

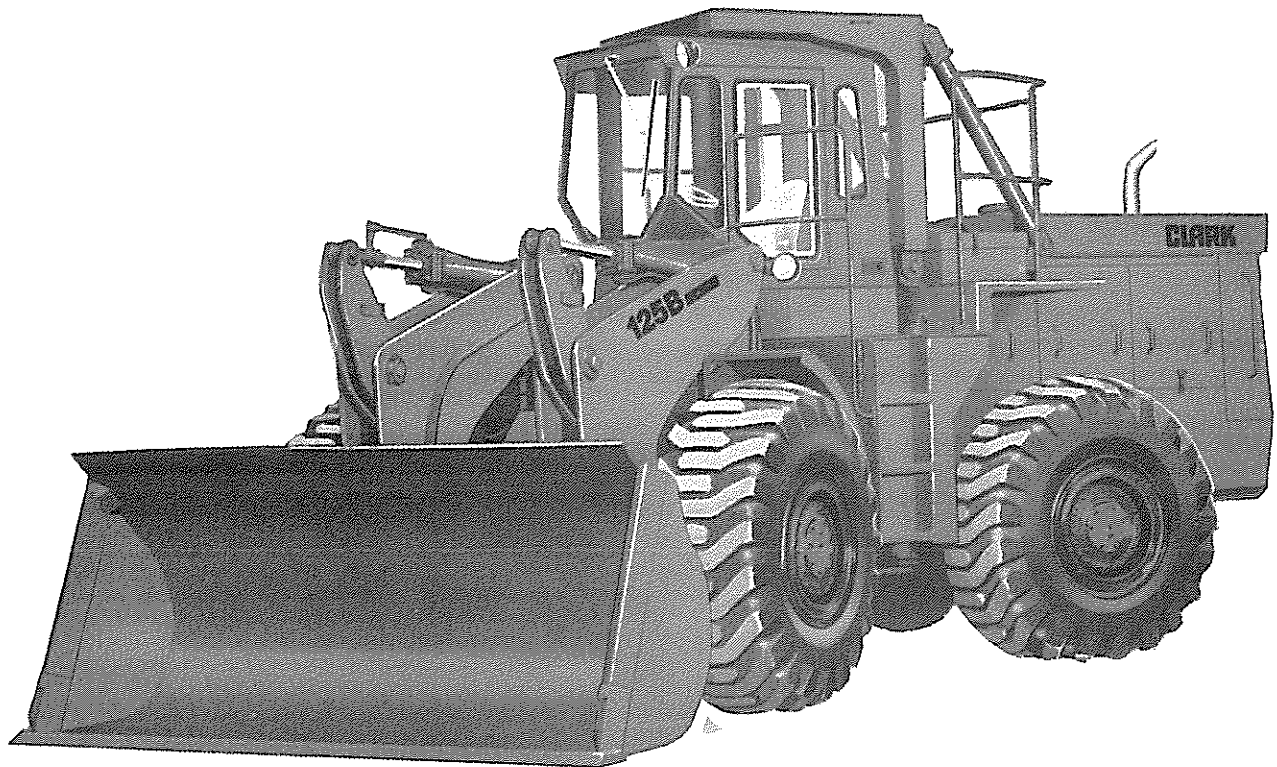
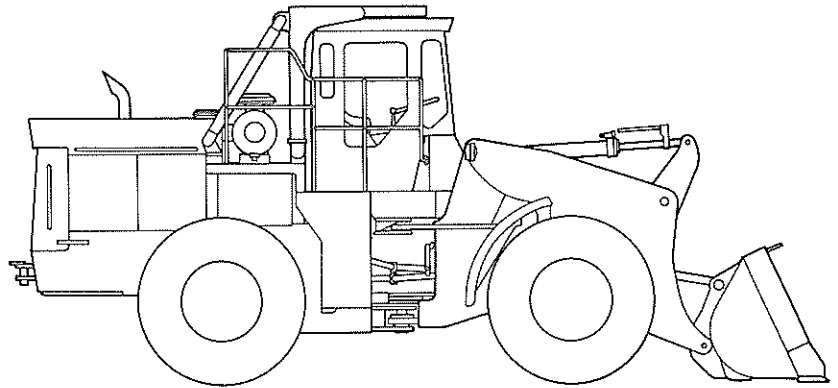
CLARK

125B

MICHIGAN

TRACTOR SHOVEL

- Complete powertrain designed and manufactured by Clark
- Large capacity hydraulic system... dual filtration
- Sealed bucket and boom pins
- Buckets available from 3½ to 6 cu. yd. (2,7 to 4,6 m³)
- GM 6V-71N65 engine with 212 flywheel horsepower (158 kW) or Cummins VT-555-C with 210 flywheel horsepower (157 kW)
- Disc brakes on all wheels... manually or automatically applied emergency brake



ENGINE

Make	GM	Cummins
Model	6V-71N65	VT-555-C
*Maximum h.p. (kW)	236 (176)	222 (166)
**Flywheel h.p. (kW)	212 (158)	210 (157)
Governed RPM	2300	2850
Maximum torque, ft. lbs.	600 @ 1600	445 @ 1900
(N•m)	(813 @ 1600)	(603 @ 1900)
Bore and stroke, in.	4.25 x 5.00	4.62 x 4.13
(mm)	(108 x 127)	(117 x 95)
Number of cylinders	6	8
Displacement, cubic in.	425.6	555
(litres)	(6.98)	(9.10)
Electrical system (alternator) ...	24 V, 30 A	24 V, 30 A

*Maximum horsepower based on SAE J816 barometric pressure of 29.38 in. hg. (74.62 cm hg) and ambient temperature of 85°F (29.4°C) at maximum engine speed with fuel pump, water pump, and lubricating oil pump.

**Net usable horsepower at engine flywheel under SAE J816 with standard engine fan, alternator, fuel pump, water pump, lubricating oil pump, air compressor and air cleaner.

POWER TRAIN

TORQUE CONVERTER: Clark high-efficiency single-stage industrial type: 3.09:1 torque multiplication ratio with GM engine, 2.91:1 with Cummins.

TRANSMISSION: Clark countershaft type powershift, with four speeds forward, four speeds reverse. Travel speeds, MPH (km/h):*

CUMMINS				GM			
1st	2nd	3rd	4th	1st	2nd	3rd	4th
3.5	6.5	10.8	18.4	3.2	6.0	10.3	17.8
(5,6)	(10,5)	(17,4)	(29,6)	(5,1)	(9,7)	(16,6)	(28,6)

*Measured with 23.5-25, 16 PR (L-3) tires.

DIFFERENTIAL: Clark limited slip front and rear.

AXLES: Heavy-duty Clark planetary design with single-piece cast steel housing. Front axle fixed, rear axle oscillates a total of 24°. Vertical wheel travel of 15.0" (381 mm) with all wheels remaining on ground.

PLANETARY DRIVES: Clark low-friction, roller bearing planetary in each wheel. Planetary units can be removed without removing wheels and brakes.

TIRES

Tubeless, nylon body, loader/dozer type 23.5-25, 16 PR (L-3)

Other tires available: 23.5-25, 12 PR (L-3)
23.5-25, 16 PR (L-4)
23.5-25, 20 PR (L-5)
26.5-25, 14 PR (L-2)

STEERING SYSTEM

Articulated frame; full hydraulic power steering with mechanical follow-up.

ANGLE OF STEER: Each direction 35°; total 70°.

PUMP: Gear-type design, torque converter mounted; high volume at low engine RPM assures fast response, safe steering. Total pump output is 74 GPM (280 litres/min).

RELIEF PRESSURE: 1600 PSI (11032 kPa).

CYLINDERS: Two double-acting with chrome plated piston rods. Bore and stroke — 3.5 x 20.3 in. (88,9 x 515,6 mm).

BRAKES (SAE J1152)

SERVICE: Four wheel air-over-hydraulic self-adjusting caliper with 18 in. (457,2 mm) diameter discs. Application of left pedal also neutralizes transmission in Forward only.

EMERGENCY: Axle-by-axle system. Automatically actuated by low air pressure or manually applied through dash-mounted control; audible and visual alarm.

PARKING: Mechanical on front transmission output shaft; 10" x 3" (254,0 x 76,2 mm) shoe.

HYDRAULIC SYSTEM

Closed and pressurized with a capacity of 87 U.S. gals. (330 litres); oil supplied from sturdy plate steel reservoir. Hand hole in tank for easy cleaning; in-tank magnet provides extra protection.

BOOM CONTROLS: Valve has four positions: raise, hold, lower, float. Automatic kickout adjustable for any position between maximum boom reach and full lift height.

BUCKET CONTROLS: Valve has three positions: rollback, hold, dump. Automatic bucket positioner adjustable to any desired loading angle.

PUMP: Tandem gear-type design, torque converter mounted. Total pump output is 73 GPM (276,3 litres/min) — large section rated 66 GPM (249,8 litres/min) @ 2100 RPM and 2250 PSI (15513 kPa) and small section rated 7 GPM (26,5 litres/min) @ 2100 RPM and 750 PSI (5171 kPa).

VALVE: Built-in pressure relief valve and controlled power assist actuator for low lever efforts. Mounted on front frame for easy access.

RELIEF PRESSURE: 2250 PSI (15513 kPa).

CYLINDERS: Two boom and two bucket, all double-acting. Boom, bore & stroke — 6.00" x 39.3" (152,4 x 998,0 mm). Bucket, bore & stroke — 4.50" x 24.7" (114,3 x 627,4 mm).

FILTERS: Two full-flow 140 micron suction filters and two full-flow 15 micron return filters in reservoir.

HYDRAULIC SPEEDS

	GM	CUMMINS
Raising time (with load)	7.2 s	6.4 s
Lowering time (empty)	3.6 s	3.1 s
Dumping time (with load)	1.2 s	1.0 s
Total cycle	12.0 s	10.5 s

SERVICE CAPACITIES

	U.S. Gal.	(litres)
Cooling system, GM	18.0	(68,1)
Cummins	15.0	(56,8)
Crankcase	7.0	(26,5)
Torque converter & transmission	8.0	(30,3)
Front & rear axle differential (each)	9.0	(34,1)
Front & rear wheel hubs (each)	1.5	(5,6)
Fuel tank	75.0	(283,9)
Hydraulic reservoir	76.0	(287,7)

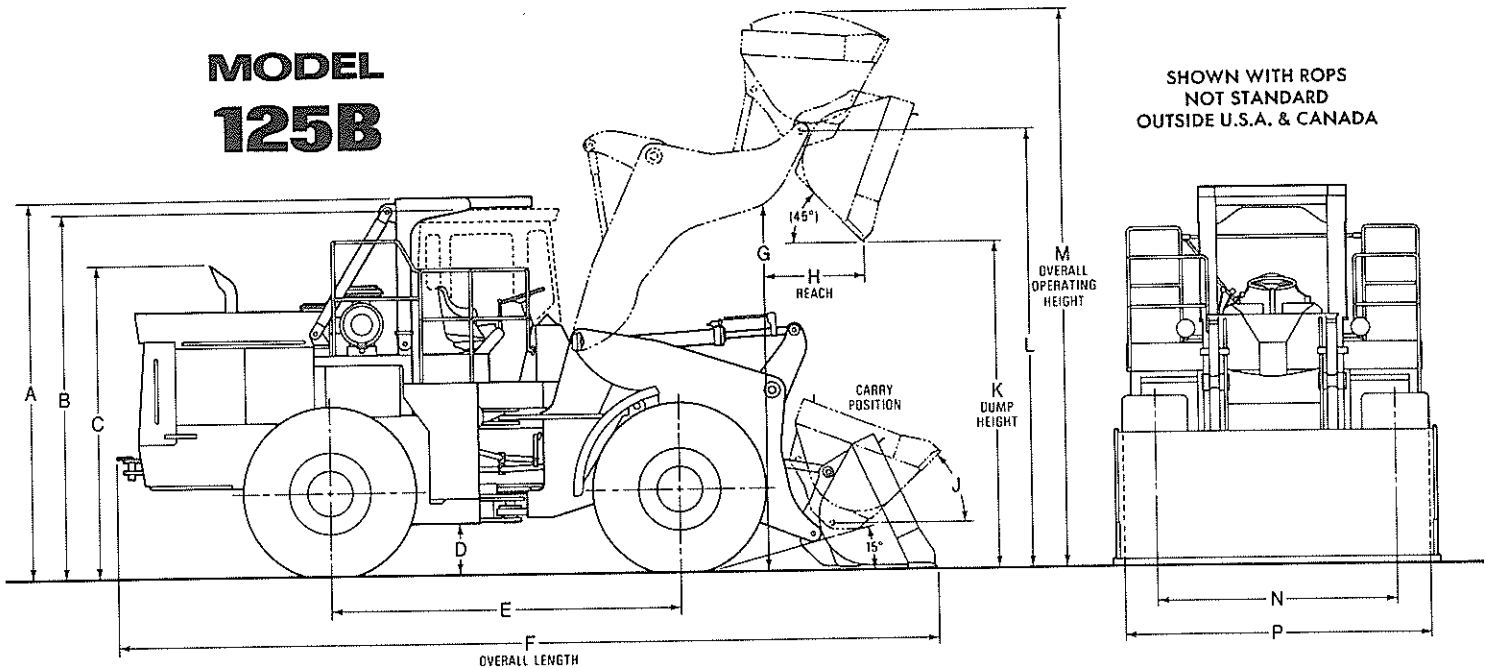
STANDARD EQUIPMENT

Ladder & Handrails (SAE J185); Reverse Warning Alarm* (SAE J994); ROPS Canopy* (SAE J1040); Seat Belt* (SAE J386); Boom Kickout*; Bucket Positioner; Bucket Seat, adjustable; Caps, lockable (fuel, hydraulic, radiator, transmission); Covers, Instrument Panel, lockable; Drawbar; Fenders; Horn; Lights, work (2 front, 2 rear); Lights, Tail/Stop; Panels, Engine Compartment; Service Platforms, rear; Storage Compartments, lockable.

*Optional outside U.S.A. and Canada.

INSTRUMENTS: Gauges for air pressure, engine temperature, oil pressure, torque converter temperature, hourmeter, voltmeter. Warning lights and audible warning for air pressure, brake oil pressure, parking brake.

FILTERS: Engine oil, fuel, air (dual-element dry-type); hydraulic oil (suction and return); torque converter/transmission.



MACHINE DIMENSIONS*

Tire Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P
23.5-25 — L-3 (mm)	11' 6"	11' 4.5"	9' 7"	1' 4"	10' 8"	**	11' 1"	**	45°	**	13' 4"	**	7' 4"	9' 5"
	(3505)	(3467)	(2921)	(406)	(3251)		(3378)				(4064)		(2235)	(2870)
23.5-25 — L-4 (mm)	11' 7.5"	11' 6"	9' 8.5"	1' 5.5"	10' 8"	**	11' 2.5"	**	45°	**	13' 5.5"	**	7' 4"	9' 6"
	(3543)	(3505)	(2599)	(445)	(3251)		(3416)				(4102)		(2235)	(2896)
23.5-25 — L-5 (mm)	11' 8"	11' 6.5"	9' 9"	1' 6"	10' 8"	**	11' 3"	**	45°	**	13' 6"	**	7' 4"	9' 6"
	(3556)	(3518)	(2972)	(457)	(3251)		(3429)				(4115)		(2235)	(2896)
26.5-25 — L-2 (mm)	11' 8"	11' 6.5"	9' 9"	1' 6"	10' 8"	**	11' 3"	**	45°	**	13' 6"	**	7' 4"	9' 7.5"
	(3556)	(3518)	(2972)	(457)	(3251)		(3429)				(4115)		(2235)	(2934)

*Per SAE J732 and J742. **See Operating Data.

OPTIONAL EQUIPMENT

and approximate installed weights

	lbs	(kg)		lbs	(kg)
Acoustical Kit, Cockpit (with floor mat)	70	(31,8)	Cab (non-ROPS) (includes air filter, pressurizer, heater, front & rear wipers, front washer and acoustical lining)	750	(340,2)
Air Conditioner	150	(68,0)	Cab Headlights (2)	10	(4,5)
Air Dryer, Brake System	20	(9,1)	Counterweight (in lieu of hydroinflation)	1450	(657,7)
Alternator, 50 amp.	50	(22,7)	Counterweight	1500	(680,4)
Auxiliary Steering Kit (electric)	100	(45,4)	Rearview Mirrors (2)	10	(4,5)
Belly Guard, Front	600	(272,2)	Suspension Seat	100	(45,4)
Belly Guard, Rear	350	(158,8)	3-Spool Valve, Piping & Controls	250	(113,4)
Bucket Spillguard	170	(77,1)			
Bucket Teeth (8)	200	(90,7)			

Data presented here conforms to applicable standards recommended by the Society of Automotive Engineers; SAE loader ratings — as governed by standard J732 and J742 — are denoted in the text by△

OPERATING DATA (with 23.5-25 tires)

Bucket Type	Spade Nose Rock	General Purpose	General Purpose	Light Material	Coal
Capacity, Rated (heaped), cu. yd. (m³)△	3.5 (2,67)	3.5 (2,67)	4 (3,06)	5 (3,82)	6 (4,59)
Rated (struck), cu. yd. (m³)△	2.91 (2,22)	2.89 (2,21)	3.39 (2,60)	4.20 (3,21)	5.09 (3,89)
Cutting Edge Width, (mm)△	120" (3048)	120" (3048)	120" (3048)	120" (3048)	143.5" (3645)
Dump Height @ Full Lift and 45° Discharge Angle* (mm) ...△	9' 6.6" (2911)	9' 11.5" (3035)	9' 9.7" (2990)	9' 5" (2870)	9' 5" (2870)
Reach @ Full Lift and 45° Discharge* (mm)△	3' 6.5" (1079)	3' 1.5" (953)	3' 3" (991)	3' 8" (1118)	3' 8" (1118)
Reach @ 45° Discharge Angle and 7' (2130 mm) Height* (mm) △	5' 3" (1600)	4' 10" (1473)	5' 3" (1600)	5' 4" (1626)	5' 4" (1626)
Overall Length (mm)△	25' 4.5" (7734)	24' 9" (7544)	25' 0" (7620)	25' 6.5" (7785)	25' 6.5" (7785)
Overall Operating Height* (mm)△	17' 0.5" (5194)	17' 0.5" (5194)	17' 5.8" (5329)	18' 1.5" (5524)	18' 1.5" (5524)
Clearance Circle (bucket in carry position) (m)△	45' 9" (13,95)	45' 9" (13,95)	45' 10" (13,97)	46' 0" (14,02)	46' 0" (14,02)
Breakout Force, lbs. (N)△	25,700 (114319)	30,100 (133891)	28,400 (126329)	24,700 (109871)	24,400 (108537)
Static Tipping Load, Straight lbs. (kg)△	29,000 (13154)	29,050 (13177)	28,600 (12973)	28,150 (12769)	27,570 (12506)
Full (35°) Turn lbs. (kg)△	26,370 (11961)	26,420 (11984)	26,010 (11798)	25,590 (11608)	24,120 (10941)
Operating Weight** lbs. (kg) Total△	41,100 (18643)	41,050 (18620)	41,190 (18684)	41,350 (18756)	41,930 (19019)

*Changes with tires other than 23.5-25 (L-2 or L-3); add (or subtract) as applicable:

	VERTICAL	HORIZONTAL
23.5-25 (L-4)	+1.7" (43,2 mm)	-1.1" (-27,9 mm)
23.5-25 (L-5)	+2.1" (53,3 mm)	-1.3" (-33,0 mm)
26.5-25 (L-2)	+2.2" (55,9 mm)	-2.5" (-63,5 mm)

**Approximate weight; includes bucket shown, ROPS canopy and 2240 lbs. (1016 kg) rear tire hydroinflation; a change in tire size or the addition of either optional equipment or attachments will affect both operating weight and tipping loads. These changes are shown below for certain selected items.

	CHANGE IN OPERATING WEIGHT		CHANGE IN FULL TURN STATIC TIPPING LOAD	
	lbs.	(kg)	lbs.	(kg)
23.5-25, 12 PR (L-3)	-2360	(-1070)	-3150	(-1429)
23.5-25, 16 PR (L-3)	-2240	(-1016)	-3070	(-1393)
23.5-25, 16 PR (L-4)	-1360	(-617)	-2470	(-1120)
23.5-25, 20 PR (L-5)	100	(45)	70	(32)
26.5-25, 14 PR (L-2)	-1710	(-776)	-2760	(-1252)
23.5-25, 12 PR (L-3) with 75% rear tire Ca Cl ₂ hydroinflation by volume	-120	(-54)	-80	(-36)
23.5-25, 16 PR (L-3) with 75% rear tire Ca Cl ₂ hydroinflation by volume	0	(0)	0	(0)
23.5-25, 16 PR (L-4) with 75% rear tire Ca Cl ₂ hydroinflation by volume	880	(399)	600	(272)
23.5-25, 20 PR (L-5) with 75% rear tire Ca Cl ₂ hydroinflation by volume	2340	(1061)	1600	(726)
26.5-25, 14 PR (L-2) with 75% rear tire Ca Cl ₂ hydroinflation by volume	1190	(540)	1210	(549)
Bucket Spillguard	170	(77)	-120	(-54)
Bucket Teeth (8)	200	(91)	-230	(-104)
Counterweight (in lieu of hydroinflation)	-790	(-358)	0	(0)
Optional Counterweight	1500	(680)	2830	(1284)
Cab (with acoustical lining, wipers)	750	(340)	630	(286)
ROPS Canopy (removal)	-950	(-430)	-1040	(-470)

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