

NOTE: Standard and optional equipment may vary outside the U.S.A. Consult your Caterpillar Dealer for specifics.



973

Demolition Arrangement

Standard equipment

Alternator, 24-volt, 35-amp. Lift kickout. Backup alarm. Cab, ROPS, sound-suppressed with air pressurization. Crankcase guard. 24-volt direct electric starting motor. Blower fan. Floor mat. Forward warning horn. Front and rear retrieval hitch. Fuel priming pump. Hydraulic track adjuster. Hydrostatic transmission. Muffler. Operator panel includes: illumination lights, elec-

tric hour-meter and EMS operator warning system. Rearview mirror. Segmented sprocket rims. Sprocket guard. Sealed and Lubricated Track with two-piece master link. Seat belt. Literature compartment in seat back. 19.7"/500 mm double bar grouser track shoes. Track guiding guards. Washers and wipers, windshield and back window.

Optional equipment

(with approximate change from operating weight)

	Lb	Kg		Lb	Kg
Air conditioner (includes 50-amp alternator)	216	98	Heater and defroster (hot water 24V)	19	8.6
Alternator, heavy-duty (50-amp)	12	5	Hydraulic system:		
Buckets, 3.75 yd ³ /2.8 m ³ General Purpose —			3rd valve for front or rear attachments	167	76
Standard Gauge	3663	1662	Lighting systems:		
Low ground pressure	3733	1693	Four lights (machine-mounted, 2 forward,		
Multi-purpose			2 rear)	28	13
3.25 yd ³ /2.4 m ³	5888	2671	Two lights (ROPS-mounted forward)	4	1.8
Rock			Seat, suspension (replaces standard seat)	15	7
3.75 yd ³ /2.8 m ³	4192	1901	Fabric seat cover for adjustable		
Bucket control, single lever	0	0	static seat	2	1
Bucket cutting edge, reversible,			Fabric seat cover for suspension seat	2	1
sharpened, bolt-on for Std. gauge	433	196	Sound suppression (spectator)		
for LGP	475	215	(available in selected areas)	0	0
Bucket teeth, 8 bolt-on (includes corner teeth)			Tool kit	15	6.8
Long (abrasion)	492	223	Vandalism protection:		
Short (impact)	482	219	For use with cab — lockable fuel tank		
Canopy, ROPS (includes rearview mirror)	425	193	cap, radiator cap and lockable hydraulic		
Cold weather starting aids:			tank cap cover with padlocks	4	1.8
Engine coolant heater	1	.5	For use with canopy — consists of cab		
Ether starting aid (less canister)	5	2	vandalism package plus padlock to		
Gauge package (coolant and transmission			prevent movement of implement and		
oil temperatures)	3	1	transmission control lever, and instrument		
Guards:			panel guard group with padlock	9	4
Track roller	645	293			
Demolition package (fender, rear bumper,					
bottom, front, tilt cylinder, lift cylinder					
line, idler and windshield screen)	2873	1300			

Materials and specifications are subject to change without notice.



Base machine is the Caterpillar 973 Track-type Loader. Special guarding is recommended and can be furnished as part of the factory package. Demolition buckets are available through your Caterpillar Dealer. Machine shown may have optional equipment.

Caterpillar Engine

Flywheel power @ 2200 rpm 210 HP/157 kW (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, 77°F/25°C and 29.61" Hg/100 kPa, using 35 API gravity fuel oil at 60°F/15.6°C, and after deductions for fan, air cleaner, water pump, lubricating oil pump, fuel pump, muffler and alternator. No derating required up to 7,500 ft/2300 m altitude.

Cat 4-stroke-cycle 3306 turbocharged diesel Engine with six cylinders, 4.75"/121 mm bore, 6.0"/152 mm stroke and 638 cu. in./10.45 liters displacement.

Direct injection Caterpillar fuel system with individual adjustment-free injection pumps and valves.

Track roller frames

Roller frames use pinned equalizer bar and pivot shafts for ± 1.5° oscillation. Equalizer bar is pinned to each roller frame and center of main frame to help maintain a stable working platform. Rubber pads between equalizer bar and main frame dampen shocks. Pivot shafts press fit into loader frame ahead of planetary final drives and support vehicle's weight. Roller frames are box-section with full length welds.

Undercarriage

Sealed and Lubricated Track surrounds track pins with lubricant to virtually eliminate wear inside the bushing. Two-piece master link for easy track removal and installation. All rollers and idlers have Duo-Cone Floating Ring Seals and are Lifetime Lubricated.

Summary of features

- **Rear engine design** helps protect engine from dust and work hazards, provides excellent balance without additional counterweight and superior visibility to the work area.
- **Hydrostatic drive** features power turn and counterrotation capabilities for excellent maneuverability in tight demolition work areas.
- **Implement power requirements** have automatic priority over track requirements . . . full implement power available for quick cycle time.
- **Oscillating undercarriage** with pinned equalizer bar improves machine stability, and reduces ground induced shock loads to machine and operator.
- **Hydraulic system** . . . two or three valve arrangements to match your bucket.
- **Two-post integral ROPS cab** is standard and is sound-suppressed, air pressurized and resiliently-mounted for a superior working environment.

Modification features

Guarding . . . available from the factory for protection of machine and operator . . . rugged package makes the 973 durable and dependable.

Several available demolition buckets . . . enable you to select the one for your needs . . . machine modification may be required for installation.

Drive

Hydrostatic drive provides infinite machine speeds to 6.4 mph/10.3 km/h, forward or reverse. Each track is driven by a separate hydraulic circuit consisting of one variable displacement piston **pump**, connected by Caterpillar XT-6 hydraulic hose and couplings to a two-speed piston **motor**.

Single lever on operator's left controls machine speed and direction. Engine/Transmission resiliently mounted as one unit to reduce vibration and shocks.

Drive pumps . . . Two Caterpillar variable displacement, slipper-axial piston pumps driven from engine flywheel.

Track motors . . . Two Caterpillar two-speed piston motors mounted inboard of main frame at the sprocket. Pressure summing valve between pumps and motors automatically regulates displacement of both providing increased torque as load increases.

Relief valve setting 5500 psi/379 bar/37 921 kPa
Charging pump One gear type, supplies power to automatic control system.

Full flow filtering of hydrostatic drive system oil.

973

Steering

Steering controlled by foot pedals. Partially depressing left or right pedal slows that track, causing machine to smoothly turn that direction with full power. Full pedal depression causes the track to stop, then reverse for track counterrotation turning within the machine's length.

Brakes

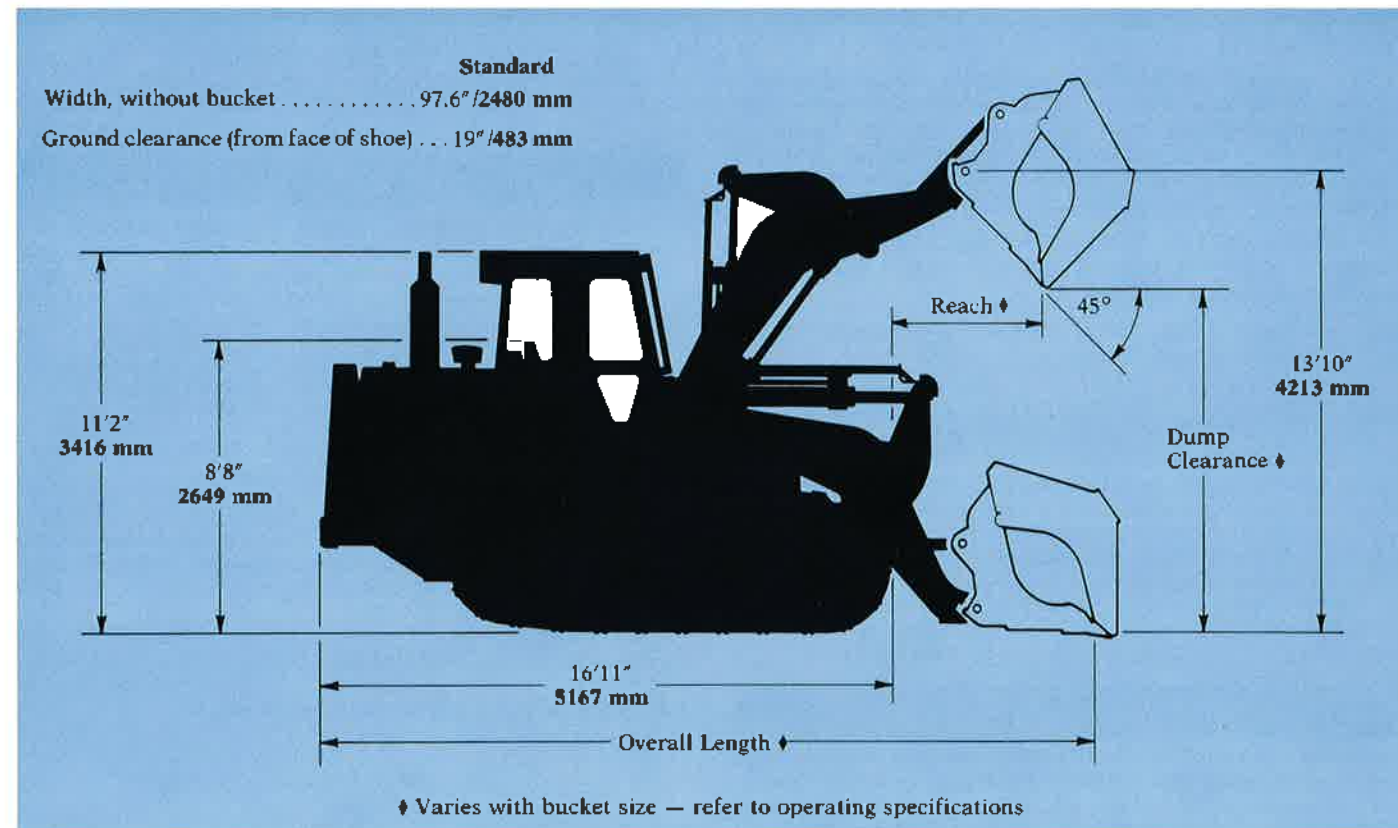
Service — hydrostatic, through vehicle drive system resistance, using transmission lever.

Emergency and Parking — splash-lubricated disc brakes located between each hydraulic track motor and final drive. **Spring applied; hydraulically released** by oil pressure from hydrostatic control system. Also actuated by center pedal, automatically applied in the event of transmission hydraulic oil pressure loss.

Final drives

Planetary. Isolated from vehicle weight and ground-induced shock loads by track roller frame pivot shafts.

Dimensions (approximate)



Implement hydraulics

Large capacity 2 section vane-type pump, mounted on engine fly-wheel housing. Increase in implement loads or tractive effort sufficient to drop engine speed below rated RPM causes a load sensor to reduce power to vehicle drive and increase power available to implement. System sealed to keep out wear-causing dirt and protected by full-flow filter on return line, helping prevent foreign material from entering reservoir. Pilot-operated control valves require little operator effort while retaining delay-free bucket control.

Output @ rated engine speed and
1000 psi / 69 bar / 6900 kPa 78 gpm / 295 liters/min
Relief valve setting (main) 2750 psi / 190 bar / 19 000 kPa

Cylinders:
Lift — bore and stroke (2) 6.5" × 36.8" / 165 × 935 mm
Tilt — bore and stroke (2) 5.5" × 24.9" / 139.7 × 633 mm

Pilot system — gear-type pump:
Output @ rated engine speed and
348 psi / 24 bar / 2400 kPa 3.2 gpm / 12.2 liters/min
Relief valve setting 348 psi / 24 bar / 2400 kPa

ROPS cab

ROPS cab is standard. Integrally designed with two-post ROPS and resiliently mounted. Sound-suppressed. Includes laminated safety glass, washers/wipers for windshield and rear window, rearview mirror. ROPS canopy also available.

Modification information

The demanding nature of the demolition business requires the following optional guarding to protect machine components. All are available as part of a Caterpillar factory package.

Rear bumper guard, of fabricated steel weighing 1517 lb / 688 kg, surrounds the radiator and rear engine enclosures, protecting engine and components from impact damage.

Windshield screen, of heavy steel mesh, protects the operator and operator's compartment from falling debris.

Tilt cylinder guards protect cylinders, cylinder rods and hydraulic lines from falling debris.

Front guard surrounds the lower portion of the hydraulic tank and, at .47 in / 12 mm, is more than twice as thick as the standard arrangement.

Fender guards protect the operator's platform. The one piece, .39 in / 10 mm thick steel guards are bolted directly to the main frame to transfer shock away from body members.

Bottom guard, hinged to provide access for servicing, protects engine and drive train from damage.

Idler guards protect the yoke, link, recoil rod and idler by preventing material from entering the idler area.

Operating specifications

The buckets listed below are just a few of the many selections available for the 973 Track Loader. Use of these attachments may affect dimensions, weight and performance.

Bucket		Anvil	Hewitt	Peterson
Capacity	yd ³	3.25	3.0	3.0
	m ³	2.50	2.3	2.3
Width	in	110	105.6	104.5
	mm	2794	2682	2654
Dump height †	in	123.3	128.5	128.3
	mm	3133	326.3	3260
Reach †	in	52	48.2	47
	mm	1321	12.25	1194
Jaw opening	in	58.25	64.0	73
	mm	1480	1624	1854
Overall length †	in	294.8	288.8	285.9
	mm	7488	7336	7262
Operating weight	lb	62,470	62,810	61,510
	kg	28 336	28 490	27 900
Bucket weight	lb	9460	9800	8500
	kg	4291	4445	3856
Hinge pin to cutting edge	in	62.4	56.4	53.5
	mm	1585	1433	1359

NOTE: These buckets may require rear counterweight. Contact the respective AEM for counterweight recommendations.

