



CATERPILLAR

Off-Highway
Tractors



776

Shown with optional windrow attachment.



772

Cat-built Off-Highway Tractors provide dependable power to haul your big loads. Adaptable to a wide variety of trailing units, these modern-design tractors offer the features you demand to meet rugged hauling conditions.










768B



ROPS structure shown is a required attachment in U.S.A. on the 772 and 768B.

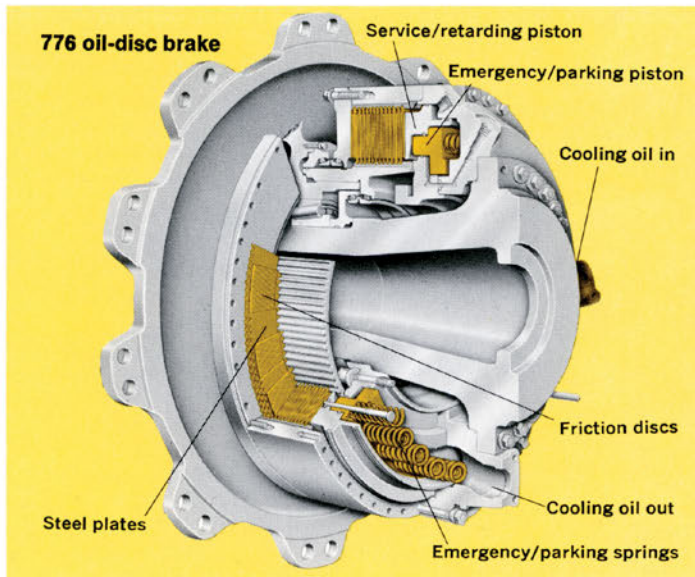
Summary of features

- Oil-cooled disc brakes give fade-resistant, adjustment-free braking.
- Rugged box-section frame resists stresses for long life.
- Yoke-type hitch oscillates four ways to reduce frame stresses.
- Oil-pneumatic suspension cylinders at each wheel cushion hauling shocks.
- Turbocharged and aftercooled Cat Diesels deliver dependable power.
- All-steel sound-suppressed cab keeps operator comfortable.

SPECIFICATIONS		768B	772	776
	engine			
Type		Cat D343 In-line 6	Cat D346 V-8	Cat D348 V-12
Flywheel HP*		415 @ 1900 RPM	600 @ 1900 RPM	870 @ 1900 RPM
	transmission			
Type		Cat-built planetary power shift	Cat-built planetary power shift	Cat-built planetary power shift automatic
Speeds		9 forward, 3 reverse	9 forward, 3 reverse	7 forward, 1 reverse
	brakes			
Front		Expander Tube	Expander Tube	Wedge-Type Shoe
Rear		Oil-cooled Disc	Oil-cooled Disc	Oil-cooled Disc
Parking		Mechanically actuated expanding-shoe type on transmission output shaft.	Spring engaged, air disengaged expanding-shoe type on transmission output shaft.	Spring engaged, oil disengaged oil disc rear brakes.
Emergency		Separate air systems for manual actuation of front and rear brakes. If emergency air pressure falls to 45 psi (3.1 bar), brakes will not release manually.	Separate air systems for manual actuation of front and rear brakes. If emergency air pressure falls to 45 psi (3.1 bar), brakes will not release manually.	Spring engaged, oil disengaged oil disc rear brakes. Separate air system actuates front brakes.
	steering			
Turning circle on front wheel track		52'7" (16 m)	67'6" (20.6 m)	80'0" (24.4 m)
Vehicle Clearance turning circle		59'1" (18 m)	72'6" (22.1 m)	88'5" (27 m)
Steering Angle		39°	31°	31°
	suspension			
Independent, self-contained oil-pneumatic suspension cylinders on each wheel.				
Effective cylinder stroke:				
Front		9.3" (236 mm)	9.3" (236 mm)	12.5" (317 mm)
Rear		7.5" (190 mm)	7.5" (190 mm)	6.5" (165 mm)
Drive axle oscillation		8°	8°	6°
	weight			
Tractor with hitch and turn stops		48,500 lb. (22 000 kg)	70,800 lb. (32 100 kg)	108,000 lb. (49 000 kg)
	standard tires			
Front & Dual Rear		18.00 x 33, 24 PR	24.00 x 35, 36 PR	27.00 x 49, 36 PR

* The net horsepower 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

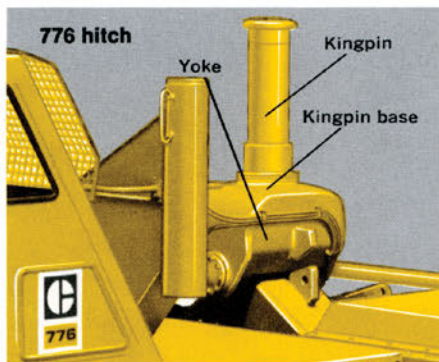
60°F (15.6°C). Vehicle engine equipment includes fan, air cleaners, water pump, lubricating oil pump, fuel pump, air compressor and alternator.



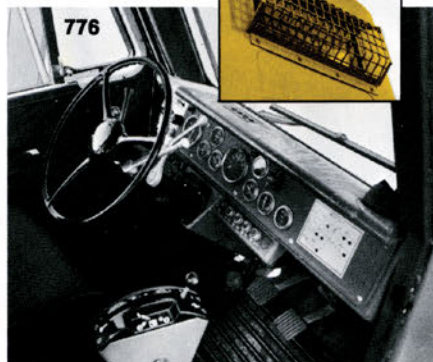
Cat oil-cooled disc brakes on the tractor drive wheels provide reliable, adjustment-free braking. The discs in each rear brake are fade resistant because the oil which surrounds them is continuously cooled by a water/oil heat exchanger. They are completely sealed to keep out wear-increasing contaminants, and require no periodic adjustment. In addition to their service brake function, the rear disc brakes also serve as retarders . . . absorbing high torque loads at the wheels and reducing stress on the power train. This efficient retarding system leads to higher controlled speeds on long downhill grades . . . meaning higher production.



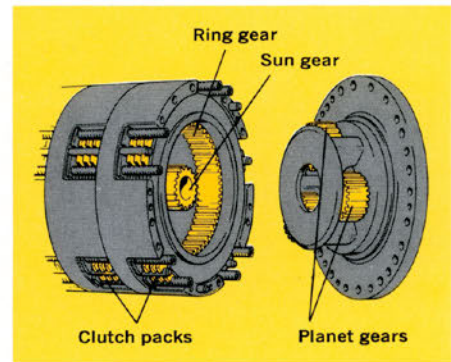
Large service deck to the right of the cab allows convenient checking of maintenance items. Battery, steering oil, engine coolant, and air filter indicator all can be readily checked from the platform. Oil and fuel filters are easily accessible on the right side of the engine, making proper maintenance simple. 776 shown features in-frame serviceability of major power train components, which mean less downtime for in-shop repairs.



Yoke-type hitch means reliable hauling. The kingpin base allows oscillation of 12° to either side, while the yoke itself provides fore-and-aft movement. This four-way oscillation helps relieve stresses to the hitch area when hauling on uneven ground. Yoke is tied directly to tractor frame by durable straddle mountings on the 776 and 772, and trunnion mountings on the 768B. Turn-stops prevent the wagon from rotating in excess of 90° (768B) or 105° (772, 776) in either direction.

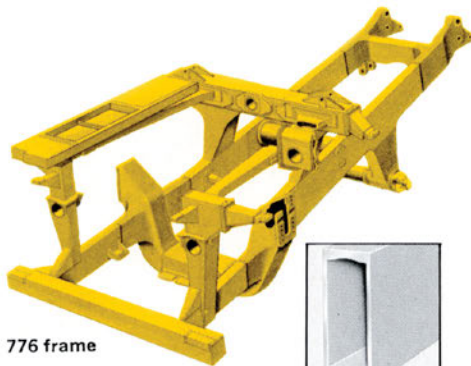


Standard all-steel cab protects the operator from harsh working environments. 776 Tractor has integral ROPS cab standard. ROPS structure is available on 772 and 768B (standard in U.S.A.). All three Cat Off-Highway Tractor cabs meet OSHA requirements for sound suppression. Easy-to-read dash gauges with international symbols all point to 3 o'clock in normal position for fast, at-a-glance checking. Operator's seat is fully adjustable and suspended. Cushioned passenger seat is available. An optional heavy wire grid protects the rear window from falling debris during wagon loading.



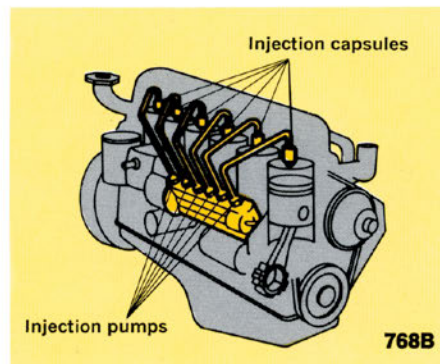
Rugged planetary design reduces load stresses, keeps Cat-built transmissions working day-in, day-out. Clutch packs have large surface contact area and are continuously cooled and pressure lubricated by oil for longer life.

Caterpillar transmissions give efficient speed selection for increased production. On the 772 and 768B a single shift lever controls three forward and one reverse gear ranges. Within each range a speed-sensing device automatically shifts through torque-divider drive, direct drive, and overdrive . . . giving nine speeds forward and three reverse. The 776 transmission automatically shifts up and down between first and whatever top range the operator selects, providing seven speeds forward and one reverse.

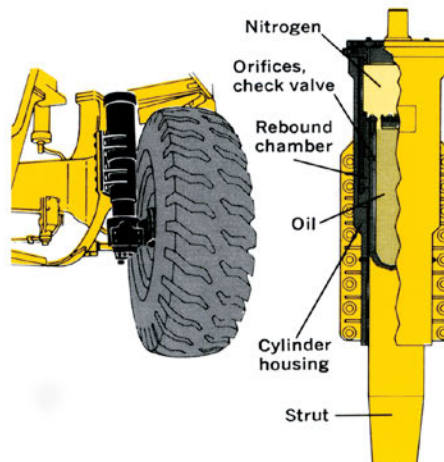


776 frame

Rugged box-section tractor main frame resists severe vertical and bending stresses associated with hauling big loads in tough conditions. Side, top and bottom members are welded full length for extra durability. Steel castings for front suspension strut mounts and rear strut pivots give additional strength in critical areas. Integral bumper and non-supporting cross-member are also of box-section design to add reinforcement.

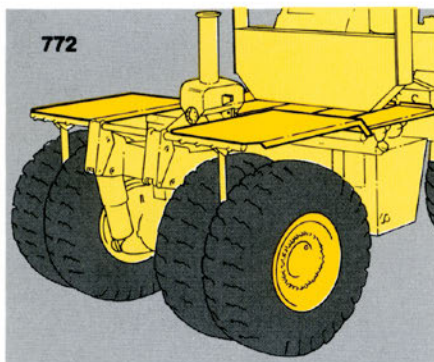


768B



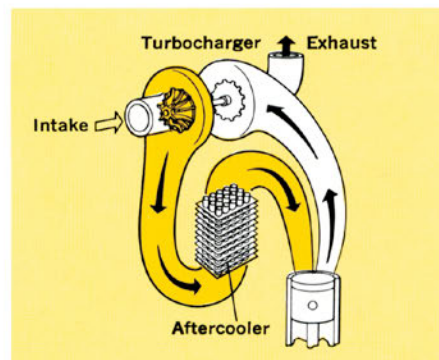
Dependable Cat-built engines deliver fast, smooth performance for hauling big loads. Adjustment-free fuel system with individual pump design for each cylinder means reliable performance. Aluminum-alloy pistons are cam-ground and tapered for long life. Stellite-faced valves resist warping, and rotators increase valve life.

Oil-pneumatic suspension cushions loading and hauling shocks for greater operator comfort and less stress on the tractor. Four independent suspension cylinders are widely spaced for stability. Rolling over a bump forces the strut into the cylinder housing, compressing nitrogen in the main cylinder to absorb the impact. This also forces oil into the rebound chamber through orifices. When the wheel drops back down, the compressed nitrogen pushes the strut smoothly back to the normal position. The orifices and a ball check valve control oil flow and rebound rate to prevent harsh rebounding. The two front suspension cylinders act as steering kingpins, providing excellent maneuverability. Rear axle oscillates so all wheels remain firmly on the ground for increased stability and traction.

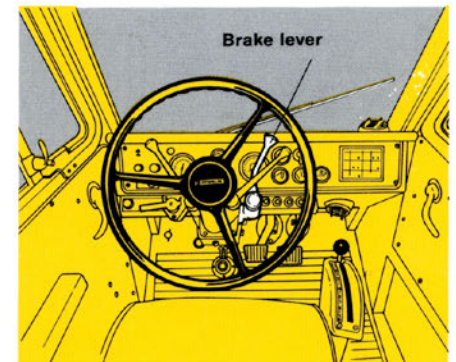


772

Rear platform (standard on the 776, 772 and 768B) functions as a power train guard and work area. Cover plates are easily removable for easy access to power train components. Fenders and mud flaps are attached to protect against material thrown by the rear tires. A front-mounted windrow breaker is available to protect the underside of the tractor.



Turbocharging and aftercooling increase air flow through the engines and lower exhaust temperatures. The turbocharger, driven by exhaust gases, compresses the incoming air. It is then cooled and made more dense by the aftercooler. That packs more air into the cylinders for more complete combustion and more power for big loads.



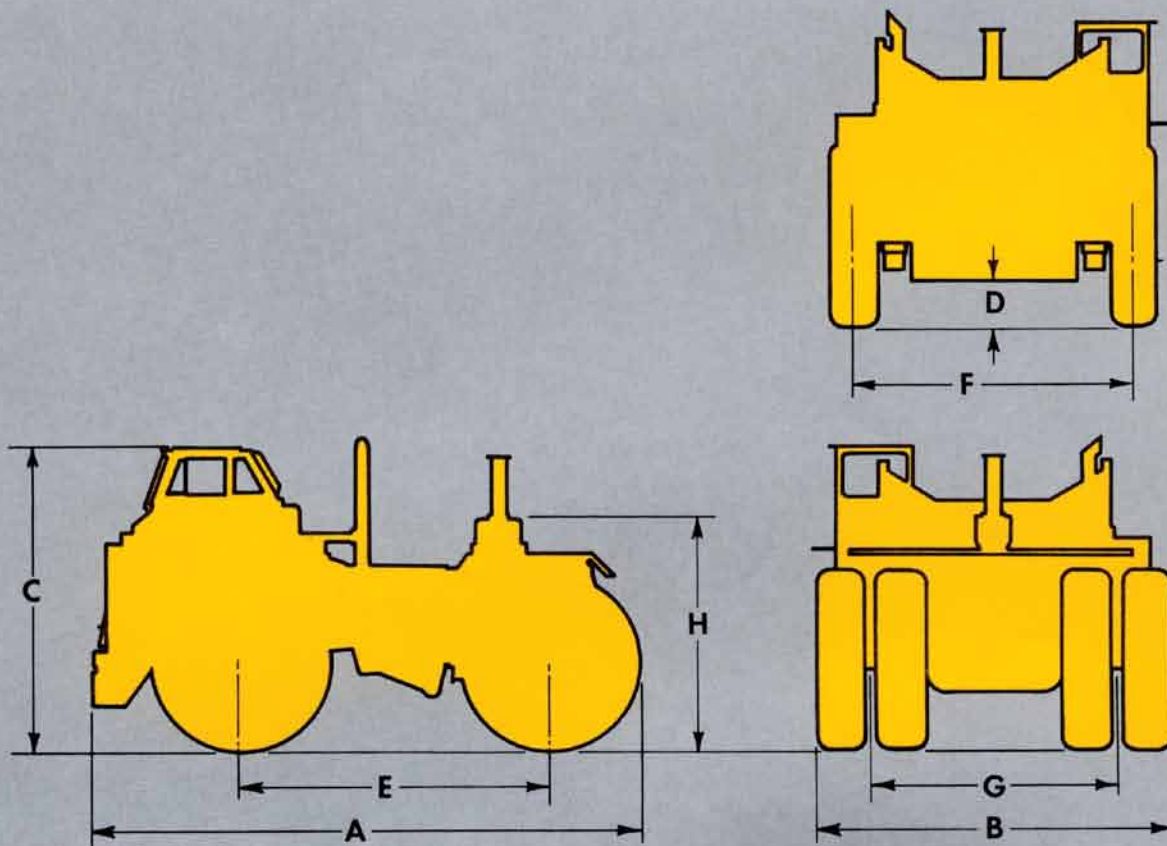
Separate brake lever conveniently located on the right of the steering column allows the operator to apply the wagon brakes separately to prevent jackknifing when descending a grade or stopping on a slippery surface . . . Otherwise the wagon brakes are actuated as a part of the entire braking system by the brake foot pedal.

SPECS. (CONT.)**768B****772****776****service refill capacities**

	U.S. Gals.	(litres)	U.S. Gals.	(litres)	U.S. Gals.	(litres)
Fuel tank	135	(510)	180	(680)	250	(950)
Cooling system	27	(102)	38	(144)	76	(288)
Crankcase	9.25	(35)	15	(57)	18.75	(71)
Differential & final drives	22.5	(85)	37	(140)	83	(314)
Integral transmission, brake & trailing unit hydraulic system	45	(170)	55	(208)	64	(242)
Steering system	12.75	(48)	12.75	(48)	22	(83)

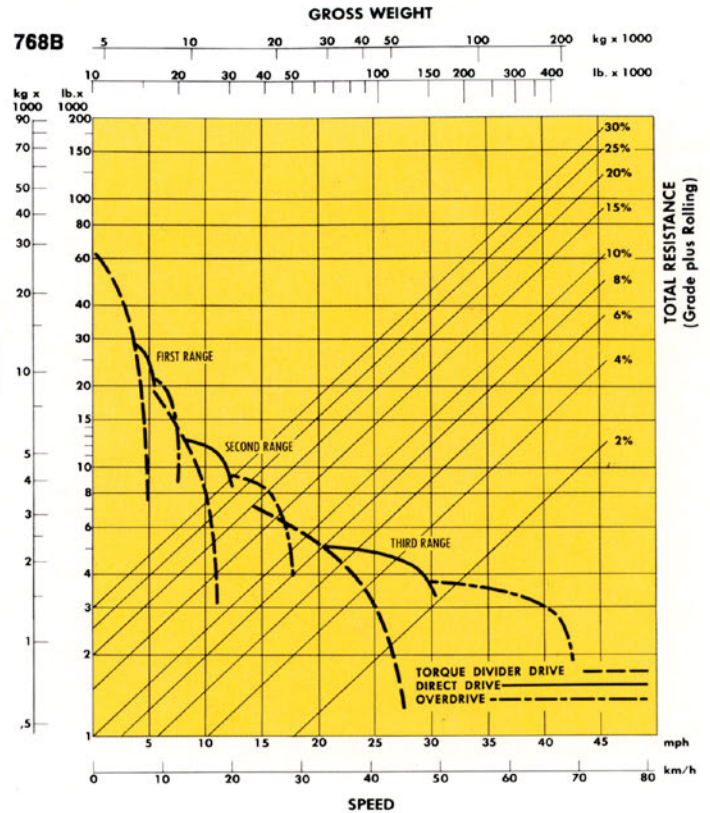
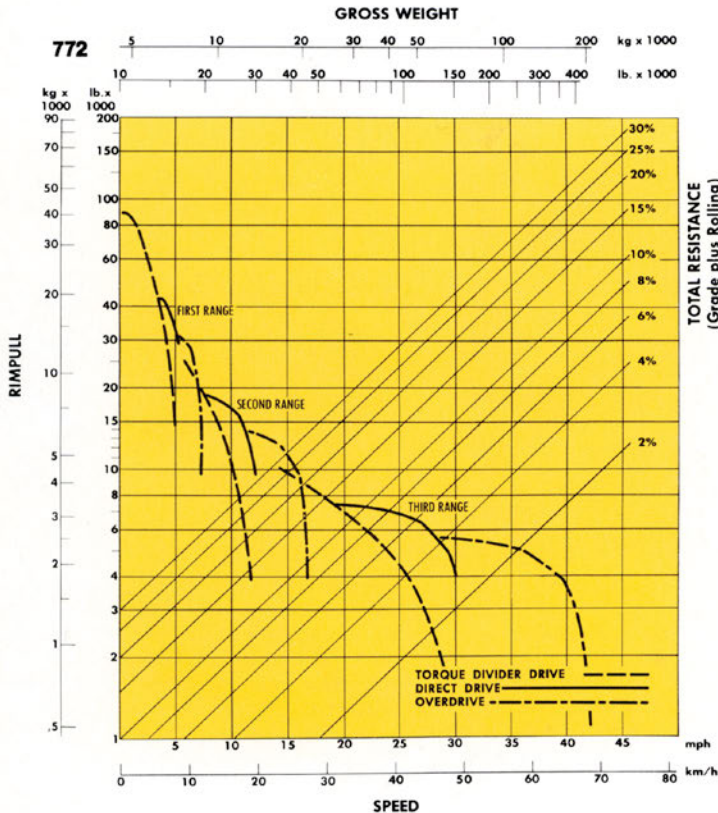
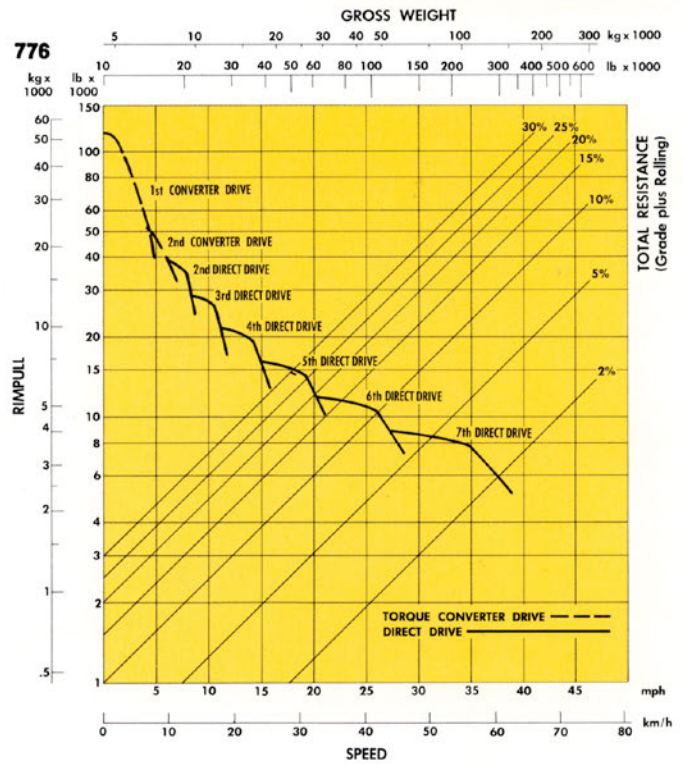
**dimensions**

	Ft.	(mm)	Ft.	(mm)	Ft.	(mm)
(A) Overall length	21'6"	(6550)	23'6"	(7160)	26'7"	(8100)
(B) Overall width	11'10"	(3580)	14'5"	(4390)	17'1"	(5210)
(C) Overall height	11'5"	(3500)	12'8"	(3860)	14'8"	(4470)
(D) Minimum ground clearance	19.8"	(500)	24"	(610)	30"	(760)
(E) Wheelbase	11'10"	(3600)	13'	(3950)	15'	(4570)
(F) Front gauge	10'1"	(3050)	10'8"	(3250)	13'4"	(4060)
(G) Rear gauge	8'1"	(2460)	9'7"	(2920)	11'9"	(3580)
(H) Height to yoke seat	7'4"	(2235)	8'7"	(2620)	11'2"	(3400)



Gradeability-Speed-Rimpull

To determine gradeability performance: Read gross weight down to the % of total resistance. (Total resistance equals actual % grade plus 1% for each 20 lb./ton (10 kg/t) of rolling resistance.) From this weight-resistance point, read horizontally to the curve with the highest obtainable speed range, then down to maximum speed. Usable rimpull depends upon traction available and weight on drive wheels.



Materials and specifications are subject to change without notice.