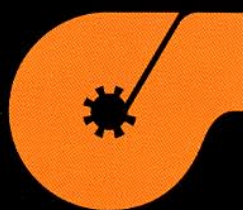


C50A



CHAMPION[®] C-Series MOTOR GRADERS



MODEL	C50A
Configuration	Articulated
Operating Weight*	9,420 lbs (4 273 kg)
Horsepower (kW)	76 (55)
* Typically equipped; see specifications for details Model shown may include optional equipment	

C-Series C50A

C50A - Articulated Frame



OPERATING WEIGHTS

(C50A)		
Total	9,420 lbs.	4 273 kg
Front wheels	2,900 lbs.	1 450 kg
Rear wheels	6,520 lbs.	3 260 kg

Weights shown include ROPS canopy, all operating fluids and operator.



ENGINE DATA

Make/Model Cummins 4B3.9
Type 4 cycle, naturally aspirated, diesel
No. of cylinders In-line 4
Bore & stroke 4.02 in. x 4.72 in. (102 mm x 120 mm)
Displacement 239 cu. in. (3.92 L)
Horsepower 76 @ 2500 RPM (55 kW @ 2500 RPM)
Engine equipped with a dual element, dry-type air cleaner with evacuator. 12 volt starting and electrical system with 65 amp (780 watt) alternator.
Performance: rated gross horsepower to SAE J1349 standard conditions with water pump, lubricating oil pump and fuel system.



TRANSMISSION

Type Heavy-duty hydrostatic
Control Hand lever
Mechanical neutral lockout with neutral start switch.
Operating pressure 3000 PSI (20 700 kPa)
Maximum pressure 5000 PSI (34 500 kPa)
Heavy-duty hydrostatic drive gives complete control to the operator over operating ground speeds. This permits very smooth increases or decreases in operating speeds, essential when fine grading. Easy forward or reverse selection without the need for clutching makes repetitive operation, such as pad work, simpler.
SPEEDS @ 2500 RPM
Forward and Reverse 0 - 15 mph (0 - 24 km/h)



FINAL DRIVE/TANDEM

Positive traction tandem drive is accomplished through heavy-duty, bi-directional hydrostatic drive motors. Differential action is incorporated in the system, providing smoother turns, reducing tire scuffing, and offering positive traction in low traction conditions. Tandems are fabricated steel box construction with oscillation. Each tandem wheel is driven by chain, sized for long life.
Wall thicknesses (inner & outer) 1/2" (13 mm)
Drive chain pitch 1.25" (32 mm)
Oscillation ± 30°



WHEELS & TIRES

Tire size 12 x 16.5
Ply rating (pr.) 6 pr.
Rim size 9.75" (248 mm)
Bolt-on rim front and rear.
All-weather diamond tread tires available.



BRAKES

Hydrostatic drive provides dynamic braking.
Spring applied parking brake.



FRONT AXLE / STEERING

Front axle type: fully welded steel truss, gusseted for torsional strength and rigidity. Replaceable wear plates on each side of truss. Single oscillation pin with replaceable pin supports.
Oscillation 35° up and down
Ground clearance 16" (406 mm)
Steering type: hydraulic power steering. Entire axle assembly steers just behind nose assembly.
Turning radius (outside front wheel)
- articulated frame 12'10" (3 912 mm)



FRAME / ARTICULATION

Rear 8" (203 mm) heavy gauge channel
Front Box type
Size 3/8" x 6" x 8" (10 mm x 152 mm x 203 mm)
Full front and rear frame perimeter frame sections. First user lifetime frame warranty. Articulation joint constructed from 3" (76 mm) diameter shaft, turning on 4 tapered roller bearings. Powered by 2 hydraulic cylinders mounted with replaceable ball joints and dust shields.



CIRCLE ASSEMBLY / DRIVE

Size 31" (787 mm) outside diameter
Type Full circle construction
Lifted by two hydraulic cylinders connected with ball joints at turntable. Trunnion-mounted to frame with bearings and replaceable bushings. Turntable centered with 3 adjustable alignment blocks with removable shims. Replaceable wearplate between circle and drawbar.
Circle rotation 120° either side
Twin hydraulic cylinder circle drive system uses direct acting hydraulic power permitting moldboard repositioning under full load. Permits moldboard to be repositioned within grader's width for travel.



DRAWBAR

Main bar (solid) 3" (76 mm) square
Cross bar (solid) 1" x 4" (25 mm x 102 mm)
T-bar designed for maximum visibility and support.
Connected with ball and socket, shim adjustable.



MOLDBOARD ASSEMBLY

Size 1/2" thick x 17" high x 10' long
(13 mm thick x 432 mm high x 3 048 mm long)
Replaceable cutting edges:
2 @ 5' x 6" x 1/2" (1 524 mm x 152 mm x 13 mm)
Blade ground clearance 12" (305 mm)
Blade tilt positions 4
Changed manually, standard.
Blade reach outside front tires:
- moldboard extended 58" (1 473 mm) right or left
- articulated & extended 87" (2 210 mm) right or left



CONTROLS

Full hydraulic operation of circle turn, blade lift, front blade, moldboard slide and articulation. Direct acting control levers.
Operating pressure 1 700 PSI (11 730 kPa)
Operator can use more than one function at a time. Hydraulic tank contains a temperature gauge and sight glass for fluid level checks.
Instrument panel: temperature gauge; oil pressure gauge; fuel level gauge; volt meter; tachometer; hour meter.



FRONT-MOUNTED BLADE / SCARIFIER (optional)

Size 1/2" thick x 141/2" high x 6' long
(13 mm thick x 368 mm high x 1 829 mm long)
Blade ground clearance 14" (356 mm)
Replaceable, standard grader cutting edge.
Number of scarifiers 4
Cutting depth 6" (152 mm) below blade
Mounted on front blade. Replaceable tips.



CAPACITIES / FILTERS

Fuel tank 20 gallon (76 L)
Hydraulic 30 gallon (114 L)
Coolant 4.5 gallon (17 L)
Tandems (ea.) 10 gallon (37 L)
Transmission filter 10 micron suction
Hydraulic filter Suction strainer, return 33 micron
Spin-on type filter for easy servicing.

DIMENSIONS

Overall length 18'6" (5 639 mm)
Overall width: @ front tires 5'10" (1 778 mm)
@ rear tires 6'8" (2 032 mm)
Overall height with cab 8'0" (2 432 mm)
Wheelbase 12'6" (3 810 mm)
Blade base 6'2" (1 880 mm)

STANDARD EQUIPMENT

- Cummins 4B3.9 76 HP (55 kW) engine
- Hydrostatic drive
- 12 volt electrical system
- Back-up alarm
- Gauges: engine temperature and PSI, Volt meter, fuel level, tachometer, hour meter
- 10" (3 048 mm)-hydraulic sliding moldboard
- Muffler
- ROPS open canopy
- Seat belt
- Steps and grab handles
- Power steering
- Engine side shields
- Spring applied parking brake
- 2 dual beam headlights
- Front and rear directional and hazard lights
- Back up lights
- Inside mirror 6" convex round

OPTIONAL EQUIPMENT

- ROPS cab enclosure
- Cab heater
- Windshield defroster
- Beacon light
- Working lights
- Windshield wipers
- Tilt steering wheel and controls
- Air cleaner service indicator
- Mirrors outside
- Cummins 4BT3.9 turbo diesel 100 HP (75 kW)
- Hydraulic blade tilt adjustment
- Foot pedal accelerator
- F-N-R foot control pedal
- Independent moldboard floats
- FOPS installation for cab or canopy

ATTACHMENTS

- 6' (1 829 mm) front-mounted blade
- 4 scarifiers mounted on front blade
- Side dozer



CANADA

Goderich, Ont.

C50A(05/96)

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Specifications subject to change without notice. Some items included in this brochure are optional.

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