

## ENGINE

Make/Model/Fuel Type	Cummins/QSB5.9/Diesel
Type	4-cycle, watercooled, in-line direct injection type with turbo charger and air-cooled intercooler
Net flywheel horsepower	168 HP/2400 RPM
Max Torque	525 lb/ft. @ 1300 RPM
Number of cylinders	6
Bore and stroke	4.02" x 4.72" (102mm x 120mm)
Total displacement	359 in <sup>3</sup> (5890 cm <sup>3</sup> )
Alternator	AC24V-1.68kw (70amp)
Starting motor	24V-7.5kw (10.1 HP)
Battery	12V-150AH, 2 units
Governor	All-speed, electrical type

## TORQUE CONVERTER AND TRANSMISSION

Torque converter	3 elements, single stage	
Torque stall ratio	3.03:1	
Main clutches	Wet hydraulic, multi-disc type	
Cooling method	Forced circulation type	
Transmission	Full power shift, 4 forward, 4 reverse with automatic mode (2nd - 4th) with downshift switch for 2nd - 1st downshifting	
Speeds	Forward	1st: 4.5 MPH (7.2 km/hr) 2nd: 7.5 MPH (12.0 km/hr) 3rd: 12.6 MPH (20.3 km/hr) 4th: 23.6 MPH (37.8 km/hr)
	Reverse	1st: 4.5 MPH (7.2 km/hr) 2nd: 7.5 MPH (12.0 km/hr) 3rd: 12.6 MPH (20.2 km/hr) 4th: 23.5 MPH (37.8 km/hr)

## SYSTEMS CAPACITY

LOCATION	Gallons	Liters
Engine (coolant)	11.9	(45.0)
Fuel tank (diesel fuel)	75.3	(285.0)
Engine (oil pan)	3.7	(14.0)
Front axle (gear oil)	13.2	(50.0)
Rear axle (gear oil)	13.7	(52.0)
Torque converter and transmission (engine oil)	7.9	(30.0)
Hydraulic system including tank (hydraulic oil)	44.9	(170.0)

## HYDRAULIC AND STEERING SYSTEM

Steering type	Articulated frame steering	
Steering mechanism	Hydraulic power steering unit, pilot operated type	
Lift (boom) cylinder	Two (2) double-acting piston type: 5.5" x 29.7" (140mm x 754mm)	
Tilt (bucket) cylinder	One (1) double-acting piston type: 6.3" x 20.1" (160mm x 511mm)	
Steering cylinder	Two (2) double-acting piston type: 3.1" x 15.0" (80mm x 380mm)	
Main oil pump	Gear type: 17.7 GPM @ 2400 RPM (67 LPM @ 2400 RPM)	
Steering oil pump	Gear type: 43.1 GPM @ 2400 RPM (163 LPM @ 2400 RPM)	
Pilot oil pump	Gear type: 17.7 GPM @ 2400 RPM (67 LPM @ 2400 RPM)	
Relief valve set pressure	Loading	3000 psi (210 kg/cm <sup>2</sup> )
	Steering	3000 psi (210 kg/cm <sup>2</sup> )
HYDRAULIC CYCLE TIME*		
Lifting time (at full load)	6.2 sec.	
Lowering time (empty)	3.1 sec.	
Bucket dumping time	1.2 sec.	
TOTAL	10.5 sec.	

\* Measured in accordance with SAE J732C

## AXLE SYSTEM

Drive system	4-wheel drive	
Front and rear axle	Full floating banjo type	
Tires	Standard	20.5 x 25-12PR (L-2)
	Optional	20.5 x 25-12PR (L-3) 23.5 x 25-12PR (L-2) (L-3) 650/65R25 Low Profile
Reduction and differential gear	Spiral bevel/gear, 1 stage reduction torque, proportioning type	
Final reduction gear	Outboard mounted. Internal planetary gear	
Oscillation angle	±12° (total 24°)	

## BRAKE SYSTEM

Service brakes	4 wheel, adjustment free, wet multiple disc brake. Controlled by full hydraulic system. Dual circuit.	
Parking/Emergency brake	Spring applied oil pressure released type. Meets MSHA requirements.	