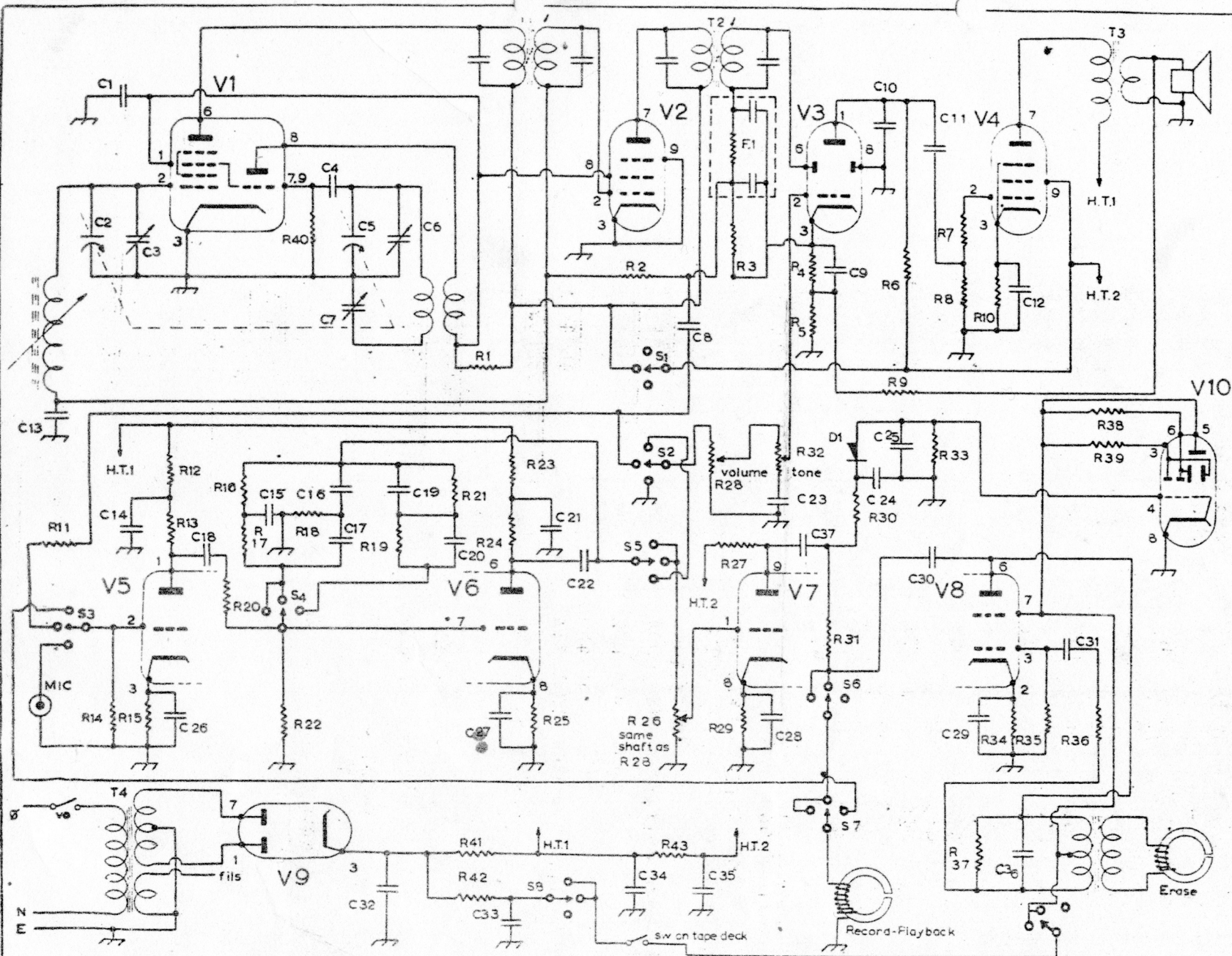




R1	22K Ω 1w	C1	1 μ f
R2	2.2meg	C2	30-430 pf
R3	470K Ω	C3	3-30 pf
R4	2.2K Ω	C4	100 pf
R5	100 Ω	C5	30-430 pf
R6	270K Ω	C6	3-30 pf
R7	10K Ω	C7	30-600 pf
R8	270K Ω	C8	0.05 μ f
R9	3.3K Ω	C9	25 μ f 10v
R10	220 Ω 1w	C10	250 pf
R11	2.2meg	C11	0.05 μ f
R12	33K Ω	C12	25 μ f 40v
R13	100K Ω	C13	0.05 μ f
R14	100K Ω	C14	20 μ f electro
R15	1.8K Ω	C15	330 pf
R16	220K Ω	C16	150 pf
R17	220K Ω	C17	150 pf
R18	100K Ω	C18	0.05 μ f
R19	1meg Ω	C19	270 pf
R20	150K Ω	C20	470 pf
R21	100K Ω	C21	20 μ f electro
R22	470K Ω	C22	0.05 μ f
R23	33K Ω	C23	470 pf
R24	100K Ω	C24	330 pf
R25	1.8K Ω	C25	1 μ f
R26	500K Ω log switch	C26	100 μ f 10v
R27	100K Ω	C27	100 μ f 10v
R28	500K Ω log	C28	25 μ f 25v
R29	1.8K Ω	C29	25 μ f 25v
R30	47K Ω	C30	150 pf
R31	100K Ω	C31	2000 pf
R32	500K Ω linear	C32	40 μ f electro
R33	1meg Ω	C33	40 μ f electro
R34	390K Ω 1w	C34	40 μ f electro
R35	5K Ω	C35	40 μ f electro
R36	33K Ω	C36	3300 pf
R37	47K Ω	C37	0.05 μ f
R38	1meg Ω		
R39	1meg Ω		
R40	47K Ω		
R41	1K Ω 5w w/w		
R42	2.2K Ω 1w		
R43	1K Ω 5w w/w		

F1	DIODE FILTER	T1	philips ap1014
D1	OA85	T2	455 kd/s
		T3	7000 / 5A
		T4	teleco low flux leakage
V1	ECH 81		
V2	EF89		
V3	EBC81		
V4	EL 84		
V5	1/2 ECC83		
V6	1/2 ECC83		
V7	1/2 ECL 82		
V8	1/2 ECL 82		
V9	EZ 80		
V10	EM34		
		Si-8	switch positions
		1	record mic
		2	record radio
		3	playback
			(shown in pos 2)

STEWART ELECTRICAL INDUSTRIES LTD.
CHRISTCHURCH N.Z.

TAPE RADIO Model TD.1

3 Valve combined tape recorder radio.

*g. H. Hall*TECHNICAL INFORMATION.RADIO:

<u>Frequency Range</u>	535 kc/s - 1600 kc/s
<u>Intermediate Frequency</u>	455 kc/s
<u>Speaker</u>	Philips ADZ3461Z 6" x 4"
<u>Valves</u>	ECH81 Mixer EF 89 IF Amplifier ECB31 Audio Detector and amplifier EL84 Output valve EZ80 Rectifier
<u>Supply Voltage</u>	230V 50c/s
<u>Consumption</u>	.23 amps

TAPE RECORDER:

<u>Frequency Range</u>	50 c/s to 8 Kc/s
<u>Output</u>	Via Radio audio amplifier and EI output.
<u>Tape Speed</u>	3 $\frac{3}{4}$ " per second
<u>Valves</u>	ECC83 Pre amplifier and 1st audio amplifier. ECL82 2nd audio drive to record and bias oscillator.

Voltage Table:

	BT1	275	volts
	BT2	250	"
Pin 6	V1	235	"
1	V1	.95	"
7	V2	235	"
8	V2	.90	"
Pin 1	V3	130	"
3	V3	1.6	"
Pin 9	V4	245	"
7	V4	260	"
3	V4	10	"
Pin 1	V5	170	"
3	V5	1.4	"
Pin 6	V6	150	"
8	V6	1.5	"
Pin 9	V7	145	"
8	V7	1.65	"
Pin 6	V8	2.25	"
2	V8	.15	"
7	V8	225	"
Pin 3	V9	270	"
Pin 5	V10	225	"
on record			
on record			
on record			
on record			

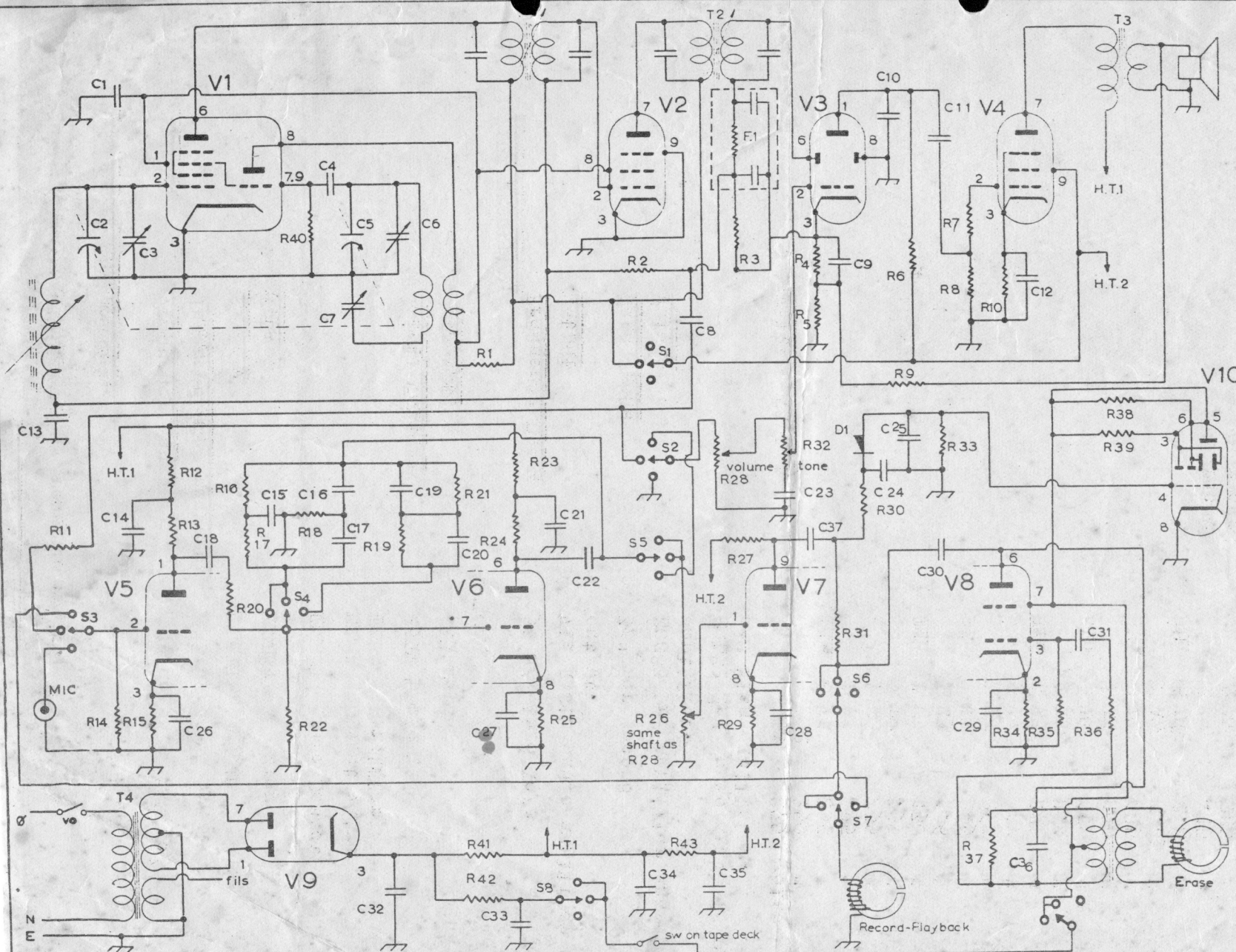
All voltage measured with 20,000 ohms per volt meter.

In record position the erase voltage at the erase head is approx 20 volts, a lower limit is 14 volts. On record the bias voltage applied to the record/playback head is 40 volts.

ALIGNMENT PROCEDURE:

IF Alignment: A 455 kc/s signal of low output is coupled via .01 μ F condenser to the grid of V1 (6CP81). The output can be monitored either by the audio output, but of greater accuracy for maximum A.V.C. with low input signal with a valve volt meter.

NOTE: At all times the input signal be adjusted so that there is just sufficient to give a reasonable indication of alignment.



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R26	500K Ω log+switch	C26	100 μ f 10v
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R28	500K Ω log	C28	25 μ f 25v
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