

865/865DHP

Motor Grader



ENGINE

Model..... Cummins 6CT 8.3
 Type 4-stroke, turbocharged
 Cylinders 6, in-line
 Bore/Stroke 4.49" x 532"
 (114 x 135 mm)
 Displacement 504.5 in³ (8.3 L)
 Fuel injection..... Direct
 Fuel..... Diesel
 Cooling Liquid
 Standard horsepower per SAE J1995
 Gross170 hp (127 kW) @ 2200 rpm
 Net..... 155 hp (116 kW) @ 2200 rpm
 Torque @ 1300 rpm
 Gross 568 ft-lbs (770 N-m)
 Net..... 533 ft-lbs (722 N-m)
 Dual horsepower per SAE J1995
 Gross183/205 hp
 (136/152 kW) @ 2200 rpm
 Net..... 168/190 hp
 (125/141 kW) @ 2200 rpm
 Torque @ 1300 rpm
 Gross 519/636 ft-lbs
 (703/862 N-m)
 Net..... 484/601 ft-lbs
 (655/814 N-m)

POWERTRAIN

Rear axle..... Planetary
 Differential..... Hydraulic lock,
 operator controlled
 Inboard brakes Wet disc
 Number of discs/brake 5
 Disc size14.2" x 10"
 (360 mm x 255 mm)
 Tandems —
 Type..... Welded plate
 Oscillation 20° each way
 Front axle..... High strength,
 welded steel
 Ground clearance 25" (635 mm)
 Oscillation 19° each direction
 Wheel lean 17.5° left/right
 Tires 14.0 x 24 12PR
 TL G2 Firestone
 Rims..... 1-piece
 9" x 24" (227 x 610 mm)

HYDRAULICS

Type..... Closed center,
 load sensing
 Hydraulic pump..... Load sensing
 piston pump, variable displacement,
 pressure and flow compensated
 Rated flow @ 2200 rpm..... 53 gpm
 (201/min)
 Control valve..... 9 section
 Side shift and pitch..... Hydraulic
 Saddle..... 5 positions
 Moldboard..... 13' (3.96 m)
 Diagnostic quick couplers 8

TRANSMISSION

Type Direct drive countershaft
 powershift w/ electronic shift
 control and inching pedal
 Pump flow
 @ 2200 rpm..... 24 gpm (91 L/min)
 Sump..... Integral
 Speeds..... 8 forward/4 reverse
 Shifting.....Single lever, bump style
 automatic electronic control
 Diagnostics..... Onboard
 Speeds— mph (km/h) —
 Forward
 1st..... 2.2 (3.6)
 2nd 3.2 (5.1)
 3rd 4.4 (7.2)
 4th 6.2 (10.0)
 5th 8.9 (14.3)
 6th 12.4 (20.0)
 7th 17.7 (28.5)
 8th 26.6 (42.9)
 Reverse
 1st..... 2.2 (3.6)
 2nd 4.4 (7.2)
 3rd 8.9 (14.3)
 4th 17.7 (28.5)

ELECTRICAL

Voltage 24 volts,
 negative ground
 Alternator..... 70 amp
 45 amp (optional)
 Batteries (2) Low-maintenance
 750 CCA – 100 Ah (20 hr rate)
 Lighting —
 Headlights (2); Turn signals,
 front/rear; Stop/tail (2); Rear
 mounted floods (2); Front mount-
 ed floods (2); moldboard work-
 lights (2)
 Backup alarm Standard

MISCELLANEOUS

Front counterweight 1,100 lb
 (499 kg)

STEERING

Type Hydrostatic power steering
 Turns (lock-to-lock) 4.75
 Pump capacity @
 2200 engine rpm.....10.6 GPM
 (40.1 LPM)
 Relief pressure2030 psi (140 bar)
 2100 PSI (145 bar) integral
 with steering unit
 Cylinder (2) —
 2.5" bore x 10.5" stroke x 1.5" rod dia.
 (63.5 mm x 266.7 mm x 38.1 mm)
 Supplemental steering Integral

ARTICULATION

Type Hydraulic actuated
 (with lock valve)
 Range..... 25° left/right
 Controls..... Hydraulic

SERVICE CAPACITIES

Engine 3.8 gal (14.4 L)
 w/filter change 5.4 gal (20 L)
 Fuel..... 90 gal (341 L)
 Transmission..... 6.6 gal (25 L)
 w/filter change 7.2 gal (27 L)
 Radiator 10.5 gal (40 L)
 Hydraulic reservoir 25 gal (94.6 L)
 Hydraulic system 53 gal (200.3 L)
 Circle gearbox..... 2.9 qt. (2.8 L)
 Rear axle center 7.7 gal (29 L)
 Total axle 7.7 gal (29 L)
 Tandem case, each..... 7.6 gal (28.7 L)

OPERATING WEIGHT

With 13 ft. (3.96 m) moldboard,
175 lb (79 kg) operator, full fuel
and standard equipment.... 32,077 lb
(14 550 kg)
Weight, front axle 9,370 lb
(4250 kg)
Weight, rear axle 22,707 lb
(10 300 kg)
Blade pressure ... 16,768 lb (7606 kg)

MAINFRAME

Type All welded box
Front section —
Size 10.0" x 11.73"
(254 x 298 mm)
Weight 124.7 lbs-ft (172.8 kg/m)
Rear section —
Size 4.75" x 11.75"
(121 x 299 mm)
Weight (each side).....55.6 lbs-ft
(84.0 kg/m)

DRAWBAR

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

CIRCLE

Type..... Welded construction
Diameter —
Max. outside..... 69.0" (1752.6 mm)
Vertical member 63.0"
(1600.2 mm)
Rotation 360°
Speed..... 1.2 rpm (7.2°/second)
Drive Hydraulic motor
Type..... Roller Geroter
Displacement..... 15.8 in³/Rev.
(0.26 L/Rev)
Rated hydraulic flow 25 gpm
(94.6 l/min)

MOLDBOARD

Type..... High-carbon steel
Shape..... Involute curve
Length..... 13' 0" (3962 mm)
Height..... 23.6" (600 mm)
Thickness..... 0.875" (22.2 mm)
End bits 2, interchangeable
Blade pitch positions —
Normal pitch 47°
Minimum pitch 42°
Maximum pitch 87°
Blade shift —
Right..... 27.0" (686 mm)
Left.....21.0" (533 mm)
Max. bank cutting angle
(right and left): 90°
Ground penetration (max.) 28"
(711.2 mm)
Lift above ground (max.).....17.5"
(444.5 mm)

SCARIFIER

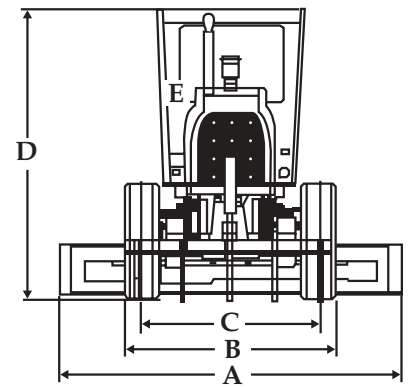
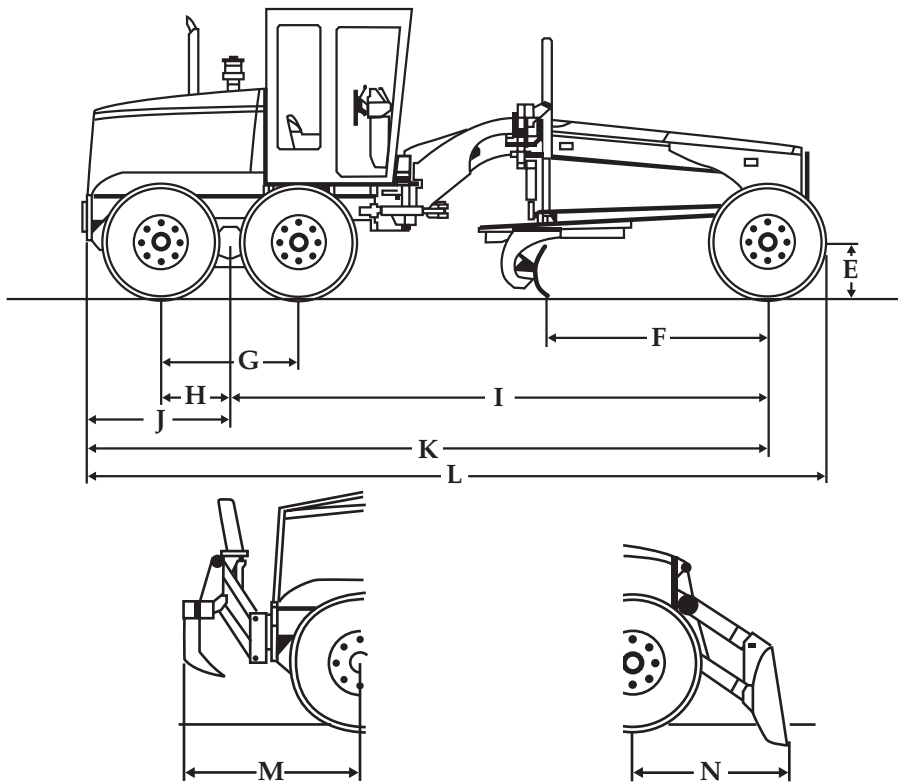
Type..... Front mounted
Width of cut 46" (1168 mm)
Teeth 6 (11 optional)
Tooth spacing..... 9.0" (229 mm)
(4.5" optional)
Lift above ground ... 20.75" (527 mm)
Max. penetration..... 12.5" (318 mm)
Weight..... 1,256 lb (570 kg)
(includes front attachment group)

REAR RIPPER

Type Parallel
Ripper teeth..... 3 (5 optional)
Scarifier teeth 5 (9 optional)
Width of cut 83.46" (2120 mm)
Lift above ground —
Ripper teeth..... 20.38" (518 mm)
Scarifier teeth 27.67" (703 mm)
Max. penetration —
Ripper teeth..... 17.22" (437 mm)
Scarifier teeth 9.43" (252 mm)
Weight..... 2,167 lb (985 kg)

DOZER BLADE

Type..... Front mounted
Width 109" (2762 mm)
Height 37.5" (953 mm)
Lift above ground ... 24.5" (622 mm)
Penetration..... 6.5" (165 mm)
Weight 2,568 lb (1165 kg)
(includes front attachment group)



Line drawings are for illustrative purpose only and may not be exact representation of unit.

DIMENSIONS

865

A. Blade width.....	13' 0" (3962 mm)
B. Distance between outside edges of tires	8' 3" (2510 mm)
C. Wheel tread.....	7' 0" (2134 mm)
D. Height to top of cab.....	10' 11" (3340 mm)
E. Tire radius — when static.....	2' 0" (610 mm)
F. Blade base.....	8' 5" (2562 mm)
G. Distance between tandem axles.....	5' 2" (1594 mm)
H. Distance between tandem center and wheel.....	2' 7" (797 mm)
I. Wheel base	20' 5" (6219 mm)
J. Distance between tandem center and rearend of machine.....	5' 5" (1650 mm)
K. Distance between front axle and rear end of machine.....	25' 10" (7869 mm)
L. Overall length.....	28' 0" (8534 mm)
M. Distance between rear tires & rear ripper.....	6' 8" (2028 mm)
N. Distance between front tires & front scarifier	4' 12" (1520 mm)
O. Distance between front tires & front dozer blade.....	5' 4" (1620 mm)
Outside tire turning radius.....	23' 9" (7250 mm)
Ground clearance (rear axle)	14.9" (380 mm)
Ground clearance (front axle).....	24.5" (622 mm)

All units equipped with 14.0 x 24-10 PR tires, ROPS cab with heater & A/C, std. battery, full fuel, 175 lb (79 kg) operator. Specifications per JISO 7134.

STANDARD EQUIPMENT

OPERATOR'S COMPARTMENT

ROPS cab
Adjustable operator's console
Adjustable cloth suspension seat with 3 in. (76 mm) retractable seat belt
Front/rear wipers w/washer
Safety glass
Dome light
Inside rearview mirror
Outside rearview mirrors
Sunshade – front & rear
Cup holder
Storage tray
12-volt outlet
Ashtray
Radio ready (12 volt)
Master switch
Heater/defroster/pressurizer
Air conditioner
Sound suppression - 76 dBA in cab
Cab doors - left/right
Steps - left/right
Steering wheel knob

POWERTRAIN

Hydraulic differential lock
Limited slip (optional)

ENGINE

Cummins 6CT 8.3 turbocharged diesel
Federal emission certified

HYDRAULICS

Closed center, load sensing hydraulic system
Controls for all functions
9 section control valve
Front attachment piping
Hydraulic moldboard side shift and pitch
5-position saddle
13 ft. x .875 in. (3962 x 22 mm) moldboard
Rear pull hook
8 hydraulic diagnostic quick couplers

TIRES

14.0 x 24-12 PR

INSTRUMENTS

Analog LED Instruments:
Speedometer; Tachometer;
Gear shift display; Hourmeter;
Engine oil pressure; Engine coolant temperature
Monitor Functions:
Engine oil pressure, Engine coolant temperature; Transmission oil pressure; Transmission filter restriction; Brake oil pressure;
Battery voltage; Hourmeter; Tachometer; Parking brake applied; Air and hydraulic oil filter restriction; Hydraulic oil temperature; Emergency flashers; High beams; Supplemental steering

ELECTRICAL

Batteries (2)
Electronic Systems Monitor
Horn, dual
Alternator, 70 amp
Backup alarm

OPTIONAL EQUIPMENT

MOLDBOARDS

12 ft. x .875 in. (3658 x 22 mm)
14 ft. x .875 in. (4267 x 22 mm)
Extensions - 1 ft. (305 mm)
Frame Float Control
Moldboard Float Control
Lift cylinder/side shift accumulator
Lift cylinder accumulator

TIRES

13.0 x 24-10 PR
13.0 x 24-12 PR
14.0 x 24-10 PR
16.0 x 24-12 PR
17.5 x 25-12 PR
17.5 x 25-16 PR

ELECTRICAL

Alternator, 45 amp

OTHER

Fire Extinguisher
Front lower windshield washer and wiper
Strobe Light
Tool Box (w/o tools)
Deluxe Tool Box (w/tools)
Cold Climate Kit

CASE CONSTRUCTION EQUIPMENT CONTACT INFORMATION

NORTH AMERICA/MEXICO:
700 STATE STREET
RACINE, WISCONSIN 53404

LATIN AMERICA:
AV. GENERAL DAVID SARNOFF 2237
32210 – 900 CONTAGEM – MG
BELO HORIZONTE BRAZIL

EUROPE/AFRICA/MIDDLE EAST:
18, PLACE DES NYMPHEAS
ZI PARIS NORD 11 95915
ROISSY CDG CEDEX FRANCE

ASIA PACIFIC:
31-67 KURRAJONG ROAD
ST. MARY'S
NEW SOUTH WALES 2760 AUSTRALIA

NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

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IMPORTANT: Case Corporation reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Case Corporation does not warrant the safety or reliability of attachments from other manufacturers.

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