



**Specification for Type ST Plug-in Relay
Biased Neutral Relay, Regular Release
4FB-2F-1B Contacts, 100 Ohm**

Coils	Characteristic		Original Requirements	Contact/Coil Arrangement
	Nominal V or I			
Resistance/Tolerance			50 Ohms \pm 5% each coil	
Temperature Range			-40C (-40F) to 85C (185F)	
P.U./W.C.	Voltage		2.6 Volts Maximum	
	Current		26 milliamps Maximum	
	Speed	Pickup	Regular	
Dropaway	Voltage		1.3 Volts Minimum	
	Current		13 milliamps Minimum	
	Speed	Release	Regular	
Contacts	Arrangement		4FB-2F-1B	
	Rating		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.	14 Grams Minimum	
	Overtravel per Adjustment C		*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		.073" Minimum		
Retainer Gap Reference		.002" to .004"		
Residual Screw (Adjustable)		.017" Minimum		
Stop Pin (Fixed)		.008" Minimum		

(Front of Relay)

Relay register
(Rear of Relay)

1-2-7-25

Notes

- #1 N.O. Contacts to make with .025" and break with .030" between armature residual screw and core.
N.C. Contacts to make with .057" and break with .052" between armature residual screw and core.
- #2 Adjust armature compression spring to have one ounce (28.4 grams) minimum at the adjustable residual screw to just raise the armature stop screw from its stop.

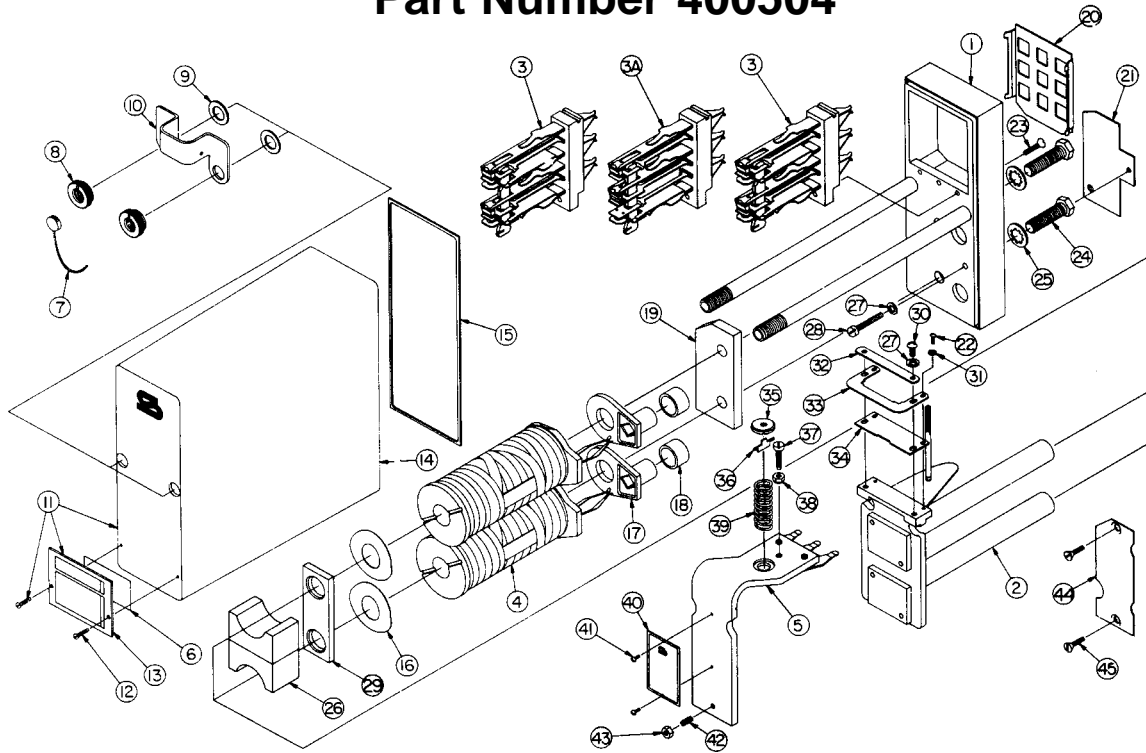
Field Requirements

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 400504



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"	3	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 Contact	2	420052-1X	25	Washer, Spring Lock, I, 5/16"	2	420053-13
3A	Stack, 2F-1B Contact	1	420052-2X	26	Magnet	2	420053-80
4	Coil Assembly, 50 Ohm	2	420051-26X	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, Shunting	1	420053-79
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	420053-54
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	420050-513	44	Plate, Code Pin	1	420050-56X
22	Machine Screw, Fillister Head, #4-40 X .250"	2	420053-14	45	Machine Screw, Flat Head, #6-32 X .5"	2	420050-36

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