



# CATERPILLAR

## 815B Compactor



Model shown may have optional equipment.

### Summary of features

- 157 kW/210 flywheel power Caterpillar 3306 diesel Engine.
- **Single-lever power shift transmission** . . . four speeds forward and four reverse.
- **978 mm/38.5" wide wheels** with modified chevron foot pattern give two-pass coverage of 4.343 m/14'3".
- **Articulated frame** steering makes maneuvering quick and easy.
- **Centered operator's seat** provides riding ease . . . engine in rear provides good forward visibility.
- **Versatility** for dozing, filling and compacting . . . with sufficient power for multiple functions.



### Caterpillar Engine

Flywheel power @ 2200 RPM . . . . . 157 kW/210 HP  
(Kilowatt (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, 29° C/85° F and 995 mbar/29.38" Hg, using 35 API gravity fuel oil at 15.6° C/60° F. Vehicle engine equipment includes blower fan, air cleaner, water pump, lubricating oil pump, fuel pump, muffler, air compressor and alternator. Engine will maintain specified flywheel power up to 2300 m/7500 ft. altitude.*

Caterpillar 4-stroke-cycle 3306 turbocharged diesel Engine, with six cylinders, 121 mm/4.75" bore, 152 mm/6" stroke and 10.5 liters/638 cu. in. displacement.

# 815B

## Compactor

### engine (continued)

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

Stellite-faced valves, hard alloy steel valve seats, valve rotators. Cam-ground and tapered aluminum alloy pistons with 3-ring design, cooled by oil spray. Steel-backed aluminum bearings, thru-hardened crankshaft. Pressure lubrication with full-flow filtered and cooled oil. Dry-type air cleaner with primary and safety elements.

Uses 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.

Two 24-volt direct electric starting systems — standard or low temperature.

### transmission

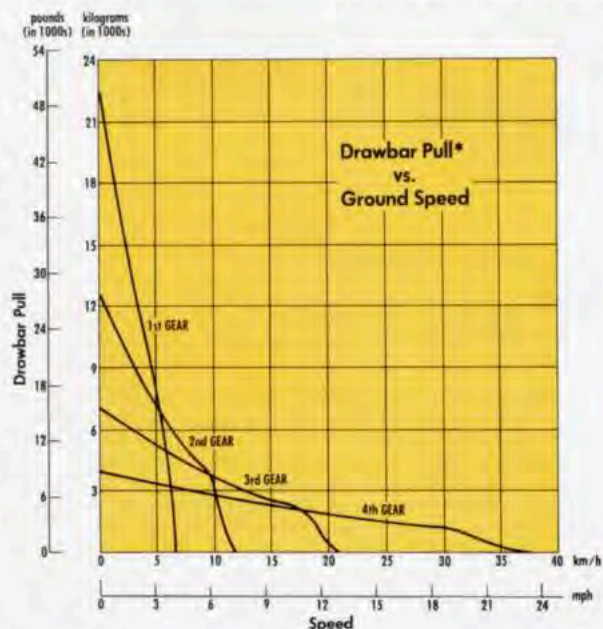
Planetary type. Full power shift in four forward and four reverse speeds.

Single lever on left side of steering column controls both speed and direction. Rotate the handle for four speeds in each direction. Move the lever forward or backward for directional change. Separate lever locks the transmission control in neutral.

Single-stage, single-phase torque converter.

#### Speeds:

	1st	2nd	3rd	4th
Forward, km/h:	6.70	11.96	21.17	37.58
MPH:	4.16	7.43	13.15	23.34
Reverse, km/h:	7.65	13.67	24.2	42.95
MPH:	4.75	8.49	15.03	26.68



\*Usable pull will depend on weight and traction of equipped tractor.

### axles

Front axle fixed, rear axle oscillates  $\pm 12^\circ$ , total of  $24^\circ$ . One wheel can drop or rise a total of 471 mm/18.5" with all wheels remaining on ground for maximum traction. Conventional differentials.



### final drives

All-wheel drive with planetary reduction in each wheel.



### frame

Two frames fabricated from steel plate and rolled sections. Joined at the center by two hardened-steel pins. Straight upper roller bearing and double-tapered lower roller bearing, with 1000 hour lube intervals on both.



### steering

Flow amplified steering with articulated frame gives precise control for maneuvering in tight quarters.

Minimum turning radius (outside corner of blade)	6.136 m/20'2"
Clearance circle with blade	12.272 m/40'3"
Steering angle (each direction)	45°
Hydraulic system — two 102 mm/4" bore, double-acting cylinders powered by vane-type pump:	
Output @ 2090 RPM with	
6895 kPa (69 bar) 1000 psi	186 liters/min/49 gpm
Relief valve setting	17 237 kPa (172 bar) 2500 psi



### brakes

**Service** — four-wheel, air over hydraulic wedge actuated, automatically adjusted shoe brakes.

**Parking** — uses drive line, drum-type shoe brake, spring applied, air released.



### service refill capacities

	Liters	U.S. Gallons
Fuel tank	462	122
Cooling system	44	12
Crankcase	29	7.7
Transmission and torque converter	60	15.9
Differential and final drives:		
Front	52	13.7
Rear	51	13.5
Hydraulic system	134	35



### operating weight (approximate)

Includes lubricants, coolant, operator, full fuel tank, bulldozer, ROPS cab and hydraulic system. 20 037 kg/44,174 lb.

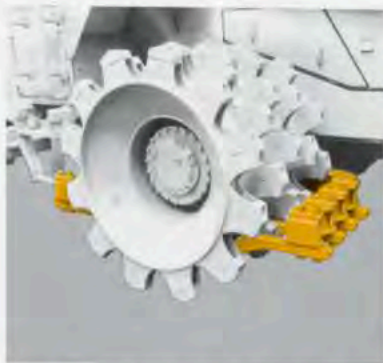


### wheels

Drum width	978 mm/38.5"
Diameter, over feet	1.425 m/56"
Over drum	1.029 m/40.5"
Total feet per wheel	60
Feet per row	12
Rows of feet	5
Foot length	198 mm/7.8"
End area per foot	116 cm <sup>2</sup> /18 sq. in.
Foot pattern	Staggered or modified chevron
Maximum ballast per wheel	352 liters/93 gallons



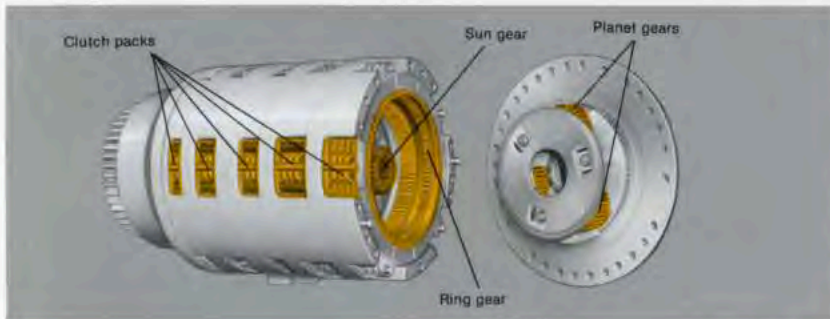
**Wheels with tamping foot design** and modified chevron pattern give traction, penetration and compaction needed for high production. Modified chevron patterns are reversed on front and rear drums for one-pass double coverage: rear feet hit areas missed by front feet. Feet are anchored to drum with a continuous weld for extra strength. Each foot has replaceable weld-on tips.



**Two cleaner bars per wheel** keep drums free of carry-over dirt . . . regardless of rolling direction. Cleaner tips peel — rather than shear — material. Adjustable and reversible for long life, tips can be replaced individually or as a unit.



**Operator's compartment** features a multiple-position tilt steering column and fully adjustable suspension seat with seat belt. Instrument panel contains hour meter, start switch, windshield washer and wiper controls, light switches and an advanced warning system that constantly monitors the operating condition of important machine components, systems and filters. A red light mounted ahead of the controls flashes when any critical malfunction occurs alerting operator to check instrument panel for specific problem.

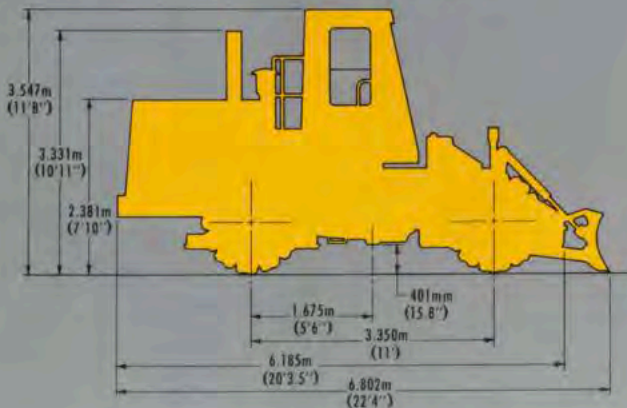


◀ **Planetary power shift transmission** is designed for tough work . . . with big 345 mm/13.6" clutch packs. Hydraulic modulation cushions clutch engagement for full-power, on-the-go shifting. Planet gears spaced 120° apart spread out stresses for longer life. Oil cooling and lubrication reduce heat and wearing friction.



### dimensions

Tread	2.266 m/7'5"
Overall width, over drums	3.243 m/10'6"
Over cleaner bars	3.400 m/11'2"
With bulldozer	3.652 m/12'
Ground clearance	401 mm/10.25"



**Sound-suppressed cab plus ROPS** contains many standard operator comfort features. ROPS structure is isolated from operator's station which enables the cab to be resiliently mounted to the vehicle chassis. When properly installed and maintained, cab meets OSHA and MSHA requirements for operator sound exposure limits in effect at date of manufacture. Cab features include tinted glass, windshield washer/wiper, dome lights, pressurized and filtered air circulation system, inside mounted rear view mirrors, coat hook, cigar lighter, ash tray, floor mat and lockable entry door all standard. Cab air conditioner and heater are optional.



**Fill-spreading blade** is multiple box-section steel. Reversible cutting edges and self-sharpening end bits add service life.



### standard equipment

35-amp alternator. Lockable toolbox. Drawbar hitch. 24-volt direct electric starting. Fuel priming pump. Muffler. Seat belt. Horn. Back up alarm. Cab, ROPS, sound suppressed with air pressurization. Guards: crankcase, power train, front drive shaft. Decelerator.



### bulldozer

Complete unit consists of blade, push arms, trunnion mounting, reversible cutting edges, self-sharpening end bits, hydraulic lift cylinder, hydraulic lines guard and control valve.

#### Blade:

Length	3.761 m/12'4"
Height	860 mm/34"
Overall length, including machine	6.802 m/22'4"
Ground clearance, maximum	628 mm/24.7"
Depth of cut, maximum	407 mm/16"
Moldboard material	Heat-treated steel
Construction	Multiple box sections

#### Cutting edges (reversible):

Length, center section	1.496 m/58.9"
Length, each end section	860 mm/33.82"
Width x thickness	203 x 19 mm/8" x .75"
Material	Through-hardened DH-2 steel

#### End bits (self-sharpening):

Length, each	377 mm/14.8"
Width x thickness	203 x 19 mm/8" x .75"
Material	Through-hardened DH-2 steel

#### Hydraulic system:

One control lever for raise and lower. Hydraulic oil is full-flow filtered.  
 Pump output @ 2090 RPM and  
 6895 kPa (69 bar) **1000 psi** with  
 SAE No. 10 oil @ 66° C/150° F ..... 107 liters/min/28.3 gpm  
 Relief valve opening pressure ..... 12 500 kPa (125 bar) **1813 psi**  
 Cylinder, double acting,  
 bore x stroke ..... 102 x 627 mm/4" x 25"



### optional equipment

	Kg	Lb
Air conditioner	36	78.8
Alternator, 50-amp	7	15
Bulldozer, straight, fill spreading	1270	3,000
Cab deletion	-232	-511
Canopy, ROPS, allowance for deletion	-750	-1,600
Fast fuel adapter	7.7	17
Fire extinguisher	16	35
Gauge package	2	4
Hand throttle/decelerator	7	15
Heaters:		
Cab includes defroster	4.5	10
Engine coolant	1.3	3

	Kg	Lb
Hydraulic system, tilt	70	155
Lighting system, 2 working lights	3.6	8
Low temperature starting aids:		
Ether	2.7	6
Heavy duty batteries	23	50
Starting receptacle, 110 V	3.6	8
Tool kit	8	18
Vandalism protection:		
Instrument panel guard (without cab)	1	3
Cap locks for fuel tank, hydraulic tank, oil filler and radiator	5	11
Wiper/washer, rear window	2	4

Materials and specifications are subject to change without notice.