



Specification for Type ST Plug-in Relay Neutral Relay, Slow Release 2F-4B Contacts, 80 Ohm

Characteristic		Original Requirements	Contact/Coil Arrangement		
Coils	Nominal V or I	Special - See Ratings	<div style="text-align: center;">(Front of Relay)</div>		
	Resistance/Tolerance	40 Ohms ±5% each coil			
Temperature Range		-40C (-40F) to 85C (185F)			
P.U./W.C.	Voltage			<div style="text-align: center;">(Rear of Relay)</div>	
	Current				
	Speed	Pickup			Regular
Dropaway	Voltage			<div style="text-align: center;">Relay register</div>	
	Current				
	Speed	Release			0.1-0.2 Second Delay @ 2 Volts
Contacts	Arrangement				<div style="text-align: center;">(Rear of Relay)</div>
	Rating				
	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)		.005" Minimum			
Stop Pin (Fixed)		.003" 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.

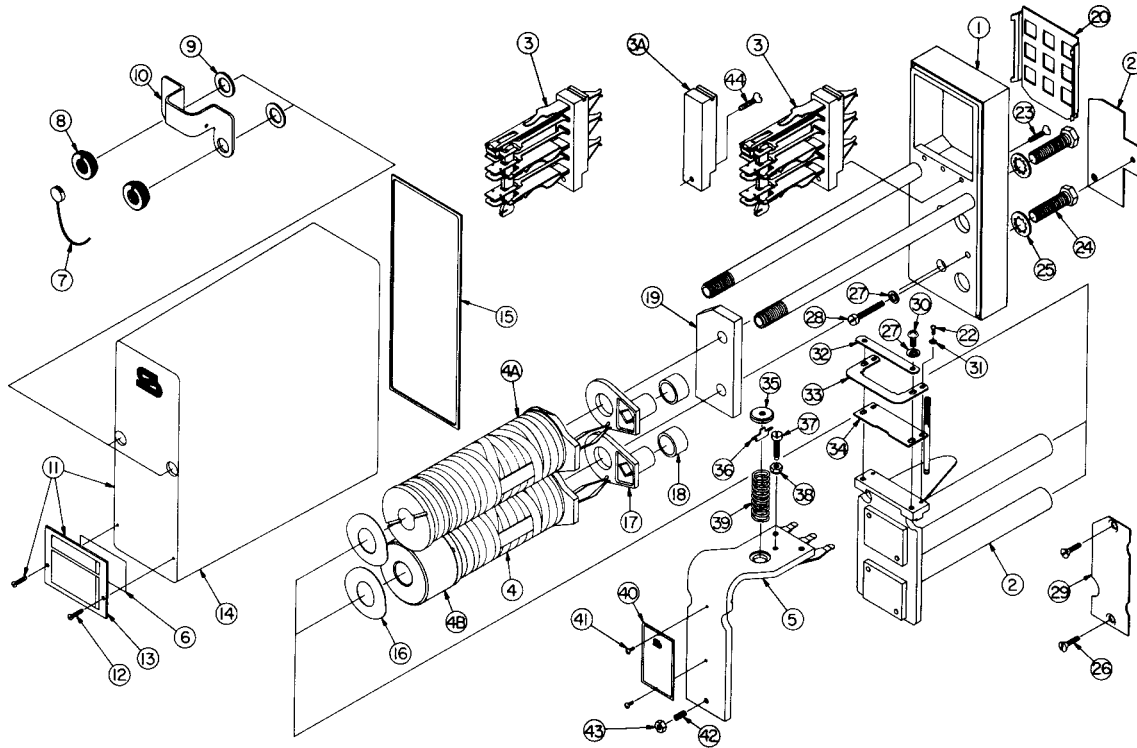
Field Requirements

- 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 400220



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	22	Machine Screw, Fillister Head #4-40, x .250"	2	420053-14
2	Frame Assembly, Coil	1	420053-6X	23	Machine Screw, Flat Head #6-32, x .531"	2	420052-36
3	Stack, 1F-2B, Coil	2	420052-8X	24	Machine Screw, Hex Head 5/16"-24, x 1.125"	2	420053-12
3A	Stack, Blank Contact	1	420052-3	25	Washer, Spring Lock, I 5/16"	2	420053-13
4	Coil Assembly, 40 Ohm	1	420051-21X	26	Machine Screw, Flat Head, #6-32 x .5"	2	420050-36
4A	Coil Assembly, 40 Ohm	1	420051-22X	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	420050-50X
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	420053-4	40	Namplate, Type ST Relay	1	420053-30
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	420053-2
21	Plate, Code	1	420050-20				

Safetran Systems Corporation
2400 Nelson Miller Parkway
Louisville, Kentucky 40223
502-244-7400