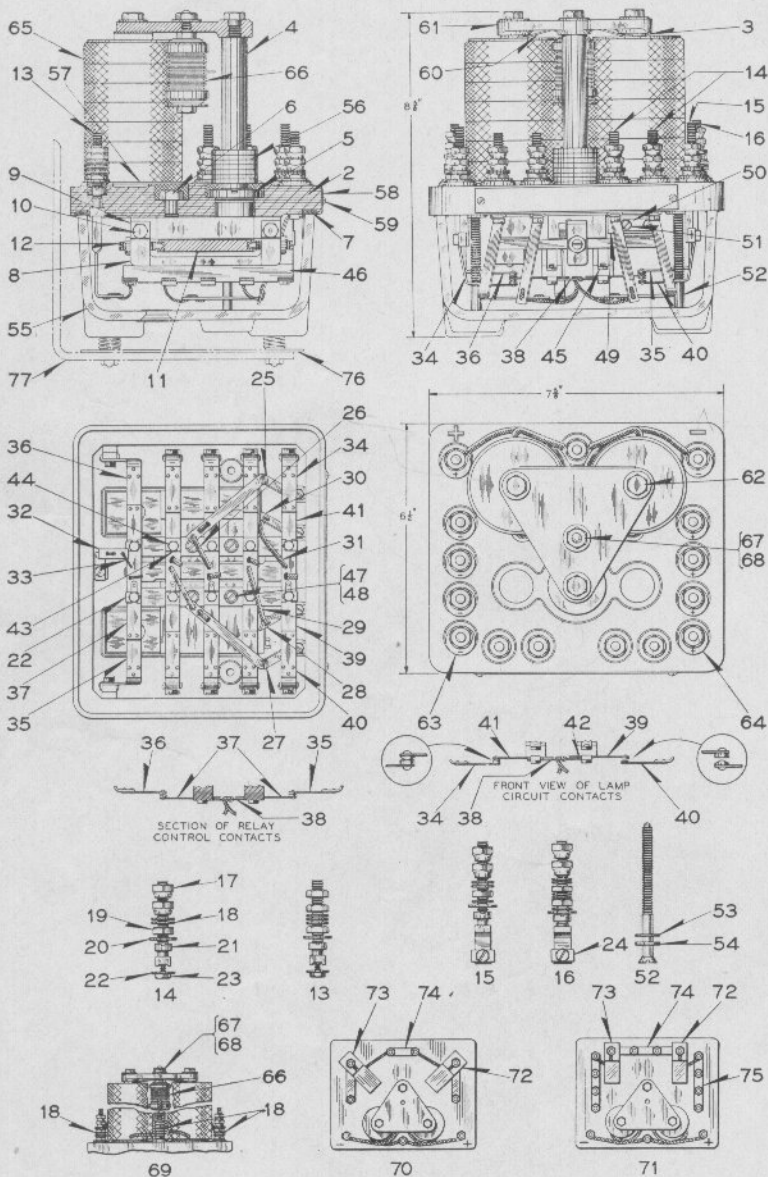




Style "FN-16" 4N-4R and 2N-2R D. C.
Flasher Relays

UNION SWITCH & SIGNAL CO.

PLATE **E-5064**

Style "FN-16" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

For complete Relays refer to Plate E-5051.

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

Piece	Ref.	Description	Drawing Reference
103884	2	Top Plate Only (Without Cores).....	C-9356-4
	3	Pair of Main Cores (Cores should be ordered in pairs so they can be ground to the same dimensions at our factory).....	C-9356-
171509	4	Center Core with Pole Piece.....	8101-349
104169	5	Nut.....	8265-359
	6	Tap Bolt, $\frac{3}{8}$ "-16x $\frac{7}{8}$ " Hex. Hd. S. (Tin Pl.)	
171503	7	Gasket.....	8078-1510
183983	8	Armature Bracket.....	8303-125
152184	9	Bolt Lock.....	8486-368
183899	10	Screw.....	8098-256
103962	11	Armature Complete.....	8157-443
199626	12	Trunnion Screw Complete (Inc. 1-12a and 1-12b)...	12471-20
100402	12a	Trunnion Screw Only.....	8378-375
535	12b	Nut.....	8109-1
	13	Terminal Post with Nuts and Washers (Inc. 1-13a, 3-18, 3-19, 1-20, 1-21, 1-22 and 1-23).....	12451-
158035	13a	Terminal Post Only, for Refs. 13 and 14.....	8094-2125
	14	Terminal Post with Nuts and Washers (Inc. 1-13a, 2-17, 2-18, 1-19, 1-20, 1-21, 1-22 and 1-23).....	12451-
	15	Terminal Post with Nuts and Washers (Inc. 1-15a, 2-17, 3-18, 1-19, 1-20, 1-21, 1-23 and 1-24).....	12451-
103977	15a	Terminal Post Only, for Refs. 15 and 16.....	8094-2377
	16	Terminal Post with Nuts and Washers (Inc. 1-15a, 2-17, 5-18, 2-19, 1-20, 1-21, 1-23 and 1-24).....	12451-
29101	17	Nut.....	8109-193

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PLATE **E-5064**

UNION SWITCH & SIGNAL CO.

Style "FN-16" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

(Continued)

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

Piece	Ref.	Description	Drawing Reference
29102	18	Washer	7828-139
29103	19	Nut	8109-194
69705	20	Washer	7828-287
72948	21	Nut	8109-383
134516	22	Screw Lock	8486-368
62977	23	Screw	8098-845
210763	24	Screw Lock	8486-405
104067	25	L.H. Connector with Flexible Connector (For 4N-4R Relay)	8064-846
104066	25a	L.H. Connector without Flexible Connector	8064-846
137945	26	Flexible Connector for Refs. 25 and 27	10934-147
104065	27	R.H. Connector with Flexible Connector (For 4N-4R Relay)	8064-846
104064	27a	R.H. Connector without Flexible Connector	8064-846
104072	28	R.H. Connector with Flexible Connector (For 2N-2R and 4N-4R Relays)	8064-851
104071	28a	R.H. Connector without Flexible Connector	8064-851
135276	29	Flexible Connector for Ref. 28	10934-147
104074	30	L.H. Connector with Flexible Connector (For 2N-2R and 4N-4R Relays)	8064-851
104073	30a	L.H. Connector without Flexible Connector	8064-851
210822	31	Flexible Connector for Ref. 30	10934-147
171513	32	Connector with Flexible Connector (For 2N-2R and 4N-4R Relays)	8064-766
171512	32a	Connector without Flexible Connector	8064-766
209752	33	Flexible Connector for Ref. 32	10934-100

UNION SWITCH & SIGNAL CO.

PLATE **E-5064**

Style "FN-16" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

(Continued)

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

Piece	Ref.	Description	Drawing Reference
103973	34	Lamp Contact Spring Complete (Terminal Post Extension) for 4N-4R Relays	8385-2582
104090	34a	Lamp Contact Spring Complete (Terminal Post Extension) for 2N-2R Relays	8385-2582
104051	35	R.H. Operating (Control) Contact Spring Complete (For 2N-2R and 4N-4R Relays)	8385-2583
104053	36	L.H. Operating (Control) Contact Spring Complete (For 2N-2R and 4N-4R Relays)	8385-2583
104003	37	Contact Spring	8385-2580
104033	38	Connector	8064-850
104979	39	Contact Spring Complete for 4N-4R Relays	8385-2580
104088	39a	Contact Spring Complete for 2N-2R Relays	8385-2580
104981	40	Lamp Contact Spring Complete (Terminal Post Extension) for 4N-4R Relays	8385-2582
104982	40a	Lamp Contact Spring Complete (Terminal Post Extension) for 2N-2R Relays	8385-2582
104980	41	Contact Spring Complete for 4N-4R Relays	8385-2580
104978	41a	Contact Spring Complete for 2N-2R Relays	8385-2580
150140	42	Lock Washer	8486-367
171092	43	Screw Lock	8486-405
150166	44	Screw	8098-550
151836	45	Nut for Ref. 44	8109-445
103888	46	Contact Spring Block (5-Way)	9968-1236
	47	Machine Screw, No. 8-36x $\frac{11}{16}$ " Fil. Hd. S. (Tin Pl.)	
	48	Lock Washer, No. 8 S. (Tin Pl.)	
100403	49	Magnetic Shunt	8250-109

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PLATE **E-5064**

UNION SWITCH & SIGNAL CO.

Style "FN-16" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

(Continued)

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

Piece	Ref.	Description	Drawing Reference
199421	50	Bolt Lock	8486-399
199452	51	Screw	8098-1300
	52	Machine Screw, No. 14-24x3 $\frac{3}{8}$ " Flat Hd. S. (Tin Pl.) with Washers Refs. 53 and 54	
210592	53	Washer	8078-1503
38149	54	Washer	7826-98
171473	55	Glass Case with Ventilator Ref. 55a	C-9356-2
157612	55a	Ventilator for Ref. 55	7318-78
161195	56	Washer	7828-176
168826	57	Washer	8078-1499
104091	58	Name Plate for 4N-4R Relays	8225-520
104104	58a	Name Plate for 2N-2R Relays	8225-521
	59	Screw, No. 4x $\frac{5}{16}$ " Rd. Hd. Hardened (Tin Pl.)	
199632	60	Coil Lock	8735-784
171090	61	Back Strap	8162-241
	62	Cap Screw, $\frac{5}{16}$ "-18x $\frac{3}{4}$ " Hex. Hd. S. (Cad. Pl.)	
142777	63	Tag (Marked—)	8988-75
107232	64	Tag (Marked+)	8988-53
156500	65	Coil, 4.5-ohms	8133-365
171491	65a	Coil, 200-ohms	8133-365
145969	65b	Coil, 500-ohms	8133-365
102258	66	Rectifier Complete	12746-4
	67	Lock Washer, $\frac{1}{4}$ " Pl. S. ($\frac{3}{32}$ "x $\frac{1}{16}$ ") (Tin Pl.)	
	68	Jam Nut, $\frac{1}{4}$ " S. Hex. (Tin Pl.)	

UNION SWITCH & SIGNAL CO.

PLATE **E-5064**

Style "FN-16" 4N-4R and 2N-2R D. C. Flasher Relays

Detail Parts

(Continued)

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

Piece	Ref.	Description	Drawing Reference
102807	69	Parts Necessary to Apply Rectifier to "FN-16" Flasher Relay (For suppression of radio inter- ference originating in the operating contacts) (Inc. 3-18, 1-66, 1-67 and 1-68).....	C-9357-2
104919	70	Parts Necessary to Apply Condensers to 2N-2R "FN-16" Flasher Relay (For suppression of radio interference originating in the lamp contacts) (Inc. 1-72, 1-73 and 3-74).....	C-9357-7
104918	71	Parts Necessary to Apply Condensers to 4N-4R "FN-16" Flasher Relay (For suppression of radio interference originating in the lamp contacts) (Inc. 1-72, 1-73, 1-74 and 8-75).....	C-9357-6
102786	72	L.H. Condenser Complete.....	B-12549-36
102787	73	R.H. Condenser Complete.....	B-12549-36
147302	74	Connector.....	8064-305
47290	75	Connector.....	8064-305
172590	76	Shelf Type Shock Absorber Complete (For details see Ref. Ea, Plate E-5030).....	12404-27
199782	77	Wall Type Shock Absorber Complete (Similar to Ref. Fa, Plate E-5030).....	12404-28