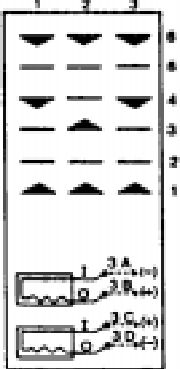
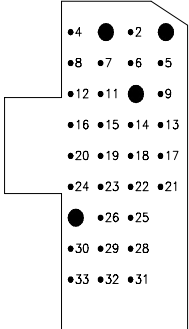




**Specification for Type ST Plug-in Relay
Biased Neutral Relay
5F-4B Contacts, 4 Ohm**

Characteristic		Original Requirements	Contact/Coil Arrangement	
Coils	Nominal V or I	175-200 Volts	(Front of Relay) 	
	Resistance/Tolerance	2.0 Ohms ±5% Each Coil		
	Temperature Range	-40C (-40F) to 85C (185F)		
P.U./W.C.	Voltage	.504 Volts Maximum		
	Current	126 milliamps Maximum		
	Speed	Pickup Regular		
Dropaway	Voltage	.328 Volts Minimum		
	Current	82 milliamps Minimum		
	Speed	Release Regular		
Contacts	Arrangement	5F-4B		(Rear of Relay) Relay register 
	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 F	*See Notes 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)	.020" Minimum Top Core .040" Minimum Bottom Core			
Stop Pin (Fixed)	.008" Minimum			

Notes

- #1 N.O. Contacts to make with .029" and break with .034" 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.

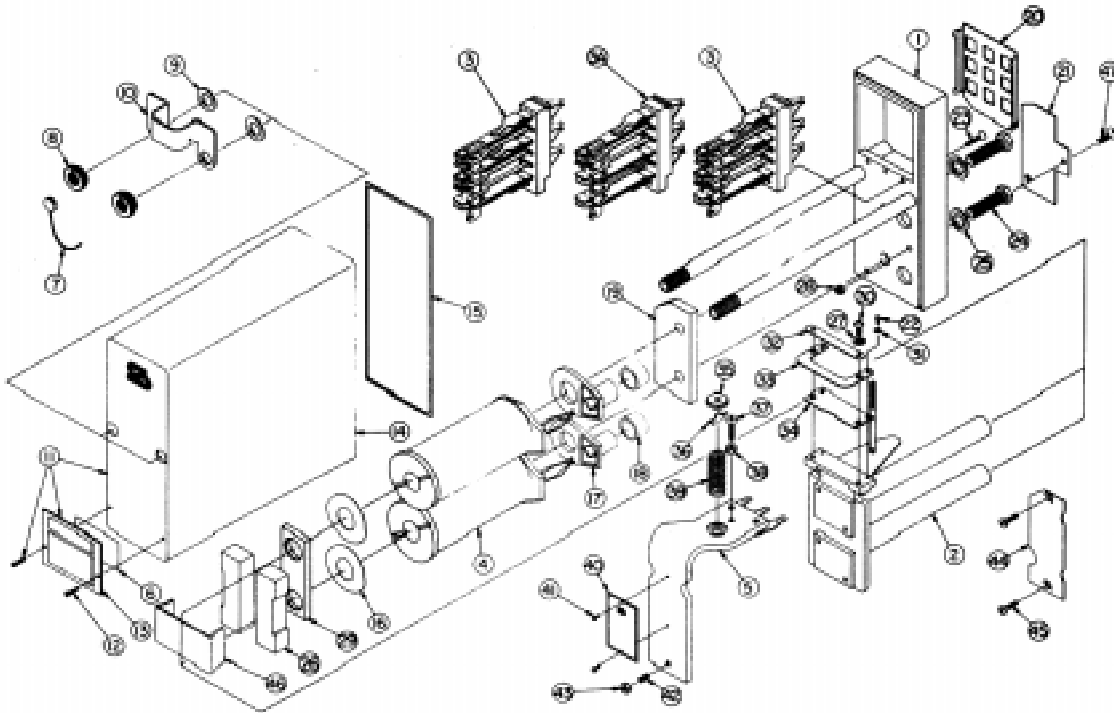
Field Requirements

Drop Away Value — Not less than 85% 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 400507



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	24	Machine Screw, Hex Head, 5/16"-24 X 1.125"	2	420053-12
2	Frame Assembly, Coil	1	420053-71X	25	Washer, Spring Lock, I, 5/16"	2	420053-13
3	Stack, 2F-1B Contact	2	420052-2X	26	Magnet	2	420053-47
3A	Stack, 1F-2B Contact	1	420052-8X	27	Washer, Spring Lock, I, #8	2	420050-33
4	Coil Assembly, 2 Ohm	2	420051-54X	28	Nut, Hex, #8-32 X .345"	1	420053-8
5	Armature	1	420053-1X	29	Plate, Shunting	2	420053-79
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	420053-43
16	Washer, Spring	2	420053-7	40	Nameplate, Type ST Relay	1	420053-110
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	Plate, Code Pin	1	420050-76
21	Plate, Code	1	420050-546	45	Machine Screw, Flat Head, #6-32 X .5"	2	420050-36
22	Machine Screw, Fillister Head, #4-40 X .250"	2	420053-14	46	Clip, Spring	1	420053-46
23	Machine Screw, Flat Head, #6-32 X .531"	3	420050-36	47	Screw, Flat Head, #8-32 X .345"	1	420053-88

Safetran Systems Corporation

2400 Nelson Miller Parkway

Louisville, Kentucky 40223

502-244-7400