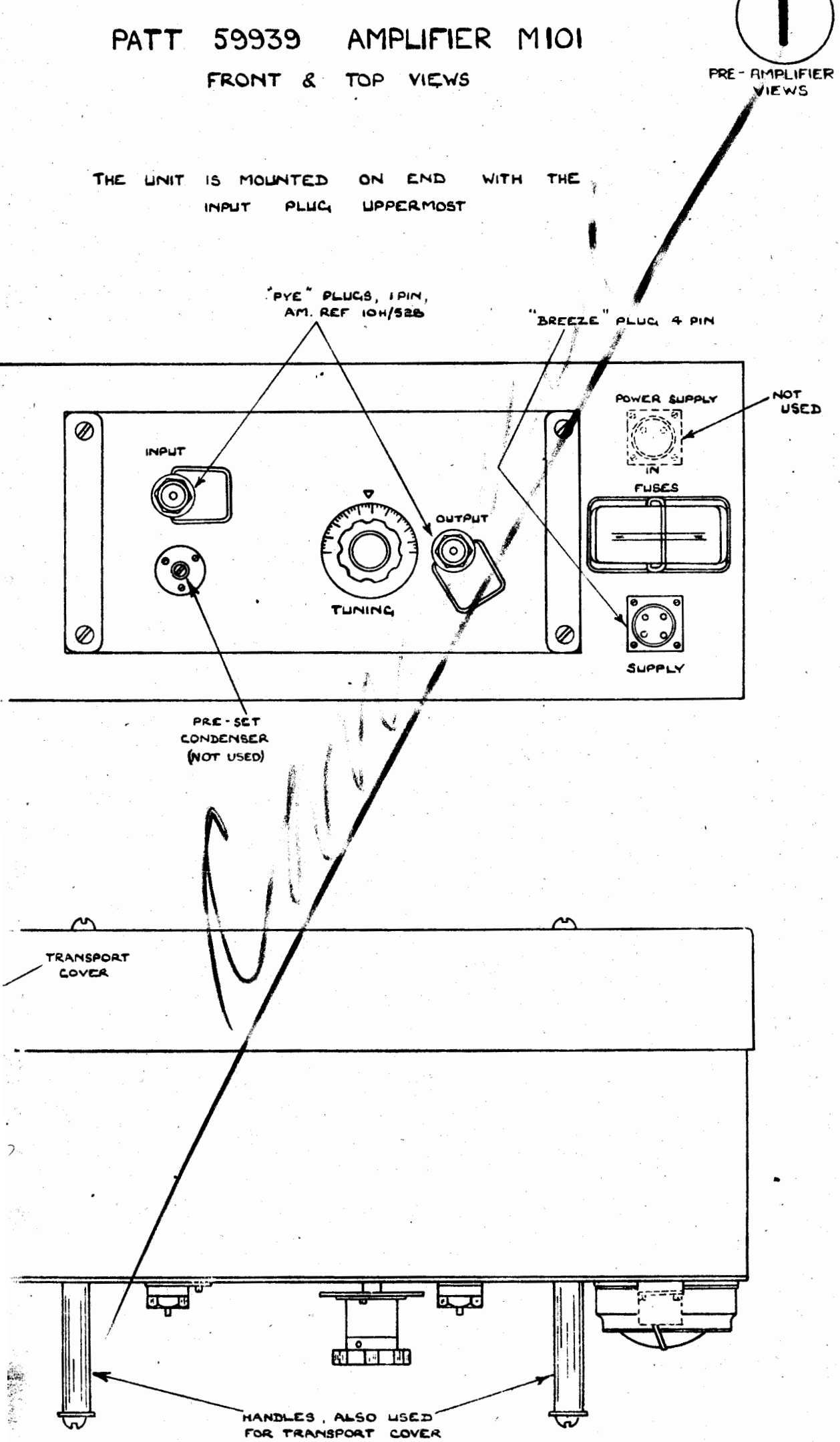
PATT 59939 AMPLIFIER M101

FRONT & TOP VIEWS

PRE-AMPLIFIER VIEWS

THE UNIT IS MOUNTED ON END WITH THE INPUT PLUG UPPERMOST

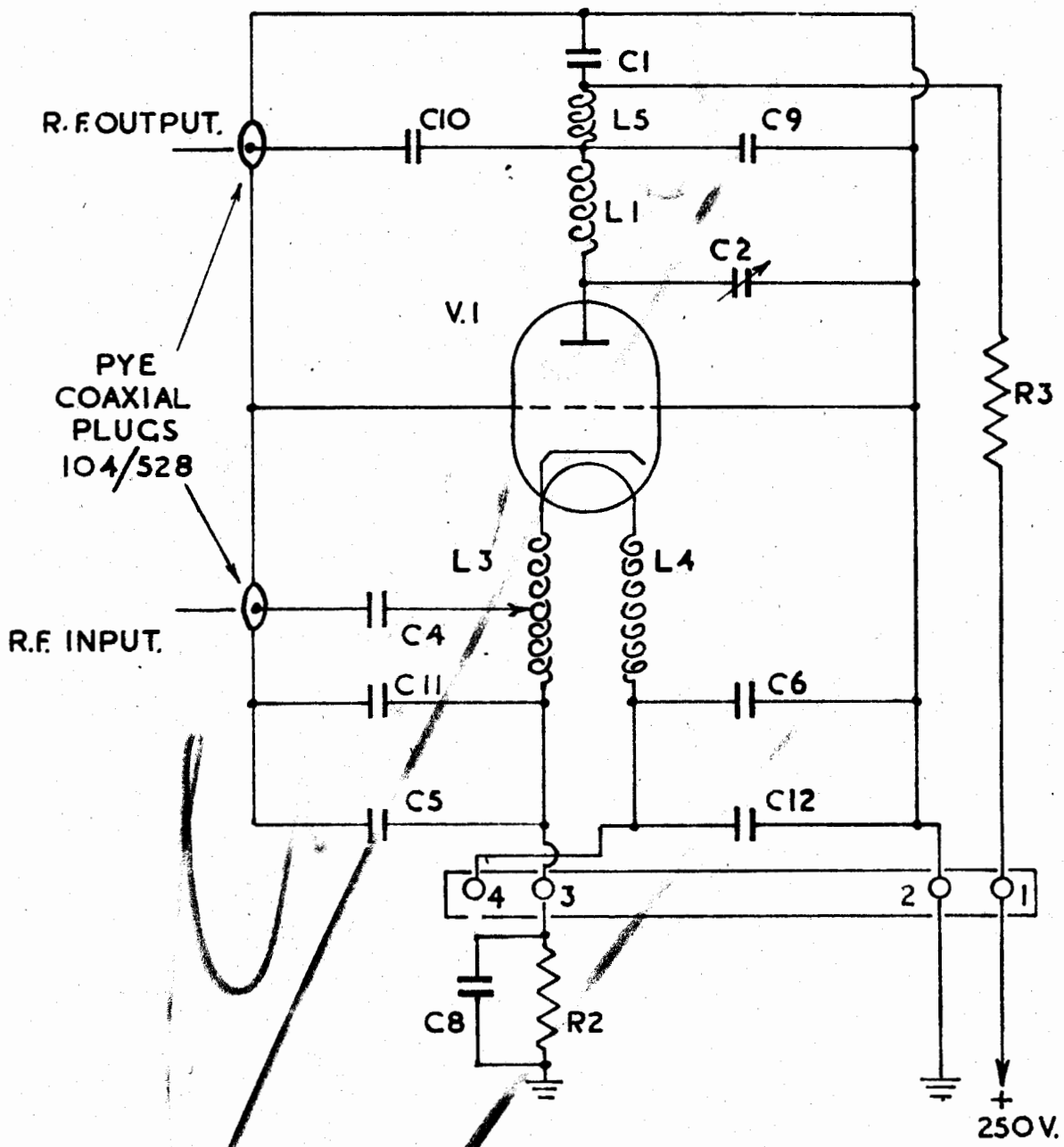


AMPLIFIER MIOI. PATT. 59939.

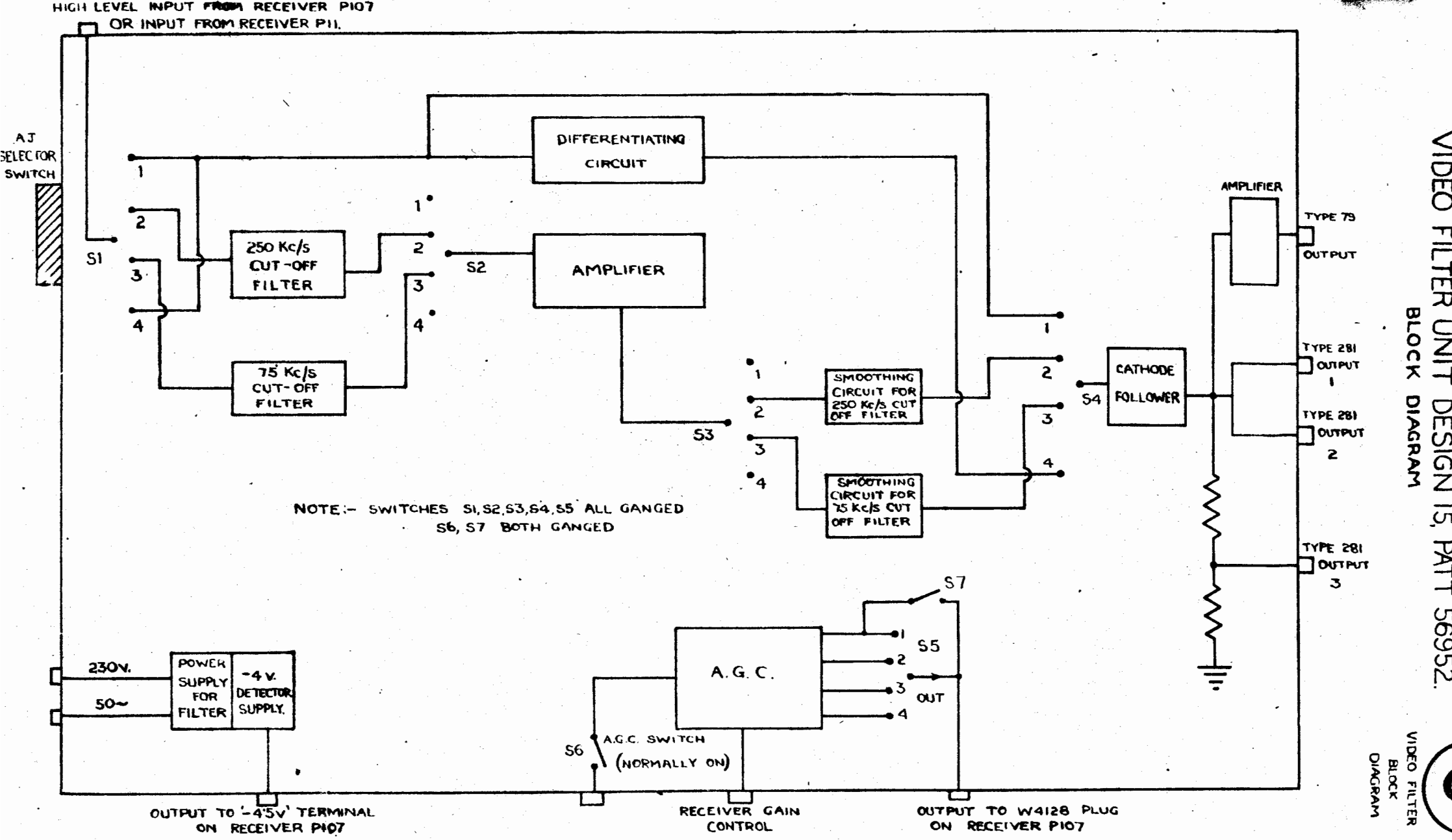
CIRCUIT DIAGRAM.

2

PRE-AMPLIFIER CIRCUIT



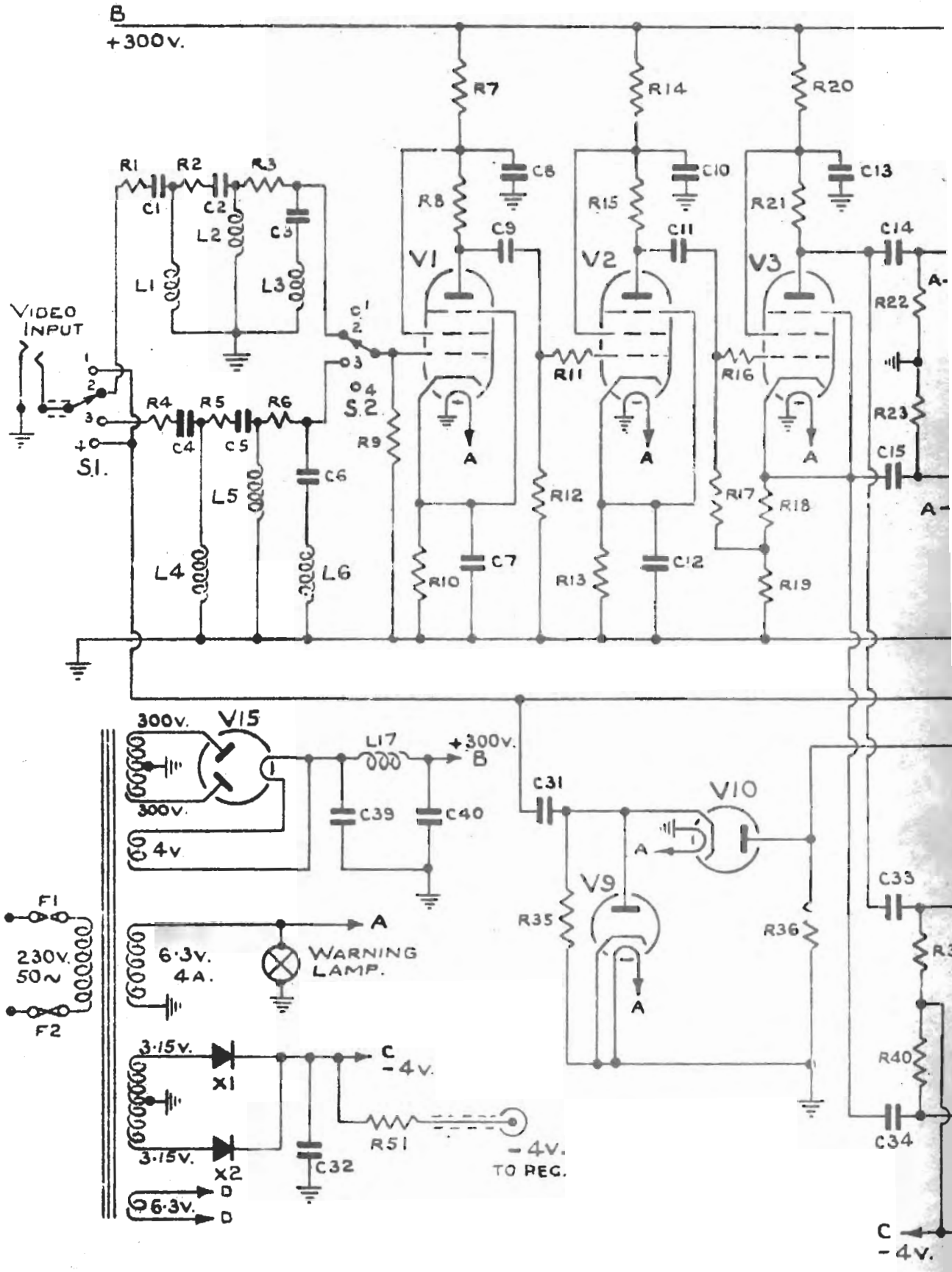
ITEM	PATT. N°	DESCRIPTION
C1	W3316	0·00035μF
C2	SPECIAL	2·3μμF – 3·5μμF
C4		100μμF
C5	W4348	0·001μF
C6	"	" " "
C8	W1704	0·002μF
C9		30μμF
C10	W4348	0·001μF
C11	W1704	·002μF
C12	W1704	·004μF
R2	W4363	150Ω ¼W
R3	W2634	1K. ¼W
L1	–	24 TURNS 20 S.W.G. ON ½" FORMER
L3	–	17 TURNS 22 S.W.G. TAPPED 6 TURNS FROM ONE END ON ½" FORMER
L4	–	19 TURNS 22 S.W.G. ON STANDARD I.F. FORMER (ABOUT ½" DIA.)
L5	–	3·5μH "R" TYPE FORMER FILLED WITH 36 S.W.G. WIRE. (D.S.C)

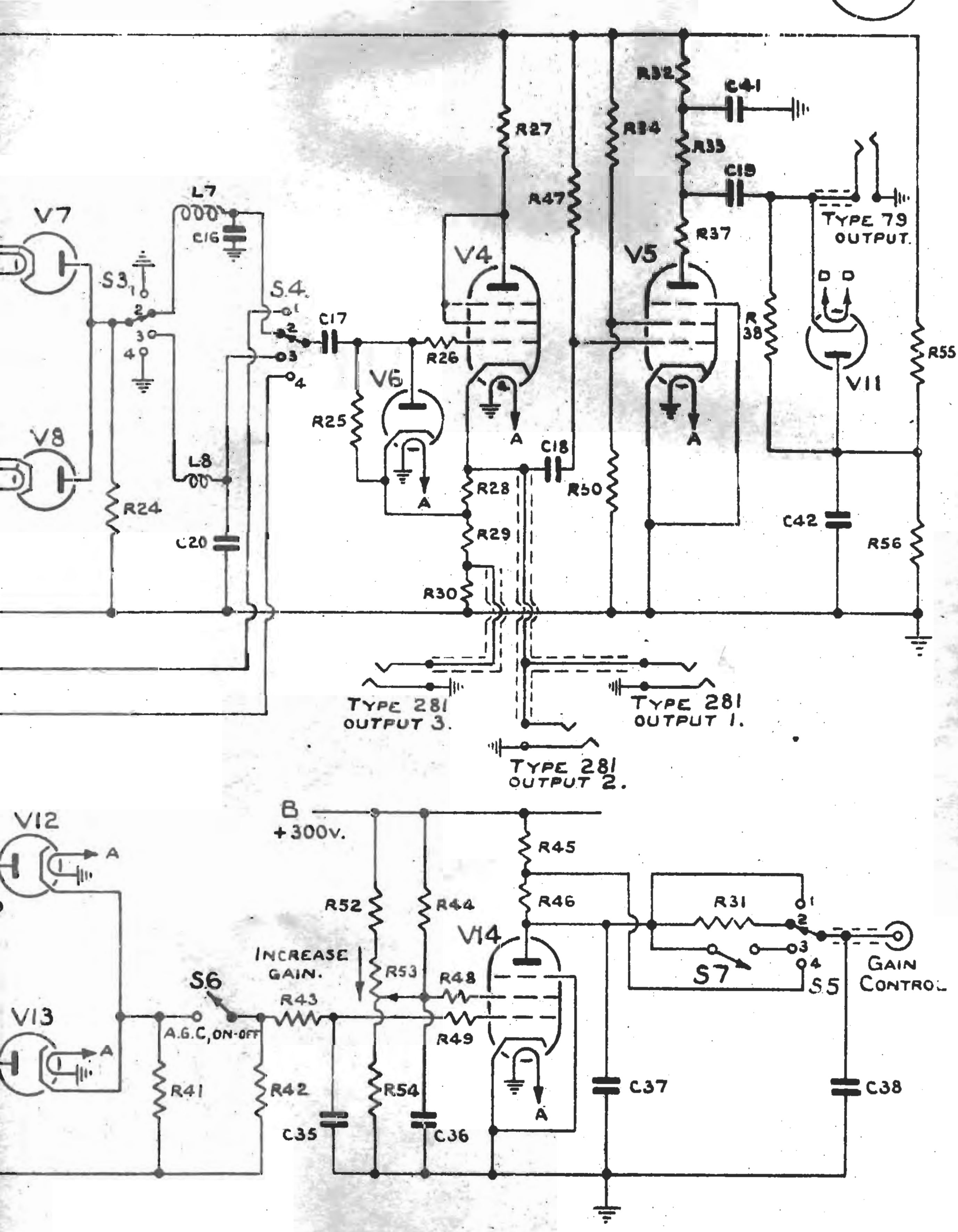


VIDEO FILTER UNIT DESIGN 15, PATT 5695/2.

BLOCK DIAGRAM

VIDEO FILTER BLOCK DIAGRAM


B
+300v.
R7
R14
R20
R1
R2
R3
C1
C2
C3
L1
L2
L3
C8
C10
C13
R8
R15
R21
C9
C11
C14
V1
V2
V3
A-
VIDEO INPUT
S1.
S2
R4
R5
R6
C4
C5
C6
L4
L5
L6
R9
R11
R16
R22
R23
C15
R12
R17
R18
R10
C7
R13
C12
R19
300v.
V15
L17
+300v.
B
C31
V10
C39
C40
4v
V9
R35
R36
C33
F1
230v.
50~
F2
6·3v.
4A.
WARNING LAMP.
3·15v.
X1
X2
C
-4v.
R51
C32
-4v.
TO REG.
D
6·3v.
R40
C34
C
-4v.



V7
V8
S3
L7
C16
L8
R24
C20
S4.
C17
R25
V6
R26
R27
V4
R47
R28
R29
R30
C18
R50
R34
R32
C41
R33
C19
R37
V5
R 38
TYPE 79 OUTPUT.
D D
V11
R55
C42
R56
TYPE 281 OUTPUT 3.
TYPE 281 OUTPUT 1.
TYPE 281 OUTPUT 2.
V12
V13
A
B +300v.
R45
R46
R52
R44
R31
V14
S7
S5
GAIN CONTROL
INCREASE GAIN.
R53
R48
S6
R43
R49
A.G.C, ON-OFF
R41
R42
R54
C35
C36
C37
C38

A.P. 56952 FILTER UNIT, DESIGN 15.
VIDEO.

LIST OF COMPONENTS.

Note:- Tolerances are ± 20% where not quoted.

RESISTANCES				
Item	Value ohms.	Tolerance ± %	Watts	A.M. Ref.
R1	100	5	¼	W8589
R2	2,200		¼	W3354A
R3	6,800	5	¼	W9495
R4	100	5	½	W9128
R5	1,800	5	¼	51959
R6	10,000		¼	W3348A
R7	2,200	5	¼	W3354A
R8	4,700		½	W2651
R9	100,000		¼	W5655
R10	220		¼	W3071A
R11	4,700		¼	W3374A
R12	33,000		¼	W8594
R13	220		¼	W3071A
R14	2,200		¼	W3354A
R15	4,700		½	W8561
R16	4,700		¼	W3347A
R17	33,000		¼	W8594
R18	220		¼	W3071A
R19	3,300		½	W8560
R20	2,200		¼	W3354A
R21	5,600	10	1	W5140
R22	3,300		¼	W3073A
R23	3,300		¼	W3073A
R24	27,000	5	¼	50185
R25	47,000	5	¼	W3350A
R26	4,700		¼	W3347A
R27	100		¼	W8589
R28	220		¼	W3071A
R29	1,000		¼	W8592
R30	220		¼	W3071A
R31	47,000		½	W8567
R32	3,300		½	W3073A
R33	5,600		2	W5303
R34	15,000		2	W8467
R35	1 M.		¼	W3352A
R36	3,300		¼	W8594
R37	100		¼	W8589
R38	470,000		¼	W8598
R39	10,000		¼	W3348A
R40	10,000		¼	W3348A
R41	1 M.		¼	W3352A
R42	100,000		¼	W5655
R43	100,000		¼	W5655
R44	1 M.		¼	W3352A
R45	10,000	5	7·5 (Painton)	52262
R46	10,000	5	7·5 (Painton)	52262
R47	10 M.		¼	W8600
R48	4,700		¼	W3347A
R49	10,000		¼	W3348A
R50	22,000		2	W8675
R51	5		¼	-
R52	10,000		2	W2729
R53	10,000 Pot.		6	W3979
R54	10,000		2	W2729
R55	3·3 M.		½	W7245
R56	820,000	10	½	W6161

contd.

CONDENSERS			
Item	Value	Tolerance ± %	A.M.Ref.
C1	•003 mfd.	5	W1430
C2	•0005 mfd.	5	–
C3	200 mmfd.	5	–
C4	•01 mfd.	5	W3941
C5	•002 mfd.	5	W3803
C6	500 mmfd.	5	–
C7	•0005 mfd.		–
C8	0•5 mfd.		50011
C9	0•1 mfd.		50006
C10	0•5 mfd.		50011
C11	0•1 mfd.		50006
C12	•0005 mfd.		–
C13	0•5 mfd.		50011
C14	0•1 mfd.		50006
C15	0•1 mfd.		50006
C16	150 mmfd.	5	50775
C17	0•1 mfd.		50006
C18	0•1 mfd.		50006
C19	0•1 mfd.		50006
C20	500 mmfd.	5	–
C31	500 mmfd.		–
C32	250 mfd.		W121A
C33	•05 mfd.		50011
C34	•05 mfd.		50011
C35	0•1 mfd.		50006
C36	8 mfd.		1140
C37	0•1 mfd.		50006
C38	0•1 mfd.		50006
C39	8 mfd.		1140
C40	16 mfd.		W5205
C41	0•5 mfd.		50011
C42	0•5 mfd.		50011

CHOKES			
L1	133 mH.	5	–
L2	0•8 mH.	5	–
L3	6•5 mH.	5	–
L4	450 mH.	5	–
L5	2•2 mH.	5	–
L6	28•5 mH.	5	–
L7	19•3 mH.	5	–
L8	65 mH.	5	–
L17	20 H.		W3668

VALVES		
Ref.No.	Type	Patt.No.
V1	VR91	CV1091
V2	VR91	CV1091
V3	VR91	CV1091
V4	VR91	CV1091
V5	VR91	CV1091
V6–13	VR92	CV1092
V14	CV173	CV173
V15	NU17	CV1289

FUSES		
Ref.No.	Value	Tol.± %
F1 & F2	1 amp.	–

AERIAL ARRANGEMENT (OUTFIT ATD)
SCHEMATIC DIAGRAM

1	RECEIVER P11
2	
3	DIODE SWITCH UNIT, PATT. W2941/2/3
4	TRANSFORMER & RECTIFIER UNIT
5	TRANSMITTER
6	FEEDER UNIT PATT. W3235/6/7.
7	TRANSFORMER & MATCHING UNIT, PATT. 2945/6/7
8	AERIAL CONNECTIONS, PATT. W3228
9	MASTHEAD BRACKET

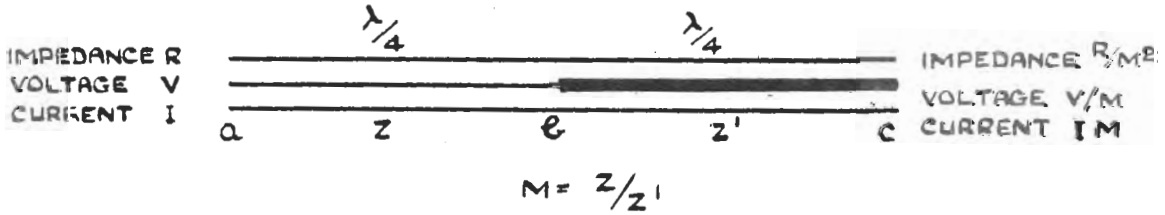
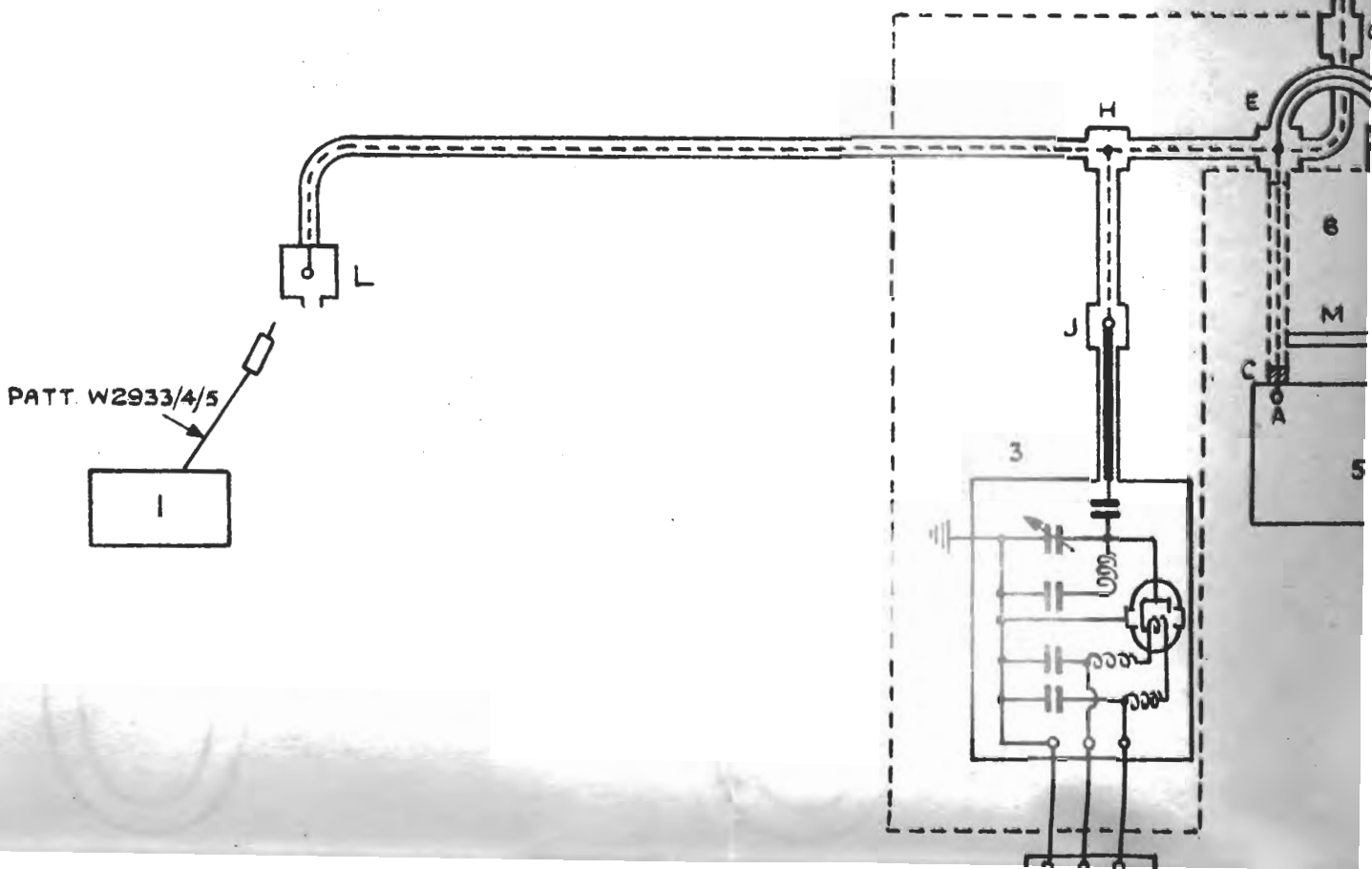
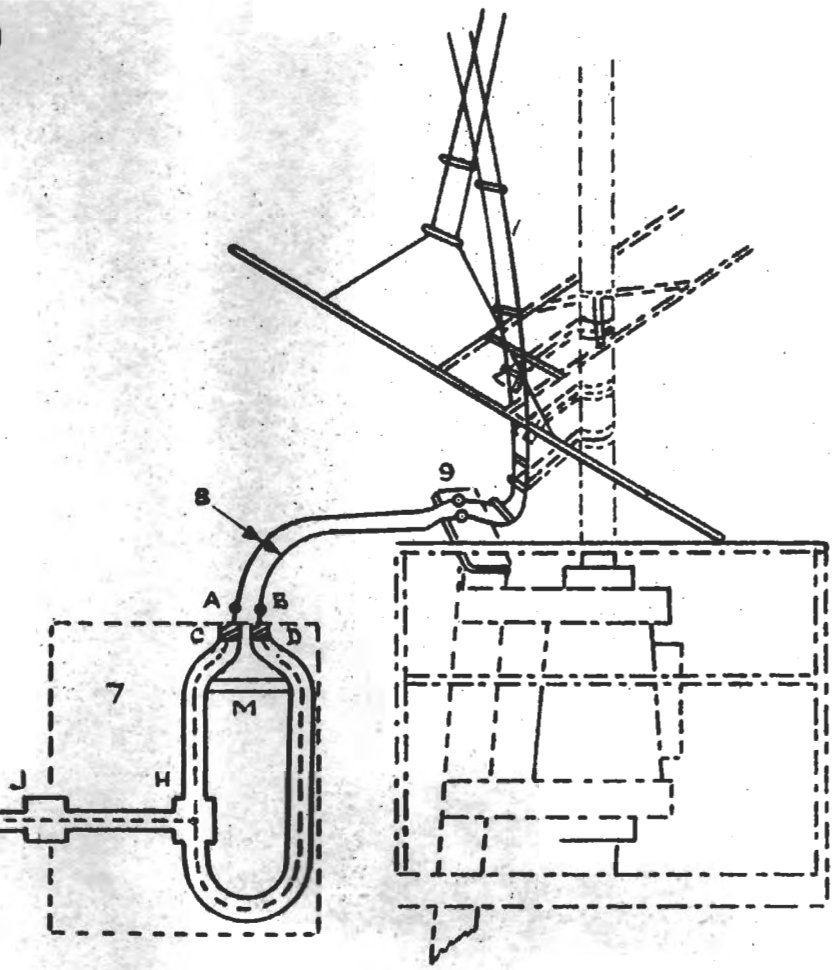


FIG. 6



6

AERIAL ARRANGEMENT DOUBLE $\frac{\lambda}{4}$ TRANSFORMER

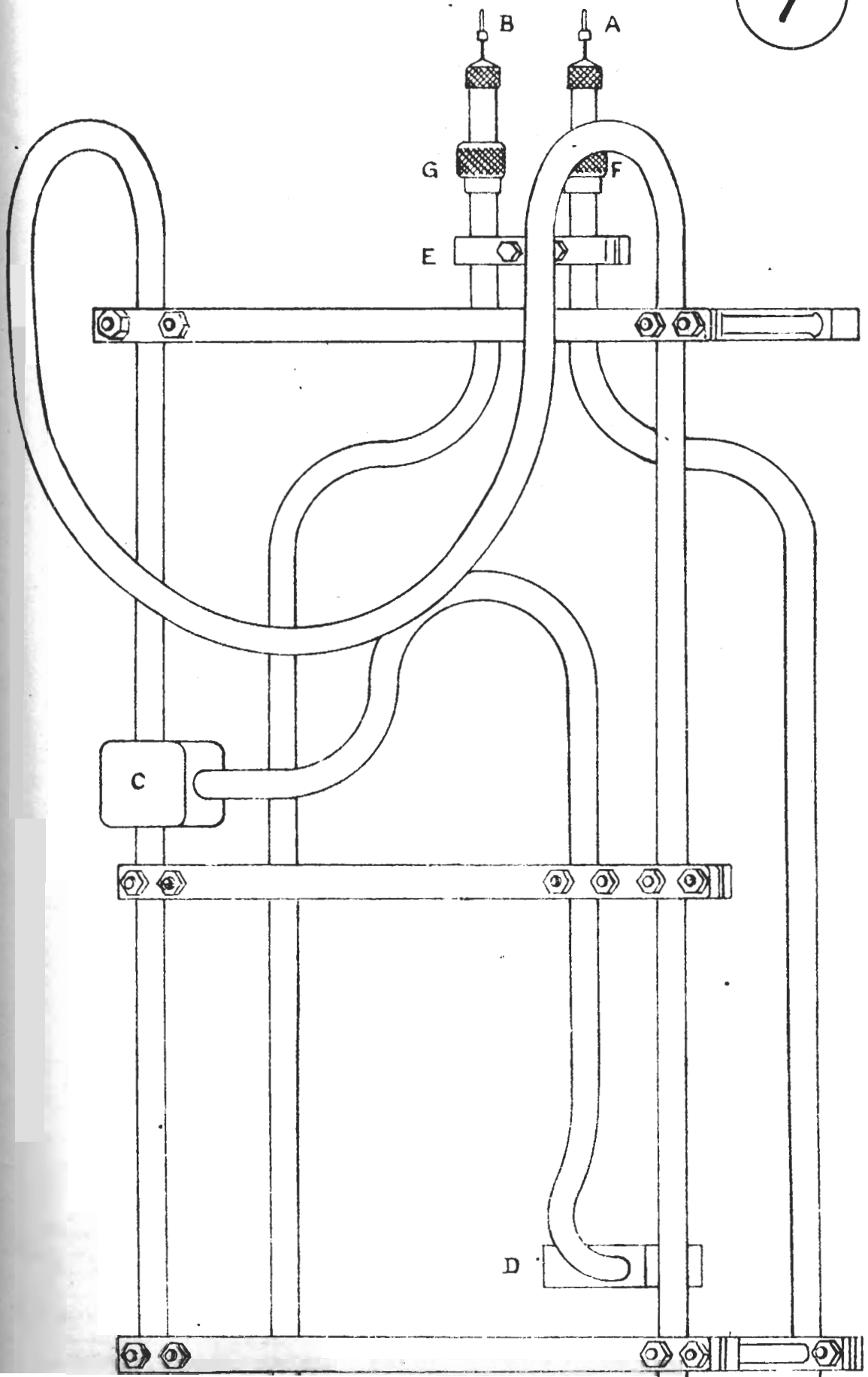


PYROTENAX ON MAST

A & B	CONNECTORS AT ENDS OF INNERS
C & D	SEALING PLUGS
E	4-WAY JUNCTION BOX WITH RING SEAL FOR TRANSMITTER CONNECTION
F	2-WAY JUNCTION BOX WITH RING SEAL FOR TRANSMITTER CONNECTION
G	2-WAY JUNCTION BOX WITH RING SEAL FOR AERIAL CONNECTION
H	3-WAY JUNCTION BOX
J	2-WAY JUNCTION BOX
K	
L	2-WAY JUNCTION BOX WITH RING SEAL FOR RECEIVER CONNECTION
M	EARTHING CLAMP

AERIAL MATCHING TRANSFORMER.

7



FOR SCHEMATIC DIAGRAM SEE FIG 4.