



**Specification for Type ST Plug-in Relay  
Neutral Relay, Switch Control  
4FB HD Contacts, 500 Ohm**

Characteristic		Original Requirements	Contact/Coil Arrangement	
Coils	Nominal V or I	10-12 VDC	<p align="center">(Front of Relay)</p>	
	Resistance/Tolerance	250 Ohms ±5% each Coil		
Temperature Range		-40C (-40F) to 85C (185F)		
P.U./W.C.	Voltage	6.5Volts Maximum		
	Current	13 milliamps Maximum		
	Speed	Pickup		Regular
Dropaway	Voltage	2.5 Volts Minimum		
	Current	5.0 milliamps Minimum		
	Speed	Release		Regular
Contacts	Arrangement	4FB HD		<p align="center"><b>Relay register</b> (Rear of Relay)</p>
	Rating	15 Amps/30 Volts		
	Material	N.O.	SCdO/SCdO	
		N.C.	SCdO/SCdO	
	Dynamic Gap		.060" Minimum	
	Contact Gap		.090" Minimum	
	Pressure	N.O.	75 Grams Minimum	
		N.C.	21 Grams Minimum	
	Overtravel per Adjustment C		*See Note #1 below	
	Resistance	N.O.	30 milliohms Maximum @10 VDC, 1.0 Amps	
N.C.		30 milliohms Maximum @10 VDC, 1.0 Amps		
Armature Travel		.120" 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 .099" and break with .092" between armature residual screw and core.

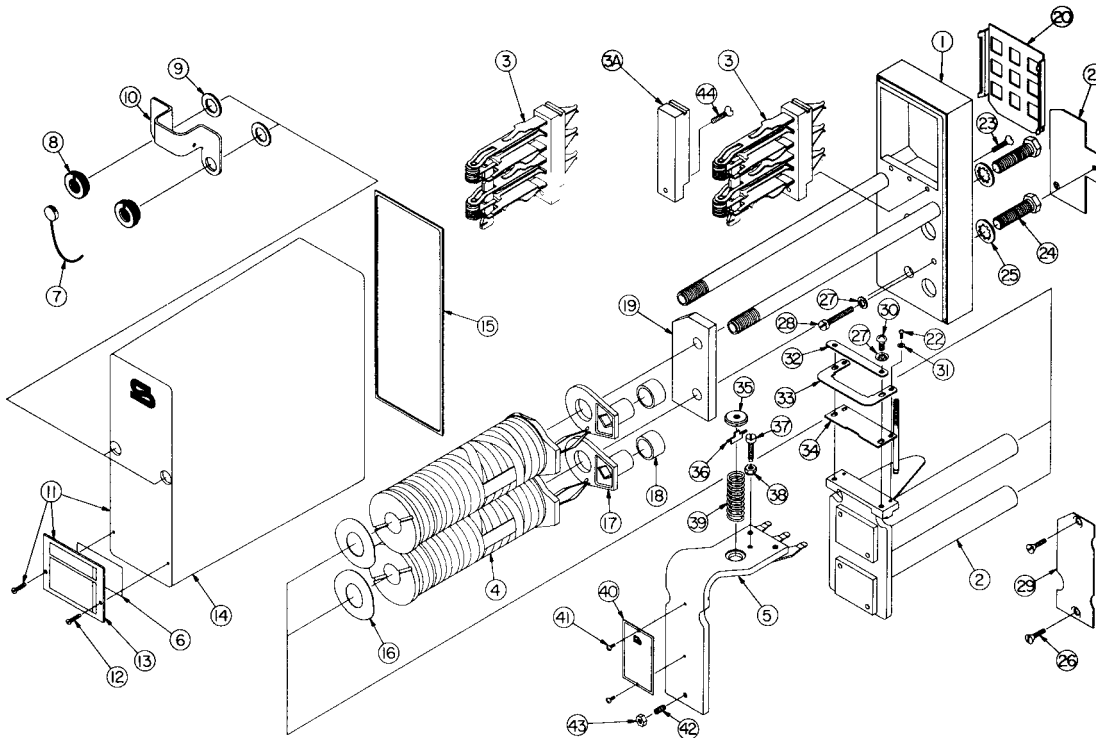
**Field Requirements**

- 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 400025



**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	23	Machine Screw, Flat Head, #6-32 X .531"	2	420050-36
2	Frame Assembly, Coil	1	420053-X	24	Machine Screw, Hex Head, 5/16"-24 X 1.125"	2	420053-12
3	Stack, 2FB HD Contact	2	420052-4X	25	Washer, Spring Lock, I, 5/16"	2	420053-13
3A	Stack, Blank	1	420052-3	26	Machine Screw, Flat Head, #6-32 X .5"	2	420050-36
4	Coil Assembly, 250 Ohm	2	420051-1X	27	Washer, Spring Lock, I, #8	3	420050-33
5	Armature	1	420053-1X	28	Machine Screw, Fillister Head, #8-32 X .937"	1	420050-32
6	Label, Paper Identification	1	420050-3	29	Plate, Code Pin	1	420050-113X
7	Seal, Lead	1	420050-8	30	Machine Screw, Pan Head, #8-32 x .375"	2	420053-16
8	Nut, Knurl, Locking	2	420050-5	31	Washer, Spring Lock, I, #4	2	420053-15
9	Washer, Flat Rubber	2	420050-7	32	Plate, Retainer	1	420053-3
10	Bracket, Cover	1	420050-4	33	Retainer, Armature	1	420053-2
11	Cover Assembly	1	420050-2X	34	Plate, Hinge	1	420053-1
12	Tap Screw, Round Head, #4 X .375"	2	420050-35	35	Nut, Spring Post	1	420053-6
13	Cover, Nameplate	1	420050-2	36	Key, Spring Retainer	1	420053-5
14	Molded Cover, Clear	1	420050	37	Screw, Tailstop	1	420053-9
15	Gasket, Cover	1	420050-1	38	Nut, Tailstop	1	420053-8
16	Washer, Spring	2	420053-7	39	Spring, Compression	1	420053-4
17	Insulator, Terminal Retainer	2	420051	40	Nameplate, Type ST Relay	1	420053-74
18	Seal, Rubber	2	420051-1	41	Phillips Screw, Pan Head, #4-40 X .187"	2	420053-18
19	Plate, Base	1	420053	42	Screw, Residual	1	420053-11
20	Seal, Dust	1	420052	43	Nut, Residual	1	420053-10
21	Plate, Code	1	420050-524	44	Machine Screw, Flat Head, #6-32 X .375"	1	420052-2
22	Machine Screw, Fillister Head, #4-40 X .250"	2	420053-14				

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