BID SUBMITTAL FORM Alabama County Joint Bid Program

Heavy Equipment – Bid Item: Light Duty Motor Grader - Option A

Company Name: THOMPSON TRACTOR COMPANY				
Address: P.O. BOX 10367				
BIRMINGHAM, AL 35202-0367				
Bid Submitted by: JAY SMITH				
(Name of company representative)				
Title: <u>SALES OPERATIONS MANAGER</u> E-mail address: <u>JAYSMITH@THOMP</u>	SONTRACTOR.COM			
Phone: (205) 849-4242 Fax:				
By submitting this bid, we agree:	Initials			
The equipment model number identified below meets the bid specs for this bid item)#S			
That the bid price will be honored for all counties for the period from January 1, 2023 to December 31, 2023.				
The equipment will be delivered at the bid price to all counties participating in the joint bid program.	QA5			
The company acknowledges the freight preparation and delivery price is to be included in the total bid price for the standard machine.	JAS			
The company representative listed above will be the contact person for purchasing this bid item under the joint bid program.	215			
The bid is accompanied by a current catalog or model specification document for the model number identified below.	248			
The bid is accompanied by a copy of the manufacturer's standard warranty as required in the bid specifications.	945			
The bid includes the e-verify documentation required by Alabama law.	DH			
If awarded the bid, a performance bond will be provided upon request.	22			
The bid documents include the Manufacturer's Suggested Retail Price Sheet (MSRP) for the Standard Machine	045			

Total Bid Price for Standard Machine: \$ 321,225 (Total Bid Price for Standard Machine Includes Freight Preparation, Delivery and Standard Warranty Costs) *
Freight Preparation and Delivery: \$8,368(Included in Standard Machine Bid Price)
Manufacturer's Suggested Retail Price for Standard Machine: \$ 496,599
Equipment Model #: CATERPILLAR 120 (JOYSTICK STEERING)
Description: MOTOR GRADER
Signature of company representative submitting bid:

*NOTE: Award will be made based on the total cost of the **Standard Machine**. The total cost of the standard machine is to include the freight preparation, delivery and standard warranty cost. Freight preparation, delivery will be excluded from the total bid price of the standard machine in determining the percentage discount for any available options.

Title: __SALES OPERATIONS MANAGER

BID SUBMITTAL FORM: OPTION COST SHEET

By submitting this bid, we agree:
To offer any available options at the percent difference between the Manufacturer's Suggested Retail Price Sheet and the actual bid price on the Standard Machine*
The bid documents include the Manufacturer's Suggested Retail Price Sheet (MSRP) for the Standard Machine
Equipment Model #: CATERPILLAR 120 (JOYSTICK STEERING)
Description: MOTOR GRADER
Description:MOTOR GRADER Signature of company representative submitting bid:
Title: SALES OPERATIONS MANAGER

*NOTE: The percent difference between the Manufacturer's Suggested Retail Price Sheet (MSRP) for the standard machine as specified by these Bid Specifications and the actual price bid by the vendor will be calculated to determine the percentage discount to be applied to any available options. The bid price of the freight preparation, delivery cost shall be excluded in determining the percentage discount to be applied to available options. Any individual county may choose to add any available option to the standard machine at the percentage discount at the time of purchase.

BID SPECIFICATIONS FOR LIGHT DUTY MOTOR GRADER – OPTION A

GENERAL

These specifications shall be construed as the minimum acceptable standards for a medium duty motor grader. Should the manufacturer's current published data or specifications exceed these standards, the manufacturer's standards shall be considered minimum and shall be furnished. All integral parts not specifically mentioned in the scope of these specifications that are necessary to provide a complete working unit shall be furnished. Additional, the machine offered for bid shall include all standard manufacturer's equipment. The motor graders must be a new current production model and shall meet all EPA and other applicable standards at the time of manufacture.

The use of specific names or numbers in the specifications is not intended to restrict the bidder or any seller or manufacturer, but is intended solely for the purpose of indicating the type, size, and quality of equipment considered best adapted to the uses of counties participating in this joint bid.

BID SUBMITTAL FORM

Each bidder must submit his or her bid on the Bid Submittal Form included in the invitation to bid package. All written warranties to be submitted shall be attached to the Bid Submittal Form.

BID PRICE

The price bid shall include all destination charges, delivery charges, title fees, rebates and all other applicable costs and refunds.

MANUALS

Each unit shall be provided with one (1) copy of the operator's manual, one (1) copy of the repair manual and one (1) copy of the current parts manual. Units will not be accepted for delivery until the manuals as outlined above are received by the purchaser.

REPLACEMENT PARTS AVAILABILITY

Parts must be available for 5 years or 7,500 hours of use for the piece of equipment bid. If replacement parts are not delivered within three (3) working days of an order being placed, the bidder will deliver an equivalent machine for the County to use at no cost to the County until such time as the parts are delivered to the County so it can affect repairs to its machine.

WARRANTY

Bidders shall submit a copy of the manufacturer's standard warranty. Warranty shall include service response time of a maximum of 36 hours within notification by county.

Yes No ___ Page #___ or Attachment

ENGINE

Engine shall be a turbo-charged, direct injection, four-stroke, **6-cylinder** diesel engine and shall be electronically controlled for more efficient fuel injection and fuel burn. **Engine shall be designed and manufactured by the machine manufacture**

Engine displacement shall not be less than 427.8 cu. In. and shall develop, as standard, a rated net power of at least 139 HP.

Engine shall be isolation/resilient mounted to minimize sound and vibration and shall meet currently required EPA emission regulations for manufacturer.

Engine compartment enclosure doors shall be lockable without the use of external locks and accessible from the ground. All daily service points shall be accessible from ground level and grouped together.

Engine will increase its low idle to 1,000 rpm when the battery voltage is below 24.5 volts for more than 5 minutes to ensure adequate system voltage and battery reliability.

STARTING SYSTEM

Shall be equipped with a 24-volt electrical system. 100-amp alternator.

TRANSMISSION - 8 Forward Speeds, 6 Reverse Speeds

Shall be designed and built by the machine manufacturer and shall be a direct drive, power shift, counter-shaft type transmission.

Shall be equipped with built-in self-diagnostic capability

A controlled throttle shifting system shall be standard to smooth directional gear changes without use of the inching pedal.

Electronic Throttle Control (cruise control) shall be standard and shall be controlled by a push button, located on a **3-axis** joystick as standard on the right joystick control for resuming and decreasing throttle set.

Direction control shall be a **3-position** rocker switch for selecting forward, neutral, and reverse, while gear selection shall be controlled by dual push-buttons for up-shifting and down-shifting, both of which shall be incorporated into a single, **3-axis**, multi-function, left-hand joystick control.

Differential Lock/Unlock shall be electro-hydraulically controlled, via a push-button, located on a single 3-axis, multi-function, right-hand joystick control.

Final drive shall be a planetary design.

Machine shall be equipped with an electronic inching pedal for improved modulation and machine control, and with electronic over-speed protection to protect the engine and transmission from over speeding.

Also to be equipped with transmission guard.

TANDEM

Machine to be equipped with differential lock/unlock electro-hydraulically controlled with a multi-disc design.

Tandems shall be capable if oscillating 15 degrees front tandem up and 25 degrees front tandem down, with full machine articulation and having no interference between tandem wheel and machine structure

CONTROLS AND HYDRAULICS

Hydraulics system shall be a closed center, load sensing type, with a variable Displacement, axial piston-type pump.

Implement valves shall be electro-hydraulic, designed and built by the machine manufacturer.

Lock valves shall be integrated into the main implement valve to prevent cylinder drift.

Blade lift cylinders shall have independent float capability, actuated by two, multi-functioning, 3-axis joystick controls and auxiliary controls inside the cab.

Hydraulic controls shall be joystick actuated.

BLADES

Machine shall be equipped with 14 ft. long, 24 in high and no less than 7/8 in thick moldboard with hydraulic side shift and tip control.

Blade shall also include reversible overlay end bits.

All blade functions shall be hydraulically or electronically actuated.

Blade lift accumulators shall be provided, to reduce vertical impact damage.

DRAWBAR AND CIRCLE

The circle shall be steel construction with 4 replaceable wear shoes.

Rear drawbar shall be equipped with slip clutch designed to protect the circle, drawbar, and moldboard from shock when end of blade encounters, hidden objects.

Drawbar shall feature welded protective wear plates to prevent lift group contact with the primary drawbar structure.

FRAME

Articulated type main frame.

Articulation joint shall have mechanical locking device to prevent frame articulation while servicing or transporting machine.

Shall be that of a flanged box section type frame that runs from the front bolster to the articulation joint.

STEERING

Fully hydraulic, **2-cylinder** steering system, with front steering wheel angle not less than **47.5°** left or right.

Machine, drawbar, circle, and moldboard shall be controlled with a maximum of two multifunction, **3-axis**, joysticks, as standard.

Joystick controls shall be mounted to adjustable pedestals, hard mounted to the cab floor, independent of the operator seat.

Yes No PAICE

Yes No Page # 120 PRICE

Yes No Page # 811 SACCA.

Yes No SACCA.

Yes No SACCA. Yes No Page # RIJ SPEC A. 2 Yes No Page # B 12 Spec A. Yes No Spec A-6 Yes No Spec p. 8. Page # 210 Spec p. 8 Yes No Page # BN SPEC P-/ Yes No Spec A. 4 Yes No SPEC PS

Yes No SPEC PS

Page # 810 SPEC PS

Joystick Steering capabilities shall be ISO 5010

Primary steering shall be achieved via a left-hand joystick, using an intuitive steering control system.

A steering wheel and lever control option must also be available as an option to the base model.

Secondary steering shall be a standard feature.

TIRES

All six wheels shall be 10 in by 24 in size multi-piece tire rims and shall provide mounting for 14.00 R24 tires.

Tires shall be Goodyear, Bridgestone/Firestone, or Michelin only **14.00 x R24 12PR** Bias Tires.

BRAKES

Service brakes shall be multi-disc, oil-cooled and completely sealed.

OIL ANALYSIS

To be included at no cost of the duration of the warranty period selected at intervals recommended by the manufacturer's warranty and maintenance schedule.

WEIGHT (STANDARD OPERATING)

Base machine weight shall not be less than **35,067 lbs**. Weight shall include standard machine configuration, lubricants, coolants, full fuel tank and operator of **200lbs** This is factory specified operating weight only. No additional weights may be added for purpose of meeting these specifications.

Yes No_ Page #__/*/
Yes No_ Page #__/*/
Yes No_ Page #__/*/
Yes No_ Page #__*

Yes No Page # ZIX SACCA, 4

Yes No 7Re
Page # 126 7Re
Secetion

Yes No Page # 212 Spec A 3

Yes No ___

LIST PRICE

AT DEALER

REF Ship Weight LANE 2 / 3 MANDATORY USE NO. LANE SELECTION OP-9002 Only for dealers enrolled in the Base Orders Management (BOM) program. OP-9003 **REGIONAL PACKAGES** 561-9459 ONLY FOR USE WITH: 460-7653 120 14B AWD MOTOR GRADER 468-2237 120 14B MOTOR GRADER PERFORMANCE PACKAGES **MOLDBOARDS** L 320-9924 INCLUDES: Moldboard 12*x 24[∞]x7/8[∞] (3658 x 610 x 22mm) with hydraulic side shift and 5/8" (15.89mm) end bits. Cutting edge 8"x 3/4" (203 x 19.mm) curved cutting edge. COMPATIBLE WITH ALL HYDRAULICS L 436-3473 **INCLUDES:** Moldboard 12*x 24[™]x7/8[™] (3658 x 610 x 22mm) with hydraulic side shift and 5/8" (15.89mm) end bits. g edge. Cutting edge 8"x 3/4" (203 x 19mm) curved cutting edge. Reversible end bits overlay with curved edges, can protect moldboard and cutting edges. Reversible pair for use with 8" x 3/4" (203 x 19mm) cutting edge L 320-7431 INCLUDES: Moldboard 14"x 27"x7/8" (4267 x 686 x 22mm) with hydraulic side shift and 5/8" (15.89mm) end bits. Cutting edge 8"x 3/4" (203 x 19mm) curved cutting edge. Reversible end bits overlay with curved edges, can protect moldboard and cutting edges. Reversible pair for use with 8" x 3/4" (203 x 19mm) cutting edge. WEATHER PACKAGES (TANDEM MACHINES) WEATHER, STANDARD TND 0 467-7404 L Recommended for year around use when typical ambient temperature range is 0 degrees C (32 degrees F) to 43 degrees C (110 degrees F) and operating at altitude below 1220 m (4000 feet). INCLUDES: Batteries, Heavy Duty - 1125 CCA Oil, Hydraulic, 10W ONLY FOR USE WITH: 468-2237 120 14B MOTOR GRADER

USE

REF NO.

LANE 2 / 3 MANDATORY

Ship Weight lbs

LIST PRICE AT DEALER

TIRES, RIMS, AND WHEELS

Tires listed below include a set of six tires.

**To calculate tire loads with machine attachments, please reference the MG Tire Selection Pocket Guide (media #AEXQ0182), available on the Electronic Sales Library. All tire selections should be made with consideration for planned machine attachments (OEM and aftermarket) and their additional weight. Each tire has a maximum load rating that is not to be exceeded. The tire selection should be based on the maximum of all tire position loads on the machine. Assistance for calculating the highest tire load can be found in the Tire Load Worksheet in the back of the Caterpillar Motor Graders Tire Selection Pocket Guide. Failure to abide by the load ratings of the tires without first consulting the local tire supplier representative could result in nullification of the tire warranty.

Due to industry-wide tire availability limitations, tire brand and type cannot be guaranteed. Every effort will be made to satisfy your tire choice, but we reserve the right to change to alternate tires. If the tire brand cannot be supplied, we may contact the dealer. However, in some cases, we will change to an alternative premium brand tire without notice. If the tire type cannot be supplied, we will contact the dealer to propose alternatives. The dealer needs to choose between an alternative tire or a "rims only" option (where available) within 72 hours. If no response is provided by the deadline, the order will default to the alternative tire and will be changed at that point. As a consequence of a possible tire change, the total machine price will be decreased or increased depending on the price of the new tire.

The information provided can be used to make a tire selection based on the particular conditions at the site. When available, the tire manufacturer should be consulted regarding proper tire selection.

TIRES (TANDEM MACHINES)

MAXAM

578-9458

FOR USE IN LANE 3 ONLY

Maxam MS202 2* on 14- x 25- multi-piece rims.

THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING (8600 lbs) 3900kg.* ONLY FOR USE WITH: 468-2237 120 14B MOTOR GRADER

Supersedes 23SEP2022 Caterpillar: Confidential Green

L

REF USE NO.

LANE 2 / 3 MANDATORY

Ship Weight

LIST PRICE AT DEALER

TIRES, RIMS, AND WHEELS (CONT.)

TIRES (TANDEM MACHINES) (Cont.)

L	578-9460	TIRES 14.00R24 MA MS202 * MP
	FIRESTON	
L	252-0753	TIRES, 17.5-25 FS SRG 12PR MP
L	340-2602	TIRES,13.0-24 GY SGG 12 G2 SP
	MICHELIN	400-2237 120 14D MOTOR GRADER
L	254-7904	TIRES,14.0R24 MX XGLA2 * G2 SP
L	252-0701	TIRES,14.0R24 MX XSNO + * G2 MP
L	252-0777	ONLY FOR USE WITH: 468-2237 120 14B MOTOR GRADER TIRES,17.5R25 MX XSNO+ * G2 MP
L .	252-0771	ONLY FOR USE WITH: 468-2237 120 14B MOTOR GRADER TIRES, 17.5R25 MX XTLA * L2 MP
L	254-7971	ONLY FOR USE WITH: 468-2237 120 14B MOTOR GRADER TIRES, 17.5R25 MX XTLA * L2 SP

REF Ship Weight LIST PRICE LANE 2 / 3 MANDATORY USE NO. AT DEALER TIRES, RIMS, AND WHEELS (CONT.) TIRES (TANDEM MACHINES) (Cont.) L THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING (7824 lbs) 3550 kg.** ONLY FOR USE WITH: 468-2237 120 14B MOTOR GRADER 468-2238 120 14B MOTOR GRADER BRIDGESTONE L 252-0708 FOR USE IN LANE 3 ONLY Bridgestone VSW 1* on 10" x 24" multi-piece rims. THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING (8045 lbs) 3650 kg.** 468-2237 120 14B MOTOR GRADER ONLY FOR USE WITH: L 252-0720 TIRE LOADS EXCEEDING (8045 lbs) 3650 kg.** ONLY FOR USE WITH: 468-2237 120 14B MOTOR GRADER 468-2238 120 14B MOTOR GRADER L 252-0775 Bridgestone VKT 1* on 14" x 25" multi-piece rims. THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING (8045 lbs) 3650 kg.** 468-2237 120 14B MOTOR GRADER ONLY FOR USE WITH: 468-2238 120 14B MOTOR GRADER 310-7331 L Bridgestone VSW 1* on 14" x 25" multi-piece rims. THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING (8045 lbs) 3650 kg.** ONLY FOR USE WITH: 468-2237 120 14B MOTOR GRADER TRIANGLE TIRES (AWD MACHINES) MAXAM

Supersedes 23SEP2022 Caterpillar: Confidential Green

578-9459

L

US-A D

THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING (8600 lbs) 3900kg.**

460-7653 120 14B AWD MOTOR GRADER 468-2239 120 14B AWD MOTOR GRADER

Maxam MS202 2* on 14- x 25- multi-piece rims.

FOR USE IN LANE 3 ONLY

ONLY FOR USE WITH:

120 LIGHT DUTY MOTOR GRAD A

120	LIGHT DUTY MOTOR GRADER OPTION A	2023 Pricing
467-7423	120 MOTOR GRADER JOYSTICK (ALSO AVAILABLE W/ STEERING WHEEL)	\$419,360
561-6489	GLOBAL ARRANGEMENT	\$0
320-7431	14' PLUS MOLDBOARD	\$3,175
320-7431	BLADE, 14' X 27" X 1"	\$0,173
	INCLUDES END BITS WITH OVERLAY	\$0
467-7411	COLD WEATHER PACKAGE	\$1,037
462-6539	BLADE LIFT ACCUMULATORS	\$6,441
579-6852	STANDARD DRAWBAR WITH WEAR STRIPS	-\$1,638
590-7345	STABE 5 AND T4 FINAL ENGINE	-\$1,030
422-6603	GRAVITY ENGINE OIL DRAIN	\$0
462-6514	BASE HYDRAULICS	\$0
563-2423	LED BRAKE & TURN SIGNALES	\$569
517-0703	HEAVY DUTY ELECTRIC STARTER	\$565
506-4262	JUMP START STUDS	\$0
438-5768	145 AMP ALTERNATOR	\$0
466-1363	CAB PLUS:	\$37,848
506-2611	AIR SUSPENSION SEAT SEAT BELT	\$2,844
513-0286		-\$215
466-1360 435-5797	COMFORT PACKAGE (INCLUDES AM/FM RADIO) GLOVE BOX	\$4,007
471-5509	PRODUCT LINK, CELLULAR PLE742	\$0 \$0
543-0221	NO GRADE CONTROL	\$0
	BASIC JOYSTICK CONTROLS	
466-1315		\$0
575-2980	AUTO ARTICULATION DEMO	\$0
577-8014	GROUND LEVEL FUELING	\$0
574-8803	NEXT GEN FUEL FILTER	\$0
575-7683	STANDARD FAN	\$0
252-0720	14.00R24 BS VUT * L2 MP BRIDGESTONE TIRES	\$9,516
	RADIAL TIRES WITH MULTI-PIECE RIMS	\$0
498-8871	REAR PANEL W/ ACCESS DOOR	\$285
416-6892	TOWING HITCH	\$764
0P-3978	FUEL ANTIFREEZE	\$0
462-6595	ENGLISH LANGUAGE	\$0
421-8926	TECHNICAL MEDIA KIT	\$0
0P-1939	WINDSHIELD WASHER	\$0
564-5009	LOW FRONT HEADLIGHTS	\$901
466-1299	LED WARNING STROBE LIGHT WITH MOUNTS	\$1,807
467-7439	REAR VISION CAMERA	\$3,551
466-1323	OUTSIDE MOUNTED MIRRORS	\$384
453-4972	TRANSMISSION GUARD	\$4,760
462-9053	BOTTOM CAB GUARD	\$638
462-6655	ENGLISH DECALS	
	TOTAL BID PRICE FOR STANDARD MACHINE	\$321,225
	FREIGHT PREPARATION AND DELIVERY	\$8,368
	TOTAL MANUFACTURER'S SUGGESTED RETAIL PRICE FOR STANDARD MACHINE	\$496,599

	MOTOR GRADERS
	BID SPECIFICATION FOR 120 JOYSTICK OR EQUIVALENT
Compliant?	
	BASIC SPECIFICATIONS
Y N	Machine shall be designed and built by the manufacturer.
Y N	Base Machine Weight shall not be less than 30,624 lbs (13,892 kg). Weight shall include: standard machine
''	configuration, lubricants, coolants, full fuel tank and operator of 200 lbs (91 kg).
YN	Machine height to top of the cab shall not exceed 137.4 in (3,465 mm).
YXN	
12 11	Machine length from the front outside edge tire to end of tow hitch shall not be more than 340 in
YXN	(8,629mm).
1211	Machine Wheel Base (distance from front axle to mid tandem) shall not be more than 232.7 in
	(5,910mm).
Y_N	The rear frame shall have two box section channels with an integrated bumper as standard.
Y NN	A toolbox shall be provided.
	BASIC SPECIFICATIONS-OPTIONAL ATTACHMENTS
Y N	Machine shall have vandal protection standard including locks for cab doors, engine side shields (4), top
	tank radiator access door, engine coolant surge tank, hydraulic reservoir cap, fuel tank cap and tool box.
	у у у у у у у у у у у у у у у у у у у
Y N	An optional rear hitch shall be provided
YXX	Machine length from counterweight to ripper shall not exceed 387 in (9,838 mm).
	_ masting is right to important not exceed our in (0,000 min).
	ENGINE
YN	Engine shall be designed and built by the manufacturer.
V N	Engine shall be a turbo-charged, direct injection, four stroke, 6-cylinder diesel engine
YN	Engine shall be a turbo-charged, direct injection, four stroke, 6-cylinder diesel engine.
YN	Engine shall be certified EPA Tier 4 Final and European Union Stage IV
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Y N Y N Y N	 Engine shall be certified EPA Tier 4 Final and European Union Stage IV Engine shall be electronically controlled for more efficient fuel injection and fuel burn. Engine shall achieve rated power requirement with engine displacement not less than 7.1L (428 in3) for better fuel economy. Engine shall develop a rated net flywheel of at least 139 HP (104 kW) in 1st gear, 143 HP (107 kW) in 2nd gear, 148 HP (110 kW) in 3rd gear, 160 HP (119 kW) in 4th gear, and 165 HP (123 kW) in gears 5 through 8.
Y N Y N Y N	 Engine shall be certified EPA Tier 4 Final and European Union Stage IV Engine shall be electronically controlled for more efficient fuel injection and fuel burn. Engine shall achieve rated power requirement with engine displacement not less than 7.1L (428 in3) for better fuel economy. Engine shall develop a rated net flywheel of at least 139 HP (104 kW) in 1st gear, 143 HP (107 kW) in 2nd gear, 148 HP (110 kW) in 3rd gear, 160 HP (119 kW) in 4th gear, and 165 HP (123 kW) in gears 5 through 8. Engine will increase its low idle speed to 1,000 rpm when the battery voltage is below 24.5 volts for more than 5 minutes to ensure adequate system voltage and battery reliability.
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	MOTOR GRADERS
	BID SPECIFICATION FOR 120 JOYSTICK OR EQUIVALENT
	ENGINE-OPTIONAL ATTACHMENTS
Y N	An engine coolant heater shall be available to assist in cold weather starting.
	Ether starting aid shall be available and must automatically meter ether injection to prevent engine damage.
	POWERTRAIN/TRANSMISSION
Y N	Transmission shall be designed and built by the machine manufacturer.
	Transmission shall be a direct drive, power shift, countershaft type.
	Transmission shall be equipped with built-in self-diagnostic capability.
THE RESERVE THE PARTY OF THE PA	Transmission shall have no less than 8 forward speeds and 6 reverse speeds(for added safety).
	Transmission shall have 5 working gears between 0-11.0 mph (0-17.7 km/h), for dirt applications.
Y N	Transmission shall be isolated/resilient mounted to reduce sound and vibration.
Y~ N	A controlled throttle shifting system shall be standard to smooth directional gear changes without
(3)-34	use of the inching pedal.
Y N	Electronic Throttle Control (cruise control) shall be standard and shall be controlled by a push
(5)	button, located on a 3-axis joystick as standard on the right joystick control for resuming and
	decreasing throttle set.
YN	Electronic Throttle Control modes, set and accelerate functions, shall be located on the right control column
	for easy access.
YN	A load compensating system for the transmission shall be standard to ensure consistent shift quality in all
	applications.
YN	Automatic Differential Lock/Unlock feature shall be standard and shall not have speed, shuttle shifting or
	tandem spinning restrictions for engaging/disengaging. System must be load-sensing for optimal
	performance
YN	Automatic mode shall not be overriden via manual intervention for optimal performance and to prevent
	unintended differential engagement
Contract of the Contract of th	Differential Lock/Unlock shall be electro-hydraulically controlled, as a standard feature.
	Differential Lock/Unlock shall be a multi-disc design.
	Final drive shall be a planetary design.
1N	The total surface area of all the transmission clutch packs shall not be less than 2,031 in² (13,102 cm²).
V N	Diameter at the output end of the transmission shaft shall be no less than 2.29 in (58.1 mm).
V	Machine shall be equipped with an electronic inching pedal for improved modulation and machine
- N_	control.
Y N	Machine shall be equipped with electronic over-speed protection to prevent the engine and transmission
·	from over speeding, as a standard feature.
	nom over speculing, as a standard reature.
	POWERTRAIN/TRANSMISSION-OPTIONAL ATTACHMENTS
Y N	An autoshift transmission option shall be available on all forward and reverse gears.
	Tri dutostilit trafisitiission option shall be available on all forward and reverse gears.
	STEERING & IMPLEMENT CONTROLS
V N	
	Steering wheel shall not be required to operate machine. Joystick steering capabilities shall be ISO 5010.
	Joystick steering capabilities stiali be 150 50 to.
<u></u>	Machine shall employ a friction pack style steering mechanism, utilizing the follow steer concept.
V	The left 3-axis joystick shall control wheel lean with individual left and right wheel lean buttons as
1- J N	standard.
Y WI	Primary steering shall be achieved via a left hand, multifunction, 3- axis, joystick as standard, using
	an intuitive steering control system that automatically adjusts steering sensitivity as machine
	的现在分词,因为自己的证明,我们可以是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们
Y N	ground speed increases. Articulation to the right or left shall be achieved by a multifunction, 3-axis left joystick with the twist
	Y N N N N N N N N N N N N N N N N N N N

	MOTOR GRADERS
	BID SPECIFICATION FOR 120 JOYSTICK OR EQUIVALENT
N	An articulation return-to-center button on the left multifunction, 3- axis, joystick, shall return the machine to a straight frame position from any articulation angle with the touch of a single button.
Y N	The right 3 axis joystick shall primarily control the Drawbar, Circle, and Moldboard.
N_N	Machine, Drawbar, Circle, and Moldboard shall be control shall be achieved via a right hand multifunction, 3-axis, joystick, including moldboard slide and tip, drabar center shift through a 4 way hat switch and circle turn by a left or right twist intuitively.
YN	Blade lift cylinders shall be individually controlled by the multifunction, 3 axis joysticks; Lift and drop of cylinders shall be achieved by the forward and back motion of the respective joystick. Forward(left joystick) lowers left lift cylinder, back(left joystick)raises the left lift cylinder, forward(right joystick) lowers the right right lift cylinder, back(right joystick) raises the right lift cylinder.
YN	Joystick controls shall be mounted to adjustable pedestals, hard mounted to the cab floor, independent of the operator seat.
YN	Secondary steering shall have a primary and secondary power supply in the event the primary source is lost.
Y N	Transmission direction control shall be a 3-position rocker switch for selecting forward, neutral, and reverse incorporated into a single, 3-axis, multi-function, left-hand joystick control.
YN	Transmission gear selection shall be controlled by dual push buttons for up shifting and downshifting and shall be incorporated into a single, 3-axis, multi-function, left-hand joystick control.
X_N_	Manual Differential Lock/Unlock shall be operator controlled, via a push-button, located on a single 3-axis, multi-function, right-hand joystick control.
Y N	The machine shall have two redundant articulation sensors.
Y N	Two redundant sensors shall be standard in the steering cylinders (one in each).
YN_	Three redundant sensors shall be provided in the steering joystick for additional safety.
	STEERING & IMPLEMENTS-OPTIONAL ATTACHMENTS
YN	Optional up to 4 Auxiliary hydraulic circuits available: Ripper, Mid Mount Scarifier, Front Lift and Dozer Angle shall be available
	BRAKES
Y N	
I IN	Machine shall have primary and secondary service brakes.
Y N	Machine shall have primary and secondary service brakes. Entire braking system shall meet all requirements of ISO 3450: 2001.
	Machine shall have primary and secondary service brakes. Entire braking system shall meet all requirements of ISO 3450: 2001. Two separate left and right hydraulic brake accumulators shall be standard for safety.
YN	Entire braking system shall meet all requirements of ISO 3450: 2001. Two separate left and right hydraulic brake accumulators shall be standard for safety.
YN_ YN_	 Entire braking system shall meet all requirements of ISO 3450: 2001. Two separate left and right hydraulic brake accumulators shall be standard for safety. Parking brake shall be multi-disc, oil-cooled, spring-applied, hydraulically released, sealed, adjustment-fre and integrated into the transmission. Park brake shall not be externally located. Parking brake shall be serviceable without removing the transmission.
Y N Y N Y N N Y N N N N N N N N N N N N	 Entire braking system shall meet all requirements of ISO 3450: 2001. Two separate left and right hydraulic brake accumulators shall be standard for safety. Parking brake shall be multi-disc, oil-cooled, spring-applied, hydraulically released, sealed, adjustment-fre and integrated into the transmission. Park brake shall not be externally located. Parking brake shall be serviceable without removing the transmission. Service brakes shall be multi-disc, oil-cooled and sealed; they will also provide access to check are
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Y N Y N Y N N Y N N N N N N N N N N N N	Entire braking system shall meet all requirements of ISO 3450: 2001. Two separate left and right hydraulic brake accumulators shall be standard for safety. Parking brake shall be multi-disc, oil-cooled, spring-applied, hydraulically released, sealed, adjustment-free and integrated into the transmission. Park brake shall not be externally located. Parking brake shall be serviceable without removing the transmission. Service brakes shall be multi-disc, oil-cooled and sealed; they will also provide access to check and determine brake wear without removing or disassembling the brake assembly. Service brake disc surfaces shall be grooved and carry oil between discs and plates with brakes fully applied. Service brakes shall be hydraulically actuated, utilizing dual independent brake circuits. Brakes shall be continuously pressurized, filtered, oil cooled. Machine shall have individual brake pods for each rear wheel, located at each rear wheel inside the tandem box, independent of tandem chains.

		MOTOR GRADERS
		BID SPECIFICATION FOR 120 JOYSTICK OR EQUIVALENT
		HYDRAULIC SYSTEM
	Y > N	A standard triple redundant hydraulic relief system shall protect machine hydraulic components.
	' <u>-</u> '\	A standard triple redundant riyuradiic rener system shan protect machine nyuradiic components.
	Y N	Hydraulic implement pump shall produce between 0 and 53 gal/min (201 L/min) of oil flow at high idle.
	Y N	Hydraulic system shall be a closed center, load sensing type, with a variable displacement, axial
		piston-type pump.
	Y N	Hydraulic system shall be fully sealed, using Duo-cone and O-ring face seals to prevent
		leaks,contamination, and spillage.
	Y N	The hydraulic tank shall have a baffling system to reduce potential pump cavitations.
	YN	The maximum hydraulic system pressure shall be no more than 3,500 psi (24,150 kPa).
	Y_N	Implement valves shall be mechanical, designed and built by the machine manufacturer.
	Y N	Implement valves shall be proportional priority pressure compensating for consistent response, when multi-
	N/ NI	functioning any combination of implement controls and independent of engine speed.
	Y N	Steering and implement pump shall be solely dedicated to steering and implement controls and not shared
	Y N	with any other components.
	Y N	Lock valves shall be integrated into the main implement valve to prevent cylinder drift. The hydraulic stand-by pressure shall be no Less than 943 psi (6,500 kPa).
	Y N	There shall be a provision to install up to twelve modulating hydraulic valves, controlled by two, three-axis,
	''N	multi-functioning, joystick controls and auxiliary controls inside the cab.
	Y N	Left and right blade lift cylinders shall have independent float capability, actuated by two multifunction, 3-
		axis joystick controls inside the cab, as a standard feature.
	Y N	A sight gauge will be provided for checking hydraulic reservoir fluid.
	Y N	Hydraulic oil change service interval shall be no less than 6000 hours with oil sampling
-	YN	Hydraulic system shall have a separate oil tank solely dedicated to the implement pump.
	YN	FRONT AXLE AND TANDEMS Front axle oscillation shall be no less than 32 degrees total, per side 16 degrees up, 16 degrees down.
	YN	Front axle shall be an arched design for maximum ground clearance.
	YN	Wheel spindle shall be a "live" spindle design and rotate inside a sealed compartment with
	<u>-</u>	lightweight oil for lubrication of the bearings.
	Y N	Front spindle shall be heat induction hardened.
	1 <u>-\</u> N_	Front wheel spindle bearings shall be a double tapered design with the larger diameter bearing
	Y_N	mounted closest to the centerline of the front tire. Front wheel spindle maintenance intervals shall be no less than 2000 hrs.
	YSN	Front wheel steering angle shall be a maximum of 50 degrees left or right.
	YN	Maximum front wheel lean shall be no less than 18 degrees left or right.
	Y N	Machine turning radius shall not exceed 24 ft. 3 in. (7.4 m) using front steering, full articulation and unlocke
		differential.
	YN	Distance between center of tandem wheels shall be no less than 59.5 in (1510 mm).
	YN	Tandem chain pitch shall not be less than 1.75 in (44.45 mm).
	Y N	Tandems shall be capable of oscillating 15 degrees front tandem up and 25 degrees front tandem
		down, with full machine articulation and having no interference between tandem wheel and
		m <mark>achine structure.</mark>
	YN	Mechanical steering stops located at each wheel and steering cylinder relief valves shall be present to
	V N	prevent steering system damage during normal operation.
	YN_ YN	Steering tie rod ends shall be heat induction hardened. Machine shall provide 2 steering cylinders for maximum steering force.
	Y N	When equipped with a ripper, the machine shall have a minimum ramp angle of 15 degrees.
	I	
		TIRES AND RIMS
	Y/N	TIRES AND RIMS A 10 in (25.4 cm) by 24 in (60.96 cm) size 3-piece tire rim shall be available to provide mounting for

			MOTOR GRADERS
			BID SPECIFICATION FOR 120 JOYSTICK OR EQUIVALENT
	V	- NI	TIRES AND RIMS-OPTIONAL ATTACHMENTS
	Υ	_ N	A 9 in (22.86 cm) by 24 in (60.96 cm) size single-piece tire rim shall be available to provide mounting for 13.0-24 and 14.00R24 conventional tires
	Y	_ N	A 13 in (33.0 cm) by 25 in (63.5 cm) size single-piece tire rim shall be available to provide mounting for 17.5-25 tires.
	Y	N	A 14 in (35.6 cm) by 25 in (63.5 cm) size 3-piece tire rim shall be available to provide mounting for 17.5-R25 tires.
			OPERATORS STATION
	Y	_N	A 42,075 BTU/h (12.3 kW) heater shall have an integral pressurizer and four-speed fan along with A/C.
	Y	N	Seat shall be a cloth-covered suspension seat with, 3-inch (76 mm) retractable seat belts, with adjustments for fore-aft position, seat height, seat back angle, thigh support, and lumbar support.
	Υ	N	An enclosed cab with ROPS (Rollover Protective Structure) according to ISO 3471shall be provided.
	Y	N	Cab door shall have a hold-open clasp with a ground-level release and in addition to, a release in the cab.
	Υ	N	Cab shall be isolation-mounted to the front frame section of the machine.
	Y	N	Cab shall have fixed front window of laminated glass with intermittent wiper.
	V	N	FOPS (Falling Object Protective Structure) shall be provided according to ISO 3499.
100	V	N	Machine shall have no less than 16 adjustable vents standard positioned to direct air to front windows and
	' 	_ '\	operator.
	Υ.	N	Radio ready arrangement will include 24V to 12V converter, two speakers, antenna and wiring.
	Y	N	An instrument cluster shall be integrated into main tablet style display and include a speedometer,
		-	tachometer, coolant temperature, fuel and articulation angle gauge.
	Y	N	Tablet style touchscreen display shall be high definition, anti-glare and scratch resistant.
	Y	N	Operator cab fresh air-filter shall be accessible for clean out and replacement, from outside of the cab.
	1	<u> </u>	
	Y	_ N	Machine shall have the Optional Cat Grade with Cross Slope system fully integrated into the
	- V		machine design with integral hydraulic and electrical components.
	Υ	_N	A real-time information system shall monitor all system data and alert the operator of any faults through a
	V	N.I	digital text display. This information system shall be programmable for multiple languages.
	I	N	Left and right side cab doors shall be provided.
	Y	N	Wipers shall be provided on side and rear windows.
	Υ	<u>N</u>	Digital machine hour meter shall be provided.
	Y	_N	An electronic message system shall provide real-time machine performance and diagnostic data.
	Υ	_ N	The forward visibility shall unobstructed visibility of the blade, heel and toe, back of the cutting edge, and front tires.
	Υ	N	Access to cab shall be three anti-skid steps.
	Υ	N	Cab shall have cup holder, personal cooler holder/storage compartment for operator's manual, with a molded floor mat.
	Y	N	Window washer fluid bottle refill spout shall be located external of the cab.
	Y	N	Cab shall have "Split C post" pillars located behind the operator.
	Y.)	-N	Cab shall have Heating, ventilation and air conditioning vents/ducts in the cab ceiling/headliner.
	Y	N	Cab shall have door release lever activated from groundlevel or with the operator's heel without
			stretching or obstruction to the release.
			OPERATORS STATION-OPTIONAL ATTACHMENTS
	Y_	N	Automatic climate control shall be available.
	Y	-N	Manufacturer must provide Stable Grade sensor and software to automatically reduce engine speed
	1	Mark Comment	in various applications to reduce machine bounce and scalloping of surface
	YX	N_	Digital Blade Slope Meter shall be available from the factory in order ensure proper calibration and
	1/	Mary	installation for improved accuracy and performance.
	Y_ (N_	Cat Grade with Cross Slope Indicate shall be available from the factory in order to ensure proper
			calibration and installation for improved accuracy and performance.

	MOTOR GRADERS
_	BID SPECIFICATION FOR 120 JOYSTICK OR EQUIVALENT
YN	Cat Grade with Cross Slope System shall be available from the factory in order to ensure proper
	calibration and installation for improved accuracy and performance.
Y N_	Integrated display and wiring for a rear vision camera shall be available with capability to view at a
,	times without interfering with the gauge and diagnostic display.
Y N	An auxiliary control pod, with implement float control capability, shall be available.
Y N	Auxiliary controls shall be available for control of attachment implements and/or work tools, and shall be
	programmable via computer software.
YN	Auxiliary controls shall be a fingertip control type and located beside the right-hand joystick control.
YN	A rear sun shade shall be available.
YN	A rear defroster fan shall be available.
Y N	Attachment Ready Option (ARO) shall be available from the factory. This option shall Include additional
	mounting brackets and electrical harnesses for easy installation of the electronics kit.
YN	An air suspension seat shall be available.
YN	Heated and ventilated air suspension seat shall be available.
Y N	Cab shall have sliding side windows available.
YN	Cab shall have "B" pillar mirrors increasing visibility to the rear of the machine and ripper.
YN	Cab shall have optional auxillary heater available with additional 4 vents under the seat.
V VII	DRAWBAR, CIRCLE & MOLDBOARD, also known as DCM
7 N_	Optional Top Adjust Drawbar, Circle and Moldboard wear strips shall be replaceable drop-in insert
	made from nylon composite material, replaceable and adjustable from the top of the drawbar plate
, X ,,	via removable cover plates.
Y / ~ N	The drawbar shall feature welded protective wear plates to prevent lift group contact with the
Y N	primary drawbar structure.
īN	The standard moldboard shall be at least 12 ft (3.7 m) long, 24 in (610 mm) high and no less than 7/8 in (2 mm) thick. Cutting edge 9" v 3/4" (203 v 41 mm) survey outling edge.
Y N	mm) thick. Cutting edge 8" x 3/4" (203 x 11 mm) curved cutting edge
Y N	 Moldboard shall have a bank slope angle capability of at least 90 degrees to both sides. Moldboard shall have no less than 16.3 in (413 mm) arc radius (blade curvature) for optimum productivity
	Moldboard shall have no less than 16.5 in (4.15 min) are radius (blade curvature) for optimum productivity
$_{\rm Y}$ \times $_{\rm N}$	Optional top adjust DCM moldboard retention system shall have no more than two retention point
7	located on the left and right side of the moldboard. The surface area shall not be less than 55,332
	mm² (85.76 in²).
ΥX	Moldboard shall have a hydraulic tip control through a range of 40 degrees fore and 5 degrees aft.
Y N	Optional Top Adjust Moldboard wear strips shall be adjusted with lock screws, providing shim-les
	adjustment capability both vertical & horizontal.
Y N	The moldboard shall be pre-stressed during manufacturing for superior strength and durability.
Y N	Moldboard slide rails shall be constructed of a heat-treated, high carbon steel and have replaceable bronz
	alloy wear inserts on top and bottom.
YN	Circle shall be a single piece, rolled-ring forging, with raised wear surfaces on the top and bottom.
YN_	Circle shall be rotated by a hydraulically driven motor with a minimum circle pinion torque capability of
	12,538.56 ft-lb (17,000 N-m).
YN	Circle teeth contact surfaces shall be induction-hardened on the front 240 degrees of the circle.
YN	Blade lift and center shift cylinders shall have replaceable bronze coated steel wear inserts in the
	ball sockets with removable shims to insure the ability to remove free play throughout the useful
	wear insert life.
Y N	The standard mounting hardware for cutting edges and end bits shall be 3/4 in (16 mm)
	Link bar shall have large diameter 7 positions for increased versatility, the center most of which bear
YN	replaceable bushings.
YN YN	replaceable bushings. Linkbar pin shall be separate from pin pulling mechanism for easier service and lower O&O costs.
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YN YN YN	replaceable bushings. Linkbar pin shall be separate from pin pulling mechanism for easier service and lower O&O costs. The lift cylinder casting shall be welded to the front frame for added strength and structural integrity. The draft frame pivot connection shall have a single ball stud with grease zerk. Ball stud shall be bolt-on, shimable and adjustable to allow for quick and easy field serviceable design.
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YN YN YN	replaceable bushings. Linkbar pin shall be separate from pin pulling mechanism for easier service and lower O&O costs. The lift cylinder casting shall be welded to the front frame for added strength and structural integrity. The draft frame pivot connection shall have a single ball stud with grease zerk. Ball stud shall be bolt-on, shimable and adjustable to allow for quick and easy field serviceable design.

		MOTOR GRADERS
		BID SPECIFICATION FOR 120 JOYSTICK OR EQUIVALENT
1	YN_	Circle outside diameter shall be no less than 60.2 in (1530 mm).
	YN_	Throat clearance with standard moldboard shall be at least 410 mm.
	Y N	A greaseable moldboard pivot pin shall be available as standard equipment.
	Y_N_	There will be no more than 6 replaceable wear inserts between the circle and drawbar providing at least 120 in ² (770 cm ²) of wear surface area and 6 additional wearstrips on circle shoes totaling 19
		in² (122 cm²).
		OLDOL E & MOLDBOARD ORTIONAL ATTACHMENTS
		CIRCLE & MOLDBOARD-OPTIONAL ATTACHMENTS
	Y N	A 12 ft (4267 mm) long, 24 in (610 mm) high and no less than 7/8 in (22 mm) thick moldboard shall be available. Cutting edge 8"x 3/4" (203 x 19mm) curved cutting edge, Reversible end bits overlay with curved edges.
	YN	A 14 ft (4267 mm) long, 27 in (686 mm) high and no less than 7/8 in (22 mm) thick moldboard shall be available. Cutting edge 8"x 3/4" (203 x 19mm) curved cutting edge, Reversible end bits overlay with curved edges.
	Y_XN_	Blade lift accumulators shall be provided, protecting cutting edge and other components from
	- V W N	damage from shock loads as an option.
	Y_K_N_	There shall be 3 sideshift anchor positions shall be provided for extended reach capability on
		optional 14 foot moldboard.
		ELECTRICAL
	Y N	Machine shall have a 145 amp-hour, 1125 CCA heavy-duty battery.
	Y N	Machine shall have a minimum 150-amp alternator at 24 volts provided which is brushless for increased life
		and durability.
	YN_	A 24 V to 12 V converter with 15-amp capacity shall be provided.
	Y N	Starting system shall be a 24V direct electric type.
	YN	Incandescent white reversing lamps and LED stop lamps shall be provided.
	YN	Electrical system shall have a master disconnect switch with a removable key (in addition to the ignition switch), accessible from the ground level.
	YN	All core machine systems shall be electronically connected, optimizing performance and preventing machine damage.
	Y N	All wiring shall be arranged and located so as to facilitate regular visual inspections, not be in contact with hot surfaces and not routed with other services lines (e.g. fuel, oil, etc.).
	YN	All harnesses / cabling are secured with clipping clamps providing a gap between the conduit/harness and the mounting surface preventing material build-up.
		ELECTRICAL-OPTIONAL ATTACHMENTS
	YN	Machine shall have 200 amp-hour, 1400 CCA extreme duty batteries available.
**************************************	YN	Machine shall have a 150-amp alternator at 24 volts available which is brushless for increased life and durability.
	Y N	There will be 6 (3 x 3 in) (76 x 76 mm) halogen mounted on the cab, 4 forward facing and 2 rear facing shall be available.
	YN	There will be 6 (3 x 3 in) (76 x 76 mm) LED mounted on the cab, 4 forward facing and 2 rear facing shall be evailable.
	Y N	There will be 2 (3 x 3 in)(76 x 76 mm) halogen heel work lamps mounted underneath the cab shall be available as an option.
	YN	There will be 2 (3 x 3 in) (76 x 76 mm) halogen mid-frame toe lamps shall be available to illuminate moldboard and surrounding area as an option.
	Y N	There will be 2 (3 x 3 in) (76 x 76 mm) halogen ripper work lamps shall be available as an option.
	YN_	There will be 2 (3 x 3 in)(76 x 76 mm) LED heel work lamps mounted underneath the cab shall be available
		as an option.
	YN	There will be 2 (3 x 3 in) (76 x 76 mm) LED mid-frame toe lamps shall be available to illuminate moldboard and surrounding area as an option.
	YN_	There will be 2 (3 x 3 in) (76 x 76 mm) LED ripper work lamps shall be available as an option.
	YN	High and low bar headlights with front turn signals shall be available.

		MOTOR GRADERS
		BID SPECIFICATION FOR 120 JOYSTICK OR EQUIVALENT
	YN	One or two amber LED high-speed strobe beacon shall be available.
	Y N	A 24V to 12V converter with 25 amp capacity shall be available.
		•
		SERVICEABILITY
	YN	The dip stick for checking transmission fluid shall be at ground level.
	Y N	Hydraulic tank site gauge shall be readable from the ground.
	YON	Hydraulic tank filter shall be a cartridge style filter located inside the hydraulic oil tank.
	YN	Sampling ports shall be accessible from the tandem level and provide access to the engine, hydraulic,
		coolant, and fuel ports.
	Y N	A two-way communication tool shall give service technicians easy access to stored diagnostic data and
		allow configuration of machine parameters.
	YN	Machine shall provide 3 points of contact on all areas of the machine, for mounting and dismounting.
	YX N	The articulation joint shall have mechanical locking device to prevent frame articulation while
	Assertation of the second	servicing or transporting machine.
	Y N	Left and right side tandem case assemblies shall be covered with punched steel plate to provide an
	V N	adequate platform for standing and walking.
	Y N	Sampling ports shall be accessible from the tandem level and provide access to the engine, hydraulic,
-	YXN	coolant, and fuel ports. Engine primary and final fuel filters shall have 500 hour service replacement interval.
	YN	Engine shall have primary fuel filter with fuel water separator and electronic sensor, quick release dual
	''\'	stage filter and primer pump.
	Y N	The centralized lube bank shall be at the articulation joint to give access to difficult zerks.
	YN	Transmission filter restriction indicator shall be displayed in the cab.
	Y N	Lock out Tag out capabilities shall be provided standard and increase the safety levels during down time.
		This ensures that an energy isolating device and the machine which are being worked on and cannot be
		operated
		SERVICEABILITY-OPTIONAL ATTACHMENTS
	YN	High-speed oil drain system shall be available with ground level quick connect access.
	YN_	A guard shall be available to protect the machine's transmission from debris.
	YN_	A guard shall be available to suppress sound from the engine.
	YN_	An internal service lights shall be available to illuminate engine compartment.
	Y N	A circle pinion grease bucket, known as circle saver, with remote grease line shall be available.
		MINIMUM SERVICE FILL CAPACITIES
	V N	
	YN_ Y N	Standard fuel tank capacity shall not be more than 65 gallons (246 L). Standard cooling system capacity shall not be less than 13.9 gallons (52.5 L).
	Y N	Standard cooling system capacity shall not be less than 19.8 gallons (75 L).
	Y N	Standard hydraulic tank capacity shall not be less than 4.8 gallons (18 L).
	Y N	Standard tandem housing capacity shall not be less than 15.8 gallons (59 L) each.
	Y N	Standard front wheel spindle bearing housing capacity shall not be less than 0.1 gallons (0.5 L).
	Y N	Standard circle drive housing capacity shall not be less than 1.8 gallons (7 L).
	^	SAFETY AND ENVIRONMENTAL
	YOUN	A standard circle drive slip clutch shall be provided to reduce horizontal moldboard impact damage.
	YN	Black glare-reducing paint shall be used on the front frame and engine enclosure to decrease glare from
		other equipment lights and reflection from the sun and snow.
	YN	An external emergency kill switch shall be available for ground level engine shut down.
	YN	Machine shall have laminated glass for the front windows and doors, to protect the operator from shattered
		glass.
	Y N	Machine shall provide dual exits allowing for emergency egges should one side become obstructed

120 Bid Specifications

YSTICK OR EQUIVALENT
onnect switch with a removable key and lock for added safety.(in
nding alarm when reverse gears are selected.
be provided for the hydraulic oil, engine oil, engine coolant,
ear grill for protection during service.
or lights to remain on separate from ignition switch, for safe exit
olation mounted to reduce noise and vibration.
OPTIONAL ATTACHMENTS
achine's transmission from debris.
and wiring shall be available.
s an option, to reduce vertical impact damage.
ts) shall be available to span the profile of the machine, for
shall be available.
ers.
on of maximum 11.3 in (286 mm) and a penetration force of at
ments and shall not interfere with the ability to fully open any ca ors.
ically connected optimizing performance and preventing machin
g flow of vital machine data and location shall be available. This achine parameters such as machine hours, machine condition,
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120 MOTOR GRADER

Engine Power Operating Weight 104 kW (139 hp) 15 906 kg (35,067 lb)

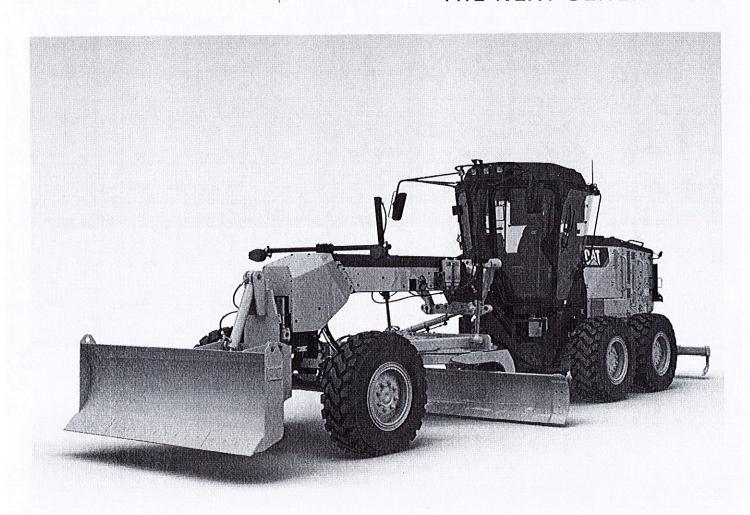
Cat* C7.1 Engine meets U.S. EPA Tier 4 Final and EU Stage IV emission standards.



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.

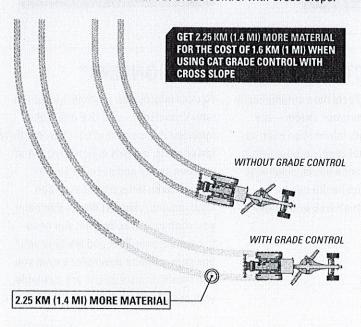
- + UP TO 15 PERCENT INCREASED FUEL ECONOMY WITH THE C7.1 ENGINE
- + NEXT GENERATION CAB OPTIONS FOR MAXIMUM COMFORT
- + SPEND LESS TIME AND MONEY ON REGULAR MAINTENANCE





SAVE MORE MATERIAL.

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



SCENARIO:

1559 M³/KM (2,039 YD³/MI) MGVED 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.

¹Compared 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 CONNECT

Cat Connect 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

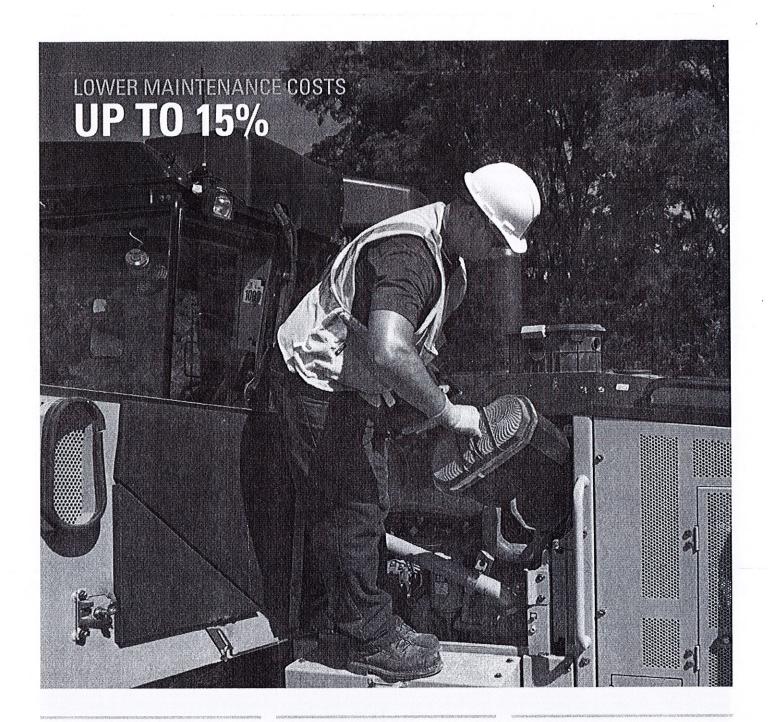
View blade slope on the integrated machine display with the Digital Blade Slope Meter. Reduce the need for manual grade checking to keep you and your worksite safer.



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.





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.



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

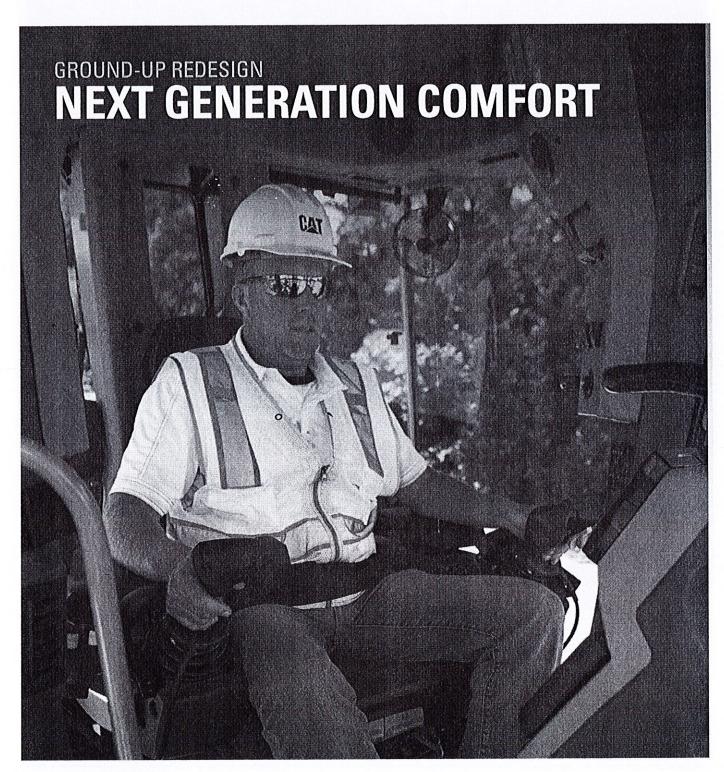
Get the job done with a choice of joysticks or traditional steering wheel and lever controls. Integrated technology options put more productivity at your fingertips.

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.





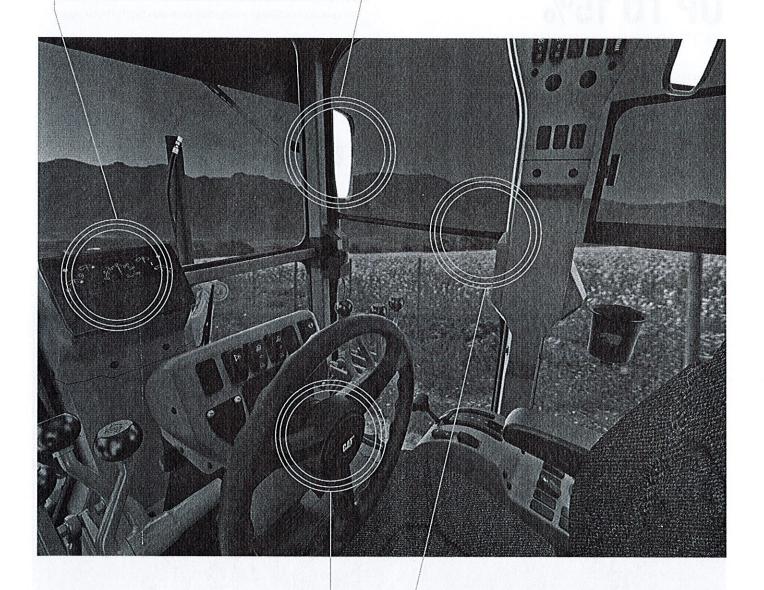
CONVENIENT SETTINGS

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.

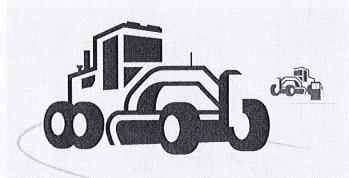
The Cat C7.1 engine uses up to 10 percent less fuel.

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.

WORK MORE... FUEL LESS

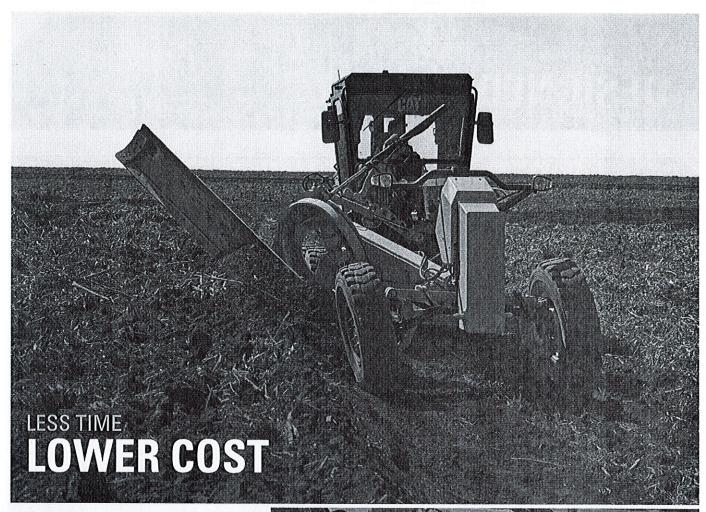
Get up to 15% Fuel Savings with the Next Generation Cat® 120 Motor Grader



SCENARIO:

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

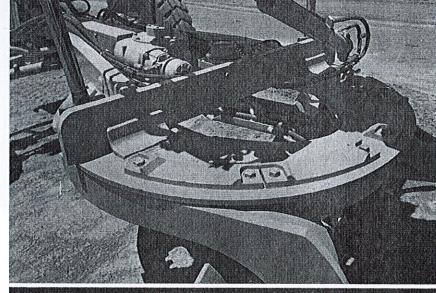




Keep your circle moldboard tight for precise grading throughout the motor grader's life. Durable structures with drawbar circle moldboard adjustments save you service time using replaceable wear inserts.

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

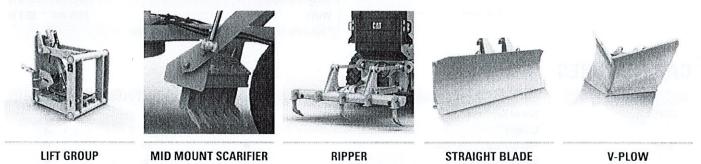
The circle drive slip clutch protects your pinion drive and circle teeth from potential damage.

DIMINISH 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.







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.

Engine Model	Cat C7.1	
Net Power ISO 9249/SAE J1349 EEC 80/1269 104 kW-123 139 hp-16		
All Wheel Drive Range — Net	108 kW-141 kW 145 hp-189 hp	
Bore	105 mm 4.1 ir	
Displacement	7.01 L 427.8 in	
Stroke	135 mm 5.3 ir	
Engine RPM	2,000 rpn	
Maximum Torque — ISO 9294	822 N·m 606 lbf-f	
Top Forward Speed	48.3 km/h 30.1 mpl	
Top Reverse Speed	38.1 km/h 23.7 mpl	
Turning Radius, Outside Front Tires	7.4 m 291.3 ii	
 Net Power is tested per ISO 9249, SAE J1349, a in effect at the time of manufacture. 	and EEC 80/1269 Standards	
 The air conditioning system on this machine or greenhouse gas refrigerant R134a (Global War 	rming Potential = 1430).	
The system contains 1.6 kg of refrigerant whic of 2.288 metric tonnes.		
of 2.288 metric tonnes.		
of 2.288 metric tonnes.		
of 2.288 metric tonnes.	15 906 kg 35,067 ll	
of 2.288 metric tonnes. WEIGHT Typically Equipped Machine Weight* Lever/Steering Wheel Weight Joystick Weight	15 906 kg 35,067 l 16 038 kg 35,358 l	
of 2.288 metric tonnes. WEIGHT Typically Equipped Machine Weight* Lever/Steering Wheel Weight		
of 2.288 metric tonnes. WEIGHT Typically Equipped Machine Weight* Lever/Steering Wheel Weight Joystick Weight Lever/Steering Wheel All-Wheel Drive	16 038 kg 35,358 l 16 661 kg 36,731 l 16 713 kg 36,846 l	

SERVICE REFILL CAI	PACITIES	431126.0
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 RANG	BE .	
Circle Center Shift		
Right	656 mm	26 in
Left	656 mm	26 in
Moldboard Side Shift		
Right	510 mm	20.1 in
Left 1	660 mm	26 ir
Blade Tip Range		
Forward		40°
Backward		5°
Maximum Shoulder Reach		
Right	1905 mm	75 ir
Left	1742 mm	68.6 ir
Maximum Lift Above Ground	410 mm	16.1 ir
Maximum Depth of Cut	775 mm	30.5 ir
MOLDBOAR	D	
Width	3.7	m 12 f
Height	610 mm	24 ir
End Bit	152 mm	6 ir
Cutting Edge	152 mm	6 iı
Arc Radius	413 mm	NAME AND ADDRESS OF THE OWNER, OR
Throat Clearance	120 mm	4.7 ìı
DIMENSION	IS	
Length of Machine*	9838 mm	387 iı
Maximum Height	3465 mm	136.4 ir
Width	2495 mm	98.2 ii
*Typically equipped with push block and ri	pper.	

CAB FEATURES

FEATURE	DESCRIPTION	BASE	COMFORT PLUS	PREMIUM PLUS
ROPS	Sound Suppression	•	•	•
	Canopy	0	x x	X
Seat	Mechanical Suspension	•	0	0
	Air Suspension	x	•	•
	Heated/Cooled	x	x	•
	Lumbar Support	x	•	•
HVAC	Heating, Ventilation, and Air Conditioning	•		enan en Arsa
	Defrost Fans	X		•
nformation Display	Touchscreen	0	0	0
	Standard Display	0	0	0
Lighting	Halogen Bulbs	•	•	•
	LED Bulbs	0	0	0

● – standard O – 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	- UAPPAULDEDERSHILLISHTELL	
Differential Lock	•	
CAB	STANDARD	OPTIONAL
ROPS	•	
Mechanical Suspension Seat		
Air Suspension Adjustable Seat		•
Сапору		
Touchscreen Display*	•	
Standard Information Display	•	
Adjustable Control Console (Levers)	•	
Entertainment Radio Ready		
Halogen Lighting	•	
LED Lighting		•
USB/Auxiliary Radio		•
*Standard touchscreen on the joystick machi	ine.	
CAT CONNECT 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 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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VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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AEXQ2484 Build Number: 14A





Effective with sales to the first user on or after June 1, 2015

CATERPLLAR LIMITED WARRANTY

For Selected Machine Models Designated by Caterpillar with 12 Month/Unlimited Hour Warranty

Worldwide

Caterpillar Inc. or any of its subsidiaries ("Caterpillar") warrants the following products sold by it to be free from defects in material and workmanship:

- New earthmoving, construction, material handling, forestry product, paving product, compact wheel loader, mini hydraulic excavator, skid steer loader, multi terrain loader, and compact track loader machines designated by Caterpillar as having 12 -months/unlimited hour warranty. See your Cat[®] dealer for a complete listing of covered models.
- Attachments/work tools installed on such machines prior to delivery (unless covered by the Cat Work Tool warranty statement or another manufacturer's warranty). Hammer tool points and compacting plates used on hydraulic hammers are not warranted.

An additional warranty against breakage is applicable to certain Cat ground engaging tools. An additional warranty against wear is applicable to all landfill compactor tips when used in residential waste landfills. Refer to the applicable warranty statements for coverage detail.

This warranty does not apply to:

- · Cat Batteries
- Mobil-trac belts, rubber tracks used on multi terrain loaders, compact track loaders, and mini hydraulic excavators
- Cat Work Tools
- Select models designated by Caterpillar that are sold in India and China

These products are covered by other Caterpillar warranties. This warranty is subject to the following:

Warranty Period

For new machines and work tools/attachments the warranty period is 12-months/unlimited hours, starting from date of delivery to the first user.

- For hydraulic line's quick connect/disconnect components sold on compact wheel loaders, mini hydraulic excavators, skid steer loaders, multi terrain loaders, and compact track loader machines, the warranty period is 50 hours starting from the date of delivery to the first user.
- For Draglines, Electric Rope Shovels, Hard Rock Movers, Hard Rock Feeders; the warranty period is not to exceed 24 months from shipment of the last major component from the Caterpillar place of manufacture.

Caterpillar Responsibilities

If a defect in material or workmanship is found during the warranty period, Caterpillar will, during normal working hours and at a place of business of a Cat dealer or other source approved by Caterpillar:

- Provide (at Caterpillar's choice) new, remanufactured, or Caterpillar approved repaired parts or assembled components needed to correct the defect.
- Note: New, remanufactured, or Caterpillar approved replacement parts provided under the terms of this warranty are warranted for the remainder of the warranty period applicable to the product in which installed as if such parts were original components of that product. Items replaced under this warranty become the property of Caterpillar.
- Replace lubricating oil, filters, antifreeze, and other service items made unusable by the defect.
- Provide reasonable and customary labor needed to correct the defect.

User Responsibilities

The user is responsible for:

Providing proof of delivery date to the first user.

- Labor costs, except as stated under "Caterpillar Responsibilities."
- Transportation costs, except as stated under "Caterpillar Responsibilities."
- Premium or overtime labor costs
- Parts shipping charges in excess of those that are considered usual and customary.
- Local taxes, if applicable.
- Costs to investigate complaints, unless the problem is caused by a defect in Caterpillar material or workmanship.
 - Giving timely notice of a warrantable failure and promptly making the product available for repair.
- Performance of the required maintenance (including use of proper fuel, oil, lubricants, and coolant) and items replaced due to normal wear and tear.
- Allowing Caterpillar access to all electronically stored

Limitations

Caterpillar is not responsible for:

- Failures resulting from any use or installation that Caterpillar judges improper.
- Failures resulting from attachments, accessory items, and parts not sold or approved by Caterpillar.
- Failures resulting from abuse, neglect, and/or improper storage or repair.
- Failures resulting from user's delay in making the product available after being notified of a potential product problem.
- Failures resulting from unauthorized repair or adjustments, and unauthorized fuel setting changes.

(Continued on the reverse side....



This warranty covers every major component of the products. Claims under this warranty should be submitted to a place of business of a Cat dealer or other source approved by Caterpillar. For further information concerning either the location to submit claims or Caterpillar as the issuer of this warranty, write Caterpillar Inc., 100 N. E. Adams St., Peoria, IL USA 61629.

Caterpillar's obligations under this Limited Warranty are subject to, and shall not apply in contravention of, the laws, rules, regulations, directives, ordinances, orders, or statutes of the United States, or of any other applicable jurisdiction, without recourse or liability with respect to Caterpillar.

A) For products operating outside of Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the Solomon Islands, and Tahiti, the following is applicable:

NEITHER THE FOREGOING EXPRESS WARRANTY NOR ANY OTHER WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED, IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EXCEPT CATERPILLAR EMISSION-RELATED COMPONENTS WARRANTY FOR NEW ENGINES, WHERE APPLICABLE, REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN.

CATERPILLAR IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ON THE PART OF ANY OF ITS EMPLOYEES, AGENTS, OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

IF OTHERWISE APPLICABLE, THE VIENNA CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS IS EXCLUDED IN ITS ENTIRETY.

B) For products operating in Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea the Solomon Islands, and Tahili, the following is applicable: THIS WARRANTY IS IN ADDITION TO WARRANTIES AND CONDITIONS IMPLIED BY STATUTE AND OTHER STATUTORY RIGHTS AND OBLIGATIONS THAT BY ANY APPLICABLE LAW CANNOT BE EXCLUDED, RESTRICTED OR MODIFIED ("MANDATORY RIGHTS"). ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED (BY STATUTE OR OTHERWISE), ARE EXCLUDED. WITHOUT LIMITING THE FOREGOING PROVISIONS OF THIS PARAGRAPH, WHERE A PRODUCT IS SUPPLIED FOR BUSINESS PURPOSES, THE CONSUMER GUARANTEES UNDER THE CONSUMER GUARANTEES UNDER

NEITHER THIS WARRANTY NOR ANY OTHER CONDITION OR WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED (SUBJECT ONLY TO THE MANDATORY RIGHTS), IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

IF THE MANDATORY RIGHTS MAKE CATERPILLAR LIABLE IN CONNECTION WITH SERVICES OR GOODS, THEN TO THE EXTENT PERMITTED UNDER THE MANDATORY RIGHT'S, THAT LIABILITY SHALL BE LIMITED AT CATERPILLAR'S OPTION TO (a) IN THE CASE OF SERVICES, THE SUPPLY OF THE SERVICES AGAIN OR THE PAYMENT OF THE COST OF HAVING THE SERVICES SUPPLIED AGAIN AND (b) IN THE CASE OF GOODS, THE REPAIR OR REPLACEMENT OF THE GOODS, THE SUPPLY OF EQUIVALENT GOODS, THE PAYMENT OF THE COST OF SUCH REPAIR OR REPLACEMENT

CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ON THE PART OF ANY OF ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

CATERPILLAR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES UNLESS IMPOSED UNDER MANDATORY RIGHTS. IF OTHERWISE APPLICABLE, THE VIENNA CONVENTION (CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS) IS EXCLUDED IN ITS ENTIRETY.

C) For products supplied in Australia:

IF THE PRODUCTS TO WHICH THIS WARRANTY APPLIES ARE:

- PRODUCTS OF A KIND ORDINARILY ACQUIRED FOR PERSONAL, DOMESTIC OR HOUSEHOLD USE OR CONSUMPTION; OR
- PRODUCTS THAT COST AUD 40,000 OR LESS.

WHERE THOSE PRODUCTS WERE NOT ACQUIRED FOR THE PURPOSE OF RE-SUPPLY OR FOR THE PURPOSE OF USING THEM UP OR TRANSFORMING THEM IN THE COURSE OF PRODUCTION OR MANUFACTURE OR IN THE COURSE OF FIXTURES, THEN THIS SECTION C APPLIES.

THE FOLLOWING MANDATORY TEXT IS INCLUDED PURSUANT TO THE AUSTRALIAN CONSUMER LAW AND INCLUDES REFERENCES TO RIGHTS THE USER MAY HAVE AGAINST THE DIRECT SUPPLIER OF THE PRODUCTS: OUR GOODS COME WITH GUARANTEES THAT CANNOT BE EXCLUDED UNDOR THE AUSTRALIAN CONSUMER LAW. YOU ARE ENTITLED TO AR REPLACEMENT OR REFUND FOR A MAJOR FAILURE AND COMPENSATION FOR ANY OTHER REASONABLY FORESEEABLE LOSS OR DAMAGE. YOU ARE ALSO ENTITLED TO HAVE THE GOODS REPAIRED OR REPLACED IF THE GOODS FAIL TO BE OF ACCEPTABLE QUALITY AND THE FAILURE DOES NOT CANSTITUTE ANY REPRESENTATION OR ACCEPTANCE BY CATERPILLAR OF LIABILITY TO THE USER OR ANY OTHER PERSON IN ADDITION TO THAT WHICH CATERPILLAR MAY HAVE UNDER THE AUSTRALIAN CONSUMER LAW.

TO THE EXTENT THE PRODUCTS FALL WITHIN THIS SECTION C BUT ARE NOT OF A KIND ORDINARILY ACQUIRED FOR PERSONAL, DOMESTIC OR HOUSEHOLD USE OR CONSUMPTION, CATERPILLAR LIMITS ITS LIABILITY TO THE EXTENT IT IS PERMITTED TO DO SO UNDER THE AUSTRALIAN CONSUMER LAW TO, AT ITS OFFIVE THE REPAIR OR REPLACEMENT OF THE PRODUCTS, THE SUPPLY OF EQUIVALENT PRODUCTS, OR THE PAYMENT OF THE COST OF SUCH REPAIR OR REPLACEMENT OR THE ACQUISITION OF EQUIVALENT PRODUCTS.

THE WARRANTY SET OUT IN THIS DOCUMENT IS GIVEN BY CATERPILLAR INC. OR ANY OF ITS SUBSIDIARIES, 100 N. E. ADAMS ST, PEORIA, IL USA 61629, TELEPHONE 1 309 675 1000.THE USER IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH MAKING A CLAIM UNDER THE WARRANTY SET OUT IN THIS DOCUMENT, EXCEPT AS EXPRESSLY STATED OTHERWISE IN THIS DOCUMENT, AND THE USER IS REFERRED TO THE BALANCE OF THE DOCUMENT TERMS CONCERNING CLAIM PROCEDURES, CATERPILLAR RESPONSIBILITIES AND USER RESPONSIBILITIES.

TO THE EXTENT PERMISSIBLE BY LAW, THE TERMS SET OUT IN THE REMAINDER OF THIS WARRANTY DOCUMENT (INCLUDING SECTION B) CONTINUE TO APPLY TO PRODUCTS TO WHICH THIS SECTION C APPLIES.

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CONTROL YOUR COSTS **MINIMIZE YOUR RISKS**

failures caused by defects in materials and workmanship. With the Powertrain Equipment Protection Plan, you can This plan safeguards your investments in new, used and rebuilt machines beyond the standard warranty period. increase the predictability of service and maintenance It includes all parts and labor to protect you against costs—and reduce unplanned downtime.





- Perform necessary inspections to
- · Install parts approved by Caterpillar on
- Validate your enrollment in the program





- confirm eligibility
- covered repairs





WHAT YOU DO

- Operation & Maintenance Manual (OMM) Operate equipment according to the Cat
- Upon request, provide proof of preventive maintenance Have recommended preventive maintenance performed at intervals specified in the OMM
- Promptly provide the machine for repair in the event of a covered failure

compliance (receipts, copies of work orders, invoices)

Camshaft & Camshaft Bearings Engine - Internal Components

liming / Accessory Gears nlet / Exhaust Valve Timing Chain / Belt

Valve Spring & Guide Jaive Cover & Base

Rocker Shaft Assembly Rocker Arm

Fuel Injection Pumps

Water Pump

Manifolds -an Motor

Oil Cooler

Push Rod Balancer

Senders / Solenoids / Sensors

Lift / Transfer Pump

Injectors

Flywheel & Torque Converter

Thermostat

Engine Oil Filter Mount

Fuel Pump / Governor Drive Oil Pump

Fan & Fan Drive Oil Pan Group

Fransmission Oil Filter Base Final Drives/Planetary Fransmission Gears Hydraulic Controls **Transmissions** fransfer Case **Drive Shafts**

Crankshaft, Main Bearings & Rod

Piston & Connecting Rod

Piston Rings

Oil Hoses / Lines (non-hydrostatic)

Cylinder Block

AC Compressor / Condenser Electronic Control Modules

Turbocharger

Drive (pilot / eh) Control Valves Linkage / lines Connected to **Bevel and Transfer Case** Aydrostatic Pumps & Drive Motors Hystat Pump

Final Drive Case / Bore Final Drive & Wheel Final Drive Chain Final Drive Gears Axle Seals

Drive Axle Oil Pump Axle Shaft

Steering Clutch & Brake Control Valve Steering Clutch

Hydraulic Oil Coolers

EXCLUSIONS

included in the plan. Other exclusions include: If a component is not listed, it may not be

- Improper or abusive use of the machine
- rendered unusable by a covered component failure and other maintenance items replaced during the covered component repair, unless such items are > Lubricating oil, antifreeze, filters, consumables
- > Failures caused by normal wear-out
- > Freight charges for parts shipments
- > Travel time and mileage involved in getting to a job site
- > Hauling costs and / or retrieval costs
- > Overtime labor costs
- > Repair costs resulting from the failure of any non-covered components
- > Downtime loss
- > Equipment rental charges
- incurred as a result of a covered component failure. > Any incidental / consequential damages or costs
- Modifications unless approved by Caterpillar

Examples of covered and excluded components included components and more information on Cat Equipment Protection Plans, contact your local Cat dealer. contract will govern. For a complete list of or items are listed here. The actual dealer



Employment Eligibility Verification



User IO TMOR9-102

Last Logan 09:22 AM - 01/06/2012

View / Edit



Click any 🚱 for help

Home

My Cases

Hey Casa

View Cases

Search Cases

My Profile

Edit Profile

Change Password

Change Security Questions

My Company

Edit Company Profile

Add New User

View Existing Users

Close Company Account

My Reports

View Reports

My Resturces

View Essential Resources

Take Tutorial

View User Manual

Contact Us

Company Information

Company Name:

Thompson Tractor Co., Inc.

Company ID Number: 47130

Doing Business As (DBA)

DUNS Number:

Physical Location:

Address 1:

Address 2:

City:

State:

Zip Code:

County:

Birmingham AL

35217

JEFFERSON

1,000 to 2,499

2401 Pinson Highway

Additional Information:

Employer Identification Number: 630377478

Total Number of Employees:

Parent Organization:

Administrator:

Organization Designation:

Employer Category:

Mailing Address:

Address 1: P O. Box 10367

Address 2:

City:

Birmingham

State: AL

Zip Code: 35202-0367

NAICS Code:

423 - MERCHANT WHOLESALERS, DURABLE GOODS

View / Edit

Total Hiring Sites:

40

View / Edit

Total Points of Contact:

View / Edit

View MOU

Company ID Number: 47130

the Employer issues a tentative nonconfirmation based upon a photo non-match. The Employer will determine whether the employee contests the tentative nonconfirmation as soon as possible after the Employer receives it.

- 4. If the employee contests a tentative nonconfirmation issued by DHS, the Employer will provide the employee with a referral letter and instruct the employee to contact the Department through its toll-free hotline within 8 Federal Government work days.
- 5. If the employee contests a tentative nonconfirmation based upon a photo non-match, the Employer will provide the employee with a referral letter to DHS. DHS will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.
- 6. The Employer agrees that if an employee contests a tentative nonconfirmation based upon a photo non-match, the Employer will send a copy of the employee's Form I-551 or Form I-766 to DHS for review by:
 - Scanning and uploading the document, or
 - Sending a photocopy of the document by an express mail account (furnished and paid for by DHS).
- 7. The Employer understands that if it cannot determine whether there is a photo match/non-match, the Employer is required to forward the employee's documentation to DHS by scanning and uploading, or by sending the document as described in the preceding paragraph, and resolving the case as specified by the Immigration Services Verifier at DHS who will determine the photo match or non-match.

ARTICLE IV

SERVICE PROVISIONS

The SSA and DHS will not charge the Employer for verification services performed under this MOU. The Employer is responsible for providing equipment needed to make inquiries. To access the E-Verify System, an Employer will need a personal computer with Internet access.

ARTICLE V

PARTIES

This MOU is effective upon the signature of all parties, and shall continue in effect for as long as the SSA and DHS conduct the E-Verify program unless modified in writing by the mutual consent of all parties, or terminated by any party upon 30 days prior written notice to the others. Any and all system enhancements to the E-Verify program by DHS or SSA, including but not limited to the E-Verify checking against additional data sources and instituting new verification procedures, will be covered under this MOU and will not cause the need for a supplemental MOU that outlines these changes. DHS agrees to train employers on all changes made to E-Verify through the use of mandatory refresher tutorials and updates to the E-Verify manual. Even

Company ID Number: 47130

INFORMATION REQUIRED FOR THE E-VERIFY PROGRAM				
Information relating to your Comp	any:			
Company Name:	Thompson Tractor Co., Inc.			
Company Facility Address:	2401 Pinson Highway Birmingham, AL 35217			
Company Alternate Address:	P.O. Box 10367 Birmingham, AL 35202-0367			
County or Parish:	JEFFERSON			
Employer Identification Number:	630377478			
North American Industry Classification Systems Code:	423			
Parent Company:				
Number of Employees:	1,000 to 2,499 Number of Sites Verified for: 5			
Are you verifying for more than 1 site? If yes, please provide the number of sites verified for in each State.				
• GEORGIA	5 site(s)			

Information relating to the Program Administrator(s) for your Company on policy questions or operational problems:

Name: Telephone Number:

Fax Number:

(205) 849 - 4565

E-mail Address:

Kimberly A Stark (205) 849 - 4279 H kimberlystark@thompsontractor.com

Name:

Frank M Wright (205) 849 - 4267

Fax Number:

(205) 849 - 4854

Telephone Number: E-mail Address:

frankwright@thompsontractor.com

(Rev. October 2007)

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

111011101						
is	Name (as shown on your income tax return) Thompson Tractor Co., Inc. DBA Thompson Power Systems, Thompson Lift Truck Co.					
раде						
5	Business name, If different from above					
8	and The Cat Rent Store					
Print or type Specific Instructions on	Check appropriate box: Individual/Sole proprietor Corporation Partnership Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) >					
불분	Address (number, street, and apt. or suite no.)	T	Requester's name and address (optional)			
들트	P O Box 10367 2401 Pinson Hwy. Tarrant	AL 35217	2000 CO. C.			
#	City, state, and ZIP code	- Au JJEII				
ě	and the same of th					
S	Birmingham, AL 35202-0367 List account number(s) here (optional)					
See	Lockbox Remit To: P O Box 934065, At	lanta, GA 31	193-400	5	3.	
	The state of the s	Zuncu, on or		-		
	177					
Enter y	our TIN in the appropriate box. The TIN provided must match the r	name given on Line 1 t	O avoic	ocial socur	ty number	
backur	o withholding. For individuals, this is your social security number (Sicole proprietor, or disregarded entity, see the Part I instructions on I	SN). However, for a res	es. It ls			
your er	inployer Identification number (EIN). If you do not have a number, se	ee How to get a TIN or	page 3.	or		
	If the account is in more than one name, see the chart on page 4 for		E		untification number	
numbe	r to enter.			63 : 03	77478	
Late	Certification	<u></u>				
Under	penalties of perjury, I certify that:					
1 The	number shown on this form is my correct texpayer identification r	number (or I am walting	for a number	er to be iss	ued to me), and	
2. I ar	n not subject to backup withholding because: (a) I am exempt from venue Service (IRS) that I am subject to backup withholding as a re ified me that I am no longer subject to backup withholding, and	hackun withholding, o	or (b) I have r	not been n	otified by the Internal	
3 1 ac	n a U.S. citizen or other U.S. person (defined below).					
For mo	pation instructions. You must cross out item 2 above if you have a ding because you have failed to report all interest and dividends or atgage interest paid, acquisition or abandonment of secured properment (IRA), and generally, payments other than interest and divide your correct TIN. See the instructions on page 4.	n your tax return, For r	ea estate tra	ns to an Ir	dividual retirement	
Sign Here	Signature of Linda & Duntax Con	troller .	Oate >			
	eral Instructions	Definition of a U.S. p	6. person, f erson if you	or federa are:	I tax purposes, you are	
	references are to the Internal Revenue Code unless	 An Individual who is a U.S. citizen or U.S. resident alien, 				
	se noted.	 A partnership, co 	rporation, co	ompany, o	or association created or	
	ose of Form	organized in the Ur States,	ited States	or under t	he laws of the United	
A person who is required to file an Information return with the IRS must obtain your correct taxpayer identification number (TIN) • An estate (other than a foreign estate), or						
to repo	rt, for example, income paid to you, real estate tions, mortgage Interest you paid, acquisition or	 A domestic trust (as defined in Regulations section 301.7701-7). 				
abandonment of secured property, cancellation of debt, or Special rules for partnerships. Partnerships that conduct a						
	utions you made to an IRA.	trade or business in	the United	States ar	e generally required to	
residen	Form W-9 only if you are a U.S. person (including a t alien), to provide your correct TiN to the person ing it (the requester) and, when applicable, to:	pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that				

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be Issued).

- 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note, if a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

a partner is a foreign person, and pay the withholding tax. Therefore, it you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the

. The U.S. owner of a disregarded entity and not the enlity,