

Operating Weight	
447L	101,500 lbs
447HDR	111,000 lbs

Structural	
Manufacturer	Exodus
General Description	Purpose built for heavy material handling and designed to hold up under extreme conditions
Steel type	High strength/low allow steel
Pins and bushings	Oversized (when compared to SAE standards), nuts on all pins with side-load
Main & Secondary Booms	Single piece top, bottom and side plates, chamfered continuous welds, below-boom cylinder pinning points

Engine	
Manufacturer	John Deere
General Description	9.0L 6 cylinder Tier III emissions 275 hp @ 2000rpm (300 hp @ 1800rpm)
Cooling System	Oversized system (rated for 350hp) with dedicated engine air tunnel and side by side engine radiator & charge cooler with variable pitch auto reversing fan.
Air Filter	Pre-cleaner plus two-stage filter
Fuel Capacity	110 Gallons

Hydraulic system	
Controls	Electro/hydraulic pilot control
Control Valves	VOAC load-sense with post compensation (allows oil share) and pre-compensation (allows lower pressure functions to operate without going over relief).
Main pumps	Two Bosch Rexroth 75gpm tied together to supply 150gpm to main functions at 4800psi.
Swing	Closed loop system with regenerative hydraulic braking. 41gpm Bosch Rexroth pump at 5000psi with large capacity direct drive swing motor. 52" ring gear. 10gpm kidney filtration loop with 2 micron filter.
Other pumps	Tandem vane pump with 10gpm ring and 6gpm ring - one for hydraulic cooling fan and one for cab lift. 26gpm piston pump for the generator (when equipped).
Cylinders	Induction hardened, chrome plated, with electronic stops. Load holding valves on cylinders for main and secondary booms.
Tank	135 gallons, 20% expansion. Fill only through 5 micron return filter with either quick connect for power fill or hand pump (equipped). Shut off valves on all pump suction lines.
Filters	Parker & Donaldson filters - Two main return filters are 5 micron absolute and are integrated with tank. 2-micron kidney loop filter running at 10gpm. Three 10-micron case drain filters for main pumps, swing motor, fan motor, generator motor and drive motors.
Cooling	Variable speed auto reversing fan. Dedicated cooling tunnel. Normal operating range is a low 140 - 160 degrees. Auto-cooling circuit turns on when machine is at idle (when necessary).
Warm-up	Optional warm-up button runs engine at 1100 rpm and operates hydraulic warm-up circuit until hydraulic fluid reaches 60 degrees at which point it returns to idle.

Electrical System	
Wiring	Circuit breakers (no fuses). Deutsch plugs. Color coded plus each wire's specific function is written on the wire casing. Three steel sealed enclosures with easy access 1)lower 2)upper main 3)cab.
Voltage	24 V
Batteries	Two 12 V
Lighting	Three lights are mounted to lower side of cab including two flood and one spot light. Three service lights in the engine and hydraulic compartments. Option for two halogen lights mounted to the secondary boom.

Undercarriage	
Drive	Four independent wheel drives with Fairfield planetary gear boxes. All components are protected inside the box of the lower structure. True 4WD limited slip hydraulic differential but with no tire scrub around corners.
Steering	Joystick steering. Components are protected inside the box of the lower structure.
Turning Radius	21' inside
Rear Axle	Oscillating with lock-out feature
Travel Speed	Two mode system features creeper mode which is set at 3mph but is adjustable on the fly, and standard mode which has a max speed of 7.5mph
Braking	Four wheel independent hydraulic brakes plus park brake. Stopping distance from 7.5mph to zero is 9 feet
Outriggers	One button operation for all outriggers plus 4 buttons for single control. Shielded cylinders with load-holding valves.
Tires & Wheels	59.5" outside diameter x 23.5" wide. Flexible durometer Goodyear solid rubber. Wheel/tire rebuild program.

Auto - Lube	
	Full machine auto-lube covers all lube points except the outriggers. Sends grease based on frequency of movement. Blockage and low reservoir notification are built in. Most points have a manual grease zerk as well. Estimated to run about 240 hours between fills.

Operator Cab	
Construction	Chromoly structure with double walled insulated shell mounted on viscous dampeners. Heavy-duty lift system with roller bearings at all load bearing points to eliminate side-to-side movement.
Heat & Air Conditioning	High capacity heat and AC units including a high output 10 speed fan. Automatic controls.
Seat	Premium seat with air suspension. Adjustable joystick/armrest position, seat height, recline, fore/aft.
Convenience	Two 12 VDC outlets, cup holder, storage compartments.
Glass	Two-ply glass with polycarbonate between. Puncture resistant safety glass.
Lift range	From ground level to 18' - 8" at eye level.
Safety	Fire extinguisher, safety belt, automatic boom & stick slow-down when in 9' range of the cab. Load holding valves on cylinders. Manual lowering valve in cab.
Audio	AM/FM/CD/MP3 audio system

IQAN	
Communication	Connect to the factory through the modem. All reminders and notification can be sent via text message. Programmed for Exodus by Exodus engineers. Easy to navigate.
Maintenance	Fuel filter, air filters and all hydraulic filters have sensors to determine when they need to be replaced. Fluid change reminders are based on time intervals.
Diagnostics	Monitor hydraulic pump pressures, valve positions, and fluid temperatures as well as electronic inputs and outputs. Engine diagnostics including fault codes and hydraulic pressure spikes are tracked. All in plain english and all standard on every machine. All through on-board system or through the modem to the factory/dealer.
Remote Machine Monitor	Send a text message to the machine to check things like fuel level, hydraulic temp, engine temp, loads, loads per hour and next service intervals.
Adjustability	Joystick controls and machine function speeds can easily be taylored to the operator's preferences.