



CASE
CONSTRUCTION

C-SERIES MOTOR GRADERS



845C | 865C

C-SERIES

MOTOR GRADERS



- 1842** CASE is founded.
- 1869** The first CASE portable steam engine – road construction is born!
- 1957** The first factory-integrated loader/backhoe in the world: a CASE industry first.
- 1958** The first CASE 4-WD wheel loader, the W9, is introduced.
- 1967** CASE enters the excavator market.
- 1998** Ride control on loader backhoes and skid steer loaders: another CASE first.

HERITAGE

A TRADITION OF INDUSTRY FIRSTS



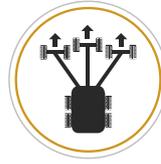
- 2011** All around visibility cab introduction on 800 series and FPT TIER III Engine installation (“B series”)
- 2012** Torque converter introduction on flagship model 885B
- 2015** CASE graders enter the European market with the new T4 final /EU Stage IV models.
- 2022** Machine productivity and reliability improve with the introduction of the new CASE Graders B series 2
- 2022** C Series is launched with the T4 engine

MAIN REASONS TO CHOOSE THE C-SERIES



SAFE AND EASY MAINTENANCE

Easy serviceability is a hallmark of CASE machines: all the main checks can be easily performed from ground level; all the service points are conveniently grouped and positioned.



REAR MOUNTED CAB

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



VARIABLE POWER CURVE

The FPT Engine always delivers the power needed for every task. Two power curves are available on the 845C, while on the 865C three power curves ensure even better performance.



HIGH VERSATILITY

The wide variety of options enables every customer to tailor the grader to their requirements, even for the most demanding applications.



LOW EMISSIONS

Without particulate filter





TORQUE CONVERTER LOCK-UP

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



LOAD-SENSING HYDRAULIC SYSTEM

Balanced flow for all applications and for simultaneous moldboard movements.



«A-SHAPE» FRAME

The optimized effort distribution in any condition ensures a long operating life.



EXTERNALLY DRIVEN CIRCLE TEETH

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



MULTI-RADIUS BLADE

Lower power absorption and optimized rolling effect.

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MOTOR GRADERS

TORQUE CONVERTER LOCK-UP

The machine drives faster with no extra torque

The lock-up system overrides the torque converter operation in machines featuring the B-Series' type of engine and transmission coupling. When it is activated, the lock turns the hydraulic coupling into a direct (rigid) coupling. The Lock-up system is automatically activated according to operating conditions, when the transmission electronics unit's torque and engine speed readings reach preset values. The Lock-up is usually activated in travel applications where no extra torque is required from the torque converter and the machine runs at a higher speed.

LOAD-SENSING HYDRAULIC SYSTEM

Highly responsive & precise control

The load-sensing hydraulic system helps maintain a balanced flow for all applications and for simultaneous moldboard movements. It ensures highly responsive and precise control, as well as easy and smooth operation. A directly activated axial piston pump only delivers the required amount of oil where it is needed, so that no power is wasted. The control valves ensure pressure compensation, enabling parallel lifting and lowering of the moldboard. A dedicated switch on the cab floor enables the operator to obtain maximum output from the hydraulic circuit independently from engine revolutions for faster reaction (Full Flow Mode).



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 to pass over obstructions and then return to its original position. This works automatically. No adjustment or operator intervention is required.

ENGINE AND MAINTENANCE

LOW EMISSIONS

Tier 4 Final

The patented FPT Hi-eSCR is the key to performance and success. The CASE grader is the only one in the market to meet the restrictive TIER 4 final demands with SCR-only after-treatment technology. This unique solution delivers a highly cost efficient performance thanks to exclusive features:

- No DPF regeneration during the working activities means no waste of fuel
- No DPF filter periodical replacement
- No need for double stage aftertreatment DPF+SCR
- No gas recirculation improves combustion efficiency
- Neat engine layout thanks to the small size of the after-treatment system. small size
- Lower engine cooling requirement and consequently smaller radiator size for better rear visibility and easy cleaning



SAFE AND EASY MAINTENANCE

No tools needed

The daily maintenance of all CASE grader models can be performed without the use of any specific tools. All the hoods can be easily removed or lifted without any effort providing access to all the vital components of the machine. Refuelling can be done from ground level and the large fuel tanks have the capacity for a whole working day without stopping.



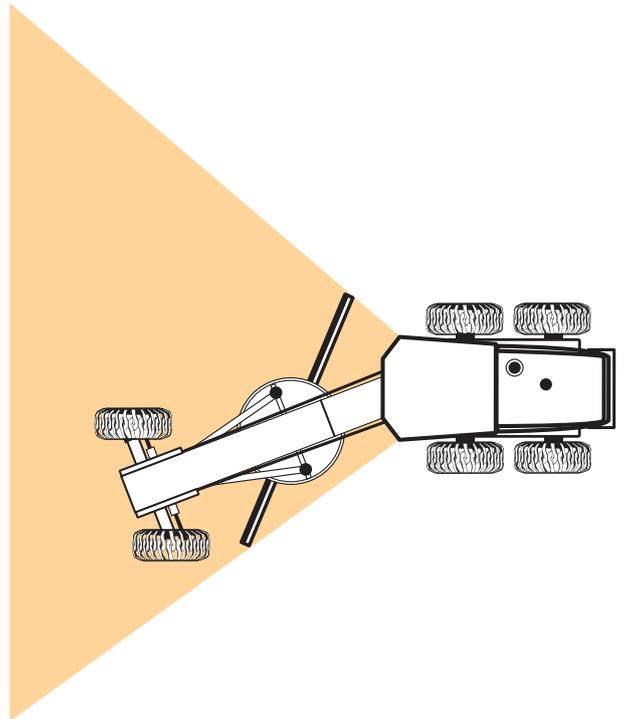
C-SERIES

MOTOR GRADERS

HIGH VISIBILITY

The best visibility on circle, saddle, moldboard and more

The rear-mounted cab of C 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 to the rear, the sleek, sloping hood provides excellent visibility when backing up.



REAR MOUNTED CAB

Aligned with performance

CASE™ industry exclusive front articulation design allows the cab to be mounted 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. It enables the operator to see simultaneously the rear and the front half of the machine without having to turn 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.

MASSIVE CAB, IDEAL COMFORT

Stress free operation

The rear-mounted cab reduces noise and vibration, and consequently operator fatigue. Coupled with a deluxe suspension seat with lumbar control it provides superior comfort, for greater operator productivity. 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.

ATTACHMENTS

THE ART OF VERSATILITY



FRONT COUNTERWEIGHT



FRONT PUSH PLATE

HIGH VERSATILITY

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

- Front counterweight
- Ripper
- Scarifier
- Front push plate - light 492kg
- heavy 800kg
- Front dozer blade
- Rear pull hook
- Additional lighting packages
- Lift cylinder accumulators
- Float control
- Moldboard extensions

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MOTOR GRADERS



MULTI RADIUS BLADE

Productivity with less power

The reinforced involuted moldboard design improves blade life thanks three different radii, resulting in 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 increases the life of the circle and the drawbar components.



EXTERNALLY DRIVEN CIRCLE TEETH

Insensitive to shocks

CASE motor graders are designed with external circle teeth. They are easier to clean and provide a larger contact area which avoids component wear and provides 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 repairs.





C-SERIES

MOTOR GRADERS

845C

ENGINE	
Make / Model	FPT / F4HE613B*W002
Type	Electronic common rail fuel system, Water cooled, 4 Cycle, Direct injection, Open combustion chamber, Turbocharged, Charge air cooled. Tier IV
Cylinders	6
Bore/Stroke	104 mm X 132 mm (4.09 in x 5.17 in)
Displacement	6.7 L (409 Cubic Inch)
Horsepower at 2200 rpm Gross (SAE J1995 Gross)	
Low Curve	112 kW
Imperial	150 hp
Metric	152 hp
High Curve	129 kW
Imperial	173 hp
Metric	175 hp
Net (SAE J1349)	
Low Curve	104 kW
Imperial	140 hp
Metric	141 hp
High Curve	119 kW
Imperial	160 hp
Metric	162 hp
Maximum torque at 1500 rpm Gross (SAE J1995 Gross)	
Low Curve	659 Nm (486 ft.lb)
High Curve	758 Nm (560 ft.lb)
Net (SAE J1349)	
Low Curve	591 Nm (436 ft.lb)
High Curve	678 Nm (500 ft.lb)
POWERTRAIN	
Rear axle	380 mm (14.9")
Vertical ground clearance	
Differential	Limited Slip
* Brakes	Disc, bathed in Oil
Number of disks per brake	5
Tandem	
Type	Welded Plate
Oscillation	20 Deg in each direction
Command chain pitch	50.8 mm pitch (2.00"), press fit connecting link
Thickness of the internal and external side wall	/
Front axle	
Type	CNH LA
Oscillation	15 deg each way
Wheel lean	20°
Ground clearance	580 mm
HYDRAULIC SYSTEM	
Type	Piston pump, variable displacement Pressure and flow compensated, Load sensing
Hydraulic pump	Rexroth
Rated flow	186 LPM (49 GPM) @ 2200 RPM
Control valve	HUSCO, LOAD SENSING 9 SECTION
ELECTRICAL SYSTEM	
Power	24V
Alternator	BOSCH - 120A
Batteries	2x100 Ah – low maintenance

TRANSMISSION		
Brand/Model	ZF TC LOCK UP 6WG-160	
Type	Power shift, electronic shift change control Torque converter, automatic lockup	
Gears	6 Forward 3 Reverse	
Self-diagnostic system	On board	
Speeds - km/h	Forward	Reverse
	5.0	5.3
	7.7	12.6
	11.9	29.2
	18.4	-
	27.7	-
	42.8	-

STEERING	
Type	Hydrostatic power steering
Steering wheel turns (lock to lock)	4.5 turns (fast), 3.2 turns (slow)
Pump capacity	41.8 LPM (11.1GPM) @ 2200 engine RPM
Pressure	175 bar (2530 PSI) Integral with priority valve
Cylinders	2

ARTICULATION	
Type	Hydraulic actuated (with lock valve)
Angle	25° left/right
Controls	Hydraulic

CAPACITIES (REFILL)	
Engine with and w/o filter	16/15 L
Fuel tank	380 L
DEF tank	60 L
Transmission with and w/o filter	31/30 L
Engine water cooling system	16 L
Hydraulic oil tank	90 L
Total hydraulic system	158 L
Rear axle center	44 L
Tandem case (each)	69 L

SADDLE	
Locking system	5 Positions, Two cylinders actuated by an electric solenoid

FRAME	
Type	Box section
Size - Rear section	254 x 298 mm
Size - Front section	190 x 327 mm

DRAWBAR	
Type	"A" frame welded construction with center mounted circle turn motor. Shim adjustable at ball and circle

CIRCLE	
Type	Welded construction
Maximum outside diameter	1752.6 mm (69")
Rotation / Speed	360° / 1.2 RPM (7.2 degrees per second)
Number of support plates	4

SPECIFICATION

BLADE/MOLDBOARD	
Type	Standard/Optional
Form	Involute curve
Width	3962 mm - standard, 3658 mm/ 4267 mm - optional
Height of dozer blade (curved profile)	953 mm (37.5")
Thickness	22 mm (0.875")
Cutting edge	2 interchangeable
Blade pitch positions - Normal pitch	47°
Minimum pitch	42°
Maximum pitch	87°
Blade side shift	
Right	1105 mm (43.5")
Left	1105 mm (43.5")
Maximum bank-cutting angle (left and right)	90°
Ground penetration (max.)	711.2 mm (28")
Lift above ground (max.)	444.5 mm (17.5")
Blade side shift and pitch	Hydraulic type

REAR RIPPER	
Type	Parallelogram
Cutting width	2156 mm (85.3")
Ripper teeth	5
Lift above ground - Ripper teeth	703 mm (27.67")
Maximum penetration - Ripper teeth	306 mm (12.1")
Weight	640 kg (1410 lb)

FRONT SCARIFIER	
Cutting width	1168 mm
Teeth	5 (opt, 11)
Spacing between teeth	229 mm (opt, 114.5 mm)
Lift above ground	527 mm
Maximum penetration	318 mm
Weight	570 kg
Scarifier teeth	5 STD / 9 OPT

845C OPERATING WEIGHT

Standard equipment with standard blade, full fuel tank, coolant, lubricants and operator

845C VHP	Weight (kg)
Weight on front axle	3689
Weight on rear axle	10684
Operating weight	14373
Front counterweight	492
Push plate heavy	800
Push plate light	492
Dozer blade	1165
Moldboard extension (each)	105
Moldboard 12ft	728
Moldboard 13ft	800
Moldboard 14ft	854

C-SERIES

MOTOR GRADERS

865C

ENGINE	
Make / Model	FPT / F4HE613B*W002
Type	Electronic common rail fuel system, Water cooled, 4 Cycle, Direct injection, Open combustion chamber, Turbocharged, Charge air cooled. Tier IV
Cylinders	6
Bore/Stroke	104 mm x 132 mm (4.09 in x 5.17 in)
Displacement	6.7 L (409 Cubic Inch)
Horsepower at 2200 rpm Gross (SAE J1995 Gross)	
Low Curve	144 kW
Imperial	193 hp
Metric	196 hp
Mid Curve	153 kW
Imperial	205 hp
Metric	208 hp
High Curve	164 kW
Imperial	220 hp
Metric	223 hp
Net (SAE J1349)	
Low Curve	133 kW
Imperial	178 hp
Metric	181 hp
Mid Curve	142 kW
Imperial	190 hp
Metric	193 hp
High Curve	153 kW
Imperial	205 hp
Metric	208 hp
Maximum torque at 1500 rpm Gross (SAE J1995 Gross)	
Low Curve	830 Nm (612 ft.lb)
Mid Curve	880 Nm (649 ft.lb)
High Curve	930 Nm (686 ft.lb)
Net (SAE J1349)	
Low Curve	743 Nm (548 ft.lb)
Mid Curve	788 Nm (581 ft.lb)
High Curve	832 Nm (615 ft.lb)
POWERTRAIN	
Rear axle	
Vertical ground clearance	380 mm (14.9")
Differential	Limited Slip
* Brakes	Disc, bathed in Oil
Number of disks per brake	5
Tandem	
Type	Welded Plate
Oscillation	20 Deg in each direction
Command chain pitch	50.8 mm pitch (2.00"), press fit connecting link
Thickness of the internal and external side wall	19 mm
Front axle	
Type	CNH LA
Oscillation	15 deg each way
Wheel lean	20°
Ground clearance	580 mm (22.8")
HYDRAULIC SYSTEM	
Type	Piston pump, variable displacement Pressure and flow compensated, Load sensing
Hydraulic pump	Rexroth
Rated flow	186 LPM (49 GPM)
Control valve	HUSCO, LOAD SENSING 9 SECTION

ELECTRICAL SYSTEM	
Power	24V
Alternator	BOSCH - 120A
Batteries	2x100 Ah – low maintenance
TRANSMISSION	
Brand/Model	ZF TC LOCK UP 6WG-160
Type	Power shift, electronic shift change control Torque converter, automatic lockup
Gears	6 Forward 3 Revers
Self-diagnostic system	On board
Speeds - km/h	Forward Reverse
1st	5.2 5.5
2nd	8.1 13.1
3rd	12.4 30.3
4th	19.2 -
5th	28.7 -
6th	44.1 -
STEERING	
Type	Hydrostatic power steering
Steering wheel turns (lock to lock)	4.5 turns (fast), 3.2 turns (slow)
Pump capacity	41.8 LPM (11.1 GPM) @ 2200 engine RPM
Pressure	175 bar (2530 PSI) Integral with priority valve
Cylinders	2
ARTICULATION	
Type	Hydraulic actuated (with lock valve)
Angle	25° left/right
Controls	Hydraulic
CAPACITIES (REFILL)	
Engine with and w/o filter	16/15 L
Fuel tank	380 L
DEF tank	60 L
Transmission with and w/o filter	31/30 L
Engine water cooling system	20 L
Hydraulic oil tank	90 L
Total hydraulic system	150 L
Rear axle center	44 L
Tandem case (each)	69 L
SADDLE	
Locking system	5 Positions, Two cylinders actuated by an electric solenoid
FRAME	
Type	Box section
Size - Rear section	327 X 220.5 mm
Size - Front section	298 X 258 mm
DRAWBAR	
Type	"A" frame welded construction with center mounted circle turn motor. Shim adjustable at ball and circle
CIRCLE	
Type	Welded construction
Maximum outside diameter	1752.6 mm (69")
Rotation / Speed	360° / 1.2 RPM (7.2 degrees per second)
No of supports in phenolic resin	4

SPECIFICATION

BLADE/MOLDBOARD	
Type	Standard/Optional
Form	Involute curve
Width	standard 3962 mm / optional 3658-4267 mm
Height (curved profile)	622 mm
Thickness	22 mm (875")
Cutting edge	2 interchangeable
Blade pitch positions - Normal pitch	47°
Minimum pitch	42°
Maximum pitch	87°
Blade side shift	
Right	1257 mm (49.5")
Left	1105 mm (43.5")
Maximum bank-cutting angle (left and right)	90°
Ground penetration (max.)	711.2 mm (28")
Lift above ground (max.)	444.5 mm (17.5")
Blade side shift and pitch	Hydraulic type

REAR RIPPER (OPTIONAL)	
Type	Parallelogram
Cutting width	2195 mm (86.4")
Ripper teeth	3 STD / 5 OPT
Lift above ground - Ripper teeth	518 mm (20.38")
Maximum penetration - Ripper teeth	437 mm (17.22")
Weight	795 kg

FRONT SCARIFIER	
Cutting width	1168 mm
Teeth	5 STD / 11 OPT
Spacing between teeth	229 mm (opt, 114.5 mm)
Lift above ground	527 mm
Maximum penetration	318 mm
Weight	570 kg

865C OPERATING WEIGHT

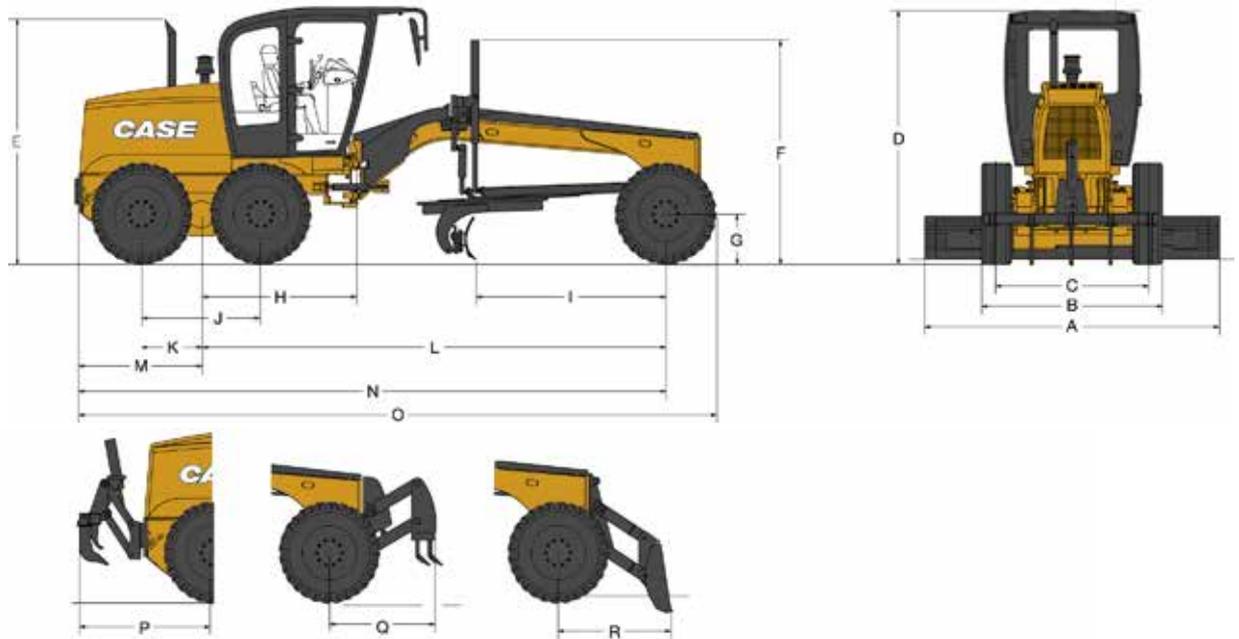
Standard equipment with standard blade, full fuel tank, coolant, lubricants and operator

865C VHP	Weight (kg)
Weight on front axle	4316
Weight on rear axle	11165
Operating weight	15481
Front counterweight	492
Push plate heavy	800
Push plate light	492
Dozer blade	1165
Moldboard extension (each)	105
Moldboard 12ft	728
Moldboard 13ft	800
Moldboard 14ft	854

C-SERIES

MOTOR GRADERS

GENERAL DIMENSIONS



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.

	845C	865C	
A	Blade width	3658 mm	3962 mm
B	Standard blade width	2527 mm	2527 mm
C	Tread gauge (single rim)	2074 mm	2074 mm
D	Height on top of the cab	3200/3400 mm	3200/3400 mm
E	Height of top of exhaust (low profile/high profile)	3323 mm	3323 mm
F	Height to top of blade lift cylinder	3047 mm	3047 mm
G	Tire static radius	610 mm	610 mm
H	Distance between tandem center and the frame articulation pin	1958 mm	1958 mm
I	Distance between the front axle and the blade	2562 mm	2562 mm
J	Distance between the center of the rear tires	1572 mm	1572 mm
K	Distance between tandem center and the wheel	786 mm	786 mm
L	Wheelbase	6219 mm	6219 mm
M	Distance between tandem center and the rear part of the equipment	2064 mm	2064 mm
N	Distance between the front wheel axle and the rear part of the equipment	7868 mm	7868 mm
O	Overall length	8957 mm	8957 mm
P	Distance between the rear tires and the ripper	2028 mm	2028 mm
Q	Distance between the front tires and the scarifier	1513 mm	1520 mm
R	Distance between the front tires and the dozer blade	1619 mm	1626 mm
	Turning radius (outside the tires)	7250 mm	7250 mm

STANDARD AND OPTIONS

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

FPT / F4HE613B*W002
Turbocharged, diesel
Dry air filter with primary and secondary safety elements
Air pre-filter with cyclonic dust ejector
90 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

9" Single piece rim / 14 x 24

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 EQUIPMENT*

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

Front counter weight
Lighting on dozer blade

BLADE

3,658 x 671 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

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

10" Rim - 3 pieces / 14x24 tire
14" Rim - 3 pieces / 17.5x25 tire

RADIAL TUBELESS TIRES

9" Rim - single piece / 14x24 tire
XGLA2 RADIAL

*All the options are subject to the local availability.







CASE
CONSTRUCTION

SINCE 1842

BUILDING A STRONG CASE.

Since 1842, at CASE Construction Equipment we have lived by an unwavering commitment to build practical, intuitive solutions that deliver both efficiency and productivity.

We continually strive to make it easier for our customers to implement emerging technologies and new compliance mandates.

Today, our global scale combined with our local expertise enables us to keep customers' real-world challenges at the center of our product development.

The vast CASE dealers' network is always ready to support and protect your investment and exceed your expectations, while also providing you with the ultimate ownership experience.

Our goal is to build both stronger machines—and stronger communities. At the end of the day, we do what's right for our customers and our communities so that they can count on CASE.

CASECE.com

NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your CASE dealer. Furthermore, CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes.

Conforms to directive 2006/42/EC

