



**Specification for Type ST Plug-in Relay  
Code Responsive Relay  
4FB Contacts, 80 Ohm**

Characteristic		Original Requirements	Contact & Terminal Arrangement			
Coils	Nominal V or I	10-12 VDC	<p align="center">(Front of Relay)</p>			
	Resistance/Tolerance	40 Ohms ± 10% Each Coil				
	Coils in Series					
Working Current		63 Milliamps Maximum				
Pick-Up Current		43-53 Milliamps				
Drop Away Current		19 Milliamps Minimum				
Contacts	Arrangement	4 FB			<p align="center"><b>Relay Register</b> (Rear of Relay)</p>	
	Rating	4 Amps/30 Volts				
	Material	Silver Platinum - 5/32" Diameter				
	Dynamic Gap	.10" - .015" Minimum				
	Contact Gap	.050" Minimum				
	Pressure	N.O.	50-70 Grams			
		N.O.	50-70 Grams			
	Overtravel		.020" Minimum - .023" Maximum			
	Resistance	N.O.	1.0 Ohm			
		N.O.	1.0 Ohm			
Retainer Gap		.001"-.003"				
Residual Gap Fixed		.000" - .001"				
Residual Gap Adjustable	Front	.010" Minimum				
	Back	.005" Minimum				
Armature Air Gap Center		.007" Minimum				
Build and Test		Per Adjustment "7"				

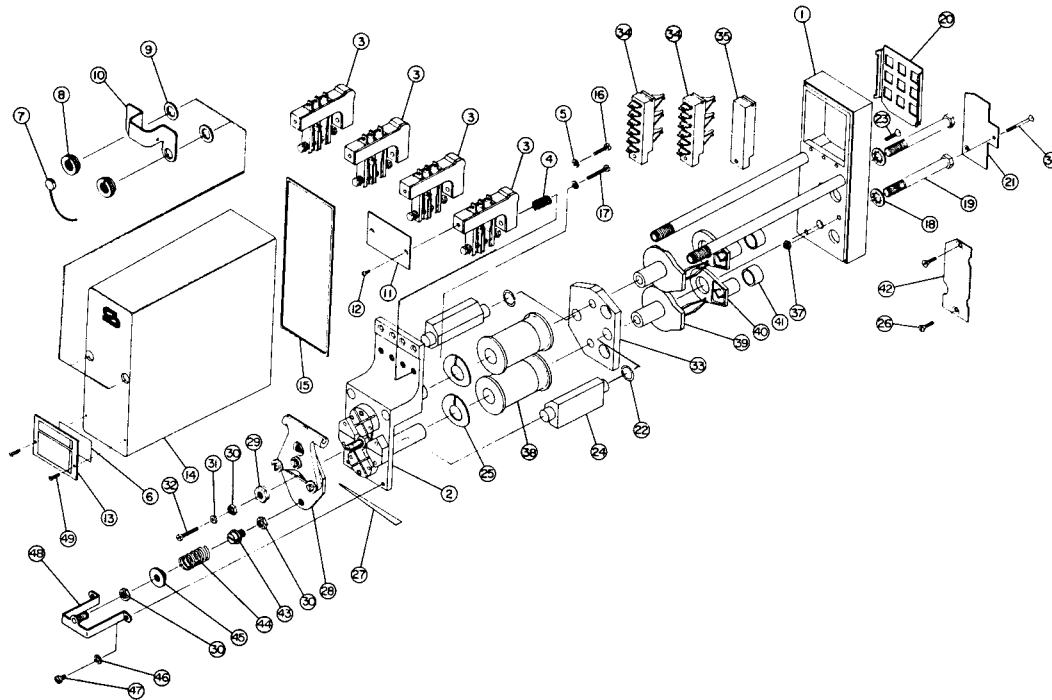
**Field Requirements**

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 400954



**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	1	420050-4X	26	Machine Screw, Flat Head, #6-32 X .5"	2	420050-36
2	Frame Assembly w/Cores & Pole PCS	1	420053-18X	27	Hinge Plate	1	420053-125
3	Contact Stack	4	420052-26X	28	Armature Assembly	1	420054-23
4	Compression Spring	4	420053-114	29	Nut, Hex, #1/4 - 40 X .500"	1	420053-127
5	Lock Washer	8	420053-115	30	Nut, Hex, #1/4 - 40 X .312"	3	420053-128
6	Label, Paper Identification	1	420050-3	31	Nut, Hex, #6 - 32 X .250"	1	420053-129
7	Seal, Lead	1	420050-8	32	Screw, #6 - 32 X .750"	1	420053-130
8	Nut, Knurl, Locking	2	420050-5	33	Base Plate	1	420053-131
9	Washer, Flat Rubber	2	420050-7	34	Terminal Strip	2	420053-132
10	Bracket, Cover	1	420050-4	35	Stack, Blank	1	420052-3
11	Name Plate	1	420053-105	36	Screw, Flat Head #8 - 32 X 1.185"	1	420053-88
12	Phillips Screw, Pan Head, #4-40 X .187"	2	420053-18	37	Nut, Hex, #8 - 32 X .345	1	420053-8
13	Cover, Nameplate	1	420050-2	38	Coil 40 Ohms	2	420051-48X
14	Molded Cover, Clear	1	420050	39	Bobbin & Terminal Assembly	2	420053-143
15	Gasket, Cover	1	420050-1	40	Insulator, Terminal Retainer	2	420051
16	Screw, #6 -40 X .562"	4	420053-118	41	Seal, Rubber	2	420051-1
17	Screw, #6 -40 X .812"	4	420053-119	42	Code Pin Plate 1-3-4-33	1	420050-135
18	Lock Washer, 5/16"	2	420053-13	43	Residual Screw, #1/4-40 X .504"	1	420053-139
19	Bolt, 5/16 - 24 X 2.75"	2	420053-120	44	Compression Spring	1	420054-22
20	Seal, Dust	1	420052	45	Nut, Knurl, 1/4 - 40" RD	1	420053-141
21	Plate, Code	1	420050-551	46	Washer, Int	1	420054-11
22	Washer, .450 X .064"	2	420053-122	47	Screw, Fil. Hd., #8 - 32 X .312"	1	420053-142
23	Machine Screw, Flat Head, #6-32 X .531"	3	420050-36	48	Bracket Assembly	1	420053-140
24	Magnet, Alnico	2	420053-123	49	Tap Screw, Round Head #4 X .375"	2	420050-35
25	Washer, Spring	2	420053-124				

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