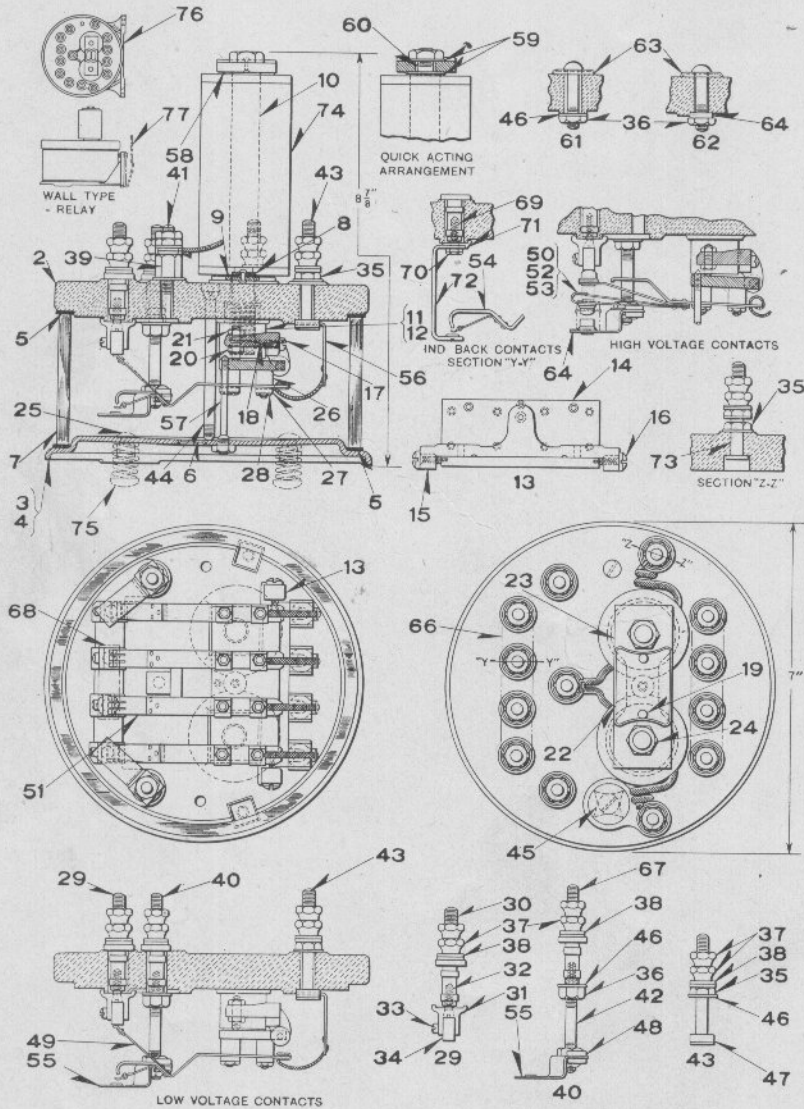


UNION SWITCH & SIGNAL COMPANY



DETAILS OF MODEL 13 ROUND BASE NEUTRAL RELAY
(FOUR-POINT)

UNION SWITCH & SIGNAL COMPANY

DETAILS OF MODEL 13 ROUND BASE NEUTRAL RELAY

(FOUR-POINT)

Order by Plate, Piece, Reference and Abbreviated Description Given in
Heavy Face Type Only.

Piece	Ref.	Description	Drawing Reference
74745	2	Top Plate with Gasket Ref. 5.....	C-7459-11
76002	3	Bottom Plate with Gasket and Ventilator (Inc. 1-4, 1-5 and 1-6).....	10937-1
145361	3a	Bottom Plate with Gasket, Ventilator, Studs and Shock Absorber Springs (Inc. 1-4a, 1-5, 1-6, 4-25 and 4-15).....	10937-5
46517	4	Bottom Plate only, for Ref. 3.....	10937-1
145360	4a	Bottom Plate only, for Ref. 3a.....	10937-5
33872	5	Gasket.....	8078-76
34340	6	Ventilator.....	C-7459-6
35872	7	Glass Shield.....	8163-96
75337	8	Core Plate.....	C-7459-10
51611	9	Washer used under Magnet Coil.....	7828-218
51617	10	Core.....	8101-206
51618	11	L. H. Pole Piece.....	8250-44
51619	12	R. H. Pole Piece.....	8250-44
96900	13	Armature with Bracket and Trunnions (Inc. 1-14, 1-15 and 2-16).....	C-7459-8
69754	14	Armature only, for Ref. 13.....	8157-226
49143	15	Bracket only, for Ref. 13.....	8303-68
47579	16	Trunnion for Ref. 13.....	8378-197
	17	Machine Screw No. 8-36x $\frac{1}{2}$ " Fil. Hd. Br. for fasten- ing Ref. 15 to Pole Piece.	
49067	18	Dowel Pin for Armature Bracket.....	8097-336

PLATE E-4835

UNION SWITCH & SIGNAL COMPANY

DETAILS OF MODEL 13 ROUND BASE NEUTRAL RELAY

(FOUR-POINT)

(Continued)

Order by Plate, Piece, Reference and Abbreviated Description Given in
Heavy Face Type Only.

Piece	Ref.	Description	Drawing Reference
	19	Drive Screw No. $4 \times \frac{3}{16}$ " (N. P.) for fastening Ref. 22 to Back Strap.	
	20	Screw (Core Pin) with Nut Ref. 21.....	12471
49141	20a	Screw (Core Pin) only for Ref. 20.....	8098-887
26942	21	Nut for Ref. 20.....	8109-184
46539	22	Name Plate.....	8225-135
46450	23	Back Strap only.....	8162-146
51610	24	Nut for Ref. 10.....	8265-161
131215	25	Stud for Ref. 3a.....	8114-631
22621	26	Bushing.....	8095-199
19409	27	Lock Washer for Ref. 28.....	8486-68
1515	28	Nut, for Ref. 26.....	8109-23
	29	Front Terminal Post with Graphite Tip and Screw (Inc. 1-30, 1-31, 1-32, 1-33, 1-34, 2-37 and 2-38)...	12451
30812	30	Terminal Post only for Ref. 29.....	8094-639
30274	31	Terminal Post only for Ref. 29.....	8094-641
30810	32	Screw for fastening Ref. 31 to Ref. 30.....	8098-538
	33	Machine Screw No. $6-40 \times \frac{1}{2}$ " Fil. Hd. Blued Steel for fastening Graphite Tip to Ref. 31.	
30811	34	Graphite Contact Tip.....	8341-32
69758	34a	Silver Contact Tip (Special).....	8341-71

UNION SWITCH & SIGNAL COMPANY

DETAILS OF MODEL 13 ROUND BASE NEUTRAL RELAY

(FOUR-POINT)

(Continued)

Order by Plate, Piece, Reference and Abbreviated Description Given in
Heavy Face Type Only.

Piece	Ref.	Description	Drawing Reference
29103	35	Nut.....	8109-194
31670	36	Nut for Ref. 40.....	8109-218
29101	37	Nut.....	8109-193
29102	38	Washer.....	7828-139
56635	39	Nut for Ref. 41.....	8109-324
91828	40	Terminal Post with Nuts, Washers and Back Contact (Inc. 1-67, 1-42, 2-35, 1-36, 1-48, 2-37, 2-38 and 1-55).....	12451-20
112832	40a	Terminal Post with Nuts, Washers and Back Con- tact (Inc. 1-67, 1-42, 2-35, 1-36, 1-48, 2-37, 2-38 and 1-65).....	12451-20
	41	Terminal Post with Nuts and Washer for Magnet Lead (Inc. 1-41a, 2-35, 1-38, 1-39 and 1-46).....	12451-121
29147	41a	Terminal Post only, for Refs. 41 and 73.....	8094-706
46277	42	Terminal Post only, for Ref. 40.....	8094-874
	43	Terminal Post with Nuts, Washers and Lock Washer for Terminal Connector (Inc. 1-43a, 2-37, 2-38, 1-35 1-47 and 1-46).....	12451
30108	43a	Terminal Post only, for Ref. 43.....	8094-706
35873	44	Screw for fastening Bottom Plate to Ref. 2.....	8098-572
37761	45	Anchor Washer for Ref. 44.....	7828-168
29104	46	Washer.....	7828-138
132658	47	Lock Washer, for Ref. 43.....	8486-369
32186	48	Lock Washer, for Ref. 40.....	8486-129

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PLATE E-4835

UNION SWITCH & SIGNAL COMPANY

DETAILS OF MODEL 13 ROUND BASE NEUTRAL RELAY

(FOUR-POINT)

(Continued)

Order by Plate, Piece, Reference and Abbreviated Description Given in Heavy Face Type Only.

Contact Springs				
Piece	Ref.	Description	Remarks	Drawing Reference
69755	49	L. V. Front and Back		8385-1320
76198	49a	H. V. Front and L. V. Back		8385-1336
69759	50	H. V. Front and Back		8385-1334
69756	51	L. V. Front		8385-1321
76280	52	H. V. Front		8385-1338
82292	53	H. V. Back		8385-1652
86140	54	L. V. Back		8385-1320
Piece	Ref.	Description		Drawing Reference
74804	55	Back Contact Post (L. V.) for Ref. 40.....		8094-2034
97875	56	Terminal Connector.....		10934-162
	57	Screw with nut (Inc. 1-57a, and 1-35 used for shipping)		12471
51615	57a	Screw only, for Ref. 57.....		8098-951
121374	57b	Screw (Used in place of Ref. 57 when installed)....		8098-1289
122646	58	Washer.....		8078-1366
25153	59	Washer (Used for quick acting Relay).....		7828-127
25107	60	Bushing (Used for quick acting Relay).....		C-7459-2
94436	61	Dummy Post, with Nuts and Washers for front of Relay (Inc. 1-61a, 1-35, 1-46 and 1-63).....		12471-3
31067	61a	Dummy Post only, for Refs. 61 and 62.....		8098-558

UNION SWITCH & SIGNAL COMPANY

DETAILS OF MODEL 13 ROUND BASE NEUTRAL RELAY

(FOUR-POINT)

(Continued)

Order by Plate, Piece, Reference and Abbreviated Description Given in
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Piece	Ref.	Description	Drawing Reference
98875	62	Dummy Post, with Nuts and Washers for back of Relay (Inc. 1-61a, 1-35, 1-63 and 1-64).....	12471-11
36088	63	Washer, for Refs. 61 and 62.....	7826-136
31068	64	Washer, for Ref. 62.....	7828-144
76384	65	Back Contact Post (H. V.).....	8094-2034
47290	66	Terminal Connector (For connecting contacts in multiple).....	8064-305
30813	67	Terminal Post only, for Ref. 40.....	8094-639
69757	68	Back Contact Post, (Silver Tip) (Used on Relays having three front and three back contacts).....	8094-874
38619	69	Screw for fastening Ref. 72, to Terminal Post.....	8098-736
29353	70	Lock Washer for Ref. 69.....	8486-103
62686	71	Lock Washer for Ref. 72.....	8486-335
122781	72	Back Post only.....	8094-1102
	73	Terminal Post with Nuts and Washers for Magnet Lead (Inc. 1-41a, 2-37, 3-38, 2-35 and 1-46).....	12451
	74	Magnet Coil complete with Leads and Terminals (for details refer to Plate E-5025).....	8133
410218	75	Shock Absorber Spring for Shelf Type Relay.	
114929	76	Base with Gasket and Ventilator for Wall Type Relay (Inc. 1-76a, 1-5 and 1-6).....	C-7459-15
114877	76a	Base only for Ref. 76.....	C-7459-15
149677	77	Shock Absorber Spring for Wall Type Relay.....	12404-19