Joint Agency Command Post

2016 Freightliner/Frontline

Specification Chart

Engine	Cummins 450 HP
Brakes	
Front Axle	14,600 pounds
Intermediate Axle	20,000 pounds
Rear Axle	20,000 pounds
Curb Weight	
Unit Height	13’ 6”
Unit Length	
Unit Width	
Tire Pressure	
Coolant	Purple
Engine Oil	
Transmission Fluid	TES-295
Power Steering Fluid	Dexron III
Diesel Exhaust Fluid	6 Gallons DEF

Chassis

WARNING

This vehicle is the maximum allowable height to travel on public roadways.

Extreme caution must be exercised when operating. In addition to the height, the rollers for the slide out awnings extend beyond the side of the vehicle.

They are very high and not visible in the mirrors.

Chassis

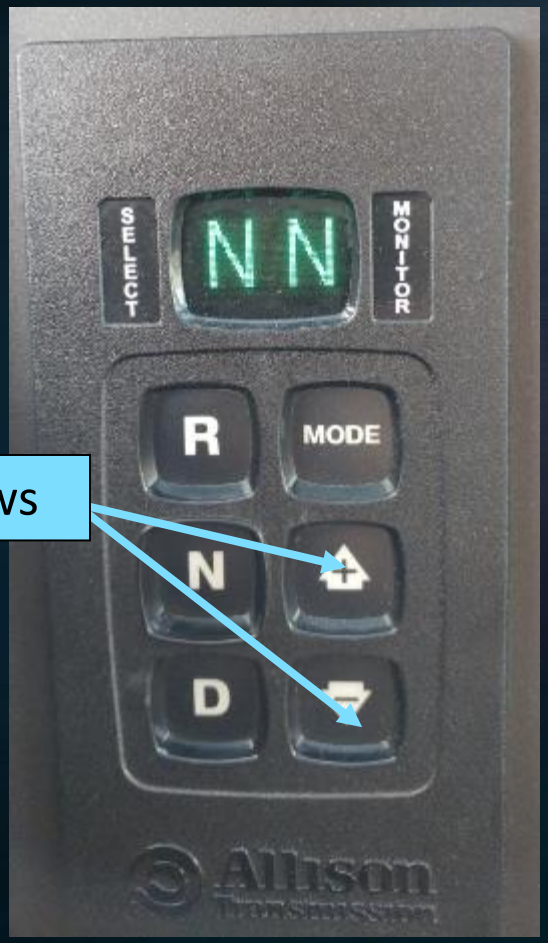
Auxiliary Braking Device

CAUTION

This unit is equipped with an Exhaust Brake.

The Exhaust Brake will not be used in low traction or slippery conditions.

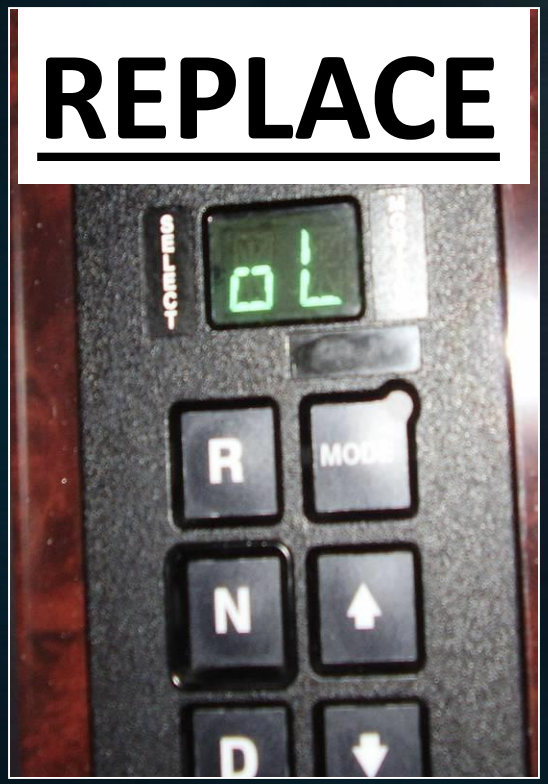
Transmission Fluid Check



Arrows

- The Transmission Fluid level may be checked in the cab through the keypad selector.
- The engine must be running at idle and the unit must be on level ground.
- The engine must idle at least five minutes from a cold start.
- The transmission must heat to at least 140 degrees F.
- Push both the up and down arrows simultaneously on the keypad.

Transmission Fluid Check



- After simultaneously pushing both buttons, the symbol “OL” will display on the screen.
- OL will be followed by OK, -1 thru -7, or +1 thru +7. The – indicates under filled and the + indicates overfilled. The numeral indicates the number of quarts.
- Any other message indicates a problem and CMF should be notified.
- Always confirm the digital reading on the dipstick BEFORE adding fluid.
- ONLY use Trans-Synd Fluid.

Reverse Camera

- The video screen is located at ceiling level in the center of the unit.

- The camera is located on the AC unit.

Cab Features

Cab Features

Driver's Window

Passenger's Window

Mirror Heat

Door Locks

Use of this switch will lock/unlock the cab ONLY

Cab Features

Parking Brake

Rear Suspension Dump

(This can be used when the vehicle is off to dump the rear air if the stabilization system fails)

Cab Features

Cab Features

Inter-Axle Lock

Exhaust Brake

Manual Regeneration

Cab Features

Arrow Stick Control

Warning Light Controls

Siren Controls

Cab Features

- Top row are switches
  - Battery Parallel links chassis and coach batteries

- Bottom row are warning lights
  - DO NOT move vehicle if any are illuminated

Cab Features

- Steering Wheel Adjustment

Step on adjustment pedal for telescoping and tilt functions.
Releasing the pedal will lock the steering wheel in place.

Cab Features

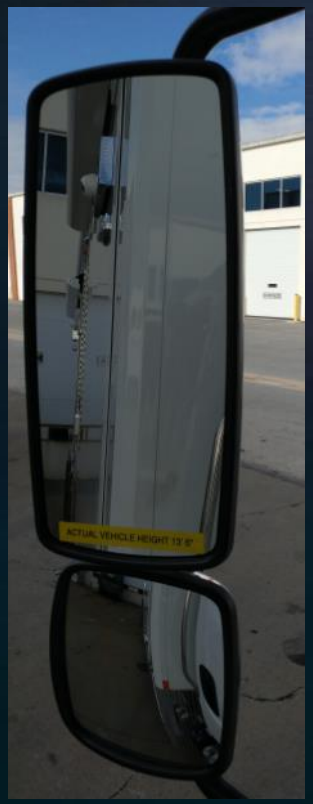
- This unit is equipped with Automatic Traction Control
  - Up is Normal mode and allows wheels to spin
  - Down is Automatic Traction Control mode and will brake and transfer power as needed

Cab Features

- On-Spot Tire Chains
  - Not installed yet

Cab Features

- Mirrors
  - Both Mirrors are heated
  - Only large mirror is electronically adjusted



Control located on Driver's Door

Regeneration

1) All diesel exhaust systems must be fitted with a DPF and a regeneration system.
2) DPF is Diesel Particulate Filter which captures soot and ash from the engine exhaust.
3) Regeneration is the process of burning off the soot and ash.
4) There are two types of regeneration:
   1. **Passive which requires no driver involvement.**
   2. **Active which requires driver involvement.**
5) Warning lights in the dash cluster will advise the driver of what action is needed.

Regeneration

- Active Parked Regeneration

1) When the DPF lamp is solid a parked regeneration may be needed.
2) When the DPF lamp is flashing a parked regeneration is REQUIRED AS SOON AS POSSIBLE
3) During a regeneration exhaust temperature can reach 1300 degrees. Select an appropriate location.
4) Park unit, place the transmission in neutral, chock the wheel, and toggle the regeneration switch. Engine rpm should increase to approximately 1100rpm.
5) Keep exhaust 5 feet away from all objects and pedestrians.
6) The driver must remain with the vehicle during regeneration.

Regeneration

- Active Parked Regeneration

7) During the regeneration process the high exhaust temperature lamp will illuminate.
8) DO NOT complete regeneration in the Station or while connected to a Plymovent.
9) When the ECM determines the DPF has been regenerated engine rpm will decrease to normal rpm signaling the regeneration is over.
10) Remember exhaust components are still very hot.
11) If the regeneration process needs to be interrupted or stopped, depress the brake pedal.

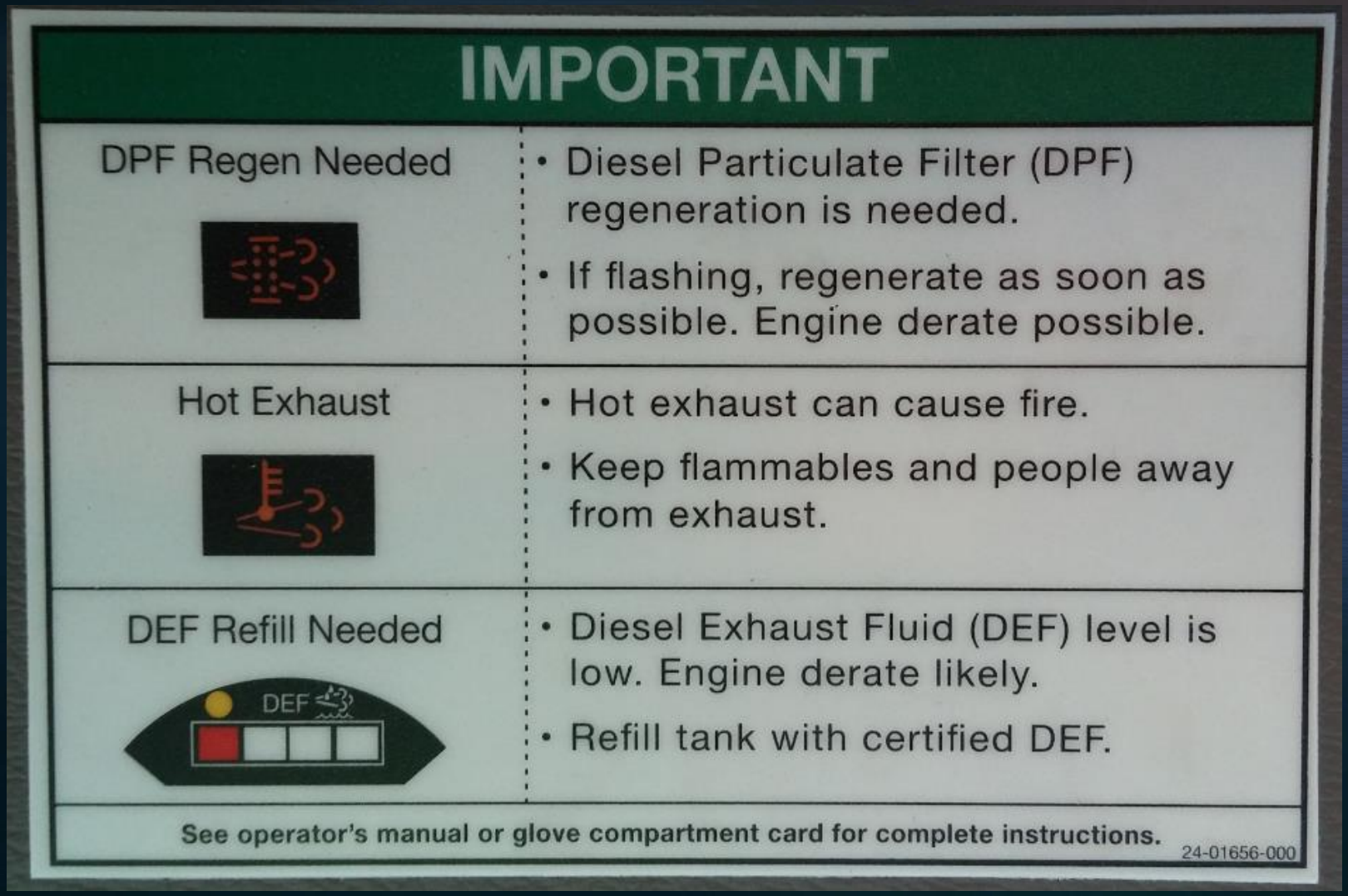
Regeneration

- Active Parked Regeneration

The regeneration switch is located in the center of the dash below the Axle Lock switch.

Regeneration

- DPF/DEF Warning Lights



IMPORTANT	
DPF Regen Needed	• Diesel Particulate Filter (DPF) regeneration is needed. • If flashing, regenerate as soon as possible. Engine derate possible.
Hot Exhaust	• Hot exhaust can cause fire. • Keep flammables and people away from exhaust.
DEF Refill Needed	• Diesel Exhaust Fluid (DEF) level is low. Engine derate likely. • Refill tank with certified DEF.

See operator's manual or glove compartment card for complete instructions.

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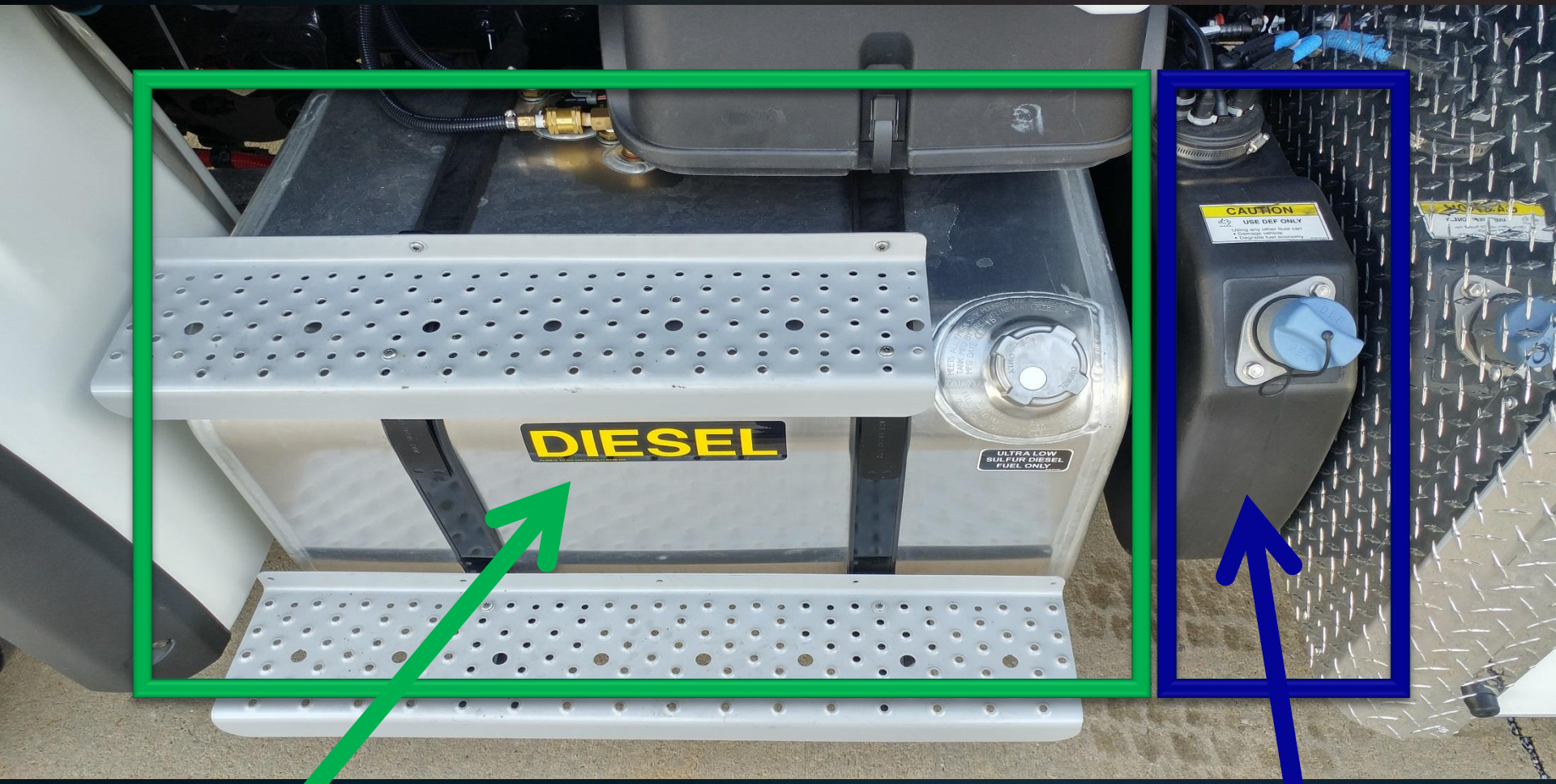
Regeneration

- Passive Regeneration
  - Passive Regeneration will only occur during highway driving
  - It is unlikely this unit will drive enough highway miles for Passive Regeneration to complete it’s cycle

Diesel Exhaust Fluid



Diesel FUEL Tank

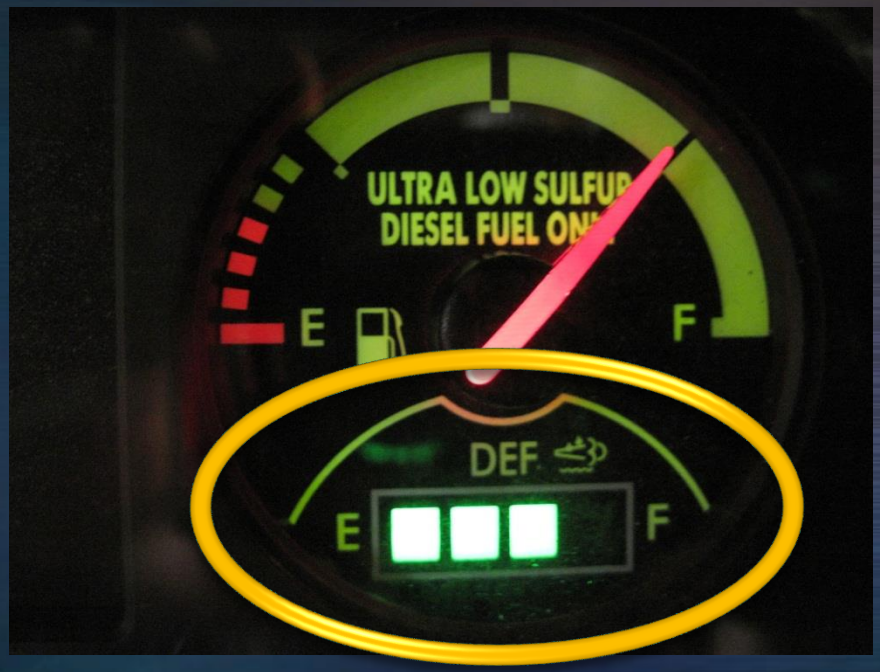
Diesel EXHAUST FLUID Tank

Diesel Exhaust Fluid

- Diesel Exhaust Fluid (DEF)
  - Urea based fluid
  - Designed to lower Nitrous Oxides in exhaust
  - Follow recommended storage procedures for fluid in station.

Diesel Exhaust Fluid

DEF Tank located rear of Fuel tank on the driver's side of the unit.



DEF Tank gauge located below fuel gauge on dash.

Diesel Exhaust Fluid

- Refill Procedures
  - CMF stocks DEF in industry standard 2.5 Gallon Containers
  - 2 containers per case
  - Each case comes with 2 filler tubes
  - DEF is requested when ordering Station Supplies or as needed through FMRS.
  - Any DEF container or filler tube that shows any signs of crystallization MUST be immediately discarded to avoid vehicle damage
  - Any DEF spills or splashes should be diluted with water

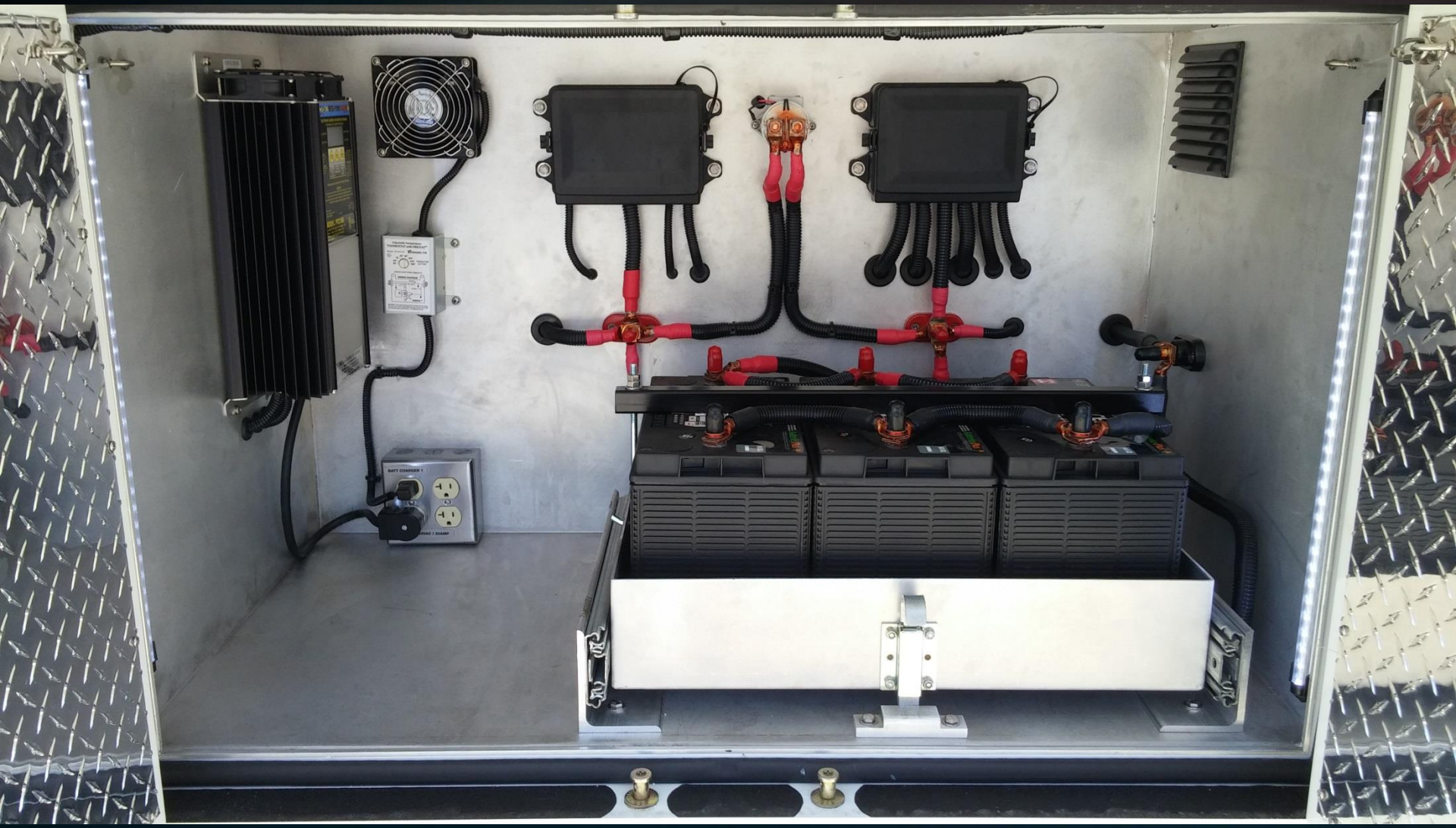
Diesel Exhaust Fluid

- Refill Procedures
  - Only add DEF to the appropriate DEF tank
  - DO NOT add DEF to the fuel tank
  - DO NOT add fluid until the DEF level is at HALF (1/2)
  - When DEF level reaches HALF, only add a single 2.5 gallon jug to the DEF tank using the supplied filler tube
  - DO NOT top off DEF
  - The empty jug AND filler tube MUST be thrown away. **DO NOT RE-USE!!!**

Batteries

- The vehicle has 2 banks of batteries
  - Chassis Batteries are located under the driver's seat
  - Coach batteries are located in the first driver side compartment
  - The systems are separate
  - Can be linked by pressing either "Battery Parallel" switch

Batteries



Batteries

Stabilization System

- 4 Electric Stabilizer Jacks are under the vehicle
- Control panel located beside entry door
- System is automatic with manual overrides
- Intended to stabilize vehicle and overcome MINOR slope differences
- Vehicle should be parked on solid ground that is as flat and level as possible
- When necessary, cribbing or ground pads may be needed

Stabilization System

- Press “System Power” button
- Press “Auto” button
  - Rear air suspension will automatically dump
  - Stabilizers will deploy automatically
- This may take a few minutes
- Stabilization complete when footprint indicator light turns green
- This MUST be done before any slides or accessories are deployed

Stabilization System

Stabilization System

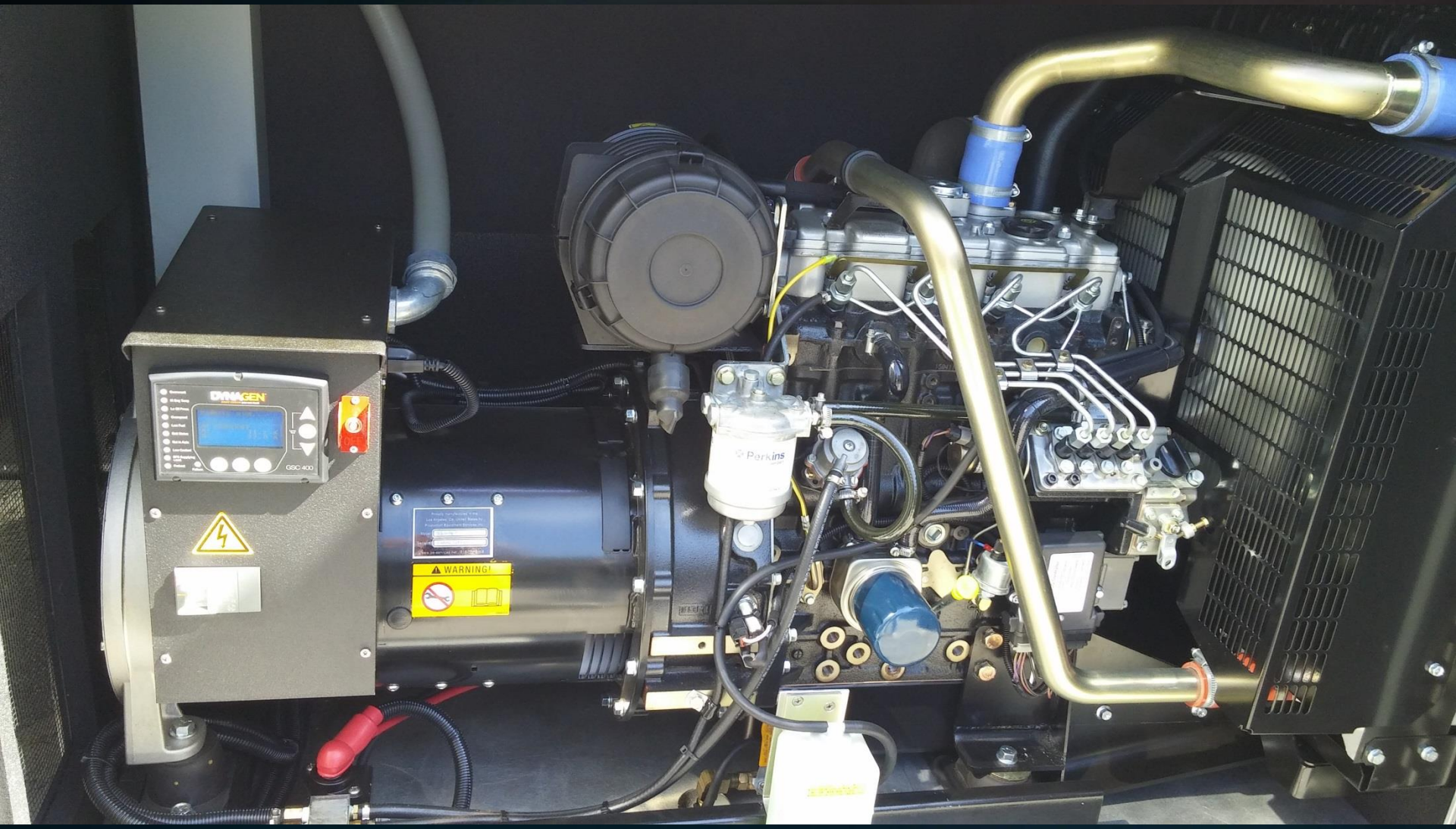
- Initial Power Up
  - System Power lit
  - All Up lit

- Vehicle Stabilized
  - System Power lit
  - Auto lit
  - Green Foot lit

Generator

- Unit is equipped with a 30kW diesel powered generator
- Shares fuel tank with chassis
- Can power ALL functions of unit simultaneously
- Located in second compartment on driver’s side
- Compartment is completely enclosed allowing the generator to be run while driving
- Started on the 12 Volt Control Panel in the back

Generator



Generator

- To start generator go to DC Control Panel
- Press Generator Remote switch
- Generator will start after glow plugs have cycled

12 Volt DC Control Panel

- Located above door in the coach
  - Controls all 12 volt functions
  - Controls Passenger side awning
  - Slide Room Control Panel also located here

12 Volt DC Control Panel

120 Volt Power Distribution System

- Located opposite door in the coach
  - Controls all 120 volt AC functions

120 Volt Power Distribution System

CAUTION

The following steps MUST be completed exactly as show.

Failure to follow the proper order can cause significant damage to the electrical system

120 Volt Power Distribution System

- Once the generator is running go to the right side of the 120 Volt panel
  - The panel should appear as shown
  - Power Select OFF
  - Main Breaker OFF

120 Volt Power Distribution System

- Turn the POWER SELECT switch to GEN
  - The panel should appear as shown
  - Power Select GEN
  - Main Breaker OFF

Before proceeding confirm that the L1 and L2 gauges both show 120 volts and the center gauge shows 60 hertz

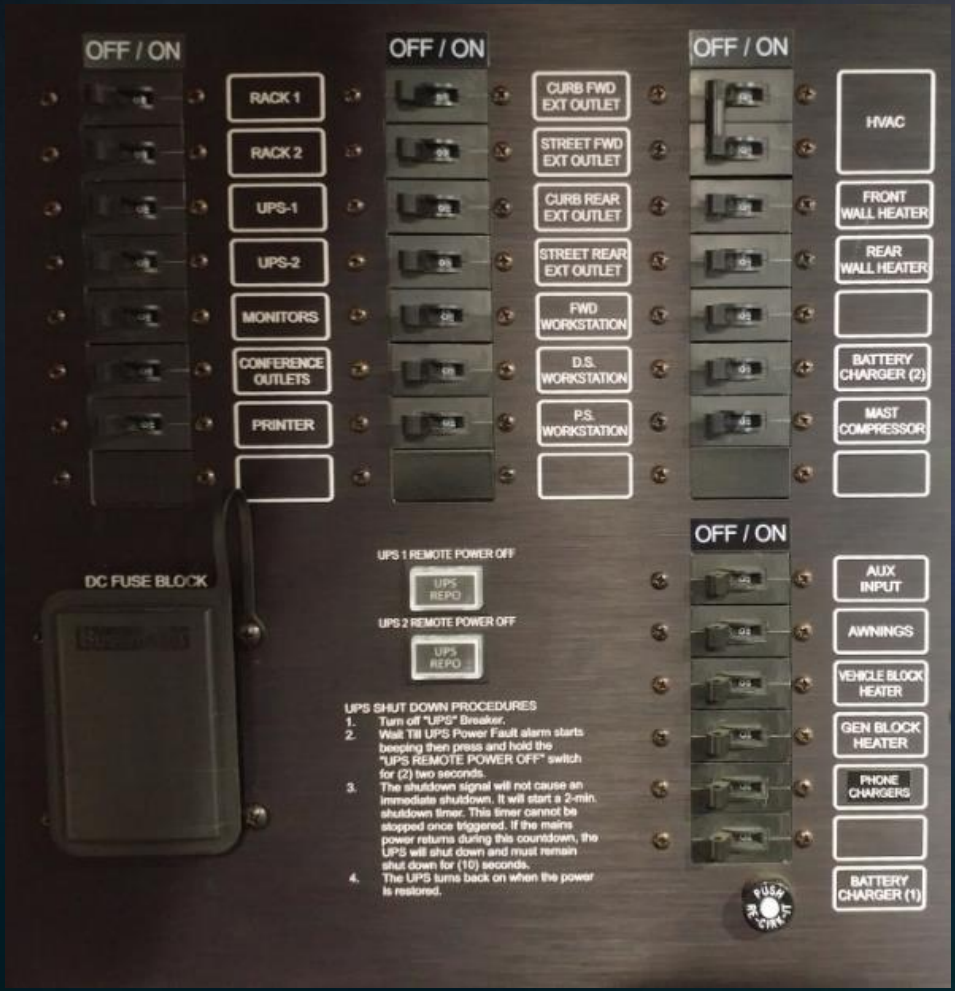
120 Volt Power Distribution System

After confirming that the L1 and L2 gauges both show 120 volts and the center gauge shows 60 hertz you can proceed

- Turn the MAIN breaker on (UP)
  - The panel should appear as shown
  - Power Select GEN
  - Main Breaker ON
  - L1 & L2 120 volts
  - Center 60 hertz

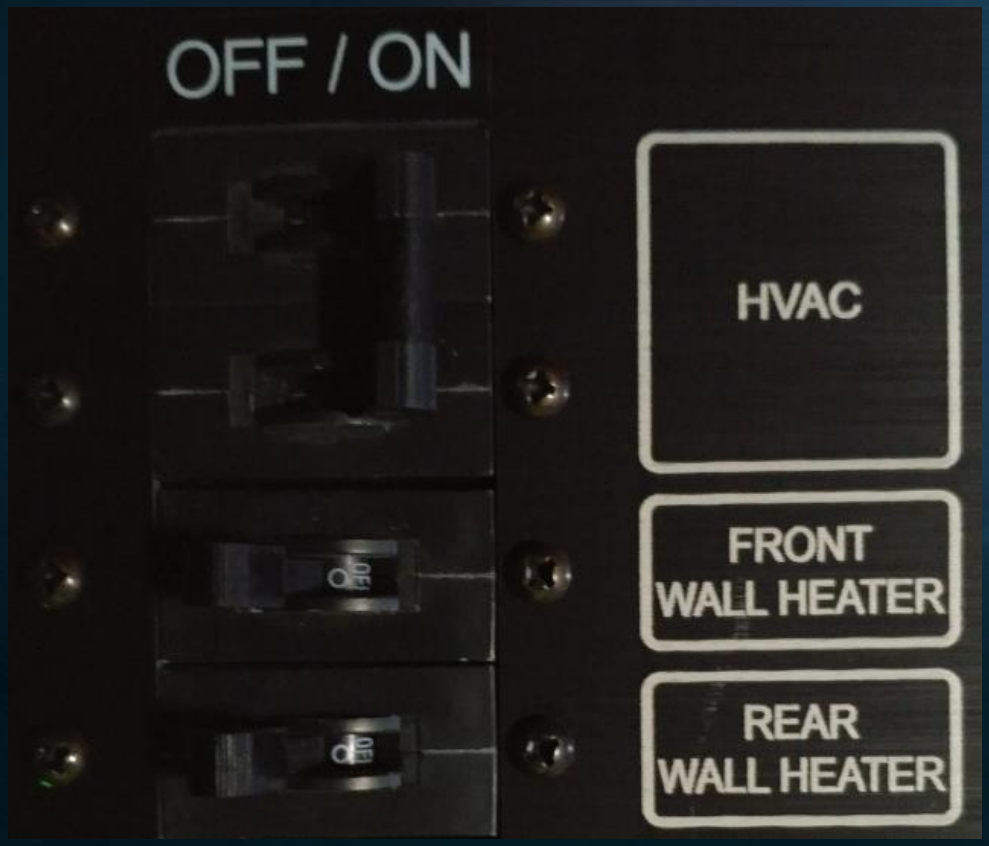
120 Volt Power Distribution System

- Individual breakers can now be turned on for desired components



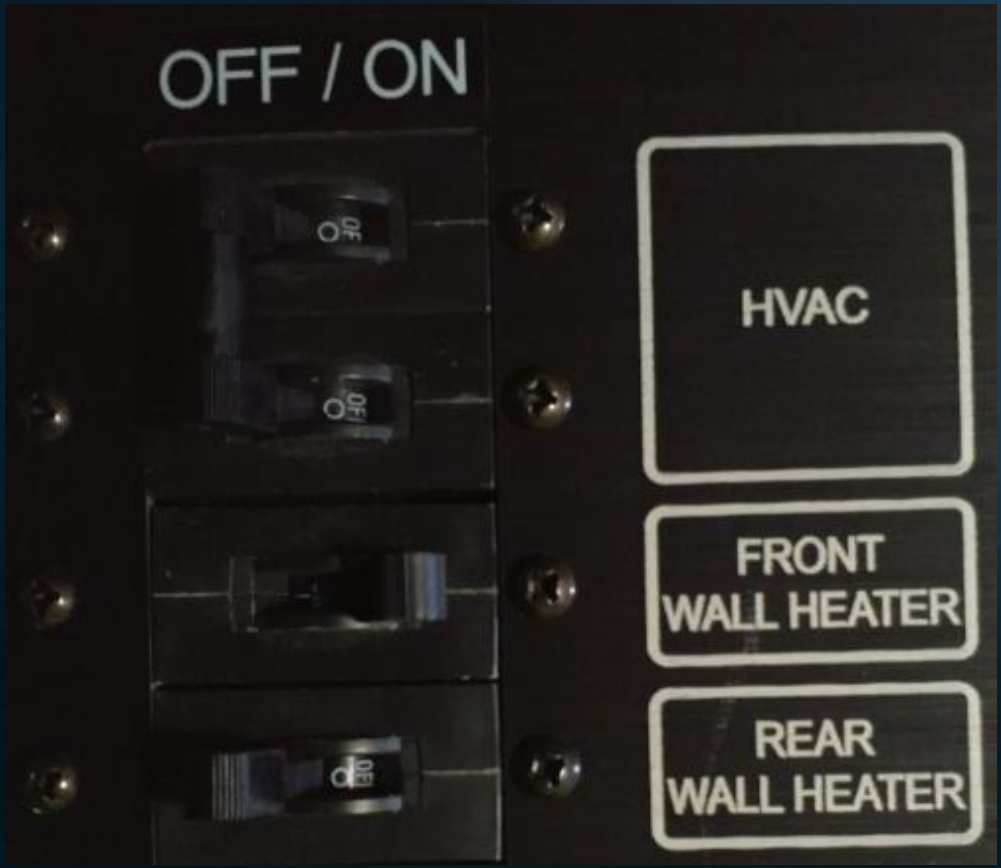
HVAC System

- Air conditioning unit is on rear of vehicle
- HVAC Breaker must be on
- Thermostat next to breaker panel



HVAC System

- Electric heaters located in front and rear rooms
- Corresponding Wall Heater Breaker must be on
- Thermostat located on heater

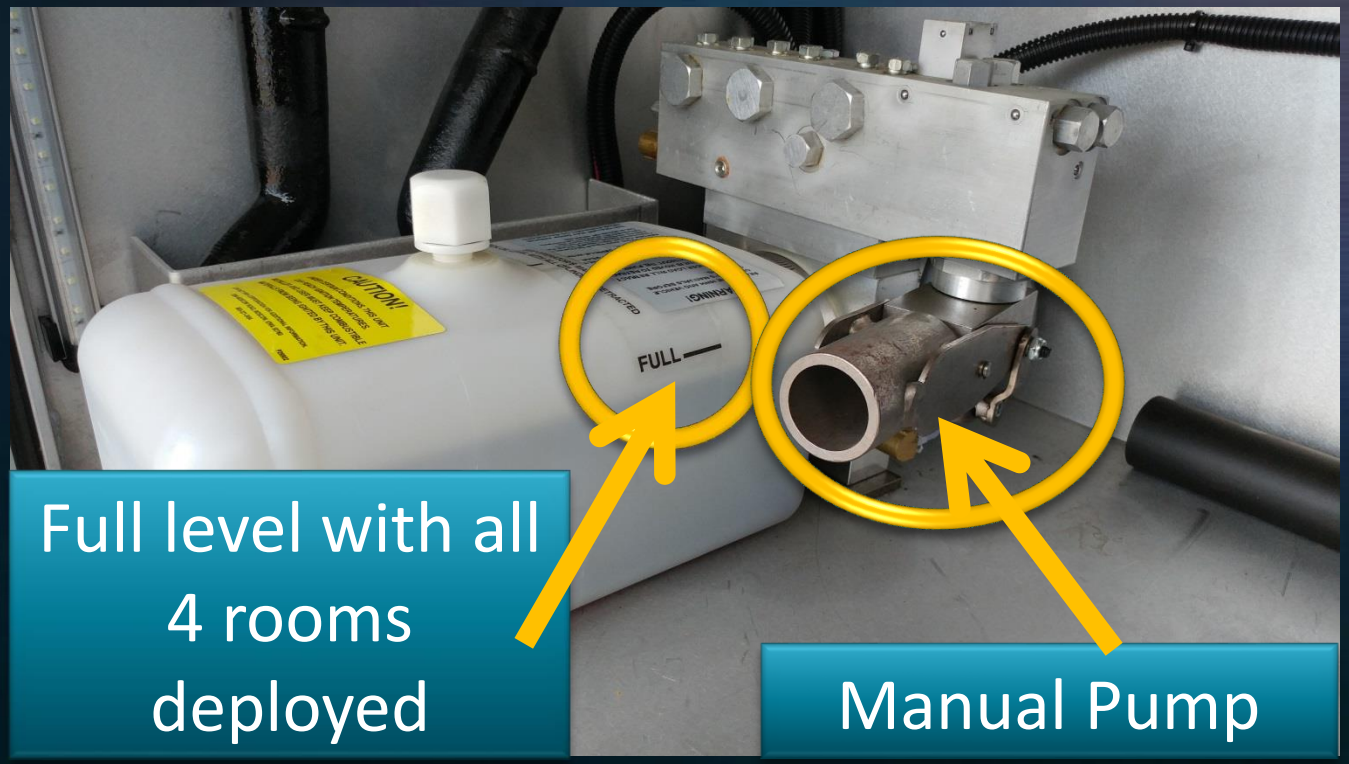


Hydraulic Room Extensions

- There are 4 hydraulic room extensions
  - 2 in the front conference room
  - 2 in the rear workstation area
- Powered by 12 volt hydraulic pump
- Pump and reservoir located in the left rear compartment
- Rooms extend roughly 3 feet
- Visually inspect area for obstructions before extending

Hydraulic Room Extensions

- The reservoir FULL line is for when ALL 4 rooms are deployed
  - Plans to mark reservoir with retracted fluid level
- Manual pump also located here



Hydraulic Room Extensions

- Controls for room extensions located on 12 volt DC control panel above entry door
  - Turn system ON
  - Select extension
  - Press extend
  - Repeat for each

Hydraulic Room Extensions

- To retract rooms simply reverse the steps and press retract
  - Visually inspect interior of unit for any obstructions before retracting room extensions

Awnings

- Electric awning on both sides above extensions
  - Require 120 volt power
  - Can be stopped at desired length
  - Have wind sensors to automatically retract

Awnings

- Controls passenger side awning located on 12 volt DC control panel above entry door
  - Turn on awning breaker on 120 volt panel
  - Turn on awning control
  - Ensure no obstructions
  - Extend awning to desired length
  - Set wind speed sensor if desired

Pneumatic Mast

ALWAYS check for overhead obstructions before deploying mast

NEVER operate mast within 10 feet of power lines

Pneumatic Mast

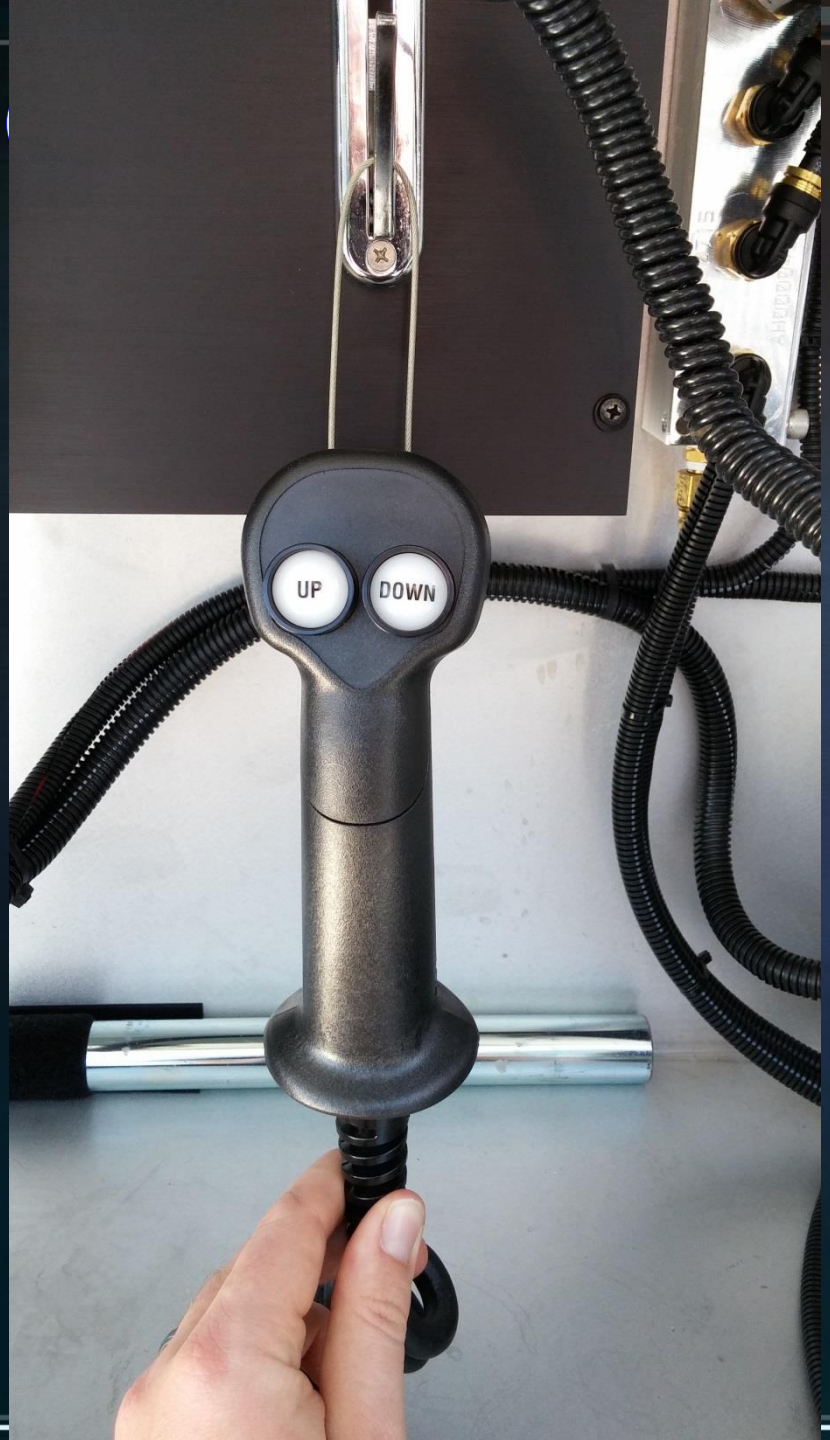
- 40 Foot Pneumatic Mast located on driver's side rear of unit
  - Nothing mounted on it yet
  - 120 volt air compressor located in driver's rear compartment

Pneumatic Mast

Pneumatic Mast

Pneumatic Mast

Pneumati



Pneumatic Mast

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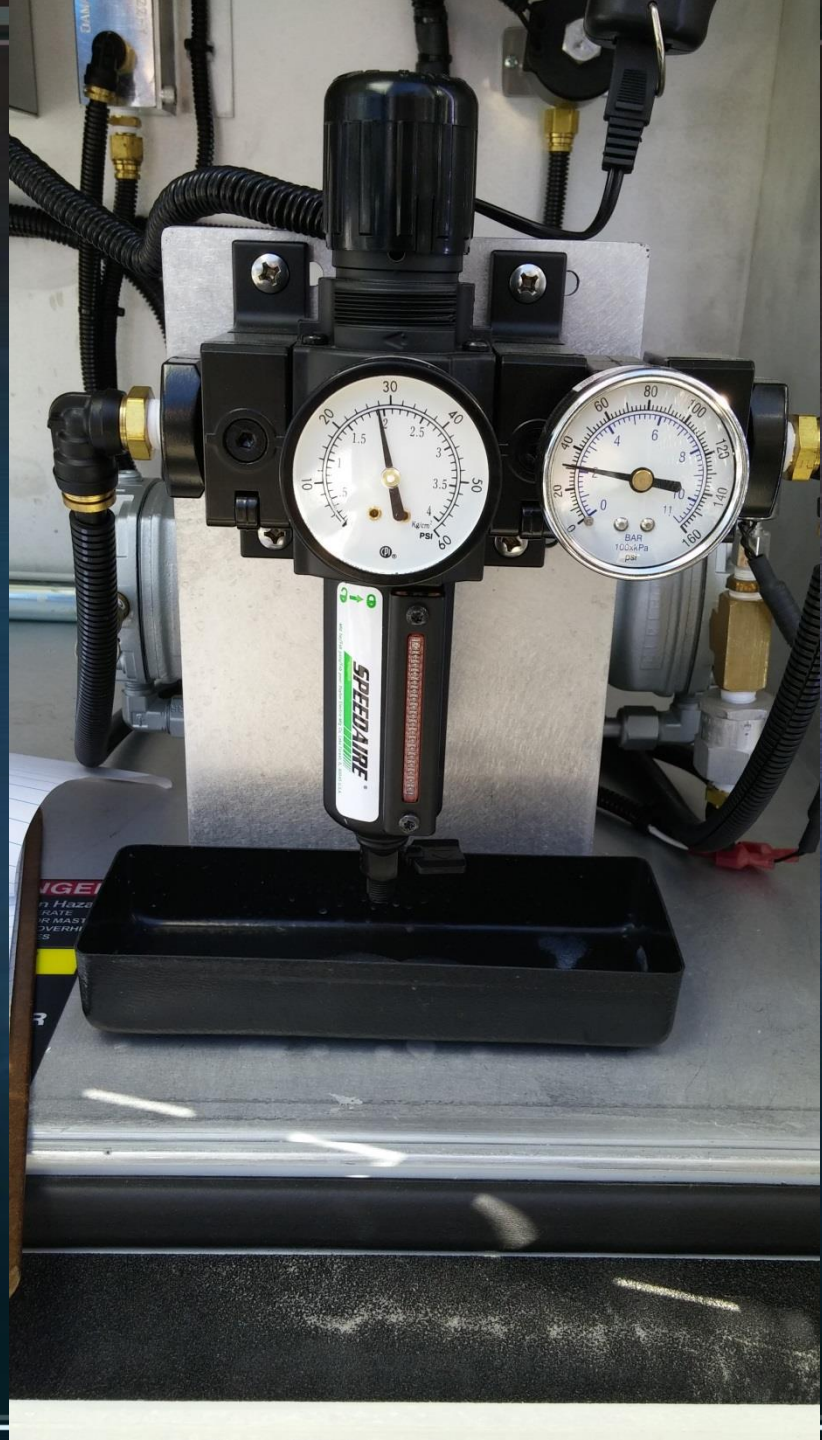

Pneumatic Mast

Shoreline

EXTERNAL INPUT
120 / 240 VAC 100 AMP
3 POLE 4 WIRE
MUST HAVE NEUTRAL CONNECTED
DO NOT CONNECT TO HIGHER VOLTAGE
HUBBELL
SPRAY CONTACTS
WITH ELECTRICAL
CONTACT CLEANER
MONTHLY

Safety Equipment