


1. NOTE THAT LEAF-LEVER SLOT STRADDLES POST ON BLADE-OPERATING RING
2. LIFT OFF LEAF LEVER
3. NOTE THAT ARMATURE-SETTING-LEVER SPRING HOOKS IN LOWER GROOVE OF POST -- UNDER GROOVE FOR RELEASE-LEVER SPRING
4. CAREFULLY DISCONNECT ARMATURE-SETTING-LEVER SPRING FROM POST
5. REMOVE SCREW AND LIFT OUT ARMATURE-SETTING LEVER



NOTE: SCREWS MAY BE DIFFERENT IN LENGTH



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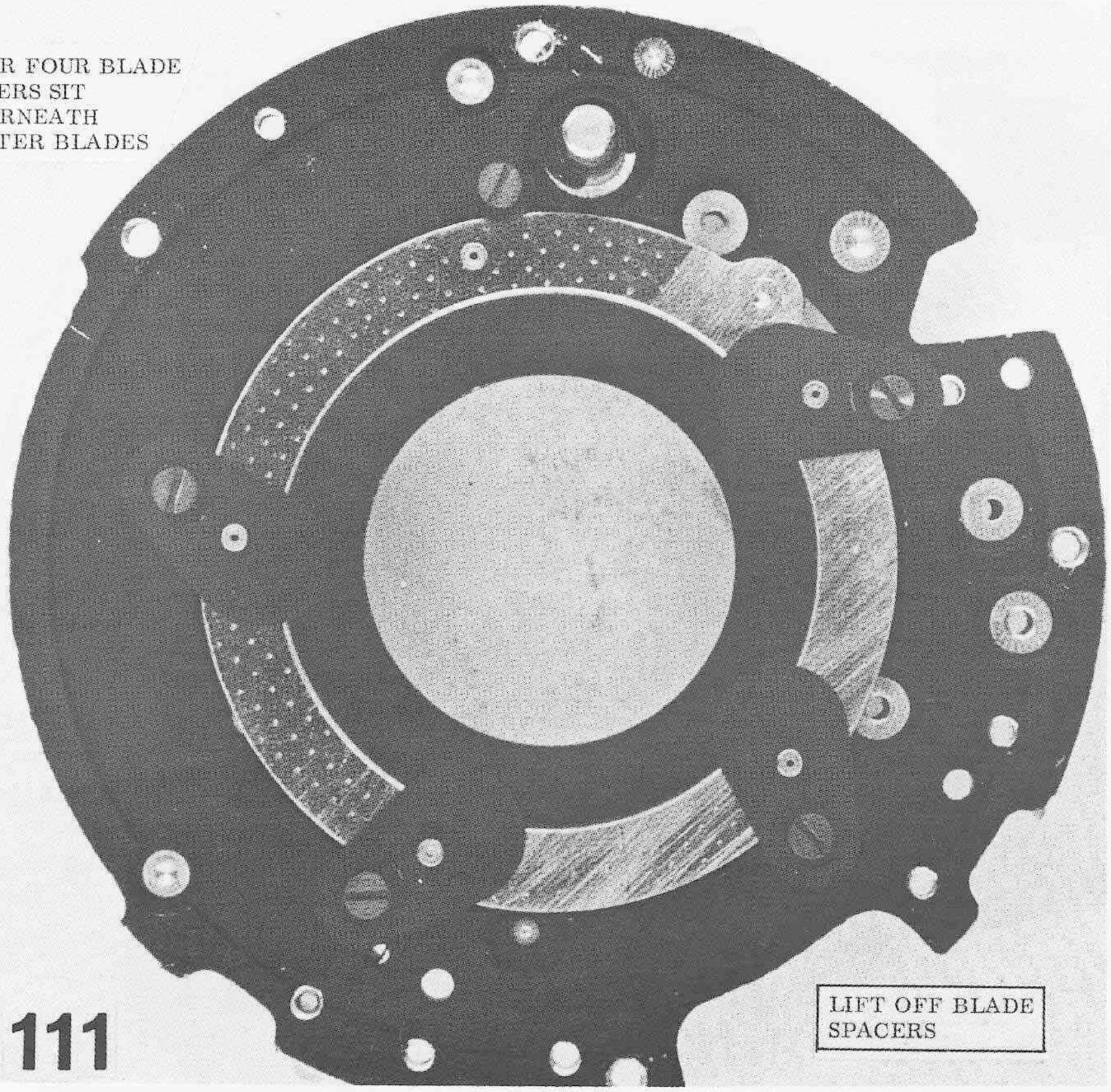
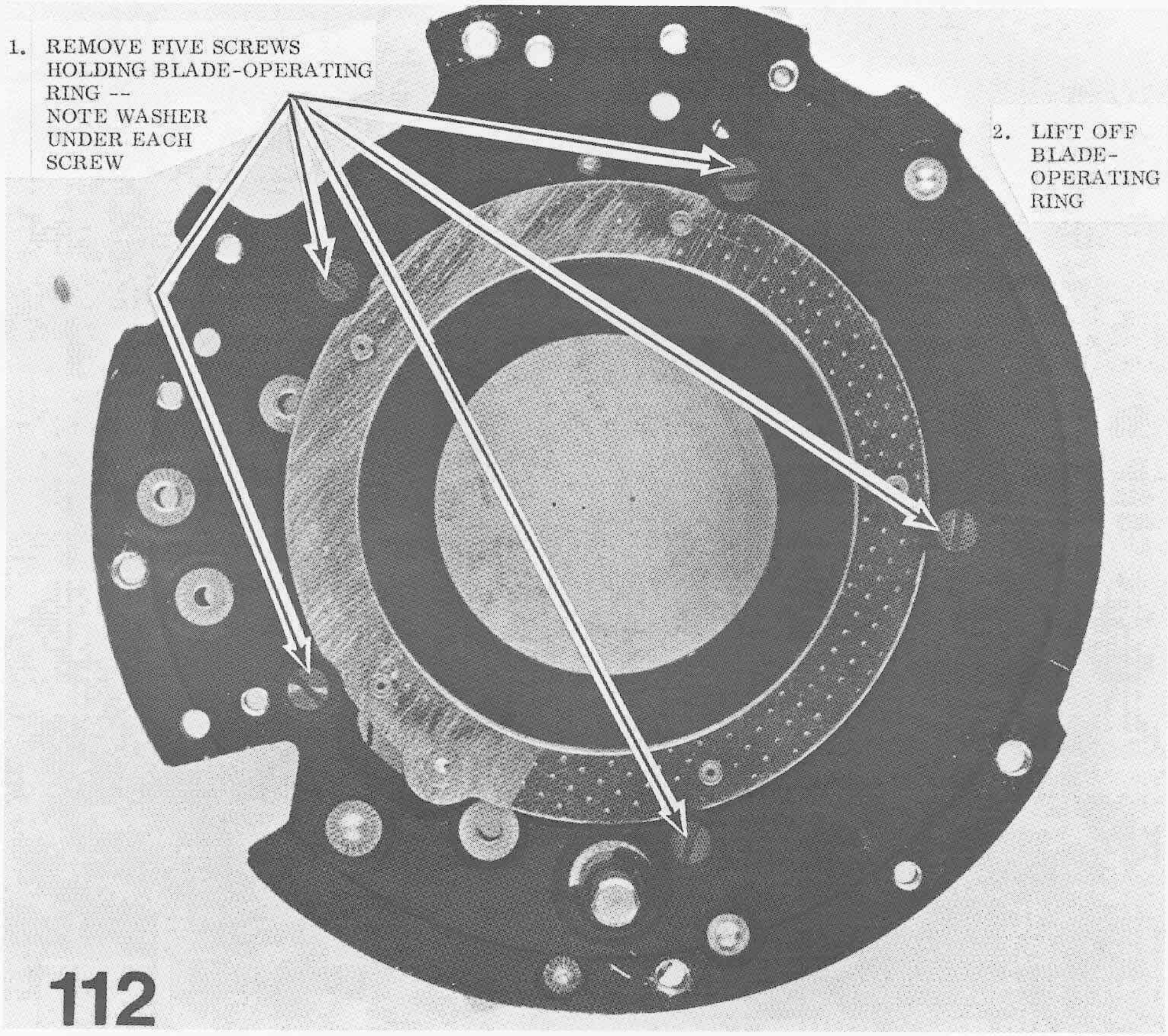
BLADES ARE ASSEMBLED IN COUNTERCLOCKWISE ROTATION

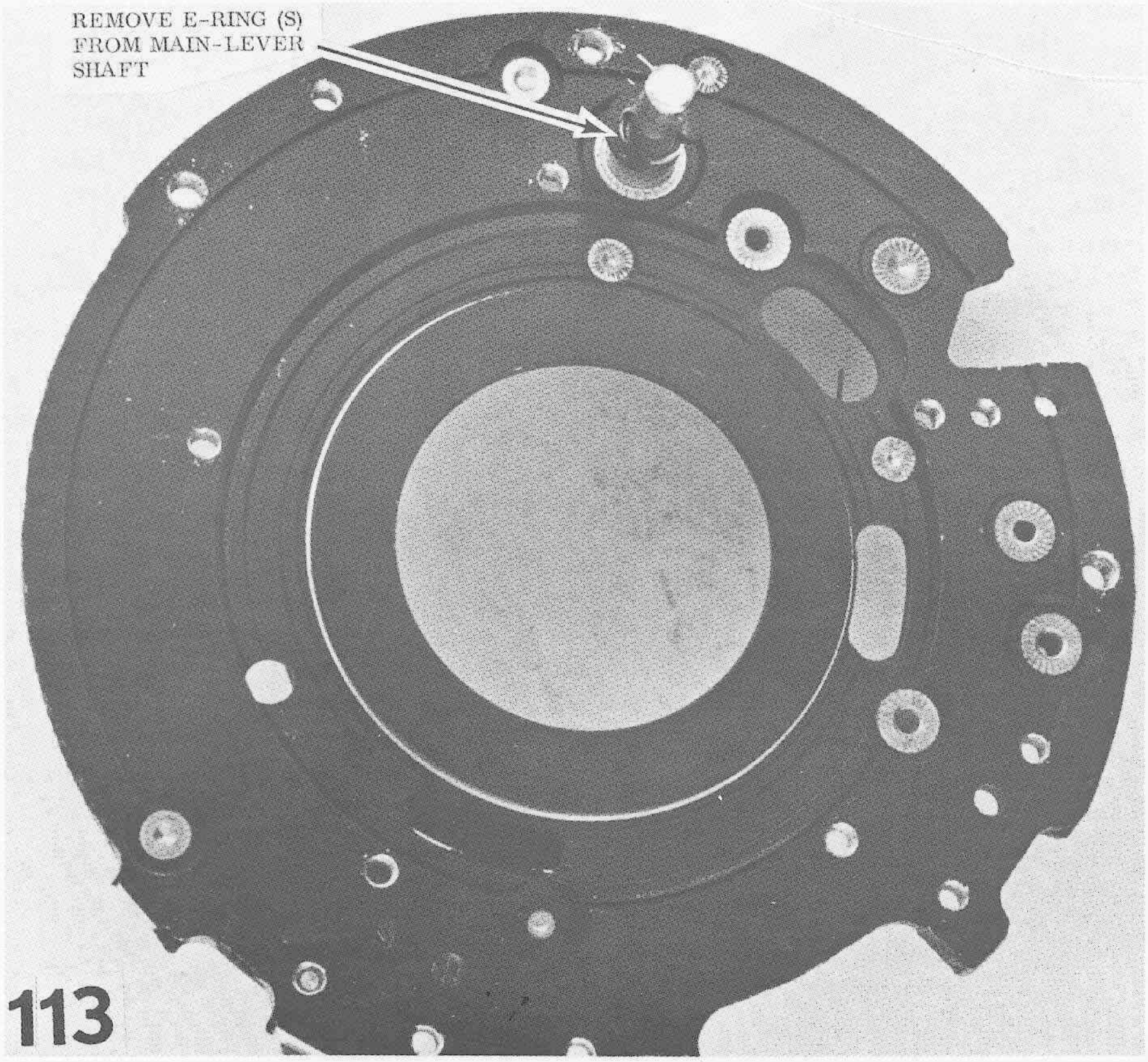
OTHER FOUR BLADE
SPACERS SIT
UNDERNEATH
SHUTTER BLADES

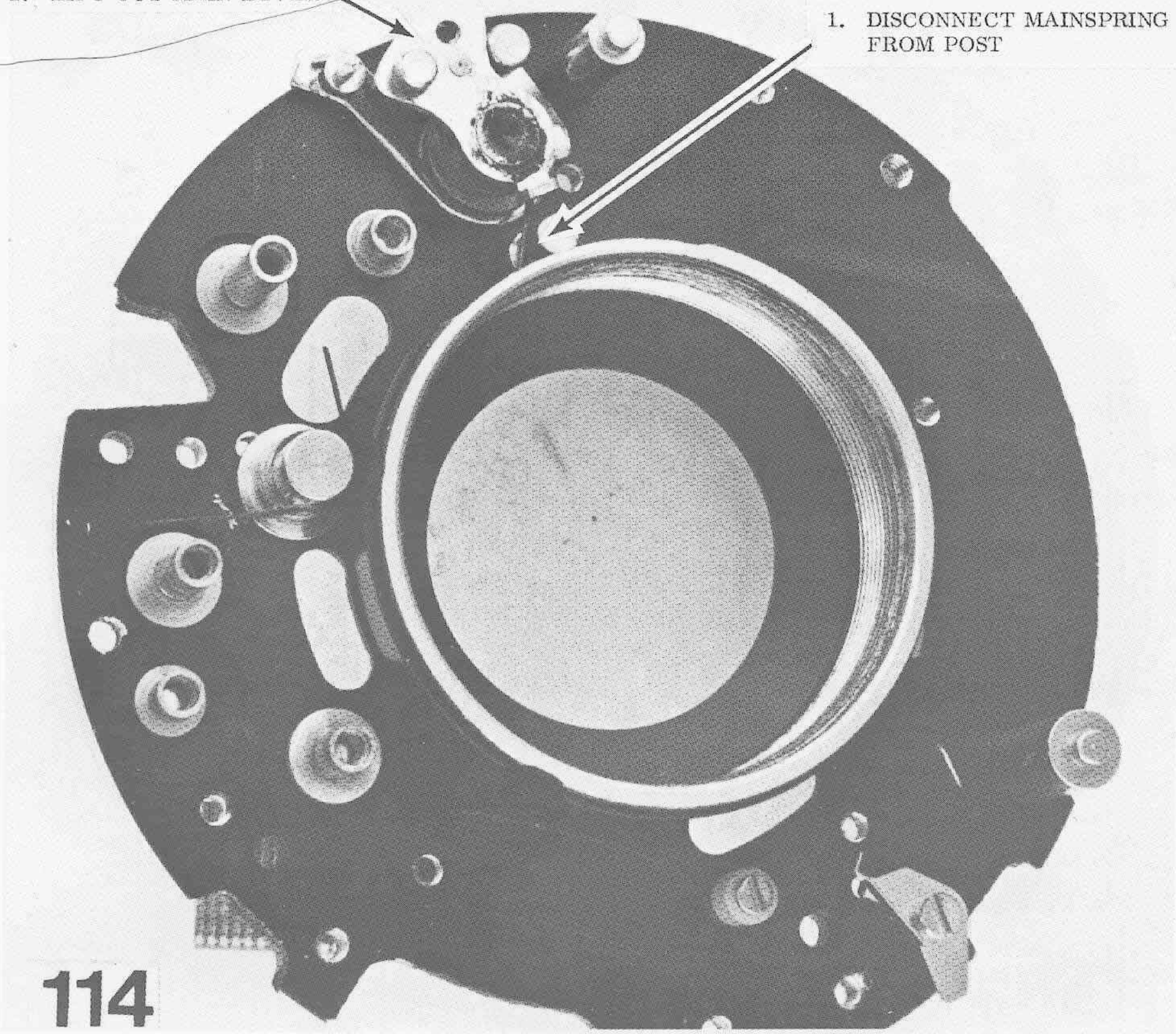


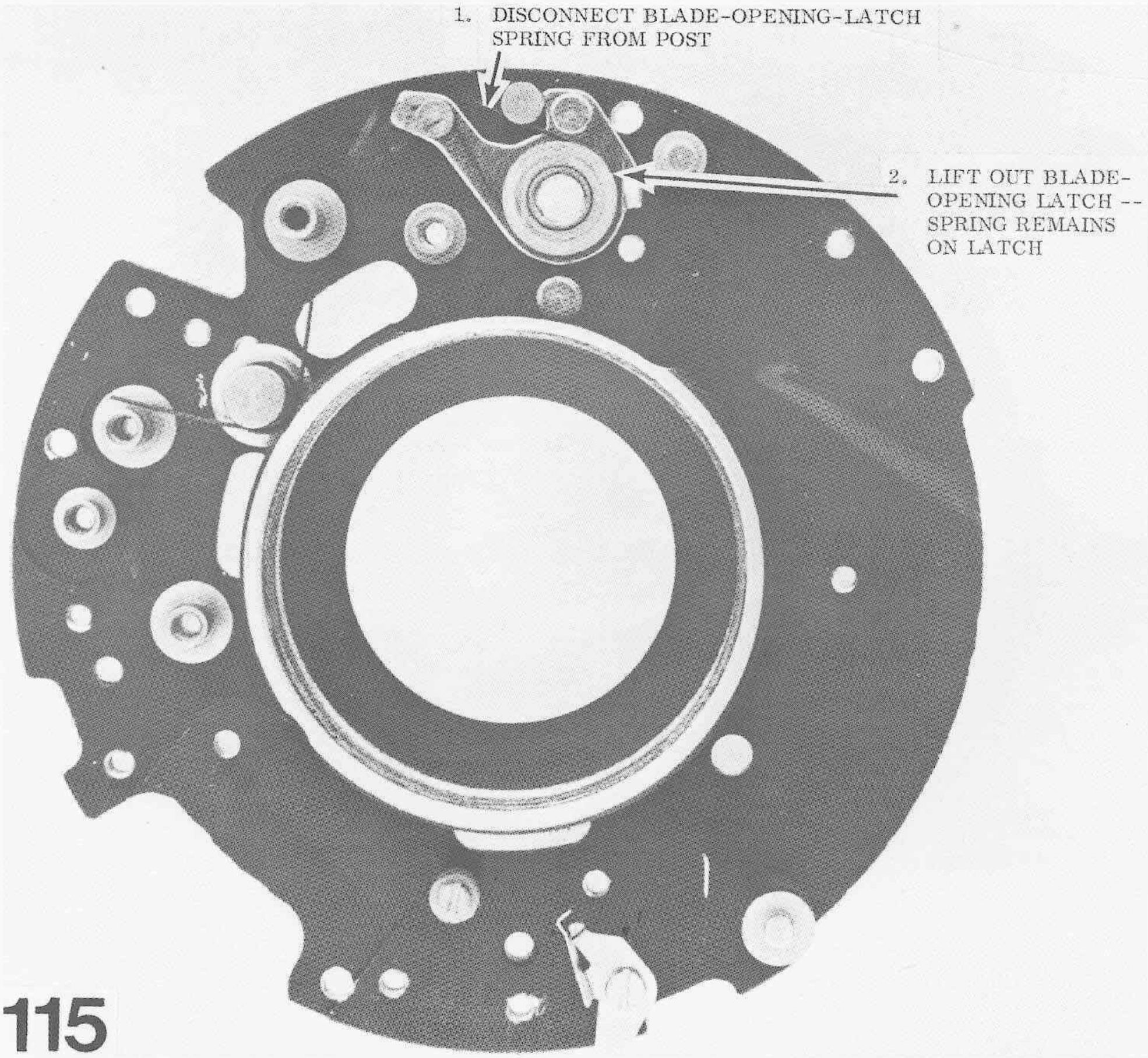
LIFT OFF BLADE
SPACERS

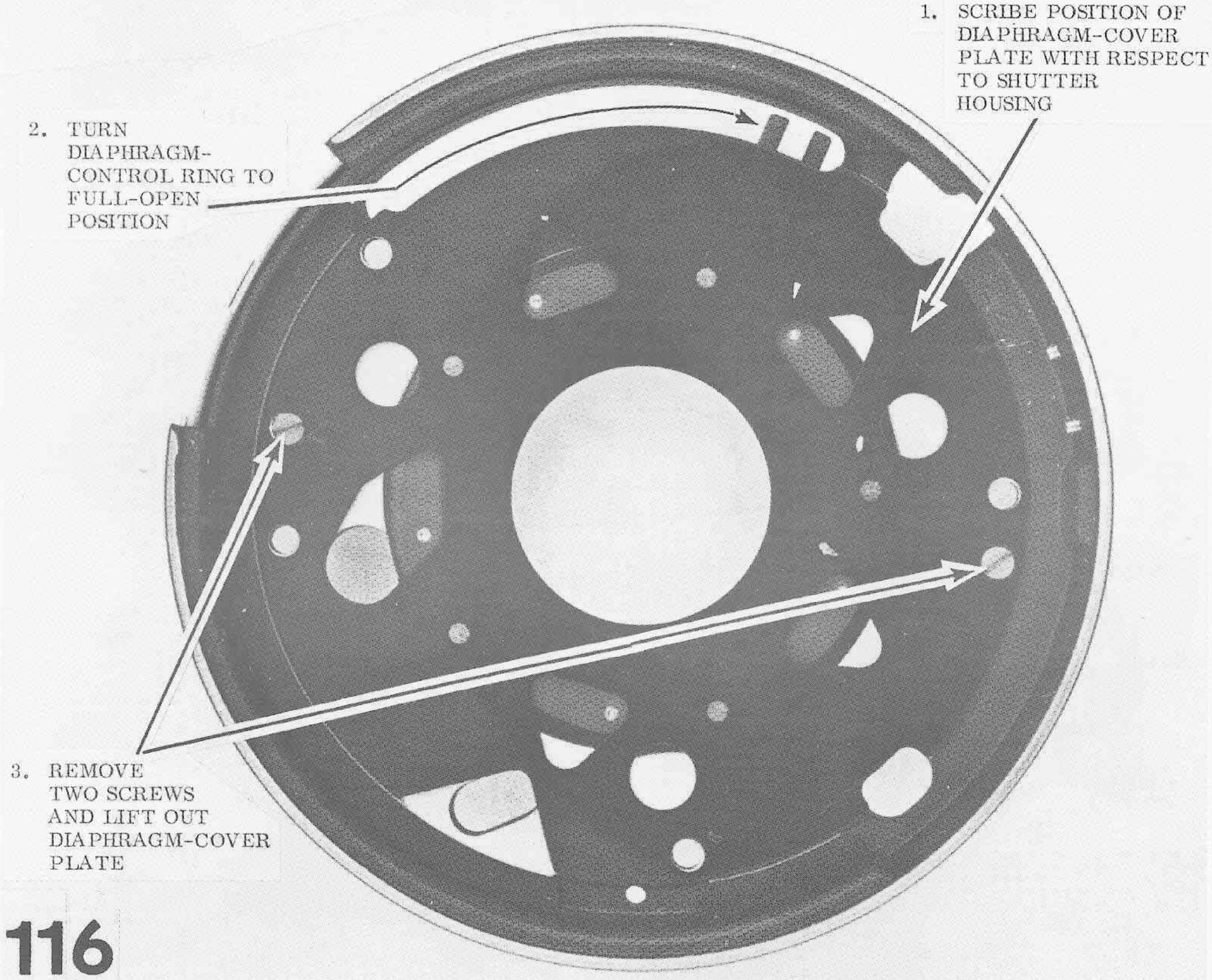
111

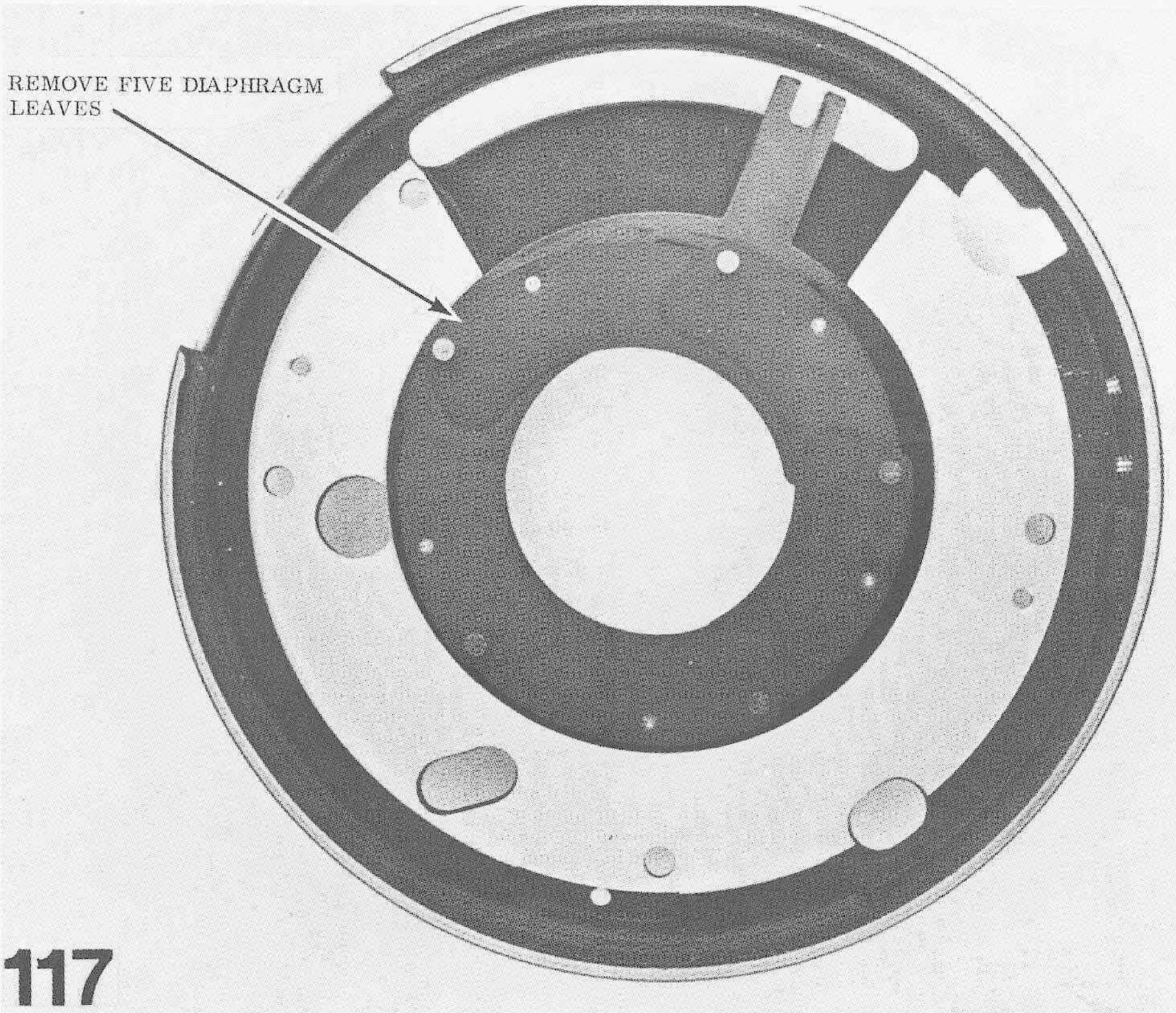

1. REMOVE FIVE SCREWS HOLDING BLADE-OPERATING RING -- NOTE WASHER UNDER EACH SCREW
2. LIFT OFF BLADE-OPERATING RING

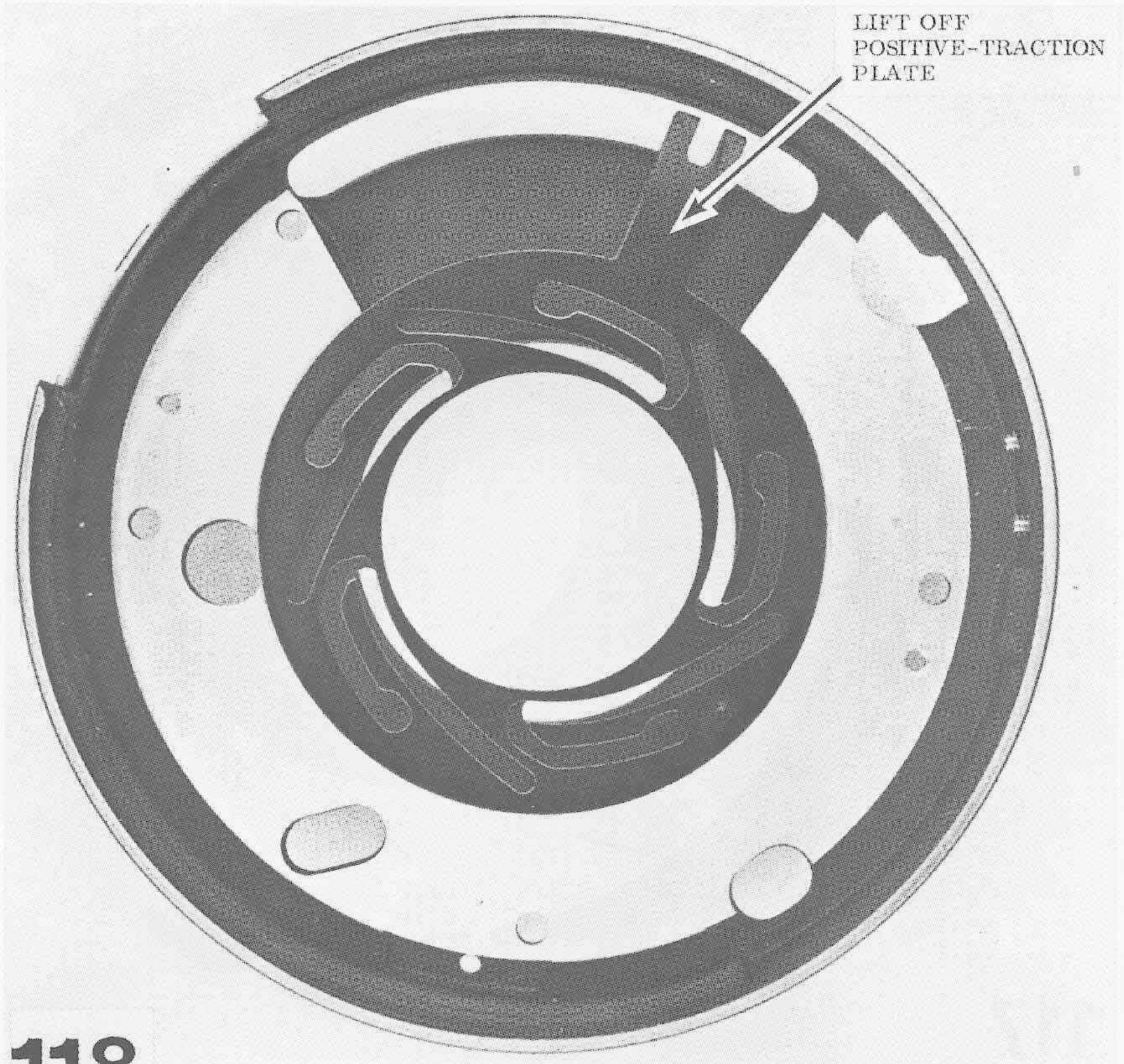

REMOVE E-RING (S)
FROM MAIN-LEVER
SHAFT


2. LIFT OUT MAIN LEVER
1. DISCONNECT MAINSPRING FROM POST

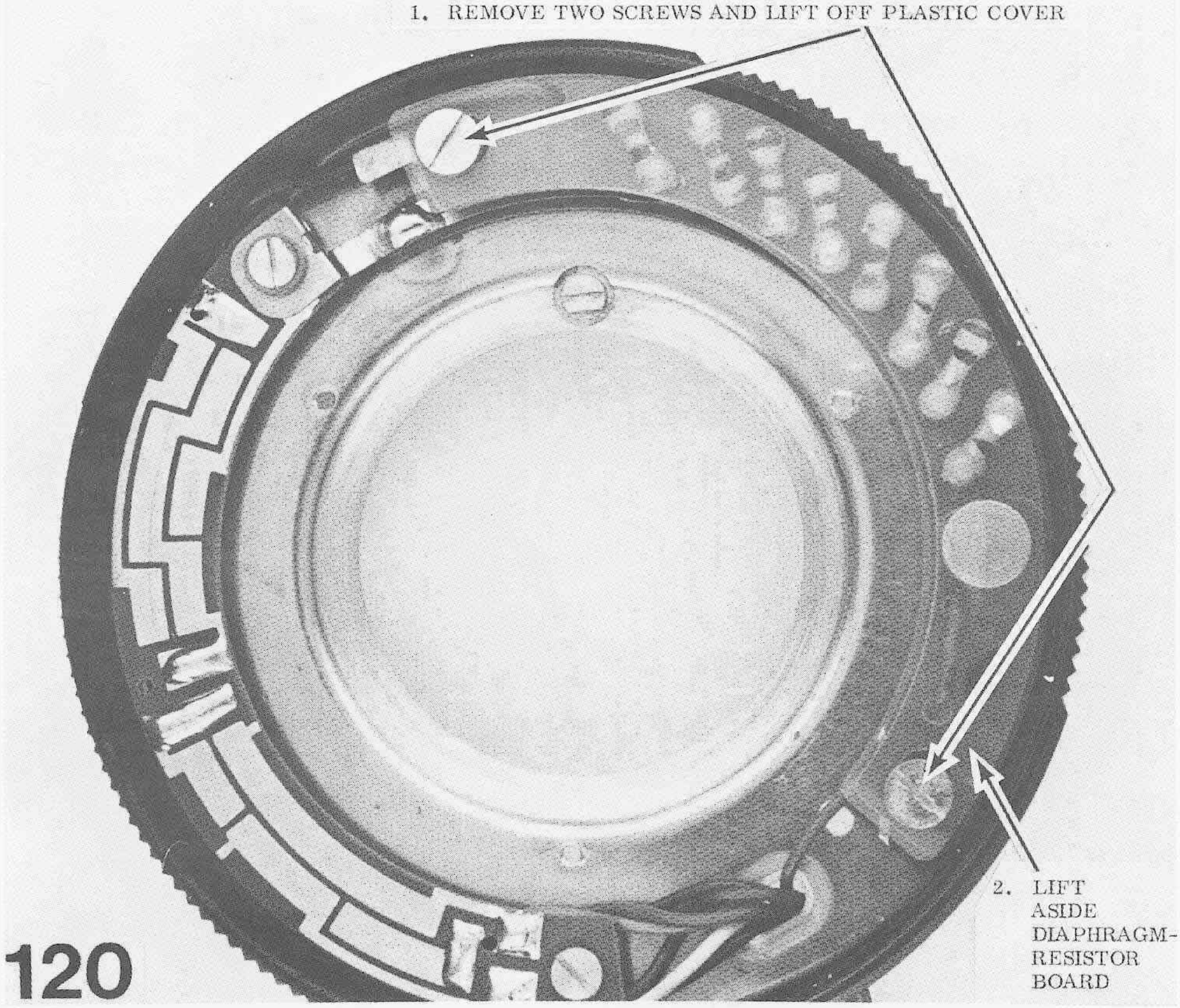

1. DISCONNECT BLADE-OPENING-LATCH SPRING FROM POST
2. LIFT OUT BLADE-OPENING LATCH -- SPRING REMAINS ON LATCH

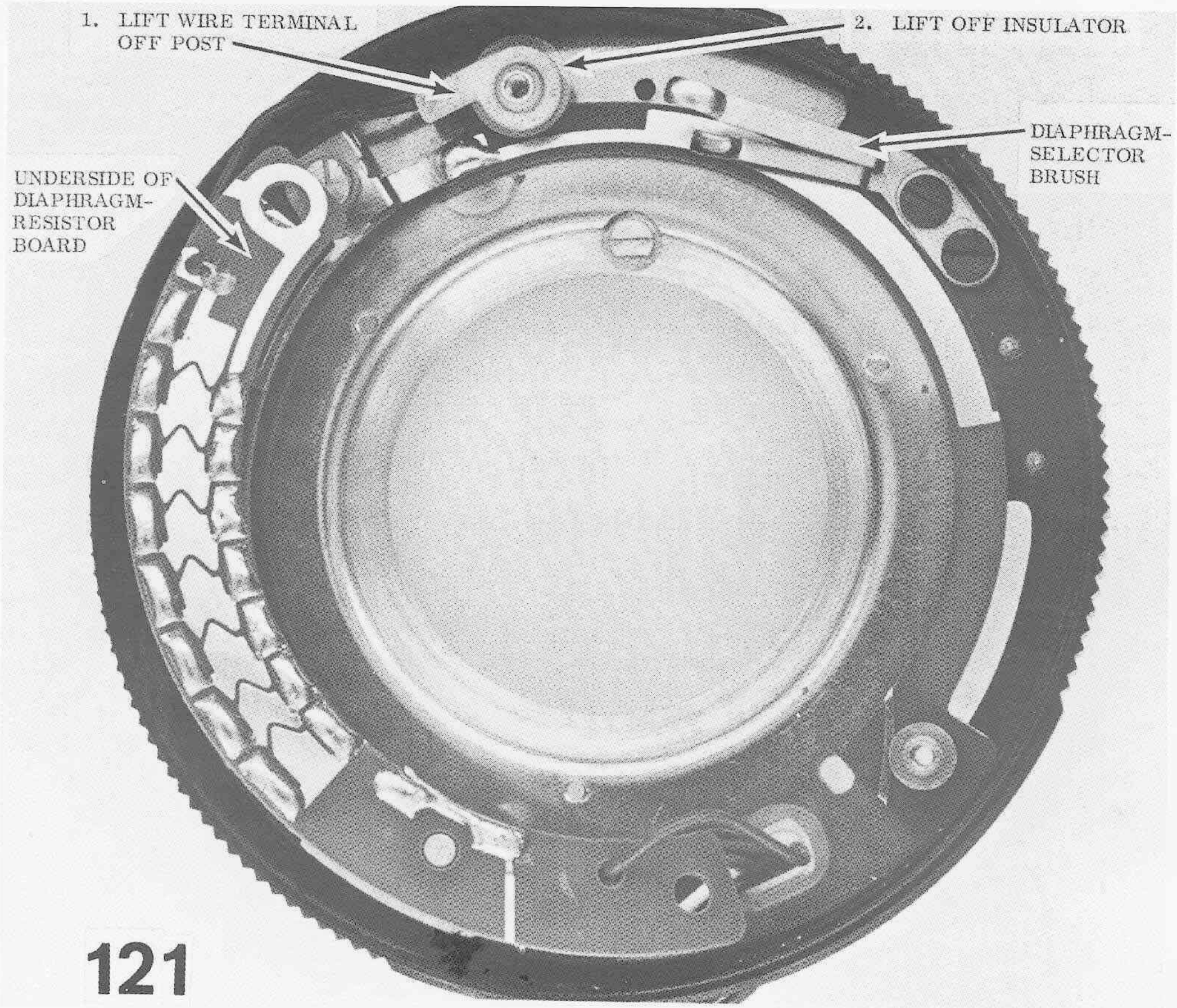

1. SCRIBE POSITION OF DIAPHRAGM-COVER PLATE WITH RESPECT TO SHUTTER HOUSING
2. TURN DIAPHRAGM-CONTROL RING TO FULL-OPEN POSITION
3. REMOVE TWO SCREWS AND LIFT OUT DIAPHRAGM-COVER PLATE

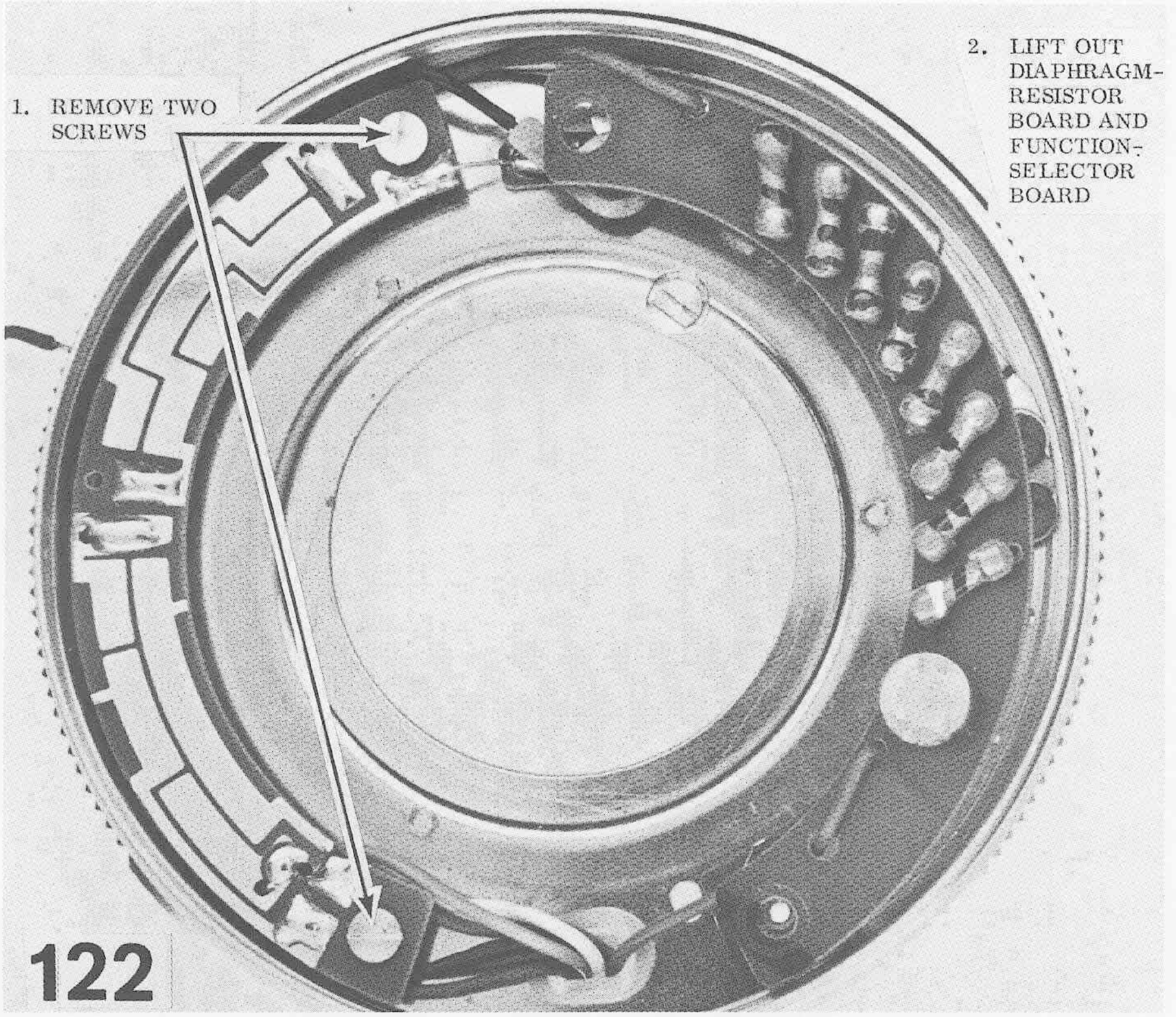

REMOVE FIVE DIAPHRAGM
LEAVES

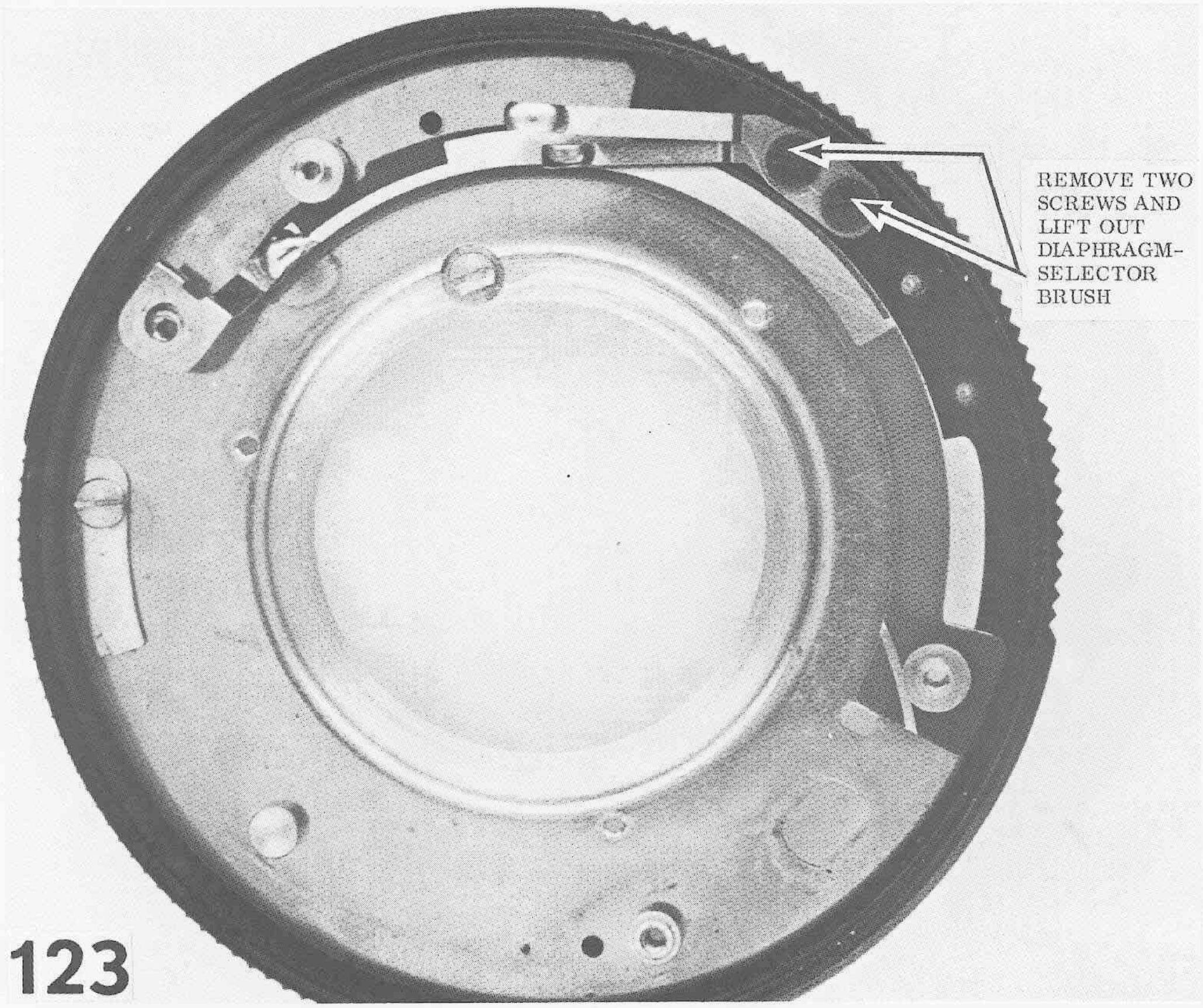

LIFT OFF
POSITIVE-TRACTION
PLATE

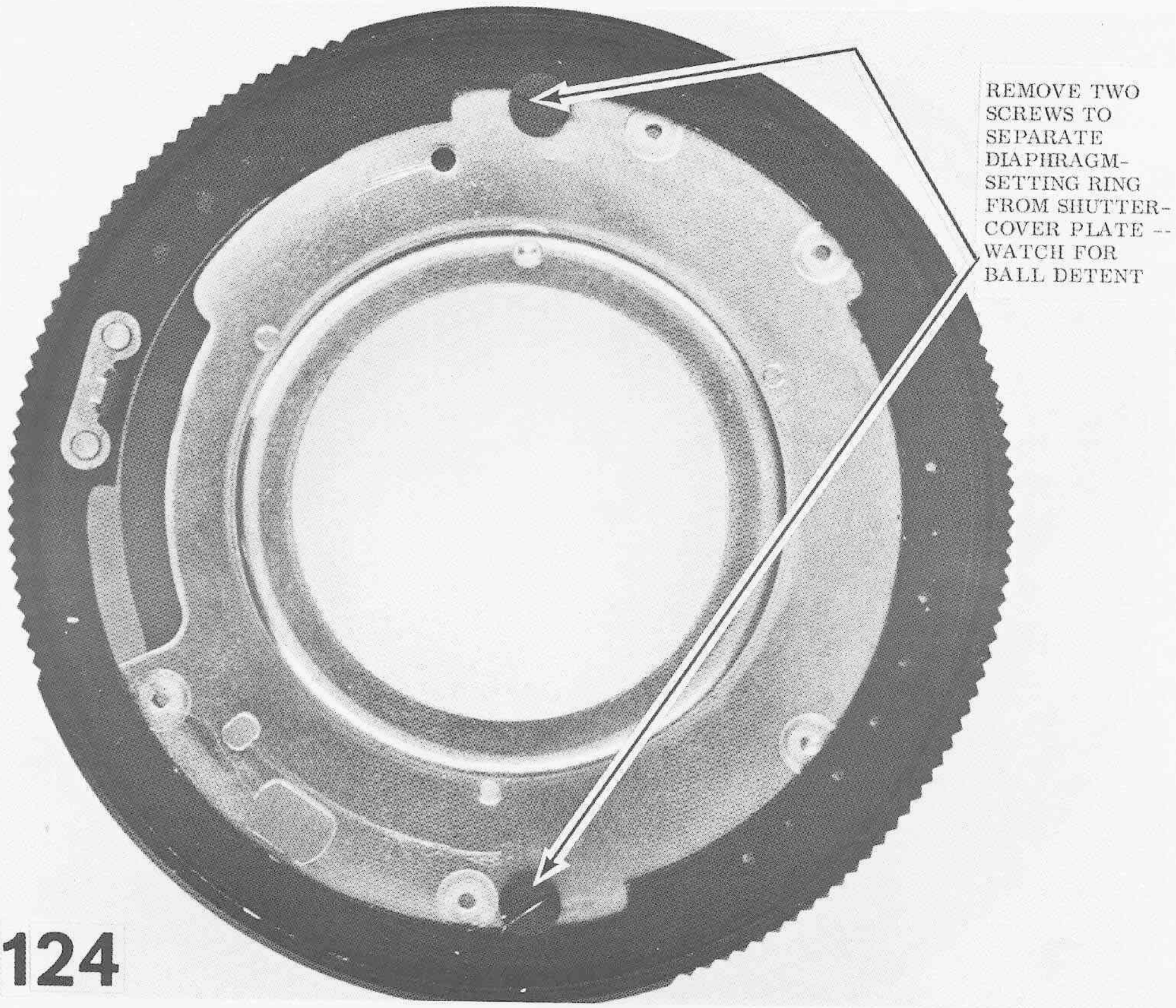

LIFT OUT
DIAPHRAGM-CONTROL
RING


1. REMOVE TWO SCREWS AND LIFT OFF PLASTIC COVER
2. LIFT ASIDE DIAPHRAGM-RESISTOR BOARD


1. LIFT WIRE TERMINAL OFF POST
2. LIFT OFF INSULATOR
DIAPHRAGM-SELECTOR BRUSH
UNDERSIDE OF DIAPHRAGM-RESISTOR BOARD


1. REMOVE TWO SCREWS
2. LIFT OUT DIAPHRAGM-RESISTOR BOARD AND FUNCTION-SELECTOR BOARD


REMOVE TWO
SCREWS AND
LIFT OUT
DIAPHRAGM-
SELECTOR
BRUSH


REMOVE TWO SCREWS TO SEPARATE DIAPHRAGM-SETTING RING FROM SHUTTER-COVER PLATE -- WATCH FOR BALL DETENT