

CHAMPION MOTOR GRADERS

A Company within the Volvo Construction Equipment Group

NOW YOU CAN GET
LARGE GRADER FEATURES
IN A COMPACT GRADER...



... AND A LOT MORE!

CHAMPION C-Series MOTOR GRADERS

Cab . . .



The Champion C-Series cab provides a complete working environment with superior 360° visibility. It's roomy, comfortable and quiet (the hydraulic manifold is under the cab). ROPS is standard equipment whether you choose a canopy or the fully enclosed cab with all environmental functions. You'll find the C-series very operator-friendly, with fully adjustable, low effort, industry standard controls.

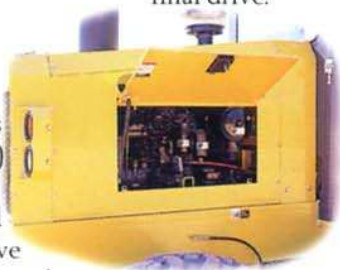
Powertrain . . .

Champion C-Series' heavy duty Hydrostatic Drive delivers infinitely variable ground speeds regardless of engine RPM. A 2-



speed rear axle provides working speeds up to 10 mph (16 km/h) and high roading speeds up to 20 mph (32 km/h) through an automatic lock-up final drive.

Standard engines are high torque with low emissions; a naturally aspirated 4-cylinder Cummins diesel yields 80 net hp (60 net kW) for the C60A, C70A and C80A. C76A and C86A. All Wheel Drive models use a turbocharged Cummins diesel at 110 net hp (82 net kW); this same engine is also optional for other models. 4-wheel effective disc brakes (drum-type on C60) provide positive braking and "declutch" the transmission when activated.



Hydraulics . . .

Champion's C-Series models use three separate pumps to provide an abundance of hydraulic power. Two gear-type pumps provide power for the steering, brakes and main implement manifold.



Separate piston pumps provide the motive power for the tandem drive and all wheel drive. Attachment and supplementary control sections are standard on the manifold and all models offer a choice of Single- or Twin-Flow hydraulic systems. Standard equipment includes detent-style blade float controls and blade feathering capability for accurate fine grading.

Controls . . .

The C-Series is packed with large grader features for operator productivity; these include a fully adjustable control pedestal with complete instrumentation, industry standard grader control sequence, and a choice of either hand or foot hydrostatic speed controls. All transmission, electrical and climate controls are conveniently located in the right hand console.



All Wheel Drive . . .

Champion's C-Series All Wheel Drive system is powered by a Sunstrand pump and hydrostatically controlled to match torque and ground speeds with the rear drive. All Wheel Drive is available in the low range (0-10 mph / 0-16 km/h) and disengages in high range. It automatically equalizes traction to each front wheel regardless of ground conditions, while grading and through turns. Full mobilities are retained on the front axle, including wheel lean. C-Series All Wheel Drive systems can add up to 2,360 lb. (1 070 kg) additional rim pull for extra grading capability.



Circle/Drawbar/Bladelift . . .

Circle turn on C-Series is achieved through simple, reliable, direct-to-the-circle hydraulics; 100% start-up torque is available the second the operator actuates the circle turn control lever. As with every Champion, this circle will hold and turn whatever the machine can cut and push, through a 120° range of movement. A "T"-shaped drawbar provides optimum blade stability and operator visibility to the working area. Moldboard slide is standard equipment. The blade lift system is trunnion-mounted with straddle ball joints for durability. The circle is shim adjustable with replaceable wear plates, ensuring circle smoothness and blading accuracy.



Agility . . .

This is where the C-Series really shines! The C66A turning radius is as little as 13' 6" (4 115 mm), and on the C86A, only 16' 6" (5 029 mm), allowing turns on a dime. These are graders that fit and perform in small places - 37° articulation plus tight steering arcs yield highly maneuverable machines. For a small footprint, maximum ground bearing pressure is only 16.4 pounds per square inch. And C-Series graders are easily transportable on a tilt or ramp equipment trailer.



Attachments . . .

For just about any application, you'll find a tool that will increase the productivity and versatility of your C-Series grader. All implements and attachments are controlled from the operator's pedestal. (See the back panel for the complete range of Champion attachments)



Front mounted Dozer/Scarifier

CHAMPION MOTOR GRADERS

C-Series



Model Specifications	C60A	C66A	C70A	C76A	C80A	C86A
Power: hp (kW)	80 (60)	80 (60)	80 (60)	110 (82)	80 (60)	110 (82)
Engine - Cummins	4B3.9	4B3.9	4B3.9	4BT3.9	4B3.9	4BT3.9
Operating Weight -lb. (kg)	11,250 (5 100)	11,800 (5 352)	13,050 (5 919)	13,600 (6 169)	15,320 (6 949)	15,870 (7 205)
Blade Down Pressure -lb. (kg)	5,687 (2 579)	6,189 (2 807)	6,557 (2 974)	7,059 (3 201)	8,564 (3 884)	9,066 (4 112)
Rim Pull -lb. (kg)	7,065 (3 204)	9,650 (4 376)	8,217 (3 727)	10,802 (4 899)	9,180 (4 163)	11,765 (5 336)
Frame Type	Articulated	Articulated	Articulated	Articulated	Articulated	Articulated
Drive Configuration	4 X 2	4 X 4	6 X 4	6 X 6	6 X 4	6 X 6
Drivetrain	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic
Turning Radius: ft. in. (mm)	13' 6" (4 115)	13' 6" (4 115)	16' 6" (5 029)	16' 6" (5 029)	16' 6" (5 029)	16' 6" (5 029)
Articulation Angle	37°	37°	37°	37°	37°	37°
Overall Length ft. in. (mm)	21' 0" (6 401)	21' 0" (6 401)	21' 0" (6 401)	21' 0" (6 401)	21' 0" (6 401)	21' 0" (6 401)
Overall Width ft. in. (mm)	7' 2" (2 184)	7' 2" (2 184)	7' 5" (2 261)	7' 5" (2 261)	7' 10" (2 337)	7' 10" (2 337)
Wheelbase ft. in. (mm)	15' 4" (4 674)	15' 4" (4 674)	15' 4" (4 674)	15' 4" (4 674)	15' 4" (4 674)	15' 4" (4 674)
Bladebase ft. in. (mm)	6' 2" (1 880)	6' 2" (1 880)	6' 2" (1 880)	6' 2" (1 880)	6' 2" (1 880)	6' 2" (1 880)
Blade Length ft. in. (mm)	10' 0" (3 048)	10' 0" (3 048)	10' 0" (3 048)	10' 0" (3 048)	11' 0" (3 353)	11' 0" (3 353)
Blade Lift Float Valves	Standard Eq.	Standard Eq.	Standard Eq.	Standard Eq.	Standard Eq.	Standard Eq.
Twin Flow Hydraulics	Optional	Optional	Optional	Optional	Standard Eq.	Standard Eq.

ATTACHMENTS (fit ✓):	C60A	C66A	C70A	C76A	C80A	C86A
Windrow Eliminator	✓	✓	✓	✓	✓	✓
Rotary Broom	✓	✓	✓	✓	✓	✓
Front End Loader	✓	✓	✓	✓	✓	✓
Side Dozer	✓	✓	✓	✓	✓	✓
Rear Scarifier	✓	✓	✓	✓	✓	✓
Dozer/Scarifier	✓	✓	✓	✓	Standard Eq.	Standard Eq.
Auto Blade Controls	✓	✓	✓	✓	✓	✓

Selected Options (check individual specification brochures for availability by model):

Fully enclosed cab, Air conditioning, Heater, Work Lights, Twin-Flow Hydraulics, 12" (3 658 mm) Moldboard, F-N-R Foot Control Pedal, Foot Pedal Accelerator, 110 HP (82 kW) Turbocharged engine, FOPS, Hydraulic Blade Tilt, Hydraulic Leaning Wheels, Hydraulic Circle Sideshift

CHAMPION MOTOR GRADERS

A Company within the Volvo Construction Equipment Group

Canada
Goderich, Ontario

©1999 Champion Road Machinery Limited

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