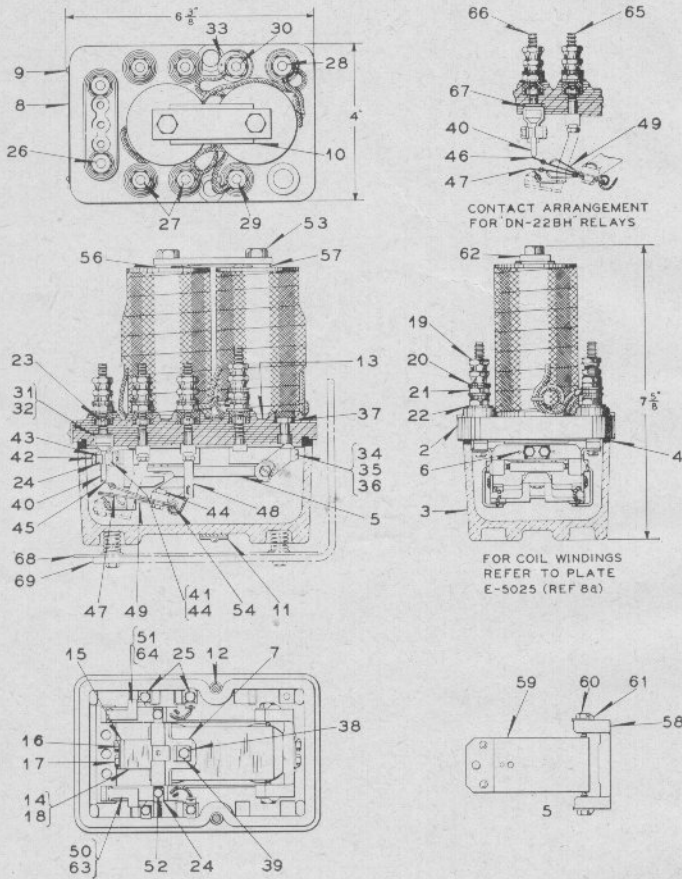


Zachary C. Gillihan 2008



Styles "DN-22B" D. C. Biased Neutral Relay
And "DN-22BH" D. C. Biased Neutral High
Release Relay

UNION SWITCH & SIGNAL CO.

PLATE **E-4980**

Styles "DN-22B" D. C. Biased Neutral Relay And "DN-22BH" D. C. Biased Neutral High Release Relay Detail Parts

Refer to the following Plates for items not listed on this Plate:

Coils: Ref. 8a, Plate E-5025

Plug Couplers: Ref. Aa, Plate E-5035-2

Complete Relays will be found on Plate E-4937.

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

Piece	Ref.	Description	Drawing Reference
273191	2	Top Plate, without Cores.....	C-9433-1
184908	3	Case.....	8163-215
261990	4	Gasket.....	8078-1775
268073	5	Armature and Bracket Assembly Complete for Style "DN-22B" Relay (Inc. 1-58, 1-59, 2-60 and 2-61).....	C-9433-8
268059	5a	Armature and Bracket Assembly Complete for Style "DN-22BH" Relay (Inc. 1-58a, 1-59a, 2-60 and 2-61).....	C-9433-3
	5b	Armature and Bracket Assembly Complete with Dowel Pins for Style "DN-22B" Relay (Inc. 1-5 and 2-6).....	C-9433-3
	5c	Armature and Bracket Assembly Complete with Dowel Pins for Style "DN-22BH" Relay (Inc. 1-5a and 2-6).....	C-9433-3
57497	6	Dowel Pin.....	8097-872
170966	7	Contact Spring Support.....	9968-1014
184892	8	Name Plate for Relays with 2F-2B Contacts.....	8225-455
193864	8a	Name Plate for Relays with 2F-1B Contacts.....	8225-478
	9	Screw, No. 4-40x $\frac{1}{4}$ " Type "F" Rd. Hd. (C. N. 52620) (Tin Pl.).....	
184909	10	Coil Lock.....	8735-784
195622	11	Clamp Plate.....	9999-1175
266724	12	Clamp Stud with Nut and Washers (Inc. 1-12a, 1- 12b, 1-12c and 1-12d).....	8114-889
195626	12a	Clamp Stud only.....	8114-889
56349	12b	Washer used under Top Plate.....	7826-180
190681	12c	Nut.....	8109-383

PLATE **E-4980**

UNION SWITCH & SIGNAL CO.

Styles "DN-22B" D. C. Biased Neutral Relay And "DN-22BH" D. C. Biased Neutral High Release Relay

Detail Parts

(Continued)

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

Piece	Ref.	Description	Drawing Reference
44618	12d	Washer used under Nut Ref. 12c	7828-184
168826	13	Coil Spacing Washer	8078-1499
269811	14	Permanent Magnet	12586-29
269847	15	Plate	9999-2418
268066	16	Lock Washer	8486-432
268067	17	Screw	8098-305
269846	18	Pole Shoe	12748-76
29101	19	Nut	8109-193
29102	20	Washer	7828-139
29103	21	Nut	8109-194
69705	22	Washer	7828-287
72948	23	Nut	8109-383
134516	24	Lock Washer	8486-368
171092	24a	Lock Washer (for middle spring of contact support) ..	8486-405
62977	25	Screw	8098-845
	26	Binding Post with Nuts and Washers (Inc. 1-26a, 2-19, 2-20, 1-21, 1-22 and 1-23)	12451-
115706	26a	Binding Post Only	8094-1192
	27	Binding Post with Nuts and Washers (Inc. 1-27a, 2-19, 2-20, 1-21, 1-22, 1-23, 1-24 and 1-25)	12451-
131234	27a	Binding Post Only	8094-2125
	28	Binding Post with Nuts and Washers (Inc. 1-28a, 2-20, 3-21, 1-22 and 1-23)	12451-
199852	28a	Binding Post Only	8094-2207
	29	Binding Post with Nuts and Washers (Inc. 1-29a, 2-19, 3-20, 2-21, 1-22 and 1-23)	12451-

UNION SWITCH & SIGNAL CO.

PLATE **E-4980**

Styles "DN-22B" D. C. Biased Neutral Relay And "DN-22BH" D. C. Biased Neutral High Release Relay

Detail Parts

(Continued)

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

Piece	Ref.	Description	Drawing Reference
118271	29a	Binding Post Only	8094-1192
	30	Binding Post with Nuts and Washers (Inc. 1-30a, 2-19, 4-20, 2-21, 1-22 and 1-23)	12451-
113978	30a	Binding Post Only	8094-1192
131245	31	Front Binding Post (Contact Holder)	8094-2122
134400	32	Nut Lock	8486-371
142777	33	Tag (Marked +)	8988-75
195913	34	Screw	8098-1300
260688	35	Washer	7828-265
259269	36	Lock Washer	8486-432
239949	37	Dummy Plug	8078-732
178251	38	Nut Lock	8486-405
142673	39	Screw	8098-1300
158043	40	Contact Tip (Silver Imp. Carbon)	8341-476
173737	41	Nut Lock	8486-403
	42	Screw with Nut, Washer and Lock Washer (Inc. 1-42a, 1-24, 1-41, 1-43 and 1-44)	12471-
57996	42a	Screw Only	8098-845
20686	43	Washer	7828-108
151836	44	Nut	8109-445
189835	45	Front Contact Spring Complete (Without Flexible Connector) for Style "DN-22B" Relay	8385-2336
279295	46	Front Contact Spring Complete (Without Flexible Connector) for Style "DN-22BH" Relay	8385-2336
234980	47	Back Contact Spring Complete (Without Flexible Connector) for Styles "DN-22B" and "DN-22BH" Relays	8385-2376

Zachary C. Gillihan 2008

PLATE **E-4980**

UNION SWITCH & SIGNAL CO.

Styles "DN-22B" D. C. Biased Neutral Relay And "DN-22BH" D. C. Biased Neutral High Release Relay

Detail Parts

(Continued)

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

Piece	Ref.	Description	Drawing Reference
184900	48	Connector with Flexible Connector.....	8244-151
194343	48a	Connector with Flexible Connector (for relay having independent back contact).....	8244-155
156580	49	Stop Spring.....	8385-2191
187079	50	L.H. Back Post Complete with Silver Tip.....	8094-2342
187078	51	R.H. Back Post Complete with Silver Tip.....	8094-2342
187058	51a	R.H. Back Post Complete with Silver Tip. (For re- lay with 1 back contact).....	8094-2340
	52	Screw with Washer and Nut (Inc. 1-52a, 1-24 and 1-44).....	12471-
150166	52a	Screw.....	8098-550
	53	Cap Screw, $\frac{5}{16}$ "-18x $\frac{3}{4}$ " Hex. Hd. S. (C.N. 50036) (Cad. Pl.).....	
184902	54	Washer (used between Contact Springs).....	7828-379
104169	55	Nut for Cores (Not Shown).....	8265-359
268056	56	Front Core.....	8101-419
184907	57	Rear Core.....	8101-365
183695	58	Armature Bracket for "DN-22B" Relay.....	8303-128
268070	58a	Armature Bracket for "DN-22BH" Relay.....	8303-140
268072	59	Armature Complete for "DN-22B" Relay.....	8157-508
268058	59a	Armature Complete for "DN-22BH" Relay.....	8157-507
159814	60	Pivot Screw.....	8378-354
159815	61	Lock Washer.....	8486-395
184894	62	Back Strap for Style "DN-22B" Relay.....	8162-253
184895	62a	Back Strap for Style "DN-22BH" Relay.....	8162-253
277827	63	L.H. Back Post Complete with Silver Impregnated Carbon Tip.....	8094-2500

UNION SWITCH & SIGNAL CO.
PLATE **E-4980**

Styles “DN-22B” D. C. Biased Neutral Relay And “DN-22BH” D. C. Biased Neutral High Release Relay Detail Parts

(Continued)

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

Piece	Ref.	Description	Drawing Reference
277826	64	R.H. Back Post Complete with Silver Impregnated Carbon Tip	8094-2500
	65	Binding Post with Nuts and Washers (Inc. 1-65a, 2-19, 2-20, 1-21, 1-22, 1-23, 1-24 and 1-25)	12451-
277760	65a	Binding Post Only	8094-2445
	66	Binding Post with Nuts and Washers (Inc. 1-26a, 2-19, 2-20, 1-21, 1-22, 1-23 and 1-67)	12451-
52335	67	Washer	7828-184
185129	68	Shelf Type Shock Absorber Base (For details see Plate E-5030)	12404-50
185131	69	Wall Type Shock Absorber Base (For details see Plate E-5030)	12404-28