

VACALL™

All Excavate 35



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NON-COL HYDRO EXCAVATOR

SPECIFICATIONS

GENERAL SPECIFICATIONS

Silencer: Outlet silencer based on blower requirements

Electrical: 12 volt CAN bus system with sealed connectors

VACUUM SYSTEM

Blower: Howden-Roots 6x16 with two vacuum reliefs

Vacuum: 2,200 CFM @ 15" Hg (240"H2O)
70 HP @ 2,800 rpm

Blower Airflow: 2,446 CFM free air

Drive: Chelsea PTO on Transmission,
Fully Hydrostatic drive

Blower Inlet: Filter housing with 304 SS
screen assembly

Cyclone Separator: Single with drop box clean out

Vacuum Relief: Air operated 4" valve controlled
at control panel and handheld pendant

WATER SYSTEM

Pump Type: Hydraulically powered triplex plunger

Filter: In-line suction strainer on pump inlet

Water Pump: 0-10 gpm @ 3,000 psi
(37.8 LPM @ 206.8 BAR)

Excavating Hose Reel: Hannay spring rewind,
0.5" x 50' capacity, includes 50' of 0.5" high
pressure, high temperature hose

Standard Handgun, Lance, and Nozzle Kit:
(1) Handgun/lance assembly, (2) extension
lances with quick couplers, 50' handgun hose
with quick couplers on each end, 3,000 psi
hose shipped loose

Drain Valves: High pressure section, water
pump suction line, strainer on water pump
inlet, cut-off on water pump inlet line

Water Pressure Relief Valve: Adjustable

Air Purge System

Cold Weather Recirculation: TBD

DEBRIS TANK

Volumetric Capacity: 3.5 cubic yards, 776 gallons

Dump Angle: 50°

Construction: Round Steel Tank

Sides: .187" thick steel

Lifting: Hydraulic 2-stage telescopic cylinder

Debris Body Safety Prop: Dual prop manually
operated, located on hoist frame near cylinder

Tailgate: Heavy-duty rear 90° hydraulically
opening with dual positive hydraulic locks

Tailgate Safety Prop: TBD

Carbon Steel Float Ball Cage

Stainless Steel Float Ball Shut-Off

Carbon Steel Splash Shield

Float Level Indicator

Interior and Exterior Powder Coated

Sludge Pump Port

BOOM AND HOSE

Hose: 6" bore x 240" long, single piece rubber
hose, boom turret head to end connector

Hose Construction: Smooth bore Gumrubber liner

Hydraulic Boom: Rear mounted

Boom Rotation: 270°

HYDRAULIC SYSTEM

Hydraulic Pump: Pressure-compensated
piston pump with ORS fittings

Hydraulic Reservoir: 51 gal max

Return Filter: 5 microns

OPERATOR CONTROLS

AllSmartFlow Control Panel:

Enclosed cabinet control box containing:
CAN bus boom control joystick recessed for
protection. LCD color display with 32 output
microprocessor control (expandable), J1939
can communication, increase/decrease engine
RPM, tachometer, hour meter, water pressure
psi, vacuum Hg, water pump hour meter, blower
hour meter, vacuum gauge, low water light

Boom Control Joystick: Recessed for
protection

Throttle Control: Increase and decrease RPM

Water Pump: On, off, increase and decrease
pressure

Blower: On, off, increase and decrease vacuum

Vacuum Relief: Open and close

Electric Implement Controls: Debris tank
raise and lower, rear door open and close,
vibrator, and sludge pump

Emergency Stop

Electrical Controls and Wiring Harness:
Ip66 sealed exterior, protective cover exceeds
Nema 4 rating

Two Channel Camera System: 7" Swivel Color
LCD Monitor (Back Up)

POWER MODULE

Vacuum Pump: Hydrostatic drive

Hydraulic Level Sight Gauge

Hydraulic Reservoir Shut-Off Valve(s)

Hydraulic Pump: Dual Implement and
Water System

Tube Storage at Power Module

WATER TANKS

Volumetric Capacity: 500 gallons

Construction: Poly-Tank

Water Tank Fill: 4" air gap with water tank
electronic level indicator on control panel display
2-1/2" Y-Strainer on Fill Line

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SPECIFICATIONS (cont.)

CHASSIS	PAINT	PACKAGED ITEMS
Electric Back Up Alarm Factory Mounted Single Axle, Fenders Mud Flaps Behind Rear Tires Rear Dot Under Ride Protection (Bumper)	Supreme Finished Galvanized Debris Body Supreme Finished Galvanized Air Water Separator Supreme Finished Galvanized Tailgate Powder Coat: Subframe, power frame, exhaust silencer, debris tank exterior and interior, water tanks and air/water separator exterior only	TBD
LIGHTING		
LED D.O.T. Lighting: Stop, tail, turn and back-up LED Boom Work Lights		

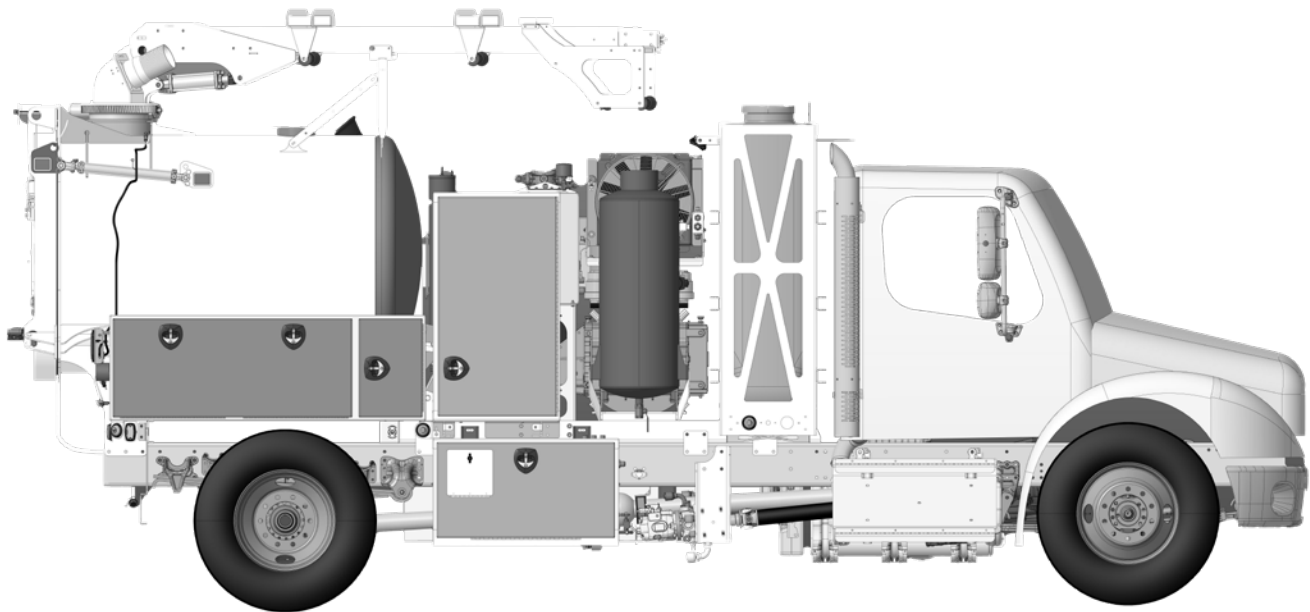
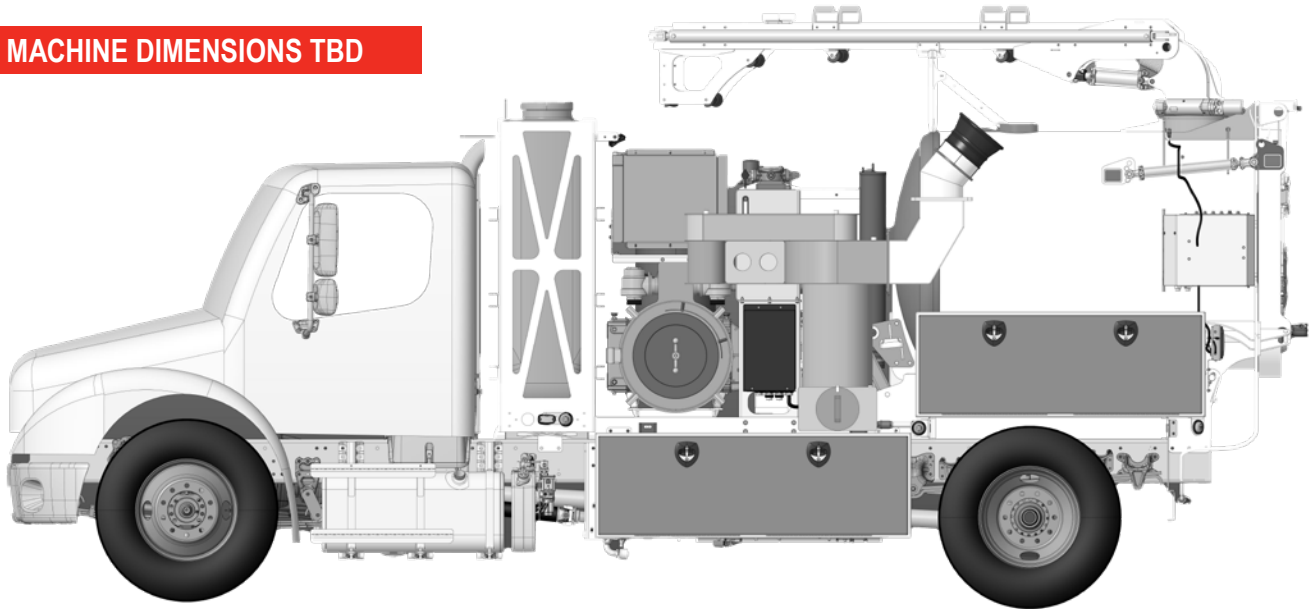
VACALL ALLEXCAVATE 35 CHASSIS REQUIREMENTS

Vehicle configuration <ul style="list-style-type: none"> Set forward axle - truck 	Transmission equipment <ul style="list-style-type: none"> PTO mounting, driver side and passenger side of main transmission
General service <ul style="list-style-type: none"> Expected front axle(s) load: 11,000 lb (max weight) Expected rear drive axle(s) load: 21,000 lb (max weight) Expected gross vehicle weight capacity: 26,000.0 lb (max weight) Domiciled, USA 50 states (including California and carb opt-in states) 	Rear suspension <ul style="list-style-type: none"> Hendrickson RT463 @ 46,000 lb rear suspension 54" axle spacing
Engine <ul style="list-style-type: none"> Cummins 6.7 325 hp @ 2400 rpm, 2600 gov rpm, 750 lb-ft @ 1800 rpm 	Brake system <ul style="list-style-type: none"> Air dryer reservoir mounted (no sideout frame mount)
Engine equipment <ul style="list-style-type: none"> 2010 EPA/GHG 2024/CARB 2024 configuration (dependent on registration state) 12 volt, 160 amp alternator Passenger side outboard under step mounted horizontal after-treatment system assembly with passenger side b-pillar mounted vertical tailpipe 6 gal diesel exhaust fluid tank (mounted behind fuel tank) 	Wheelbase & frame <ul style="list-style-type: none"> Frame overhang: 65"+ (1.65 m) Calculated effective back of cab to rear suspension c/l (ca): 195.03" (Usable ca 195" minimum)
Transmission <ul style="list-style-type: none"> Allison 3000 RDS automatic transmission with side/side PTO provision (minimum) 	Chassis equipment <ul style="list-style-type: none"> Clear frame rails 36" from back of cab inside/outboard/below both frame rails
	Fuel tanks <ul style="list-style-type: none"> 100 gal / 25" diameter fuel tank(s)

VEHICLE SPECIFICATIONS SUMMARY – FRAME RBM

Wheelbase (545).....	192" (4,8750 mm)
Frame Rails (546)	0.281" x 3.062" x 10.062" (7.14 mm x 77.78.5 mm x 255.6 mm) steel
80KSI (546)	
Yield Strength (psi).....	80,000
Section Modulus (per rail) (cu in).....	12.331
RBM (per rail) (lbf-in)	976,000
Inner Frame Reinforcement (547)	No inner frame reinforcement
Outer Frame Reinforcement (548)	No outer frame reinforcement

MACHINE DIMENSIONS TBD



DIMENSIONS - TBD

A	Overall Stored Height	AB	Boom Max Working Height Extended
A1	Module Stored Height	AC	Hose Max Height Extended
A2	Chassis Frame Height	AD	Boom Working Height Retracted
B	Overall Length	AE	Hose Height Retracted
C	Module Length Front	AF	Boom Min Height Extended
C1	Wheelbase	AG	Hose Min Height Extended
C2	Module Length Rear	AH	Boom Min Height Retracted
E	Overall Width	AI	Hose Min Height Retracted
F	Boom Max Reach	AQ	Boom Max Up Angle
F1	Boom Min Reach	AZ	Boom Total Angle
F2	Boom Rotation	AX	Boom Mad Down Angle

NOTE: All dimensions shown are applicable to Freightliner M2-106 Chassis only.
* Rear Tandem Axle Required.

OPTIONS

Belly Pack Wireless Pendant: Controls all boom functions, engine RPM, vacuum relief, emergency stop, and water pump speed. Other Functions Also Available.

Handheld Wireless Remote

Sludge Pump

Full Load Indicator

Electric Debris Body Vibrator

Anti-Siphon Fill

Work Lights

Strobe Lights

Toolboxes

Vacuum Tube Racks

Camlock Fill Adapter

SS Float Ball Cage

SS Hinged Decant Screens

Standpipes - Various sizes

Anti-Splash Valve

Air Compressor

1" Drain Valve on Air Water Separator

1" Drain Valve on Silencer

4" Air Operated Vacuum Relief

Lube Chart

Blower Temp Gauge

**Blower Temp Gauge Connection to
Vac Relief**

Can/USB Cable

Debris Tank High Level Alarms and Light

**Debris Tank High Level Alarms and Light
Hooked to Vac Relief**

Camera System

Power Pack with Emergency Hydraulics

Remote Emergency Stop

Low Water Light and Alarm

Override for Alarms

Spotlights

First Aid Kit

Nozzles

Handguns Pistol and Straight Grip

**Vacuum Tubes Various Sizes and
Connection Ends**



AIR EXCAVATION SYSTEM (ALLEXCAVATE 2 OPTION)



Air hose Reel: Spring Rewind, 75' of 1" Air Hose

Air Compressor: Low Pressure Mode: Up To 110 psi at 185 CFM

High Pressure Mode: Up To 150 psi at 150 CFM



COLD WEATHER PACKAGE OPTION

Boiler: Diesel fired 470,000 Btu

Cabinet Heater

External Waterlines: Insulated with heat trace

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