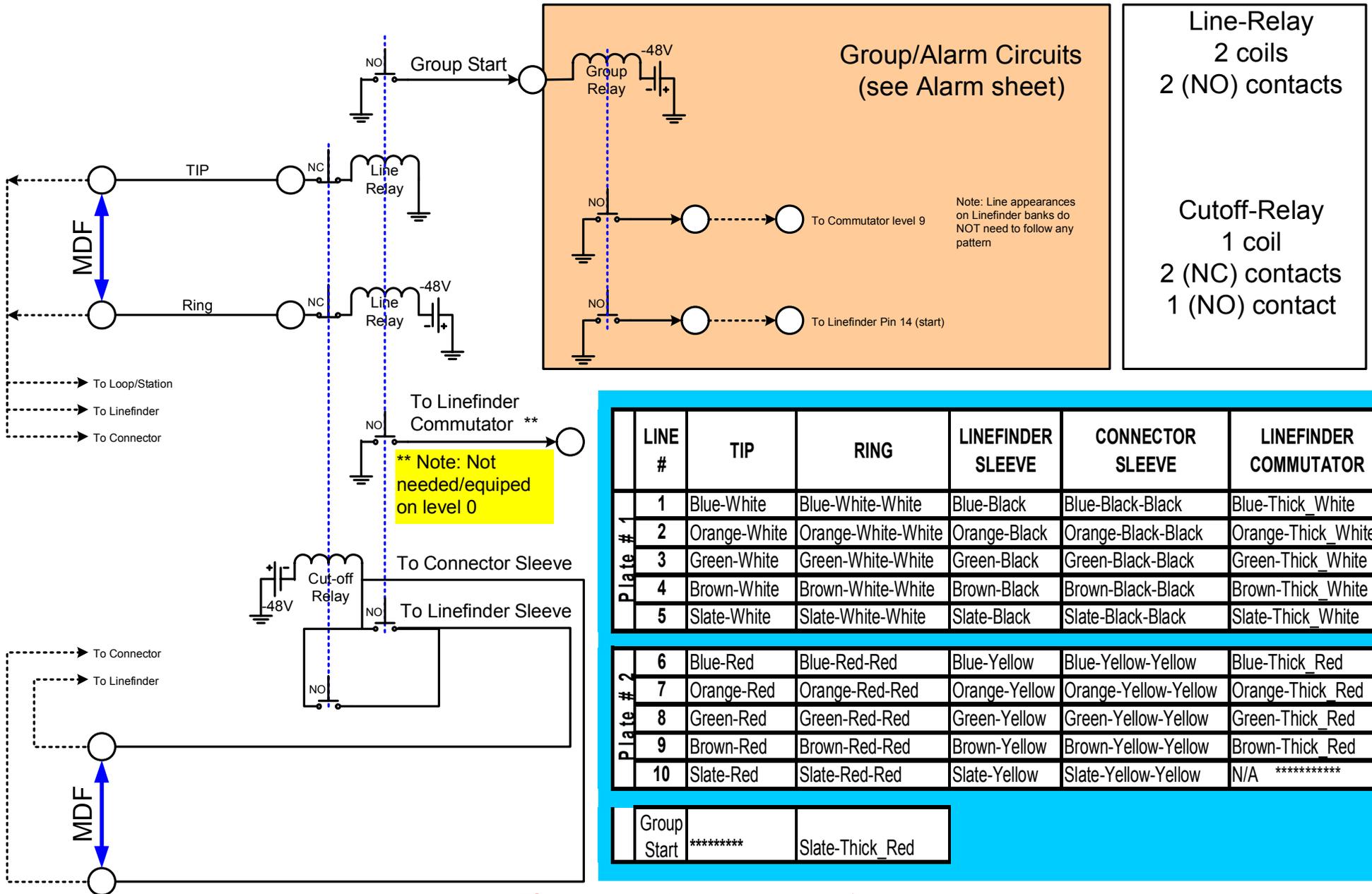


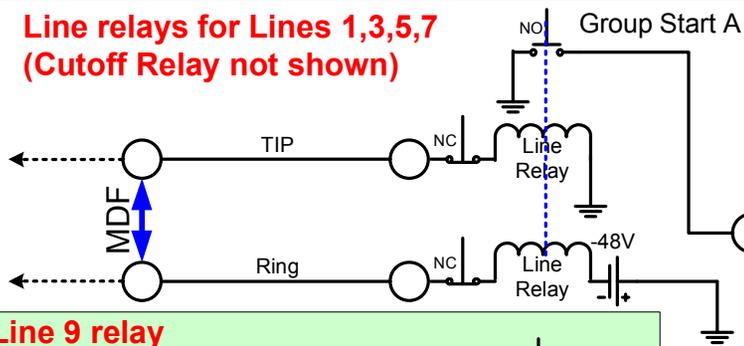
Line Cut-Off Relays- Group/Start Circuit



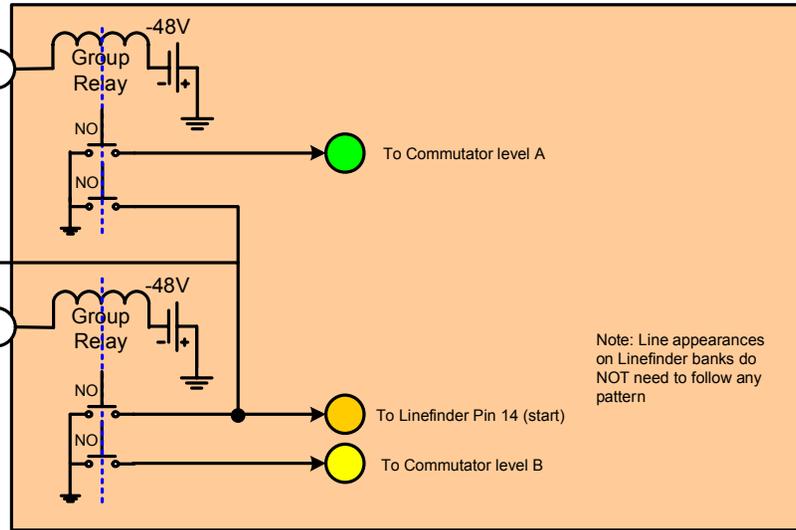
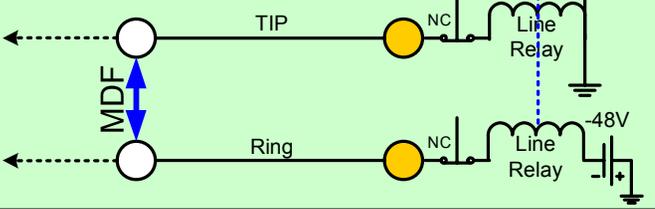
AE 10 Position Line/Cutoff Relay Plate

Modified: 8 Lines with two Group Relays and one line for incoming C*Net Trunk

Line relays for Lines 1,3,5,7
(Cutoff Relay not shown)



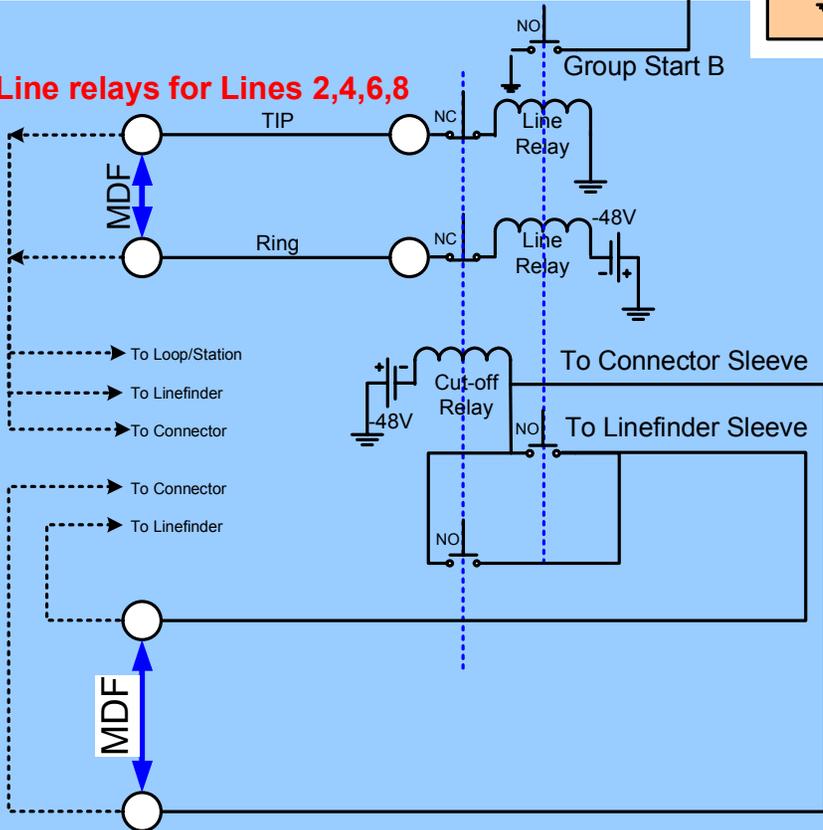
Line 9 relay
C*Net Incoming Trunk
Level 0 No Commutator Req'd



Line-Relay
2 coils
2 (NO) contacts
1 NO/NC contact

Cutoff-Relay
1 coil
2 (NC) contacts
2 (NO) contacts

Line relays for Lines 2,4,6,8



LINE #	TIP	RING	LF #	LINEFINDER SLEEVE	CONN #	CONNECTOR SLEEVE
1	White-Blue	Blue-White	36	Black-Blue	22	Blue-Black
2	White-Orange	Orange-White	76	Black-Orange	33	Orange-Black
3	White-Green	Green-White	37	Black-Green	44	Green-Black
4	White-Brown	Brown-White	77	Black-Brown	66	Brown-Black
5	White-Slate	Slate-White	38	Black-Slate	77	Slate-Black

6	Red-Blue	Blue-Red	78	Yellow-Blue	88	Blue-Yellow
7	Red-Orange	Orange-Red	39	Yellow-Orange	99	Orange-Yellow
8	Red-Green	Green-Red	79	Yellow-Green	00	Green-Yellow
9	Red-Brown	Brown-Red	00	Yellow-Brown		

Start	"Group A" Lines 1-5 Commutator	"Group B" Lines 6-9 Commutator
	Red-Slate Level 7	Slate-Red Level 3

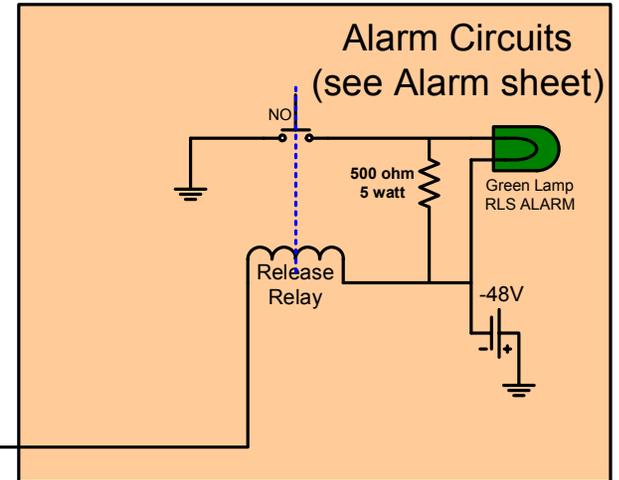
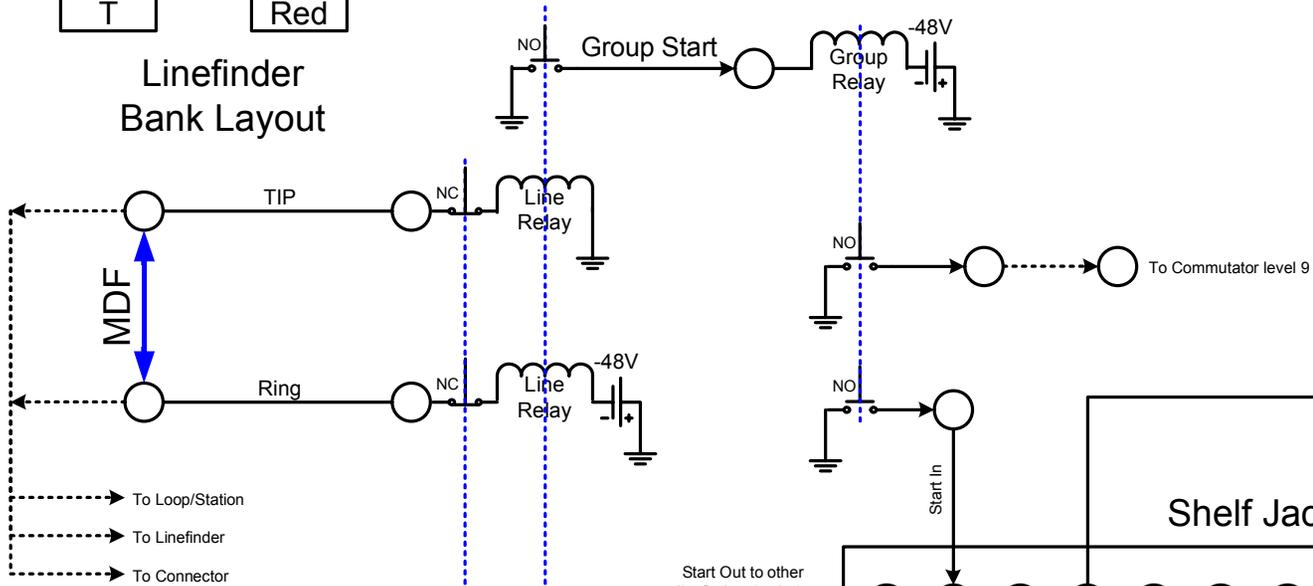
Linefinder Start
Yellow-Slate

-48V	Violet-Slate	Slate-Violet
GND	Violet-Green	Green-Violet

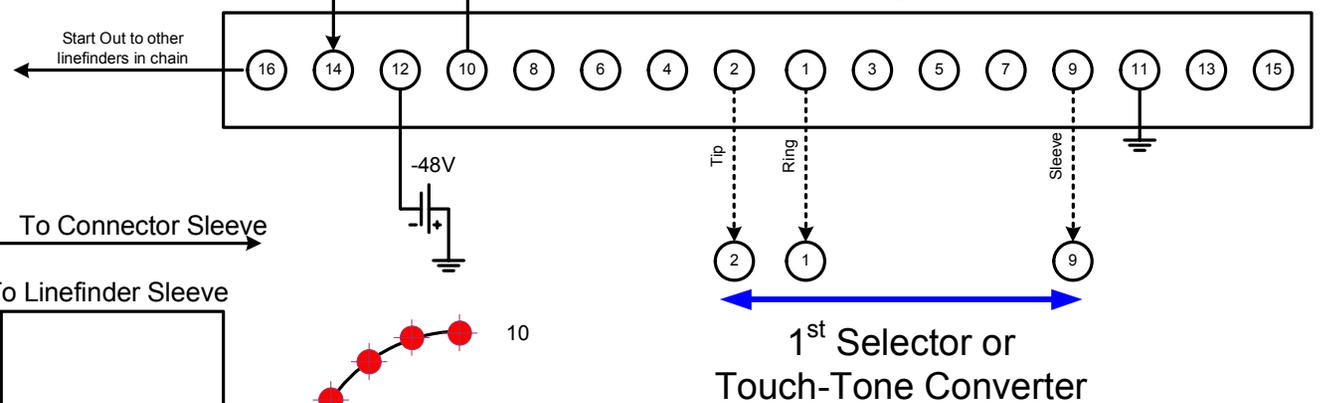
33013/33014 Linefinder

S1	Blue
S	Red
R1	Blue
T1	Red
R	Blue
T	Red

Linefinder Bank Layout



Shelf Jack Numbering as seen from the rear



0
9
8
7
6
5
4
3
2
1

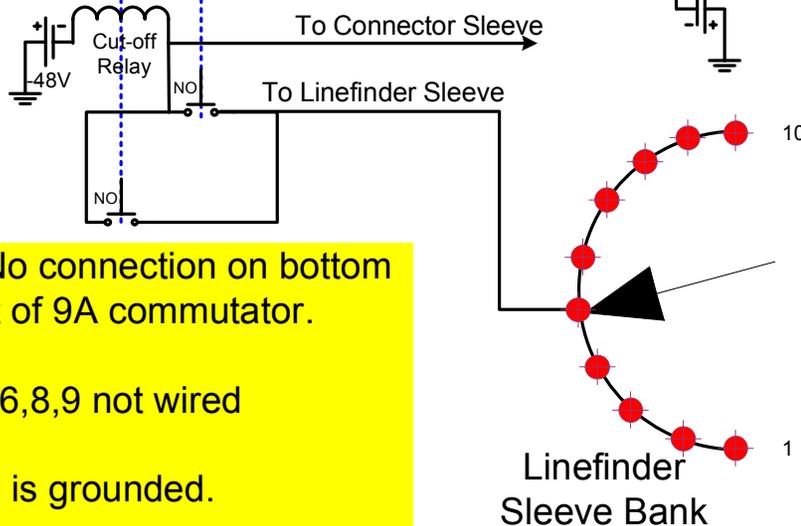
9A

Commutator

Note: No connection on bottom contact of 9A commutator.

Levels 6,8,9 not wired

Level 0 is grounded.



Note: Pin 9 must be grounded by succeeding switch or the linefinder will hunt continuously. If pin 9 is grounded before pin 14 (start), the finder will get locked out by LF relay D simulating a busy finder.

C
S

Blue
Red

R
T

Blue
Red

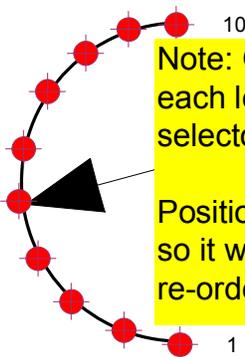
30976 Selector

Either Ground all TEN positions of unused levels or install a normal post spring cam with the right finger selected to rotate to the 11th position

Selector
Bank
Layout

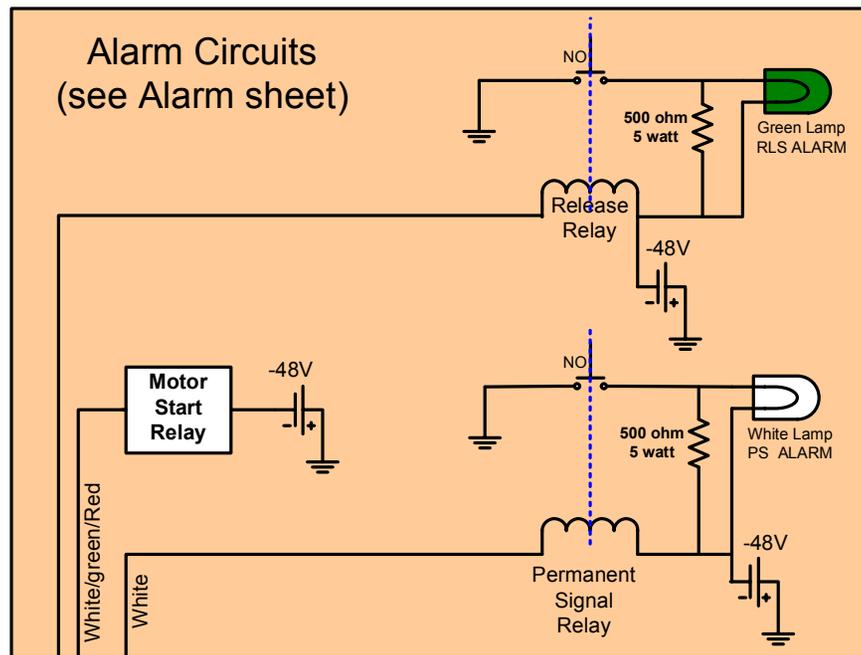
Note: Switch modified to maintain Motor Start function until subsequent switches drop

Move wire from #8 Spring Relay B to #9 Spring of Relay B.
Tie Spring #8 of Relay B to GND (Relay B Spring 6)

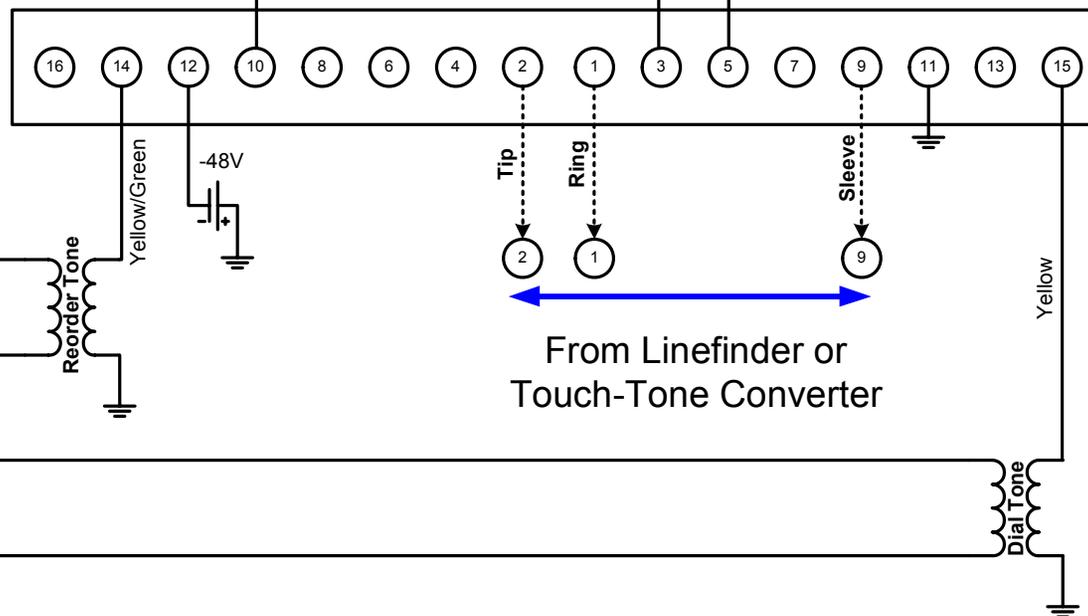


Note: On the Sleeve bank, positions 1-9 of each level are grounded to force the first selector to hunt to the last position.

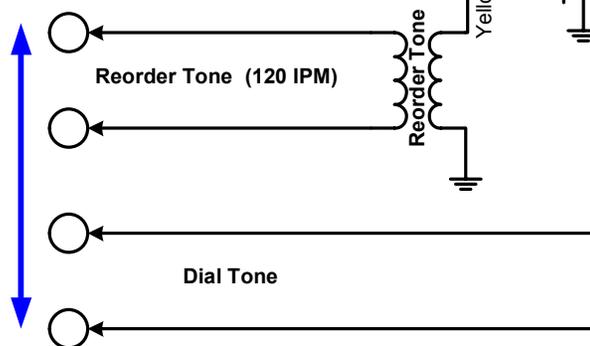
Position 10 of level 2 provides the ground so it will hunt to the 11th position and provide re-order tone.



Shelf Jack Numbering as seen from the rear



From Tone/Timing
Circuits

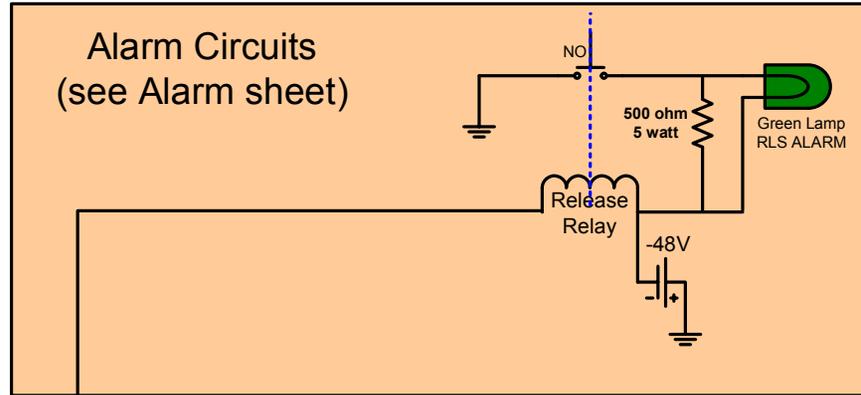


30215 Local Rotary Hunting Connector Selective or 1 Ring Semi-selective Ringing

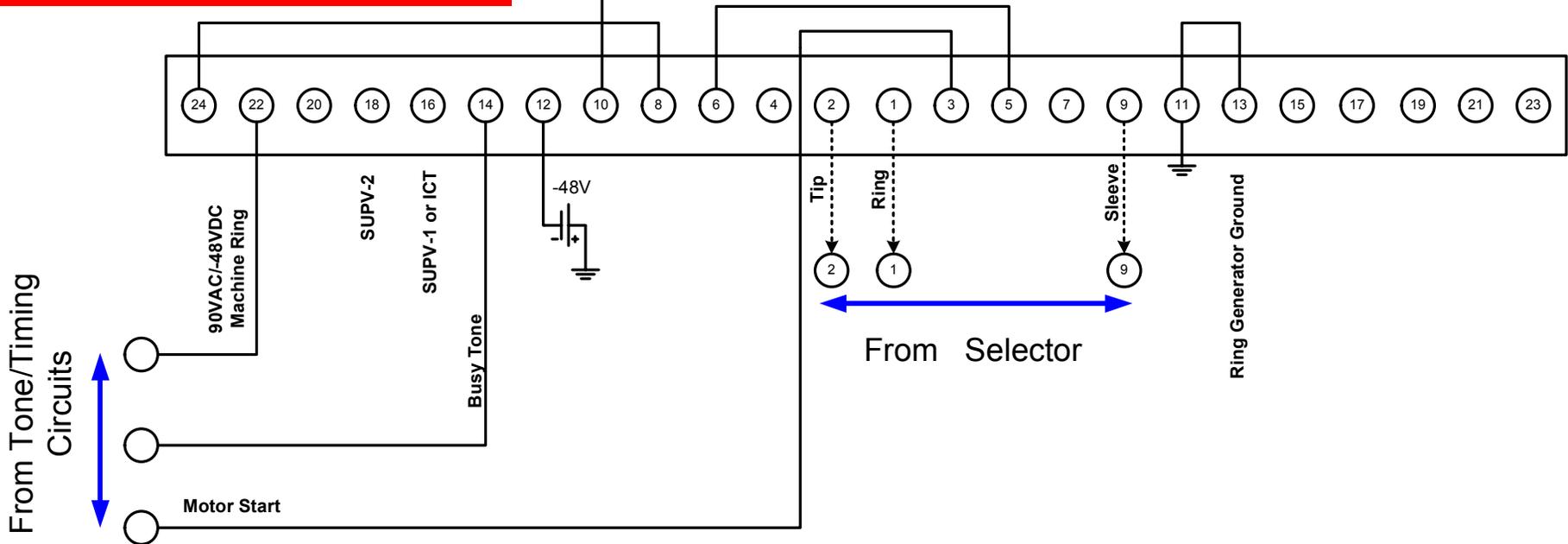
H	Blue
S	Red
R	Blue
T	Red

Connector
Bank
Layout

Note: Switch modified to perform Motor Start function on Shelf Jack Terminal 3.
Installed Extra set of springs on Relay B
Not needed with proper mod of 1st Selector

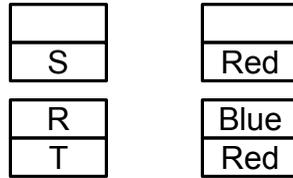


Shelf Jack Numbering as seen from the rear

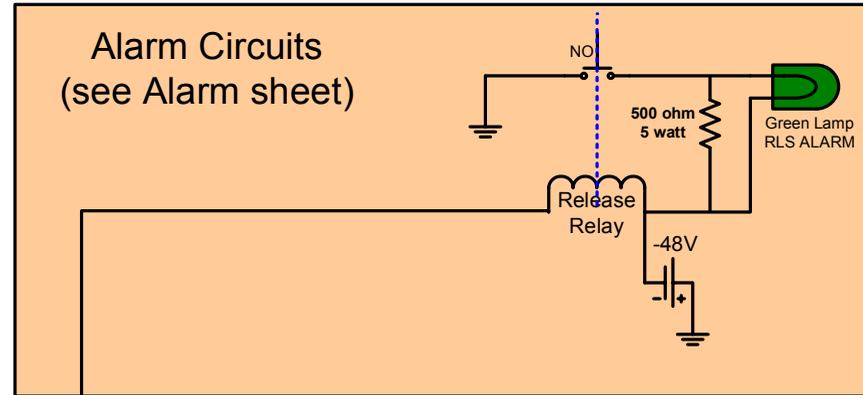


31739 Combination Connector

1 Ring with/without reverse battery supervision

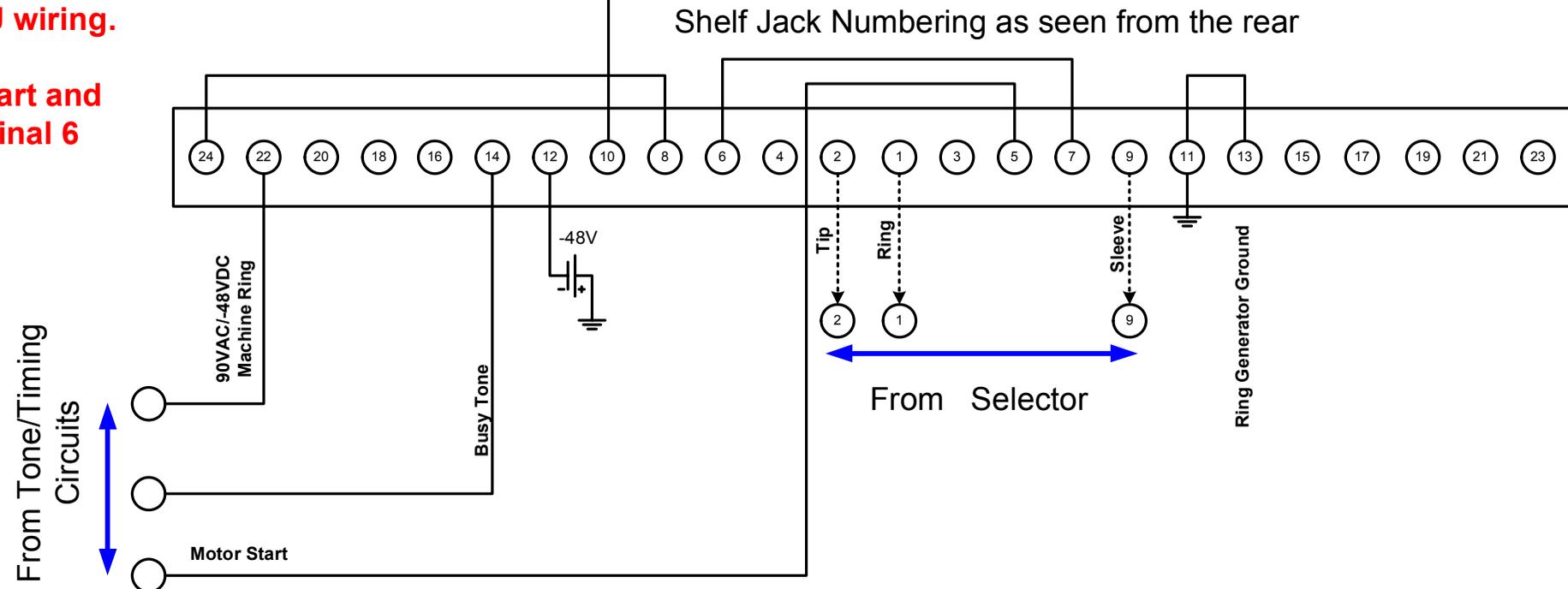


Connector
Bank
Layout



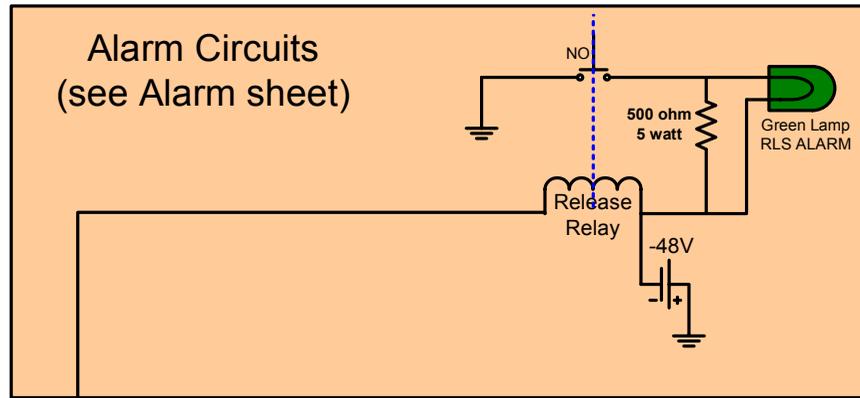
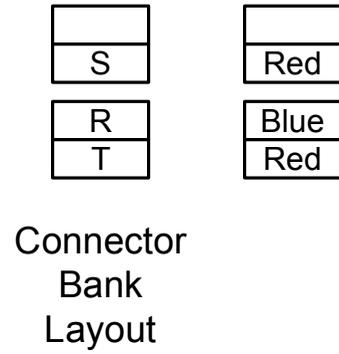
Terminals 5 and 7 need to be
verified for S or U wiring.

Affects motor start and
jumper to terminal 6



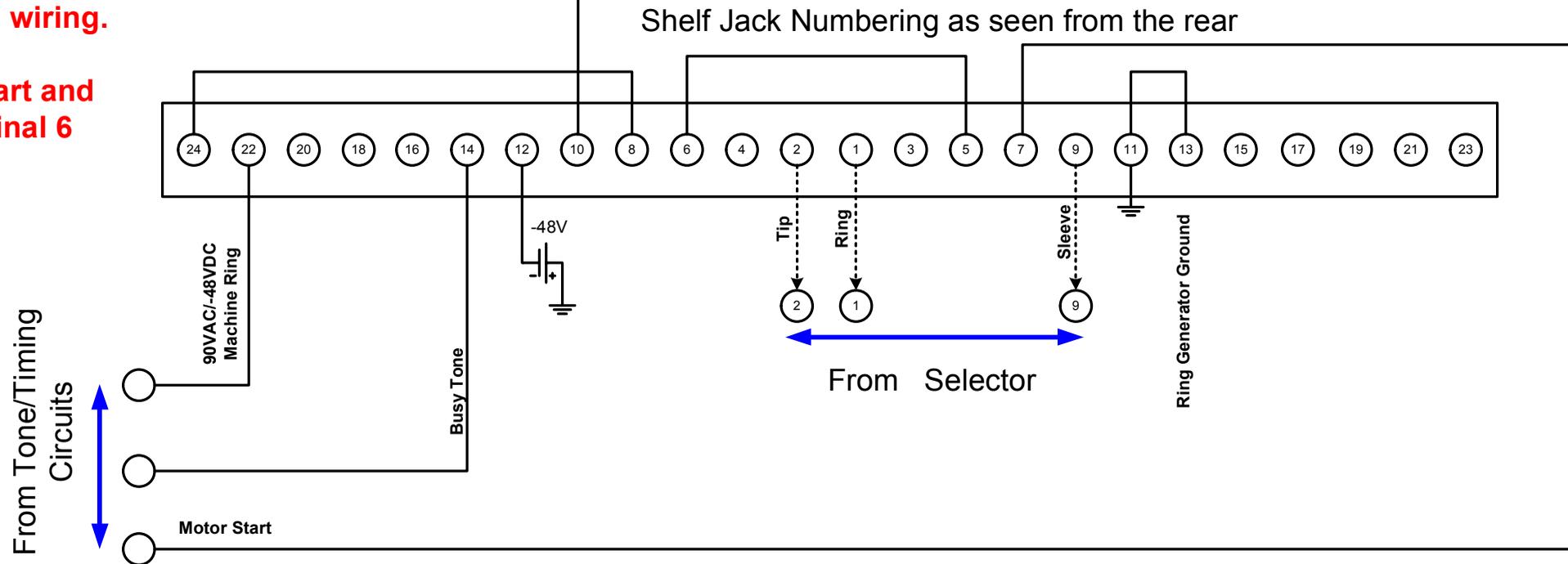
31739 Combination Connector

1 Ring with/without reverse battery supervision



Terminals 5 and 7 need to be verified for S or U wiring.

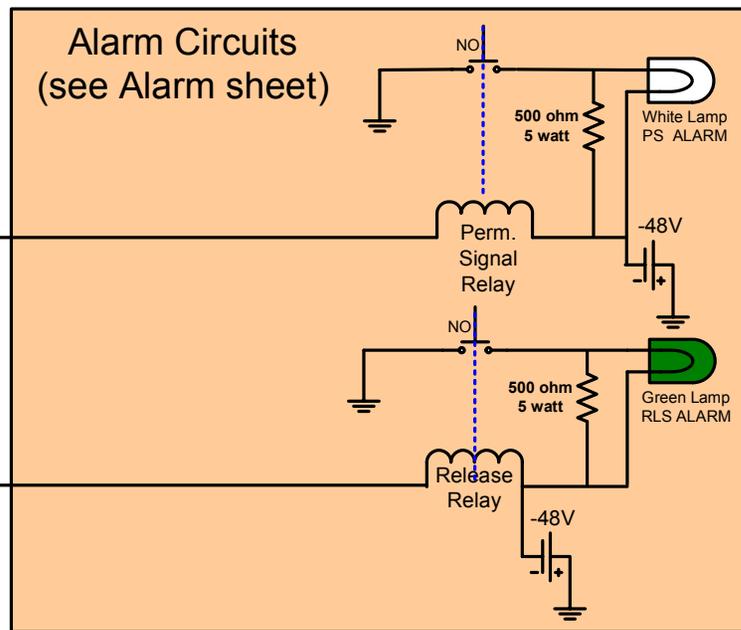
Affects motor start and jumper to terminal 6



30978 Reverting Selector

H	Blue
S	Red
R	Blue
T	Red

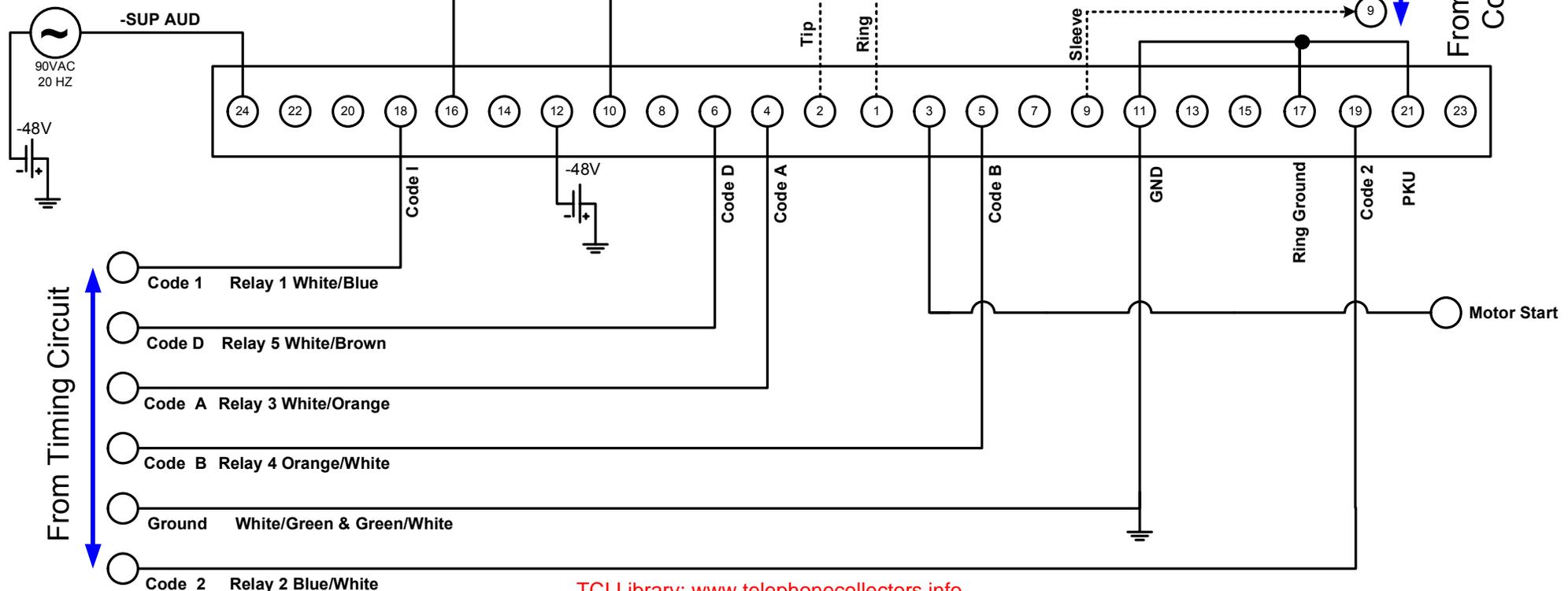
Selector Bank Layout
Used with special bank
to select which stations
to ring



**Dial 119
to access
Then
2 digit
code**

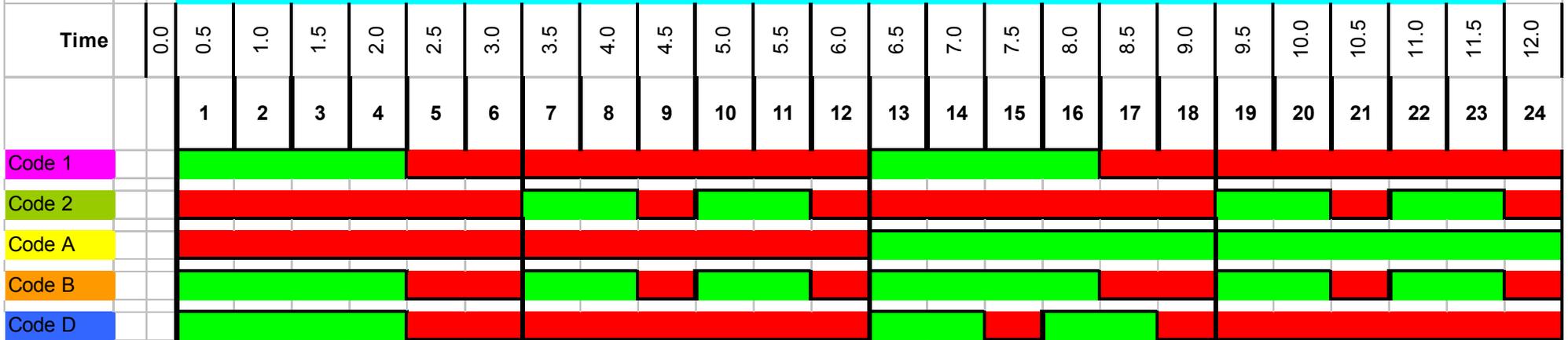
Note: Switch modified to perform Motor Start function on Shelf Jack Terminal 3.
Installed Extra set of springs on Relay B
Not needed with proper mod of 1st Selector

Shelf Jack Numbering as seen from the rear



30978

Repeat until Answered Ground on MS powers Timing Circuit. PKU is Grounded Permanently



Station 1	1 Long on Ring	11	33	Code 1	22	44	Code 2	T	Gnd	Ring on Tip
Station 2	2 Short on Ring	12	21	Code B	23	32	Code D / Code A	T	N/C	Ring on Ring
Station 3	1 Long on Tip	13	31	Code 1 / Code A	24	42	Code 2 / Code A	R	N/C	Not used
Station 4	2 Short on Tip	14	41	Code D / Code A	34	43	Code B	S		Controls Ring Cadence

Top Bank					Bottom Bank					Top Bank					Bottom Bank									
#	Cadence		Ring Pol	Not Used	Always Ground	#	Cadence		Ring Pol	Not Used	Always Ground	#	Cadence		Ring Pol	Not Used	Always Ground	#	Cadence		Ring Pol	Not Used	Always Ground	
	S	T					R	H					S	T					R	H				S
41	D	A		GND	42	2	A		GND	43	B	GND		GND	44	2	GND		GND	31	1	A		GND
21	B	X		GND	22	2	X		GND	23	D	A		GND	24	2	A		GND	11	1	X		GND
11	1	X		GND	12	B	X		GND	13	1	A		GND	14	D	A		GND					

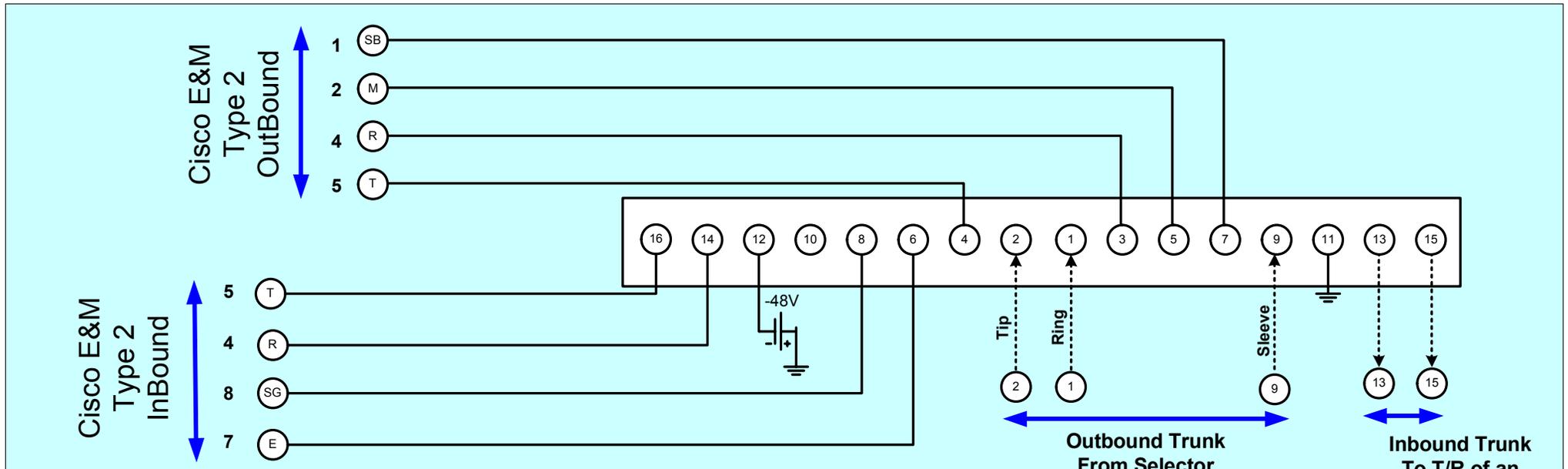
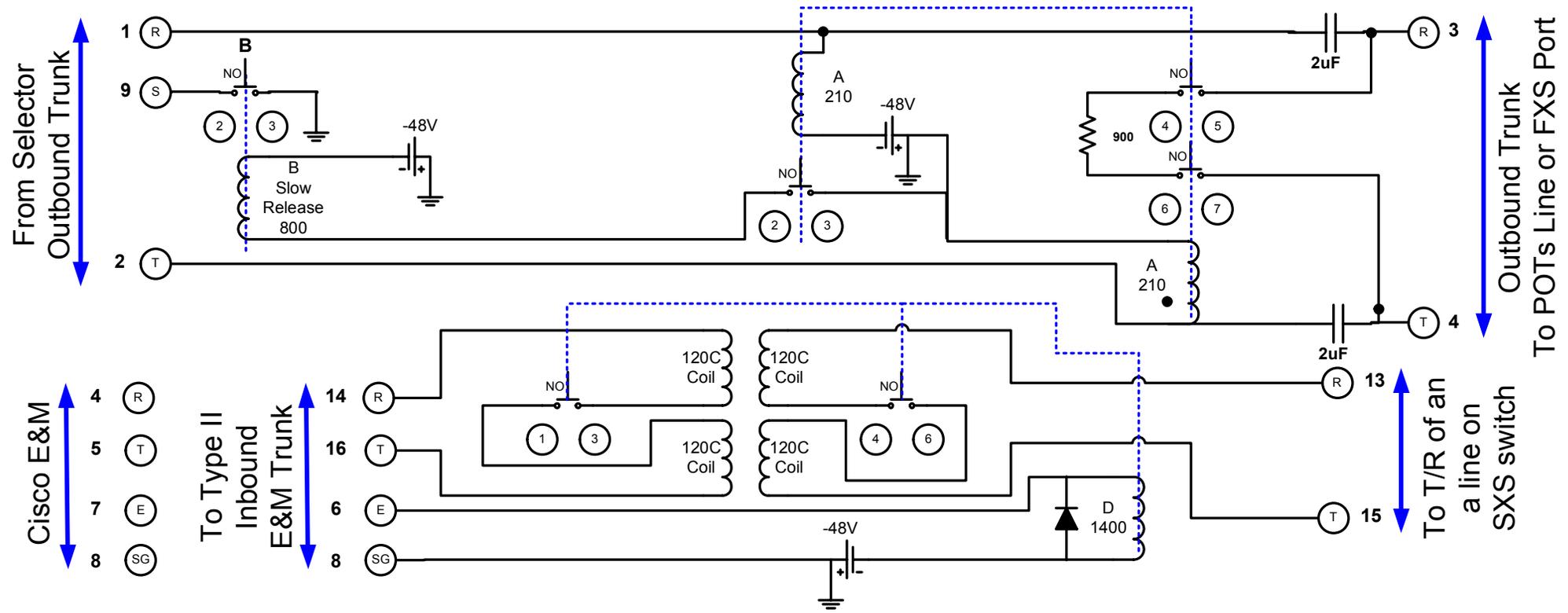
Top Bank

H
S

Bottom Bank

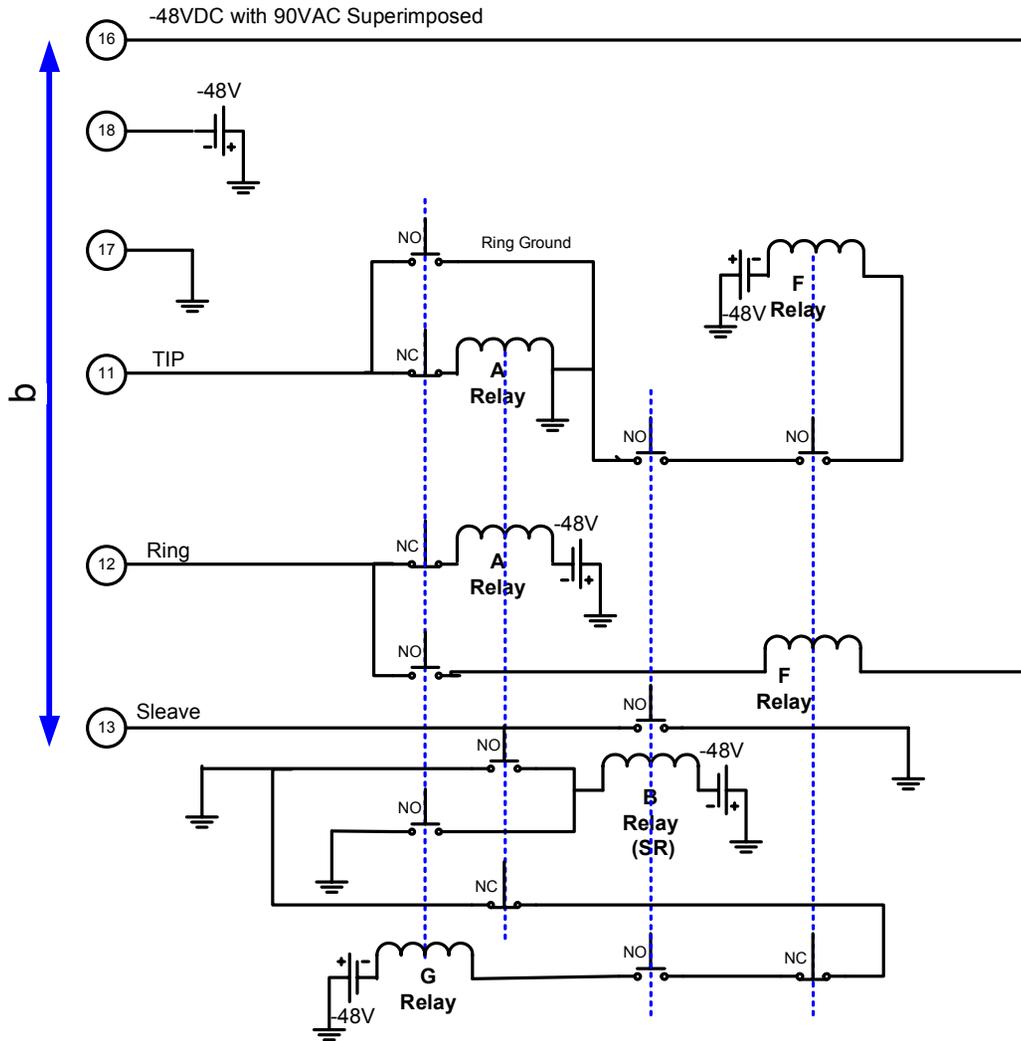
R
T

Modified 31779 Trunk

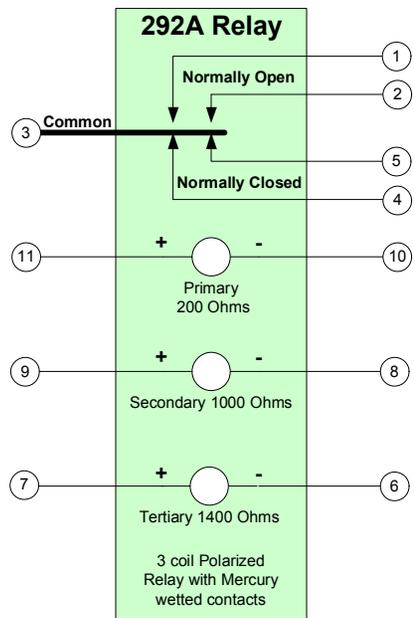


Shelf Jack Numbering as seen from the rear

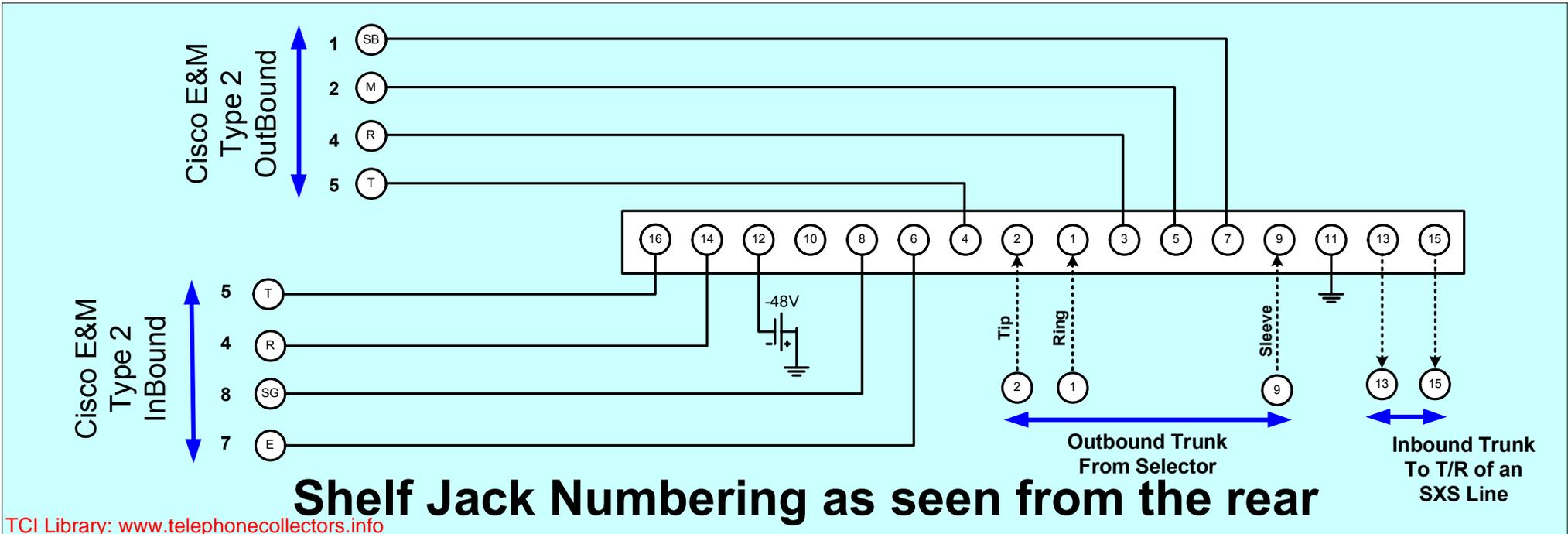
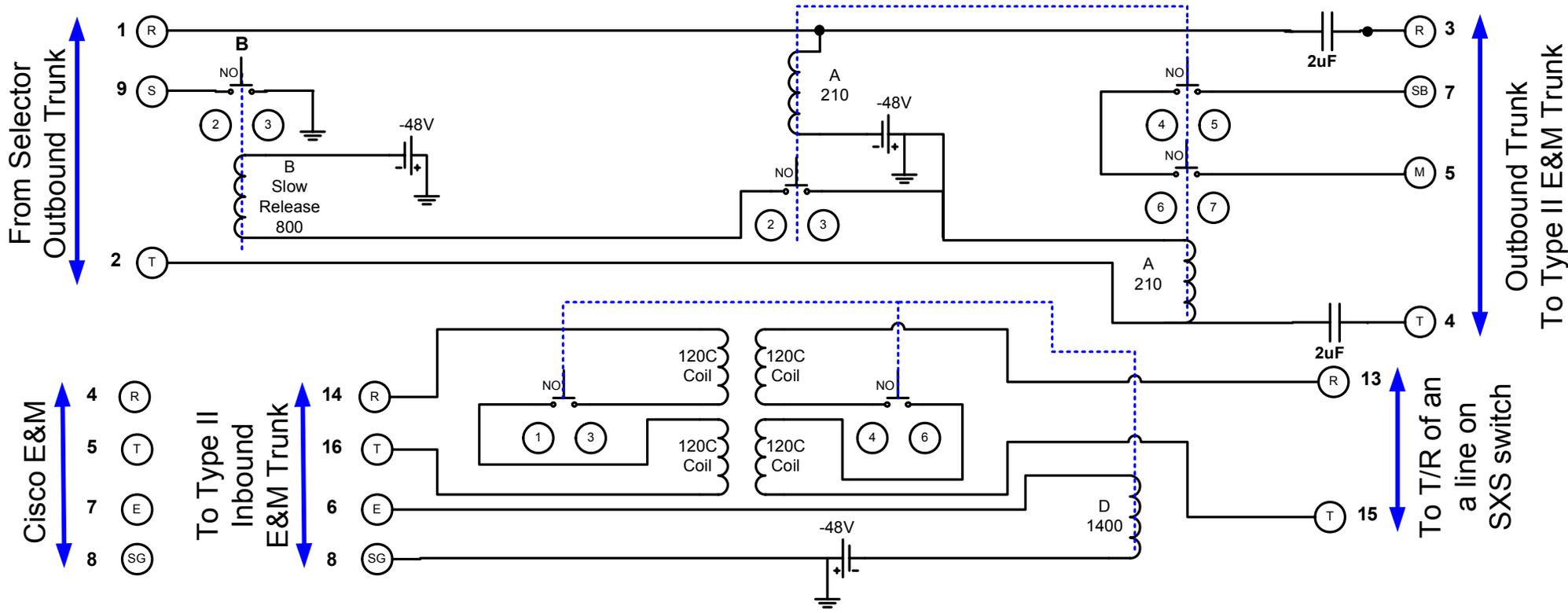
From Rick Walsh's diagram



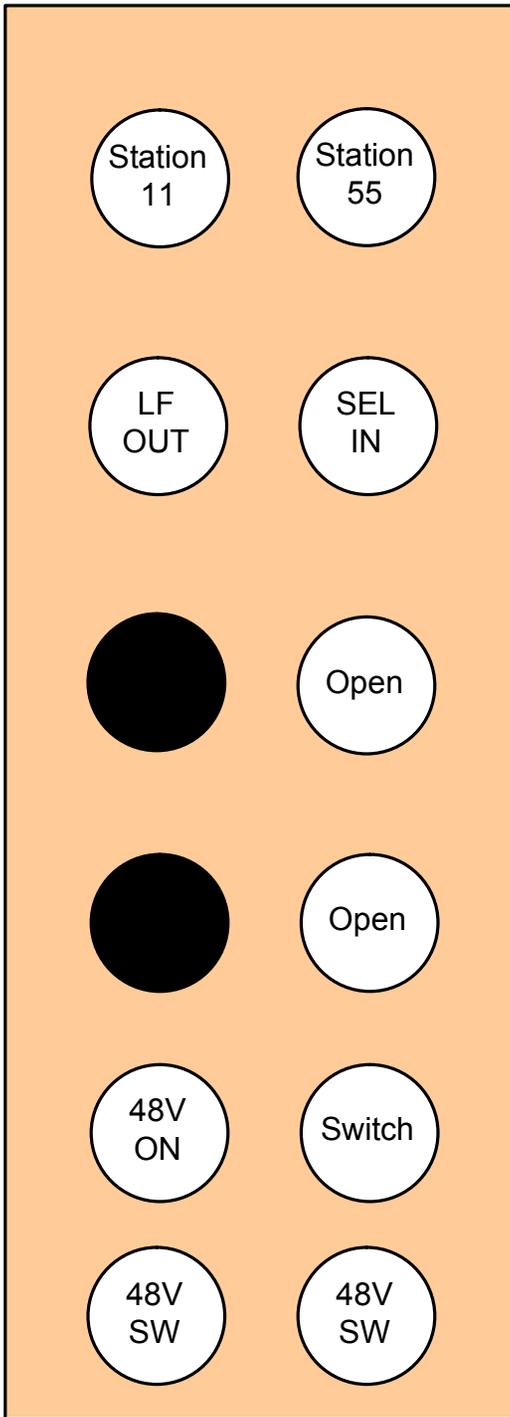
292A



Dual E & M Trunk



Shelf Jack Numbering as seen from the rear



Not
Connected
Anymore

- 2x4 10'
- 2x4 Oak 4'
- 2'x4' Plywood cut down to
- (2) 18"x24"
- (2) Oak 10" x 72"
- Oak 1" x 2" x 48"

1.5" square drive screws

