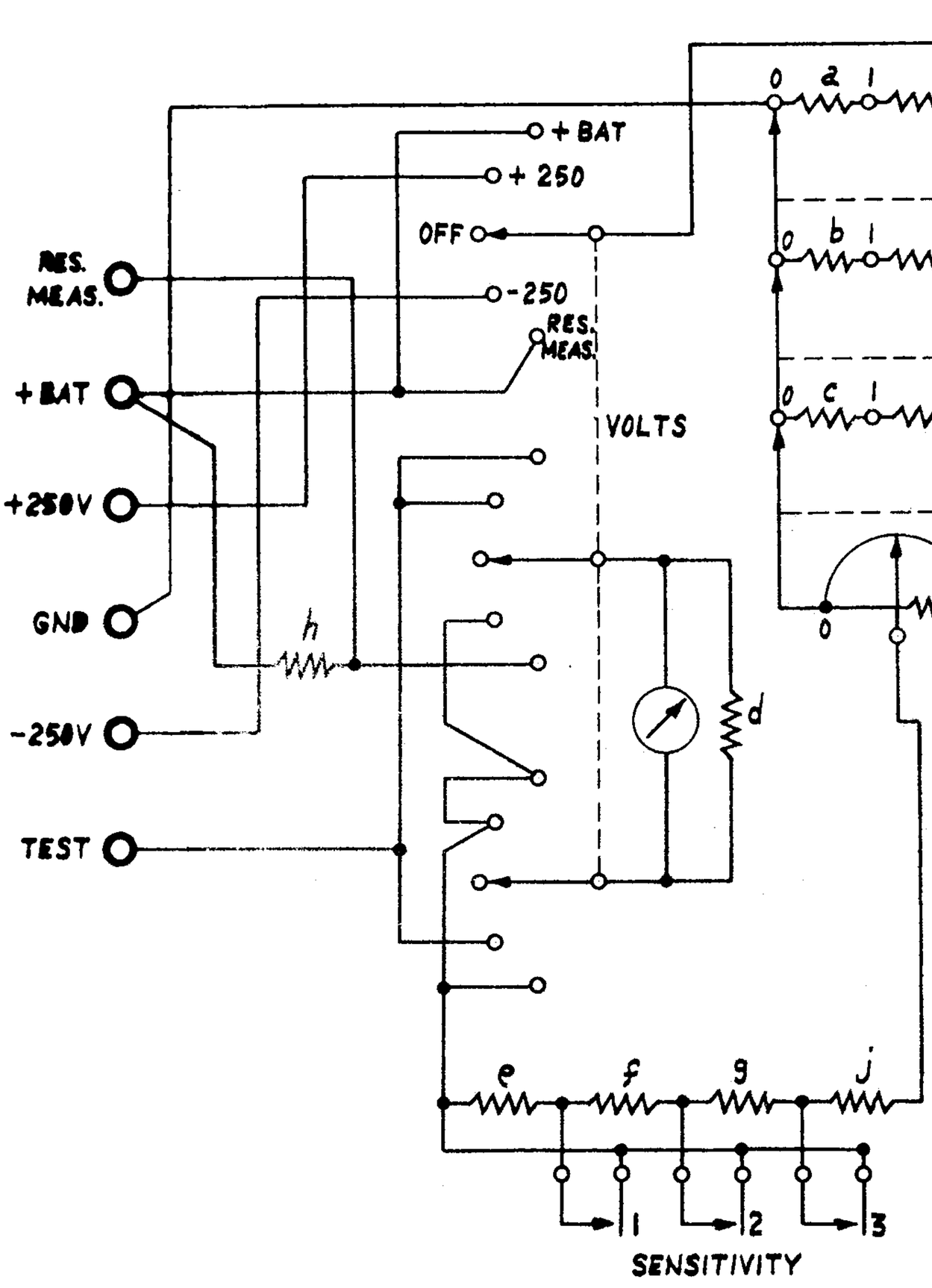
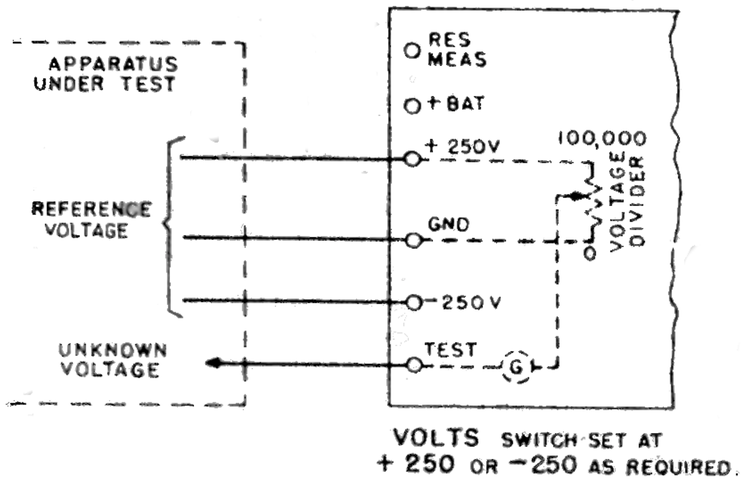


RESISTORS	
ITEM	VALUE
a	10000 Ω EA
b	2000 Ω EA
C	400 Ω EA
d	2400 Ω
e	10 MEG.
f	0.51 MEG.
g	20000 Ω
h	10000 Ω
J	10000 Ω
S	800 Ω

FORM B-D-67-44

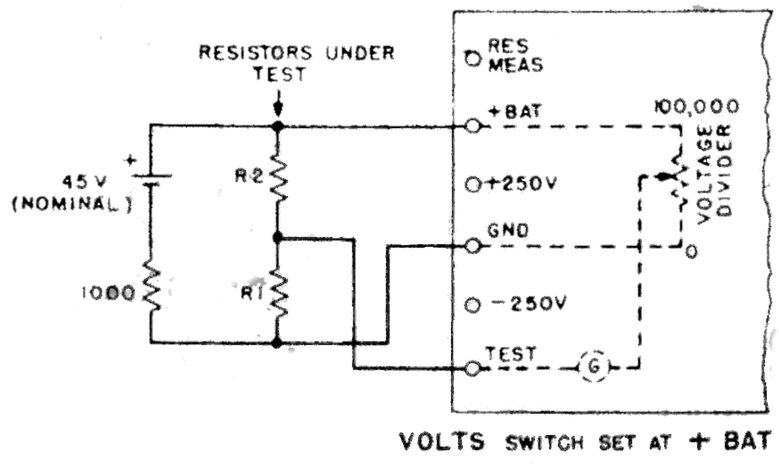
KS10376 NULL VOLTAGE TEST SET



VOLTS SWITCH SET AT + 250 OR −250 AS REQUIRED.

CONNECTIONS FOR VOLTAGE RATIO MEASUREMENT

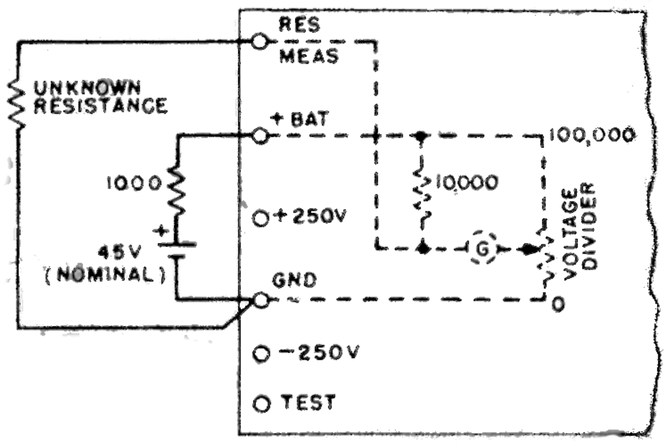
$$\text{VOLTS} = \text{REF VOLTS} \times \frac{D}{100{,}000}$$



VOLTS SWITCH SET AT + BAT

CONNECTIONS FOR RATIO MEASUREMENT

$$\text{RATIO } \frac{R1}{R1+R2} = \frac{D}{100{,}000}$$



VOLTS SWITCH SET AT RES MEAS

CONNECTIONS FOR RESISTANCE MEASUREMENT

$$\text{UNKNOWN RESISTANCE (OHMS)} = \frac{10{,}000 \times D}{100{,}000 - D}$$

RESISTANCE MEASUREMENT CONVERSION TABLE — DIAL READING IN OHMS

DIAL → ↓	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	AVE DIFF OHMS PER DIAL UNIT
	RESISTANCE IN OHMS										
0	0	101	204	309	416	526	638	752	869	989	0.11
10000	1111	1235	1363	1494	1627	1764	1904	2048	2195	2346	0.14
20000	2500	2658	2820	2987	3157	3333	3513	3698	3888	4084	0.18
30000	4285	4492	4705	4925	5151	5384	5625	5873	6129	6393	0.23
40000	6666	6949	7241	7543	7857	8181	8518	8867	9230	9608	0.32
50000	10000	10408	10833	11276	11739	12222	12727	13255	13809	14390	0.49
60000	15000	15641	16315	17027	17777	18571	19411	20303	21250	22258	0.81
70000	23333	24482	25714	27037	28461	30000	31666	33478	35454	37619	1.5
80000	40000	42631	45555	48823	52500	56666	61428	66923	73333	80909	4.1
90000	90000	101111	115000	132857	156666						5.2

INTERPOLATION ERROR IS APPROX. ±1% FOR GREATER ACCURACY OR VALUES HIGHER THAN SHOWN IN TABLE USE FORMULA, $\text{OHMS} = \frac{10000 \times D}{100000 - D}$

GENERAL INSTRUCTIONS — CONNECT AS SHOWN AND ADJUST DIALS FOR ZERO INDICATION ON GALVANOMETER. OBTAIN APPROXIMATE BALANCE WITH SENSITIVITY KEYS 1 AND 2 BEFORE DEPRESSING (RED) KEY 3.

NOTES —

1. WHEN MAKING RESISTANCE AND RESISTANCE RATIO MEASUREMENTS SELECT BATTERY VOLTAGE SUCH THAT RESISTOR UNDER TEST IS NOT OVERLOADED.
2. D INDICATES DIAL READING AT BALANCE
3. COMPLETE SCHEMATIC SHOWN ON INSIDE OF CASE.