

Grader

G140 | G160 | G200

6x4

6x6

Stage IIIA Certified





G140 SPECIFICATIONS



ENGINE	6x4	6x6
MANUFACTURER AND MODEL	Cummins QSB6.7	
EMISSIONS LEVEL	Stage 3A	
NUMBER OF CYLINDERS	6	
DISPLACEMENT	6,7 L (409 cu. in.)	
ENGINE OUTPUT - Nett	179 kW (240 hp)	
PEAK ENGINE TORQUE	990 Nm (730 lbft.) @ 1 500 rpm	
TORQUE RISE	22%	
NET ENGINE POWER		
Gear 1	135 kW (181 hp)	
Gear 2	141 kW (189 hp)	
Gear 3	142 kW (190 hp)	
Gear 4	148 kW (198 hp)	
Gear 5	152 kW (204 hp)	
Gear 6	179 kW (240 hp)	
Reverse Gear 1	179 kW (240 hp)	
Reverse Gear 2	179 kW (240 hp)	
Reverse Gear 3	179 kW (240 hp)	

DRIVETRAIN	6x4	6x6
MANUFACTURER & MODEL	ZF 6WG210	
TRANSMISSION TYPE	Automatic Powershift	
NUMBER OF SPEEDS: Forward	6	
NUMBER OF SPEEDS: Reverse	3	
FRONT AXLE	Heavy duty welded fabrication with integrated lean bar lock	
FINAL DRIVES	Inboard-mounted planetary reduction, sealed in cooled, filtered oil.	
BRAKES	Foot-controlled, hydraulically operated, multiple wet-disc brakes sealed in pressurized, cooled & filtered oil. Both independent systems effective on all 4 tandem wheels.	
PRIMARY AND SECONDARY BRAKES	Hydraulically actuated, inboard of tandem pivot, self-adjusting, sealed in cooled and filtered oil, multi-disc (ISO 3450 compliant).	
PARK BRAKE	Automatically spring applied, hydraulically released disc brake (ISO 3450).	
FRONT AXLE OSCILLATION (Total)	32 deg.	
FRONT WHEEL LEAN	20 deg.	
DIFFERENTIAL	Spiral bevel gear system, hydraulically actuated with a clutch-type mechanism, allowing differential lock engagement while the machine is in motion. It can be applied in both manual and automatic differential lock modes.	
TANDEM AXLE OSCILLATION (Total)	30 deg.	
STEERING	The motor grader features hydraulic frame articulation for enhanced maneuverability and productivity, while crab steering minimizes side drift, positions tandems on stable ground, and improves side-slope stability	
TYRE SIZE - Standard	17.5R25	
SERVICE BRAKE TYPE	Multiple Wet Discs	
SERVICE BRAKE ACTUATION	Hydraulic	
GROUND CLEARANCE FRONT AXLE	546 mm (21.5 in.)	

G140 SPECIFICATIONS

PERFORMANCE	6x4	6x6
SPEED		
Forward Gear 1		4,9 kph (3 mph)
Forward Gear 2		7,6 kph (5 mph)
Forward Gear 3		12,6 kph (8 mph)
Forward Gear 4		19,3 kph (12 mph)
Forward Gear 5		29,7 kph (18 mph)
Forward Gear 6		45 kph (28 mph)
Reverse Gear 1		5,3 kph (3 mph)
Reverse Gear 2		13,3 kph (8 mph)
Reverse Gear 3		31,3 kph (19 mph)
Top Speed Forward		45 kph (28 mph)
Top Speed Reverse		31,3 kph (19 mph)

6-WHEEL DRIVE	6x4	6x6
FRONT WHEEL DRIVE		Yes
DESCRIPTION		A hydrostatic drive to improve vehicle traction and benefit control of the front wheels. The system can be activated electronically in realtime whilst operating. It consists of independent left/right circuits, utilising variable displacement pumps coupled to auto-shifting two speed motors. When not active the circuits use an efficient freewheeling mode. The system enables inching mode as well as precision mode (a front wheel only drive mode).
PUMPS		Danfoss
PUMP DISPLACEMENT		53 cm ³ (3.2 cu. in.)
FRONT WHEEL MOTORS		Poclairn
MOTOR DISPLACEMENT		2 238 cm ³ (137 cu. in.)
REDUCTION		None
6WD MAX SPEED		30 kph (19 mph)
PRECISION MODE MAX SPEED		10 kph (6 mph)

HYDRAULICS	6x4	6x6
TYPE	Variable displacement axial piston pump	
PUMP DISPLACEMENT	100 cc / rev	
PUMP FLOW, L / min (US-Gallons / min)	220 L / min (58 gal / min)	
RELIEF PRESSURE	18 961 kPa (2 750 Psi)	

KINEMATICS	6x4	6x6
CIRCLE SIDE SHIFT	789 mm (31 in.)	
FRAME CIRCLE DIAMETER	1 500 mm (59 in.)	
CIRCLE DRIVE	Hydraulic geroller motor driving a reduction worm box with overload wetplate clutch.	
CIRCLE TYPE	Precision Circle: Sealed and lubricated slewing bearing, requiring no adjustment. Mounted between the drawbar and circleframe, which are welded and machined structures.	
CIRCLE ROTATION	360 deg.	
STEERING ANGLE, DEG	48 deg.	
TURNING RADIUS - Minimum	7,22 m (23 ft. 8 in.)	
FRAME ARTICULATION (each way)	22 deg.	

G140 SPECIFICATIONS

CAPACITIES	6x4	6x6
FUEL TANK (Refilling capacity)	400 L (106 US gal.)	
HYDRAULIC TANK (Refilling Capacity)	68,75 L (18 US gal.)	
COOLING SYSTEM	35 L (9 US gal.)	
ENGINE OIL WITH FILTER	15 L (4 US gal.)	
TRANSMISSION FLUID	33 L (9 US gal.)	
DIFF HOUSING	32 L (8 US gal.)	
TANDEM HOUSINGS	158 L (42 US gal.)	
CIRCLE GEARBOX	5 L (1 US gal.)	

MOULDBOARD / BLADE	6x4	6x6
DESCRIPTION	High strength welded construction, using wear resistant high carbon steel materials. Underlays/overlays & cutting edges can be exchanged left to right. Mouldboard bronze guides are easily replaceable and adjustable for precision.	
WIDTH - Mouldboard	4 270 mm (14 ft. 0 in.)	
MOULDBOARD HEIGHT	610 mm (24 in.)	
THICKNESS - Mouldboard	20/25 mm combination	
MOULDBOARD SIDESHIFT - Right	685,5 mm (27 in.)	
MOULDBOARD SIDESHIFT - Left	685,5 mm (27 in.)	
SHOULDER REACH	2 287 mm (7 ft. 6 in.)	
HYDRAULIC BLADE TIP - Forward	42 deg.	
HYDRAULIC BLADE TIP - Rearward	5 deg.	
MOULDBOARD - Lift Above Ground	490 mm (19.3 in.)	
MOULDBOARD ARC RADIUS	426 mm (16.8 in.)	
THROAT CLEARANCE	111 mm (4.4 in.)	
BANK ANGLE	90 deg.	
DRAWBAR (DRAFT FRAME) Description	Welded box construction machined for flatness with variable height double ball-and-socket pivot connection	
BLADE DOWN FORCE AT MAX WEIGHT	12 011 kg (26 480 lbs)	11 790 kg (25 992 lbs)
BLADE DOWN FORCE AT NORMAL WEIGHT	10 249 kg (22 595 lbs)	10 774 kg (23 753 lbs)
BLADE DOWN FORCE AT BASE WEIGHT	8 343 kg (18 393 lbs)	8 868 kg (19 551 lbs)
BLADE PULL AT MAX WEIGHT	14 637 kg (32 270 lbs)	20 520 kg (45 239 lbs)
BLADE PULL AT NORMAL WEIGHT	13 667 kg (30 131 lbs)	19 781 kg (43 610 lbs)
BLADE PULL AT BASE WEIGHT	11 947 kg (26 338 lbs)	17 191 kg (37 899 lbs)

CUTTING EDGE	6x4	6x6
DESCRIPTION	Through hardened Boron steel edge	
THICKNESS	19 mm (0.7 in.)	
WIDTH	203 mm (8 in.)	

G140 SPECIFICATIONS

ELECTRICAL	6x4	6x6
SYSTEM VOLTAGE	24 V	
NUMBER OF BATTERIES	2	
BATTERY CAPACITY	1 350 CCA	
RESERVE CAPACITY	400 min.	
AMP HOUR RATING	230 amp-hour	
ALTERNATOR RATING	120 amp	
NUMBER OF LED WORKLIGHTS		
Grading Option	4	
Delux Option	8	
Engine Bay - Standard	3	

WEIGHTS	6x4	6x6
GROSS VEHICLE WEIGHT - BASE - Front Axle	5 137 kg (11 325 lbs)	5 385 kg (11 872 lbs)
GROSS VEHICLE WEIGHT - BASE - Rear Axle	13 274 kg (29 264 lbs)	13 716 kg (30 239 lbs)
OPERATING WEIGHT	18 411 kg (40 589 lbs)	19 101 kg (42 110 lbs)
GROSS VEHICLE WEIGHT - TYPICAL - Front Axle	6 103 kg (13 455 lbs)	6 351 kg (14 002 lbs)
GROSS VEHICLE WEIGHT - TYPICAL - Rear Axle	15 186 kg (33 479 lbs)	15 628 kg (34 454 lbs)
WEIGHT WITH PUSH BLOCK & RIPPER	21 289 kg (46 934 lbs)	21 979 kg (48 455 lbs)
GROSS VEHICLE WEIGHT - Maximum - Front Axle	6 536 kg (14 410 lbs)	6 588 kg (14 525 lbs)
GROSS VEHICLE WEIGHT - Maximum - Rear Axle	16 264 kg (35 856 lbs)	16 212 kg (35 741 lbs)
OPERATING WEIGHT - MAX	22 800 kg (50 265 lbs)	

MID SCARIFIER	6x4	6x6
TYPE	Radial arm linkage with maintenance free bearings and underslung lift cylinder and hydraulic float. V-type scarifier beam with 3 pitch angle positions.	
WIDTH OF CUT	1 188 mm (46.8 in.)	
NUMBER OF SHANKS/TEETH	11	
LIFT ABOVE GROUND	300 mm (11,8 in.)	
MAX DEPTH	241 mm (9,5 in.)	
SHANK SPACING	114 mm (4,5 in.)	
SHANK SIZE	27.5 x 78 mm (1 x 3 in.)	

G140 SPECIFICATIONS

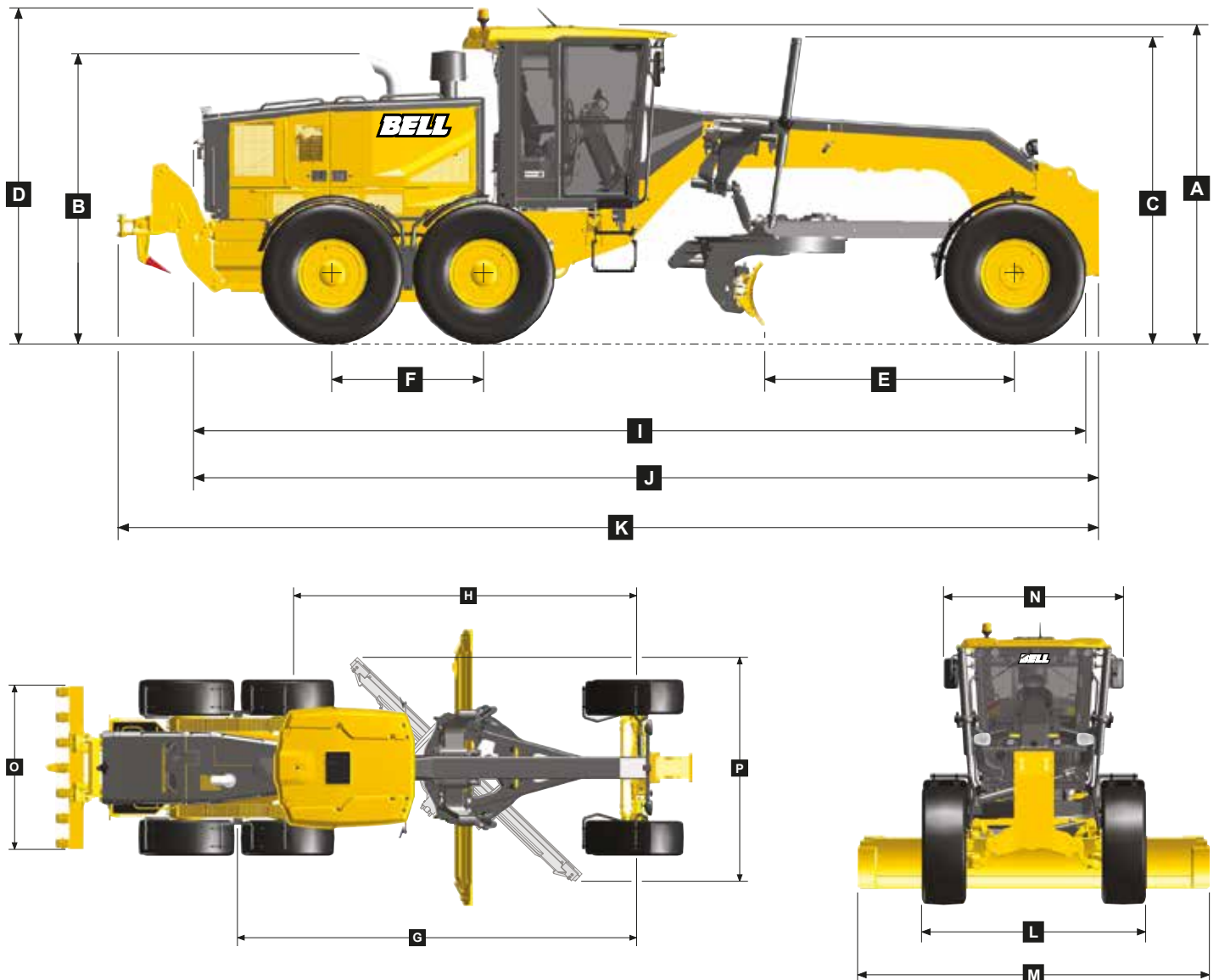
REAR RIPPER & SCARIFIER	6x4	6x6
DESCRIPTION	Parallel linkage, with maintenance free bearings, hydraulic float, and integrated tow hitch	
WIDTH OF CUT		
Ripper	2 300 mm (7 ft. 6 in.)	
Scarifier	2 300 mm (7 ft. 6 in.)	
MAX NUMBER OF SHANKS/TEETH		
Ripper	5	
Scarifier	9	
LIFT ABOVE GROUND		
Ripper	645 mm (25,4 in.)	
Scarifier	815 mm (32,1 in.)	
MAXIMUM DEPTH		
Ripper	370 mm (14,6 in.)	
Scarifier	240 mm (9,4 in.)	
RIPPER PRY-OUT FORCE (HYDRAULIC LIMIT)	25 500 kg (56 218 lbs)	
RIPPER PENETRATION FORCE (HYDRAULIC LIMIT)	9 268 kg (20 432 lbs)	
SHANK SIZE		
Ripper	58 x 137 mm (2.3 x 5.3 in.)	
Scarifier	27,5 x 78 mm (1.1 x 3.1 in.)	

CAB	6x4	6x6
DESCRIPTION	Steel cab frame with GRP roof	
ROPS/FOPS	Yes	

G140 SPECIFICATIONS

MACHINE DIMENSIONS

A	Height-Cab	3 161 mm (10 ft. 4 in.)
B	Height-Exhaust-T3A	2 861 mm (9 ft. 4 in.)
C	Height-Blade Lift Cylinders	3 034 mm (9 ft. 9 in.)
D	Height-Beacon Light	3 333 mm (10 ft. 9 in.)
E	Front Axle Centre to Blade	2 580 mm (8 ft. 5 in.)
F	Tandem Axle Wheel Centres	1 566 mm (5 ft. 1 in.)
G	Front Axle Centre to Tandem Axle Pivot	6 272 mm (20 ft. 6 in.)
H	Front Axle Centre to Artic Centre	5 392 mm (17 ft. 7 in.)
I	Length-Overall w/o Pushblock/Ripper	9 112 mm (29 ft. 9 in.)
J	Length-Overall with Pushblock	9 310 mm (30 ft. 6 in.)
K	Length-Overall with Pushblock and Ripper	10 138 mm (33 ft. 3 in.)
L	Width over Tyre 17,5 R25 (Std G140/G160)	2 634 mm (8 ft. 6 in.)
M	Width over Blade-14Ft (Std G140/G160)	4 273 mm (14 ft. 0 in.)
N	Width over Mirrors-Operating Position	2 212 mm (7 ft. 3 in.)
O	Width over Ripper	2 300 mm (7 ft. 5 in.)
P	Width Transport Position - 14ft Blade with 17.5R25 Tyres	2 970 mm (9 ft. 7 in.)





G160 SPECIFICATIONS



ENGINE	6x4	6x6
MANUFACTURER AND MODEL	Cummins QSL9	
EMISSIONS LEVEL	Stage 3A	
NUMBER OF CYLINDERS	6	
DISPLACEMENT	9 L (543 cu. in.)	
ENGINE OUTPUT - Nett	229 kW (307 hp)	
PEAK ENGINE TORQUE	1 424 Nm (1 050 lbf.ft.) @ 1 300 rpm	
TORQUE RISE	15%	
NET ENGINE POWER		
Gear 1	229 kW (307 hp)	
Gear 2	229 kW (307 hp)	
Gear 3	229 kW (307 hp)	
Gear 4	229 kW (307 hp)	
Gear D	229 kW (307 hp)	
Reverse Gear 1	229 kW (307 hp)	
Reverse Gear 2	229 kW (307 hp)	
Reverse Gear 3	229 kW (307 hp)	
Reverse Gear 4	229 kW (307 hp)	
Reverse Gear D	229 kW (307 hp)	

DRIVETRAIN	6x4	6x6
MANUFACTURER AND MODEL	ZF CP230	
TRANSMISSION DESCRIPTION	cPower	
NUMBER OF SPEEDS: Forward	Inf	
NUMBER OF SPEEDS: Reverse	Inf	
FRONT AXLE	Heavy duty welded fabrication with integrated lean bar lock	
FINAL DRIVES	Inboard-mounted planetary sealed in cooled, filtered oil	
BRAKES	Foot-controlled, hydraulically operated, multiple wet-disc brakes sealed in pressurized, cooled, filtered oil; both independent systems effective on all 4 tandem wheels	
PRIMARY AND SECONDARY BRAKES	Hydraulically actuated, inboard of tandem pivot, self-adjusting, sealed in cooled and filtered oil, multi-disc (ISO 3450).	
PARK BRAKE	Automatically spring applied, hydraulically released disc brake (ISO 3450).	
FRONT AXLE OSCILLATION (Total)	32 deg.	
FRONT WHEEL LEAN	20 deg.	
DIFFERENTIAL	Spiral bevel gear system, hydraulically actuated with a clutch-type mechanism, allowing differential lock engagement while the machine is in motion. It can be applied in both manual and automatic differential lock modes.	
TANDEM AXLE OSCILLATION	30 deg. (Total)	
STEERING	Hydraulic frame articulation for maneuverability and productivity; crab steering reduces side drift, positions tandems on firm ground, and increases side-slope stability	
TYRE SIZE - STANDARD	17.5R25	
SERVICE BRAKE TYPE	Multiple Wet Discs	
SERVICE BRAKE ACTUATION	Hydraulic	
GROUND CLEARANCE FRONT AXLE	546 mm (21.5 in.)	

G160 SPECIFICATIONS

PERFORMANCE	6x4	6x6
LOADING - FRONT AXLE	5 114 kg (11 274 lbs)	5 362 kg (11 821 lbs)
LOADING - REAR AXLE / TANDEM	13 646 kg (30 084 lbs)	14 088 kg (31 059 lbs)
SPEED		
Forward Gear 1		3,7 kph (2 mph)
Forward Gear 2		5.3 kph (3 mph)
Forward Gear 3		7.9 kph (5 mph)
Forward Gear 4		11.6 kph (7 mph)
Forward Gear D		0 - 45 kph (0 - 28 mph)
Reverse Gear 1		3.7 kph (2 mph)
Reverse Gear 2		5.3 kph (3 mph)
Reverse Gear 3		7.9 kph (5 mph)
Reverse Gear 4		11.6 kph (7 mph)
Reverse Gear D		0 - 45 kph (0 - 28 mph)
Top Speed Forward		45 kph (28 mph)
Top Speed Reverse		45 kph (28 mph)

6-WHEEL DRIVE	6x4	6x6
FRONT WHEEL DRIVE		Yes
DESCRIPTION		<p>A hydrostatic drive to improve vehicle traction and benefit control of the front wheels.</p> <p>The system can be activated electronically in realtime whilst operating. It consists of independent left/right circuits, utilising variable displacement pumps coupled to auto-shifting two speed motors.</p> <p>When not active the circuits use an efficient freewheeling mode. The system enables inching mode as well as precision mode (a front wheel only drive mode).</p>
PUMPS		Rexroth
PUMP DISPLACEMENT		53 cm ³ (3.4 cu. in.)
FRONT WHEEL MOTORS		Poclair
MOTOR DISPLACEMENT		2 238 cm ³ (137 cu. in.)
REDUCTION		None
6WD MAX SPEED		35 kph (22 mph)
PRECISION MODE MAX SPEED		10 kph (6 mph)

HYDRAULICS	6x4	6x6
TYPE	Variable displacement axial piston pump	
PUMP DISPLACEMENT	100 cc / rev	
PUMP FLOW, L / min (US-Gallons / min)	220 L / min (58 gal / min)	
RELIEF PRESSURE	18 961 kPa (2 750 Psi)	

G160 SPECIFICATIONS

KINEMATICS	6x4	6x6
CIRCLE SIDE SHIFT	789 mm (31 in.)	
FRAME CIRCLE DIAMETER	1 500 mm (59 in.)	
CIRCLE DRIVE	Hydraulic geroller motor driving a reduction worm box with overload wetplate clutch.	
CIRCLE TYPE	Precision Circle: Sealed and lubricated slewing bearing, requiring no adjustment. Mounted between the drawbar and circleframe, which are welded and machined structures.	
CIRCLE ROTATION	360 deg.	
STEERING ANGLE, DEG	48 deg.	
TURNING RADIUS - Minimum	7,2 m (23 ft. 8 in.)	
FRAME ARTICULATION (Each way)	22 deg.	

CAPACITIES	6x4	6x6
FUEL TANK (Refilling capacity)	400 L (106 US gal.)	
HYDRAULIC TANK (Refilling Capacity)	68,75 L (18 US gal.)	
COOLING SYSTEM	36 L (10 US gal.)	
ENGINE OIL WITH FILTER	21 L (6 US gal.)	
TRANSMISSION FLUID	36 L (10 US gal.)	
DIFF HOUSING	32 L (8 US gal.)	
TANDEM	158 L (42 US gal.)	
CIRCLE GEARBOX	5 L (1 US gal.)	

MOULDBOARD / BLADE	6x4	6x6
DESCRIPTION	High strength welded construction, using wear resistant high carbon steel materials. Underlays/overlays & cutting edges can be exchanged left to right. Moldboard bronze guides are easily replaceable and adjustable for precision.	
WIDTH - Mouldboard	4 270 mm (14 ft. 0 in.)	
MOULDBOARD HEIGHT	686 mm (27 in.)	
THICKNESS - Mouldboard	20/25 mm (7.8 / 9.8) combination	
MOULDBOARD SIDESHIFT - Right	685,5 mm (27 in)	
MOULDBOARD SIDESHIFT - Left	685,5 mm (27 in)	
SHOULDER REACH	2 287 mm (7 ft. 6 in.)	
HYDRAULIC BLADE TIP - Forward	42 deg.	
HYDRAULIC BLADE TIP - Rearward	5 deg.	
MOULDBOARD - Lift above ground	490 mm (19.3 in.)	
MOULDBOARD ARC RADIUS	426 mm (16.8 in.)	
THROAT CLEARANCE	111 mm (4.4 in.)	
BANK ANGLE	90 deg.	
DRAWBAR (DRAFT FRAME) Description	Welded box construction machined for flatness with variable height double ball-&-socket pivot connection	
BLADE DOWN FORCE AT MAX WEIGHT	12 741 kg (28 089 lbs)	12 741 kg (28 089 lbs)
BLADE DOWN FORCE AT NORMAL WEIGHT	10 439 kg (23 014 lbs)	10 964 kg (24 171 lbs)
BLADE DOWN FORCE AT BASE WEIGHT	8 678 kg (30 916 lbs)	8 868 kg (30 502 lbs)
BLADE PULL AT MAX WEIGHT	15 750 kg (34 723 lbs)	22 500 kg (49 604 lbs)
BLADE PULL AT NORMAL WEIGHT	14 002 kg (30 870 lbs)	20 095 kg (44 302 lbs)
BLADE PULL AT BASE WEIGHT	12 281 kg (27 076 lbs)	17 505 kg (38 592 lbs)

G160 SPECIFICATIONS

CUTTING EDGE	6x4	6x6
DESCRIPTION	Through hardened Boron steel edge	
THICKNESS	19 mm (0.7 in.)	
WIDTH	203 mm (8 in.)	

ELECTRICAL	6x4	6x6
SYSTEM VOLTAGE	24 V	
NUMBER OF BATTERIES	2	
BATTERY CAPACITY	1 352 CCA	
RESERVE CAPACITY	400 min.	
AMP HOUR RATING	230 amp-hour	
ALTERNATOR RATING	122 amp	
NUMBER OF LED WORKLIGHTS		
Grading Option	4	
Deluxe Option	8	
Engine Bay - Standard	3	

WEIGHTS	6x4	6x6
GROSS VEHICLE WEIGHT - Base - Front Axle	5 114 kg (11 274 lbs)	5 362 kg (11 821 lbs)
GROSS VEHICLE WEIGHT - Base - Rear Axle	13 646 kg (30 084 lbs)	14 088 kg (31 059 lbs)
OPERATING WEIGHT	18 760 kg (41 359 lbs)	19 450 kg (42 880 lbs)
GROSS VEHICLE WEIGHT - Typical - Front Axle	6 080 kg (13 404 lbs)	6 328 kg (13 951 lbs)
GROSS VEHICLE WEIGHT - Typical - Rear Axle	15 558 kg (34 299 lbs)	16 000 kg (35 274 lbs)
WEIGHT WITH PUSH BLOCK & RIPPER	21 638 kg (47 704 lbs)	22 328 kg (49 225 lbs)
GROSS VEHICLE WEIGHT - Maximum - Front Axle	7 500 kg (16 535 lbs)	
GROSS VEHICLE WEIGHT - Maximum - Rear Axle	17 500 kg (38 581 lbs)	
OPERATING WEIGHT - Maximum	25 000 kg (55 116 lbs)	

REAR RIPPER & SCARIFIER	6x4	6x6
DESCRIPTION	Parallel linkage, with maintenance free bearings, hydraulic float, and integrated tow hitch 3	Parallel linkage, with maintenance free bearings, hydraulic float, and integrated tow hitch 4
WIDTH OF CUT		
Ripper	2 300 mm (7 ft. 6 in.)	
Scarifier	2 300 mm (7 ft. 6 in.)	
MAX NUMBER OF SHANKS/TEETH		
Ripper	5	
Scarifier	9	
LIFT ABOVE GROUND		
Ripper	645 mm (25,4 in.)	
Scarifier	815 mm (32,1 in.)	
MAXIMUM DEPTH		
Ripper	370 mm (14,6 in.)	
Scarifier	240 mm (9,4 in.)	
RIPPER PRY-OUT FORCE (Hydraulic limit)	25 500 kg (56 218 lbs)	
RIPPER PENETRATION FORCE (Hydraulic limit)	9 268 kg (20 432 lbs)	
SHANK SIZE		
Ripper	59 x 137 mm (2.4 x 5.4 in.)	
Scarifier	27,5 x 78 mm (1.0 x 3.1 in.)	

G160 SPECIFICATIONS

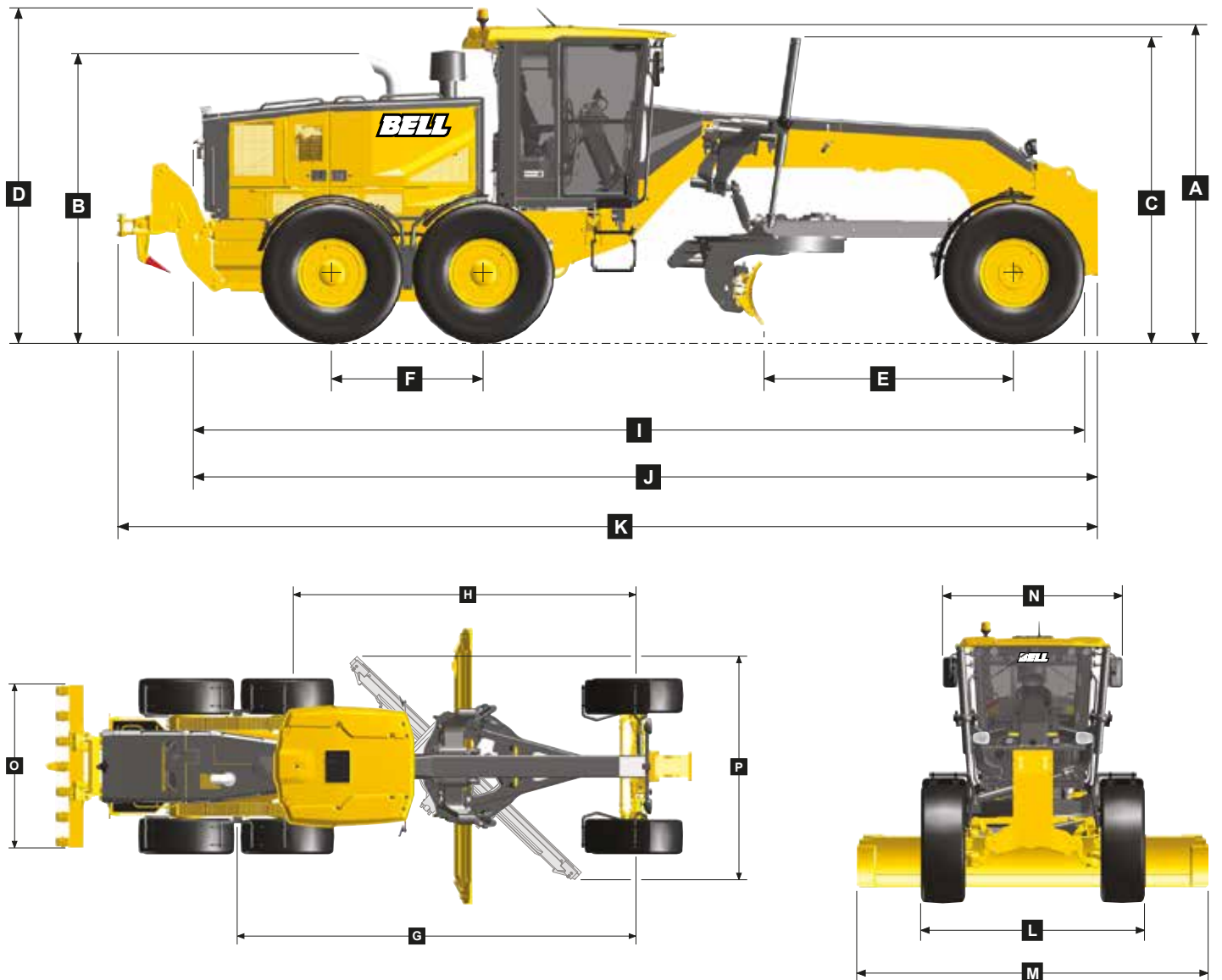
MID SCARIFIER	6x4	6x6
TYPE	Radial arm linkage with maintenance free bearings and underslung lift cylinder and hydraulic float. V-type scarifier beam with 3 pitch angle positions.	
WIDTH OF CUT	1 188 mm (46.8 in.)	
NUMBER OF SHANKS/TEETH	11	
LIFT ABOVE GROUND	300 mm (11,8 in.)	
MAX DEPTH	241 mm (9,5 in.)	
SHANK SPACING	114 mm (4,5 in.)	
SHANK SIZE	27.5 x 78 mm (1,0 x 3,1 in.)	

CAB	6x4	6x6
DESCRIPTION	Steel cab frame with GRP roof	
ROPS/FOPS	Yes	

G160 SPECIFICATIONS

MACHINE DIMENSIONS

A	Height-Cab	3 161 mm (10 ft. 4 in.)
B	Height-Exhaust-T3A	2 861 mm (9 ft. 4 in.)
C	Height-Blade Lift Cylinders	3 034 mm (9 ft. 9 in.)
D	Height-Beacon Light	3 333 mm (10 ft. 9 in.)
E	Front Axle Centre to Blade	2 580 mm (8 ft. 5 in.)
F	Tandem Axle Wheel Centres	1 566 mm (5 ft. 1 in.)
G	Front Axle Centre to Tandem Axle Pivot	6 272 mm (20 ft. 6 in.)
H	Front Axle Centre to Artic Centre	5 392 mm (17 ft. 7 in.)
I	Length-Overall w/o Pushblock/Ripper	9 112 mm (29 ft. 9 in.)
J	Length-Overall with Pushblock	9 310 mm (30 ft. 6 in.)
K	Length-Overall with Pushblock and Ripper	10 138 mm (33 ft. 3 in.)
L	Width over Tyre 17,5 R25 (Std G140/G160)	2 634 mm (8 ft. 7 in.)
M	Width over Blade-14Ft (Std G140/G160)	4 273 mm (14 ft. 0 in.)
N	Width over Mirrors-Operating Position	2 212 mm (7 ft. 3 in.)
O	Width over Ripper	2 300 mm (7 ft. 5 in.)
P	Width Transport Position - 14ft Blade with 17.5R25 Tyres	2 970 mm (9 ft. 3 in.)





G200 SPECIFICATIONS



ENGINE	6x4	6x6
MANUFACTURER AND MODEL	Cummins QSL9	
EMISSIONS LEVEL	Stage 3A	
NUMBER OF CYLINDERS	6	
DISPLACEMENT	9 L (543 cu. in.)	
ENGINE OUTPUT - NETT	245 kW (329 hp)	
PEAK ENGINE TORQUE	1 424 Nm (1 050 lbf.) @ 1 500 rpm	
TORQUE RISE	9%	
NET ENGINE POWER		
Gear 1	245 kW (329 hp)	
Gear 2	245 kW (329 hp)	
Gear 3	245 kW (329 hp)	
Gear 4	245 kW (329 hp)	
Gear D	245 kW (329 hp)	
Reverse Gear 1	245 kW (329 hp)	
Reverse Gear 2	245 kW (329 hp)	
Reverse Gear 3	245 kW (329 hp)	

DRIVETRAIN	6x4	6x6
MANUFACTURER AND MODEL	ZF CP290	
TRANSMISSION DESCRIPTION	cPower	
NUMBER OF SPEEDS: Forward	Inf	
NUMBER OF SPEEDS: Reverse	Inf	
FRONT AXLE	Heavy duty welded fabrication with integrated lean bar lock	
FINAL DRIVES	Inboard-mounted planetary sealed in cooled, filtered oil	
BRAKES	Foot-controlled, hydraulically operated, multiple wet-disc brakes sealed in pressurized, cooled, filtered oil; both independent systems effective on all 4 tandem wheels	
PRIMARY AND SECONDARY BRAKES	Hydraulically actuated, inboard of tandem pivot, self-adjusting, sealed in cooled and filtered oil, multi-disc (ISO 3450).	
PARK BRAKE	Automatically spring applied, hydraulically released, oil cooled, self-adjusting (ISO 3450)	
FRONT AXLE OSCILLATION (Total)	32 deg.	
FRONT WHEEL LEAN	20 deg.	
DIFFERENTIAL	Spiral bevel gear system, hydraulically actuated with a clutch-type mechanism, allowing differential lock engagement while the machine is in motion. It can be applied in both manual and automatic differential lock modes.	
TANDEM AXLE OSCILLATION (Total)	30 deg.	
STEERING	Hydraulic frame articulation for maneuverability and productivity; crab steering reduces side drift, positions tandems on firm ground, and increases side-slope stability	
TYRE SIZE - STANDARD	20.5R25	
SERVICE BRAKE TYPE	Multiple Wet Discs	
SERVICE BRAKE ACTUATION	Hydraulic	
GROUND CLEARANCE FRONT AXLE	605 mm (23.8 in.)	

G200 SPECIFICATIONS

PERFORMANCE	6x4	6x6
LOADING - FRONT AXLE	5 351 kg (11 797 lbs)	5 599 kg (12 344 lbs)
LOADING - REAR AXLE / TANDEM	14 184 kg (31 270 lbs)	14 626 kg (32 245 lbs)
SPEED		
Forward Gear 1	3.7 kph (2 mph)	
Forward Gear 2	5.3 kph (3 mph)	
Forward Gear 3	7.9 kph (5 mph)	
Forward Gear 4	11.6 kph (7 mph)	
Forward Gear D	0 - 44,8 kph (0 - 28 mph)	
Reverse Gear 1	3.7 kph (2 mph)	
Reverse Gear 2	5.3 kph (3 mph)	
Reverse Gear 3	7.9 kph (5 mph)	
Reverse Gear 4	11.6 kph (7 mph)	
Reverse Gear D	0 - 44,8 kph (0 - 28 mph)	
Top Speed Forward	44,8 kph (28 mph)	
Top Speed Reverse	44,8 kph (28 mph)	

6-WHEEL DRIVE	6x4	6x6
FRONT WHEEL DRIVE		Yes
DESCRIPTION		A hydrostatic drive to improve vehicle traction and benefit control of the front wheels. The system can be activated electronically in realtime whilst operating. It consists of independent left/right circuits, utilising variable displacement pumps coupled to auto-shifting two speed motors. When not active the circuits use an efficient freewheeling mode. The system enables inching mode as well as precision mode (a front wheel only drive mode).
PUMPS		Rexroth
PUMP DISPLACEMENT		56 cm ³ (3.4 cu. in.)
FRONT WHEEL MOTORS		Poclair
MOTOR DISPLACEMENT		2 238 cm ³ (137 cu. in.)
REDUCTION		None
6WD MAX SPEED		35 kph (22 mph)
PRECISION MODE MAX SPEED		10 kph (6 mph)

HYDRAULICS	6x4	6x6
TYPE	Variable displacement axial piston pump	
PUMP DISPLACEMENT	100 cc / rev	
PUMP FLOW, L / min (US-Gallons / min)	220 L / min (58 gal / min)	
RELIEF PRESSURE	18 961 kPa (2 750 Psi)	

KINEMATICS	6x4	6x6
CIRCLE SIDE SHIFT	789 mm (31 in)	
FRAME CIRCLE DIAMETER	1 500 mm (59 in)	
CIRCLE DRIVE	Hydraulic geroller motor driving a reduction worm box with overload wetplate clutch	
CIRCLE TYPE	Precision Circle: Sealed and lubricated slewing bearing, requiring no adjustment. Mounted between the drawbar and circleframe, which are welded and machined structures.	
CIRCLE ROTATION	360 deg.	
STEERING ANGLE, DEG	48 deg.	
TURNING RADIUS - MINIMUM	7,22 m (23 ft. 8 in.)	
FRAME ARTICULATION (EACH WAY)	22 deg.	

G200 SPECIFICATIONS

CAPACITIES	6x4	6x6
FUEL TANK (REFILLING CAPACITY)	400 L (106 US gal.)	
HYDRAULIC TANK (REFILLING CAPACITY)	68,75 L (18 US gal.)	
COOLING SYSTEM	36 L (10 US gal.)	
ENGINE OIL WITH FILTER	21 L (6 US gal.)	
TRANSMISSION FLUID	47 L (12 US gal.)	
DIFF HOUSING	32 L (8 US gal.)	
TANDEM	158 L (42 US gal.)	
CIRCLE GEARBOX	5 L (1 US gal.)	

MOULDBOARD / BLADE	6x4	6x6
DESCRIPTION	High strength welded construction, using wear resistant high carbon steel materials. Underlays/overlays & cutting edges can be exchanged left to right. Moldboard bronze guides are easily replaceable and adjustable for precision.	
WIDTH - MOULDBOARD	4 880 mm (16 ft. 0 in.)	
MOULDBOARD HEIGHT	686 mm (27 in.)	
THICKNESS - MOULDBOARD	20/25 mm (0.7 / 0.9) combination	
MOULDBOARD SIDESHIFT - RIGHT	685,5 mm (27 in.)	
MOULDBOARD SIDESHIFT - LEFT	685,5 mm (27 in.)	
SHOULDER REACH	2 478 mm (8 ft. 2 in.)	
HYDRAULIC BLADE TIP - FORWARD	44 deg.	
HYDRAULIC BLADE TIP - REARWARD	3 deg.	
MOULDBOARD - LIFT ABOVE GROUND	490 mm (19.3 in.)	
MOULDBOARD - DEPTH OF CUT		
MOULDBOARD ARC RADIUS	426 mm (16.8 in.)	
THROAT CLEARANCE	87 mm (3.4 in.)	
BANK ANGLE	90 deg.	
DRAWBAR (DRAFT FRAME) DESCRIPTION	Welded box construction machined for flatness with variable height double ball-and-socket pivot connection	
BLADE DOWN FORCE AT MAX WEIGHT	12 741 kg (28 089 lbs)	12 741 kg (28 089 lbs)
BLADE DOWN FORCE AT NORMAL WEIGHT	10 242 kg (22 580 lbs)	10 767 kg (23 737 lbs)
BLADE DOWN FORCE AT BASE WEIGHT	8 678 kg (30 734 lbs)	8 868 kg (31 189 lbs)
BLADE PULL AT MAX WEIGHT	15 750 kg (34 723 lbs)	22 500 kg (49 604 lbs)
BLADE PULL AT NORMAL WEIGHT	14 648 kg (32 294 lbs)	20 905 kg (46 088 lbs)
BLADE PULL AT BASE WEIGHT	12 766 kg (28 143 lbs)	18 203 kg (40 130 lbs)

CUTTING EDGE	6x4	6x6
DESCRIPTION	Through hardened Boron steel edge	
THICKNESS	19 mm (0.7 in.)	
WIDTH	203 mm (8 in.)	

G200 SPECIFICATIONS

ELECTRICAL	6x4	6x6
SYSTEM VOLTAGE	24 V	
NUMBER OF BATTERIES	2	
BATTERY CAPACITY	1 353 CCA	
RESERVE CAPACITY	400 min.	
AMP HOUR RATING	230 amp-hour	
ALTERNATOR RATING	122 amp	
NUMBER OF LED WORKLIGHTS		
Grading Option	4	
Delux Option	8	
Engine Bay - Standard	3	

WEIGHTS	6x4	6x6
GROSS VEHICLE WEIGHT - Base - Front Axle	5 351 kg (11 797 lbs)	5 599 kg (12 344 lbs)
GROSS VEHICLE WEIGHT - Base - Rear Axle	14 184 kg (31 270 lbs)	14 626 kg (32 245 lbs)
OPERATING WEIGHT	19 535 kg (43 067 lbs)	20 225 kg (44 588 lbs)
GROSS VEHICLE WEIGHT - Typical - Front Axle	6 262 kg (13 805 lbs)	6 510 kg (14 352 lbs)
GROSS VEHICLE WEIGHT - Typical - Rear Axle	16 276 kg (35 882 lbs)	16 718 kg (36 857 lbs)
WEIGHT WITH PUSH BLOCK & RIPPER	22 538 kg (49 688 lbs)	23 228 kg (51 209 lbs)
GROSS VEHICLE WEIGHT - Maximum - Front Axle	7 500 kg (16 535 lbs)	
GROSS VEHICLE WEIGHT - Maximum - Rear Axle	17 500 kg (38 581 lbs)	
OPERATING WEIGHT - Maximum	25 000 kg (55 116 lbs)	

REAR RIPPER & SCARIFIER	6x4	6x6
DESCRIPTION	Parallel linkage, with maintenance free bearings, hydraulic float, and integrated tow hitch 5	
WIDTH OF CUT		
Ripper	2 550 mm (8 ft. 4 in.)	
Scarifier	N/A	
MAX NUMBER OF SHANKS/TEETH		
Ripper	7	
Scarifier	N/A	
LIFT ABOVE GROUND		
Ripper	712 mm (28 in.)	
Scarifier	N/A	
MAXIMUM DEPTH		
Ripper	302 mm (11,89 in.)	
Scarifier	N/A	
RIPPER PRY-OUT FORCE (HYDRAULIC LIMIT)	25 500 kg (56 218 lbs)	
RIPPER PENETRATION FORCE (HYDRAULIC LIMIT)	10 092 kg (22 249 lbs)	
SHANK SIZE		
Ripper	58 x 137 mm (2.28 x 5.39 in.)	
Scarifier	N/A	

G200 SPECIFICATIONS

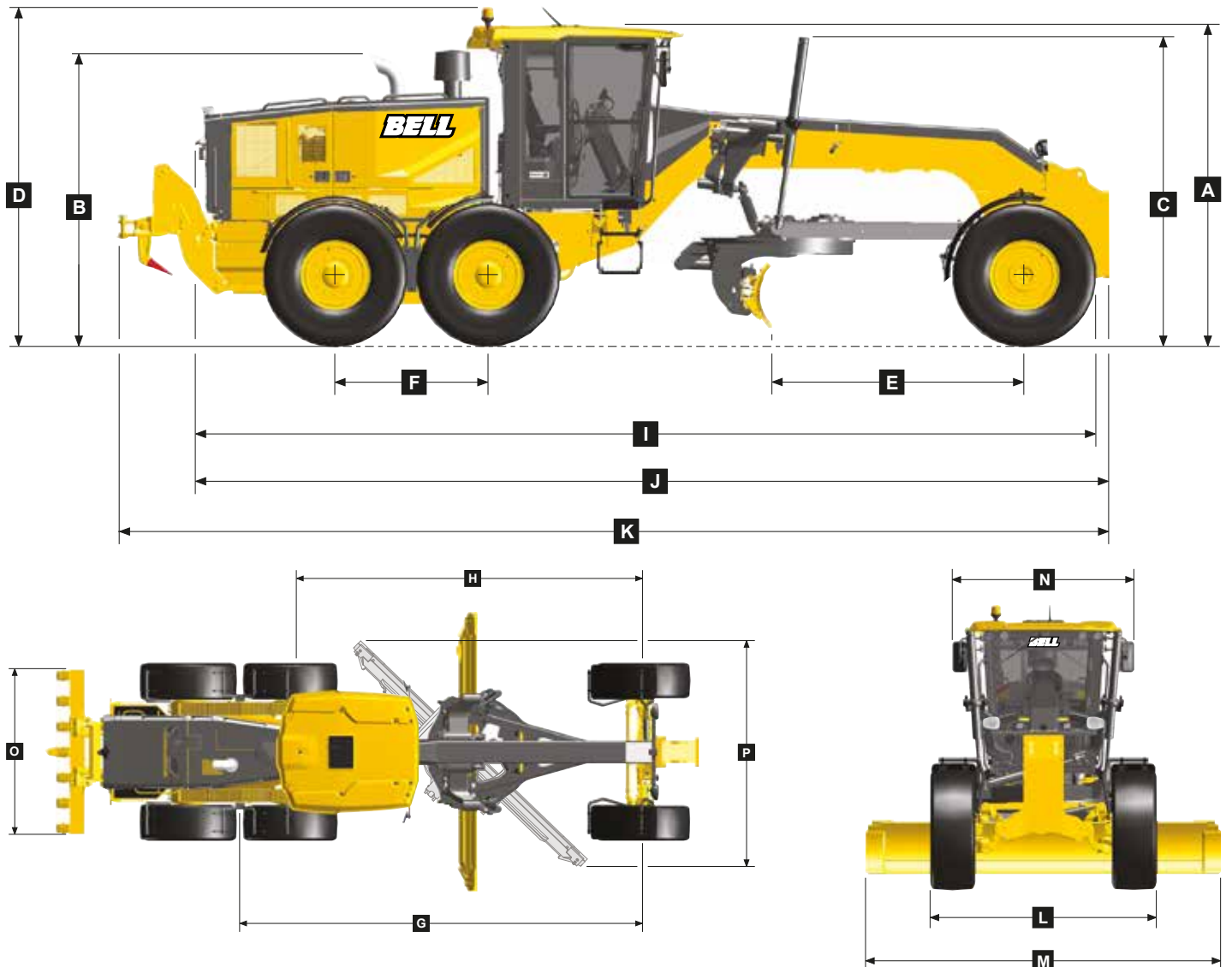
MID SCARIFIER	6x4	6x6
TYPE	Radial arm linkage with maintenance free bearings and underslung lift cylinder and hydraulic float. V-type scarifier beam with 3 pitch angle positions.	
WIDTH OF CUT	1 189 mm (46.8 in.)	
NUMBER OF SHANKS/TEETH	12	
LIFT ABOVE GROUND	300 mm (11,8 in.)	
MAX DEPTH	241 mm (9,5 in.)	
SHANK SPACING	114 mm (4,5 in.)	
SHANK SIZE	27.5 x 78 mm (1,0 x 3,1 in.)	

CAB	6x4	6x6
DESCRIPTION	Steel cab frame with GRP roof	
ROPS/FOPS	Yes	

G200 SPECIFICATIONS

MACHINE DIMENSIONS

A	Height-Cab	3 216 mm (10 ft. 5 in.)
B	Height-Exhaust-T3A	2 915 mm (9 ft. 5 in.)
C	Height-Blade Lift Cylinders	3 089 mm (10 ft. 1 in.)
D	Height-Beacon Light	3 388 mm (11 ft. 1 in.)
E	Front Axle Centre to Blade	2 580 mm (8 ft. 5 in.)
F	Tandem Axle Wheel Centres	1 566 mm (5 ft. 1 in.)
G	Front Axle Centre to Tandem Axle Pivot	6 272 mm (20 ft. 6 in.)
H	Front Axle Centre to Artic Centre	5 392 mm (17 ft. 7 in.)
I	Length-Overall w/o Pushblock/Ripper	9 166 mm (30 ft.)
J	Length-Overall with Pushblock	9 310 mm (30 ft. 6 in.)
K	Length-Overall with Pushblock and Ripper	10 138 mm (33 ft. 3 in.)
L	Width over Tyre 17,5 R25 (Option G200)	2 634 mm (8 ft. 6 in.)
L	Width over Tyre 20,5 R25 (Std G200)	2 735 mm (8 ft. 9 in.)
M	Width over Blade-14 Ft (Option G200)	4 273 mm (14 ft.)
M	Width over Blade-16 Ft (Std G200)	4 883 mm (16 ft.)
N	Width over Mirrors-Operating Position	2 212 mm (7 ft. 3 in.)
O	Width over Ripper	2 550 mm (8 ft. 5 in.)
P	Width Transport Position - 14ft Blade with 17.5R25 Tyres	2 970 mm (9 ft. 9 in.)
P	Width Transport Position - 16ft Blade with 20.5R25 Tyres	3 380 mm (11 ft. 1 in.)



Features & Options



Key: ● Standard ▲ Optional

G140	G160	G200	
CAB			
●	●	●	ROPS/FOPS certified
●	●	▲	Standard cab
▲	▲	●	Deluxe cab
▲	▲	●	Powered cab air precleaner
▲	▲	▲	Radio
●	●	●	HVAC Climate control
ELECTRICAL			
▲	▲	▲	PDS ready
▲	▲	▲	Rear camera
▲	▲	▲	Front camera
●	●	●	Reverse alarm
▲	▲	▲	White noise reverse alarm
●	●	●	LED grading worklights
▲	▲	●	LED Deluxe worklights
●	●	●	Engine bay lights
●	●	●	Rotating beacon lights
●	●	●	Wiper/washer with intermittent control
●	●	●	Rear wipers
●	●	●	Headlights: Halogen
▲	▲	▲	Headlights: LED
●	●	●	Reversing fan motor
●	●	●	Battery 1 350 CCA
GROUND ENGAGING TOOLS (GET)			
▲	▲		9 extra Scarifier shanks with tips
▲	▲		2 extra Ripper shanks with tips
▲	▲		All extra Ripper and scarifier shanks
▲	▲	▲	Reverse overlay end bids

G140	G160	G200	
MOLDBOARD			
▲			12 ft x 24 in
●	▲		14 ft x 24 in
▲	●	▲	14 ft x 27 in
		●	16 ft x 27 in
WHEELSET			
●	●	▲	17.5R25
		●	20.5R25
▲	▲	▲	550/65R25
MUDGUARDS			
▲	▲	▲	Front
▲	▲	▲	Front and rear
OTHERS			
▲	▲	●	Blade impact
▲	▲	▲	Quick service group
▲	▲	▲	Quick-fill fuel
●	●	●	Slip clutch
●	●	●	Sealed slew bearing
▲	▲	▲	Protection kit
ATTACHMENTS			
●	●		Rear ripper
▲	▲	▲	Rear hitch
		●	Wider ripper
▲	▲	▲	Mid scarifier



All dimensions are shown in millimetres, unless otherwise stated between brackets.

Under our policy of continuous improvement, we reserve the right to change technical data and design without prior notice. Photographs featured in this brochure may include optional equipment.

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