



MULLĒN
COMMERCIAL

2024 Mullen ONE & CAMPUS Electrical Upfit Guide

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Mullen Upfitter Integration

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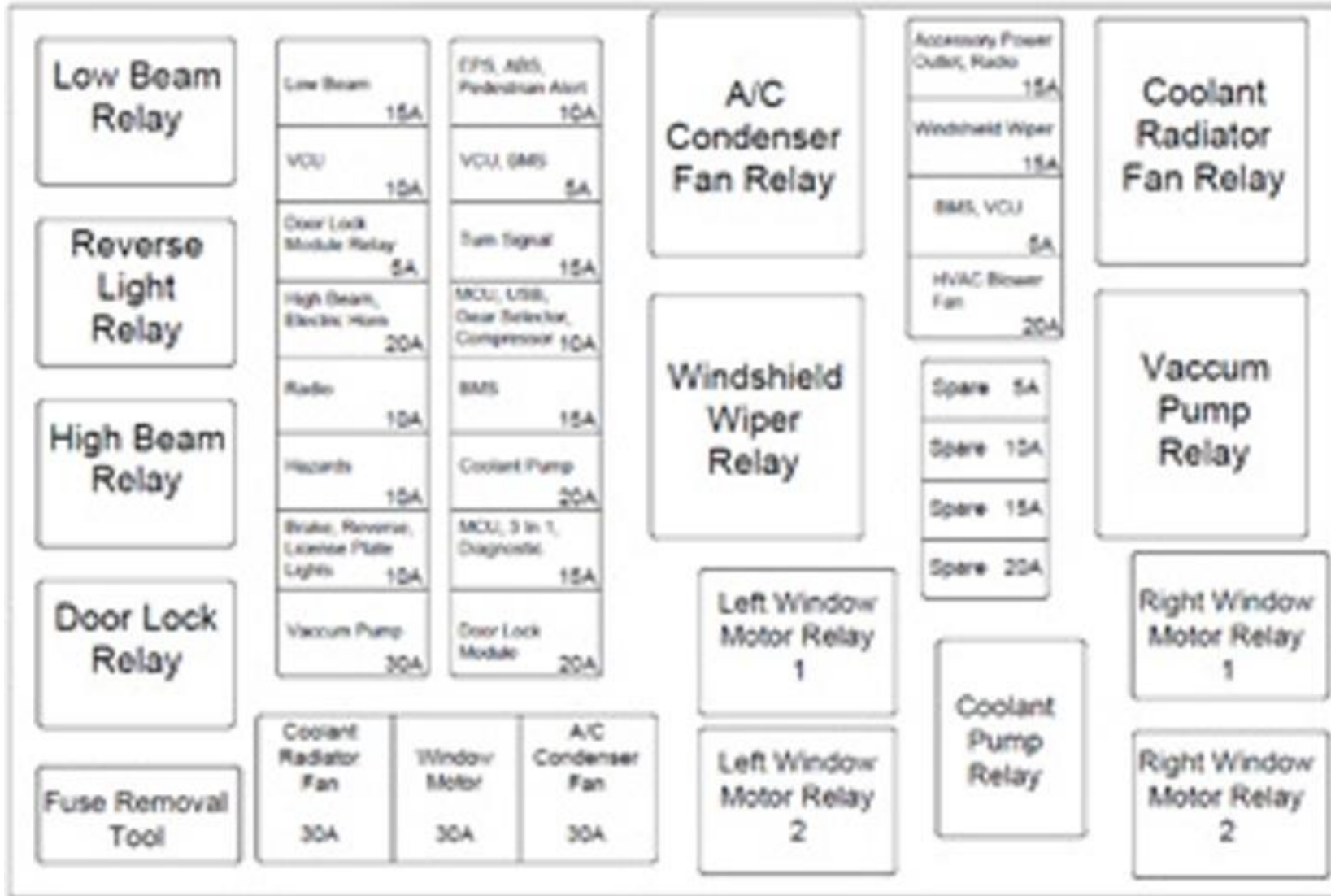
23.1 Camera, Marker Light & Horn Unit
Schematics

Model Chart



| Model | Body Style | Electric Motor/ Drive Type | HP / Torque | Drive Battery V/ Capacity / Type | Charging Level 2 | Start Battery V / CCA | Regenerative Braking |
|--------|------------|----------------------------|-----------------|----------------------------------|------------------|-----------------------|----------------------|
| CAMPUS | Van | 60 kW RWD | 80 / 162 ft lbs | 340 V / 42 kWh / Lithium Iron | 6.6 kW ~ 7.6 Hrs | 12 V / 650 | Standard |
| ONE | Van | 60 kW RWD | 80 / 162 ft lbs | 340 V / 42 kWh / Lithium Iron | 6.6 kW ~ 7.6 Hrs | 12 V / 650 | Standard |

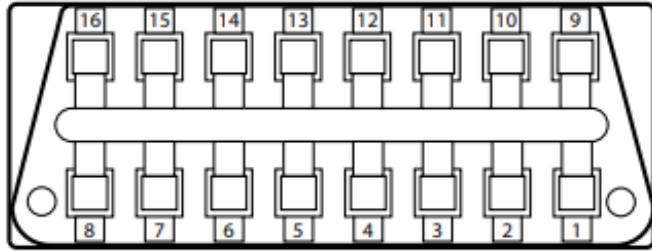
Fuse & Relay Center



Diagnostic Connector

UD0 Diagnostic interface connector pin-out - Campus

| Pin Number | Signal | Pin Number | Signal |
|------------|---------------------------|------------|--------------------------|
| 1 | Motor CAN02 High | 9 | Motor CAN2 Low |
| 2 | DC quick charge CAN3 High | 10 | DC quick charge CAN3 Low |
| 3 | BMS 2 CAN06 High | 11 | BMS 2 CAN06 Low |
| 4 | Ground | 12 | NA |
| 5 | Ground | 13 | NA |
| 6 | Network CAN01 High | 14 | Network CAN01 Low |
| 7 | ABS | 15 | MCU CAN04 Low |
| 8 | MCU CAN04 High | 16 | NA |

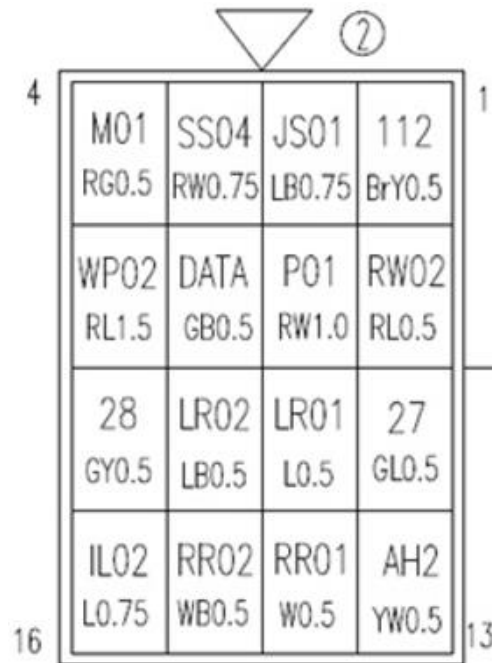


UD1 Diagnostic interface connector pin-out - Cargo

| Pin Number | Signal | Pin Number | Signal |
|------------|----------------------|------------|---------------------|
| 1 | Motor CAN02 High | 9 | Motor CAN02 Low |
| 2 | NA | 10 | NA |
| 3 | Network 2 CAN06 High | 11 | Network 2 CAN06 Low |
| 4 | Ground | 12 | BMS CAN05 High |
| 5 | Ground | 13 | BMS CAN05Low |
| 6 | Network CAN01 High | 14 | Network CAN01 Low |
| 7 | NA | 15 | MCU CAN04 Low |
| 8 | MCU CAN04 High | 16 | Power 12V |

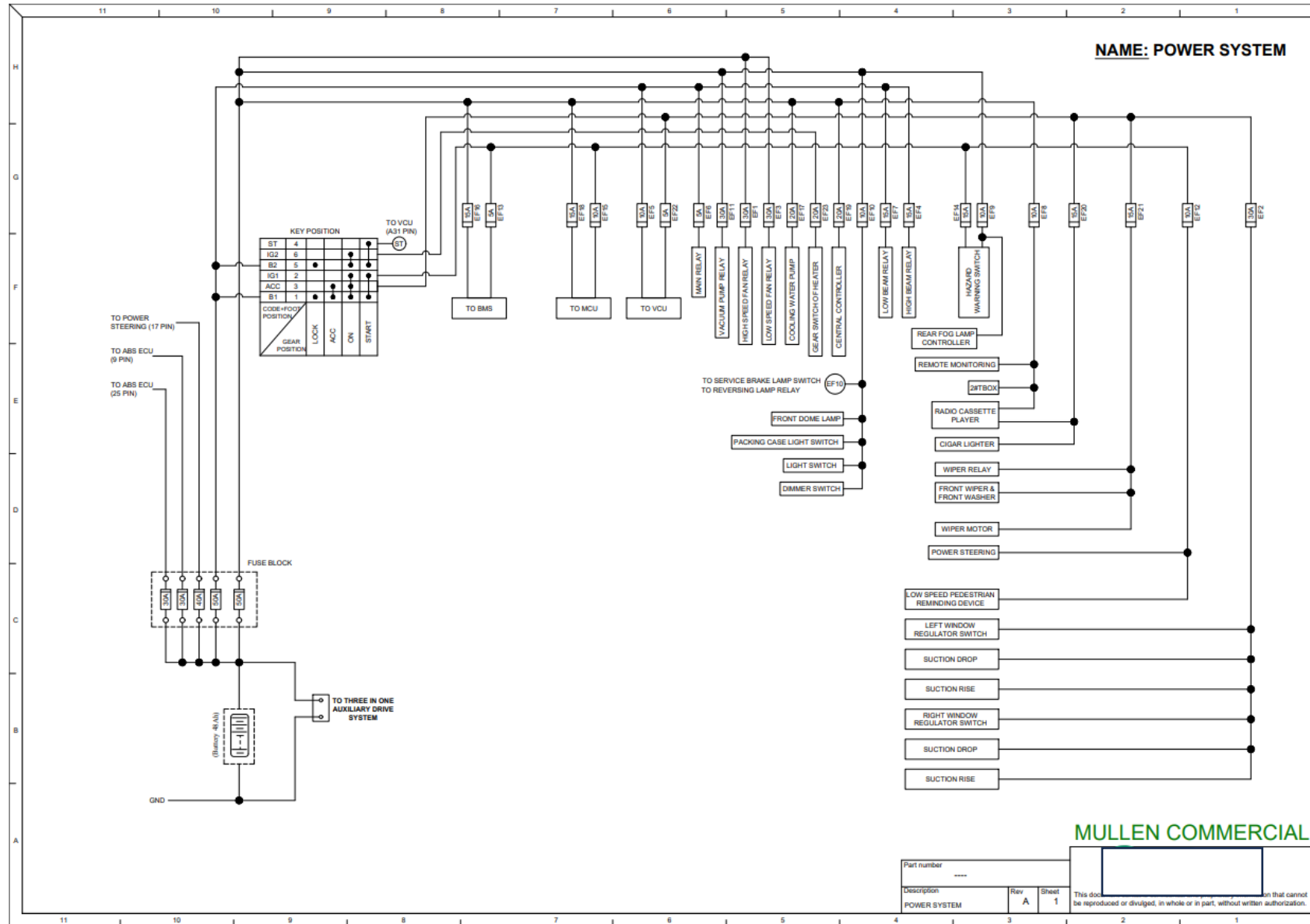
Cargo/Campus On-Board Diagnostic plug pin-out

Upfitter Connector Interface

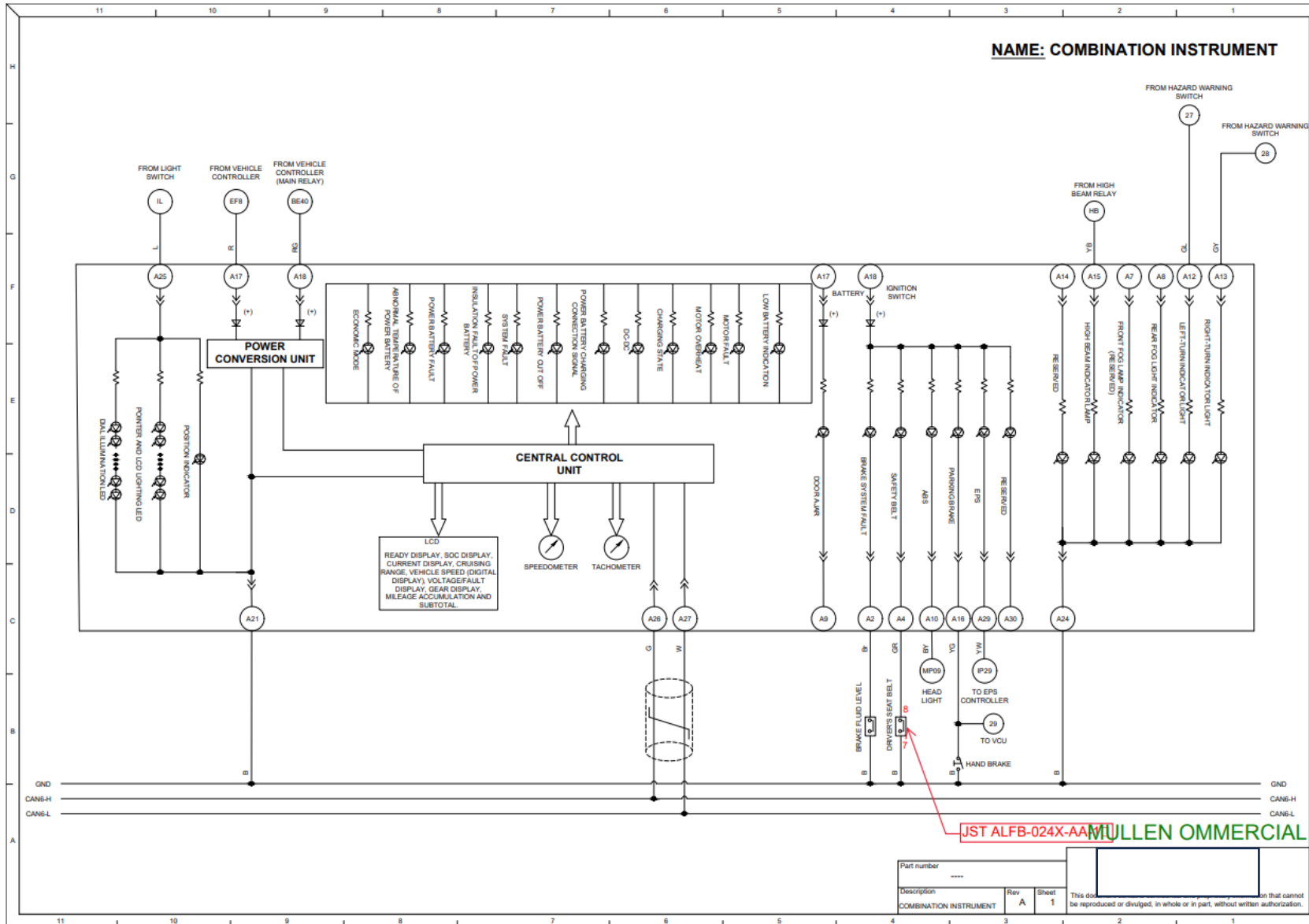


| Position | Signal Purpose | Wire Color |
|----------|-----------------------------------|----------------------------|
| 1 | Rear fog lamp high | Brown with a yellow stripe |
| 2 | Door lock left rear | Blue with a black stripe |
| 3 | Door lock right rear | Red with a white stripe |
| 4 | MCU ignition 1 | Red with a green stripe |
| 5 | Reverse 12 V | Red with a blue stripe |
| 6 | <u>Mcu b+</u> | Red with a white stripe |
| 7 | Reverse radar 12 V | Green with a blue stripe |
| 8 | Water pump B+ | Red with a blue stripe |
| 9 | Left turn signal 12V intermittent | Green with a blue stripe |
| 10 | WSS LR high | Blue with a red stripe |
| 11 | WSS RR high | Blue with a black stripe |
| 12 | Right turn signal 12V | Green with a yellow stripe |
| 13 | Brake switch | Yellow with a white stripe |
| 14 | WSS LR low | White |
| 15 | WSS RR low | White with a black stripe |
| 16 | Park lamps | Blue |

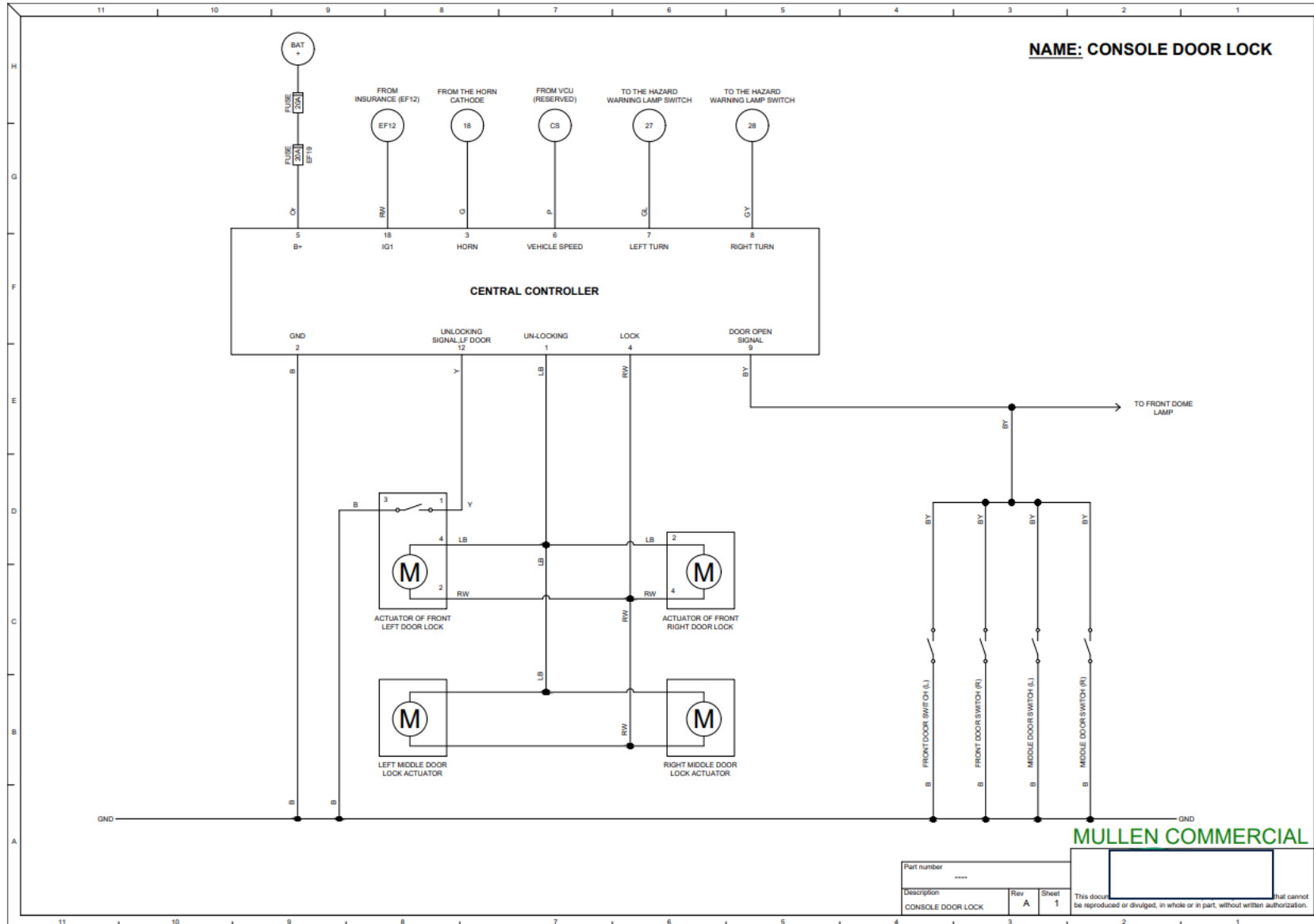
Power System



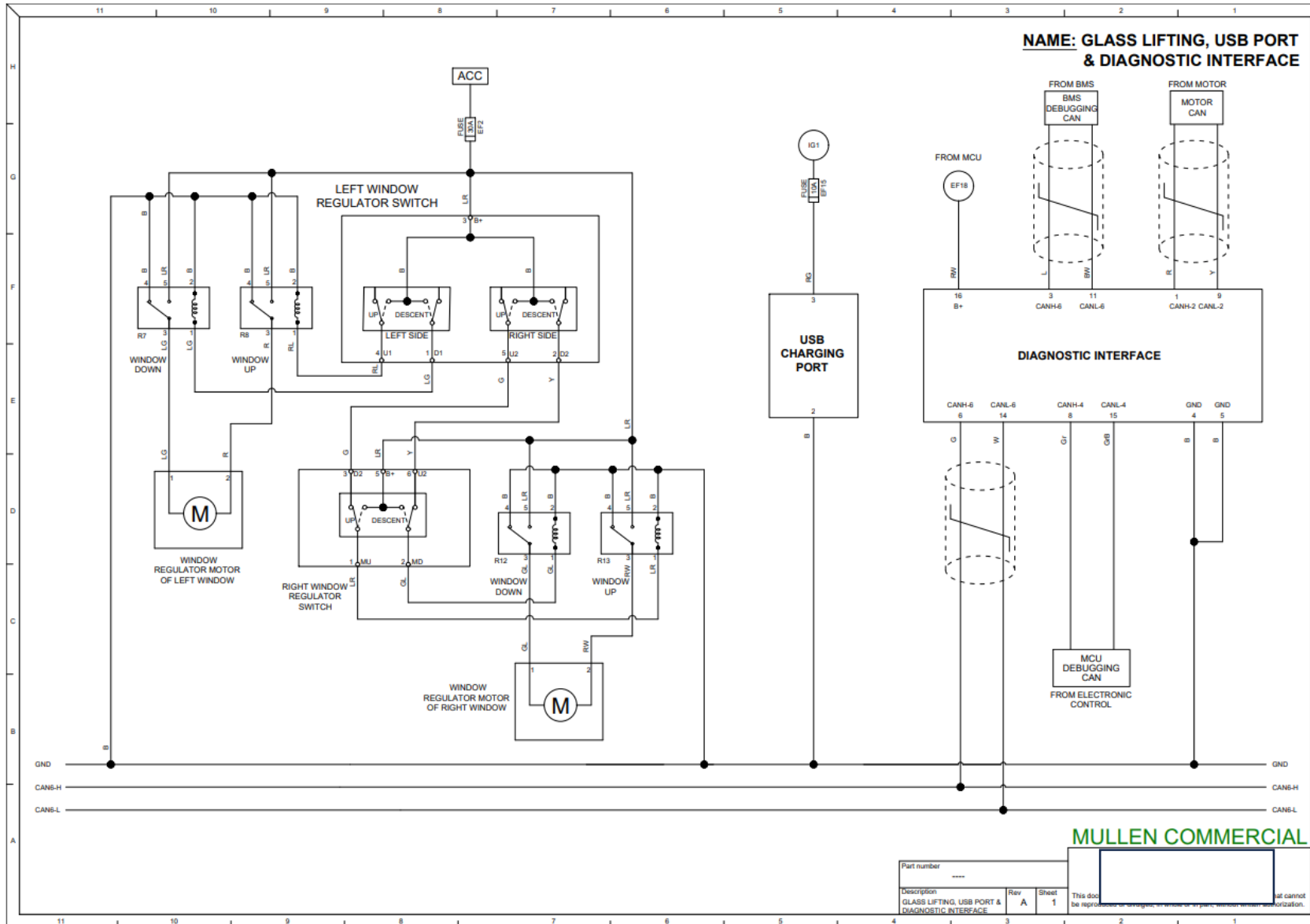
Combination Instrument



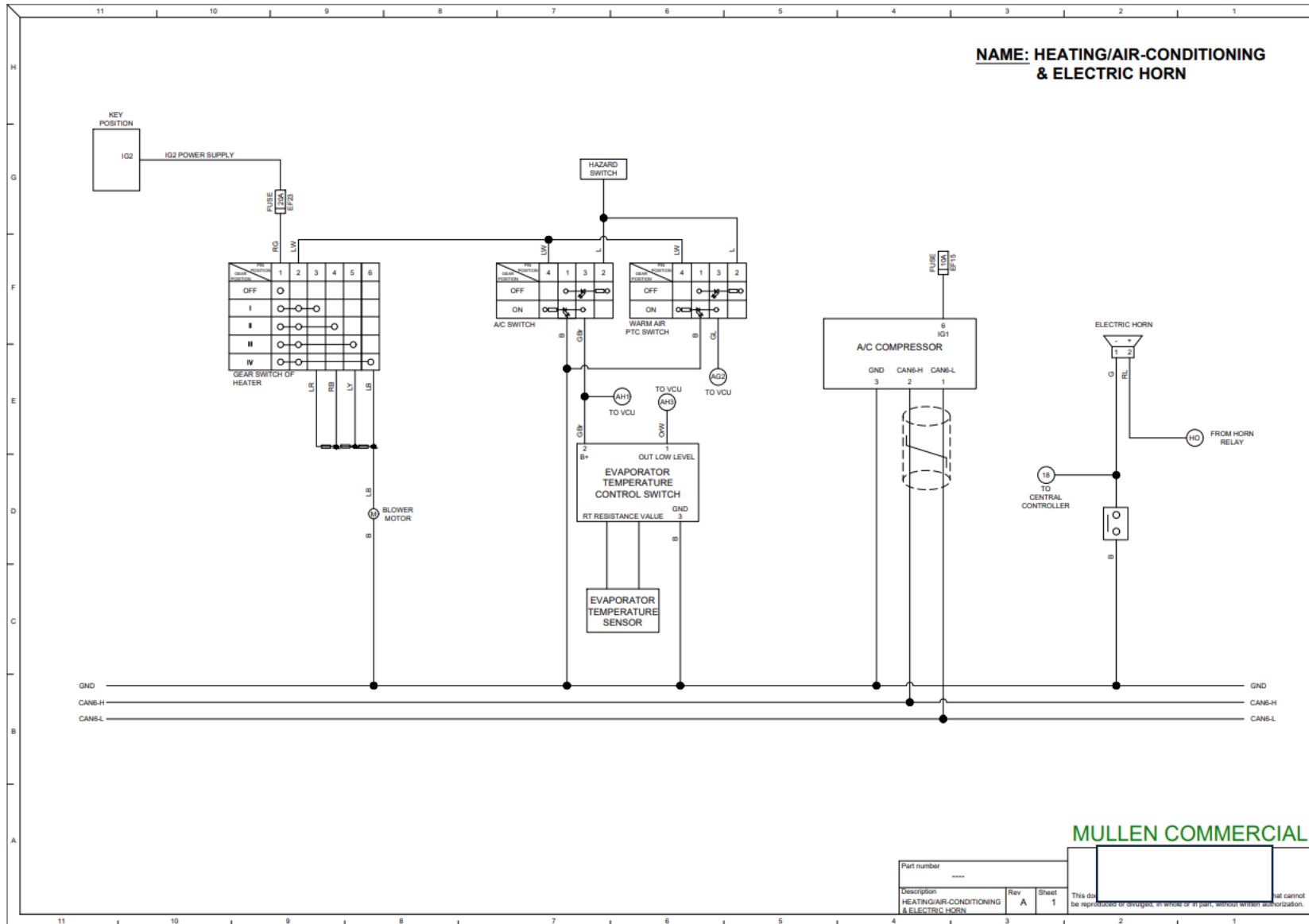
Console Door Lock



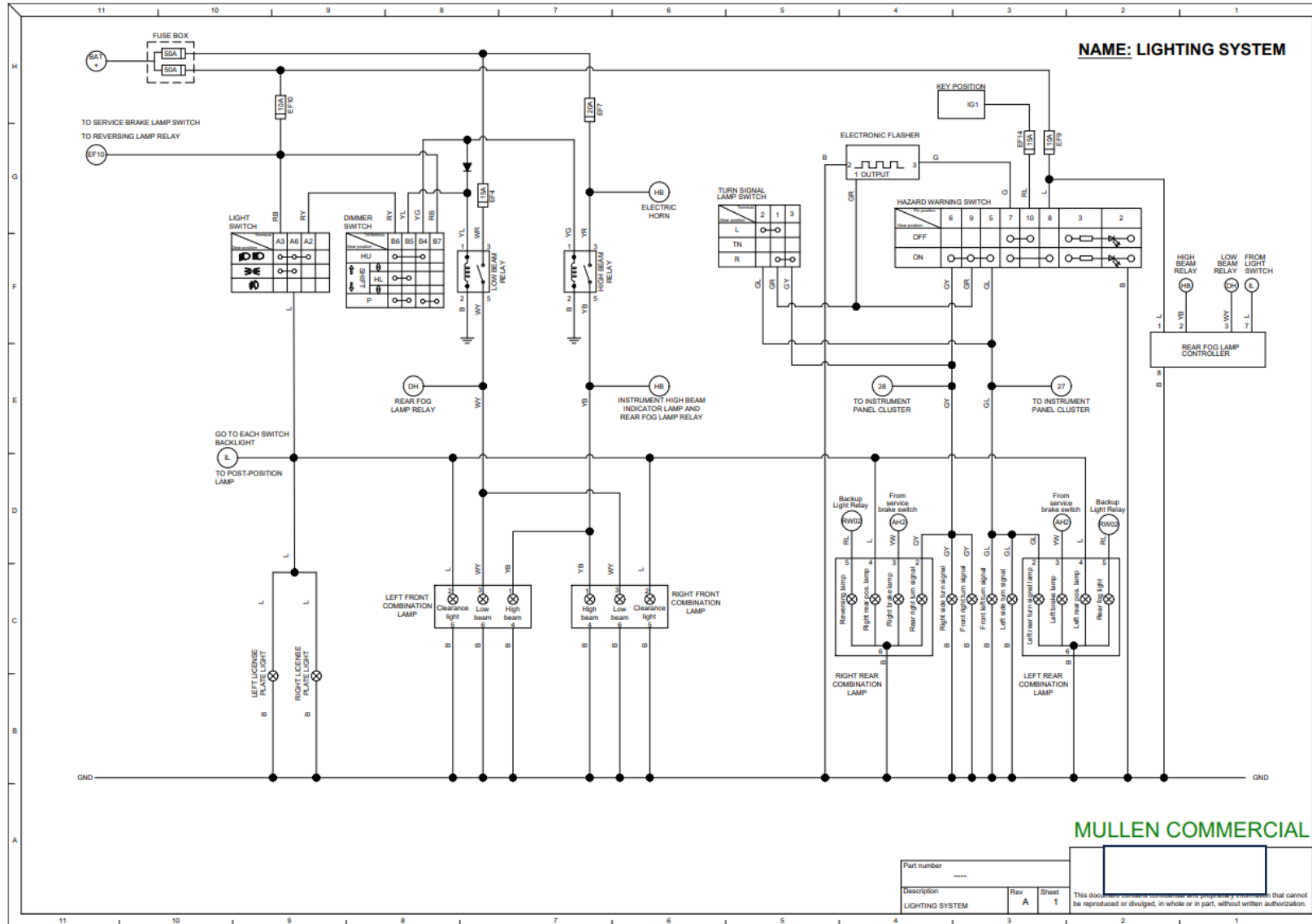
Glass, USB Port & Diagnostic Interface



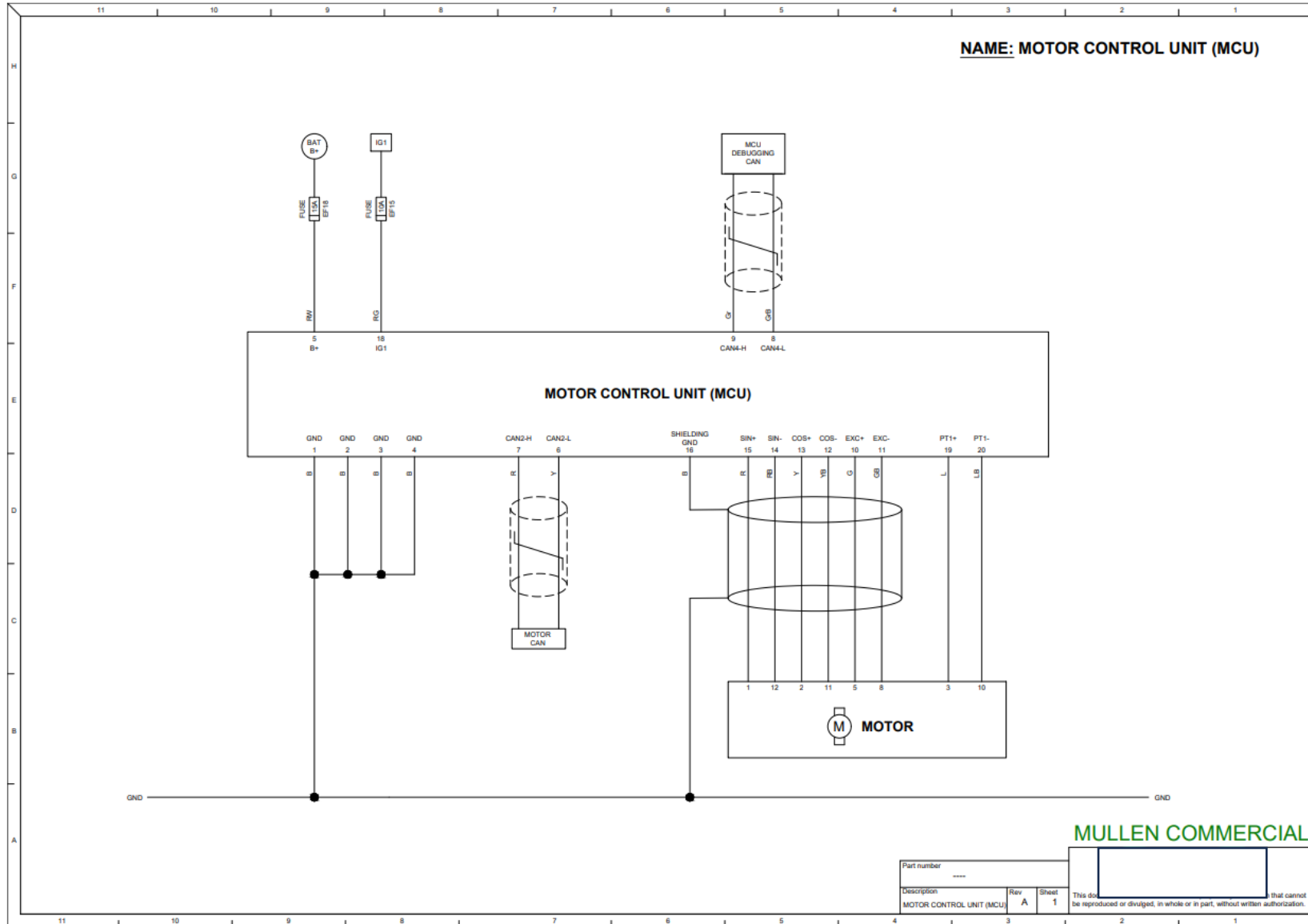
HVAC & Horn



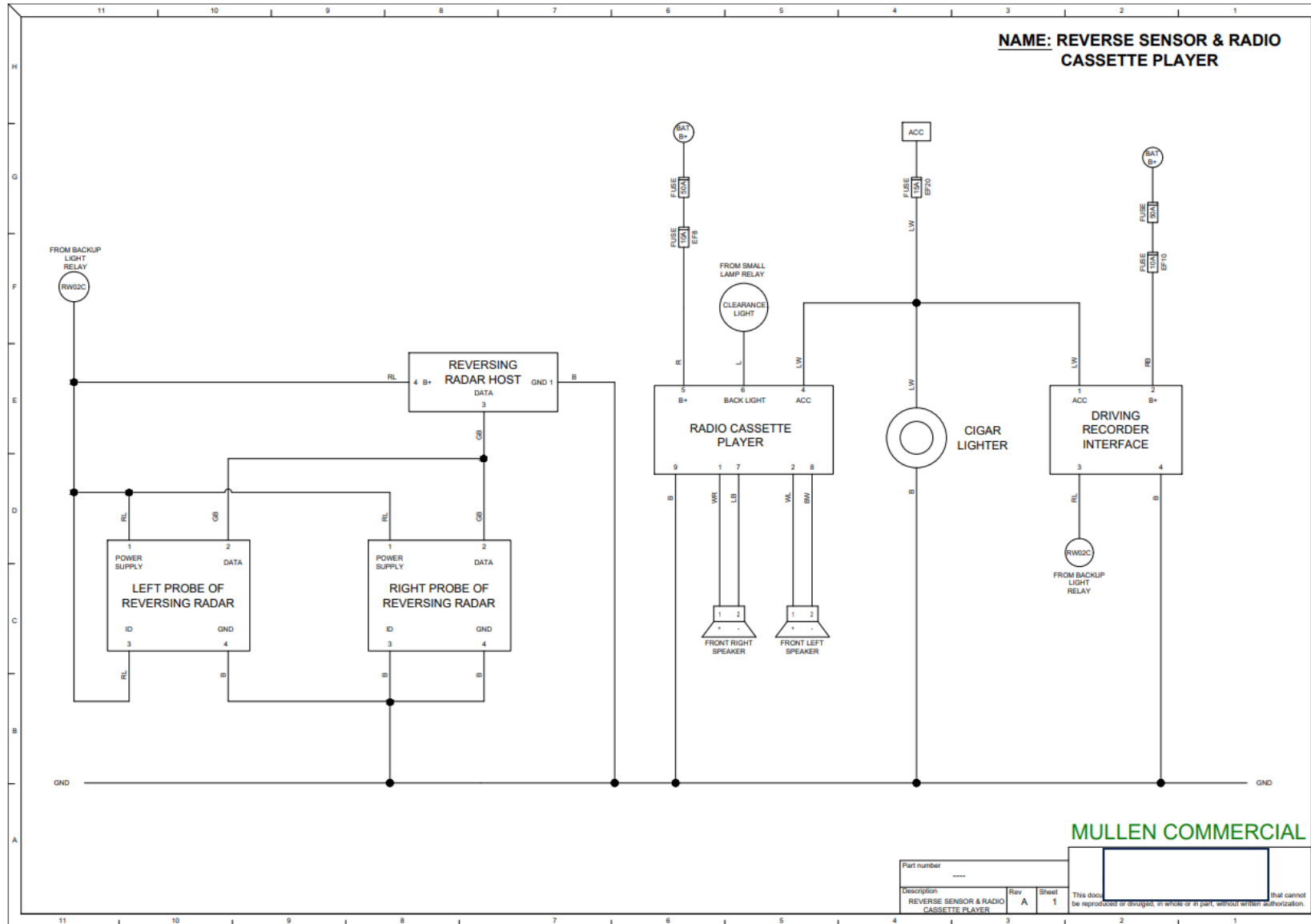
Lighting System



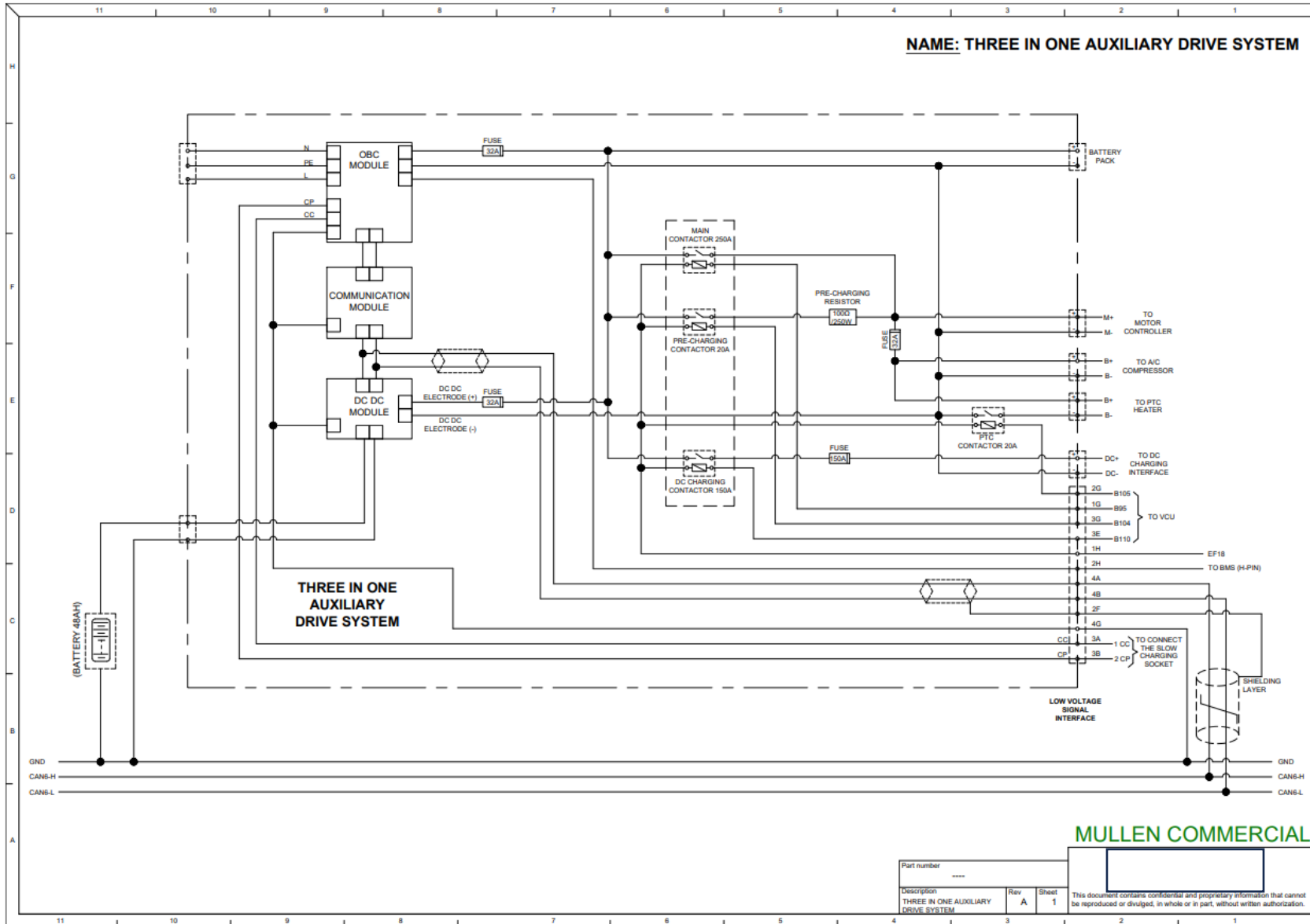
Motor Control Unit



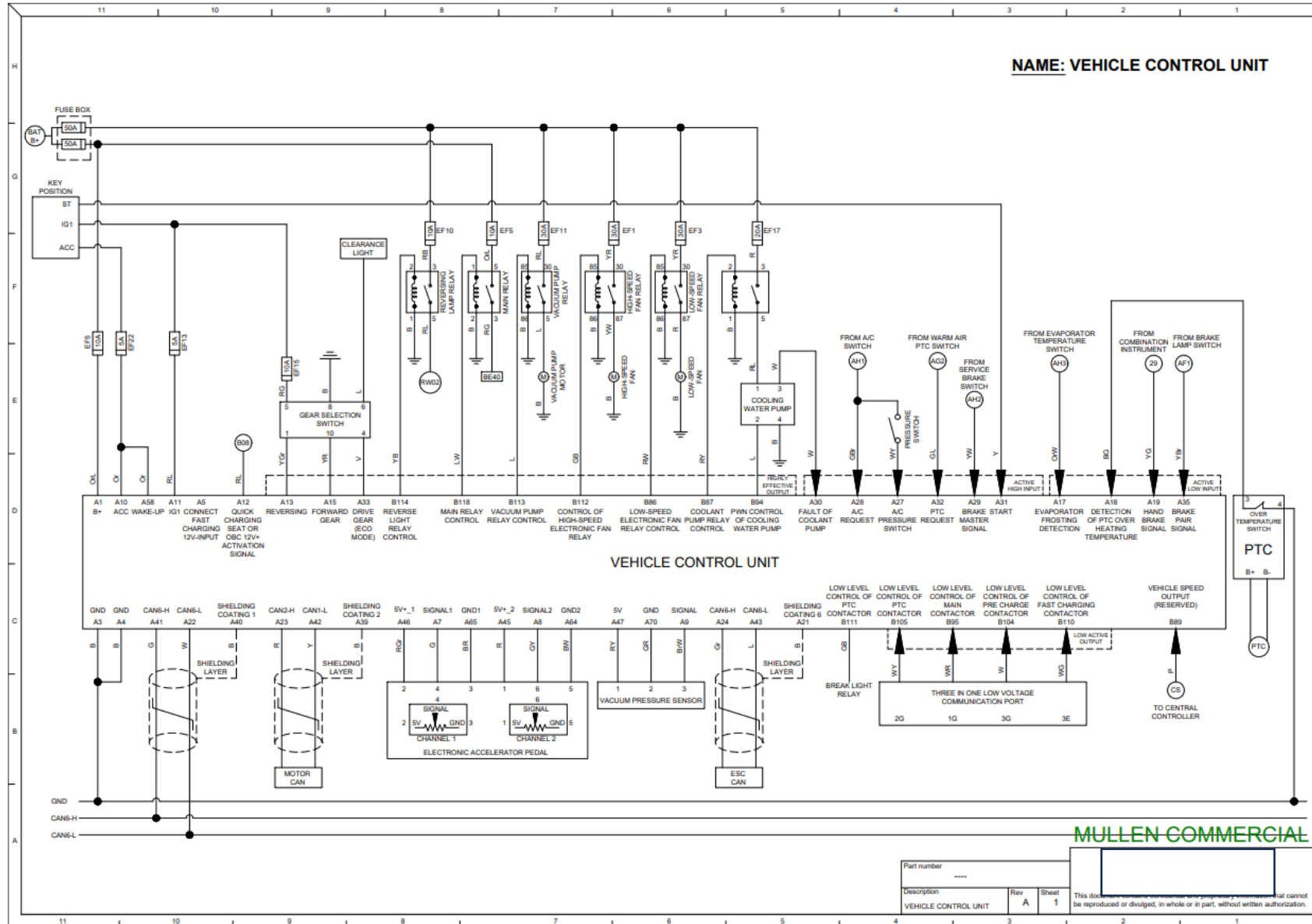
Reverse Sensor & Audio



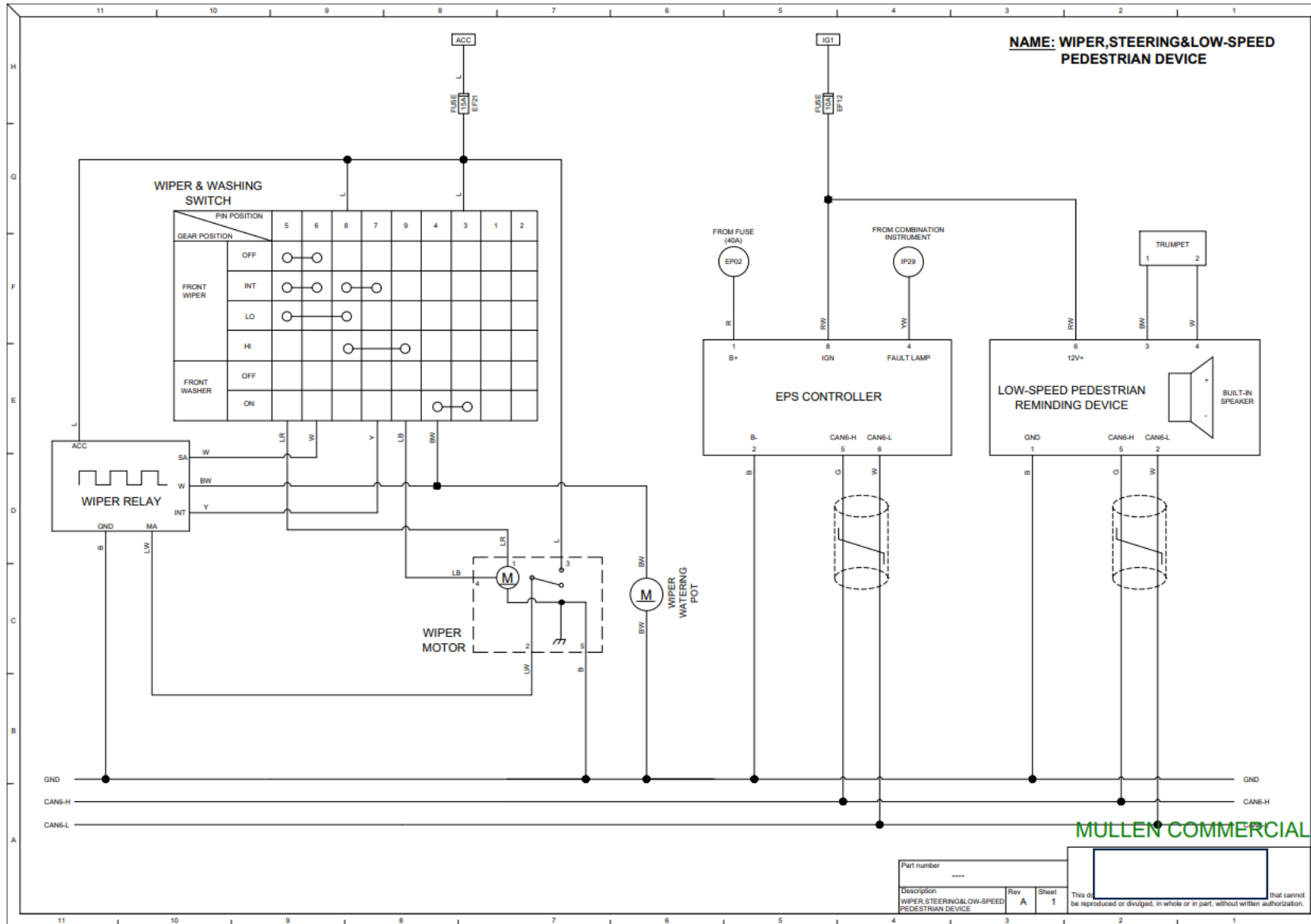
Three-in-one Auxiliary Drive System



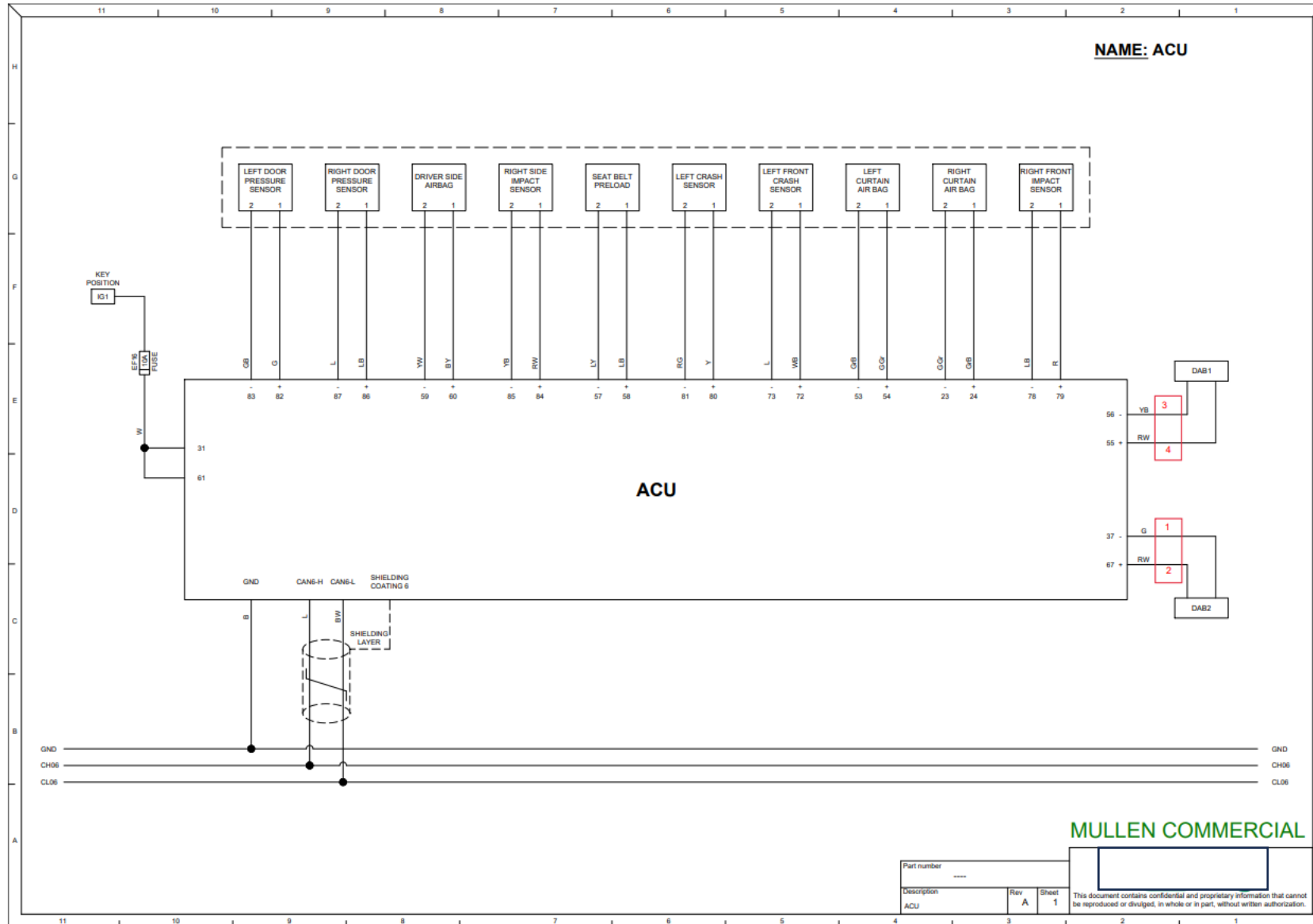
Vehicle Control Unit



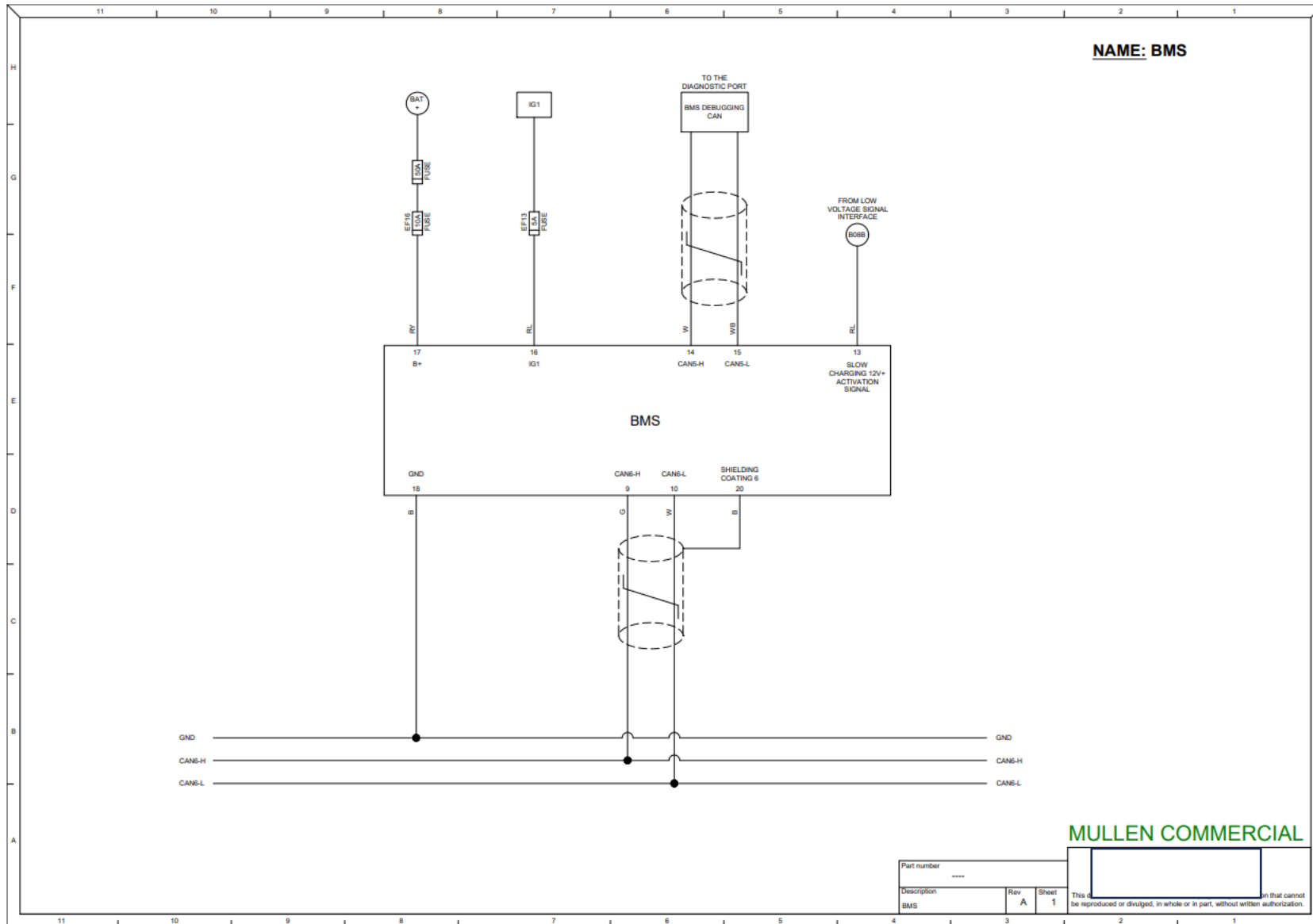
Wiper, Steering, Low Speed Pedestrian Device



Airbag Control Unit



Battery Management System



Camera, Marker Light & Horn Circuit

