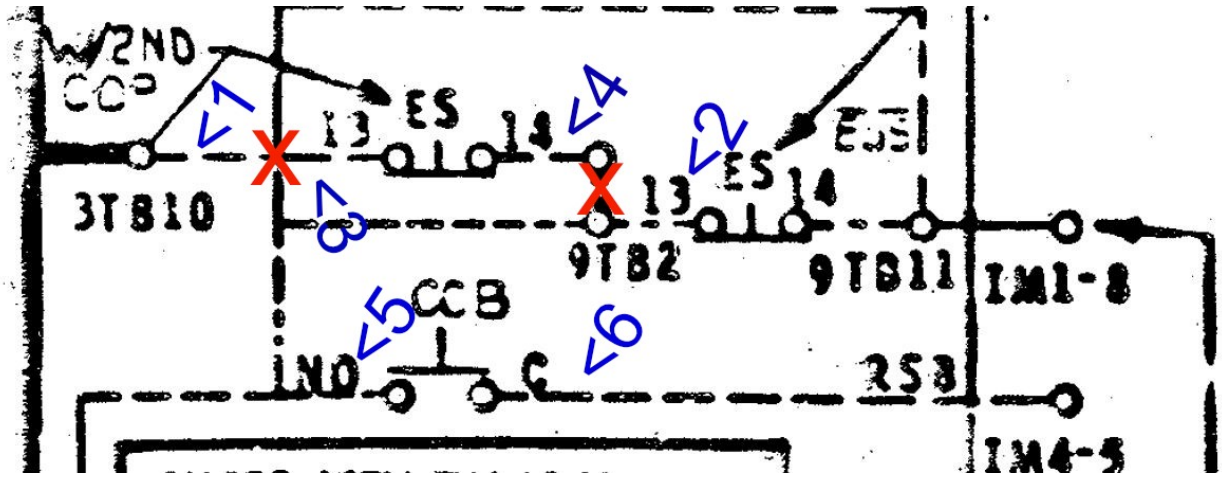
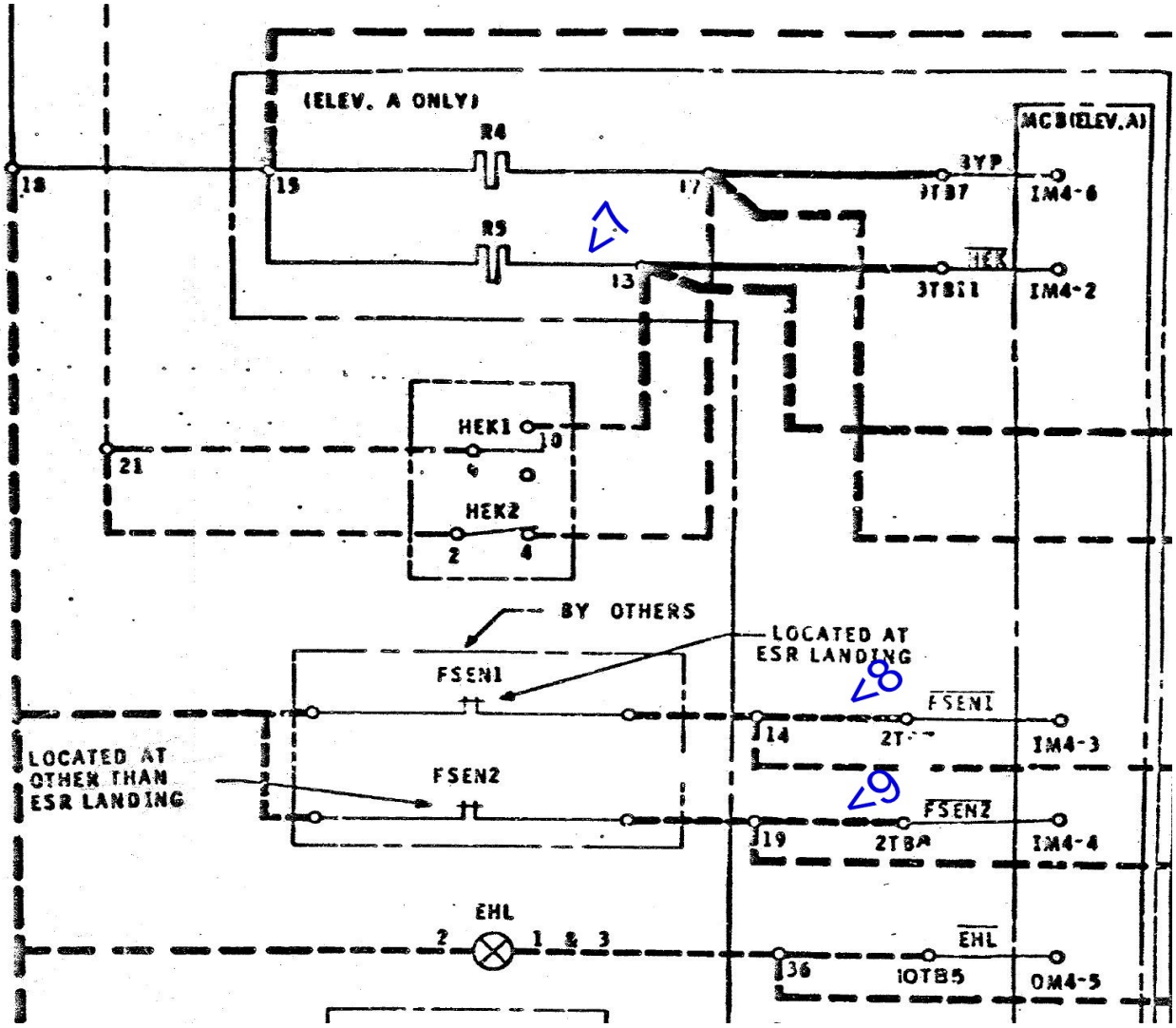
FS90 LRV4 EXAMPLE (GREEN 24VDC FS90 Board and BLACK N/C Smoke Board)
Each installation may be different. DUPLEX may require additional changes to PHI circuits

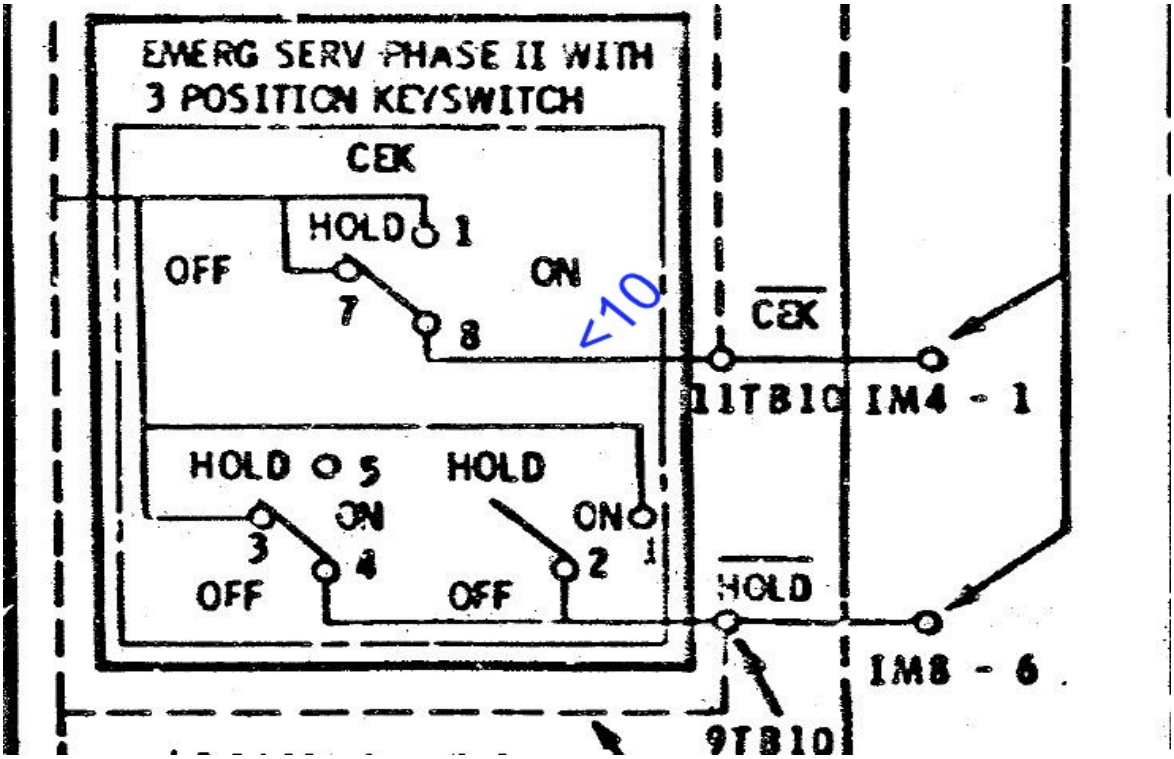
Notes:
Red X indicates cut in existing circuit.
Blue numbers on marked up drawings relate to the corresponding note numbers below

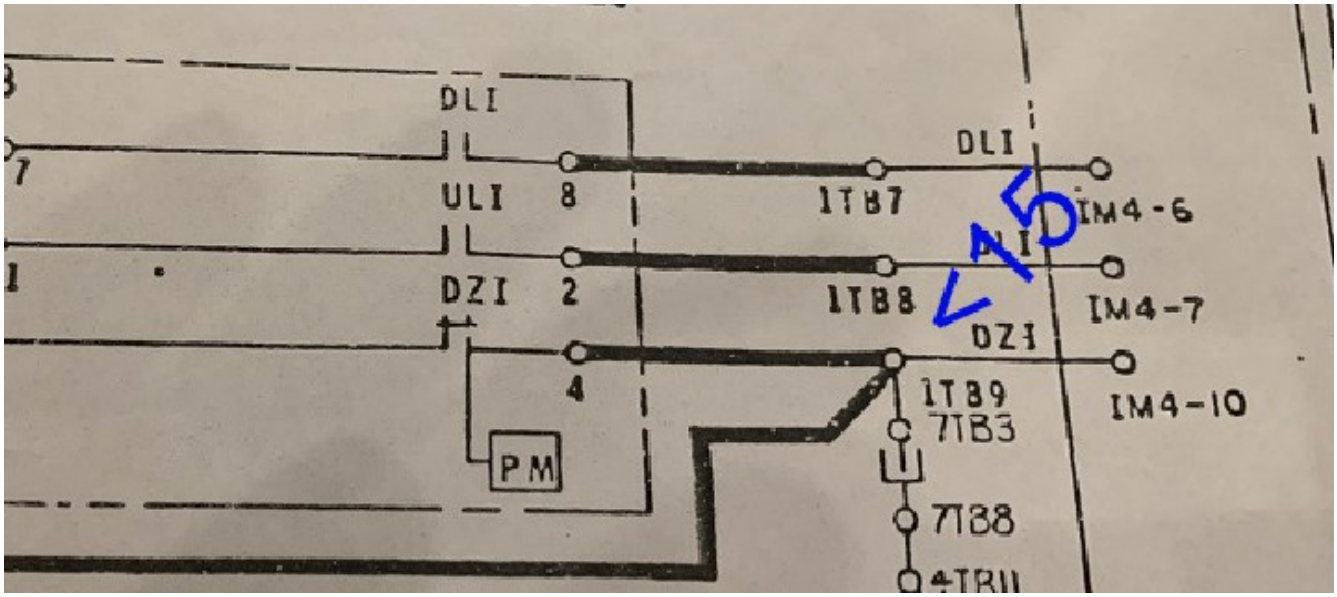
Step	Wire#	Instruction
1		Connect to one of the STP terminals on the FS90 Board
2		Connect to remaining STP terminal on the FS90 Board
3		Connect to one of the KEY STOP terminals on the FS90 Board
4		Connect to remaining KEY STOP terminal on the FS90 Board
5		Connect to one CC terminal on FS90 Board
6		Connect to remaining CC terminal on FS90 Board
7		Connect to HEK terminal on FS90 Board / Move jumper to KS side *See Sinking Drawing below
8		Connect to SMK1 terminal on NC FIRE MODULE
9		Connect to SMK2 terminal on NC FIRE MODULE
10		Connect toSMK3 terminal on NC FIRE MODULE
11		Connect PH1SND Terminal on NC Fire Module to KEYHAT on FS90 Board
12	Provided	Connect lead NC FIRE MODULE to PHIISIG terminal on the FS90 Board
13		Connect HL1 to 24dc- on FS90 Board, & SMKCOM, HEKCOM on FIRE MODULE
14		Connect 24VDC to 24DC+ on FS90 Board, and "+" terminal on NC FIRE Module
15		Connect to DZSIG on FS90 Board

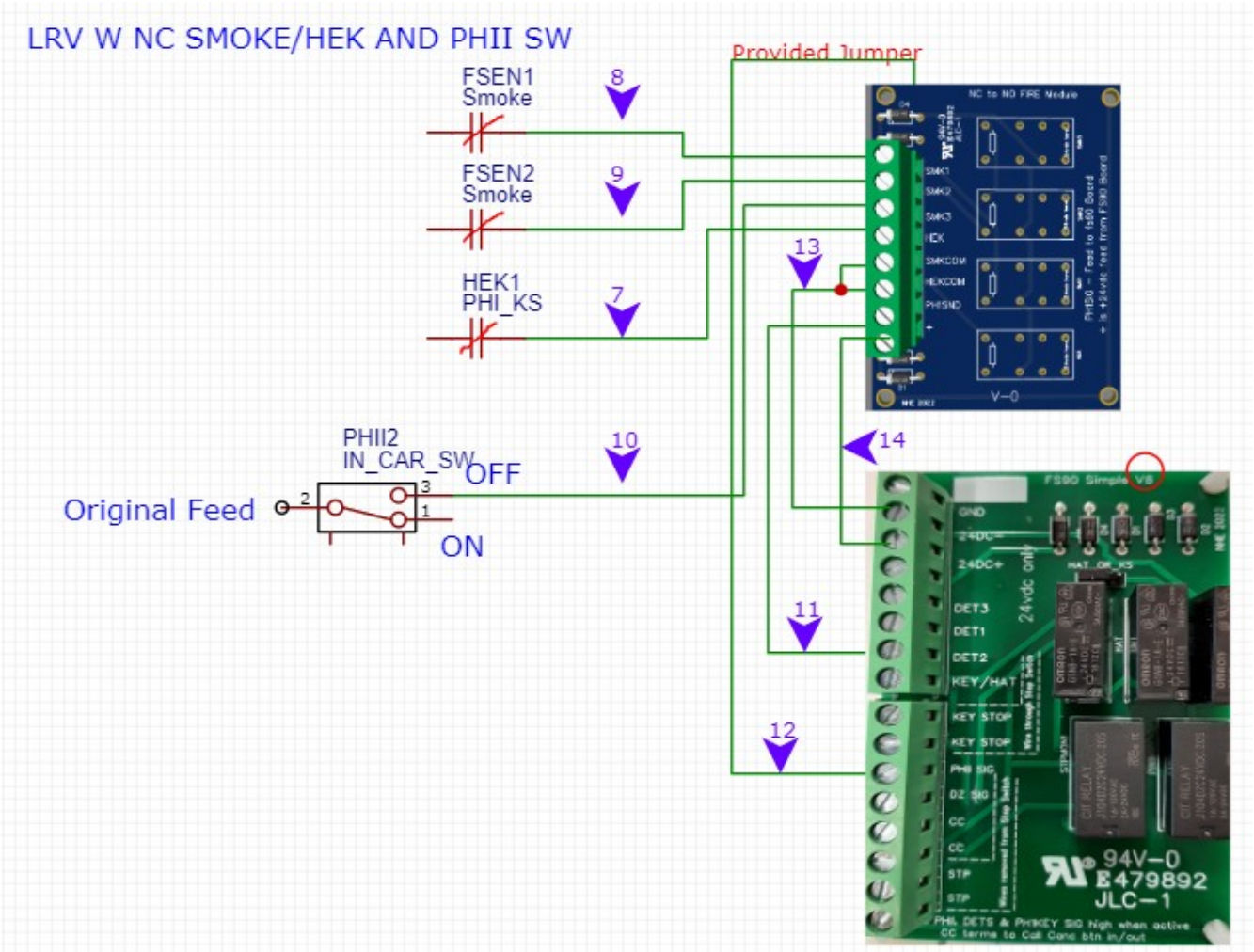
NOTE:
* Test PHII doors while holding the CC button before beginning. If doors do not operate properly you may have to break up the Car Call button feed instead of using the CC terminals to parallel the Call Cancel Button. In this case, you'd use the CC terminals to pull a relay and break a n/c contact that would normally feed the Car Calls. See below



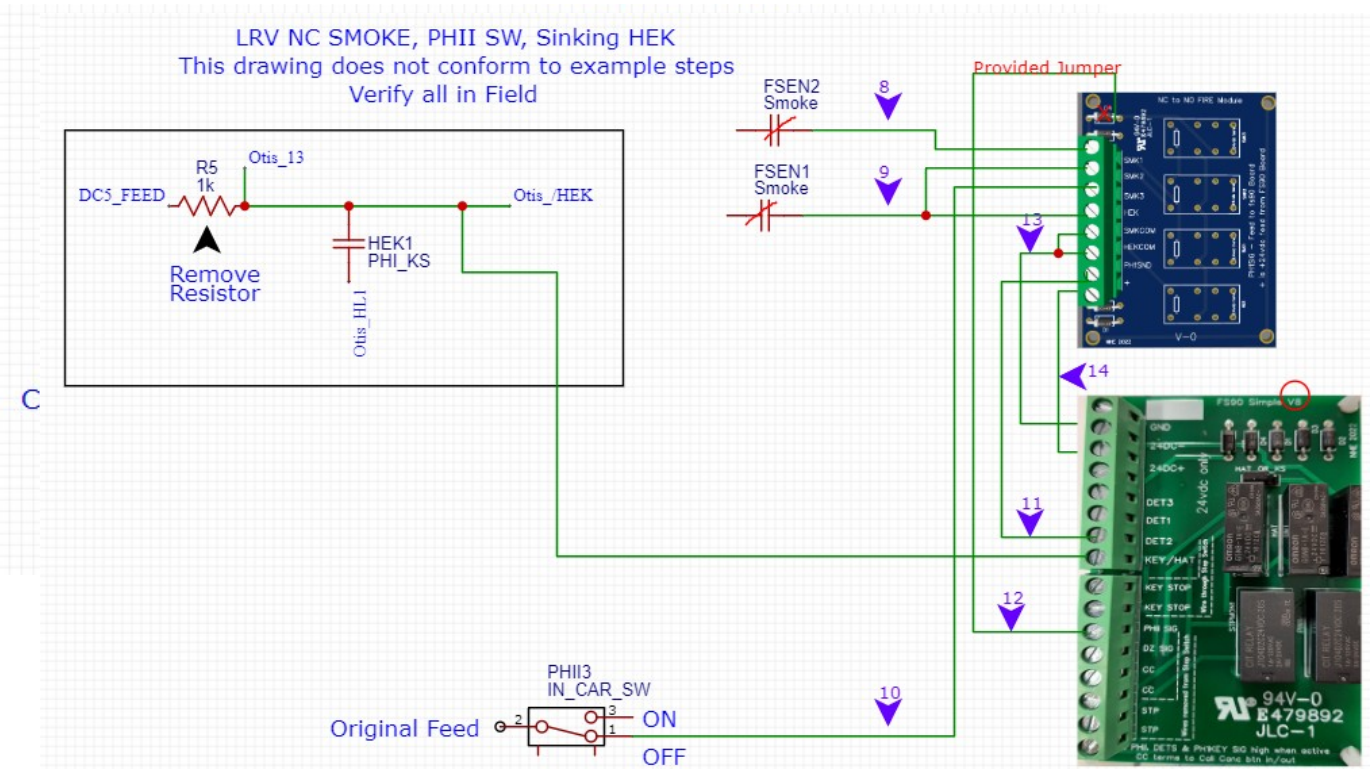

(ELEV. A ONLY)
MCB(ELEV.A)
R4
R5
18
15
17
13
3YP
3TB7
IM4-6
HEK
3TB11
IM4-2
HEK1
HEK2
10
21
2
4
BY OTHERS
LOCATED AT
ESR LANDING
FSEN1
FSEN1
14
IM4-3
LOCATED AT
OTHER THAN
ESR LANDING
FSEN2
FSEN2
19
2TB
IM4-4
EHL
2
1 & 3
EHL
36
IOTB5
OM4-5


EMERG SERV PHASE II WITH
3 POSITION KEYSWITCH
CEK
HOLD
1
OFF
ON
7
8
<10
CEK
11TB10
IM4 - 1
HOLD
5
HOLD
ON
ON
3
4
2
1
OFF
OFF
HOLD
IM8 - 6
9TB10


DLI
ULI
8
DZI
2
4
PM
DLI
1TB7
IM4-6
<15
1TB8
IM4-7
DZI
1TB9
7TB3
IM4-10
7TB8



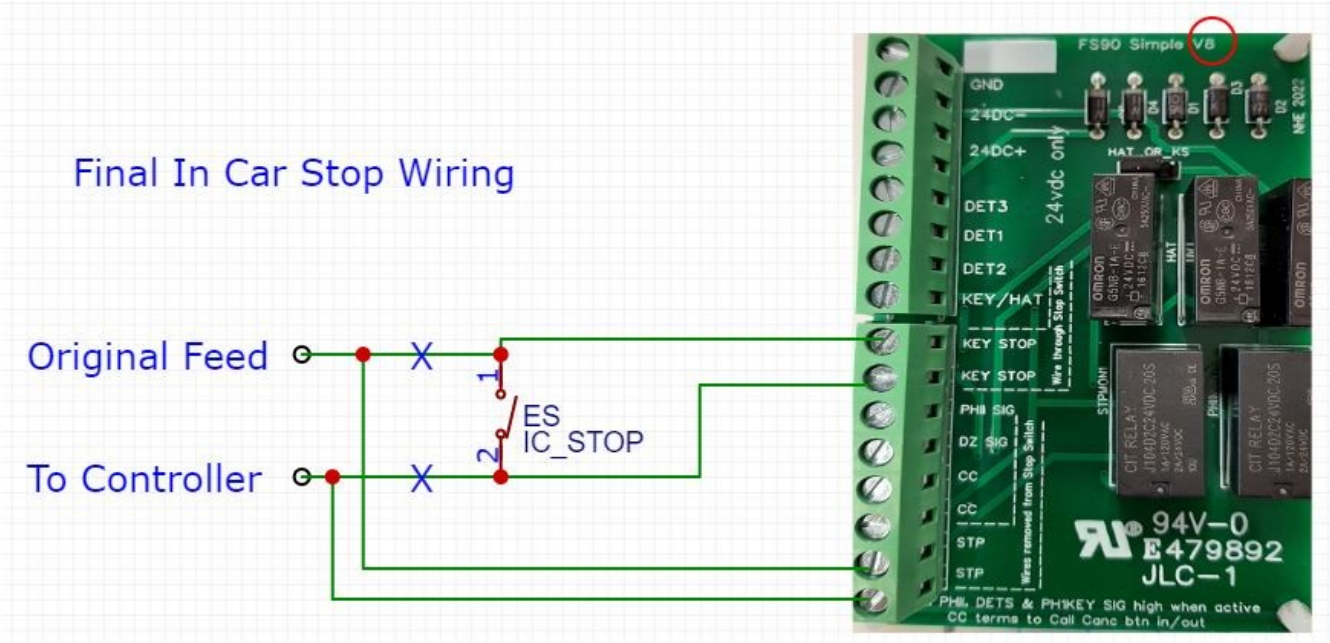
Example below: place HAT_OR_KS jumper in position furthest from the terminal blocks (Remove Resistor below is an option if controls don't respond to HEK after install)

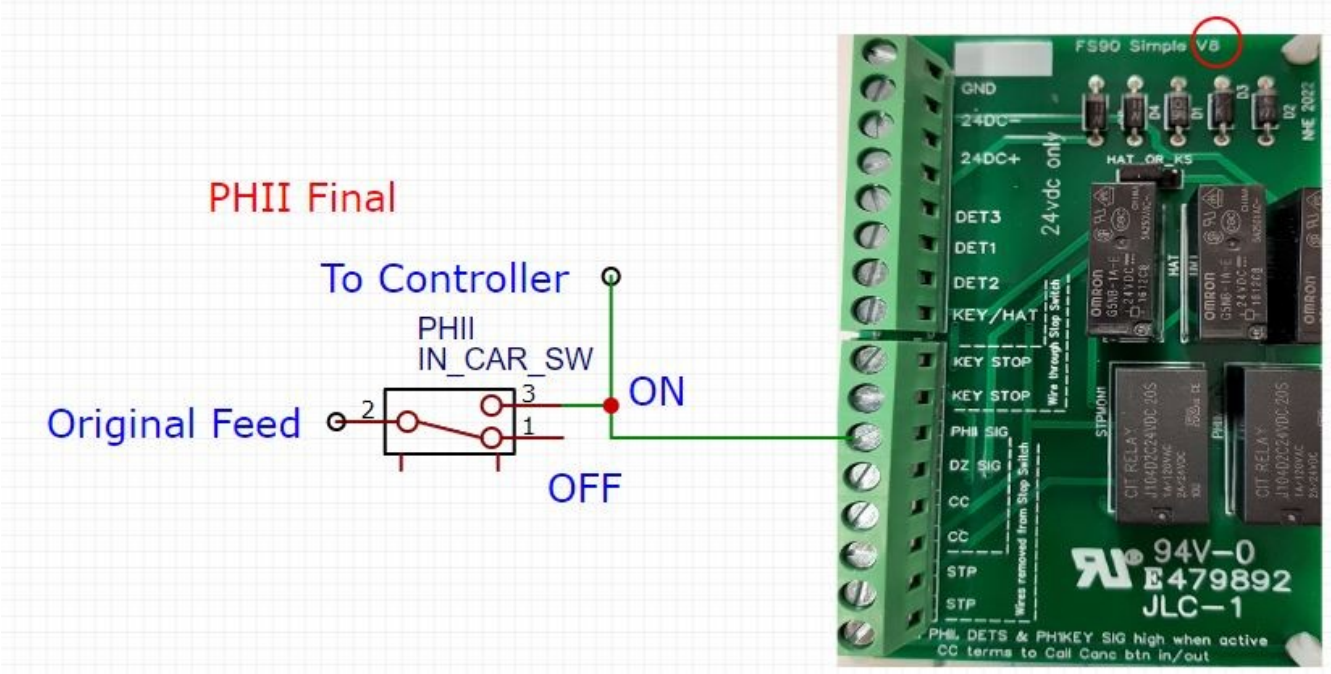


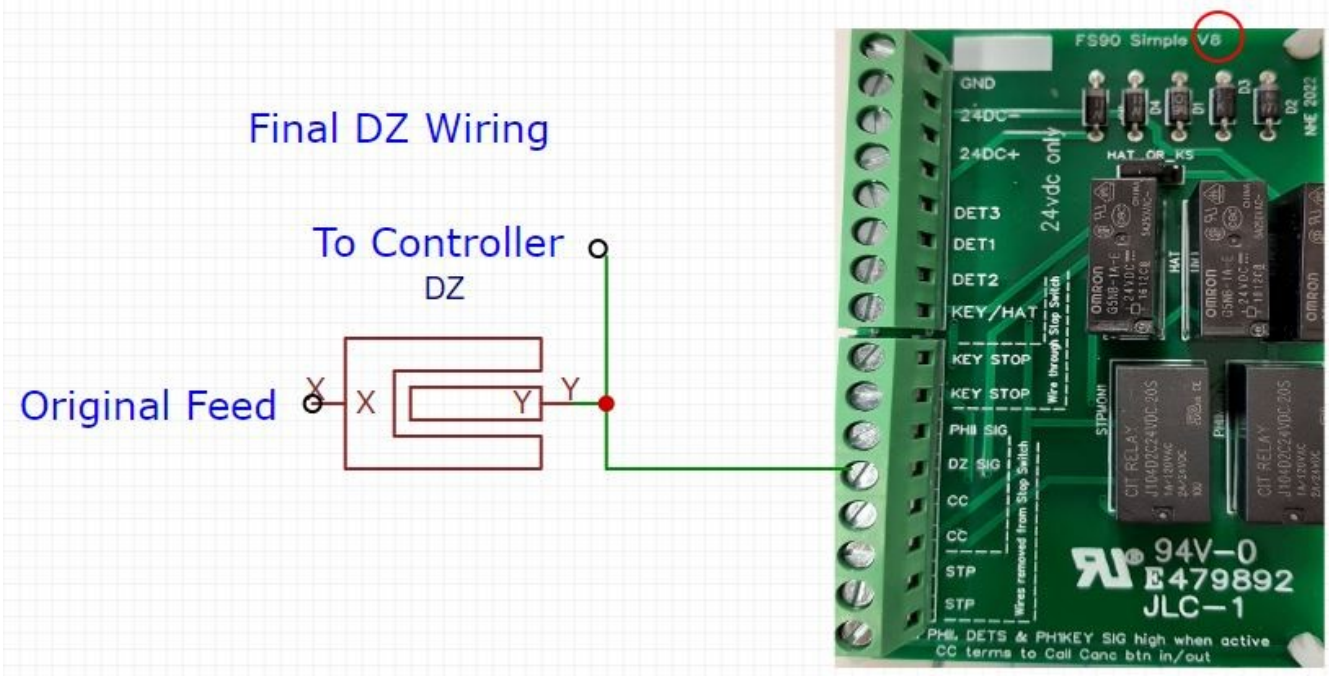
GENERIC WIRING EXAMPLES
FS90 Simple V8
Use correct connections for each individual system.

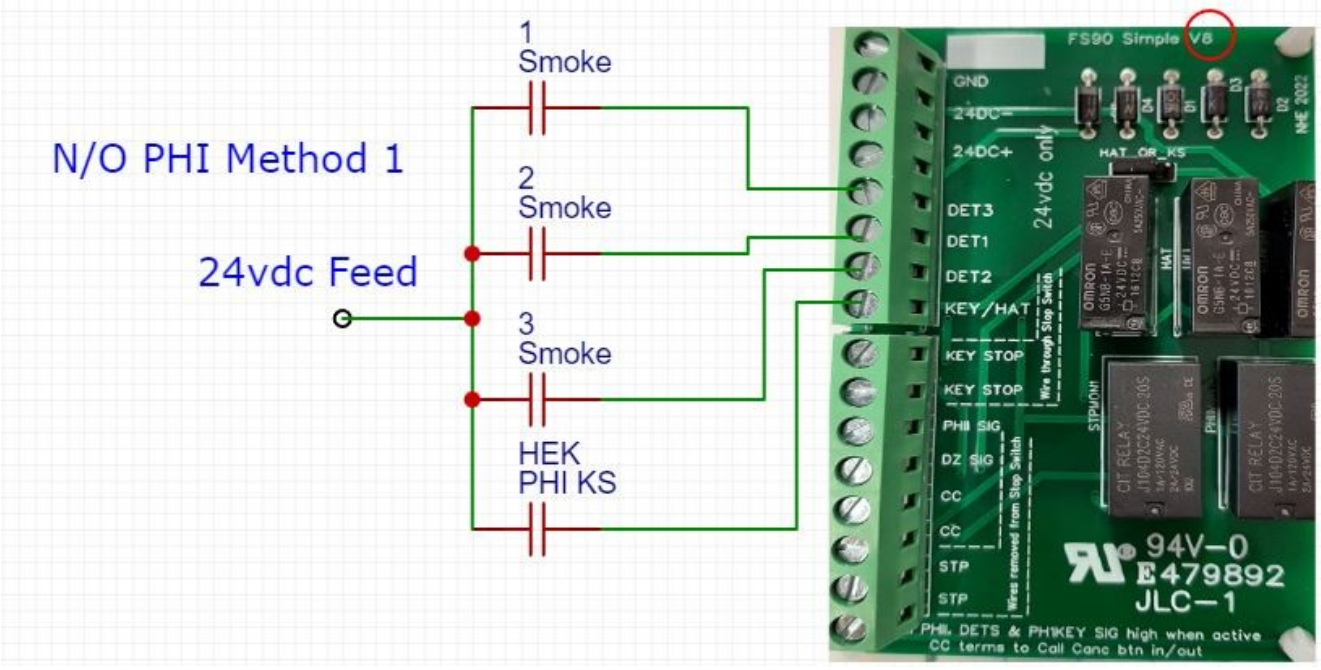
STP = terminals = N/O Relay contact
CC terminals = N/O Relay contact

All other connections are 24VDC referenced to 24vdc- terminal on FS90 Board






Final DZ Wiring
To Controller
DZ
Original Feed
X
X
Y
Y
FS90 Simple V8
GND
24DC-
24DC+
24vdc only
HAT_OR_KS
DET3
DET1
DET2
KEY/HAT
KEY STOP
KEY STOP
PHII SIG
DZ SIG
CC
CC
STP
STP
Wires removed from Stop Switch
Wire through Stop Switch
94V-0
E479892
JLC-1
PHII, DETS & PHIKEY SIG high when active
CC terms to Call Canc btn in/out


N/O PHI Method 1
24vdc Feed
1
Smoke
2
Smoke
3
Smoke
HEK
PHI KS
FS90 Simple V8
GND
24DC-
24DC+
24vdc only
HAT_OR_KS
DET3
DET1
DET2
KEY/HAT
KEY STOP
KEY STOP
PHII SIG
DZ SIG
CC
CC
STP
STP
Wires removed from Stop Switch
Wire through Stop Switch
94V-0
E479892
JLC-1
PHII, DETS & PHIKEY SIG high when active
CC terms to Call Canc btn in/out

PHI Method 2

24vdc Feed Active High

HAT_OR_KS
Jumper on HAT side

PHI_IC
BULB

GND

PHI Method 3

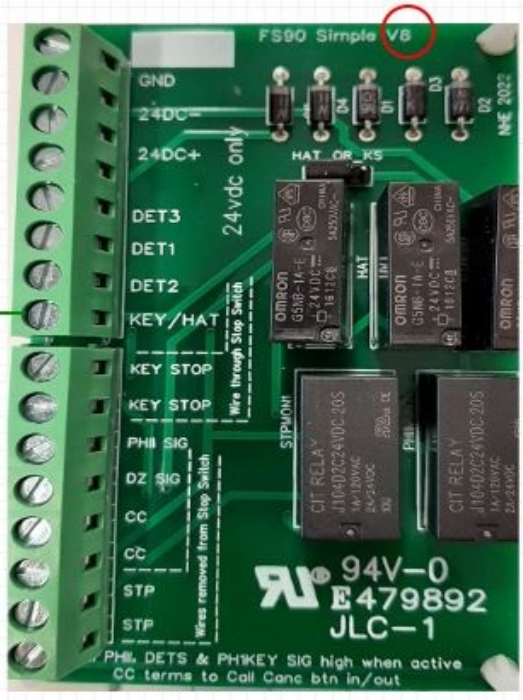
24vdc Feed

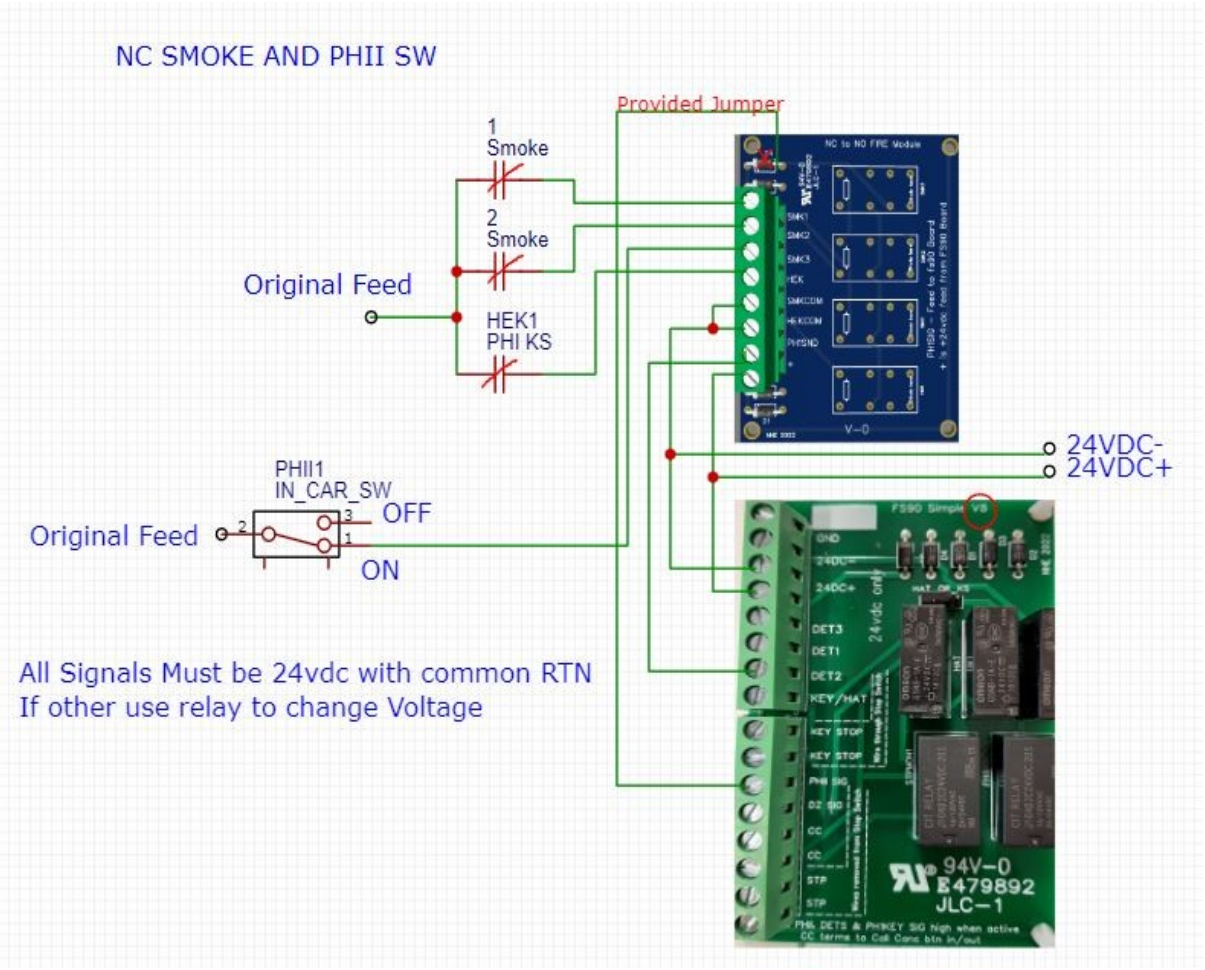
PHI_IC1
BULB

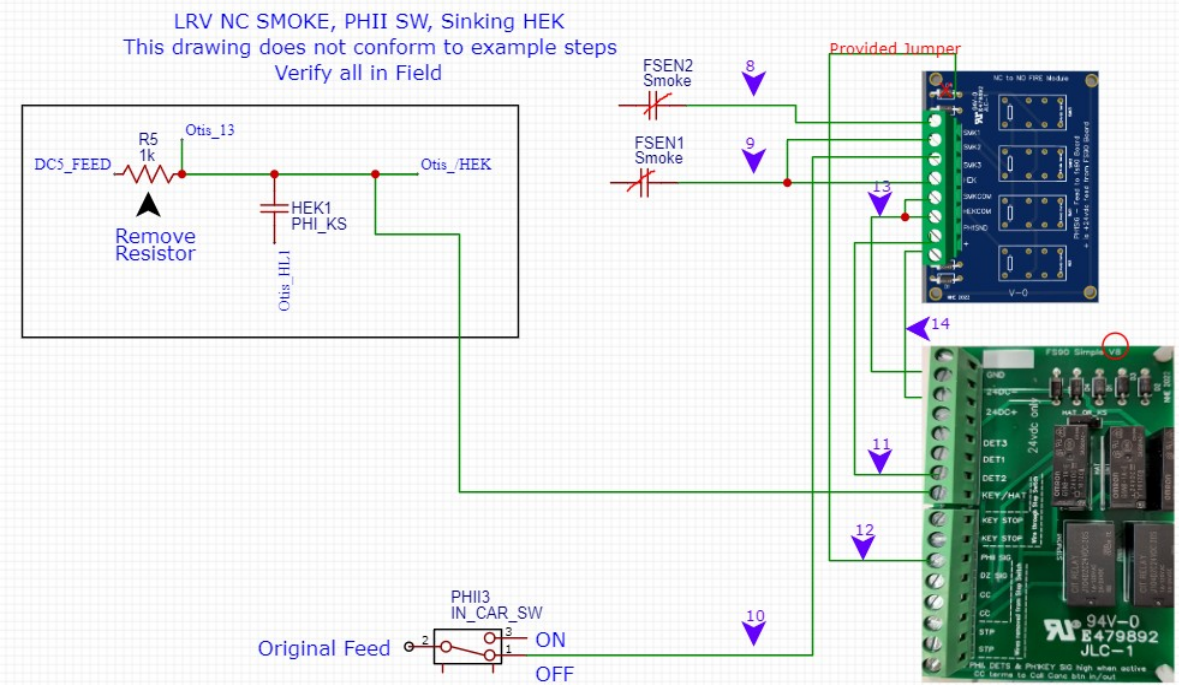
HAT_OR_KS
Jumper on KS side

CONTROLLER
Sinks

GND




NC SMOKE AND PHII SW
Provided Jumper
1
Smoke
2
Smoke
Original Feed
HEK1
PHI KS
24VDC-
24VDC+
PHII1
IN_CAR_SW
Original Feed
OFF
ON
All Signals Must be 24vdc with common RTN
If other use relay to change Voltage


LRV NC SMOKE, PHII SW, Sinking HEK
This drawing does not conform to example steps
Verify all in Field
DC5_FEED
R5
1k
Otis_13
Otis_/HEK
Remove
Resistor
HEK1
PHI_KS
Otis_HL1
Provided Jumper
FSEN2
Smoke
FSEN1
Smoke
8
9
13
14
11
12
10
PHII3
IN_CAR_SW
Original Feed
ON
OFF