Film-Tech

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These manuals are designed to facilitate the exchange of information related to cinema projection and film handling, with no warranties nor obligations from the authors, for qualified field service engineers.

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www.film-tech.com

INSTRUCTIONS

for

AMPRO STYLIST

16mm SOUND PROJECTOR

AMPRO

2835 NORTH WESTERN AVENUE

CHICAGO 18, ILLINOIS

NEW YORK SALES AND SERVICE

92 GOLD STREET, NEW YORK 38, N. Y.

1st EDITION

Correspondence relative to service or parts should be addressed, Attention: Service Division, 240 E. Ontario St., Chicago 11, Ill., or New York Office, 92 Gold Street, New York 38, New York.

AMPRO GUARANTEE

Upon receipt of the registration card for this projector, and providing same has been returned within 10 days from date of purchase, the Ampro Corporation guarantees this projector as follows:

1. The Ampro Corporation hereby guarantees that the Ampro Projector above indicated is mechanically perfect and with proper care, cleaning and lubrication, will perform complete and satisfactory service.

2. Service will be provided without charge for any imperfection in material or workmanship, PROVIDED that the equipment is returned PREPAID to our Chicago factory.

3. We cannot guarantee free servicing for Ampro equipment which has been abused or damaged in accident; neither can we provide free replacement of parts worn from constant use.

4. Tubes and lamps are guaranteed by their manufacturers, and in this regard the Ampro Corporation will assist you at all times in securing proper credit.

5. This guarantee is not valid if any device or accessory other than those manufactured or approved by us is attached to our equipment which tends to interfere with its normal construction and operation.

6. Since there are so many variable factors regarding film damage this guarantee does not obligate Ampro either to replace damaged film or to reimburse users for any expense in this regard.

7. The Ampro Corporation will not be responsible for service rendered by unauthorized service organizations.

FREE INSPECTION AND CLEANING

8. FOR THREE YEARS after date of original purchase your Ampro projector will be cleaned, lubricated and carefully inspected FREE OF CHARGE ONCE EACH YEAR PROVIDED that it is returned PREPAID to our Chicago service department or to the New York Office. After three years, this service may be secured at a nominal charge.

9. It is important in shipping your projector to the Ampro Corporation to facilitate handling that we be advised as to SERIAL NUMBER and HOW SHIPMENT WAS MADE.

AMPRO
CORPORATION

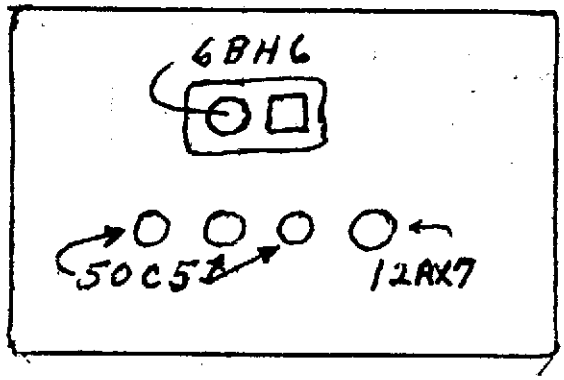
FOREWORD

The manufacturer makes the following recommendations for the owner's protection and convenience.

1 FILL OUT AND RETURN THE REGISTRATION CARD—In the event that your projector is lost or stolen, the information contained on this card will enable the manufacturer to help you in identifying and recovering the projector.

2 IF IT IS NECESSARY FOR YOU TO CONTACT THE MANUFACTURER OR HIS REPRESENTATIVE RELATIVE TO THIS PROJECTOR, ALWAYS MENTION THE MODEL AND SERIAL NUMBER.

BULB DDB 750 W
115 - 120 V



AMPRO COMPACT
TUBE CHART

COMPACT

AMPRO STYLIST

16mm. 1 Case Sound Projector, Weighing less than 29 lbs.
Complete with case, 8" Speaker, Cords and Accessories.

Instructions for Setting Up, Operating and Maintaining the Ampro Stylist Projector

SPECIFICATIONS

1. **POWER REQUIREMENTS**—105 to 125 volts alternating or direct current. Power consumption 1000 watts with 750 watt lamp, 1250 watts with 1000 watt lamp.

2. **PROJECTION LAMP**—A 750 watt 25 hour lamp with medium prefocused base is standard equipment—1000 watt lamp may be used if desired.

3. **EXCITER LAMP**—4 volt, ¾ Ampere (Part No. 18460).

4. **PHOTOCELL**—CE 25C (Part No. 17572).

5. **AMPLIFIER TUBES**—1 type 6BH6 (Part No. 18495), 1 type 12AX7 (Part No. 18497), 3 type 50C5 (Part No. 18498).

6. **AMPLIFIER FUSE**—1½ Amp. (Part No. 18351, box of 5).

7. **FILM CAPACITY**—2000 feet (400 ft. reel supplied as standard equipment.)

SETTING UP

1. Place the projector on a projector stand (Ampro No. 19496), desk, or table near the end of the room opposite the screen location. The end of the case on which the two catches are located should be pointed toward the screen.

2. Open the three catches which hold the top of the case in place and lift off the top of the case.

3. Uncoil the line cord (1 Fig. 1). Pull outward on the reel arm lock pin (2) and swing the takeup reel arm (3) downward into position. If reels having a capacity of less than 800 ft. are to be used, position the arm so that the lock pin engages the upper hole in the arm. (See Fig. 1.) If reels having a capacity of 800 ft. or more are to be used, position the arm so that the pin engages the lower hole in the arm. **Also move the projector to the front of the stand or table so that the larger reels will clear the edge.** Move the belt shifter (4) to the forward position as indicated.

4. Remove the 400 ft. reel and speaker cable (5 Fig. 1) from the clips which hold it in place inside the top portion of the case.

5. Swing the feed reel arm (6 Fig. 1) to the forward position. Make sure that the rewind belt (7) is in the groove of the spindle pulley.

6. Connect the line cord plug (8 Fig. 1) to the nearest outlet supplying 105-125 volts AC or DC current and turn on the "VOLUME CONTROL" (9 Fig. 1).

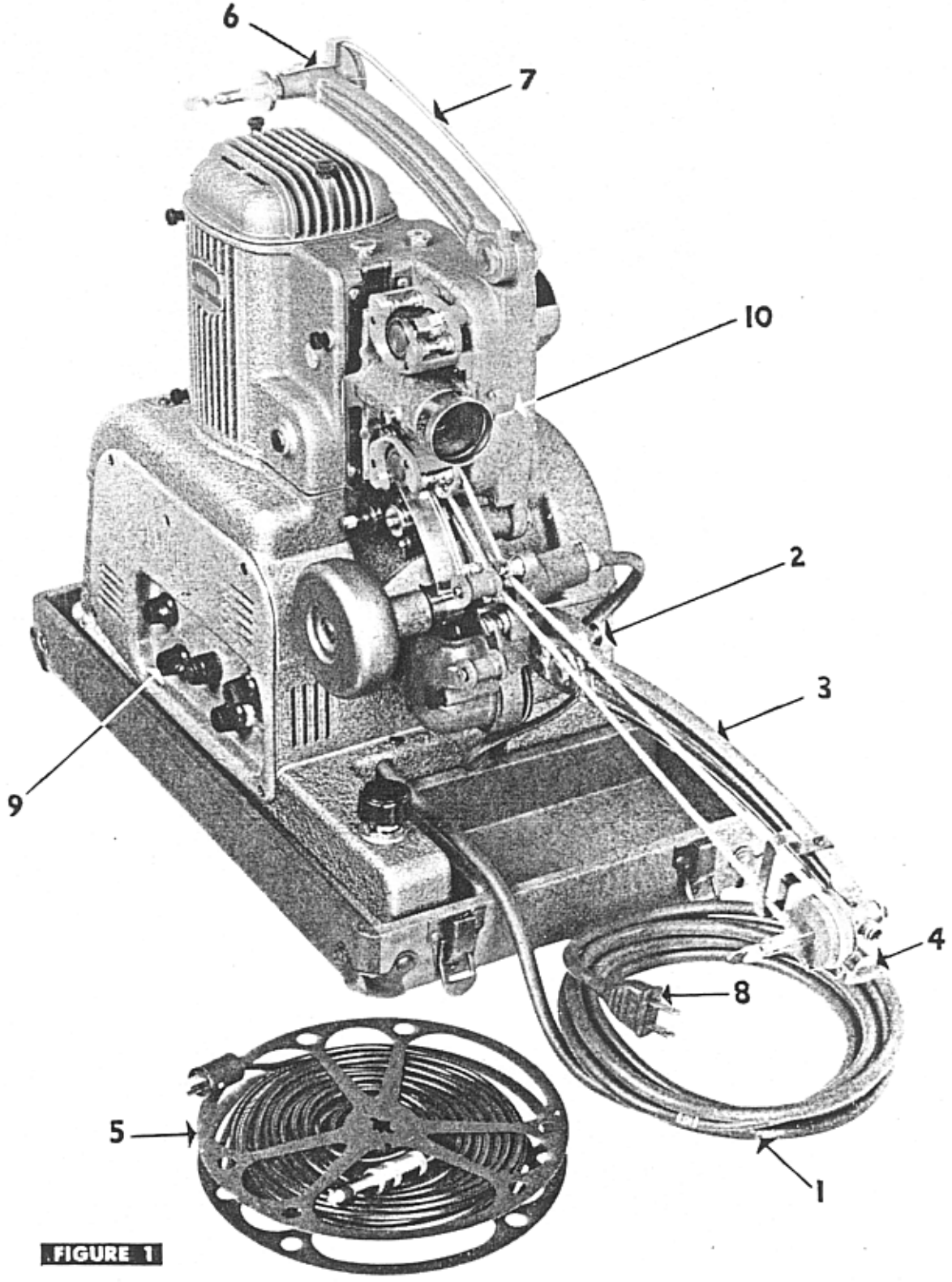


FIGURE 1

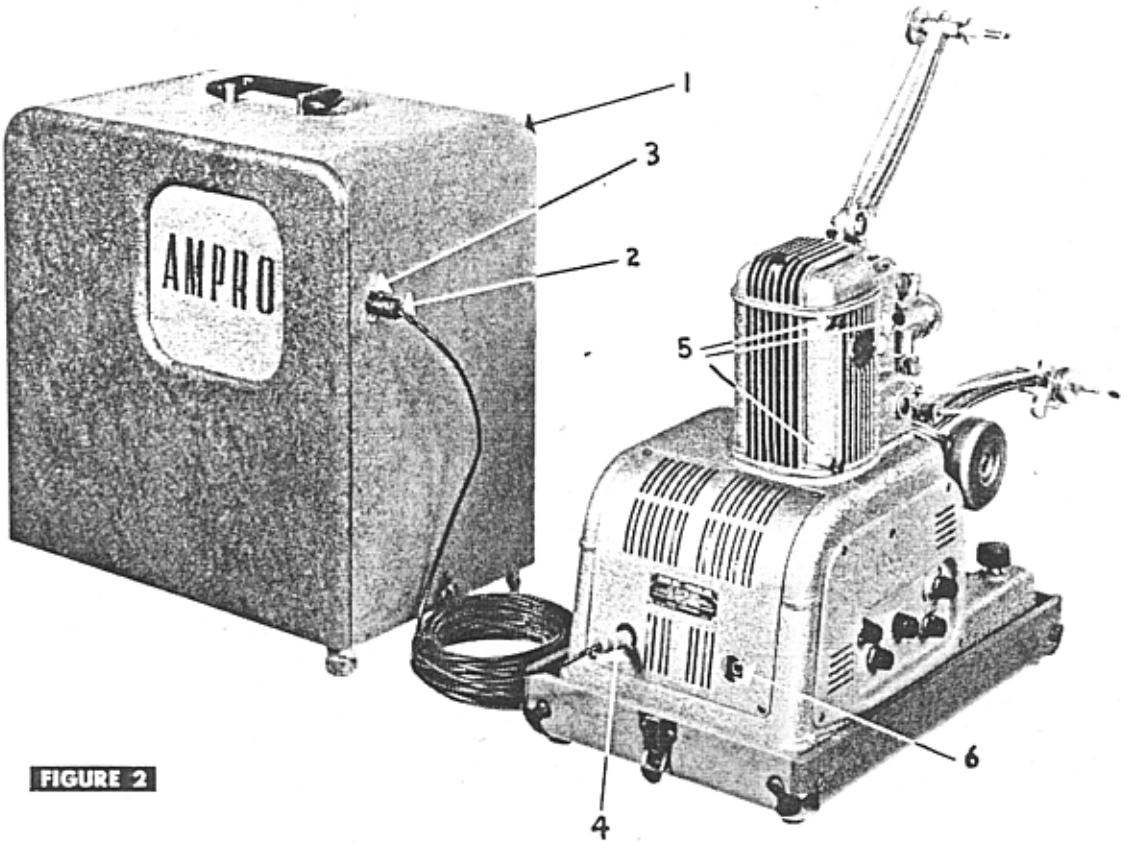


FIGURE 2

If the Exciter Lamp does not light within one minute, when operating on direct current, remove the cord plug, rotate at 180 degrees and reinsert it in the outlet. This will reverse the polarity and correct the condition.

7. Place the speaker enclosure (top portion of the case) (1 Fig. 2) at a point near the screen.

NOTE: Generally, better sound will be obtained if the speaker is placed on a chair or some other object which will raise it at least 18 in. above the floor. Insert the two-prong plug (2 Fig. 2) in the receptacle (3 Fig. 2) in the side of the speaker enclosure. Insert a pencil or small round rod in the hole in the center of the 400 ft. reel then back away from the speaker, thereby unwinding the speaker cable. It is advisable to pull the cable off of the reel with one hand rather than risk pulling out the speaker plug. Insert the phone plug (4 Fig. 2) in the "SPEAKER JACK" as indicated in Fig. 2.

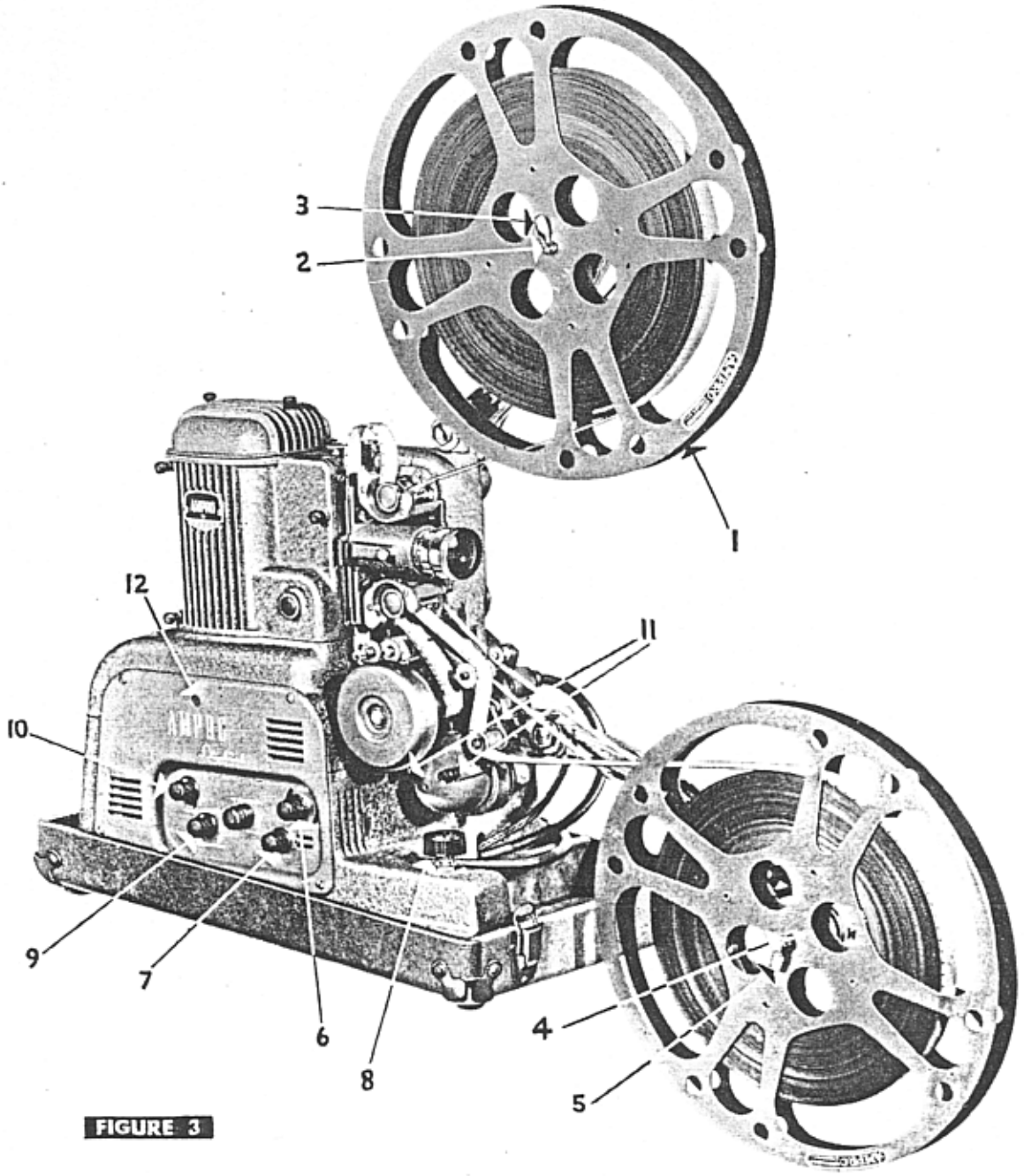


FIGURE 3

THREADING

1. Place the reel of film which is to be projected (1 Fig. 3) on the feed spindle (2 Fig. 3) and fold over the reel lock finger (3 Fig. 3).
2. Place an empty reel of suitable capacity on the takeup spindle (4 Fig. 3) and fold over the reel lock finger (5 Fig. 3).

NOTE: If the film is properly wound for projection, the sprocket holes will be toward the operator, the film will feed off the side of the reel nearest the screen and if an individual frame is inspected, the image will be upside down and titles will read from right to left.

3. Unwind about 3½ ft. of film.
4. Lift up on the gate lever (10 Fig. 1).
5. Place the film under the "Feed Sprocket" (1 Fig. 4) and pull up on the loose end in order to be sure that the sprocket holes engage the sprocket teeth.
6. Thread the film through the film gate (2 Fig. 4) leaving a loop at the top large enough for the insertion of two fingers.
7. Push the "Sound Loop Synchronizer" (3 Fig. 4) to the rear position and thread the film up over the "Tension Roller." (4 Fig. 4).
8. Thread the film around the lower guideway (5 Fig. 4) then around the "Sound Drum" and up over the upper guideway to the "Takeup Sprocket" (6 Fig. 4).

NOTE: BE SURE TO PLACE THE FILM ON THE POLISHED SURFACE OF THE LOWER GUIDEWAY. DO NOT ATTEMPT TO THREAD THE FILM BETWEEN THE LOWER GUIDEWAY AND THE SOUND DRUM.

9. Place the film over the "Takeup Sprocket" and pull on the loose end in order to be sure that the sprocket holes have engaged the sprocket teeth.
10. Place the film on top of the "Film Guide Roller" (7 Fig. 4) and under the "Tension Equalizer Roller" (8 Fig. 4).
11. Place the loose end of the film in a slot in the reel hub and turn the takeup reel in a clockwise direction in order to wind up any slack in the film.
12. Make sure that the film lies in the recessed portion of the film gate, then push down on the gate lever (10 Fig. 1) thereby closing the film gate and the sprocket shoes.
13. Swing the "Sound Loop Synchronizer" (3 Fig. 4) to the forward position.
14. Rotate the Manual Adjusting Knob (1 Fig. 5) so that the top surface of the knob is turned toward the screen and make sure that the upper and lower loops are maintained. (If not, re-check threading.)

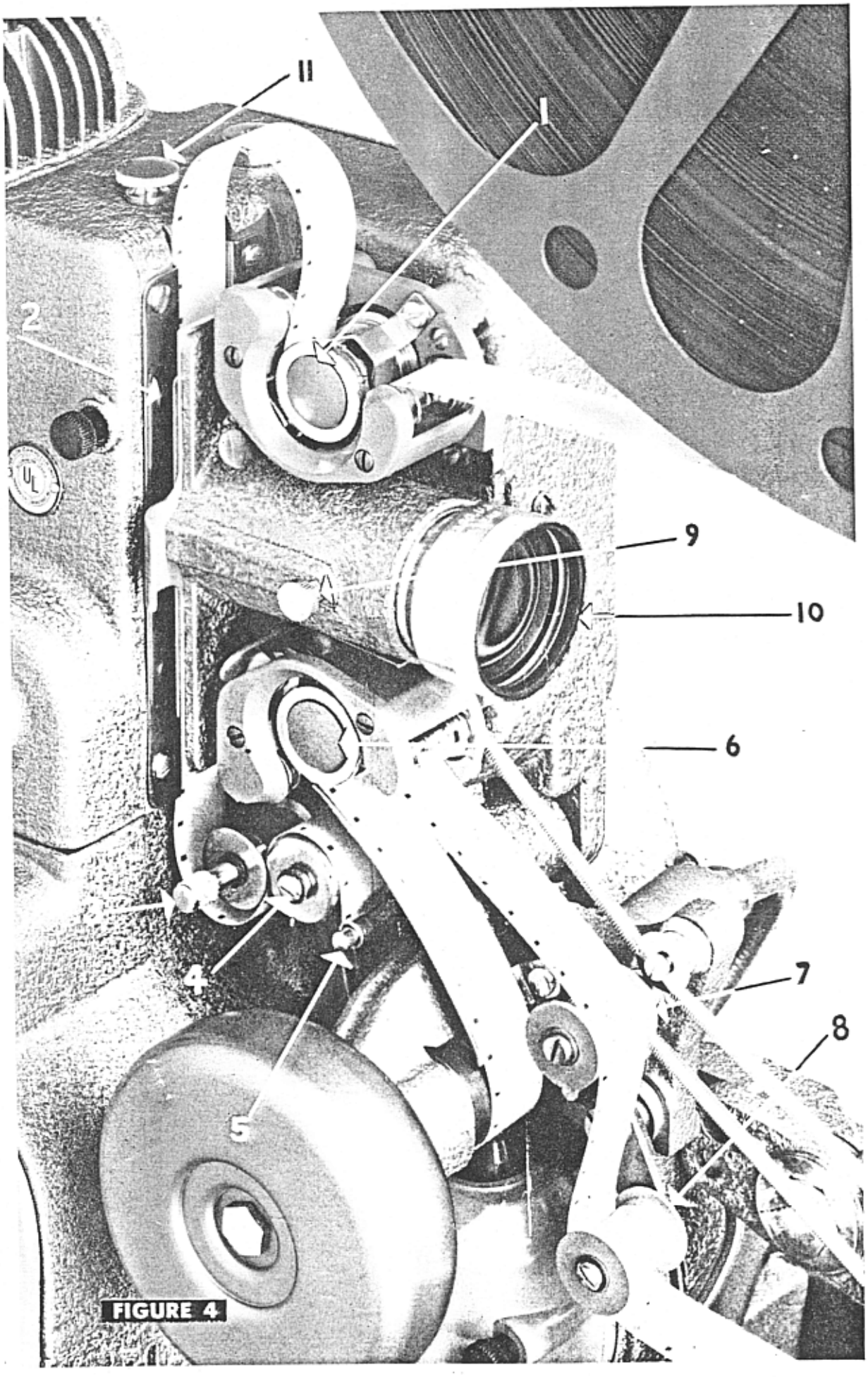


FIGURE 4

PROJECTING THE PICTURE

1. Turn the speed control knob (6 Fig. 3) as far as it will go in the direction marked "Sound."
2. Turn the motor control knob (7 Fig. 3) to the position marked "Motor." If the film feeds through the projector properly turn the knob to the position marked "Lamp," if not, turn the knob back to the "Off" position and re-check the threading.

WARNING

If the motor does not start do not turn the Control Knob to the "Lamp" position until the cause of the trouble has been ascertained and corrected. Failure to comply with this instruction will result in extremely short Lamp life.

3. Loosen the lens lock screw (9 Fig. 4) and rotate the lens (10 Fig. 4) in order to focus the picture on the screen. After the picture has been properly focused, tighten the lock screw.
4. If parts of two pictures or a horizontal line appears on the screen rotate the framer knob (11 Fig. 4) in order to correct the condition.
5. If the picture is too high or too low, rotate the tilt knob (8 Fig. 3) to position it on the screen.
   Note: If the picture is larger than the screen, decrease the distance between projector and screen. If the picture is smaller than the screen, increase the distance between the projector and screen.
6. If silent film is being projected, turn the speed control knob (6 Fig. 3) toward the "Silent" position until proper rate of screen action is obtained.

WARNING

When projecting silent films do not advance the volume control unless a microphone or phonograph is plugged into the "Phono-Mic" jack (6 Fig. 2) because the buzzing noise produced by the sprocket holes will be very annoying and might injure the speaker.

7. If sound film is being projected turn the Volume Control (9 Fig. 3) clockwise until the proper volume level is established, then adjust the "Tone Control" (10 Fig. 3) to obtain satisfactory reproduction of sound.
8. When "The End" trailer appears on the screen turn the motor control switch (7 Fig. 3) to the "Motor" position and turn down the volume. When all of the film has passed through the projector turn the control switch to the "Off" position.

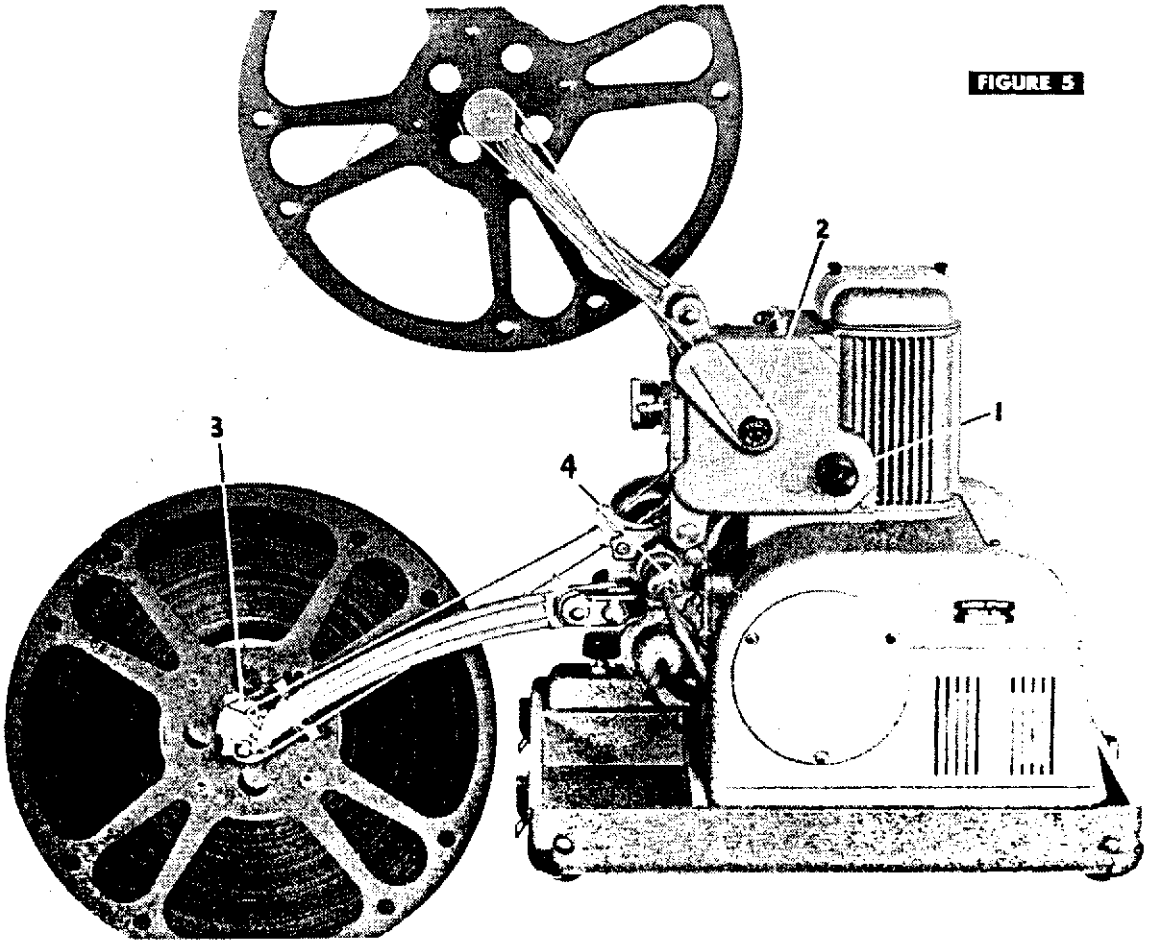


FIGURE 5

REWINDING FILM

(See Fig. 5)

1. Thread the film from the lower reel to the upper reel as indicated. Insert the loose end of the film in a slot in the upper reel and turn the reel clockwise (as viewed in Fig. 5) two or three turns to wind up the slack in the film.

2. Turn the control switch (7 Fig. 3) to the "Motor" position.

3. Push in the rewind clutch (2) and after approximately 150 ft. of film have been rewound, move the belt shifter (3) to the maximum clockwise position as indicated in Fig. 5.

4. Turn off switch just as the last of film leaves the take-up reel so as to permit the rewind clutch to restore to normal position. This will reduce the momentum of the upper reel and will prevent the film end from flapping.

5. Rotate the belt shifter (3) to its maximum counter clockwise position.

STORAGE

1. If projector is to be used again in the same location within a few hours all that is necessary is to turn off all switches, disconnect the line cord, and fold back the reel arms. It is advisable to roll up the line cord and speaker cable to prevent anyone from tripping over them.
2. If the projector is to be moved or put away disconnect the line cord, fold back the upper and lower reel arms, remove the phone plug from the speaker jack and wind the speaker cable on the reel (5 Fig. 1) as indicated.
3. Place the reel of speaker cable on the screw post inside the speaker enclosure. Place the speaker enclosure over the projector, making sure that the catches are properly aligned and close the catches.
4. Store the projector in a dry place and if the location is dusty either use a case slip cover or wrap the case in tightly woven cloth or canvas to keep the dust from filtering into the unit.

MAINTENANCE

1. CLEANING

a. Before each show, lift the gate lever (10 Fig. 1) in order to open the gate, then pull out the pressure shoe carrier (1 Fig. 6). Clean the pressure shoe and aperture plate, using either the cleaning brush or a soft cloth.

b. Wipe the upper and lower guideways with a soft cloth.

c. Loosen the lens lock screw (9 Fig. 4) and remove the lens (10 Fig. 4). Clean the lens elements with lens tissue. If the elements cannot be cleaned by breathing on them and wiping them with tissue, then dampen the tissue with lens cleaner.

WARNING: DO NOT POUR LENS CLEANER OR OTHER SOLVENTS ON THE LENS ELEMENTS. SOME LIQUIDS MAY CAUSE SEPARATION OF THE LENS ELEMENTS.

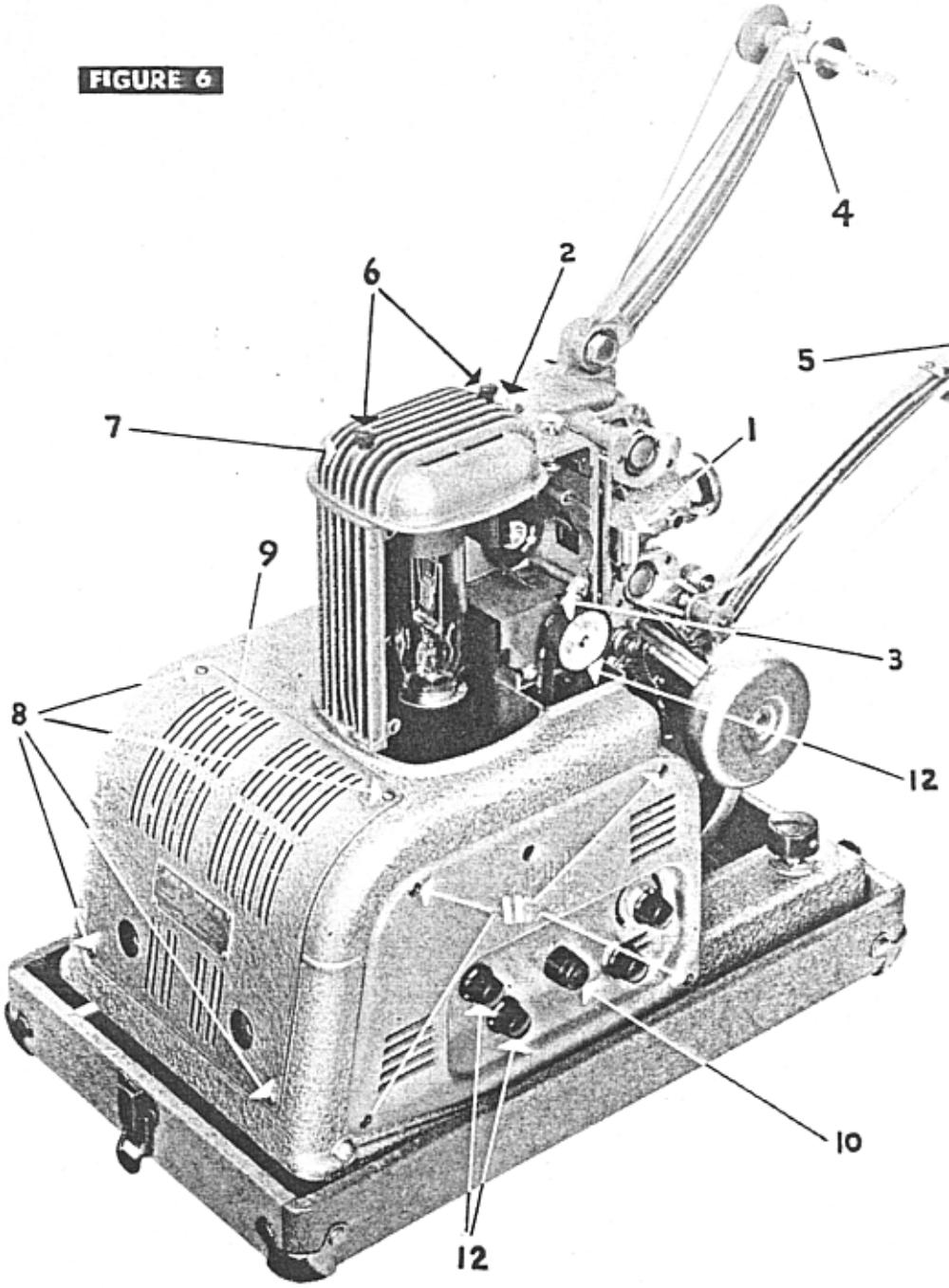
d. Wipe the guide rollers and tension rollers with a soft cloth.

e. Wipe off any dirt on the projector mechanism and periodically clean the case.

2. LUBRICATION

a. After each 25 hours of operation apply 2 or 3 drops of Amproil to the central oil well (2 Fig. 6). Remove the three cover screws (5 Fig. 2) and pull off the front cover assembly. Apply 2 or 3 drops of Amproil to the vertical cam shaft bearing oilhole (3 Fig. 6). Before replacing the front cover clean the condensing lenses and reflector.

FIGURE 6



b. After each 75 hours of operation apply 2 or 3 drops of oil spindle oilholes (4 and 5 Fig. 6).

3. REMOVAL OF PARTS FOR INSPECTION OR REPLACEMENT (See Fig. 6)

WARNING: ALWAYS DISCONNECT LINE CORD BEFORE REMOVING ELECTRICAL COMPONENTS OR COVERS.

a. Projection Lamp—Remove the two cover screws (6) and lift off the lamp house top (7). Press downward on the lamp and turn it 90 degrees counterclockwise; this will release the lamp so that it may be removed from the lamp house. To replace the lamp reverse the procedure. Note: One of the flanges on the lamp base is wider than the other—line up the flanges with the corresponding slots in the lamp socket when replacing the lamp.

b. Exciter Lamp—Remove the two cover screws (11 Fig. 3) and the exciter lamp cover—rotate the lamp to release it from the socket. Note: The slots in the exciter lamp base are not equally spaced—when replacing the lamp be sure to position the base so that the three slots line up with the pins in the socket.

c. Photocell—Loosen the insulator clamp screw (4 Fig. 5) and slide the socket insulator back along the photocell cable, then unscrew the socket ring and pull out the socket and photocell.

WARNING: **After replacing the Photocell be sure to push the socket insulator back over the socket and up against the receiver.**

d. Tubes—Remove the four screws (8 Fig. 6) and lift off the tube cover (9 Fig. 6). This will expose the tubes (1 Fig. 7). When replacing the amplifier tubes be sure to align the pins on the tubes with the holes in the sockets before attempting to insert tubes. To release the tube retainers push the retainer clips (2 Fig. 7) to the left.

e. Fuse—Turn the cap of the fuseholder (10 Fig. 6) counterclockwise to release the cap, then pull out the cap and fuse.

WARNING: Never use a fuse having a capacity greater than 1½ amperes. The purpose of the fuse is to protect the amplifier. If the wrong fuse is used the protection is lost.

f. Reel Belts—Locate the point where the ends of the belt are screwed together. Unscrew the joint and screw the end of the new belt on to the old belt. Pull out the old belt, thereby threading the new belt over the pulleys. Turn the ends of the new belt 1½ or 2 turns in the direction opposite to the one in which they will normally screw together, then place the ends together and join them.

Note: If the ends of the belt are not turned backwards before screwing them together, the belt will come open under tension.

When installing the rewind belt always cross the belt before joining the ends.

g. Drive Belt—Remove the four screws (11 Fig. 6), loosen the two set screws which hold the volume and tone control knobs (12) in place and pull off the knobs and tip the top of the control panel towards you. Remove the front cover from the mechanism and pull off the drive belt (12 Fig. 6). Install a new belt on the pulleys and make sure that the idler roller is placed on the **outside** of the belt.

h. Removal of Amplifier—Remove the photocell receiver as described in paragraph (c), and the tube cover as described in paragraph (d), then remove the control panel as described in paragraph (g). Tip the projector over on its back and remove the three hexagonal nuts which hold the base to the projector. Lift off the base and take out the four screws which attach the amplifier to the projector base housing. Partially remove the amplifier, then disconnect the connector located on the side of the amplifier adjacent to the projector motor, and complete removal of the amplifier.

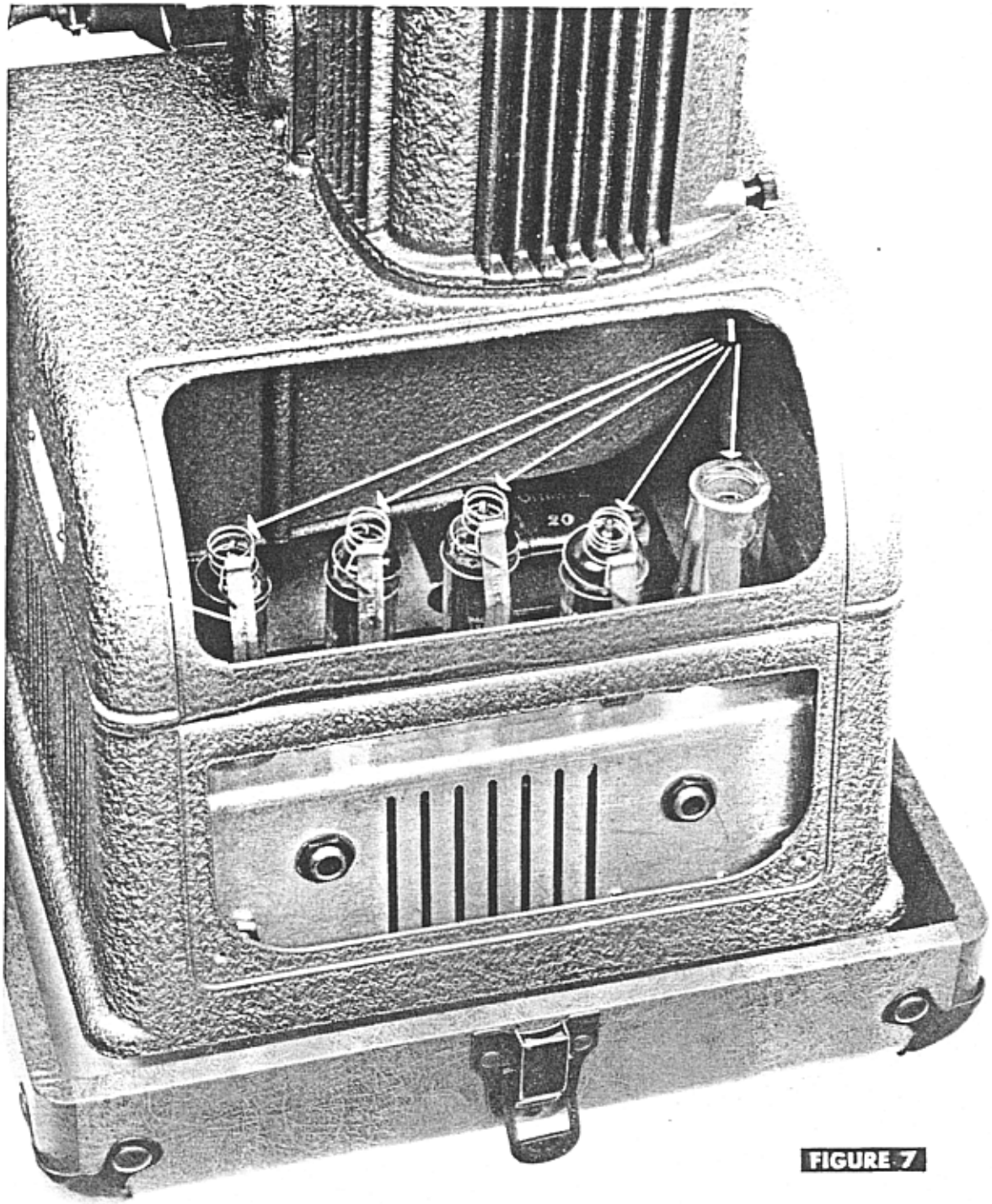


FIGURE 7

OPERATORS TROUBLE SHOOTING GUIDE

The following material is a list of the difficulties most commonly encountered by operators together with the cause of the difficulty and the remedy.

SYMPTOM	PROBABLE CAUSE	REMEDY
(1) Lamp does not light	Branch circuit fuse burned out	Replace fuse
Tubes do not light	Broken connection in line cord	Repair cord
Motor does not run	Broken connection in extension cords	Repair cord
(2) Lamp does not light Amplifier and motor operate	Burned out lamp	Replace lamp
	Lamp switch has failed	Contact Authorized Service Station
(3) Lamp lights, amplifier operates, motor does not run	Worn motor brushes	Contact Authorized Service Station
	Worn governor brushes	Contact Authorized Service Station
	Dirty governor contacts	Clean contacts
(4) Amplifier tubes do not light	Burned out amplifier fuse	Replace fuse
(5) Amplifier tubes light, but exciter lamp does not light	Polarity reversed if operating on DC current	Turn line cord plug around
	Burned out exciter lamp	Replace exciter lamp
	Damaged tubes	Replace tubes
(6) Hum or crackle from speaker	Amplifier is wet	Store in dry place
	Dirty motor	Contact Authorized Service Station
	Damaged tube	Check tubes
(7) Volume decreases when lamp is turned on	Poorly regulated power supply	Use voltage regulator
	Loose connection in power cord	Check connections
	Power extension cords are inadequate	Use larger extension cord
(8) Amplifier fuse burns out	Excessive line voltage	Check with public utility
	Damaged tubes	Replace tubes
	Amplifier requires servicing	Contact Authorized Service Station

	SYMPTOM	PROBABLE CAUSE	REMEDY
(9)	Ringing noise from speaker	Damaged photocell or exciter lamp	Replace cell or lamp
(10)	Regular thumping noise from speaker	Dirt on edge of sound drum	Clean drum
(11)	Film slap	Stretched or shrunken film	Check film
		Mechanism requires adjustment	Contact Authorized Service Station
(12)	Picture moves vertically on screen	Stretched or shrunken film	Check film
		Dirt in film gate	Clean gate
		Mechanism requires adjustment	Contact Authorized Service Station
(13)	Poor focus	Dirty lens	Clean lens
		Warped film	Check film
(14)	Color bands on screen	Damaged lamp	Replace lamp
		Lamp not centered	Rotate adjusting screw (12 Fig. 3)

SCREEN TABLE

Upper Dimension is Height of Picture
Lower Dimension is Width of Picture

Proj. Lens Focal Length	DISTANCE FROM SCREEN IN FEET																					
	2′	3′	4′	5′	6′	7′	8′	10′	12′	15′	20′	25′	30′	35′	40′	45′	50′	60′	75′	100′	125′	150′
¾″	0′9″ 1′0″	1′ 2″ 1′ 6″	1′6″ 2′0″	1′10″ 2′ 6″	2′3″ 3′0″	2′8″ 3′6″	3′0″ 4′0″	3′ 9″ 5′ 0″	4′6″ 6′0″	5′ 7″ 7′ 6″	7′ 6″ 10′ 0″	9′ 4″ 12′ 6″										
1″	0′7″ 0′9″	0′10″ 1′ 2″	1′1″ 1′6″	1′ 5″ 1′11″	1′8″ 2′3″	2′0″ 2′8″	2′3″ 3′0″	2′10″ 3′ 9″	3′4″ 4′6″	4′ 3″ 5′ 8″	5′ 7″ 7′ 6″	7′ 0″ 9′ 4″	8′ 6″ 11′ 4″	9′ 9″ 13′ 1″								
1½″		0′ 7″ 0′ 9″	0′9″ 1′0″	0′11″ 1′ 3″	1′1″ 1′6″	1′4″ 1′9″	1′6″ 2′0″	1′10″ 2′ 6″	2′3″ 3′0″	2′10″ 3′ 9″	3′ 9″ 5′ 0″	4′ 8″ 6′ 3″	5′ 7″ 7′ 6″	6′ 7″ 8′ 9″	7′ 6″ 10′ 0″	8′ 4″ 11′ 2″	9′4″ 12′6″					
2″								1′ 4″ 1′10″	1′8″ 2′3″	2′ 1″ 2′10″	2′10″ 3′ 9″	3′ 6″ 4′ 8″	4′ 1″ 5′ 6″	4′10″ 6′ 6″	5′ 6″ 7′ 5″	6′ 3″ 8′ 5″	7′0″ 9′4″	8′4″ 11′2″	10′5″ 14′0″	14′ 0″ 18′ 9″	17′10″ 23′ 5″	21′ 0″ 28′ 1″
2½″								1′ 2″ 1′ 6″	1′4″ 1′9″	1′ 7″ 2′ 1″	2′ 3″ 3′ 0″	2′10″ 3′ 9″	3′ 4″ 4′ 6″	3′11″ 5′ 3″	4′ 6″ 6′ 0″	5′ 1″ 6′ 9″	5′7″ 7′6″	6′9″ 9′0″	8′5″ 11′3″	11′ 2″ 15′ 0″	14′ 8″ 19′ 8″	16′ 9″ 22′ 5″
3″												2′ 4″ 3′ 1″	2′10″ 3′ 9″	3′ 3″ 4′ 4″	3′ 9″ 5′ 0″	4′ 3″ 5′ 8″	4′8″ 6′3″	5′7″ 7′6″	7′0″ 9′4″	9′ 4″ 12′ 6″	11′ 7″ 15′ 7″	13′11″ 18′ 8″
3½″												2′ 0″ 2′ 8″	2′ 4″ 3′ 2″	2′10″ 3′ 9″	3′ 2″ 4′ 3″	3′ 6″ 4′10″	4′0″ 5′4″	4′8″ 6′3″	6′0″ 8′0″	7′11″ 10′ 8″	9′11″ 13′ 4″	11′11″ 16′ 0″
4″												1′ 9″ 2′ 4″	2′ 1″ 2′10″	2′ 2″ 3′ 3″	2′10″ 3′ 9″	3′ 2″ 4′ 3″	3′6″ 4′8″	4′1″ 5′6″	5′3″ 7′0″	7′ 0″ 9′ 4″	8′ 8″ 11′ 8″	10′ 5″ 14′ 0″

Operation Checks

Most of the difficulties encountered in operating a projector are due to troubles of a minor nature which can be corrected by the operator. If the adjustments or remedies listed in the following material do not correct the difficulty, then contact the nearest Authorized Service Station.

Motor does not run and lamp does not light—check building branch circuit fuse and power cord for loose connection.

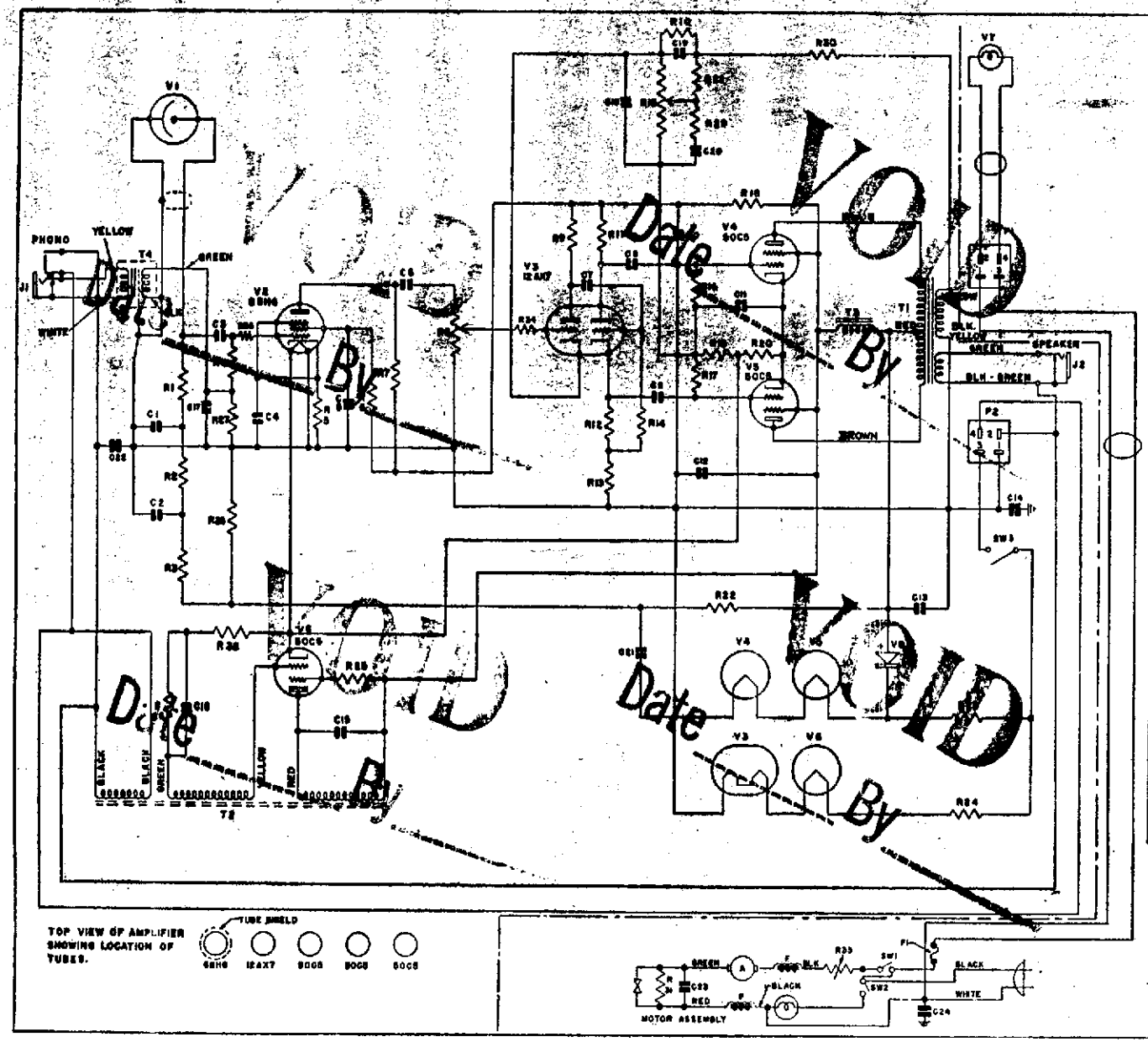
Motor runs but lamp does not light—probably a burned out projection lamp - replace.

Motor runs but mechanism does not run—still picture button turned clockwise - turn counter-clockwise as far as possible.

No sound, dial and threading lamps do not light—amplifier fuse burned out - replace.

No sound, dial and threading lamps light, exciter lamp does not light - burned out exciter lamp - replace.

No sound, all lamps light—damaged speaker cable or damaged tubes - repair or replace as required.



TOP VIEW OF AMPLIFIER SHOWING LOCATION OF TUBES.

NOMENCLATURE	DESCRIPTION	PART NO.
C1, C2, C21, C24	CAPACITOR .2 MFD 150 VOLT PAPER	18599
C3, C6	" .001 MFD 400 " CERAMIC	18495
C5, C7, C8, C9	" .01 MFD 400 " CERAMIC	18597
C10	" 10 MFD 150 " ELECT.	18496
C11	" 25 MFD 18 " "	18488
C12, C13	" 60 MFD 150 " "	18491
C15	" 0001 MFD 500 " CERAMIC	18493
C16, C17	" .00005 MFD 500 " CERAMIC	18489
C19, C20	" .03 MFD 150 " PAPER	18494
C4, C22	" .02 MFD 150 " "	18598
C23	" .1 MFD 150 " "	18596
C25	" 5 MFD GOVERNOR CONDENSER	18657
C26	" .03 MFD LINE FILTER	18681
R1, R4, R28	RESISTOR 5.6 M 1/2 WATT CARBON	18464
R2, R3	" 2.2 M 1/2 " "	18463
R5	" 10 K 1/2 " "	17883
R6, R27	" 560 K 1/2 " "	18469
R7, R9, R14, R34, R35	" 270 K 1/2 " "	18468
R8	CONTROL VOLUME 1 MEGOHM	18655
R10, R11, R13	RESISTOR 100 K 1/2 WATT CARBON	18471
R12	" 2.2 K 1/2 " "	18472
R15	CONTROL TONE 5 K CARBON	18686
R16, R17	RESISTOR 47 K 1/2 WATT CARBON	18473
R18	" 22 K " "	18505
R19, R29	" 270 OHM 1/2 " "	18476
R20	" 10 " 1/2 " "	18477
R21, R31	" 2.7 K 1/2 " "	18932
R22	" 1.8 MEGOHM 1/2 WATT CARBON	18480
R23	" 200 OHM 50 WW	18481
R24	" 350 " 50 "	18652
R25	" 2.7 K 1 " CARBON	18483
R26, R32	" 1500 OHM 1/2 WATT CARBON	18482
R30	" 60 OHM 40 WATT (GOVERNOR)	18658
R33	RHEOSTAT 60 OHM 25 WATT W.W.	18652
B1	PROJECTION LAMP 750 WATT	1595-115
F1	FUSE 1.5 AMP	17579
G1	GOVERNOR	18651
J1	PHONO-MIC JACK	18598
J2	SPEAKER JACK	18597
P1	FEMALE CONNECTOR	18594
P2	MALE CONNECTOR	18590
SW1, SW2	SWITCH ASSEMBLY	20319
SW3	SWITCH PART OF R8	
T1	OUTPUT TRANSFORMER	18643
T2	OSCILLATOR COIL	18641
T3	CHOKE	18640
T4	INPUT TRANSFORMER	18642
V1	PHOTO CELL	17572
V2	TUBE 6SH6	19498
V3	TUBE 12AX7	18497
V4, V5, V6	TUBE 6SC7	18499
V7	EXCITER LAMP 4 VOLT 3/4 AMP	18680
V8	DRY DISK RECTIFIER	18499

ENGINEERING DEPT.
AMPRO CORPORATION
CHICAGO
REVISIONS

TITLE SCHEMATIC DIAGRAM
DEVICE STYLIST PROJECTOR MODEL 473
DATE JAN. 20, 1949 SCALE
DESIGNED H.W.B. DRG. NO.
DRAWN A.C.C. D-10558
CHECKED

FULLY GUARANTEED

All Ampro Precision Projectors bear an unqualified guarantee as to original defects in materials or workmanship.

Any part or parts showing such defects will be promptly replaced without charge, provided projector is returned to factory transportation charges prepaid.

Our guarantee does not cover projection lamps, which are covered by the lamp manufacturers. If the rated life of projection lamp is not obtained, return lamp to dealer or to factory and lamp will be submitted to lamp manufacturer for adjustment.

An addressed registration card is furnished with each projector shipped from factory. This card should be filled in and mailed promptly after machine is purchased to obtain full benefits of guarantee, and aid in recovery of projector if lost or stolen.

It is understood that the replacement of parts damaged as a result of natural wear, the adding of attachments not supplied by Ampro Corporation, abuse or tampering, is not covered by this guarantee.

A-472-5-51

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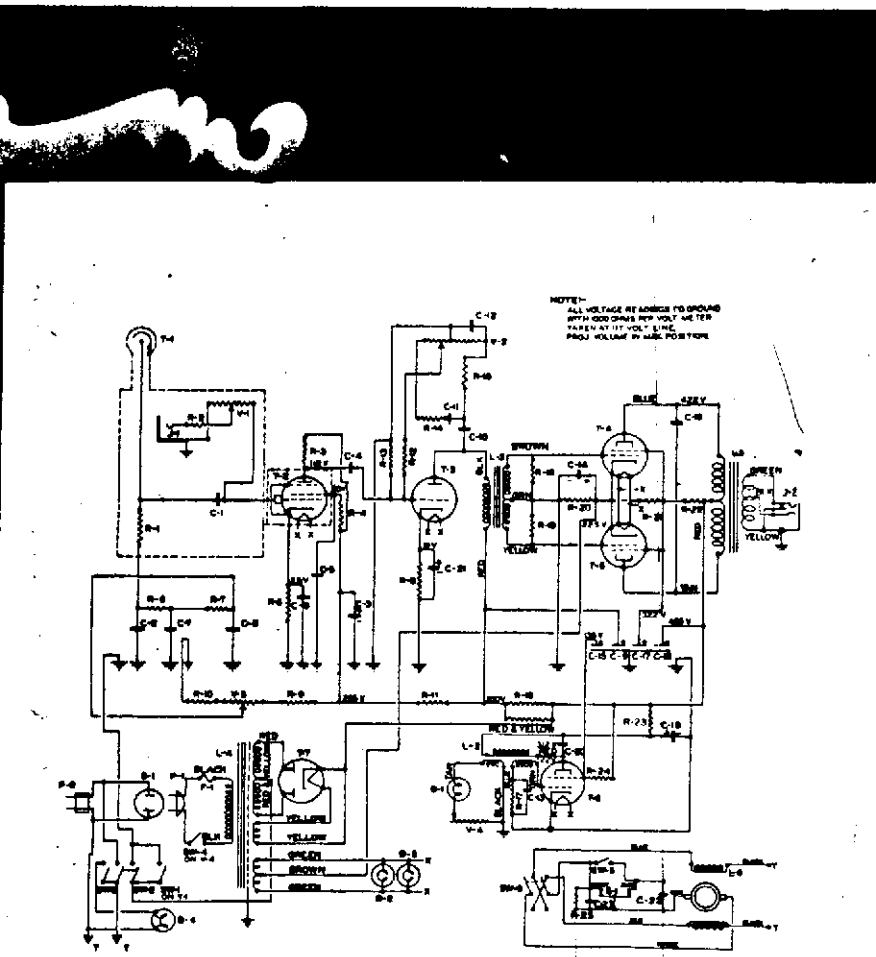
AMPRO PREMIER 10



MARK	DESCRIPTION	PART NO.
B- 1	Gen. Lamp-6V-1A	19772
B- 2	Dial " No. 31	18195
B- 3	Thdg " No. 31	18195
B- 4	Proj " 1595-115	
C- 1	.005 MFD. 300V	17514
C- 2	.02 " 400V	17731
C- 3	.1 " 450V	17775
C- 4	.01 " 300V	17732
C- 5	.05 " 400V	17751
C- 6	.05 " 400V	17751
C- 7	.05 " 400V	17751
C- 8	.05 " 400V	17751
C- 9	.02 " 330V	18066
C-10	.05 " 400V	17895
C-11	.00017 " 300V	17793
C-12	.01 " 300V	17732
C-13	.005 " 300V	17514
C-14	.02 " 300V	17779
C-15	.10 " 300V	18064
C-16	.0068 " 3000V	17784
C-17	.10 " 300V	18064
C-18	.02 " 300V	18064
C-19	.15 " 400V	17670
C-20	.0068 " 3000V	17784
C-21	.16 " 25V	19172
C-22	.5 " 400V	17767
C-23	.25 " 400V	17767
F-1	1.5 Amp. Fuse	17379

MARK	DESCRIPTION	PART NO.
G-1	3 Speed Gear	18134
J-1	Input Jack	18083
J-2	Output Jack	18084
L-1	Oscillator Cl.	17771
L-3	Driver Transf.	17790
L-4	Power Transf.	17768
L-5	Output Transf.	17779
L-6	Choke	18147
P-1	Conn. Plug	19175
P-2	Line Connector	17697
R- 1	3.3 Meg Ω .5 Watt	17807
R- 2	.5 Meg Ω .5 "	17814
R- 3	200000 Ω .5 "	17536
R- 4	1 Meg Ω .5 "	17538
R- 5	3000 Ω .5 "	17804
R- 6	250000 Ω .5 "	18075
R- 7	250000 Ω .5 "	18075
R- 8	1000 Ω 1 "	17550
R- 9	500000 Ω .5 "	18075
R-10	10000 Ω .5 "	18072
R-11	2000 Ω 1 "	17552
R-12	250000 Ω .5 "	18075
R-13	200000 Ω .5 "	17536
R-14	1 Meg Ω .5 "	17538
R-15	250000 Ω .5 "	18075
R-16	11300 Ω .5 " (2)	17785
R-17	4000 Ω 1 "	17699
R-18	30000 Ω .5 "	17538

MARK	DESCRIPTION	PART NO.
R-19	30000 Ω .5 "	17535
R-20	242 Ω 5 "	17749
R-21	100000 Ω 1 "	17788
R-22	13000 Ω 10 "	17748
R-23	2980 Ω 3 "	17747
R-24	46000 Ω 10 "	17750
R-25	50 Ω 40 "	18183
S-1	Conn. Rot'y'el.	18881
SW-1	Part of V-1	
SW-2	Start-Stop Sw.	17714
SW-3	Proj. Lamp Sw.	17718
SW-4	Part of V-4	
SW-5	Speed Chg. Sw.	17716
SW-6	Reverse Sw.	17715
T-1	Phono Coil	17397
T-2	6J7-6J7GT	18107
T-3	6J5-6J5GT	17934
T-4	6V6-6V6GT	17788
T-5	6V6-6V6GT	17788
T-6	6V6-6V6GT	17788
T-7	5Z4-5Z4GT	17701
V-1	Mic. Control 2 Meg Ω	17762
V-2	Tone Control 4 Meg Ω	17762
V-3	P. E. C. Control 100000 Ω	18069
V-4	Proj. Vol. Cont. 15Ω	17937