



**\*\*Ground distribution:\*\***

- 0-Electric gnd
- 00- Electronic Gnd

- A-Dash - Lh console harness
- F-Front junction box harness
- FH-Front harness
- R-Rear junction box harness
- FR-Front to rear
- P-Parcel Rack
- RS-RJB to Rear Seat

**Dash harness**

- gnd-00A-16 → 23.1\_Indirect\_Lights:1 B
- gnd-00A1-16 → 7.1\_Mux\_Power:4 B
- gnd-00A-18 → 3.2\_Ign\_EngineStart:0 B
- gnd-00A-18 → 10.1\_Cluster:1 B
- gnd-00A-18 → 22.2\_Reading\_lamps:3 F
- gnd-00A-18 → 18.4\_Upper\_Defroster:1 B
- gnd-00A-18 → 29.1\_Entrance\_door:1 D
- gnd-00A-18 → 22.2\_Reading\_lamps:6 F
- gnd-00A-18 → 22.2\_Reading\_lamps:2 F
- gnd-00A-18 → 19.1\_Driver\_Its:1 D
- gnd-00A-18 → 22.2\_Reading\_lamps:5 F
- gnd-00A-18 → 18.3\_Parcel\_Rack\_4AC:2 B
- gnd-00A-18 → 12.1\_Brake:3 A
- gnd-00A-18 → 10.1\_Cluster:3 B
- gnd-00A-18 → 36.1\_WCL\_Ricon:2 A
- gnd-00A-18 → 40.1\_Inverters:0 B
- gnd-00A-18 → 26.1\_Front\_Lighting:1 A
- gnd-00A-18 → 6.2\_Network:4 C
- gnd-00A-18 → 26.1\_Front\_Lighting:1 E
- gnd-00A-18 → 3.1\_Horn:1 C

**Lh console harness**

- gnd-00A-18 → 14.1\_Engine\_Ecu:6 E
- gnd-00A-18 → 32.1\_Kneeling:0 E
- gnd-00A-18 → 14.1\_Engine\_Ecu:7 E
- gnd-00A-18 → 16.1\_ESP:0 A
- gnd-00A-18 → 12.1\_Brake:1 D
- gnd-00A-18 → 35.5\_PA\_system:2 E
- gnd-00A-18 → 33.1\_Luggage\_LockUnlock:3 B
- gnd-00A-18 → 32.1\_Kneeling:1 A
- gnd-00A-18 → 30.1\_Drivers\_Window:1 B
- gnd-00A-18 → 17.1\_Pre\_Heat:1 D

**Front harness**

- gnd-00FH-16 → 9.1\_Horn:4 C
- gnd-00FH-18 → 34.1\_wiper\_washer:2 E
- gnd-00FH-18 → 12.1\_Brake:1 C
- gnd-00FH-18 → 32.1\_Kneeling:1 C
- gnd-00FH1-12 → 18.1\_Defroster:2 B
- gnd-00FH2-10 → 7.1\_Mux\_Power:2 C
- gnd-00FH2-10 → 7.1\_Mux\_Power:2 C

**FJB harness**

- gnd-00F1-12 → 7.1\_Mux\_Power:1 C
- gnd-00F1-12 → 7.1\_Mux\_Power:1 D
- gnd-00F2-12 → 7.1\_Mux\_Power:1 E
- gnd-00F3-16 → 7.1\_Mux\_Power:1 B
- gnd-00F4-12 → 28.1\_Destination\_Signs\_and\_Farebox:0 C
- gnd-00F4-14 → 35.8\_INIT\_Subsystems:0 B
- gnd-00F5-18 → 6.2\_Network:4 B
- gnd-00F5-14 → 35.7\_Camera\_System:0 A

- gnd-00F-18 → 32.1\_Kneeling:1 C
- gnd-00F-18 → 14.1\_Engine\_Ecu:7 C
- gnd-00F-18 → 4.1\_Dist\_12V\_FJB:2 C
- gnd-00F-14 → 16.1\_ESP:1 B
- gnd-00F-18 → 12.1\_Brake:1 E
- gnd-00F-18 → 18.2\_HvacPass:0 B
- gnd-00F-18 → 4.1\_Dist\_12V\_FJB:4 A
- gnd-00F-18 → 4.1\_Dist\_12V\_FJB:4 B
- gnd-00F-18 → 9.1\_Horn:1 B
- gnd-00F-18 → 38.2\_AFSS\_AMEREX:1 C
- gnd-00F-18 → 12.1\_Brake:1 A
- gnd-00F-18 → 17.1\_Pre\_Heat:0 C

**RJB harness**

- gnd-00R1-18 → 12.1\_Brake:1 B
- gnd-00R1-18 → 6.2\_Network:0 B
- gnd-00R1-14 → 17.1\_Pre\_Heat:3 E
- gnd-00R1-14 → 15.1\_Transmission:0 A
- gnd-00R1-18 → 14.3\_Tacho\_Air\_Coolant:1 C
- gnd-00R1-18 → 3.1\_Main\_Dist:1 A
- gnd-00R2-10 → 7.1\_Mux\_Power:2 E
- gnd-00R2-12 → 7.1\_Mux\_Power:2 D
- gnd-00R3-12 → 7.1\_Mux\_Power:4 C
- gnd-00R3-12 → 7.1\_Mux\_Power:4 D

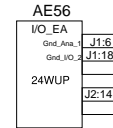
- gnd-00R4-12 → 7.1\_Mux\_Power:4 D
- gnd-00R4-12 → 7.1\_Mux\_Power:4 E
- gnd-00R4-16 → 7.1\_Mux\_Power:3 C
- gnd-00R4-18 → 33.2\_LuggageLockSw:2 B
- gnd-00R5-14 → 14.2\_Urea\_OBD13:1 B
- gnd-00R5-12 → 14.1\_Engine\_Ecu:3 C
- gnd-00R5-14 → 1.1\_batteries:0 B

**REAR SEAT**

- gnd-00VA-2 → 1.1\_batteries:0 C
- gnd-00-170 → 1.1\_batteries:2 B
- gnd-00P-12 → 18.3\_Parcel\_Rack\_4AC:3 D
- gnd-00P-12 → 18.3\_Parcel\_Rack\_4AC:3 E
- gnd-00P-12 → 18.3\_Parcel\_Rack\_4AC:3 C
- gnd-00P-12 → 18.3\_Parcel\_Rack\_4AC:3 C

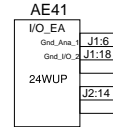
**Electronic ground distribution**

**Dash**

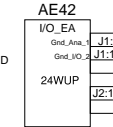


- gnd-A56RJ1.6-18 → 18.2\_HvacPass:2 A

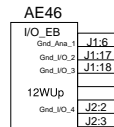
**FJB**



- gnd-A41RJ1.18-14 → 43.2\_Auxiliary\_Batteries:3 D

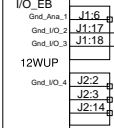


- gnd-A42RJ1.18-18 → 32.1\_Kneeling:4 C
- gnd-A42RJ2.14-18 → 12.1\_Brake:1 E
- gnd-A42RJ2.14-18 → 32.1\_Kneeling:1 C



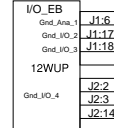
- gnd-A46RJ1.17-14 → 26.1\_Front\_Lighting:3 C
- gnd-A46RJ1.18-18 → 26.1\_Front\_Lighting:4 D
- gnd-A46RJ2.2-18 → 26.1\_Front\_Lighting:0 D

**AE45**



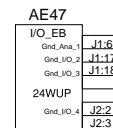
- gnd-A45RJ1.17-18 → 31.1\_Mirror\_FlatConvex:2 B
- gnd-A45RJ1.18-18 → 37.2\_SteeringCtrl:2 B

**AE43**

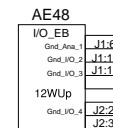


- gnd-A43RJ1.18-18 → 39.1\_TPMS:2 C

**RH console JB**

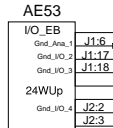


- gnd-A47RJ1.6-18 → 18.1\_Defroster:2 E
- gnd-A47RJ1.17-18 → 18.1\_Defroster:3 C
- gnd-A47RJ1.18-18 → 29.1\_Entrance\_door:1 C
- gnd-A47RJ2.2-18 → 34.1\_wiper\_washer:3 C
- gnd-A47RJ2.2-18 → 29.1\_Entrance\_door:3 B



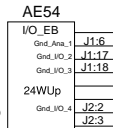
- gnd-A48RJ1.18-18 → 12.1\_Brake:3 E
- gnd-A48RJ2.2-14 → 26.1\_Front\_Lighting:4 B
- gnd-A48RJ2.2-14 → 26.1\_Front\_Lighting:3 A

**Parcel Rack JB**



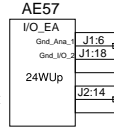
- gnd-A53RJ1.17-18 → 18.3\_Parcel\_Rack\_4AC:2 C
- gnd-A53RJ1.18-16 → 20.1\_Emeroy\_Light:5 B
- gnd-A53RJ2.3-14 → 18.5\_Parcel\_Rack\_2AC:2 D
- gnd-A53RJ2.3-14 → 22.2\_Reading\_lamps:8 D

**Evaporator**



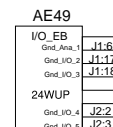
- gnd-A54RJ1.6-18 → 18.2\_HvacPass:1 D
- gnd-A54RJ1.17-16 → 18.2\_HvacPass:0 C
- gnd-A54RJ1.18-14 → 18.3\_HvacPass:3 B
- gnd-A54RJ2.2-16 → 18.3\_HvacPass:4 B
- gnd-A54RJ2.2-16 → 18.5\_Parcel\_Rack\_2AC:4 E
- gnd-A54RJ2.3-16 → 18.2\_HvacPass:5 D
- gnd-A54RJ2.3-16 → 18.2\_HvacPass:5 C

**WCL**

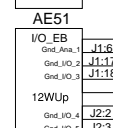


- gnd-A57RJ1.18-18 → 36.1\_WCL\_Ricon:5 B
- gnd-A57RJ1.18-18 → 36.1\_WCL\_Ricon:3 C

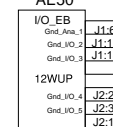
**RJB**



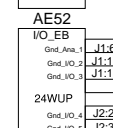
- gnd-A49RJ1.6-18 → 40.1\_Inverters:1 C
- gnd-A49RJ1.17-18 → 32.1\_Kneeling:3 E
- gnd-A49RJ1.18-18 → 37.1\_VLink\_Adry\_OSep:3 E
- gnd-A49RJ2.2-18 → 13.1\_FanDriveElectric:1 D
- gnd-A49RJ2.3-16 → 36.1\_WCL\_Ricon:7 A



- gnd-A51RJ1.17-14 → 26.4\_Front\_Trailer:3 E
- gnd-A51RJ1.17-18 → 26.2\_Rear\_lights:1 D
- gnd-A51RJ1.18-16 → 36.1\_WCL\_Ricon:6 A
- gnd-A51RJ2.14-18 → 43.2\_Auxiliary\_Batteries:1 B



- gnd-A50RJ1.6-18 → 12.2\_Brake\_Wear:3 D
- gnd-A50RJ1.17-18 → 26.2\_Rear\_lights:2 E
- gnd-A50RJ1.18-18 → 26.2\_Rear\_lights:2 B
- gnd-A50RJ2.2-16 → 5.2\_Pwr\_Dist\_P Rack:0 B
- gnd-A50RJ2.2-16 → 26.3\_Backup\_Warnings:3 B
- gnd-A50RJ2.3-18 → 37.1\_VLink\_Adry\_OSep:2 C



- gnd-A52RJ1.17-16 → 1.1\_batteries:1 D
- gnd-A52RJ1.18-18 → 11.1\_Lavatory:2 B
- gnd-A52RJ1.18-18 → 25.1\_Luggages\_Cmpt:0 B
- gnd-A52RJ1.18-18 → 25.1\_Luggages\_Cmpt:2 A
- gnd-A52RJ2.2-18 → 14.1\_Engine\_Ecu:5 A
- gnd-A52RJ2.3-18 → 3.2\_Ign\_EngineStart:1 C

Electronic GND FJB

Electronic GND RJB

Rr\_Seat Electronic GND

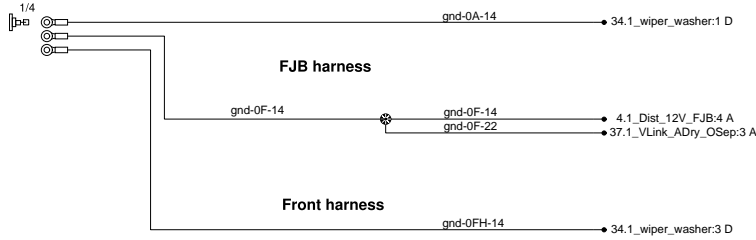
**\*\*Ground distribution:\*\***

0-Electric gnd  
00- Electronic Gnd

A-Dash - Lh console harness  
F-Front junction box harness  
FH-Front harness  
R-Rear junction box harness  
FR-Front to rear

# Chassis ground distribution

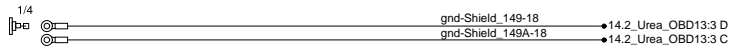
## Front GND stud



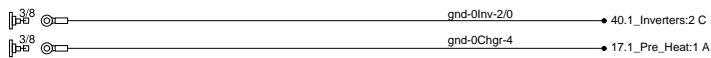
## Evaporator cmpt. stud



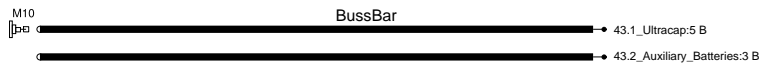
## Urea cmpt. stud



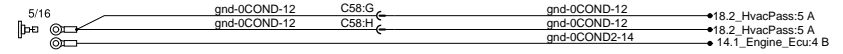
## Parcel rack stud #1



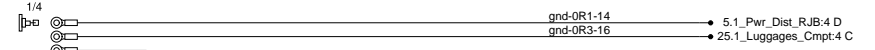
## Luggage chassis stud



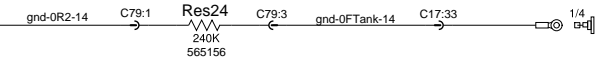
## Condensor cmpt. stud



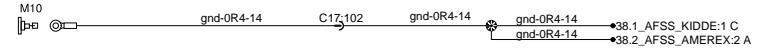
## RJB stud



## Fuel tank ground stud



## RJB Stud AFSS GND



## Front radiator stud



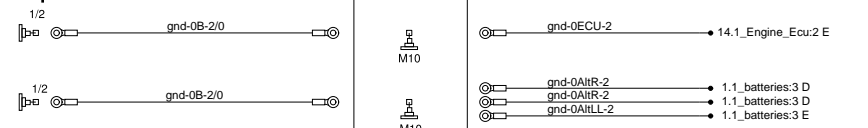
## Radiator door stud

## Rear radiator stud

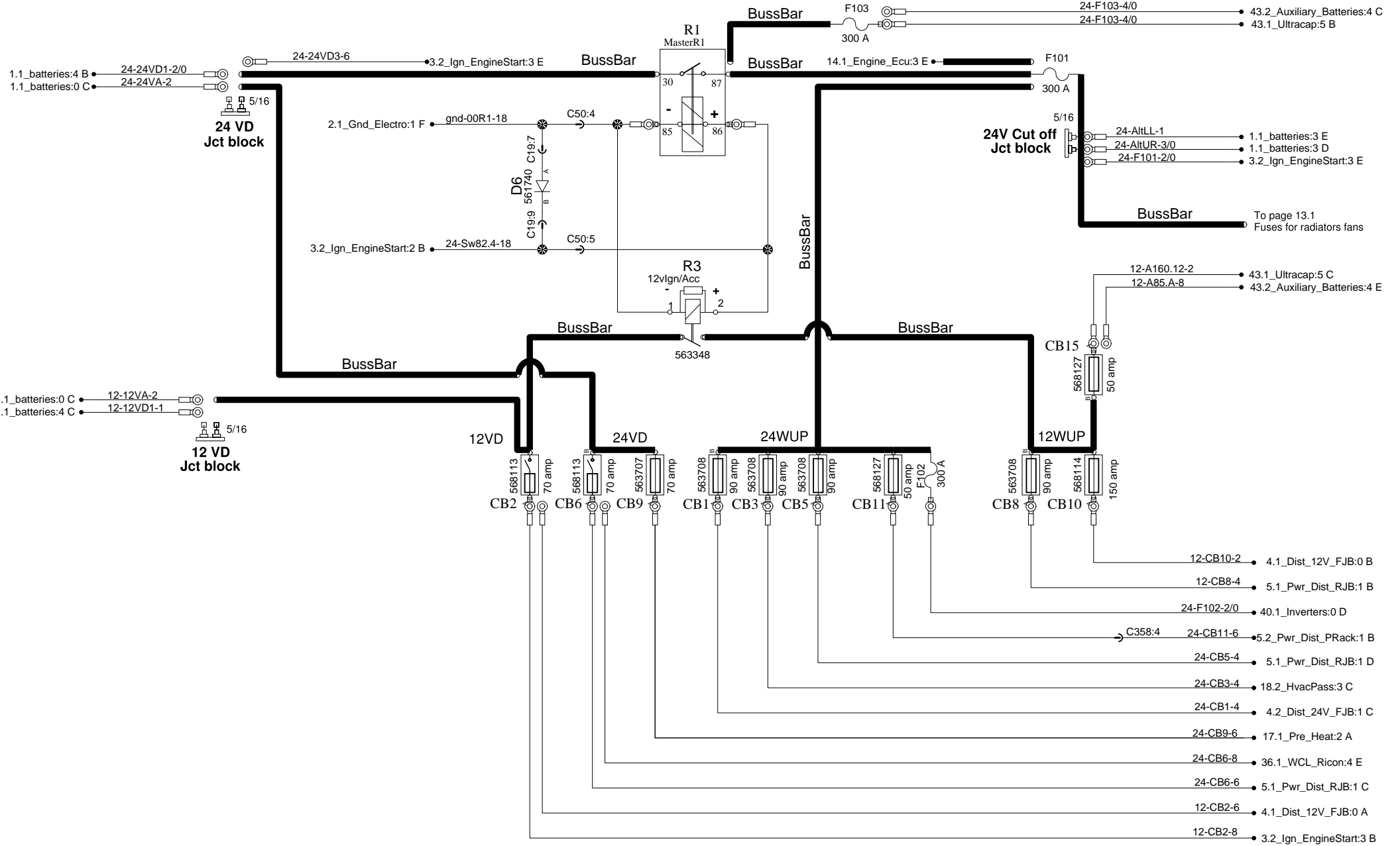


## Engine studs

## Engine cmpt. studs

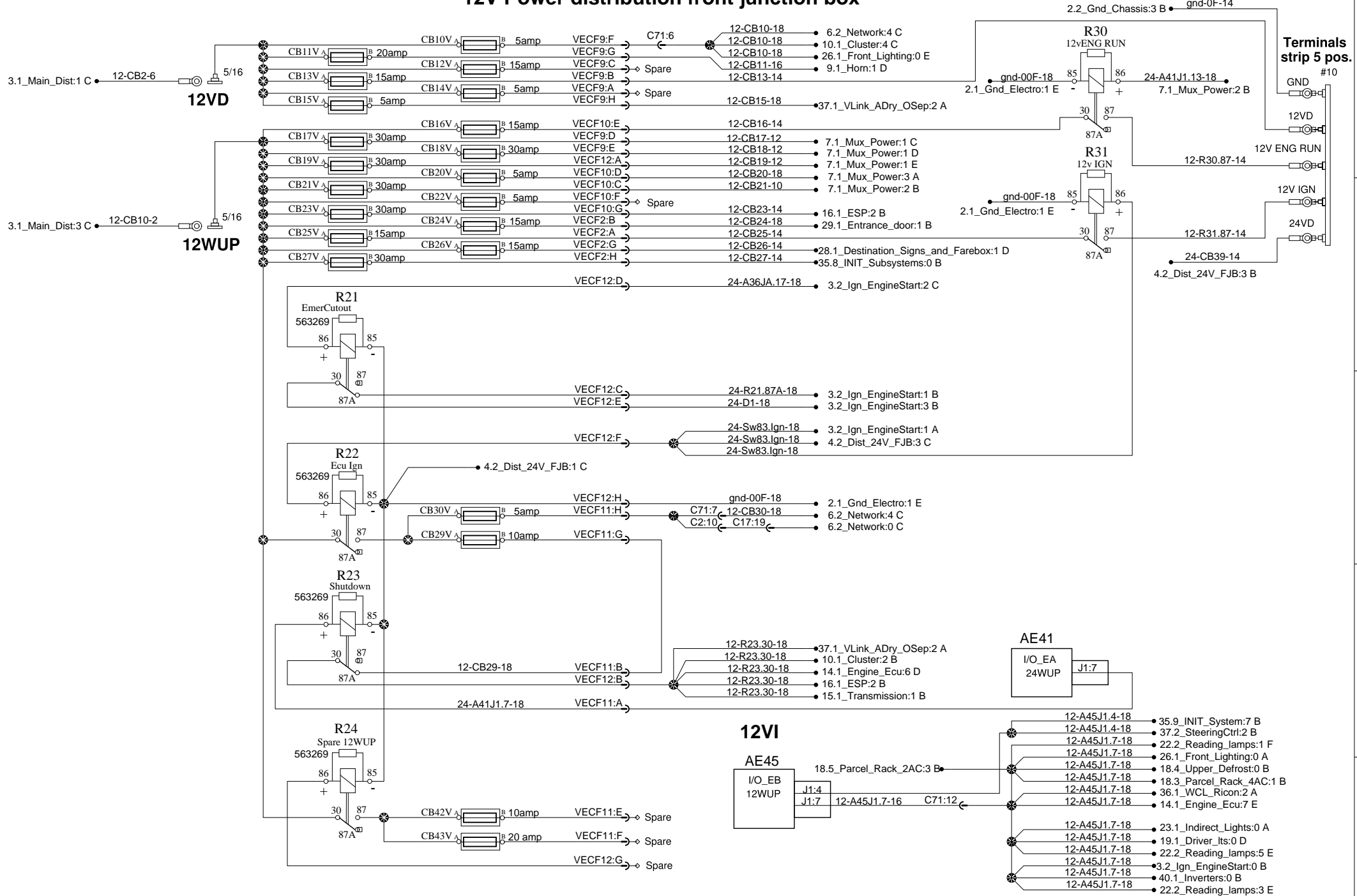


# Main distribution batteries & ignition

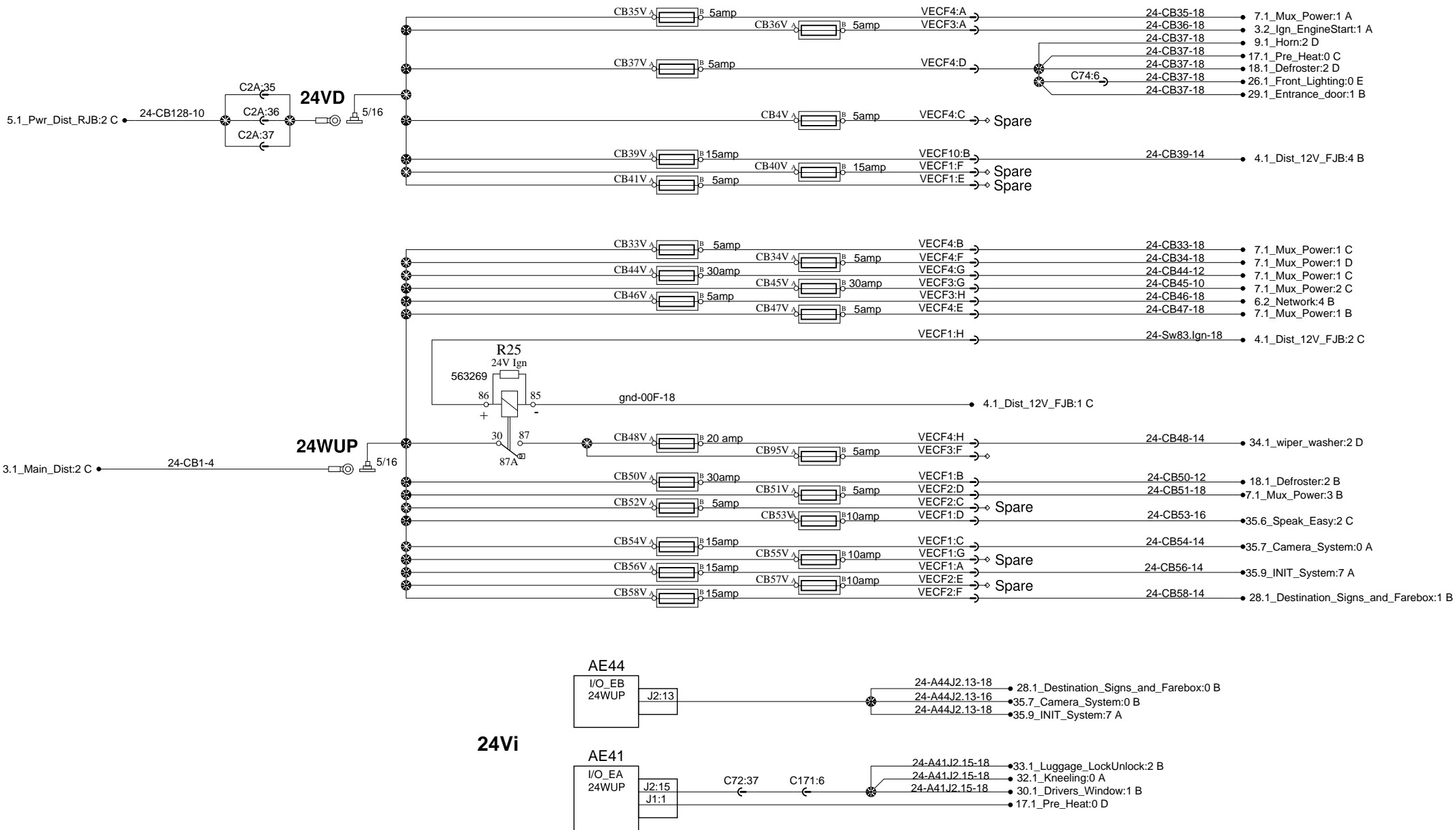




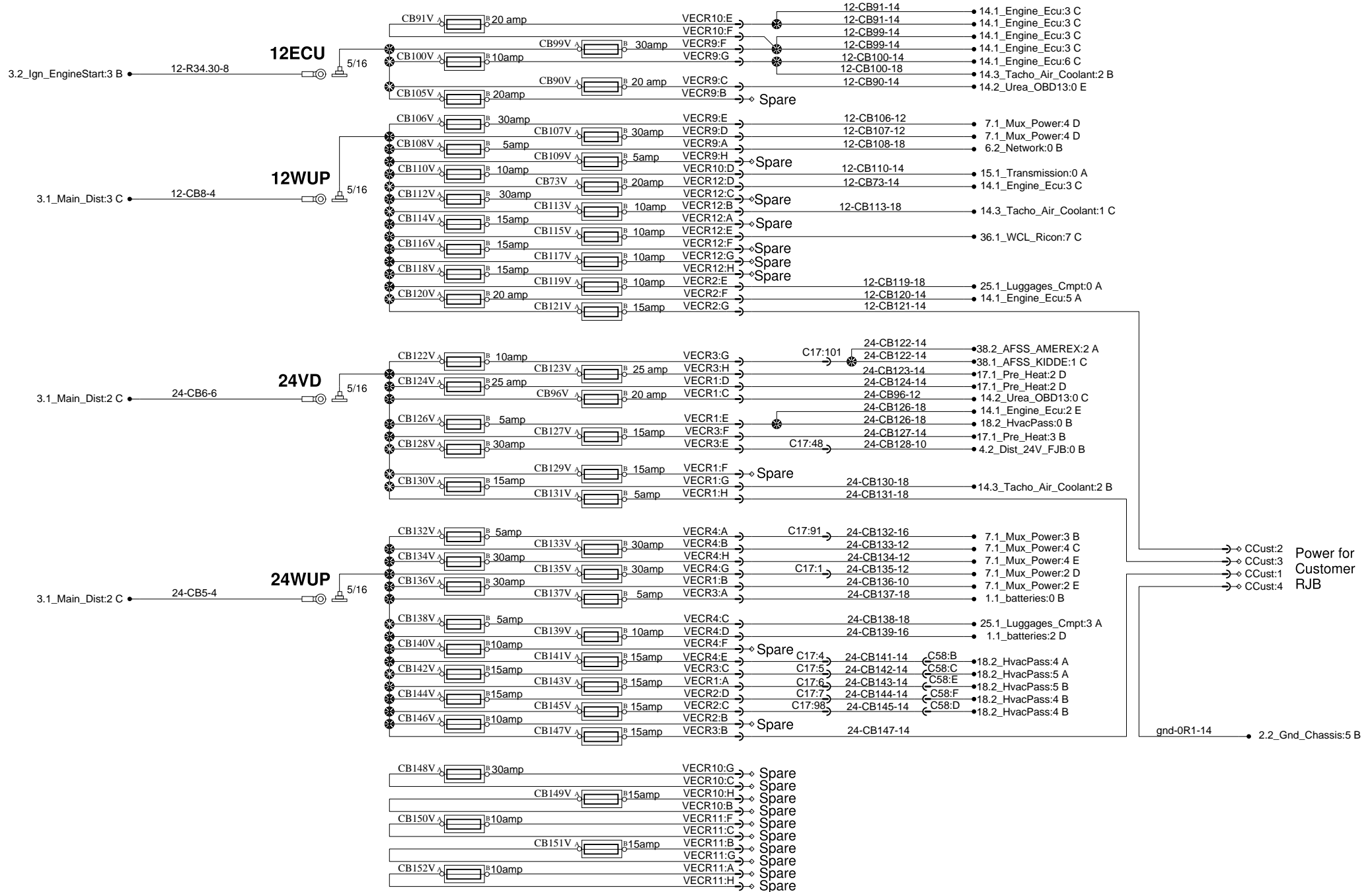
# 12V Power distribution front junction box



# 24V Power distribution front junction box

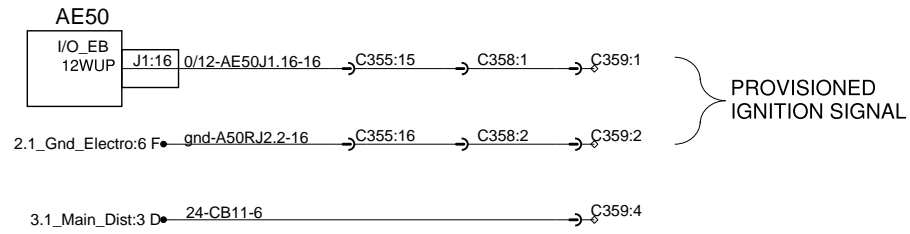


# Power distribution rear junction box

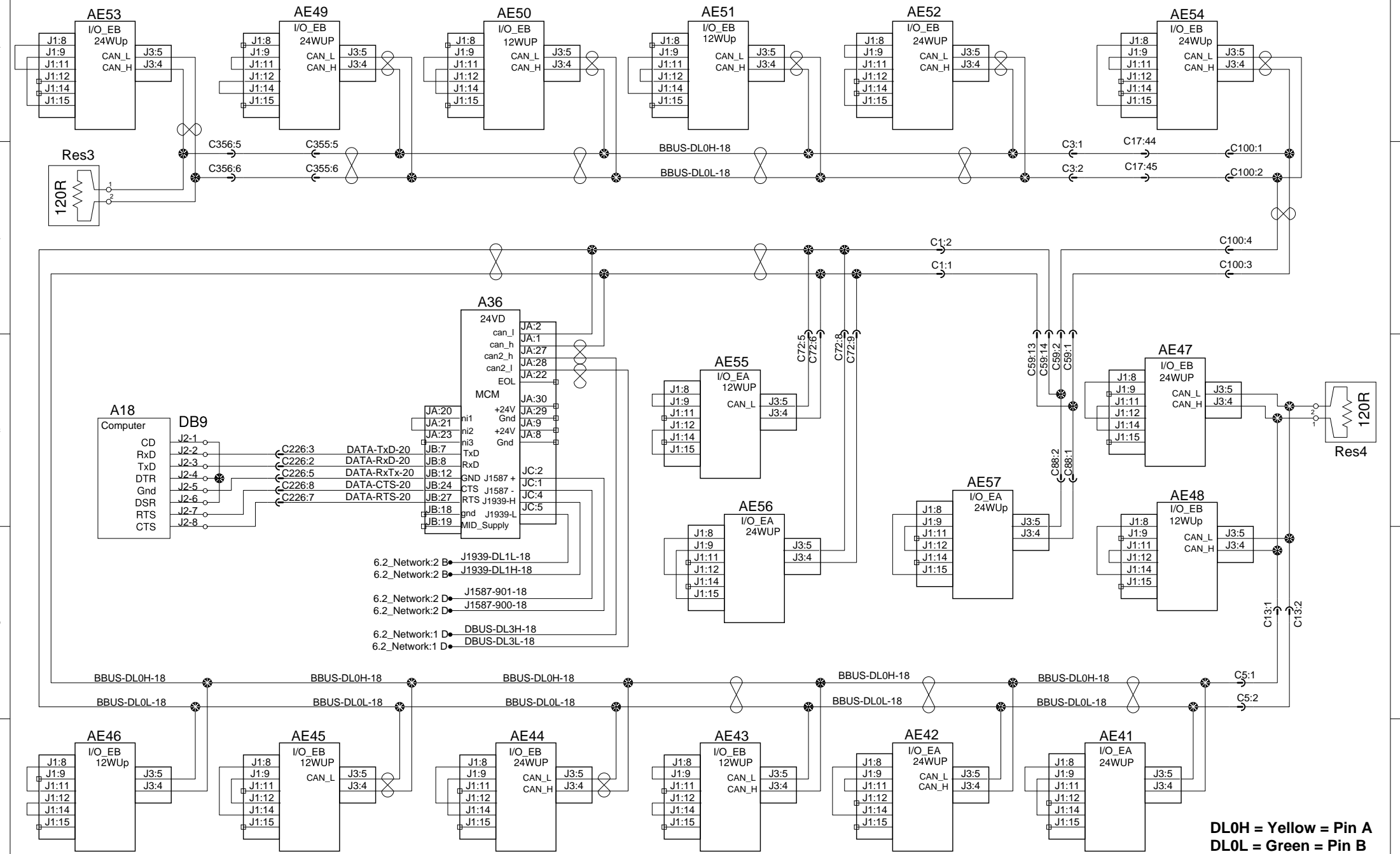




# Parcel Rack Power Distribution

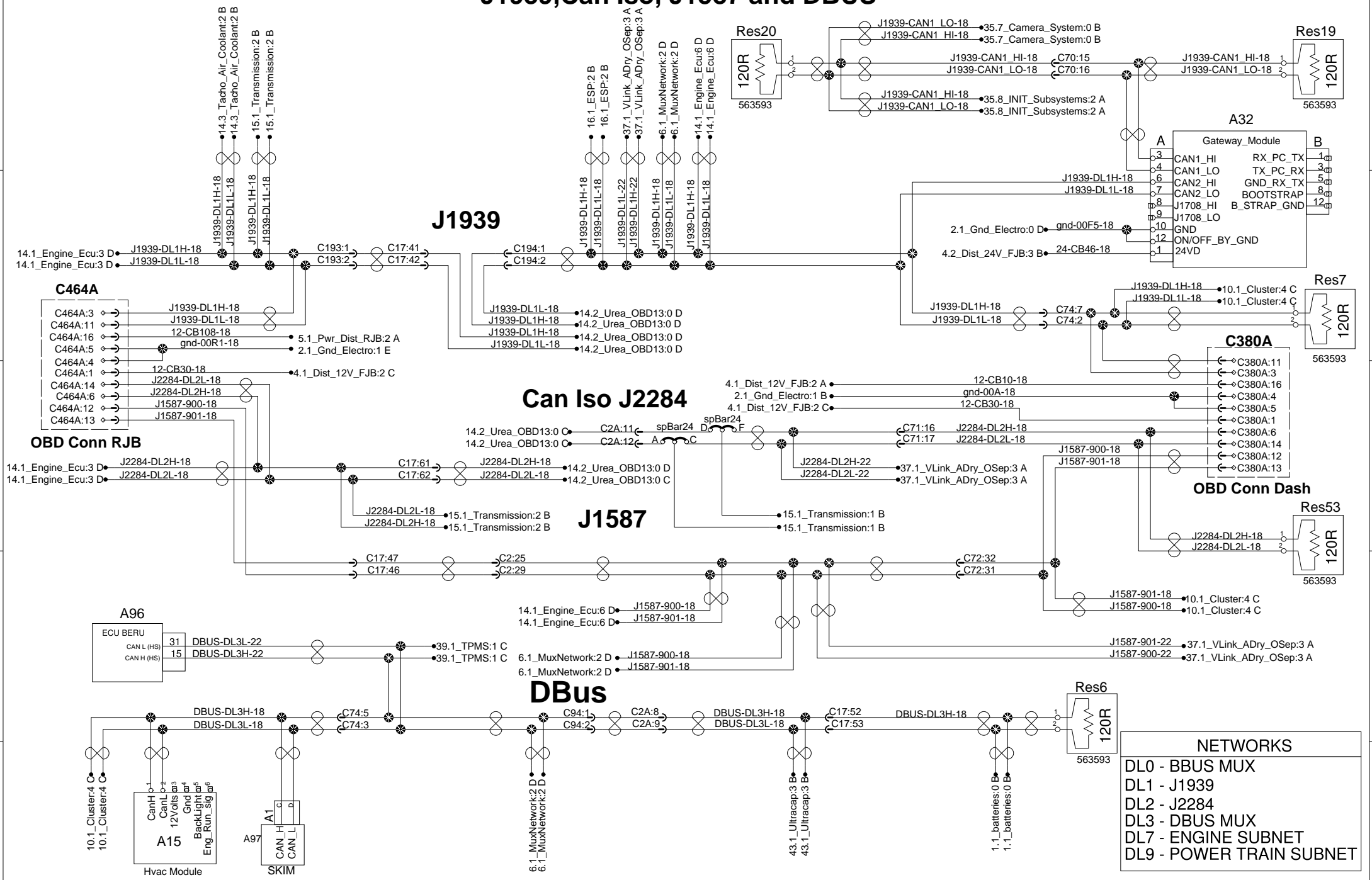


# Multiplex Can, J1587 Network and Addressing



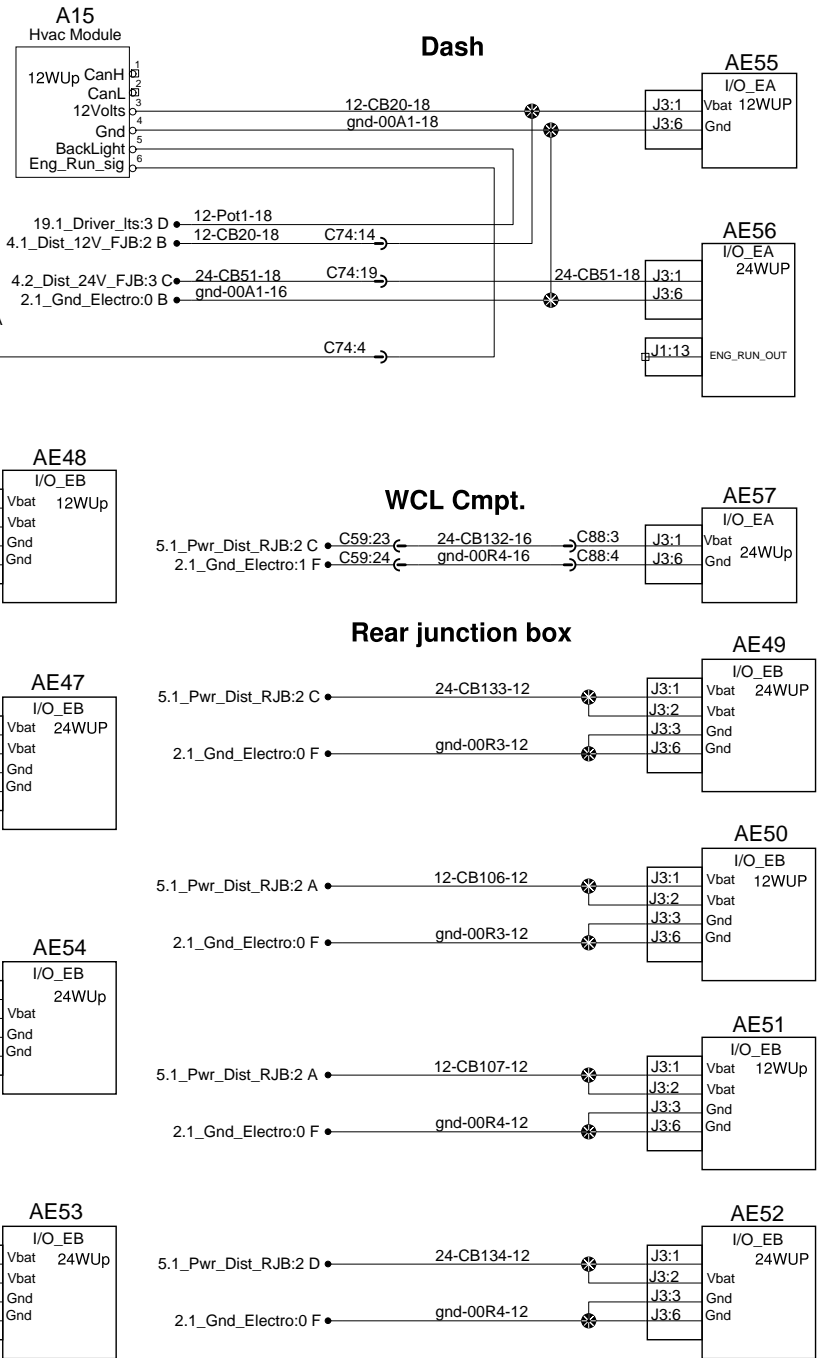
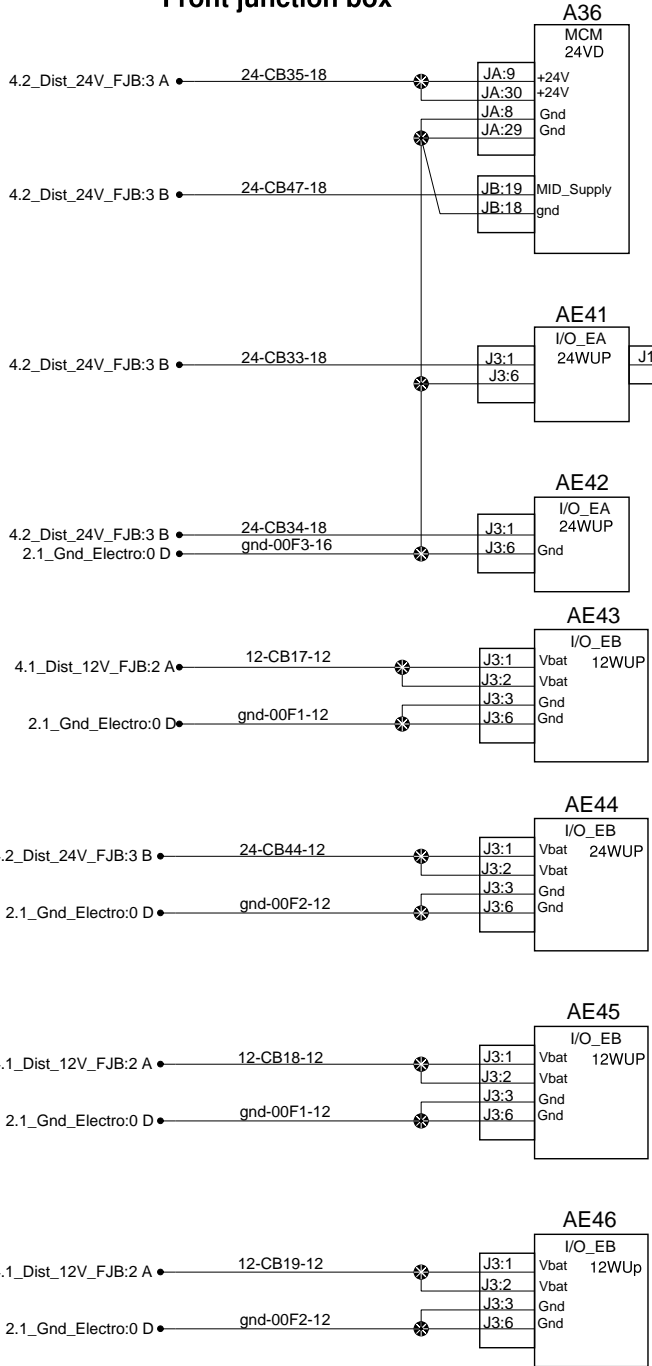
DL0H = Yellow = Pin A  
DL0L = Green = Pin B

# J1939, Can Iso, J1587 and DBUS

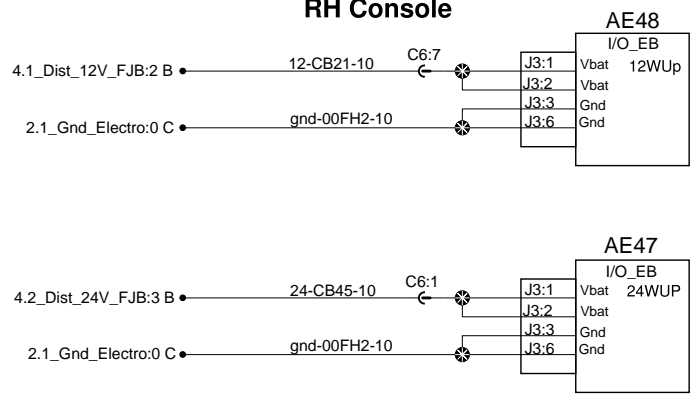


### Front junction box

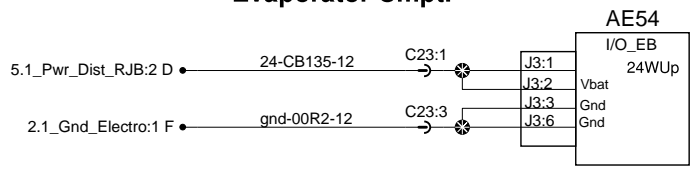
### Multiplex power supply distribution



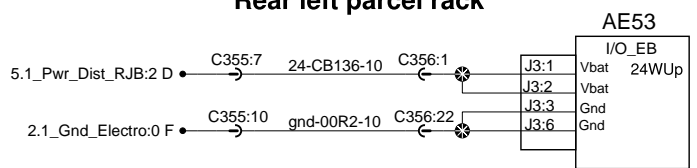
### RH Console



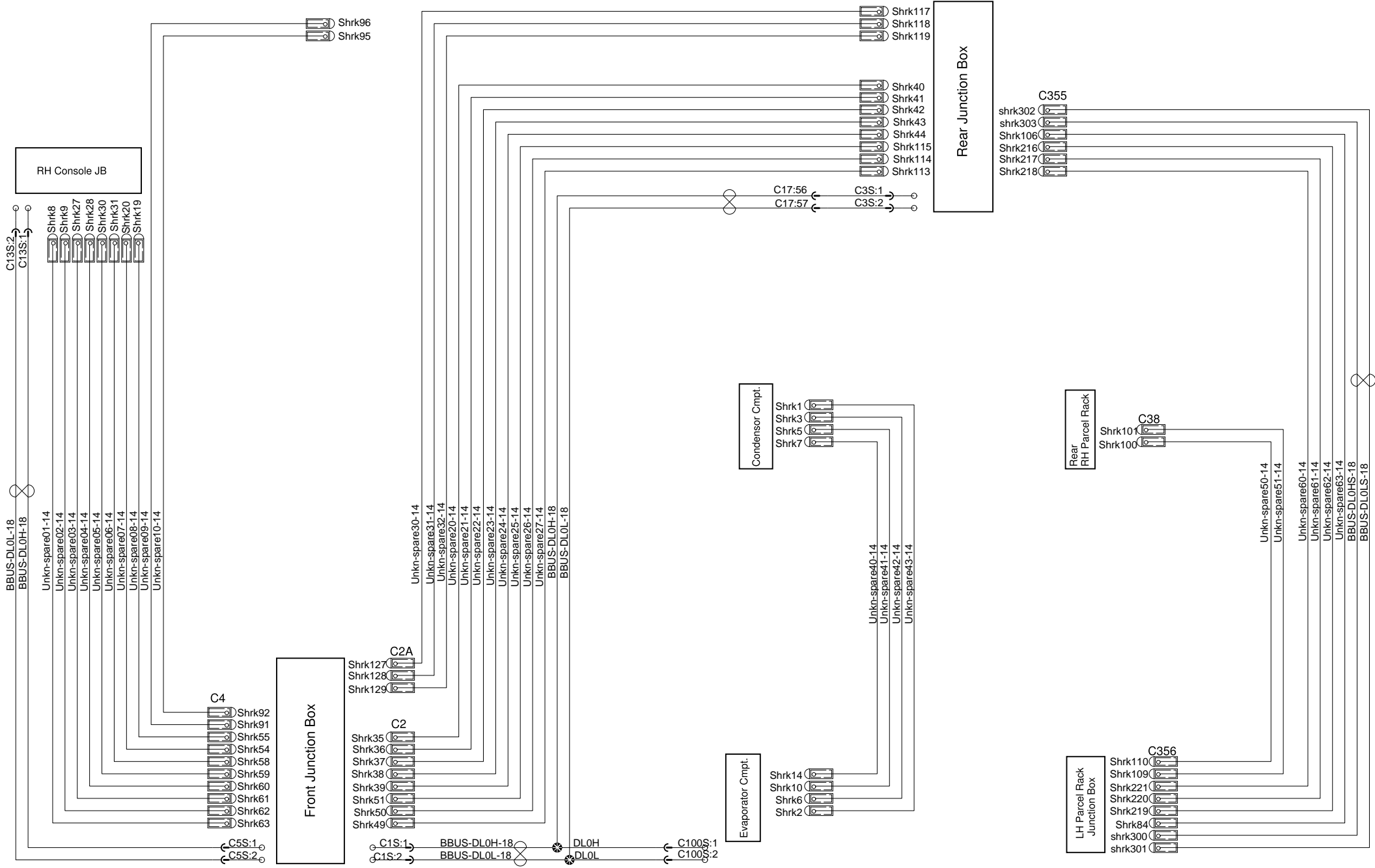
### Evaporator Cmpt.



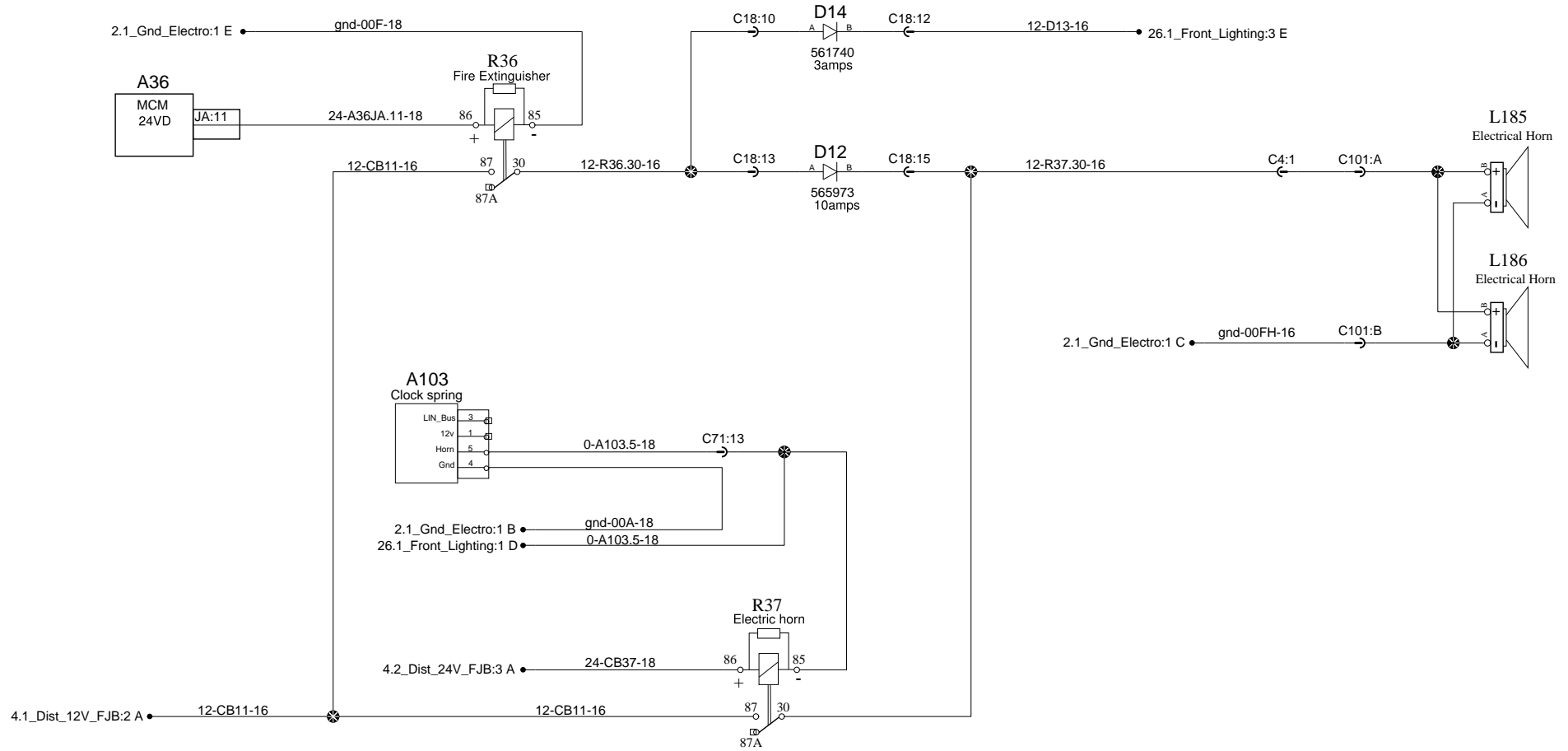
### Parcel rack junction box Rear left parcel rack



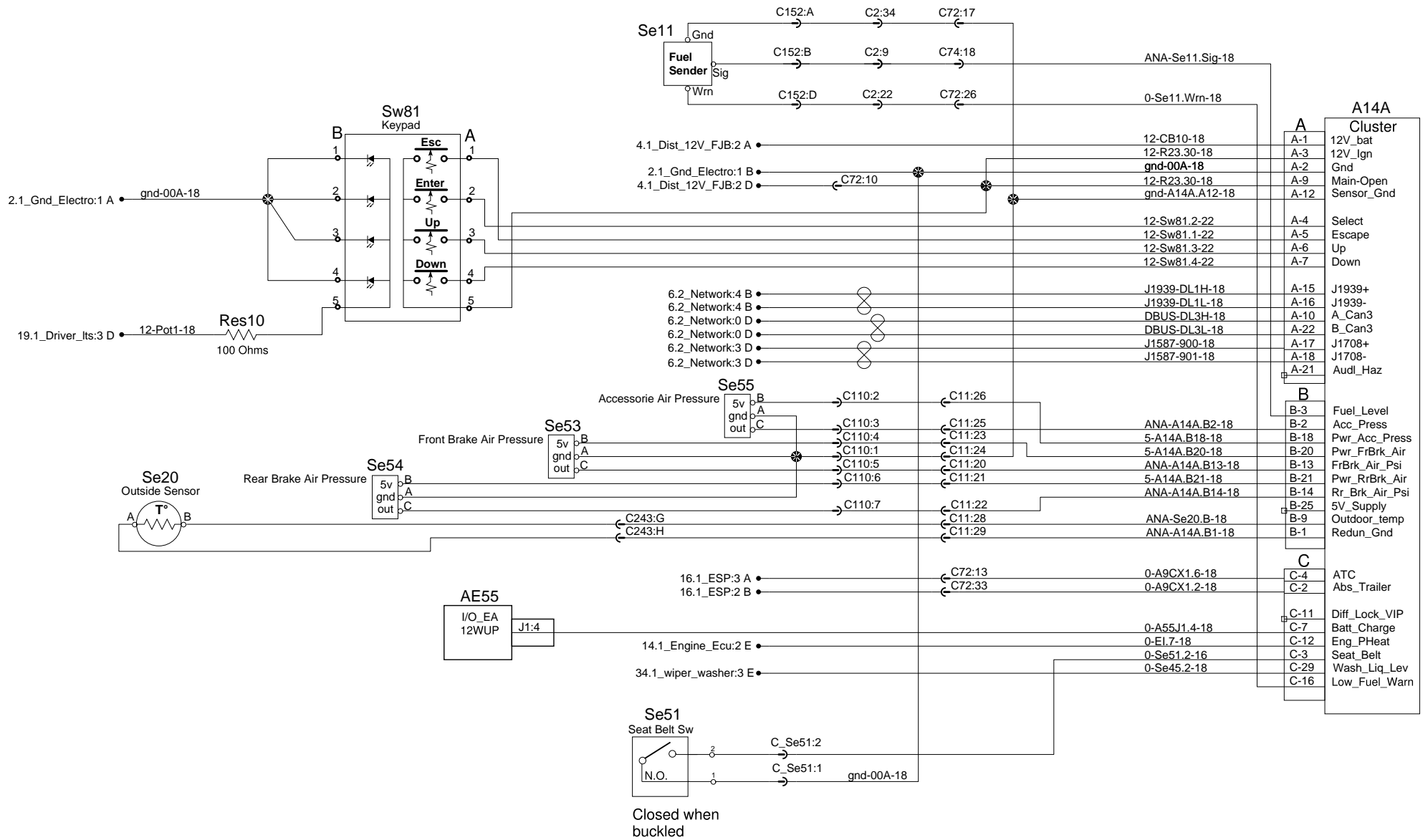
# Spare Wires



# Horn



# Cluster



0

1

2

3

4

A

A

B

B

C

C

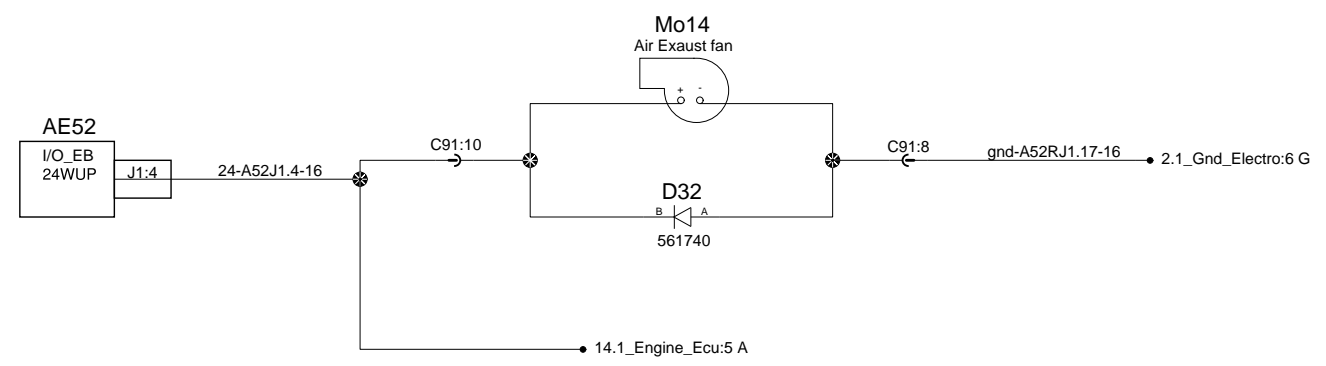
D

D

E

E

### Air Exsust



0

1

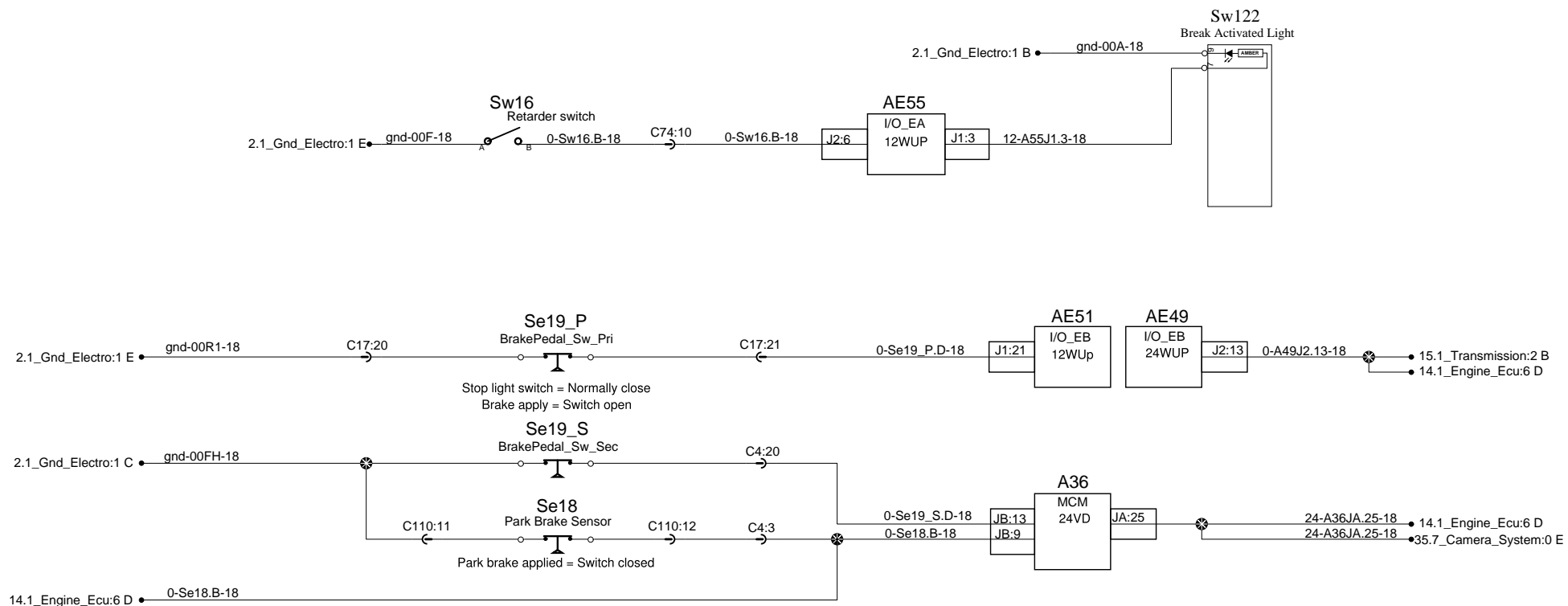
2

3

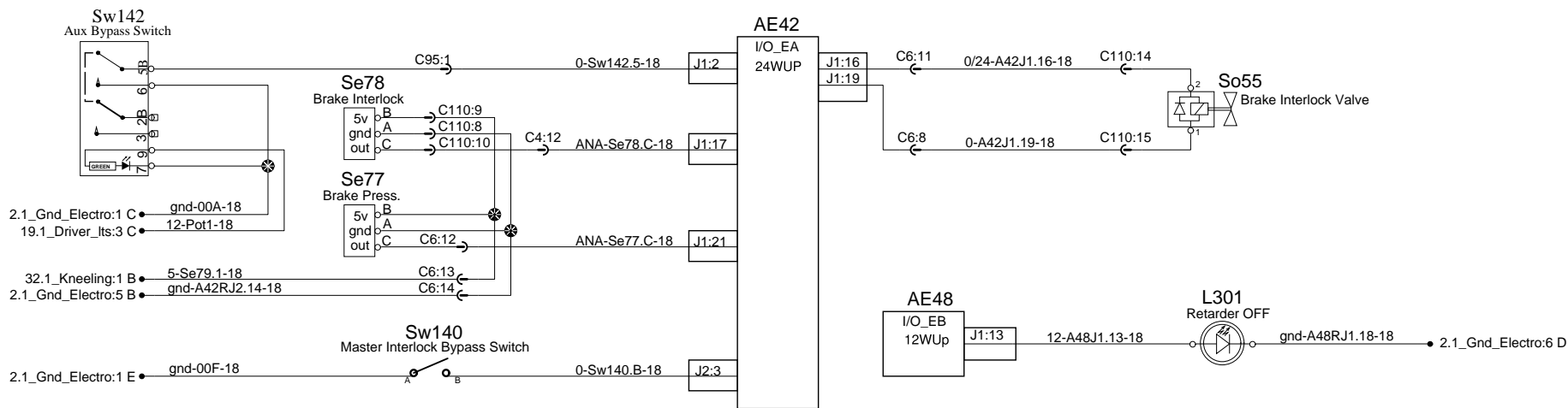
4



# Brake, Brake interlock and Retarder

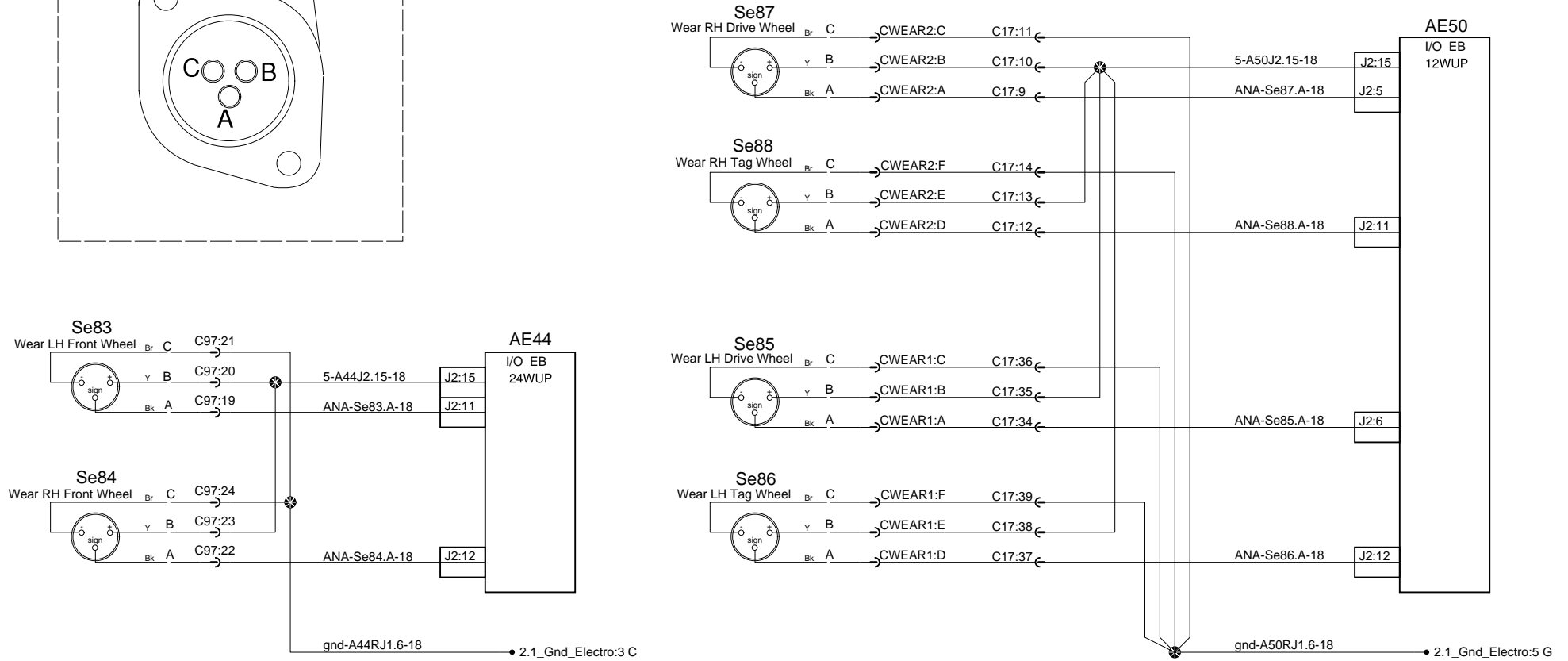
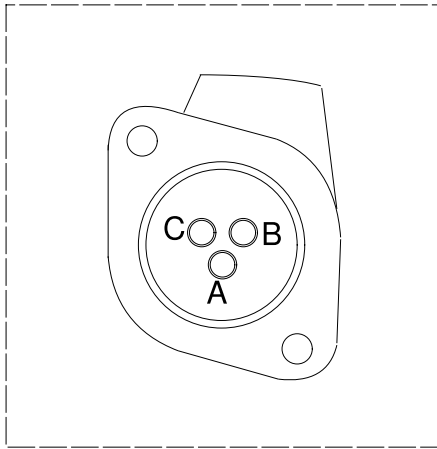


## Brake interlock

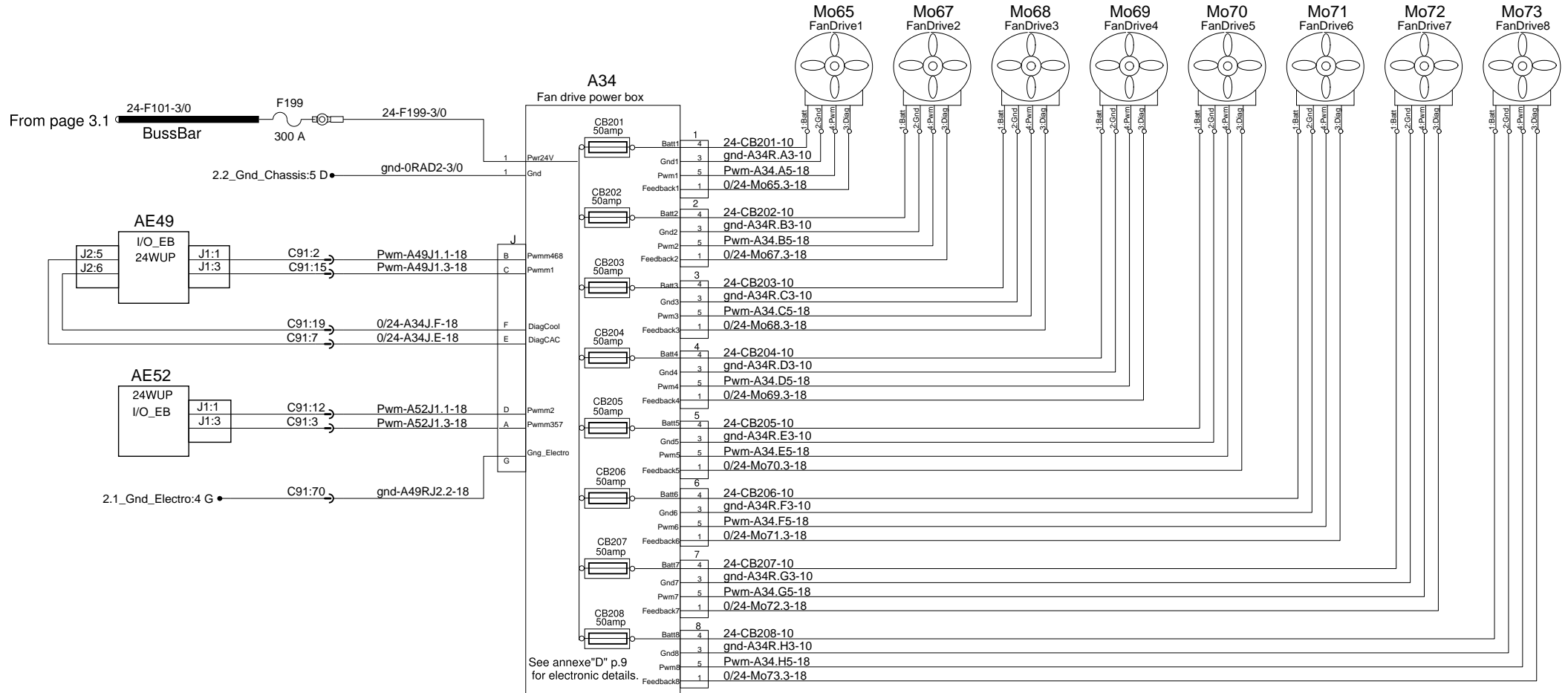


# Brake wear sensors

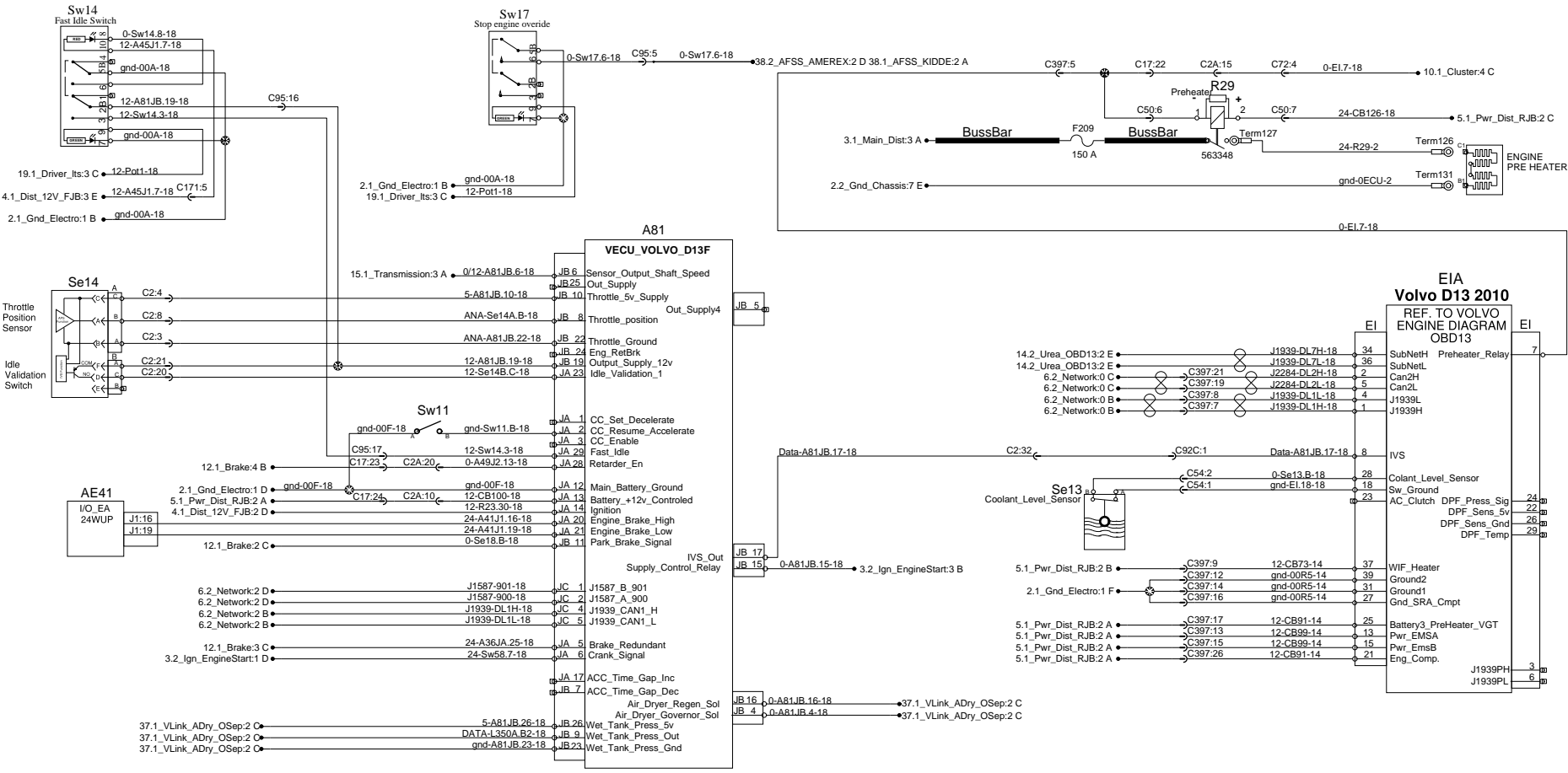
Wear sensor detail



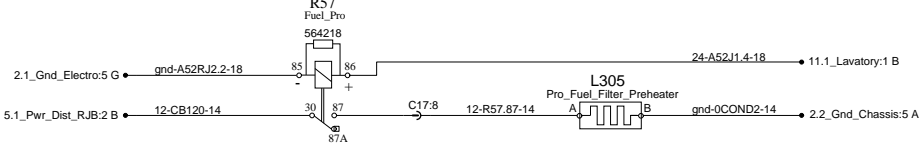
# Electric fans drive



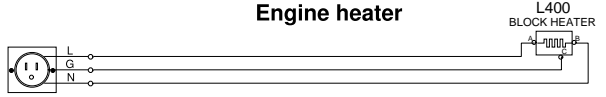
# Engine ECU Volvo

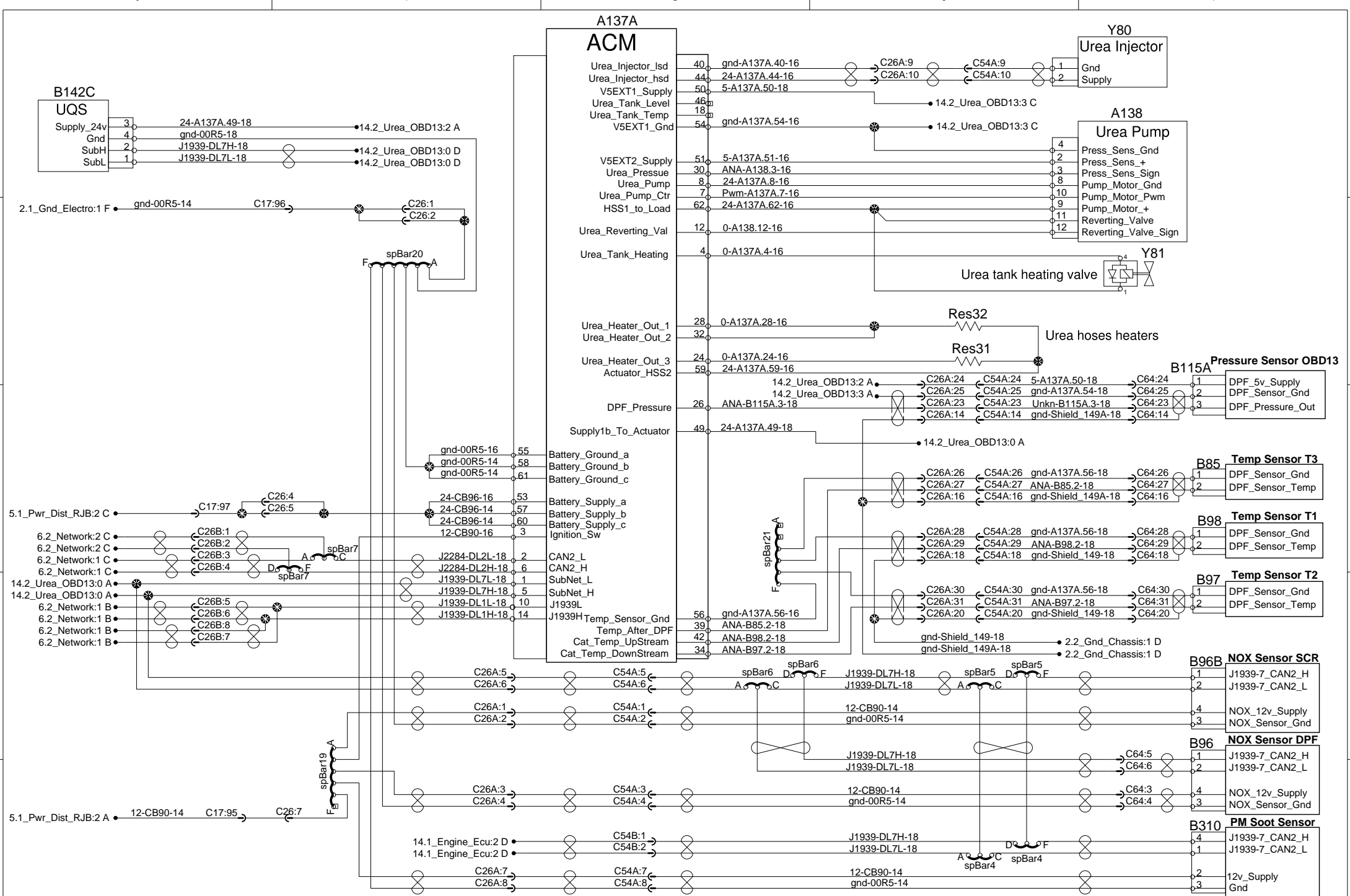


## Fuel filter / Preheater

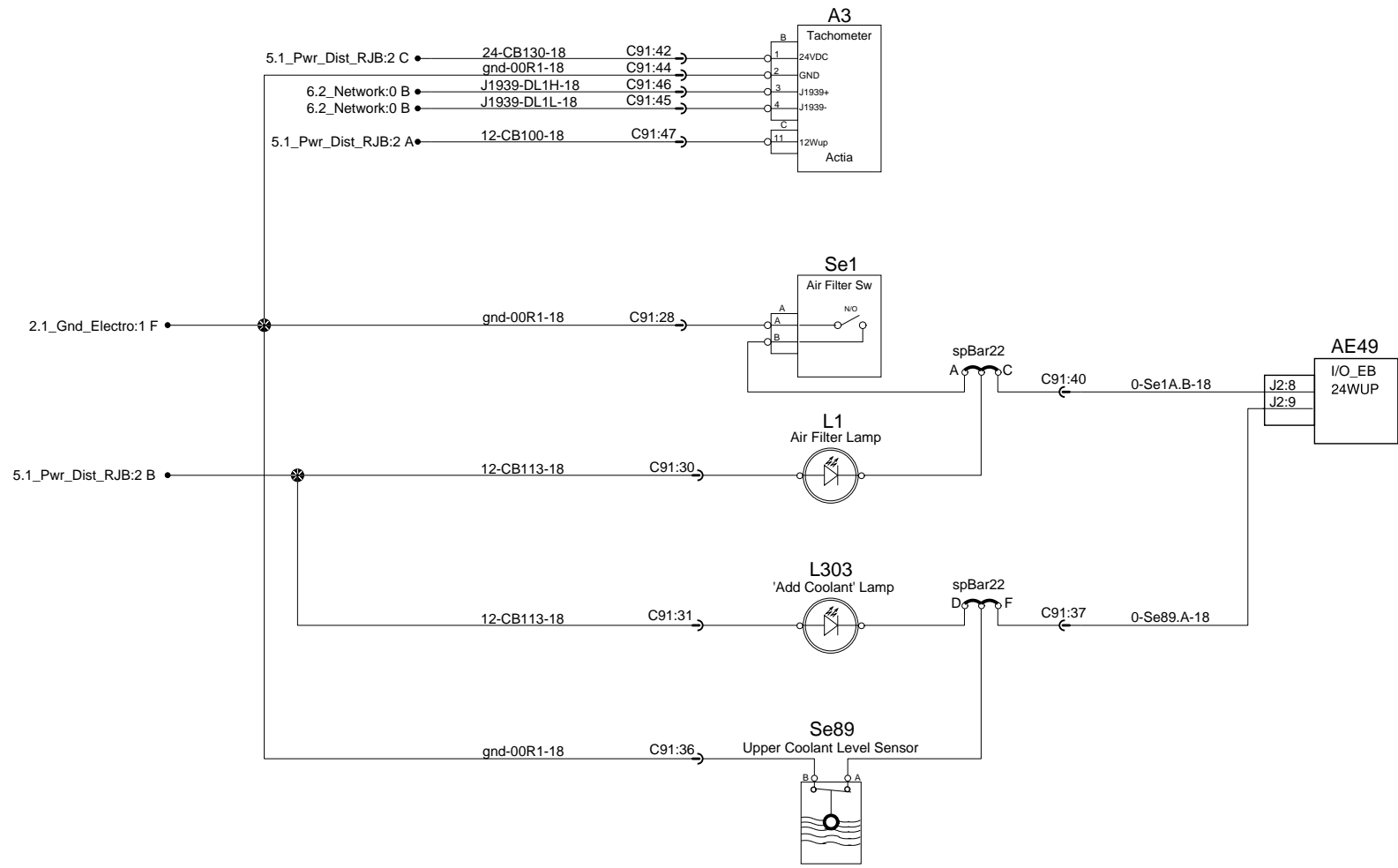


## Engine heater

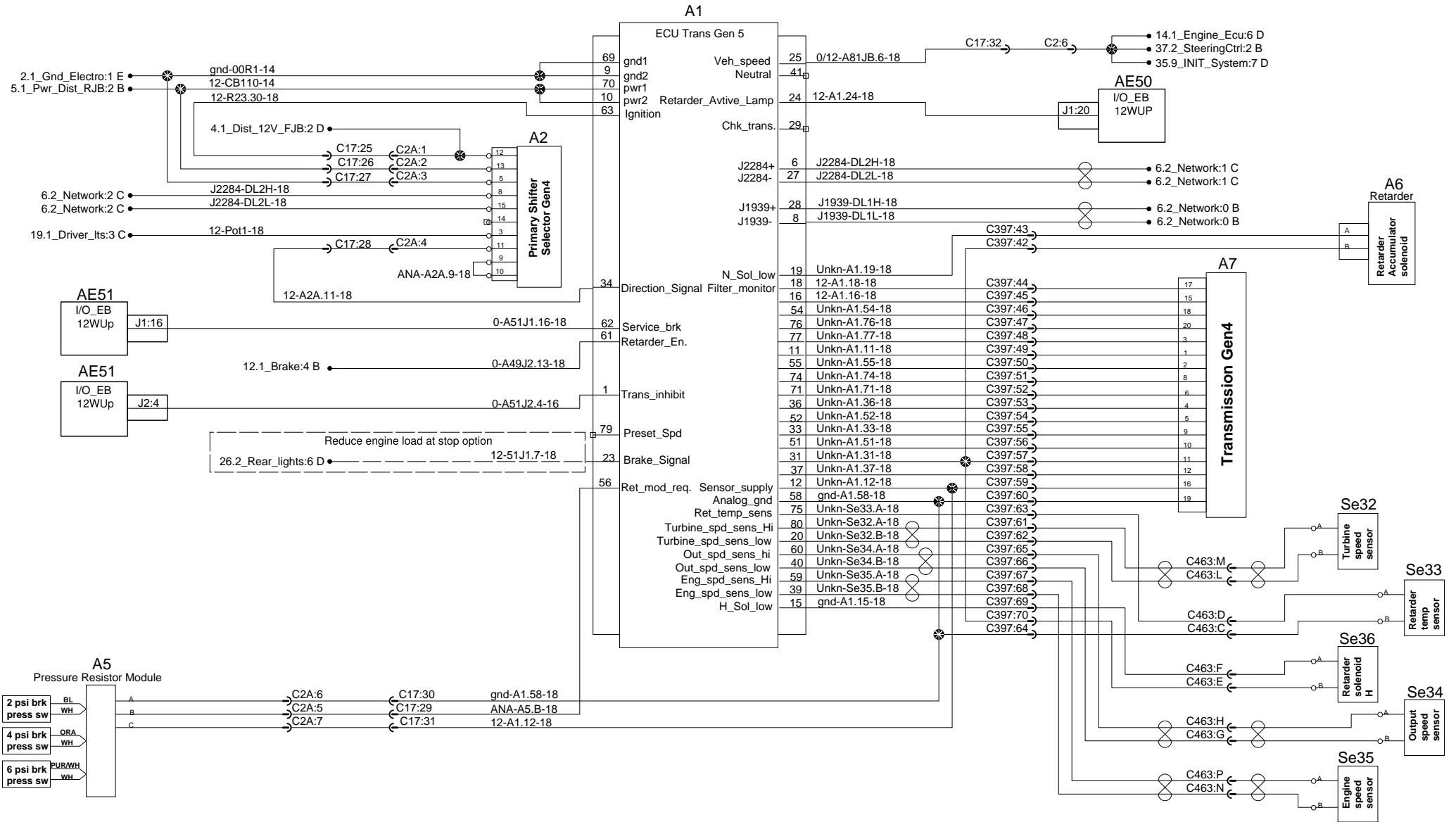




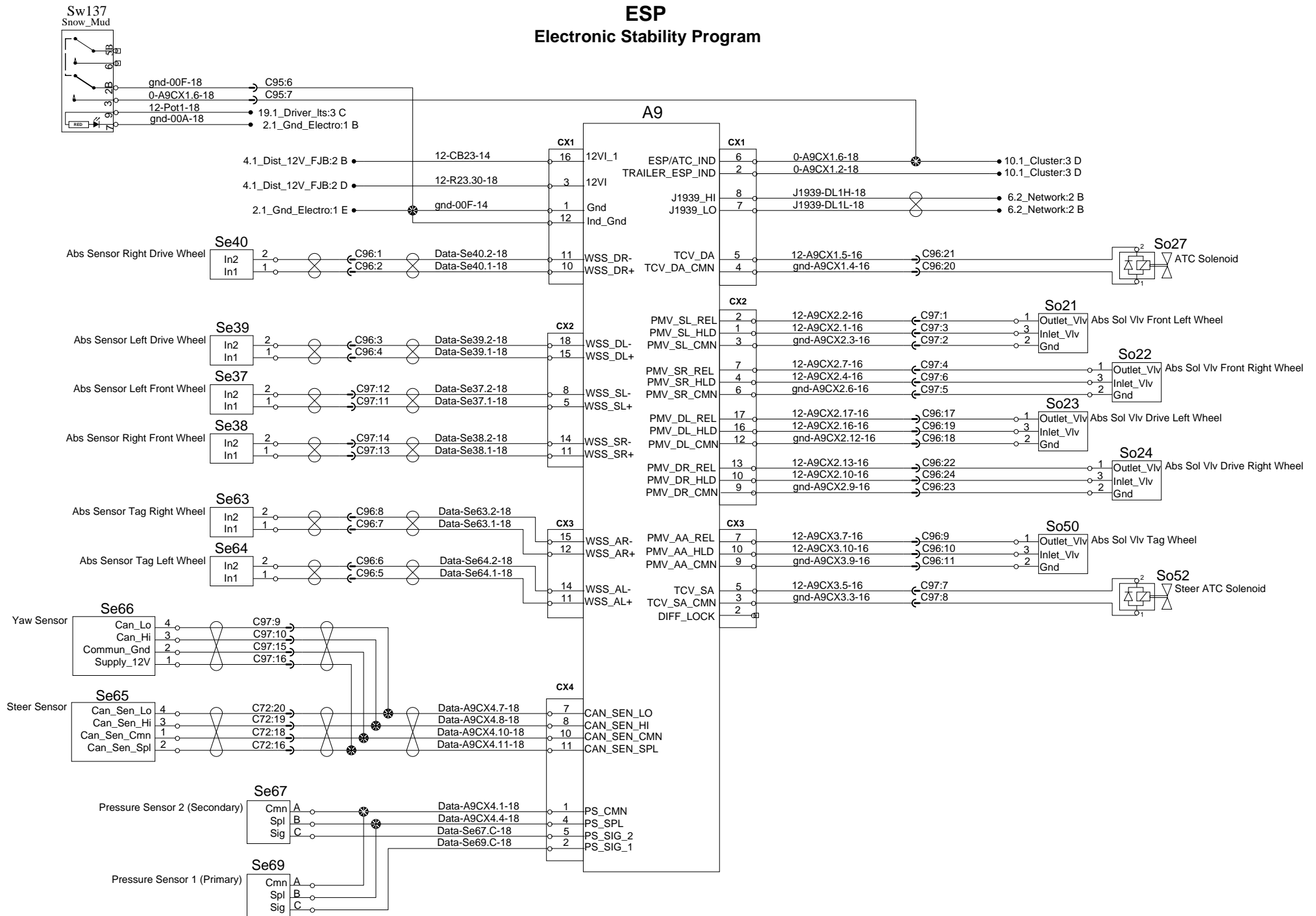
# Rear tachometer - Air filter LED - Coolant level LED - Pro\_Fuel



# Transmission Alisson Gen 5

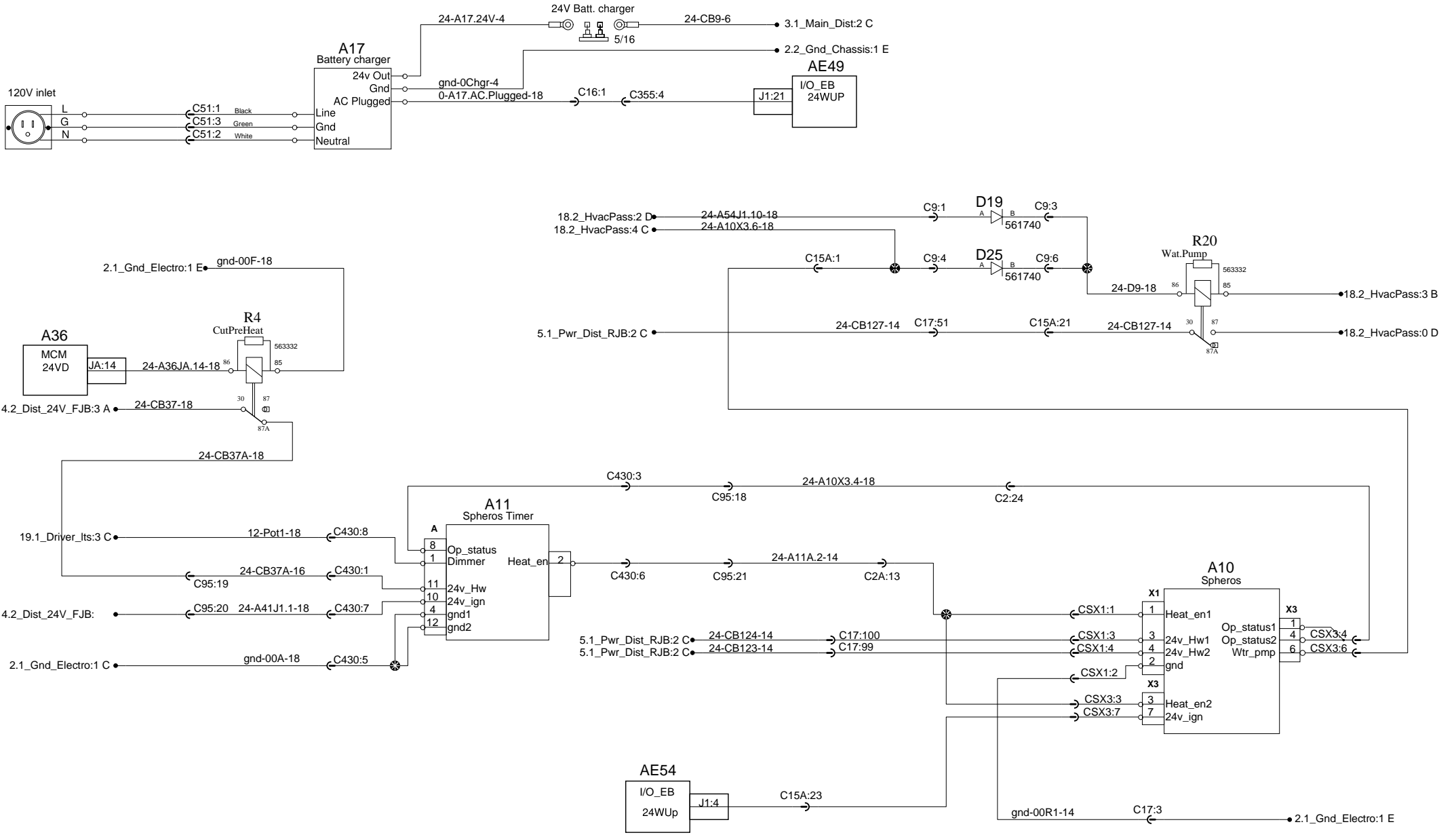


# ESP Electronic Stability Program

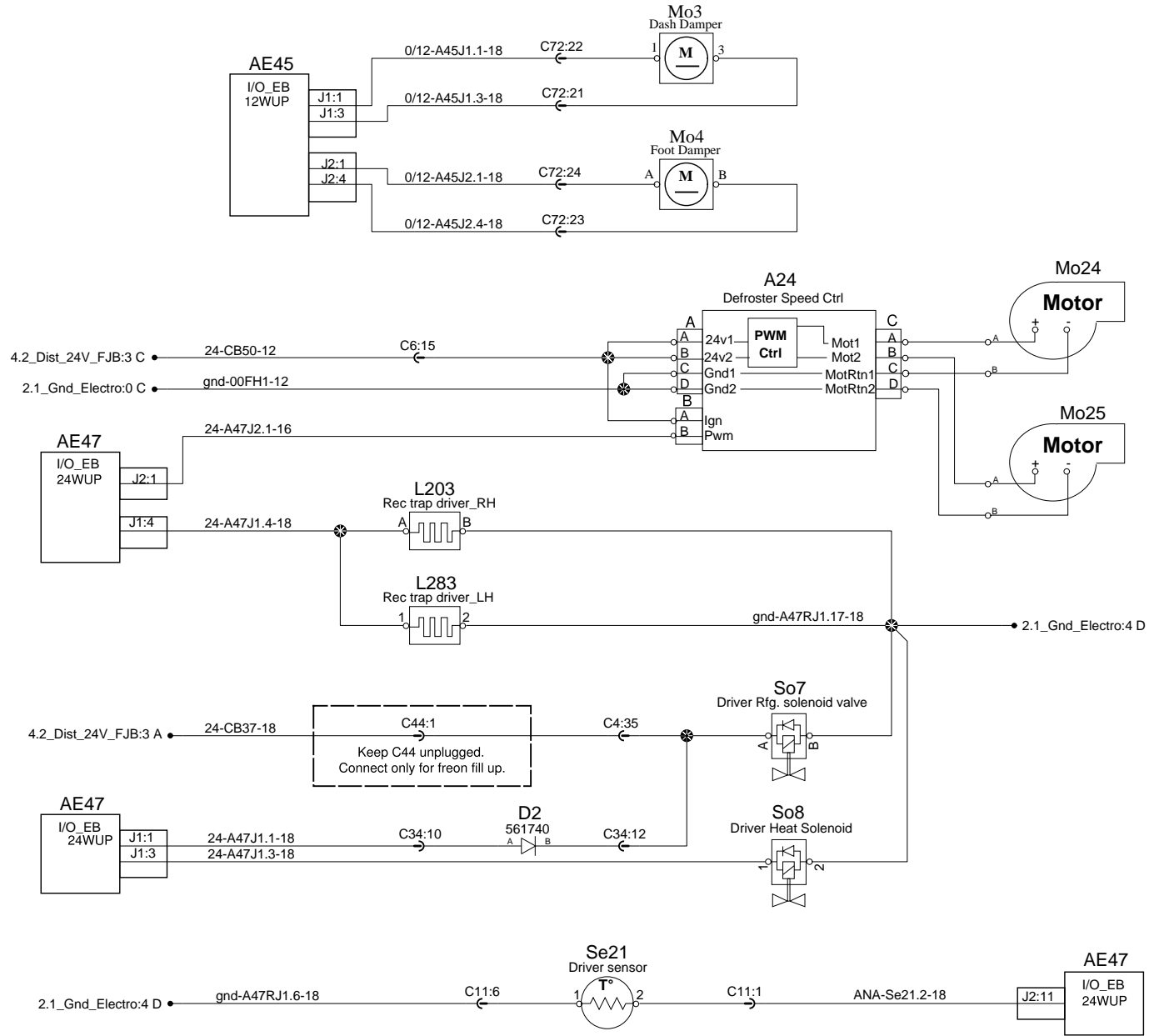




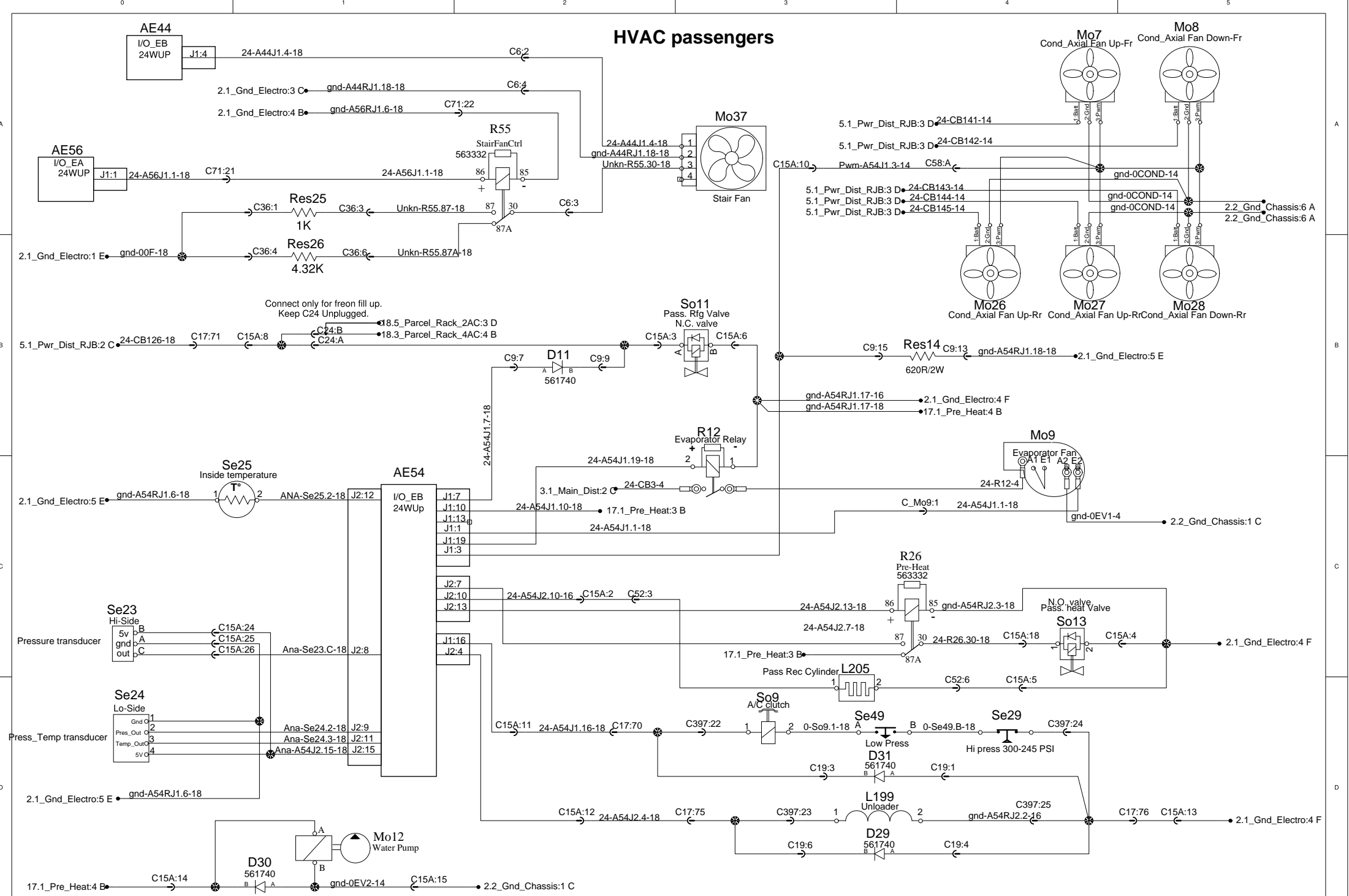
# Battery charger



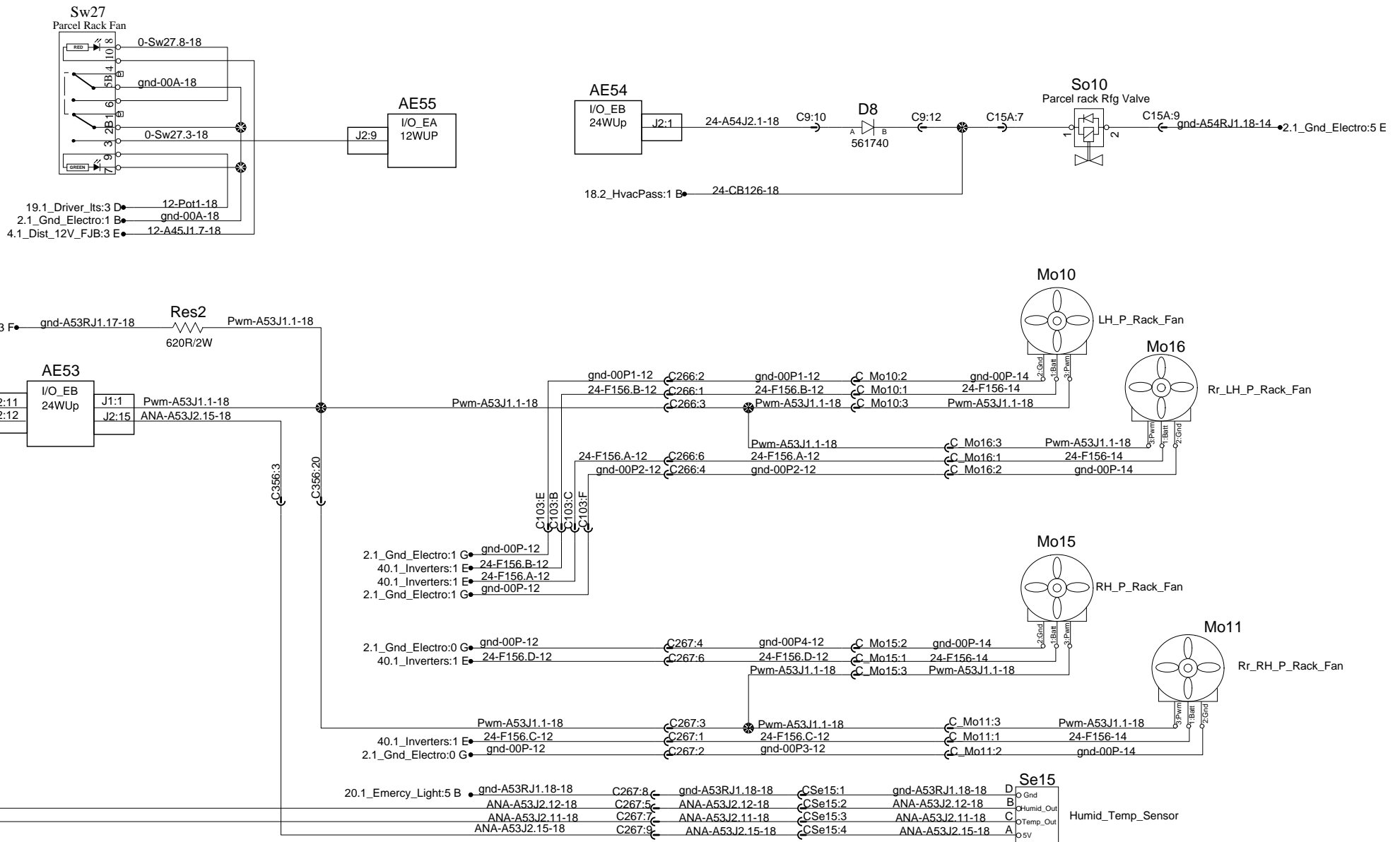
# Hvac defroster



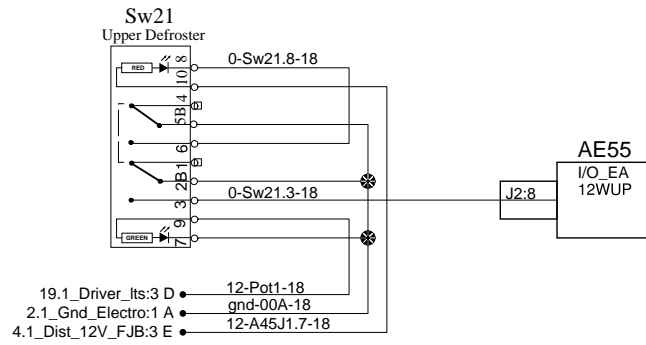
# HVAC passengers



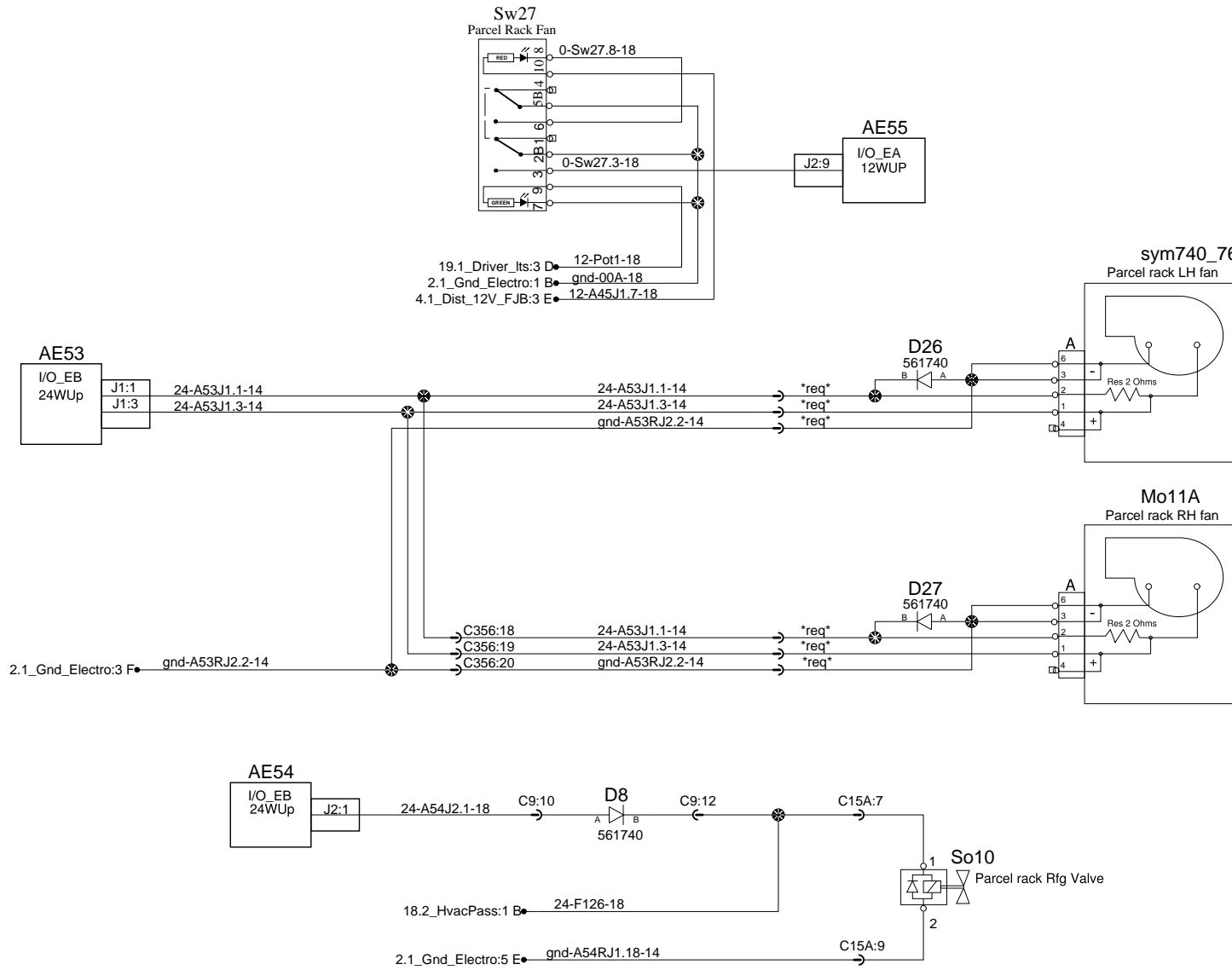
# Parcel rack 4 A/C system



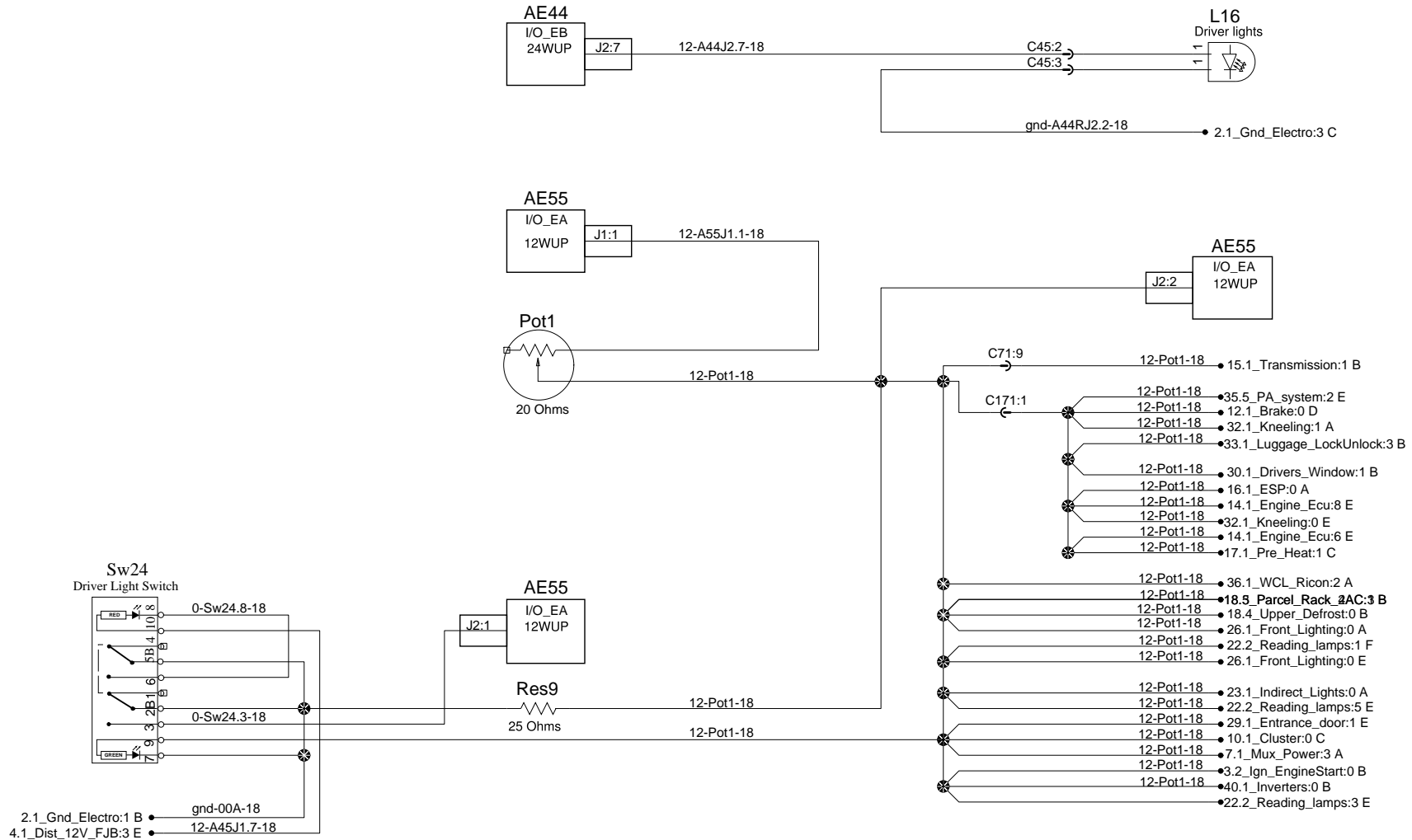
# Upper defrost option

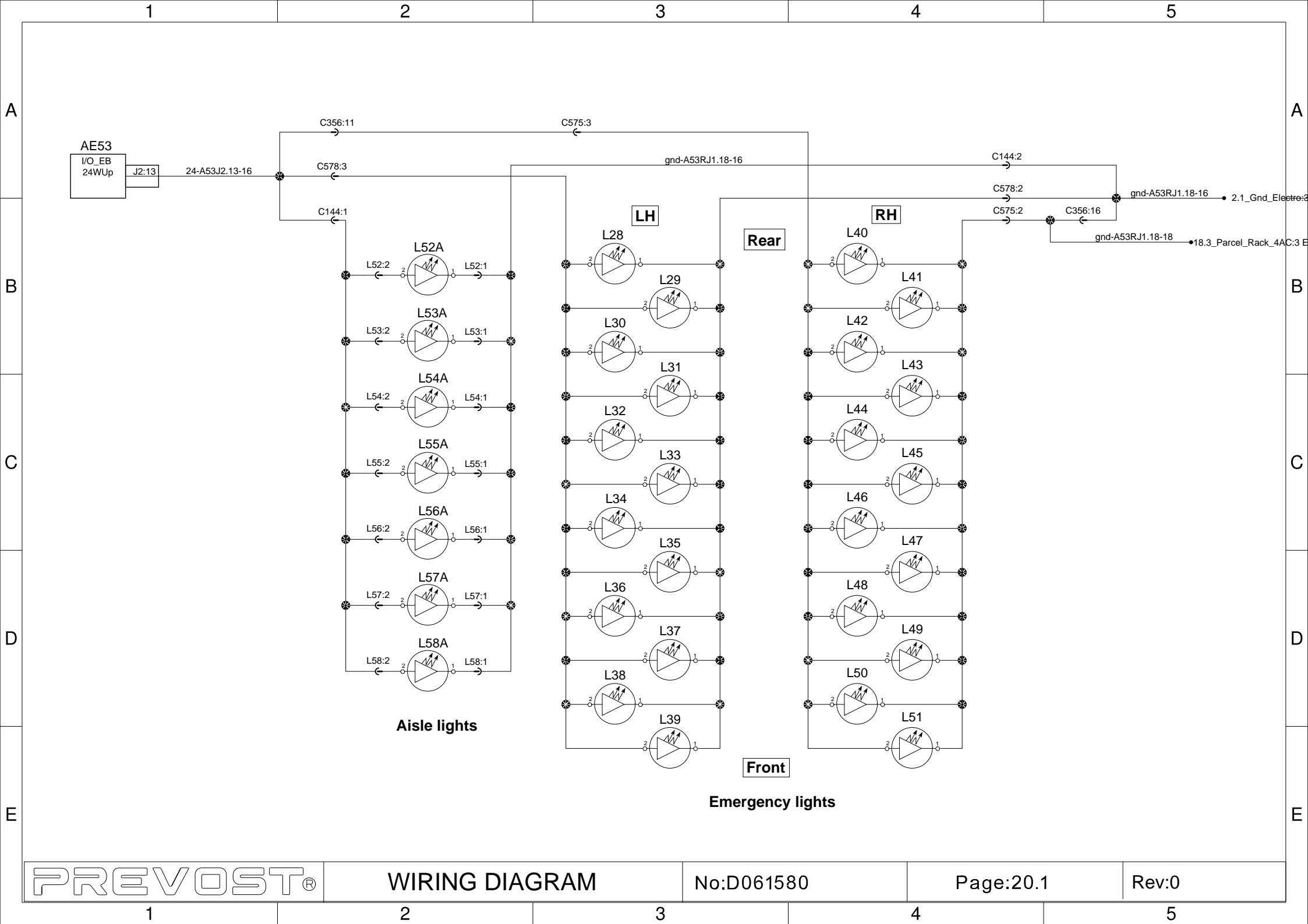


# Parcel rack A/C system



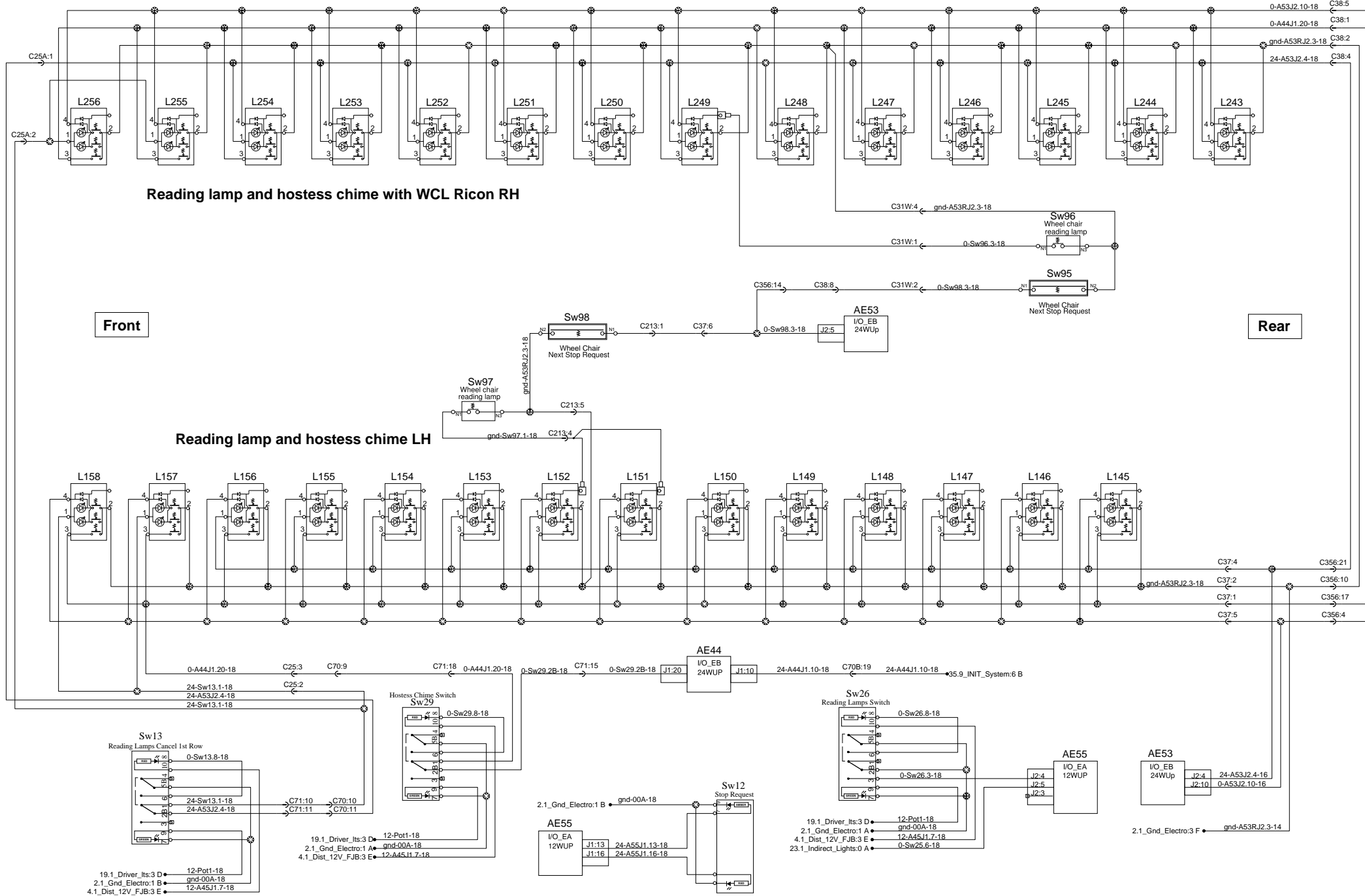
# Driver's lights





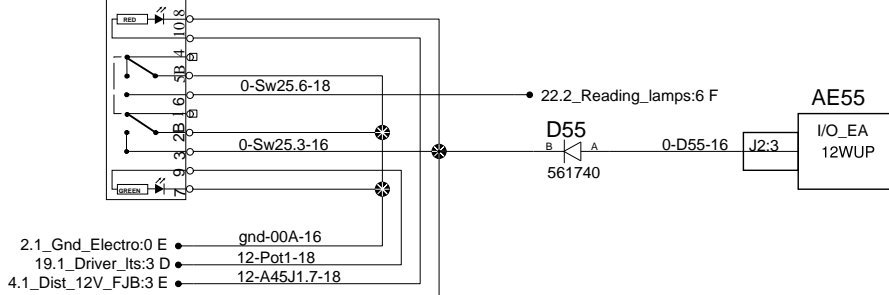


# Reading Lamp and Next Stop Request

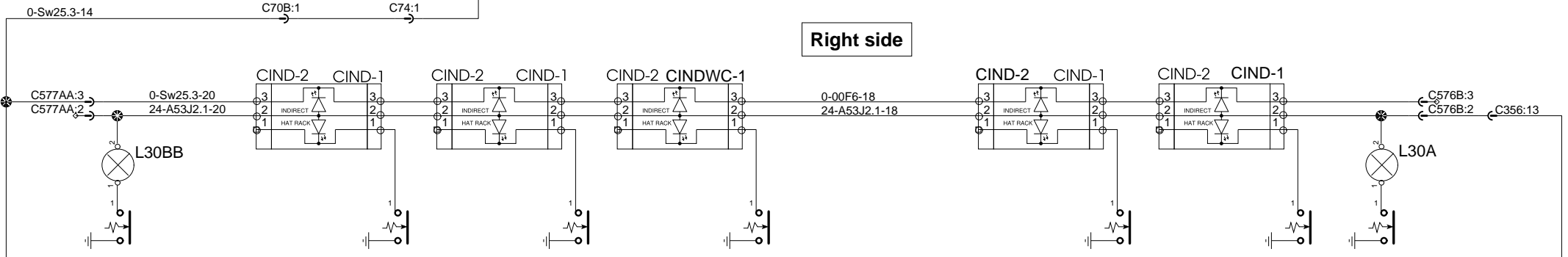


# Indirect lighting

Sw25  
Indirect and Reading Lights Switch

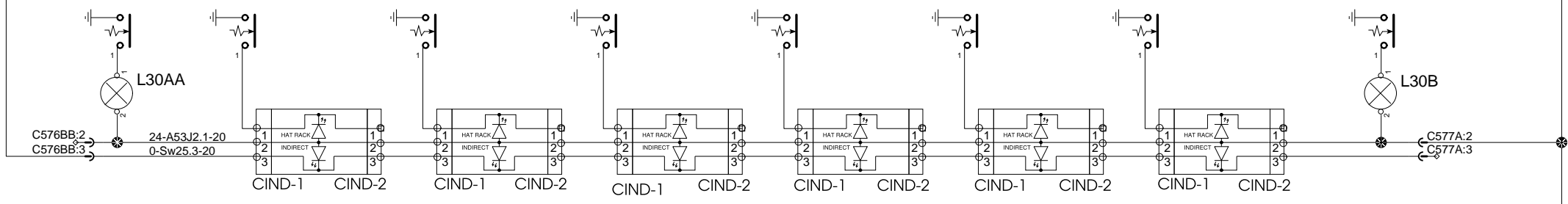


Right side



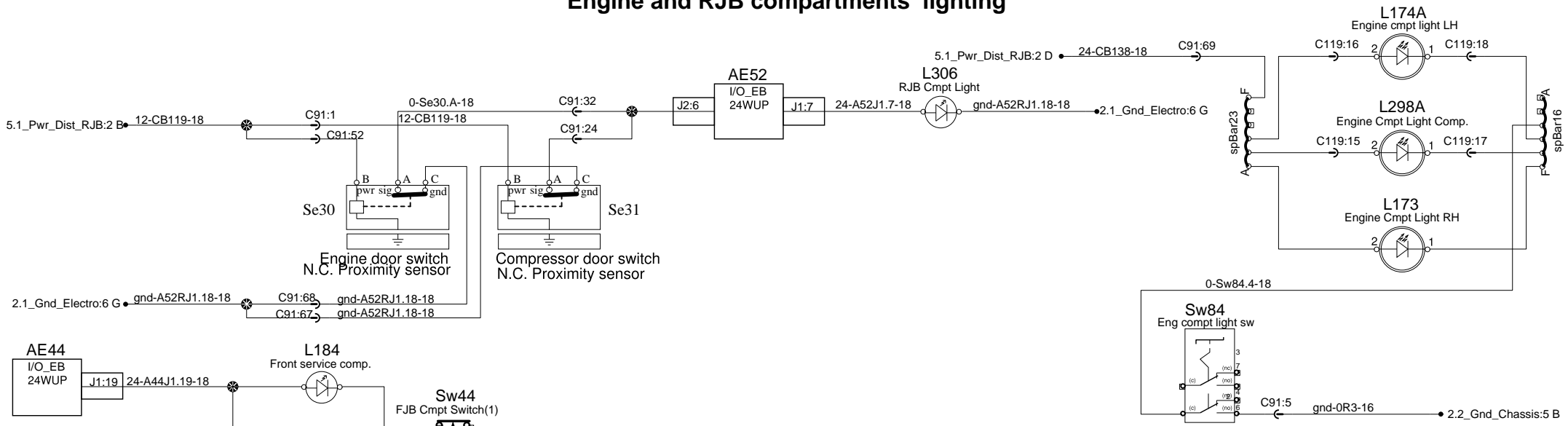
Front

Rear

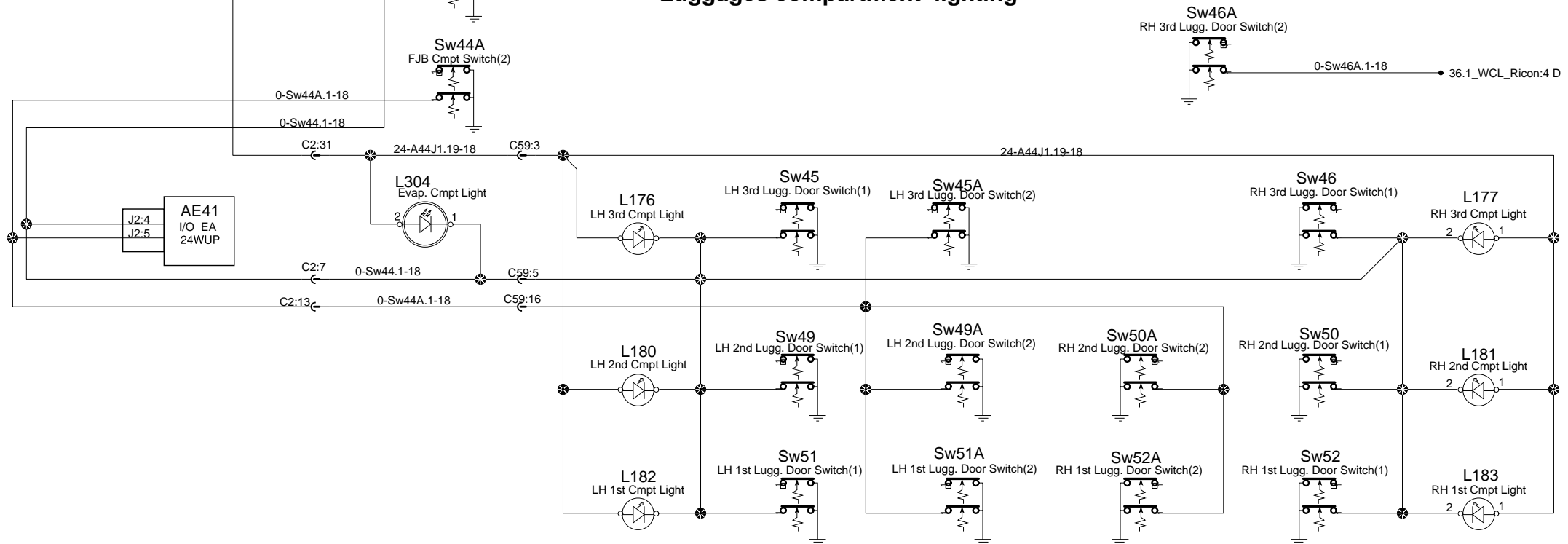


Left side

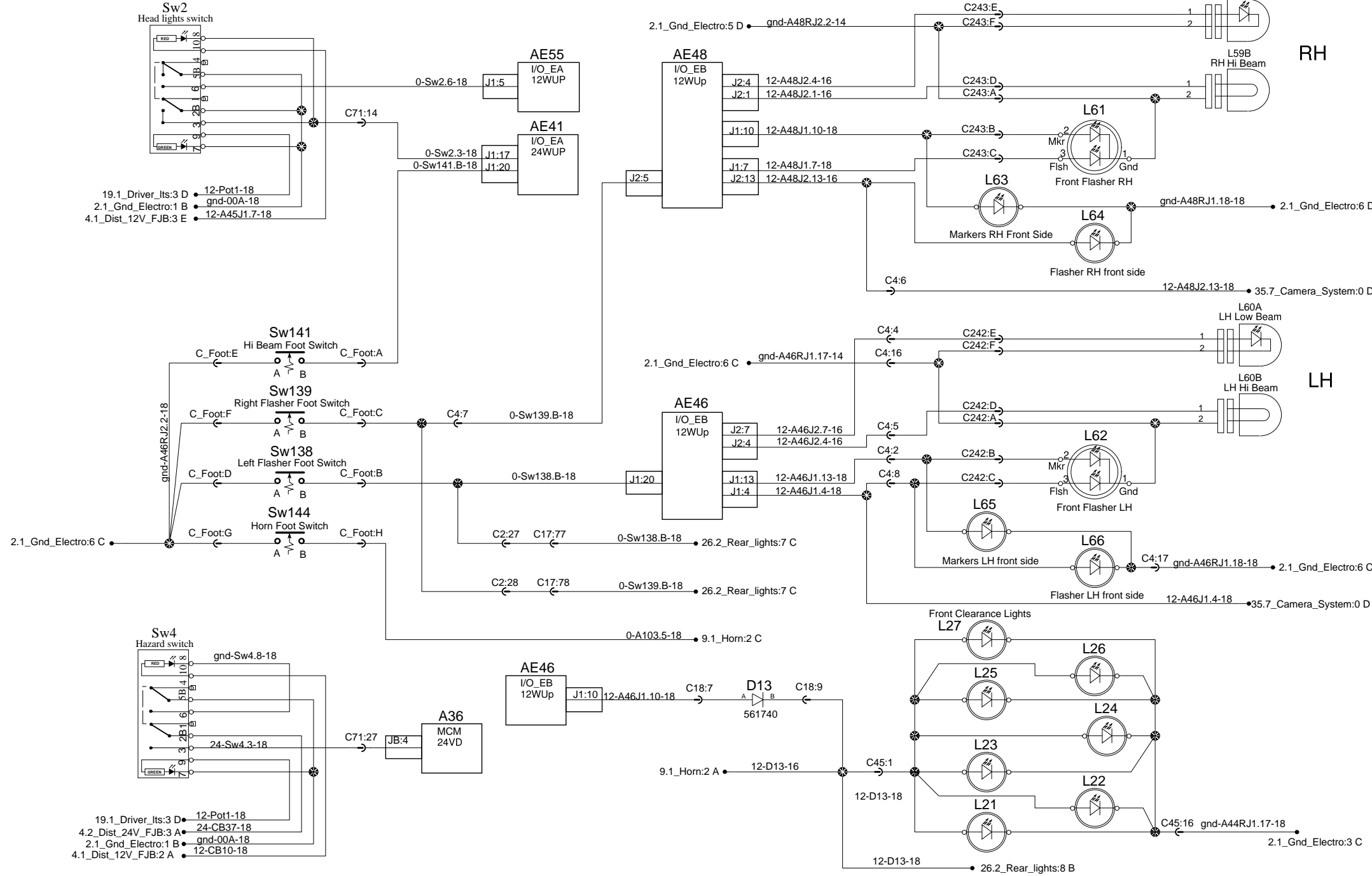
# Engine and RJB compartments lighting



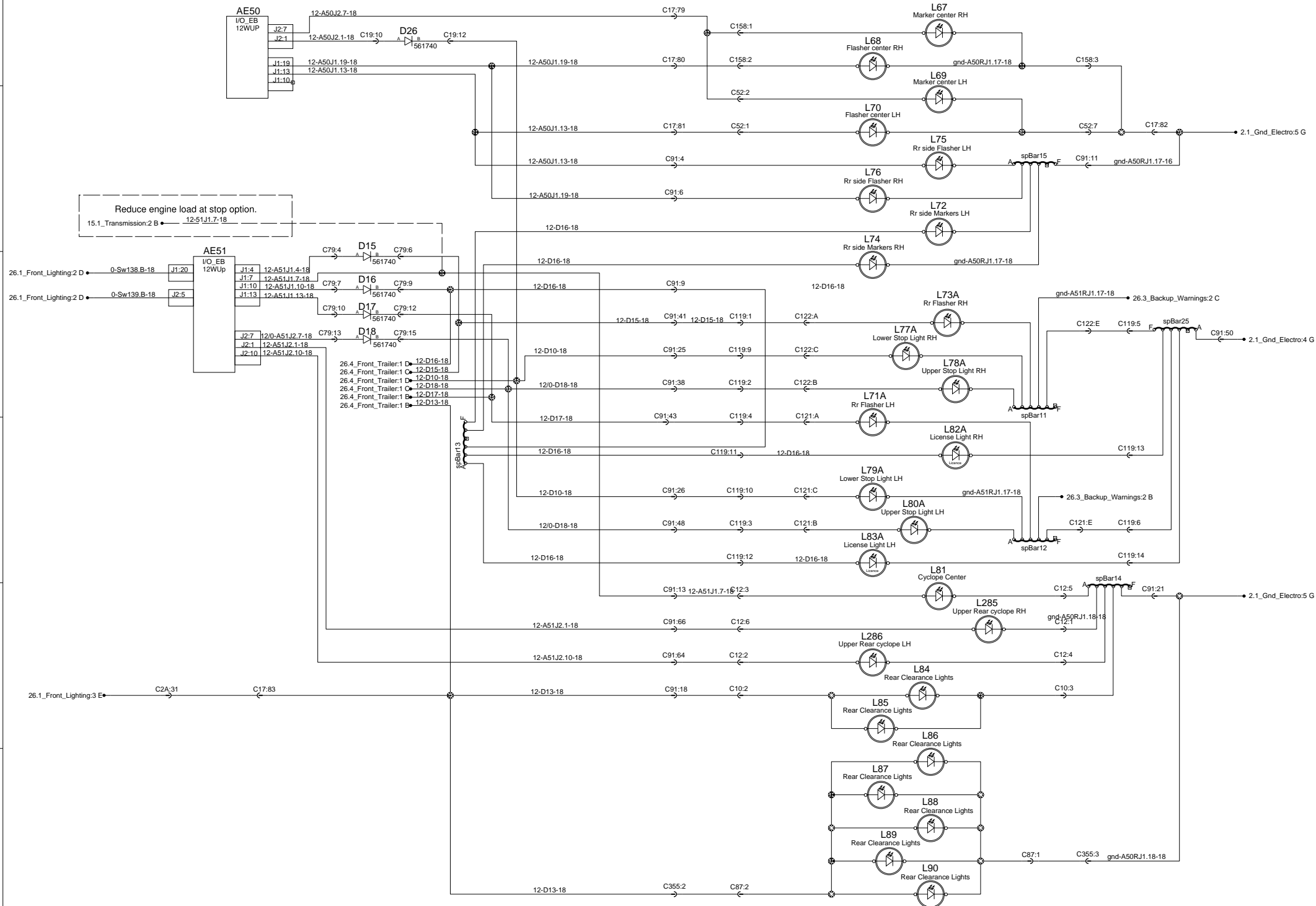
# Luggages compartment lighting



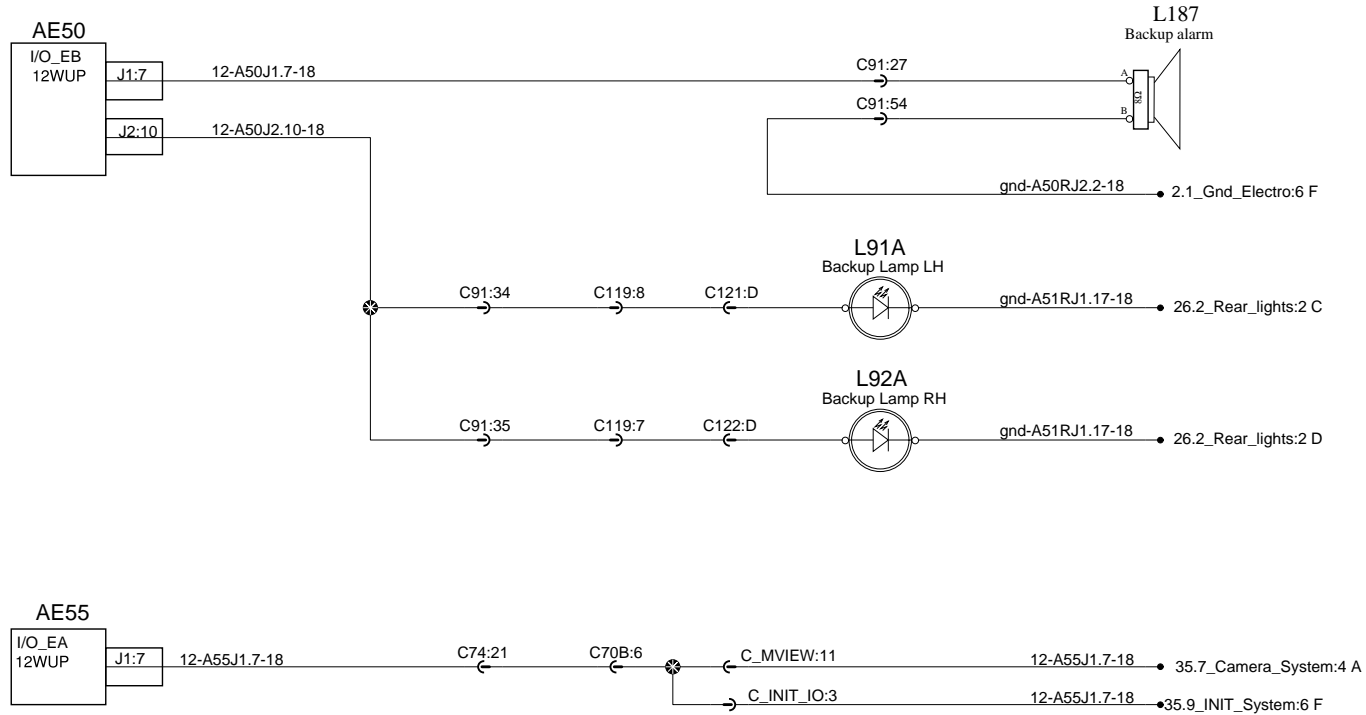
# Front flashers, Markers and Head lights



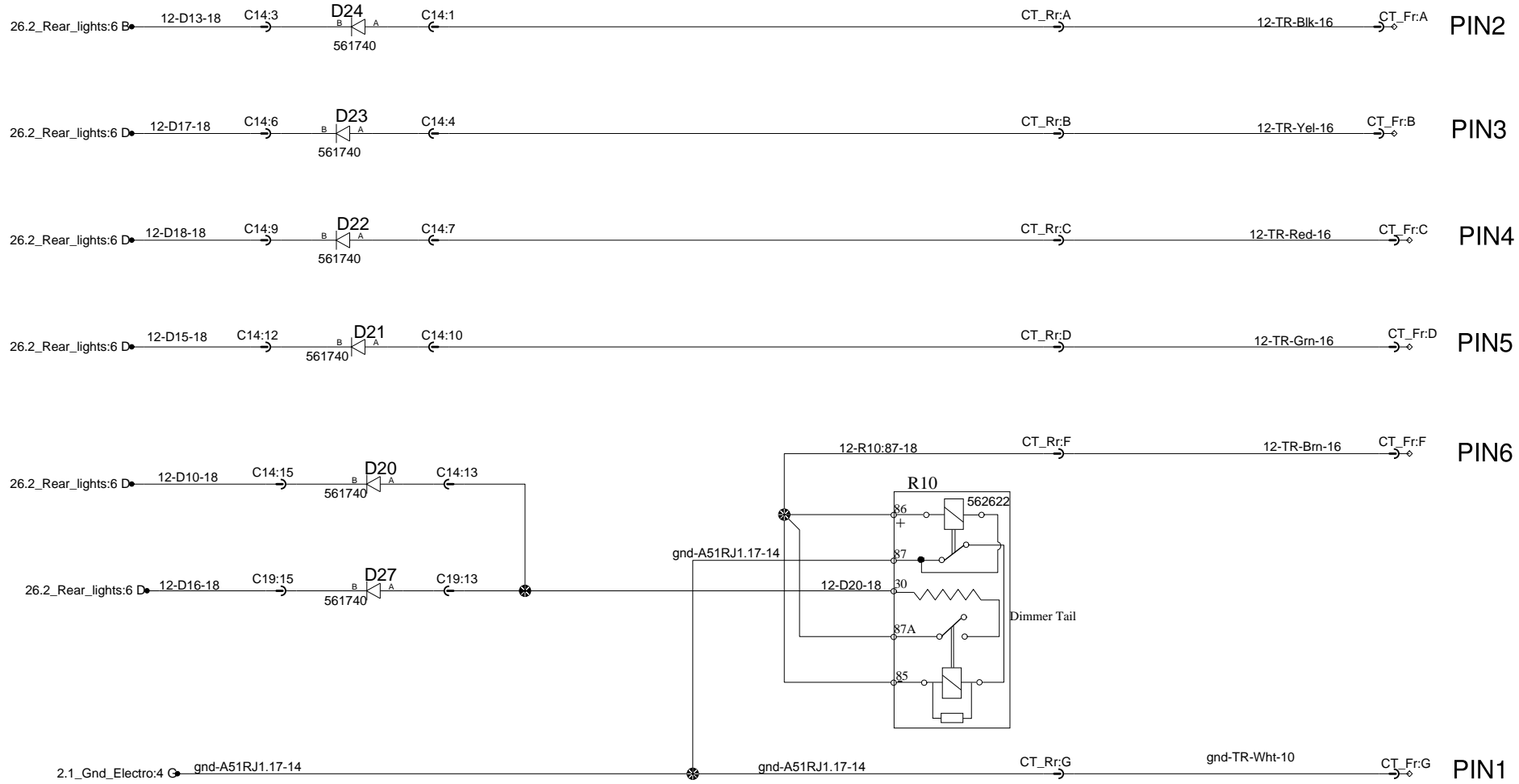
# Rear flashers, Markers, Tail and stop lights



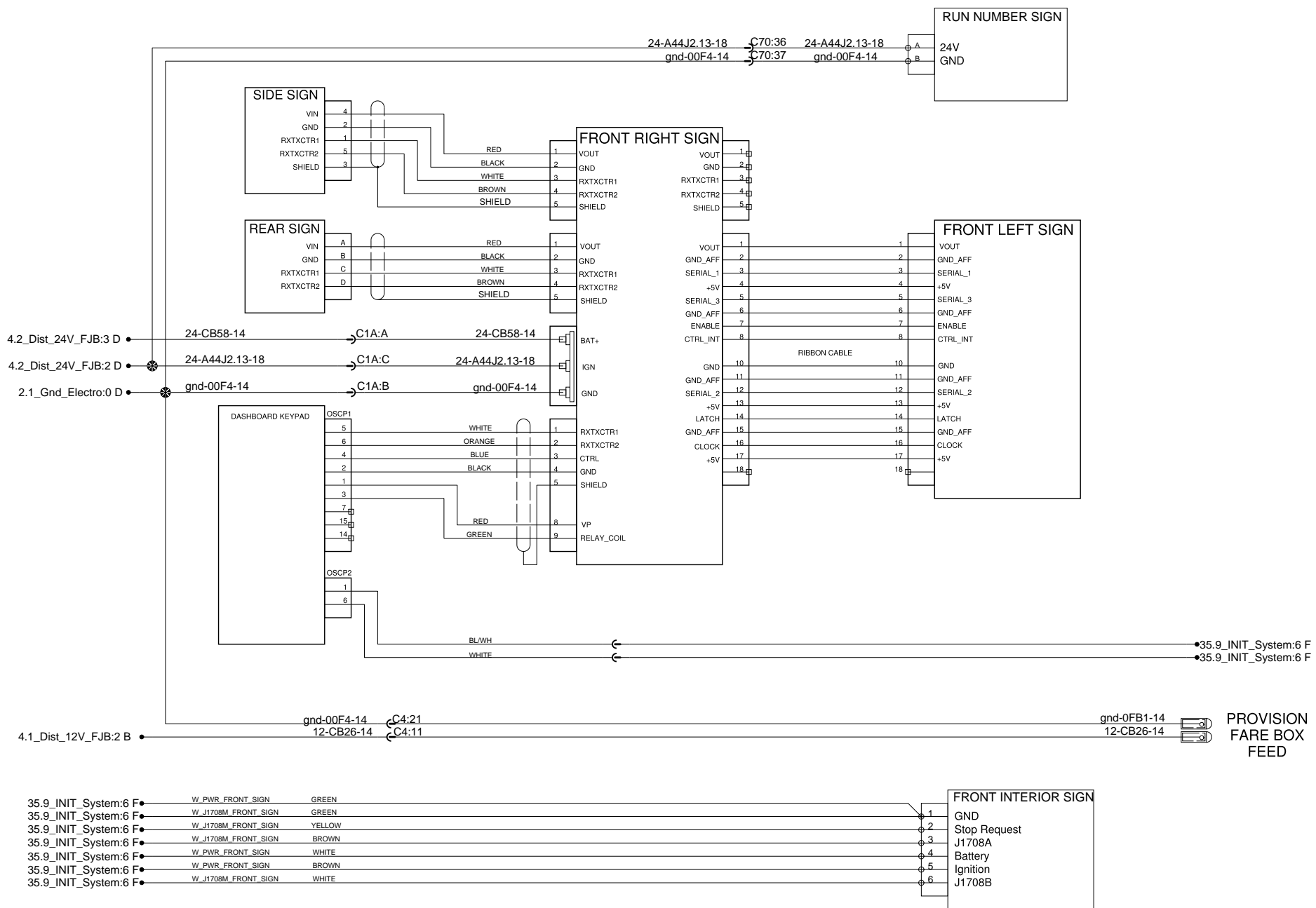
# Backup warnings



# Front Trailer

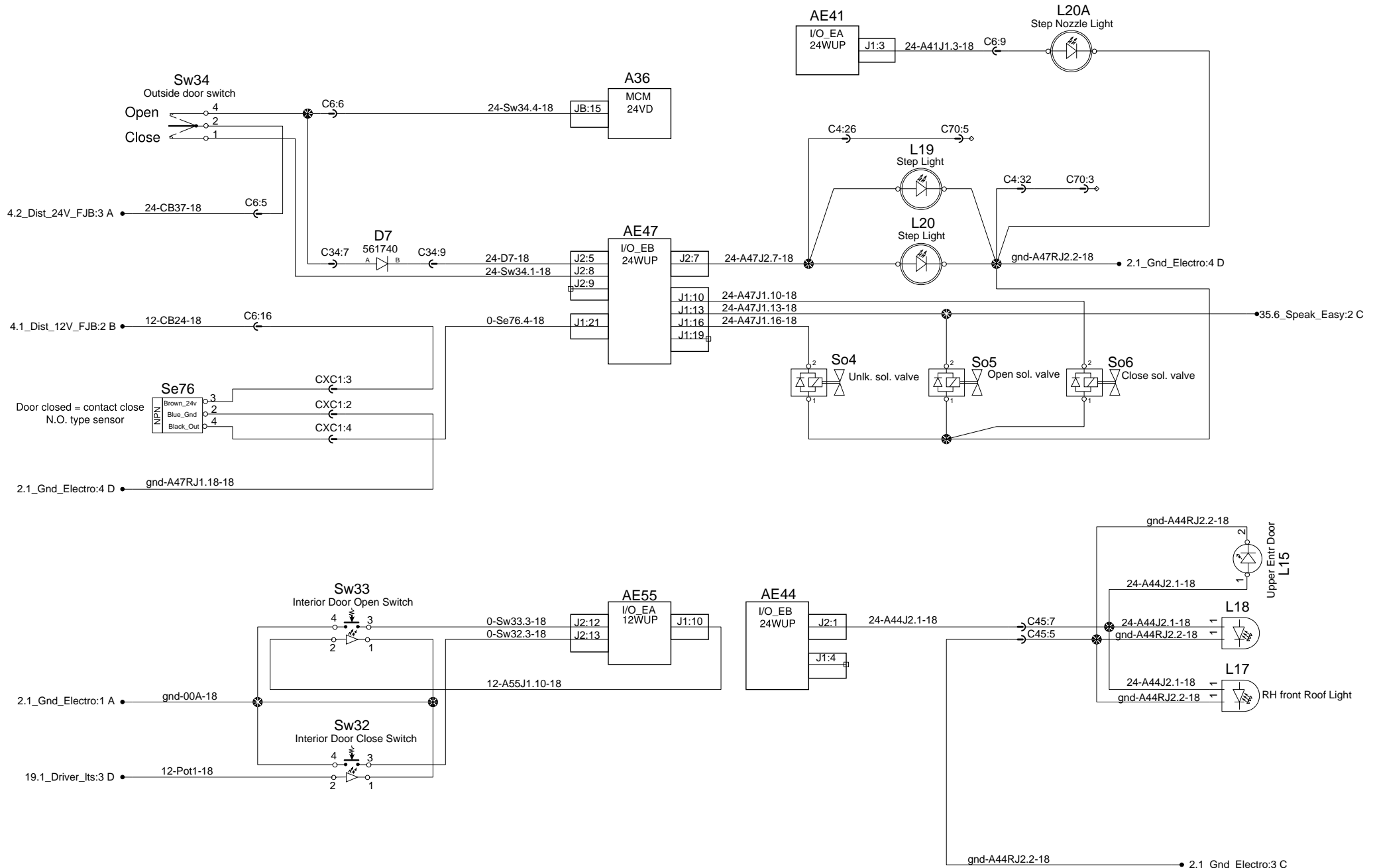


# Destination Signs and Farebox

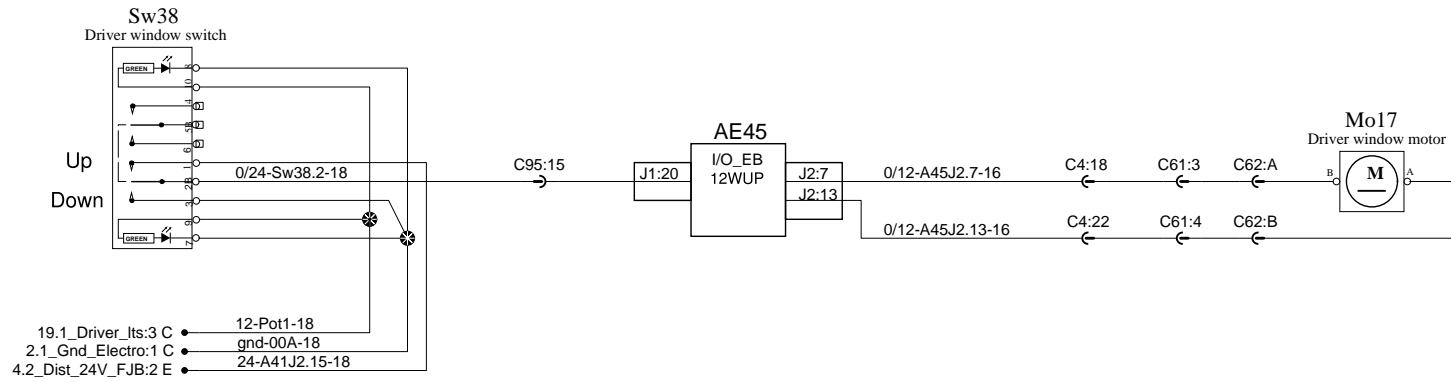




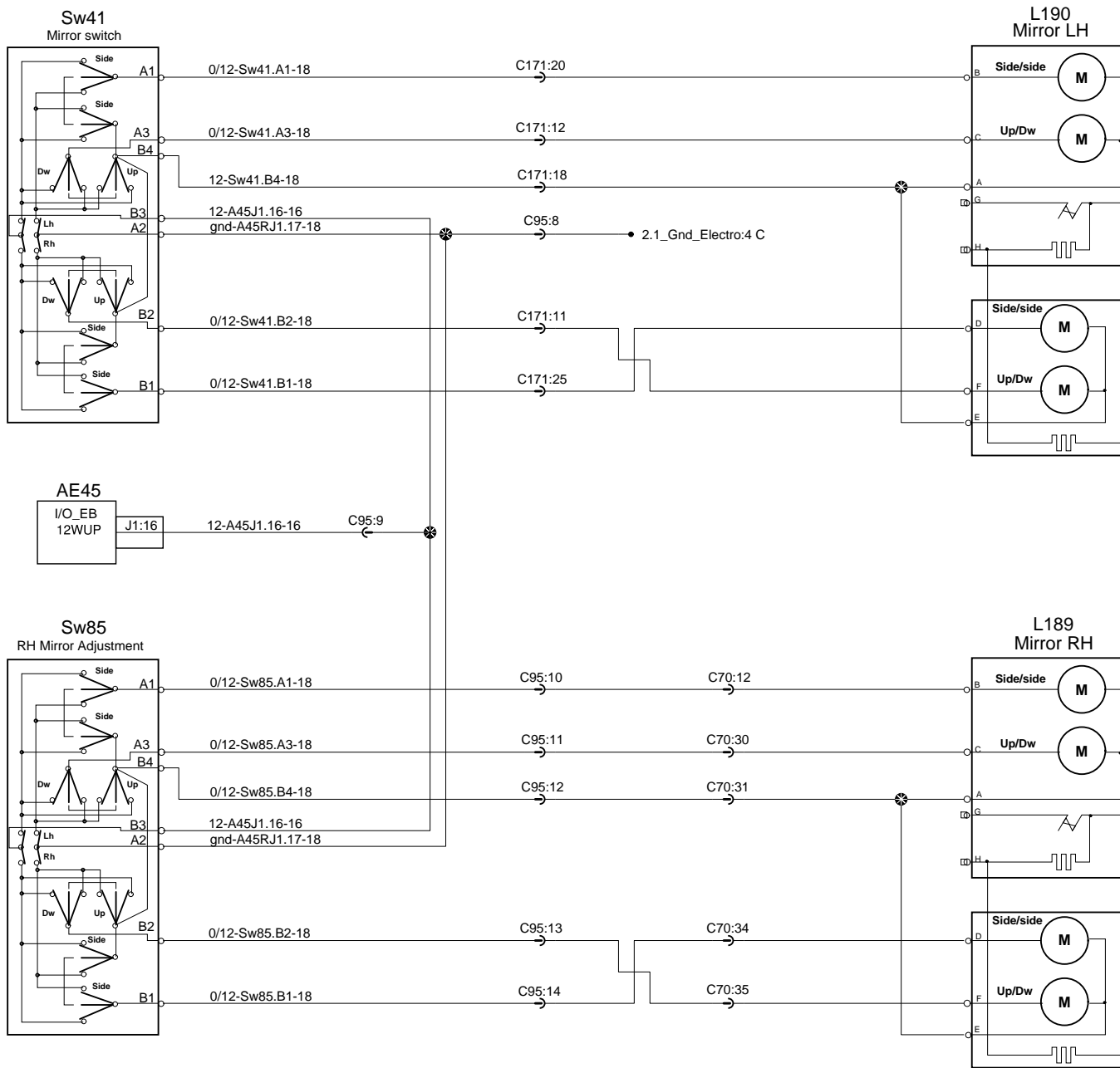
# Entrance door



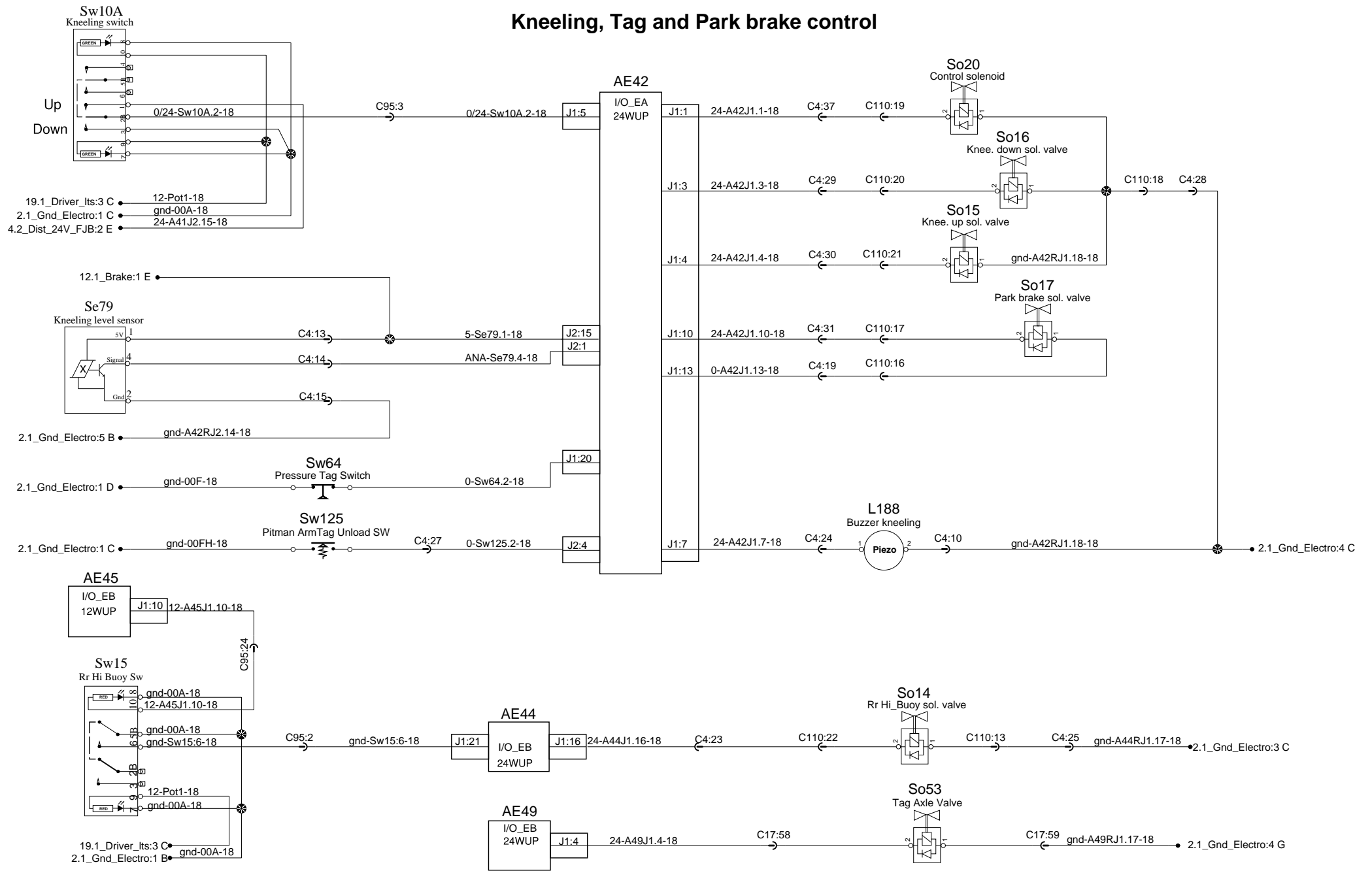
# Driver window



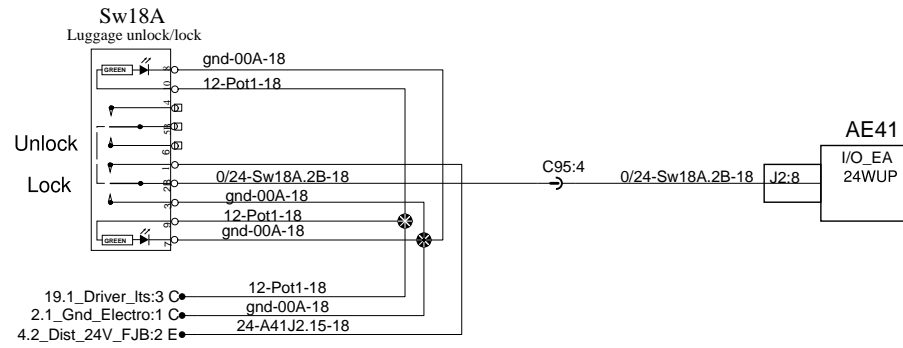
# Mirrors, 2 adjustments switch and heated



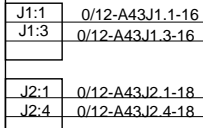
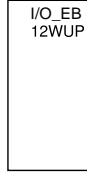
# Kneeling, Tag and Park brake control



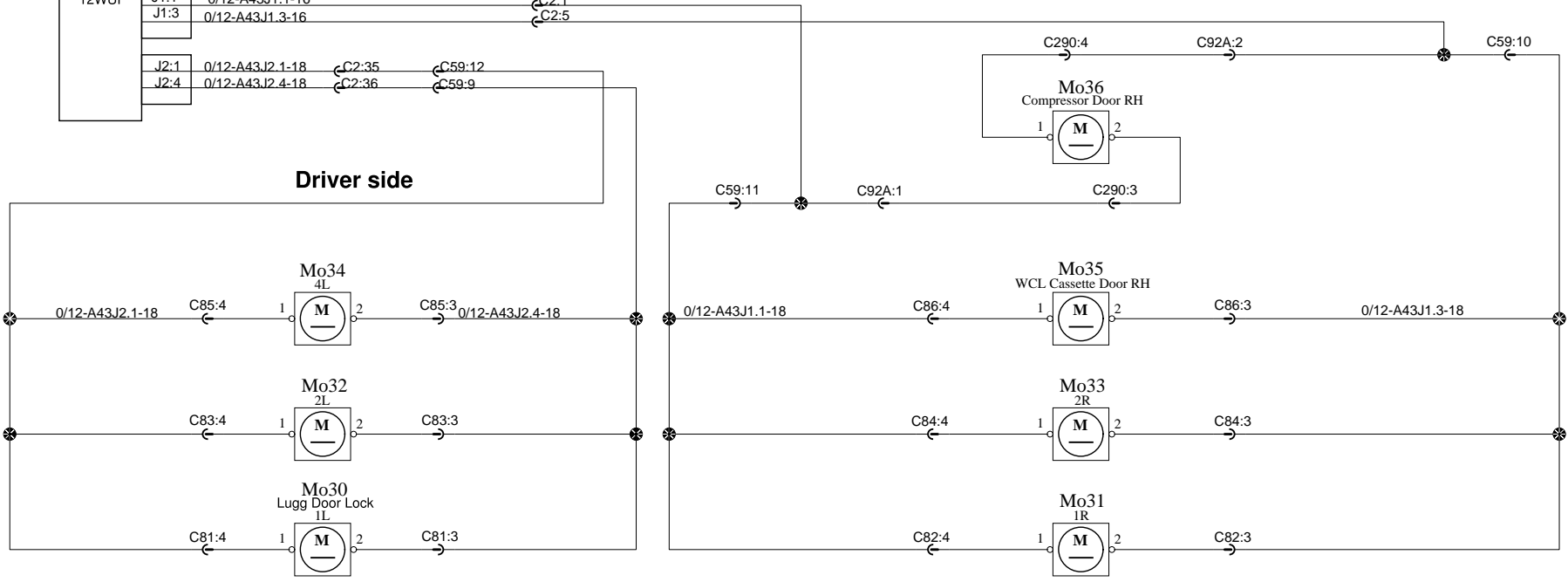
### Luggage door Lock/Unlock



### AE43



### Entrance door side



1

2

3

4

5

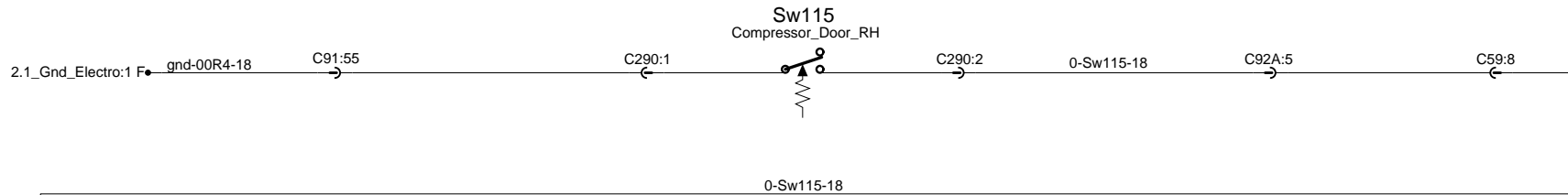
A

# Luggage door lock switches

A

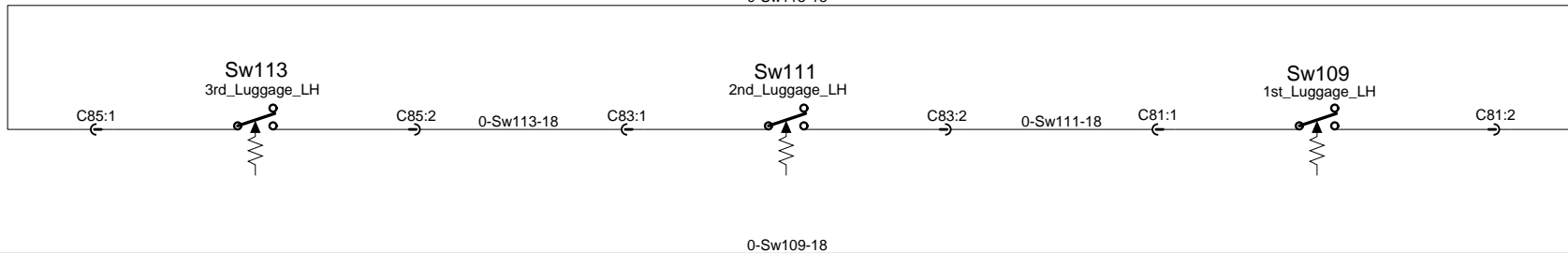
Switch closed = Door locked

B



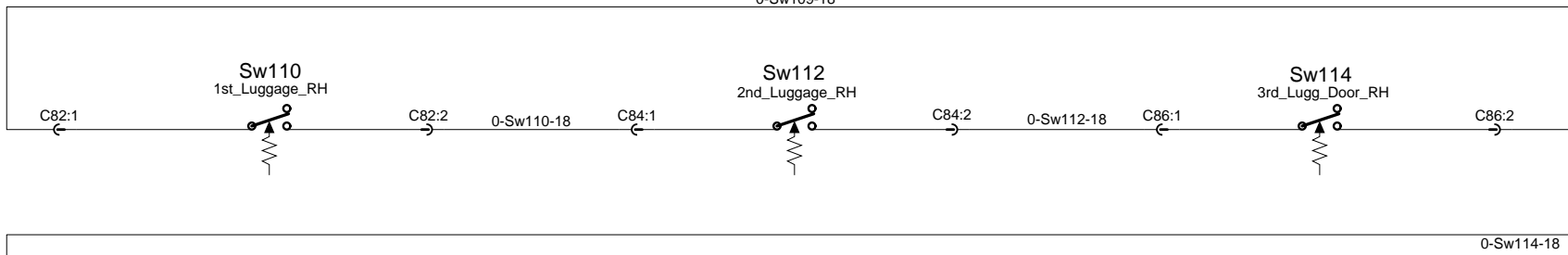
B

C



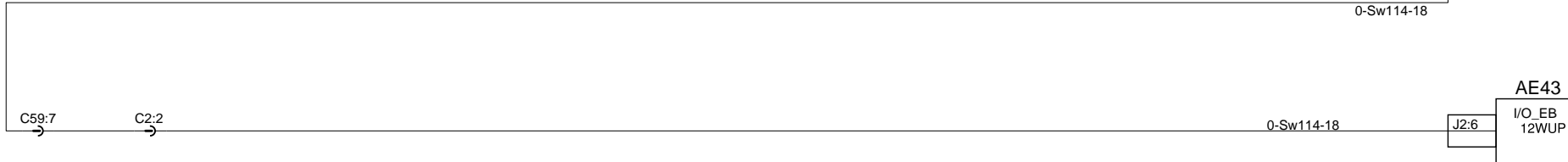
C

D



D

E



E

1

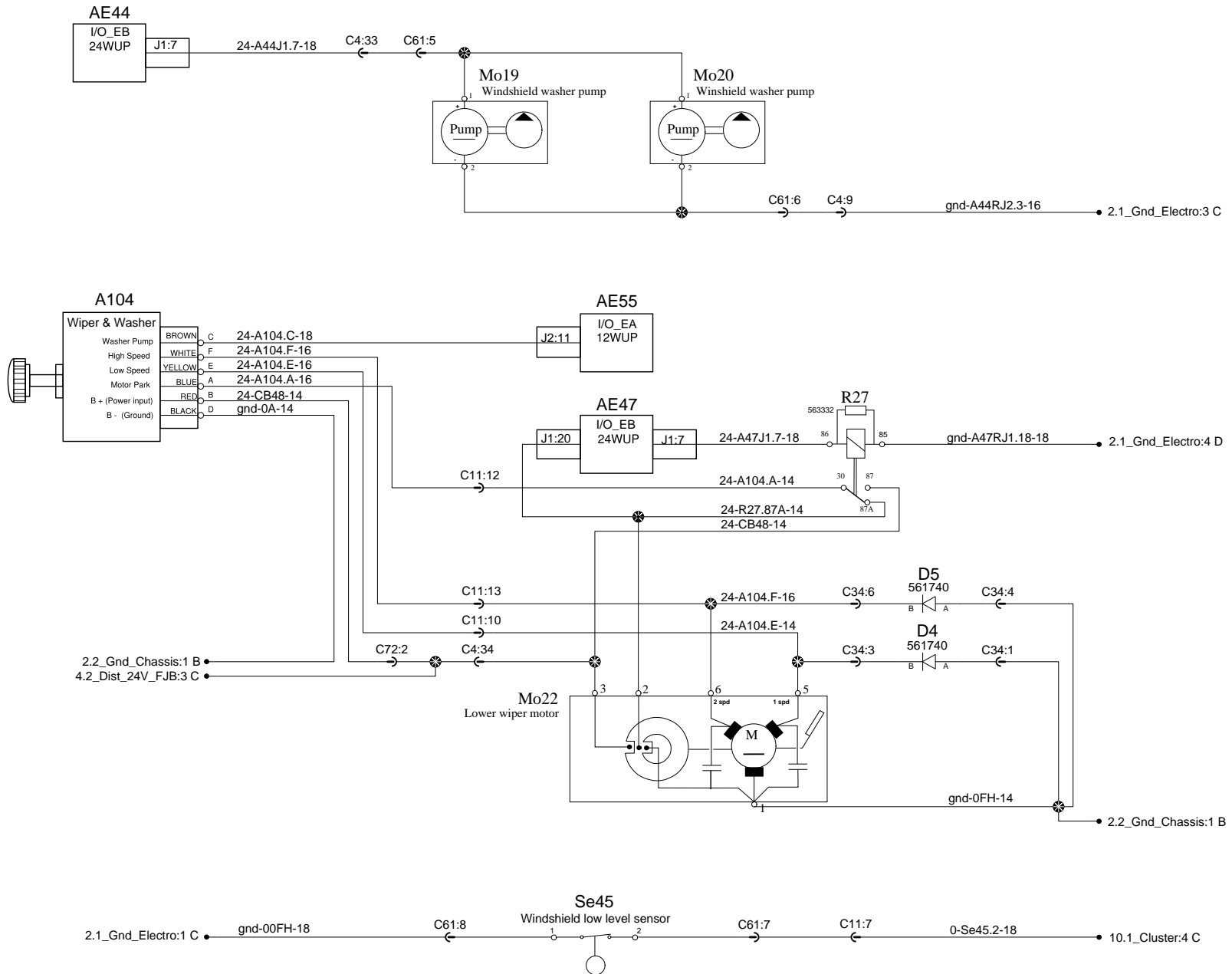
2

3

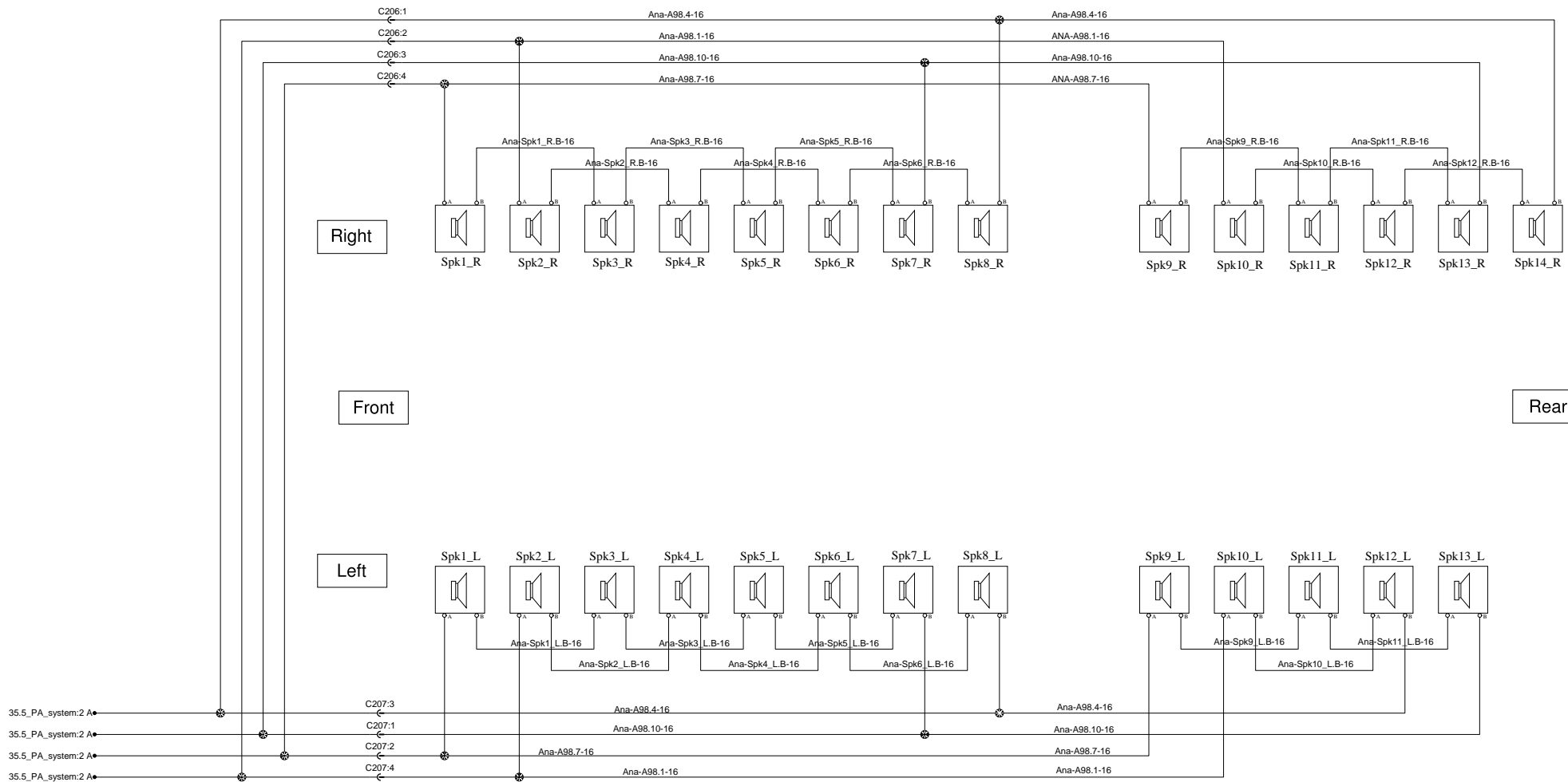
4

5

# Wiper and washer

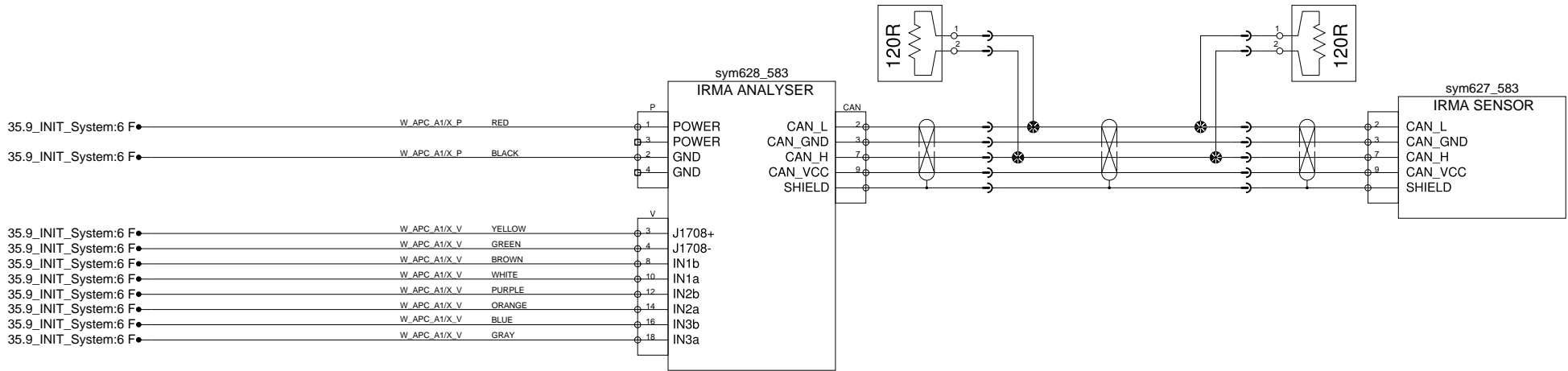


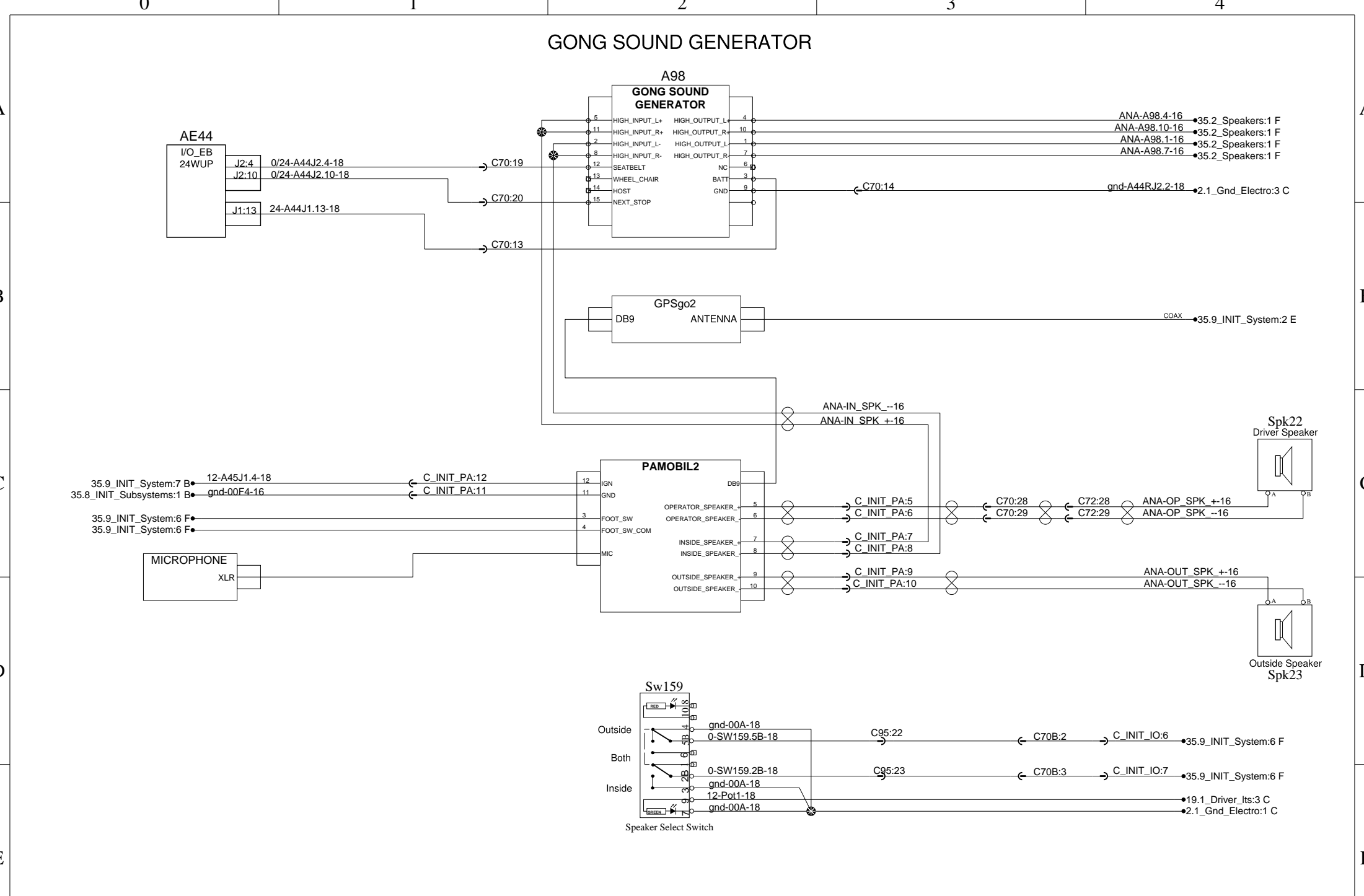
# Speakers arrangement (Delta configuration)



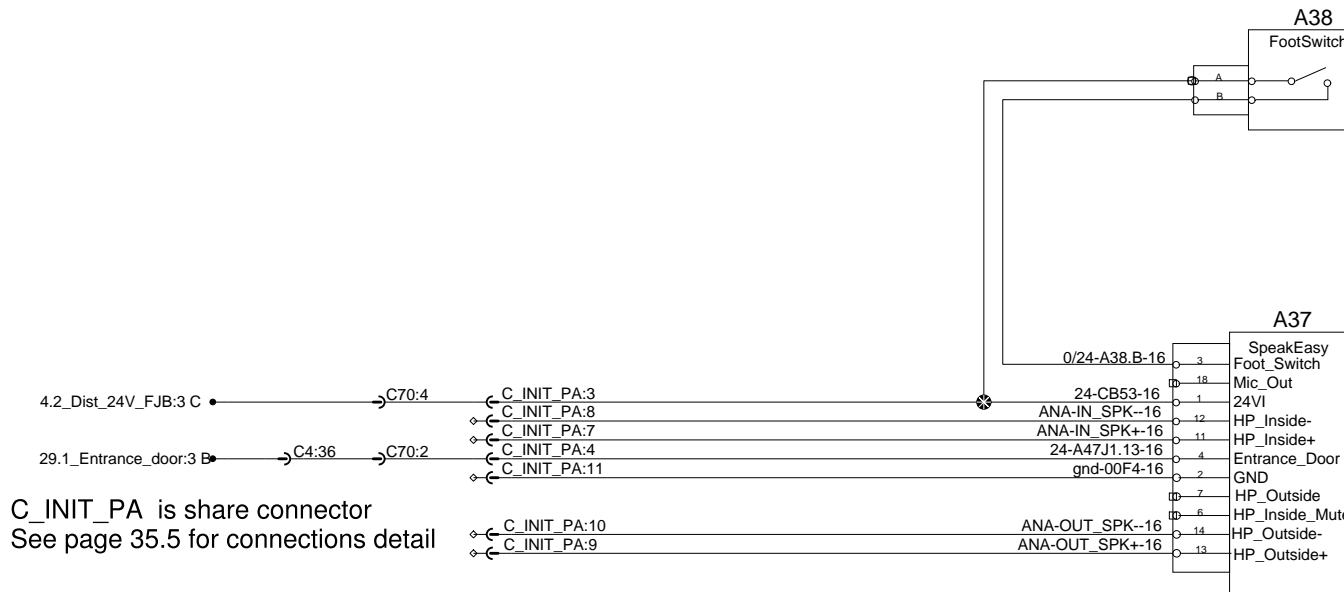


# AUTOMATIC PASSENGER COUNTING

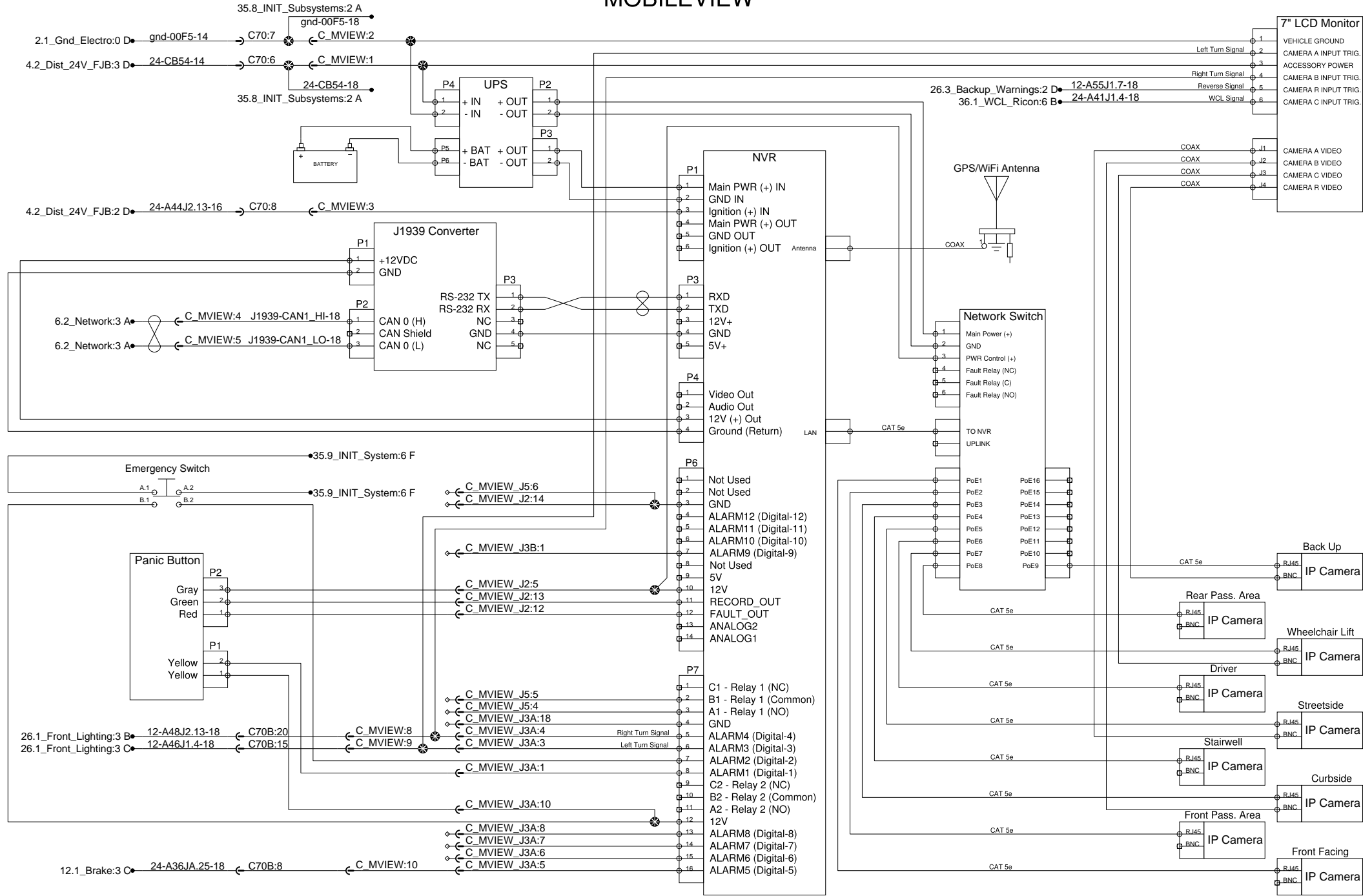




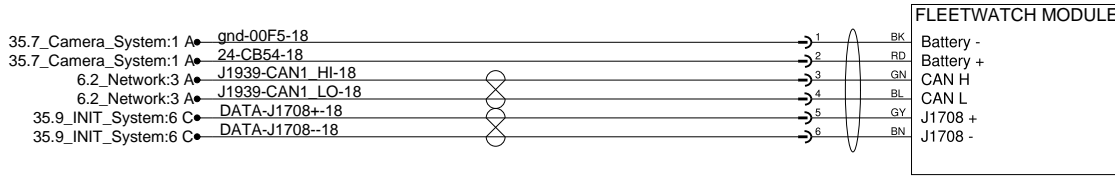
# Speak Easy StandAlone



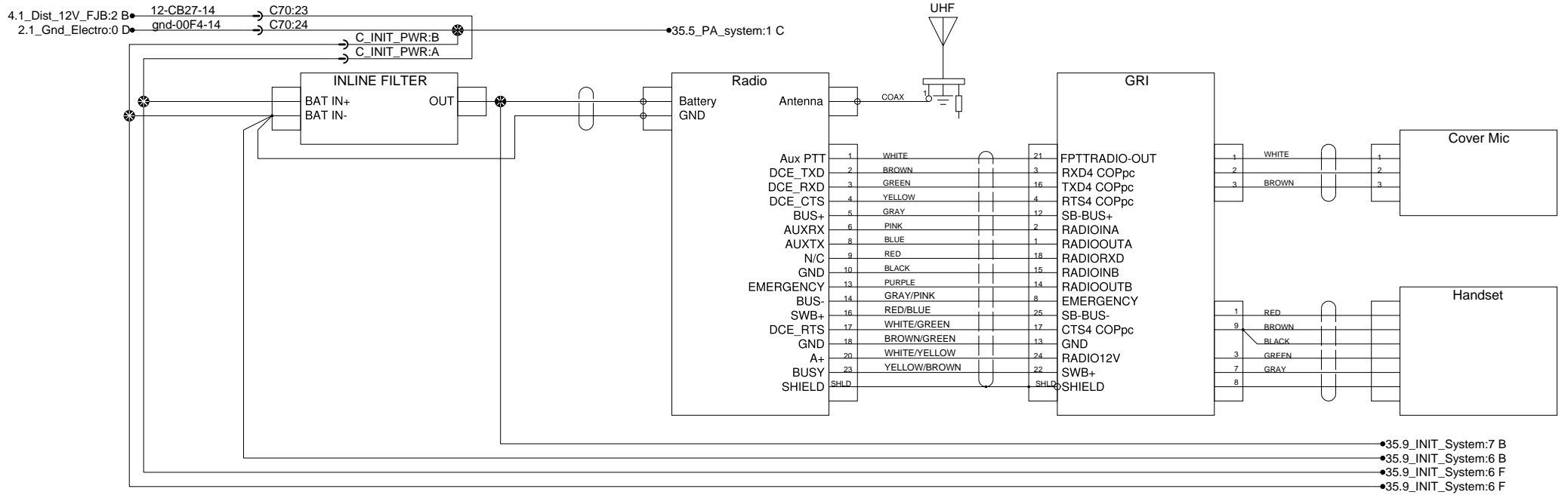
# MOBILEVIEW



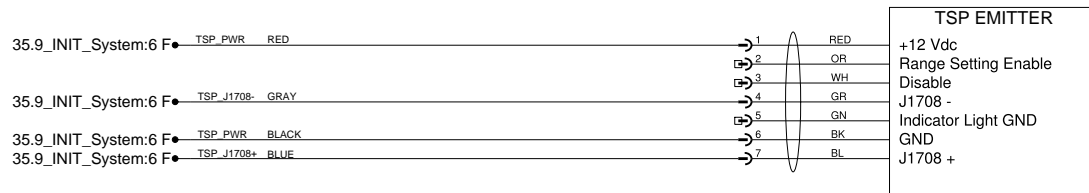
## FLEETWATCH



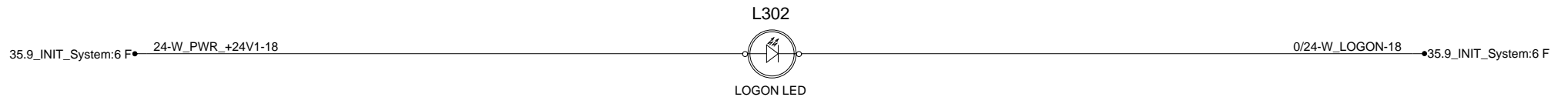
## RADIO



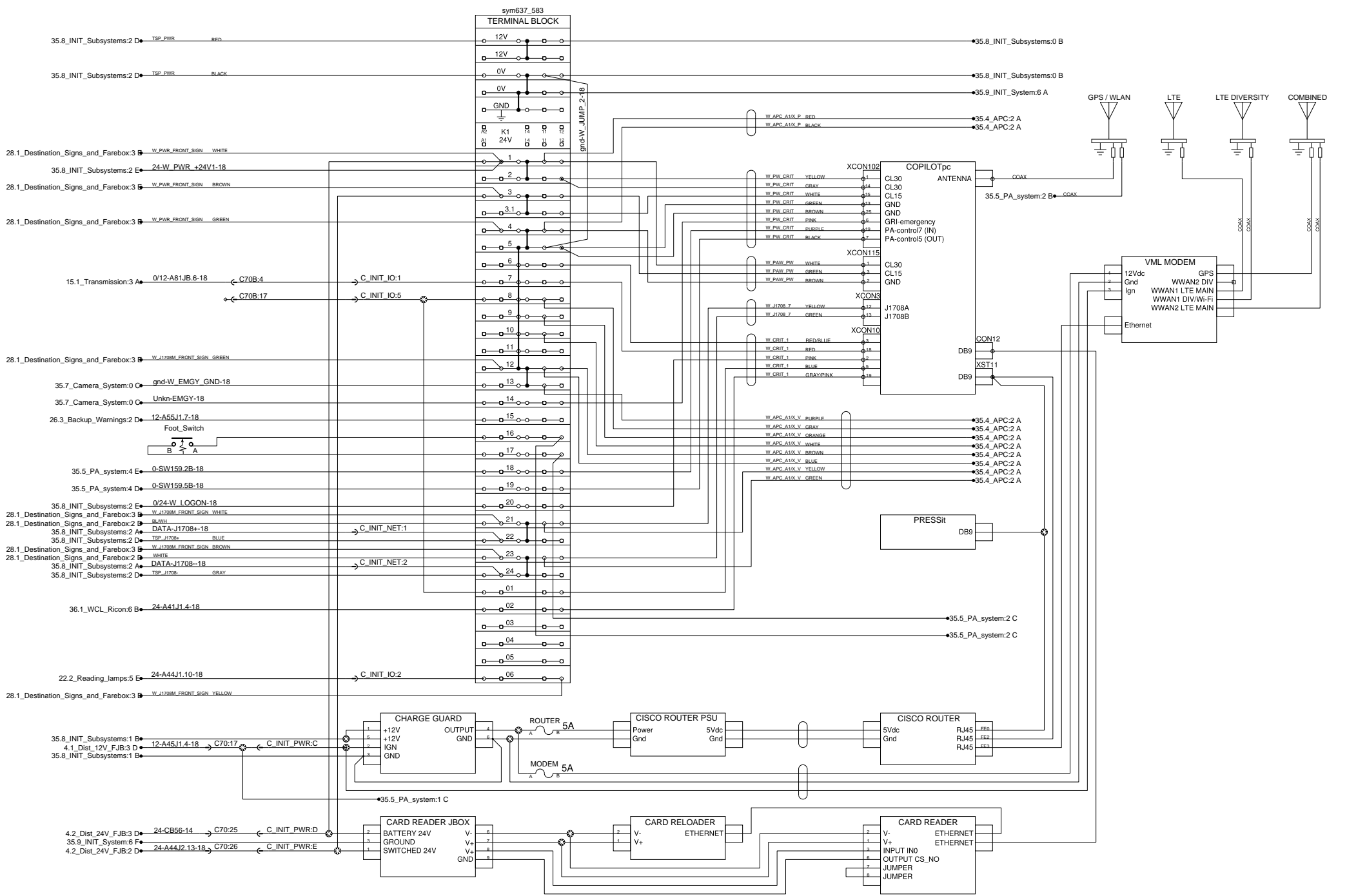
## TRAFFIC SIGNAL PRIORITY



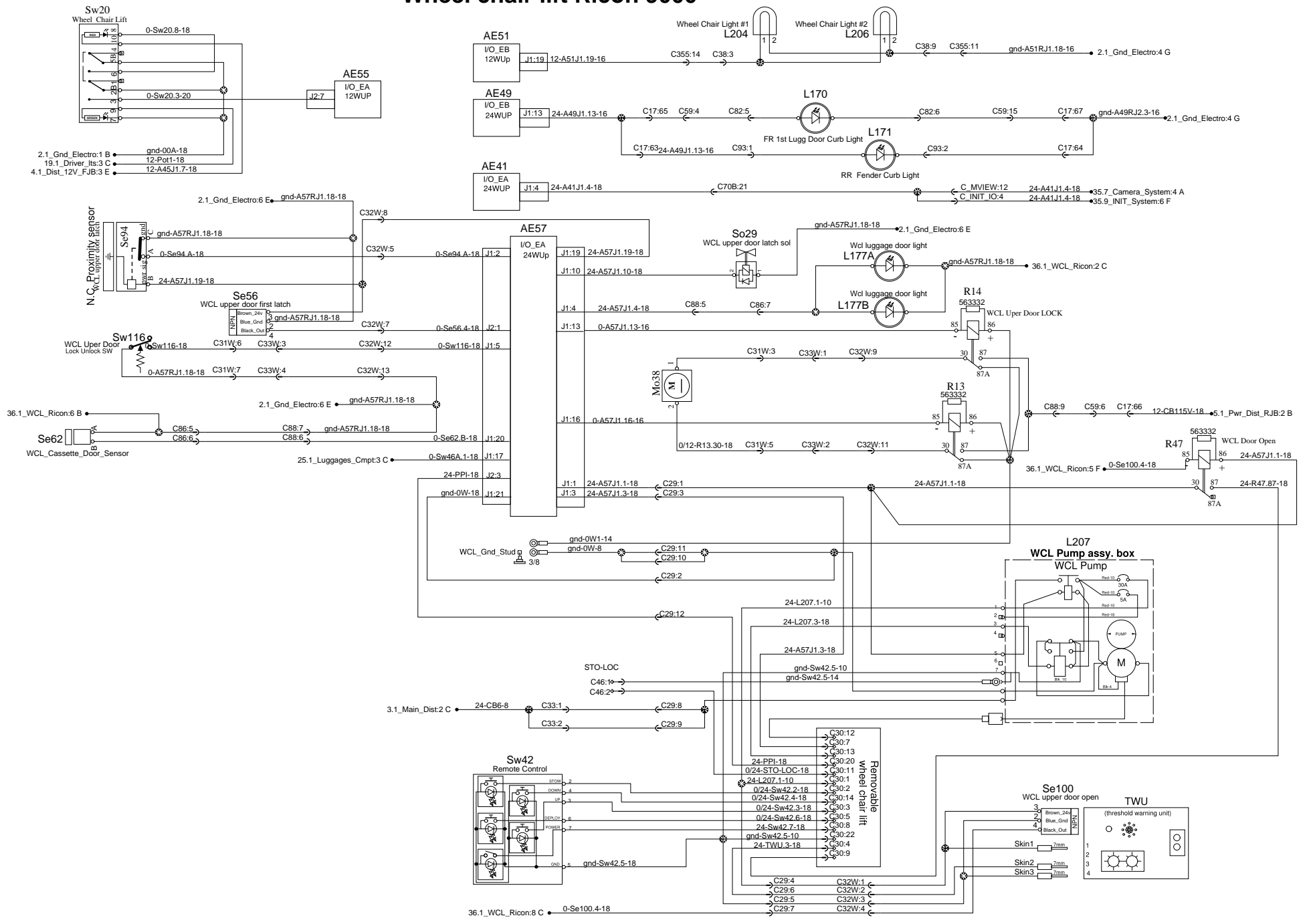
## LOGON INDICATOR LIGHT



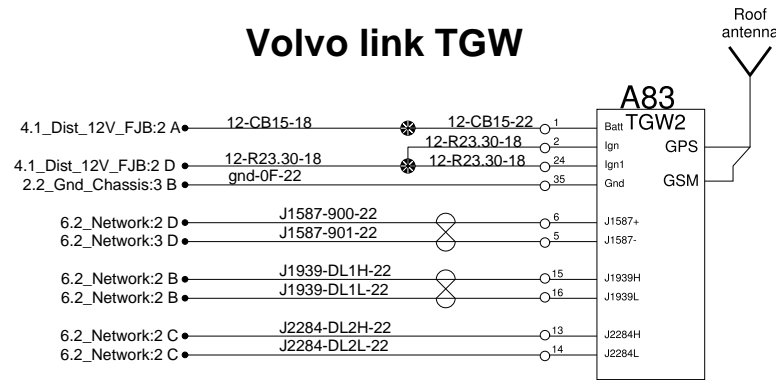
# INIT SYSTEM



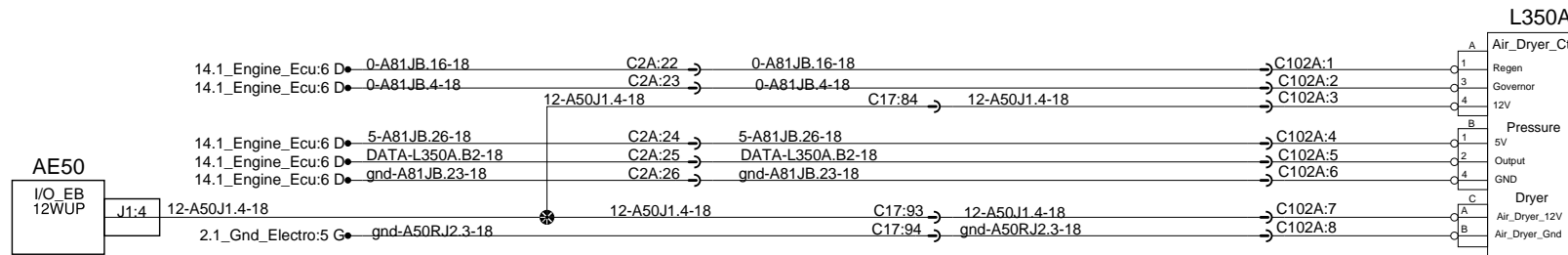
# Wheel chair lift Ricon 9000



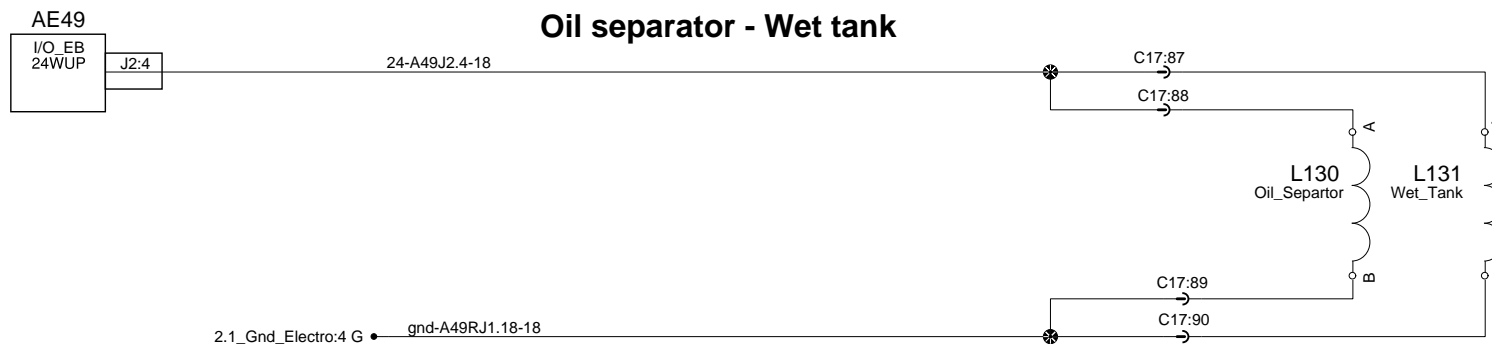
## Volvo link TGW



## Air dryer electric control and heater

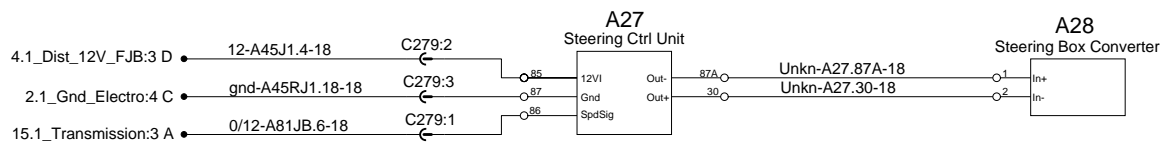


## Oil separator - Wet tank





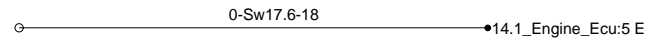
### ZF Steering control



# Automatic fire suppression system KIDDE

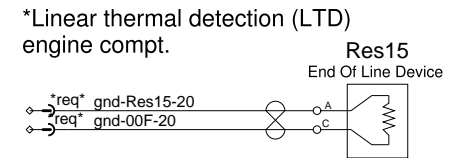
A

A



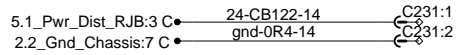
B

B



C

C



**\***  
LTD are rated to alarm  
between 334F (168C) and  
356F (180C), if the temperature  
sensitive insulation melt,  
the two wires give a signal  
when short-circuiting.

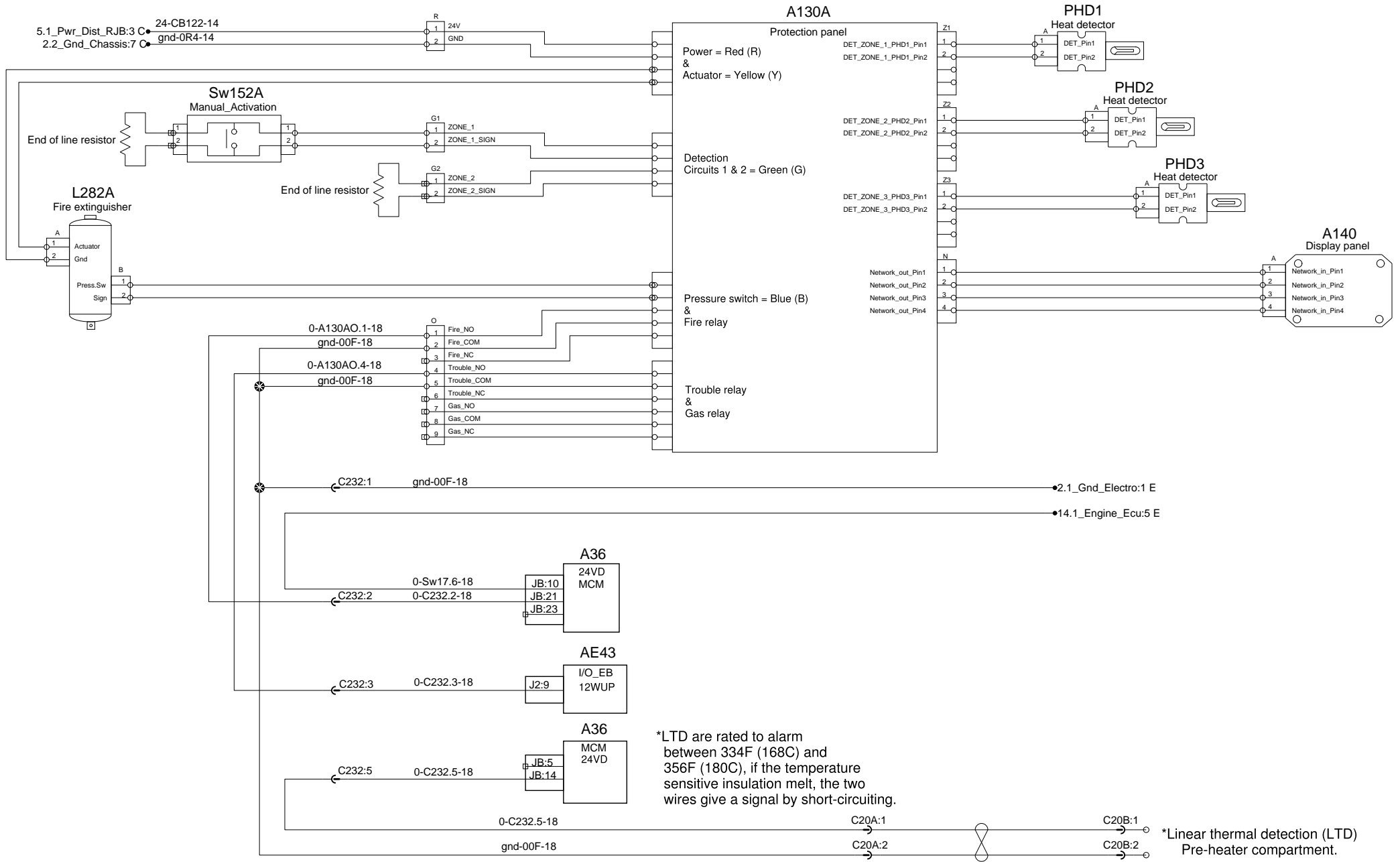
D

D

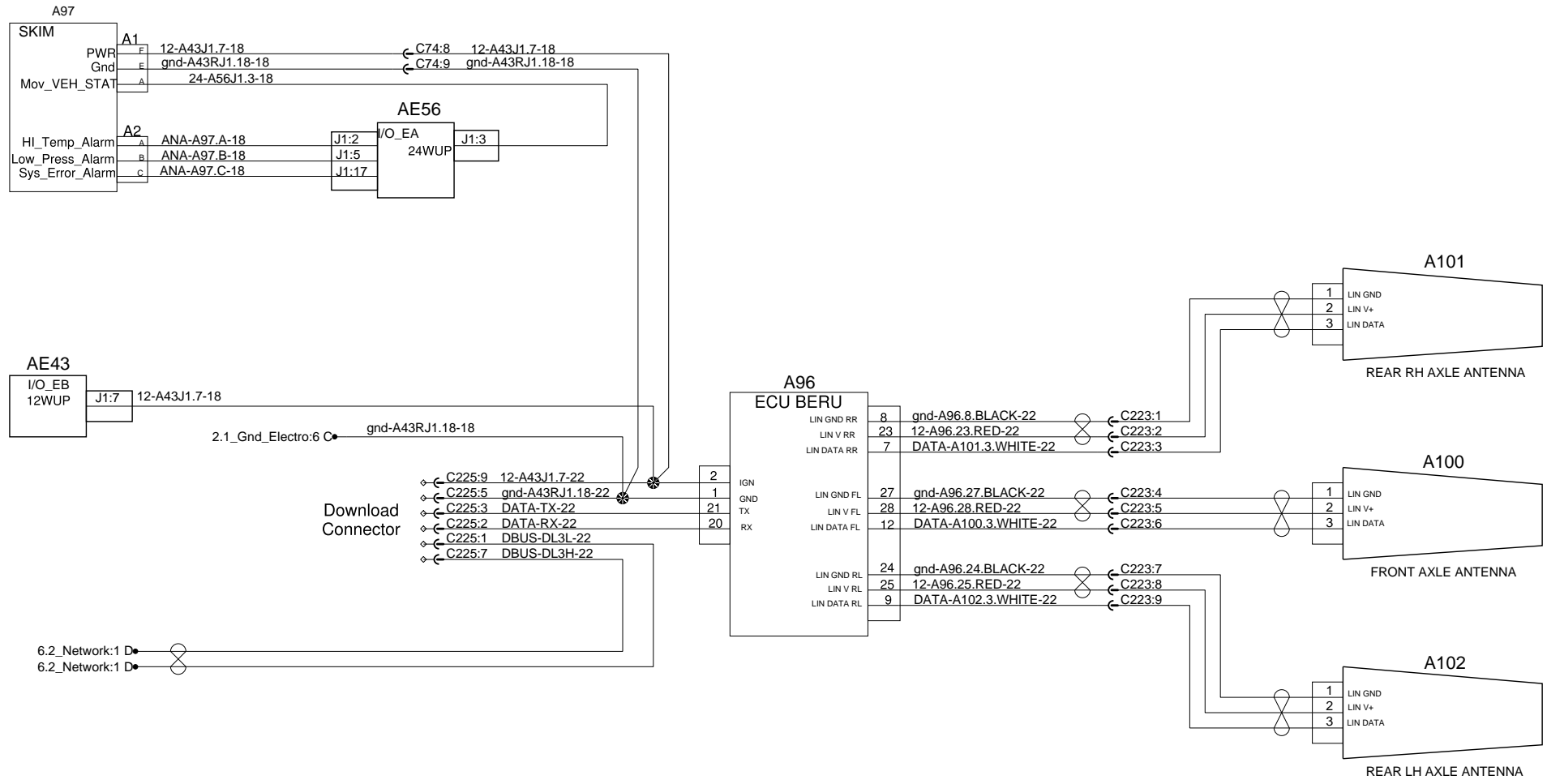
E

E

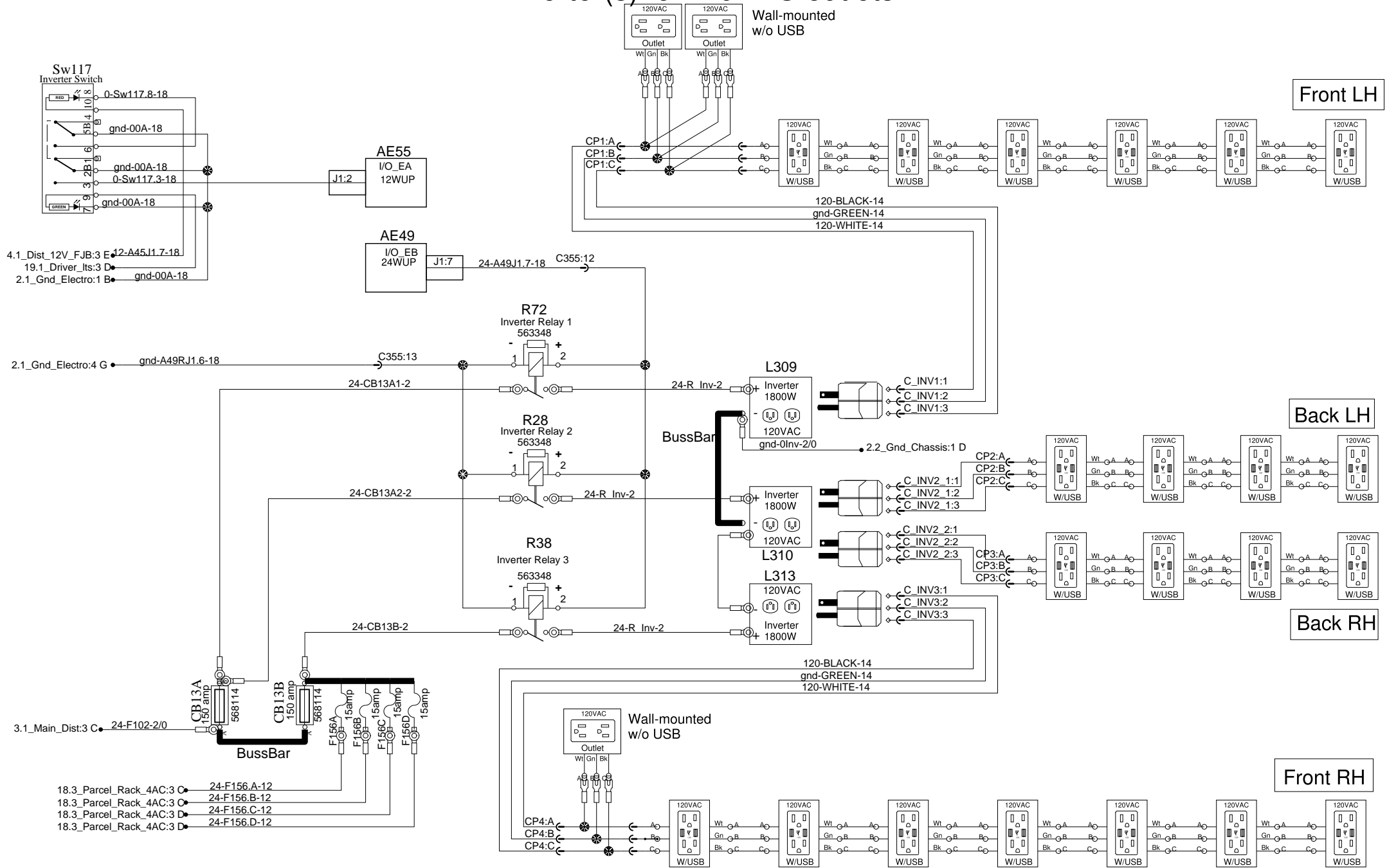
# Automatic fire suppression system Amerex



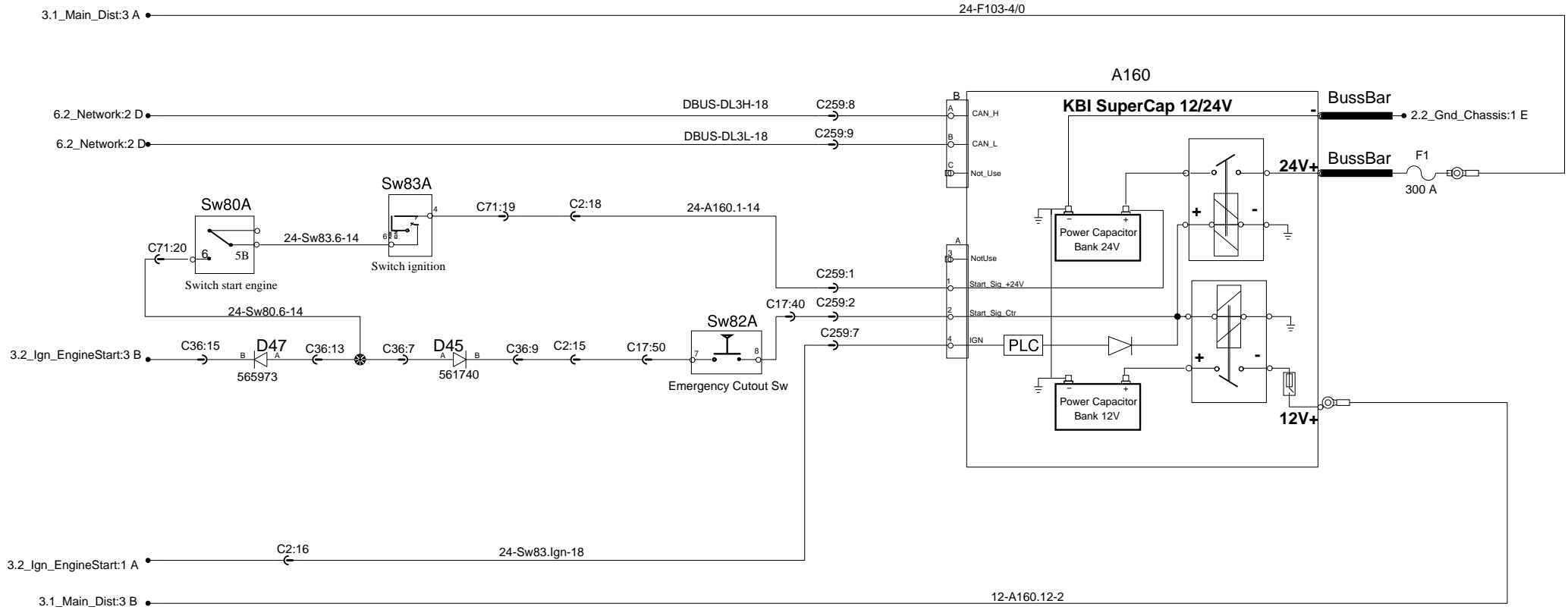
# TIRE PRESSURE MONITORING SYSTEM



# Inverter(s) & 120VAC outlets



# Ultracap (Starting aid)



# Auxiliary batteries (Starting aid)

