

UNIT POWER SUPPLY.

TYPE "S."

Y10D/73030.

BRIEF SPECIFICATION.

The Power Supply Unit type "S" has been designed to supply the low tension and high tension voltages necessary for the operation of the general purpose radio equipment type AT5/ARS from 240 volt 50 Ω A.C. mains.

The input power required is approximately 480 watts when the equipment is transmitting on C.W. telegraphy with the key down.

The overall dimensions of the unit are shown in Fig. 30.

The weight of the unit complete is approximately 108 pounds. The special mounting base weighs approximately 5 pounds.

DESCRIPTION.

Fig. 29.

1. LAYOUT AND CONSTRUCTION.

The control switches, connections and fuses of the A.C. unit type "S" are arranged so that their mounting positions and operational functions are the same as in the D.C. unit type "G". The type "S" fits the same "clip-on" mounting base as the type "G" but, because of its greater weight, the A.C. unit is provided with a specially strengthened base of similar size and construction to that of the D.C. unit. In installations where bed vibration may be encountered, the units should not be interchanged without also changing the mounting base. Either unit will fit either type of mounting base.

The combined main chassis and case is made of folded sheet steel, and is assembled with brackets and mounting panels spot welded to it. All steel parts are first cadmium plated and then enamelled; the interior is finished in flat grey, whilst the exterior is finished in grey wrinkle. The panel mounting the relays and resistors is fastened by screws, and the leads to the components "goose-necked" to make it removable.

The top, bottom and front panels are all removable and finished like the case. Ventilation is obtained through gauze-backed holes in the case and outer panels.

2. CIRCUIT ARRANGEMENT.

The circuit provides for the full operation of AT5/ARS equipment.

The receiver L.T. is supplied with 12V A.C. from the secondary winding of the L.T. Power transformer T1. This winding is connected through a contact on the H.T. relay (REL2) to the element of the time delay relay (TDR1), so that the time delay is automatically started when the Receiver L.T. is supplied. After the adjustable period of delay, the contacts of TDR1 close, causing REL2 to operate and lock itself in. The element of TDR1 is disconnected by contacts which open when REL2 operates. This eliminates over-heating and leaves the delay relay ready to operate again for the transmitter.

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Thus the receiver becomes fully operative by the manual operation of the " MAINS " switch alone.

The transmitter L.T. is switched by S2, and is supplied from the metal rectifier MR1 and its associated single stage filter (L3, C3). The output of this rectifier is also supplied to a keying relay line and a bleeder (R2, R3). The microphone voltage is tapped off at the junction of R2 and R3 and by-passed to ground by C5.

The H.T. supplies for both transmitter and receiver come from a full-wave rectifier circuit supplied by the H.T. power transformer T2 and using two Radiotron type 866, 866A valves. The output of this circuit is adequately filtered in two stages by L4, C1 and L5, C2 for the Main H.T. transmitter supply. The transmitter Minor H.T. is tapped on the bleeder network R4, R5 across the main H.T., and is filtered in one extra stage L1, C6, before being connected through to the relay REL1 and thence to the connector. The Receiver H.T. uses a similar circuit, the bleeder consisting of R1, R6, R7, R8. The extra filter is L2, C1, and the supply goes directly to the receiver connector.

The transmitter H.T. is controlled by the " EMISSION " switch on the transmitter, which causes REL1 to operate and connect the Main and Minor H.T. supplies through to the connector.

Fuses are connected in the appropriate circuits to give protection to all components and the mains.

INSTALLATING INSTRUCTIONS.

3. INSTALLATION.

The unit, as packed for shipment, is mounted on its own mounting base, and the base is removed from the packing case and installed in an appropriate position. If the A.C. unit is being used to replace a D.C. unit, the new mounting base should be installed in the position of the original one. The new base will then take either an A.C. or a D.C. power unit. The outline diagram Fig. 30 indicates the overall dimensions of the unit and the space necessary. This space is no larger than that required for the C. Power Unit of the MDD6719 series machines.

OPERATING INSTRUCTIONS.

4. "MAINS" SWITCH.

Operation of the "MAINS" switch provides the following supplies:--

- (a) Receiver filaments.
- (b) Microphone.
- (c) Keying relay.
- (d) The time delay circuit is energised automatically, and, after an interval of approximately 20 seconds, connects the H.T. transformer to the mains of the Receiver H.T. The receiver is then fully operative.

5. "TRANS. L.T." SWITCH.

Operation of the "TRANSMITTER L.T." switch provides 12V D.C. for the L.T. of the transmitter.

6. SWITCHING TRANSMITTER H.T.

To obtain the transmitter H.T. supplies it is necessary to operate the H.T. switch located on the transmitter.

7. TRANSMITTER TIME DELAY.

When the "TRANSMITTER L.T." switch is operated while the transmitter is cold, the regulating properties of the metal rectifier cause the voltage to drop and permit the H.T. switching relay (REL.2) to fall out. Another time delay period is automatically completed before H.T. supplies are available. When the transmitter is operated with the transmitter filaments still hot, no extra time delay is necessary.

8. CAUTIONARY NOTE.

When switching on a unit employing mercury vapour rectifiers for the first time, or if the valves have been replaced, it is necessary to allow the valve filaments to heat for 10 minutes before applying the high tension. This is done to evaporate all stray mercury from the valve electrodes and prevent arcing. In this case it is best achieved by removing the clips from the two valves before switching on. Switch off, and replace the clips after the 10 minute period.

5.—SERVICING AND MAINTENANCE.

9. REMOVAL AND ACCESS.

The power unit may be easily removed from the installation by detaching the interwiring connections and sliding the unit off the mounting base, after releasing the latch bars in the usual manner. It is only necessary to slide the unit half the length of the base, after which it may be lifted off.

Access is gained to the components mounted on the chassis and case assembly by removable front, top and bottom panels. The front panel can be removed by undoing two screws near its lower edge, and then lifting it off the bollards on the upper edge of the case. This exposes all components which might need adjustment or quick replacement, i.e., valves, relays, etc.

The top and bottom panels, which are fastened by eleven and twelve screws respectively, need only be removed when more serious faults occur.

The panel which mounts the relays and bleeder resistors can be removed by undoing four small screws in the lower brackets and two slightly larger screws in the upper panel, above and below TDRI. The leads to the components on this panel are "goose-necked" to provide easy access to those situated behind the panel.

10. INTERWIRING CONNECTIONS.

With the exception of the mains input, special L.T. output, and earth connections, all leads pass through two eight-pin sockets, one for the receiver supplies and one for the transmitter supplies.

Receiver Eight Pin Connector.

<i>Pin No.</i>	<i>Purpose.</i>
1	L.T. supply, 12V A.C.
2	Earth.
3	Earth and 12V A.C.
4	Earth.
7	L.T. supply positive to pulse sender.
8	L.T. supply positive to keying relay.
9	H.T. supply 250V positive.
10	Microphone supply, positive.

Transmitter Eight-Pin Connector.

<i>Pin No.</i>	<i>Purpose.</i>
1	L.T. supply 12V positive.
2	Earth.
3	L.T. supply 12V negative.
4	L.T. supply 12V negative.
7	Earth.
8	H.T. on switch.
9	H.T. supply 550V positive.
10	H.T. supply 800V positive.

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11. CONTINUITY TESTS.

The following table supplies the necessary information for continuity checking any choke, relay, fuse or resistor in the power unit.

The first column gives the reference number of the component to be tested. The second column gives the nominal resistance to be expected between the test points given in columns three and four. Column five gives any special conditions required for test. It is assumed that all external leads are disconnected from the unit and that the front cover and relay covers are removed.

Both switches are left in the "OFF" position.

In column two, a nominal resistance of 1 Ω means that a resistance of 1 Ω or less may be expected.

It will be found, in some cases, that the test points will include components other than the one under test. This is done for convenience in testing and should be remembered if incorrect readings are obtained. The special conditions of test have been chosen to reduce, as far as possible, the influence of other components on the test.

Component Reference No.	Nominal Test Resistance Ω	Test Points.		Special Conditions for Test Remarks
		1	2	
R1	4,000 Ω	R1	R1	See 1 below
R2	25 Ω	Rec. Con. 7	Rec. Con. 10	Remove F9
R3	25 Ω	Rec. Con. 10	Socket of F9	Remove F9
R4	1,700 Ω	R4	R5	See 1 below
R5	6,000 Ω	R5	R5	See 1 below
R6	3,600 Ω	Socket of F7	Earth	See 2 below
R7	3,600 Ω	Socket of F7	Earth	See 2 below
R8	5,000 Ω	R8	R8	See 1 below
T1 (Pri.)	9 Ω	Socket of F1	Socket of F2	Remove F1 and F2
T1 (Sec. 1)	1 Ω	Rec. Con. 1	Rec. Con. 3	See 3 below
T1 (Sec. 2)	1 Ω	A.C. terminals of MR1	.....	.....
T1 (Sec. 3)	1 Ω	Fil. V1	.....	.....
T2 (Pri.)	1.5 Ω	Socket of F1	Socket of F2	See 4 below
T2 (1/2 Sec.)	50 Ω	Anode V1	Earth	.....
T2 (1/2 Sec.)	50 Ω	Anode V2	Earth	.....
L1	45 Ω	Socket of F6	Trans. Con. 10	See 5 below
L2	45 Ω	Socket of F7	Rec. Con. 9	Remove secondary fuses.
L3	1 Ω	Socket of F8	Positive of MR1	Remove F8
L4	63 Ω	Socket of F5	Trans. Con. 9	See 6 below
L5	63 Ω	Socket of F5	Trans. Con. 9	See 6 below
REL1 coil	75 Ω	Socket of F4	Trans. Con. 8	Remove secondary fuses.
REL2 coil	75 Ω	REL2	REL2	See 7 below
TDR1 heater	3.5 Ω	TDR1	TDR1	See 8 below
F1	1 Ω	F1	F1	Remove F1
F2	1 Ω	F2	F2	Remove F2
F3	1 Ω	F3	F3	Remove secondary fuses.
F4	1 Ω	F4	F4	Remove secondary fuses.
F5	1 Ω	F5	F5	Remove secondary fuses.
F6	15 Ω	F6	F6	Remove secondary fuses.
F7	15 Ω	F7	F7	Remove secondary fuses.
F8	1 Ω	F8	F8	Remove F8
F9	1 Ω	F9	F9	Remove F9

References to Table.

1. Disconnect one end of the component by undoing the mounting screw. R4 and R5 are each two in series.
2. R6 and R7 are in series 1,800 Ω each. Remove secondary fuses and disconnect one end of R4.
3. Operate REL2 to the position it would occupy if its coil were energised.
4. Operate REL2 to the position it would occupy if its coil were energised; remove F1 and F2. The primary windings of T1 and T2 are now in parallel, being 9 Ω and 2 Ω respectively.
5. Operate REL1 to the position it would occupy if its coil were energised. Remove secondary fuses.
6. Remove secondary fuses. L4 and L5 are in series, being 31.5 Ω each.
7. Measure the resistance across the coil terminals of the relay.
8. Operate REL2 to the position it would occupy if its coil were energised, and measure the resistance on the element terminals of TDR1.

12. ELECTRICAL TESTS.

The following is a list of the voltages which should appear on the terminals of the unit when the mains input reads 240V and when the connecting cables A and B are disconnected.

The voltages are measured on the outlet sockets between the points shown. To make the transmitter H.T. voltages available it is necessary to short pins 8 and 9 of the transmitter socket together, thereby operating REL1 and switching the supplies through to the outlet socket.

The voltages may vary somewhat from the figures quoted, and these should be taken as a guide only.

Receiver Outlet.		
Measuring Points.		
1 Positive for D.C.	2 Negative for D.C.	Voltage.
Pin 1	Pin 2, 3, 4 or earth	12V A.C.
Pin 7	Pin 2 or earth	17.0V D.C.
Pin 8	Pin 2 or earth	17.0V D.C.
Pin 9	Pin 2 or earth	390V D.C.
Pin 10	Pin 2 or earth	8.4V D.C.
Transmitter Outlet.		
Measuring Points.		
1 Positive.	2 Negative.	Voltage.
Pin 1 with REL1 operated	Pin 2, 3, 4 or earth	15.5V D.C.
Pin 9	Pin 2 or earth	605V D.C.
Pin 10	Pin 2 or earth	480V D.C.

13. RELAY ADJUSTMENT.

(a) Time Delay Relay.

This relay CDR1 is located on the removable panel, directly behind the front panel, and is used to delay the application of H.T. to the anodes of the rectifier valves until the valve filaments have been heated sufficiently for safe operation.

It is not necessary to remove the cover from the relay to make the adjustment.

The following procedure is suggested on the assumption that the relay is badly out of timing. If the timing is only slightly in error, then it is only necessary to follow the instructions in step (v).

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- (i) Loosen lock nut between head of adjusting screw and body of relay.
- (ii) Turn knurled screw CLOCKWISE until a distinct click is heard.
- (iii) Turn screw ANTI-CLOCKWISE until the click is again heard.
- (iv) Turn the screw a fraction of a turn CLOCKWISE. Then tighten the locknut. This gives an average adjustment which can be set more accurately by making very small movements to the adjusting screw.
- (v) Close the " MAINS " switch; note the time taken till the relay clicks in. This should be 30-35 seconds. If the time is too long loosen the lock nut, and move the screw slightly CLOCKWISE. Tighten the locknut and check as before. If the time is too short, turn the screw ANTI-CLOCKWISE and time the operation again. The relay should be allowed several minutes to cool down between each adjustment.

(b) Power Relays.

These relays REL1 and REL2 are similar in construction and operation, so the instructions which follow apply to both.

The relay can give trouble by failing to pull in, sticking on one or both contacts, or non-simultaneous operation of contact pairs.

- (i) Check the relay for loose screws and faulty connections.
- (ii) See that when the armature is closed there is an air gap of .001" to .010" between the armature and the field core.
- (iii) Set the contact arms so that each moving contact just makes on the bottom fixed contact when the armature is closed on to a feeler gauge of 0.015" which is inserted in the air gap between the armature and yoke.
- (iv) Adjust the spring tension so that the pull in and release voltages are within the following range :—
 - Pull in—not greater than 9V.
 - Pull out—not less than 2V.
- (v) The relay should be operated a number of times to see that no adjustments vary and that good contact is made.

14. FUSE RATINGS.

The required ratings and types of fuse employed in the equipment are as follows :—

<i>Fuse No.</i>	<i>Type.</i>	<i>Rating.</i>	<i>Wire Size.</i> (when used)
F1	Slydlok	.....	38 S.W.G. T.C.
F2	Slydiok	.....	38 S.W.G. T.C.
F3	Autoglas 4AG	5 amp.	.....
F4	Autoglas 4AG	5 amp.	.....
F5	Autoglas 4AG	1 amp.	.....
F6	Autoglas 4AG	3/8 amp.	.....
F7	Autoglas 4AG	3/8 amp.	.....
F8	Slydlok Autoglas 4AG	5 amp.	38 S.W.G. T.C.
F9	Slydlok Autoglas 4AG	5 amp.	38 S.W.G. T.C.

Care should be taken to replace an open circuit fuse with one of the same rating.

SCHEDULE OF COMPONENTS FOR UNIT, POWER SUPPLY, TYPE S, Y10D/73080.

Fig. 29. Photo Nos. 31, 32, 33.

Item No.	Circ. Ref. No.	Description.	Dwg. Photo Ref.	Circuit.	Function.	Test Ref.	Maker's Name.	Maker's Designation.	R.A.A.F. Ref. No.
1	C1	CONDENSER, 16 μ F, Fixed, 525V Peak Wkg., Semi-dry Elec.	.....	8811D3	Main H.T. Smoothing	...	Ducon	EE10783	Y10C/66009
2	C2	CONDENSER, 16 μ F, Fixed, 525V Peak Wkg., Semi-dry Elec.	.....	8811D3	Main H.T. Smoothing	...	Ducon	EE10783	Y10C/66009
3	C3	CONDENSER, 1,000 μ F, Fixed, 13V Peak Wkg., Semi-dry Elec. (2 connected in parallel).	.....	8811D3	L.T. Smoothing	...	Ducon	E.H.P.	Y10C/66010
4	C4	CONDENSER, 4 μ F, $\pm 10\%$ Fixed, 400V Wkg., Paper Dielectric (A.W.A. 7955).	.....	8811D3	Rec. H.T. Smoothing	...	Ducon	PS78	Y10C/65033
5	C5	CONDENSER, 4 μ F, $\pm 10\%$ Fixed, 500V Wkg., Paper Dielectric (A.W.A. 7955).	.....	8811D3	Mic. Supply By-pass...	...	Ducon	YS62	Y10C/65199
6	C6	CONDENSER, 4 μ F, $\pm 10\%$ Fixed, 350V Wkg., Paper Dielectric.	.....	8811D3	Minor H.T. Smoothing	...	A.W.A.	6U3551	Y10C/66011
7	C7	CONDENSER, 16 mfd. 525V Peak, Semi-dry Electrolytic.	.....	.....	.....	...	Ducon	EE10783	Y10C/66009
8	C8	CONDENSER, 16 mfd., 525V, Peak, Semi-dry Electrolytic.	.....	.....	.....	...	Ducon	EE10783	Y10C/66009
8a	C9	CONDENSER, 16 mfd., 525V, Peak, Semi-dry Electrolytic.	.....	.....	.....	...	Ducon	EE10783	Y10C/66009
8b	C10	CONDENSER, 16 mfd., 525V, Peak, Semi-dry Electrolytic.	.....	.....	.....	...	Ducon	EE10783	Y10C/66009
9	F1	FUSE, Bakelite Carrier, Loaded 5 amp.	.....	8811D3	Mains Input	5.2, 5.6	Slydlok	5344	Y10H/90072
10	F2	FUSE, Bakelite Carrier, Loaded 5 amp.	.....	8811D3	Mains Input	5.3, 5.6	Slydlok	5344	Y10H/90072
11	F3	FUSE, 5 amp. Glass Cartridge	.....	8811D3	Transmitter Supply	5.3, 5.6	Australux	4AG	Y10H/90073
12	F4	FUSE, 5 amp. Glass Cartridge	.....	8811D3	Transmitter Supply	5.3, 5.6	Australux	4AG	Y10H/90073
13	F5	FUSE, 1 amp. Glass Cartridge	.....	8811D3	Main 50V H.T. Supply	5.3, 5.6	Australux	4AG	.....
14	F6	FUSE, 1 amp. Glass Cartridge	.....	8811D3	Transmitter 300V H.T. Supply	5.3, 5.6	Australux	4AG	Y10H/90075
15	F7	FUSE, 1 amp. Glass Cartridge	.....	8811D3	Receiver 250V H.T. Supply	5.3, 5.6	Australux	4AG	Y10H/90075
16	F8	FUSE, Bakelite Carrier, Loaded 5 amp. Or 5 amp. Glass Cartridge	8811D3	L.T. Supply Positive	5.3, 5.6	Slydlok	5344	Y10H/90072
			8811D3	L.T. Supply Positive	...	Australux	4AG	Y10H/90073

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Schedule of Components for Unit, Power Supply, Type S—continued.

Item No.	Circ. Ref. No.	Description.	Dwg. Photo. Ref.	Circuit.	Function.	Test Ref.	Maker's Name.	Maker's Designation.	R.A.A.F. Ref. No.
17	F9	FUSE, Bakelite Carrier, Loaded 5 amp. Or 5 amp. Glass Cartridge	..... .....	8811D3 8811D3	L.T. Supply Negative L.T. Supply Negative	5.3, 5.6 ...	Sivdlok ... Australux	5344 4AG	Y101I/90072 Y101I/90073
18									
19									
20	L1	CHOKER, 1.4H, 0.1A D.C., Flash Test Rating, 1,500V.	.....	8811D2	Minor H.T. Smoothing	5.3	A.W.A. ...	1XA7819	Y10C/65102
21	L2	CHOKER, 1.4H, 0.1A D.C., Flash Test Rating, 1,500V.	.....	8811D3	Receiver H.T. Smoothing	5.3	A.W.A. ...	1XA7819	Y10C/65102
22	L3	CHOKER, 0.08H, 4.25A D.C., Flash Test Rating, 1,900V.	.....	6811D3	L.T. Smoothing	5.3	A.W.A. ...	2TK3641	Y10C/66003
23	L4	CHOKER, 5.0H, 0.5A D.C., Flash Test Rating, 2,000V.	.....	8811D3	Main H.T. Smoothing	5.3	A.W.A. ...	ETH8195	Y10C/66004
24	L5	CHOKER, 5.0H, 0.5A D.C., Flash Test Rating, 2,000V.	.....	8811D3	Main H.T. Smoothing	5.3	A.W.A. ...	2TH8195	Y10C/66004
25									
26	M1R	Rectifier, Metal, 12V, 3A, Selenium	.....	8811D3	L.T. Supply	5.4	S.T.C. ...	BH12-2-2 (with special stud).	Y10D/70100
27	R1	RESISTOR, 4,000 Ω Fixed, Wire Wound, Ctg. B, with Lug Terminals Type 3, Overall Dimensions 3 1/4 in. L x 1 1/4 in. dia.	.....	8811D3	Receiver Supply Po- tential Divider.	5.3	I.R.C. ...	FN	Y10C/66006
28	R2	RESISTOR, 25 Ω Fixed, Wire Wound, Ctg. B, with Mounting Brackets and Lug Terminals Type 2, Overall Di- mensions 3 1/4 in. L x 1 in. dia.	.....	8811D3	Microphone Supply Potential Divider.	5.3	I.R.C. ...	DG	Y10C/65203
29	R3	RESISTOR, 25 Ω Fixed, Wire Wound, Ctg. B, with Mounting Brackets and Lug Terminals Type 2, Overall Di- mensions 3 1/4 in. L x 1 in. dia.	.....	8811D3	Microphone Supply Potential Divider.	5.3	I.R.C. ...	DG	Y10C/65203
30	R4	RESISTOR, 850 Ω Fixed, Wire Wound, Ctg. B, with Lug Terminals, Type 3, Overall Dimensions 3 1/4 in. L x 1 1/4 in. dia. (2 connected in series).	.....	8811D2	Transmitter 300V H.T. Potential Divider.	5.2	I.R.C.	FN	Y10C/65204

Schedule of Components for Unit, Power Supply, Type S—continued.

Item No.	Circ. Ref. No.	Description:	Dwg. Photo. Ref.	Circuit.	Function.	Test Ref.	Maker's Name	Maker's Designation.	R.A.A.F. Ref. No.
31	R5	RESISTOR, 3,000 Ω Fixed, Wire Wound, Ctg. B, with Lag Terminals, Type 3, Overall Dimensions $3\frac{1}{2}$ in. L. x $\frac{1}{2}$ in. dia. (2 connected in series).	.....	8811D3	Transmitter 300V H.T. Potential Divider.	5.3	I.R.C.	EN	Y10C/66005
32	R6	RESISTOR, 1,800 Ω Fixed, Wire Wound, Ctg. B, with Mounting Brackets and Lag Terminals, Type 2, Overall Dimensions 4 in. L. x $\frac{1}{2}$ in. dia.	.....	8811D3	Receiver H.T. Potential Divider.	5.3	I.R.C.	DH	Y10C/66008
33	R7	RESISTOR, 1,800 Ω Fixed, Wire Wound, Ctg. B, with Mounting Brackets and Lag Terminals, Type 2, Overall Dimensions 4 in. L. x $\frac{1}{2}$ in. dia.	.....	8811D3	Receiver H.T. Potential Divider.	5.3	I.R.C.	DH	Y10C/66008
34	R8	RESISTOR, 5,000 Ω Fixed, Wire Wound, Ctg. B, with Lag Terminal, Type 3, Overall Dimensions $3\frac{1}{2}$ in. L. x $\frac{1}{2}$ in. dia.	.....	8811D3	Receiver H.T. Potential Divider.	5.3	I.R.C.	EN	Y10C/66007
35	R9	RESISTOR, 2 watt, 80,000 ohms, metallised.	.....	.....	.....	.....	I.R.C.	BT2	Y10C/66569
35a	R10	RESISTOR, 2 watt, 80,000 ohms, metallised.	.....	.....	.....	.....	I.R.C.	BT2	Y10C/66569
36	R11	RESISTOR, 2 watt, 80,000 ohms, metallised.	.....	.....	.....	.....	I.R.C.	BT2	Y10C/66569
36a	R12	RESISTOR, 2 watt, 80,000 ohms, metallised.	.....	.....	.....	.....	I.R.C.	BT2	Y10C/66569
37	R13	RESISTOR, 2 watt, 80,000 ohms, metallised.	.....	.....	.....	.....	I.R.C.	BT2	Y10C/66569
37a	R14	RESISTOR, 2 watt, 80,000 ohms, metallised.	.....	.....	.....	.....	I.R.C.	BT2	Y10C/66569
38	RELI	RELAY, Coil 12V, 2 "make" Contacts	.....	8811D3	Transmitter H.T. Supplies, Main H.T. Supply	5.3, 5.5	A.W.A.	6R7800	Y10F/70488
39	ICEL2	RELAY, Coil 12V, 3 "make," 2 "break" Contacts.	.....	8811D3	Main H.T. Supply	5.3, 5.5	A.W.A.	1R7160	Y10F/70489
40	S1	SWITCH, Tumbler Type, $\frac{1}{2}$ Pole, 2 Position, 240V, 10A.	.....	8811D3	Main Supply	5.4	Scanlan	4308	Y10F/80071
42	S2	SWITCH, Tumbler Type, 2 Pole, 2 Position, 240V, 10A.	8811D3	Transmitter Supply.	5.4	Scanlan	4308	Y10F/80071

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Schedule of Components for Unit, Power Supply, Type S—continued.

Item No.	Circ. Ref. No.	Description.	Dwg. Photo. Ref.	Circuit.	Function.	Test Ref.	Maker's Name.	Maker's Designation.	R.A.A.F. Ref. No.
43	T1	TRANSFORMER— 220V /12V 3A 240V, 40-60 ~ /18V 3A tap 18V 260V /2.5V 10A (1000V P. Insulation).	.....	8811D3	L.T. and Filament Supply.	5.3	A.W.A.	2TK9068	Y10A/55692
44	T2	TRANSFORMER— 220V /625V-625V 240V, 40-60 ~ /0.5A D.C. 260V	.....	8811D3	Main H.T. Supply ...	5.3	A.W.A.	1TM9067	Y10A/55693
45	TDRI	RELAY, Time Delay, 10V, 30W, 1 Make, 1 Break Contact.	.....	8811D3	H.T. Supply Delay ...	5.3, 5.5	A.W.A.	R7504	Y10F/80112
46	V1	VALVE ... ..	.....	8811D3	H.T. Rectifying ...	5.4	A.W.V.	868/868A	Y10E/75105
47	V2	VALVE ... ..	.....	8811D3	H.T. Rectifying ...	5.4	A.W.V.	838/868A	Y10E/75105
48	...	VALVE SOCKET, 4 Pin Ampheno; Bakelite, with Mtg. Plate and Spring.	.....	.....	For V1 ... ..	...	Inter Radio.	RS4	Y10H/90224
49	...	VALVE SOCKET, 4 Pin Ampheno; Bakelite, with Mtg. Plate and Spring.	.....	.....	For V2 ... ..	...	Inter Radio.	RS4	Y10H/90224
50	...	PLUG, 8 Pin, Panel Mounting ... ..	.....	8811D3	Transmitter Connect- in-2.	5.2	A.W.A.	7R5585	Y10H/90093
51	...	PLUG, 8 Pin, Panel Mounting ... ..	.....	8811D3	Receiver Connecting	5.2	A.W.A.	7R5585	Y10H/90093
52	...	TERMINAL BLOCK ... ..	.....	8811D3	Special L.T. Conne- tion.	...	.....	.....	G5C/516

Synect: Alfred Henry Peffer, Acting Government Printer—1944.

681103

APPROVAL	DATE	REVISION
7/1	7-12-57	0

Form blocks added.
Circuit 14, Rev. 0-1-57.

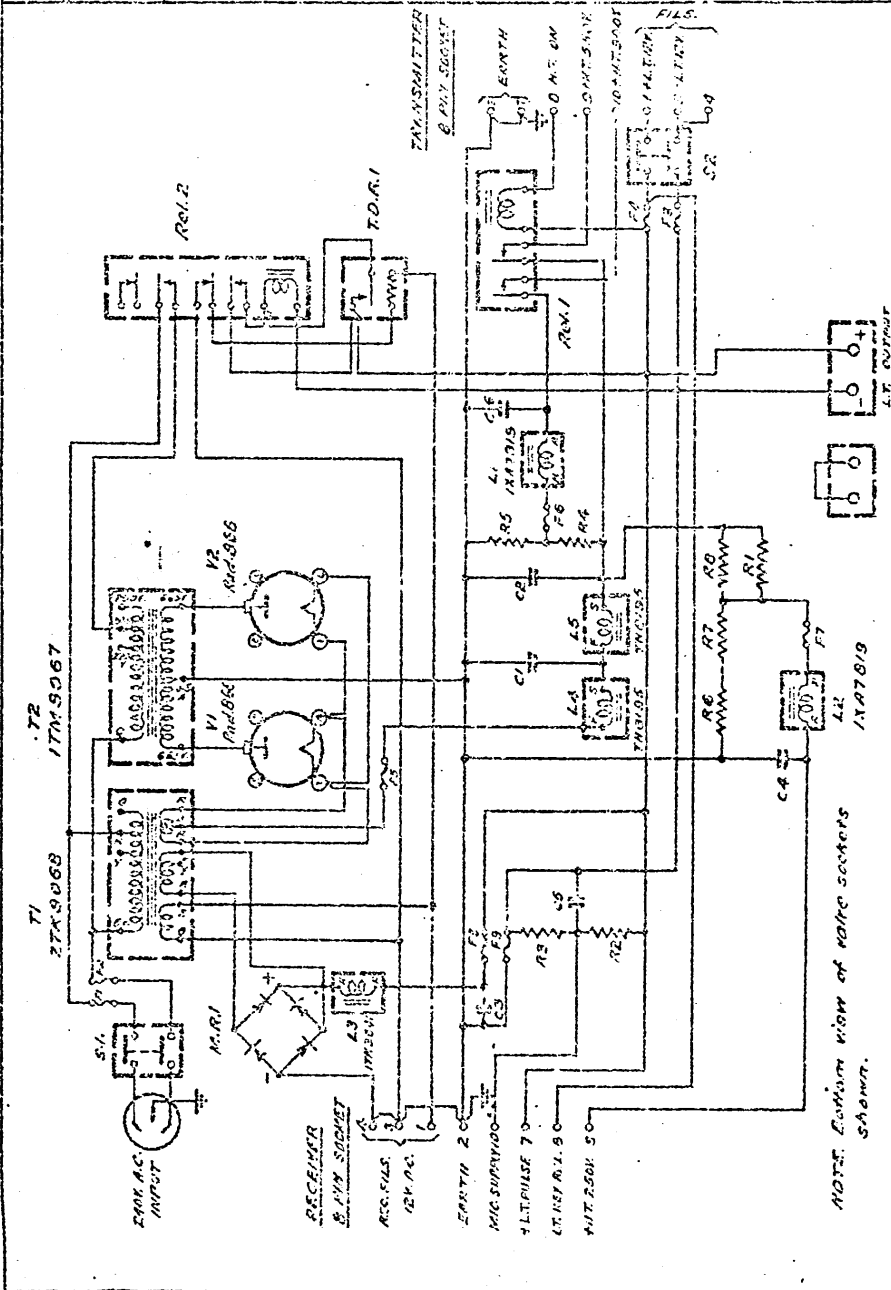


FIG. 29 WIRING DIAGRAM
UNIT POWER SUPPLY TYPE 'S'