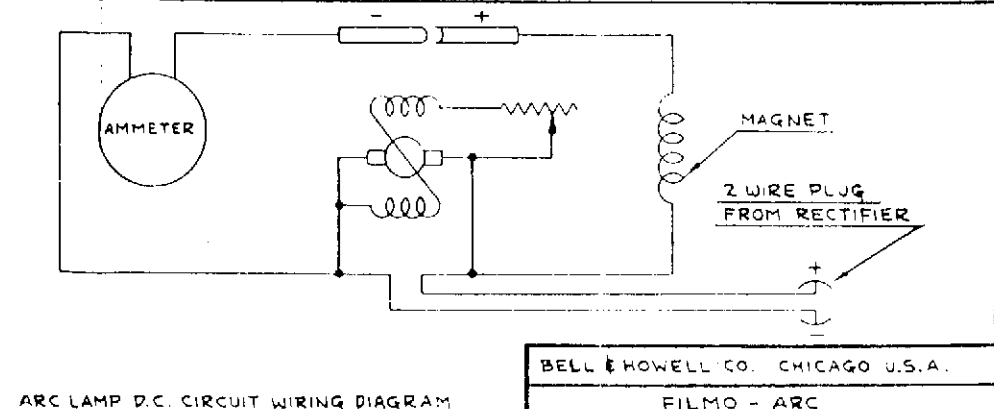
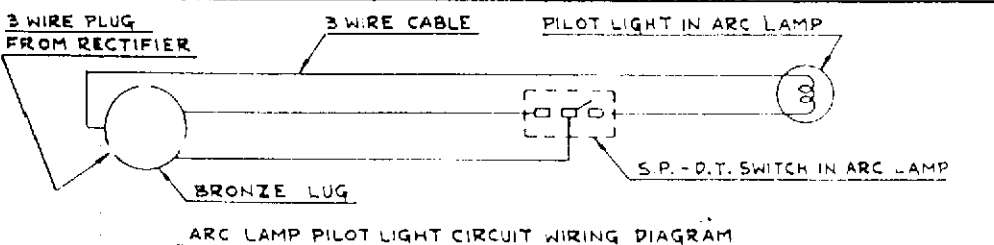
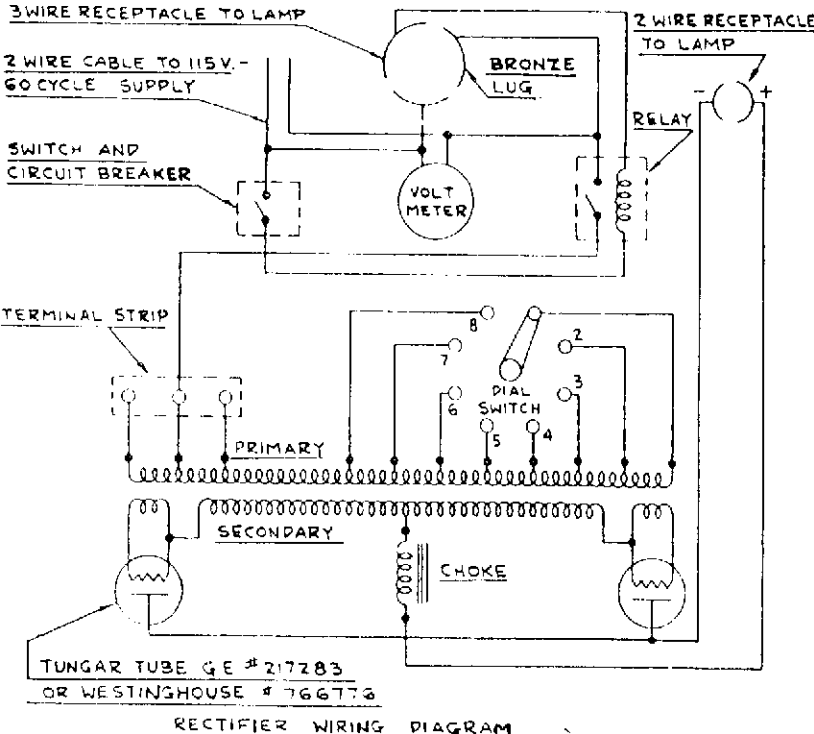
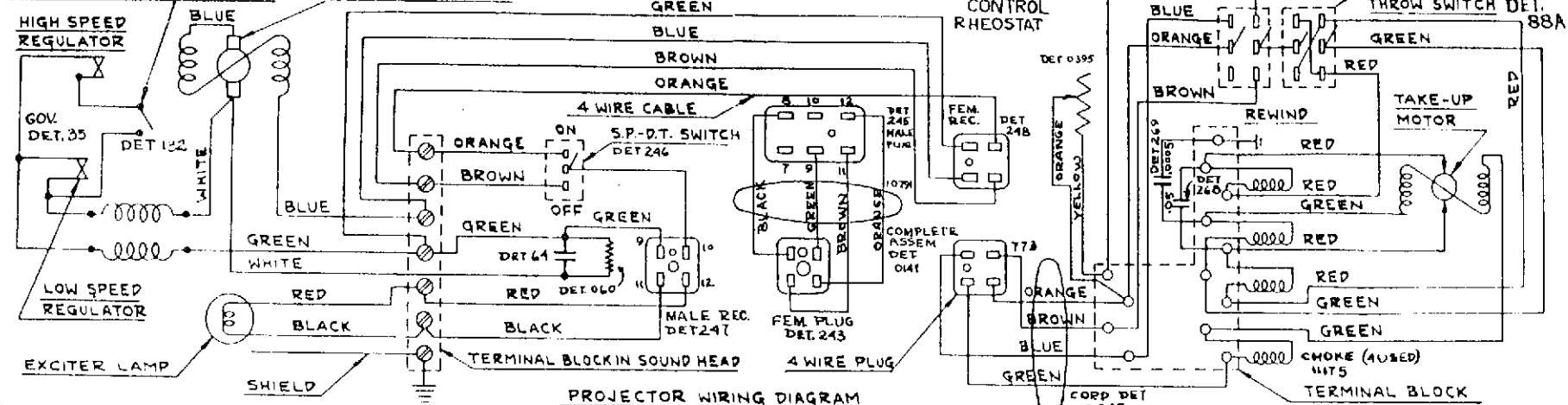
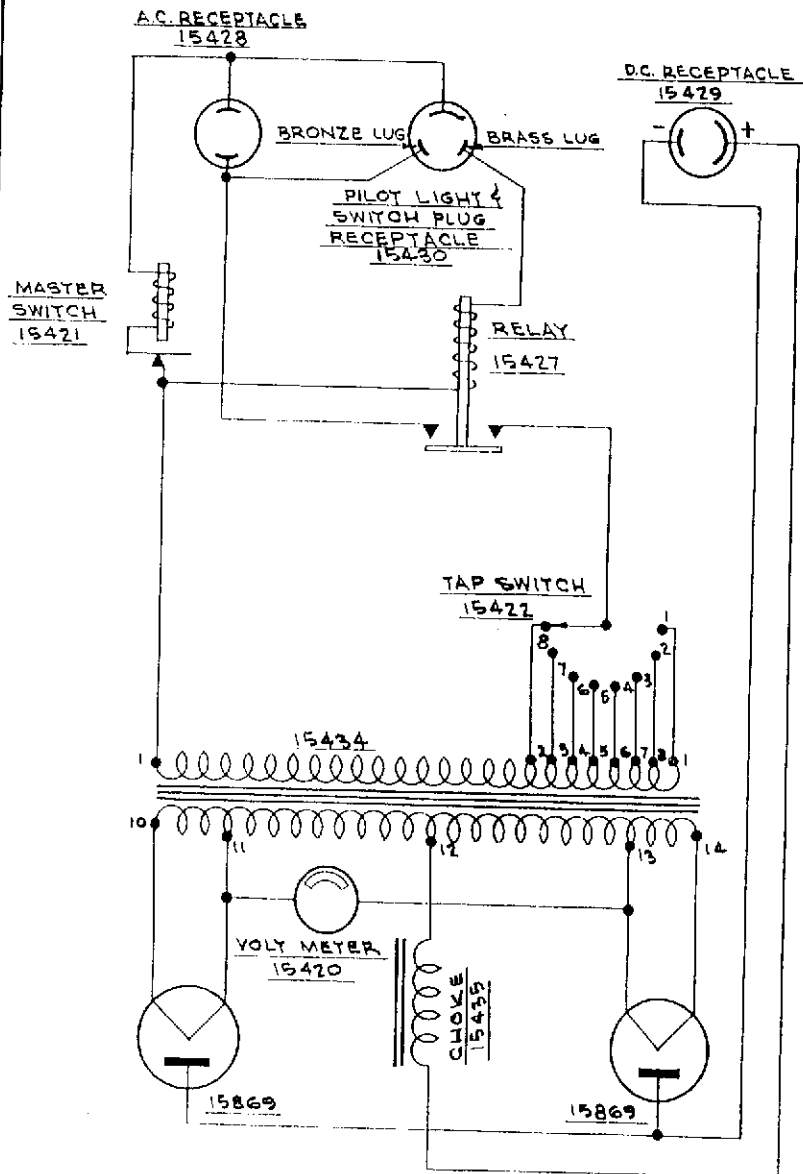


SWITCH OPEN FOR SILENT AND
CLOSED FOR SOUND SPEEDS

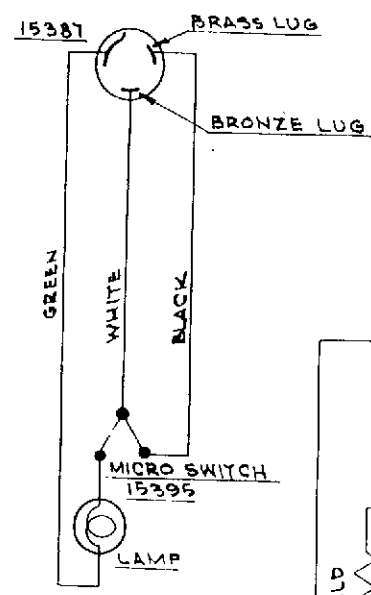


BELL & HOWELL CO. CHICAGO U.S.A.
 FILMO - ARC
 DESIGN 140 MODELS A-B-C-D-E-F-G-H
 1-28-38 SERVICE DATA DRAWN P.C.R. APVD.

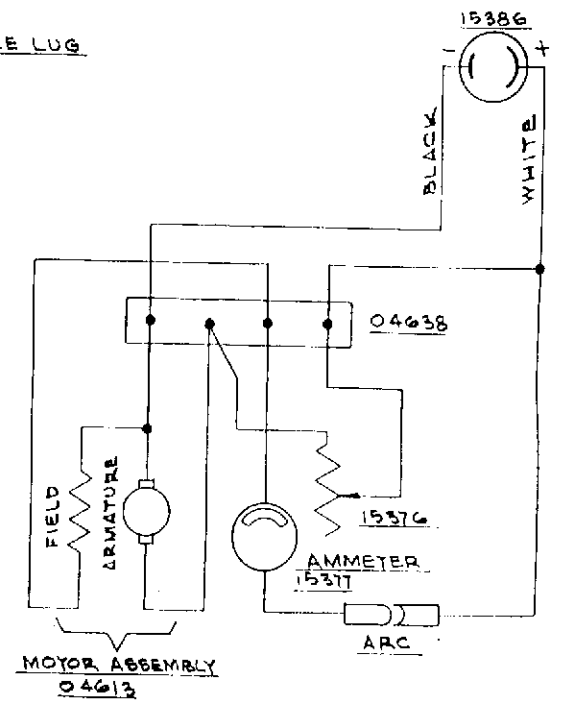
F5



RECTIFIER CIRCUIT



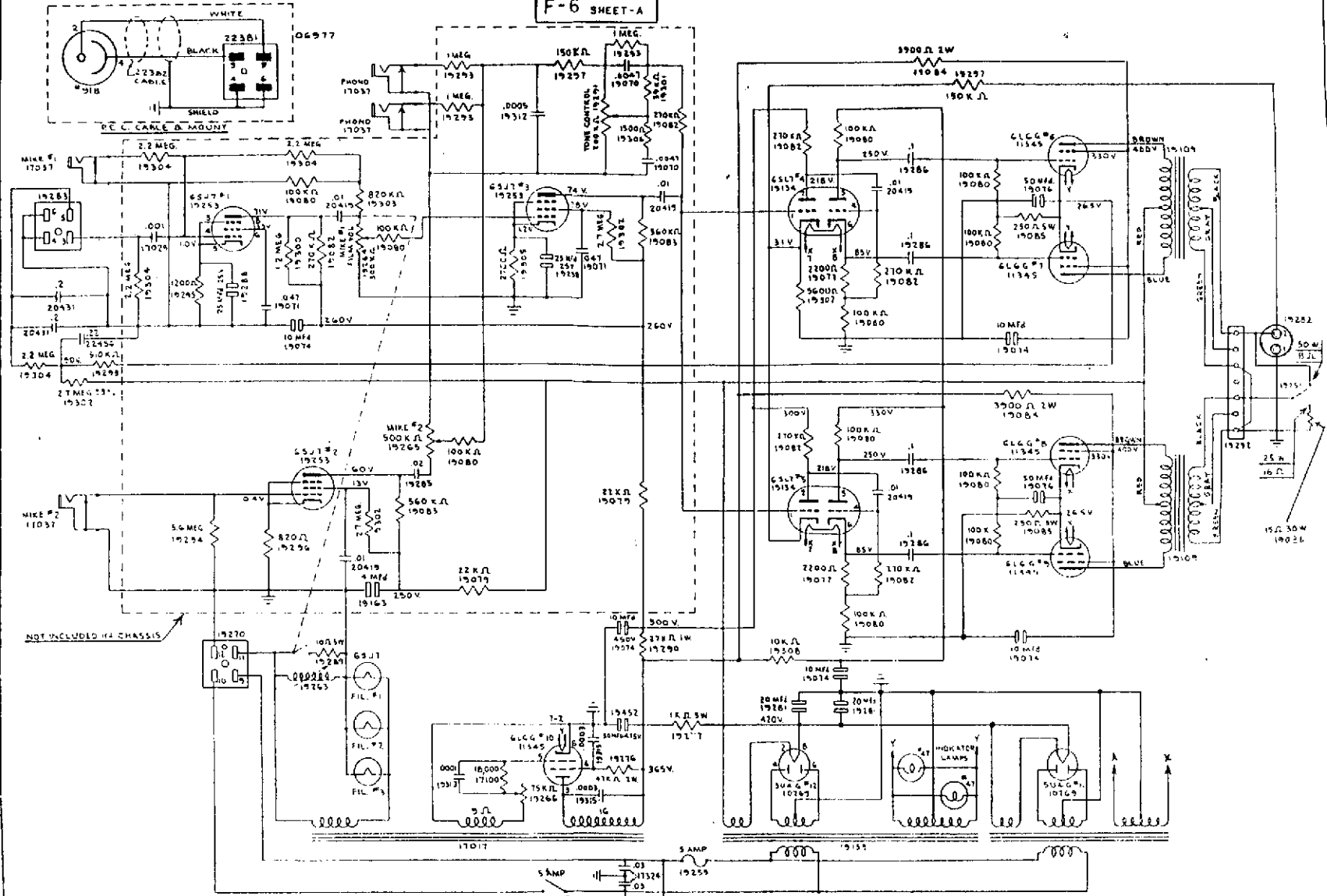
PILOT LIGHT & SWITCH CIRCUIT IN LAMPHOUSE



LAMP CIRCUIT

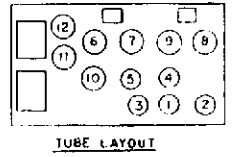
SERVICE DATA	
WIRING DIAGRAM FILMOARC LAMP & RECTIFIER	
DESIGN 140 FILMOARC	MODEL R
DRAWN E.G.P.	APVD. DATE 4-21-48

F-6 SHEET-A

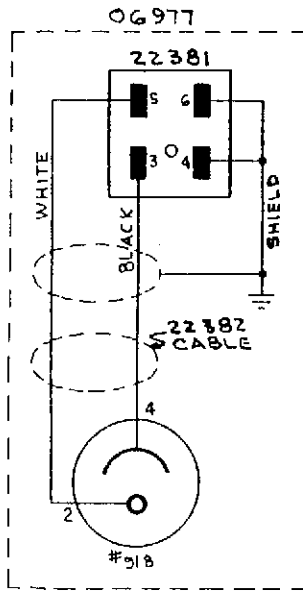


SENSITIVITY AT 117 V LINE VOL ON FULL TONE CONT BASS		FREQUENCY RESPONSE THRU FILM CHANNEL			
FILM CHANNEL THRU 20 MEG TO PTC CATHODE 152 V		FREQUENCY	10% TONE CONTROL	50% TONE CONTROL	INPUT VOLTS 0.50
MIC #1 DIRECT TO JACK	0.1V	70	6.0	20.5	
MIC #2 DIRECT TO JACK	0.04V	100	3.5	18.0	
PHONO DIRECT TO JACK	1.7V	500	8.0	13.0	
MEASUREMENT MADE AT 1000 ~ 8 Ω RES LOAD		1M	9.0	9.5	
OUTPUT VOLTAGE 13.8 V		3M	9.0	1.5	
POWER OUTPUT AT 117 V LINE 400 ~ 8 Ω LOAD		5M	9.0	0	
45 WATTS AT 5%		7M	9.0	1.5	
		10M	9.5	5.5	

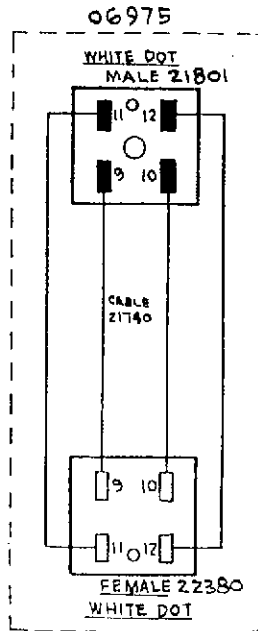
WIRE COLOR CODE			
WHITE	GROUND	BLU	PLATE
YELLOW	CATHODE	BROWN	SCREEN
RED	B+	BLACK	A.C.
GREEN	GRID	BLACK & WHITE	B-



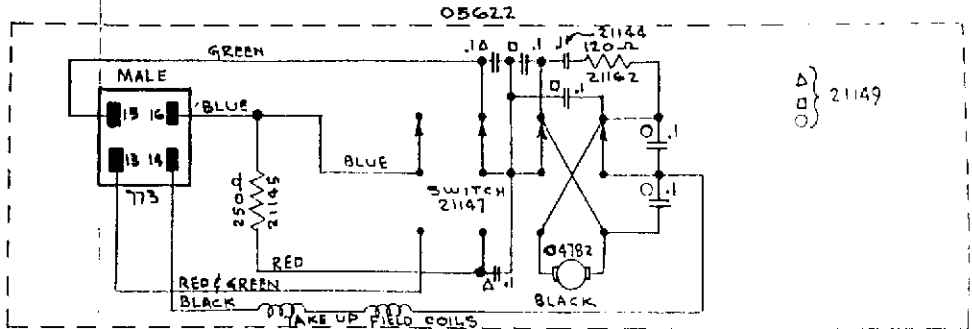
Bell & Howell Co. Chicago U.S.A.
 50W AMPLIFIER WIRING DIAGRAM FOR
 DESIGNS 140 S.T.U. 1063291
 DATE 3-12-52 SERVICE DATA DRAWN BY APVJ



P.E.C. CABLE & MOUNT

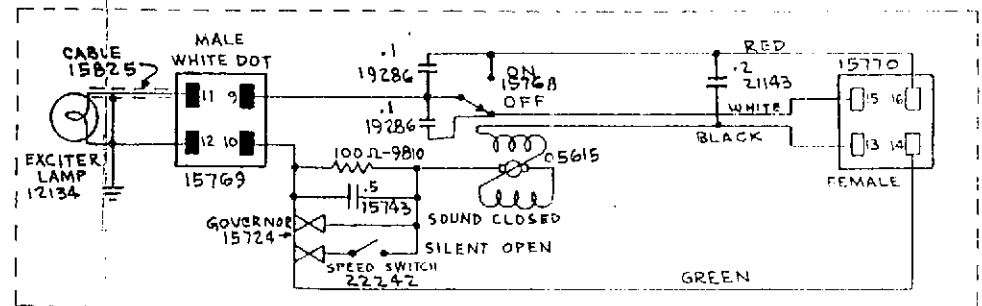


POWER CABLE TO PROJECTOR



TAKE UP MOTOR WIRING

21149



PROJECTOR WIRING

PARTS ON THIS SHEET NOT INCLUDED IN AMPLIFIER CHASSIS

Bell & Howell Co. Chicago U S A.		
PROJECTOR & TAKE-UP MOTOR WIRING DIAGRAM & CABLES FOR DESIGNS 140 S.T.U.		
DATE 3-12-52	SERVICE DATA	DRAWN BY APVD. ✓

SECTION F
DESIGN 140-FILMOARC

GENERAL INFORMATION.

On page F2 will be found the projector and arc lamp - DC current - wiring diagrams. The Bell & Howell Filmoarc uses the Design 130 amplifier, information for which may be found under Section "D" of this manual.

Be sure the speaker selector switch in the rear of the amplifier is set to the "Single Speaker" position for single speaker and "Dual Speaker" position when two speakers are being used.

When ordering parts be sure to use the work "DETAIL" and number wherever shown.

Lamp house and rectifier parts have not been given a Bell & Howell number; therefore, it will be necessary to order them by description.

The Instructions and Manual of Operation for the Filmoarc thoroughly cover the projector lamp housing and rectifier.

DESIGN 130 and 140 - AMPLIFIER NO. 03600GENERAL INFORMATION.

This amplifier differs from other Design 130 types in that all three input tubes as well as the phase inverter have their filaments connected in series and are operated by the current flowing in the output tube cathode circuit.

Frequency characteristics of the amplifier may be altered by means of a tapped control on the rear of the amplifier.

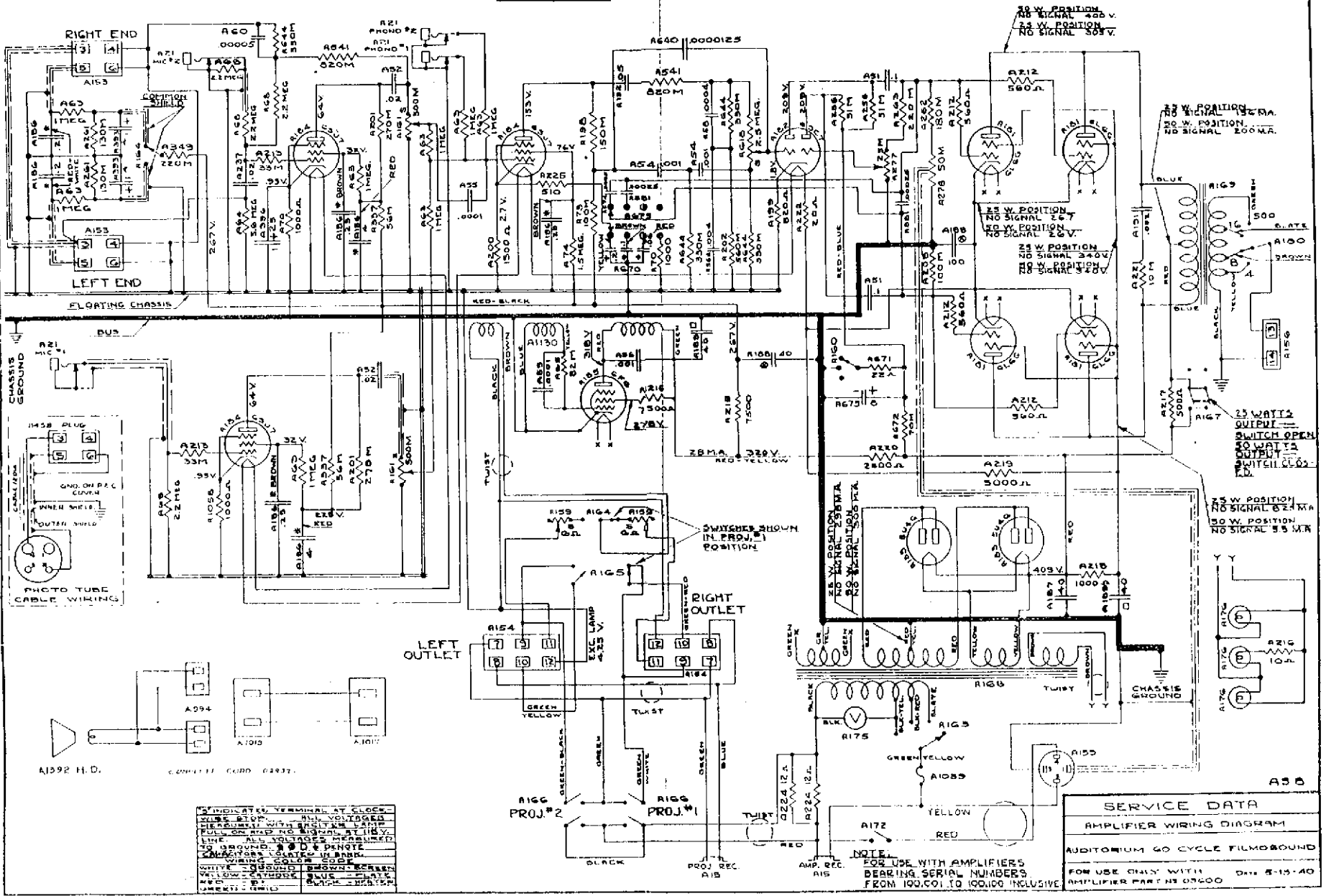
Two microphone inputs are featured, one of which is under separate control. The second is mixed at a fixed level with the photocell input. Control is by the main film volume control.

Two phonograph inputs are provided, neither of which has a volume control. Phonovolume should be controlled by means of the volume control on the phonograph.

The output transformer has a tapped secondary controlled by means of a switch on the rear of amplifier. The permanent-magnet type speaker has an impedance of 16 ohms.

The power output is 25 watts with a single speaker and 50 watts with dual speakers.

See General Information 130-C, par. 1.



SERVICE DATA	
AMPLIFIER WIRING DIAGRAM	
AUDITORIUM 60 CYCLE FILM SOUND	
FOR USE ONLY WITH	DATE 5-15-40
AMPLIFIER PART NO. 02400	