

*In stock
SA*



DATE: Mar 27, 2023
QUOTE #:316640-01



**HIDALGO COUNTY PCT 4
1051 N DOOLITTLE RD
EDINBURG, TEXAS 78542 0337**

**Morado, Remy
956.373.0787**

RAMON RODRIGUEZ

BUY BOARD QUOTE CONTRACT # 685-22

One (1) New Caterpillar Inc Model: 120 Motor Graders with all standard equipment in addition to the additional specifications listed below:

MACHINE SPECIFICATIONS

STOCK NUMBER: HLK047837 SERIAL NUMBER: 0Y9A00900 YEAR: 2023 HOURS: 0

DESCRIPTION	REF.#	PRICE
120 14B MOTOR GRADER	468-2237	\$343,090.00
LANE 3 ORDER	0P-9003	\$0.00
GLOBAL ARRANGEMENT LVR	561-9459	\$0.00
MOLDBOARD, 14' PLUS	320-7431	\$2,925.00
WEATHER, STANDARD TND	467-7404	\$0.00
ACCUMULATORS, WITH ARO, LVR	468-2255	\$5,930.00
ENGINE, STAGE V AND T4 FINAL	590-7345	\$0.00
DRAIN, HIGH SPEED, ENGINE OIL	505-7041	\$369.00
BASE+2(TIP,RIP), ARO, LVR	599-8686	\$12,720.00
LIGHTS, ARM, FOLD DOWN, LED	563-2430	\$2,425.00
STARTER, STANDARD DUTY	462-6512	\$0.00
CAB, ROPS, PREMIUM, LVR, TND	461-3559	\$25,060.00
SEAT COMFORT, SUSPENSION, LVR	461-3554	\$2,620.00
SEAT BELT	594-6359	(\$263.00)
COMFORT PACKAGE, PREMIUM, LVR	471-5352	\$3,690.00
PRODUCT LINK, CELLULAR PLE742	491-5100	\$0.00
CAT GRADE ARO, LVR, TND	468-2246	\$6,230.00
TIRES, 17.5R25 BS VKT * D2A MP	252-0775	\$15,390.00
FUEL ANTIFREEZE, -25C (-13F)	0P-3978	\$0.00
LOW BAR, HALOGEN, LVR, TND	565-5395	\$830.00
LIGHTS, WORKING, PLUS,HAL,LVR	468-7619	\$1,330.00
LIGHTS, CAB HALOGEN, LVR	490-2608	\$660.00
ALTERNATOR, 150 AMP	438-5769	\$725.00
NO LOCK OUT	461-3545	\$0.00
CAMERA, REAR VISION, LVR	492-0617	\$3,270.00
MIRRORS, EXTERNAL, BASE, LVR	483-9353	\$0.00

DESCRIPTION	REF.#	PRICE
WIPER, REAR, LVR	471-5346	\$590.00
GUARD, BOTTOM	453-4972	\$4,385.00
PUSH PLATE, COUNTERWEIGHT	336-1559	\$5,170.00
STARTING AID	422-6605	\$630.00
RIPPER	456-5359	\$16,300.00
TOOTH, STRAIGHT	8J-5313	\$492.00
JUMP START RECEPTACLE	506-4261	\$91.00
HVAC, BASIC,W/O AIR COMPRESSOR	510-8447	\$7,250.00
DECALS, ENGLISH (U.S)	472-5087	\$0.00
DRAWBAR, TOP ADJUST, HYD TIP, LVR	468-1607	\$0.00
REAR PANEL W/O ACCESS DOOR	518-1195	\$0.00
ROLL ON-ROLL OFF	0P-2265	\$393.00
FAN, STANDARD TND	575-7683	\$0.00
FUEL FILTER, NEXT GEN	574-8803	\$0.00
GROUND LEVEL, FUELING	577-8014	\$0.00
SERIALIZED TECHNICAL MEDIA KIT	421-8926	\$0.00

Total Machine & Attachment List Price \$462,302.00

Minimum Buy Board discount 20% off list price \$92,460.40

Holt Governmental Discount \$52,391.60

SALE PRICE	\$317,450.00
EXT WARRANTY	Included
TOTAL PRICE	\$317,450.00
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SUB TOTAL	\$317,450.00
TOTAL PURCHASE PRICE	\$317,450.00

WARRANTY

Extended Warranty: 120-36 MO/5000 HR PREMIER WARRANTY

STANDARD EQUIPMENT

POWERTRAIN -Air cleaner, dual stage dry type radial -seal with service indicator through -messenger and automatic dust ejector
-Air-to-air after cooler (ATAAC) -Brakes, oil disc, four-wheel, hydraulic -Demand fan, hydraulic -Differential, lock/unlock, auto -Drain,
engine oil, ecology -Engine: --C7.1 diesel, with automatic -engine derate, and idle control. --Optimized VHP Plus --Engine ECO mode
--Fuel-water separator -Parking brake, multi-disc, sealed -and oil cooled -Priming pump, fuel -Transmission, 8 speed forward and 6
-speed reverse, power shift, direct -drive

ELECTRICAL -Alarm, back-up -Alternator, -Batteries, maintenance free -Electrical system, 24V

OPERATOR ENVIRONMENT -Steering wheel -Display, digital speed and gear -Gauge, machine level -Gauges (analog) inside the
cab -(includes fuel, articulation, engine -coolant temp, engine RPM, and -hydraulic oil temp) -Ladders, cab, left and right side
-Message operator information display, -meter, hour, digital -ISO 6394 (70% fan speed) -Throttle control, electronic

SAFETY AND SECURITY -Clutch, circle drive slip -Doors, engine compartment, -Ground level engine shutdown -Seat belt,
retractable 76.2 (3")

TIRES, RIMS, AND WHEELS -A partial allowance for tires -on 254mm x 609mm (10"x24") multi- -piece rims is included in the base
-machine weight and price

OTHER STANDARD EQUIPMENT -CD ROM parts book -Doors, service compartment, -locking -SOS ports, engine, hydraulic,
-transmission, coolant, fuel -Tool box -Fuel tank, 225 liters (59 gallon) -Radiator, cleanout access

THE NEXT GENERATION OF MOTOR GRADERS
CAT® 120 MOTOR GRADER



STEERING WHEEL AND LEVER
 CONTROLS
 FAMILIAR CONTROLS

Choose your Options
 JOYSTICK OR LEVER /
 STEERING WHEEL
 TANDEM OR
 ALL-WHEEL DRIVE
 CAT GRADE
 TECHNOLOGIES
 STANDARD TO
 PREMIUM PLUS CAB



JOYSTICK CONTROLS
 LESS FATIGUE

MAXIMUM COMFORT AND PERFORMANCE WITH CONTROL OPTIONS.

CAT MOTOR GRADERS BUILT FOR YOUR PREFERENCE AND JOBSITE NEEDS

UP TO **15%** MORE
 FUEL EFFICIENT

- Increased fuel economy
- Balanced weight and power with the CT 1 Engine
- Factory integrated and scalable technology options

CAB DESIGNED FOR
MAXIMUM CAB COMFORT.

- Standard to Premium Plus Cab options
- Touchscreen display screens with Cat® GRADE technology
- Automatic climate control option
- Improved rear visibility

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 MAINTENANCE COSTS

- Extended fluid and filter maintenance intervals
- Lower owning and operating costs

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120

Motor Grader

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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120 Motor Grader Specifications

Engine – Tier 3/Stage IIIA Equivalent

Engine Model	Cat C7.1	
Emissions	U.S. Tier 3 Equivalent	EU Stage IIIA
Base Net Power ISO 9249/SAE J1349	93 kW	125 hp
Base Net Power EEC 80/1269 (metric)	127 hp	
Power Range – Net	93-116 kW	125-156 hp
Power Range – Net (metric)	127-158 hp	
All Wheel Drive Range – Net	97-129 kW	130-173 hp
All Wheel Drive Range – Net (metric)	131-176 hp	
Derating Altitude	4500 m	14,764 ft
Derating Altitude AWD	3000 m	9,842 ft

Engine – Tier 4 Final/Stage V

Engine Model	C7.1	
Emissions	Tier 4 Final	Stage V
Base Net Power ISO 9249/SAE J1349 EEC 80/1269	104 kW	140 hp
Base Net Power ISO 9249/SAE J1349 EEC 80/1269 (metric)	142 hp	
Power Range – Net	104-123 kW	140-164 hp
Power Range – Net (metric)	142-167 hp	
All Wheel Drive Range – Net	108-141 kW	144-189 hp
All Wheel Drive Range – Net (metric)	146-192 hp	
Bore	105 mm	4.1 in

Displacement	7.01 L	427.8 in ³
Stroke	135 mm	5.3 in
Engine RPM	2,000	
Number of Cylinders	6	
Torque Rise – ISO 9249	42%	
Maximum Torque – ISO 9249	822 N·m	606 lb-ft
Maximum Torque (All-Wheel Drive On)	828 N·m	611 lb-ft
Derating Altitude	3000 m	9,842 ft
Derating Altitude AWD	1676 m	5,499 ft
Maximum – Fan Speed	1,300 rpm	
Minimum – Fan Speed	600 rpm	
Ambient Capacity	50° C	122° F

- Net Power is tested per ISO 9249, SAE J1349, and EEC 80/1269 Standards in effect at the time of manufacture.
- Net power advertised is the power available at rated speed of 2,000 rpm, measured at the flywheel when engine is equipped with fan, air cleaner, muffler, and alternator.
- VHP Plus is standard for the 120 and 120 all-wheel drive (AWD).
- Rated speed at 2,000 rpm.
- Biodiesel blends up to B30 (30% blend by volume) are acceptable when blended with 500 ppm (mg/kg) sulfur or less ULSD. B30 should meet ASTM D7467 specification (biodiesel blend should meet Cat biodiesel spec, ASTM D6751 or EN 14214). Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specification are required. Consult your OMM for further machine specific fuel recommendations.

120 Motor Grader Specifications

120 Net Power – Tier 3/Stage IIIA Equivalent

Gear	Non-AWD – kW (hp)	AWD Off – kW (hp)	AWD On – kW (hp)
Forward			
1st	93 (125)	97 (130)	96 (129)
2nd	97 (130)	100 (135)	101 (136)
3rd	101 (136)	104 (140)	107 (144)
4th	108 (145)	111 (149)	115 (155)
5th	112 (150)	124 (167)	128 (171)
6th	116 (156)	129 (173)	129 (173)
7th	116 (156)	129 (173)	129 (173)
8th	116 (156)	129 (173)	129 (173)
Reverse			
1st	93 (125)	97 (130)	96 (129)
2nd	97 (130)	100 (135)	101 (136)
3rd-6th	101 (135)	104 (140)	107 (144)

120 Net Power – Tier 4 Final/Stage V

Gear	Non-AWD – kW (hp)	AWD Off – kW (hp)	AWD On – kW (hp)
Forward			
1st	104 (139)	108 (145)	109 (146)
2nd	107 (143)	111 (149)	114 (153)
3rd	110 (148)	114 (153)	120 (161)
4th	119 (160)	122 (164)	122 (164)
5th	123 (165)	134 (180)	141 (189)
6th	123 (165)	134 (180)	141 (189)
7th	123 (165)	134 (180)	141 (189)
8th	123 (165)	134 (180)	134 (180)
Reverse			
1st	104 (139)	108 (145)	109 (146)
2nd	107 (143)	111 (149)	114 (153)
3rd-6th	110 (148)	114 (153)	120 (161)

Power Train

Forward/Reverse Gears	8 Forward/6 Reverse
Transmission	Direct Drive Powershift Countershaft
High Idle Speed	2,000 rpm
Low Idle Speed	
Tier 3	800 rpm
Tier 4	1,030 rpm
Air Cleaner	Dry

Hydraulic System

Type	Closed – Center	
Type Circuit	Parallel	
Pump Type	Variable Displacement Piston	
System Pressure	24 129 kPa	3500 psi
System Flow	0-200 L/min	0-53 gal/min

Operating Specifications

Top speed forward	48.3 km/h	30.1 mph
Top speed reverse	38.1 km/h	23.7 mph
Turning Radius, Outside Front Tires	7.4 m	291.3 in
Steering Range	50° Left and Right	
Articulation Angle	20° Left and Right	
Front Wheel Lean	18° Left and Right	
Total Oscillation	32°	
Front Wheel Lean*	16°	
Total Oscillation*	32°	
Forward		
1st	4.1 km/h	2.6 mph
2nd	5.6 km/h	3.5 mph
3rd	8.2 km/h	5.1 mph
4th	11.3 km/h	7.0 mph
5th	17.7 km/h	11.0 mph
6th	24.1 km/h	15.0 mph
7th	33.2 km/h	20.6 mph
8th	48.3 km/h	30.1 mph
Reverse		
1st	3.3 km/h	2.0 mph
2nd	6.1 km/h	3.8 mph
3rd	8.9 km/h	5.5 mph
4th	14.0 km/h	8.7 mph
5th	26.2 km/h	16.3 mph
6th	38.1 km/h	23.7 mph

*Joystick – STD only

- Machine speed measured at 2,150 rpm with 14.00R24 radial tires, no slip.

120 Motor Grader Specifications

Base Machine Weight – Tier 3/Stage IIIA Equivalent

Lever/Steering Wheel Weight	13 527 kg	29,822 lb
Front Axle:	3458 kg	7,624 lb
Rear Axle:	10 069 kg	22,198 lb
Joystick Weight	13 810 kg	30,446 lb
Front Axle:	3682 kg	8,117 lb
Rear Axle:	10 128 kg	22,328 lb
Lever/Steering Wheel All-Wheel Drive (AWD) Weight	14 282 kg	31,486 lb
Front Axle:	3866 kg	8,523 lb
Rear Axle:	10 416 kg	22,963 lb
Joystick All-Wheel Drive (AWD) Weight	14 485 kg	31,934 lb
Front Axle:	4095 kg	9,028 lb
Rear Axle:	10 390 kg	22,906 lb

Typically Equipped Machine Weight

Lever/Steering Wheel Weight*	15 699 kg	34,610 lb
Front Axle:	4309 kg	9,550 lb
Rear Axle:	11 390 kg	24,111 lb
Joystick Weight*	15 824 kg	34,886 lb
Front Axle:	4423 kg	9,751 lb
Rear Axle:	11 401 kg	25,135 lb
Lever/Steering Wheel All-Wheel Drive (AWD) Weight*	16 454 kg	36,275 lb
Front Axle:	4562 kg	10,057 lb
Rear Axle:	11 892 kg	26,217 lb
Joystick All-Wheel Drive (AWD) Weight*	16 499 kg	36,374 lb
Front Axle:	4657 kg	10,267 lb
Rear Axle:	11 842 kg	26,107 lb

*Typically equipped includes 3.7 m (12') blade, 14.00R24 tires, push plate, ripper, bottom guard, operator, and full fluids.

Major Component Weights

Moldboard (with cutting edge)		
3658 mm × 610 mm × 22 mm (12 ft × 24 in × 7/8 in)	670 kg	1,474 lb
4267 mm × 610 mm × 22 mm (14 ft × 24 in × 7/8 in)	782 kg	1,720 lb
Guards		
Transmission	105 kg	231 lb
Front Fender	50 kg (AWD)/ 93 kg (STD)	110 lb (AWD)/ 205 lb (STD)
Blade Extension		
LH and RH – 152.4 wide, 15.9 thick cutting edge (each)	113 kg	249 lb
LH and RH – 203.2 wide, 19 thick cutting edge (each)	127 kg	280 lb
Mid-Mount Scarifier Package	834 kg	1,835 lb
Front Lift Group	680 kg	1,496 lb
Push Plate	895 kg	1,969 lb
Rear Ripper	680 kg	1,496 lb
Front Scarifier	434 kg	956 lb

Base Machine Weight – Tier 4 Final/Stage V

Lever/Steering Wheel Weight	13 892 kg	30,627 lb
Front Axle:	3502 kg	7,721 lb
Rear Axle:	10 390 kg	22,906 lb
Joystick Weight	14 024 kg	30,918 lb
Front Axle:	3688 kg	8,131 lb
Rear Axle:	10 336 kg	22,787 lb
Lever/Steering Wheel All-Wheel Drive (AWD) Weight	14 647 kg	32,291 lb
Front Axle:	3,912 kg	8,624 lb
Rear Axle:	10,735 kg	23,667 lb
Joystick All-Wheel Drive (AWD) Weight	14 699 kg	32,406 lb
Front Axle:	4101 kg	9,041 lb
Rear Axle:	10 598 kg	23,365 lb

Typically Equipped Machine Weight

Lever/Steering Wheel Weight*	15 906 kg	35,067 lb
Front Axle:	4342 kg	9,572 lb
Rear Axle:	11 564 kg	25,494 lb
Joystick Weight*	16 038 kg	35,358 lb
Front Axle:	4459 kg	9,830 lb
Rear Axle:	11 580 kg	25,529 lb
Lever/Steering Wheel All-Wheel Drive (AWD) Weight*	16 661 kg	36,731 lb
Front Axle:	4502 kg	9,925 lb
Rear Axle:	12 159 kg	26,806 lb
Joystick All-Wheel Drive (AWD) Weight*	16 713 kg	36,846 lb
Front Axle:	4600 kg	10,141 lb
Rear Axle:	12 113 kg	26,705 lb

Service Refill Capacities

Fuel Tank	246 L	65 gal
Circle Drive	7 L	1.8 gal
Engine Crankcase	18 L	4.8 gal
Cooling System	52.5 L	14 gal
Hydraulic System	97 L	25.6 gal
Diesel Exhaust Fluid Tank (Tier 4 only)	11 L	2.9 gal
Transmission and Differential	60 L	15.8 gal
Tandem	60 L	15.8 gal

Tandems

Oscillation Front Up	15°
Oscillation Rear Up	22°

120 Motor Grader Specifications

Service Brakes

Type System	Dual Circuit Hydraulic	
Type Brake	Multiple Oil Disc	
Number of Brakes	4	
Number of Disc Assemblies (each)	6	
Size (outer diameter)	270 mm	10.6 in
Size (inner diameter)	189 mm	7.4 in
Lining Area Per Brake	3,504 cm ²	543.1 in ²

Parking Brake

Type System	Hydraulic Actuated
Type Brake	Multiple Oil Disc, Meets ISO 3450
Slope Holding Ability	30°
Secondary Brakes	Dual Circuit Control System, Applies Two Service Brakes

Moldboard

	Standard		Option 1		Option 2	
Width	3.7 m	12 ft	3.7 m	12 ft	4.3 m	14 ft
Height	610 mm	24 in	610 mm	24 in	610 mm	24 in
End Bit	152 mm	6 in	152 mm	6 in	152 mm	6 in
Cutting Edge	152 mm	6 in	203 mm	8 in	203 mm	8 in
Arc Radius	413 mm	16.3 in	413 mm	16.3 in	413 mm	16.3 in
Throat Clearance	120 mm	4.7 in	124 mm	4.9 in	89 mm	3.5 in

Drawbar Circle Moldboard

	Standard		Top Adjust	
Range of Motion				
Lift Cylinders	2		2	
Maximum Depth of Cut	775 mm	30.5 in	775 mm	30.5 in
Maximum Lift Above Ground	410 mm	16.1 in	410 mm	16.1 in
Throat Clearance	120 mm	4.7 in	120 mm	4.7 in
Circle Center Shift Cylinder				
Center Shift Right	656 mm	25.8 in	656 mm	25.8 in
Center Shift Left	656 mm	25.8 in	656 mm	25.8 in
Moldboard Side Shift Cylinder				
Side Shift Left	660 mm	26 in	660 mm	26 in
Side Shift Right	510 mm	20.1 in	510 mm	20.1 in
Blade Tip Cylinder				
Maximum Blade Tip Forward	40°		40°	
Maximum Blade Tip Backward	5°		5°	
Circle Drive	360° of Blade Rotation			
Link Bar	7 Positions to adjust the drawbar circle moldboard range of motion			
Drawbar Shoes	4 with replaceable wear strips			

Circle

Section	Rolled Ring Forging
Number of Teeth	64
Rotation	360°

120 Motor Grader Specifications

Blades – Tier 3/Stage IIIA Equivalent

Lever/Steering Wheel Weight		
Blade Pull Adv. Base GVW	9027 kg	19,901 lb
Blade Down Force Adv. Base GVW	6126 kg	13,505 lb
Blade Pull Adv. Typically Equipped GVW	10 222 kg	22,535 lb
Blade Down Force Adv. Typically Equipped GVW	7604 kg	16,764 lb
Blade Pull Adv. Max GVW	12 402 kg	27,341 lb
Blade Down Force Adv. Max GVW	10 895 kg	24,019 lb
Lever/Steering Wheel All-Wheel Drive (AWD) Weight		
Blade Pull Adv. Base GVW	12 854 kg	28,337 lb
Blade Down Force Adv. Base GVW	6685 kg	14,738 lb
Blade Pull Adv. Typically Equipped GVW	14 809 kg	32,647 lb
Blade Down Force Adv. Typically Equipped GVW	8165 kg	18,001 lb
Blade Pull Adv. Max GVW	18 000 kg	39,683 lb
Blade Down Force Adv. Max GVW	10 831 kg	23,878 lb
Joystick Weight		
Blade Pull Adv. Base GVW	9136 kg	20,141 lb
Blade Down Force Adv. Base GVW	6409 kg	14,129 lb
Blade Pull Adv. Typically Equipped GVW	10 206 kg	22,500 lb
Blade Down Force Adv. Typically Equipped GVW	7854 kg	17,315 lb
Blade Pull Adv. Max GVW	12 402 kg	27,341 lb
Blade Down Force Adv. Max GVW	10 895 kg	24,019 lb
Joystick All-Wheel Drive (AWD) Weight		
Blade Pull Adv. Base GVW	13 037 kg	28,740 lb
Blade Down Force Adv. Base GVW	6929 kg	15,276 lb
Blade Pull Adv. Typically Equipped GVW	14 849 kg	32,736 lb
Blade Down Force Adv. Typically Equipped GVW	8373 kg	18,459 lb
Blade Pull Adv. Max GVW	18 000 kg	39,683 lb
Blade Down Force Adv. Max GVW	10 831 kg	23,878 lb

Blades – Tier 4 Final/Stage V

Lever/Steering Wheel Weight		
Blade Pull Adv. Base GVW	9351 kg	20,615 lb
Blade Down Force Adv. Base GVW	6134 kg	13,523 lb
Blade Pull Adv. Typically Equipped GVW	10 408 kg	22,945 lb
Blade Down Force Adv. Typically Equipped GVW	7606 kg	16,768 lb
Blade Pull Adv. Max GVW	12 402 kg	27,341 lb
Blade Down Force Adv. Max GVW	10 895 kg	24,019 lb
Lever/Steering Wheel All-Wheel Drive (AWD) Weight		
Blade Pull Adv. Base GVW	13 182 kg	29,062 lb
Blade Down Force Adv. Base GVW	6812 kg	15,018 lb
Blade Pull Adv. Typically Equipped GVW	14 995 kg	33,058 lb
Blade Down Force Adv. Typically Equipped GVW	7839 kg	17,282 lb
Blade Pull Adv. Max GVW	18 000 kg	39,683 lb
Blade Down Force Adv. Max GVW	10 831 kg	23,878 lb
Joystick Weight		
Blade Pull Adv. Base GVW	9302 kg	20,507 lb
Blade Down Force Adv. Base GVW	6460 kg	14,242 lb
Blade Pull Adv. Typically Equipped GVW	10 422 kg	22,976 lb
Blade Down Force Adv. Typically Equipped GVW	7810 kg	17,218 lb
Blade Pull Adv. Max GVW	12 402 kg	27,341 lb
Blade Down Force Adv. Max GVW	10 895 kg	24,019 lb
Joystick All-Wheel Drive (AWD) Weight		
Blade Pull Adv. Base GVW	13 229 kg	29,165 lb
Blade Down Force Adv. Base GVW	7141 kg	15,743 lb
Blade Pull Adv. Typically Equipped GVW	15 042 kg	33,161 lb
Blade Down Force Adv. Typically Equipped GVW	8010 kg	17,659 lb
Blade Pull Adv. Max GVW	18 000 kg	39,683 lb
Blade Down Force Adv. Max GVW	10 831 kg	23,878 lb

120 Motor Grader Specifications

Maximum Shoulder Reach Outside of Tires

Blade	3.7 m (12 ft)		4.3 m (14 ft)	
Right	1905 mm	75 in	2210 mm	87 in
Left	1742 mm	68.6 in	2180 mm	85.8 in

- An additional 300 mm (11.8 in) of reach can be achieved to the right or left by changing the side shift mounting bracket on the 4.3 m (14 ft) blade.

Standards

ROPS	ISO 3471:2008
FOPS	ISO 3449:2005 Level II
Brakes	ISO 3450:2011
Steering	ISO 5010:2007

Sound Standards

Sound	ISO 6395:2008 ISO 6396:2008
Spectator Sound Level – Non-AWD	105 dB(A)
Spectator Sound Level – AWD	106 dB(A)
Operator Sound Level – Joystick	71 dB(A)
Operator Sound Level – Lever/ Steering Wheel	75 dB(A)

- The dynamic spectator sound power level measurements are performed according to the dynamic test procedures that are specified in ISO 6395:2008. The measurements were conducted at 70% of the maximum engine cooling fan speed. The machine was equipped with sound suppression system.
- The dynamic operator sound pressure level measurements are performed according to the dynamic test procedures that are specified in ISO 6396:2008. The measurements were conducted at 70% of the maximum engine cooling fan speed, with the cab doors and the cab windows closed. The cab was properly installed and maintained. The machine was equipped with sound suppression system.

Tier 3/Stage IIIA/Bharat Stage III, and Bharat Stage V, with LVR tandem for India/APD

Sound	ISO 6395:2008 ISO 6396:2008
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- The dynamic spectator sound power level is 107 dB(A). Measurements are performed according to the dynamic test procedures that are specified in ISO 6395:2008. The measurements were conducted at 70% of the maximum engine cooling fan speed. The machine was not equipped with sound suppression.
- The dynamic operator sound pressure level is 75 dB(A). Measurements are performed according to the dynamic test procedures that are specified in ISO 6396:2008. The measurements were conducted at 70% of the maximum engine cooling fan speed, with the cab doors and the cab windows closed. The cab was properly installed and maintained. The machine was not equipped with sound suppression.

Ripper

Ripping Depth Maximum	288 mm	11.2 in
Ripper Shank Holder	5	
Ripper Shank Holder Spacing	533 mm	20.8 in
Penetration Force	5119 kg	11,287 lb
Pryout Force	2029 kg	4,474 lb
Machine Length Increase, Beam Raised	900 mm	35.1 in

Mid Mount Scarifier

Front, V-Type: Working Width	1205 mm	47.4 in
Number of Shanks	11	
Shank Spacing	116 mm	4.5 in
Scarifying Width	1031 mm	40.2 in

Electrical

Starting System Type	Direct Electric
Heavy Duty Battery	
CCA at –18°	1,125 amp
Volts	12V
Quantity	2
Extreme Duty Battery	
CCA at –18°	1,400 amp
Volts	12V
Quantity	2
Standard Alternator	145 amps at 24V
Heavy Duty Alternator	150 amps at 24V

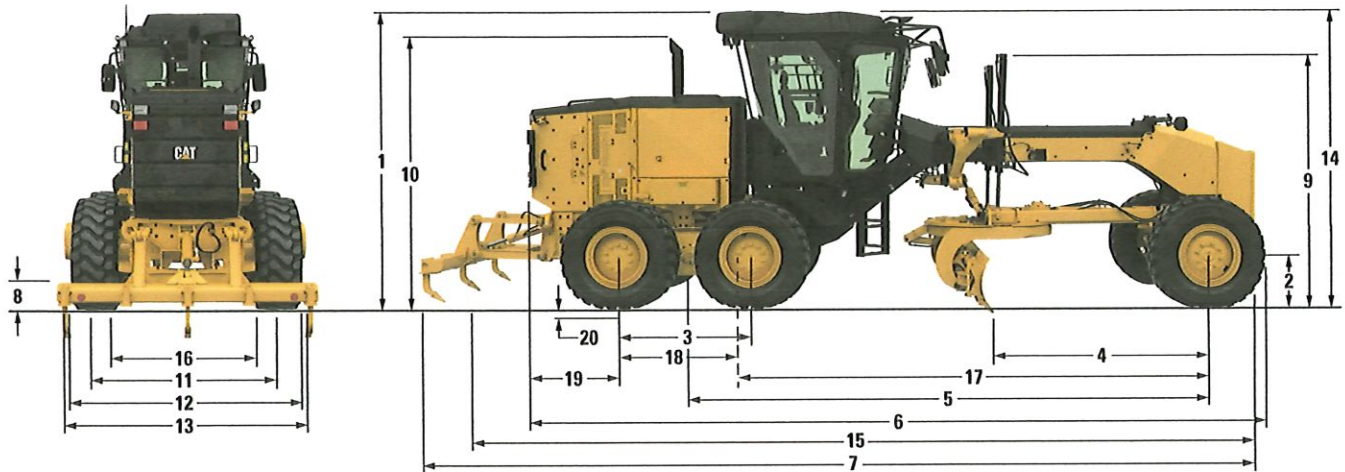
Electrical – Tier 3/Stage IIIA Equivalent Lever

Starting System Type	Direct Electric
Standard Duty Battery	Only offered on Levers
CCA at –18°	900 amp
Volts	12v
Quantity	2
Heavy Duty Battery	
CCA at –18°	1,125 amp
Volts	12V
Quantity	2
Extreme Duty Battery	
CCA at –18°	1,400 amp
Volts	12V
Quantity	2
Standard Alternator – Levers	115 amps at 24V
Standard Alternator – Joystick	145 amps at 24V
Heavy Duty Alternator	150 amps at 24V

120 Motor Grader Specifications

Dimensions

All dimensions are approximate.



1 Height – Top of Cab	3465 mm	136.4 in
2 Height		
Front Axle Center (Non AWD)	590 mm	23.2 in
Front Axle Center (AWD)	596 mm	23.5 in
3 Length – Between Tandem Axles	1510 mm	59.5 in
4 Length		
Front Axle to Moldboard (Non AWD)	2551 mm	100.4 in
Length – Front Axle to Moldboard (AWD)	2516 mm	99 in
5 Length		
Front Axle to Mid Tandem (Non AWD)	5945 mm	234 in
Front Awd Axle to Mid Tandem (AWD)	5910 mm	232.7 in
6 Length		
Front Tire to Rear of Machine (Non AWD)	8534 mm	336 in
Front Tire to Rear of Machine (AWD)	8499 mm	334.6 in
7 Length – Push Plate to Ripper	9838 mm	387 in
8 Ground Clearance at Rear Axle	349 mm	13.7 in

9 Height to Top of Cylinders	2895 mm	114 in
10 Height to Exhaust Stack	3185 mm	125.4 in
Height to Exhaust Stack (Tier 3)	2924 mm	115 in
11 Width – Tire Center Lines	2070 mm	81.5 in
12 Width – Outside Rear Tires	2491 mm	98 in
13 Width		
Outside Front Tires (Non AWD)	2495 mm	98.2 in
Outside Front Tires (AWD)	2638 mm	103.9 in
14 Maximum Height – with Attachments	3440 mm	135.4 in
15 Length – Push Plate to Raised Ripper	9583 mm	377 in
16 Width – Inside Rear Tires	1649 mm	64.9 in
17 Length		
Front Axle to Articulation Hitch (Non AWD)	5284 mm	208 in
Front Axle to Articulation Hitch (AWD)	5249 mm	206.7 in
18 Length – Rear Axle to Articulation Hitch	660 mm	26 in
19 Length – Rear Axle to Rear of Frame	1726 mm	68 in
20 Height – Tire Deflection at Performance Weight	45 mm	1.8 in

Optional Tire Arrangements

Rim Size	Wheel Group	Tires
9 x 24	Single-Piece	13.00-24
9 x 24	Single-Piece	14.00-24
10 x 24	Multi-Piece	13.00-24
10 x 24	Multi-Piece	14.00-24
10 x 24	Multi-Piece	14.00-24
13 x 25	Single-Piece	17.5R25
14 x 25	Multi-Piece	14.00R24
14 x 25	Multi-Piece	17.5R25
14 x 25	Multi-Piece	17.5-25

Note: Consult your dealer for individual tire width, size and brand.

120 Standard and Optional Equipment

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional
POWER TRAIN		
Cat C7.1 engine	✓	
ECO mode	✓	
Extreme duty starter		✓
50° C (122° F) ambient capacity	✓	
43° C (109° F) ambient capacity – all wheel drive	✓	
All-Wheel Drive (AWD)		✓
Differential lock/unlock	✓	
Engine idle shutdown timer	✓	
Hydraulic demand fan	✓	
Reversing fan		✓
Biodiesel capability up to B30	✓	
Transmission, autoshift*	✓	
*Optional on lever machines.		
MOLDBOARD		
Standard drawbar circle moldboard	✓	
Circle drive slip clutch	✓	
Top adjust drawbar circle moldboard		✓
Circle saver		✓
ELECTRICAL		
Sealed alternator	✓	
Reversing lights	✓	
Breaker panel	✓	
900 CCA standard duty batteries*	✓	
1,125 CCA heavy duty batteries	✓	
1,400 CCA extreme duty batteries		✓
Electric starter	✓	

*Available on T3 Lever machines only (1,125 and 1,400 CCA are optional).

(continued on next page)

120 Standard and Optional Equipment

Standard and Optional Equipment *(continued)*

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Lever/Steering Wheel		Joystick	
	Standard	Optional	Standard	Optional
CAB				
Vinyl seat	✓		N/A	N/A
ROPS/FOPS	✓		✓	
Air suspension adjustable seat		✓	✓	
Leather heated/cooled seat		✓		✓
Seat belt, retractable	✓		✓	
Seat belt, indication		✓	✓	
203 mm (8 in) touchscreen monitor		✓	✓	
254 mm (10 in) hybrid information display	✓		N/A	N/A
Canopy cab (T3 lever only)		✓	N/A	N/A
Heating, ventilation, and air conditioning (HVAC) system		✓	✓	
Defrost fans		✓	✓	
Halogen lighting		✓		✓
Cup and bottle holders	✓		✓	
Implement lockout		✓	✓	
Adjustable control console	✓		✓	
Interior lights (dome lamp)	✓		✓	
LED lighting		✓		✓
Entertainment Radio Ready		✓	✓	
Coat hook	✓		✓	
USB/Auxiliary Radio		✓		✓
Joystick controls		N/A	✓	
Communication radio mounting		✓		✓
Steering wheel and lever controls	✓		N/A	
Heated mirrors		✓		✓
Electric throttle control	✓		✓	
Front windshield wiper	✓		✓	
Front windshield wiper (lower)		✓	N/A	N/A
Rear wiper		✓		✓
Rear window screen		✓		✓
Cab storage	✓		✓	
Side window wipers	N/A	N/A		✓
Slider side window		✓		✓

(continued on next page)

120 Standard and Optional Equipment

Standard and Optional Equipment (continued)

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional
SAFETY AND SECURITY		
Parking brake	✓	
Back up alarm	✓	
Ground level fuel fill*		✓
Signaling/warning horn	✓	
Warning beacon		✓
Rearview mirror	✓	
Rearview camera		✓
Hydraulic brakes	✓	
Secondary steering system	✓	
Side view mirrors	✓	
Strategically placed walkways and grab rails	✓	
*Standard for North America and Europe.		
SERVICE AND MAINTENANCE		
Ground level DEF fill – Tier 4 Final/Stage V	✓	
Grouped location for engine oil and fuel filters	✓	
Extended Life Coolant	✓	
CAT TECHNOLOGY		
Cat Grade with Digital Blade Slope Meter		✓
Cat Grade with Cross Slope Indicate		✓
Cat Grade with Cross Slope		✓
Cat Grade Attachment Ready Option (ARO)		✓
Stable blade		✓
Product Link™*	✓	
Remote services		✓
*Optional on Lever models.		
GUARDS		
Front fenders*		✓
Rear fenders		✓
Front axle guard for all-wheel drive		✓
Transmission		✓
Cover, under cab platform		✓
*Not available for lever and steering wheel tandem machines.		
ATTACHMENTS		
Push block		✓
Ripper		✓
Scarifier		✓
Mid mount scarifier		✓
Front lift group		✓
Front blade		✓



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