Chapter III

INSTALLATION

1.0 GENERAL

Since installation of the A.R.I.5206 is not confined to one particular type of aircraft, layout will vary according to loading problems and space available.

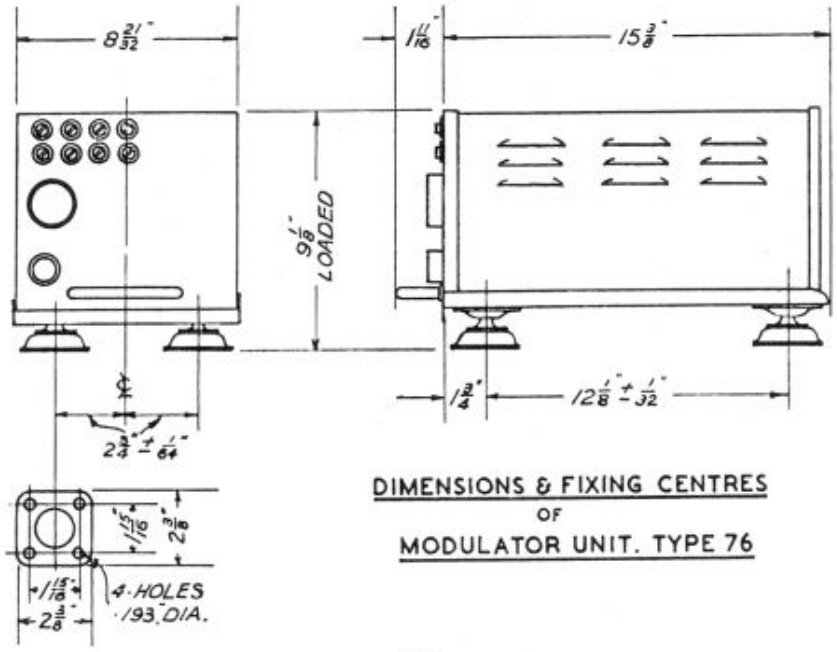
Accordingly, only general suggestions are incorporated in the following chapter for the guidance of those responsible for decisions regarding individual layouts.

2.0 INSTALLING THE MODULATOR UNIT (see C.1)

The Modulator Unit must be installed in a horizontal position and as near to the L.T. batteries as practicable to avoid voltage drop.

It need not adjoin the main transmitter-receiver assembly but should nevertheless be in the most accessible position possible to permit ease of inspection or to enable minor adjustments to be made. Adjustments will, under normal circumstances, only be effected when the aircraft is on the ground.

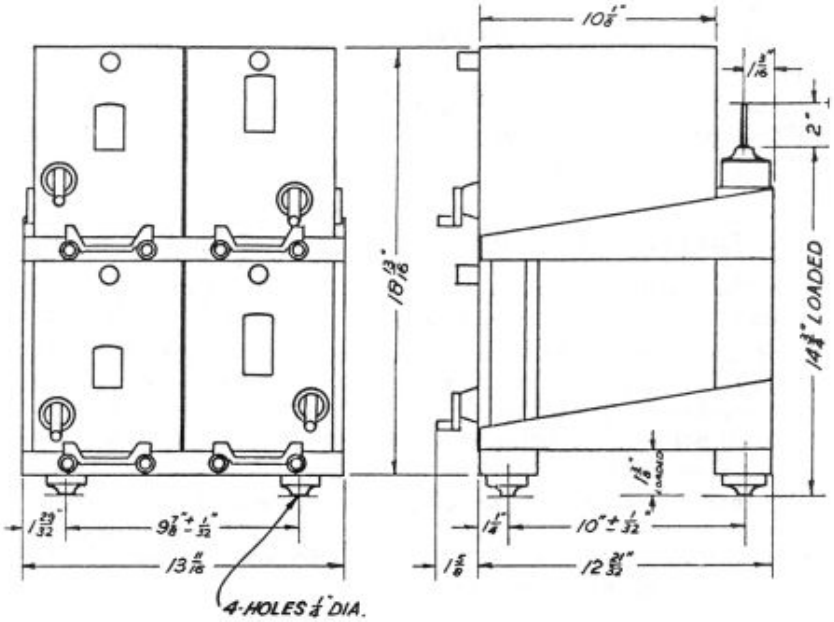
Sufficient clearance must be left to enable the unit to be withdrawn from the mounting tray for overhaul, and provision made for two cable runs to the front of the unit, one from the power supply and the other from the Chassis Assembly.



DIMENSIONS & FIXING CENTRES OF MODULATOR UNIT. TYPE 76

C.1.

The mounting tray into which the Modulator Unit slides is fitted with cup type shock absorbers which are secured to the airframe by four bolts per absorber.



DIMENSIONS & FIXING CENTRES OF CHASSIS ASSEMBLY. TYPE 18

C.2.

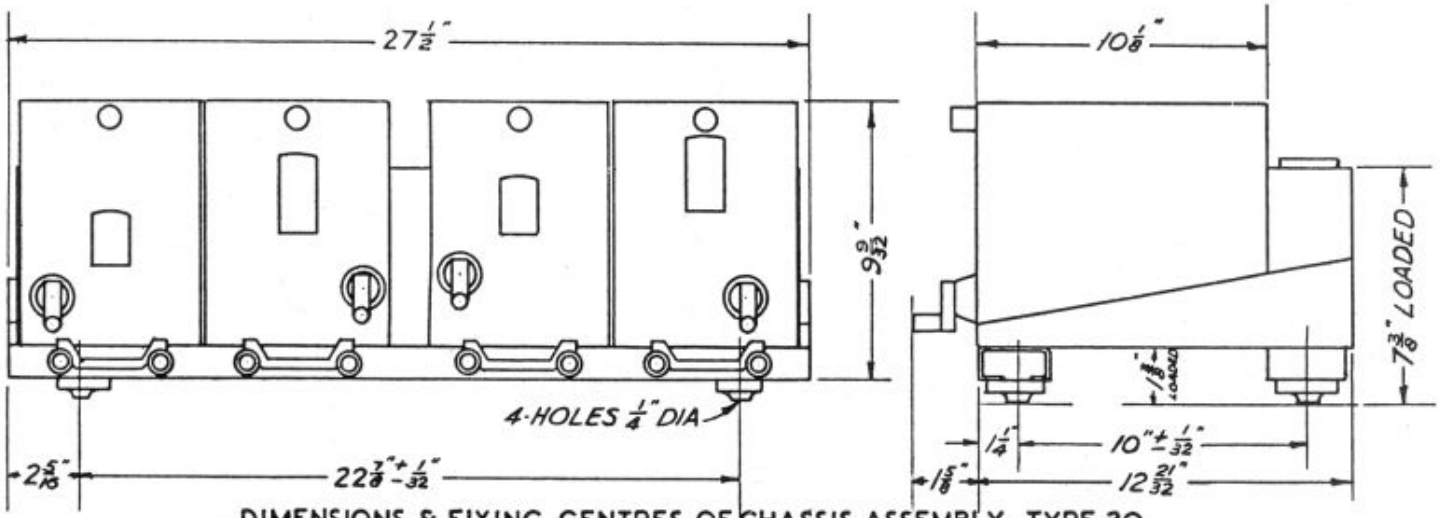
3.0 **INSTALLING THE CHASSIS ASSEMBLY** (see C.2, C.3 and C.4)

The Chassis Assembly carrying transmitters and receivers should be located at breast height in such a position as to give the operator free manual access to all controls on the front panel of the assembly during flight.

Sufficient clearance should be left in the vicinity of the Chassis Assembly to permit the withdrawal of one or all of the R.F. Units, or even the assembly itself. The latter action would not be expected to be undertaken during flight.

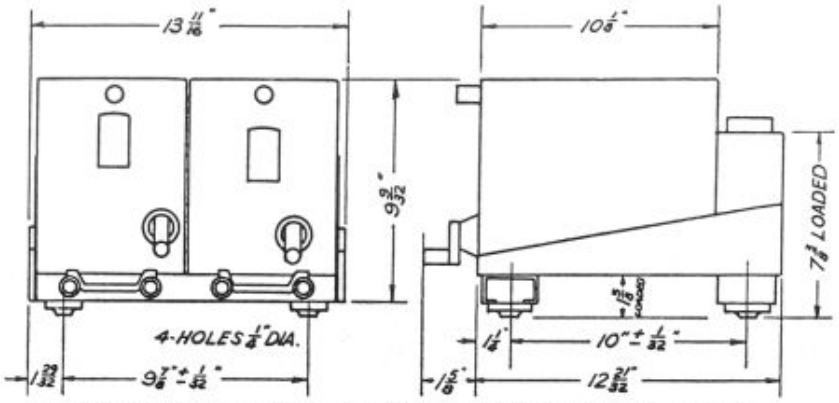
A " Steady Pin " is fitted to Chassis Assemblies supplied for use in aircraft which are likely to be catapulted. This pin, which is mounted on the upper portion of the assembly, is anchored to the airframe via a U-shaped bracket. The additional anchorage prevents excessive horizontal thrust of the Chassis Assembly due to sudden propulsion.

Three separate cables terminate on the rear of the Chassis Assembly linking the Assembly to the Modulator Unit and two control units respectively. Provision should accordingly be made for appropriate cable runs. The transmitters and receivers slide into allocated positions in the Assembly and are secured by knurled locknuts.



DIMENSIONS & FIXING CENTRES OF CHASSIS ASSEMBLY. TYPE 20

C.3.



DIMENSIONS & FIXING CENTRES OF CHASSIS ASSEMBLY. TYPE 21

C.4.

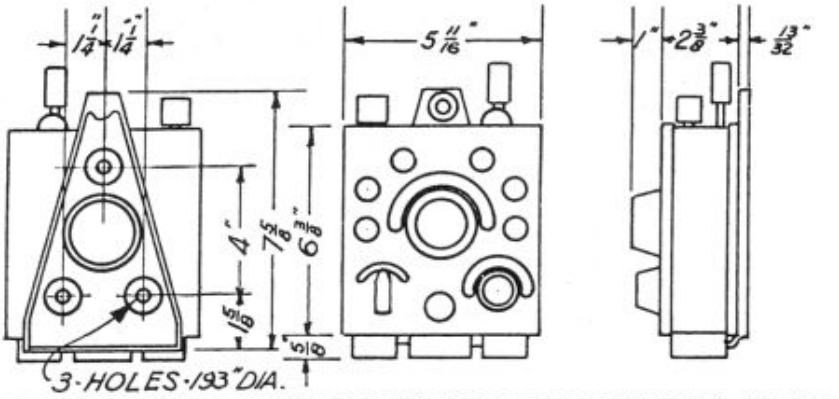
4.0 INSTALLING THE CONTROL UNITS (see C.5)

The Control Units should be installed in such a manner as to give their respective operators clear access to all controls during flight, without the necessity of moving from their stations.

The units themselves are mounted on triangular false backplates in the aircraft, the backplates being permanently secured and the units detachable. No form of shock absorption is employed for this particular mounting.

Sufficient clearance must be left for cable entries at the base of the units, the actual amount depending on the type of equipment and the shape of the cable terminations (i.e. " right angle " or " straight " fittings used).

When the TR.1366 and A.R.I.5206 in combination are to be installed, three cables will be utilized for each control unit, linking



DIMENSIONS & FIXING CENTRES OF CONTROL UNITS TYPES 260, 260A, 271, 271A & 276

C.5.

with the mic-telephone set, Modulator Unit and TR.1366 respectively.

When the A.R.I.5206 is used alone two cables only are fitted to each unit, connecting to the mic-telephone set and Modulator Unit.

5.0 INSTALLING THE AERIAL TUNING UNIT (see C.6)

The Aerial Tuning Unit should be installed as close to the H.F. Aerial as possible.

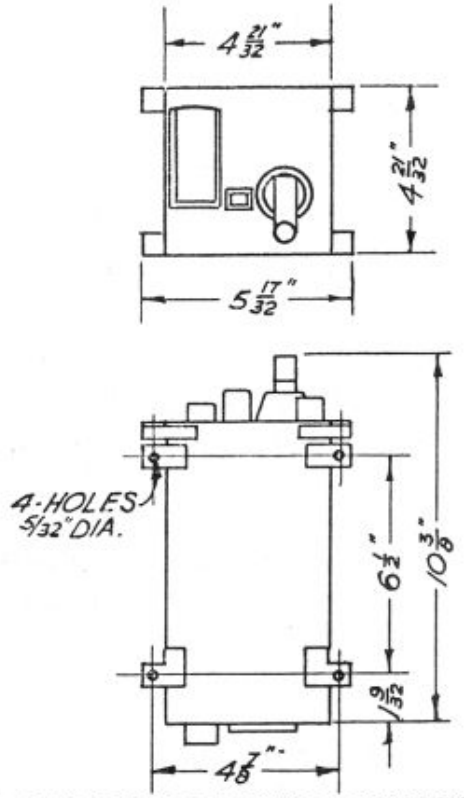
Since it may be necessary for a member of the crew to vary the aerial tuning during flight, the location of the unit should permit access for manual operation.

It should also be located so that the front panel may be under the observation of the operator if possible.

When mounting the unit, sufficient room must be allowed to permit the withdrawal of the aerial, earth, and lighting plugs, all of which are situated at the rear of the unit.

The actual mounting is effected via shock absorbers which are bolted to brackets forming part of the dust cover.

Clearance must be left in front of the unit to permit the withdrawal of the interior without dismounting the dust cover.



DIMENSIONS & FIXING CENTRES FOR AERIAL TUNING UNITS TYPES 126 & 126A

C.6.

6.0 SCREENING AND BONDING

Complete screening of the aircraft ignition system and any other likely source of electrical interference is absolutely necessary.

The bonding of the aircraft should be in good condition and should be extended to include the equipment under installation.

Chapter IV

INITIAL ADJUSTMENT

1.0 GENERAL

Lining up the A.R.I.5206 after installation and preparatory to operating involves the following actions :—

(*a*) Setting the R.F. Circuits for the required working frequencies.

(*b*) Setting preset noise adjuster on the receivers for optimum reception.

(*c*) Checking the general functioning of the equipment.

These actions also apply to lining-up from time to time on new working frequencies, and checking that the equipment is functioning properly. However, the procedure for tuning the aerial circuits of the transmitters need not be carried out in its entirety on every occasion if the initial adjustments are recorded.

If this is done, the aerial circuits can be set entirely to dial readings for any frequency previously used ; and if readings are established over a wide band of frequencies, a chart may be drawn up enabling the equipment to be set for any frequency entirely by dial readings.

Detailed step-by-step routine instructions for lining up by the normal Ground Staff are given in the Instruction Manual No. I.M./101 on the A.R.I.5206. The following is a general explanatory description of the procedure involved. For convenience the procedure is described separately for each R.F. Unit.

Notes on the Type 260 Control Unit

(1.1) Type 260 (Air Gunner's) Control Unit

If the A.R.I.5206 is used alone the TR.1366 switch on the Type 260 Control Unit must be kept in the ISOLATE position.

If the A.R.I.5206 is used in combination with the TR.1366, the TR.1366 switch on the Type 260 Control Unit is normally kept in the " TR.1366 " position.

During lining up of the receivers however, if operating from the Type 260 Control Unit, the TR.1366 switch may be put to Isolate so as to cut out any possible background from the Intercommunication system.

2.0 H.F. TRANSMITTER

(2.1) Setting of R.F. Circuits

First, all the R.F. Circuits in the H.F. Transmitter Unit are adjusted for the desired working frequency. This is done by setting the Band switch and Oscillator Tuning Control to the appropriate dial readings. The Oscillator Tuning Control is then locked.

Next the equipment is set for H.F., M.C.W. or R.T., and switched on by means of the Control Unit. The Intertune switch on the H.F. Transmitter Unit is put in the OFF position. With the transmitting key held down, the aerial circuit is then tuned by the control on the Aerial Tuning Unit to give maximum aerial current, this should approximate .6 Amp.

(2.2) Functional Checks

The last operation above will show whether the equipment is functioning normally on M.C.W. or R.T. A check on H.F. C.W. full power can be made by operating the corresponding switches on the Control Unit, and seeing that the aerial current rises to approximately 1.5 Amps.

The actual aerial currents obtained will depend on the characteristics of the aerial used. They should be recorded, so that subsequent readings can be compared with them as a check that the operation of the equipment has not deteriorated.

The M.C.W. and R.T. conditions are verified, recording the aerial currents for future reference, and checking that the current rises slightly during modulation on R.T.

During these tests, sidetone should be heard in the telephones.

3.0 M.F. TRANSMITTER

A trailing aerial is normally used for transmitting on medium frequencies. Therefore, lining up and checking on the ground can be done only with the artificial aerial (Type I or I.B.) provided, or with the M.F. fixed aerial. Final lining-up (it involves only resetting the Aerial Tuning Controls) necessitates a flight on the first occasion a new frequency is used, or until a tuning chart has been compiled. Thereafter, all lining up may be done on the ground to dial settings.

(3.1) Setting of the R.F. Circuits

All R.F. Circuits are adjusted by the controls on the M.F. Transmitter Unit. First, the Band switch, Oscillator Tuning Control, and the Coarse and Fine Aerial Tuning Controls, are set for the appropriate dial readings. The Oscillator Tuning Control is locked.

The equipment is set for M.F. C.W. full power and switched on. The Intertune switch on the Transmitter Unit is put to OFF.

With the key pressed, the Fine Aerial Tuning Control is adjusted to give maximum brilliance on the Aerial Tuning Indicator.

(3.2) Functional Checks

The proper functioning of the transmitter will be denoted by the lighting up of the Aerial Tuning Indicator. Operation on low power may be verified by changing to this condition and checking that the brilliance of the Aerial Tuning Indicator decreases proportionally.

During the tests, sidetone should be heard in the telephones when the key is pressed.

(3.3) Final Tuning of Aerial Circuit on Trailing Aerial

With the equipment lined up according to 3.1 above, it is operated during flight with the trailing aerial. The Aerial Tuning Controls are re-set to give maximum brilliance of the Aerial Tuning Indicator, and the dial reading recorded.

4.0 H.F. RECEIVER

NOTE.—The H.F. Receiver should not be lined-up until lining-up of the H.F. Transmitter has been completed.

(4.1) Setting of R.F. Circuits

The Aerial circuit trimmers C.4 and C.5 must be adjusted for maximum noise output. This should be done at 13 mc/s on band 1 and 5.9 mc/s on band 2. The remaining circuits of the H.F. Receiver are tuned by setting the Band switch, Oscillator Tuning Control and R.F. Tuning Control, to the appropriate dial settings. The Oscillator Tuning Control is then locked.

(4.2) Setting of the Preset Noise Adjuster

The best Signal/Noise ratio under a given condition can be obtained during flight by means of the Noise Adjuster on the Control Unit. The base line around which this control operates, however, is determined by the preset noise adjuster, located under a mask on the front panel of the H.F. Receiver Unit.

The preset adjuster is set by switching on the equipment in the H.F. C.W. condition and with the R.F. Control on the H.F. Receiver adjusted until maximum noise is heard, putting the Noise Adjuster on the Control Unit in its maximum position, and setting the preset adjuster until background noise is just audible, or alternatively tuning the receivers to a weak signal and setting the preset adjuster for best signal/noise ratio. In general it will be found that the Noise Adjuster can be left set for maximum gain (fully clockwise) if there is little static or engine interference.

(4.3) **Functional Checks**

The foregoing adjustments will indicate whether the receiver is "Live." If a station can be picked up other checks can be made, viz. :—

(*a*) Rotating the H.F. Tune Control should affect reception.

(*b*) Cutting in the note filter should make the tuning appreciably sharper, and reduce noise.

(*c*) Rotation of the Noise Adjuster should alter the noise level if no signal is present.

5.0 M.F. RECEIVER

The procedure on this receiver is similar to that given under paragraph (4.0) above, except that :—

(*a*) It is most important for best signal to noise condition to adjust C.4 and C.5 (aerial trimmers) at 500 and 270 kc/s for maximum noise output with the aerial connected. Providing that the aerial is not changed there is no need to repeat this procedure at any other frequency. In practice it will be found that after having adjusted the preset noise adjuster on the receiver, to suit static conditions, that an even better operational signal to noise condition may be obtained by finally adjusting the NOISE ADJUST on the control unit.

(*b*) The M.F. Tune Control is used instead of the H.F. Tune Control.

NOTE.—After both receivers have been lined up and checked, DUAL reception may be tried. Having changed to this condition, there should be a rise in background noise, and stations working on both channels should be audible simultaneously, and controllable by manipulation of the M.F. and H.F. Tune Controls.

Chapter V

OPERATING

1.0 GENERAL

This Chapter describes the general procedure for operating the A.R.I.5206. Detailed instructions for the air-crew are laid down in the Instruction Manual (No. I.M.101).

It is assumed that the equipment has already been adjusted for the required working frequencies, as described in Chapter IV.

The A.R.I.5206 may be used with or without a TR.1366 in the same installation, and operating will first be considered for the case where the TR.1366 is not fitted. The additional facilities and operations for installations comprising both types of equipment will then be described.

All operating is done from the Control Units. When reading the text it will be found helpful to refer to Plates XXIV, XXVI and XXVII showing these units (pages 53, 55 and 56).

2.0 OPERATING THE A.R.I.5206 WITHOUT THE TR.1366

(2.1) Switching ON and OFF, Taking Control

NOTE.—During the following operations the TR.1366 switch on the Type 260 Control Unit must be kept in the ISOLATE position.

The equipment is switched on from either Control Unit by the ON/OFF switch. (In the case of the Type 271 Control Unit, the action must be followed by pressing the " Take Control " button.)

The equipment will now be " live," and inter-communication will exist between Air Gunner and Observer. Control of the A.R.I.5206 may be taken by either Observer or Air Gunner, each pressing his " Take Control " button.

To switch off the equipment, the ON/OFF switch is put to " OFF," but it should be noted that this operation on the Observer's Control Unit is only effective if the Air Gunner's ON/OFF switch is already at " OFF," otherwise, the effect of this operation is to put the control back to the Air Gunner, thus it will be seen that the AIR GUNNER'S POSITION IS THE MASTER CONTROL POSITION.

(2.2) Receiving

Assuming the equipment is switched on it will automatically be in the " receive " condition.

For keeping watch, the " H.F. and M.F. Tune " controls should be set to zero degrees, as the receivers

are calibrated for this condition. The note filter should be " out " so that the audio response is relatively flat.

Watch may be kept on both channels simultaneously by putting the Channel Switch to " Dual," and the Service Switch to H.F. C.W. or M.F. C.W., otherwise the Channel Switch should be at " Single " and the Service Switch in a position appropriate for the expected signal.

The Noise Adjuster on the control unit should be set to give just audible background noise.

On hearing a call, optimum reception is obtained by trimming the appropriate " Tune " Control and the Noise Adjuster. If the signal is C.W. or M.C.W. and interference is present, the note filter can be cut in, and the " Tune " Control and Noise Adjuster re-set.

(2.3) Transmitting

The Service Switch is set for the type of transmission and frequency band desired. (If M.F. C.W. or H.F. C.W. is selected the Power Switch must be set to " Full " or " Reduce " as required.)

It is then only necessary to manipulate the transmitting key or to hold down the " Press-to-Trans." Switch and speak. (The " Press-to-Trans." Switch functions on R.T. only.)

3.0 OPERATING THE A.R.I.5206 WITH THE TR.1366

Where the TR.1366 and the A.R.I.5206 are installed in combination, the operating procedure under paragraph (2) still applies, but there are certain additional facilities and operations. On such installations, both positions of the TR.1366 switch on the Type 260 Control Unit are operative ; and the Observer's Control Unit (Type 276) has a TR.1366 key with three positions—" Rec," " Trans," and " Rec. G.P."

The Chart in paragraph 3.1 shows the various conditions obtainable and the corresponding switch positions. As there are two positions for the TR.1366 key on the Air Gunner's Control Unit, and three positions for the TR.1366 key on the Observer's Control Unit, and as control of the A.R.I.5206 may be taken by Air Gunner or Observer, there are twelve conditions possible. Not all of these are likely to be needed, but the chart is given to indicate all the conditions which may result from the various control settings possible.

(3.1) CHART OF FACILITIES AND CONTROL POSITIONS FOR A.R.I.5206/TR.1366 INSTALLATIONS

To determine the facilities given by a particular group of control positions, select the control position in use, follow the column downwards and read across to the left to find the facilities given for Air Gunner or Observer. An example of the procedure is given below. To determine control settings required for a particular group of facilities, follow the column upwards and read across to the left to find the settings necessary.

NOTE.—Unless otherwise indicated Intercommunication includes Pilot, Observer and Air Gunner.

CONTROL POSITIONS

		1	2	3	4	5	6	7	8	9	10	11	12
A. Gunner's TR.1366 Key	REC.	X	X	X				X	X	X			
	ISOLATE				X	X	X				X	X	X
Observer's TR.1366 Key	REC.	X			X			X			X		
	TRANS.		X			X			X			X	
	REC. G.P.			X			X			X			X
Control, of A.R.I.5206 taken by	A. Gunner	X	X	X	X	X	X						
	Observer							X	X	X	X	X	X

FACILITIES GIVEN

	1 AG	1 OBS	2 AG	2 OBS	3 AG	3 OBS	4 AG	4 OBS	5 AG	5 OBS	6 AG	6 OBS	7 AG	7 OBS	8 AG	8 OBS	9 AG	9 OBS	10 AG	10 OBS	11 AG	11 OBS	12 AG	12 OBS
Transmit on A.R.I.5206	X		X		X		X		X		X		X	X	X	X	X	X	X	X	X	X	X	X
Receive on A.R.I.5206	X		X		X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
Transmit on TR.1366				X						X						X						X		
Receive on TR.1366		X		X				X		X														
Transmit on Intercommunication	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X
Receive on Intercommunication	X	X	X	X	X	X		X		X		X	X	X	X	X	X	X		X		X		X

EXAMPLE :—The operator requires to know what facilities are available when the switches on the Type 260 and Type 276 Control Units are set in the following manner :—

TR.1366 Switch on Type 260 (Air Gunner's) Control Unit to ISOLATE.
TR.1366 Switch on Type 276 (Observer's) Control Unit to RECEIVE.
Control of the A.R.I.5206 is taken by Air Gunner.

An inspection of the Chart will reveal that in column 4 of the section entitled CONTROL POSITIONS, each of the above settings is denoted by the letter X placed opposite to the tabulated possible switch positions on the extreme left.

The column 4 should then be followed downwards until the FACILITIES GIVEN section of the chart is reached. Here it will be seen that the column divides into two sub-columns entitled AG and OBS respectively. In the AG column reading across to the extreme left from the points indicated by the letter X, it will be seen that the Air Gunner may (1) transmit on the A.R.I.5206, (2) receive on the A.R.I.5206, (3) transmit on Intercommunication. In the OBS column again reading across to the left from the points indicated by the letter X, it will be seen that the Observer may (1) receive on the TR.1366, (2) transmit on Intercommunication, (3) receive on Intercommunication.

Chapter VI

MAINTENANCE

1.0 GENERAL

The term " maintenance " is here used to denote the day-to-day upkeep of the equipment by the normal staff working on a routine basis. It does not embrace the diagnosis and clearance of faults other than the most simple ones. The more serious faults are dealt with in a series of Fault Charts (Figs. 16 to 22).

" Maintenance " of the equipment is therefore considered to comprise the following :—

(*a*) Checking the general functioning of the equipment.

(*b*) Reducing chances of failure by regular inspection and attention.

(*c*) Locating and clearing the simple faults, including replacement of valves.

(*d*) Locating and replacing defective units, i.e. where the fault is not due to defective consumable items.

The routine to be carried out by the maintenance crews in the execution of the above are laid down in detail in the Instruction Manual No. I.M./101. The following is a statement of the facilities needed, and a review of the work to be done by the maintenance crews.

2.0 FACILITIES NEEDED

(2.1) Number of Personnel

No maintenance operation requires more than one man.

(2.2) Space, Layout and Power Supplies

All work can be carried out in the aircraft. For the examination of and attention to the units when removed from their mountings, however, it would be a convenience to have a bench with an approximate surface of 3 ft. × 2 ft. or larger, in a place protected from the weather.

(2.3) Equipment

(1) Tools and Materials

Item	*Needed for*
1 — 8-in. Screwdriver	Releasing dust cover catches
1 — 3-in. Screwdriver	General use
1 — pair 6-in. Combination Pliers	General use
Soft lint-free Cloth	Cleaning Purposes

(2) **Test Gear**

Item	*Needed for*
Avometer, or other suitable continuity tester complete with flex leads	Continuity checks of wiring and cabling

3.0 WORK TO BE CARRIED OUT

(3.1) Regular Duties

(1) Daily Inspection

The connections to the aircraft supply battery should be checked.

Connections to microphones, telephones, transmitting keys, and the aerials themselves, should be checked, as items most likely to become worn.

Finally, the equipment should be run-up on both frequency bands and on all services, to see that it is functioning properly. (If a change of frequency has been made, this operation will have to be carried out automatically as part of the lining-up procedure.)

(2) 30-hour Inspection

After every period of 30 flying hours, a general mechanical check of the installation should be made, verifying that :—

(*a*) Shock absorbers are in good order.

(*b*) Units are secure in mountings, and mountings are secure in aircraft.

(*c*) Cable connections are screwed tight.

(*d*) Aerial insulators are in good condition.

(*e*) The brushes and commutator of the rotary converter are in good condition.

(*f*) The general condition of the units is satisfactory and that the relay contacts show no signs of burning.

(*g*) The frequency calibration of the four R.F. units is correct.

(3) 180-hour Inspection

The opportunity should be taken when the aircraft is undergoing 180 hours overhaul to inspect and clean the equipment in the following manner :—

(*a*) The pins on the cable terminations should be examined, and if dirty, cleaned.

(*b*) The bonding of the installation should be carefully examined.

(*c*) Remove the units from the aircraft and pass them to a W/T workshop for examination and test even if they appear to be still functioning satisfactorily. (Procedure to be followed by personnel in the W/T workshop on units passed in for examination is given in section 4.0.)

(3.2) Handling of Faults

From the viewpoint of maintenance, faults may be considered to fall into three classes :—

(*a*) Failure of items external to the units, i.e. battery supply, cables and cable connections.

(*b*) Failure of consumable items in the units, i.e. valves and fuses.

(*c*) Failure of items in the units other than valves and fuses.

It is recommended that faults found in classes (*a*) or (*b*) should be cleared by the maintenance crew. Faults found in class (*c*) should be traced to the unit involved, and the maintenance crew should then remove the unit and fit a new one.

The routine for diagnosing and handling faults as given in the Instruction Manual I.M./101 is based upon the above procedure.

Units containing faults other than defective valves and fuses should be passed to a suitable repair organisation.

4.0 WORKSHOP PROCEDURE

The procedure in the W/T workshop should be to give the units a general examination, carrying out any re-alignment found necessary. (If during the tests a fault is discovered, the fault should be located and remedied. A series of Fault Charts (Figs. 16 to 22) are provided for detailed fault location.)

In carrying out the general examination the following points should be attended to :—

Blow out any dust and dirt.

Examine valve pins for cleanliness.

Examine brushes and commutators of rotary converter.

Replace any valves and fuses which have had a life of 1000 hours even if they are still working satisfactorily.

Check all controls for smooth working.

Look for broken wiring or joints and for broken components.

Look for any shorting connections and for frayed or rubbed insulation.

Look for any signs of charring or overheating.

Check that no component or assembly is working loose on its mounting.

Chapter VII

FAULT LOCATION AND REPAIR

1.0 FAULT LOCATION

During service, faults of varying description are liable to occur in any part of the equipment.

Since it is manifestly impossible to tabulate a complete list of causes of failure, a circuit tracing procedure has been outlined which takes the form of a series of fault charts. These charts (Figs. 16 to 22) are located at the end of the manual.

Individual charts covering the various units have been included and it is anticipated that personnel following the suggestions outlined in these charts, will find little difficulty in clearing faults, irrespective of their nature.

Localization of a fault to a particular unit is of primary importance in the A.R.I.5206, due to all R.F. units being dependent upon a common power supply and to varying degrees, upon common I.F. and audio circuits.

The first action to be taken, when a fault is suspected in a particular unit, should be to check the functioning of the remainder of the equipment, sufficient information may thereby be gained to confirm, or dismiss the suspected unit as the source of trouble.

When a unit is known to be faulty it should be removed from the aircraft and checked with the aid of suitable instruments and the fault charts.

2.0 REPAIR

(2.1) General

The following paragraphs are intended to provide guidance in the dismantling and re-assembly of component parts of the A.R.I.5206. Such dismantling may be necessitated by the development of serious faults in, or injury to the equipment.

Since faults or damage may occur in any part of a particular unit, a general description of dismantling procedure has been given and application will depend upon individual circumstances.

(2.2) Workshop Facilities Needed

(1) Tools

The following minimum number of tools are required :

1 — 8-in. Screwdriver.
1 — 3-in. Screwdriver.
1 — Soldering Iron.
1 — Pair 5-in. Round-nose Pliers.
1 — Pair 6-in. Combination Pliers.
1 — Pair Sidecutters.

(1) **Tools**—*continued*

Assorted Files.
1 — Complete set 0 to 8 BA Flat Spanners.
1 — Complete set 0 to 8 BA Box Spanners.

(2) **Materials**

Fine grade glasspaper.
Carbon Tetrachloride.
Resin cored solder.
Soft lint-free cloth.

(2.3) Dismantling the H.F. Transmitter

(1) Removing the front panel

When removing the front panel of the transmitter it will first be necessary to detach all external control knobs. These knobs are fitted to the tuning control, band change and panel light dimmer shafts respectively, and are retained in position by grub screws. The tuning control lock need not be removed, but must not be in the " locked " position.

The above action should be followed by the release of small retaining screws situated at the upper left and right-hand side of the panel.

Finally, with the dust cover removed, nuts located at the rear of the panel for the purpose of securing the lifting handle eyebolts are released. The eyebolts handle and panel are then withdrawn.

(2) Detaching the Coil Cans

The cans may be removed quite readily to permit coil inspection. Each is held in position by three retaining screws, two of which are situated diagonally on the top, and the remaining one on the side near the base. These screws are clearly indicated by a surrounding ring of red paint.

While no further information regarding the removal of the cans covering inductances L.1 and L.2 need be given, that covering L.3 requires extra comment.

The structure of the can of L.3 is slightly different to that of L.1 and L.2 inasmuch that it is fitted with a detachable lid which may be released when the top screws are withdrawn.

Inside the front wall of the can is mounted a mechanical link connection to the band change switch. This connection must be sprung by slight hand-pressure to permit withdrawal of the cover.

The panel lamp should be detached from its bracket on the side of the can and the anode leads to V.2 and V.3 released.

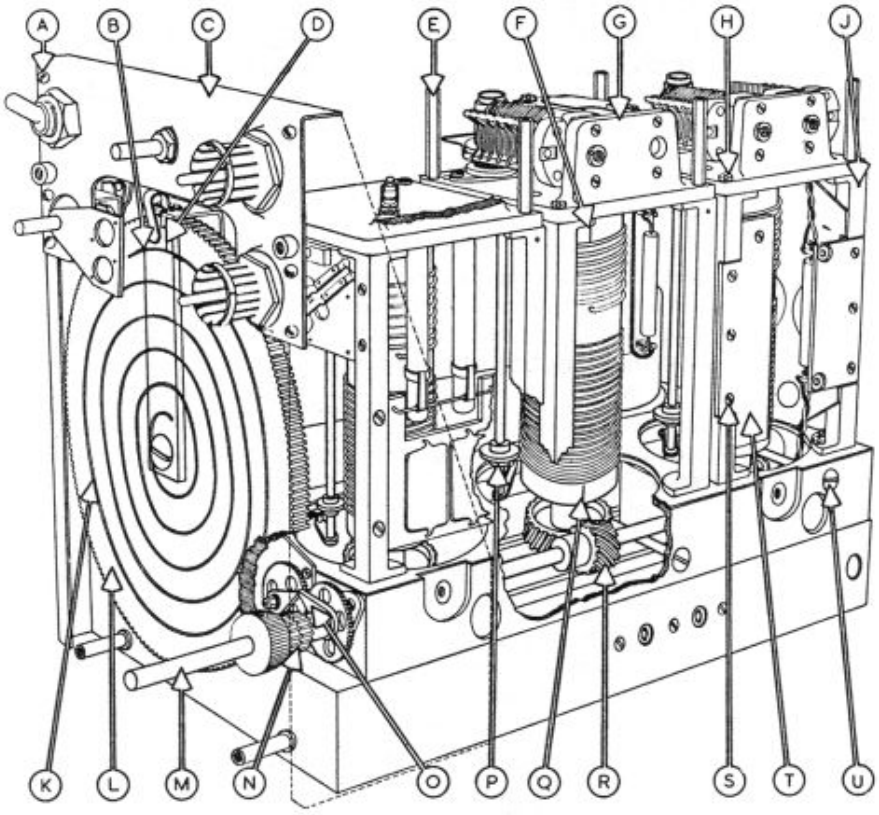
The remaining screw in the base of the can may then be withdrawn and the can passed over the anode resistors and so finally removed.

(3) **Withdrawing the Inductance Assembly** (see G.1)

It is possible to withdraw the inductance assembly complete with dial mechanism, should the assembly need replacement.

For this purpose it is necessary to remove the front panel as described in paragraph 2.3 (1) and to release the retaining screw (A) from the sub-panel (C) mounted on the chassis uprights. The sub-panel should then be carefully twisted in an upwards and sideways (to the left) direction in order to give ample clearance for the dial withdrawal.

Three countersunk retaining screws (U) should then be withdrawn from the right-hand side of the chassis near the base, and with the chassis inverted all wiring connections to the Inductance Assembly should be unsoldered.



G.1.

Finally, four small retaining screws (not shown in the sketch) securing the base of the Inductance Assembly to the chassis should be released. These screws are readily accessible from the underside of the chassis.

The Inductance Assembly will now be quite free, and with the chassis in an upright position, may be lifted upwards and withdrawn.

It is most inadvisable to dismantle the dial mechanism, but if such action becomes essential, careful reference should be made to the sketch during re-assembly.

The dial is re-set so that the black scale rider (B) is centred on the black setting up mark (D) on the outer edge of the scroll groove (K). The shaft (M) should be rotated in an anti-clockwise direction until the cams (O), on the stop mechanism, lock, before setting up the dial mechanism. The split pinion (N) should also be set to avoid backlash. This is carried out by rotating the free half to the fullest extent of its spring tension, then releasing it one tooth before engaging the gearing on the dial (L) with the pinion.

If replacement of a rotating inductance is necessary it may be carried out by removing the associated top plate (G) and withdrawing the inductance from its bearings. The top plates are held in position by screws (H) and columns (E). The columns are pinned at points (J) and the pins must be driven out before the columns can be released.

When inserting a new inductance the marks (F and Q) engraved thereon must be aligned with the centre of the pinion (R) and a similar mark on the underside of the associated top plate. The shaft (M) should be in a maximum clockwise position during this operation and the roller (P) set on the top winding of the inductance.

The thermostat is mounted on the panel (T) and if necessary may be removed by detaching the screws (S), turning the panel outwards and unsoldering the connections.

(2.4) **Dismantling the H.F. Receiver**

(1) **Removing the front panel**

The front panel of the receiver may be removed in a similar manner to that outlined for the H.F. Transmitter except that two screws on either side of the lifting handle must be released before the panel can be detached.

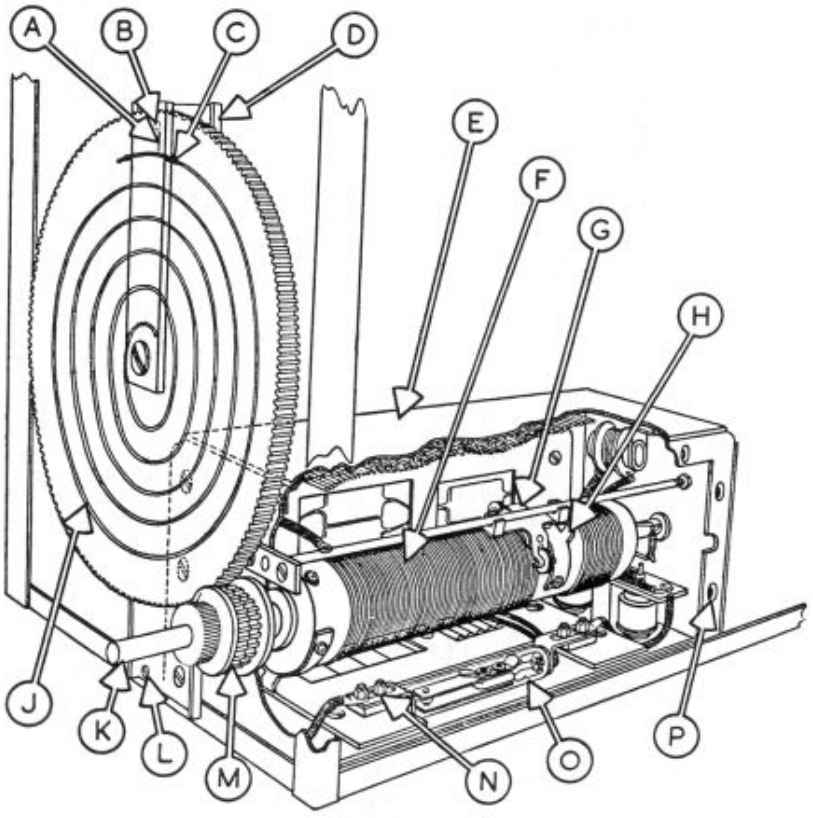
(2) **Detaching the Oscillator Unit** (see G.2)

Where inspection of the oscillator is required the whole oscillator compartment need not be withdrawn from the chassis, since detachment of the side panel will permit of reasonable access to the interior.

This panel is located on the right side of the oscillator compartment and is retained in position by sixteen countersunk screws. The screw heads are ringed with red paint for identification purposes. The cover plate is not shown in the sketch, but three of the threaded bushes (P) into which the countersunk bolts are fitted appear.

When replacing the cover, care should be taken that all screws are tightened securely and that contact faces of both cover and compartment are clean and well fitting.

Should it become necessary to replace the oscillator compartment or to effect major repairs thereto, the compartment, complete with valve socket and dial mechanism may be withdrawn without



G.2.

great difficulty, providing the front panel has been detached.

The compartment (E), which slides into the chassis is retained in position by the steel member (D) supporting the dial. This member is secured at top and bottom to the chassis by bolts (L and B), which must be withdrawn before any attempt is made to remove the compartment. The wiring to terminals at the rear of the compartment should then be detached and the oscillator valve removed. The compartment complete with dial may then be eased forward from the chassis.

Should the dial be removed it will be necessary to reset the inductance and dial gearing in correct relation. For this purpose the shaft (K) should be rotated in an anti-clockwise direction until the stop (H) contacts the roller carrier (G), the roller will then be resting upon the end turn of the inductance (F). The dial gearing should be meshed with the pinion (M) in such a manner that the scale rider is situated centrally with the setting mark (A) on the outer edge of the scroll groove (J). The pinion (M) is of the split pattern and must be set to avoid backlash. This is accomplished by rotating the free half to the fullest extent of its spring tension, then releasing it one tooth before meshing it with the dial gear.

The thermostat (O) may be removed if necessary by releasing the nuts (N) at both ends of the thermostat.

(3) Removing the Ganged Condenser C.1, C.2

The ganged R.F. condenser, C.1, C.2 is secured to a chassis bracket at four points, the condenser, wiring and bolts all being accessible from the left-hand side of the chassis.

The condenser may be withdrawn (providing the front panel has first been removed) following the release of the holding bolts and the associated R.F. dial. Lamp LP.2 is clipped to the condenser and should also be detached.

(4) Resistance and Condenser Panels

The resistance panels in the lower compartment of the chassis are secured in the conventional manner.

Should it become necessary to remove the complete vertical panel, the oscillator compartment must first be withdrawn to permit access to the heads of the retaining screws.

(5) Removing the Switch S.1

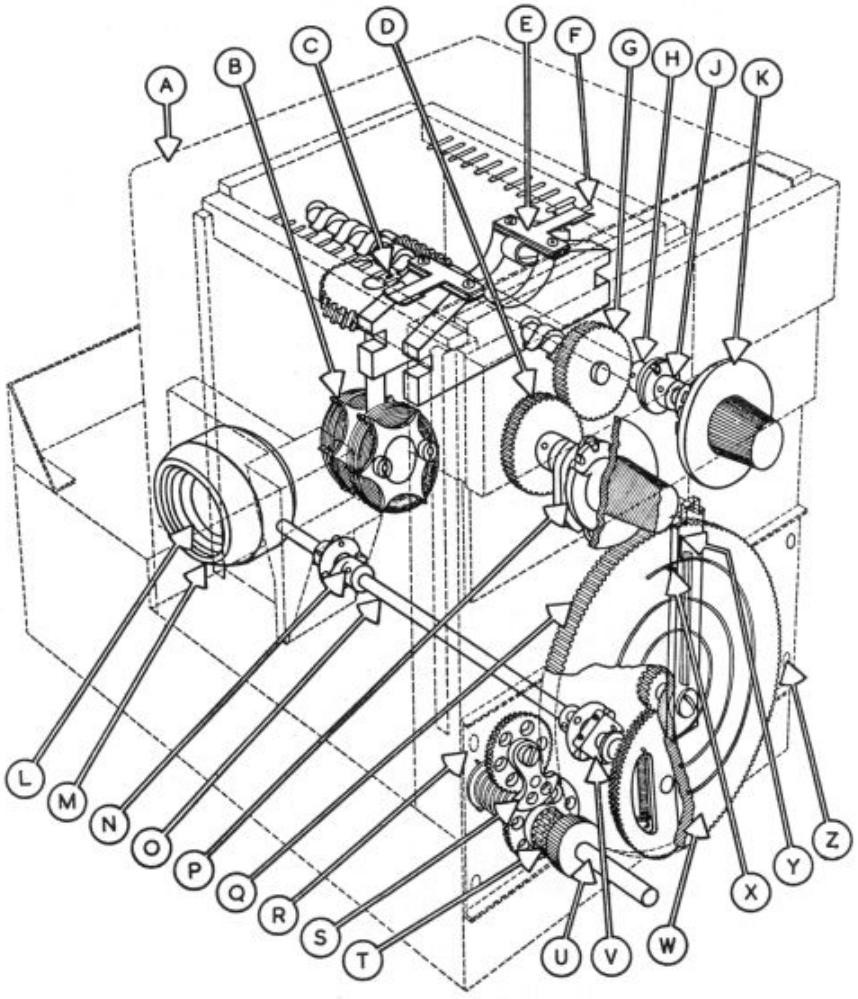
The band switch S.1 is screwed to the upper deck of the chassis, the heads of all screws being accessible.

In addition to the removal of wiring and holding bolts, the clevis pin securing the crank arm to the front panel switch mechanism must be withdrawn before the switch can be finally detached.

(2.5) Dismantling the M.F. Transmitter

(1) Removing the Front Panel (see Plate XXVIII)

The procedure for removing the front panel of the transmitter is similar to that adopted for the other units. All control knobs are released, the screws at the top corners of the panel extracted and handle eyebolts removed. The panel may then be withdrawn.



G.3.

(2) **Removing and re-assembling the sub-panels and Main Coil Assembly** (see Plates XXIX and XXX. Also G.3)

With the front panel removed, three sub-panels, fitted horizontally to the upright chassis members, will be observed. Any one of these sub-panels may be detached provided retaining screws holding each to the chassis, and the mechanical and electrical connections on the rear side of the panels are released.

The upper or aerial indicator panel is fitted on the rear face with wiring to the aerial socket, dimmer control and neon indicator lamp.

The centre panel mounting the output circuit tuning indicators is coupled to the output coil gearing.

The lower panel carries the dial gearing which is secured to the oscillator variometer via the drive mechanism. The grub screws in the flexible joint on the driving shaft must be loosened before this panel can be withdrawn.

If the centre panel has been removed for any purpose it will be necessary to re-set the tuning control indicators in correct relation to the output coil.

For this purpose with the panel removed both dials (K) are set on three respective Geneva movements (P) for maximum reading (as would be indicated at the front panel window aperture). The wiper contacts (E) on the top of the output coil are then arranged by rotation of the coupling (H) so that they rest centrally on the first pair of fixed contacts (F).

The variometer (B) in the output coil is then rotated via pinion (G) until an engraved mark (C) on the pinion is directly under an inspection hole provided in the top of the screen (A).

The couplings (H and J) and the pinions (D and G) are engaged on fitting the centre panel.

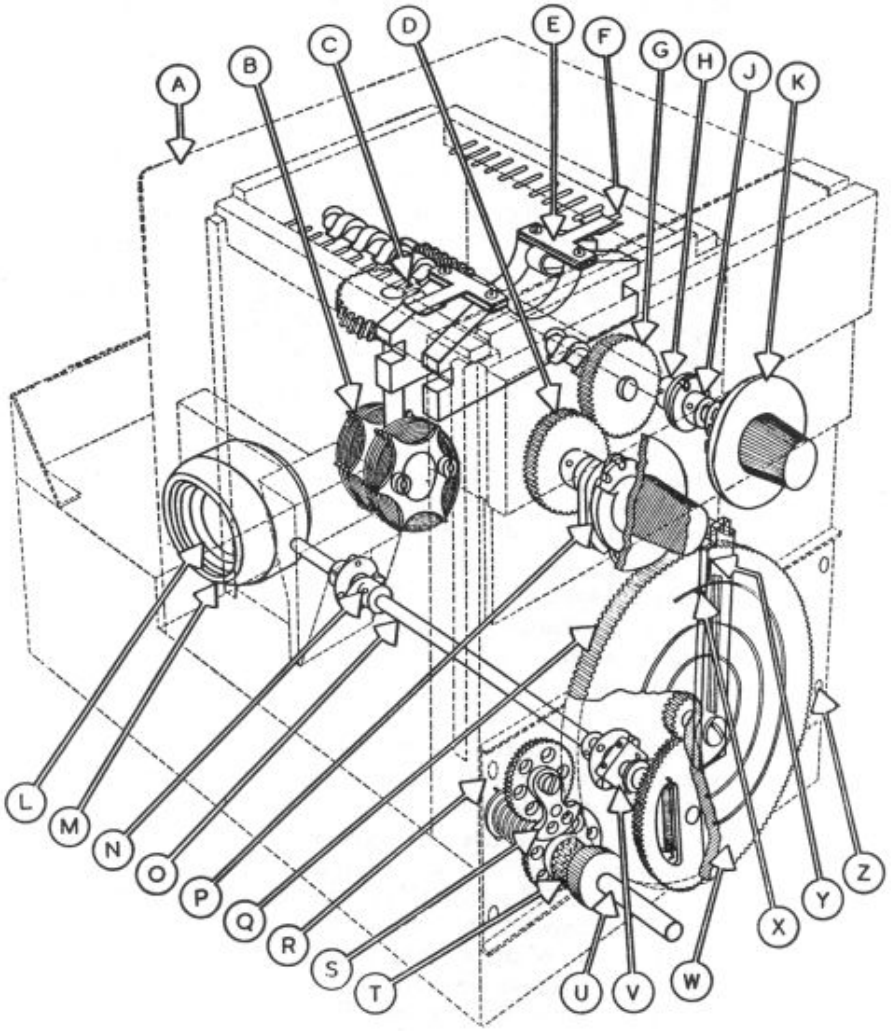
The oscillator variometer is mounted on a metal bracket which is in turn bolted to the underside of the chassis.

If the lower panel has been removed it will be necessary on re-assembling the coupling mechanism to ensure that the variometer is set in correct relation to the dial mechanism.

For this purpose the variometer must first be rotated to a position of minimum inductance, with the rotor (L) and stator (M) in the same plane and the winding in opposition. With the grub screws on the flexible joints of the driving shaft (N) loose and maintained in an accessible position, the scroll mechanism is rotated via the driving shaft (U) in an anti-clockwise

direction until the cams (S), in the stop mechanism, lock. The scale rider (X) should now rest centrally on the black setting mark (Y) on the outside edge of the scroll groove. If this is not the case due to the dial mechanism having been dismantled, the dial (W) should be unbolted from the mounting plate (R) and the gearing (Q) re-engaged with the pinion (T) at the appropriate position. The pinion (T) should be set in the manner described in Sub-section 2.4 (2) to avoid backlash. (See G.4.)

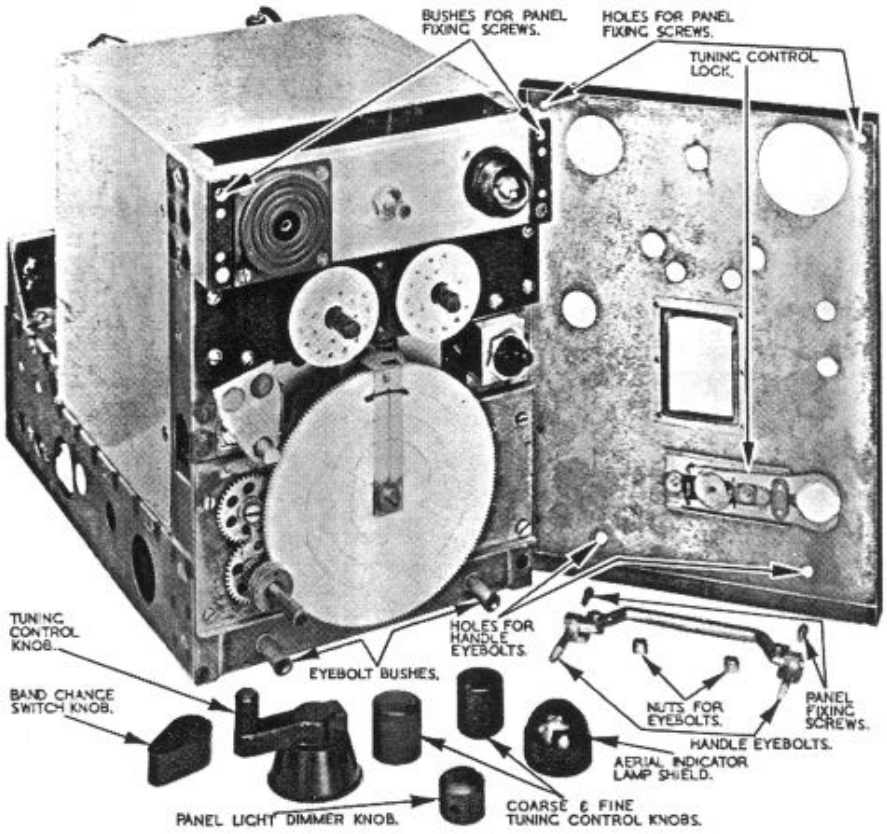
When the foregoing conditions have been fulfilled the grub screws (N) on the driving shaft (O) may be tightened up. Final trimming may be carried out by adjustment of centering screws on coupling (V).



G.4.

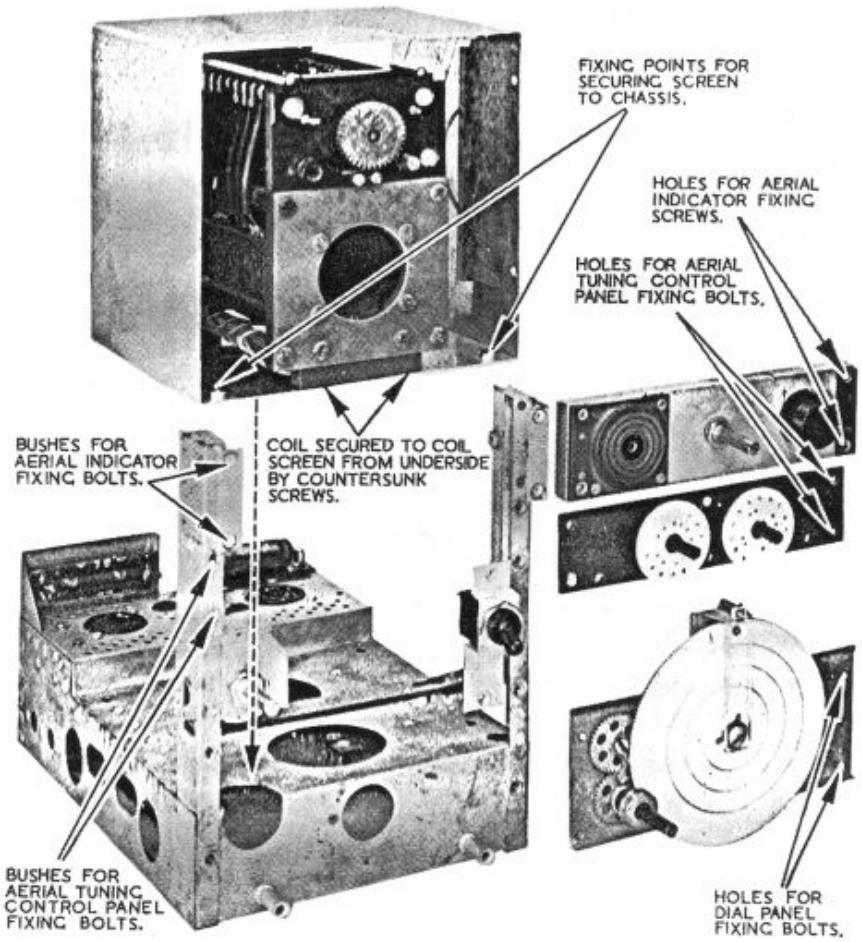
PLATE XXVIII

M.F. TRANSMITTER UNIT
(Front panel removed)



A.R.I.5206

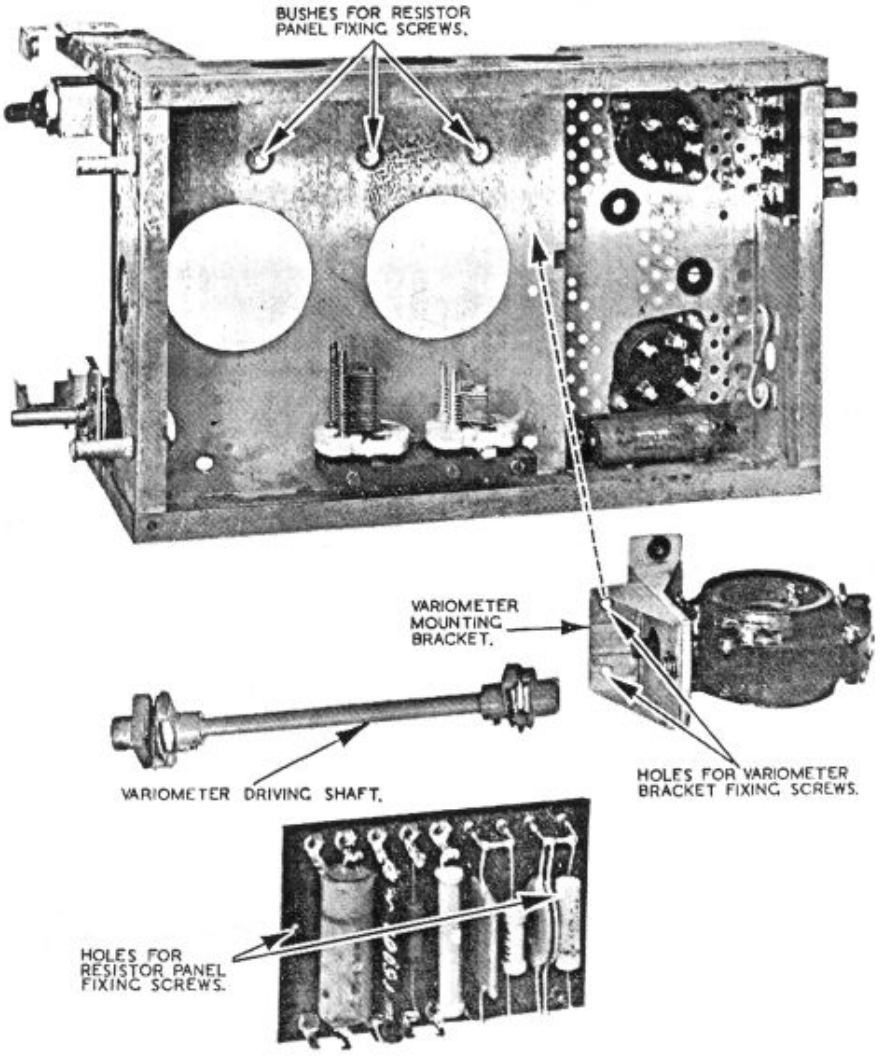
PLATE XXIX



A.R.I.5206

M.F. TRANSMITTER UNIT
(Dial mechanism and coil assembly removed)

PLATE XXX



A.R.I.5206

M.F. TRANSMITTER UNIT
(Oscillator variometer removed)

If for any reason it becomes necessary to remove the main output coil entirely, both screen and coil must be detached together. The screen is screwed to the chassis by four bolts inserted from the underside of the deck. External wiring will require releasing before the assembly can be removed.

Following removal of the assembly, the coil may in turn be separated from the screen by the withdrawal of four countersunk screws on the screen base.

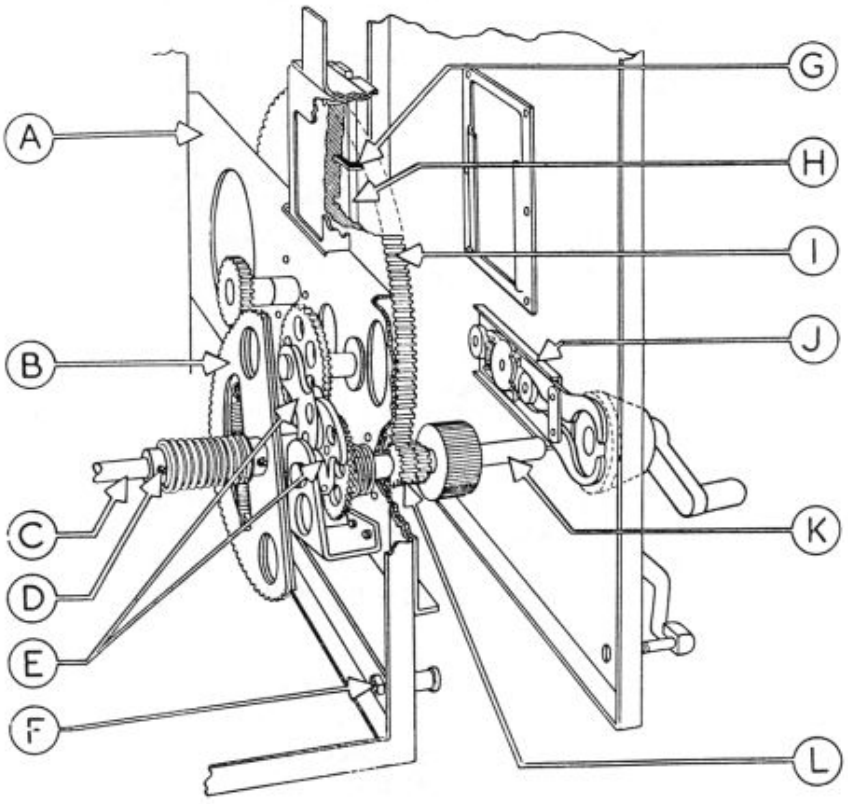
(2.6) **Dismantling the M.F. Receiver**

(1) **Removing the front panel** (see Plate XXXI)

The procedure for removing the front panel is similar to that previously described for other units.

(2) **Removing the dial mechanism** (see Plate XXXII. Also G.5)

The front panel of the unit must be removed in the manner already described before the dial mechanism can be dismantled. It should be again emphasized that dismantling of this mechanism should only be carried out in cases of absolute necessity.



G.5.

The dial mechanism mounting plate (A) is secured to the chassis uprights by four bolts. These should be withdrawn and the grub screws (D) on the flexible coupling to the condenser shaft (G) loosened. The panel lamp should also be unclipped from the cursor bracket. The mounting plate may then be withdrawn.

(3) **Removing the ganged condenser and small components** (see Plates XXXII and XXXIII)

The ganged condenser C.1, C.2 and C.3 is fitted with mounting brackets, the whole assembly being bolted to the underside of the chassis deck.

The removal of the condenser entails the detachment of external wiring, the release of the chassis holding bolts from the upper deck and the slackening of the grub screws on the universal joint linking the condenser to the dial mechanism. A holding bolt of relay K must also be released.

The keying relay (K) complete with mounting bracket is bolted to the upper deck of the chassis. To remove the relay it is necessary to detach all wiring and the holding bolts, to which access may be had from the lower deck. The relay and bracket may then be removed.

The practice of mounting resistors on sub-panels has been followed in the construction of the unit. The sub-panels are bolted in the normal manner to the chassis structure. Two such panels are illustrated on Plate XXXII having been removed from the vertical steel member on the left of the upper deck.

Since the top cover plate of the aerial filter may be removed for inspection, it is improbable that the whole assembly will ever need removal. It is, however, possible to detach the casing by releasing all wiring and holding bolts from the chassis structure.

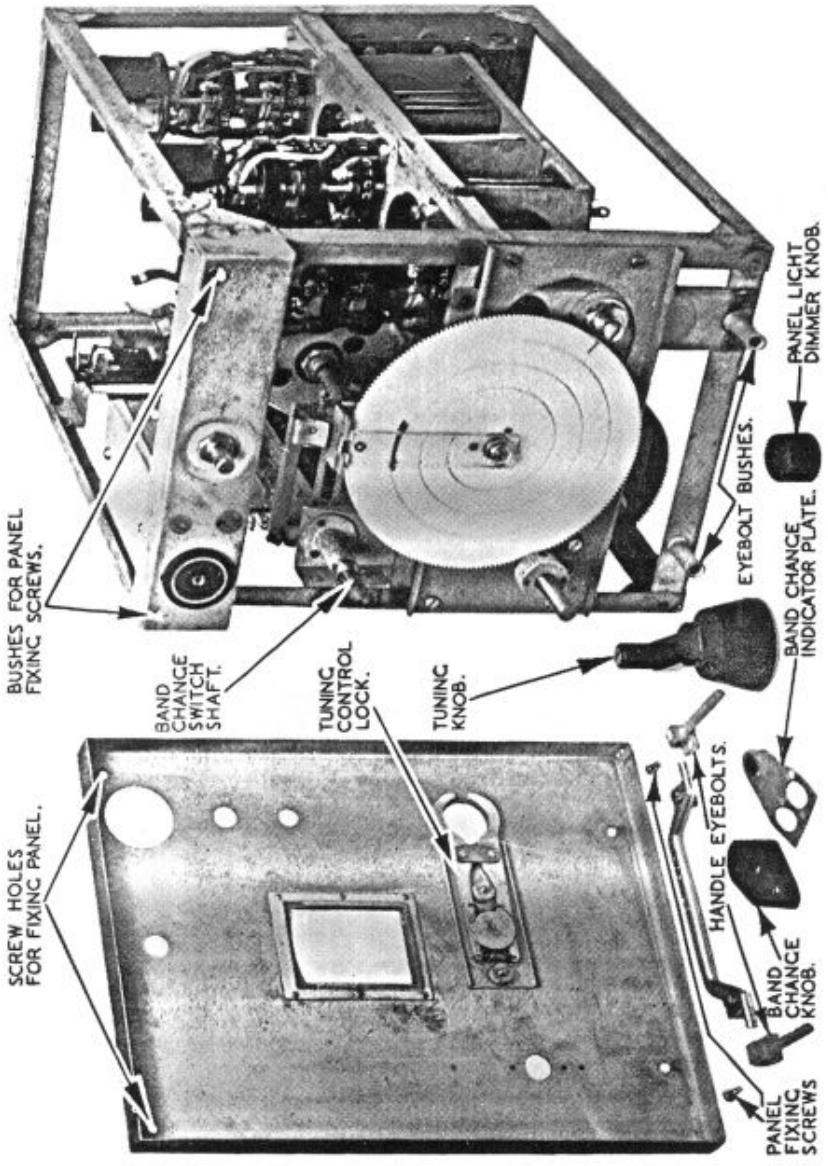
The interstage transformers and valve sockets are constructed as far as possible on a sub-unit basis, each holder or transformer carrying associated resistors and condensers in a compact arrangement.

In the event of a serious failure in a particular stage, a whole sub-assembly may be withdrawn following detachment of external wiring and the release of the holding bolts securing the assemblies to the chassis.

(4) **Removing the switch assembly**

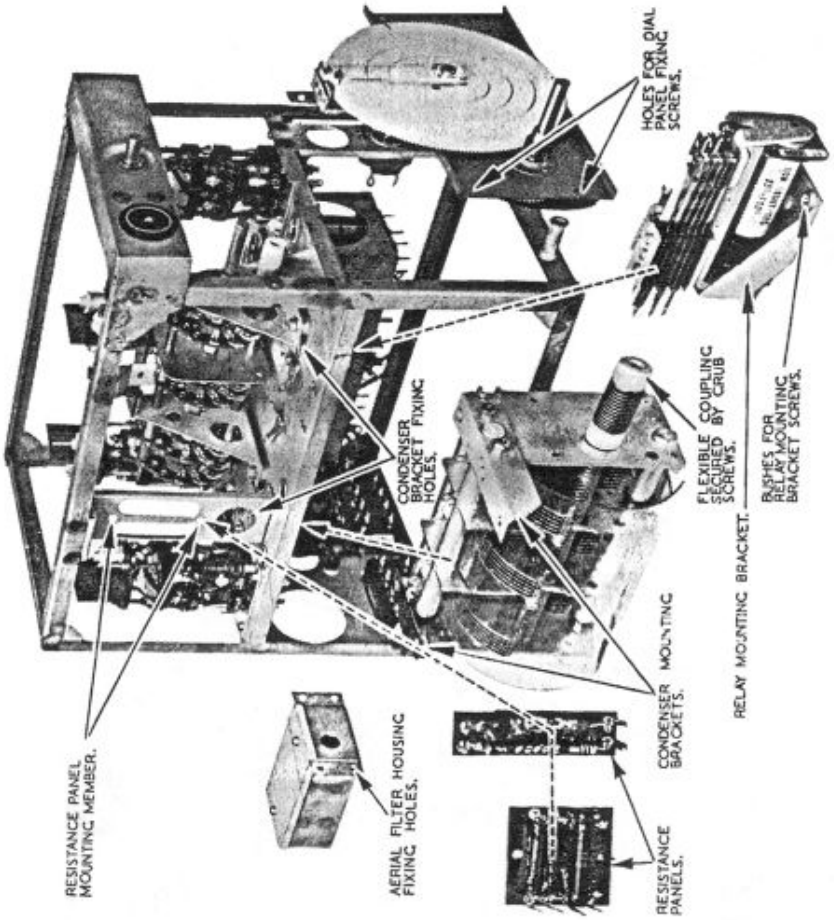
Finally, the complete switch assembly S.1, mounted on the upper deck of the chassis, may be removed providing the band change switch crank arm

PLATE XXXI



A.R.I.5206 M.F. RECEIVER UNIT (Front panel removed)

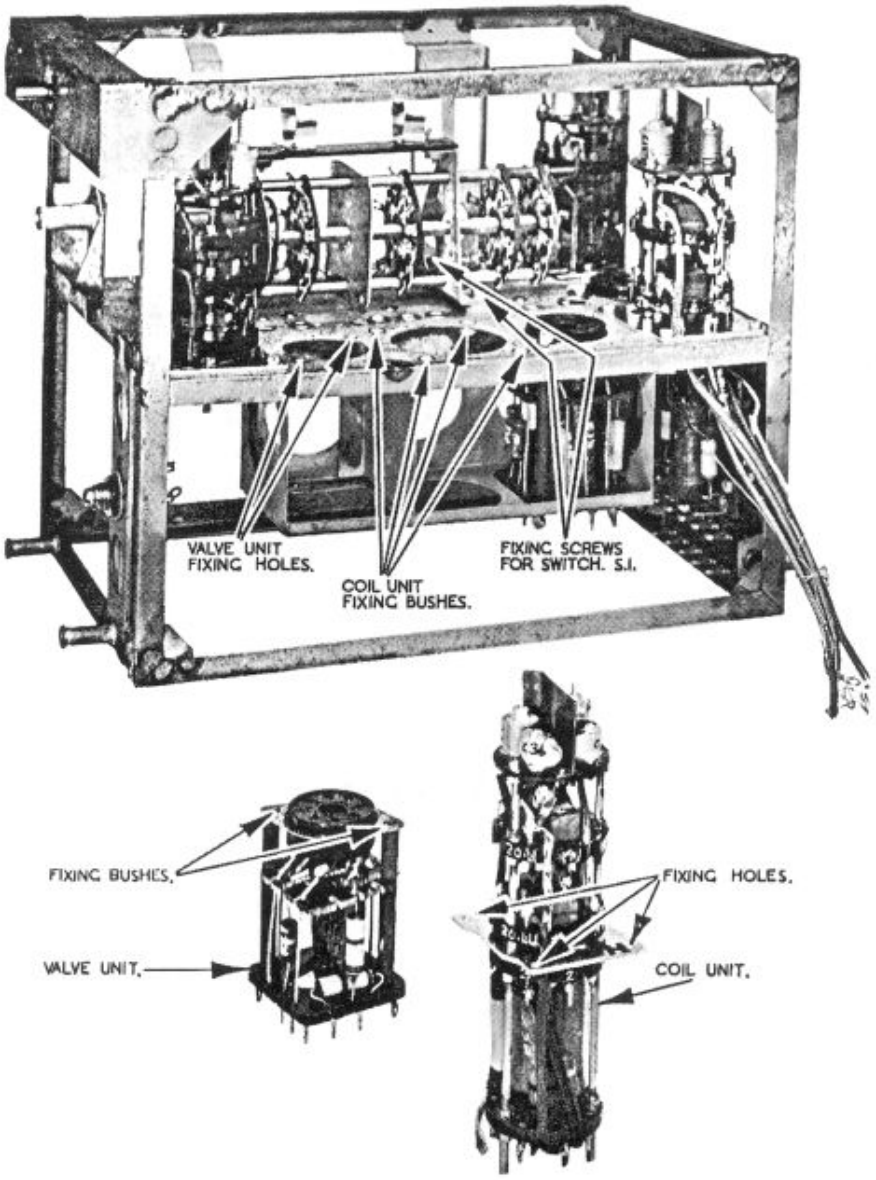
PLATE XXXII



M.F. RECEIVER UNIT
(Dial mechanism and components removed)

A.R.I.5206

PLATE XXXIII



A.R.I.5206

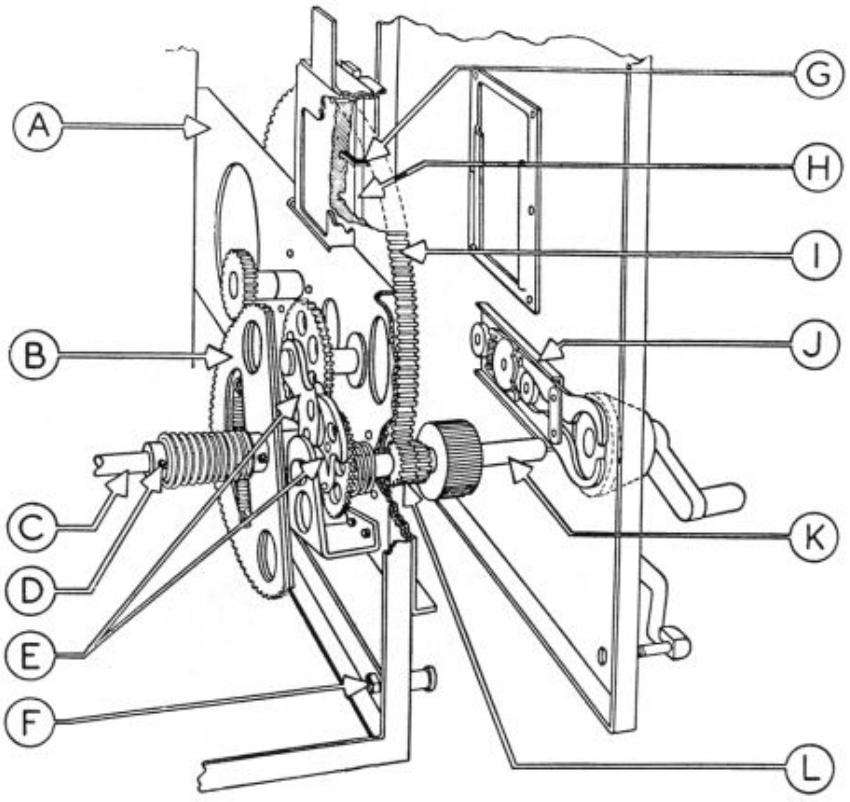
M.F. RECEIVER UNIT
(Coil units removed)

and all associated wiring and holding bolts are released. Access to these bolts is obtained from the upper deck of the chassis.

(5) **Resetting the dial mechanism** (see G.6 and Plate XXXII)

Where the dial mechanism or condenser C.1, 2, 3 has been removed for repair it will be necessary to reset these components in proper relation during re-assembly.

The driving shaft (K) should first be rotated in an anti-clockwise direction until the cams (E), on the stop mechanism, lock. In this position the scale rider (G) should centre on the black setting mark on the outer edge of the scroll groove on the dial. If this is not the case it will be necessary to remove the dial from its mounting and re-engage its gearing (I) in the correct position with relation to the pinion (L). This pinion is of the split pattern, and must be set to avoid backlash. This is accomplished by rotating the outer half to the fullest extent of its



G.6.

spring tensions and releasing it one tooth before engaging it with the dial scroll.

The condenser C.1, 2, 3 when mounted should be so arranged that the rotating vanes are in a position of minimum capacity, i.e. right out.

When the foregoing conditions have been fulfilled the panel carrying the dial mechanism may be mounted on the chassis, care being taken that the flexible coupling connects the condenser shaft (C) to the quadrant (B). The grub screws (D) on the coupling may then be tightened up.

(2.7) **Dismantling the Modulator Unit** (see Plate XXXIV)

(1) **Removing the Rotary Converter**

The dust cover is removed from the modulator unit in the manner already described.

The rotary converter, complete with filter circuits may then be withdrawn by releasing four holding screws at the respective corners of the converter base plate. The screws are accessible from the upper deck of the chassis.

(2) **Removing small components**

Since the unit method of construction has been employed as far as possible, interstage transformers and valve bases are designed to incorporate associated resistors, condensers, etc. These sub-assemblies are bolted to the upper deck of the chassis, and are detachable providing external wiring is first released.

Coil cans are secured to the chassis in the conventional manner by two bolts diagonally situated at the base of the cans.

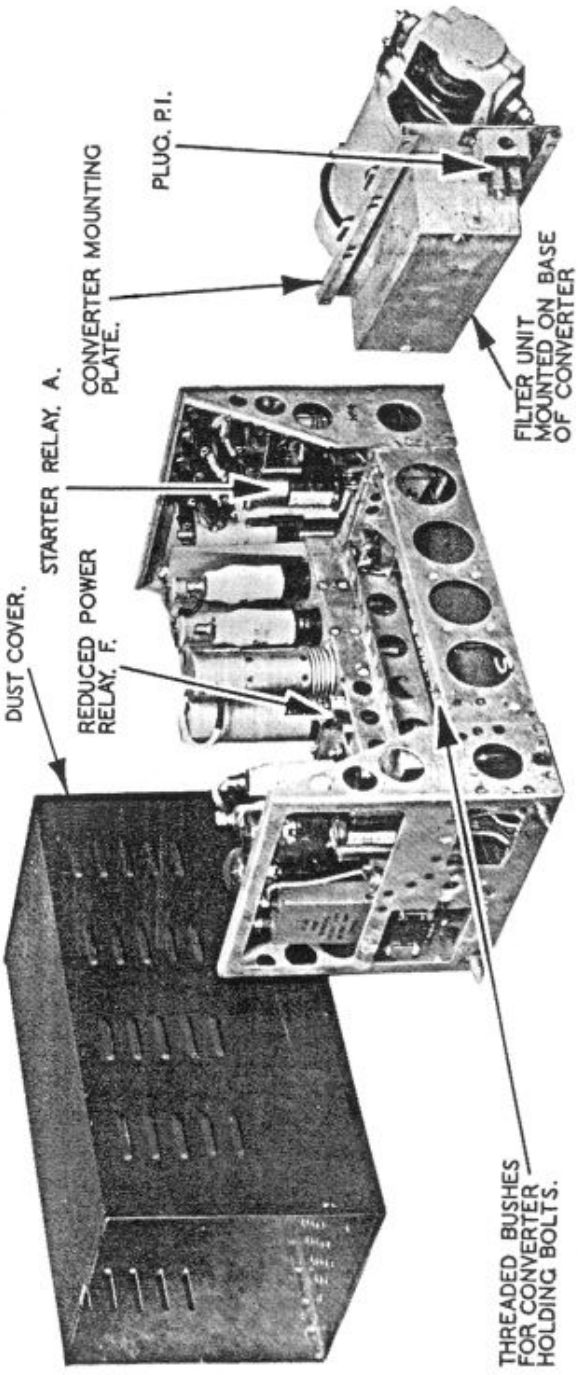
Valve sockets V.7 and V.8 combine to form a single assembly located at the rear of the chassis and secured thereto by four bolts.

Relays are directly fastened to the chassis with two bolts per relay, which are accessible from the underside of the chassis.

Transformers T.1 and T.3 and choke L.6 are secured to the chassis by means of shakeproof nuts in positions which permit of reasonable access.

Tubular condensers C.27 and C.49 are inverted and protrude through the lower chassis deck. The bases of these condensers are secured to the upper deck with a large hexagon nut.

PLATE XXXIV



MODULATOR UNIT
(Converter unit removed)

A.R.I.5206

APPENDIX

(1) **LIST OF COMPONENTS**

(2) **MISCELLANEOUS INFORMATION**

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A.M. Type 53A. Ref. 10D/1451 (For use with 13-volt supply)
(Circuit diagrams Figs. 3 & 3A)

CONDENSERS

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.1	10C/3092	1498	3.5–22.5 μμF.	—	S.T.C. Code RL.Spec. 7002–26
C.2	10C/3092	1498	3.5–22.5 μμF.	—	S.T.C. Code R.L.Spec. 7002–26
C.3	10C/14679	4912	1,000 μμF.	350	S.T.C. Code RL.Spec. 7002–70A
C.4	—	—	350 μμF.	—	Consists of C.4A together with 250 μμF. chosen from C.4B to C.4J
C.4A	10C/14686	4919	100 μμF.	500	Silvered ceramic. Pattern X
C.4B	10C/14686	4919	100 μμF.	500	Silvered ceramic. Pattern X
C.4C	10C/3987	2043	75 μμF.	500	Silvered ceramic. Pattern W
C.4D	10C/3986	2042	50 μμF.	500	Silvered ceramic. Pattern W
C.4E	10C/3985	2041	25 μμF.	500	Silvered ceramic. Pattern W
C.4F	10C/14680	4913	100 μμF.	350	S.T.C. RL.Spec. 7002–72D
C.4G	10C/14681	4914	75 μμF.	350	S.T.C. RL.Spec. 7002–72C
C.4H	10C/14682	4915	50 μμF.	350	S.T.C. RL.Spec. 7002–72B
C.4J	10C/14683	4916	25 μμF.	350	S.T.C. RL.Spec. 7002–72A
C.5	—	—	200 μμF.	—	Consists of C.5A and C.5B in parallel
C.5A	10C/12232	3831	100 μμF.	500	Silvered ceramic. Pattern X
C.5B	10C/12232	3831	100 μμF.	500	Silvered ceramic. Pattern X
C.6	10C/14684	4917	430 μμF.	350	S.T.C. Code RL. Spec. 7002–71A
C.7	10C/4488	2314	30 μμF.	500	Silvered ceramic, flat
C.8	10C/14685	4918	1,300 μμF.	350	S.T.C. Code RL. Spec. 7002–70B
C.9	10C/4236	2181	200 μμF.	350	Silvered mica, flat. Size 4
C.10	10C/10393	403	.01 μF.	750	Silvered mica. Pattern B.T. Size 8
C.11	10C/11698	552	.001 μF.	350	Moulded silvered mica. Pattern BW. Size 7

CONDENSERS—*continued*

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.12	10C/3679	1864	300 μμF.	350	Moulded silvered mica. Pattern BW. Size 5
C.13	10C/3092	1498	3.5–22.5 μμF.	—	S.T.C. Code RL. Spec. 7002–26
C.14	10C/3081	1487	50 μμF.	500	Cup type ceramic
C.15	10C/10393	403	.01 μF.	750	Moulded mica. Pattern BT. Size 8
C.16	10C/8496	188	.01 μF.	350	Moulded mica. Pattern BT. Size 7
C.17	10C/10512	379	.001 μF.	750	Moulded mica. Pattern BT. Size 7
C.18	10C/10512	379	.001 μF.	750	Moulded mica. Pattern BT. Size 7
C.19	10C/954	888	25 μμF.	500	Silvered ceramic
C.20	10C/12473	7410	750 μμF.	350	S.T.C. RL. Spec. 7002–76A
C.21	10C/3092	1498	3.5–22.5 μμF.	—	S.T.C. RL. Spec. 7002–26
C.22	10C/3092	1498	3.5–22.5 μμF.	—	S.T.C. Code RL. Spec. 7002–26
C.23	—	—	260 μμF.	—	Consisting of C.23A and C.23B in parallel
C.23A	10C/14689	4920	130 μμF.	500	Silvered ceramic Dubilier. Type DMY 950
C.23B	10C/14689	4920	130 μμF.	500	Silvered ceramic Dubilier. Type DMY 950
C.24	10C/14692	4922	1,050 μμF.	350	S.T.C. Code RL. Spec. 7002–76B
C.25	10C/8496	188	.01 μF.	350	Moulded mica. Pattern BT. Size 7
*C.26	10C/8496	188	.01 μF.	350	Moulded mica. Pattern BT. Size 7
C.27	10C/8496	188	.01 μF.	350	Moulded mica. Pattern BT. Size 7
*C.28	10C/8496	188	.01 μF.	350	Moulded mica. Pattern BT. Size 7
C.29	10C/8496	188	.01 μF.	350	Moulded mica. Pattern BT. Size 7
C.30	10C/14692	4922	1,050 μμF.	350	S.T.C. Code RL. Spec. 7002–76B
C.31	10C/10392	402	200 μμF.	750	Moulded mica. Pattern BT. Size 7
C.32	10C/8496	188	.01 μF.	350	Moulded mica. Pattern BT. Size 7
C.33	10C/10393	403	.01 μF.	750	Moulded mica. Pattern BT. Size 8

* Deleted in Type 53A Transmitter.

INDUCTANCES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
L.1 L.2 L.3	—	—	S.T.C. Code :—LP.120860
L.4	10C/79	53	S.T.G. Code :—LP.115569
L.5	10C/79	53	S.T.C. Code :—LP.115569
L.6	10C/14270	51	S.T.C. Code :—LP.125251

LAMP

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
LP.1	5L/2080	—	12-volt 1-watt M.E.S.

PLUGS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
PJ	10H/4048	563	S.T.C. Code LP.115196, 12-pin Jones Pattern
PV	10H/3930	552	Co-axial Plug to W.T.26258
PW	10H/3930	552	Co-axial Plug to W.T.26258

RELAYS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
Relay J 1/3	10F/2357	844	S.T.C. Code :—4639AW. TFG.
Relay J 2/3	10F/2358	845	S.T.C. Code :—4639AX. TFG.
T.H.1	10F/532	13	Thermal Relay, Sunvic 2-CLG.

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value	Wattage	Description and/or Manufacturers' Reference
R.1	10W/1717	1717	20,000	3	Painton Type 301
R.2	10W/1719	1719	50,000	7	Painton Type 302
R.3	10W/1719	1719	50,000	7	Painton Type 302
R.4	10W/8525	2041	56	½	R.M.A.8
R.5	10W/1736	1736	10,000	3	Painton Type 301
R.6	10W/53	561	100	½	R.M.A.8
R.7	10W/53	561	100	½	R.M.A.8
R.8	10W/1972	1972	25,000	7	Painton Type 302
R.9	10W/1972	1972	25,000	7	Painton Type 302
R.10	10W/15758	4444	130	7	Painton Type 302
*R.11	10W/16078	4734	36	3	Painton Type 301
†R.11	—	—	9	3	Painton Type 301
*R.12	10W/16078	4734	36	3	Painton Type 301
†R.12	—	—	9	3	Painton Type 301
R.13	10W/16018	4693	7	7	Painton Type 302
R.14	—	—	—	—	—
*R.15	10W/15635	4074	300	—	Colvern 21/9 S.3
†R.15	10W/15781	4465	150	—	Colvern 21/9 S.3
*R.16	10W/15311	4020	140	3	Painton Type 301
†R.16	10W/15782	4466	10	3	Painton Type 301
R.17	10W/1872	9/17	4,700	¼	R.M.A.9

* Used in Type 53 Transmitter only.
† Used in Type 53A Transmitter only.

SOCKET

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
J.1	10H/1129	246	S.T.C. Code: —LP.120985. P.A. Grid Jack

SWITCHES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
S.1	10F/2482	1500	S.T.C. Code LP.125001
S.2	10F/10338	152	Wylex Single Pole Changeover

VALVES AND VALVE SOCKETS

Component Number	Valves			Sockets		
	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
V.1	10E/587	VT.60A	S.T.C. 5B/250–A	10H/13136	200	Celestion "Amphenol" 5-pin American
V.2	10E/587	VT.60A	S.T.C. 5B/250–A	10H/13136	200	
V.3	10E/587	VT.60A	S.T.C. 5B/250–A	10H/13136	200	

2. H.F. RECEIVER. Type 78. A.M. Ref. 10D/1307 (For 26-volt working)
Type 78A. A.M. Ref. 10D/1448 (For 13-volt working)
(Circuit diagrams Figs. 4 & 4A)

CONDENSERS

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.1	10C/14301	4717	10–315 μμF.	—	Two-ganged condenser S.T.C. Code RL. Spec. 7002–75
C.2					
C.3	10C/16	572	10 μμF.	500	Disc Type ceramic
C.4	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864–01
C.5	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864–01
C.6	10C/4271	2215	100 μμF.	350	Silvered mica, Flat. Size 5

CONDENSERS—*continued*

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.8	10C/11123	3359	.01 μF.	1000	Tubular Paper
C.9	10C/11123	3359	.01 μF.	1000	Tubular Paper
C.10	10C/11123	3359	.01 μF.	1000	Tubular Paper
C.11	10C/2589	1227	5 μμF.	500	Bead type ceramic
C.12	10C/16	572	10 μμF.	500	Disc type ceramic
C.13	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.14	10C/11126	3362	.1 μF.	1000	Tubular, paper
C.15	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.16	10C/4271	2215	100 μμF.	350	Silvered mica, Flat. Size 3
C.17	10C/4970	2660	.002 μF.	350	Moulded silvered mica. Pattern BW. Size 5
C.18	10C/11123	3359	.01 μF.	1000	Tubular, paper
C.19	10C/11123	3359	.01 μF.	1000	Tubular, paper
C.21	10C/4271	2215	100 μμF.	350	Silvered mica, Flat. Size 3
C.22	10C/11126	3362	.1 μF.	350	Tubular, paper
C.23	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.24	10C/5055	2725	100 μμF.	350	Silvered mica, Flat. Size 3
C.25	10C/10395	405	30 μμF.	500	Disc Type ceramic
C.30	10C/4184	2140	200 μμF.	350	Silvered mica, Flat. Size 4
C.31	10C/4184	2140	200 μμF.	350	Silvered mica, Flat. Size 4
C.32	10C/4798	2529	150 μμF.	350	Silvered mica, Flat. Size 4
C.33	10C/14258	4707	80 μμF.	500	Erie type N.750L
C.34	10C/5055	2725	100 μμF.	350	Silvered mica, Flat. Size 3
C.35	10C/2009	921	80 μμF.	350	Silvered mica, Flat. Size 3
C.36	10C/11206	3409	40 μμF.	350	Silvered mica, Flat. Size 3
C.37	10C/12073	3746	20 μμF.	350	Silvered mica, Flat. Size 1
C.38	10C/14257	4706	100 μμF.	500	Erie type N.750L
C.39	10C/14258	4707	80 μμF.	500	Erie type N.750L
C.40	10C/14259	4708	40 μμF.	500	Erie type N.750L
C.41	10C/14260	4709	20 μμF.	500	Erie type N.750L
C.42	10C/4271	2215	100 μμF.	350	Silvered mica, Flat. Size 3

CONDENSERS—*continued*

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.43	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.44	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.46	10C/12073	3746	20 μμF.	350	
C.47	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.50	10C/11123	3359	.01 μF.	1000	
C.52	10C/743	823	3–30 μF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.53	10C/2009	921	80 μμF.	350	Silvered mica, Flat. Size 3
C.58	10C/36	582	2 μμF.	500	Disc ceramic
C.59	10C/36	582	2 μμF.	500	Disc ceramic
C.61	10C/4184	2140	200 μμF.	350	Silvered mica, Flat. Size 4

CRYSTAL

Component Number	A.M. Reference	A.M. Type	Frequency	Description and/or Manufacturers' Reference
X.1	10X/100	Crystal	100 kc/s	S.T.C. Code RL.Spec. 7065–1A

INDUCTANCES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
L.1, L.2 Complete Coil Unit	10C/14266	40	S.T.C. Code :—20LU.131A.
L.3, L.4 Complete Coil Unit	10C/14207	41	S.T.C. Code :—20LU.131B.
L.5	10C/79	53	Eddystone L.1022
L.6	—	—	S.T.C. Code :—LP.120453
L.7 Complete Coil Unit	10C/14268	42	S.T.C. Code :—20LU.131C.

INDUCTANCES—*continued*

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
L.8 Complete Coil Unit	10C/14264	3359	S.T.C. Code :—20LU.131D.
L.9	—	—	
L.10 }	10C/14265	—	S.T.C. Code :—LP.120439
L.11 }			
L.12	10C/14262	1097	S.T.C. Code :—LP.120544

LAMPS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
LP.1	5L/2080	—	12-volt 1-watt M.E.S.
LP.2	5L/2080	—	12-volt 1-watt M.E.S.

PLUGS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
PK	10H/4048	563	S.T.C. Code :—LP.115196, 12-pin Jones Pattern Plug
PX	10H/3930	552	Co-axial Plug to WT.26258

RELAY

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
TH.1	10F/532	13	Thermal Relay Sunvic Type 2–CLG.

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
R.1	10W/11384	480	1 meg.	$\frac{1}{4}$	R.M.A.9
R.2	10W/690	874	470	$\frac{1}{4}$	R.M.A.9
R.3	10W/11671	505	10,000	$\frac{1}{4}$	R.M.A.9
R.4	10W/11384	480	1 meg.	$\frac{1}{4}$	R.M.A.9
R.5	10W/539	805	47,000	$\frac{1}{2}$	R.M.A.8
R.6	10W/659	857	270	$\frac{1}{2}$	R.M.A.8
R.7	10W/16109	4758	2,000	—	Morganite Stackpole Potentiometer, L.H.N.A.R. 20250/20800
R.8	10W/11691	8/81	39,000	$\frac{1}{2}$	R.M.A.8
R.11	10W/546	809	47,000	$\frac{1}{4}$	R.M.A.9
R.12	10W/899	2366	5,600	1	R.M.A.2
R.13	10W/15744	4436	30	—	S.T.C. Code 7007/25
R.14	10W/15744	4436	30	—	S.T.C. Code 7007/25
R.15	10W/546	809	47,000	$\frac{1}{4}$	R.M.A.9
R.16	10W/753	891	4,700	$\frac{1}{2}$	R.M.A.8
R.17	10W/10955	3670	42	3	Painton Type 301
*R.18	10W/15770	4455	90	3	Painton Type 301
†R.18	10W/7098	7098	45	30	Painton Type 301
*R.19	10W/1735	1735	20	3	Painton Type 301
†R.19	10W/15481	4190	5	3	Painton Type 301
*R.20	10W/15572	4278	300	—	Colvern Type 21/2/S.3
†R.20	10W/16022	4694	75	—	Colvern Type 21/2/S.3
R.21	—	—	—	—	—
R.22	10W/546	809	47,000	$\frac{1}{4}$	R.M.A.9
R.23	10W/660	860	270	$\frac{1}{4}$	R.M.A.9
R.24	10W/27	544	10,000	$\frac{1}{2}$	R.M.A.8
R.25	10W/1592	1592	150,000	$\frac{1}{2}$	R.M.A.8
R.30	10W/754	892	560,000	$\frac{1}{4}$	R.M.A.9
R.31	10W/11691	525	100,000	$\frac{1}{4}$	R.M.A.9
R.32	10W/1106	1106	560	$\frac{1}{4}$	R.M.A.9

* Used in Type 78 Receiver only. † Used in Type 78A Receiver only.

REMOTE TUNING CONTROL

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
RT.1	10C/13741	136	" Desynn " Tuning Unit, Smith Type 167FL.

SWITCHES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
S.1	—	—	Band change switch, S.T.C. Code RL.Spec. 7016–63
S.2	—	—	Crystal calibrator switch, S.T.C. Code RL.Spec. 7016–64

TUNING COIL UNIT (Complete with dial)

A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
10D/2139	138	Coil Unit and Scroll, S.T.C. Code LP.120451

VALVES AND VALVE SOCKETS

Component Number	Valves			Sockets		
	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
V.1	10E/105	VR.92	E.A.50	10H/150	40	Belling Lee Type L.357
V.2	10E/92	VR.91	E.F.50	10H/3237	238	Belling Lee Type L.500
V.3	10E/ZA.2985 or 10E/ZC.3642	ARTH.2	E.C.H.35	10H/493	73	" Amphenol " Octal S.P.8 US.
V.4	10E/348 or 110/E.68	VR.67	6J.5G.	10H/493	73	" Amphenol " Octal S.P.8 US.
V.5	10E/11399	VR.53	E.F.39	10H/493	73	" Amphenol " Octal S.P.8 US.

3. M.F. TRANSMITTER. A.M. Type 51. Ref. 10D/1308 (For 26-volt working)
A.M. Type 51A. Ref. 10D/1499 (For 13-volt working)
(Circuit diagrams Figs. 5 & 5A)

CONDENSERS

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.1	10C/3606	1814	200 μμF.	500	Silvered ceramic Pattern XT.
C.2	—	—	820 μμF.	—	Consisting of C.2A and C.2B in parallel
C.2A	10C/13891	4563	410 μμF.	750	Silvered mica, Flat, Size 6
C.2B	10C/13891	4563	410 μμF.	750	Silvered mica, Flat, Size 6
C.3	10C/4415	2281	50 μμF. max.	—	Polar C.803
C.4	10C/13890	4562	200 μμF.	500	Erie Type N.750L
C.5	10C/13893	4564	2,300 μμF.	750	Silvered mica, Flat, Size 8
C.6	10C/12229	3829	100 μμF. max.	—	S.T.C. Code RL. Spec. 7002/5/20
C.7	10C/5307	2825	.1 μF.	600	Mullard TM.100 60P
C.8	10C/958	890	500 μμF	750	Moulded mica, Pattern BT., Size 7
C.9	10C/10393	403	.01 μF.	750	Moulded mica, Pattern BT., Size 8
C.10	10C/10512	379	.001 μF.	750	Moulded mica, Pattern BT., Size 7
C.11	10C/5307	2858	.1 μF.	600	Mullard TM.100 60P
C.12	10C/5884	3232	.005 μF.	750	Moulded mica, Pattern BT., Size 8
C.13	10C/5307	2858	.1 μF.	600	Mullard TM.100 60P
C.14	10C/11558	3527	15 μμF.	350	Silvered mica, Flat, Size 1
C.15	10C/13804	4520	20 μμF.	500	Erie Type N.750L

INDUCTANCES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
L.1 Variometer	10D/1958	12	S.T.C. Code :—LP.120750
L.2 Tuning Unit	10D/1955	130	S.T.C. Code :—LP.120681
L.3 Choke	10C/13907	605	S.T.C. Code :—247–LU–17D.
L.4	10D/1881	—	—

LAMP

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
LP.1	5/L2080	—	12-volt 1-watt M.E.S.

PLUG

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
PF.	10H/4117	570	8-pin Jones Pattern, S.T.C. Code LP.115194

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
R.1	10W/1971	1971	15,000	7	Painton Type 302
R.2	10W/1614	1614	22,000	½	R.M.A.8
R.3	10W/7908	95	1 meg.	1	R.M.A.2
R.4	10W/9233	2560	330,000	1	R.M.A.2
R.5	10W/1614	1614	22,000	½	R.M.A.8
R.6	10W/8525	2041	56	½	R.M.A.8
R.7	10W/1854	8/110	10 meg.	½	R.M.A.8
*R.8	10W/15414	4123	28	7	Painton Type 302
*R.9	10W/15414	4123	28	7	Painton Type 302
*R.10	10W/15365	4074	300	—	Colvern Type 21/9 S.3
†R.10	10W/15781	4465	150	—	Colvern Type 21/9 S.3
R.11	10W/8525	2041	56	½	R.M.A.8
*R.12	10W/15311	4020	140	3	Painton Type P.301
†R.12	10W/15782	4466	10	3	Painton Type 301

* Used in Type 51 Transmitter only. † Used in Type 51A Transmitter only.

SOCKETS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
J.1	10H/5752	602	Aerial Socket, S.T.C. Code :—LP.120633
J.2	10H/1129	246	P.A. Grid Jack, S.T.C. Code :—LP.100985

SWITCHES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
S.1	10F/1902	1356	Four-pole, two-position switch, S.T.C. Code :— RL.Spec. 7016–60
S.2	10F/10338	152	Single-pole changeover, Wylex

VALVES AND VALVE SOCKETS

Component Number	Valves			Sockets		
	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
V.1	10E/587	VT.60A	5B/250A	10H/493	73	Celestion " Amphenol " 5-pin American
V.2	10E/587	VT.60A	5B/250A	10H/493	73	Celestion " Amphenol " 5-pin American
N.1	10E/6	VI.132	—	—	—	Siemens Type 67

4. M.F. RECEIVER. Type 76. A.M. Ref. 10D/1305 (For 26-volt working)
Type 76A. A.M. Ref. 10D/1446 (For 13-volt working)
(Circuit diagrams Figs. 6 and 6A)

CONDENSERS

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.1 C.2 C.3	10C/13801	4518	10–170 μμF.	—	Jackson Bros. 3-Gang pattern. S.T.C. Code LP.120386
C.4	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.5	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.6	10C/4760	2492	100 μμF.	500	Cup type ceramic
C.7	10C/11126	3362	.1 μF.	350	Tubular paper
C.8	10C/11126	3362	.1 μF.	350	Tubular paper
C.9	10C/11126	3362	.1 μF.	350	Tubular paper
C.10	10C/4760	2492	100 μμF.	500	Cup type ceramic
C.11	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.12	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.13	10C/11126	3362	.1 μF.	350	Tubular paper
C.14	10C/11123	3359	.01 μF.	350	Tubular paper
C.15	10C/11126	3362	.1 μF.	350	Tubular paper
C.16	10C/14674	4907	100 μμF.	500	Cup type ceramic
C.17	10C/13804	4520	20 μμF.	350	Silvered mica, Flat, Size 1
C.18	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.19	10C/13804	4520	20 μμF.	350	Silvered mica, Flat, Size 1
C.20	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.21	—	—	15–45 μμF.	—	S.T.C. Code RL. Spec. 7002/4/24B
C.22	10C/13806	4522	50 μμF.	500	Erie type N.750L
C.23	—	—	8–123 μμF.	—	S.T.C. Code RL. Spec. 7002/5/23
C.24	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 743
C.25	10C/11126	3362	.1 μF.	350	Tubular paper
C.26	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3

CONDENSERS—*continued*

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.27	10C/743	829	3–30 μμF.	—	Mullard Type 7864/01
C.28	10C/11126	3362	.1 μF.	350	Tubular paper
C.29	10C/11126	3362	.1 μF.	350	Tubular paper
C.30	10C/11126	3362	.1 μF.	350	Tubular paper
C.31	10C/11126	3362	.1 μF.	350	Tubular paper
C.32	10C/13808	4524	15 μμF.	500	Erie type N.750L
C.33	10C/13804	4520	20 μμF.	500	Erie type N.750L
C.34	10C/13805	4521	10 μμF.	500	Erie type N.750L
C.35	10C/4756	2488	10 μμF.	500	Disc type ceramic
C.36	10C/10395	405	30 μμF.	500	Disc type ceramic
C.37	10C/10395	405	30 μμF.	500	Disc type ceramic
C.38	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.39	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.40	10C/11135	3371	.005 μF.	1000	Tubular paper
C.41	10C/958	—	500 μμF.	750	T.C.C. Type M

INDUCTANCES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
L.1, L.2 Inductance Unit complete	10C/13848	27	S.T.C. Code :—20–LU–131E.
L.3, L.4 Inductance Unit complete	10C/13849	28	S.T.C. Code :—20–LU–131F.
L.7, L.8 Inductance Unit complete	10C/13850	29	S.T.C. Code :—20-LU–131G.
L.9	10C/13851	30	S.T.C. Code :—20–LU–131H.
L.10	10C/13739	589	S.T.C. Code :—LP.120148
L.11	10C/13739	589	S.T.C. Code :—LP.120148

LAMP

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
LP.1	5L/2080	—	12-volt 1-watt M.E.S.

LIGHTNING ARRESTER

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
A.1	10E/285	Tube Rare Gas Type 1	Rare gas cartridge pattern, Philips Type 4378

PLUGS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
PD. PE.	10H/4117 10H/307	570 184	8-pin. Jones Pattern, S.T.C. Code :—LP.115194 10-pin Jones Pattern, S.T.C. Code :—LP.115195

RELAY

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
Relay K/5	10F/1868	708	S.T.C. Code :—1665 M.A.C.

REMOTE TUNING CONTROL

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
RT.1	10C/13741	136	"Desynn" Tuning Unit, Smith Type 167FL. S.T.C. Code :—RL.7002/77

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
R.1	10W/11384	480	1 meg.	¼	R.M.A.9
R.2	10W/875	941	470	½	R.M.A.8
R.3	10W/27	544	10,000	½	R.M.A.8
R.4	10W/11691	525	100,000	¼	R.M.A.9
R.5	10W/300	726	33,000	¼	R.M.A.9
R.6	10W/546	809	47,000	¼	R.M.A.9
R.7	10W/15364	4073	5,000	—	Morganite Stackpole Potentiometer L.H.N.A.R. 50250/28000
R.8	10W/589	827	270,000	½	R.M.A.8
R.9	10W/1482	1482	27,000	½	R.M.A.8
R.10	10W/11691	525	100,000	¼	R.M.A.9
R.11	10W/1718	1718	20,000	10	Painton Type 302
R.12	10W/11384	480	1 meg.	¼	R.M.A.9
R.13	10W/659	857	270	½	R.M.A.8
R.14	10W/11691	525	100,000	½	R.M.A.8
R.16	10W/875	941	470	½	R.M.A.8
R.17	10W/1476	1476	330,000	¼	R.M.A.9
*R.20	10W/16078	4734	36	3	Painton P.301
R.21	10W/15310	4019	126	3	Painton P.301
R.22	10W/124	592	1,500	½	R.M.A.8
R.26	10W/1476	1476	330,000	¼	R.M.A.9
R.27	10W/1149	487	100,000	¼	R.M.A.9
*R.30	10W/15365	4074	300	—	Colvern Type 21/9/S.3
†R.30	10W/15781	4465	150	—	Colvern Type 21/9/S.3
*R.31	10W/15311	4020	140	3	Painton Type 301
†R.31	—	—	10	3	Painton Type 301

* Used in Type 76 Receiver only. † Used in Type 76A Receiver only.

SOCKET

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
J.1	10H/1314	272	Aerial Socket. S.T.C. Code :—LP.101527

SWITCH

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
S.1	10F/1869	1340	Band change switch, S.T.C. Code :—R.L.Spec. 7016–62

VALVES AND VALVE SOCKETS

Component Number	Valves			Sockets		
	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
V.1	10E/105	VR.92	E.A.50	10H/150	40	Belling Lee Type L.357
V.2	10E/11399	VR.53	E.F.39	10H/493	73	Celestion " Amphenol " Octal SP.8 US.
V.3	10E/ZA.2985 or 10E/ZC.3642	ARTH.2	E.C.H.35	10H/493	73	Celestion " Amphenol " Octal SP.8 US.

VALVE MOUNTING UNITS (Complete)

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
Mounting Unit complete V.2	10D/1879	5	LP.120241
Mounting Unit complete V.3	10D/1880	5/1	LP.120242

5. MODULATOR UNIT. Type 76. A.M. Ref. 10D/1311 (For use with 26-volt supply)
Type 76A. A.M. Ref. 10D/1344 (For use with 13-volt supply)
(Circuit diagrams Figs. 7 & 7A)

CONDENSERS

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.1	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.2	10C/743	829	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.3A	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.3B	10C/10395	405	30 μμF.	500	Disc type ceramic
C.4	—	—	130 μμF.	—	Consisting of C.4A and C.4B in parallel
C.4A	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.4B	10C/10395	405	30 μμF.	500	Disc type ceramic
C.5	10C/11135	3371	.005 μF.	1000	Tubular paper
C.7	10C/11123	3359	.01 μF.	1000	Tubular paper
C.8	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.9	10C/743	289	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.10	10C/743	289	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.11	—	—	130 μμF.	—	Consists of C.11A and C.11B in parallel
C.11A	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.11B	10C/10395	405	30 μμF.	500	Disc type ceramic
C.12	—	—	130 μμF.	—	Consists of C.12A and C.12B in parallel
C.12A	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.12B	10C/10395	405	30 μμF.	500	Disc type ceramic
C.13	10C/5763	3150	.1 μF.	350	Tubular paper T.C.C. type 345
C.14	10C/11126	3362	.1 μF.	350	Tubular paper T.C.C. type 345
C.15	10C/10948	429	20 μμF.	500	Disc type ceramic
C.16	10C/743	289	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.17	10C/743	289	3–30 μμF.	—	Variable Air Trimmer. Mullard Type 7864/01
C.18	—	—	130 μμF.	—	Consists of C.18A and C.18B in parallel
C.18A	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.18B	10C/10395	405	30 μμF.	500	Disc type ceramic

CONDENSERS—*continued*

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.19	—	—	130 μμF.	—	Consisting of C.19A and C.19B in parallel
C.19A	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.19B	10C/10395	405	30 μμF.	500	Disc type ceramic
C.20	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.21	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.22	10C/11126	3362	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.23	10C/94	609	500 μμF.	350	Moulded mica, Dubilier Type 635
C.24	10C/11126	3362	.1 μF.	350	Tubular paper
C.25	10C/4951	2641	100 μμF.	500	Silvered ceramic, Pattern XT
C.26	10C/11142	3378	.02 μF.	750	Tubular paper
C.27	10C/13962	4587	25 μF.	50	T.C.C. Micro Pack
C.28	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.29	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.30	10C/11123	3359	.01 μF.	1000	Tubular paper
C.31	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.32	10C/11124	3360	.02 μF.	750	Tubular paper
C.33	10C/11786	3604	.01 μF.	350	Tubular paper, Hunt Type 53A1/23
C.34	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.35	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.36	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.37	10C/4951	2641	100 μμF.	500	Silvered ceramic, Pattern XT
C.38	—	—	200 μμF.	—	Consists of C.38A and C.38B in parallel
C.38A	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.38B	10C/5055	2725	100 μμF.	350	Silvered mica, Flat, Size 3
C.39	10C/3853	1942	40 μμF.	500	Disc type ceramic
C.40	10C/4415	2281	4.5–50 μμF.	—	Trimmer, Wingrove & Rogers, Type C.803
C.41	10C/11786	3604	.01 μF.	350	Tubular paper, Hunt Type 53A1/23
C.42	10C/11786	3604	.01 μF.	350	Tubular paper
C.43	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345
C.46	10C/5763	3150	.1 μF.	350	Tubular paper, T.C.C. Type 345

CONDENSERS—*continued*

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.47	10C/10510	377	400 μμF.	500	Silvered ceramic, Pattern X
C.48	10C/10510	377	400 μμF.	500	Silvered ceramic, Pattern X
C.49	10C/13962	4587	25 μF.	50	T.C.C. Micro pack
C.50	10C/3397	1661	80 μμF.	500	Silvered ceramic, Pattern XT
C.51	10C/4970	2660	.002 μF.	350	Moulded silvered mica, Pattern B.W., Size 5
C.52	10C/13762	4506	.5 μF.	600	Paper, Metal, Rectangular, T.C.C. Type 92
C.53	10C/13979	4595	.5 μF.	—	T.M.C. Type S.Z.21152
C.54	10C/13979	4595	.5 μF.	—	T.M.C. Type S.Z.21152
C.55	10C/13979	4595	.5 μF.	—	T.M.C. Type S.Z.21152
C.56	10C/13979	4595	.5 μF.	—	T.M.C. Type S.Z.21152
C.57	10C/11128	3364	.25 μF.	350	Tubular paper
C.58	10C/10568	410	50 μμF.	500	Disc type ceramic
C.59	10C/11786	3604	.01 μF.	350	Tubular paper, Hunt Type 53A.1/23
C.60	10C/11123	3359	.01 μF.	1000	Tubular paper, Hunt Type 53A.1/23
C.61	10C/11127	3363	.1 μF.	500	Tubular paper, Hunt Type 53A.1/23
C.62	10C/11127	3363	.1 μF.	500	Tubular paper
C.63	10C/11127	3363	.1 μF.	500	Tubular paper
C.64	10C/11127	3363	.1 μF.	500	Tubular paper
C.65	10C/11126	3362	.1 μF.	350	Tubular paper

FUSES

Component Number	A.M. Reference	A.M. Type	Rating	Description and/or Manufacturers' Reference
F.1	10H/238	29	500 mA.	Belling Lee Type L.1055
F.2	10H/238	29	500 mA.	Belling Lee Type L.1055
F.3	10H/11718	49	5 amp.	Belling Lee Type L.1055
F.4	10H/11718	49	5 amp.	Belling Lee Type L.1055

INDUCTANCES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
L.1	10C/13939	32	S.T.C. Code :—20-LU-131J. Complete Coil Unit
L.2	10C/13940	33	S.T.C. Code :—20-LU-131K. Complete Coil Unit
L.3	10C/13941	34	S.T.C. Code :—20-LU-131L. Complete Coil Unit
L.4	10C/13938	31	S.T.C. Code :—20-LU-131M. Complete Coil Unit
L.5	10C/13936	515	S.T.C. Code :—CAH.44119/1
L.6	10C/13936	515	S.T.C. Code :—CAH.44119/1
L.7	10C/13978	612	LP.125335
L.8	10C/13978	612	LP.125335
L.9	10C/13977	611	LP.125334
L.10	10C/13977	611	LP.125334
L.11	10C/13977	611	LP.125334
L.12	10C/13977	611	LP.125334

MACHINE (Rotary Converter)

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
*MC.1	10K/1153	76	Mackie Type K.4 150, S.T.C. Code :—RL. Spec. 7001-38B.
†MC.1	10K/1152	75	S.T.C. Code :—RL. Spec. 7001-38GRB.

* Used in Modulator Unit Type 76 only. † Used in Modulator Unit Type 76A only.

PLUGS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
PA.	10H/13873	W.506	25-pin " W " Plug
PG.	10H/397	W.204	2-pin " W " Plug, S.T.C. Code :—58-4074A.
PH.	10H/4046	561	4-pin Jones Plug, S.T.C. Code :—LP.115192
PI.	10H/4046	561	4-pin Jones Plug, S.T.C. Code :—LP.115192

RECTIFIER

Component Number	A.M Reference	A.M. Type	Description and/or Manufacturers' Reference
RECT.1	10D 96	16	Westinghouse WESTECTOR Type W.6

RELAYS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
REL.A/4	10F/2165	732	S.T.C. No. 4172C.
REL.B/4	10F/2166	733	S.T.C. No. 4639 AR.
REL.C/4	10F/2167	734	S.T.C. No. 4639 AS.
REL.D/2	10F/2168	735	S.T.C. No. 4639 AT.
REL.F/1	10F/1601	565	S.T.C. No. 4631 ABA.TFG

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
R.2	10W/11499	487	100,000	$\frac{1}{4}$	R.M.A.9
R.3	10W/1650	1650	390	$\frac{1}{2}$	R.M.A.8
R.4	10W/11691	525	100,000	$\frac{1}{2}$	R.M.A.8
R.5	10W/11691	525	100,000	$\frac{1}{2}$	R.M.A.8
R.6	10W/300	726	33,000	$\frac{1}{2}$	R.M.A.8
R.7	10W/27	544	10,000	$\frac{1}{2}$	R.M.A.8
R.8	10W/6414	6414	330	$\frac{1}{2}$	R.M.A.8
R.9	10W/11691	525	100,000	$\frac{1}{2}$	R.M.A.8
R.10	10W/11691	525	100,000	$\frac{1}{2}$	R.M.A.8
R.11	10W/300	726	33,000	$\frac{1}{2}$	R.M.A.8
R.12	10W/27	544	10,000	$\frac{1}{2}$	R.M.A.8
R.13	10W/11692	526	200,000	$\frac{1}{2}$	R.M.A.8
R.14	10W/1008	1008	56,000	$\frac{1}{4}$	R.M.A.9

RESISTANCES—*continued*

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
R.15	10W/11499	487	100,000	¼	R.M.A.9
R.16	10W/11499	487	100,000	¼	R.M.A.9
R.17	10W/15435	4144	500,000	—	Morganite Stackpole Potentiometer L.N.H.A.R. 50450/20800
R.18	10W/1853	8/81	39,000	¼	R.M.A.9
R.19	10W/648	855	220,000	¼	R.M.A.9
R.20	10W/11671	505	10,000	¼	R.M.A.9
R.21	10W/11692	526	200,000	½	R.M.A.8
R.23	10W/3885	2305	120,000	¼	R.M.A.9
R.24	10W/11499	487	100,000	¼	R.M.A.9
R.25	10W/11384	480	1 meg.	¼	R.M.A.9
R.26	10W/11384	480	1 meg.	¼	R.M.A.9
R.28	—	—	—	—	—
R.29	10W/549	812	1.8 meg.	¼	R.M.A.9
R.30	10W/15435	4144	500,000	—	Morganite Stackpole Potentiometer 50450/20800
R.31	10W/548	811	270,000	¼	R.M.A.9
R.32	10W/1853	8/81	39,000	½	R.M.A.8
R.33	10W/927	963	220,000	½	R.M.A.8
R.34	10W/927	963	220,000	½	R.M.A.8
R.35	10W/537	803	1,000	¼	R.M.A.9
R.36	10W/1008	1008	56,000	¼	R.M.A.9
R.37	10W/8611	2117	820	¼	R.M.A.9
R.38	10W/8611	2117	820	¼	R.M.A.9
R.39	10W/9612	2857	390,000	½	R.M.A.8
R.40	10W/760	898	330,000	½	R.M.A.8
R.41	10W/6195	6195	330,000	¼	R.M.A.9
R.42	10W/11384	480	1 meg.	¼	R.M.A.9
R.43	10W/11384	480	1 meg.	¼	R.M.A.9

RESISTANCES—*continued*

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
R.44	10W/1562	1562	100,000	¼	R.M.A.9
R.45	10W/10349	3302	470,000	¼	R.M.A.9
R.46	10W/10349	3302	470,000	¼	R.M.A.9
R.47	10W/1562	1562	100,000	¼	R.M.A.9
R.48	10W/15455	4164	200	3	Painton Type 301
R.49	10W/27	544	10,000	½	R.M.A.8
R.50	10W/989	989	470,000	¼	R.M.A.9
R.52	10W/1106	1106	560	¼	R.M.A.9
R.53	10W/15437	4146	21	3	Painton Type 301
*R.54	10W/15438	4147	63	3	Painton Type 301
*R.55	10W/15438	4147	63	3	Painton Type 301
R.56	10W/1076	1076	68,000	¼	R.M.A.9
R.57	10W/548	811	270,000	¼	R.M.A.9
R.58	10W/6909	6909	1.2 meg.	¼	R.M.A.9
R.59	10W/15436	4145	3,000	7	Painton Type 302
R.60	10W/539	805	47,000	½	R.M.A.8
R.61	10W/589	827	270,000	½	R.M.A.8
R.62	10W/589	827	270,000	½	R.M.A.8
R.63	10W/1614	1614	22,000	½	R.M.A.8
R.64	10W/589	827	270,000	½	R.M.A.8
R.65	10W/589	827	270,000	½	R.M.A.8
R.66	10W/1614	1614	22,000	½	R.M.A.8

* Used in Modulator Unit Type 76A only.

SOCKETS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
J.1	10H/4052	530	4-pin Jones Pattern, S.T.C. Code LP.115196
J.2	10H/4052	530	4-pin Jones Pattern, S.T.C. Code LP.115196

TRANSFORMERS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
T.1	10K/1558	1625	S.T.C. Code CAH.42119/1
T.2	10K/1559	1626	S.T.C. Code AM.4300/2
T.3	10K/1560	1627	S.T.C. Code BS.43120/1

VALVES AND VALVE SOCKETS

Component Number	Valves			Sockets		
	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
V.1	10E/11399	VR.53	E.F.39	10H/493	73	Celestion "Amphenol" Octal SP.8/US.
V.2	10E/11399	VR.53	E.F.39	10H/493	73	
V.3	10E/11401	VR.55	E.B.C.33	10H/493	73	
V.4	10E/11399	VR.53	E.F.39	10H/493	73	
V.5	10E/11402	VR.56	E.F.36	10H/493	73	
V.6	10E/11402	VR.56	E.F.36	10H/493	72	
V.7	10E/382	VR.503	K.T.33C	10H/493	73	
V.8	10E/382	VR.503	K.T.33C.	10H/493	73	
V.9	10E/92	VR.91	E.F.50	10H/5043	286	Benjamin Electric Type 75/652

VALVE UNITS (Complete)

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
Valve Unit V.1	10D/2009	5/2	S.T.C. Code LP.120243
V.2	10D/2010	5/3	S.T.C. Code LP.120244
V.3	10D/2011	5/4	S.T.C. Code LP.120245
V.4	10D/2012	5/5	S.T.C. Code LP.120246
V.5	10D/2013	5/6	S.T.C. Code LP.120247
V.6	10D/2014	5/7	S.T.C. Code LP.120248
V.7 & V.8	10D/2015	6/1	S.T.C. Code LP.120259

6. CHASSIS ASSEMBLY.

Type 18. **A.M. Ref. 10D/1304 (For use with 26-volt supply)**
Type 18A. **A.M. Ref. 10D/1445 (For use with 13-volt supply)**
Type 20A. **A.M. Ref. 10D/1746 (For use with 13-volt supply)**
Type 21. **A.M. Ref. 10D/1748 (For use with 26-volt supply)**
(Circuit diagrams Figs. 12 & 12B)

CONDENSER

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
*C.1	10C/11126	3362	.1 mfd. 350-volt working. Tubular paper

* Not used in Type 21 Chassis Assembly.

INDUCTANCES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
*L.1	10C/13799	1009	S.T.C. Code LP.120148
*L.2	10C/13800	1010	S.T.C. Code LP.120067
*L.3	10C/13800	1010	S.T.C. Code LP.120067
*L.4	10C/13799	1009	S.T.C. Code LP.120148
*L.5	10C/13799	1009	S.T.C. Code LP.120148
*L.6	10C/13799	1009	S.T.C. Code LP.120148
*L.7	10C/13799	1009	S.T.C. Code LP.120148
*L.8	10C/13799	1009	S.T.C. Code LP.120148
*L.9	10C/13799	1009	S.T.C. Code LP.120148
*L.10	10C/13799	1009	S.T.C. Code LP.120148
*L.11	10C/13799	1009	S.T.C. Code LP.120148

* Not used in Type 21 Chassis Assembly.

PLUGS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
PA.	10H/13873	W.506	25-pin " W " Plug
PB.	10H/13873	W.506	25-pin " W " Plug
PC.	10H/13873	W.506	25-pin " W " Plug

RELAYS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
* *REL.G/8	10F/1781	654	S.T.C. Code 4679 MA.
*REL.G/8	10F/1884	722	S.T.C. Code 4679 MB.
†REL.G/8	10F/1883	721	S.T.C. Code 4679 AB.
* *REL.H/8	10F/1781	654	S.T.C. Code 4679 MA.
†REL.H/8	10F/1884	722	S.T.C. Code 4679 MB.
*REL.1/8	10F/1782	655	S.T.C. Code 4668 MC.
†REL.1/8	10F/1885	723	S.T.C. Code 4668 MD.

* Used in Types 18A and 20A. † Used in Types 18 and 20. * * Used in Type 21.

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
*R.1	10W/589	827	270,000	$\frac{1}{2}$	R.M.A.8
R.2	10W/589	827	270,000	$\frac{1}{2}$	R.M.A.8
R.4	10W/7081	7081	390,000	$\frac{1}{4}$	R.M.A.9

* Not used in Type 21 Chassis Assembly.

SOCKETS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
*JD.	10H/3898	517	8-pin Jones Type, S.T.C. Code 50–4076C.
*JE.	10H/3987	516	10-pin Jones Type, S.T.C. Code 50–4076B.
*JF.	10H/3898	517	8-pin Jones Type, S.T.C. Code 50–4076C.
JJ.	10H/4010	526	12-pin Jones Type, S.T.C. Code 50–4076A.
JK.	10H/4010	526	12-pin Jones Type, S.T.C. Code 50–4076A.

* Not used in Type 21 Chassis Assembly.

7. CONTROL UNITS.

Type 276. A.M. Ref. 10L/121 (For use with TR.1366)
Type 271. A.M. Ref. 10L/116 (For use without TR.1366, 26-volt working)
Type 271A. A.M. Ref. 10L/117 (For use without TR.1366, 13-volt working)
(Circuit diagrams Figs. 9, 9A & 10)

CONDENSER

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and or Manufacturers' Reference
C.1	10C/545	759	6 μμF.	500	Cup type ceramic

Used in Type 276 Unit only.

LAMPS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
LP.1	5L/2080	—	12-volt 1-watt M.E.S. Lamp
LP.2	5L/2080	—	12-volt 1-watt M.E.S. Lamp
*LP.3	5L/1141	—	12-volt P.O. No. 2 Lamp

* Used in Type 286 Unit only.

PLUGS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
PB.	10H/13873	W.506	25-pin " W " Plug
*PP.	10H/392	W.199	6-pin " W " Plug, S.T.C. Code 58–4074B.
PS.	10H/393	W.200	6-pin " W " Plug, S.T.C. Code 58–4074H.

* Used in Type 276 Unit only.

RELAY

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
REL.E/4	10F/1780	653	S.T.C. Code 4634 ABE/TFG.

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
†R.1	10W/15482	4191	75	—	Colvern Type 21/9/S.3
*R.1	10W/15365	4074	300	—	Colvern Type 21/9/S.3
R.2	10W/15535	4244	20,000	—	Morganite Stackpole L.H.N.A.R. 20350 3200
R.3	10W/15536	4245	68	—	Desynn Transmitter 168 FL.S.T.C. Code 7007 26
R.4	10W/15536	4245	68	—	Desynn Transmitter 168 FL.S.T.C. Code 7007 26
*R.5	10W/1735	1735	20	3	Painton Type 301
†R.5	10W/15481	4190	5	3	Painton Type 301

* Used in Types 276 and 271 Units only. † Used in Type 271A Unit only.

SWITCHES

Component Number	A.M. Reference	A.M. Type	Description and or Manufacturers' Reference
S.1	10F/2172	1369	S.T.C. Code RL. Spec. 7016–65
*S.2	10F/899	652	S.T.C. Code 4152A Key
S.3	10F/10338	152	Wylex
S.4	10F/10338	152	Wylex
S.5	10F/10338	152	Wylex
S.6	10F/10338	152	Wylex
S.7	10F/1786	1290	Wylex
S.8	10F/1786	1290	Wylex

* Used in Type 276 Unit only.

8. CONTROL UNIT. Type 260. A.M. Ref. 10L/107 (For use with 26-volt supply)
Type 260A. A.M. Ref. 10L/114 (For use with 13-volt supply)

CONDENSER

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.1	10C/545	759	6 μμF.	500	Cup type ceramic

LAMPS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
LP.1	5L/2080A	—	12-volt 1-watt M.E.S. Lamp
LP.2	5L/2080A	—	12-volt 1-watt M.E.S. Lamp
LP.3	5L/1141	—	12-volt P.O. No. 2

PLUGS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
PC.	10H/13873	W.506	25-pin " W " Plug
PL.	10H/392	W.199	6-pin " W " Plug, S.T.C. Code 58–4074B.
PM.	10H/393	W.200	6-pin " W " Plug, S.T.C. Code 58–4074H.

RELAY

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
REL.E/4	10F/1780	653	S.T.C. Code ABE.4634

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
†R.1	10W/15482	4191	75	—	Colvern Type 21/9/S.3
*R.1	10W/15365	4074	300	—	Colvern Type 21/9/S.3
R.2	10W/15535	4244	20,000	—	Morganite Stackpole Potential Type L.H.N.A.R. 20350/3200
R.3	10W/15536	4245	68	—	Desynn Transmitter. Smith 168 FL.
R.4	10W/15536	4245	68	—	Desynn Transmitter. Smith 168 FL.
*R.5	10W/1735	1735	20	3	Painton Type 301
†R.5	10W/15481	4190	5	3	Painton Type 301

* Used in Type 260 Control Unit only. † Used in Type 260A Control Unit only.

SWITCHES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
S.1	10F/2172	1369	S.T.C. Code RL. Spec. 7016–65.
S.2	10F/2197	1387	S.T.C. Code 4152E
S.3	10F/10338	152	Wylex
S.4	10F/10338	152	Wylex
S.5	10F/10338	152	Wylex
S.6	10F/10338	152	Wylex
S.7	10F/1786	1290	Walters A1300
S.8	10F/1786	1290	Walters A1300

9. AERIAL TUNING UNIT. Type 126. A.M. Ref. 10D/1673 (For use with 26-volt supply)
Type 126A. A.M. Ref. 10D/1745 (For use with 13-volt supply)
(Circuit diagrams Figs. 14 & 14A)

CONDENSERS

Component Number	A.M. Reference	A.M. Type	Capacity	Working Voltage	Description and/or Manufacturers' Reference
C.1	—	—	3.5–22.5 μμF.	—	S.T.C. Code RL. Spec. 7002–26
C.2	10C/13803	4519	80 μμF.	2500	Dubilier type DMY.950

INDUCTANCES

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
L.1	10D/1830	—	S.T.C. Code No. LP. 125101
L.2	10C/13717	586	S.T.C. Code No. LP.125240

LAMPS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
LP.1	5L/2080	—	12-volt 1-watt M.E.S. Lamp
LP.2	5L/2080	—	12-volt 1-watt M.E.S. Lamp

METER

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
M.1	10A/13382	D	Thermo Ammeter 0–3 amps.

PLUGS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
P.1	10H/3930	552	Co-axial Plug to WT.26258
P.2	5X/750	M	Two-pole Plug, 4-amp.

RESISTANCES

Component Number	A.M. Reference	A.M. Type	Resistance Value ohms	Wattage	Description and/or Manufacturers' Reference
R.1	10W/7176	7176	1,500	3	Painton Type 301
†R.2	10W/15481	4190	5	3	Painton Type 301
*R.2	10W/1735	1735	20	3	Painton Type 301
*R.3	10W/15365	4074	300	—	Colvern Type 21/9 S3
†R.3	10W/15482	4191	75	—	Colvern Type 21/9 S3

* Used in Type 126 Tuning Unit only. † Used in Type 126A Tuning Unit only.

SOCKETS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
J.1	10H/5752	602	S.T.C. Code LP.120633 Aerial Socket
J.2	10H/1130	247	S.T.C. Code 50–4081C Earth Socket

SWITCH

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
S.1	10F/1857	1331	S.T.C. Code LP.125034

10. TOOLS

Component Number	A.M. Reference	A.M. Type	Description and/or Manufacturers' Reference
Complete Tool Kit	10D/1496	—	Wooden case fitted with tools and test meters for maintenance of A.R.I.5206 and TR.1366. S.T.C. Code 221–LU.7A.
(including the following)			
Ceramic Trimmer Adjuster	10A/13074	12	S.T.C. Code 73–4215AB.
Air Trimmer Adjuster	10A/13075	13	S.T.C. Code 73–4215AC.
Air Trimmer Locking Tool	10A/13076	14	S.T.C. Code 73–4215AD.
Connector	10H/5721	2307	S.T.C. Code 33–4265C.
Connector	10H/5248	2192	S.T.C. Code 33–4265A.
Connector	10H/5722	2308	S.T.C. Code 73–4329A.
Extractor-Crystal	10A/17061	16	S.T.C. Code LP.114971
Extractor Valve (for VR91)	10A/13077	8	S.T.C. Code 73–4329A.
Test Meter	10S/54	J	—
Test Meter	10S/643	U	—
Handbook Instruction	—	—	Instruction Manual for A.R.I.5206. S.T.C. Code IM.101
*Handbook Technical	—	—	Technical Manual for A.R.I.5206. S.T.C. Code TM.101

* Not included in the Tool Kit.

APPENDIX 2

MISCELLANEOUS INFORMATION

FUSING CURRENTS PER GIVEN SIZE OF FUSE WIRE

Size of Wire S.W.G.	Diameter.	Fusing Current in Amperes.			
		Copper.	Lead.	Tin.	Lead-Tin 2/1
40	0.0048	3.4	0.5	0.6	0.4
36	0.0076	6.8	0.9	1.1	0.9
32	0.0108	11.5	1.5	1.8	1.5
30	0.0124	14.0	2.0	2.3	1.8
28	0.0148	18.1	2.5	3.0	2.4
26	0.018	25	3.3	4.0	3.2
24	0.022	33	4.5	5.4	4.3
22	0.028	48	6.5	7.7	6.2
20	0.036	70	9.5	11	9
19	0.040	81	11	13	10
18	0.048	107	14.5	17	14
17	0.056	132	18	21	17
16	0.064	166	22	26	21

The above currents apply to fuses of sufficient length for the cooling effect of the terminals to be neglected. For short fuses the values of the fusing currents will be higher.

RESISTANCE COLOUR CODE

The Standard Colour Code for indicating the value of resistance is set out below :—

Figure	Colour	Figure	Colour	Figure	Colour
0	Black	3	Orange	6	Blue
1	Brown	4	Yellow	7	Violet
2	Red	5	Green	8	Grey
				9	White

Resistances under this code carry three colours placed in three positions as indicated in the diagram, and denoted by the letters A, B and C.

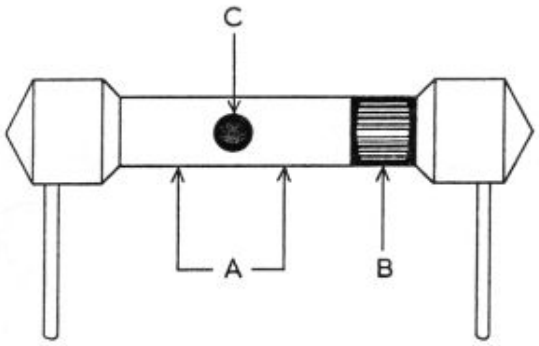
Colour A gives the first significant figure of the resistance value, colour B the second significant figure, and colour C, which is a dot, indicates the number of " noughts " which follow B.

If the dot is omitted it is the same colour as A, the same arrangement applies when B appears to be missing. Where only one colour appears, A, B and C are the same colour and therefore have the same figure value.

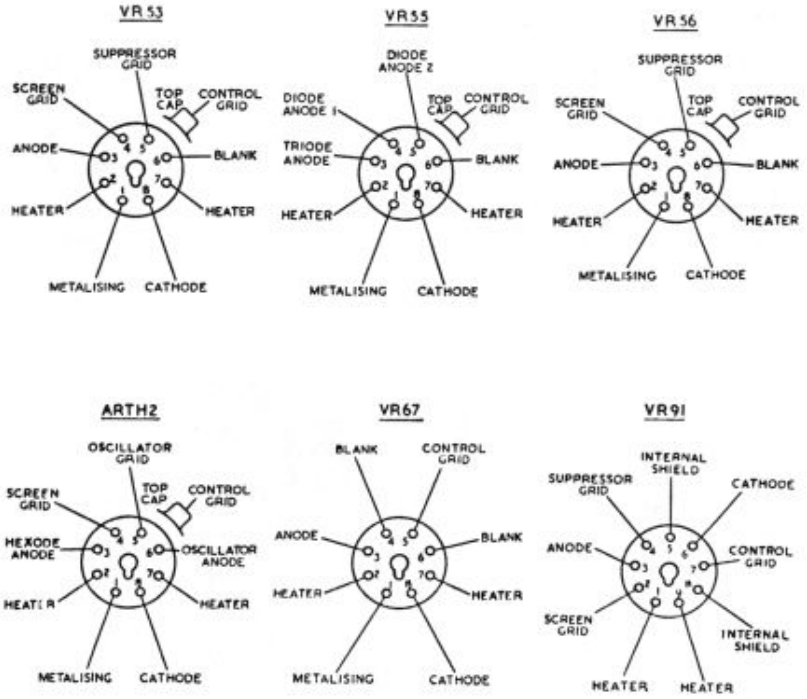
APPENDIX 2

The colours must always be read in their proper order, viz., Body, Tip, Dot. Examples are as follows :—

A (Body)	B (Tip)	C (Dot)	ohms
Blue	Black	Black	60
Blue	Black	Brown	600
Violet	Blue	Red	7,600
Red	Blue	Orange	26,000
Brown	Brown	Yellow	110,000
Blue	Blue	Blue	66 megohms



APPENDIX 2



VALVE BASE CONNECTIONS

VIEWED FROM UNDERSIDE

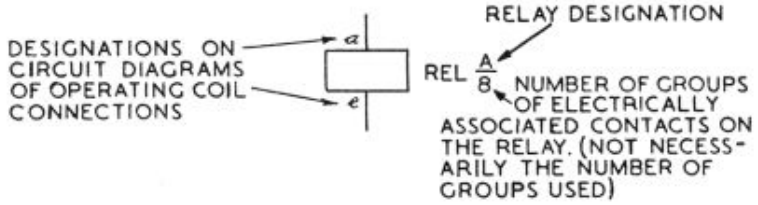
APPENDIX 2

EXPLANATION OF SYSTEM
OF

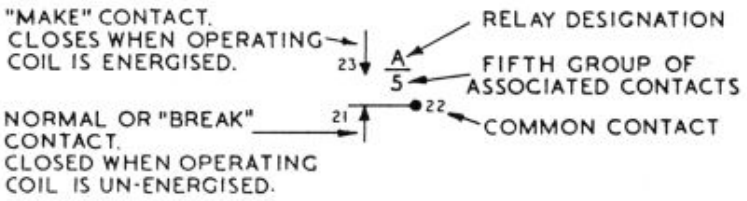
RELAY SYMBOLS

USED IN THE FOLLOWING CIRCUIT DIAGRAMS.

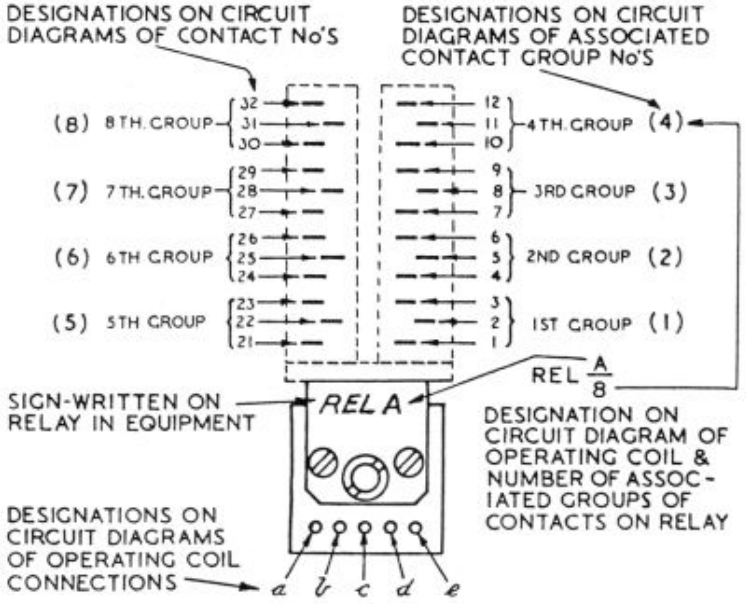
1. RELAY OPERATING COIL DESIGNATIONS



2. RELAY CONTACT DESIGNATIONS



3. PHYSICAL LAYOUT OF TYPICAL RELAY



END VIEW OF RELAY SHOWING CONNECTION TAGS