



**CENTRAL BIDDING**  
FROM CENTRAL AUCTION HOUSE

Toggle navigation

- [Home](#)
- [Central Bidding](#)
- [My CP](#)
- [Contact Us](#)
- [Create New](#)
- [Logout \(CovingtonSalesPS\)](#)

**Central Bidding Time:** Fri Feb 14 2025 10:11:35 GMT-0600 (Central Standard Time)



*The City of Slidell*

**Combination Sewer Cleaner Bid# 25-B011**

[Louisiana](#) > [City of Slidell](#)

Sealed Bid: **46005009**

## **Listing Information/Advertisement:**

City of Slidell  
INVITATION TO BID

SEALED BIDS will be received until March 12th, 2025 10:00 A.M. CST in the Director of Finance Office, located at the Slidell City Council & Administrative Center, 2045 Second Street, second floor, Suite 214, Slidell, LA. 70458 and thereafter opened and publicly read for the following one or more Combination Sewer Cleaner and Truck Mounted Jet Rodder

Each bid must be contained in a sealed envelope and each envelope must be clearly marked as applicable:

SEALED BID: Combination Sewer Cleaner Bid#25-B011

OPENING: March 12th, 2025, 10:00 AM CST

Bid Documents may be picked up in the Purchasing Department, 1329 Bayou Lane, Slidell, LA (985) 646-4250 or email [purchasingdept@cityofslidell.org](mailto:purchasingdept@cityofslidell.org).

Bidders also have the option to review bid documents and submit bids electronically by visiting [centralbidding.com](http://centralbidding.com). Electronic bids will require a digital signature. You must register directly with Central Bidding to utilize this service. You may also contact them at 833-412-5717.

The signature on the bid must be that of an authorized representative of the corporation, partnership or other legal entity, as defined by Louisiana Public Bid Law Revised Statute 38:2212.A.(1)(c) which dictates parties authorized to sign bids for public contracts. All required Certificates of Liability Insurance shall list the City of Slidell as "additionally insured".

All applicable Federal, State, Local laws, ordinances, and the rules and regulations of all authorities having jurisdiction over supply and service of this type shall apply to the contract throughout.

The city encourages participation by Minority, Woman-Owned, and Disadvantaged Business Enterprises. The City of Slidell reserves the right to reject any and all bids.

CITY OF SLIDELL

Blair Ellinwood Director of Finance  
Advertise: February 12th, 19th, 26th 2025

# CITY OF SLIDELL

## SPECIFICATION FOR COMBINATION SEWER CLEANER

BID# 25-B011

### ADDENDUM NO.1



DATE ISSUED: 02/20/2025

#### Positive Displacement Blower:

A lobe type positive displacement blower shall be provided which is capable of 6000 CFMs and 18" of Hg with cyclone separator. Control of the blower regarding start, stop and the rate of vacuum suction is to be performed from the front of the truck. A vacuum suction breaker disconnect switch is provided to enable the operator to pick up large debris with boom and place debris on road surface. The vacuum system shall operate independent of the high-pressure water system.

The Blower is driven by the chassis via a closed loop hydrostatic system using a variable piston pump and motor. This system shall use a heat exchanger for extreme ambient conditions and to maintain the pump suction oil temperature at 160 deg. F max. The heat exchanger shall be protected by a 30-micron filter and cold weather bypass valve. Hydrostatic loop filtration shall be accomplished by a 10 Beta micron return filter and a 10-micron absolute (no bypass) charge filter.

Two 3" diameter vacuum relief valves (@ 18"hg) shall be provided for system protection.

Unit must be capable of vacuuming under water without air induction (240" of water column from top of water level to vacuum boom elbow)

Blower to have a minimum of a 12-month non-prorated warranty.

The above mentioned shall replace the Centrifugal Compressor (Fan Design).

## Mark Wardlaw

---

**From:** Kathy Taylor <ktaylor@cityofslidell.org>  
**Sent:** Thursday, February 20, 2025 1:25 PM  
**To:** Mark Wardlaw  
**Cc:** Michael Provenzano  
**Subject:** addendum #2 updated bid form  
**Attachments:** Addendum NO 2 updated bid form.docx

I've attached the updated bid form and added a space to acknowledge the addendums (the updated bid form is the addendum #2) (OK)

Please confirm you've received this addendum, thank you.

Thank you,

*Kathy Taylor*  
*Purchasing Agent*  
*City of Slidell*  
*1329 Bayou Lane*  
*Slidell, La 70460*  
*985-646-4251*



# **CITY OF SLIDELL**

ONE OR MORE

## **SPECIFICATIONS FOR COMBINATION SEWER CLEANER**

**BID# 25-B011**

### **GENERAL:**

All equipment furnished under this contract shall be new and current production.

The machine can remove stones, grit, grease, sludge, and other debris from sanitary sewer and/or storm drain lines by the flushing action of high-pressure water. The machine will be equipped with a self-contained, non-corrosive, non-metallic water tank supply as the water source for the high-pressure pump.

The machine is capable of being operated by one man, with all operating controls for high-pressure water pump, and hose reel located at the front of the machine for safety.

The machine shall be dual engine design with a total of 510HP to reduce wear on the chassis engine by driving the water pump with the auxiliary engine. The machine used a 2025 Freightliner 1145D chassis for these specifications or equal.

### **DEBRIS BODY:**

Debris storage body has a minimum usable liquid capacity of 11 cubic yards. The debris body shall be round for maximum strength and constructed of 3/16-inch ASTM A242 Corten A steel for enhanced corrosion resistance.

The rear door shall be flat (industrial style) and flanged for maximum strength. It shall be full-opening to 90 degrees by means of 2 hydraulic cylinders and hinged at the top with low profile and adjustable style hinges. There shall be a 6" diameter liquid drain knife valve and screen weldment inside for retaining solids while removing excess liquids. Drain will have 10 feet of 6" lay flat hose.

The debris body shall be supplied with a debris deflector shield mounted at the inlet of the vacuum port. The debris deflector shield shall deflect material from the rear door to prevent the door from being damaged by debris entering the tank. A rear door safety prop shall be provided. For ease of maintenance there shall be no hydraulic components located inside the debris body or rear door.

The door locking system shall have four (4) externally mounted wedge-style door locks that lock hydraulically. The hydraulic locks shall be operated by one (1) sequential control and 2 hydraulic cylinders to allow the operator to control the discharging of the liquids, from the debris tank, by cracking open the door slowly prior to dumping the debris.

Dual steel weldments with stainless steel screen 8" x 28" each providing up to 1200 square inches of added filtration for the vacuum system shall be provided inside the debris tank. These weldments shall be removable and require no cutting or welding.

A double acting power up/power down hydraulic scissors lift mechanism will be provided to raise the body to a minimum 90-degree angle. The scissors lift mechanism shall be designed to support a minimum of 24 inches of the debris tank width to provide stability and when dumping on uneven ground. The lift capacity of hydraulic scissors lift cylinder is 56,000 lbs.

Dump controls are located on curbside mid-ship of the unit, well forward of the dumping area for operator safety. A manual override system is provided in case of system failure.

The debris body has a five-year warranty. A copy of the manufacturer's warranty statement shall be enclosed with the bid. If pro-rated so state on the bid form.

An internal polyethylene float device with external indicator is supplied to show when body is loaded to capacity.

**AUTOMATIC VACUUM BREAKER:**

The automatic vacuum breaker assembly is located inside the body.

The automatic vacuum breaker assembly shall be controlled by an electric over hydraulic circuit. The entire system shall be replaceable via a bolt on assembly. The assembly shall consist of a 12" inlet and two 8" ports that provide air flow to the vacuum system.

A full indication activates an automatic vacuum breaker shut down system that completely shuts down 100 percent of the airflow to the vacuum system to prevent overfilling and wastewater discharge into the atmosphere.

The vacuum breaker system is automatically activated (closed) when the parking brake system is released to eliminate carryover during transit.

The system is controlled/activated, at the front hose reel control station. This enables the operator to pick up large debris with boom and place debris on the road surface. This system can be used for safety in the event suction must be shut off in case of an emergency.

**CENTRIFUGAL COMPRESSOR (FAN DESIGN):**

The centrifugal vacuum compressor shall be of 3-stage construction (i.e. 3-27" minimum diameter fans in tandem). The centrifugal compressor (fans) shall be constructed of Carbon steel. The compressor's outer housing shall be spun from one piece of 3/16" steel for strength and provide proper airflow in operation. The vacuum system shall operate independent of the high-pressure water system.

The compressor is driven by the chassis engine via a closed loop hydrostatic system using a variable piston pump and motor. This system shall include a heat exchanger for extreme ambient conditions and to maintain the pump suction oil temp at 160 deg. F. max. The heat exchanger shall be protected by a 30-micron filter and cold weather bypass valve. Hydrostatic loop filtration shall be accomplished by a 10 Beta micron return filter and a 10-micron Absolute (no bypass) charge filter.

To maximize long term durability by reducing the load on one side of the compressor, the compressor shaft shall extend through the compressor and shall be additionally stabilized by using two high speed bearings, one at each side of the shaft. No exceptions will be allowed to this requirement.

A means of starting, stopping and varying the vacuum suction from operator station at the front of the machine is provided.

A centrifugal separator located in the inlet chamber to the fans with cleanout box is provided. The separator removes particles from the air stream, thus enabling the unit to vacuum wet or dry material. The separator is separate from the debris body. The centrifugal compressor (fan) system can produce 90% vacuum with no airflow. This feature allows material to be vacuumed under the water surface, i.e. lift stations, plugged manholes, etc.

Unit must be capable of vacuuming under water 16.6' (200") without air induction. A manometer/vacuum test may be required to demonstrate the system performance.

The centrifugal compressor fans have a 5-year replacement non-prorated warranty.

### **VACUUM PICK UP HOSE:**

Shall be front loading, attached at the front of the machine to provide ease of positioning the machine over the manhole, as well as afford maximum safety for the operator.

The 8" will be mounted on a boom that will provide a minimum of 18' vertical lift utilizing dual hydraulic cylinder and 230 degree of boom rotation powered hydraulically for non-interrupted smooth movement. Boom to have a lift capacity of 500 lbs. at the front bumper.

The boom will be powered by an electric over hydraulic system; up/down by dual lift cylinders. The right/left movements shall be hydraulic via worm gear rotation.

The boom shall hydraulically telescope a minimum of 10 ft. forward from the operator's station. The height of the boom shall not change while the boom is being telescoped. A manual override system shall be provided for right/left, and up/down functions in case of system failure.

Control of the boom is by means of a joystick control at the operator's station, requiring no cables at operator's feet for boom operation. A wireless remote control will be provided for Boom, Vacuum Breaker, Chassis Throttle, and Debris Body functions. A manual override system shall be provided for right/left, and up/down functions in case of system failure.

A boom coverage chart shall be provided showing the square footage of boom coverage.

8-inch diameter pipe extensions with clamps will be provided and carried on the truck as follows:

- 1 6-1/2' Catch Basin Nozzle
- 1 6' Aluminum Pipe Extension
- 1 5' Aluminum Pipe Extension
- 1 3' Aluminum Pipe Extension

### **WATER SUPPLY:**

The water tanks shall have a minimum usable capacity of 1300 U.S. gallons.

The water tanks shall be constructed of non-corrosive, non-metallic, durable, cross-linked polyethylene to eliminate rust, corrosion, and stress cracking.

The water tanks shall be mounted at and below the truck frame level to provide a low center of gravity for truck stability.

A 2-1/2-inch diameter x 25 feet long hydrant hose with hydrant wrench is supplied on the unit.

An anti-siphon fill device is installed on the unit.

Inspection ports shall be provided to fill or to add chemicals to the water system. A sight gauge to indicate water level is located within sight of the operator station.

The water tanks are protected by a minimum of 11-gauge steel plating mounted below the water tanks for protection against road hazards when unit travels over the road, off the road or to landfills.

The water tanks carry a ten-year replacement warranty.

#### **AUXILIARY ENGINE (WATER PUMP DRIVE ENGINE):**

The auxiliary engine, John Deere Tier 4 final -140HP or approved equal, shall be used to drive the water pump. An electronic digital diagnostic and fault monitoring panel shall be mounted on the front of the unit at the operator's station and be able to display various engine operation conditions including but not limited to engine rpm, hours, coolant temp and oil pressure. A standard integrated safety shutdown system shall be provided in the engine ecu and will shut the engine down in the event of low oil pressure or excessive coolant temperature. The ignition system start stop switch will be located at the operator's station. The auxiliary engine shall be shrouded and have a hinged door on the driver's side of the unit. The engine oil dipstick shall be accessed from the ground level on the driver's side.

#### **HIGH-PRESSURE WATER PUMP:**

The high-pressure water pump shall be rated to deliver smooth continuous pressure and flow through the entire flow range of the pump. The high pressure shall have smooth continuous flow for both the high-pressure system and the handgun system.

A continuous duty flow of 60 gpm. and 3,000 psi shall be provided.

High-pressure relief valves are provided for both the high-pressure system and handgun system.

The water pump operates independently of the vacuum system and is powered by the auxiliary engine via clutch less, direct dual powerband drive system.

The high-pressure water pump drive system carries a five-year replacement warranty. Warranty excludes the drive engine, i.e. auxiliary engine. The water pump can run dry.

Controls for starting and stopping the water pump and to vary the flow and pressure shall be at the front hose reel operator's station.

The high-pressure water pump is equipped with a cold weather drain valve. The valve allows the operator to completely drain the high-pressure pump.

#### **HOSE REEL ASSEMBLY:**

The hose reel assembly is mounted on the front of the vehicle. The hose reel shall have a minimum of 30" inside diameter with a capacity of 800' x 1" hose. The hose reel is hydraulically powered in both directions by means of a double chain and sprocket drive. The controls for operating the motor have a flow control device to regulate the rotational speed of the reel in both directions. All hydraulic hoses are behind a steel housing to protect operator from hydraulic oil if a hose fails. The hydraulic motor, chain, and sprockets have a protective cover or are mounted on the radiator side of the hose reel for operator safety. The hose reel articulates 180 degrees to the driver's side allowing operator to work in any position through this arc. This allows greater flexibility in truck placement for manholes located in tough areas and provides greater safety to the operator. Reel extends beyond the width of unit for greater flexibility for positioning reel over offset manholes, catch basins, etc. A hydraulically controlled outrigger leg is supplied that comes in contact with the ground at any one position. A warning light is located in the cab to warn the operator that the outrigger leg is not in its transported position prior to moving the unit. A manual bypass system for the hose reel assembly is provided to manually pull the reel assembly away from its transported position. This feature allows operators to check fluids without starting engines.

#### **JET HOSE:**

800' x 1" jet rodder hose will be supplied rated for 3000 psi working pressure and 7500 psi burst pressure.



A heavy-duty hose guide with 25' of nylon rope will be provided.

Nozzles shall be hardened steel with replaceable ceramic orifices as follows: 1) Chisel head penetrator & 1) standard sanitary.

#### **MANHOLE CLEANING WATER SYSTEM (HANDGUN):**

The high-pressure pump and independent water tank assembly supplied shall be used for manhole cleaning. A smooth continuous flow of 20 gpm. and pressure of 600 psi shall be provided for ease of operation. A handgun pressure relief valve set at 600 psi shall be provided. One full functioning handgun with on/off hand control, replaceable nozzle tip, 12-inch extension, adjustable spray and 50' x 1/2" hose with retractable reel will be provided.

The handgun will attach to the system via a quick couple connection at the curbside of the unit. To avoid being coiled at the operator's station a handgun holder will be provided at the front bumper.

#### **HYDRAULIC SYSTEM AND LUBRICATION:**

The hydraulic system has a 55-gallon capacity.

The hydraulic system shall incorporate a main shut off valve in case of hydraulic failure.

The hydraulic system shall incorporate hydraulic pressure relief valves and pressure gauges for ease of trouble shooting and maintenance.

The unit is equipped on the passenger side, mid-section of the module, a permanent weatherproof white vinyl lubrication chart that points out lubrication points on the module and specifies what type of lubrication and hydraulic fluids are required. The chart also specifies the frequency of each lubrication point.

Remote plumbed grease fittings are provided for the vacuum compressor, boom rotation, and water pump drive areas.

#### **ACCESSORIES:**

A minimum twelve (12) month manufacturer's guarantee on the unit will be provided.

- A storage box behind the cab will be provided, 16" x 42" x 96"
- 1 - Debris body power flush out system
- 1 - Rear mounted hydraulic pump off system, 350 gpm w/20' lay flat hose
- 1 - Rear splash guard, tank mounted (2 - 10 O'clock Position)
- 1 - Air purge system
- 1 - 1/4 turn ball valve water drain
- 1 - Variable flow valve
- 1 - Lazy Susan style, deck mounted pipe rack, holds 5 pipe
- 1 - Hose footage counter, standard - drivers side
- 1 - Rear mounted tow hooks
- 1 - Auxiliary engine remote oil drain
- 1 - Remote boom grease zerk assembly, (accessible from ground level)
- 1 - 10' leader hose
- 1 - Water pump remote oil drain
- 1 - Built in Body Prop - Rear Boom Support Mounted

- 1 - Move pump off to front, curbside of debris tank
- 1 - Traffic Camera with Color Monitor (Camera placement must be picked)
- 1 - Rear traffic camera
- 1 - Front hose reel camera - to view front of hose reel area
- 1 - Cone racks, between bogies on tandem units
- 1 - Hydro excavation Package Includes: 50-foot handgun hose reel with 1/2" hose, 72" 1/2" schedule 80 lance with single forward spray nozzle, Storage tubes for lances, Heavy duty unloader valve, Main control ball valve, Variable flow valve - Wireless Remote Control for boom functions and debris tank functions
- 1 - OMSI Transfer Case ilo V the front-engine PTO vacuum drive

#### **LIGHTING:**

The entire module electrical system is vapor sealed to eliminate moisture damage.

All wiring is color-coded, labeled, and run in sealed terminal enclosures.

All module circuits are protected by circuit breakers.

Clearance lights and reflectors are furnished in accordance with D.O.T. requirements.

- 1 - LED strobe light with limb guard, rear debris tank door mounted - Whelen L21HAP LED Beacon with Whelen BGH Branch Guard
- 1 - 4 LED strobes - (2) front bumper, (2) rear bumper - Whelen S0A03ZCR - Amber
- 1 - LED Arrow stick - Whelen TAM85 Traffic Advisor
- 1 - LED Boom Mounted Flood Light - Whelen NP6BB Worklight
- 1 - LED Rear Mounted Flood Lights - Whelen NP6BB Worklight

#### **PAINT:**

Unit paint surfaces are shot blasted, Ambershield zinc primed, sanded, and sealed with epoxy primer. The hose reel spool, debris tank and sides of mainframe painted with PPG Delfleet single stage polyurethane paint. All other paintable surfaces coated in PPG Ambershield textured black paint.

Unit shall have reflective White or Blue body and boom stripes

Chassis shall be painted manufacturers standard white with DuPont Imron 5000 polyurethane paint.

#### **TRAINING AND MANUALS:**

Operator training will be conducted by a factory-trained representative for a minimum of one day at the time of delivery. 1 copy of the operating and maintenance manual for the sewer cleaner module shall be provided, on a USB flash drive, upon unit delivery.

#### **MOUNTING AND DELIVERY:**

The unit described will be mounted on a truck chassis acceptable to the body manufacturer at the factory of the body manufacturer.

#### **EXCEPTIONS AND DEVIATIONS:**

Bidder shall fully explain every variance, exception, and or deviation to the bid specifications. Additional sheets/lines may be added if required.

**BID FORM:**

Bids must be submitted on the Bid Form furnished by the City of Slidell. All the COMPLY, Indicate: Yes or No must be marked.

**AFFIDAVIT:**

An executed Affidavit must be submitted prior to award of bid.

**SIGNATURE:**

The signature on the bid form must be that of an authorized representative of the corporation, partnership or other legal entity as defined by Louisiana Public Bid Law Revised Statute 38:2212.A.(1)(c)\_which dictates parties authorized to submit bids for public contracts.

The City of Slidell reserves the right to reject any and all bids.

## S P E C I F I C A T I O N

	Description	Weight Front	Weight Rear
<b>Price Level</b>			
	SD PRL-27D (EFF:MY25 ORDERS)		
<b>Data Version</b>			
	SPECPRO21 DATA RELEASE VER 033		
<b>Vehicle Configuration</b>			
	114SD PLUS CONVENTIONAL CHASSIS	7,934	6,476
	2025 MODEL YEAR SPECIFIED		
	SET FORWARD AXLE - TRUCK		
	STRAIGHT TRUCK PROVISION, NON-TOWING		
	LH PRIMARY STEERING LOCATION		
<b>General Service</b>			
	TRUCK CONFIGURATION		
	DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)		
	UTILITY/REPAIR/MAINTENANCE SERVICE		
	UTILITY BUSINESS SEGMENT		
	LIQUID BULK COMMODITY		
	TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS		
	MAXIMUM 8% EXPECTED GRADE		
	SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE		
	FREIGHTLINER SD VOCATIONAL WARRANTY		
	EXPECTED FRONT AXLE(S) LOAD : 20000.0 lbs		
	EXPECTED REAR DRIVE AXLE(S) LOAD : 46000.0 lbs		
	EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 66000.0 lbs		
<b>Truck Service</b>			
	SEWER/INDUSTRIAL VACUUM BODY		
	VAC CON		
<b>Engine</b>			
	CUM L9 370 HP @ 2100 RPM; 2100 GOV RPM, 1250 LB-FT @ 1200 RPM	-850	-70
<b>Electronic Parameters</b>			
	72 MPH ROAD SPEED LIMIT		
	CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT		

Description	Weight Front	Weight Rear
PTO MODE ENGINE RPM LIMIT - 1400 RPM		
PTO GOVERNOR RAMP RATE - 100 RPM PER SECOND		
CRUISE CONTROL BUTTON PTO CONTROL		
PTO MINIMUM RPM - 700		
REGEN INHIBIT SPEED THRESHOLD - 5 MPH		
PTO 1, DASH SWITCH, STATIONARY OPERATION		
ENGINE MOUNT PTO, DASH SWITCH ENGAGES PTO MODE, STATIONARY OPERATION		
<b>Engine Equipment</b>		
2010 EPA/CARB/GHG21 CONFIGURATION		
2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR)		
STANDARD OIL PAN		
OIL FILL AND DIPSTICK LOCATED FOR ENHANCED SERVICEABILITY		
SIDE OF HOOD AIR INTAKE WITH DONALDSON HIGH CAPACITY AIR CLEANER WITH SAFETY ELEMENT, FIREWALL MOUNTED		
DR 12V 160 AMP 28-SI QUADRAMOUNT PAD ALTERNATOR WITH REMOTE BATTERY VOLT SENSE		
(2) DTNA GENUINE, FLOODED STARTING, MIN 2000CCA, 370RC, THREADED STUD BATTERIES	-50	-10
BATTERY BOX FRAME MOUNTED		
STANDARD BATTERY JUMPERS		
SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB		
WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN		
NON-POLISHED BATTERY BOX COVER		
POSITIVE LOAD DISCONNECT WITH CAB MOUNTED CONTROL SWITCH MOUNTED OUTBOARD DRIVER SEAT	2	
POSITIVE AND NEGATIVE POSTS FOR JUMPSTART LOCATED ON FRAME NEXT TO STARTER	2	
PROGRESSIVE LOW VOLTAGE DISCONNECT AT 12.3 VOLTS FOR DESIGNATED CIRCUITS		
CUMMINS TURBOCHARGED 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE		
ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM		
CUMMINS ENGINE INTEGRAL BRAKE WITH VARIABLE GEOMETRY TURBO ON/OFF	20	



Description	Weight Front	Weight Rear
RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE	30	25
ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND VIRTUAL REGENERATION REQUEST SWITCH IN CLUSTER		
INTEGRATED STACK AND B-PILLAR PIPE WITH MINIMUM STACK PROTRUSION ABOVE CAB		
RH CURVED VERTICAL TAILPIPE B-PILLAR MOUNTED ROUTED FROM STEP		
6 GALLON DIESEL EXHAUST FLUID TANK	-35	-10
100 PERCENT DIESEL EXHAUST FLUID FILL		
STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING		
LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION		
STANDARD DIESEL EXHAUST FLUID TANK CAP		
ALUMINUM AFTERTREATMENT DEVICE/MUFFLER/TAILOPIPE SHIELD(S)		
AIR POWERED ON/OFF ENGINE FAN CLUTCH		
AUTOMATIC FAN CONTROL WITH DASH SWITCH AND INDICATOR LIGHT, NON ENGINE MOUNTED		
CUMMINS SPIN ON FUEL FILTER		
COMBINATION FULL FLOW/BYPASS OIL FILTER		
1300 SQUARE INCH ALUMINUM RADIATOR	-50	
ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT		
GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT		
CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES		
RADIATOR DRAIN VALVE		
1350 ADAPTER FLANGE FOR FRONT PTO PROVISION	20	
ELECTRIC GRID AIR INTAKE WARMER		
DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH	-35	

### Transmission

ALLISON 3000 RDS AUTOMATIC TRANSMISSION  
WITH PTO PROVISION

### Transmission Equipment

ALLISON VOCATIONAL PACKAGE 223 -  
AVAILABLE ON 3000/4000 PRODUCT FAMILIES  
WITH VOCATIONAL MODELS RDS, HS, MH AND  
TRV

Description	Weight Front	Weight Rear
ALLISON VOCATIONAL RATING FOR ON/OFF HIGHWAY APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES		
PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
FUEL SENSE 2.0 DISABLED - PERFORMANCE - TABLE BASED		
DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES		
DIRECTION CHANGE ENABLED WITH MULTIPLEXED SERVICE BRAKES - ALLISON 5TH GEN TRANSMISSIONS		
MAXIMUM ENGINE SPEED FOR PTO ENGAGEMENT 1000 RPM		
QUICKFIT BODY LIGHTING CONNECTOR UNDER CAB, WITH CAP		
ELECTRONIC TRANSMISSION WIRING TO CUSTOMER INTERFACE CONNECTOR		
CUSTOMER INSTALLED CHELSEA 280 SERIES PTO		
PTO MOUNTING, LH SIDE OF MAIN TRANSMISSION ALLISON		
MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN		
PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED		
TRANSMISSION PROGNOSTICS - ENABLED 2013		
WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK	-15	
TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK		
SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)		

## Front Axle and Equipment

Description	Weight Front	Weight Rear
DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE	190	
MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES	10	
NON-ASBESTOS FRONT BRAKE LINING		
CONMET CAST IRON FRONT BRAKE DRUMS		
FRONT BRAKE DUST SHIELDS	5	
FRONT OIL SEALS		
VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL		
STANDARD SPINDLE NUTS FOR ALL AXLES		
MERITOR AUTOMATIC FRONT SLACK ADJUSTERS		
STANDARD KING PIN BUSHINGS		
TRW THP-60 POWER STEERING WITH RCH45 AUXILIARY GEAR	130	
POWER STEERING PUMP		
4 QUART POWER STEERING RESERVOIR		
OIL/AIR POWER STEERING COOLER MOUNTED ABOVE FRONT CLOSING CROSSMEMBER	5	
MINERAL SAE 80/90 FRONT AXLE LUBE		
<b>Front Suspension</b>		
20,000# FLAT LEAF FRONT SUSPENSION	310	
GRAPHITE BRONZE BUSHINGS WITH SEALS - FRONT SUSPENSION		
FRONT SHOCK ABSORBERS		
<b>Rear Axle and Equipment</b>		
RT-46-160 46,000# R-SERIES TANDEM REAR AXLE		420
5.38 REAR AXLE RATIO		
IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING		
MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES	40	40
MXL 17T MERITOR EXTENDED LUBE INTERAXLE DRIVELINE WITH HALF ROUND YOKES		
(1) INTERAXLE LOCK VALVE FOR TANDEM DRIVE AXLES		
INDICATOR LIGHT AND BUZZER FOR EACH INTERAXLE LOCKOUT SWITCH		
MERITOR 16.5X7 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES		
NON-ASBESTOS REAR BRAKE LINING		
STANDARD BRAKE CHAMBER LOCATION		



Description	Weight Front	Weight Rear
CONMET CAST IRON REAR BRAKE DRUMS		
REAR BRAKE DUST SHIELDS		10
REAR OIL SEALS		
BENDIX EVERSURE LONGSTROKE 2-DRIVE AXLES SPRING PARKING CHAMBERS		
HALDEX AUTOMATIC REAR SLACK ADJUSTERS		
MINERAL SAE 80/90 REAR AXLE LUBE		
STANDARD REAR AXLE BREATHER(S)		
<b>Rear Suspension</b>		
HENDRICKSON RT463 @46,000# REAR SUSPENSION		750
HENDRICKSON RT/RTE - 7.19" SADDLE		
STANDARD AXLE SEATS IN AXLE CLAMP GROUP		
52 INCH AXLE SPACING		
STEEL BEAMS AND BRONZE CENTER BUSHINGS WITH BAR PIN ADJUSTABLE END CONNECTIONS		
FORE/AFT CONTROL RODS		
<b>Brake System</b>		
WABCO 4S/4M ABS WITH TRACTION CONTROL		
REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES		
FIBER BRAID PARKING BRAKE HOSE		
STANDARD BRAKE SYSTEM VALVES		
STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM		
STD U.S. FRONT BRAKE VALVE		
RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE		
WABCO SYSTEM SAVER HP WITH INTEGRAL AIR GOVERNOR AND HEATER		
WABCO OIL COALESCING FILTER FOR AIR DRYER		
AIR DRYER FRAME MOUNTED		
STEEL AIR TANKS MOUNTED AFT INSIDE AND/OR BELOW FRAME JUST FORWARD OF REAR SUSPENSION		
PULL CABLE ON WET TANK, PETCOCK DRAIN VALVES ON ALL OTHER AIR TANKS		
<b>Wheelbase &amp; Frame</b>		
6700MM (264 INCH) WHEELBASE		
11/32X3-1/2X10-15/16 INCH STEEL FRAME (8.73MMX277.8MM/0.344X10.94 INCH) 120KSI	360	120
1/4 INCH (6.35MM) C-CHANNEL INNER FRAME REINFORCEMENT	220	435

Description	Weight Front	Weight Rear
2275MM (90 INCH) REAR FRAME OVERHANG		
FRAME OVERHANG RANGE: 81 INCH TO 90 INCH	-40	190
12 INCH INTEGRAL FRONT FRAME EXTENSION	60	-10
CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 180.32 in		
CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 177.32 in		
CALC'D FRAME LENGTH - OVERALL : 393.06 in		
CALCULATED FRAME SPACE LH SIDE : 100.01 in		
CALCULATED FRAME SPACE RH SIDE : 92.12 in		
SQUARE END OF FRAME		
FRONT CLOSING CROSSMEMBER		
STANDARD WEIGHT ENGINE CROSSMEMBER		
STANDARD MIDSHIP #1 CROSSMEMBER(S)		
STANDARD REARMOST CROSSMEMBER		
STANDARD SUSPENSION CROSSMEMBER		
<b>Chassis Equipment</b>		
OMIT FRONT BUMPER, CUSTOMER INSTALLED SPECIAL BUMPER, DOES NOT COMPLY WITH FMCSR 393.203	-100	
GRADE 8 THREADED HEX HEADED FRAME FASTENERS INSTALLED WITH BOLT HEADS ON OUTSIDE OF FRAME		
EXTERIOR HARNESES WRAPPED IN ABRASION TAPE		
<b>Fuel Tanks</b>		
100 GALLON/378 LITER ALUMINUM FUEL TANK - LH	20	
25 INCH DIAMETER FUEL TANK(S)		
PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS		
FUEL TANK(S) FORWARD		
PLAIN STEP FINISH		
FUEL TANK CAP(S)		
DETROIT FUEL/WATER SEPARATOR WITH WATER IN FUEL SENSOR, HAND PRIMER AND 12 VOLT PREHEATER"	10	
EQUIFLO INBOARD FUEL SYSTEM		
AUXILIARY FUEL SUPPLY AND RETURN PORTS LOCATED ON LH FUEL TANK		
HIGH TEMPERATURE REINFORCED NYLON FUEL LINE		
FUEL COOLER	10	

	Description	Weight Front	Weight Rear
<b>Tires</b>			
	MICHELIN XZY-3 425/65R22.5 20 PLY RADIAL FRONT TIRES	196	
	MICHELIN X MULTI D 11R22.5 16 PLY RADIAL REAR TIRES		120
<b>Hubs</b>			
	CONMET PRESET PLUS PREMIUM IRON FRONT HUBS		
	CONMET PRESET PLUS PREMIUM IRON REAR HUBS		
<b>Wheels</b>			
	ACCURIDE 29374A 22.5X12.25 10-HUB PILOT 4.75 INSET 10-HAND ALUMINUM DISC FRONT WHEELS	-8	
	ACCURIDE 43644 ACCU-LITE 22.5X8.25 10-HUB PILOT ALUMINUM DISC REAR WHEELS		-256
	FRONT WHEEL MOUNTING NUTS		
	REAR WHEEL MOUNTING NUTS		
<b>Cab Exterior</b>			
	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB		
	AIR CAB MOUNTING		
	NONREMOVABLE BUGSCREEN MOUNTED BEHIND GRILLE		
	FRONT FENDERS		
	3-1/2 INCH FENDER EXTENSIONS	15	
	LH AND RH GRAB HANDLES		
	BRIGHT FINISH RADIATOR SHELL/HOOD BEZEL		
	STATIONARY BLACK GRILLE WITH BRIGHT ACCENTS		
	CHROME HOOD MOUNTED AIR INTAKE GRILLE		
	FIBERGLASS HOOD WITH ACCESS HATCHES	10	
	SINGLE 14 INCH ROUND HADLEY AIR HORN UNDER LH DECK		
	SINGLE ELECTRIC HORN		
	SINGLE HORN SHIELD		
	REAR LICENSE PLATE MOUNT END OF FRAME		
	HALOGEN COMPOSITE HEADLAMPS WITH BRIGHT BEZELS		
	LED AERODYNAMIC MARKER LIGHTS		
	DAYTIME RUNNING LIGHTS		
	GROTE #54332 LED STOP/TAIL/TURN LIGHTS GROMMET MOUNTED WITH SEPARATE GROTE #62401 LED BACKUP LIGHTS		
	STANDARD FRONT TURN SIGNAL LAMPS		



Description	Weight Front	Weight Rear
DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LH AND RH REMOTE		
DOOR MOUNTED MIRRORS		
102 INCH EQUIPMENT WIDTH		
LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS		
STANDARD SIDE/REAR REFLECTORS		
RH AFTERTREATMENT SYSTEM CAB ACCESS WITH PLAIN DIAMOND PLATE COVER		
63X14 INCH TINTED REAR WINDOW		
TINTED DOOR GLASS LH AND RH WITH TINTED NON-OPERATING WING WINDOWS		
RH AND LH ELECTRIC POWERED WINDOWS	4	4
1-PIECE SOLAR GREEN GLASS WINDSHIELD		
8 LITER (2 GAL) WINDSHIELD WASHER RESERVOIR, CAB MOUNTED, WITHOUT FLUID LEVEL INDICATOR		

#### Cab Interior

RUGGED TRIM PACKAGE  
 GRAY & CARBON VINYL INTERIOR "RUGGED"  
 CARBON WITH PREMIUM GUNMETAL ACCENT  
 (RUGGED)  
 MOLDED PLASTIC DOOR PANEL  
 MOLDED PLASTIC DOOR PANEL  
 BLACK MATS WITH SINGLE INSULATION  
 (1) DUAL USB CHARGING OUTLET, (1) LIGHTER  
 OUTLET AND ASH TRAY  
 FORWARD ROOF MOUNTED CONSOLE  
 LH AND RH DOOR STORAGE POCKETS  
 INTEGRATED INTO MOLDED DOOR PANELS  
 DIGITAL ALARM CLOCK IN DRIVER DISPLAY  
 (2) CUP HOLDERS LH AND RH DASH  
 M2/SD DASH  
 HEATER, DEFROSTER AND AIR CONDITIONER  
 STANDARD HVAC DUCTING  
 MAIN HVAC CONTROLS WITH RECIRCULATION  
 SWITCH  
 STANDARD HEATER PLUMBING  
 VALEO HEAVY DUTY A/C REFRIGERANT  
 COMPRESSOR  
 BINARY CONTROL, R-134A  
 STANDARD INSULATION  
 SOLID-STATE CIRCUIT PROTECTION AND  
 FUSES  
 12V NEGATIVE GROUND ELECTRICAL SYSTEM

Description	Weight Front	Weight Rear
STANDARD LED CAB LIGHTING		
REMOTE KEYLESS ENTRY AND 2 TRANSMITTERS	2	
DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME		
KEY QUANTITY OF 4		
LH AND RH ELECTRIC DOOR LOCKS		
BASIC ISRINGHAUSEN HIGH BACK AIR SUSPENSION DRIVERS SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION	30	
BASIC ISRINGHAUSEN HIGH BACK AIR SUSPENSION PASSENGER SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION	25	10
DUAL DRIVER SEAT ARMRESTS AND INBOARD PASSENGER SEAT ARMREST	6	
LH AND RH INTEGRAL DOOR PANEL ARMRESTS		
VINYL WITH VINYL INSERT DRIVER SEAT		
VINYL WITH VINYL INSERT PASSENGER SEAT		
BLACK SEAT BELTS		
ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN	10	
4-SPOKE 18 INCH (450MM) LEATHER WRAPPED STEERING WHEEL WITH CHROME SWITCH BEZELS		
DRIVER AND PASSENGER INTERIOR SUN VISORS		

### Instruments & Controls

DIGITAL PANEL LAMP DIMMER SWITCH IN DRIVER DISPLAY	
ELECTRONIC ACCELERATOR CONTROL	
NO INSTRUMENT PANEL-DRIVER	
FULLY CONFIGURABLE CENTER INSTRUMENT PANELS	
ENGINE REMOTE INTERFACE WITH PARK BRAKE AND NEUTRAL INTERLOCKS	
BRIGHT ARGENT FINISH GAUGE BEZELS	
LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM	
DUAL NEEDLE PRIMARY AND SECONDARY AIR PRESSURE GAUGE	
DASH MOUNTED AIR RESTRICTION INDICATOR WITH GRADUATIONS	
87 DECIBELS TO 112 DECIBELS AUTOMATIC SELF-ADJUSTING BACKUP ALARM	3
ELECTRONIC CRUISE CONTROL WITH CONTROLS ON STEERING WHEEL SPOKES	

Description	Weight Front	Weight Rear
KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY		
MANUAL REMOTE ENGINE STOP/START WITH PTO RE-ENGAGE		
PREMIUM INSTRUMENT CLUSTER WITH 5.0 INCH TFT COLOR DISPLAY		
HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH		
2 INCH ELECTRIC FUEL GAUGE		
ENGINE REMOTE INTERFACE WITH MULTIPLE SET SPEEDS		
QUICKFIT POWERTRAIN INTERFACE CONNECTOR UNDER CAB WITH CAPS		
QUICKFIT PROGRAMMABLE INTERFACE CONNECTOR(S) UNDER CAB WITH CAP		
ENGINE REMOTE INTERFACE CONNECTOR AT POWERTRAIN INTERFACE CONNECTOR		
ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE		
2 INCH TRANSMISSION OIL TEMPERATURE GAUGE		
ELECTRONIC OUTSIDE TEMPERATURE SENSOR DISPLAY IN DRIVER MESSAGE CENTER		
ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY		
10 AMP FUSED BEACON LT PRE-WIRE THROUGH MIRRORS W/O RELAY		
PTO CONTROLS FOR ENHANCED VEHICLE ELECTRIC/ELECTRONIC ARCHITECTURE		
ELECTRIC ENGINE OIL PRESSURE GAUGE		
CENTER OVERHEAD INSTRUMENT PANEL BLANK		
QUICKFIT PROGRAMMABLE INTERFACE MODULE	10	
AM/FM/WB WORLD TUNER RADIO WITH BLUETOOTH, USB AND AUXILIARY INPUTS, J1939	10	
DASH MOUNTED RADIO		
(2) RADIO SPEAKERS IN CAB		
AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF		
STANDARD RADIO WIRING WITH STEERING WHEEL CONTROLS		
ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER		
STANDARD VEHICLE SPEED SENSOR		

Description	Weight Front	Weight Rear
ELECTRONIC 3000 RPM TACHOMETER DETROIT CONNECT PLATFORM HARDWARE 3 YEARS DAIMLER CONNECTIVITY BASE PACKAGE (FEATURES VARY BY MODEL) POWERED BY DETROIT CONNECT TMC RP1226 ACCESSORY CONNECTOR LOCATED BEHIND PASSENGER SIDE REMOVEABLE DASH PANEL IGNITION SWITCH CONTROLLED ENGINE STOP TWO EXTRA HARDWIRED SWITCHES IN DASH, ROUTE TO BETWEEN SEATS, CAPPED HARDWIRE SWITCH #1,ON/OFF MOMENTARY, 20 AMPS IGNITION POWER HARDWIRE SWITCH #2,ON/OFF MOMENTARY, 20 AMPS IGNITION POWER PRE-TRIP INSPECTION FEATURE FOR EXTERIOR LAMPS ONLY (1) OVERHEAD MOUNTED LANYARD CONTROL FOR DRIVER AIR HORN DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY ROTARY HEADLAMP SWITCH, MARKER LIGHTS/HEADLIGHTS SWITCH WITH PULL OUT FOR OPTIONAL FOG/ROAD LAMPS ONE VALVE PARKING BRAKE SYSTEM WITH DASH VALVE CONTROL AUTONEUTRAL AND WARNING INDICATOR SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, HEADLAMP FLASH, WASH/WIPE/INTERMITTENT INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH 40 AMP (20 AMP PER SIDE) TRAILER LAMP CAPACITY		
Design		
PAINT: ONE SOLID COLOR		
Color		
CAB COLOR A: L0006EY WHITE ELITE EY BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT STANDARD E COAT/UNDERCOATING		
Certification / Compliance		
U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS		
TOTAL VEHICLE SUMMARY		

### Weight Summary

	Weight Front	Weight Rear	Total Weight
Factory Weight <sup>+</sup>	8513 lbs	8247 lbs	16760 lbs
<hr/>			
Total Weight <sup>+</sup>	8513 lbs	8247 lbs	16760 lbs

### Extended Warranty

TOWING: 2 YEARS/UNLIMITED MILES/KM EXTENDED TOWING  
COVERAGE \$750 CAP FEX APPLIES

(+) Weights shown are estimates only.

If weight is critical, contact Customer Application Engineering.

(\*\*\*) All cost increases for major components (Engines, Transmissions, Axles, Front and Rear Tires) and government mandated requirements, tariffs, and raw material surcharges will be passed through and added to factory invoices.



## SHIFT CHART

### VEHICLE SPECIFICATIONS SUMMARY - SHIFT CHART

Model.....	114SD
Cab Size (829).....	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Desired Cruise Speed (mph).....	65.0
Engine (101).....	CUM L9 370 HP @ 2100 RPM; 2100 GOV RPM, 1250 LB-FT @ 1200 RPM
RPM at Peak Torque.....	1200
Governed RPM.....	2100
Transmission (342).....	ALLISON 3000 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION
Gear Ratio: LL.....	N/A
Gear Ratio: L.....	N/A
Gear Ratio: 1.....	3.49
Gear Ratio: 2.....	1.86
Gear Ratio: 3.....	1.41
Gear Ratio: 4.....	1
Gear Ratio: 5.....	0.75
Gear Ratio: 6.....	0.65
Gear Ratio: 7.....	N/A
Gear Ratio: 8.....	N/A
Gear Ratio: 9.....	N/A
Gear Ratio: 10.....	N/A
Gear Ratio: 11.....	N/A
Gear Ratio: 12.....	N/A
Gear Ratio: 13.....	N/A
Gear Ratio: 14.....	N/A
Gear Ratio: 15.....	N/A
Gear Ratio: 16.....	N/A
Gear Ratio: 17.....	N/A
Gear Ratio: 18.....	N/A
Auxiliary Transmission (352).....	NO AUXILIARY TRANSMISSION
Low Gear Ratio.....	N/A
High Gear Ratio.....	N/A
Transfer Case (373).....	NO TRANSFER CASE
Low Gear Ratio.....	N/A
High Gear Ratio.....	N/A
Rear Axle (420).....	RT-46-160 46,000# R-SERIES TANDEM REAR AXLE
Number of Speeds.....	1
Rear Axle Gear Ratio(s).....	5.38 REAR AXLE RATIO
Rear Tires (094).....	MICHELIN X MULTI D 11R22.5 16 PLY RADIAL REAR TIRES
Revolutions per Mile.....	494

## TABLE SUMMARY - SHIFT CHART

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

## STARTABILITY

### VEHICLE SPECIFICATIONS SUMMARY - STARTABILITY

Model.....	114SD
Cab Size (829).....	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Expected Front Axle(s) Load (lbs).....	20000.0
Expected Pusher Axle(s) Load (lbs).....	0.0
Expected Rear Axle(s) Load (lbs).....	46000.0
Expected Tag Axle(s) Load (lbs).....	0.0
Expected GVW (lbs).....	66000
Expected GCW (lbs).....	0.0
Engine (101).....	CUM L9 370 HP @ 2100 RPM; 2100 GOV RPM, 1250 LB-FT @ 1200 RPM
Torque at Clutch Engagement (lbs-ft).....	549
Transmission (342).....	ALLISON 3000 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION
Gear Ratio: Forward 1.....	3.49
Gear Ratio: Forward 2.....	1.86
Gear Ratio: Forward 3.....	1.41
Gear Ratio: Reverse 1.....	5.03
Gear Ratio: Reverse 2.....	N/A
Gear Ratio: Reverse 3.....	N/A
Auxiliary Transmission (352).....	NO AUXILIARY TRANSMISSION
Low Gear Ratio.....	N/A
High Gear Ratio.....	N/A
Transfer Case (373).....	NO TRANSFER CASE
Low Gear Ratio.....	N/A
High Gear Ratio.....	N/A
Rear Axle (420).....	RT-46-160 46,000# R-SERIES TANDEM REAR AXLE
Number of Speeds.....	1
Rear Axle Gear Ratio(s).....	5.38 REAR AXLE RATIO
Rear Tires (094).....	MICHELIN X MULTI D 11R22.5 16 PLY RADIAL REAR TIRES
Revolutions per Mile.....	494
Vehicle Service (A85).....	UTILITY/REPAIR/MAINTENANCE SERVICE
Startability Factor.....	8
Terrain (AA5).....	TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS
Startability Factor.....	0
Most Severe Grade Expected (AB1).....	MAXIMUM 8% EXPECTED GRADE
Startability Factor.....	8
Road Surface (AB5). SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE	
Startability Factor.....	0
Suggested Torque Converter Stall Ratio.....	1.77

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.



## D I M E N S I O N S

### VEHICLE SPECIFICATIONS SUMMARY - DIMENSIONS

Model.....	114SD
Wheelbase (545) .....	6700MM (264 INCH) WHEELBASE
Rear Frame Overhang (552) .....	2275MM (90 INCH) REAR FRAME OVERHANG
Fifth Wheel (578) .....	NO FIFTH WHEEL
Mounting Location (577).....	NO FIFTH WHEEL LOCATION
Maximum Forward Position (in).....	0
Maximum Rearward Position (in) .....	0
Amount of Slide Travel (in).....	0
Slide Increment (in).....	0
Desired Slide Position (in).....	0.0
Cab Size (829).....	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Sleeper (682).....	NO SLEEPER BOX/SLEEPER CAB
Exhaust System (016).....	RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE

### TABLE SUMMARY - DIMENSIONS

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

## S P E E D A B I L I T Y

### VEHICLE SPECIFICATIONS SUMMARY - SPEEDABILITY

Model.....	114SD
Cab Size (829).....	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Desired Cruise Speed (mph).....	65.0
Expected Front Axle(s) Load (lbs).....	20000.0
Expected Pusher Axle(s) Load (lbs).....	0.0
Expected Rear Axle(s) Load (lbs).....	46000.0
Expected Tag Axle(s) Load (lbs).....	0.0
Expected GVW (lbs).....	66000
Expected GCW (lbs).....	0.0
Engine (101).....	CUM L9 370 HP @ 2100 RPM; 2100 GOV RPM, 1250 LB-FT @ 1200 RPM
Governed RPM.....	2100
HP at Governed RPM.....	370
RPM at Max HP.....	2100
Max HP.....	370
HP at Governed RPM (High Torque).....	370
RPM at Max HP (High Torque).....	2100
Max HP (High Torque).....	370
Multi-torque.....	NO
Transmission (342).....	ALLISON 3000 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION
Rear Axle (420).....	RT-46-160 46,000# R-SERIES TANDEM REAR AXLE
Number of Speeds.....	1
Rear Axle Gear Ratio(s).....	5.38 REAR AXLE RATIO
Rear Tires (094).....	MICHELIN X MULTI D 11R22.5 16 PLY RADIAL REAR TIRES
Revolutions per Mile.....	494
Trailer Width (in).....	0.0
Trailer Height (ground to top) (ft).....	10.0
Body Width (in).....	96.0
Body Height (ground to top) (ft).....	10.0
Roof Mounted Aero Device (784).....	NO AIR SHIELD OR BRACKETS
Road Surface (AB5). SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE	
Auxiliary Transmission (352).....	NO AUXILIARY TRANSMISSION
High Gear Ratio.....	N/A
Low Gear Ratio.....	N/A
Transfer Case (373).....	NO TRANSFER CASE
High Gear Ratio.....	N/A
Low Gear Ratio.....	N/A

## TABLE SUMMARY - SPEEDABILITY

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

## TURNING RADIUS

### VEHICLE SPECIFICATIONS SUMMARY - TURNING RADIUS

Model.....	114SD
Cab Size (829).....	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Wheelbase (545) .....	6700MM (264 INCH) WHEELBASE
Front Tires (093) .....	MICHELIN XZY-3 425/65R22.5 20 PLY RADIAL FRONT TIRES
Width (in) .....	17.7
Front Axle (400) .....	DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE
Kingpin Intersection (in) .....	71
Bumper (556).....	OMIT FRONT BUMPER, CUSTOMER INSTALLED SPECIAL BUMPER, DOES NOT COMPLY WITH FMCSR 393.203
Width (in) .....	96
Bumper Miter to Front Axle (in) .....	49.394
Primary Steering Location (003).....	LH PRIMARY STEERING LOCATION
Steering Gear (536) .....	TRW THP-60 POWER STEERING WITH RCH45 AUXILIARY GEAR
Dual Steering Gear .....	RCH45
Ram .....	NONE
Rear Axle (420).....	RT-46-160 46,000# R-SERIES TANDEM REAR AXLE
Axle Spacing (624).....	52 INCH AXLE SPACING

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.



## GRADEABILITY

### VEHICLE SPECIFICATIONS SUMMARY - GRADEABILITY

Model .....	114SD
Cab Size (829) .....	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Desired Gradeability at Peak Torque (%) .....	0.5
Desired Gradeability at Cruise Speed(%) .....	0.3
Desired Cruise Speed (mph) .....	65.0
Expected Front Axle(s) Load (lbs) .....	20000.0
Expected Pusher Axle(s) Load (lbs) .....	0.0
Expected Rear Axle(s) Load (lbs) .....	46000.0
Expected Tag Axle(s) Load (lbs) .....	0.0
Expected GVW (lbs) .....	66000
Expected GCW (lbs) .....	0.0
Engine (101) .....	CUM L9 370 HP @ 2100 RPM; 2100 GOV RPM, 1250 LB-FT @ 1200 RPM
Peak Torque (lbs-ft) .....	1250
RPM at Peak Torque .....	1200
Peak Torque (Multi-torque High) (lbs-ft) .....	1250
RPM at Peak Torque (Multi-torque High) .....	1200
Multi-torque .....	NO
Transmission (342) .....	ALLISON 3000 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION
Rear Axle (420) .....	RT-46-160 46,000# R-SERIES TANDEM REAR AXLE
Number of Speeds .....	1
Rear Axle Gear Ratio(s) .....	5.38 REAR AXLE RATIO
Rear Tires (094) .....	MICHELIN X MULTI D 11R22.5 16 PLY RADIAL REAR TIRES
Revolutions per Mile .....	494
Trailer Width (in) .....	0.0
Trailer Height (ground to top) (ft) .....	10.0
Body Width (in) .....	96.0
Body Height (ground to top) (ft) .....	10.0
Roof Mounted Aero Device (784) .....	NO AIR SHIELD OR BRACKETS
Road Surface (AB5)SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE	
Auxiliary Transmission (352) .....	NO AUXILIARY TRANSMISSION
High Gear Ratio .....	N/A
Low Gear Ratio .....	N/A
Transfer Case (373) .....	NO TRANSFER CASE
High Gear Ratio .....	N/A
Low Gear Ratio .....	N/A
Trailer Configuration (AA2) .....	NO TRAILER SPECIFIED

### TABLE SUMMARY - GRADEABILITY

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

**Bid Form**  
**COMBINATION SEWER CLEANER**  
**25-B011**

OPENING DATE: MARCH 12<sup>TH</sup>, 2025

TOTAL PRICE FOR COMBINATION SEWER CLEANERS 599,482.<sup>00</sup>  
INCLUDING DELIVERY.

ESTIMATED DELIVERY DATE 150-180 DAYS

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following ADDENDA

No. 1 Dated: 2/20/2025 No. 2 Dated: 2/20/2025

SIGNATURE: Chris Kinchen

COMPANY NAME: COUINGTON SALES + SERVICE, INC.

NAME: CHRIS KINCHEN TITLE: PRESIDENT

MAILING ADDRESS: P.O. Box 1144 Denham Springs STATE: LA ZIP: 70727

ADDRESS OF PLANT 7868 FLORIDA BLVD. DENHAM SPRINGS STATE: LA ZIP: 70726

EMAIL: PAT@COUINGTONSALES.COM

PHONE NUMBER: 225-664-7427 FAX NUMBER: 225-665-1567

The signature on the bid must be that of an authorized representative of the corporation, partnership or other legal entity as defined by Louisiana Public Bid Law Revised Statute 38:2212.A.(1)(c) which dictates parties authorized to submit bids for public contracts.

No taxes, environmental Fees, shop fees or fuel surcharges shall be applied or added to invoices. Bid must be total cost.

The City of Slidell reserves the right to reject any and all bids.

The bidder shall complete every space on this bid form. You should mark specification bidder's proposal column with a check mark to indicate if the item being bid is exactly as specified. If not, the "NO" column must be checked and a detailed description of the deviation from the specification to be supplied.



COMPLY, Indicate: Yes or No

**GENERAL:**

✓ Yes No

The machine can remove stones, grit, grease, sludge, and other debris from sanitary sewer and/or storm drain lines by the flushing action of high-pressure water. The machine will be equipped with a self-contained, non-corrosive, non-metallic water tank supply as the water source for the high-pressure pump. The machine is capable of being operated by one man, with all operating controls for high-pressure water pump, and hose reel located at the front of the machine for safety. The machine shall be dual engine design with a total of 510HP to reduce wear on the chassis engine by driving the water pump with the auxiliary engine. The machine used a 2025 Freightliner 114SD chassis for these specifications.

**DEBRIS BODY:**

✓ Yes No

Debris storage body has a minimum usable liquid capacity of 11 cubic yards. The debris body shall be round for maximum strength and constructed of 3/16-inch ASTM A242 Corten A steel for enhanced corrosion resistance.

The rear door shall be flat (industrial style) and flanged for maximum strength. It shall be fully opened to 90 degrees by means of 2 hydraulic cylinders and hinged at the top with low profile and adjustable style hinges. There shall be a 6" diameter liquid drain knife valve and screen weldment inside for retaining solids while removing excess liquids. The drain will have 10 feet of 6" lay flat hose. The debris body shall be supplied with a debris deflector shield mounted at the inlet of the vacuum port. The debris deflector shield shall deflect material from the rear door to prevent the door from being damaged by debris entering the tank. A rear door safety prop shall be provided. For ease of maintenance there shall be no hydraulic components located inside the debris body or rear door.

The door locking system shall have four (4) externally mounted wedge-style door locks that lock hydraulically. The hydraulic locks shall be operated by one (1) sequential control and 2 hydraulic cylinders to allow the operator to control the discharging of the liquids, from the debris tank, by cracking open the door slowly prior to dumping the debris.

Dual steel weldments with stainless steel screen 8" x 28" each providing up to 1200 square inches of added filtration for the vacuum system shall be provided inside the debris tank. These weldments shall be removable and require no cutting or welding.

A double acting power up/power down hydraulic scissors lift mechanism will be provided to raise the body to a minimum 50-degree angle. The scissors lift mechanism shall be designed to support a minimum of 24 inches of the debris tank width to provide stability and when dumping on uneven ground. The lift capacity of hydraulic scissors lift cylinder is 56,000 lbs.

Dump controls are located on curbside mid-ship of the unit, well forward of the dumping area for operator safety. A manual override system is provided in case of system failure.

The debris body has a five-year warranty. A copy of the manufacturer's warranty statement shall be enclosed with the bid. If pro-rated so state: \_\_\_\_\_

An internal polyethylene float device with external indicator is supplied to show when the body is loaded to capacity.

**AUTOMATIC VACUUM BREAKER:**

✓ Yes No

The automatic vacuum breaker assembly is located inside the body.

The automatic vacuum breaker assembly shall be controlled by an electric over hydraulic circuit.

The entire system shall be replaceable via a bolt on assembly.

The assembly shall consist of a 12" inlet and two 8" ports that provide air flow to the vacuum system.

A full indication activates an automatic vacuum breaker shut down system that completely shuts down 100 percent of the airflow to the vacuum system to prevent overfilling and wastewater



discharge into the atmosphere.

The vacuum breaker system is automatically activated (closed) when the parking brake system is released to eliminate carryover during transit.

The system is controlled/activated, at the front hose reel control station. This enables the operator to pick up large debris with boom and place debris on the road surface. This system can be used for safety in the event the suction must be shut off in case of an emergency.

#### CENTRIFUGAL COMPRESSOR (FAN DESIGN):

Roots PD BLOWER (827) ✓ Yes No  
AS PER ADDENDUM #1

The centrifugal vacuum compressor shall be of 3-stage construction (i.e. 3-27" minimum diameter fans in tandem). The centrifugal compressor (fans) shall be constructed of Carbon steel.

The compressor's outer housing shall be spun from one piece of 3/16" steel for strength and provide proper airflow in operation.

The vacuum system shall operate independent of the high-pressure water system.

The compressor is driven by the chassis engine via a closed loop hydrostatic system using a variable piston pump and motor.

This system shall include a heat exchanger for extreme ambient conditions and to maintain the pump suction oil temp at 160 deg. F. max. The heat exchanger shall be protected by a 30-micron filter and cold weather bypass valve. Hydrostatic loop filtration shall be accomplished by a 10 Beta micron return filter and a 10-micron Absolute (no bypass) charge filter.

To maximize long term durability by reducing the load on one side of the compressor, the compressor shaft shall extend through the compressor and shall be additional stabilized by using two high speed bearings, one at each side of the shaft. No exceptions will be allowed to this requirement.

A means of starting, stopping and varying the vacuum suction from operator station at the front of the machine is provided.

A centrifugal separator located in the inlet chamber to the fans with cleanout box is provided. The separator removes particles from the air stream, thus enabling the unit to vacuum wet or dry material. The separator is separate from the debris body. The centrifugal compressor (fan) system can produce 90% vacuum with no airflow. This feature allows material to be vacuumed under the water surface, i.e. lift stations, plugged manholes, etc.

Unit must be capable of vacuuming under water 16.6' (200") without air induction. A manometer/vacuum test may be required to demonstrate the system performance.

The centrifugal compressor fans have a 5-year replacement non-prorated warranty.

#### VACUUM PICK UP HOSE:

✓ Yes No

Shall be front loading, attached at the front of the machine to provide ease of positioning the machine over the manhole, as well as afford maximum safety for the operator.

The 8" will be mounted on a boom that will provide a minimum of 18' vertical lift utilizing dual hydraulic cylinder and 230 degree of boom rotation powered hydraulically for non-interrupted smooth movement. Boom to have a lift capacity of 500 lbs. at the front bumper.

The boom will be powered by an electric over hydraulic system: up/down by dual lift cylinders.

The right/left movements shall be hydraulic via worm gear rotation.

The boom shall hydraulically telescope a minimum of 10 ft. forward from the operator's station. The height of the boom shall not change while the boom is being telescoped. A manual override system shall be provided for right/left, and up/down functions in case of system failure.

Control of the boom is by means of a joystick control at the operator's station, requiring no cables at operator's feet for boom operation. A wireless remote control will be provided for Boom, Vacuum Breaker, Chassis Throttle, and Debris Body functions. A manual override system shall be provided for right/left, and up/down functions in case of system failure.

A boom coverage chart shall be provided showing the square footage of boom coverage.

8-inch diameter pipe extensions with clamps will be provided and carried on the truck as follows:

1 6-1/2' Catch Basin Nozzle

6' Aluminum Pipe Extension



- 1 5' Aluminum Pipe Extension
- 3' Aluminum Pipe Extension

#### **WATER SUPPLY:**

✓ Yes No

The water tanks shall have a minimum usable capacity of 1300 U.S. gallons.  
The water tanks shall be constructed of non-corrosive, non-metallic, durable, cross-linked polyethylene to eliminate rust, corrosion, and stress cracking.  
The water tanks shall be mounted at and below the truck frame level to provide a low center of gravity for truck stability.  
A 2-1/2-inch diameter x 25 feet long hydrant hose with hydrant wrench is supplied on the unit.  
An anti-siphon fill device is installed on the unit.  
Inspection ports shall be provided to fill or to add chemicals to the water system. A sight gauge to indicate water level is located within sight of the operator station. The water tanks are protected by a minimum of 11-gauge steel plating mounted below the water tanks for protection against road hazards when unit travels over the road, off the road or to landfills.  
The water tanks carry a ten-year replacement warranty.

#### **AUXILIARY ENGINE (WATER PUMP DRIVE ENGINE):**

✓ Yes No

The auxiliary engine, John Deere Tier 4 final -140HP or approved equal, shall be used to drive the water pump. An electronic digital diagnostic and fault monitoring panel shall be mounted on the front of the unit at the operator's station and be able to display various engine operation conditions including but not limited to engine rpm, hours, coolant temp and oil pressure. A standard integrated safety shutdown system shall be provided in the engine ecu and will shut the engine down in the event of low oil pressure or excessive coolant temperature. The ignition system start stop switch will be located at the operator's station. The auxiliary engine shall be shrouded and have a hinged door on the driver's side of the unit. The engine oil dipstick shall be accessed from the ground level on the driver's side.

#### **HIGH-PRESSURE WATER PUMP:**

✓ Yes No

The high-pressure water pump shall be rated to deliver smooth continuous pressure and flow through the entire flow range of the pump. The high pressure shall have smooth continuous flow for both the high-pressure system and the handgun system.  
A continuous duty flow of 60 gpm. and 3,000 psi shall be provided.  
High-pressure relief valves are provided for both the high-pressure system and handgun system.  
The water pump operates independently of the vacuum system and is powered by the auxiliary engine via clutch less, direct dual powerband drive system.  
The high-pressure water pump drive system carries a five-year replacement warranty. Warranty excludes the drive engine, i.e. auxiliary engine.  
The water pump can be ran dry. Controls for starting and stopping the water pump and to vary the flow and pressure shall be at the front hose reel operator's station.  
The high-pressure water pump is equipped with a cold weather drain valve. The valve allows the operator to completely drain the high-pressure pump.

#### **HOSE REEL ASSEMBLY:**

✓ Yes No

The hose reel assembly is mounted on the front of the vehicle. The hose reel shall have a minimum of 30" inside diameter with a capacity of 800' x 1" hose. The hose reel is hydraulically powered in both directions by means of a double chain and sprocket drive. The controls for operating the motor have a flow control device to regulate the rotational speed of the reel in both directions. All hydraulic hoses are behind a steel housing to protect operator from hydraulic oil if a hose fails. The hydraulic motor, chain, and sprockets have a protective cover or are mounted on the radiator side of the hose reel for operator safety. The hose reel articulates 180 degrees to

the driver's side allowing operator to work in any position through this arc. This allows greater flexibility in truck placement for manholes located in tough areas and provides greater safety to the operator. Reel extends beyond the width of unit for greater flexibility for positioning reel over offset manholes, catch basins, etc. A hydraulically controlled outrigger leg is supplied that comes in contact with the ground at any one position. A warning light is located in the cab to warn the operator that the outrigger leg is not in its transported position prior to moving the unit. A manual bypass system for the hose reel assembly is provided to manually pull the reel assembly away from its transported position. This feature allows operators to check fluids without starting engines.

#### JET HOSE:

✓ Yes No

800' x 1" jet rodder hose will be supplied rated for 3000 psi working pressure and 7500 psi burst pressure. A heavy-duty hose guide with 25' of nylon rope will be provided. Nozzles shall be hardened steel with replaceable ceramic orifices as follows: 1) Chisel head penetrator & 1) standard sanitary.

#### MANHOLE CLEANING WATER SYSTEM (HANDGUN):

✓ Yes No

The high-pressure pump and independent water tank assembly supplied shall be used for manhole cleaning. A smooth continuous flow of 20 gpm. and pressure of 600 psi shall be provided for ease of operation. A handgun pressure relief valve set at 600 psi shall be provided. One full functioning handgun with on/off hand control, replaceable nozzle tip, 12-inch extension, adjustable spray and 50' x 1/2" hose with retractable reel will be provided.

The handgun will attach to the system via a quick couple connection at the curbside of the unit. To avoid being coiled at the operator's station a handgun holder will be provided at the front bumper.

#### HYDRAULIC SYSTEM AND LUBRICATION:

✓ Yes No

The hydraulic system has a 55-gallon capacity.

The hydraulic system shall incorporate a main shut off valve in case of hydraulic failure.

The hydraulic system shall incorporate hydraulic pressure relief valves and pressure gauges for ease of trouble shooting and maintenance.

The unit is equipped on the passenger side, mid-section of the module, a permanent weatherproof white vinyl lubrication chart that points out lubrication points on the module and specifies what type of lubrication and hydraulic fluids are required. The chart also specifies the frequency of each lubrication point.

Remote plumbed grease fittings are provided for the vacuum compressor, boom rotation, and water pump drive areas.

#### ACCESSORIES:

✓ Yes No

A minimum twelve (12) month manufacturer's guarantee on the unit will be provided. A storage box behind the cab will be provided, 16" x 42" x 96"

- 1 Debris body power flush out system
- 1 Rear mounted hydraulic pump off system, 350 gpm w/20' lay flat hose
  - Rear splash guard, tank mounted (2 - 10 O'clock Position)
- 1 Air purge system
- 1 1/4 turn ball valve water drain
  - Variable flow valve



Lazy Susan style, deck mounted pipe rack, holds 5 pipe  
 Hose footage counter, standard - drivers side  
 Rear mounted tow hooks  
 Auxiliary engine remote oil drain  
 Remote boom grease zerk assembly, (accessible from ground level)  
 Remote debris tank grease zerk assembly (accessible from ground level)  
 10' leader hose  
 Water pump remote oil drain  
 Built in Body Prop - Rear Boom Support Mounted  
 Move pump off to front, curbside of debris tank  
 Traffic Camera with Color Monitor (Camera placement must be picked)  
 Rear traffic camera  
 Front hose reel camera - to view front of hose reel area  
 Cone racks, between bogies on tandem units  
 Hydro excavation Package Includes: 50-foot handgun hose reel with 1/2" hose, 72" 1/2" schedule 80 lance  
 with single forward spray nozzle, Storage tubes for lances, Heavy duty unloader valve, Main control ball valve, Variable flow valve  
 Wireless Remote Control for boom functions and debris tank functions  
 OMSI Transfer Case ilo front engine PTO VACUUM DRIVE

## LIGHTING:

✓ Yes No

The entire module electrical system is vapor sealed to eliminate moisture damage. All wiring is color-coded, labeled, and run in sealed terminal enclosures.  
 All module circuits are protected by circuit breakers.  
 Clearance lights and reflectors are furnished in accordance with D.O.T. requirements.

LED strobe light with limb guard, rear debris tank door mounted - Whelen L21HAP LED Beacon with Whelen BGH Branch Guard  
 4 LED strobes - (2) front bumper, (2) rear bumper - Whelen 50A03ZCR - Amber  
 LED Arrow stick - Whelen TAM85 Traffic Advisor  
 LED Boom Mounted Flood Light - Whelen NP6BB Worklight  
 LED Rear Mounted Flood lights -Whelen NP6BB Worklight

## PAINT:

✓ Yes No

Unit paint surfaces are shot blasted, Ambershield zinc primed, sanded, and sealed with epoxy primer. The hose reel spool, debris tank and sides of mainframe painted with PPG Delfleet single stage polyurethane paint. All other paintable surfaces coated in PPG Ambershield textured black paint.  
 Unit shall have reflective White or Blue body and boom stripes.  
 Chassis shall be painted manufacturers standard white with DuPont Imron 5000 polyurethane paint.

**TRAINING AND MANUALS:**

☒ Yes ☐ No

Operator training will be conducted by a factory-trained representative for a minimum of one day at the time of delivery. 1 copy of the operating and maintenance manual for the sewer cleaner module shall be provided, on a USB flash drive, upon unit delivery.

**MOUNTING AND DELIVERY:**

☒ Yes ☐ No

The unit described will be mounted on a truck chassis acceptable to the body manufacturer at the factory of the body manufacturer.

**EXCEPTIONS AND DEVIATIONS:**

☒ Yes ☐ No

Bidder shall fully explain every variance, exception, and or deviation to the bid specifications. Additional sheets/lines may be added if required

*NO VARIATIONS, NO EXCEPTIONS,  
NO DEVIATIONS*



**POWERFULLY PRECISE,  
SUPERIOR PERFORMANCE.  
DUAL ENGINE COMBINATION MACHINE**



**Covington Sales & Svc. Inc.**  
P. O. Box 1144  
Denham Springs, LA 70727  
(225) 664-7427 (800)349-8000



969 Hall Park Road | Green Cove Springs, FL 32043 | USA  
PHONE (904) 284-4200 | FAX (904) 284-3305  
www.vac-con.com | info@vac-con.com

A subsidiary of Holden Industries, Inc.  
Vac-Con is a 100% employee-owned company.  
©2016 Vac-Con, all rights reserved.



**TOUGH, INNOVATIVE, AND EFFICIENT  
- DESIGN YOUR DUAL ENGINE  
COMBINATION MACHINE TO MEET  
ALL YOUR NEEDS.**

\*SOME COMPONENTS SHOWN ARE NON-STANDARD.

**AS SHOWN:**

1. 180° Articulating Hose Reel, 600 ft. x 1 in.
2. Omnibus™ Precision Power
3. Manual Level Wind Guide
4. Cross-Linked Polyethylene Water Tanks
5. Diesel Auxiliary Engine
6. 3-Stage Fan with Centrifugal Separator
7. Hydraulic Reservoir
8. Aluminum Tool Boxes
9. Positive Seal Vacuum Breaker
10. 10 ft. Telescopic Boom with 270° Rotation
11. Hinged Boom Tie Down
12. Debris Body Dump Controls
13. Corten® Steel Debris Tank
14. External Load Level Indicator
15. Lateral Line Cleaning Kit
16. Water Pump with Suction Strainer

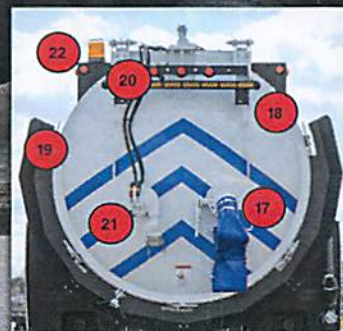
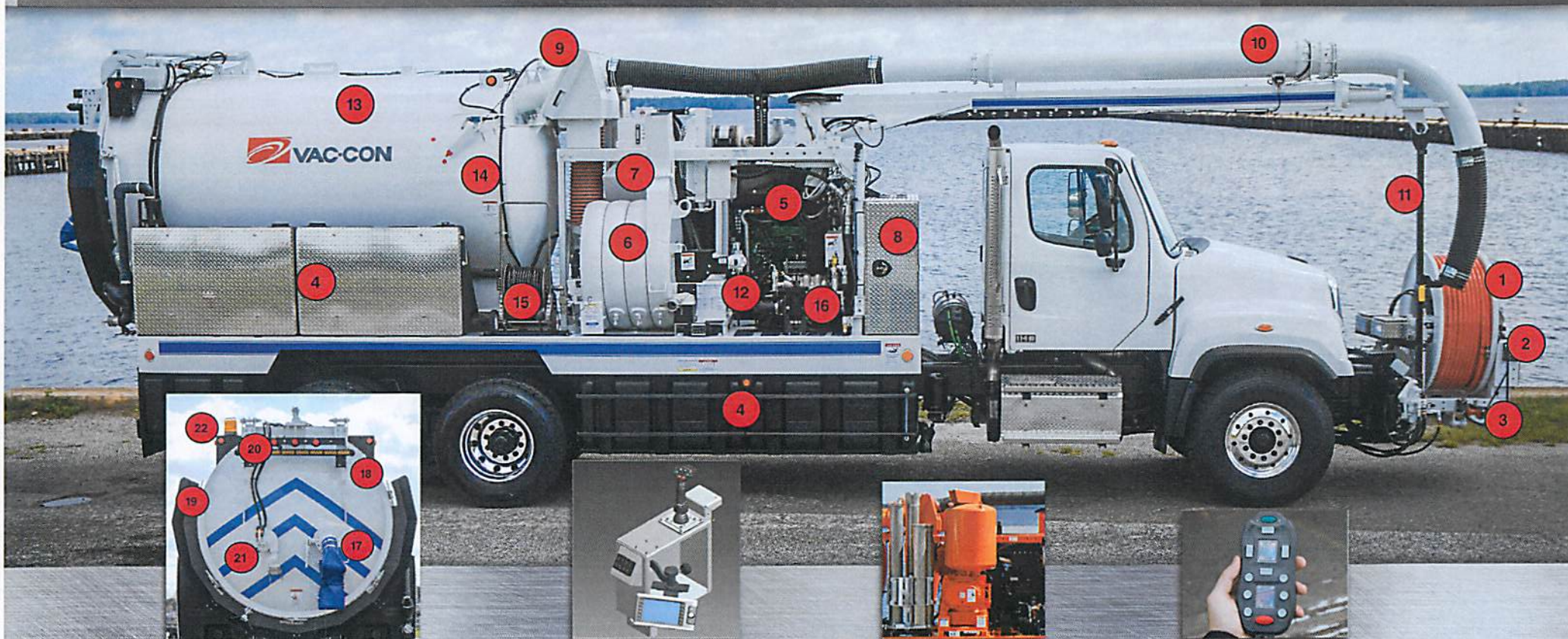
**REAR DOOR:**

17. 5 in. Butterfly Decant Valve
18. Full-Opening Rear Door with Hydraulic Locks
19. Splash Shield
20. Arrow Stick Lighting
21. Hydraulic Pump Off
22. Strobe Light

**OPTIONS**

- A. Omnibus™ Precision Power
- B. PD Blower
- C. Centrifugal Compressor Quiet "Q" Drive (with Aeroblast Fan Only)
- D. Wireless Remote
- E. Mainframe Deck Coating
- F. Hydro-Excavation Package
- G. Safety Light Packages
- H. 5yd to 16yd Debris Tank
- I. 500 to 1500 gal. Water Capacity
- J. Hi-Dump

Consult Factory/Dealer for Additional Options



**Rear Door**

Operator friendly rear door features 5 in. Butterfly Decant Valve, Hydraulic Locks, and Splash Shield.



**Omnibus™ Precision Power**

The Omnibus Precision Power Control System provides complete control of machine functions from one centralized location, all with real-time diagnostics.



**PD Blower**

PD Blower with multiple ratings up to 27" Hg and 5,400 CFM.



**Wireless Remote**

An integrated, enhanced control system that vastly improves usability and efficiency.



# PowerTech™ PWL 4045HFC04 Diesel Engine

Industrial Engine Specifications

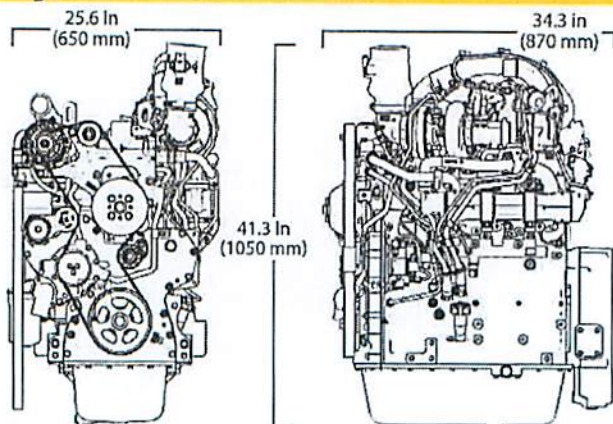


4045HFC04 shown

## Certifications

CARB  
EPA Tier 4  
EU Stage IV

## Engine dimensions



\*4045HFC09 shown

Dimensions may vary according to options selected. Call your distributor for more information.

## General data

Model	4045HFC04	Length—mm (in) to rear of block	870 (34.3)
Number of cylinders	4	Width—mm (in)	650 (25.6)
Displacement—L (cu in)	4.5 (275)	Height—mm (in)	1050 (41.3)
Bore and stroke—mm (in)	106 x 127 (4.2 x 5.0)	Weight, dry—kg (lb)	~ 553 (1220)
Engine type	In-line, 4-cycle		
Aspiration	Turbocharged and air-to-air aftercooled		

## Performance data range

Application ratings	Intermittent	Heavy Duty	Continuous
Rated power/Rated speed	100–104 kW (135–140 hp) @ 2200–2400 rpm	86–93 kW (115–125 hp) @ 2200–2400 rpm	63–84 kW (85–100 hp) @ 2200–2400 rpm
Peak power	104 kW (139 hp) @ 2200 rpm	86–94 kW (115–125 hp) @ 1900–2400 rpm	63–80 kW (84–107 hp) @ 1900–2400 rpm
Power bulge	0–4% @ 2200 rpm	0%	0–8% @ 2000–2200 rpm
Peak torque	540 N.m (398 ft-lb) @ 1600 rpm	461–536 N.m (340–395 ft-lb) @ 1600 rpm	333–427 N.m (246–315 ft-lb) @ 1600 rpm
Torque rise	20–36%	33–36%	30–33%

The Industrial Intermittent engine power rating is for applications that operate at varying loads and speeds, and do not fit the Industrial Heavy-Duty rating definition.

Some applications require Industrial Heavy-Duty engine power ratings. Please contact your John Deere Power Systems engine distributor for more information.

The Industrial Continuous engine power rating is for applications that operate with constant load and speed, except for short periods during startup or shutdown.

Power output is within + or – 5% at standard SAE J 1995 and ISO 3046.



### Exhaust filter dimensions

Size	2
Diameter – mm (in)	260.71 (10.26)
Length – mm (in)	572.59 (22.54)
Weight – kg (lb)	19.96 (44)

### SCR catalyst dimensions

Size	3
Diameter – mm (in)	322.58 (12.7)
Length – mm (in)	673.1 (26.5)
Weight – kg (lb)	34.02 (75)

See your John Deere Power Systems engine distributor for more information on available filter size options.

### Features and benefits

#### Wastegated turbocharger

- Wastegated turbochargers are designed to develop more airflow at lower engine speeds to improve low-speed torque. The wastegate control device bleeds off a portion of the exhaust flow at higher engine speeds. Wastegated turbos deliver improved transient response and higher peak torque without compromising engine envelope size. They also provide the lowest installed cost across a given power range.

#### Cooled exhaust gas recirculation (EGR)

- EGR cools and mixes measured amounts of cooled exhaust gas with incoming fresh air to lower peak combustion temperatures, thereby reducing NOx.

#### Diesel oxidation catalyst (DOC)

- PowerTech PWL 4.5L engines for Final Tier 4/Stage IV produce near-zero levels of particulate matter (PM) without a filter, thanks to an optimized combustion system and engine calibration. Remaining PM and other hydrocarbons are oxidized passively in a flow-through DOC without the need for regeneration.

#### Selective catalytic reduction (SCR)

- John Deere engines feature an SCR system that utilizes a urea-based additive, sometimes referred to as diesel exhaust fluid (DEF). The ammonia in the urea mixes with engine exhaust gases in the SCR catalyst to reduce NOx — converting it to nitrogen and water vapor.

#### High-pressure common-rail (HPCR) and engine control unit (ECU)

- The HPCR fuel system provides variable common-rail pressure and higher injection pressures up to 1,975 bar (29,000 psi). It also controls fuel injection timing and provides precise control for the start, duration, and end of injection.

#### 4-valve cylinder head

- The 4-valve cylinder head provides excellent airflow resulting in greater low-speed torque and better transient response time by utilizing a cross-flow design.

#### Air-to-air aftercooled

- This is the most efficient method of cooling intake air to help reduce engine emissions while maintaining low-speed torque, transient response time, and peak torque. It enables an engine to meet emissions regulations with better fuel economy and the lowest installed costs.

#### Compact size

- Simplifies installation
- Mounting points are the same as previous models

#### Engine performance

- Multiple rated speeds to further reduce noise and improve fuel economy
- Higher level of peak torque
- Optional power bulge equal to or better than Interim Tier 4/Stage III B

#### John Deere electronic engine controls

- Faster engine control unit (ECU) manages both the engine and the aftertreatment system
- Four times the memory, twice the RAM, and double the processing speed
- The input/output capability has increased 40%
- Premium software option integrates with equipment or vehicles to reduce engineering and installation costs

#### Additional features

- Gear-driven auxiliary drives; 500-hour oil change; self-adjusting poly-vee fan drive; optional factory installed variable-speed fan drive improves fuel economy and reduces noise levels; R.H. and L.H. engine-mounted final fuel filters; optional low-pressure fuel system with electrical transfer pump and “auto-prime” feature.

John Deere Power Systems  
3801 W. Ridgeway Ave.  
PO Box 5100  
Waterloo, IA 50704-5100  
Phone: 800.553.6446  
Fax: 319.292.5075

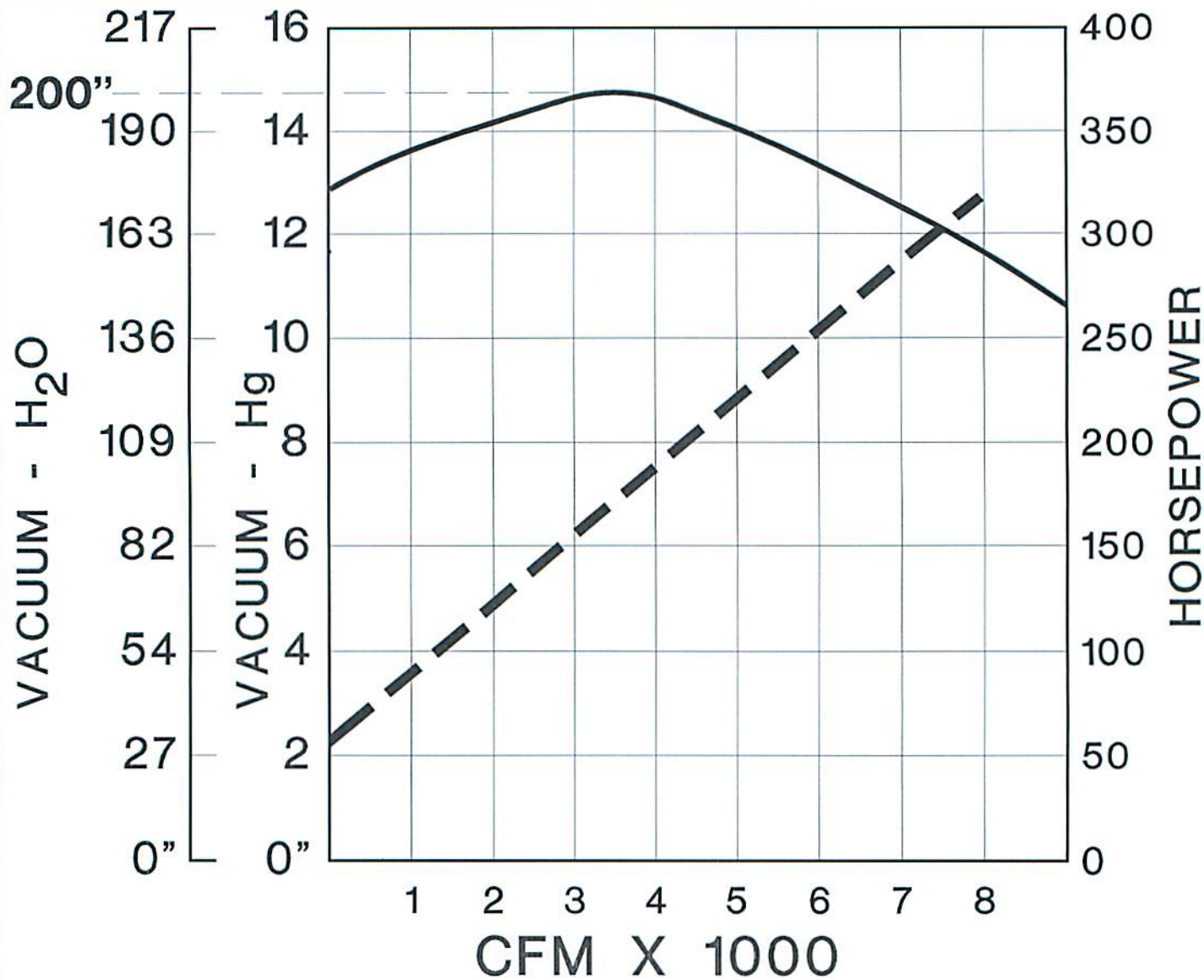
John Deere Power Systems  
Usine de Saran  
La Foulonnerie - B.P. 11.13  
45401 Fleury les Aubrais Cedex  
France  
Phone: 33.2.38.82.61.19  
Fax: 33.2.38.82.60.00

*All values at rated speed and power with standard options unless otherwise noted.  
Specifications and design subject to change without notice.*

Litho in U.S.A. (14-01) © 2014 JOHN DEERE



LET	REVISION	DATE
A	SUPERSEDES DWG SAME # DATED 5-87	8-30-93
B	ADDED 200" SCALE	8-20-98



4800 RPM MAX (AS TESTED)

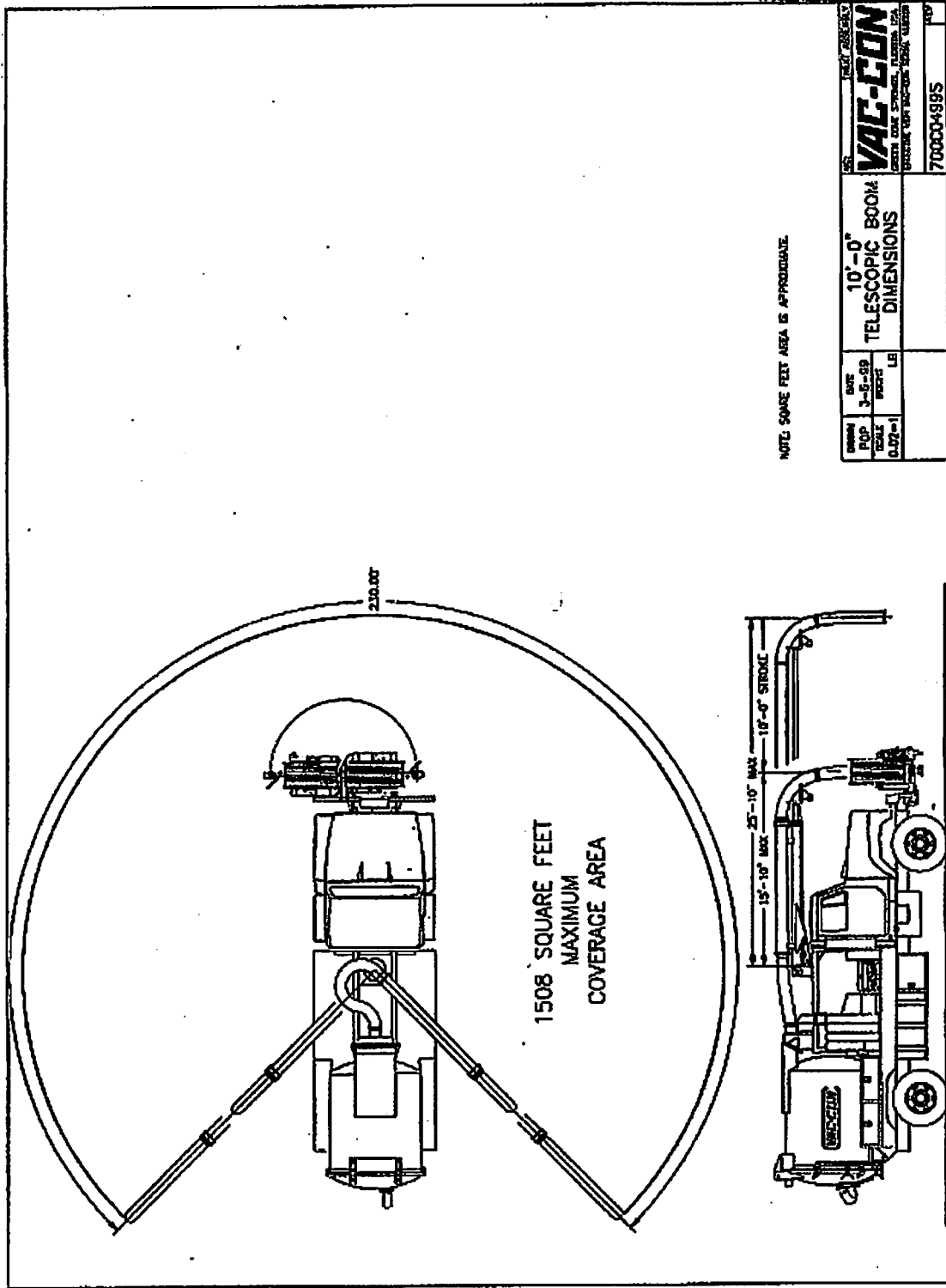
———— VACUUM      - - - - HORSEPOWER

Fan curve adjusted for standard air (0.075 lbm/ft<sup>3</sup>, 29.92 in/hg, 70°F, sea level).

TEST CONDUCTED AND CERTIFIED BY FRANK BLEIER, CERTIFIED INDUSTRIAL PHYSICIST AND PROFESSIONAL ENGINEER REGISTERED ILLINIOS NUMBER 8526, DATED 2-8-63.

DRAWN POP	DATE 8-30-93	3 STAGE FAN VAC COMPRESSOR OPERATING CURVE	NEXT ASSEMBLY	QTY
SCALE 1=1	WEIGHT LB		<b>VAC-CON</b> GREEN COVE SPRINGS, FLORIDA USA EFFECTIVE WITH VAC-CON SERIAL NUMBER	
		MATERIAL	700A0024S	
				REV B

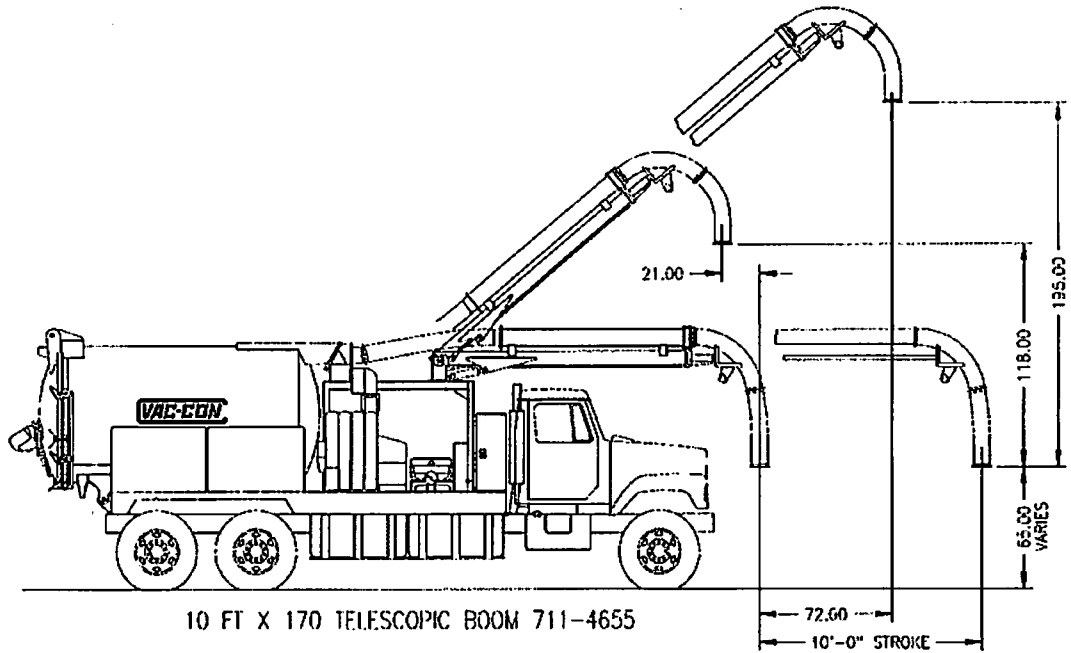




NOTE: SQUARE FEET AREA IS APPROXIMATE.

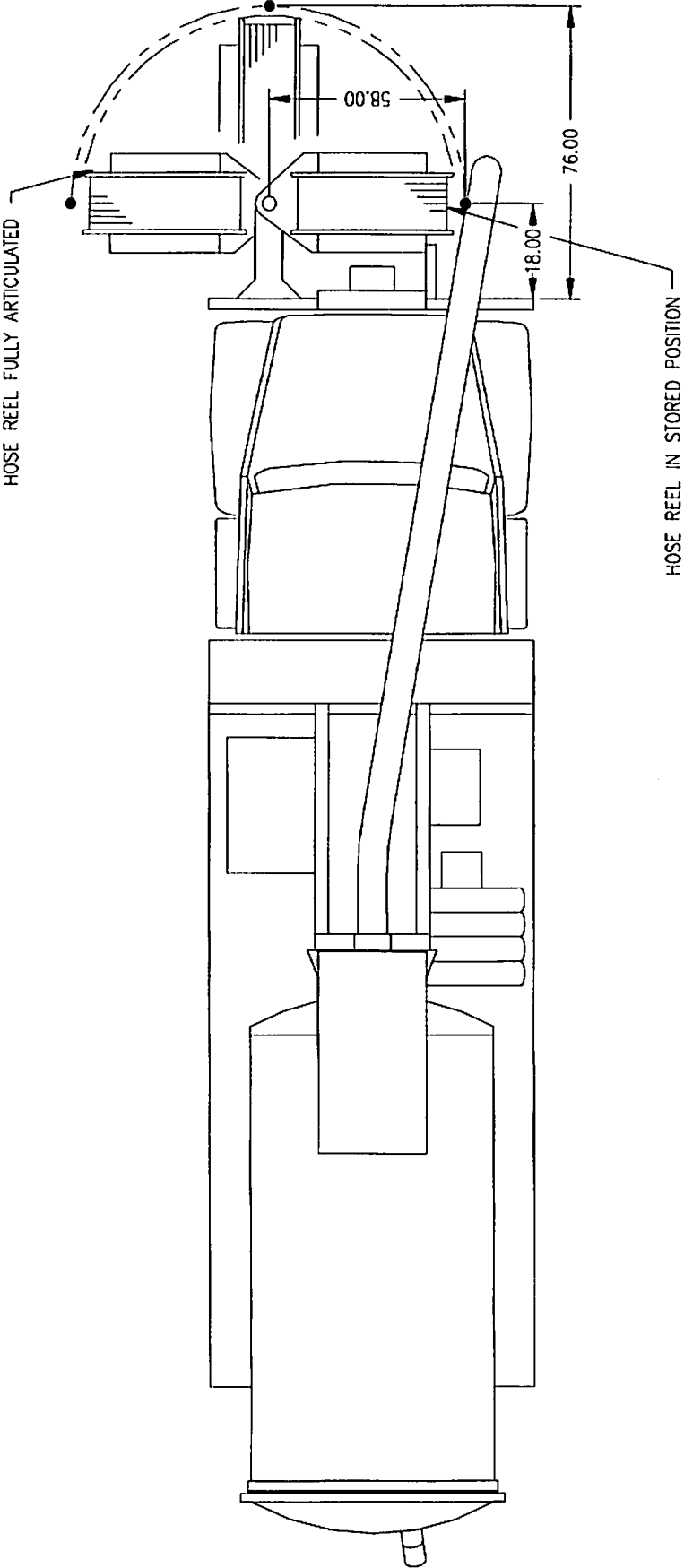
DATE	3-8-89	10'-0"	TELESCOPIC BOOM	70000-4895
POB	1000	LE	DIMENSIONS	
SCALE	1/8"=1'			
CDT	0.072-1			
VAL-CON TELESCOPIC BOOM SYSTEM, FLORIDA, USA				
VAL-CON TELESCOPIC BOOM SYSTEM, FLORIDA, USA				

G:\700\0532S.DWG: THU APR 26 11:52:41 2007



DRAWN POP	DATE 9-29-98	10'-0" TELESCOPIC BOOM DIMENSIONS	MC:	NEXT ASSEMBLY
SCALE 0.02=1	WEIGHT LB		<b>VAC-CON</b>	GREEN COVE SPRINGS, FLORIDA USA
			EFFECTIVE 10/1/11 VAC-CON SERIAL NUMBER	
			700B0532S	REV

LET	REVISION	DATE
A	SUPERSEDES A SIZE DWG DATED 5-25-89	2-16-94
B	ADDED DIMENSIONS	5-14-97



DRAWN POP	DATE 2-16-94	MC:	NEXT ASSEMBLY
SCALE 0.03=1	WEIGHT LB	<b>VAC-CON</b> GREEN COVE SPRINGS, FLORIDA USA EFFECTIVE WITH VAC-CON SERIAL NUMBER	
		700B0120S	REV B

## Freightliner SD Vocational Coverage



SD Vocational Coverage is not available for vehicles in these vocations:		Logging, Mining, Oil field
Category Determinants		
Road Surface- most severe in-transit between sites	<30% off-highway Rough, maintained concrete/asphalt; maintained gravel/crushed rock; maintained dirt or soft soil (Class C or D Roads)	
GCW	92,000 lb/41 730 kg or less	
Engines	Cummins ISB, ISC, or ISL engines only	
Axles and Their Manufacturer's GVW Rating		
2-axle unit	46,000 lb/20 865kg or less	
3-axle unit	66,000 lb/29 937kg or less	
4-axle unit	N/A	
5-axle unit	N/A	

<b>FTL SD Vocational Coverages</b>		
<b>Description</b>	<b>Time<sup>a</sup></b>	<b>Distance<sup>a</sup></b>
Basic Vehicle	2 Years	Unlimited
Battery	1 Year	100,000 mi/161 000 km
Brightwork	6 Months	Unlimited
Cab Corrosion/Perforation	5 Years	Unlimited
Cab Structure	5 Years	Unlimited
Corrosion	6 Months	Unlimited
Crossmembers	5 Years	Unlimited
Diesel Emission 2010 <sup>b</sup>	5 Years	100,000 mi/161 000 km
Drivetrain	2 Years	Unlimited
Frame Rails	5 Years	Unlimited
Paint	1 Year	100,000 mi/161 000 km
Paint, Chassis	6 Months	Unlimited

a. Time or distance, whichever comes first

b. Applies to vehicles equipped with EPA 2010 compliant diesel engines

# JOHN DEERE NEW OFF-HIGHWAY ENGINE WARRANTY



JOHN DEERE

## **Warranty Duration**

Unless otherwise provided in writing, John Deere\* makes the following warranty to the first retail purchaser and each subsequent purchaser (if purchase is made prior to expiration of applicable warranty) of each John Deere new off-highway engine marketed as part of a product manufactured by a company other than John Deere or its affiliates and on each John Deere engine used in an off-highway repower application:

- 12 months, unlimited hours of use, or
- 24 months and prior to the accumulation of 2000 hours of use

**Note:** In the absence of a functional hourmeter, hours of use will be determined on the basis of 12 hours of use per calendar day.

## **Warranty Coverage**

This warranty applies to the engine and to integral components and accessories sold by John Deere, and delivered to the first retail purchaser on or after 1 January 2007.

All John Deere-warranted parts and components of John Deere engines which, as delivered to the purchaser, are defective in materials and/or workmanship will be repaired or replaced, as John Deere elects, without charge for parts or engine repair labor, including reasonable costs of labor to remove and reinstall non-engine parts or components of the equipment in which the engine is installed, and, when required, reasonable costs of labor for engine removal and reinstallation, if such defect appears within the warranty period as measured from the date of delivery to the first retail purchaser.

## **Emissions Warranties**

Emissions warranties appear in the operation and maintenance instructions furnished with the engine/machine.

## **Obtaining Warranty Service**

Warranty service must be requested of the nearest authorized John Deere engine service outlet before the expiration of the warranty. An *authorized* service outlet is a John Deere engine distributor, a John Deere engine service dealer, or a John Deere equipment dealer selling and servicing equipment with an engine of the type covered by this warranty.

Authorized service outlets will use only new or remanufactured parts or components furnished or approved by John Deere.

Authorized service locations and the name of the John Deere division or subsidiary making this warranty are listed in the *Parts and Service Directory for John Deere Engines*.

At the time of requesting warranty service, the purchaser must be prepared to present evidence of the engine's delivery date.

John Deere reimburses authorized service outlets for limited travel expenses incurred in making warranty service repairs in non-John Deere applications when travel is actually performed. The limit, as of the date of publication of this statement, is US\$400.00 (US\$500.00 if engine is marine) or equivalent. If distances and travel times are greater than reimbursed by John Deere, the service outlet will charge the purchaser for the difference.

\* "John Deere" means John Deere Power Systems with respect to users in the United States, John Deere Limited with respect to users in Canada, and Deere & Company or its subsidiary responsible for marketing John Deere equipment in other countries where the user is located.



## **Purchaser's Responsibilities**

The cost of normal maintenance and depreciation.

Consequences of negligence, misuse, or accident involving the engine, or improper application, installation, or storage of the engine.

Consequences of service performed by someone other than a party authorized to perform warranty service, if such service, in John Deere's judgment, has adversely affected the performance or reliability of the engine.

Consequences of any modification or alteration of the engine not approved by John Deere, including, but not limited to, tampering with fuel and air delivery systems.

The effects of cooling system neglect as manifested in cylinder liner or block cavitation ("pitting", "erosion", "electrolysis").

Any premium for overtime labor requested by the purchaser.

Costs of transporting the engine or the equipment in which it is installed to and from the location at which the warranty service is performed, if such costs are in excess of the maximum amount payable to the service location were the warranty service performed at the engine's location.

Costs incurred in gaining access to the engine; i.e., overcoming physical barriers such as walls, fences, floors, decks or similar structures impeding access to the engine, rental of cranes or similar, or construction of ramps or lifts or protective structures for engine removal and reinstallation.

Incidental travel costs including tolls, meals, lodging, and similar.

Service outlet costs incurred in solving or attempting to solve non-warrantable problems.

Services performed by a party other than an authorized John Deere engine service dealer, unless required by law.

Charges by dealers for initial engine start-up and inspection, deemed unnecessary by John Deere when operation and maintenance instructions supplied with the engine are followed.

Costs of interpretation or translation services.

## **No Representations or Implied Warranty**

Where permitted by law, neither John Deere nor any company affiliated with it makes any guaranties, warranties, conditions, representations or promises, express or implied, oral or written, as to the nonoccurrence of any defect or the quality or performance of its engines other than those set forth herein, and DOES NOT MAKE ANY IMPLIED WARRANTY OR CONDITIONS OF MERCHANTABILITY OR FITNESS otherwise provided for in the Uniform Commercial Code or required by any Sale of Goods Act or any other statute. This exclusion includes fundamental terms. In no event will a John Deere engine distributor or engine service dealer, John Deere equipment dealer, John Deere or any company affiliated with John Deere be liable for incidental or consequential damages or injuries including, but not limited to, loss of profits, loss of crops, rental of substitute equipment or other commercial loss, damage to the equipment in which the engine is installed or for damage suffered by purchaser as a result of fundamental breaches of contract or breach of fundamental terms, unless such damages or injuries are caused by the gross negligence or intentional acts of the foregoing parties.

## **Remedy Limitation**

The remedies set forth in this warranty are the purchaser's exclusive remedies in connection with the performance of, or any breach of guaranty, condition, or warranty in respect of new John Deere engines. In the event the above warranty fails to correct purchaser's performance problems caused by defects in workmanship and/or materials, purchaser's exclusive remedy shall be limited to payment by John Deere of actual damages in an amount not to exceed the cost of the engine.

## **No Seller's Warranty**

No person or entity, other than John Deere, who sells the engine or product in which the engine has been installed makes any guaranty or warranty of its own on any engine warranted by John Deere unless it delivers to the purchaser a separate written guaranty certificate specifically guaranteeing the engine, in which case John Deere shall have no obligation to the purchaser. Neither original equipment manufacturers, engine or equipment distributors, engine or equipment dealers, nor any other person or entity, has any authority to make any representation or promise on behalf of John Deere or to modify the terms or limitations of this warranty in any way.

## **Additional Information**

For additional information concerning the John Deere New Off-Highway Engine Warranty, see booklet *Engine Owner's Warranty – Worldwide*.



## General Warranty

**Specific written warranty statement provided with each new truck shall take precedence over this or any other warranty statement.**

### **COVERAGE:**

VAC-CON, as seller, warrants Combination Sewer Cleaning, Xcavators, and Hot Shot equipment manufactured by it, bearing its name shall be free from defects in material, and workmanship, under normal use and service as determined by us, for a period of (12) twelve months from the date of delivery to the first retail purchaser.

VAC-CON, as seller, warrants all Industrial Vacuum Machine equipment manufactured by it, shall be free from defects in material and workmanship, under normal use and service as determined by us, for a period of (6) six months from the date of delivery to the first retail purchaser.

Should any equipment or part of such equipment sold hereunder prove to be defective in material or workmanship within said period, and be returned to Seller's factory no later than 15 days after the expiration date of the warranty, transportation charges prepaid by the Buyer, and upon examination be found to be defective, such part will be replaced at the factory by the Seller free of charge, but the Seller shall be under no further liability in respect to such warranty. It is expressly understood that the Seller's liability is limited to furnishing of such replacement parts within a reasonable length of time and that the Seller will not be liable for any damages, losses or expenses arising in connection with the use of or inability to use the unit(s), including but not limited to, injuries to persons or damage to property, loss of profits or anticipated profits, or loss of vehicle use. Buyer shall be responsible for the payment of duties or taxes on warranty parts, if applicable. The Seller shall be under no liability because of normal wear and tear of operation or maintenance contrary to the manufacturer's official Operator's Manual. The Buyer accepts any liability for damage or injury resulting from the removal or alteration of safety guards and safety precautions provided on the unit at the time of delivery. This warranty shall not apply and VAC-CON shall have no liability under it or otherwise if accident, careless handling, or improper applications shall have injured the unit or if any repairs have been made to the unit by other than VAC-CON, its agents or employees.

Warranties covering major components not of VAC-CON manufacture (power plants, hydraulics, trucks, vacuum compressors, transmissions, electrical components, batteries, tires, etc.) are warranted by their respective manufacturers. Fabricated rectangle poly water tanks are warranted by their manufacturer.

We give no warranty express or implied, as to description, quality, productiveness or any other matter and the Buyer hereby waives the right of refusal and return of the goods which is usually connected with non-warranty.

It is the sole responsibility of the purchaser to use this equipment in an appropriate application and a safe manner. VAC-CON assumes no responsibility or liability for its misuse.

### **FIVE (5) YEAR WARRANTY:**

VAC-CON warrants that the fan blades, auxiliary engine water pump drive components (excluding engine and pump) and debris tank shall be free from defects in material and workmanship, under normal use and service as determined by the manufacturer, for a period of sixty (60) months (not pro-rated) from the date the unit is first placed into service.



**TEN (10) YEAR WARRANTY:**

VAC-CON warrants that the freshwater tanks two hundred and eighty five (285) gallon capacity and less shall be free from defects in material and workmanship, under normal use and service as determined by the manufacturer, for a period of one hundred twenty (120) months (not pro-rated) from the date the unit is first placed into service.

**HOT SHOT WATER TANKS:**

One (1) YEAR WARRANTY: VAC-CON warrants that the fresh water tank shall be free from defects in material and workmanship, under normal use and service as determined by the manufacturer, for a period of twelve (12) months (not pro-rated) from the date the unit is first placed into service

**FABRICATED RECTANGLE WATER TANKS:**

These tanks are warranted by the original manufacturer of the tank to be free from defects in material and workmanship under a warranty administered by the original manufacturer of the tank.

This warranty is not transferable.

**WARRANTY REGISTRATION:**

Warranty must be registered with Vac Con upon delivery to the first retail purchaser in order to be in effect. Failure to do so will result in the original invoice date becoming the inception date of warranty coverage. Vac Con is not responsible or liable for loss of warranty coverage due to failure to register the warranty in a timely manner.

**SPECIFIC EXCLUSIONS:**

Normal and routine maintenance as specified in the specific manuals as indicated by the manufacturer's official Operator's Manual. Travel time, meals, lodging, transportation expenses, rental units, and work unrelated to a covered event. Certain parts are deemed consumable or expendable items. These parts are consumed with routine usage of the equipment and are not covered by equipment warranty. Excluded items include, but are not limited to: Nozzles, Nozzle skids, Sewer Cleaning Hoses, Ball Valves, Gate Valves, Knife Valves, Needle Valves, Hose Guides, Rotary Unions, Hand Guns, Unloader Valves, Water System Relief Valves, Hydrant Fill Hoses, Water Pump Packings, Water Pump Check Valves, all Belts, Vacuum Hoses, Boom Suction Elbows, Telescoping Boom Tubes, Suction Tubes, Catch Basin Tubes, Tube Clamps, Rear Door Wear Plate, Lay Flat drain hoses, All Bearings, All Seals and Gaskets, All Fluids, All Filters, Fuses, Electrical Switches, Electric bulbs and lenses.

**LIMITATIONS:**

Warranty claims must be filed within thirty (30) calendar days from date of repair. Claims submitted more than forty-five (45) days after date of repair, labor will not be considered. Claims submitted more than ninety (90) days after date of repair will not be considered.



License No. SV-2024-00143  
DPS Code: SDCF

2024-2026

Not Transferable  
Valid Only at Address Below

# Louisiana Motor Vehicle Commission

This Certifies that

Covington Sales & Service, Inc.  
7868 Florida Boulevard  
Denham Springs, LA 70726  
Chris Kinchen, Dealer-Operators

is duly licensed as a

Specialty Vehicle Dealer

of the following

Conversion(s): ARM Leaf Collectors, CUES, Duraco, Labrie Expert, Labrie Automizer, Leach Wittke, LeeBoy Brands, Palfinger Epsilon A-Frame, Palfinger Epsilon L-Boom, Palfinger Epsilon Z-Boom, NewWay, PB Loader, PipeHunter, Schwarze, VAC-CON

For the period ending May 31, 2026,

unless license is sooner revoked.

In Witness whereof, LOUISIANA MOTOR VEHICLE COMMISSION, under and by virtue of the authority vested in it by the laws of the State of Louisiana, has caused this license to be issued with its seal imprinted hereon.

LOUISIANA MOTOR VEHICLE COMMISSION

Dated July 25, 2024

Signed, Sealed and Attested

Issue Date: 07/25/2024



Executive Director

(To be prominently displayed in place of business)





**CORPORATE RESOLUTION**

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF  
COVINGTON SALES & SERVICE, INCORPORATED.


AT THE MEETING OF THE DIRECTORS OF COVINGTON SALES & SERVICE  
INCORPORATED, DULY NOTICED AND HELD ON JANUARY 24, 2013, A QUORUM  
BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED, IT WAS:

RESOLVED, THAT **CHRIS KINCEN**, PRESIDENT BE AND IS HEREBY APPOINTED,  
CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-FACT OF THE  
CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON BEHALF OF THIS  
CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS AND TRANSACTIONS  
WITH ANY OF ITS AGENCIES, DEPARTMENTS, EMPLOYEES OR AGENTS,  
INCLUDING BUT NOT LIMITED TO, THE EXECUTION OF ALL BIDS, PAPERS  
DOCUMENTS, AFFIDAVITS, BONDS, SURETIES, CONTRACTS AND ACTS, AND  
THEREFORE TO RECEIVE ALL PURCHASE ORDERS AND NOTICES ISSUED  
PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS  
CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING  
EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-  
FACT.

I HEREBY CERTIFY THE FOREGOING TO  
BE A TRUE AND CORRECT COPY OF AN  
EXCERPT OF THE MINUTES OF THE ABOVE  
DATED MEETING OF THE BOARD OF  
DIRECTORS OF SAID CORPORATION, AND  
THE SAME HAS NOT BEEN REVOKED OR  
RESCINDED.



KARLI ELROD  
SECRETARY - TREASURER



DATE