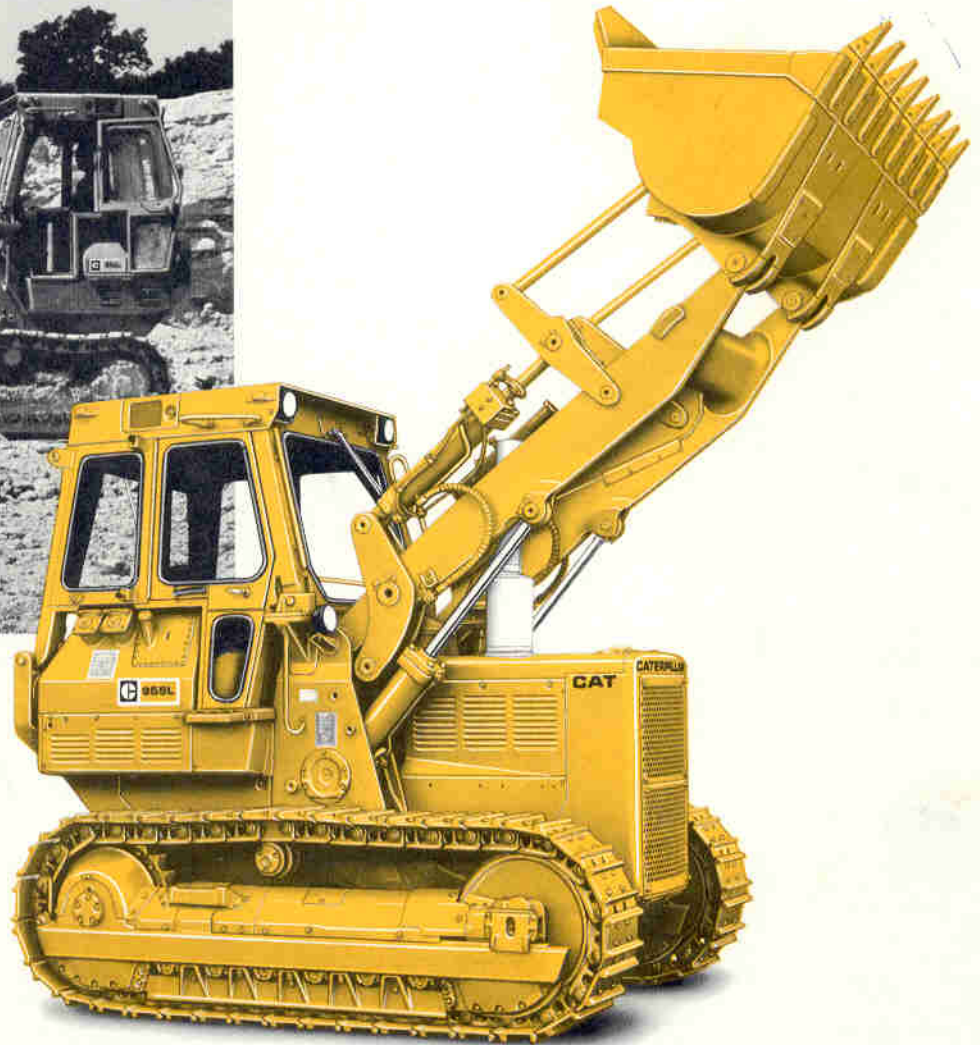




# CATERPILLAR

## 955L Track-type Loader



Shown with optional lights, track roller guards and GP bucket with teeth. ROPS cab is standard.

### Summary of features

- **Cat 3304 diesel Engine** . . . with 425 cu. in. (7 litres) displacement.
- **Single-lever power shift transmission** with three speeds forward and three reverse.
- **Pedal steering** frees operator's hands for easy operation of transmission and loader controls.
- **Sealed and Lubricated Track** greatly reduces internal pin and bushing wear . . . for lower undercarriage maintenance costs.
- **Sealed loader linkage** extends lube intervals and reduces maintenance time.
- **Semi-modular, sound-suppressed ROPS cab** is standard equipment.
- **Bolt-on sprocket rim segments** save labor time and reduce maintenance.
- **Automatic bucket controls** let bucket rise to pre-set dumping height and return to pre-set digging angle for fast cycle times. Both height and angle are adjustable.
- **CAT PLUS** . . . from your Caterpillar Dealer . . . the most comprehensive, total customer support system in the industry.



### Caterpillar Engine

Flywheel horsepower @ 2185 RPM . . . . .	130
Kilowatts . . . . .	97

(Kilowatts (kW) is the International System of Units equivalent of horsepower.)

*The net power at the flywheel of the vehicle engine operating under SAE standard ambient temperature and barometric conditions, 85° F (29° C) and 29.38" Hg (995 mbar), using 35 API gravity fuel oil at 60° F (15.6° C). Vehicle engine equipment includes fan, air cleaner, water pump, lubricating oil pump, muffler, fuel pump and alternator. Engine will maintain specified flywheel power up to 7,500 ft. (2300 m) altitude.*

Caterpillar 4-stroke-cycle 3304 diesel Engine with four cylinders, 4.75" (121 mm) bore, 6" (152 mm) stroke, and 425 cu. in. (7 litres) displacement.

Turbocharged. Precombustion chamber fuel system with individual adjustment-free injection pumps and valves. Valve rotators provide even heat distribution.

Cam-ground and tapered aluminum alloy pistons with 3-ring design. Steel-backed aluminum bearings, Hi-Electro hardened crankshaft journals. Pressure lubrication with full-flow filtered oil. Dry-type air cleaner with primary and safety elements.

# 955L

## Track-type Loader

### engine (continued)

Two 24-volt direct electric starting systems — standard or low temperature. Glow plugs for preheating precombustion chambers included with both.



### transmission

Full planetary power shift in all three ranges, forward and reverse. Single-lever shifting. Planetary gear sets shift instantly and smoothly by hydraulically actuated clutches. Oil is filtered, cooled and delivered under pressure for lubrication and hydraulic operation.

#### Travel speeds at rated engine RPM:

	MPH	Km/h	FPM	M/min
<b>Forward:</b> 1st	2.1	3.4	185	56
2nd	3.6	5.8	317	97
3rd	6.0	9.7	530	162
<b>Reverse:</b> 1st	2.5	4.0	220	67
2nd	4.3	6.9	378	115
3rd	7.2	11.6	630	193



### torque converter

Single stage, single phase. Air-to-oil cooler.



### steering

Steering and braking controlled by a foot pedal for each track. Third pedal provides braking alone for both tracks, locks down for parking.

Clutches	Oil-cooled, heavy-duty multiple discs
Brakes	Oil-cooled contracting band
Clutch friction material	Sintered bronze
Number of friction surfaces, each clutch	28
Clutch release	Hydraulically boosted, mechanically actuated.



### Sealed and Lubricated Track

Sealed and Lubricated Track surrounds the track pin with lubricant to eliminate internal bushing wear as a maintenance consideration. Lubricant is held in place by a sealing arrangement consisting of a polyurethane seal, a rubber load ring and a metal thrust ring. Additional lubricant is contained in a reservoir drilled into the track pin. Track rollers, carrier rollers and idlers are Lifetime Lubricated. Standard track guiding guards with bolt-on wear strips are mounted on the track roller frames. Split master link, hydraulic track adjusters and double grouser track shoes are standard.

Track frame	Six-roller, non-oscillating
Number of shoes (each side)	36
Width of standard track shoes	17" (432 mm)
Length of track on ground	92.7" (2355 mm)
Ground contact area	3152 sq. in. (2.03 m <sup>2</sup> )



### final drives

Crown-shaved, double reduction final drive gears. Sprockets with bolt-on replaceable rim segments and Duo-Cone® Floating Ring Seals.



### hydraulics

Completely sealed to keep out wear-causing dirt and protected by full-flow filtering. Return line filter prevents foreign material from entering reservoir from implement system. Large-capacity vane-type pump is self-compensating for wear. Operating valves are double spool-type, spring centered, and located in the reservoir for protection. Lines are steel tubing and high pressure hose with flange fittings at connections.

Output @ rated engine speed and

1000 psi (69 bar)	56.7 gpm (215 litres/min)
Relief valve setting (main)	2350 psi (162 bar)
Tilt cylinder, rod end	2800 psi (193 bar)
Tilt cylinder, head end	2475 psi (170 bar)
<b>Cylinders:</b>	
Lift — bore and stroke	5.5" × 32.77" (140 × 830 mm)
Tilt — bore and stroke	5.0" × 23.34" (127 × 590 mm)

Hydraulic cycle time, rated load in bucket, in seconds (§):

Raise	Dump	Float Down (Empty)	Total
6.6	1.6	3.2	11.4



### bucket controls

Lift circuit ..... Raise, lower, hold, float (Automatic kickout — adjustable in top 2' (610 mm) of lift height.)  
Tilt circuit ..... Tilt back, hold, dump (Automatic bucket positioner — adjustable to desired digging angle.)



### lift arms

Sealed loader linkage extends lubrication intervals and reduces maintenance time.



### service refill capacities

	U.S. Gallons	Litres
Fuel tank	63	238
Cooling system	10.5	39.7
<b>Lubricating systems:</b>		
Crankcase	5	18.9
Transmission	9	34.1
Bevel gear and steering clutch case, steering mechanism	17.5	66
Final drives (each side)	2.25	8.5
Hydraulic system (bucket controls)	39	148



### ROPS

(ROPS sound-suppressed cab is standard.)  
ROPS (Rollover Protective Structures) offered by Caterpillar for this machine meets ROPS criteria: SAE J395, SAE J1040a and ISO 3471. They also meet FOPS (Falling Object Protective Structure) criteria SAE J231 and ISO 3449.

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers. SAE Standard J732c (1969) and SAE Standard J742b (1969) govern loader ratings, denoted in the text by (§).

## Operating specifications

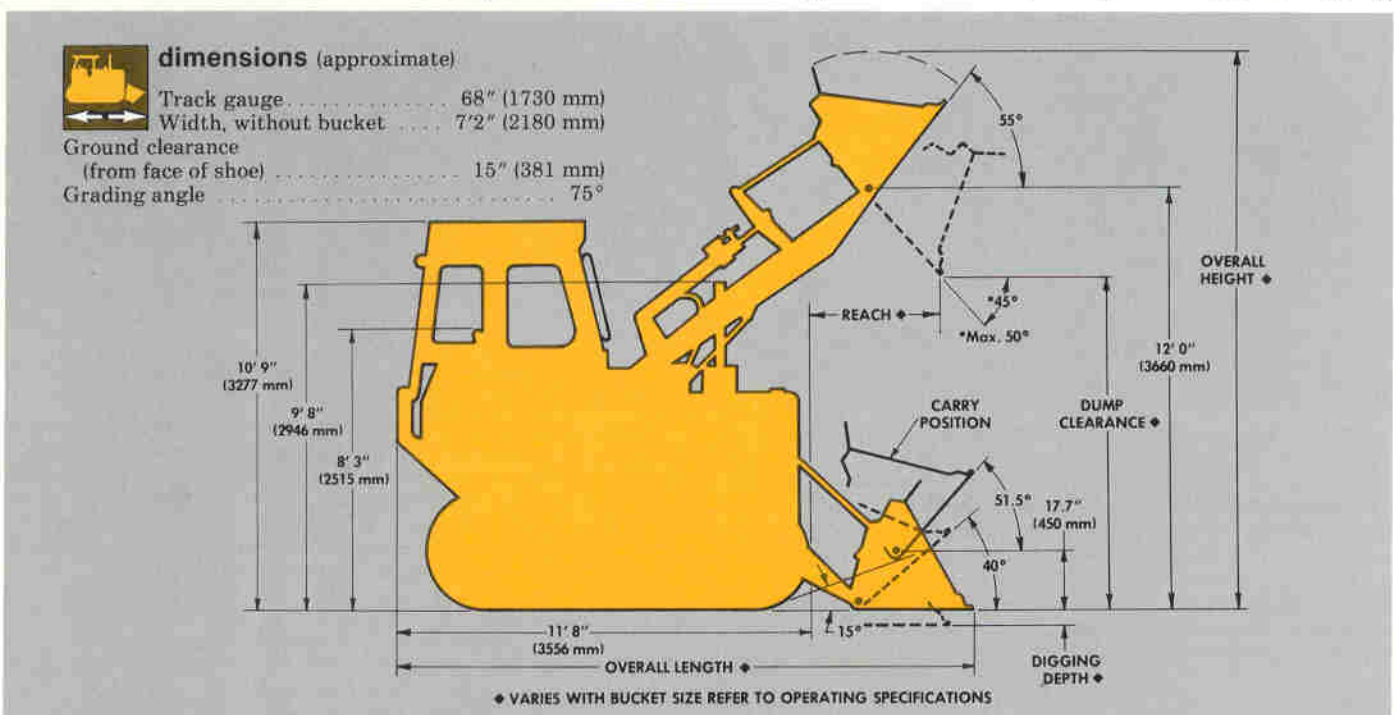
Bucket Type		General Purpose	General Purpose	General Purpose Flush-Mounted Teeth	Side Dump	Multi-Purpose
Capacity, Rated § (nominal heaped)	cu yd m <sup>3</sup>	2 1.53	2.25 1.72	2.25 1.72	1.75 1.34	2 1.53
Capacity, struck	cu yd m <sup>3</sup>	1.75 1.34	1.96 1.50	1.96 1.50	1.33 1.02	1.56 1.19
Cutting edge, type		Straight	Straight	Straight	Straight	Straight
Width §	in mm	90" 2290	90" 2290	90" 2290	103" 2620	91" 2310
Teeth		8, optional, bolt-on with replaceable tips	8, optional, bolt-on with replaceable tips	8, weld-on, with replaceable tips	9, optional bolt-on with replaceable tips	8, optional, bolt-on with replaceable tips
Dump height @ full lift and 45° discharge §	ft mm	9'6" 2900	9'4" 2840	8'9" 2670	9'2" 2790	9'3" 2820
Reach @ 45° discharge angle, 7' (2130 mm) height §	ft mm	5'1" 1550	5'2" 1575	5'5" 1650	5'4" 1625	4'11" 1500
Reach @ full lift and 45° discharge §	ft mm	3'8" 1120	3'9" 1140	4'4" 1320	4'0" 1220	3'7" 1090
Digging depth §	in mm	3.7" 94	3.7" 94	3.9" 99	3.2" 81	6.1" 155
Overall length §	ft mm	17'3" 5260	17'5" 5310	18'3" 5560	17'9" 5410	17'7" 5360
Overall height §	ft mm	16'1" 4900	16'6" 5030	16'6" 5030	16'0" 4880	16'6" 5030
Static tipping load ** §	lb kg	22,460 10 180	22,320 10 120	22,070 10 010	20,720 9390	20,740 9400
Breakout force * §	lb kg	21,950 9955	20,620 9350	20,420 9265	19,290 8750	20,720 9399
Operating weight **	lb kg	34,950 15 850	35,090 15 920	35,260 15 990	35,880 16 275	35,920 16 290

\*Measured 4" (102 mm) behind tip of cutting edge with bucket hinge pin as pivot point, in accordance with SAE J732c (1969).

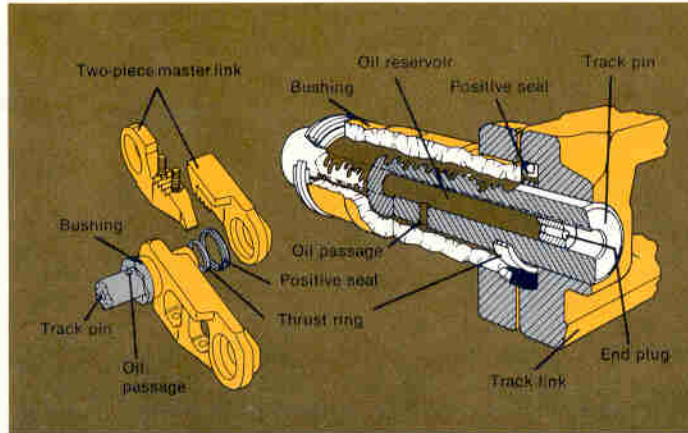
\*\*Includes coolant, lubricants, full fuel tank, ROPS cab, and operator.

Machine stability can be improved through the addition of counterweight or rear attachment. Add the following to machine weight and static tipping load:

	Change in Operating Weight	Change in Static Tipping Load
Remove ROPS cab	-2165 lb (-982 kg)	-2555 lb (-1159 kg)
Add ROPS canopy	-1065 lb (-483 kg)	-1180 lb (-535 kg)
Add Ripper-Scarifier	+1,940 lb (+880 kg)	+4495 lb (+2039 kg)
Add Bumper	+ 570 lb (+258 kg)	+1010 lb (+ 458 kg)
Add Counterweight	+ 935 lb (+424 kg)	+1510 lb (+ 685 kg)
Add Counterweight (only for use w/o ROPS cab or canopy)	+1,560 lb (+710 kg)	+2570 lb (+1165 kg)



Rugged undercarriage design means less downtime, low maintenance cost.



**Sealed and Lubricated Track** can greatly reduce undercarriage maintenance and expense. A special sealing arrangement maintains an oil film between pin and bushing contact surfaces, eliminating internal bushing wear as a maintenance consideration. The pin contains an oil reservoir in the center for continuous lubing. The thicker bushing has longer external wear life. Sealed and Lubricated Track potentially extends undercarriage component life and noticeably reduces track noise.

**Two-piece master link** makes installation and breaking of the track less time-consuming. Serrated two-piece link is held in place by bolts which fasten the track shoe to each link. Two-piece master link is standard.

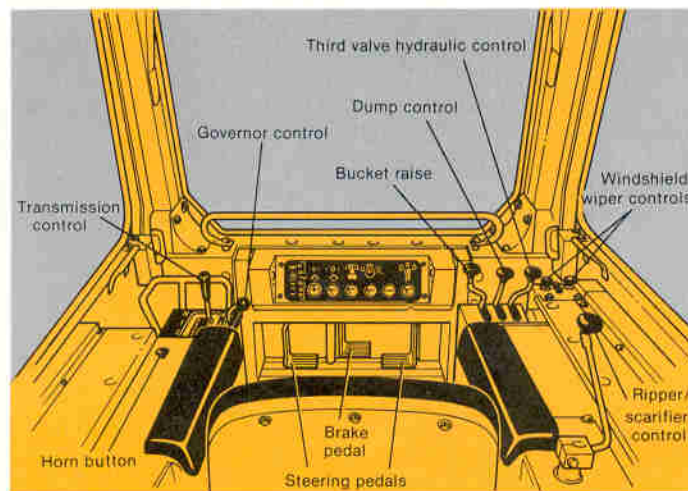


**No-daily-maintenance undercarriage** saves you time and work. Track rollers, carrier rollers and idlers are Lifetime Lubricated with Duo-Cone® Floating Ring Seals to keep in lubricant... keep out abrasives. Standard hydraulic track adjusters keep proper tension with just occasional adjustment with a grease gun.



**Bolt-on sprocket rim segments** really save on labor costs and reduce downtime because rerimring can be done in the field. There's no need to pull the sprocket or break the track.

Built-in convenience, comfort and protection mean more operator efficiency.

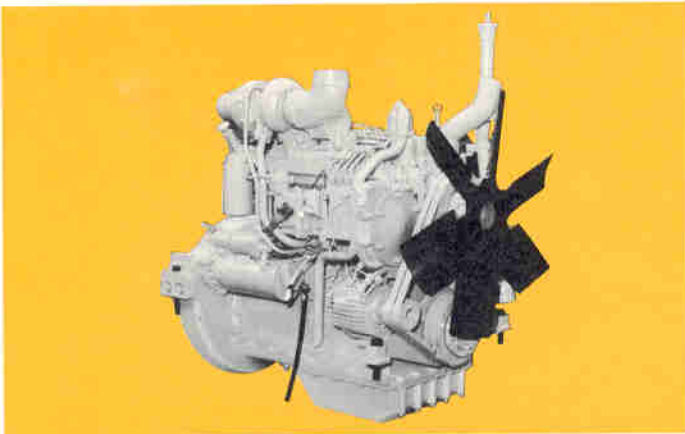


**Operator comfort** is designed into the 955L: Thickly padded coil-spring seat adjusts up and down, forward and back. Gauges and indicators are clustered on the dash for fast easy checking. Single lever transmission control located at the operator's left hand allows instant speed and direction changes. There's no decelerating or pausing in neutral. Bucket controls are mounted conveniently at the operator's right hand and feature automatic lift kick-out and bucket positioning. Three pedals mounted under the dash enable the operator to steer with his feet and keep his hands free to operate bucket and transmission. Push the right or left pedal half-way down to release the steering clutches for a slow turn... all the way down to brake for sharp turn. The center pedal brakes both tracks without releasing the clutches and locks down for a parking brake.

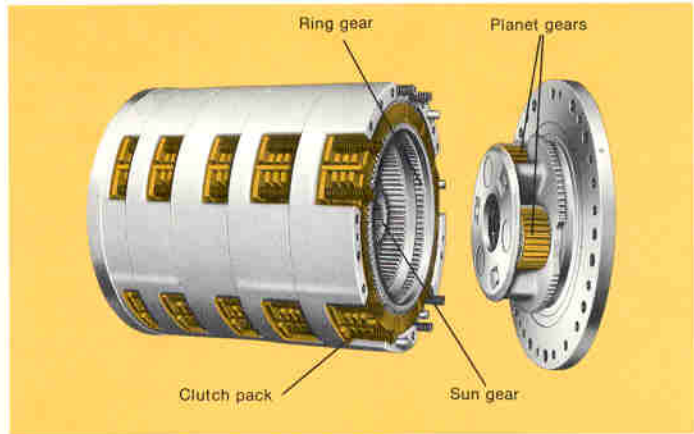


**ROPS sound-suppressed cab** is standard and contains many operator comfort features: air pressurizer and filter, windshield washers and wipers, tinted glass, dome light, rear view mirror and floor mat. Air conditioner and heater are available as options.

Reliable Cat-built power train — power you can depend on.

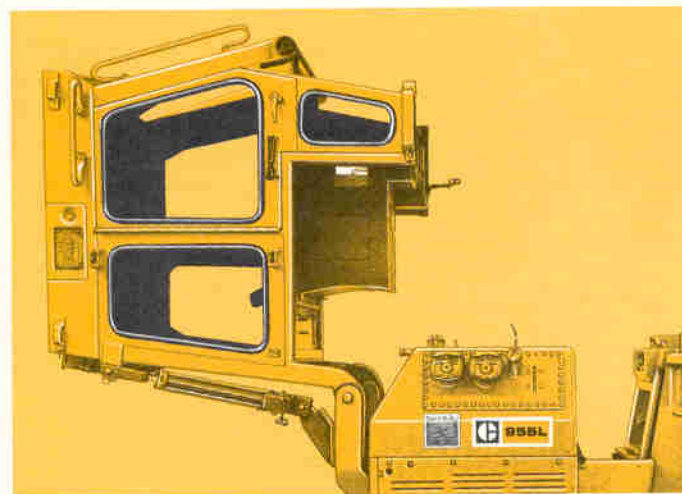


**Cat 3304 diesel Engine** packs 130 flywheel horsepower. That's real work power delivered at the flywheel — not a theoretical rating achieved only in a lab. High torque rise gives you strong lugging ability for crowding the bank and penetrating tough materials. Cam-ground and tapered aluminum alloy pistons expand during the heat of combustion to fit snugly in the cylinders for smooth, even power flow. The fully pressurized and filtered lubrication system means long engine life — and spin-on fuel and oil filters make maintenance easy.

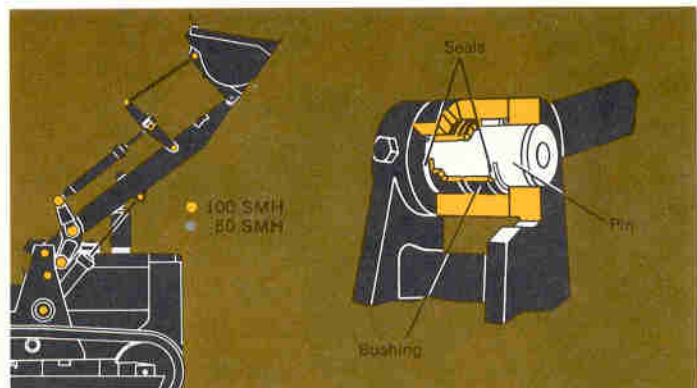


**Planetary transmission** spreads torque loads through planetary gear sets rather than concentrating them on a single, rotating countershaft. Big clutch packs surround each gear set and engage with special hydraulic modulation for smooth, cushioned shifting. Clutch plates and gears are continuously cooled by oil for dependable performance and long life.

Serviceability — less time on maintenance, more time on the job.



**Serviceability** is designed into the 955L: the sound-suppressed ROPS cab tilts rearward and out of the way if access to power train components is required. Batteries are located under the seat and are easily accessible. Hinged doors provide access to transmission and power train filters, filler spouts and dipsticks at the left of the operator's platform and fuel shutoff valve at the rear. Hydraulic filters are easily accessible on the right side of the hydraulic tank. Other maintenance features include: spin-on fuel filters, hydraulic track adjusters, two-piece master link, adjustment-free fuel system, and unit removal of steering clutches and brakes.



**Sealed loader linkage** substantially reduces maintenance time and lubricant costs. The lift arm pins need lubricating only each 100 Service Meter Hours, lower bucket pins at 50 SMH to replenish lubricant and flush out abrasives. A polyurethane lip-type seal is used on both sides of each joint. The sturdy plastic lip maintains a constant seal with the pin to keep out wearing grit and keep lubricants in.


**Ripper-Scarifier**

Shanks ..... Three (4th and 5th optional)  
 Shank spacing ..... 17" (432 mm)  
 Tips ..... Replaceable, heat-treated,  
 alloy steel  
 Maximum penetration ..... 13" (330 mm)

**General Purpose bucket** is made from thick, wear-resistant steel plate and bracing joined by deep, continuous welds. The straight-through cutting edge, forged corner and side plates, replaceable bottom wear plates and hinge guards are heat treated for greater strength and wear resistance. Eight side-pinned teeth with double-strap, bolt-on adaptors, or eight flush-mounted weld-on teeth (including corner tooth) are optional. Both are available with long or short-side-pinned tips.



**Multi-Purpose bucket** gives maximum versatility — with strength. It loads, strips topsoil, bulldozes and cleans up debris. The bucket clamps hydraulically to grip logs, carry pipe or handle other tough-to-grasp materials. Forged corner, side and bottom plates combine with heat-treated hinge guards to increase strength and reduce wear.


**standard equipment**

19-amp alternator. 24-volt direct electric starting. Fuel priming pump. Air cleaner service indicator. Blower fan. Muffler. Hood side panels. Automatic bucket positioner. Automatic lift kick out. Sealed and Lubricated Track with split master link. Hydraulic track adjusters. Segmented sprocket.

Radiator guard. End track-guiding guards with bolt-on wear strips. Crankcase guard. Power shift transmission. Pedal steering. Disconnect switch with key. ROPS sound-suppressed cab. Adjustable coil-spring seat. Backup alarm. Seat belt. Forward warning horn (U.S.A. only). Electric hour meter. 17" (432 mm) double grouser tracks (36-section). Rear hitch.


**optional equipment**

(with approximate change in standard weight)

	Lb	Kg
<b>Air Conditioning System (for cab only):</b>		
Heats only	25	11
Heats and cools	150	68
Alternator, 50-amp	8	4
<b>Buckets:</b>		
2 cu. yd. General Purpose	1,920	870
2¼ cu. yd. General Purpose	2,060	934
2¼ cu. yd. General Purpose with 8 weld-on flush-mounted teeth	2,230	1011
1¾ cu. yd. Side Dump*	2,850	1293
2 cu. yd. Multi-Purpose*	2,890	1310
*Does not include additional valve, controls, and hydraulic lines.		
<b>Bucket cutting edges, bolt-on, for General Purpose buckets:</b>		
Flat	372	169
Half-arrow	153	69
<b>Bucket teeth, bolt-on:</b>		
Long tip, set of 8, for General Purpose bucket	304	138
Short tip, set of 8, for General Purpose and Multi-Purpose buckets	296	134
Short tip, set of 9, for Side Dump bucket	185	84
Bumper, rear	570	259
Cab, ROPS (removed)	-2,165	-982
Canopy, ROPS (installed)	-1,065	-483
Remove ROPS brackets	-255	-116
Counterweight	935	424
Extension, bucket spill plate, for Side Dump bucket	84	38
Fan, reversible blade	20	9

	Lb	Kg
<b>Guards:</b>		
Radiator, hinged	10	5
Track guiding, center-section	136	62
Track roller	350	159
Heater, engine coolant	1	0.5
Hook, front pull	30	14
<b>Hydraulic systems:</b>		
For Multi-Purpose bucket	203	92
For Side Dump bucket or top clamp	203	92
For Ripper-Scarifier	153	69
For Ripper-Scarifier and Multi-Purpose bucket	226	103
For Ripper-Scarifier and Side Dump bucket or top clamp	226	103
<b>Lighting systems:</b>		
Six lights for cab or canopy	35	16
Four lights for use without cab or canopy	25	11
Power take-off	50	23
Precleaner with prescreener	5	2
Radiator core protector grid	30	14
Ripper-Scarifier	1,940	880
Ripper shank	68	31
Seat, suspension	30	14
Starting system, low temperature	10	5
Tool kit	14	6
Tracks, pair, Sealed and non-lubricated, 17" (432 mm)	0	0
<b>Vandalism protection:</b>		
Instrument panel guard	6	3
<b>Cap locks:</b>		
Fuel tank	1	0.5
Hydraulic tank	1	0.5

Materials and specifications are subject to change without notice.