



CATERPILLAR

910 wheel loader



More wheel loader for your money . . . with the Cat 910. More of the kind of performance that comes with big loader articulated design and the reliability you'd expect of a solid Cat-built power train. The easy operation from a clean, open operator's compartment and simple controls. The reduced daily maintenance from such features as sealed loader linkage. And finally, the extra parts and service support from your Caterpillar Dealer, to help you get more out of your 910. If you're looking for value, look at the Cat 910.



- 65 flywheel horsepower Cat diesel engine.
- Full power shift transmission . . . single lever shift control for three speeds forward, one reverse.
- Caliper disc brakes for excellent braking and easy servicing.
- Sealed loader linkage extends lubrication intervals and reduces maintenance time.
- Single lever bucket control provides simple, easy bucket operation.



Caterpillar engine

Flywheel horsepower @ 2400 rpm 65
Kilowatts 48

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

The net horsepower at the flywheel of the vehicle engine operating under S.A.E. standard ambient temperature and barometric conditions 85° F (29° C) and 29.38" (746 mm) Hg, using 35 API gravity fuel oil at 60° F (15.6° C). Vehicle engine equipment includes fan, air cleaner, water pump, lubricating oil pump, fuel pump and alternator. Engine will maintain specified flywheel horsepower up to 7500 feet (2250 m) altitude.

910

wheel loader

engine (cont.)

4-stroke cycle Cat diesel Model 3204 with four cylinders, 4.5" (114 mm) bore, 5" (127 mm) stroke and 318 cu. in. (5.2 litres) displacement.

Precombustion chamber fuel system with individual adjustment-free injection pumps and valves.

Cam ground and tapered aluminum alloy pistons with 2-ring design. Steel-backed aluminum bearings. Hardened crankshaft journals. Pressure lubrication with full-flow filtered and cooled oil. Dry-type air cleaner with primary and safety elements.

Uses economical No. 2 Fuel Oil (ASTM specification D396), often called No. 2 furnace or burner oil with a minimum cetane rating of 35. Premium quality diesel fuel can be used but is not required.

12-volt direct electric starting system with glow plugs for pre-heating precombustion chambers. One Caterpillar 12-volt 172 amp hour battery. Optional low temperature electric starting system is available.



transmission

Planetary-type. Full power shift with three speeds forward and one reverse.

Single lever on left side of steering column controls speed and direction. Push the lever ahead for forward speeds; pull it all the way back for reverse. A safety lever locks the control lever in neutral. Engine cannot be started in gear.

Speeds	1st	2nd	3rd
Forward, mph:	4.0	7.2	15.0
(km/h):	(6.5)	(11.6)	(24.1)
Reverse, mph:		6.6	
(km/h):		(10.6)	



axles

Front axle fixed, rear axle oscillates $\pm 11^\circ$, total of 22° . This allows 12" (305 mm) vertical travel of one rear wheel with all wheels remaining on the ground. Axle shafts may be removed without removing wheels and planetaries. Optional NoSPIN differential available for front axle.



final drives

All-wheel drive with planetary reduction in each wheel. Planetary units may be removed independently of wheels and brakes.



brakes

Service - Caliper disc brakes standard, mounted on front wheels. Hydraulically actuated. Left pedal applies brakes and neutralizes transmission. Right pedal actuates brakes without neutralizing transmission. Four wheel caliper disc brakes optional.

Parking - Mechanical shoe-type brake mounted on drive shaft. Operator applies manually. Twist knob on end of lever for adjustment.

Emergency - Manual control through booster. In event of loss of engine power or hydraulic failure, service brakes can still be applied through mechanical linkage by increased effort on brake pedal. Or, use parking brake.

Brake systems conform to OSHA regulations.



tires

(tubeless)

15.5 x 25, 8 PR Traction-type.



steering

Articulated frame. Rear and front wheels track at all times.

Minimum turning radius (over tire) 15' 6" (4720 mm)
Steering angle (each direction) 35°



bucket control

Single lever to right of operator's seat controls bucket movement. Push the lever forward to lower, pull it back to raise the bucket. Move the lever to the left for tilt back, to the right to dump. Combination automatic bucket positioner and lift kickout optional.



hydraulics

Double-section gear-type pump.

Output:

Steering and braking @ rated engine speed @ 2500 psi (172 bar)	14.0 gpm (53 litres/min)
Bucket @ rated engine speed @ 2500 psi (172 bar)	22.1 gpm (85 litres/min)
Relief valve setting (main)	2500 psi (172 bar)
Cylinders:	
Lift - bore and stroke	4.00" x 23.88" (102 x 606 mm)
Tilt - bore and stroke	3.00" x 21.87" (76 x 555 mm)



service refill capacities

	U.S. Gallons	(Litres)
Fuel tank	31	(117)
Cooling system	6.5	(25)
Crankcase	3	(11)
Transmission	6	(23)
Differential and final drive,		
Front	4	(15)
Rear	4	(15)
Hydraulic system	15	(57)
Hydraulic tank	8	(30)

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

operating specifications	General Purpose	Multi-Purpose
Bucket type		
Capacity, rated nominal heaped §	1½ cu. yd. (1.0 m³)	1 cu. yd. (0.8 m³)
Cutting edge width	84.5" (2150 mm)	84.5" (2150 mm)
Dump height @ full lift and 45° discharge §	8' 1" (2460 mm)	8' (2440 mm)
Bottom dump	—	9' 2" (2790 mm)
Reach @ full lift and 45° discharge §	34" (860 mm)	33" (840 mm)
Bottom dump	—	20" (510 mm)
Overall length §	18' (5490 mm)	18' 1" (5520 mm)
Overall height §	13' 6" (4120 mm)	14' 10" (4520 mm)
Static tipping load **		
Straight §	9,050 lb. (4100 kg)	8,040 lb. (3650 kg)
Full 35° turn §	8,500 lb. (3850 kg)	7,350 lb. (3340 kg)
Breakout force * §	10,000 lb. (4530 kg)	9,800 lb. (4450 kg)
Minimum operating weight ** §	13,400 lb. (6100 kg)	14,100 lb. (6400 kg)

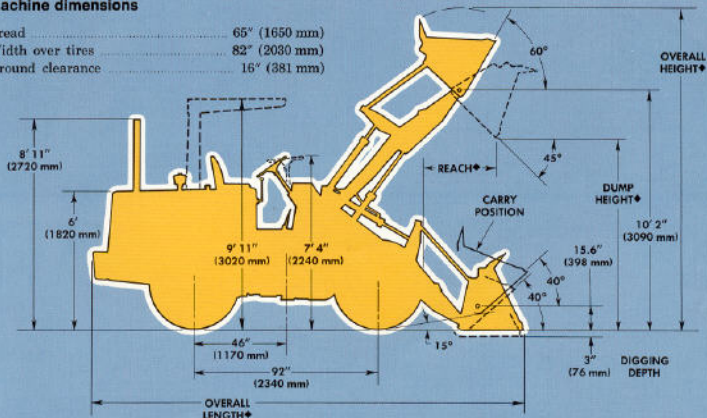
*Measured 4" (102 mm) behind tip of cutting edge with bucket hinge pin as pivot pin.

**Includes full fuel tank, operator, bucket and 15.5 x 25, 8 PR tires. Machine stability and operating weight is increased by the addition of ROPS. For ROPS add the following to machine operating weight and static tipping load:

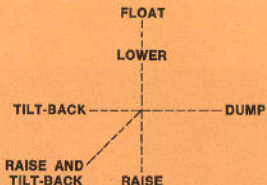
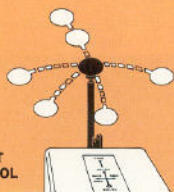
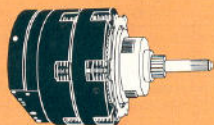
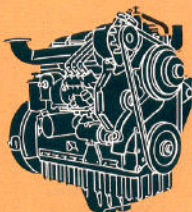
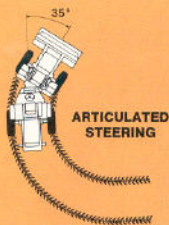
	Increase in Operating Weight	Increase in Articulated Static Tipping Load
ROPS Cab	900 lb. (400 kg)	900 lb. (400 kg)
ROPS Canopy	700 lb. (310 kg)	700 lb. (310 kg)

Machine dimensions

Tread	65" (1650 mm)
Width over tires	82" (2030 mm)
Ground clearance	16" (381 mm)



† VARIES WITH BUCKET SIZE - REFER TO OPERATING SPECIFICATIONS



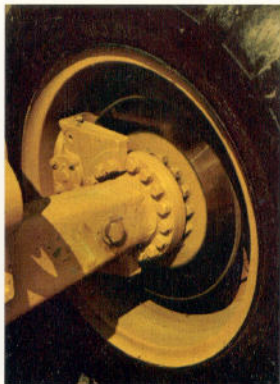
Big displacement Cat diesel engine has plenty of reserve strength for long, trouble-free performance. Fuel injection valves have single, large orifices that resist clogging, even with extended periods of idling. Injector pumps and valves need no periodic adjustments, can easily be replaced in the field without special tools when required. Reserve lugging ability, too, with a 25% torque rise as engine rpm drops in tough going.

Cat Power Shift transmission gives smooth on-the-go speed and direction changes under full power. Big clutch packs around planetary units ease together with exclusive hydraulic modulation. Single column mounted control lever selects from three forward and one reverse speed ranges.

Single lever bucket control for both raise-lower and dump-tilt-back circuits. The movements are natural, logical: *pull* to raise, pull across to tilt back; *push* forward to lower, push away (to right) to dump. Optional automatic bucket positioner stops the lift at a preset height and returns the bucket to preset digging angle after dumping.

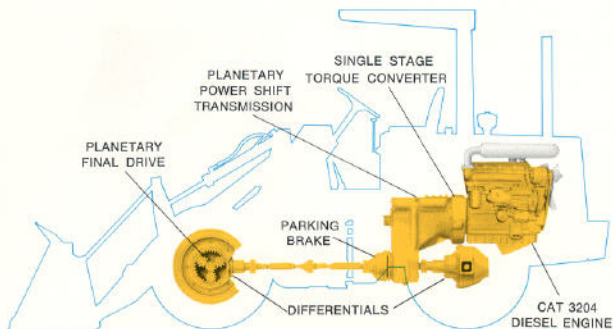
Easy to operate because all controls are simple and logical. It's easy to enter and leave the walk-through operator's compartment. And you have an excellent working view of the bucket from the comfortable, adjustable seat.

Caliper disc brakes are standard. They're mounted on the front wheels. As an option, you can get disc brakes all around. Calipers are self-adjusting for wear and self-cleaning when operated in mud or water. They are easier and less costly to replace than comparable shoe-type brakes.



Articulated steering means a tight 15'6" (4720 mm) turning radius to get you in and out of confined areas, yet a long 92" (2340 mm) wheel base for stability. Easier to handle than rear-steer designs because any obstacle the 910 bucket clears in a turn will also be cleared by the rest of the machine; the rear wheels track the front exactly. And articulation lets the operator "steer" the bucket into position for more precise dumping.

Sealed loader linkage cuts maintenance time on the 910. Grease the bucket hinges once a week, the remainder of the linkage once every three months or 250 operating hours (whichever comes first). Wear is reduced too. The seals that hold lubricants around the hinge pins also keep out dirt.



**CATERPILLAR****standard equipment**

Alternator, 40 amp. Fuel priming pump. 15.5 x 25, 8 PR tires. Front disc brakes. Adjustable seat. Dry-type air cleaner. Sealed loader linkage. Front and rear working lights. Stop and tail lights. Muffler.

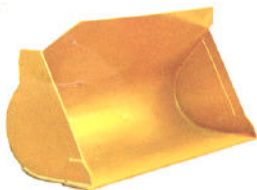
**optional equipment**

(with approx. installed weights)

Back-up alarm system 15 lb. (7 kg)
 Brakes, 4-wheel disc 10 lb. (5 kg)

Buckets,

1¼ cu. yd. (1.0 m ³) General Purpose	800 lb. (362 kg)
1 cu. yd. (0.8 m ³) Multi-purpose	1,475 lb. (670 kg)
Bucket positioner and lift kickout	25 lb. (11 kg)
Bucket teeth, set of 7	90 lb. (41 kg)
Cab, ROPS (includes seat belt and windshield wiper and washer)	910 lb. (413 kg)
Canopy, ROPS (includes seat belt)	700 lb. (317 kg)
Engine enclosures	35 lb. (16 kg)
Fan, suction	no increase
Fenders, front and rear	75 lb. (34 kg)
Guard, power train	220 lb. (100 kg)
Hydraulic system, for Multi-purpose bucket	120 lb. (54 kg)
Lighting system, for use with cab or canopy	25 lb. (11 kg)
NoSPIN differential, front only	25 lb. (11 kg)
Precleaner	6 lb. (3 kg)
Seat belt	6 lb. (3 kg)
Sound suppression kit	50 lb. (23 kg)
Speedometer	3 lb. (1 kg)
Starting system, low temperature	5 lb. (2 kg)
Steering system, emergency	35 lb. (16 kg)
Suspension seat	5 lb. (2 kg)
Tool kit	15 lb. (7 kg)
Vandalism protection group, does not include engine enclosures	15 lb. (7 kg)



General purpose bucket is made from high strength, wear-resistant steel plate and bracing. Straight-through cutting edge and bottom wear plates are replaceable.



Multi-purpose bucket can be used for loading, bulldozing, and cleaning up debris. Clamshell action grasps pipes, poles and irregular-shaped objects.

Materials and specifications are subject to change without notice.