

FSA20-EQU18.0, ITEM# 204

Group:MOTORGRADER: Motorgrader

CAT 120 SHERIFF'S CONTRACT WORKSHEET

468-2237	120 14B MOTOR GRADER
561-9459	GLOBAL ARRANGEMENT LVR
320-9924	MOLDBOARD, 12' BASIC
467-7404	WEATHER, STANDARD TND
465-4422	NO ACCUMULATORS, NO ARO, LVR
468-1607	DRAWBAR,TOP ADJUST,HYD TIP,LVR
590-7345	ENGINE, STAGE V AND T4 FINAL
422-6603	DRAIN, GRAVITY, ENGINE OIL
468-2247	BASE + 2 (TIP, MMS) LVR
561-7062	LIGHTS, BRAKE&BACKUP,LVR, LED
462-6512	STARTER, STANDARD DUTY
461-3561	CAB, ROPS, BASE,LVR,TND
461-3545	NO LOCK OUT
510-8447	HVAC, BASIC, W/O AIR COMPRESSOR
461-3554	SEAT COMFORT, SUSPENSION, LVR
513-0286	SEAT BELT
461-3583	COMFORT PACKAGE, BASE, LVR
491-5100	PRODUCT LINK, CELLULAR PLE742
543-0221	NO GRADE CONTROL TECHNOLOGY
577-8014	GROUND LEVEL, FUELING
574-8803	1000 HOUR FUEL, FILTER CHANGE
575-7683	FAN, STANDARD TND
340-2602	TIRES, 13.0-24 GY SGG 12 G2 SP
518-1195	REAR PANEL W/O ACCESS DOOR .
481-8668	NO HITCH
0P-1939	ANTIFREEZE WINDSHIELD WASHER
0P-3978	FUEL ANTIFREEZE, -25C (-13F)
462-6595	LANGUAGE, ENGLISH
565-5395	LOW BAR, HALOGEN, LVR, TND
435-9816	LIGHTS, SERVICE, INTERNAL
506-4262	JUMP START STUDS
483-9353	MIRRORS, EXTERNAL, BASE, LVR
501-8393	GUARD, COVER, LVR
472-5087	DECALS, ENGLISH (U.S.)
339-7734	BRACKET

120 MOTOR GRADER
PIRACICABA, BRAZIL

Ship Weight
lbs

LIST PRICE
AT DEALER

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

120

MOTOR GRADER



Engine Power
Operating Weight

104 kW (139 hp)
15 906 kg (35,067 lb)

Cat® C7.1 Engine meets U.S. EPA Tier 4 Final and EU Stage V emission standards.



The new Next Generation **Cat® 120** motor grader is built to fit your needs. From cab to controls, the options are in your hands, along with better fuel economy and lower maintenance costs to reduce overall operating costs.

THE NEW CAT® 120

THE NEXT GENERATION



GRADING THE ROAD AHEAD

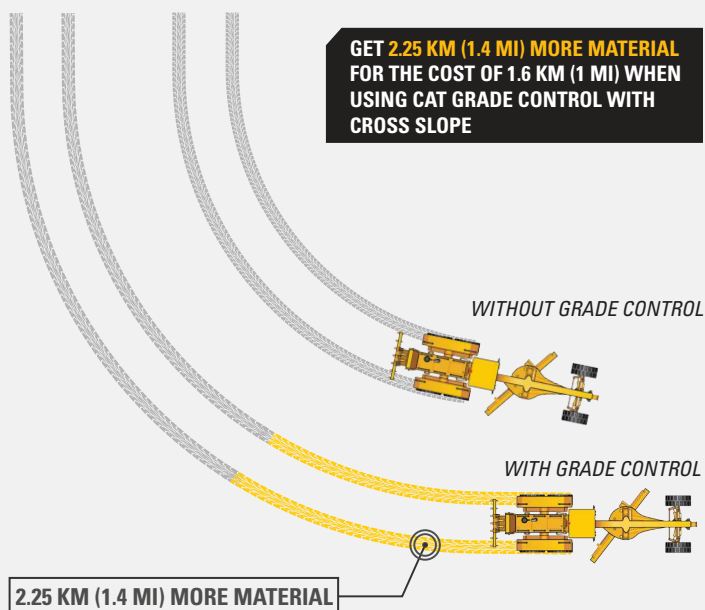
The new Cat 120 motor grader offers you total machine options including technology, controls, and cab to power through any job with the utmost performance.

- + UP TO 15 PERCENT INCREASED FUEL ECONOMY WITH THE C7.1 ENGINE
- + NEXT GENERATION CAB OPTIONS FOR MAXIMUM COMFORT
- + SPEND LESS TIME AND MONEY ON REGULAR MAINTENANCE



SAVE MORE MATERIAL.

Use 40% less material with Cat Grade Control with Cross Slope.



SCENARIO:

1559 M³/KM (2,039 YD³/MI) MOVED WITH NON-GRADE CONTROL – 924 M³/KM (1,208 YD³/MI) MOVED WITH GRADE CONTROL = 635 M³/KM (831 YD³/MI) MATERIAL SAVED

UP TO 15% BETTER FUEL ECONOMY¹

Use less fuel with the Cat C7.1 Engine and ECO mode.

CAB DESIGNED FOR MAXIMUM COMFORT

The next generation cab gives you control and comfort options to promote productivity.

UP TO 15% LOWER MAINTENANCE COSTS¹

Extend your maintenance intervals using the new filtration technology. Filters are grouped together for easy access.

¹ Compared to 120K and 120M2

TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT CAT TECHNOLOGY

Cat LINK telematics technology helps take the complexity out of managing your job sites – by gathering data generated by your equipment, materials, and people – and serving it up to you in customizable formats.



CAT TECHNOLOGIES

Cat technologies give you the edge you need to improve machine and operator efficiency while working safer.

PRODUCT LINK™

Product Link™ collects data automatically and accurately from your assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.

VISIONLINK®

Access information anytime, anywhere with VisionLink® – and use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your job site. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business, without paying for extras you don't want. Subscriptions are available with cellular or satellite reporting or both.

OPTIONAL CAT GRADE TECHNOLOGY



CROSS SLOPE

Cat GRADE with Cross Slope saves you up to 40 percent in material. Cross Slope is an integrated system that enables you to achieve grade faster and more accurately by automating the cross slope of the blade and keeps your slope consistent.



CROSS SLOPE INDICATE

Cat GRADE with Cross Slope Indicate shows cross slope information on the integrated machine display. Cross Slope Indicate improves grading efficiency by providing real-time cross slope to you without the added expense of equipment to automate blade functions.



DIGITAL BLADE SLOPE METER

View blade slope on the integrated machine display with the Digital Blade Slope Meter. Reduce the need for manual grade checking to keep you and your worksite safer.



ADDITIONAL OPTIONS

Cat GRADE with Attachment Ready Option (ARO) gives your machine the connections to add on future Cat GRADE or other grade control systems to help you get the most out of your motor grader. Stable Blade helps improve your finished surface quality by reducing machine bounce.



REFINE YOUR GRADE

WITH CAT GRADE TECHNOLOGY

LOWER MAINTENANCE COSTS
UP TO 15%



NEXT GENERATION FILTERS

New filtration system makes changing filters a breeze. The filters inside the cartridge are replaced instead of the entire canister to save you up to 15 percent in costs.

LONGER SERVICE INTERVALS

Reduce your typical operating expenses with extended engine oil, hydraulic, and transmission filter change cycles. The new filters last longer to keep your motor grader active on the job site.

GROUPED LOCATION

Service your machine faster with the filters in a central location. Filters are grouped together for easy access so you can do preventative maintenance quickly and move on to the next task.

GET THE CONTROL POWER THAT YOU NEED WITH THE ALL-WHEEL DRIVE OPTION

Providing maximum power up to 141 kW (189 hp) and full power turns, the all-wheel drive option helps keep your tires moving, even if it's muddy.



MAXIMUM TRACTION WITH ALL-WHEEL DRIVE

The all-wheel drive (AWD) option assists with traction and maneuvering in loose material. The increased power with all-wheel drive handles rough terrain with extra traction for better productivity.

CONTROL OPTIONS

Get the job done with a choice of joysticks or traditional steering wheel and lever controls. Integrated technology options put more productivity at your fingertips.

IMPROVED VENTILATION

The ISO-certified ROPS cab is pressurized to lock out noise. The heating and cooling system keeps you at your ideal temperature throughout the day.

MULTIPLE CAB OPTIONS

Your cab is like your office. Choose the options that you want to work comfortably, like adjustable seats. Heated/cooled seat options are available.

GROUND-UP REDESIGN

NEXT GENERATION COMFORT





CONVENIENT SETTINGS

Get all the settings information that you need, including integrated technology options, on the information display screen.



EXTRAORDINARY VISIBILITY

View your job site through connecting glass windows, rear and side view mirrors. Rearview camera option offers a wide view of the back of the machine for better visibility.



STOP SAFELY

If the engine should unexpectedly stall, you can count on the secondary steering system to stop safely. If the main pump pressure should drop, the secondary steering system will turn on automatically to steer safely to a stop.



EASY ON AND OFF

Work safely using three points of contact when entering and exiting the machine with strategically placed walkways and grab rails.

UP TO 15%

BETTER FUEL ECONOMY

Grade longer while using the same amount of fuel. The Cat C7.1 engine uses up to 10 percent less fuel. Couple this with ECO mode to save an additional 5 percent. ECO mode is an easy selection in your information display screen. Less stopping means more production. Ground level fuel fill keeps you from climbing onto the machine to get you back to work faster.

WORK MORE... FUEL LESS

Get up to 15% Fuel Savings with the Next Generation Cat® 120 Motor Grader



SCENARIO:

UP TO 15% SAVINGS COMPARISON IS BASED ON 120M AND 120K CAT MOTOR GRADERS.





Keep your circle moldboard tight for precise grading throughout the motor grader's life. Durable structures with drawbar circle moldboard adjustments save you service time using replaceable wear inserts.

TOP ADJUST CIRCLE

- + EASY ACCESS
- + MAXIMUM TIGHTNESS
- + REMOVABLE ACCESS PLATES



UP TO **20%** MAINTENANCE SAVINGS
WITH TOP ADJUST

SEE YOUR INVESTMENT GO FURTHER DESIGNED TO LAST

MAXIMIZE COMPONENT LIFE

Reduce daily greasing requirements and costly repairs to your circle and pinion with the Circle Saver option. The grease fitting is easy to access and maintain.

PRESERVE YOUR MACHINE

The circle drive slip clutch protects your pinion drive and circle teeth from potential damage.

REDUCE DAMAGE

Keep your machine running smoothly in demanding applications with optional guarding. Guards defend against potential damage to your transmission, filter, front axles, and hydraulic pumps.





MOVE MORE

WITH CAT ATTACHMENTS



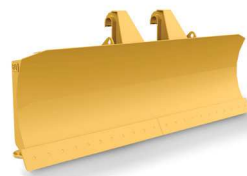
LIFT GROUP



MID MOUNT SCARIFIER



RIPPER



STRAIGHT BLADE



V-PLOW

ENHANCE YOUR PRODUCTIVITY

From rippers to blades, expand the versatility of your machine by utilizing a variety of Cat Attachments. Each one is designed to fit your needs for improved performance, safety, and stability.

TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

POWER TRAIN			
Engine Model	Cat C7.1		
Engine Power ISO 9249/SAE J1349 EEC 80/1269	104 kW-123 kW	139 hp-165 hp	
All Wheel Drive Range – Engine Power	108 kW-141 kW	145 hp-189 hp	
Bore	105 mm	4.1 in	
Displacement	7.01 L	427.8 in³	
Stroke	135 mm	5.3 in	
Engine RPM	2,000 rpm		
Maximum Torque – ISO 9294	822 N-m	606 lbf-ft	
Top Forward Speed	48.3 km/h	30.1 mph	
Top Reverse Speed	38.1 km/h	23.7 mph	
Turning Radius, Outside Front Tires	7.4 m	291.3 in	
<ul style="list-style-type: none"> • Net Power is tested per ISO 9249, SAE J1349, and EEC 80/1269 Standards in effect at the time of manufacture. • The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg of refrigerant which has a CO₂ equivalent of 2.288 metric tonnes. 			
WEIGHT			
Typically Equipped Machine Weight*			
Lever/Steering Wheel Weight	15 906 kg	35,067 lb	
Joystick Weight	16 038 kg	35,358 lb	
Lever/Steering Wheel All-Wheel Drive (AWD) Weight	16 661 kg	36,731 lb	
Joystick All-Wheel Drive (AWD) Weight	16 713 kg	36,846 lb	
*Typically equipped operating weight is calculated with full fuel tank, coolant, lubricants, operator, push block, transmission guard, rear ripper/scarifier, 14.0R24 tires on multi-piece rims, and other equipment.			

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	15 L	4 gal	
Transmission and Differential	60 L	15.8 gal	
BLADE RANGE			
Circle Center Shift			
Right	656 mm	26 in	
Left	656 mm	26 in	
Moldboard Side Shift			
Right	510 mm	20.1 in	
Left	660 mm	26 in	
Blade Tip Range			
Forward		40°	
Backward		5°	
Maximum Shoulder Reach			
Right	1905 mm	75 in	
Left	1742 mm	68.6 in	
Maximum Lift Above Ground	410 mm	16.1 in	
Maximum Depth of Cut	775 mm	30.5 in	
MOLDBOARD			
Width	3.7 m	12 ft	
Height	610 mm	24 in	
End Bit	152 mm	6 in	
Cutting Edge	152 mm	6 in	
Arc Radius	413 mm	16.3 in	
Throat Clearance	120 mm	4.7 in	
DIMENSIONS			
Length of Machine*	9838 mm	387 in	
Maximum Height	3465 mm	136.4 in	
Width	2495 mm	98.2 in	
*Typically equipped with push block and ripper.			

CAB FEATURES

FEATURE	DESCRIPTION	BASE	COMFORT PLUS	PREMIUM PLUS
ROPS/FOPS	Sound Suppression	●	●	●
	Canopy	○	X	X
Seat	Mechanical Suspension	●	○	○
	Air Suspension	X	●	●
	Heated/Cooled	X	X	●
	Lumbar Support	X	●	●
HVAC	Heating, Ventilation, and Air Conditioning	●	●	●
	Defrost Fans	X	●	●
Information Display	Touchscreen	○	○	○
	Standard Display	○	○	○
Lighting	Halogen Bulbs	●	●	●
	LED Bulbs	○	○	○

● – standard ○ – optional X – not available

STANDARD & OPTIONAL EQUIPMENT

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

POWER TRAIN	STANDARD	OPTIONAL
Cat C7.1 Engine	•	
ECO Mode	•	
All-Wheel Drive (AWD)		•
50° C (122° F) Ambient Capacity	•	
Engine Idle Shutdown Timer	•	
Differential Lock	•	
Hydraulic Demand Fan	•	
Reversing Fan		•
CAB	STANDARD	OPTIONAL
ROPS/FOPS	•	
Mechanical Suspension Seat	•	
Air Suspension Adjustable Seat		•
Canopy		•
Touchscreen Display*	•	
Standard Information Display	•	
Adjustable Control Console (Levers)	•	
Entertainment Radio Ready	•	
Halogen Lighting	•	
LED Lighting		•
USB/Auxiliary Radio		•
*Standard touchscreen on the joystick machine.		
CAT TECHNOLOGY	STANDARD	OPTIONAL
Product Link*	•	
Cat GRADE with Digital Blade Slope Meter		•
Cat GRADE with Cross Slope Indicate		•
Cat GRADE with Cross Slope		•
Cat GRADE with Attachment Ready Option (ARO)		•
Stable Blade		•
Remote Services		•
*Optional on Lever machines.		

DRAWBAR CIRCLE MOLDBOARD	STANDARD	OPTIONAL
Standard Drawbar Circle Moldboard	•	
Top Adjust Drawbar Circle Moldboard		•
Circle Drive Slip Clutch	•	
Circle Saver		•
SAFETY AND SECURITY	STANDARD	OPTIONAL
Rearview Mirror	•	
Side View Mirror	•	
Signaling/Warning Horn	•	
Secondary Steering System	•	
Rearview Camera		•
Hydraulic Brakes	•	
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Ground Level DEF and Fuel Fill	•	
Grouped Location for Engine Oil and Fuel Filters	•	
Extended Life Coolant	•	
ATTACHMENTS	STANDARD	OPTIONAL
Push Block		•
Front Lift Group		•
Ripper		•
Scarifier		•
Mid Mount Scarifier		•
Front Blade		•

For more complete information on Cat products, dealer services and industry solutions, visit us on the web at www.cat.com.

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www.cat.com www.caterpillar.com

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