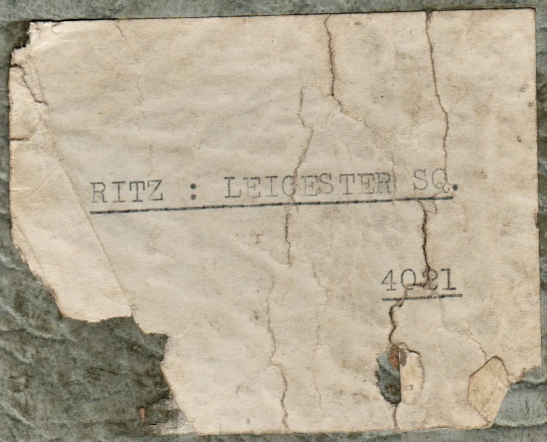


RCA PHOTOPHONE LTD.

AN ASSOCIATE COMPANY OF THE RADIO CORPORATION OF AMERICA

36, WOODSTOCK GROVE
LONDON, W.12.

OPERATING INSTRUCTIONS

RCA PHOTOPHONE

TYPES LG230/234

PERSPECTA EQUIPMENTS

RCA PHOTOPHONE LTD.,
36, WOODSTOCK GROVE,
LONDON W.12.

Issued: January 1955

RX2034

F O R W O R D

It is a well recognised fact that the operation of any machine depends upon the knowledge and ability of the operator. Usually the manufacturer has no responsibility for, or control over, the selection of the operator and therefore cannot be responsible for the knowledge of that operator. On the other hand, the ability of the operator is directly dependent upon his knowledge of the machine, and it is the responsibility of the manufacturer to make available such information concerning his product as is necessary for its intelligent operation.

In presenting this booklet, RCA Photophone Ltd. aims to give in elementary terms a comprehensive description of its apparatus and an understanding of the operation of this apparatus. It is also our aim to give this information in such a fashion as to enable the projectionist intelligently to recognise, locate and remedy such minor defects as might occur during the operation of the equipment and to keep the equipment in the best operating condition.

Your Service Engineer, and our whole Service Organisation are available and anxious at anytime to give all possible assistance to you in your duties and we trust that you will not hesitate to avail yourself of our co-operation if any difficulties arise in the use of this apparatus.

OPERATING INSTRUCTIONS LG230/234 PERSPECTA

RCA PHOTOPHONE LIMITED

1. GENERAL DESCRIPTION

RCA Photophone Sound Reproducing Equipment Type LG 230/234 (PER) is designed for use on 110-120, 200-240V AC main supply and will give outstanding performance and quality in large cinemas.

An LG.230/234 (PER) Equipment contains the following main units:

(a)	Rotary Stabilizer Soundheads	LMI-9031
(b)	Amplifier Rack Assembly (Standard Optical)	LMI-9253
(c)	Amplifier Rack Assembly	LMI-32147
(d)	Integrator	LMI-32192
(e)	Perspecta/Normal Switch	LMI-32178A
(f)	Monitor Amplifier	LMI-9228B
(g)	Triple Volume Control	LMI-32128 A/B
(h)	Triple two way speaker system	
(i)	Spare Parts Cabinet	LMI-9760A?

See Block Diagrams. 2C8 - 17. L15.
2C8 - 18. L11.

2. SOUNDHEADS

For a detailed description of the soundhead used see separate booklets:

Operating Instructions LMI.9031 Soundheads

3. AMPLIFIER RACK ASSEMBLIES

The main Rack Assembly includes the "Centre" Channel main Amplifier System which is used for Single Channel reproduction and consists of a LMI.9333 pre-amplifier; LMI. 9358 power amplifier(s); LMI.9257D Monitor/Emergency Amplifier a LMI.9384 Emergency Switching Panel; LMI.9482B Crossover Unit, and LMI. 9507C Exciter Lamp Supply Unit. In the case of LG230 one power amplifier is used and in the case of the LG234 two.

The pre-amplifier and power amplifier(s) have been designed to work together as an amplifier channel with an overall frequency response characteristic of high quality which may be set up in accordance with the requirements of any particular auditorium.

The LMI.9333 pre-amplifier consists of a 6J7 input valve RC coupled to a 6J7G. The input, interstage, and output couplings contain variable elements which enable the frequency response to be determined by the position of link strips on the front of the chassis. The output of the pre-amplifier is taken by screened cable out of the rack to the volume control unit (for description see below), and then, attenuated to the desired level, returned to the input stages of the power amplifier(s)(connected in parallel in the case of LG234).

The 9507C exciter lamp supply unit is located at the bottom of the main amplifier rack and provides a filtered D.C. power supply for the soundhead exciter lamps. It employs a selenium rectifier in place of the more usual valve type rectifiers and this feature renders it extremely reliable in operation. A mains input fuse, consisting of a 3-amp cartridge fuse mounted in a bakelite holder, protects the circuit generally while individual 2-amp fuses for the two large capacity electrolytic condensers are clip-mounted on the panel.

The LMI.9482B Crossover Units are a dividing network for the distribution of the signal output, to the two speakers of different frequency range. A switch on this unit permits the entire output to be directed to the lower frequency speakers in the event of failure of the H.F.speakers.

The LMI-32147 Rack Assembly carries the Power Amplifier for the Left and Right Perspecta Channels together with the two cross over units and the LMI-32141 Monitor Control Panel. In the case of the LG230 each channel has one LMI 9358 30 watt power amplifier whilst the LG234 has two such amplifiers for each channel giving 60 watts.

The LMI-32192 Integrator consists of the following sub units:

(a) Cabinet	LMI-32181
(b) Pre-Amplifier	LMI-32182
(c) Channel Amplifier (30 c/s)	LMI-32183
(d) Channel Amplifier (35 c/s)	LMI-32184
(e) Channel Amplifier (40 c/s)	LMI-32185
(f) Power Supply	LMI-32186

The Units have been designed as a group which in general has the function of a voltage amplifier and will provide drive for three channels containing LMI-9358 Power Amplifiers.

LMI.32182 Pre-Amplifier.

The Signals from the LMI-9031 soundhead are fed to the Pre-Amplifier LMI-32182 where after amplification, the control signals are separated from the audio signals by suitable filters.

The Audio Signal is fed via a frequency response correction network similar to that in an LMI-9333 to the low impedance output. The frequency response, network is adjusted by links on a panel and provides bass boost (up to 7 db at 60 c.p.s.) and treble boost (up to 6 db at 5 Kc/s).

The Control signal is fed via the filter to a low impedance output.

The unit, therefore, has two outputs, one handling the audio signals and the other control signals.

LMI-32183/4/5 Channel Amplifiers.

These units are identical except that they are actuated by different control signals of 30, 35, & 40 c.p.s. respectively.

Each has two inputs, one for audio and one for control signals.

The Control Signals are applied to a highly selective tuned amplifier which selects the appropriate one. After rectification the resultant D.C. is applied as bias to a control stage where it subsequently controls the volume of the audio signals.

The audio signals are applied to the control stage where their amplitude or volume is controlled by the bias developed by the control signal. They then go via an output control, which is pre-set and is used to balance the output from the three chanels, to the output stage and thus to the Power Amplifiers via the volume control.

LMI-32186 Power Supply Unit

This unit provides L.T. & H.T. power to the other four units.

The LMI-32178A Perspecta/Normal Switch.

This unit serves two main functions:

(a) it switches the output of the LMI-9725 Sound Control Unit from the LMI-32192 to the LMI-9384 Emergency Switch Panel and vice versa.

(b) It switches the input of the LMI-9358 Power Amplifier (Centre) from the LMI-32192 output to the output of the LMI-9333 Voltage Amplifier and vice versa.

It thus provides an effective change-over between the two systems, Perspecta and Normal.

The LMI-32141 Monitor Control Panel is a switching Panel which taps any one of the three channels and feeds the input of the monitor amplifier; a fifth position gives a mixture of all four channels. The fourth position is not used.

LMI-9228B Monitor Amplifier is a 5 watt output amplifier used on Perspecta reproduction only. It is brought into circuit by the operation of the Perspecta/Normal switch. A control is provided to enable the sound volume from the monitor to be regulated.

The LMI-32128B Triple Volume Control consists of three separate volume controls ganged together for simultaneous movement; one is connected in each of the "L", "C" and "R" Channels of the stage speaker systems.

The Triple two-way Stage Loudspeaker System consists of three identical sets of two-way units situated on the left, centre and right of the screen respectively. The high frequency loudspeaker mechanisms have a strong but very light plastic diaphram and are coupled by a suitable throat to a high frequency horn. The upper range of frequencies is thus properly distributed throughout the Auditorium. The large low frequency baffles employ 15 inch L.F. loudspeaker mechanisms which will handle faithfully frequencies of a very low order.

Coupling transformers mounted on the L.F. Baffle match the Crossover impedance to the voice coil impedances.

On Perspecta, all of the stage speaker systems are in operation and with ordinary photographic reproduction, only the centre speaker system is in use.

Spares Cabinets Two Cabinets, containing between them a complete set of consumable spare parts, are provided with the equipment. These include all items likely to be required urgently and it is in your interests to see that all spares used are replaced immediately.

4. OPERATING INSTRUCTIONS

It is most important to switch on the power supply to the equipment, including the exciter lamp supply as early as possible before the show is due to commence. This will allow all components in the equipment to reach a stable temperature and ensure quietness of operating when the performance commences. It will also allow time to ascertain that the amplifier system is in proper working condition.

If there is any fault in the equipment, it very frequently shows up a few minutes after switching on, and switching on in good time permits remedial action to be taken before the start of the show.

(1) See that the Perspecta-Normal Switch is set to the type of film to be shown.

(2) Check that sound is available on both soundheads by interrupting the light beam on the optical system on each soundhead in turn. In the case of Perspecta Sound place all three Test-Normal Switches in the LMI.32192 to "TEST" for this check. The monitor selector switch should be turned so that each channel in turn is tested. Do not forget to return the switches to "Normal".

(3) Check that both motors start properly.

(4) Check operation of non-synch (if any).

(5) Clean and oil soundheads.

(6) Run motors for ten minutes.

(7) Thread the film in the projector to be used first as described in "OPERATING INSTRUCTIONS FOR LMI.9031 SOUNDHEADS".

(8) When the programme is due to begin, switch on the motor of the first soundhead and when it reaches full speed (after two or three seconds) bring the soundhead into action by operating the fader switch and raising the volume to the required level.

(9) Set the monitor volume control of the LMI.9228B Amplifier to the required level, whereafter, it should not normally require to be altered, all subsequent alterations being done on the main volume control.

(10) Changeover to the second projector and soundhead is effected in the normal manner, by operating either fader switch, the timing being taken from the cue marks on the film.

(11) Always turn the volume control to zero on completion of any section of the film programme.

NON-SYNCH

To reproduce music etc. from gramophone records the switch on the top of the LMI.9725B Fader should be turned to the Non-Synch position with the Perspecta/Normal Switch in the Normal Position. The main volume control LMI.32128B will control the Auditorium sound level. Always turn off the Non-Synch switch before sound reproduction from film is resumed.

5. EMERGENCY OPERATION (Single Channel)

It is of the utmost importance that the operator should be fully conversant with the emergency facilities embodied in the equipment. Your Service Engineer is instructed to explain these facilities to you, and in the event that you find it necessary to adopt any form of emergency operation you should notify him immediately. Before switching to an emergency operation condition, you should make absolutely sure that the quality of sound reproduction IN THE AUDITORIUM is such as to warrant the changeover.

MAIN AMPLIFIER FAILURE

Should any part of the centre amplifier channel fail it is only necessary to throw the switch on the emergency switch panel from NOR to EMERG to restore sound in that channel.

STAGE LOUDSPEAKER FAILURE

In the event of failure of the H.F. loudspeaker unit the equipment may be operated on the L.F. loudspeaker only. A switch having positions NORMAL and EMERG is fitted to the crossover unit. In the NORMAL position both stage loudspeakers are in use; in the EMERG position the L.F. loudspeaker only is in use but receives the full range of frequencies.

EXCITER LAMP SUPPLY UNIT FAILURE

In the event of failure of the selenium rectifier in the exciter lamp supply unit it is possible to operate the exciter lamps from an AC supply when running photographic sound track. A special tab is provided on the mains transformer to give the correct voltage. Details of the emergency connections necessary to provide AC operation are given in drawing A.4316, a copy of which is provided with each equipment. It is recommended that this drawing be permanently mounted in a convenient point adjacent to the supply unit.

6. EMERGENCY OPERATION (Perspecta)

General faults such as Exciter Lamp Supply, Loudspeaker, or Soundhead failures are dealt with under the single channel heading.

Failure of the Centre Channel should be countered by

(a) changing over the Perspecta/Normal Switch to "Normal".
and
(b) changing over the Emergency Panel Switch to "Emergency".

OR

by putting the Test/Normal Switches in the two good channel amplifiers to "Test", thus energising both these channels at a normal volume level. The unit then operates as a voltage amplifier without Perspecta Operation.

Failure of Left or Right Channels should be countered by putting the Perspecta/Normal Switch to "Normal" when the programme will run on the single channel system.

RCA PHOTOPHONE LTD.

LOSS OF SOUND

Some of the more common faults whose solution lies in the hands of the Operator are tabulated below. It is emphasised that immediate notification of the service engineer is the best course of all but the most simple difficulties and valuable time should not be wasted on efforts to locate and remedy faults which are probably outside the province of the Operator.

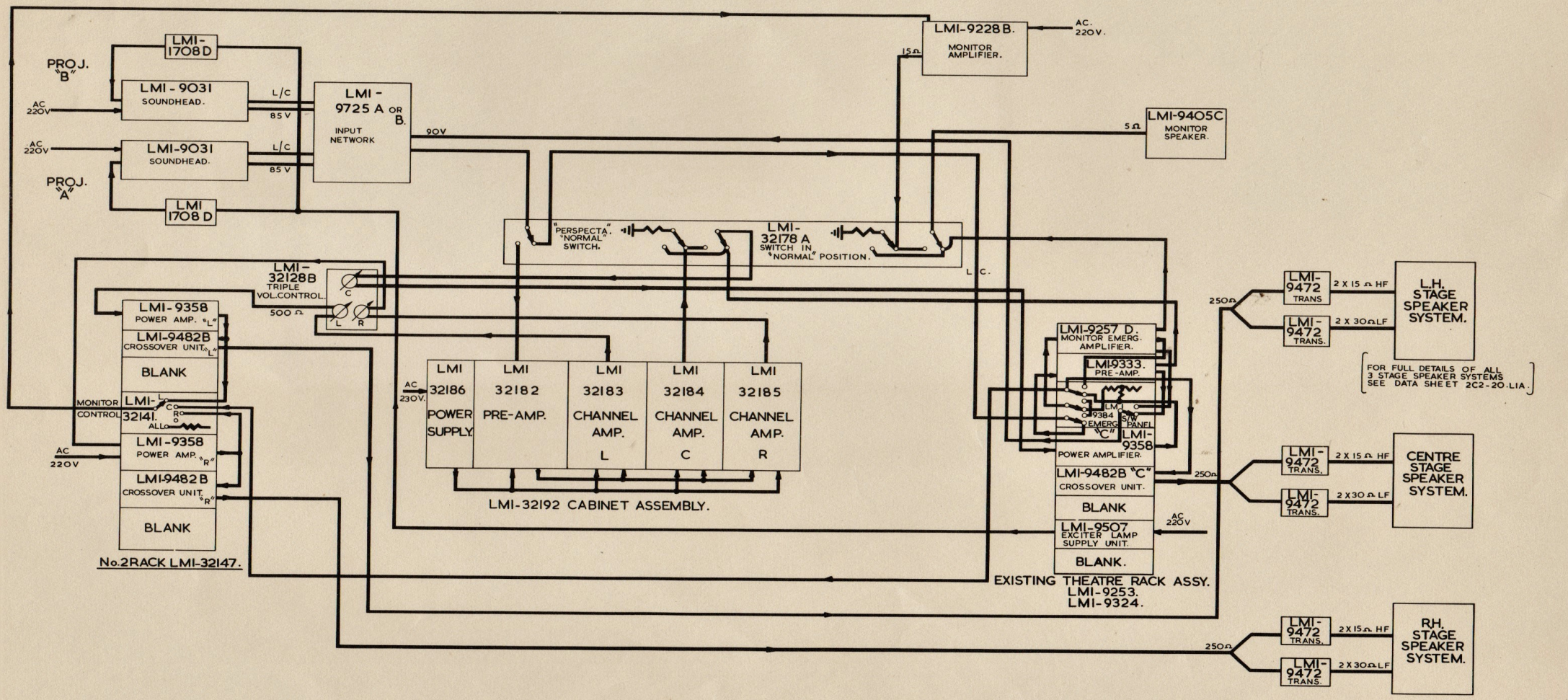
The experience of all sound equipment companies has shown that the failure of any part of an equipment is most commonly encountered when first switching on or when commencing operation. It is thus essential that the equipment be tried out as early as possible each day, so that in the event of trouble there will be ample time for attention to be given before the public performance is due to commence.

Part of System	Degree of loss	Suspected Unit	Nature of Fault	Remedy
One Sound-head	Complete	Photocell	Not properly seated in socket	Ensure photocell base resting squarely against socket
			Defective Photocell	Replace
		Exciter Lamp	Complete failure	Replace
		Low Cap-acity Cable	Fractured Wire	Disconnect faulty cable at soundhead and connect length of shielded twin cable to Terminals "GRD" & "1" and corresponding terminals of other sound-head. This loops both soundheads. Inform Service Engineer.
	Partial	Photocell	Defective	Replace
		Exciter Lamp	Incorrect fit or damage to base of lamp	Replace
		Optical System	a) Dirty b) Out of adjustment	Clean Inform Service Engineer
		Volume Control Unit	Balance of equalising potentiometer upset.	Inform Service Engineer

Part of System	Degree of loss	Suspected Unit	Nature of Fault	Remedy
Both Sound-heads but not non-sync	Complete	Exciter Lamp Supply Unit	Blown Fuse	Replace 3 amp. Fuse
All Channels	Complete	Distribution Board	Blown Fuse	Replace 10 Amp. Fuse Wire
		Pre-amplifier & Power Amplifier	Blown Fuse	Change all valves and replace 3 amp. Fuse
	Complete or Partial	Pre-amplifier	Valve test shows in red on position 7 of test switch	Replace both valves in pre-amplifier
		Power Amplifier	One valve shows in red on test meter	Replace indicated valve
		Pre-amplifier & power Amp-lifier	All valves show in lower red sector on test meter	Replace both 5U4G's
Monitor Loudspeaker	Complete	Monitor Amplifier	Blown Fuse	Replace all valves and 2 amp Fuse.
	Partial	Monitor Amplifier	Faulty valve	Replace valves
Auditorium	Loss of H.F.	H.F.Loud-speaker	Failure	Switch to emergency on Cross-over unit

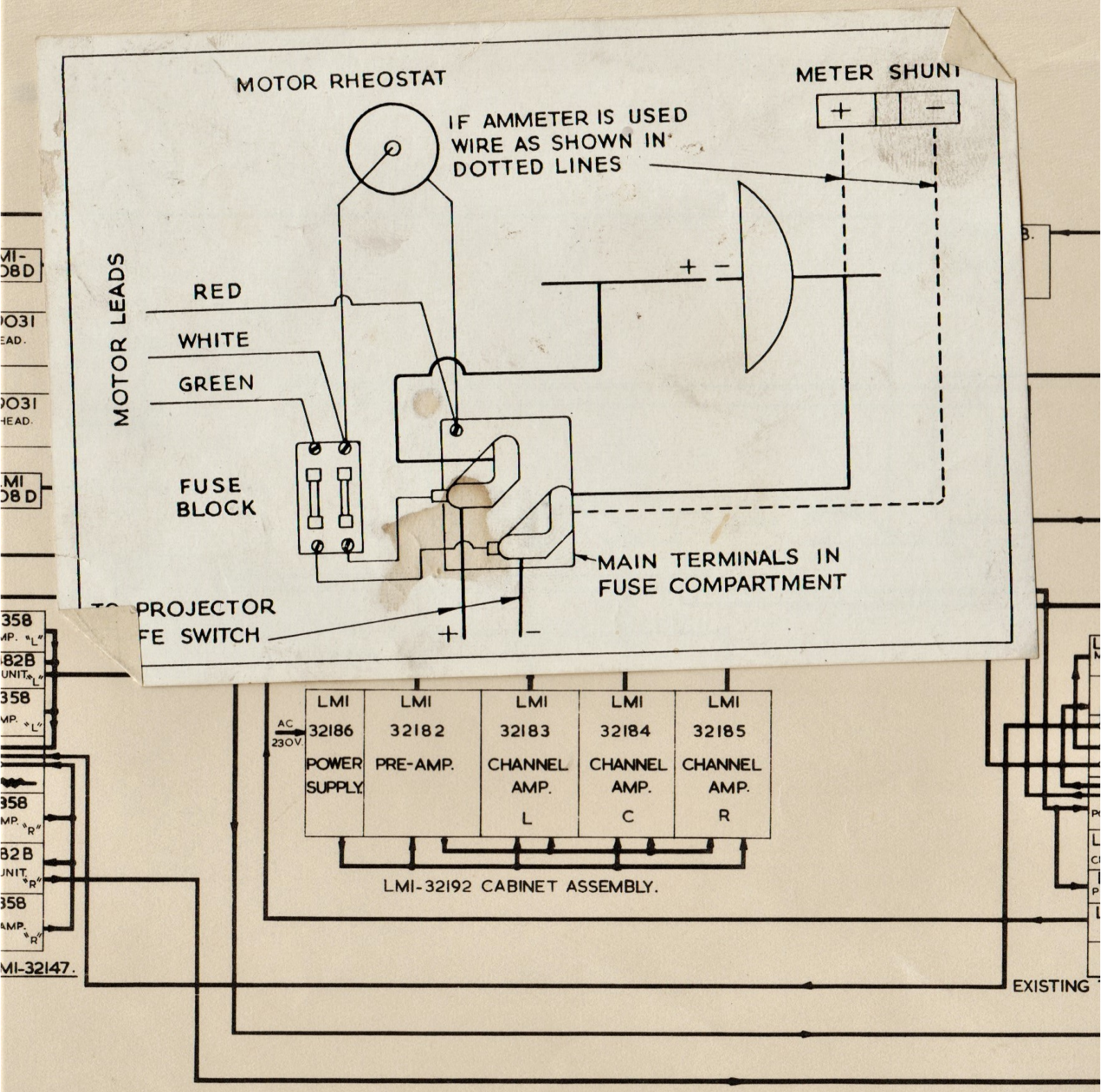
PERSPECTA (LG230/234)

Part of System	Degree of loss	Suspected Unit	Nature of fault	Remedy
All channels, Both sound-heads.	Complete	Power Supply	Integrator not switched on.	Switch on
			Power unit Fuse Blown	Remove cover and replace fuse.
			Failure of 5Y3 Rectifier in Power Unit.	Remove Cover and replace valve.
		Pre-Amplifier		Switch Perspecta/Normal to "Normal" Switch Emergency switch to "Emergency". Inform Service Engineer.
All Channels one Soundhead	Complete or Partial			Check as for Single Channel Optical
One Channel not Centre	Complete or Partial	Channel Amplifier or Power Amplifier		Switch Perspecta/Normal to "Normal". Inform Service Engineer
Centre Channel	Complete or Partial	Channel Amplifier or Power Amplifier.		Switch Perspecta/Normal to "Normal". Switch Emergency switch to "Emergency". Inform Service Engineer. OR
				Switch both good channel amplifiers to "Test" using Test/Normal Switch. This energises these channels at normal volume Check volume level in Auditorium.

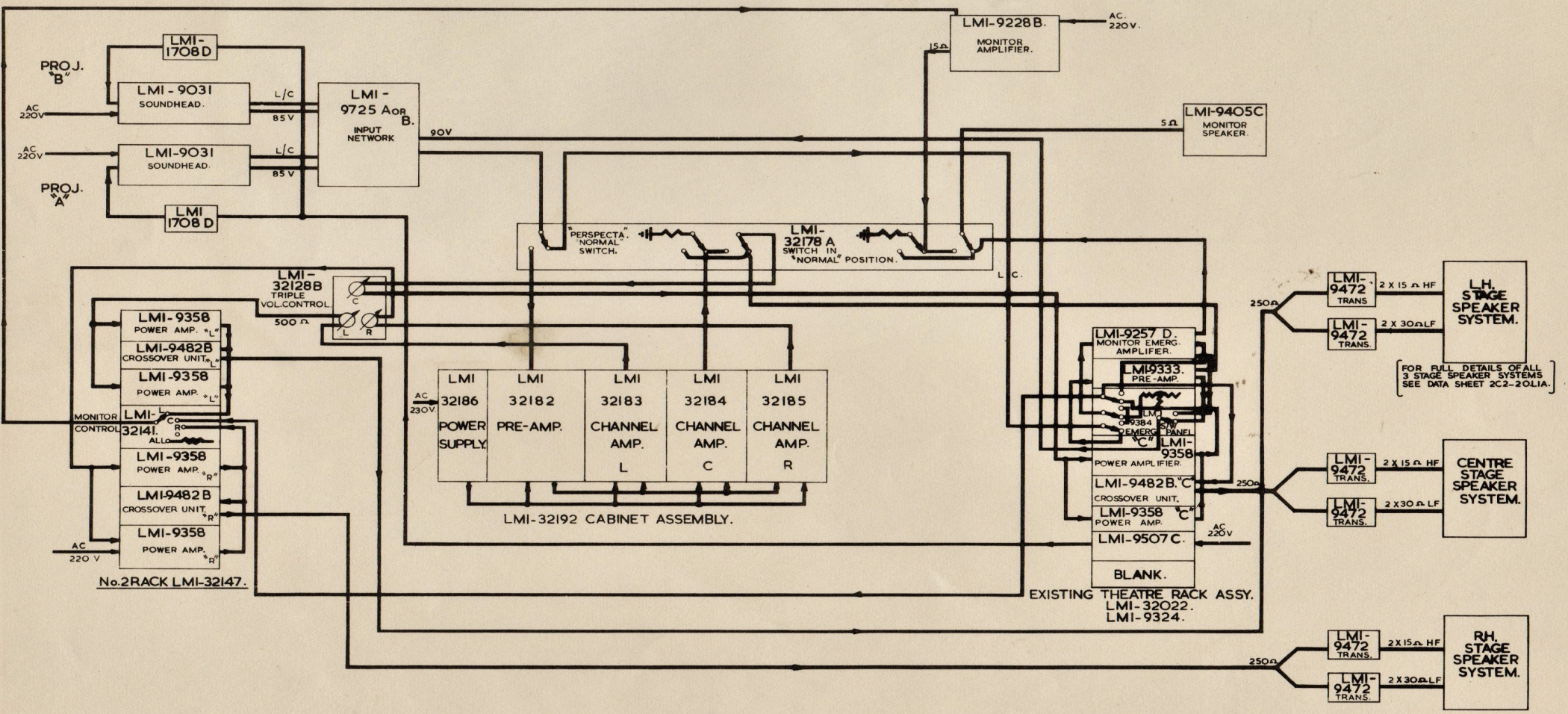


BLOCK DIAGRAM. LG 230 (PER.)

LG 230 (PER.) | BLOCK DIAGRAM. | 2C8-17.LI5.

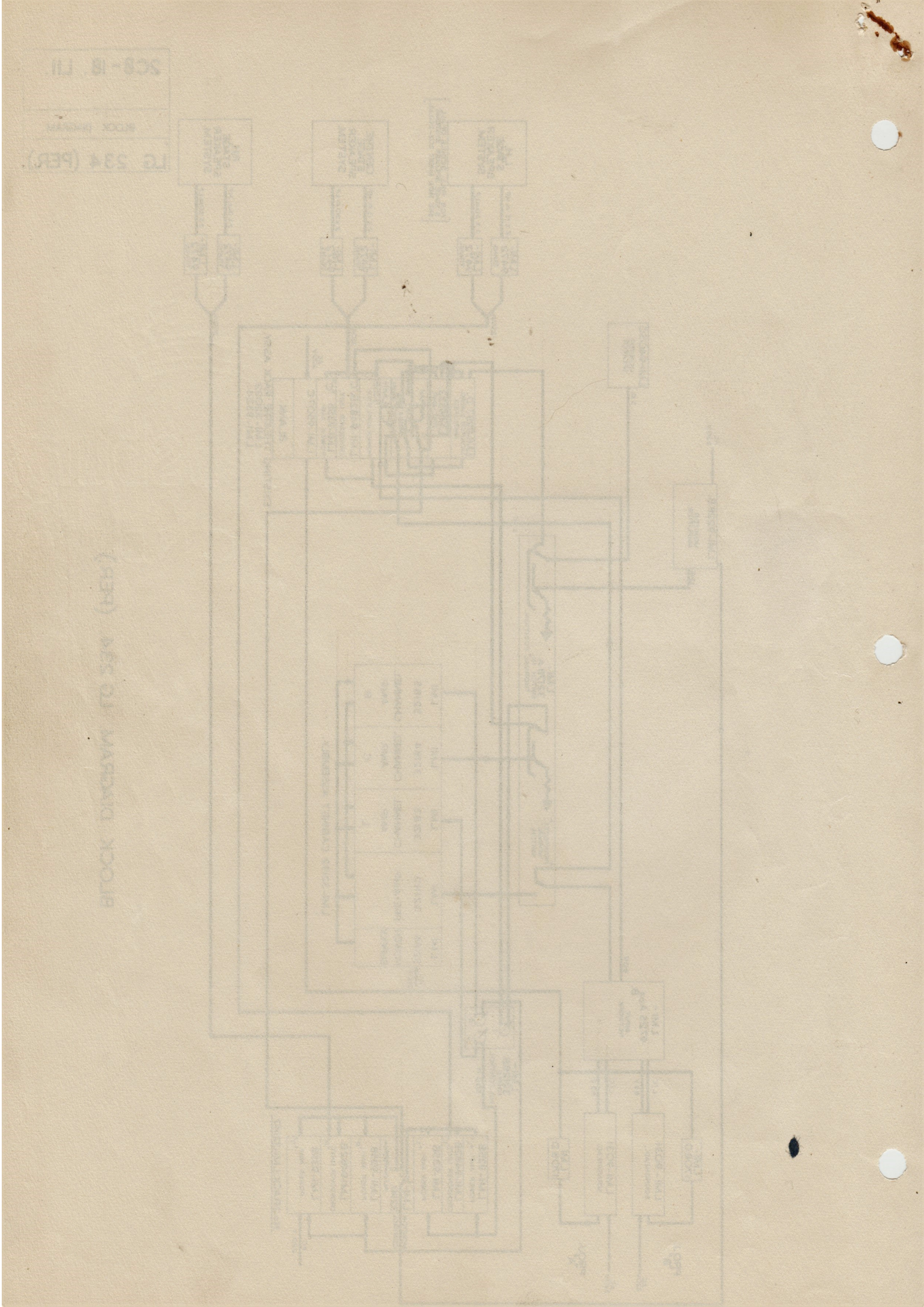


BLOCK DIAGRAM. LG 234. (PER.)



BLOCK DIAGRAM. LG 234. (PER.)

LG 234 (PER.) | BLOCK DIAGRAM. | 2C8-18. LII.



OPERATING INSTRUCTIONS

RCA PHOTOPHONE

TYPE LMI-9031

ROTARY STABILIZER SOUNDHEAD

ISSUED DECEMBER 1946.

RCA PHOTOPHONE LTD.
36 Woodstock Grove,
LONDON. W.12.

RX 1028

OPERATING INSTRUCTIONS - LMI 9031

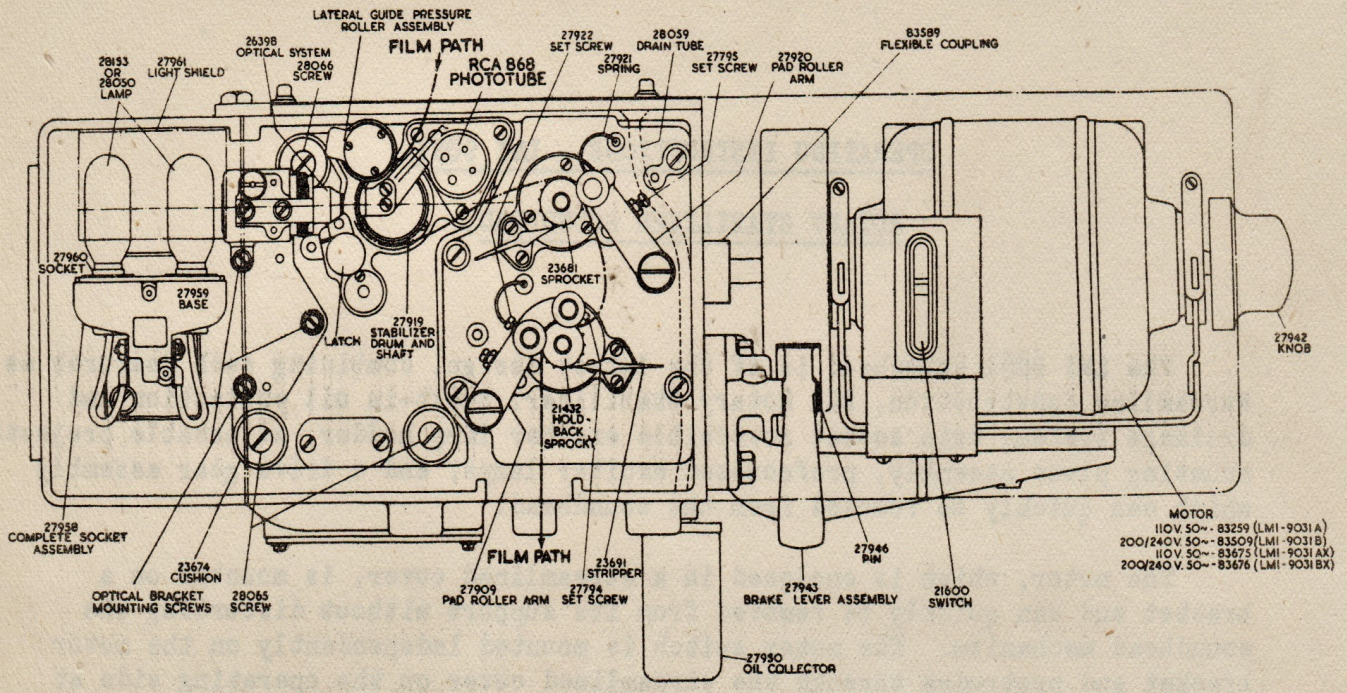
ROTARY STABILISER SOUNDHEAD.

The LMI 9031 soundhead is of the latest design, combining such features as streamline construction, RCA Rotary Stabiliser, built-in oil collection and drainage system, twin socket reversible exciter lamp holder, adjustable projector mounting plate assembly, prefocussed exciter lamps, and a drive gear assembly which can quickly be removed from the soundhead.

The motor, which is enclosed in a streamlined cover, is mounted on a bracket and can quickly be removed from its support without disturbing the soundhead mechanism. The motor switch is mounted independently on the motor bracket and protrudes through the streamlined cover on the operating side at a point convenient for operation. Speed variations are smoothed out by a heavy flywheel mounted on the motor shaft and a brake is provided so that the soundhead mechanism may be brought to a standstill quickly.

All rotating shafts run in ball bearings. The centre plate of the soundhead, to which is attached the exciter lamp mounting board, optical system, Rotary Stabiliser, and photocell, is fixed to the main casting through resilient cushions of oil resisting material thereby reducing the transmission of mechanical vibration to foregoing components, so that any tendency to reproduce soundhead mechanical noise is prevented.

Constant speed of the film past the scanning light beam is obtained by means of the Rotary Stabiliser. The Rotary Stabiliser and the sound take off drum are mounted on a common shaft and set in motion by the friction of the film on the outer surface of the drum. The Stabiliser consists of a cylindrical case of light metal alloy rigidly fixed to the shaft, and containing a heavy flywheel mounted on its own bearings so that it is free to rotate within the case. The small space between the flywheel and the case is filled with a high grade oil of a suitable viscosity so that the rotation of the case is transmitted via the viscous oil to the inner flywheel and the whole is hermetically sealed to prevent leakage. So Little friction is required for the film to drive the stabiliser system that the film is never pulled taut except at the start. Any tendency towards a change in the speed of the film is resisted by the inner flywheel and the viscous oil ensures smooth transfer of this resistance to the film. This results in the film loops adjacent to the scanning drum being positively maintained and isolates the scanning point from any minute disturbances due to gears or sprockets, thus ensuring absolutely constant film speed.



Operating Side of Soundhead

RX.1028.

OPERATION.

THREADING SOUNDHEAD

The film should be threaded through the soundhead along the path shown in the accompanying diagram and in accordance with the following procedure.

a) Open the lateral guide and pressure roller by pulling outward on the latch knob and moving the assembly back toward the exciter lamp compartment. Open both pad roller assemblies by pulling them, against the snap action of their springs, away from the associated sprockets.

b) Thread the film round the scanning drum, over the constant speed sprocket and over the take-up sprocket.

c) Allow a loop between the projector head lower sprocket and the soundhead constant speed sprocket such that when the pad rollers are down, and the lateral guide and pressure roller is latched in place, firm pressure against the film just above the drum will not quite bring the film into contact with the photocell lens holder. This loop should be carefully and accurately set as, if it is too large, the film will rub against the photocell lens holder and be scratched, and, if it is too small, there is a risk of lifting the lateral guide and pressure roller off the drum with resultant "sprocket tooth noise" or "wows".

d) If the film is "buckled" and tends to weave on the drum, the loop should be shortened so that its length does not exceed two sprocket holes.

e) Allow a four sprocket hole loop between the constant speed sprocket and the take-up sprocket so that any irregularities in the take-up reel are not transferred to the constant speed sprocket.

f) Close and latch the lateral guide and pressure roller and return both pad roller arms to the operating position.

SOUND-HEAD ADJUSTMENTS.

Exciter Lamps

No adjustment of exciter lamps is necessary, as a pre-focussed type of lamp is used.

Focussing of Light Beam

Alterations to the focus of the optical system may only be carried out by the Service Representative, since correct adjustment can only be obtained by the use of special test gear.

Pad Rollers

To obtain proper clearance between a pad roller and its associated sprocket, proceed as follows:-

a) Thread two thicknesses of film in the soundhead and adjust each pad roller by means of the set screw in the arm, so that when closed, the pad rollers rest lightly against the film. In the case of the double pad roller, should one roller come into contact with the film before the other, the roller closest to the sprocket should be adjusted for the proper clearance.

b) Tighten the locking nut on each set screw.

Adjustment of Lateral Guide and Pressure Roller

The position of the lateral guide roller determines the alignment of the sound track with the light beam and is therefore critical. Correct adjustment necessitates special equipment and should only be carried out by the Service Representative.

Adjustment of the Feed Magazine Spindle

The tension on the film is maintained by a spring, and its adjusting nut, on the non-operating end of the feed magazine spindle and should be just sufficient to prevent the reel from feeding film faster than it is taken up by the upper feed sprocket.

The adjustment may be checked by loading and threading a full reel of film, running up to speed and switching off. No excessive accumulation of film should take place between the reel and the upper feed sprocket.

Should the film accumulate, increase the tension on the spring by tightening the adjusting nut until proper film tension is obtained.

Adjustment of the Take-up Mechanism.

Correct adjustment of the take-up reel, by means of the spring and its adjusting nut on the non-operating end of the take-up magazine spindle, should provide just sufficient tension to prevent the formation of a loose loop of film in the magazine.

The Adjustment should be checked when the take-up reel is nearly full, i.e. tension is at a minimum. If a loose loop forms increase the tension on the spring by tightening the adjusting nut.

Care must be taken that excessive tension is not present or applied during adjustment since undue wear or even damage to the film will result.

CARE OF SOUNDHEAD

Always keep the soundhead scrupulously clean and properly oiled as the continuous good performance of the soundhead will repay any effort spent in its care.

OILING: The oil gauge on the non-operating side of the soundhead should be checked each day before attempting to operate the machines to make sure that the oil level in the gear box is at the point shown by the mark on the glass whilst the soundhead is stationary (the oil level will drop when the soundhead is running). RCA Stock No. 25551 oil should be used.

The oil cup on the projector drive gear shaft should receive two drops of the same oil used in the gear box, at least once each day.

A small oil hole is provided at the end of each pad roller spindle, and there is also a small oil hole on each pad roller arm adjacent to the main fixing screw. These oiling points should be lubricated daily with one small drop of oil applied by means of a tooth pick or similar pointed article.

EXCITERLAMPS: The exciter lamps used are the pre-focussed type (Cat.28050) which require no further adjustment after insertion in the exciter lamp socket. To instal an exciter lamp, insert the lamp in the socket so that the pins on the socket enter the holes in the circular lamp base, then twist the lamp to lock it in position. A spare lamp should always be kept mounted in the extra socket of the exciter lampholder, so that it is only necessary to reverse the holder to place the spare exciter lamp in operation.

OPTICAL SYSTEM: The optical unit lenses, photocell lens, photocell and exciter lamps should be cleaned with lens cleaning tissue.

LATERAL GUIDE AND SOUND TAKE-OFF DRUM: The sound drum should be kept thoroughly clean as foreign matter on the drum, such as lint, dirt, or film emulsion may cause poor quality sound, such as noise "flutter" or "wows". Never use any metallic instrument such as a knife, screwdriver, etc., for cleaning purposes, as any scratches made on the drum may cause scratches on the film.

LIGHT SHIELD: This is located between the film and the photocell lens to prevent stray light from entering the photocell. There should always be a small clearance between the curved surface of the light shield and the sprocket hole portion of the film overhanging the drum. Care should be taken to avoid altering the location of the shield when cleaning the lenses or drum. Also the V notch in the shield must be kept free from particles of lint or dirt to allow full clearance for the light beam.

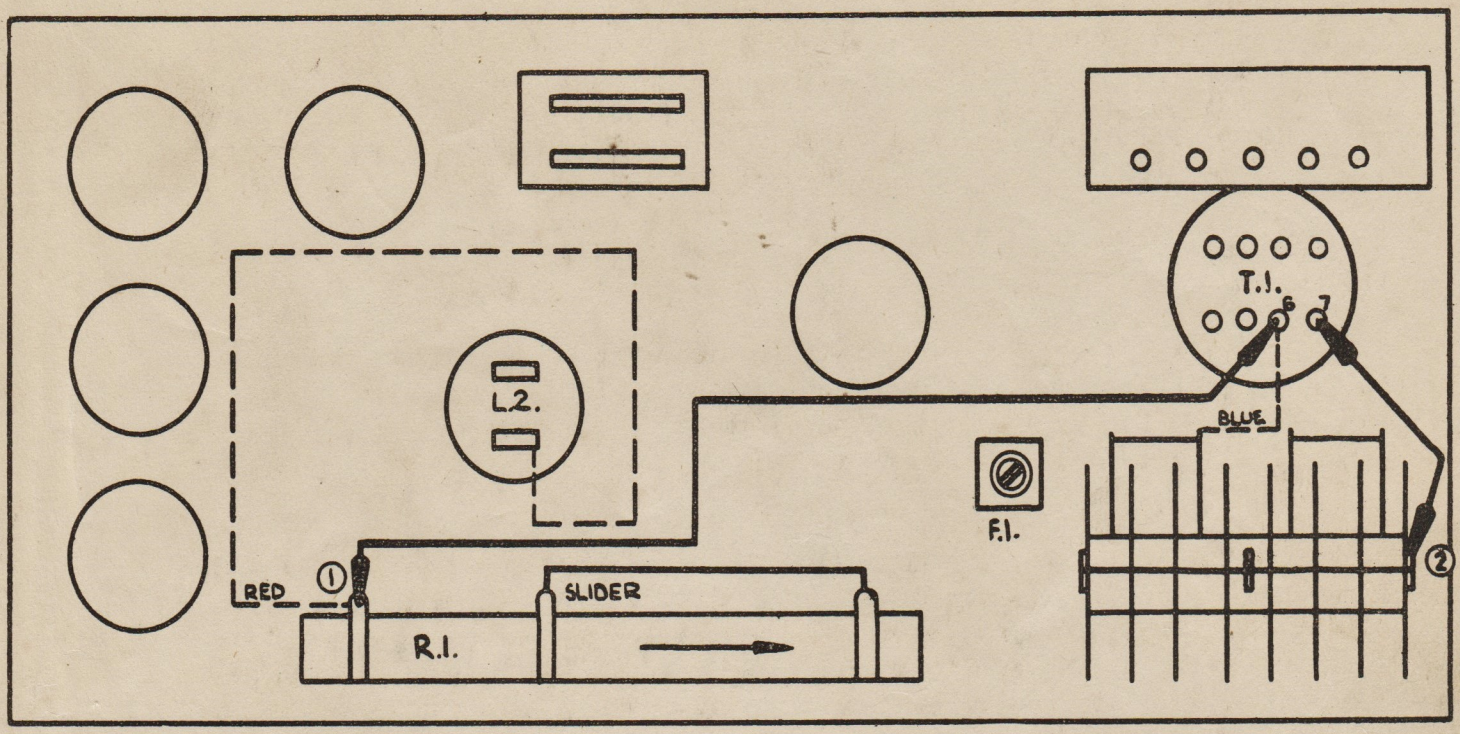
DRIVE MOTOR: The lubrication requirements of the soundhead drive motor will depend upon the type of motor fitted. Motors with grease-packed ball races should, under normal conditions only require greasing during routine inspection by the service engineer; other types should receive two drops of oil on each bearing once a week. It is recommended that each soundhead motor should be "warmed up" by running for ten minutes or so before using the equipment for show purposes.

IMPORTANT: After the end of the day's performance, the lateral guide and pressure roller assembly should be left in the "open" position.

LMI 9507 EXCITER LAMP SUPPLY UNIT

FAILURE OF SELENIUM RECTIFIER.

THE FOLLOWING EMERGENCY A.C. OPERATION IS RECOMMENDED



INSTRUCTIONS

1. INSPECT FUSE F.1. AND APPROPRIATE FUSE IN DISTRIBUTION BOARD.
2. LOOSEN SLIDER ON RESISTANCE R.1. AND MOVE TO END, IN DIRECTION SHOWN BY ARROW.
3. DISCONNECT RED WIRE FROM RESISTANCE, R.1, AT POINT ①.
4. DISCONNECT BLUE WIRE, FROM TERMINAL 6 OF T.1., AT STACK.
5. CONNECT TEMPORARY LEAD FROM TERMINAL 6 OF T.1, TO END OF R.1., POINT ①
6. CONNECT TEMPORARY LEAD FROM TERMINAL 7 OF T.1., TO NEGATIVE ON STACK, POINT ②.
7. ADJUST R.1 TO GIVE A LAMP VOLTAGE OF APPROX. 6 VOLTS AC. WHEN ON LOAD ESTIMATE BY OBSERVING THE LAMP BRIGHTNESS IF NO VOLTMETER IS AVAILABLE.

RK 1380

REVISIONS

REV-1. 20-8-48 "TEMPORY LEAD" NOTE 5 WAS "LONG CLIP LEAD PROVIDED" "TEMPORY LEAD NOTE 6. WAS "SHORT CLIP LEAD PROVIDED. N.C.

DRAWN BY	N.C.
CH K'D BY	Hawk
APP'D BY	H.L.D.
DATE	13-7-48

EMERGENCY OPERATION OF LMI 9507 SUPPLY UNIT

RCA PHOTOPHONE LTD LONDON.

A 3639