

*Western Electric*

*Components*  
*Resistors*

GENERAL BULLETIN



**EQUIPMENT BULLETIN**

**RESISTANCES, GENERAL**

**EQUIPMENT WHERE USED**

CODE NO.	RESISTANCE	STEPS	EQUIPMENT WHERE USED
QLK-5673201	5.04	Tapped	Generator Field KS-5259 Motor Generator Set

**EQUIPMENT BULLETIN**

**RESISTANCES, GENERAL**

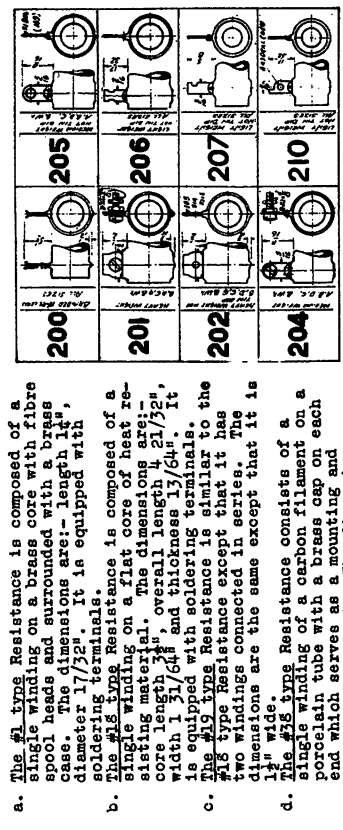
**EQUIPMENT WHERE USED**

TYPE	RES. (OHMS)	USED IN	USED IN
D-46758	50. Meg.	47 type, 48-A, 53 type & 54-A Amplifiers	709-A Control Cabinet
D-47911	504	705-A Control Cabinet	705-0 Control Cabinet
D-47941	7500	50-A Test Set	59-A Amplifier
KA-6576	1/2 Meg.	49 type, 50-A, D-6593 & 50-A Amplifiers	53-A and 53-B Ampls.
KA-6576	2 Meg.	50-A Amplifier	700-A Control Cabinet
KA-6576	10 Meg.	50-A Amplifier	398-A Feder
KA-6576	20 Meg.	50-A Amplifier	598-A Feder
KA-6576	100 Meg.	50-A Amplifier	598-A Feder

4. Description

4.1 A few of the more common types of Resistances listed above, are described briefly.

2. List of Ward Leonard Resistors



**EQUIPMENT WHERE USED**

TYPE	RESISTANCE	STEPS	TERMINALS	EQUIPMENT WHERE USED
A	.5 Ohm	.2 and .3 ohms	204	1, 1-PD, 2-PD Panels
A	1.27 ± 5%		204	1, 1-PD, 2-PD Panels
A	2.7		210	80-728 Control Cabinet
A	3.0		204	7A-7115 Filter
A	4.0		204	Resistor & Signal Cabinet
A	4.7		210	18" Box, MD Systems
A	K-40049	7.4 ± 5%	204	KA-6940 Control Cabinet
A	K-40038	8.0 ± 5%	210	48-A & 49-B Amplifiers
A		10.0 ± 5%	210	7A-7113 Filter
A		10.25 ± 5%	210	203-B Panel (V.I.)
A		15.0 ± 5%	210	705-B Apparatus Unit
A		22.0	210	D-46758-A & 4-50-A Amplifiers
A	K-40037	24.0	210	58-A Tube Tester
A		30.0 ± 5%	210	D-6593, D-6675, 49 type Ampls.
A		30.0	210	32-A Amplifier
A		200.0	210	D-50728 Control Cabinet
A		500.0	210	D-50682, D-50683 & 209-A Panels
B	4.7		207	7A-7204 Filter
B	62.0 ± 5% Ohms		200	700-A Control Cabinet
B	70.0 ± 5% Ohms		200	700-A Control Cabinet
B	27,900 ± 5%		210	59-A Amplifier
B	180.0 ± 5%	(6) 30 Ohms each ± 10%	210	6-A Potentiometer (519-A Panel)

FIG. 1

4.2 The types of terminals provided on Ward Leonard Resistors, are shown in Fig. 1.

5. Merohandlaine

5.1 Where a replacement resistance is required, obtain first the resistance value and type or make from the wiring or schematic drawing, then with the information given below as a guide, obtain the correct ordering information from the resistance charts.

For the #1, #18, #19, #20, #26, #28, #32, #33, #69, #70, and #71 types and for the D-86559, D-87276, and D-87741 types. Order as: #1 - #18-40 Resistance, or 1 - D-86758 Resistance.

For the #64, KS-6376, Durham and General Radio type Resistances order by code number and Resistance value. Order as: #1 - #64-B 1.2 ohms Resistance, or 1 - KS-6376 1/2 meg. Resistance.

For Ward Leonard Resistors having "K" numbers, order as: #1 - K-40035 Resistor or 1 - K-40011 Resistor.

Where Ward Leonard Resistors are not covered by "K" numbers, order by giving full description, as

#1 - Ward Leonard Type "G" Resistor, 205 ohm with 145, 30 and 30 ohm steps and #201 Terminals, or

#1 - Ward Leonard Type "A" Resistor, 7.4 ohms ± 5% with #204 Terminals.



## EQUIPMENT BULLETIN

1. ABSTRACT

1.1 This addendum describes a change in design of the KS-6376 Resistances (PEO Amplifiers) and gives corresponding merchandising and installation information.

2. KS-6376 RESISTANCE

2.1 This is a metallized filament resistance having resistance value as specified in the order: values of .2, .5, 1, 2, 4, and 10 megohms are now stocked. Heretofore this unit was supplied with the resistance element in a glass tube arranged with terminal ends for clipping in place. This design has been changed to provide a ceramic tube instead of a glass tube, and to add pigtail wires for soldered connection, instead of depending on spring contacts.

2.2 It is expected that KS-6376 Resistances of the new design, in the 1/2 megohm size, will be available during October, 1934. The other sizes in the new design, will become available at a later date, depending on stock conditions. However, existing KS-6376 Resistances of the clip contact type in Branch Office Stocks or Engineers' Kits may continue to be installed and used after the new design becomes available.

2.3 KS-6376 Resistances of the new design should be placed in the clips as usual, and then should have their pigtail wires soldered to the clip terminals, at the same point to which the existing wire is attached.

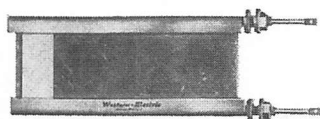
## RESISTANCES

To meet a wide range of circuit requirements and equipment conditions many types of dependable Western Electric resistances have been developed. Information on all specific types may be had upon request but shown below are the 18 and 19 type Resistances which are unique non-inductive

precision resistances of high wattage rating for size. They will dissipate six watts continuously without injury from overheating and are ideal for making up fixed attenuator pads.

### NO. 18 TYPE RESISTANCES

Resistances of the No. 18 type have a micanite core upon which a single winding is placed. The winding is protected by a covering of sheet mica. The ends of the winding are soldered to tinned terminal posts which are also used for mounting the unit. Each terminal post is provided with two fibre washers and a hexagonal nut. Will mount on 7/16 inch horizontal centers and 1 3/4 inch vertical.

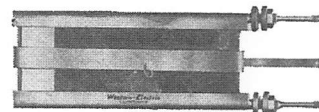


The over-all dimensions are: length, 4-21/32 inches, width, 1-31/64 inches, thickness, 3/8 inch.

The resistance values do not vary more than plus or minus 5 percent from those rated in the table below. In some cases as noted, the resistance is held to even closer limits. Each resistance will dissipate six watts continuously without injury from heating.

The 600 type Mounting Plates listed under Relay Mounting Plates, page 100, can be furnished on order drilled to provide for assembling these resistances in compact groups, and when so mounted the terminals are conveniently located for making soldered connections.

### NO. 19 TYPE RESISTANCES



These resistances are similar in construction to the No. 18 type and may be mounted on 7/16 inch horizontal centers and 1 3/4 inch vertical centers. They differ from the No. 18 type in that two windings are provided and the end of each winding soldered to a center terminal. The two outside terminals are used as mounting posts as in the 18 type. The resistance values do not vary more than plus or minus 5 percent from those rated below and in some cases, as noted, the variation is held to closer limits.

### NO. 18 TYPE RESISTANCE VALUES

Code No.	Resistance (Ohms)	Code No.	Resistance (Ohms)	Code No.	Resistance (Ohms)	Code No.	Resistance (Ohms)	Code No.	Resistance (Ohms)
18A	37	18T	50	(b) 18AP	500	18CJ	5	18EM	8600
18B	40	18U	100	18AR	380	18CN	800	18ES	4800
18C	83	18Y	90	18AT	1600	(b) 18CR	2000	(a) 18EU	500
18D	120	18Z	67	(d) 18AY	2.4	(d) 18CU	0.8	18EW	5000
18E	140	18AA	95	18BA	2000	(d) 18CW	1.6	18FB	900
18F	150	18AB	45	(b) 18BE	20	(b) 18DA	1510	18FC	4000
18G	200	18AC	500	18BF	284	18DB	3000	18FG	8080
18H	210	18AD	240	(b) 18BG	400	(b) 18DG	426	18FP	6350
18J	30	18AE	600	18BH	1000	18DH	700	(b) 18FR	3200
18K	80	18AF	300	18BJ	1200	(b) 18DJ	15	(b) 18FS	4250
18L	170	18AG	226	(b) 18BK	1300	(a) 18DP	18.75	(c) 18GL	5545
18N	180	18AJ	400	18BL	750	(b) 18DS	1700	(b) 18GU	8
18P	130	18AK	60	(b) 18BM	1000	18EA	9000	(b) 18GW	5.4
18Q	110	18AL	4	(b) 18BT	200	18EC	6000	(c) 18HH	0.3
18R	10	18AM	250	(b) 18BU	300	(b) 18EE	128	(c) 18HJ	0.5
18S	20	18AN	350	(b) 18BW	100	18EF	2500	(g) 18JC	600
								18JG	220.4

(a) Resistance value does not vary more than plus or minus 1/2%.

(b) Resistance value does not vary more than plus or minus 1%.

(c) Resistance value does not vary more than plus or minus 2%.

(d) Resistance value does not vary more than plus or minus 3%.

(g) Resistance value does not vary more than plus or minus 0.1 of 1%.

**NO. 19 TYPE RESISTANCE VALUES**

Code No.	Resistance (Ohms)	Code No.	Resistance (Ohms)	Code No.	Resistance (Ohms)	Code No.	Resistance (Ohms)
19A	37 and 37	19AN	260 and 260	(f) 19DN	100 and 100	19GJ	300 and 500
19B	40 and 40	19AP	180 and 180	19DP	0.25 and 0.5	19GL	300 and 300
19C	40 and 83	19AW	2.5 and 2.5	19DR	1 and 2	19GM	400 and 1000
19D	83 and 83	19BA	900 and 900	19DT	150 and 300	(c) 19KG	160 and 2990
19H	40 and 120	19BB	300 and 2300	19DY	500 and 500	(c) 19KH	286 and 1325
19K	100 and 100	19BC	50 and 300	(b) 19EA	115 and 115	(c) 19KJ	467 and 512
19S	60 and 90	19BE	30 and 90	19EB	20 and 330	(c) 19KL	269 and 1490
19T	25 and 25	19BG	200 and 400	19EC	650 and 1600	19KM	84 and 6350
19Z	120 and 120	19BJ	350 and 350	19EW	800 and 800	(c) 19KN	146 and 651
19AD	150 and 150	19BL	1 and 1	(b) 19GA	400 and 600	(a) 19PC	102.6 and 3509
19AH	240 and 240	(b) 19CA	185 and 770	(b) 19GB	80 and 85	(b) 19SR	600 and 800
19AJ	200 and 200	19CN	100 and 200	(b) 19GC	75 and 110	19SS	2500 and 2500
19AM	50 and 50	(b) 19DG	135 and 770	(b) 19GH	425 and 425		

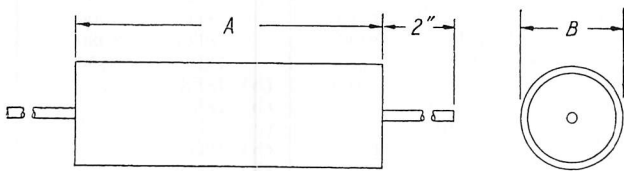
(a) Resistance value does not vary more than plus or minus 1/2%.  
 (b) Resistance value does not vary more than plus or minus 1%.

(c) Resistance value does not vary more than plus or minus 2%.  
 (f) The two parts are balanced for resistance within 1% of each other.

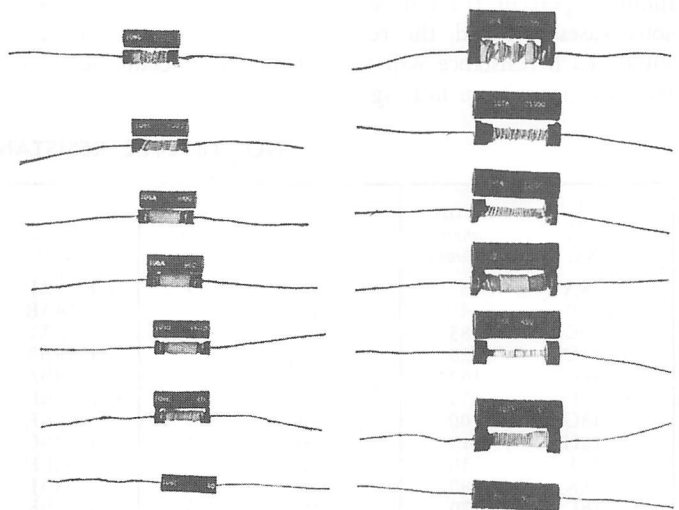
**NOS. 106 AND 107  
TYPE RESISTANCES**

These resistances are low wattage, tubular type, precision wire wound units having a low reactance; suitable for use at high frequencies. They are equipped with tinned axial terminals by which they can be supported.

Code No.	Resistance Values Held Within	Allowable Range of Resistance (Ohms)	Dimensions	
			A (inches)	B
106A	± 1%	0.4 to 30,000	1	5/16
106B	± .25%	7.0 to 12,000	1	5/16
106C	± .10%	10.0 to 12,000	1	5/16
107A	± 1%	0.4 to 250,000	1-1/2	1/2
107B	± .25%	7.0 to 90,000	1-1/2	1/2

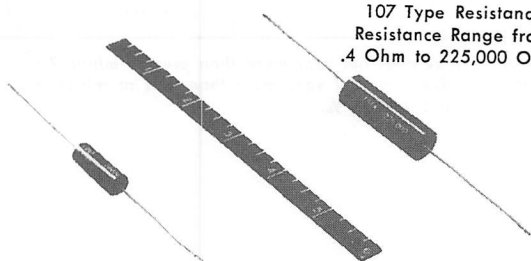


106 Type Resistance  
Resistance Range from  
.4 Ohm to 30,000 Ohms.



106 and 107 type Resistances with cases removed to show type of construction.

107 Type Resistance  
Resistance Range from  
.4 Ohm to 225,000 Ohms



EQUIPMENT BULLETIN POTENTIOMETERS, GENERAL

Potentiometer	Ohms	Used in	Ordering Information for Replacements
7-B	350,000	8-B Amplifier	7-B Potentiometer
8-A	7,300	519-A Panel	8-A " (See Notes)
8-B	6,890	519-A Panel	8-B " (See Notes)
25-B	177,900	3-C Amplifier	25-B Potentiometer
26-A	1,000	41 type Amplifiers	26-A Potentiometer
27-A	1,000	6055-0 Telephone Set	27-A Potentiometer
700-A	500	202 & 7A-4050 Rep. Sets	700-A Potentiometer
701-A	500	713 type Control Cabinets	701-A Potentiometer
702-A	490,000	59-A Amplifier	702-A Potentiometer
D-85305	500	D-90534 & D-20722 Superim-Posing Units	D-85305 Potentiometer
D-86637	500	D-86649 & D-86850 Rep. Sets, (ea. half)	D-86637 Potentiometer
D-87294	1,700	705 type Control Cabinets	D-87294 Potentiometer
D-89345	500	708-A Control Cabinet	D-87294 Potentiometer
		203 type Reproducer Sets	
D-94273	500	D-94255 Control Cabinet	D-94273 Potentiometer
DeJur #531-P	400	D-88449-A Panel	DeJur #531-P "
Eby Jr. Curv "D"	500	D-94804 Amplifier	Eby Jr. Potentiometer, 500W Curv "D"
Gen. Radio #214	400	711-A Control Cabinet	Gen. Radio #214 Potent. 200W, Item #1
KS-6692, Item #1	200	D-94804 Amplifier	KS-6692 Potentiometer, 200W, Item #1
KS-7167	500	D-94644 type Reproducer Sets	KS-7167 Potentiometer

Note 1 - The contact arms and resistors of the 8-A and 8-B Potentiometers may be ordered for replacement purposes as per the following examples:  
 "Contact Arm Assembly per ESO-271527" (1 required for each 8-A or 8-B Potentiometer).  
 "W.L. 180 ohm Resistor, six 30 ohm steps, per ESO-271527", taking the data from the following table:-

POS.	POTENTIOMETER 8-A	POTENTIOMETER 8-B	POS.
1	2529W 1 Step	1600W 1 Step	1
2	529W 1 Step	1600W 1 Step	2
3	1275W 1 Step	2450W 1 Step	3
4	180W 5 STEPS 30W Each	240W 6 STEPS 40W Each	4
5	180W 5 STEPS 30W Each	240W 6 STEPS 40W Each	5
6	180W 5 STEPS 30W Each	240W 6 STEPS 40W Each	6
7	180W 5 STEPS 30W Each	240W 6 STEPS 40W Each	7
8	180W 5 STEPS 30W Each	240W 6 STEPS 40W Each	8

Note 2 - Since the 8-A and 8-B Potentiometers each have a total resistance value of approximately 7000 ohms, it will be satisfactory in case of open circuits, to permanently strap out as many as three or four individual steps of the tapped resistors, it being assumed, of course, that such strapping will still permit satisfactory regulation of the various plate voltages.



EQUIPMENT BULLETIN RHEOSTATS, GENERAL

Rheostat	Ohms	Used in	Ordering Information for Replacements
75-A	5H	72-A Amplifier	75-A Rheostat
75-N	15.9	41-A Amplifier	1-ASP-770 Mfg. Plate, & 1-KS-7162 Rheo., 30 ohms (See Note 2)
77-H	5	203-B Panel	77-H Rheostat
42-D	1.98	9-A Amplifier	42-D Rheostat
42-E	2.17	8-B Amplifier	42-E Rheostat
42-F	1.2	512 Amplifier	42-F Rheostat
42-H	162.9	203-B Panels	42-H Rheostat
42-B	162.9	42-B Amplifier	42-B Rheostat
68-A	163.4	42-B Amplifier	68-A Rheostat
ASL-2688	4	Repro. Sets, Sound Units, & 713 type Control Cab. in connection with TA-201 Exciter Lamp	ASL-2688 Rheostat
D-89315	163.4	46-B Amplifier	D-89315 Rheostat
KS-5316	327.	209-A Panel	KS-5316 Rheostat
KS-2566	20.	221-A Panel	KS-2566 Rheostat
KS-2567	20.	220-A Panel	KS-2567 Rheostat
KS-6316	2.1	F.R. Attach. (long door)	KS-6316 Rheostat with Chassis #30728
KS-6457	50.	709-G Control Cabinet	KS-6457 Rheostat
KS-6627	3.2	KS-6540 Control Cabinet	KS-6627 Rheostat
KS-6684	2.1	F.R. Attach. & 713 type Cont. Cab. & 1 Type Sound Unit	KS-6684 Rheostat
KS-6687, 30 ohms	30.	41, 46, & PEG Amps.	KS-7162 Rheo., 30 ohms
KS-6687, 20 ohms	20.	202 type Reproducer Sets	KS-7162 Rheo., 20 ohms
KS-6687, 30 ohms	30.	41, 46, & PEG Amps.	KS-7162 Rheo., 30 ohms
KS-7162, 30 ohms	30.	41, 46, & PEG Amps. & 713 type Control Unit	KS-7162 Rheo., 30 ohms
KS-7162, 45 ohms	45.	TA-4050, TA-4051, & 202 type Reproducer Sets	KS-7162 Rheo., 45 ohms
TA-4021	1.	A-46-C & A-46-F Amps.	KS-7162 Rheo. 45 ohms
#570 DeJur 2 ohm Rheo.	2.	F.R. Attach. (short door)	TA-4021 Rheostat
TA-4021 Rheostat	1.	TA-4033 P.U.	TA-4021 Rheostat
G.R.#310, 12 ohm Rheo.	12.	F.R. Attach. (short door)	G.R.#310, 12 ohm Rheo.
RD-190 DeJur 20 ohm Rheo.	20.	51-A Test Set	RD-190 DeJur 20 ohm Rheo.
RD-190 DeJur 7.5 ohms	7.5	TA-4033 P.U.	RD-190 DeJur 7.5 ohms
KS-7162 Rheo., 30 ohms	30. & 30.	RD-190 & B Reproducer Set	KS-7162 Rheo., 30 ohms
W.L. #7402 Rheostat	125.	S. B. D. Series Amps.	W.L. #7402 Rheostat
W.L. #7403 Rheostat	15.	S. B. D. Systems	W.L. #7403 Rheostat
W.L. #483 Rheostat	14.	TA-4008 Control Cabinet	W.L. #483 Rheostat
W.L. 6" Plate, 360 ohm Rheostat	360.	706-A Control Cabinet	W.L. 6" Plate, 360 ohm Rheostat
W.L. 6" Plate, 600 ohm Rheostat	600.	700-A Control Cabinet	W.L. 6" Plate, 600 ohm Rheostat
W.L. S-2553-6	3.	Horn Meter & Sig. Cab.	W.L. S-2553-6

Note 1 - As noted above the KS-7162 Rheostat, 30 ohms, entirely supersedes the release of amplifier schematics and wiring diagrams for replacement purposes. Pending copies of all drawings affected should be marked accordingly. Incidentally all item numbers of the KS-6687 Rheostat are replaced by the KS-7162 Rheostat, due to the fact that the latter is adjustable as regards panel thickness.

Note 2 - The ASP-770 Mounting Plate, and its predecessor, the "D-90720 Converter, Less Mounting Screws and Nuts which are not suitable for use with the KS-7162 Rheostat, is being replaced by the 35W Rheostat in the 41-A Amplifier replacement kit which is being prepared. It is necessary for the field engineers to obtain locally 2 - #4-40-5/8" x 1/2" Screws and 2 - Std. Nuts for these screws to mount the rheostat on the adapter plate.

Note 3 - The KS-7162 Rheostat includes a strip of metal which functions to short circuit several turns of wire not reached by the slides at its minimum resistance position, and which would therefore be in circuit at all times without this device. This is of value only in some SB Systems, where the condition of the battery may require the resistance in the circuits to be a minimum. However, for contact between the metal strip and the wire sometimes causes noise; in such case the strip should be removed. To do this, the resistance form must be partially removed from the base.



EQUIPMENT BULLETIN

1. ABSTRACT

- 1.1 This addendum specifies that the contact arm assembly of the 68-A (or D-89315) Rheostat may be separately replaced.
- 2. 68-A RHEOSTAT - REPLACEMENT OF CONTACT ARM ASSEMBLY
- 2.1 The Contact Arm Assembly P-223073, of the 68-A and D-89315 Rheostats (monitor rheostat of 46-B and 46-C type Amplifiers) may be separately replaced in the field. This assembly includes the knob, leaf spring contact arm, detent spring, index plate, etc., and should be ordered after May 17, 1955, as:-

#1 - P-223073 Contact Arm Assembly\*.

2.2 Wiring diagrams of 46-B and 46-C type Amplifiers (E.B. Amplifiers, 46 Type", File 4.03), should be marked accordingly, pending their next release.



EQUIPMENT BULLETIN

RHEOSTATS, GENERAL

Replacing Addendum #1, Issue #1, 4/24/55 and Addendum #2, Issue #1, 6/15/55

1. REASON FOR REISSUE

1.1 To bring up-to-date, and to replace addenda.

2. TABULATION OF RHEOSTATS

Rheostat	Ohms	Used In	Ordering Information for Replacements
35-A	54	32-A Amplifier	35-A Rheostat
35-B	15.9	41-A Amplifier	1 ASP-770 Mfg. Plate & TA-4167 Rheostat, 30 ohms (see Note 1)
37-H	5.98	203-B Panel	37-B Rheostat
42-D	2.17	4-A Amplifier	42-F Rheostat
42-E	2.17	4-B Amplifier	42-H Rheostat
42-H	12.9	518-B Panel	42-N Rheostat
42-N	16.9	201 type Panels	64-B Rheostat
64-B	16.4	46-B & 46-C Amplifiers	68-A Rheostat
68-A (see Note 3)	4.	Repro.Sets, Sound Units, & 713 type Control Cab. in connection with	AS1-2688 Rheostat
D-89315 (see Note 3)	163.4	TA-201 Exciter Lamp	D-89315 Rheostat
D-89316	327.	46-B & 46-C Amplifiers	D-89316 Rheostat
KB-2260	55.	209-A Panel	KB-2260 Rheostat
KB-2266	40.	521-A Panel	KB-2266 Rheostat
KB-2267	20.	520-A Panel	KB-2267 Rheostat
KB-6316	2.1	F.R.Attach. (long door)	KB-6684 Rheostat with knob, P-23078
KB-6457	50.	709-C Control Cabinet	KB-6457 Rheostat
KB-6627	2.	KB-640 Control Cabinet	KB-6627 Rheostat
KB-6684	2.1	F.R.Attach. & 713 type Control Cab.	KB-6684 Rheostat
KB-6687	30.	1 type Sound Unit	KB-6687 Rheostat
KB-6687, 30 ohms	30.	41, 46 & PEO Amplifiers	TA-4167 Rheo., 30 ohms
KB-6687, 20 ohms	20.	202 type Reproducer Sets	TA-4167 Rheo., 20 ohms
KB-6779, 30 ohms	30.	41, 46 & PEO Amplifiers	KB-6901 Rheostat
KB-6901	20.	D-94852 Control Unit	KB-6901 Rheostat
KB-7162, 30 ohms	30.	41, 46 & PEO Amplifiers & TA-4050, TA-4053 & TA-4055	TA-4167 Rheo., 30 ohms
(See Note 2)		202 type Repro. Sets	
KB-7162, 45 ohms	45.	A-46-O & A-46-F Amps.	KB-7162 Rheo., 45 ohms
TA-4021	1.	F.R.Attach. (short door)	TA-4021 Rheostat
TA-4167, 30 ohms	30.	41, 46 & PEO Amps. & TA-4050, TA-4053 & TA-7862 Panel	TA-4167 Rheo., 30 ohms
(see Section 3)		202 type Repro. Sets	
#530 DeJur, 2 ohms	2.	TA-4035 Power Unit	#530 DeJur, 2 ohm Rheo.
Ruffalo, 1 ohm	1.	F.R.Attach. (short door)	TA-4021 Rheostat
Ultrastat, P-58, 100 ohms	100.	TA-7862 Panel	P-58 Ultrastat, 100 ohms
Ultrastat, R-58, 150 ohms	150.	TA-7313 Panel	R-58 Ultrastat, 150 ohms
General Radio #310	12.	51-A Test Set	G.R.#310, 12 ohm Rheo.
HD-40 DeJur, 20 ohms	20.	TA-4033 Power Unit	HD-40 DeJur 20 ohm Rheo.
HD-150 DeJur, 7.5 ohms	7.5	D-94844-B Repro. Set	HD-150 DeJur, 7.5 ohms Rheostat
Percent, 90 type	20. & 30.	41, 46 & PEO Amplifiers	TA-4167 Rheo., 30 ohms
W.L. #73402	125.	S.B. DO Systems	W.L. #73402 Rheostat
W.L. #73403	83.	S.B. DO Systems	W.L. #73403 Rheostat
W.L. DC-8817	44.	TA-4008 Control Cabinet	W.L. DC-8817 Rheostat
W.L. 6* Plate	360.	706-A Control Cabinet	W.L. 6* Plate, 360 ohm Rheostat
W.L. 6* Plate	600.	700-A Control Cabinet	W.L. 6* Plate, 600 ohm Rheostat
W.L. 8-2553-6	3.	Horn Meter & sig. Cab.	W.L. 8-2553-6

NOTE 1 - The ASP-770 Mounting Plate and its predecessor the D-90720 Conversion Parts less Rheostat\* (used in replacing the 35-N Rheo. in the 41-A Ampl.) both include mounting screws and nuts which are not suitable for use with the TA-4167 Rheostat, the screws being too short and the nuts too large. In making such replacement it will accordingly be necessary for the field engineers to obtain locally 2, #4-0-5/8" PHIL. screws and 2, Std. Nuts for these screws to mount the rheostat on the adapter plate.





4.36

EQUIPMENT BULLETIN

RHEOSTATS, GENERAL

NOTE 2 - The K8-7162 Rheostat includes a strip of metal which functions to short circuit several turns of wire not reached by the slider in its minimum resistance position and which would therefore be in circuit at all times, without this device. This is of value only in some SB Systems, where the condition of the batteries may require the resistance in the circuits to be a minimum. However, poor contact between the metal strip and the wire sometimes causes noise; in such event the strip should be removed. To do this, the resistance form must be partially removed from the base.

NOTE 3 - The Contact Arm Assembly P-223073 of the 68-A and D-59315 Rheostats may be separately replaced in the field. This assembly includes the knob, lead spring contact arm, detent spring, lead bars, etc., and should be ordered as: P-223073 Contact Arm Assembly.

3. TA-4167 RHEOSTAT

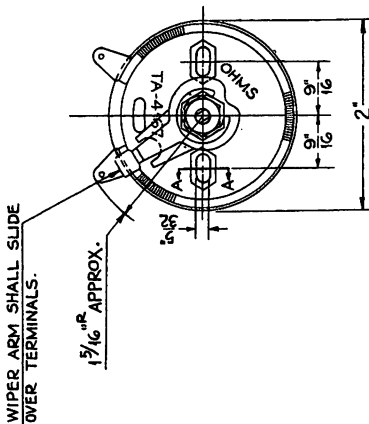
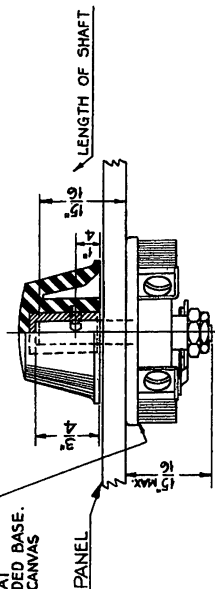
3.1 This rheostat will supersede the K8-7162 Rheostat after about July 1, 1935. All drawings specifying the K8-7162 Rheostat should be marked accordingly, pending their release. Practically all drawings on 41, 46, 49, D-85943 and D-86789 type Amplifiers are affected.

3.2 The TA-4167 Rheostat includes the following improvements:-

- (1) A pigtail connection between shaft and terminal.
- (2) A change in design of the stop feature, and elimination of the short-circuiting device.
- (3) Increased contact pressure.
- (4) Use of a bakelite form for the winding, and a new clamping device at end of form.

3.3 This rheostat will mount on panels 1/8" to 1/2" thick. Dimensional and other information is shown on Figure 1, below:-

RESISTANCE STRIP SHALL BE SO MOUNTED AS TO SEAT FIRMLY AGAINST MOUNTED BASE. WIRE TO BE WOUND ON CANVAS OR LINEN BAKELITE.



3.4 Merchandising: After July 1, 1935, all orders should specify the "TA-4167 Rheostat, 30 Ohms" instead of the "K8-7162 Rheostat, 30 Ohms". The "K8-7162 Rheostat, 45 Ohms" (used in certain 46 type Amplifiers), will continue to be supplied until stock is exhausted.