



**Specification for Type ST Plug-in Relay
Neutral Relay, Controlled Release
2B HD, 2FB Contacts, 200 Ohm
For Lamp Control**

Characteristic		Original Requirements	Contact/Coil Arrangement	
Coils	Nominal V or I	10-12 VDC	<p align="center">(Front of Relay)</p>	
	Resistance/Tolerance	100 Ohms ±5% each Coil		
Temperature Range		-40C (-40F) to 85C (185F)		
P.U./W.C.	Voltage	3.8 Volts Maximum		
	Current	19 milliamps Maximum		
	Speed	Pickup		Regular
Dropaway	Voltage	1.3 Volts Minimum		
	Current	6.5 milliamps Minimum		
	Speed	Release		Regular
Contacts	Arrangement	2B HD, 2FB		<p align="center">Relay register (Rear of Relay)</p>
	Rating	15 Amps/30 Volts, 4 Amps/30 Volts		
	Material	N.O.	Silver/Carbon	
		N.C.	Silver/Silver	
	Dynamic Gap		.020" Minimum	
	Contact Gap		.050" Minimum	
	Pressure	N.O.	40 Grams Minimum	
		N.C.	21 Grams Minimum	
	Overtravel per Adjustment A		*See Note #1 below	
	Resistance	N.O.	90 milliohms Maximum @ 10 VDC, 1.0 Amps	
N.C.		30 milliohms Maximum @ 10 VDC, 1.0 Amps		
Armature Travel		.087" Minimum		
Retainer Gap Reference		.002" to .004"		
Residual Screw (Adjustable)		.010" Minimum		
Stop Pin (Fixed)		.008" Minimum		

Notes

- #1 N.O. Contacts to make with .032" and break with .041" between armature residual screw and core.
N.C. Contacts to make with .066" and break with .059" between armature residual screw and core.

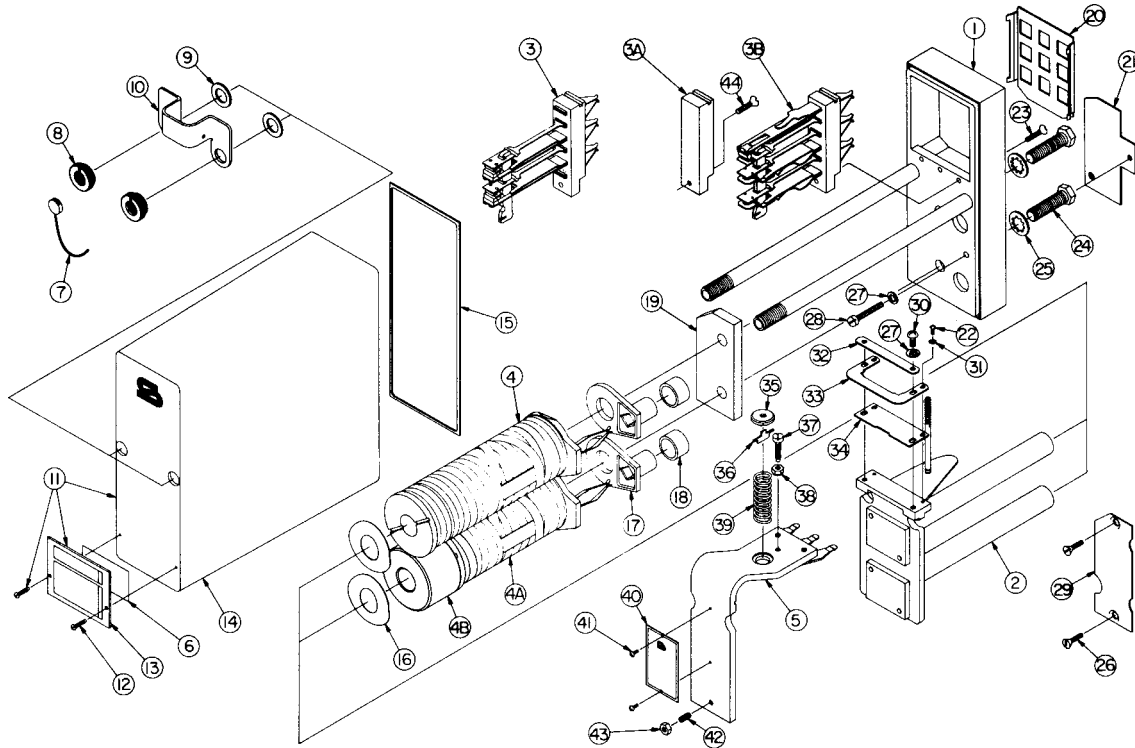
Field Requirements

- Drop Away Value — Not less than 70% of original marking.
Pickup/Working Value — Not greater than 110% of original marking.

Shop Requirements

- Drop Away Value — Not less than 95% of original marking.
Pickup/Working Value — Not greater than 105% of original marking.

Type ST Plug-in Relay Assembly and Replacement Parts Part Number 400021



To order, specify description and part number.

Item No.	Description	Qty. Req'd.	Part Number	Item No.	Description	Qty. Req'd.	Part Number
1	Base Assembly, Plug-in Relay	1	420050-X	21	Plate, Code	1	420050-506
2	Frame Assembly, Coil	1	420053-X	22	Machine Screw, Fillister Head, #4-40 X .250"	2	420053-14
3	Stack, 2B HD Contact	1	420052-12X	23	Machine Screw, Flat Head, #6-32 X .531"	2	420050-36
3A	Stack, Blank	1	420052-3	24	Machine Screw, Hex Head, 5/16"-24 X 1.125"	2	420053-12
3B	Stack, 2FB Contact	1	420052-1X	25	Washer, Spring Lock, I, 5/16"	2	420053-13
4	Coil Assembly, 100 Ohm	1	420052-1X	26	Machine Screw, Flat Head, #6-32 X .5"	2	420050-36
4A	Coil Assembly, 100 Ohm	1	420051-3X	27	Washer, Spring Lock, I, #8	3	420050-33
4B	Slug, Copper	1	420051-9	28	Machine Screw, Fillister Head, #8-32 X .937"	1	420050-32
5	Armature	1	420053-1X	29	Plate, Code Pin	1	420050-103X
6	Label, Paper Identification	1	420050-3	30	Machine Screw, Pan Head, #8-32 X .375"	2	420053-16
7	Seal, Lead	1	420050-8	31	Washer, Spring Lock, I, #4	2	420053-15
8	Nut, Knurl, Locking	2	420050-5	32	Plate, Retainer	1	420053-3
9	Washer, Flat Rubber	2	420050-7	33	Retainer, Armature	1	420053-2
10	Bracket, Cover	1	420050-4	34	Plate, Hinge	1	420053-1
11	Cover Assembly	1	420050-2X	35	Nut, Spring Post	1	420053-6
12	Tap Screw, Round Head, #4 X .375"	2	420050-35	36	Key, Spring Retainer	1	420053-5
13	Cover, Nameplate	1	420050-2	37	Screw, Tailstop	1	420053-9
14	Molded Cover, Clear	1	420050	38	Nut, Tailstop	1	420053-8
15	Gasket, Cover	1	420050-1	39	Spring, Compression	1	420053-4
16	Washer, Spring	2	420053-7	40	Nameplate, Type ST Relay	1	420053-61
17	Insulator, Terminal Retainer	2	420051	41	Phillips Screw, Pan Head, #4-40 X .187"	2	420053-18
18	Seal, Rubber	2	420051-1	42	Screw, Residual	1	420053-11
19	Plate, Base	1	420053	43	Nut, Residual	1	420053-10
20	Seal, Dust	1	420052	44	Machine Screw, Flat Head, #6-32 X .375"	1	420052-2

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