2022 PIERCE ARROX XT ASCENDANT MID-MOUNT TOWERS

MONTGOMERY COUNTY MARYLAND
GARDEZ BIEN
FIRE & RESCUE
DRIVER TRAINING

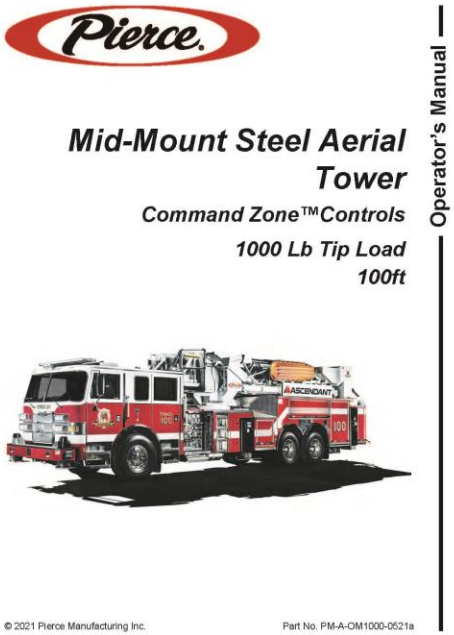
Revised 6/07/2022

Pierce
ARROW XT

This document and additional reference documents regarding this breed of apparatus are available at:
http://www.montgomerycountymd.gov/mcfrs-psta/driver/DriverTrainingPierceAscendant.html

PIERCE MANUALS

In addition to this presentation the following manuals should be read <u>by all operators</u> before operating the aerial



DIMENSIONS & WEIGHT

- Overall height: 132” (11’ 0”)
- Overall width: 100” (8’ 4”)
  - 116” (9’8”)mirror to mirror
- Overall length: 511” (42’ 7”)
- Actual weight – date?
  - Weigh stats?
  - GVW is 76,640 lbs

AERIAL SPECIFICATIONS

- Vertical Operating Height: 100 feet
- Horizontal Reach: 93’ at 0 Degrees
- Operating Range: -15 to 77 Degrees
  -20 if unit is angled
- Tip Load: 1000 Pounds (DRY)
  500 Pounds (Wet)
- Outrigger Spread: 19’ 1.5” (18’ Center line)
- Ladder Pipe Rating: 2000 gpm
- Maximum Wind Speed: 35 mph

SAFETY SYSTEMS

- Anti-lock braking on all axles
- Automatic traction control
  - Acts as electronic automatic differential lock
  - "Off-road traction" switch allows some override
- Downshift Mode – Aggressive Downshift mode
  - Provides Earlier transmission downshift to 2nd gear from 6th gear
  - Improves braking performance
- Supplemental Restraint System (SRS) cab system
- Side roll protection system
- Frontal impact protection systems

SAFETY SYSTEMS

- Seat belt monitoring system (SBMS)
- Tire pressure management
- Forward looking sensor for accident avoidance (HAAS)
  - Traffic Notification System – not yet enabled as of 6/2021

POWERTRAIN SYSTEMS

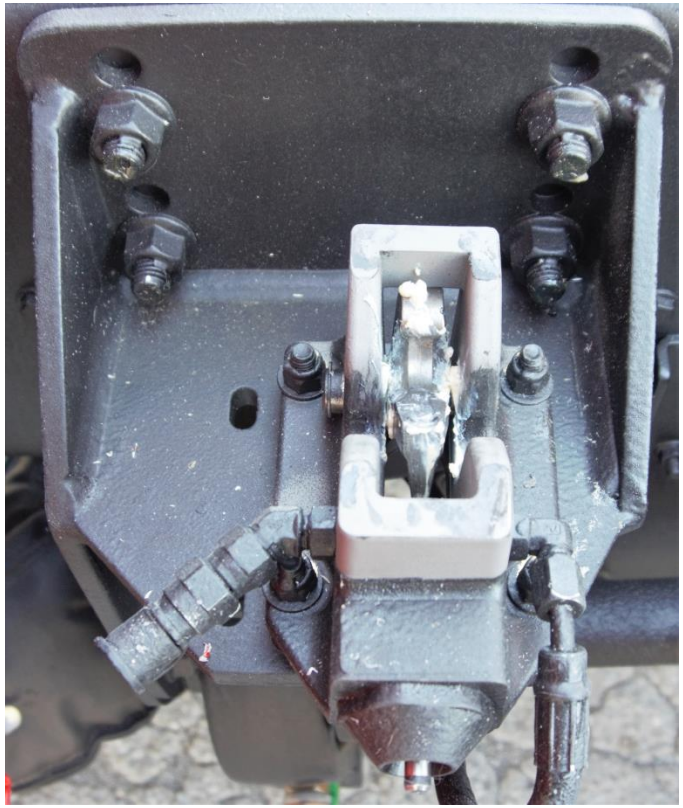
- Motor: Cummins X15 605 hp
- Transmission: Allison 5th Gen, 4500 EVS 6-speed
- Maximum speed is 60mph
- Motor oil and transmission fluid checks via access panel in crew area of cab.
  - Transmission level is also checked via the transmission keypad.

CAB TILT

- Battery and ignition switch must be on to lift cab.
- Cab locks are not visible when the cab is down. There is no sound or visible queues to verify engagement.
  - ➢ Hold 5 sec

Control is found in the second Compartment on the officer's Side of the cab

NOTE: There is a manual override for backup in the event of electrical failure. Handle for pump located behind drivers seat.

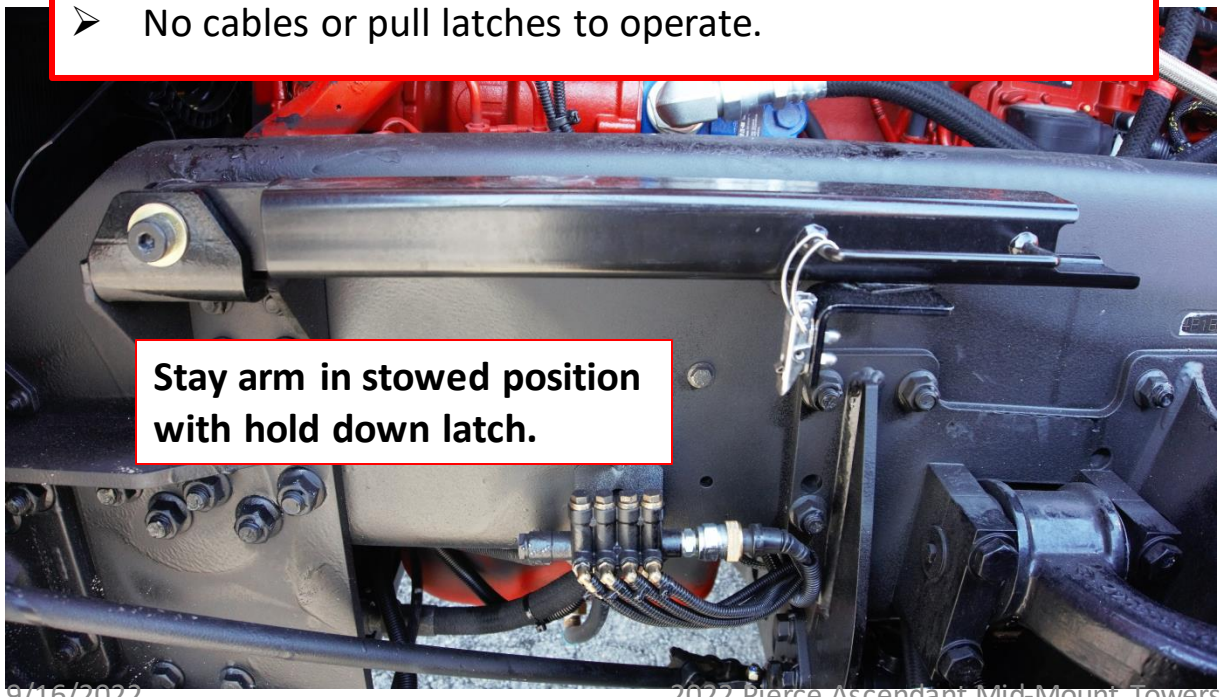


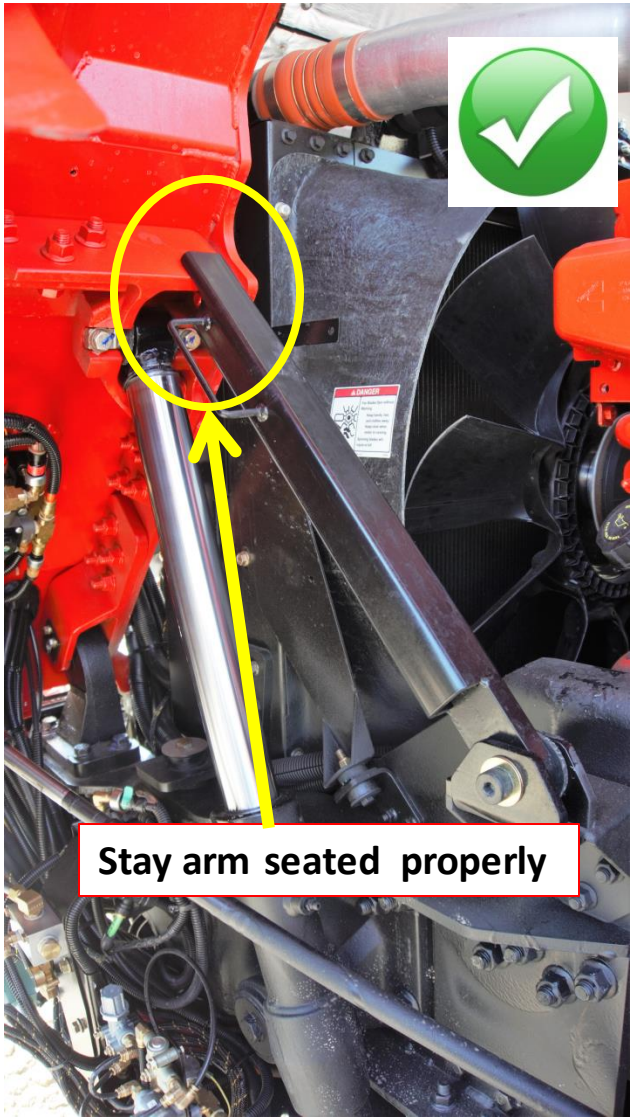
Always:
- Secure loose items in the cab
- Verify clearances
- Ensure overhead clearances when tilting the cab.

CAB TILT – SAFETY ARM

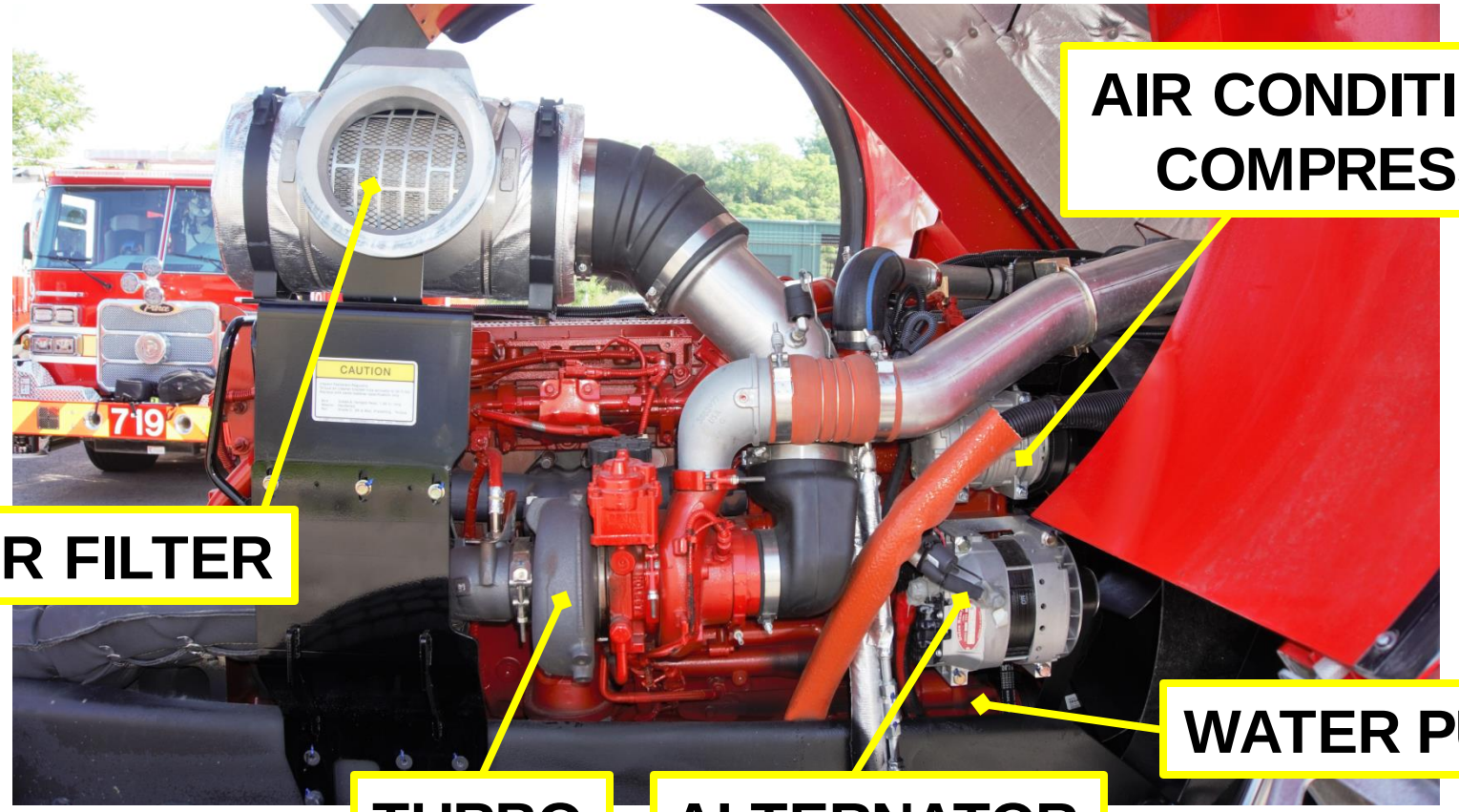
MANUAL STAY ARM

- **NOTE:** Operator must manually place stay arm after cab has been raised.
- Drops onto cab lift piston bracket ahead of the wheel well.
- Stay arm located on driver's side of engine compartment. Lift controls located on officer's side.
- No cables or pull latches to operate.

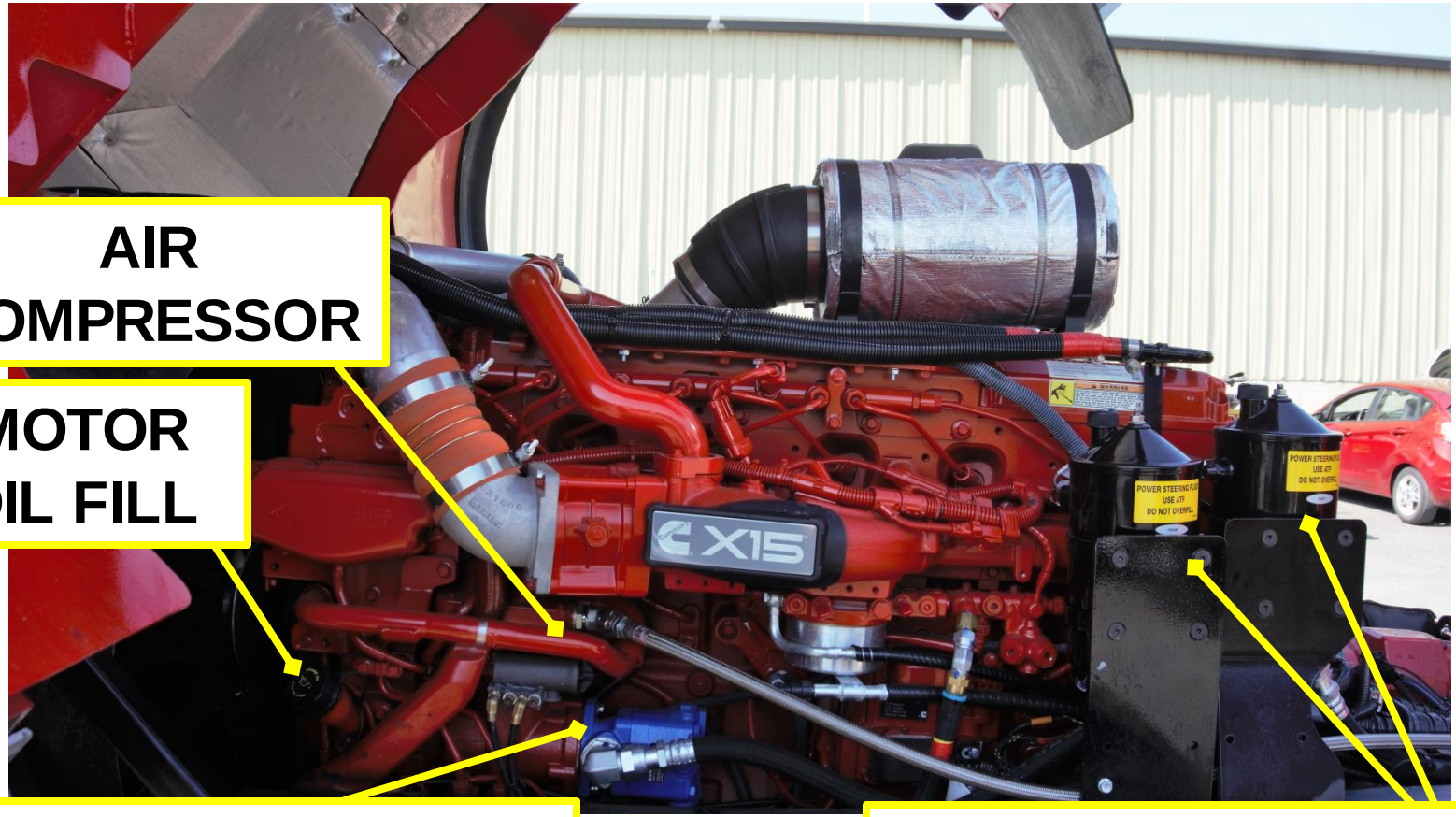




MOTOR COMPARTMENT



MOTOR COMPARTMENT



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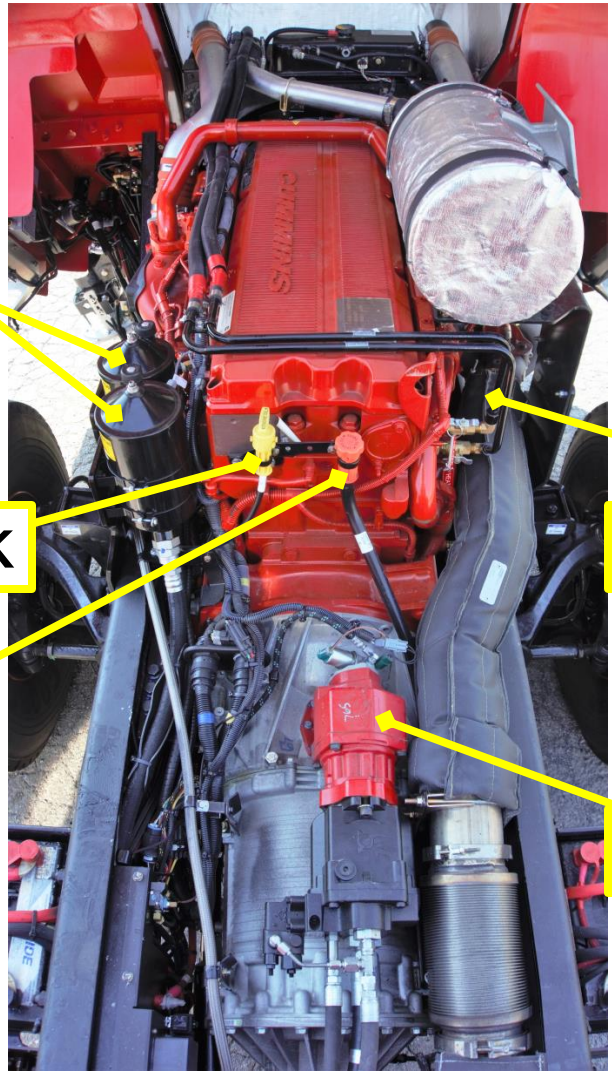


POWER STEERING FLUID

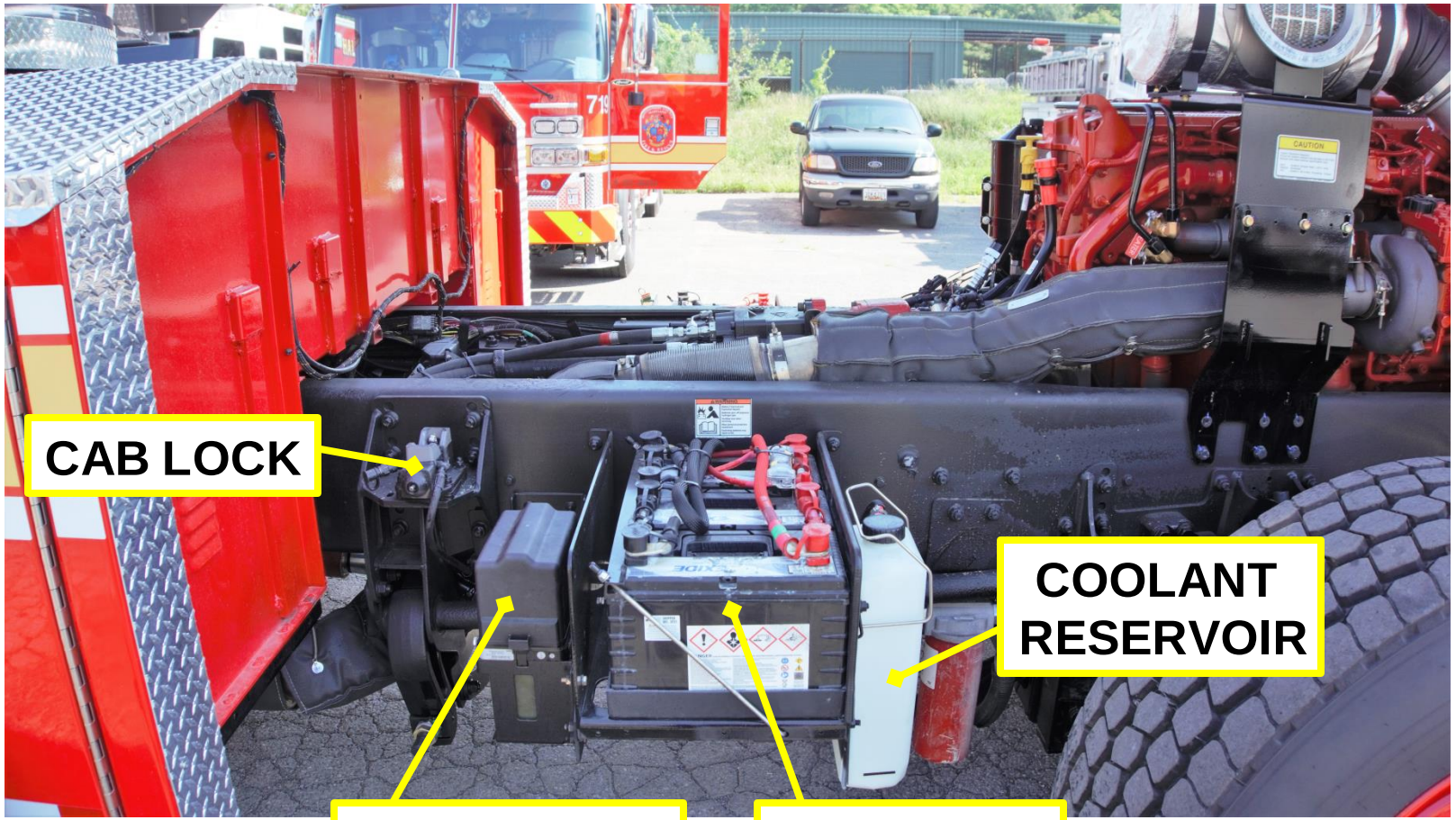
MOTOR OIL DIPSTICK

TRANSMISSION DIPSTICK AND FILL

HEATER VALVES

GENERATOR PTO

MOTOR COMPARTMENT



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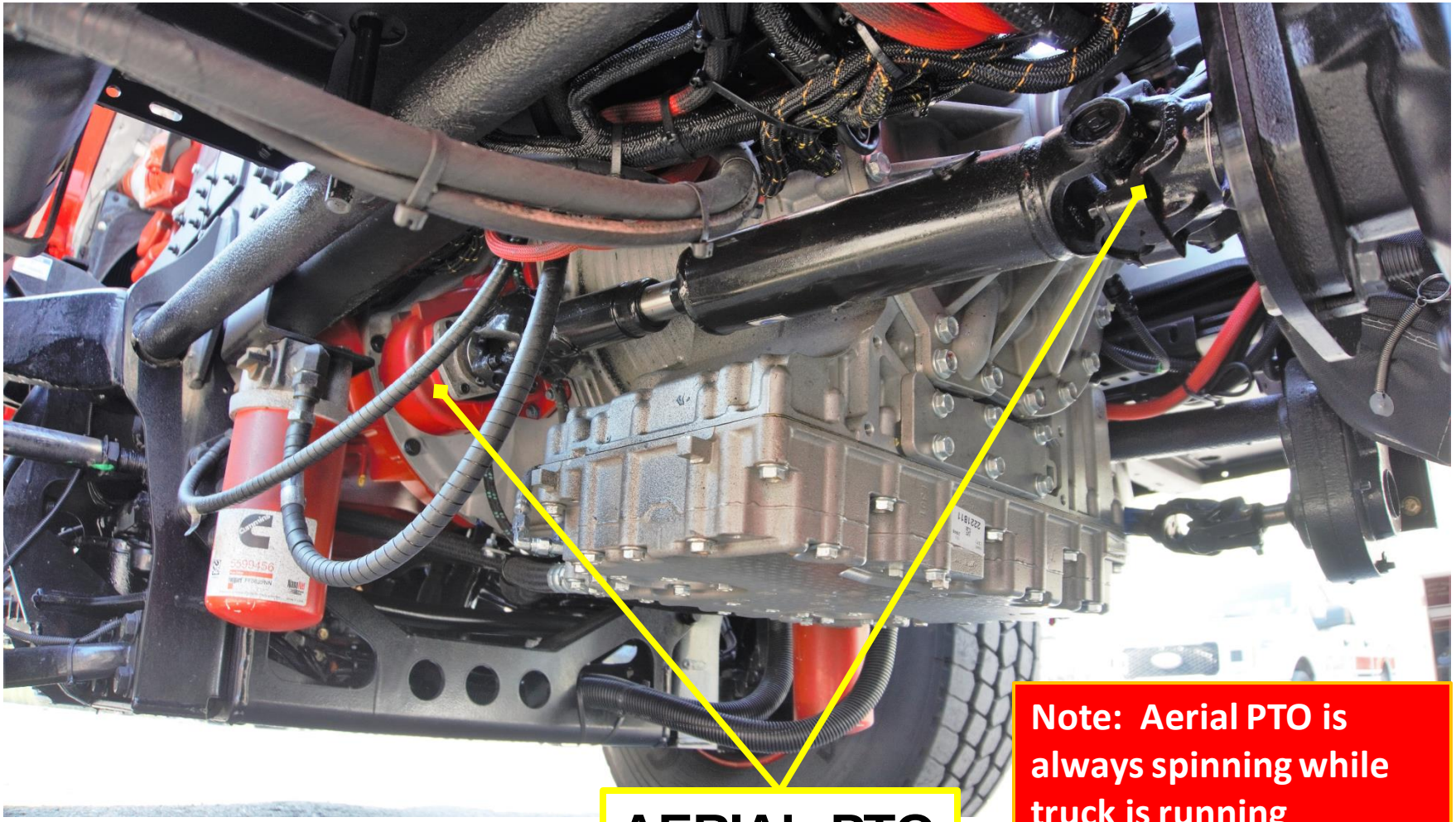
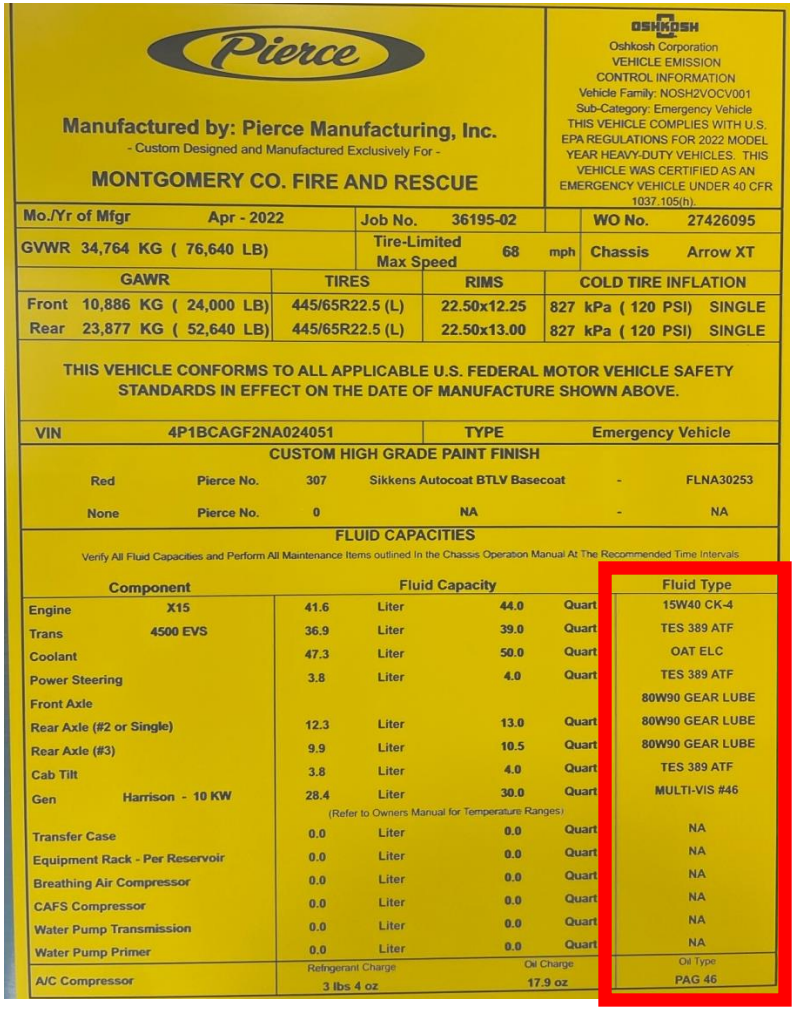


Note: Aerial PTO is always spinning while truck is running

DATA PLATE

- Located on the driver's door and on the motor housing next to the driver's seat.
- Always verify fluid type before adding.



Pierce

Manufactured by: Pierce Manufacturing, Inc.
- Custom Designed and Manufactured Exclusively For -
MONTGOMERY CO. FIRE AND RESCUE

OSHKOSH
Oshkosh Corporation
VEHICLE EMISSION CONTROL INFORMATION
Vehicle Family: NOSH2VOCV001
Sub-Category: Emergency Vehicle
THIS VEHICLE COMPLIES WITH U.S. EPA REGULATIONS FOR 2022 MODEL YEAR HEAVY-DUTY VEHICLES. THIS VEHICLE WAS CERTIFIED AS AN EMERGENCY VEHICLE UNDER 40 CFR 1037.105(h).

Mo./Yr of Mfgr	Apr - 2022	Job No. 36195-02	WO No. 27426095
GVWR 34,764 KG (76,640 LB)		Tire-Limited Max Speed 68 mph	Chassis Arrow XT

GAWR	TIRES	RIMS	COLD TIRE INFLATION
Front 10,886 KG (24,000 LB)	445/65R22.5 (L)	22.50x12.25	827 kPa (120 PSI) SINGLE
Rear 23,877 KG (52,640 LB)	445/65R22.5 (L)	22.50x13.00	827 kPa (120 PSI) SINGLE

THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

VIN 4P1BCAGF2NA024051 TYPE Emergency Vehicle

CUSTOM HIGH GRADE PAINT FINISH

Red	Pierce No.	307	Sikkens Autocoat BTLV Basecoat	-	FLNA30253
None	Pierce No.	0	NA	-	NA

FLUID CAPACITIES
Verify All Fluid Capacities and Perform All Maintenance Items outlined In the Chassis Operation Manual At The Recommended Time Intervals

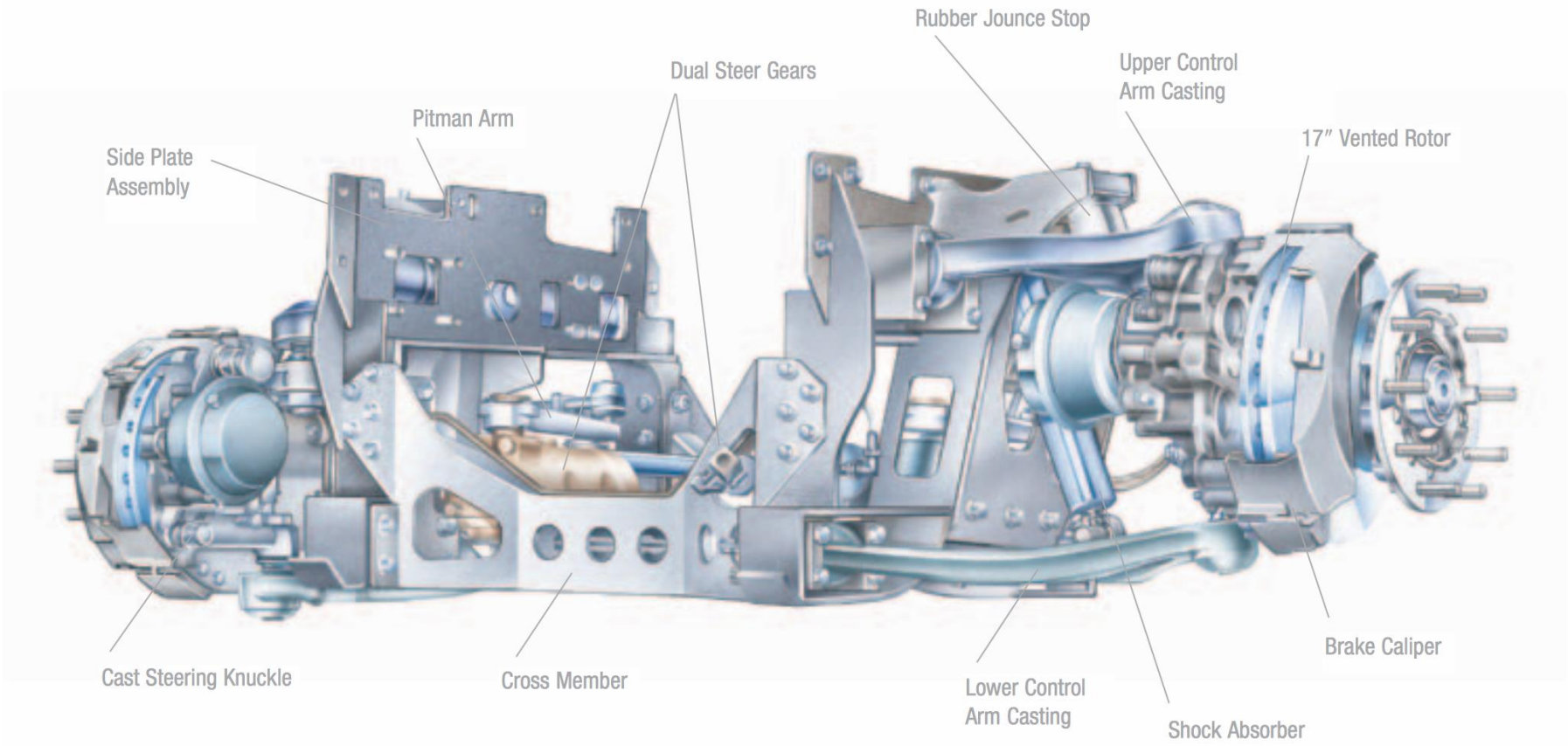
Component	Fluid Capacity				Fluid Type
Engine X15	41.6	Liter	44.0	Quart	15W40 CK-4
Trans 4500 EVS	36.9	Liter	39.0	Quart	TES 389 ATF
Coolant	47.3	Liter	50.0	Quart	OAT ELC
Power Steering	3.8	Liter	4.0	Quart	TES 389 ATF
Front Axle					80W90 GEAR LUBE
Rear Axle (#2 or Single)	12.3	Liter	13.0	Quart	80W90 GEAR LUBE
Rear Axle (#3)	9.9	Liter	10.5	Quart	80W90 GEAR LUBE
Cab Tilt	3.8	Liter	4.0	Quart	TES 389 ATF
Gen Harrison - 10 KW	28.4	Liter	30.0	Quart	MULTI-VIS #46
	(Refer to Owners Manual for Temperature Ranges)				
Transfer Case	0.0	Liter	0.0	Quart	NA
Equipment Rack - Per Reservoir	0.0	Liter	0.0	Quart	NA
Breathing Air Compressor	0.0	Liter	0.0	Quart	NA
CAFS Compressor	0.0	Liter	0.0	Quart	NA
Water Pump Transmission	0.0	Liter	0.0	Quart	NA
Water Pump Primer	0.0	Liter	0.0	Quart	NA
A/C Compressor	Refrigerant Charge 3 lbs 4 oz		Oil Charge 17.9 oz		Oil Type PAG 46

TAK-4 SUSPENSION

- Unit is equipped with TAK-4 suspension on the front and rear.
- The independent suspension system has been designed to provide maximum ride comfort. The design will allow the vehicle to travel at highway speeds over improved road surfaces and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment.
- The suspension design has 10.00" of total wheel travel and a minimum of 3.75" before suspension bottoms.
- TAK-4 is an independent suspension system that allows for a 40 degree cramp angle in your front steering for tighter turning angle.
- Allows for shorter stopping distances over a conventional suspension system

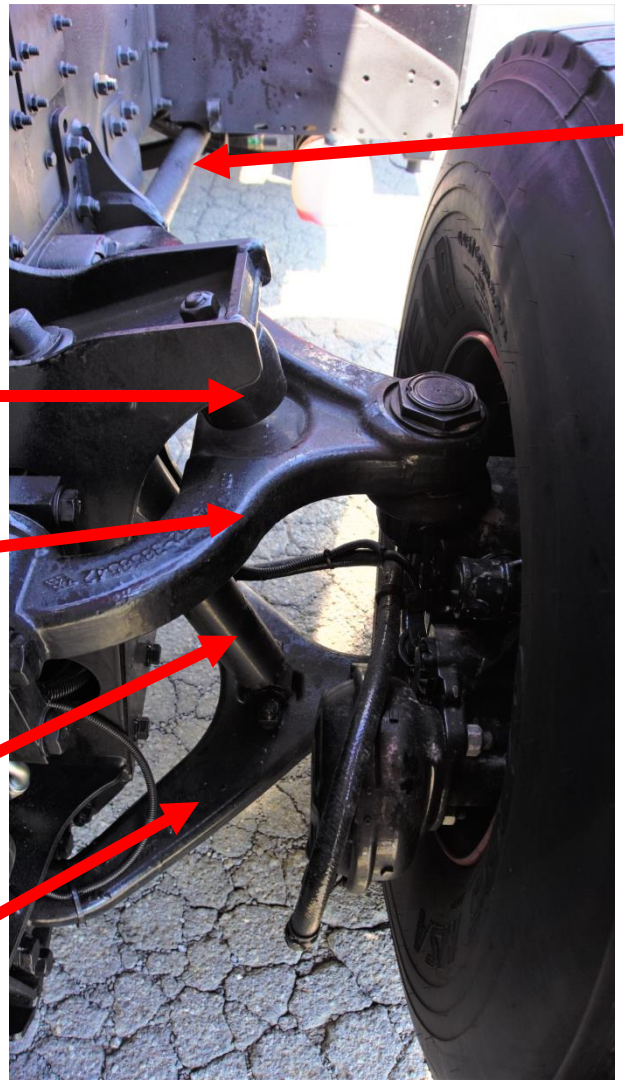
TAK-4 SUSPENSION

FRONT SUSPENSION



TAK-4 SUSPENSION

FRONT SUSPENSION



TORSION BAR

RUBBER JOUNCE STOP

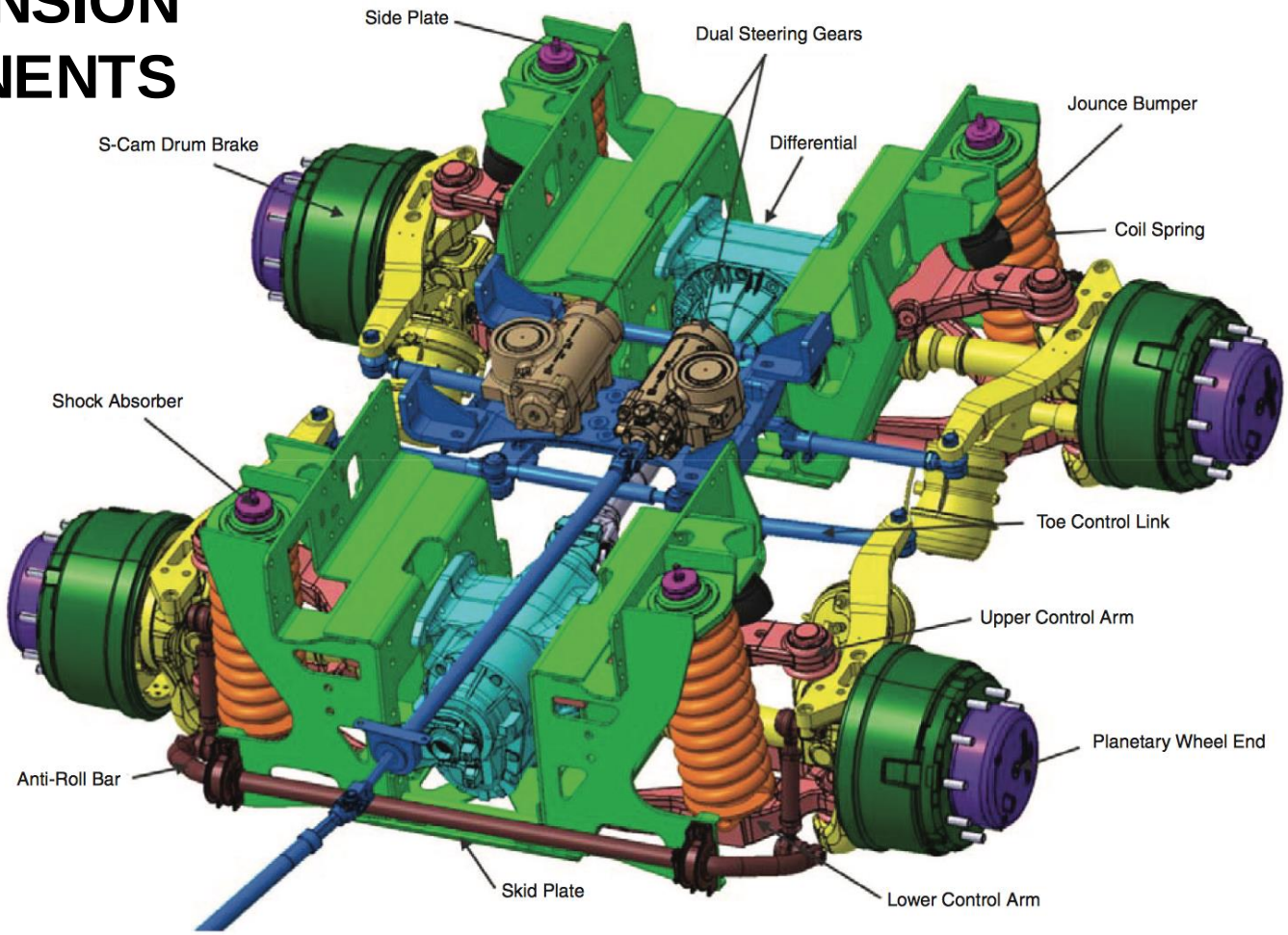
UPPER CONTROL ARM

SHOCK ABSORBER

LOWER CONTROL ARM

TAK-4 SUSPENSION

REAR SUSPENSION & T3 COMPONENTS



TAK-4 SUSPENSION

OUT OF SERVICE CRITERIA

- Damaged or Broken Control Arms
- Damaged, Bent or Broken Torsion Bar
  - Torsion bar has a Rhino Lining type coating on the outside. Check this coating for cracks, cuts or any missing chunks that may expose the torsion bar to the elements.

THINGS TO KEEP YOUR EYE ON

- Check the Rubber Jounce Stop
- Check the bolts on the Torsion Bar Mounts
- Check the bolts on the Control Arm Mounts
- Check the ball joints to make sure they haven't torn which would allow water or dirt to get inside.

TAK-4 T3 REAR STEER

TAK-4 T3 REAR-STEERING AXLE STEERS COORDINATED, OR OPPOSITE OF FRONT AXLE

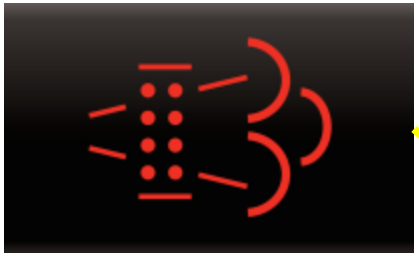
REAR OF VEHICLE SWINGS SLIGHTLY TO ACCOMPLISH OVERALL TIGHTER TURNING RADIUS

TAK-4 T3 REAR STEER

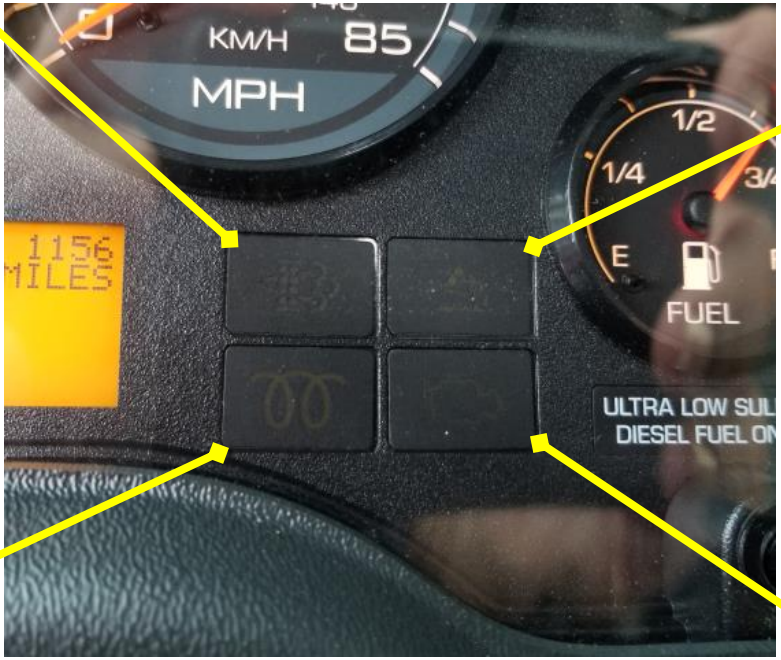
The rear axle(s) follow the steering angle of the front axle, although to a lesser degree. Therefore, making a wider conventional turn with a greater steering angle will result in the rear axle(s) steering with a greater angle and swinging out farther than the operator may intend.

- Left and right turns should be taken tighter than conventional apparatus.
- Set up for the turn slightly to the inside of the center of the lane, and follow through the turn closer to the inside than with a conventional apparatus.
- When turning, drive the vehicle judging that the rear axle(s) will follow. This can prevent the rear of the vehicle from running over the curb or into oncoming lanes or obstacles.

AFTER-ENGINE EXHAUST TREATMENT



Diesel Particulate Filter is Full



High Temperature Exhaust Warning

Glow Plugs

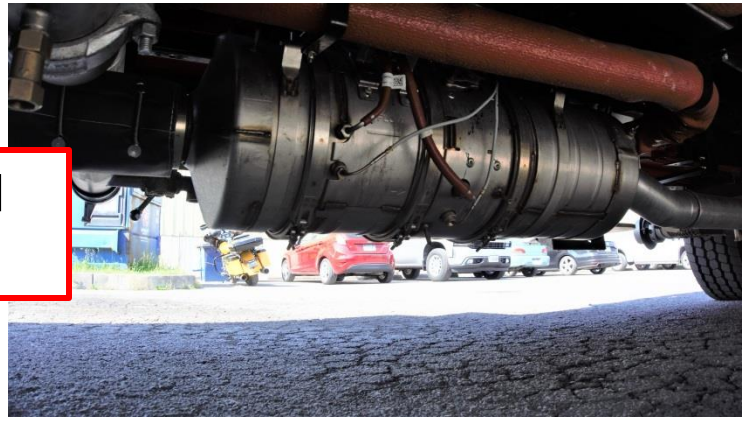
Check Engine Warning

You should wait for the glow plug symbol to switch off before starting the engine. However, if they come on after this, it means one of the glow plugs has a problem.

AFTER-ENGINE EXHAUST TREATMENT

- Vehicle is equipped with diesel exhaust fluid and a diesel particulate filter.

See Cummins After-Engine Treatment Brochure for more info.

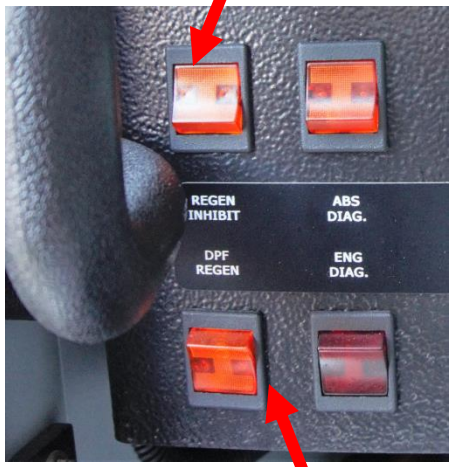


REGENERATION INDICATORS

	The **Diesel Particulate Filter (DPF)** light will illuminate when a regeneration is necessary. There are progressive stages of need for regeneration indicated by this light:
 *ON SOLID*	1. On solid (low to medium levels of particulate build up). The vehicle requires regeneration but should be able to complete its mission before a regeneration is performed. — Ensure the Regen Inhibit Switch is not activated. — Initiate a DPF regeneration by switching to a more challenging duty cycle (such as highway driving for at least 20 minutes or pumping) — OR perform a parked regeneration.
 *FLASHING*	2. Flashing (medium to high levels of particulate build up). The vehicle requires a regeneration as soon as possible). — Perform a regeneration by switching to a more challenging duty cycle or a parked regeneration.
 *FLASHING*	3. Flashing with amber Check Engine light (high level of particulate build up). A DPF regeneration is required immediately. — An automatic regeneration will not initiate. The operator must perform a parked regeneration.
 *FLASHING*	4. If a parked regeneration is not performed the red Stop Engine lamp will illuminate. — As soon as it is safe to do so, the vehicle should be **stopped** and remain shut down until serviced by an authorized dealer.

ACTIVE REGENERATION

Prevents system from entering or continuing in active regeneration mode; used when regen may engage in an undesirable location



Used to manually initiate a parked regeneration; DPF lamp must be illuminated to engage

- Due to the type of travel typical of fire apparatus "active regeneration" is most common
- Active regeneration occurs:
  a. When driving creates correct conditions for regen
     - Requires sufficient exhaust flow and temperatures
     - Speedometer >5mph
     - NO engine speed variations will occur when driving
  b. **This can occur while operating on scene if rpms > 700**

PARKED REGENERATION

DPF LAMP MUST BE ON OR FLASHING | STOP IN SAFE LOCATION | SET PARKING BRAKE | SET SAFE ZONE AROUND EXHAUST | FOOT OFF THROTTLE, BRAKE | HOLD REGEN SWITCH 5 SECONDS | MONITOR AREA STOP ENGINE FOR UNSAFE CONDITIONS!!

PRESSING BRAKE, THROTTLE, REGEN INHIBIT SWITCH WILL STOP REGENERATION PROCESS

1. Stop vehicle completely, transmission in N (neutral), and set the parking brake.
   - Park on a clean surface that will not melt or burn (clean concrete or gravel, not grass or asphalt).
   - Engine control should be from accelerator pedal (not PTO, remote PTO, cruise, etc) PTO and running at normal idle (high idle should be OFF).
   - Clear exhaust outlet area 5 ft of any items, gasses, vapors that can melt, burn or explode.
   - If indoors, exhaust discharge pipe must be rated at least 1500°F (816°C).
2. Keep foot off the throttle pedal and the brake pedal.

⚠CAUTION

STAY with the vehicle. Monitor the area during the operation. if any unsafe conditions occur, shut off engine immediately!

NOTE: Diesel Particulate Filter (DPF) lamp must be ON in order to start a stationary regeneration.

3. With the engine running, press and hold the vehicle's regeneration switch for several seconds.
   - Engine speed increases. The turbocharger may make a different sound during the event.
   - DEF lamp turns OFF. As hydrocarbons are added, temperature goes up. HEST lamp illuminates when exhaust temperature reaches 977°F (525°C).
   - Regeneration may take 20-40 minutes or more, depending on soot level.
   - Exhaust temps stay high at least 3-5 minutes after completion.
4. To stop a regeneration before completion, depress throttle pedal, release parking brake, press the regeneration inhibit switch, or turn off the engine.
5. When the regeneration is complete, the engine returns to normal idle speed and operation.
   — If excessive soot remains in the filter, the DPF light(s) will return to the appropriate stage until another regeneration occurs. Repeat parked regeneration. If the DPF light still remains on, call for service.

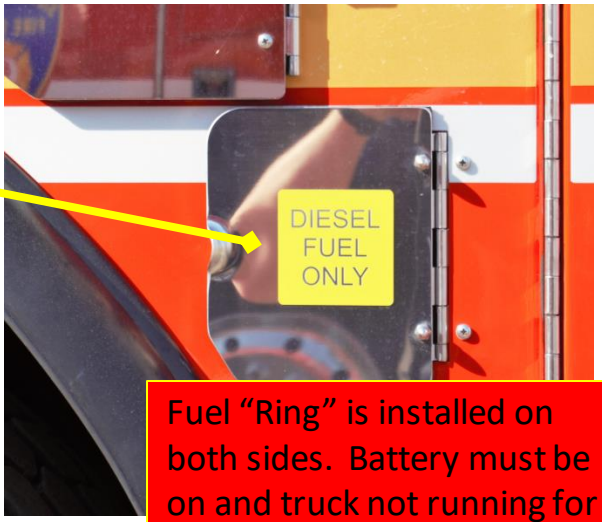
Do not perform regen inside a building or while attached to an exhaust removal system!

A minimum of 5 feet of clearance is required to the exhaust outlet.

For additional information, refer to the Pierce Ascendant Operator's Manual.

FUEL AND DEF

- Diesel Fuel
  - Fills on both sides of the apparatus body just behind the 2nd rear axle.
  - 65 gallon tank
- Diesel Exhaust Fluid (DEF)
  - Fluid level displayed on dashboard gauge panel and in Command Zone display.
  - 4.5 gallon tank
  - Fill on driver's side body forward of the first rear axle.
  - Light blue cap



Fuel "Ring" is installed on both sides. Battery must be on and truck not running for Ring to allow pumping.

Do not fill DEF tank when truck is running. It will empty small heater tank back into main tank and over flow it.

EXHAUST SYSTEM

- Exhaust outlet is 6” diffuser
- PlymoVent boots will accept up to 6 ¼” exhaust outlets.
  - The fit is tight!
- Check your mirror to ensure the hose disengages from the exhaust when exiting the station.
- Until the rubber molds to the larger tailpipe the boot may need to be manually disengaged.

PLYMOVENT®

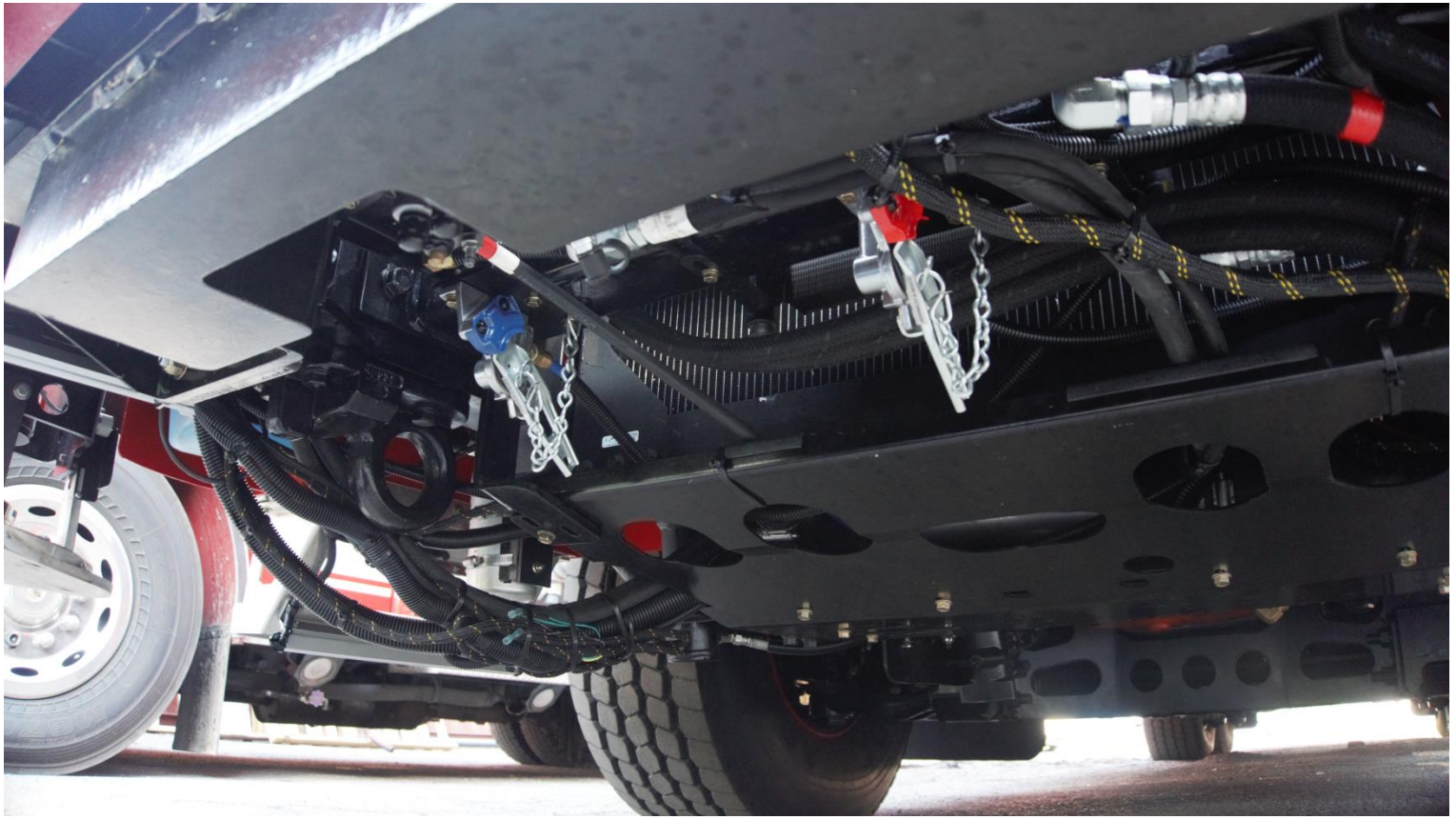
Slow and steady departures from the bay are necessary.

SUSPENSION & BRAKE SYSTEMS

- 24,000lbs front axle
  - TAK4
- 52,640lbs rear axle
  - TAK4
- Parking brake
  - Locks up rear wheels
  - 2nd actuator located on officer's side
- Anti-lock disc air brakes front
- Anti-lock drum air brakes rear axle
- 18.7cfm air compressor
- 12v auxiliary air compressor behind officer's seat.
  - Powered by shoreline to maintain brake system while parked
- Air dryer on wet tank
- Stainless steel air storage tanks
- Air tank drain actuators – driver side in front of first rear axle wheels.

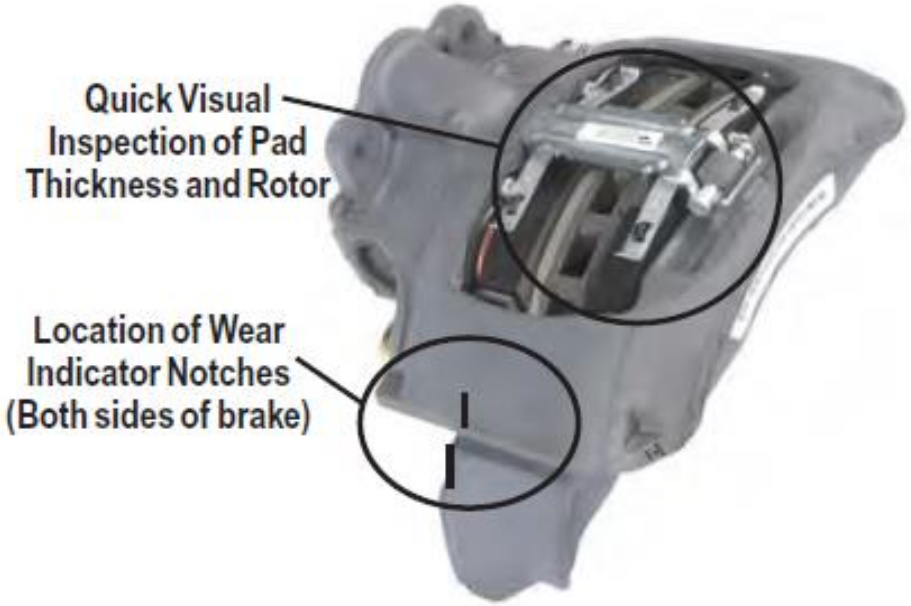
SUSPENSION & BRAKE SYSTEMS

- **GLAD HANDS**
  - Emergency Air / Towing



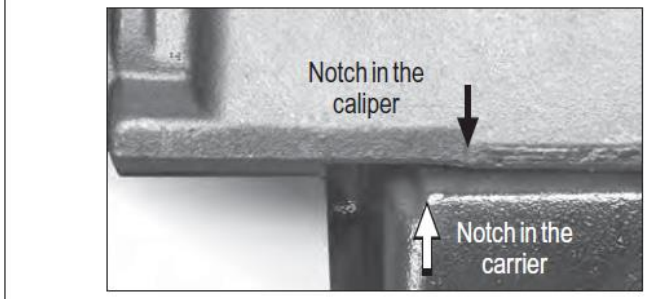
BRAKES – FRONT AXLE

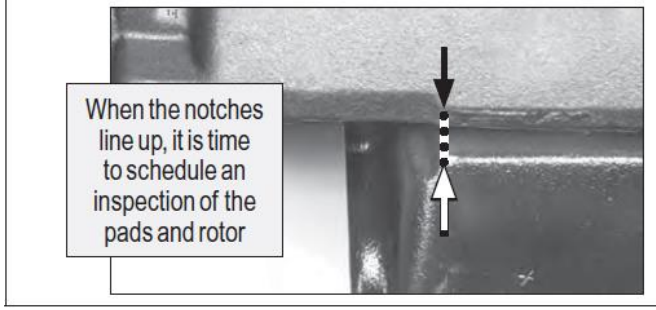
Bendix Disc



Where both the carrier and caliper have an indicator notch.

Compare the relative position of two notches cast into the carrier and caliper. When the two notches align, it is time to schedule a full wheel-removed inspection of the pads and rotor.





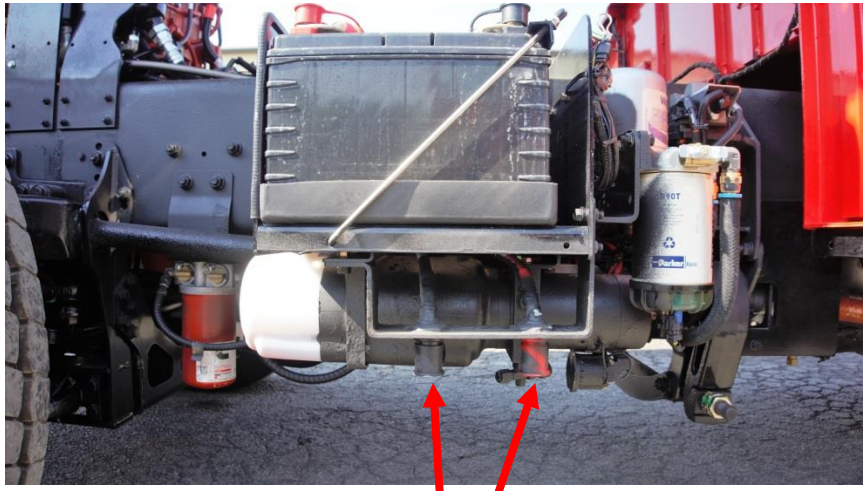
Pads must be replaced at 11mm (approximately 7/16”)

For additional information go to the Bendix Service Bulletin

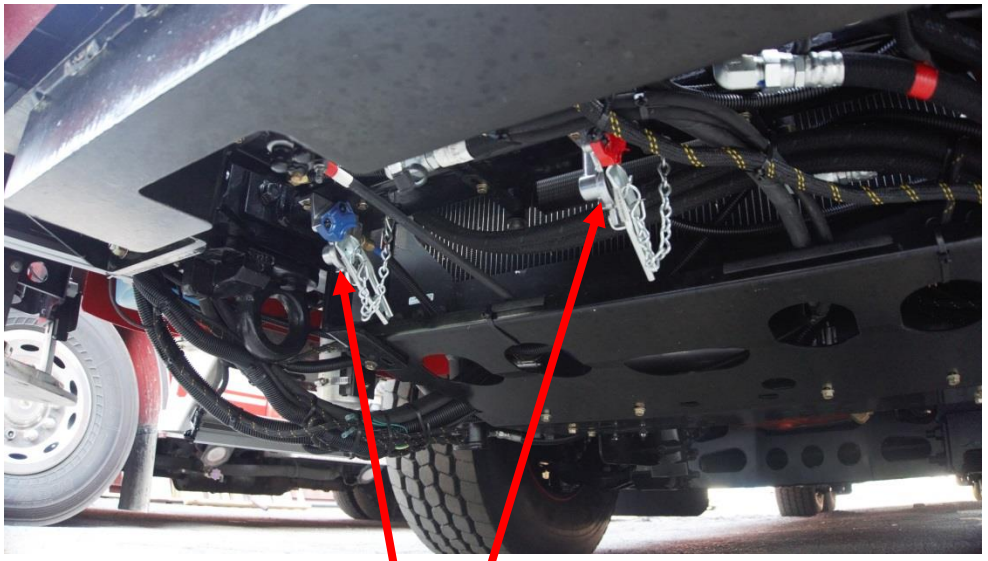
BRAKES – REAR AXLE

- Meritor Cam Drum Brakes

JUMPER STUDS & GLAD HANDS



Jumper studs accessible below driver's side cab door when cab is nested.



Glad hands located below the front bumper to assist with towing.

SHORELINE

- 20 amp, 120v NEMA 5-20 plug with green indicator light
- Supplies
  - Battery conditioner
  - Battery charger tender

This is not an auto-eject plug. Must be unplugged manually before moving the truck.

The following outlets are supported by shoreline or generator using an automatic transfer switch (ATS):

- Driver's & Officer's side EMS compartments
- One outlet between T1 and T4 seats
- RS2

SHORELINE

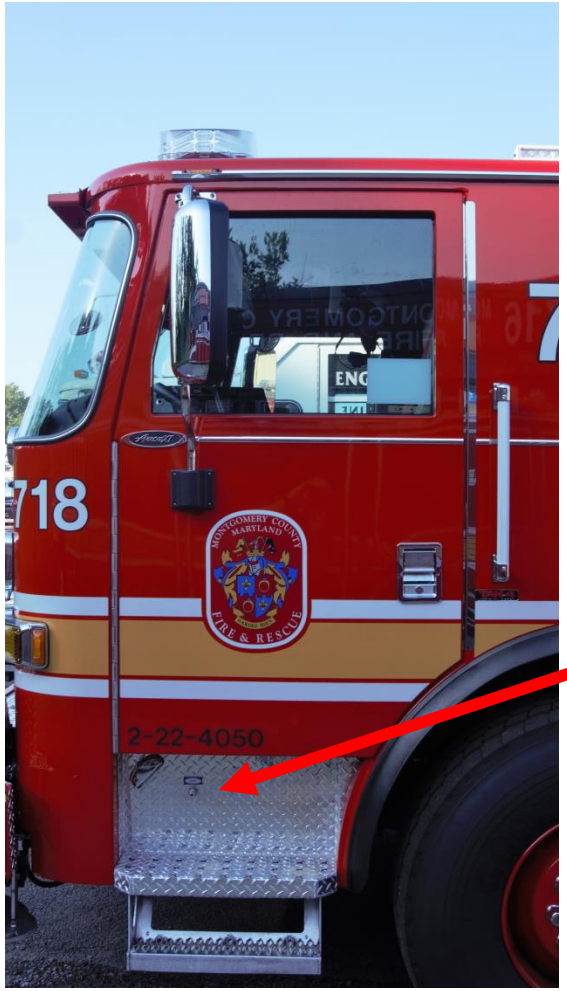
The remaining outlets are generator only, and ALL outlets are labeled with either “ATS” or “Generator only”.

It is CRITICAL that stations do not move chargers from generator only to the ATS outlets because the shoreline outlets are right at the maximum amperage that the station outlets (circuit breakers) will allow.

It is also CRITICAL that stations do not add any other devices to the ATS outlets. We ran a lot of calculations of the circuitry when we selected chargers.

If personnel need to charge more batteries than the ATS chargers will support, they need to use the station-based chargers which will be provided.

SHORELINE



If the service air tanks need to be filled or maintained, the inlet below the driver's door should be used.

This is not an auto-eject fitting. Must be unplugged manually before moving the truck.

JOCKEY PUMP

Pump is located behind the officer's seat.

OFFICER SEAT AREA

SCENE LIGHTS / GEN PTO

MOBILE RADIO PTT

RADIO LOACTION

SPEED / SEAT BELT INTICATORS

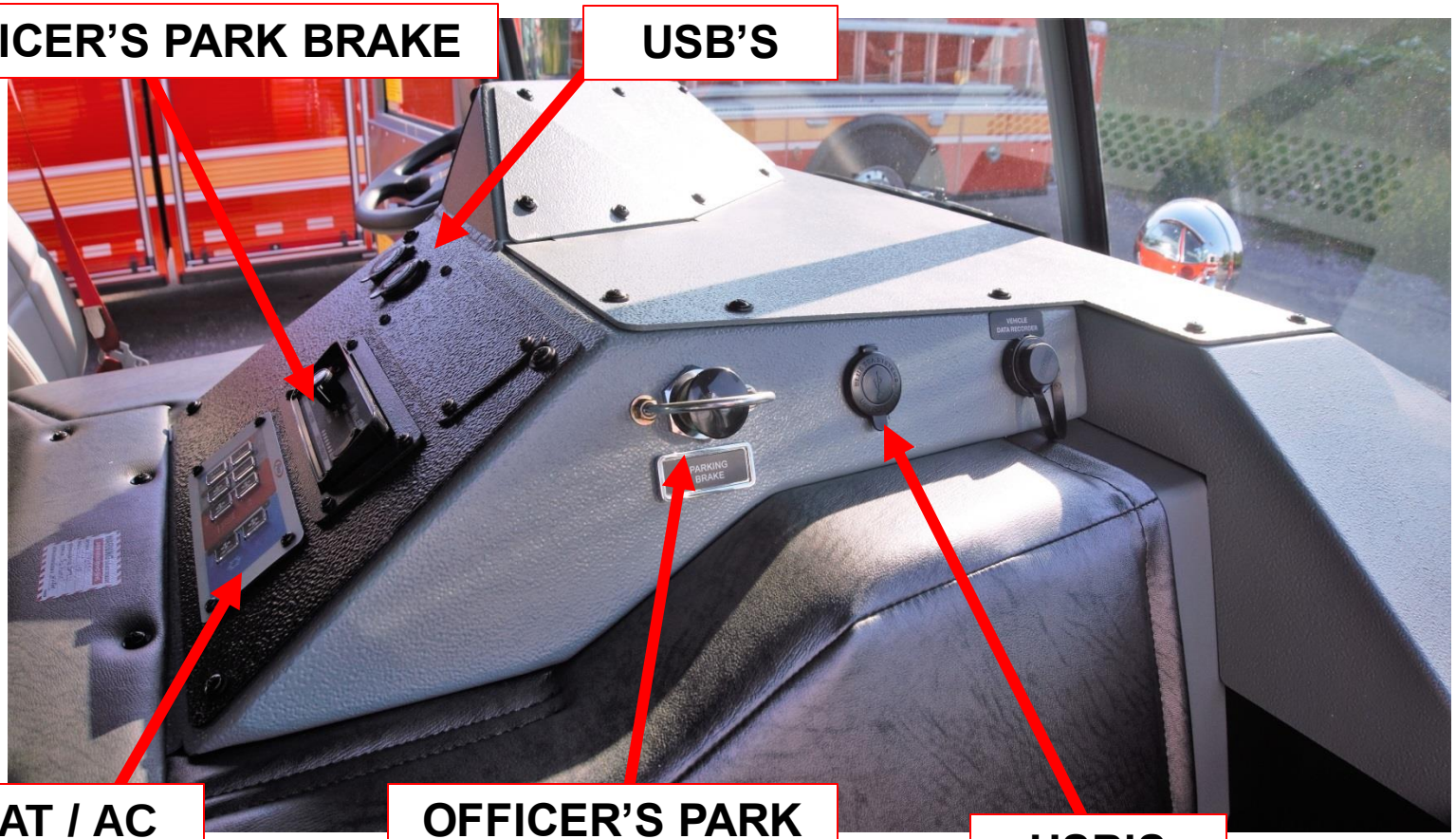
MDC

WASHER FLUID FILL

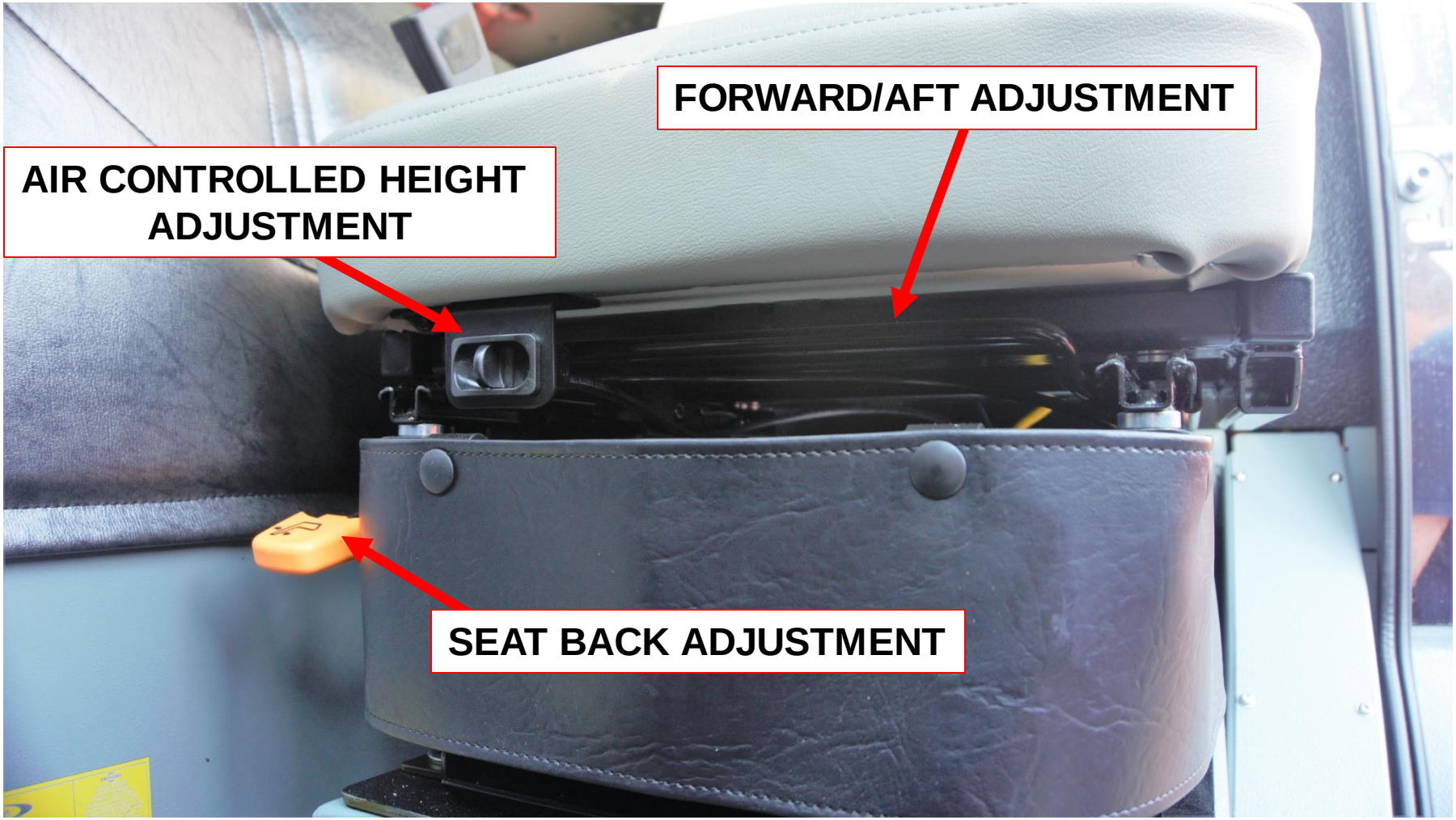
AIR HORN

SIREN

OFFICER SEAT AREA



DRIVER'S SEAT



SCBA BRACKETS – SMARTDOCK

- No straps or levers to restrain the SCBA or to release the SCBA - blue latching mechanism holds the SCBA in place during transit.
- In the event of a collision, inertial forces cause the top latching mechanism to lock the SCBA in place, preventing it from becoming a projectile.
- **To release the SCBA, a smooth motion is required. Slow is smooth; smooth is fast.**
- With the SCBA straps donned, the wear should bend forward at the waist and stand up to release the tank from the upper claw.
- If the tank is too loose or too tight within the claw there is an adjustment knob on top of the bracket.

For additional information view a quick video at https://www.youtube.com/watch?v=y43vJK3bsVo&app=desktop or check out the manufacturer's website at https://www.imminet.com/products/fire-ems/smartdock/

WARNING LIGHT CONTROLS

Warning Lights switch panels

E-master switch on the overhead panel and on the dashboard perform same function.

Allows operator to control clear (white) warning lights manually. Resets to default setting when E-master is cycled.

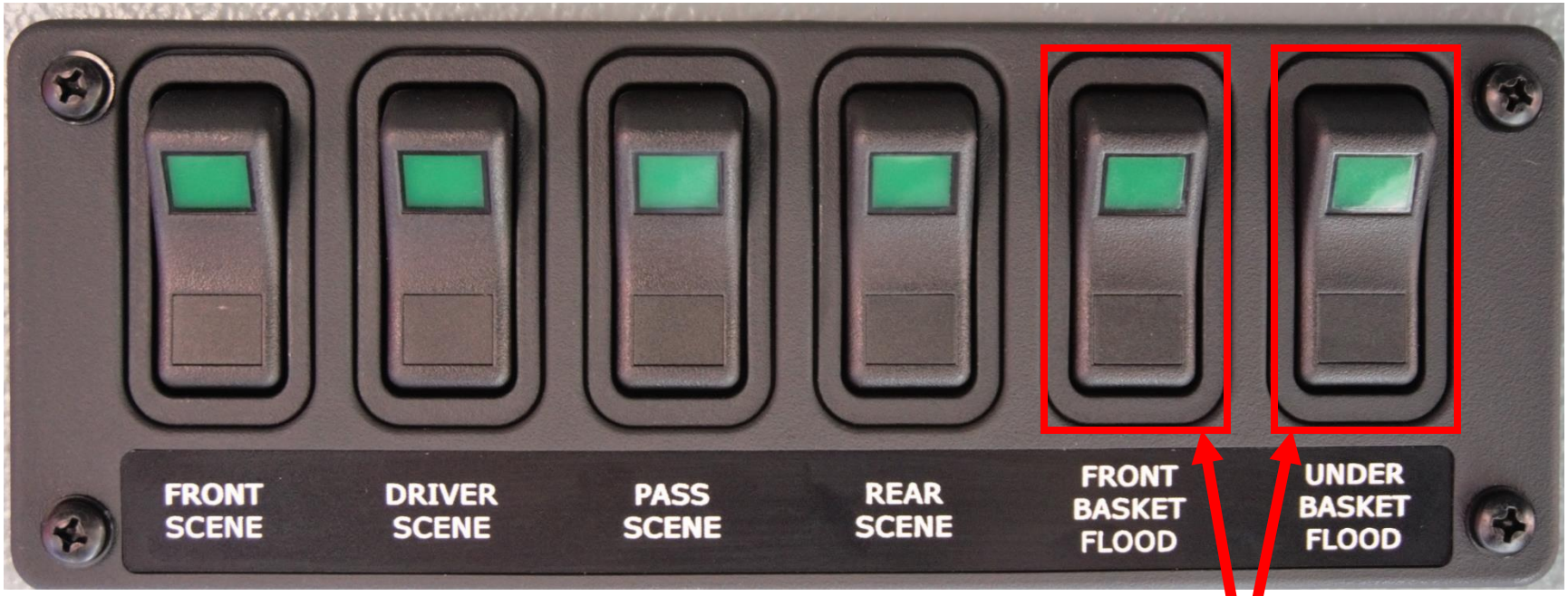
Useful when clear lights are blinding during fog or snow or other units parked in front of you.

Generator PTO

Switch activates 10KW generator

SCENE LIGHT CONTROLS

Scene light controls are located on the driver's and officer's side of the cab.



Front basket flood / Under basket flood are located on aerial basket. The lights are controlled from multiple locations cab, turntable and aerial basket.

CAB DOOR LOCKS

Lock-out button

- Electric door locks on cab entry doors.
  - Not connected to compartments
- Lock-out switch located officer's side air intake.
- Driver and officer doors control all four cab doors.
- T3 and T4 doors only control the individual doors.

STARTING & STOPPING THE MOTOR

- Battery switch, ignition switch, and start button are all grouped near the A-post on the driver's side.

Allow gauges to complete their sweep before attempting to start the motor. Failure to wait can result in false sensor alarms.

Do not leave ignition switch in the run/on position when the truck is not running. This can result in false sensor alarms.

In addition to the battery, ignition switch must be "on" for most electrical functions to work. (like cab tilt)

STARTING & STOPPING THE MOTOR

1. Turn Battery Switch To “ON”
2. Turn Ignition Switch up to run/on
3. Wait for gauge sweep
4. Press the Start engine button
   Engage for no more than 15 seconds.

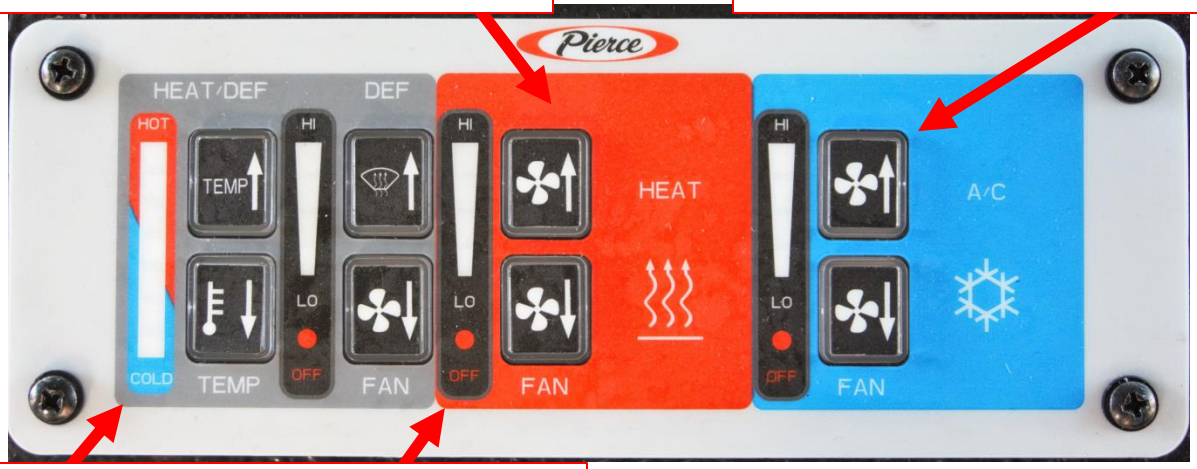
HEATING AND A/C

FLOOR HEATER CONTROLS

- Heaters located under rear facing seats.
- 2 ducts for officer and driver positions
- LED gauge shows fan speed. Fan speed increase/decrease buttons

A/C CONTROLS

- The A/C is completely external
- LED gauge shows fan speed with fan speed increase/decrease buttons.



DEFROST

- LED gauge shows temp. with buttons to increase/decrease Temp.
- LED gauge shows fan speed with fan speed increase/decrease buttons.

Defroster

IMPORTANT: As the defrost and heat are recirculation-only systems, the A/C may be required to dry the air in situations where the windshield might fog over.

AERIAL, LOAD MANAGER, FRONT WHEEL LOCK

The Aerial Master Switch will give you electronic power to your outriggers, turntable pedestal controls and Basket.

Shows when load sequencer is engaged; no operator intervention should be needed.

The Black Plunger for your front wheel lock has been replaced with a toggle switch.

Note: This switch can be left turned on at all times. As soon as you set your parking brake the front wheel lock will activate..

JAKE BRAKE, HIGH-IDLE, ATC

High idle switch and indicator (2 Locations)
Increases idle to 1,300rpm

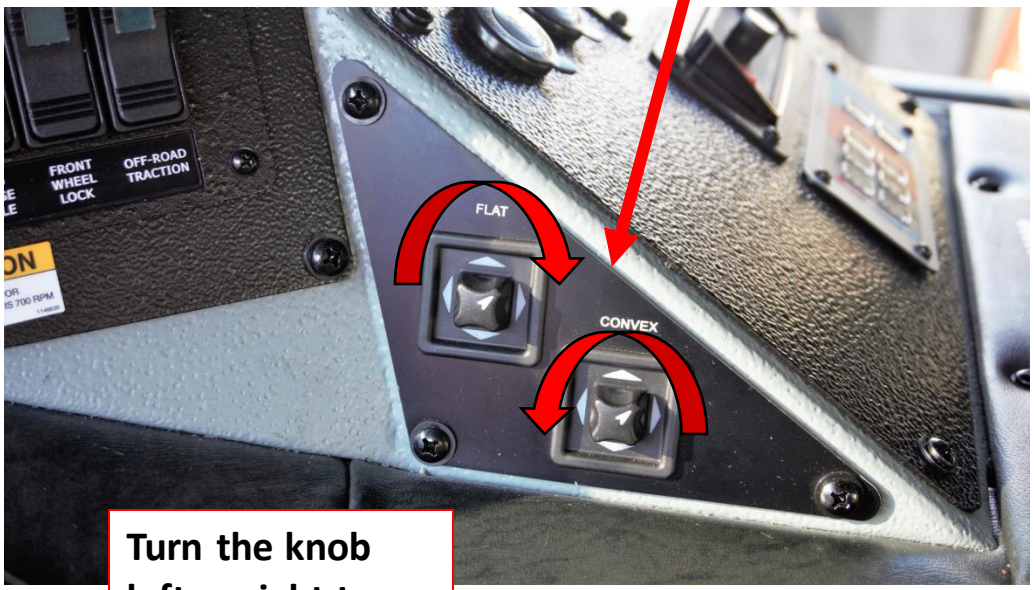
NOTE: use whenever idling for >5 minutes

Momentarily impairs ATC to allow more wheel spin; may be desirable in extra soft surfaces like snow, gravel, or mud. (similar to Mud/Snow on Crimsons)

Pierce recommendation: When road conditions dictate that a driver change his/her driving pattern, the driver should disable auxiliary braking systems. (Engine Brake)

MIRROR AND WIPER CONTROLS

Flat and convex mirror adjustment controls



Turn the knob left or right to select the mirror

Windshield wiper control

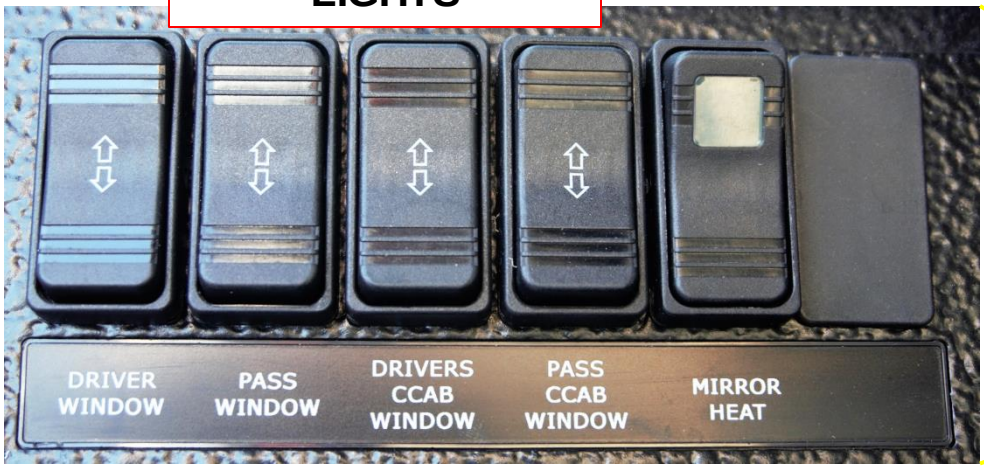
Wipers are programmed to stop operating when parking brake is engaged; saves the wiper blades.

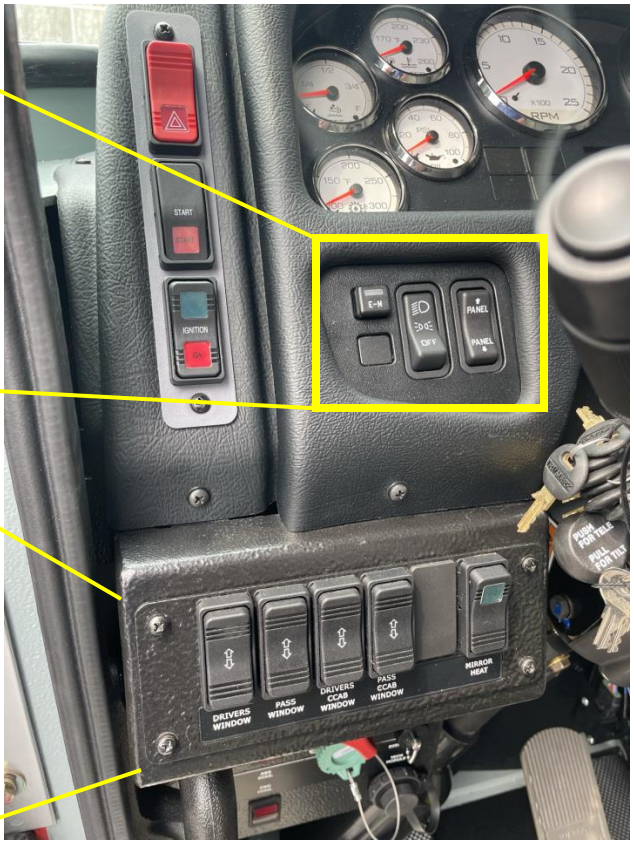
HORN, HEADLIGHTS, WINDOWS, MIRROR HEAT

EMERGENCY MASTER

HEADLIGHTS/DOT LIGHTS

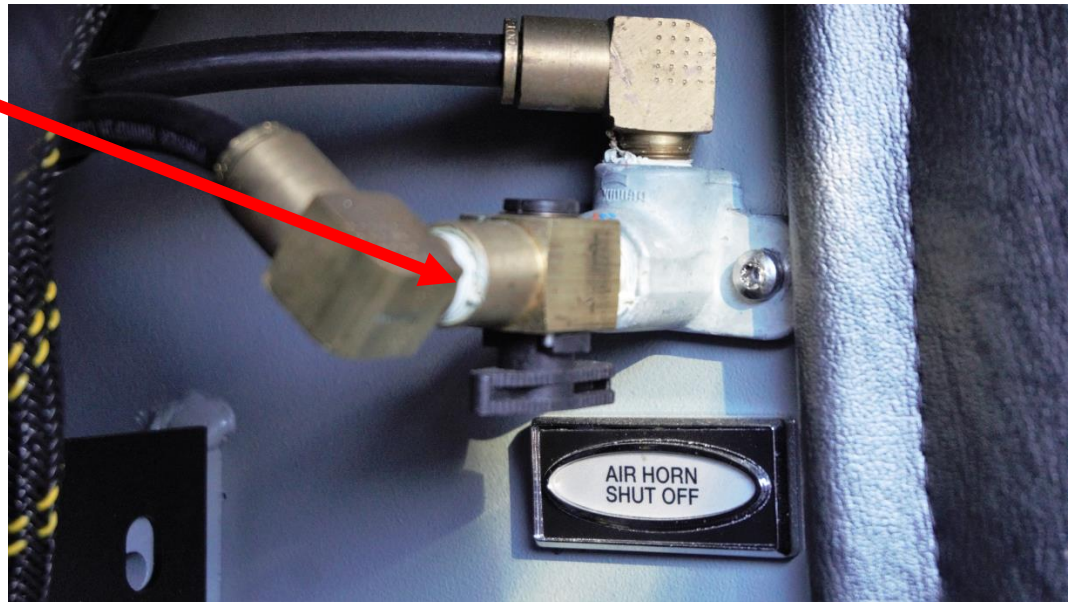
PANEL LIGHT DIMMER





AIR HORN MANUAL SHUTOFF

The Air Horn Manual Shutoff is located to the right of the steering column in front of the driver's seat.



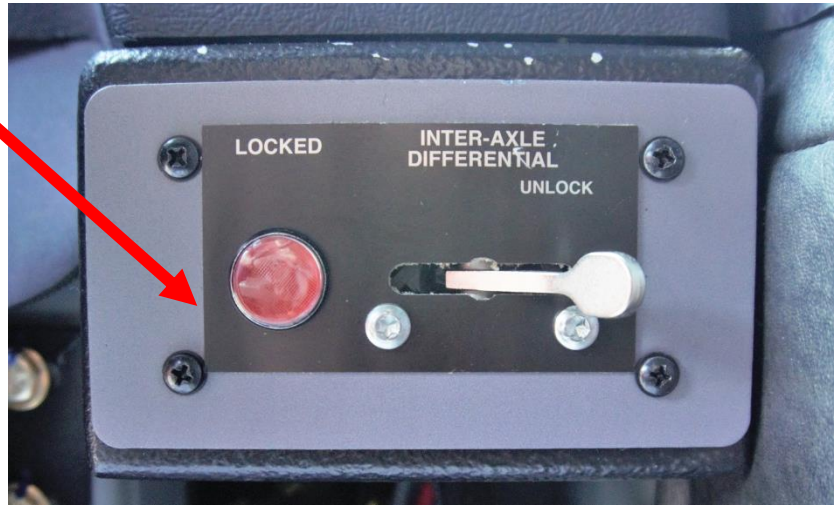
INTER-AXLE DIFFERENTIAL LOCK

INTER-AXLE DIFFERENTIAL LOCK

- Located right of the steering column

NOTE: Only engage when

- Stopped or moving at slow speed
- Never lock while wheels are spinning. Shock damage will cause axle damage.



- Lock the inter-axle differential and achieve maximum pulling power when approaching slippery or poor road conditions.
- After engaging the IAD Lock switch and proceeding at a slow, even speed, let up momentarily on the accelerator pedal to allow the lock to engage. Proceed over the poor road conditions cautiously.
- Once road conditions have improved, move the IAD Lock switch to the UNLOCK position while maintaining vehicle speed. Let up momentarily on the accelerator to allow the lock to disengage. Resume driving at normal speed.

HASS COLLISION MITIGATION

- HASS Device. Use is TBD

COMMAND III ZONE DISPLAY

- Command Zone III system located on the dashboard to the right of the steering wheel.
- Functions are a mix of hard buttons and touch screen.

✓Vehicle systems monitoring

✓Vehicle systems controls

✓Vehicle diagnostics

Home Screen
Fuel, DEF, Speed, Seat Belt Status

Go to the Driver Training website for additional Command Zone III information.

COMMAND ZONE MENU

Click the mute button to reduce some alarms to an occasional chirp. This will not work for seatbelt alarms.

Menu Screen

Press the screen to access the following functions:

HVAC
Notifications
Do Not Move Truck
Camera Menu
Aerial Screens

CZ MENU >> HVAC


Pierce
06/01/22 09:04 AM
HEAT/DEF
DEF
HEAT
FRONT
A/C
FRONT
OFF
OFF
OFF
Pierce

CZ MENU >> NOTIFICATIONS

Scroll through the four notification screens for faults, caution messages, warnings, and general information.

CZ MENU >> DO NOT MOVE TRUCK

The “Do Not Move Truck” screen shows you faults such as the screen above:

Driver Cab Door Open

CZ MENU >> CAMERAS

The backup camera is the only camera available on these towers.

You can also access the backup camera by pressing down on the arrow pad.

COMMAND ZONE FIRE SCENE

Fire Scene Screen

Press the page button to access the following functions:

- Aerial hydraulic oil temperature
- Aerial hydraulic pressure
- Ladder reach
- Extension
- Angle and Height
- Active load chart
- Status of water flow (on/off) and flow rate
- Rung aligned indicator
- Ladder angle

AERIAL TOWER OPERATIONS

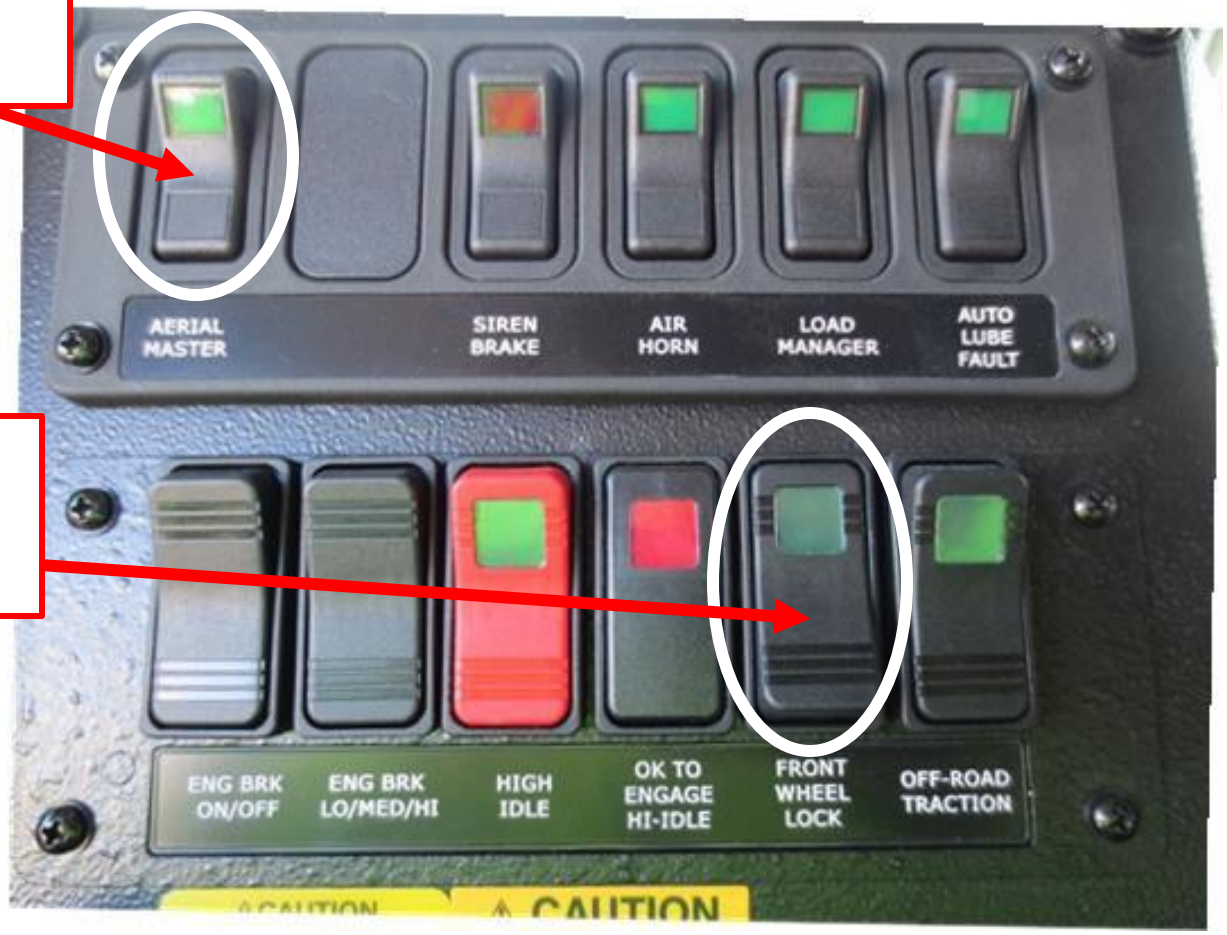
AERIAL IN CAB CONTROLS

- The Aerial PTO is always engaged therefore there is **NO** Aerial PTO switch in the cab.
- The Black Plunger for your front wheel lock has been replaced with a toggle switch.
- This switch can be left turned on at all times. As soon as you set your parking brake the front wheel lock will activate.
- The Aerial Master Switch will give you electronic power to your outriggers, turntable pedestal controls and basket.

AERIAL IN CAB CONTROLS

AERIAL MASTER SWITCH

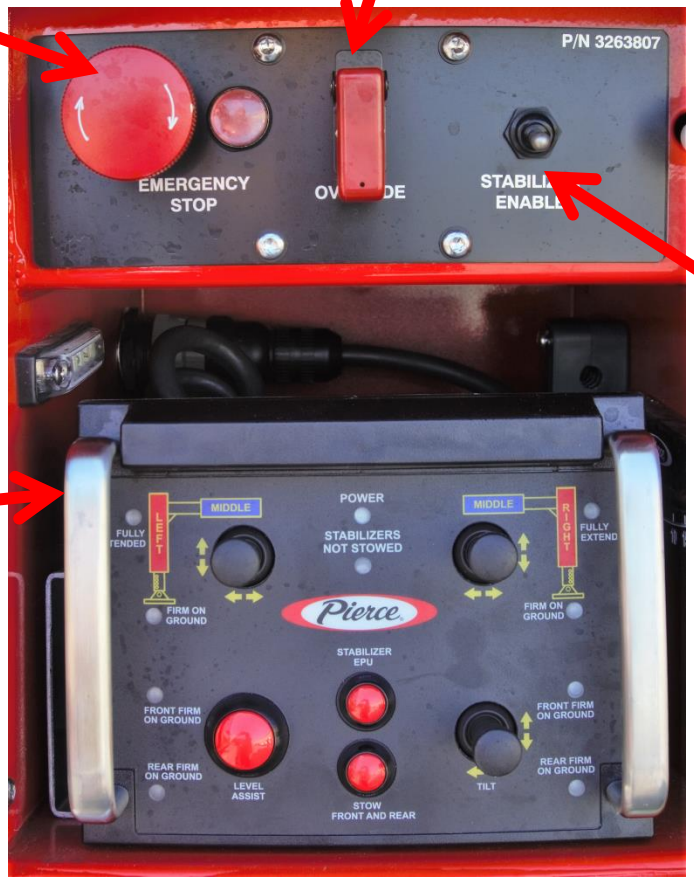
FRONT WHEEL LOCK



OUTTRIGGER CONTROLLS

EMERGENCEY STOP
Stops all aerial functions. Push button IN and rotate clockwise (to the right) to lock switch and stop all aerial functions. Rotate counter-clockwise to allow button to pop up and reset.

OVERRIDE SWITCH
Overrides interlocked circuits for emergency operation.



STABILIZER POWER
See next slide for additional info.

STABILIZER REMOTE CONTROL
Used to operate aerial Stabilizers.

OUTRIGGER CONTROLLS

STABILIZER REMOTE CONTROL SWITCH

- Toggle the switch to enable the Stabilizer Remote Control. To prevent stabilizer movement when the aerial is in use, power to the remote control shuts off automatically when the aerial comes out of the cradle.
- When the aerial returns to the cradle, the switch must be toggled again to re-enable the remote control.
- As an additional safety feature, power to the remote control turns off automatically three minutes after the stabilizers are last moved. To re-enable the remote control after three minutes of non-use, toggle the switch again. The switch does not function unless the aerial is cradled, the Aerial Master Switch is ON, the E-Stop switch is OFF and all stabilizer switches are OFF.

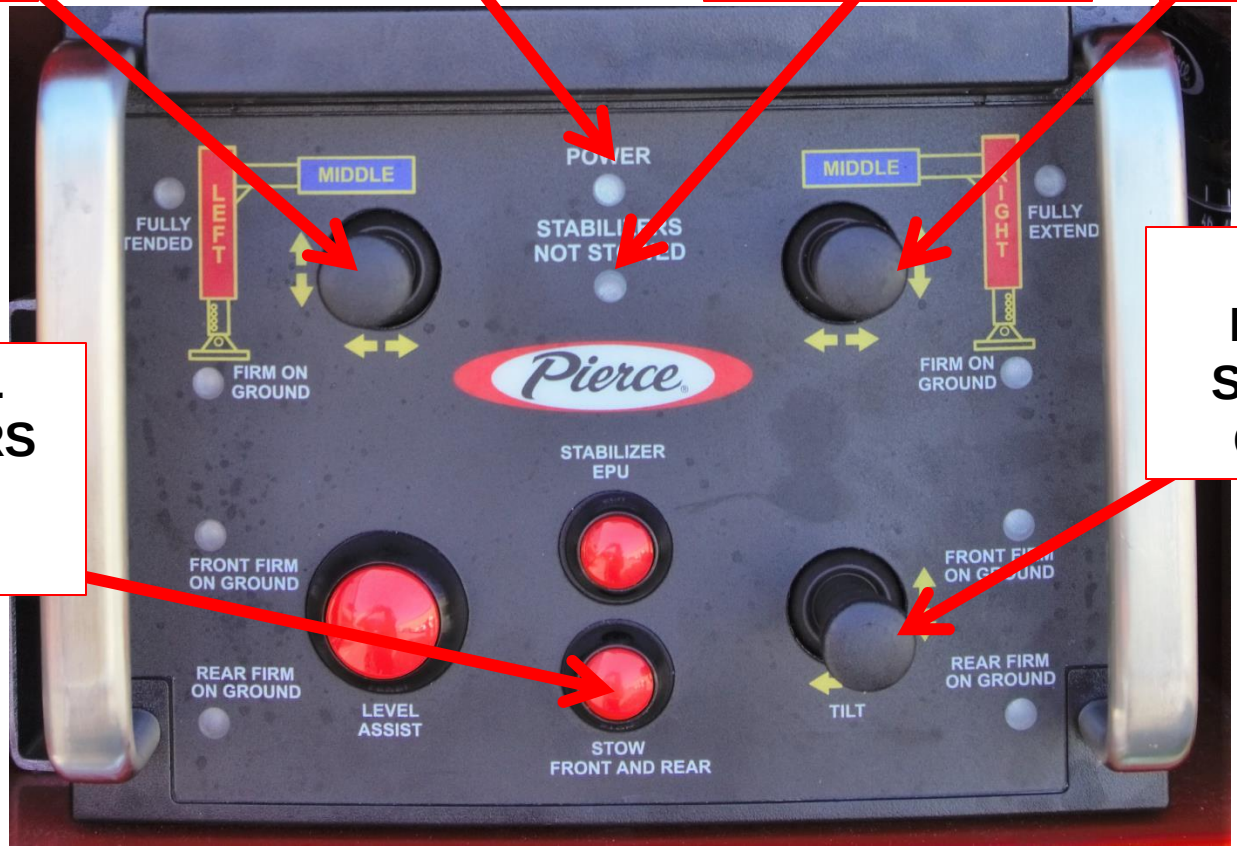
OUTTRIGGER CONTROLLS

LEFT MIDDLE STABILIZER CONTROL

STABILIZER POWER INDICATOR

STABILIZER NOT STOWED INDICATOR

RIGHT MIDDLE STABILIZER CONTROL



STOW ALL STABILIZERS CONTROL SWITCH

MANUAL LEVELING STABILIZER CONTROL

OUTTRIGGER CONTROLLS

STABILIZER POWER INDICATOR – When lit, indicates that the stabilizer controls are energized.

STABILIZERS NOT STOWED INDICATOR – When lit, indicates when one (or more) of the stabilizers is not in the stowed position.

RIGHT MIDDLE STABILIZER CONTROL – Controls the operation of the right middle stabilizer. Move switch left and right to control beam extension. Move switch up and down to control jack operation.

LEFT MIDDLE STABILIZER CONTROL – Controls the operation of the left middle stabilizer. Move switch left and right to control beam extension. Move switch up and down to control jack operation.

OUTTRIGGER CONTROLLS

MANUAL LEVELING STABILIZER CONTROL – Controls the operation of all the stabilizers simultaneously to desired truck position. Move switch up to raise the front of the truck and down to raise the rear of the truck. Move switch left to raise the left side of the truck and to the right to raise the right side of the truck. This is used to readjust the level of the truck, if desired, after the truck has been set up using the Level Assist Control Switch.

STOW ALL STABILIZERS CONTROL SWITCH – Pushing the switch down causes all stabilizer jacks to completely stow simultaneously.

OUTTRIGGER CONTROLLS

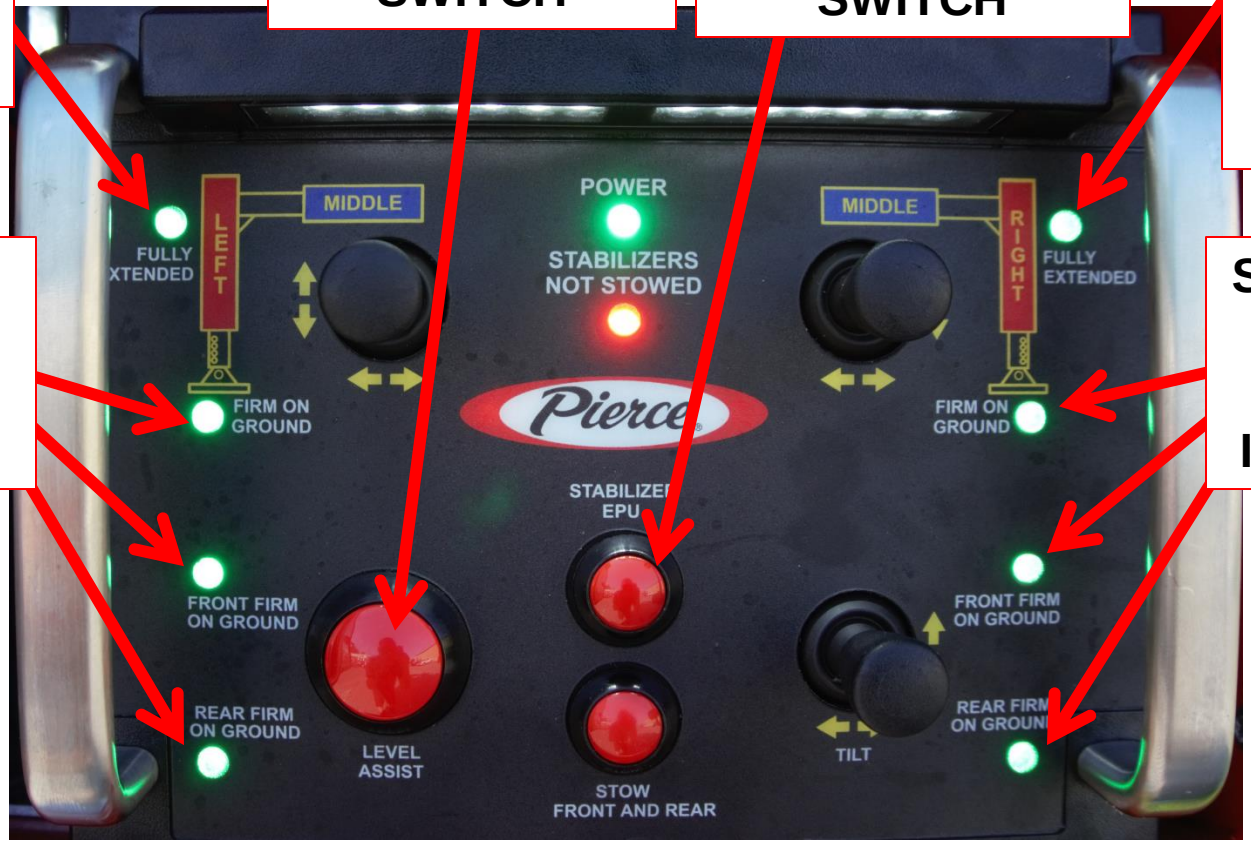
STABILIZER BEAM FULLY EXTENDED INDICATOR

LEVEL ASSIST CONTROL SWITCH

STABILIZER EPU SWITCH

STABILIZER BEAM FULLY EXTENDED INDICATOR

STABILIZER FIRM ON GROUND INDICATOR



STABILIZER FIRM ON GROUND INDICATOR

STABILIZER FIRM ON GROUND INDICATOR

OUTTRIGGER CONTROLLS

STABILIZER FIRM ON GROUND INDICATOR (6) – When lit, indicates when the stabilizer jack is down.

STABILIZER BEAM FULLY EXTENDED INDICATOR (2) – When lit, indicates when the stabilizer beam is fully extended.

NOTE: If a stabilizer stowed proximity switch and the firm on ground proximity switch are active at the same time, the “Firm on Ground LED” and “Stabilizer Not Stowed” LED will flash to indicate that there is an error. There will also be a fault message on the display to indicate which stabilizer has an error.

OUTTRIGGER CONTROLLS

LEVEL ASSIST CONTROL SWITCH – Pushing the switch down causes the stabilizer jacks to initially level the apparatus within the limits of the system. Operator may have to make final/additional adjustments using the Truck Manual Leveling Stabilizer Control.

STABILIZER EPU SWITCH – Activates the secondary hydraulic system.

- The EPU should be used only when the main system hydraulic pump is not operating.
- The EPU has a limited run time before possible overheating. DO NOT run the EPU for more than 30 minutes continuous without allowing 30 minutes for cooling down. Limiting loads and pressures will allow for more efficient use of the EPU and will also generate less heat.
- The EPU should only be activated after the desired function is selected.

INCLINOMETERS

Side to Side and Front to Back Inclinometers

Green: 0 to 5 degrees either side will allow 100% tip load capacity.

Yellow: 5 to 8 degrees either side will allow 50% tip load capacity.

Red: More than 8 degrees to either side.

DO NOT OPERATE

TURNTABLE CONTROL CONSOLE

E-STOP

EPU SWITCH

LIGHTING
- Tracking Lights
- Front Basket Lt's
- Under Basket Lt**'s**

NOZZLE CONTROL
- Fog
- Left/Right
- Raise Lower

AERIAL CONTROLS
- Extension
- Rotation
- Elevation

MANUAL BASKET LEVELING DISABLE

AERIAL MANUAL CONTROL (OVERRIDE)

AERIAL SPEED CONTROL

COMMAND ZONE

TURNTABLE CONTROL CONSOLE

EMERGENCY STOP SWITCH – Stops all aerial functions. Push button IN and rotate clockwise (to the right) to lock switch and stop all aerial functions. Rotate counter-clockwise to allow button to pop up and reset.

AERIAL MANUAL CONTROL SWITCH – Used to enable the aerial overrides and operate the aerial using the manual override control valves. Lift cover and push UP and HOLD switch forward to activate the manual override controls. Release switch to deactivate the manual override controls.

EMERGENCY HYDRAULIC POWER SWITCH – Activates the secondary hydraulic system.

AERIAL SPEED SWITCH – Used to control the relative speed of the aerial functions—normal, fast.

TURNTABLE CONTROL CONSOLE

MANUAL BASKET LEVELING DISABLE SWITCH – Overrides the MANUAL BASKET LEVELING ENABLE/DISABLE SWITCH located in the aerial basket in case the aerial has to be controlled from the turntable console.

TRACKING LIGHTS SWITCH – Controls power to tracking lights. Located at tip of bed section of ladder.

FRONT BASKET AC LIGHT SWITCH – Controls power to the front basket floodlight(s).

UNDER BASKET AC LIGHT SWITCH – Controls power to the under basket floodlight(s).

TOWER BASKET CONTROLS

BASKET MANUAL LEVELING SWITCH – After the Basket Manual Leveling System has been activated, Push switch UP to tilt the front of the basket DOWN. Pull switch DOWN to tilt the front of the basket UP.

- Activation switch is a momentary switch. Pressing the switch once will activate manual basket leveling. You will need to press switch a second time to activate auto leveling again.

TOWER BASKET CONTROLS

AERIAL SPEED CONTROL

MANUAL BASKET LEVELING

LIGHTING
- Tracking Lights
- Front Basket Lt's
- Under Basket Lt**s**

NOZZLE CONTROL
- Fog
- Left/Right
- Raise Lower

AERIAL PA SYSTEM

- The aerial has an intercom system with stations located at the turntable console and the basket.
- Both have a volume control to adjust incoming transmissions. Press UP arrow to increase intercom volume; press DOWN arrow to reduce intercom volume. Volume is shown on indicator lights.

Turntable console - Press the “press-to-talk” switch to talk to other intercom stations; release to receive communications from other intercom stations.

The tip station is hands-free, which means all the operator has to do is talk to be heard at the console.

COMMAND ZONE AERIAL SCREEN

The Command Zone Information Center (CZIC) has 4 screens to communicate information useful for the operation of the aerial. The PAGE button will toggle through screens with information pertaining to the aerial.

- **Main Aerial Screen**
- **Aerial Set-up Screen**
- **Aerial Operations Screen**
- **Aerial Limitations Screen**

A command zone information center is located at each aerial control locations.

- **Aerial Basket**
- **Turntable Console Controls**

COMMAND ZONE AERIAL SCREEN

MESSAGES AND FAULTS

If there is a Message or Fault, a triangular “Caution” icon (see left) will appear in the bottom right corner of the screen. Press the “Caution” icon and it will open the list of Messages and/or Faults that caused the icon to appear. Follow any instructions on the screen.

COMMAND ZONE AERIAL SCREEN

MAIN AERIAL SCREEN

- Aerial hydraulic oil temperature
- Aerial hydraulic pressure
- Ladder reach
- Extension
- Angle and Height

NOTE: Ladder information is Approximate and for operator reference only

MESSAGE or FAULT Triangle "Caution"
Press to see message.

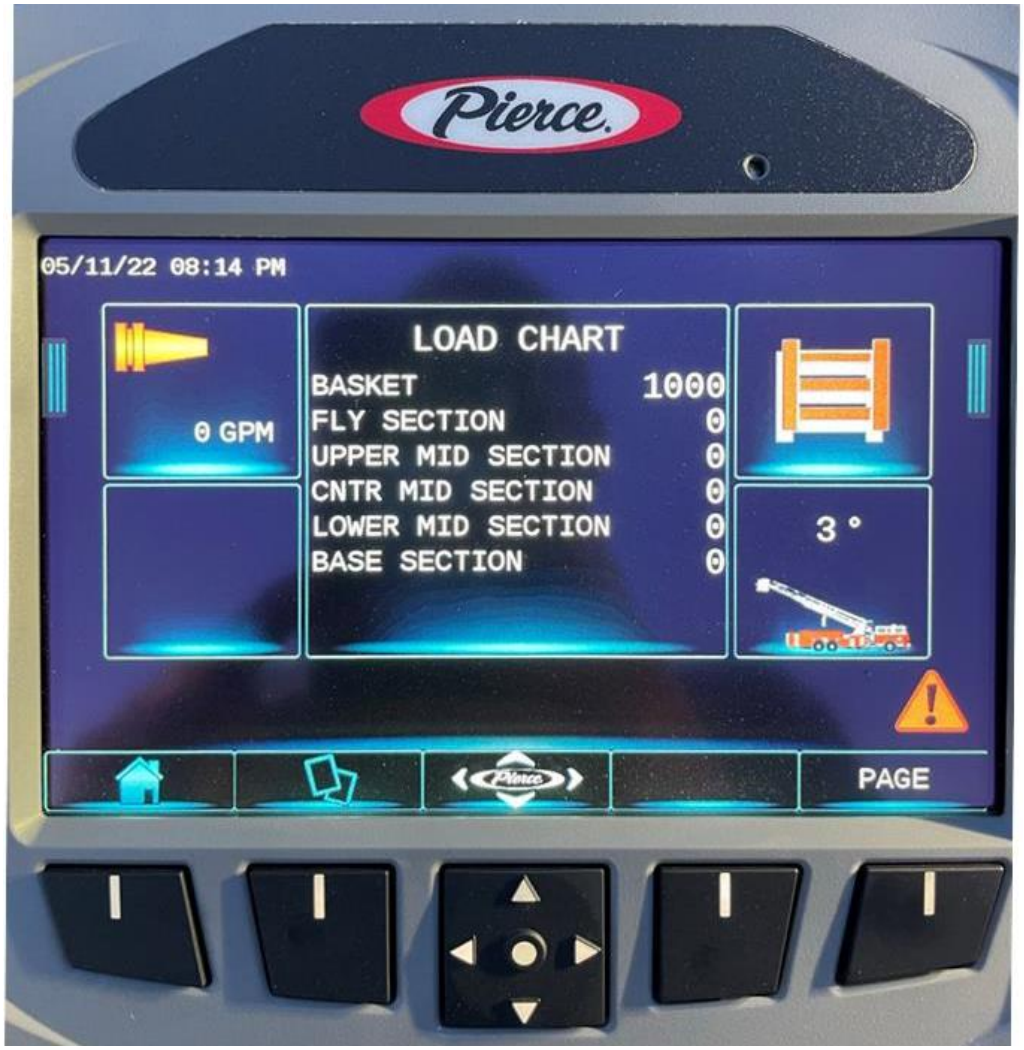
COMMAND ZONE AERIAL SCREEN

AERIAL SET-UP SCREEN

- Indicates the overall status of all stabilizers
- Slope
- Grade

Status Bar	Color	Beam Position	Jack Position
Deployed	Green	Full extension	Set
Short-Jacked	Yellow	Short extension	Set
Not Set	Red	Short extension	Not set
Stowed	Gray	Full retracted	Full retracted

COMMAND ZONE AERIAL SCREEN



AERIAL OPERATIONS SCREEN

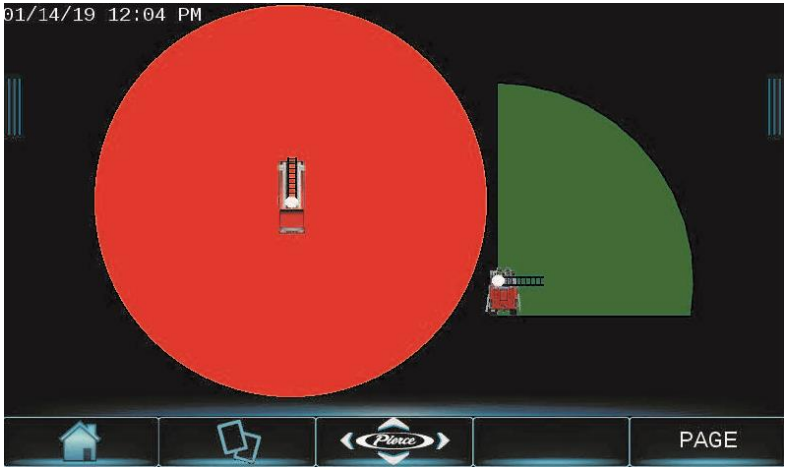
- Active load chart – During operation chart values should be the same as those published on the load chart. Located on Basket and Turntable.
- Status of water flow (on/off) and flow rate
- Rung aligned indicator
- Ladder angle

COMMAND ZONE AERIAL SCREEN

AERIAL LIMITATION SCREEN

- **GREEN** – OKAY
- **RED** – NOT OKAY

- Allowable aerial rotation
- Allowable aerial angle
- Allowable operation zones



EMERGENCY HYDRAULICS & POWER

There are two possible failures with the aerial system.

- Electronic
- Hydraulic

It is possible for both systems to fail together

DO NOT run the EPU for more than 30 minutes without allowing 30 minutes for cooling down. Limiting loads and pressures will allow for more efficient use of the EPU and will also generate less heat.

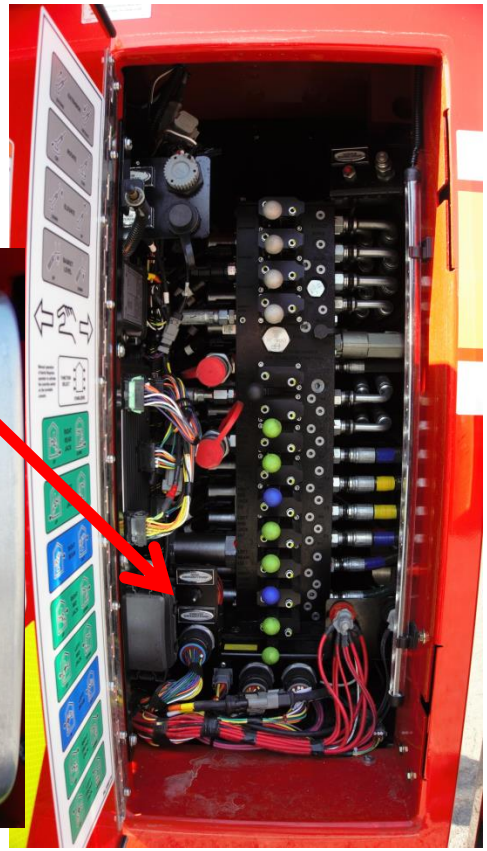
DO NOT run the EPU while the main hydraulic system operating.

ONLY activate the EPU after the desired function is selected.

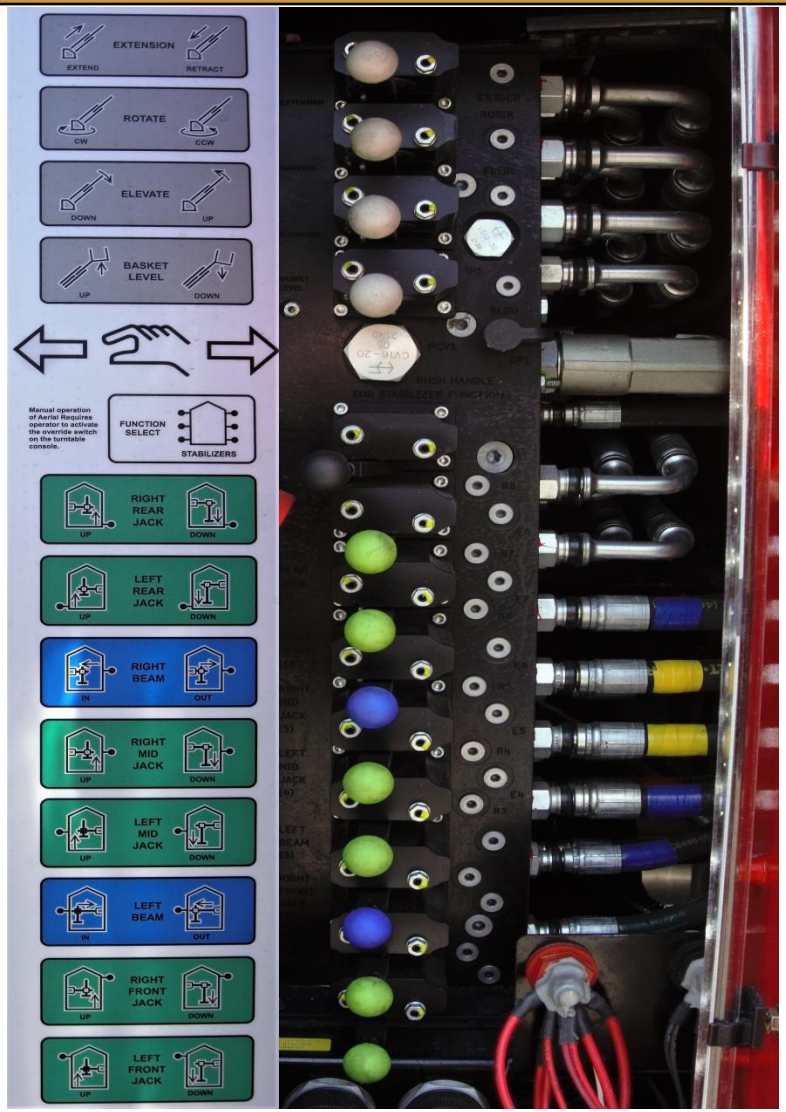
EMERGENCY HYDRAULICS & POWER

- If you have a hydraulic failure you can still use your electronic controls such as your outrigger remote and pedestal raise, rotate and extend controls to operate the outriggers and aerial. This will be using the Emergency Hydraulic Pump.

STABILIZER EPU SWITCH



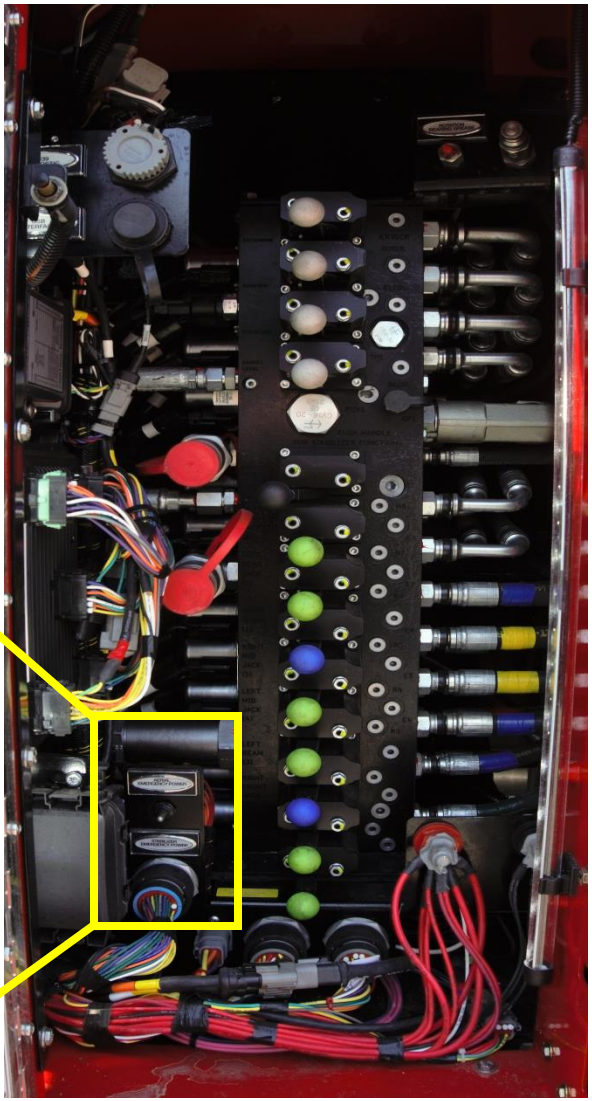
EMERGENCY HYDRAULICS & POWER



- If you have an electronic failure you will still be using the main hydraulic pump off of the aerial PTO but will have to use the emergency controls. The manual override controls are located on the driver side access compartment under the turntable.
- These can be operated without the emergency power switch since you are still operating under the PTO power.

EMERGENCY HYDRAULICS & POWER

- If both systems fail you can use the emergency controls plus operate the EPU.
- Access the same controls located on the driver side access compartment under the turntable.
- Operate the emergency power switch located with the emergency outrigger controls and choose emergency aerial or emergency stabilizer power.



EPU SWITCH

- EMERGENCY AERIAL
- EMERGENCY STABILIZER

EMERGENCY HYDRAULICS & POWER

- When operating the aerial emergency power you will need one person on the ground to hold the switch and one person on the turntable to operate the lever.
- For both the aerial controls and the stabilizer controls you will activate the lever for the action you want to take (i.e. right front stabilizer down) then activate the emergency pump to complete the action requested. When the action is complete release the switch for the emergency pump and then return the action lever back to its normal position.

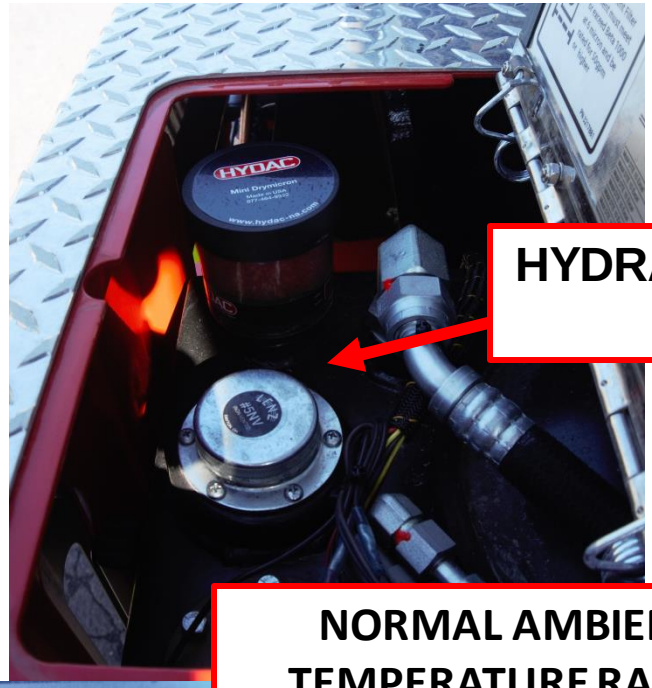
EMERGENCY HYDRAULICS & POWER

Exercise EPU weekly.

Only use emergency hydraulics and power to get yourself out of trouble… not into trouble.

Pedestal overrides require 2 people. One at pedestal and one holding the override switch on the stabilizer panel(s).

HYDRAULIC FLUID



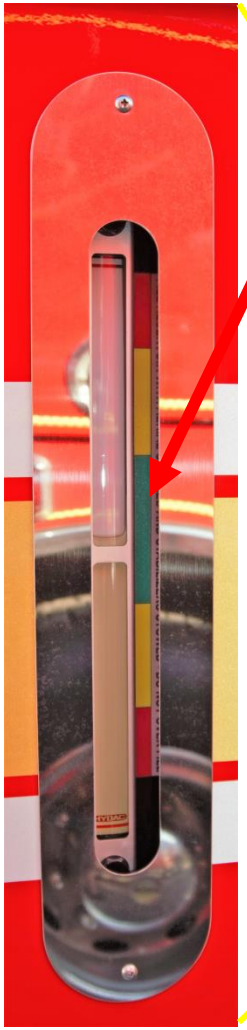
HYDRAULIC OIL FILL

NORMAL AMBIENT TEMPERATURE RANGE
14 - 107 Degrees Fahrenheit

Pierce

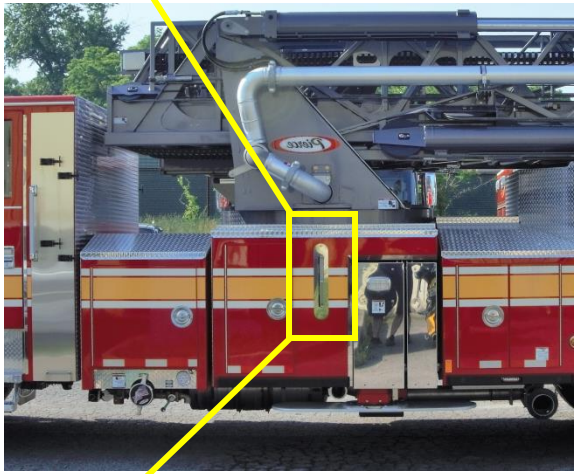
Oil	ISO Grade	Normal Ambient Range	Initial Grade
Mobil DTE 10 Excel	100	44°F to 141°F	
Mobil DTE 10 Excel	68	27°F to 129°F	
Mobil DTE 10 Excel	46	14°F to 107°F	
Mobil DTE 10 Excel	32	3°F to 88°F	
Mobil DTE 10 Excel	22	-8°F to 67°F	
Mobil DTE 10 Excel	15	-24°F to 47°F	

Recommended Cleanliness, I. S. O. 4406, 18/15/13 2049547



HYDRAULIC LEVEL

- Site glass located on drives side just below turntable.



STABILIZING THE APPARATUS

LEVEL CHARTS

Level Limits for Full Load Chart Capacity Operating Conditions		
Direction	**Maximum Safe Operating Angle (degrees)**	**Color**
Slope (Side-to-Side)	5.0°	GREEN
Grade (Front-to-Back)	5.0°	GREEN

Level Limits for 50% Load Chart Capacity Operating Conditions		
Direction	**Maximum Safe Operating Angle (degrees)**	**Color**
Slope (Side-to-Side)	8.0°	YELLOW
Grade (Front-to-Back)	8.0°	YELLOW

LEVEL TERRAIN

Always position your aerial apparatus on the most even terrain possible. Your apparatus must be capable of being leveled to within the safe operating limits as described in Load Chart and Level Chart Information. The area around the apparatus must be clear of obstructions so that the stabilizers can be deployed.

UNEVEN TERRAIN

Your apparatus may be set up on sloped terrain as long as it can still be leveled to within the safe operating limits as described in Load Chart and Level Chart Information.

STABILIZING THE APPARATUS

Pierce ASCENDANT AERIAL TOWER LOAD CHART 100

500# WET/1000# DRY – 2000 GPM WATERWAY – 35 MPH WIND

WATERWAY DRY

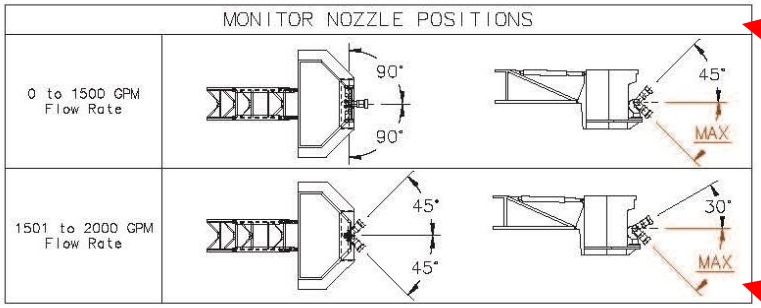
	Aerial Elevation						
	-15° to 9°	10° to 19°	20° to 29°	30° to 39°	40° to 49°	50° to 59°	60° to 77°
Basket	1000#	1000#	1000#	1000#	1000#	1000#	1000#
Fly	–	–	–	–	250#	250#	500#
Upper Mid	–	–	–	–	250#	250#	500#
Center Mid	–	–	250#	250#	250#	500#	500#
Lower Mid	–	–	250#	250#	500#	500#	500#
Base	–	250#	500#	500#	500#	500#	500#

WATERWAY CHARGED

	Aerial Elevation						
	-15° to 9°	10° to 19°	20° to 29°	30° to 39°	40° to 49°	50° to 59°	60° to 77°
Basket	500#	500#	500#	500#	500#	500#	500#
Fly	–	–	–	–	–	–	250#
Upper Mid	–	–	–	–	–	250#	250#
Center Mid	–	–	–	–	250#	250#	500#
Lower Mid	–	–	–	250#	250#	500#	500#
Base	–	–	250#	250#	250#	500#	500#

Reduced loads in the basket can be redistributed in 250# increments to the fly section, mid sections, or base section as needed.

MONITOR NOZZLE POSITIONS



Capacities are based on the following conditions:
*Apparatus is set up according to the operator's manual and leveled to within safe operating limits.
*The ladder is fully extended and unsupported, 360° continuous rotation.
*For icing conditions, refer to the operator's manual.

Rated vertical height: 100 feet
Rated horizontal reach at: 0° = 93 feet-0 inches
45° = 66 feet-5 inches
77° = 22 feet-10 inches

3229746

Waterway Dry up to 1000lbs / 35mph winds

Waterway Charged up to 500lbs / 35mph winds

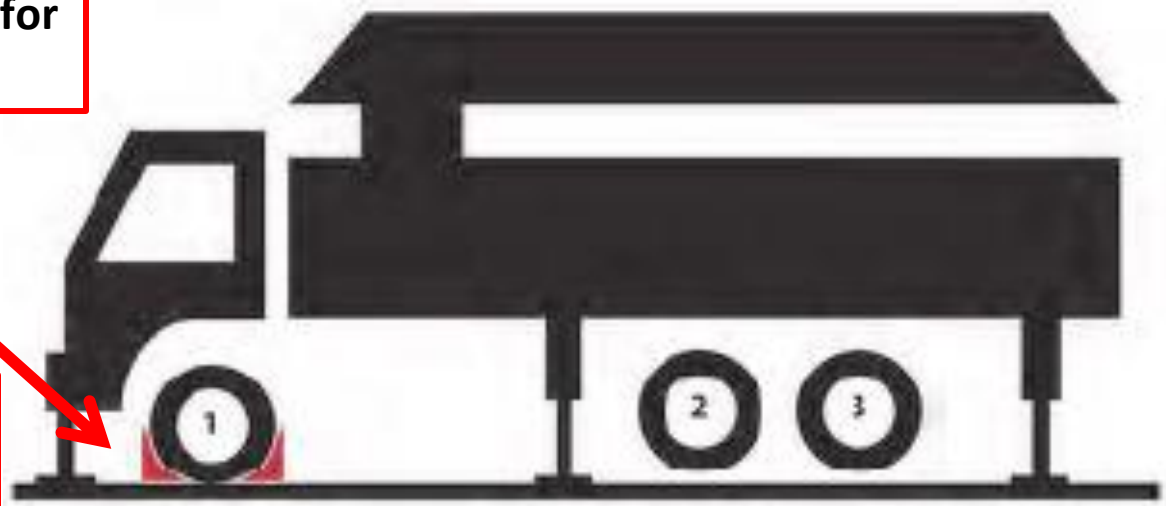
0 TO 1500gpm Nozzle Position
- 90 degree horizontal
- 45 degree vertical.

1501 TO 2000gpm Nozzle Position
- 45 degree horizontal
- 30 degree vertical.

STABILIZING THE APPARATUS

APPARATUS POSITIONED ON LEVEL TERRAIN

Wheel chock placement for LEVEL TERRAIN



Axle Weight on Ground when possible

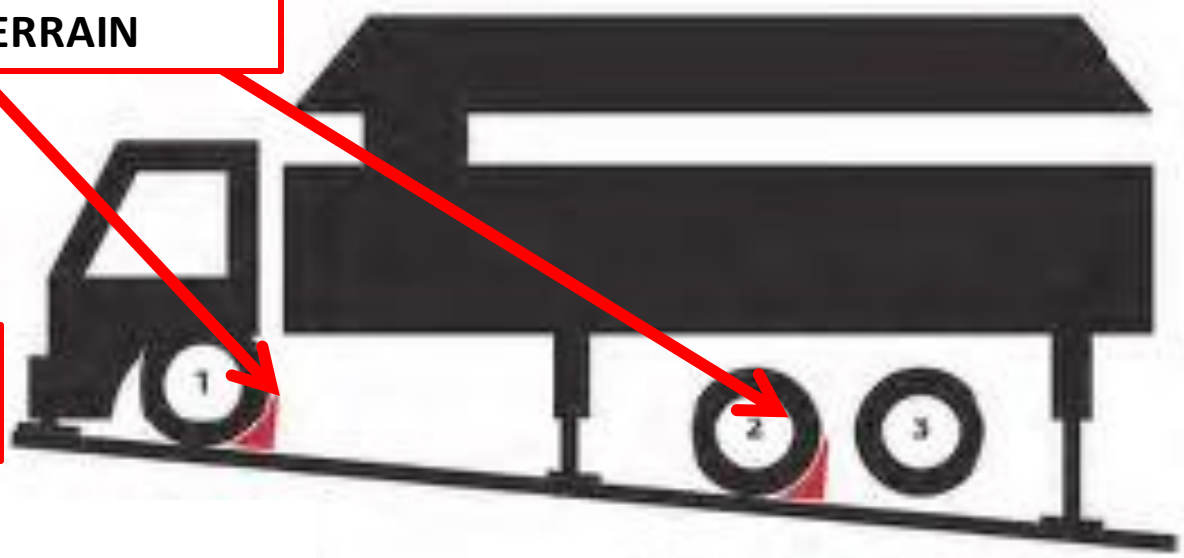
NOTE: The #2 and #3 axle tires can be on or off the ground as long as the on-ground indicators are illuminated and the angle indicators show that the apparatus is within the safe level range in slope and grade.

STABILIZING THE APPARATUS

APPARATUS POINTED UP-HILL

Wheel chock placement for LEVEL TERRAIN

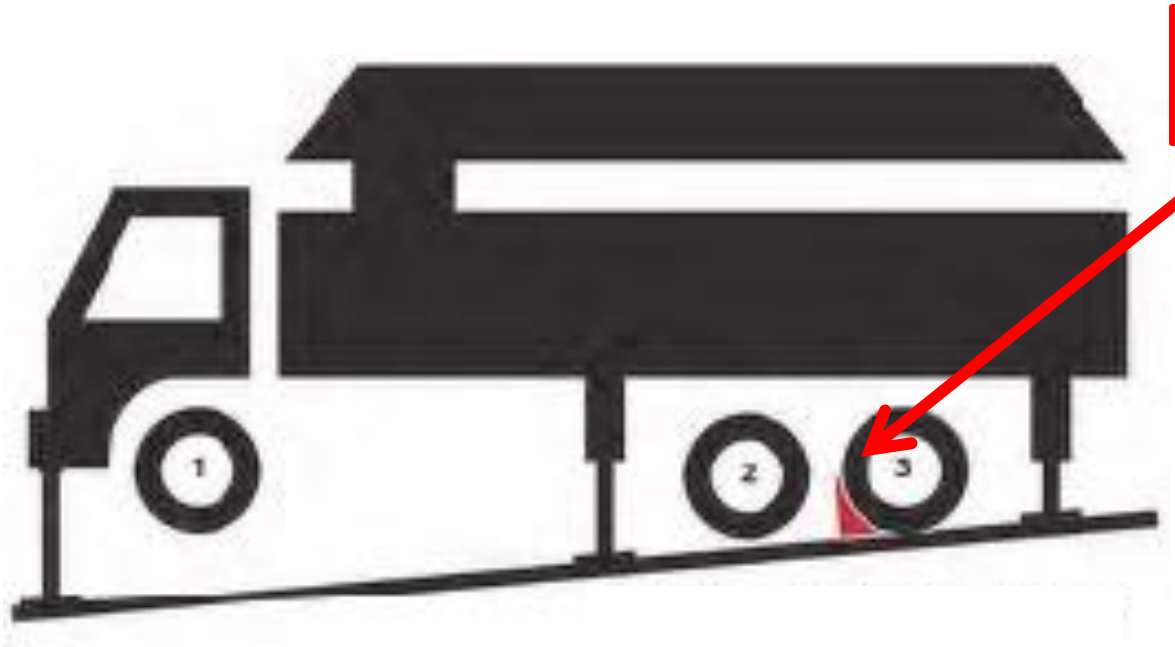
Full axle weight on the ground



NOTE: The #3 axle tires can be on or off the ground as long as the on-ground indicators are illuminated and the angle indicators show that the apparatus is within the safe level range in slope and grade.

STABILIZING THE APPARATUS

APPARATUS POINTED DOWN-HILL

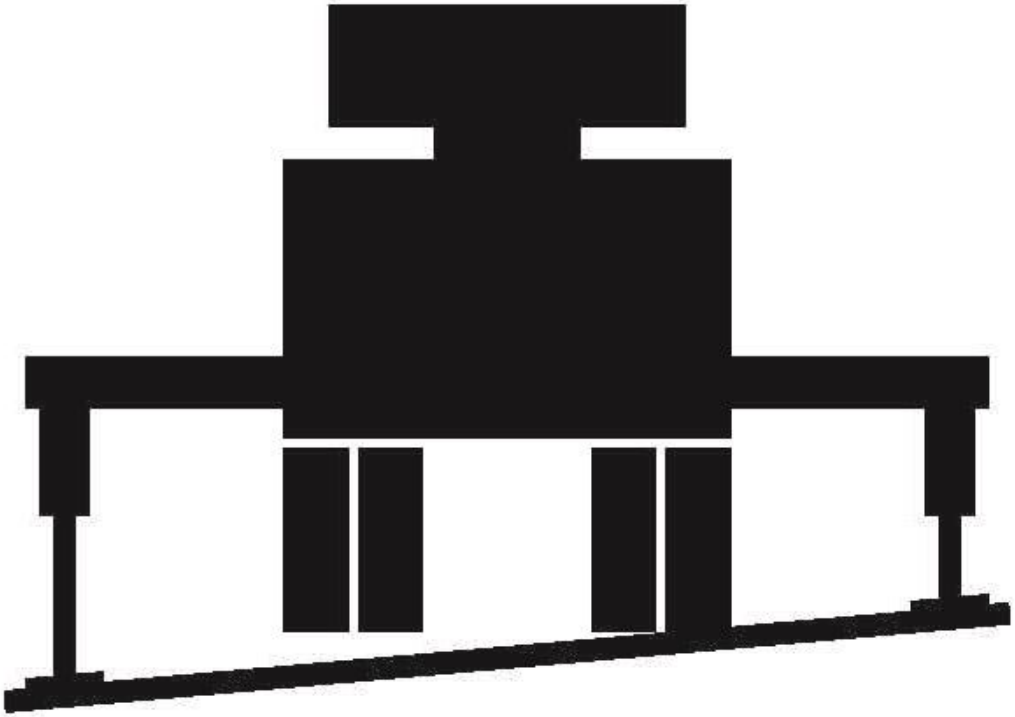


Wheel chock placement for LEVEL TERRAIN

NOTE: The #2 axle tires can be on or off the ground as long as the on-ground indicators are illuminated and the angle indicators show that the apparatus is within the safe level range in slope and grade.

STABILIZING THE APPARATUS

APPARATUS ON SIDE-SLOPE



NOTE: The low side axle tires can be on or off the ground as long as the on-ground indicators are illuminated and the angle indicators show that the apparatus is within the safe level range in slope and grade.

SETUP PROCEDURES

- Set your parking brake, turn on your front wheel lock on.
- Turn your Aerial Master switch on.
- Full extension of your outrigger on both sides is the preferred method of set up.
  - Outrigger can be short jacked on the non-working side of the truck if need be.
  - If the outrigger is short jacked the truck will not allow you to operate the ladder over the short jacked side.
- Raise the vehicle enough to take the suspension out of play. If possible leave all tires in contact with the ground.

SETUP PROCEDURES

AERIAL SET-UP PREPERATION

1. Using a spotter, position the apparatus in the selected location.
2. Place the transmission to NEUTRAL.
3. Apply the PARKING BRAKE.
4. Turn on your front wheel lock switch.
5. Provide electrical power to the aerial system by moving the AERIAL MASTER switch to the ON position.
6. Exit the cab.
7. Chock the apparatus wheels properly for the apparatus position as follows:
   - Place chocks in back of the front wheels if facing uphill.
   - Place chocks in front of the rear wheels if facing downhill.
   - Always place the wheel chocks where they will give the most resistance to truck movement.

SETUP PROCEDURES

PREPARING APPARATUS FOR STABILIZER DEPLOYMENT

NOTE: Stabilizers must be fully extended for safe operation through 360 degrees of rotation.

NOTE: Apparatus must be stabilized within the safe level range before operation.

1. Locate the stabilizer controls.
2. Ensure that the stabilizer area is clear of all personnel.
3. Shout your intention to deploy stabilizers.
4. Activate the Stabilizer Power Switch, the Stabilizer Remote Control lights will illuminate.

NOTE: If the stabilizer remote control is inactive for a couple of minutes, it will automatically shut off and the stabilizer power switch will need to be reactivated.

SETUP PROCEDURES

LEVELING THE APPARATUS WITH STABILIZERS

WARNING: Never manually rotate the aerial device over the front of the apparatus unless the front bumper stabilizers firm on the ground indicators are illuminated. Apparatus tipping or sudden movement may injure or kill.

1. Prepare apparatus for stabilizer deployment.
2. Extend the middle stabilizer beams, as conditions allow, until the middle stabilizer beam fully extended indicator light is illuminated..
3. Lower the middle stabilizer jacks until the middle stabilizer jacks firm on ground indicator light is illuminated.
4. Push and hold the Level Assist Button until the front (bumper) and rear stabilizer jacks are down and the firm on ground indicator is illuminated for all stabilizers. Level Assist sequence will be as follows:
    a. Levels the side to side (slope).
    b. Deploys the Rear stabilizers before the Front (Bumper) stabilizers.
    c. Levels the Front to Rear (grade).

SETUP PROCEDURES

LEVELING THE APPARATUS WITH STABILIZERS(CONTINUED)

5. Lower each jack until the firm on ground indicator is illuminated for all stabilizers.
6. Push and hold the Level Assist Button until the truck auto-levels and all the stabilizers stops moving.
7. If the apparatus will NOT level within the safe range of the angle indicators in slope and grade using the Level Assist Button, proceed to step 8. If the apparatus WILL level within the safe range of the angle indicators in slope and grade using the Level Assist Button, proceed to step 9.
8. Use the Truck Manual Leveling Stabilizer Control (Tilt) if further truck leveling is required. Follows are the most common conditions:

Tilt Forward used alone if Front (Bumper) Stabilizers are not “Firm on Ground”:

- If both front (bumper) stabilizers are not “Firm on Ground”, Tilt Forward to deploy the front (bumper) stabilizers until both front (bumper) stabilizers are “Firm on Ground”.
- If both front (bumper) stabilizers are “Firm on Ground”, Tilt Forward to deploy the front (bumper) stabilizers to a deeper set until desired height has been achieved.

SETUP PROCEDURES

LEVELING THE APPARATUS WITH STABILIZERS(CONTINUED)

Tilt Forward used alone if all six stabilizers are Firm on Ground:

- Tilt apparatus over the middle stabilizers to bring front (bumper) stabilizers lower and rear stabilizers higher.

Tilt Rearward used alone if Rear Stabilizers are not Firm on Ground:

- If both rear stabilizers are not “Firm on Ground”, Tilt Rearward to deploy the rear stabilizers until both rear stabilizers are “Firm on Ground”.
- If both rear stabilizers are “Firm on Ground”, Tilt Rearward to deploy the rear stabilizers to a deeper set until desired height has been achieved.

Tilt Rearward used alone if all six stabilizers are Firm on Ground

- Tilt apparatus over the middle stabilizers to bring rear stabilizers lower and front (bumper) stabilizers higher.

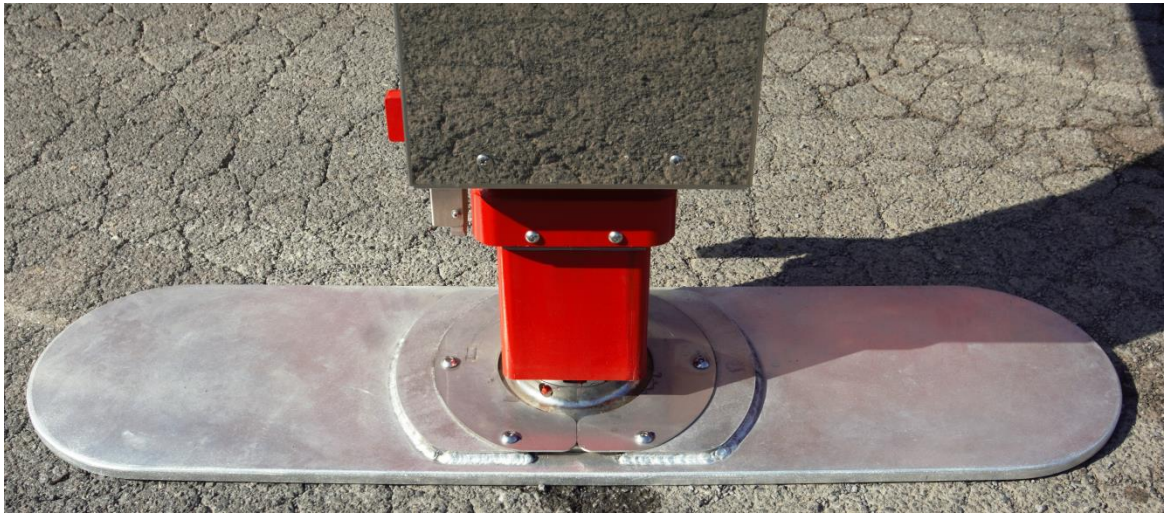
9. Install wheel chocks on both sides of the front axle tires.

OUTRIGGERS / STABILIZERS

OUTRIGGERS / STABILIZERS

OUTRIGGERS

- No pining outriggers
- Ground pads are attached
- Ground pad can rotate 360 degrees



GROUND PAD DIMENSION

57.5”(L) x 15”(W) x .75”(H)

OUTRIGGERS / STABILIZERS

OUTRIGGERS

- Ground Pads must be within 5° of being parallel to the truck while stowing the stabilizer jack.
- Ground pads not with in 5° - The ground pad deflector will rotate the ground pad into the stowed position.
- If the center ground pad was positioned or manually aligned to 5° of parallel to the truck, the ground pad may not make contact with the ground pad deflector while stowing the stabilizer beam.

OUTRIGGERS / STABILIZERS

FRONT STABILIZERS

- No pining stabilizer
- Ground pads are attached

GROUND PAD DIMENSION

14.5”(L) x 14.5”(W) x .5”(H)

OUTRIGGERS / STABILIZERS

REAR STABILIZERS

- No pining stabilizer
- Ground pads are attached

GROUND PAD DIMENSION

16”(L) x 16”(W) x .5”(H)

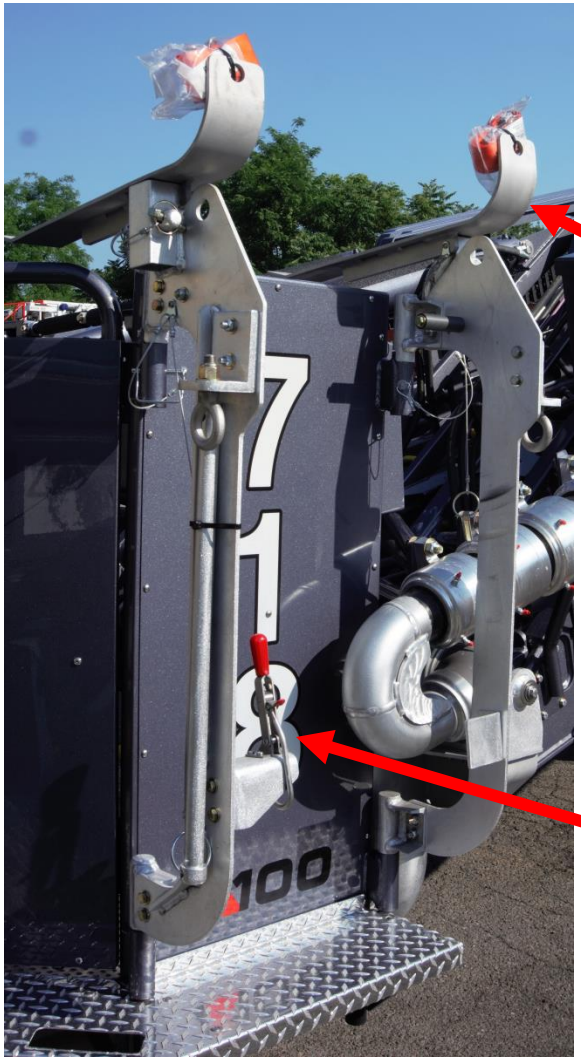
GROUND PADS

GROUND PAD DIMENSION
31”(L) x 26”(W) x 1”(H)

NOTE: 4 additional ground pads have been added to the towers. The addition of the ground pads (2 on officers side and 2 on drivers side) are to assisted in stabilization where applicable.

NOT REQUIRED FOR OUTRIGGER / STABILIZER SETUP

AERIAL BASKET LYFE BRACKETS

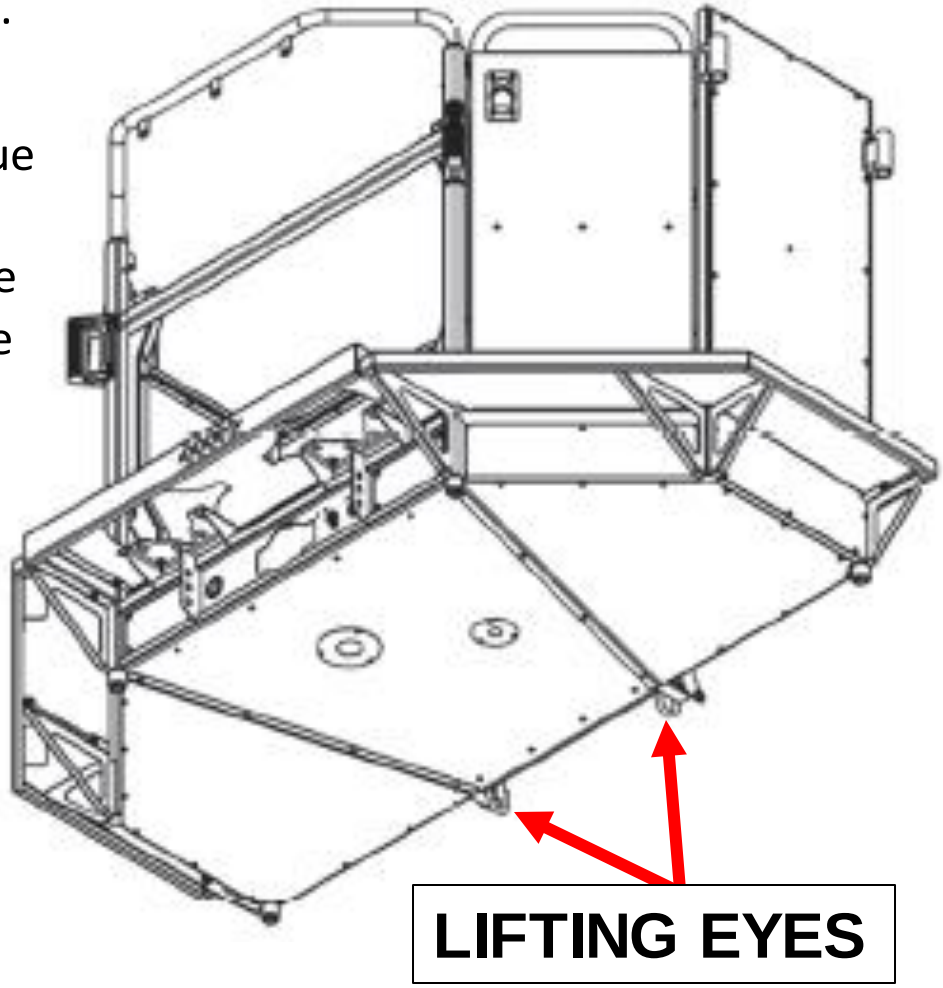


- The LyfeLadder™ can be attached to the basket for external entrance to the basket or descending to a lower surface. It has a rated capacity of 500 lbs.
- The LyfeSupport™ rescue basket supports will support a rescue basket for patient transport.

LADDER LOCK

AERIAL BASKET LIFTING EYES

- 2 lifting eyes used for rescue operations.
- The lifting eyes are intended to be used only as a single anchor for a single rescue rope. Use of a pulley or a block and tackle on the lifting eye(s) may allow the weight of the load being lifted to double and exceed the 500lbs (225 kg) limit for each lifting eye, or 1,000lbs (550 kg) combined total for both lifting eyes.
- Lifts need to be made in a smooth manner, without causing the device or the load to bounce, jerk, or sway.
- Stabilize the load while it is being lifted.
- Always anchor the working end of the rope to the lifting eye and use the boom to lift or lower the load.



WATERWAY

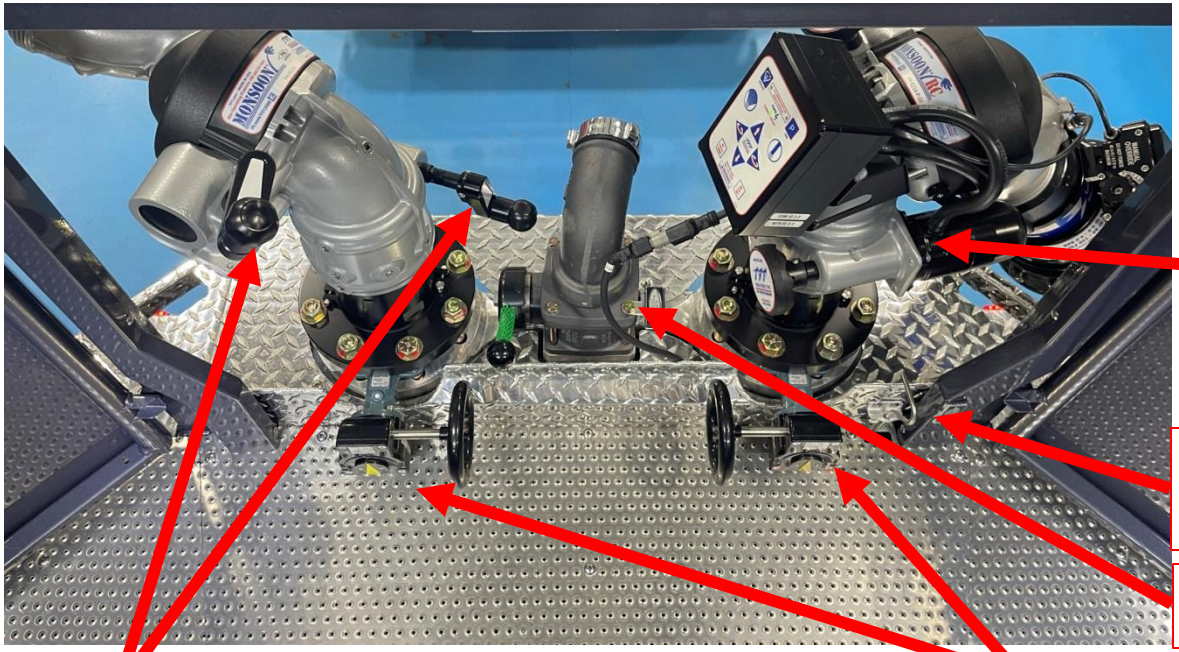
Intake relief
220psi leak
250psi dump

5” schedule 10 stainless steel intake pipe with 5” NST adapter.

The telescopic water system will consist of
5.5" diameter tube in the base section
5.0" diameter tube in the lower mid-section
4.5" diameter tube in the center mid-section
4.0" diameter tube in the upper mid-section
3.5” diameter tube in the fly section

Seals are rate up to 2000psi and temperatures in excess of 250 Degrees Fahrenheit.

NOZZLE



ELECTRONIC MONITOR

- 2000 GPM Nozzle
- Adjustable fog – straight
- 3 control locations
  - Turn table
  - Basket
  - Attached to monitor

SHOWER NOZZLE CONTROL

- Flow rate of 75gpm

2.5” PRECONNECT

MANUAL MONITOR

- Manual Nozzle Controls
- Smooth Bore Stack tips
  - 2.00”, 2.25”, 2.50”, 2.75”

CONTROL VALVES

NOTE: When aerial is in the stowed position. The electronic monitor can only be operated by the controls attached to the monitor. Power is cut from turntable and basket.

GENERATOR

10Kw Hydraulic driven generator unit

- Located in ladder compartment.
- Generator has no interlocks will be operational at any time.

- Generator digital meter panel.
- Circuit Breaker panel with Directory for each circuit.

Panel is located in second compartment back on driver's side. (LS5)

CORD REEL

200 feet of black 10/3 electrical cord.

Flip out wire guide on side of door.

TOWER COMMITTEE

Tower Committee

- Chief Brendan Bonita
- A/C Alan Butsch
- Crew Chief Danny Dean
- A/C Pete Friedman
- Mr. Steve Lamphier
- MFF Schlosser
- B/C Kelvin Thomas
- Crew Chief Steve Wolff