

**B-SERIES MOTOR GRADERS
865B**

CASE
CONSTRUCTION



**POWER AND
PRECISION**

www.casece.com
**EXPERTS FOR THE REAL WORLD
SINCE 1842**

MAIN REASONS TO CHOOSE THE B-SERIES



TORQUE CONVERTER LOCK-UP

The CASE transmission combines the torque converter typical smoothness, for fine grading, with the direct drive solution for full power transfer.



LOAD-SENSING HYDRAULIC SYSTEM

The balanced flow for all applications and for simultaneous moldboard movements.



«A-SHAPE» FRAME

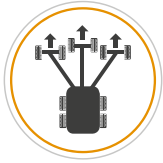
An optimized effort distribution in any condition ensures long operating life.



MULTI-RADIUS BLADE

Lower power absorption and optimized rolling effect.





REAR MOUNTED CAB

Best in class controllability and comfort: the operator is always in line with the working direction.



EASY ACCESS

The easy serviceability is part of CASE DNA: all the main checks can be easily performed from ground level; all the service points are conveniently grouped and positioned.



VARIABLE POWER CURVE

The FPT Engine always ensures the necessary power for any task. On the 845B and 885B two power curves are available, while on the 865B three engine settings are installed for even better performances.



EXTERNALLY DRIVEN CIRCLE TEETH

The external pinion is not subject to any chock while working in heavy grading, meanwhile the slewing ring external teeth prevent residual material accumulation extending the overall working life.



HIGH VERSATILITY

The wide variety of options offers, to any customer, the possibility to create a tailored grader suitable for the most demanding applications.

B-SERIES MOTOR GRADERS



MULTI RADIUS BLADE

Productivity with less power

The reinforced involuted moldboard improves the blade life thanks to different radius. The CASE radius design consists of three different radius allowing a more efficient and continuous cutting, mixing and rolling. The mixing effect is efficient on the spread out material too. This improves road surface consistency and longevity.



“A-SHAPE” FRAME

Longer working life

The durable front A-frame drawbar and high-strength circle provide outstanding stability. The A-frame drawbar has a heavy duty boxed frame design supporting the circle with a wide stance. It has increased the life of the circle and the drawbar components.



VARIABLE POWER CURVE

for excellent performance

From a unique moldboard design that rolls a superior mix to a fuel-efficient, turbocharged Tier 3 engine that achieves operating speeds of up to 43 km/h to a spacious, rear-mounted cab that gives operators exceptional visibility of the working components of the machine. For even higher performance the Dual Power maximizes operation at higher speed thanks to the double (845B/885B) or triple (865B) engine curve flattening from 4th gear.



MOLDBOARD PRECISION TECHNOLOGY



EXTERNALLY DRIVEN CIRCLE TEETH

Insensitive to shocks

Case motor graders are designed with external circle teeth. The external teeth are easier to clean and provide a larger contact area to avoid components wear and for a greater leverage when turning the blade under load.

This means there is no need for slip clutches or shear pins, which normally require repositioning or repair.



SHOCK-ABSORBING CIRCLE SAVER

Safer in tough conditions

This option protects your circle turn components. It acts as a shock absorber and allows the moldboard overpass obstructions and then return to its original position. This works automatically.

No adjustment or operator intervention is required.



B-SERIES **MOTOR GRADERS**



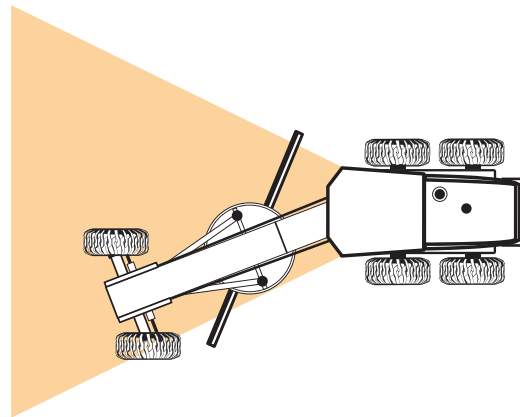


HIGH VISIBILITY

Best sight on circle, saddle, moldboard and more

The rear-mounted cab of B Series motor graders, combined with floor-to-ceiling glazed windows give operators a superior visibility of breakaway side mirrors, moldboard, circle, saddle and tires.

Even rearward, the sleek, sloping hood provide excellent visibility when backing up.

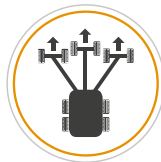


MASSIVE CAB MASSIVE COMFORT

Stress free operativity

The Isomount cab reduces noise and vibration, and consequently operator fatigue. Couple that with a deluxe suspension seat with lumbar control and any operator will be not only comfortable, but more productive.

The sloping rear hood, breakaway heavy-duty side mirrors, and floor to ceiling glass with defrost rear window allow for outstanding visibility to the rear and to the front.



REAR MOUNTED CAB

Aligned with performances

Case™ industry exclusive visibility on front articulation design allows the cab mounting to be further back on the machine. With front articulation the operator maintains a centered position while the gooseneck is articulated. This design increases visibility to the moldboard, circle, saddle, and tires. The front articulation gives the operator the possibility to see simultaneously the rear and the front half of the machine without the operator having to look to the side while the machine is articulated. In addition, front articulation allows for a tight turning radius, which is ideal for cul-de-sacs and tight job sites.

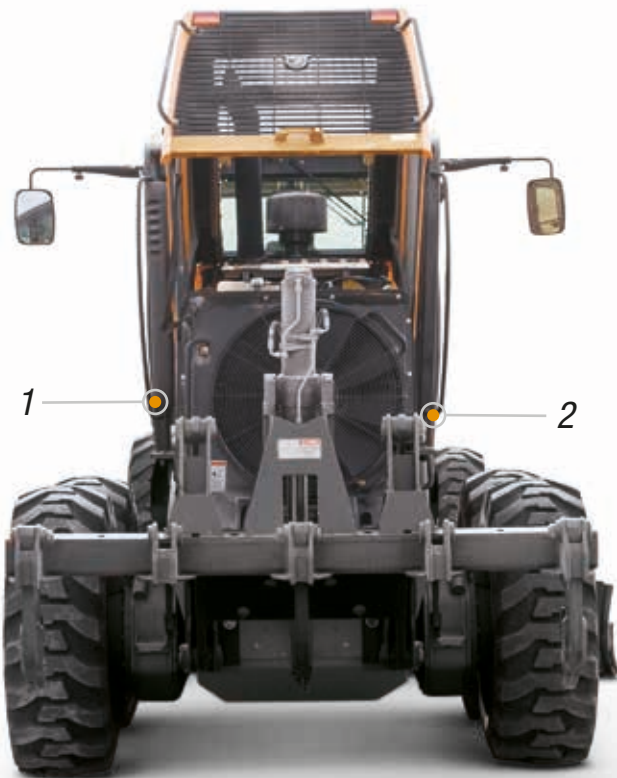
B-SERIES MOTOR GRADERS



EASY ACCESS

Make it easy

When you invest in CASE equipment, you look for duration. We make it simple. CASE B Series motor graders are no exception. From a one-piece, flip-up hood and a reversible fan option that blows out cooler debris to ground-level site gauges and service points, you can do daily maintenance in a matter of minutes. It's the easiest way to help you get the effective performance and longest life out of your machine.



SAFE AND EASY MAINTENANCE

No tools needed

The daily maintenance of each CASE grader model can be managed without the use of any specific tools. All the hoods can be easily removed or lifted without any effort making visible and reachable all the vital components of the machine. The grader refilling can be done directly from the ground and the large tanks capacity allows to work for the whole day without stopping.

MAINTENANCE SAFE AND EASY

- 1. Engine air filter
- 2. Fuel fill
- 3. External circle teeth

- 4. Hydraulic test ports
- 5. Grease zerks
- 6. Swing-out batteries

- 7. Site gauges
- 8. Flip-up hood
- 9. Oil drain hoses



B-SERIES **MOTOR GRADERS**



ATTACHMENTS

THE ART OF VERSATILITY



FRONT COUNTERWEIGHT



FRONT PUSH PLATE



RIPPER



FRONT DOZER BLADE

SCARIFIER



HIGH VERSATILITY

CASE offers a variety of versatile grader attachments, and accessories including:

- Front counterweight
- Ripper
- Scarifier
- Front push plate - light 1,084 lbs - heavy 1,764 lbs
- Front dozer blade
- Rear pull hook
- Additional lighting packages
- Lift cylinder accumulators
- Float control
- Moldboard extensions

B-SERIES MOTOR GRADERS

865B

ENGINE - VHP

Model _____ FPT F4HE9687C,
Tier 3 certified, compliant w/ EPA regulations
Electronic control _____
Type _____ 4-stroke, turbocharged, and air to air cooled
Cylinders _____ 6, in-line
Bore/Stroke _____ 4.09 in x 5.17 in
(104 mm x 132 mm)
Displacement _____ 409 in3 (6.7 L)
Fuel injection _____ Common rail
Fuel _____ Diesel
Cooling _____ Liquid
Horsepower @ 2200 RPM - SAE J1995: Gross 193/205/220
hp (144/153/164 kW)
Net 178/190/205 hp
(133/142/153 kW)

Maximum torque @ 1500 RPM: 612/649/686 ft-lb (830/880/930 N·m)

DRIVETRAIN

Rear axle _____ Graziano, planetary
Differential _____ Hydraulic lock, operator controlled
Inboard brakes _____ Wet disc
Number of discs / brake _____ 5
Brake surface area _____ 2,220 in2 (14 326 cm2)
Tandems:
Type _____ Welded plate
Oscillation _____ 20° each way
Front axle _____ High strength, welded steel
Oscillation _____ 15.3° each direction
Wheel lean _____ 20° left / right
Tires – standard _____ 14.0 x 24 12PR XGLA Michelin
Rims _____ 1-piece
9 in x 24 in (227 mm x 610 mm)
Transmission type:
Torque converter lockup (also functions as Direct Drive) Powershift,
electronic shift change control, automatic, and without inching pedal,
for progressive advancing
Sump _____ Integral
Speeds _____ 6 forward/3 reverse
Shifting _____ Single lever, bump style, automatic electronic control
Diagnostics _____ On-board

DRIVETRAIN (CONT.)

Speeds

Forward: _____ mph (km/h)
1st _____ 3.4 (5.4)
2nd _____ 5 (8.1)
3rd _____ 7.7 (12.4)
4th _____ 11.9 (19.2)
5th _____ 17.8 (28.7)
6th _____ 27.4 (44.1)
Reverse: mph (km/h)
1st _____ 3.4 (5.5)
2nd _____ 8.1 (13.1)
3rd _____ 18.8 (30.3)

ELECTRICAL

Voltage _____ 24 Volts, negative ground
Alternator _____ 90 amp
Batteries _____ (2) Low-maintenance 1010 CCA – 100 Ah (20 hr rate)
Work lights: Headlights (2); Turn signals, front/rear;
Stop/tail (2); Rear mounted floods (2);
Front mounted floods (2).
Backup alarm _____ Standard

OPERATOR ENVIRONMENT

ROPS/FOPS cab – SAE J231, ISO 3449;
Adjustable operator's console; Adjustable cloth suspension seat w/
3 in (76 mm) retractable seat belt; Safety glass; Dome light; Inside
rearview mirror; Outside rearview mirrors; Cup holder; Storage
tray; 12-volt outlet; Radio ready – 12 Volt; Electrical master switch
– automatic; Heater/defroster/pressurizer; Air conditioner; Sound
suppression; Cab doors – left/ right; Steps – left/right; Steering
wheel; Windshield wipers – front and rear; Windshield washer – front;
Window defroster – rear.

OPERATING WEIGHT

W/ 14 ft (4.27 m) moldboard, 17.5-25 tires, front counterweight, 175
lb (79 kg)
operator and full fuel: _____ 33,796 lb (15 330 kg)
Weight, front axle _____ 10,141 lb (4 600 kg)
Weight, rear axle _____ 23,655 lb (10 730 kg)
Blade pressure _____ 20,626 lb (9 356 kg)

HYDRAULICS

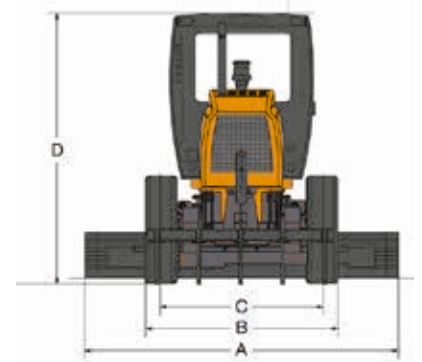
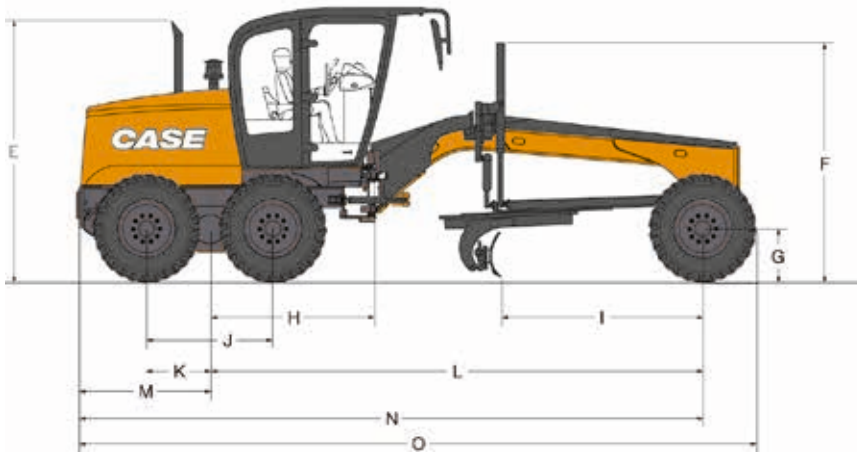
System design _____ Closed center, load sensing
Hydraulic pump _____ Load sensing piston pump,
variable displacement, pressure and flow compensated
Rated flow @ 2200 RPM _____ 49 gpm (187 L/min)
Control valve _____ 9 section
Side shift and pitch _____ Hydraulic
Saddle _____ 5 positions
Diagnostic quick couplers _____ 8

SERVICE CAPACITIES

Engine _____ 4.4 gal (17.5 L)
w/ filter change _____ 4.7 gal (18.5 L)
Fuel _____ 90 gal (341 L)
Transmission _____ 5.0 gal (23 L)
w/ filter change _____ 6.6 gal (25 L)
Radiator _____ 10.5 gal (40 L)
Hydraulic reservoir _____ 24 gal (90 L)
Hydraulic system _____ 50.2 gal (190 L)
Circle gearbox _____ 3 qt (2.8 L)
Rear axle center _____ 11.6 gal (44 L)
Total axle _____ 11.6 gal (44 L)
Tandem case, each _____ 15.9 gal (60 L)

SPECIFICATIONS

GENERAL DIMENSIONS



	865B VHP
A Blade width	3962 mm
B Tread width	2452 mm
C Tread gauge	2108 mm
D Height on top of the cab	3340 mm
E Height of top of exhaust	3323 mm
F Height to top of blade lift cylinder	3047 mm
G Tire static radius	610 mm
H Distance between tandem center and the frame articulation pin	1958 mm
I Distance between the front axle and the blade	2562 mm
J Distance between the center of the rear tires	1572 mm
K Distance between tandem center and the wheel	786 mm
L Wheelbase	6219 mm
M Distance between tandem center and the rear part of the equipment	1650 mm
N Distance between the front when axle and the rear part of the equipment	7869 mm
O Overall length	8534 mm
P Distance between the rear tires and the ripper	2028 mm
Q Distance between the front tires and the scarifier	1520 mm
R Distance between the front tires and the dozer blade	1626 mm
Turning radius (outside the tires)	7250 mm

All units fitted with 14.0 x 24-12L tires, open ROPS/FOPS cab, standard battery, full fuel tank, operator weighing 75 kg, specifications in accordance with ISO 7134.

SPECIFICATIONS

865B

SADDLE

Locking system _____ Two hydraulic cylinders
Saddle positions _____ 5

FRAME

Type _____ Box section
Front section _____
Size _____ 254 x 298 mm
Rear section _____
Size _____ 121 x 299 mm

DRAWBAR

Type _____ "A" frame welded construction with
center mounted circle turn motor
Connection with the frame _____ Shim adjustable spherical joint

CIRCLE

Type _____ Welded construction
Maximum outside diameter _____ 1752.6 mm
Rotation _____ 360°
Speed _____ 1.2 rpm (7.2°/second)
Displacement _____ 0.25 l/turn
Rated hydraulic flow _____ 94.6 l/min (25 gpm)
N° of supports in phenolic resin _____ 4

BLADE

Type _____ High-carbon steel
Form _____ Involute curve
Width _____ 3658 mm (12 ft) / 3962 mm (13 ft) / 4267 mm (14 ft)
Height (curved profile) _____ 671 mm
Thickness _____ 22 mm
Cutting edge _____ 2, interchangeable
Blade pitch positions _____

Normal pitch _____ 47°
Minimum pitch _____ 42°
Maximum pitch _____ 87°
Blade side shift _____
Right _____ 686 mm
Left _____ 533 mm
Maximum bank-cutting angle (left and right) _____ 90°
Ground penetration (max.) _____ 711.2 mm
Lift above ground (max.) _____ 444.5 mm
Blade side shift and pitch _____ Hydraulic type

FRONT SCARIFIER

Cutting width _____ 1168 mm
Teeth _____ 5 (optional, 11)
Spacing between teeth _____ 229 mm (114 mm, optional)
Lift above ground _____ 527 mm
Maximum Penetration _____ 318 mm
Weight _____ 570 kg

REAR RIPPER

Type _____ Parallelogram
Cutting width _____ 2340 mm
Ripper teeth _____ 3 / 5 optional
Scarifier teeth _____ 5 (9 option)
Lift above ground _____
Ripper teeth _____ 518 mm
Maximum penetration _____
Ripper teeth _____ 437 mm

DOZER BLADE

Width _____ 2762 mm
Height _____ 953 mm
Lift above ground _____ 622 mm
Penetration _____ 165 mm
Weight _____ 1165 kg

OPERATING WEIGHT

With a 3962 mm blade, operator weigh 75 kg, full tank

865B VHP	Weight (kg)
Basic machine	14437
Basic machine with ripper and front counterweight	15870

ACCESSORIES WEIGHT

865B VHP	Weight (kg)
Front counterweight	492
Heavy push plate	800
Light push plate	492

STANDARD EQUIPMENT

OPERATOR STATION

ROPS/FOPS open cab with:
Adjustable suspension vinyl seat, with a 50.8 mm (2") seatbelt
Adjustable operator console
Pedal accelerator
Manual accelerator
Front windshield wiper with washer
Safety glass
Ceiling light
Internal and external rear-view mirrors
12 V (*) power supply
Automatic master switch
Steps on the right and left sides
(* Only available in closed cabins)

ENGINE 865B

FPT F4HE9687C
Turbocharged, diesel
Dry air filter with primary and secondary safety elements
Air pre-filter with cyclonic dust ejector
80 A alternator
Swing-up hood, diesel

HYDRAULIC SYSTEM

Hydraulic system with load sensor, closed center
9-section control valve
Hydraulic control for all functions:
blade lifting (right and left side), circle turn, side shift of the circle, wheel lean, frame articulation, blade side shift and pitch, front and rear accessories
Diagnostics center with 8 quick couplers
Hydraulic axial piston pump
Hydraulic engine fan

BRAKES

Multidisk oil-bathed service brakes with nitrogen accumulator safety system
Disk parking brake integrated into the transmission with warning light

TIRES

14" 3-pieces rim / 17,25 x 25 - 12L - G2 tubeless

OTHERS

Standard tool kit
Drawbar / Standard circle

AXLES

Conventional differential with brakes on 4 wheels and differential locking with electrohydraulic mechanism (rear axle)

STEERING

Hydrostatic steering with integrated emergency system

INSTRUMENTS

Electronic Information Center
Indicators/gauges:
Tachometer
Direction selected F/N/R
Transmission modes - automatic/manual
Selected gear
Engine cooling temperature
Fuel level
Transmission oil temperature
Hydraulic oil temperature
Hourmeter
Fuel consumption
Engine diagnostics
Transmission diagnostics

INDICATOR LIGHTS:

Low fuel level
Floodlights
High beam
Brake pressure
Main alert
Parking brake

SOUND ALERTS:

Warning alert
Emergency alert
Reversing alert

ELECTRICAL SYSTEM

Lights
Front headlight with direction indicators (2)
Rear brake light and direction indicators (2)
Rear work light on top of the cabin (2)
Front work light on top of the cabin (2)
24 V system (Two 12 V batteries 12 V / 750 CCA)
Electronic system monitoring
Horn
Hourmeter
Reverse alarm

TRANSMISSION

ZF transmission of torque conversion type with lock up (also functions as Direct Drive), Powershift, 6 forward speeds and 3 reverse speeds, automatic gear shift, emergency electrical failure device (Limp-Home)

All ROPS/FOPS cabins are certified in accordance with the SAE J1040 (ROPS) and SAE J231 (FOPS) standards.

OPTIONS

CAB

Closed high cab (fixed front window)
Closed high cab (front flip-down window)
Sunshade(front and rear)

OTHERS

Air conditioner for closed cab
Fire extinguisher
Windshield washer and lower windshield wipers
Rear windshield washer and wipers
Radio
Tandem lock device
Rear fogger

DRAWBAR

Drawbar / Heavy Duty circle

FRONT ATTACHMENT

Dozer Blade
Push plate
5 tooth front scarifier
6 additional teeth for the front ripper
Dozer blade float electrovalve
Front counter weight
Lighting on dozer blade

BLADE

3,658 x 622 x 22 mm blade
3,962 x 671 x 22 mm blade
4,267 x 671 x 22 mm blade

-304.8 mm right blade extension

-304.8 mm left blade extension

REAR ATTACHMENT

Medium ripper with 3 large teeth and 5 small teeth
2 additional large teeth and 4 additional small teeth
Rear pull hook
Support for lifting the machine

WORK LIGHTS

2 work lights behind the blade
2 work lights mounted in front of the moldboard
2 work lights on the front attachment

LOCK/FL OATING/ANTI-SHOCK -MOLDBOARD AND CIRCLE

Moldboard lifting cylinder lock valve
Moldboard float electrovalve (includes the lock valve)
Anti-shock electrovalve with 2 accumulators for the moldboard
Anti-shock electrovalve with 3 accumulators for the moldboard and circle

SEAT / SEATBELT

Extra quality vinyl mechanical suspension seat
Mechanical suspension fabric seat
Pneumatic mechanical suspension fabric seat
(3") 76.5 mm seatbelt

OPTIONAL EXTRAS

Revolving safety light

Luxury toolbox

Toolbox without tools, with support, mounted on the rear frame

Slow movement symbol
Electric pump for filling tires
Support for spare tire

TIRES AND MOUNTED RIMS

TUBELESS TIRES

9" Rim - single piece/14x24 tire-12L-G2
10" Rim - 3 pieces / 14x24 tire - 12L - G2
13" Rim - single piece / 17.5x25 tire - 12L - L2
14" Rim - 3 pieces / 17.5x25 tire - 16L - L3

TIRES WITH TUBES

9" Rim - single piece / 14x24 tire - 12L - G2
10" Rim - 3 pieces / 14x24 tire - 12L - G2

RADIAL TUBELESS TIRES

9" Rim - single piece / 14x24 tire - 12L - L2
XGLA2 RADIAL
10" Rim - 3 piece / 14x24 tire - 12L - L2
XGLA2 RADIAL

RIMS

9" Rim - single piece with valve
10" Rim - 3 pieces with valve
13" Rim - single piece with valve
14" Rim - 3 pieces with valve



PARTS AND SERVICE

Wide network of customer support across the world.

No matter where you work, we're here to support and protect your investment and exceed your expectations. You can count on CASE and your CASE dealer for full-service solutions-productive equipment, expert advice, flexible financing, genuine CASE parts and fast service. We're here to provide you with the ultimate ownership experience. To locate a CASE dealer or learn more about CASE equipment or customer service, go to www.casece.com

NOTE: CASE provides specific outfits for various countries and many optional fittings (OPT). The illustrations on this or other leaflets may relate to standard or optional fittings. please consult your CASE dealer for any information in this regard and any possible updating on components. CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes.

