## BID SUBMITTAL FORM Alabama County Joint Bidding Program Heavy Equipment – Bid Item: Heavy Duty Motorgrader-Option B

Company Name: THOMPSON TRACTOR COMPANY	
Address: P.O. BOX 10367	
BIRMINGHAM, AL 35202-0367	
Bid Submitted by:JAY_SMITH (Name of company representative)	
Title: SALES OPERATIONS MANAGER e-mail address: JAYSMITH@THOMP	SONTRACTOR.COM
Phone: (205) 849-4242 Fax: (205) 849-4394	-
By submitting this bid, we agree:	Initials
The equipment model number identified below meets the bid specs for this bid item	DA
That the bid price will be honored for all counties for the period from Jan. 1, 2021 to Dec. 31, 2021.	J1S
The equipment will be delivered at the bid price to all counties participating in the joint bid program.	DIS
The company acknowledges the freight preparation and delivery price is to be included in the total bid price for the standard machine.	DE
The company representative listed above will be the contact person for purchasing this bid item under the joint bid program.	D18
The bid is accompanied by a current catalog or model specification document for the model number identified below.	249
The bid is accompanied by a copy of the manufacturer's standard warranty as required in the bid specifications.	9/19
The bid includes the e-verify documentation required by Alabama law.	210
If awarded the bid, a performance bond will be provided upon request.	948

The bid documents include the Manufacturer's Suggested Retail Price Sheet (MSRP)

for the Standard Machine.

Total Bid Price for Standard Machine: \$ _227,544 _ (Total Bid Price for Standard Machine Includes Freight Preparation, Delivery and Standard Warranty Costs) *
Freight Preparation and Delivery: \$7,289(Included in Standard Machine Bid Price)
Manufacturer's Suggested Retail Price for Standard Machine: \$ 379,750
Equipment Model #:CATERPILLAR 140
Description: MOTOR GRADER
Signature of company representative submitting bid:
Title: <u>SALES OPERATIONS MANAGE</u> R

<sup>\*</sup> 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.

#### **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 140
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.

#### 140 HEAVY DUTY MOTOR GRADER B

140	HEAVY DUTY MOTOR GRADER B	2021 Pricing
515-2449	140 MOTOR GRADER	\$352,066
439-9110	14' PLUS MOLDBOARD	\$1,404
100 0110	BLADE, 14' X 27" X 1"	\$0
	INCLUDES END BITS WITH OVERLAY	\$0
507-7694	TOWING HITCH	\$556
522-6393	COLD WEATHER PACKAGE (ETHER STARTING AID)	\$778
380-6774	NON SY-KLONE PRECLEANER	\$0
559-2201	HYDRAULIC LINK BAR	\$0
522-6751	STANDARD DRAWBAR	-\$2,803
566-5529	NO GRADE CONTROL TECHNOLOGY	\$0
453-2908	MANUAL LOCK OUT	\$1,369
524-8998	BASE HYDRAULICS	\$0
526-9853	BLADE ACCUMULATORS	\$4,782
515-2231	HEAVY DUTY STARTER	\$0
562-3742	ROADING LIGHTS W/ FOLD DOWN ARM	\$1,924
522-6688	CAB PLUS	\$1,884
518-3382	AIR SUSPENSION SEAT	\$2,621
565-2320	EXTERNAL MIRRORS	\$0
519-3712	CELULAR PRODUCT LINK PLE641	\$0
558-3846	STANDARD FAN	\$0
252-0714	14.0 R24 BS VKE * G2 TIRES ON MULTI PIECE RIMS	\$7,252
522-6654	COOLANT	\$0
0P-1939	WINDHSHIELD WASHER	\$0
0P-3978	FUEL ANTIFREEZE	\$0
386-1254	ENGLISH INSTRUCTIONS	\$0
516-2552	ENGLISH DECALS	\$0
519-3700	HALOGEN LIGHTS	\$657
501-4739	HALOGEN CAB ROOF LIGHTS	\$0
518-3017	WARNING STROBE	\$581
524-1768	REAR VISION CAMERA	\$2,601
518-3026	AM/FM BLUETOOTH RADIO	\$596
522-2419	TRANSMISSION GUARD	\$3,485
	TOTAL BID PRICE FOR STANDARD MACHINE	\$227,544
	FREIGHT PREPARATION AND DELIVERY	\$7,289
		,
Т	OTAL MANUFACTURER'S SUGGESTED RETAIL PRICE FOR STANDARD MACHINE	\$379,750

#### BID SPECIFICATIONS FOR HEAVY DUTY MOTOR GRADER – OPTION B

#### **GENERAL**

These specifications shall be construed as the minimum acceptable standards for a heavy-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. Additionally, 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 X

#### **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 manufacturer.** 

Yes X No Page #3,4

Engine displacement shall not be less than **567 cu. in**. and shall develop, as standard, a rated variable net power of at least **177 -250 HP**.

Yes X No \_\_\_ Page #\_ 4

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

Yes X No Page #4, 140 price

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.

Yes X No Page # 140 price page

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.

Yes X No Page # Bid Spec. P. 1

#### STARTING SYSTEM

Shall be equipped with a 24-volt electrical system. 115-amp alternator.

Yes X No Page # Bid Spec. P. 1 Tech Spec. P.G.

TRANSMISSION-8 Forward Speeds and 6 Reverse Speeds

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

Yes X No Page # 140 price page

Shall be equipped with built-in self-diagnostic capability

Yes X No Page # 17

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

Yes X No Page #

Final drive shall be a planetary design.

Yes X No Page #Bid Spec. P.1

140 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 and automatic dust ejector Air-to-air after cooler (ATAAC) Belt, serpentine, automatic tensioner Brakes, oil disc, four-wheel, hydraulic Demand fan, hydraulic Electronic over-speed protection Engine, C9 with ACERT technology, diesel with automatic engine derate and idle control. EPA/ARB tier 4 final & EU stage IV certified engine & aftertreatment Parking brake, multi-disc, sealed and oil cooled Sediment drain, fuel tank Tandem drive Transmission, 8 speed forward and 6 speed reverse, power shift, direct drive VHP Plus (Variable Horse Power Plus)

#### **ELECTRICAL**

Steering wheel

Alarm, back-up Alternator, 150 ampere, sealed Batteries, maintenance free, heavy duty, 1125 CCA Breaker panel Electrical system, 24 volt Lights, reversing Starter, electric

#### OPERATOR ENVIRONMENT

Air Conditioning with heater

Articulation Centershift pin indicator Display, digital speed and gear Load sensing hydraulic controls: -Right/left blade lift -Circle drive -Center shift -Side shift -Blade tip -Front wheel lean Doors, left and right side Gauge, machine level Gauges (analog) inside the cab (includes fuel, articulation, engine coolant temp, engine RPM and hydraulic oil temp, DEF/AdBlue) Lights, night time cab Messenger Display -Meter

-Hour digital Mirror Inside rearview, wide angle Power port, 12V Radio ready, entertainment ROPS cab, 77dB(A) ISO 6394 Storage area for cooler/lunchbox Throttle control, electronic Windows: laminated glass Fixed front with intermittent wiper windows: tempered Left and right side wipers Cab Storage

#### SAFETY AND SECURITY

Clutch, circle drive slip Doors, 2 engine compartment, (two left hand, two right hand) locking Doors, 2 service, left and right locking Ground level engine shutdown Hammer (emergency exit) Horn, electric Seat belt, retractable 3" Secondary steering Tandem walkway/guards

#### **FLUIDS**

Antifreeze Extended life coolant -35C/-30F

#### OTHER STANDARD EQUIPMENT

Accumulators -brake -dual certified Drawbar,6 shoe w/replaceable wear strips Fluid check, ground level Fuel tank, 100 gallon (378 L) Ground level fueling DEF/AdBlue Tank, 3.3 gallon (12.5 L) Hydraulic lines for base functions Pump, hydraulic, high capacity (100cc / 6 cu in) Radiator, cleanout access (both sides with swing doors) SOS ports - engine -hydraulic -transmission -coolant -fuel Tool box Debris guard

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 of oscillating 15 degrees front up and 22 degrees Rear up, with full machine articulation and having no interference between tandem wheel and machine structure

#### **CONTROLS AND HYDRAULICS**

Conventional lever style controls

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.

#### **BLADES**

Machine shall be equipped with 14 ft. long, 25 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.

Yes X No Page # Bid Spec. P. 1 Yes X No Page #Tech Spec. P. 3 Bid Spec. p. 3

Yes X No Page # Bid Spec. P.2

Yes X No Page # Bid Spec . P. 1

Yes X No Page # Bid Spec. P. 1

Yes X No Page # Bid Spec. P. 1

Yes X No Page #140 Price page Yes X No Page # Bid Spec. P.1

**140LVR** 

LIST PRICE

Ship Weight REF LANE 2 / 3 MANDATORY AT DEALER lbs USE NO. LANE SELECTION OP-9002 Only for dealers enrolled in the Base Orders Management (BOM) program. LANE 3 ORDER....... OP-9003 PERFORMANCE PACKAGES **MOLDBOARDS** MOLDBOARD, 12' BASIC ..... 0 L 320-9924 FOR USE IN LANE 3 ONLY **INCLUDES:** - Moldboard 12' x 24" x 7/8" (3658mm x 610mm x 22mm) - Curved Cutting Edge, 6" X 5/8" (152mm x 16mm) - End Bits, Standard, Without Overlay MOLDBOARD, 14' BASIC ..... 0 526-7045 L INCLUDES: - Moldboard 14' x 24" x 7/8" (4267mm x 610mm x 22mm) - Curved Cutting Edge, 8" x 3/4" (203mm x 19mm) - End Bits, Standard, Without Overlay MOLDBOARD, 14' PLUS ..... 0 439-9110 L INCLUDES: - Moldboard 14' x 27" x 1" (4267mm x 686mm x 25mm) - Curved Cutting Edge, 8" x 3/4" (203mm x 19mm) - End Bits, Standard, With Overlay REAR WORK TOOLS P 523-8156 Provides a plate that bolts to the bumper that allows for attachment points for ripper or auxiliary hoses. HITCH, TOWING ..... 0 507-7694 P Retrieval hitch. Does not include pin. 515-4649 Hydraulic, rear mounted ripper with three straight ripper shanks. Can accommodate two additional ripper shanks and nine scarifier teeth which must be ordered separately. RECOMMENDED FOR USE WITH: 336-1559 PUSH PLATE, COUNTERWEIGHT 558-2400 L FOR USE IN LANE 3 ONLY Hydraulic, rear mounted ripper with three straight ripper shanks. Includes the mount for the Caterpillar Mastless Snow Wing on the right side of the ripper backplate. Can accommodate two additional ripper shanks, nine scarifier teeth, and the Caterpillar Mastless Snow wing which must be ordered separately.

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

DRAWBAR AND CIRCLE

Circle shall be a single piece, rolled ring forging with raised wearing surface top and bottom

Must be equipped with replaceable wear strips between circle and support 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.

The circle shall be steel construction with 6 replaceable wear shoes.

**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 joints.

STEERING WHEEL

Fully hydraulic, **2-cylinder** steering system, with front steering wheel angle not less than **50°** left or right.

Yes X No Page # Bid Spec. P. 3

Yes  $\frac{X}{N_0}$  Page # Bid Spec . P. 2

Yes X No Page # Bid Spec. P.2

Yes X No Page # Bid Spec. P. 3

Yes X No. Page #BIOSpec.P.3

Yes X No Page # Bid Spec.P.2

Yes X No Page #Bicl Spec. P. 1

Yes X No Page # Bid Spec. P.3

Yes X No Page # Bid Spec .P. 1

Yes X No Page # Bid Spec. P. 1 **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.

Yes X No Page #140 Tire Section

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

Yes X No \_\_\_\_\_ Page #140 Tire Section

**BRAKES** 

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

Yes X No Page # Bid Spec. P. 1

**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.

Yes X No \_\_\_ Page #\_\_\_\_

**WEIGHT (STANDARD OPERATING)** 

Base machine weight shall not be less than **42,325 lbs**. Weight shall include standard machine configuration, lubricants, coolants, full fuel tank, push block, transmission guard, rear ripper/scarifier, 14.0 R24 tires on multi-piece rims, and operator of **200lbs** This is factory specified operating weight only. No additional weights may be added for purpose of meeting these specifications.

Yes X No. Page # 4 Tech Specs P.3 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, the dealer will be contacted to propose alternative tire options. The dealer will need to respond with an alternative tire selection within 72 hours. If no response is provided by the supplier, the order will default to a comparable tire. As a consequence of a tire change the total machine price will be decreased or increased relative to the price of the new tire selection.

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.

#### APPLICATION SPECIFIC

L	515-5399	TIRES,14.0R24 SOIL TRACTION MP
L	515-5400	TIRES,17.5R25 SOIL TRACTION MP

USE NO. LANE 2 / 3 MANDATORY

Ship Weight Ibs AT DEALER

TIRES, RIMS, AND WHEELS (CONT.)

APPLICATION SPECIFIC (Cont.)

L 515-5404 Tire group received will be one of the tire groups listed below: - Bridgestone VKT 1\* on 10" x 24" multi-piece rims. - Michelin XGLA2 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.\*\* 515-8361 140-13AAWD MOTOR GRADER ONLY FOR USE WITH: L 515-5405 Tire group received will be one of the tire groups listed below: - Bridgestone VKT 1\* on 14" x 25" multi-piece rims. - Michelin XTLA 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.\*\* 515-8361 140-13AAWD MOTOR GRADER ONLY FOR USE WITH: SHIPPING TIRES

	SHIPPING TIL	RES
L	448-5577	TIRES, 14.0 SHIPPING, MP
L	440-3433	TIRES, 17.5 SHIPPING, MP
L	448-5584	TIRES, 14.0 SHIPPING, AWD, MP  FOR USE WITH LANE 3 ONLY  Due to the height of the shipping tires, unloading will most likely require a crane to avoid damaging the bottom of the machine.  Shipping tire for use during shipment of machine only.  Solid rubber band mounted on 10" x 24" multi-piece rims.  Must be replaced with pneumatic tire before delivering to customer.  ONLY FOR USE WITH: 515-8361 140-13AAWD MOTOR GRADER
L	440-3434	TIRES, 17.5 SHIPPING, AWD, MP

ONLY FOR USE WITH:

515-8361 140-13AAWD MOTOR GRADER

**REF** Ship Weight LIST PRICE LANE 2 / 3 MANDATORY USE NO. AT DEALER lbs

#### TIRES, RIMS, AND WHEELS (CONT.)

#### MAXAM

L	578-9458	TIRES 17.5R25 MA MS202 ** MP
L	578-9460	TIRES 14.00R24 MA MS202 * MP
Ĺ	578-9462	TIRES 17.5R25 MA MS202 ** MP
L	578-9463	TIRES 14.00R24 MA MS202 * MP
	MICHELIN	
L	252-0701	TIRES,14.0R24 MX XSNO + * G2 MP
L	252-0771	TIRES, 17.5R25 MX XTLA * L2 MP
L	249-7845	TIRES,14.0R24 MX XSNO + * G2 MP
L	252-0679	TIRES,14.0R24 MX XGLA2 * G2 MP
L	252-0777	TIRES,17.5R25 MX XSNO+ * G2 MP

REF Ship Weight LIST PRICE LANE 2 / 3 MANDATORY USE NO. lbs AT DEALER TIRES, RIMS, AND WHEELS (CONT.) MICHELIN (Cont.) L 252-0681 TIRES,14.0R24 MX XGLA2 \* G2 MP ..... 1,048 Michelin XGLA2 1\* on 10" x 24" multi-piece rims. THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING (7824 lbs) 3550 kg.\*\* ONLY FOR USE WITH: 515-8361 140-13AAWD MOTOR GRADER L 252-0773 Michelin XTLA 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.\*\* 515-8361 140-13AAWD MOTOR GRADER ONLY FOR USE WITH: L 252-0779 Michelin XSNO+ 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: 515-8361 140-13AAWD MOTOR GRADER BRIDGESTONE L 252-0714 TIRES, 14.0 R24 BS VKT \* G2 MP ..... 1,540 Bridgestone VKT 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.\*\* ONLY FOR USE WITH: 515-2449 140-13A MOTOR GRADER 252-0775 L 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.\*\* L 586-5268 FOR USE IN LANE 3 ONLY 6 X Bridgestone VKT 3\* on 9- X 24- Single Piece Rims THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING 3650 kg (8045 LBS). 515-2449 140-13A MOTOR GRADER ONLY FOR USE WITH: L 586-5273 FOR USE IN LANE 3 ONLY. 6 X Bridgestone VKT 3\* on 10- X 24- Multipiece Rims THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING 3650 kg (8045 LBS). 515-8361 140-13A AWD MOTOR GRADER ONLY FOR USE WITH: L 249-7841 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.\*\* ONLY FOR USE WITH: 515-8361 140-13A AWD MOTOR GRADER

252-0716

THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL

515-8361 140-13AAWD MOTOR GRADER

Bridgestone VKT 1\* on 10" x 24" multi-piece rims.

TIRE LOADS EXCEEDING (8045 lbs) 3650 kg.\*\*

ONLY FOR USE WITH:

L

LIST PRICE Ship Weight REF LANE 2 / 3 MANDATORY AT DEALER lbs USE NO. TIRES, RIMS, AND WHEELS (CONT.) **GOODYEAR** L 310-7326 Goodyear RL2+ 6S 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: 515-2449 140-13A MOTOR GRADER L 310-7327 Goodyear RL2+ 6S on 14" x 25" multi-piece rims THE TIRE MANUFACTURER DOES NOT RECOMMEND THIS TIRE FOR INDIVIDUAL TIRE LOADS EXCEEDING (8045 lbs) 3650 kg.\*\* 515-8361 140-13AAWD MOTOR GRADER ONLY FOR USE WITH: **FLUIDS** COOLANT ANTIFREEZE COOLANT (-40C) ..... 0 P 522-6654 Standard engine coolant 522-6655 Engine coolant recommended for extreme low temperatures CAB ANTIFREEZE 0P-1939 **FUEL ANTIFREEZE** FUEL ANTIFREEZE, -25C (-13F) . . . . . . . . . . . . . . . . 0P-3978 Provides fuel (diesel) antifreeze protection down to -25C (-13F) DOCUMENTATION LANGUAGE SELECTION NOTE: This part number will provide the language for Messenger and Statement of Conformity. 386-1254 L 386-5928 L DECAL PACKAGES NOTE: This part number will provide the films in ANSI or ISO Pictograms The word "WARNING" is on picto decals for ANSI. Symbols only are on picto decals for ISO. DECALS, ENGLISH (US) ..... 0 P 516-2552 Provides decals as required by ANSI.

140 MOTOR GRADER

Engine Power Operating Weight 186 kW (250 hp) 19 198 kg (42,325 lb) CAT

Cat<sup>3</sup> C9.3 Engine meets U.S. EPA Tier 4 Final and EU Stage IV emission standards.

PAT

# THE NEW CAT 140

GRADING GREATER LENGTHS

THE CAT® 140 uses Caterpillar's 45 years of refined steering wheel and lever controls experience for more precise grading. With a range of technology options, you can improve grading accuracy and save on materials. With lowered maintenance intervals, the 140 Motor Grader sets the pace for low operating costs, while maintaining productivity and efficiency.



#### **GET TO BETTER GRADE**

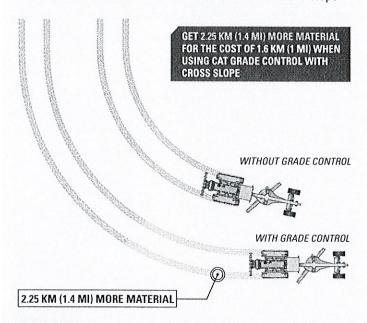
The new Cat 140 Motor Grader combines steering wheel and lever controls and Cat GRADE technology for high performance.

- + SPEND LESS TIME AND MONEY ON REGULAR MAINTENANCE
- + UPDATED CAB FOR MAXIMUM COMFORT
- + FACTORY INTEGRATED GRADE TECHNOLOGY OPTIONS



#### SAVE MORE MATERIAL.

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



#### SCENARIO:

1559 M½KM (2,039 YD½MI) MOVED WITH NON-GRADE CONTROL – 924 M½KM (1,208 YD½MI) MOVED WITH GRADE CONTROL = 635 M½KM (831 YD½MI) MATERIAL SAVED

## UP TO 20% LOWER MAINTENANCE COSTS<sup>1</sup>

Extend typical maintenance intervals with the new filtration technology and grouped filters for easy access.

## CAB DESIGNED FOR MAXIMUM COMFORT

Be productive and comfortable with steering wheel and lever controls and the ergonomically adjustable console and seat.

#### SAVE UP TO 40% IN MATERIAL<sup>2</sup>

Use less material with scalable Cat GRADE technology solutions to increase accuracy and consistency.



<sup>1</sup> Compared to 140M3

<sup>&</sup>lt;sup>2</sup> Compared to not using Cat GRADE control

## TAKE 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 GRADE TECHNOLOGY



#### **CROSS SLOPE**

Cat GRADE with Cross Slope is an integrated system that enables you to achieve grade faster and more accurately by automating the cross slope of the blade, allowing you to get more done in the same amount of time.



#### **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**

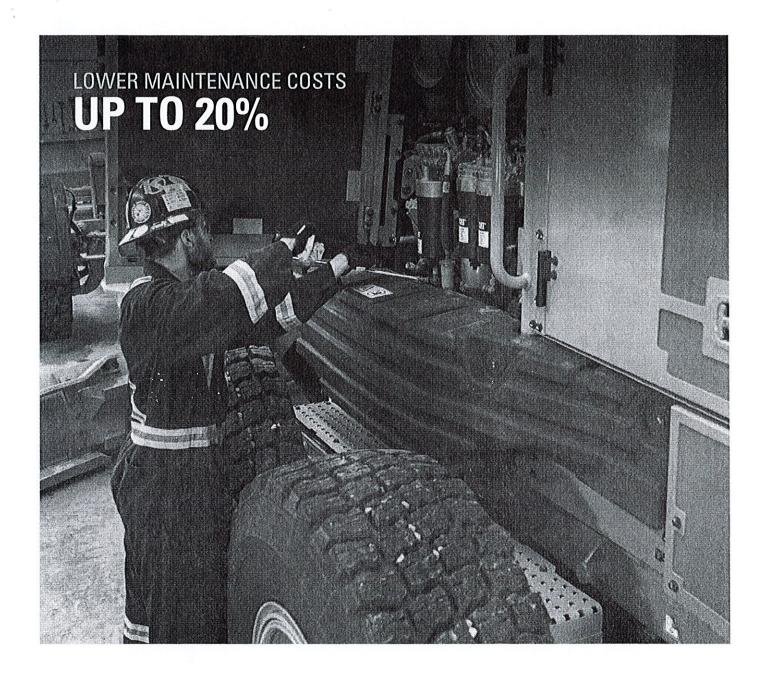
View blade slope on the integrated machine display with the Digital Blade Slope Meter. Reduce the need for manual grade checking to keep you and your worksite safer.



#### **ADDITIONAL OPTIONS**

Cat GRADE Attachment Ready Option (ARO) integrates easily with Cat Grade and 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

Filters are grouped together for preventative maintenance and easy access. With less waste, the filters are more environmentally friendly.

## LONGER SERVICE INTERVALS

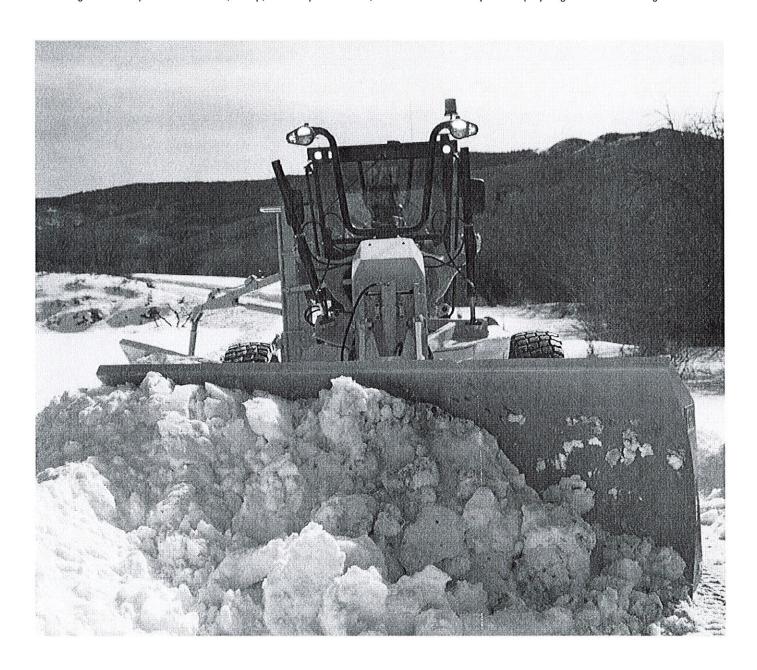
Maintenance intervals are synchronized to reduce downtime. Instead of changing filters every 500 hours, the new filters are changed at 1,000 hours.

## GROUND LEVEL FUEL FILL

Ground level fueling reduces the need to climb onto the machine. With a large fuel capacity of 378.5 L (100 gal) and ECO mode engaged, you can work longer without the need to refuel.

#### FEEL THE CONTROL AND POWER WITH THE ALL-WHEEL DRIVE OPTION

Providing maximum power of 201 kW (270 hp) and full power turns, the all-wheel drive option helps you get the best footing.



## MAXIMUM TRACTION WITH

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

#### **FAMILIAR CONTROLS**

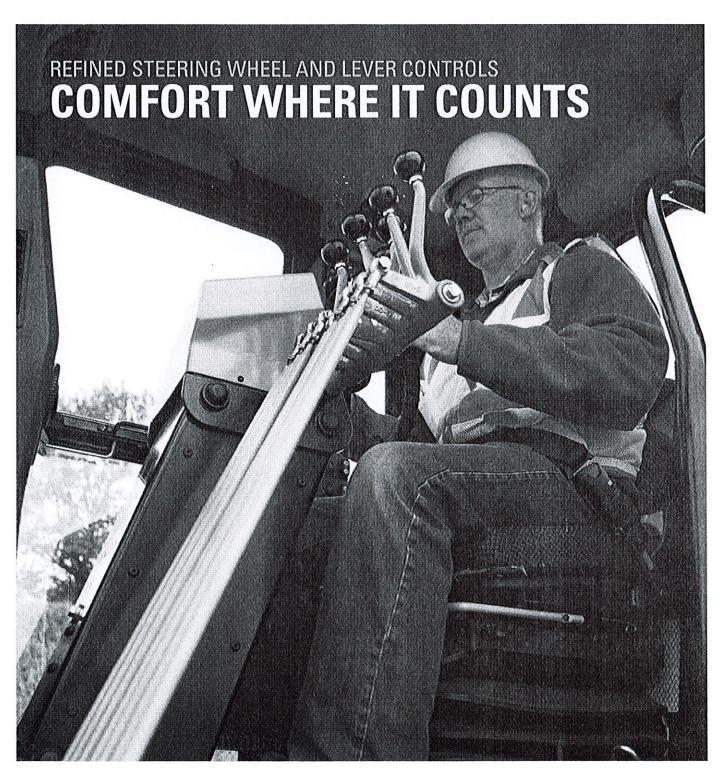
Distances between the steering wheel and levers are optimized to help reduce effort and strain on the operator.

#### **ISO-CERTIFIED ROPS**

The ISO-certified ROPS cab is sound suppressed and sealed. Vents provide heating and cooling.

#### **COMFORTABLE CAB**

Optional air suspension seat lets you adjust to your ideal comfort level.
Convenience features include radio, cup and bottle holders, and storage.





#### CONVENIENT SETTINGS

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



#### **ENHANCED VISIBILITY**

With the larger windows, rear and sideview mirrors, you can see the job site all around you. Rearview camera option offers a wide view of the rear of the machine to get the best visibility.





#### STOP SAFELY

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



#### **EASY ON AND OFF**

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

The 140 Motor Grader is equipped with the six-cylinder Cat C9.3 engine for power and reliability. The 140 is optimized for power in all gears to get the job done.

# PROVEN POWER AND RELIABILITY ELEVATE YOUR PERFORMANCE



#### REDUCE COOLING SYSTEM CLEANING

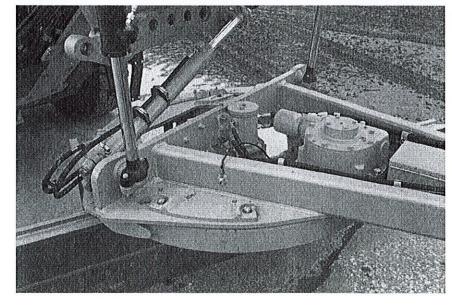
Adding the reversing fan option helps reduce maintenance costs. The fan helps prevent material from building up and blocking air flow by the rear door intake screen in high debris applications. The reversing fan runs automatically.



Keep your circle moldboard tight for grade precision throughout the motor grader's life. Durable structures with drawbar circle moldboard adjustments save you service time with replaceable wear inserts with standard or top adjust options.

#### **TOP ADJUST CIRCLE**

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



## SEE YOUR INVESTMENT GO FURTHER DESIGNED TO LAST

#### **MAXIMIZE COMPONENT LIFE**

Reduce daily greasing requirements with your machine's circle saver. The grease fitting is easy to access and maintain. Always keep your circle drive pinion greased with the Cat Circle Saver for maximum life.

#### **DIMINISH DAMAGE**

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

#### PRESERVE YOUR MACHINE

Protect your pinion drive and circle teeth from damage with the circle drive slip clutch. The standard slip clutch minimizes damage to your circle drive.















BALDERSON™ LIFT GROUP

**SCARIFIER** 

**MASTLESS SNOW WING** 

STRAIGHT BLADE

BALDERSON™ V-PLOW

#### **ENHANCE YOUR PRODUCTIVITY**

From masted and mastless snow wings to plows, you can easily 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	
Engine Model	Cat C9.3
Net Power – ISO 9249/SAE J1349	186 kW 250 hp
Net Power – EEC 80/1269	186 kW 250 hp
Net Power All Wheel Drive (AWD)	201 kW 270 hp
Bore	115 mm 4.5 i
Displacement	9.3 L 567.5 in
Stroke	149 mm 5.9 ii
Engine RPM	2,00
Torque Rise – ISO 9294	449
Maximum Torque – ISO 9294	1245 N·m 918 lb-f
Top Speed Forward	48.4 km/h 30.1 mp
Top Speed Reverse	37.4 km/h 23.2 mp
Turning Radius, Outside Front Tires	7.6 m 24 ft 11 i
WEIGHT	
Weight*	19 198 kg 42,325 l
All-Wheel Drive (AWD) Weight*	20 236 kg 44,613 l
*Typically equipped operating weight is cal- coolant, lubricants, operator, push block, to scarifier, 14.0R24 tires on multi-piece rims,	ransmission guard, rear ripper
SERVICE REFILL CAF	PACITIES
Fuel Tank	378 L 100 ga
Circle Drive	7 L 1.8 ga
Engine Crankcase	30 L 7.9 ga
(프로마): (1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	57 L 15 ga
Cooling System	37 L 13 Y
Cooling System Hydraulic System	
reservation and the propositions of the entire for the forthwest and the ma	CONTRACTOR DE LA CONTRA

BLADE RANGE		
Circle Center Shift		
Right	728 mm	28.6 in
Left	752 mm	29.6 in
Moldboard Side Shift		
Right	512 mm	20.1 in
Left	663 mm	26.1 in
Blade Tip Range		
Forward		40°
Backward		59
Maximum Shoulder Reach Outside of Tires		
Right	1928 mm	75.9 ir
Left	1764 mm	69.4 ir
Maximum Depth of Cut	735 mm	28.9 ir
Maximum Lift Above Ground	480 mm	18.9 ir
MOLDBOARD		
Width	3.7 m	12 f
Height	594 mm	23.4 ir
End Bit	152 mm	6 ir
Cutting Edge	152 mm	6 ir
Arc Radius	413 mm	16.3 ir
Throat Clearance	124 mm	4.9 ir
DIMENSIONS		
Length of Machine*	10 100 mm	397.6 ir
Maximum Height	3354 mm	148.8 ir
Width	2480 mm	97.6 ir
Basic Blade Width	3556 mm	140 ir
*Typically equipped with push block and ripper.		

#### **CAB FEATURES**

FEATURE	DESCRIPTION	BASE	COMFORT PLUS
ROPS	Sound Suppression	•	•
	Open Canopy	0	0
Seat Suspension	Mechanical	•	0
	Air	X	•
HVAC	Heating, Ventilation, and Air Conditioning	•	•
	Defrost Fans	0	•
Wipers	Front Wipers	•	•
	Rear Wiper	0	•
Lighting	Halogen Bulbs	•	•
	LED Bulbs	0	0

• - standard O - optional x - not available

#### **STANDARD & OPTIONAL EQUIPMENT**

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

ENGINE	STANDARD	OPTIONAL
Cat C9.3 engine	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Reversing fan		
ECO mode	•	
All-wheel drive (AWD)		
50° C (122° F) ambient capacity	•	
Engine idle shutdown timer	•	
Differential lock	•	
140 CAB	STANDARD	OPTIONAL
ROPS, standard sound suppression	•	******
Mechanical suspension seat	•	
Air suspension adjustable seat		•
Open ROPS cab		•
Information display screen	•	
Adjustable control console	•	
Entertainment Radio Ready	•	
Halogen lighting	•	
LED lighting		•
USB/auxiliary radio		•
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		

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	•	
Sideview mirror	•	
Signaling/warning horn	•	
Secondary steering system		
Rearview camera		•
Hydraulic brakes	•	
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Ground level fuel fill	•	
Grouped location for engine oil and fuel filters	•	
Extended Life Coolant	•	
ATTACHMENTS	STANDARD	OPTIONAL
Counterweight		•
Push block		
Front lift group		
Ripper		
Scarifier		•
Auxiliary hydraulic lines		•
V-plow		•
One-way plow		•

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

© 2018 Caterpillar. All Rights Reserved.

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.

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow," the "Power Edge" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission. www.cat.com www.caterpillar.com

AEXQ2468 Build Number: 13A





## Cat® 140

#### Motor Grader

The Cat® 140 Motor Grader combines technology and lever controls for high performance. Integrated technology, such as Cat GRADE with Cross Slope and Stable Blade options, ensures optimal grade for any project. The new cab offers increased comfort and ergonomically designed, adjustable control console. Reduce up to 10 percent fuel consumption by using ECO Mode.

#### **Increased Machine Performance with Lever Controls**

- Prefer a motor grader with steering wheel and levers? The 140 uses Caterpillar's 45 years of lever and steering wheel controls design experience to provide you with the control option you prefer.
- Save up to 40 percent in material with the Cat GRADE Cross Slope feature. Monitor Cross Slope information from the machine display.
- Optimized machine balance ensures maximum drawbar power to the ground.
- Don't let the snow stop you from working. The all-wheel drive (AWD) option assists with traction and maneuvering the machine.
- Each machine is equipped with the Cat C9.3 engine for power and reliability.
- Save up to 10 percent on fuel consumption with ECO Mode.
- For your fine grade applications, the hydraulic system provides multifunction capability of up to seven simultaneous functions for superior performance.
- Reduce risk of impact damage with the standard circle drive slip clutch. It protects your circle drive and teeth.

#### **Optimal Operator Comfort**

- Adjust to your ideal comfort with the air suspension seat with multiple ergonomic adjustments.
- The rear camera option enhances visibility along with a heated lens to prevent snow buildup.
- The high capacity Heating, Ventilation and Air Conditioning (HVAC) system dehumidifies and pressurizes the cab, circulates fresh air, seals out dust and keeps windows clear.
- Add the communications radio mount to connect with your operators from the cab.

#### Enhance Efficiency and Productivity with Integrated Cat Technology

- Reduce your dependence on manual grade checking by using the Digital Blade Slope Meter.
- Cat GRADE with Cross Slope Indicate option provides a real time readout of cross slope and can be scaled to Cat GRADE with Cross Slope for automatic blade movement.
- Cat GRADE Attachment Ready Option (ARO) ensures machine readiness for additional 2D/3D grade control technologies.
- Stable Blade senses blade bounce before the operator to reduce manual throttle use and site rework.
- Cat Production Measurement recommends gears and engine speed to improve fuel efficiency and maintain productivity. (Coming in 2019)
- Product Link™ provides location, machine hours, fuel usage, productivity, idle time, diagnostic codes, and other machine data on demand through the VisionLink® online interface, which helps you improve job site efficiency with lower operating costs.
- Remote Services eliminates the need for technicians to connect to Electronic Technician (ET) to flash software updates to the machine.

#### Maintenance

- Filters, such as hydraulic oil, engine air, and DEF filters, are grouped together for easy access and preventative maintenance.
- The new next generation filters offer up to 25 percent in reduced fluid and filter costs.
- Spend less time cleaning the cooling system with the reversing fan option, which reduces costs when cleaned once per week for more uptime.
- Maintain roads with the standard drawbar circle moldboard with hardened circle teeth for increased durability.
- For tight finish grading, consider the top adjust drawbar option for applications that require maximum accuracy. It offers up to 45 percent reduction in maintenance cost over the standard.



#### Cat® 140 Motor Grader

#### Safety

- Depend on your brakes with maximum stopping power on all four rear wheels.
- View your work space with the rear camera option. It offers a rear view of the machine to ensure the safety of you and those around you. The dedicated display can be always on to ensure a safe work environment.
- In the event of an engine issue, your operators can count on the secondary steering system to stop the machine safely. It turns on automatically if the main pump pressure drops.
- Ground level refueling requires no climbing on the machine to fill the fuel tank.
- Ensure three points of contact when entering and exiting the machine with strategically placed walkways and grab rails.
- Work past sundown using the LED light option for increased nighttime visibility.

#### Versatility

- Ripper and Scarifier options are available.
- Improve the balance of your machine with the counterweight and push block for increased performance and efficiency.
- For snow applications, straight blades or v-plows added to the front lift keep roads clear.
- Plow through snow with the mast-type or mast-less snow wing attachment.
- For more road coverage, add a moldboard extension to add 600 mm (24 in).

#### Standard and Optional Equipment

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

ninia sun su	Standard	Optional
CAB		94.23
Vinyl Seat	✓	
Air Suspension Adjustable Seat		<b>✓</b>
Information Display Screen	<b>✓</b>	
High-resolution 254 mm (10 in) Touchscreen	THE W	1
Canopy		1
Base Cab	✓	1100
Entertainment Radio Ready	<b>✓</b>	
Cab Plus		1
Rear Wiper		/
Communication Radio Mounting		1
Rear Window Screen		1
Defrost Fans		✓
HVAC	✓	liljaki
ROPS, Standard Sound Suppression	✓	1111
Halogen Lighting	1	13.915
LED Lighting	a to a witch its	1
CAT CONNECT TECHNOLOGY		
Cat GRADE with Cross Slope		1
Cat GRADE Attachment Ready Option (ARO)		1
Cat GRADE with Cross Slope Indicate		/
Digital Blade Slope Meter		<b>✓</b>
Stable Blade		<b>✓</b>
Cat GRADE with 3D		<b>✓</b>
Product Link	<b>✓</b>	
Remote Services		<b>✓</b>

PARTIE NA	Standard	Optional
ENGINE		
C9.3	✓	
Reversing Fan	143	✓
ECO Mode	✓	
All-Wheel Drive (AWD)		✓
DRAWBAR CIRCLE MOLDBOARD		
Standard Drawbar Circle Moldboard	✓	
Top Adjust Drawbar Circle Moldboard	100	✓
Circle Drive Slip Clutch	1	
Circle Saver		<b>✓</b>
SAFETY		
Rearview Mirror	✓	
Rearview Camera		1
Hydraulic Brakes	<b>✓</b>	116000
Cat Detect with Vision System	nad Transferance	✓
Secondary Steering System	<b>✓</b>	in Maria
Signaling/Warning Horn	<b>✓</b>	
Side View Mirrors	1	
VERSATILITY		
Front Bolster	✓	
Counterweight	10-07	1
Push Block	ota a salanis	✓
Front Lift Group		<b>√</b>
Mast Type – Snow Wing		✓
Mast-Less – Snow Wing		✓
Ripper/Scarifier		✓
Auxiliary Hydraulic Lines		✓
Moldboard Extension		<b>✓</b>
Front Blade		✓

#### Cat® 140 Motor Grader

AND YEAR OWN TO THE Eng	gine (1977)	
Engine Model	Cat	C9.3
Emissions	U.S. EPA Tier 4 Final/ EU Stage IV	
Net Power		
ISO 9249/SAE J1349	186 kW	250 hp
EEC 80/1269	186 kW	250 hp
Base Net Power (1st Gear)	132 kW	177 hp
Engine RPM	2,000	
Displacement	9.3 L	567.5 in <sup>3</sup>
Bore	115 mm	4.5 in
Stroke	149 mm	5.9 in
Torque Rise – ISO 9294	40%	
Maximum Torque — ISO 9294	1121 N⋅m	827 lb-ft
Number of Cylinders		ŝ
Standard Capacity	43° C	109° F

Machine	Weight	<b>电影性 化</b>
Weight*	19 198 kg	42,325 lb
All-Wheel Drive (AWD) Weight	20 236 kg	44,613 lb
*Typically equipped with push block a	nd rioner.	

Length of Machine*	10 100 mm	397.6 in
Maximum Height	3354 mm	132 in
Width	2480 mm	97.6 in
Basic Blade Width	3556 mm	140 in

Blade Width	3.7 m	12 ft
End Bit	152 mm	6.0 in
Cutting Edge	152 mm	6.0 in
Arc Radius	413 mm	16.3 in
Throat Clearance	166 mm	6.5 in

Blade Ran	ge		2000
Circle Center Shift			
Right	728 mm	28.6 in	
Left	752 mm	29.6 in	
Moldboard Side Shift			
Right	512 mm	20.1 in	
Left	663 mm	26.1 in	
Blade Tip Range			
Forward	40	10	
Backward	5	0	
Maximum Shoulder Reach Outside of Tires			
Right	1928 mm	75.9 in	
Left	1764 mm	69.4 in	
Maximum Depth of Cut	735 mm	28.9 in	
Maximum Lift Above Ground	480 mm	18.9 in	

Service R	efill	400000000
Fuel Tank	378 L	100 gal
Circle Drive	7 L	1.8 gal
Engine Crankcase	30 L	7.9 gal
Cooling System	57 L	15 gal
Hydraulic System	55 L	14.5 gal
DEF Tank	12.5 L	3.3 gal
Front Wheel Spindle Bearing (each)	0.5 L	0.13 gal

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

© 2018 Caterpillar All rights reserved

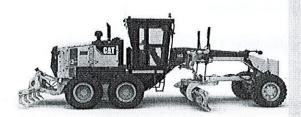
Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY, CAT.COM, their respective logus, "Caterpillar Yallow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

AEXQ2368-01 (06-2018) Replaces AEXQ2368 Build Number: 13A (North America)





### 140 Motor Grader

### **Technical Specifications**

Engine	egopie Alfrid	end the control
Engine Model	Cat® C9.3	
Net Power ISO 9249/SAE J1349	186 kW	250 hp
Net Power EEC 80/1269	186 kW	250 hp
Net Power All-Wheel Drive (AWD)	201 kW	270 hp
VHP Plus Range – Net	132-186 kW	177-250 hp
VHP Plus Range – Net (metric)		179-253 hp
AWD Range – Net	131-201 kW	176-270 hp
AWD Range – Net (metric)	Arenana.	179-273 hp
Bore	115 mm	4.5 in
Displacement	9.3 L	567.5 in <sup>3</sup>
Stroke	149 mm	5.9 in
Engine rpm	2,000	
Number of Cylinders	6	
Torque Rise – ISO 9294	44%	
Maximum Torque – ISO 9294	1245 N·m	918 lb-ft
Maximum Torque (AWD On)	1350 N·m	996 lb-ft
Derating Altitude	3962 m	13,000 ft
Derating Altitude AWD	3505 m	11,500 ft
Standard – Fan Speed	1,400 rpm	
Maximum – Fan Speed	1,550 rpm	***************************************
Minimum – Fan Speed	500 rpm	V F 1040 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Ambient Capacity	50° C	122° F

- The 140 meets U.S. EPA Tier 4 Final emission standards.
- Net Power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Rated speed at 2,000 rpm.

140 Net Power				
Gear	VHP Plus – kW (hp)	AWD Off – kW (hp)	AWD On – kW (hp)	
Forward	1000		ALSIS(2)	
1st	132 (177)	139 (186)	147 (197)	
2nd	140 (187)	147 (197)	162 (217)	
3rd	147 (198)	154 (207)	166 (223)	
4th	155 (208)	158 (212)	170 (228)	
5th	159 (213)	166 (223)	186 (249)	
6th	167 (224)	170 (228)	201 (270)	
7th	183 (245)	186 (249)	201 (270)	
8th	186 (250)	186 (249)	201 (270)	
Reverse	map (d k.			
1st	132 (177)	131 (176)	131 (176)	
2nd	140 (187)	139 (186)	139 (186)	
3rd-6th	147 (198)	147 (197)	147 (197)	



Forward/Reverse Gears	8 Forward/6 Reverse	
Transmission	Direct Drive Powershift	
High Idle Speed	2,150 rpm	
Low Idle Speed	800 rpm	
Air Cleaner	Dry	
Peak Torque at Minimum Fan	1138 N·m	839 lb-ft
Peak Torque at Minimum Fan AWD	1247 N·m	920 lb-ft
Tandems		
Tandem Chain Pitch	50.8 mm	2 in
Height and Width	506 mm ×	20 in ×
	201 mm	8 in
Oscillation Front Up	15°	
Oscillation Rear Up	22°	
Service Brakes		
Type System	Dual Circuit Hydraulic	
Type Brake	Multiple Oil Disc	
Number of Brakes	4	
Number of Disc Assemblies (each)	6	
Size (outer diameter)	355 mm	14 in
Size (inner diameter)	255 mm	10 in
Lining Area Per Brake	5749 cm <sup>2</sup>	891.1 in <sup>2</sup>
Parking Brake		
Type System	Hydraulic A	Actuated
Type Brake	Multiple Oi Meets ISO	
Secondary Brakes	Dual Circuit Control Sy	

Applies Two Service Brakes

Operating Specifications		
Top Speed Forward	48.4 km/h	30.1 mph
Top Speed Reverse	37.4 km/h	23.2 mph
Turning Radius, Outside Front Tires	7.6 m	24 ft 11 in
Steering Range	50° Left and	l Right
Articulation Angle	18° Left and	l Right
Forward		
lst	4.2 km/h	2.6 mph
2nd	5.7 km/h	3.6 mph
3rd	8.3 km/h	5.2 mph
4th	11.4 km/h	7.1 mph
5th	17.8 km/h	11.0 mph
6th	24.2 km/h	15.0 mph
7th	33.3 km/h	20.7 mph
8th	48.4 km/h	30.1 mph
Reverse		
lst	3.2 km/h	2.0 mph
2nd	6.1 km/h	3.8 mph
3rd	8.8 km/h	5.5 mph
4th	13.7 km/h	8.5 mph
5th	25.7 km/h	16.0 mph
6th	37.4 km/h	23.2 mph

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

Weight – Tandem	eniment en la cel	
Gross Vehicle Weight – Typically Equipped*	N 197	
Total	19 198 kg	42,325 lb
Front Axle	5088 kg	11,216 lb
Rear Axle	5088 kg	11,216 lb
Gross Vehicle Weight – Base		
Total	16 787 kg	37,009 lb
Front Axle	4430 kg	9,766 lb
Rear Axle	12 357 kg	27,242 lb
Gross Vehicle Weight – Maximum Tested		1.1.85
Total	24 500 kg	54,013 lb
Front Axle	8820 kg	19,445 lb
Rear Axle	15 680 kg	34,568 lb

Gross Vehicle Weight – Typically Equipped*		
Total	20 236 kg	44,613 lb
Front Axle	5859 kg	12,917 lb
Rear Axle	14 377 kg	31,696 lb
Gross Vehicle Weight – Base		
Total	17 825 kg	39,297 lb
Front Axle	5198 kg	11,460 lb
Rear Axle	12 627 kg	27,837 lb
Gross Vehicle Weight – Maximum Tested		i Sheria
Total	24 500 kg	54,013 lb
Front Axle	8820 kg	19,445 lb
Rear Axle	15 680 kg	34,568 lb

<sup>\*</sup>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.

Major Component Weights		
Base Machine	16 787 kg	37,009 lb
Canopy Open ROPS	-323 kg	-711 lb
All-Wheel Drive	873 kg	1,921 lb
Moldboard		1616
4267 mm × 610 mm × 22 mm (14 ft × 24 in × <sup>7</sup> /s in)	147 kg	323 lb
4267 mm × 686 mm × 25 mm (14 ft × 27 in × 1 in)	284 kg	625 lb
Guards		ment (
Transmission	121 kg	266 lb
Front Fender	121 kg	266 lb
Blade Extension	113 kg	249 lb
Grader Bit	181 kg	400 lb
Mid-Mount Scarifier Package	917 kg	2,017 lb
Front Lift Group	680 kg	1,500 lb
Counterweight	427 kg	939 lb
Push Plate	895 kg	1,969 lb
Rear Ripper	1104 kg	2,429 lb
Front Scarifier	434 kg	956 lb

Type	Closed - Ce	nter
Type Circuit	Parallel	
Pump	Type – Variable Pisto	
Output* - @ 1,800 rpm	24 192 kPa	3,509 psi
ai fot - nun ett	0-171	0-45.2
	L/min	gal/min

<sup>\*</sup>Depending on system requirements.

Service Refill Capacities			
Fuel Tank	378 L	100 gal	
Circle Drive	7 L	1.8 gal	
Engine Crankcase	30 L	7.9 gal	
Transmission and Differential	74 L	19.5 gal	
Cooling System	57 L	15 gal	
Hydraulic System	55 L	14.5 gal	
DEF Tank	12.5 L	3.3 gal	
Front Wheel Spindle Bearing (each)	0.5 L	0.13 gal	
All-Wheel Drive (AWD) Gearbox	7 L	1.8 gal	

Range of Motion	Standard		Top Adjust	
Lift Cylinders	2		2	
Maximum Depth of Cut	735 mm	28.9 in	715 mm	28.1 in
Maximum Lift Above Ground	480 mm	18.9 in	480 mm	18.9 in
Throat Clearance	119 mm	4.7 in	166 mm	6.5 in
Circle Center Shift Cylinder				
Center Shift Right	728 mm	28.7 in	728 mm	28.7 in
Center Shift Left	752 mm	29.6 in	695 mm	27.4
Moldboard Side Shift Cylinder				
Side Shift Left	663 mm	26.1 in	661 mm	26 in
Side Shift Right	512 mm	20.2 in	515 mm	20.3 in
Blade Tip Cylinder				
Maximum Blade Tip Forward	40°		40°	
Maximum Blade Tip Backward	5°		5°	
Circle Drive	360° of Blad	e Rotation		
Link Bar	7 Positions to adjust the drawbar circle moldboard range of motion			
Drawbar Shoes	6 with replace	eable wear strips		Eller Miller

	Standard		Option 1		Option 2	
Width	3.7 m	12 ft	4.3 mm	14 ft	4.3 mm	14 ft
Height	594 mm	23.4 in	635 mm	25 in	682 mm	26.9 in
End Bit	152 mm	6 in	152 mm	6 in	152 mm	6 in
Cutting Edge	152 mm	6 in	203 mm	8 in	203 mm	8 in
Arc Radius	413 mm	16.3 in	413 mm	16.3 in	413 mm	16.3 in
Throat Clearance	124 mm	4.9 in	124 mm	4.9 in	89 mm	3.5 in

<sup>• 3.7</sup> m (12 ft) moldboard is standard.

Circle	
Sections	Rolled Ring Forging
Number of Teeth	64
Rotation	360°

### Maximum Shoulder Reach Outside of Tires

Blade	3.7 m (12 ft)		4.3 m (14 ft)	
Right	1928 mm	76 in	2233 mm	88 in
Left	1764 mm	69.4 in	2201 mm	86.7 in

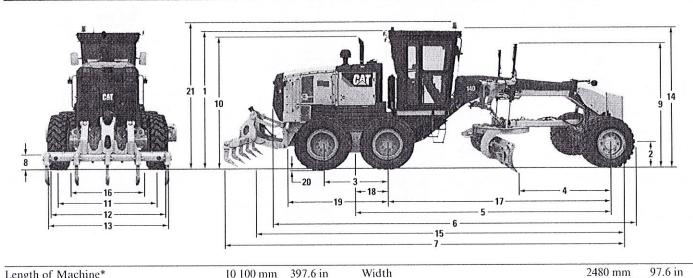
 An additional 300 mm (11.8 in) of reach can be achieved to the right or left by changing the side shift mounting bracket on the 4.3 m (14 ft) blade.

Ripping Depth Maximum	426 mm	16.8 in
Ripper Shank Holder	5	
Ripper Shank Holder Spacing	533 mm	21 in
Penetration Force	9440 kg	20,812 lb
Pryout Force	11 877 kg	26,184 lb
Pryout Force (All-Wheel Drive)	13 650 kg	30,093 lb
Machine Length Increase, Beam Raised	1031 mm	40.6 in

Scarifier	Kalendary ;	indiana and
Front, V-Type: Working Width	1205 mm	47.4 in
Front, V-Type: 5 or 11 Tooth		
Working Width	1031 mm	40.6 in
Scarifying Depth, Maximum	467 mm	18.4 in
Scarifier Shank Holders	11	
Scarifier Shank Holder Spacing	116 mm	4.6 in
Rear		
Working Width	2133 mm	84 in
Scarifying Depth, Maximum	426 mm	16.8 in
Scarifier Shank Holders	9	
Scarifier Shank Holder Spacing	267 mm	10.5 in
Electrical	12 14 15 15 15 15 15 15 15 15 15 15 15 15 15	
Starting System Type	Direct Elec	tric
Heavy Duty Battery	11	
CCA at 18°	1,125 amp	
Volts	12 <b>V</b>	
Quantity	2	
Extreme Duty Battery		dishina a mara
CCA at 18°	1,400 amp	
Volts	12V	
Quantity	2	
Standard Alternator	115 amps at 24V	
Heavy Duty Alternator	150 amps a	t 24V

### **Dimensions**

All dimensions are approximate.



Basic Blade Width

Length of Machine*	10 100 mm	397.6 in
Maximum Height	3354 mm	148.8 in

<sup>\*</sup>Typically equipped with push block and ripper.

1 Height – Top of Cab	3354 mm	132 in
2 Height – Front Axle Center	604 mm	23.7 in
3 Length – Between Tandem Axles	1497.5 mm	59 in
4 Length	to the transfer of the transfe	
Front Axle to Moldboard (Non AWD)	2592 mm	102 in
Front AWD Axle to Moldboard (AWD)	2557 mm	100.7 ir
5 Length		
Front Axle to Mid Tandem (Non AWD)	6169 mm	242.9 ir
Front AWD Axle to Mid Tandem (AWD)	6134 mm	241.5 ir
6 Length		
Front Tire to Rear of Machine (Non AWD)	8897 mm	350.3 in
Front Tire to Rear of Machine (AWD)	8862 mm	348.9 ir
7 Length – Push Plate to Ripper	10 100 mm	397.6 ii
8 Ground Clearance at Rear Axle	337 mm	13.3 in
9 Height to Top of Cylinders	3043 mm	119.8 ir

10 Height to Exhaust Stack	3275 mm	128.9 in
11 Width – Tire Center Lines	2110 mm	83.1 in
12 Width – Outside Rear Tires	2464 mm	97 in
13 Width		
Outside Front Tires (Non AWD)	2480 mm	97.6 in
Outside Front Tires (AWD)	2594 mm	102.1 in
14 Maximum Height – with Attachments (Beacon in Shipment Position)	3413 mm	134.4 in
15 Length – Push Plate to Raised Ripper	9778 mm	385 in
16 Width – Inside Rear Tires	1711 mm	67.4 in
17 Length		
Front Axle to Articulation Hitch (Non AWD)	5325 mm	209.6 in
Front Axle to Articulation Hitch (AWD)	5290 mm	208.3 in
18 Length Rear Axle to Articulation Hitch	844 mm	33.2 in
19 Length – Rear Axle to Rear of Frame	1705 mm	67.1 in
20 Height – Tire Deflection at Performance Weight	65 mm	2.6 in
21 Maximum Height – with Attachments (Beacon in Operating Position)	3780 mm	149 in

3556 mm

140 in

### **140 Standard and Optional Equipment**

### **Standard and Optional Equipment**

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

Innated textoots	Standard	Optional
ENGINE		
Cat C9.3 engine	✓	
Tier 4 Final diesel engine	1	
Snow precleaner		✓
ECO mode	✓	onle setti
Extreme duty starter		✓
50° C (122° F) ambient capacity	<b>√</b>	- Adams
Reversing fan		✓
All-Wheel Drive (AWD)		✓
Differential lock/unlock	✓	M. mo. I
Engine idle shutdown timer	✓	
Transmission, autoshift		✓
MOLDBOARD	\$165 a b	12459
Standard drawbar circle moldboard	✓	
Circle drive slip clutch	✓	
Top adjust drawbar circle moldboard		✓
Circle saver		✓
ELECTRICAL		
Sealed alternator	✓	
Reversing lights	✓	
Breaker panel	✓	
1,125 CCA heavy duty batteries	✓	
1,400 CCA extreme duty batteries		✓
Electric starter	✓	

Junnite() No. 2002	Standard	Optional
CAB		
Vinyl seat	✓	
ROPS, standard sound suppression	✓	
Air suspension adjustable seat	dana wa	✓
Information display screen	✓	Marie Co.
Open ROPS cab	10.11.11	✓
Heating, ventilation, and air conditioning (HVAC) system	✓	
Defrost fans		✓
Halogen lighting	✓	
Cup and bottle holders	<b>✓</b>	
Implement lockout		✓
Adjustable control console	✓	- THV5
Interior lights	<b>✓</b>	
LED lighting		✓
Entertainment Radio Ready	✓	
Coat hook	✓	D. STIF
USB/auxiliary radio		<b>✓</b>
Steering wheel	✓	3 - 7 - 7 - 7
Communication radio mounting		✓
Lever controls	1	621 A 183
Heated mirrors	Parpalis, spe.	✓
Electric throttle control	1	131,215
Front windshield wiper	<b>✓</b>	- 11 11
Rear wiper	***	1
Rear window screen		✓
Cab storage	/	

(continued on next page)

### 140 Standard and Optional Equipment

### Standard and Optional Equipment (continued)

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

	Standard	Optional
SAFETY AND SECURITY	distant	
Parking brake	✓	
Back up alarm	✓	
Signaling/warning horn	<b>√</b>	
Warning beacon		✓
Rearview mirror	✓	
Rearview camera		✓
Hydraulic brakes	✓	
Secondary steering system	✓	
Side view mirrors	<b>✓</b>	
Strategically placed walkways and grab rails	✓	
SERVICE AND MAINTENANCE		4051
Ground level fuel fill	✓	
Grouped location for engine oil and fuel filters	✓	
Extended Life Coolant	✓	
Radiator, cleanout access	✓	
CAT CONNECT TECHNOLOGY		
Cat GRADE with Cross Slope		✓
Cat GRADE with Cross Slope Indicate		✓
Digital Blade Slope Meter		<b>✓</b>
Cat GRADE Attachment Ready Option (ARO)		1
Product Link™	1	
Stable blade		1
Remote services		✓

	Standard	Optional
GUARDS		
Front fenders for All-Wheel Drive		✓
Rear fenders		1
Front axle guard for All-Wheel Drive		✓
Transmission		<b>✓</b>
Cover, under cab platform		1
ATTACHMENTS		
Counterweight	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	✓
Push block		✓
Front lift group		✓
Ripper		✓
Scarifier		/
Auxiliary hydraulic lines		/
V-plow		<b>✓</b>
One-way plow		<b>✓</b>

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

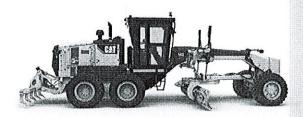
© 2018 Caterpillar All rights reserved

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

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEXQ2467 (09-2018) Build Number: 13A (North America)





### 140 Motor Grader

### **Technical Specifications**

Engine	hydrine.	
Engine Model	Cat® C9.3	
Net Power ISO 9249/SAE J1349	186 kW	250 hp
Net Power EEC 80/1269	186 kW	250 hp
Net Power All-Wheel Drive (AWD)	201 kW	270 hp
VHP Plus Range – Net	132-186 kW	177-250 hp
VHP Plus Range – Net (metric)		179-253 hp
AWD Range – Net	131-201 kW	176-270 hp
AWD Range – Net (metric)		179-273 hp
Bore	115 mm	4.5 in
Displacement	9.3 L	567.5 in <sup>3</sup>
Stroke	149 mm	5.9 in
Engine rpm	2,000	
Number of Cylinders	6	
Torque Rise – ISO 9294	44%	
Maximum Torque – ISO 9294	1245 N·m	918 lb-ft
Maximum Torque (AWD On)	1350 N·m	996 lb-ft
Derating Altitude	3962 m	13,000 ft
Derating Altitude AWD	3505 m	11,500 ft
Standard – Fan Speed	1,400 rpm	
Maximum – Fan Speed	1,550 rpm	
Minimum – Fan Speed	500 rpm	
Ambient Capacity	50° C	122° F

- The 140 meets U.S. EPA Tier 4 Final emission standards.
- Net Power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Rated speed at 2,000 rpm.

140 Net Power				
Gear	VHP Plus – kW (hp)	AWD Off – kW (hp)	AWD On – kW (hp)	
Forward				
1st	132 (177)	139 (186)	147 (197)	
2nd	140 (187)	147 (197)	162 (217)	
3rd	147 (198)	154 (207)	166 (223)	
4th	155 (208)	158 (212)	170 (228)	
5th	159 (213)	166 (223)	186 (249)	
6th	167 (224)	170 (228)	201 (270)	
7th	183 (245)	186 (249)	201 (270)	
8th	186 (250)	186 (249)	201 (270)	
Reverse				
1st	132 (177)	131 (176)	131 (176)	
2nd	140 (187)	139 (186)	139 (186)	
3rd-6th	147 (198)	147 (197)	147 (197)	



Forward/Reverse Gears	8 Forward/6 Reverse	
Transmission	Direct Drive Powershift	
High Idle Speed	2,150 rpm	
Low Idle Speed	800 rpm	
Air Cleaner	Dry	
Peak Torque at Minimum Fan	1138 N·m	839 lb-ft
Peak Torque at Minimum Fan AWD	1247 N·m	920 lb-ft
Tandems		
Tandem Chain Pitch	50.8 mm	2 in
Height and Width	506 mm ×	20 in ×
	201 mm	8 in
Oscillation Front Up	15°	
Oscillation Rear Up	22°	
Oscillation Rear Up  Service Brakes	22°	
	22°  Dual Circui	t Hydraulic
Service Brakes Type System		
Service Brakes Type System Type Brake	Dual Circui	
Service Brakes Type System Type Brake Number of Brakes	Dual Circui Multiple Oi	
Service Brakes Type System Type Brake Number of Brakes Number of Disc Assemblies (each)	Dual Circui Multiple Oi	
Service Brakes Type System Type Brake Number of Brakes Number of Disc Assemblies (each) Size (outer diameter)	Dual Circui Multiple Oi 4	l Disc
Service Brakes	Dual Circui Multiple Oi 4 6 355 mm	14 in
Service Brakes Type System Type Brake Number of Brakes Number of Disc Assemblies (each) Size (outer diameter) Size (inner diameter)	Dual Circui Multiple Oi 4 6 355 mm 255 mm	14 in 10 in
Service Brakes Type System Type Brake Number of Brakes Number of Disc Assemblies (each) Size (outer diameter) Size (inner diameter) Lining Area Per Brake	Dual Circui Multiple Oi 4 6 355 mm 255 mm	14 in 10 in 891.1 in <sup>2</sup>

Dual Circuit Control System, Applies Two Service Brakes

Operating Specifications		a a griff griff	
Top Speed Forward	48.4 km/h	30.1 mph	
Top Speed Reverse	37.4 km/h	23.2 mph	
Turning Radius, Outside Front Tires	7.6 m	24 ft 11 in	
Steering Range	50° Left and	l Right	
Articulation Angle	18° Left and Right		
Forward		*	
1st	4.2 km/h	2.6 mph	
2nd	5.7 km/h	3.6 mph	
3rd	8.3 km/h	5.2 mph	
4th	11.4 km/h	7.1 mph	
5th	17.8 km/h	11.0 mph	
6th	24.2 km/h	15.0 mph	
7th	33.3 km/h	20.7 mph	
8th	48.4 km/h	30.1 mph	
Reverse			
1st	3.2 km/h	2.0 mph	
2nd	6.1 km/h	3.8 mph	
3rd	8.8 km/h	5.5 mph	
4th	13.7 km/h	8.5 mph	
5th	25.7 km/h	16.0 mph	
6th	37.4 km/h	23.2 mph	

<sup>•</sup> Machine speed measured at 2,150 rpm with 14.00R24 radial tires, no slip.

Secondary Brakes

Weight — Tandem				
Gross Vehicle Weight – Typically Equipped*				
Total	19 198 kg	42,325 lb		
Front Axle	5088 kg	11,216 lb		
Rear Axle	5088 kg	11,216 lb		
Gross Vehicle Weight – Base				
Total	16 787 kg	37,009 lb		
Front Axle	4430 kg	9,766 lb		
Rear Axle	12 357 kg	27,242 lb		
Gross Vehicle Weight – Maximum Tested				
Total	24 500 kg	54,013 lb		
Front Axle	8820 kg	19,445 lb		
Rear Axle	15 680 kg	34,568 lb		

Gross Vehicle Weight –		
Typically Equipped*  Total	20 236 kg	44,613 lb
Front Axle	5859 kg	12,917 lb
Rear Axle	14 377 kg	31,696 lb
Gross Vehicle Weight – Base		
Total	17 825 kg	39,297 lb
Front Axle	5198 kg	11,460 lb
Rear Axle	12 627 kg	27,837 lb
Gross Vehicle Weight – Maximum Tested		
Total	24 500 kg	54,013 lb
Front Axle	8820 kg	19,445 lb
Rear Axle	15 680 kg	34,568 lb

<sup>\*</sup>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.

<b>Major Component Weights</b>		
Base Machine	16 787 kg	37,009 lb
Canopy Open ROPS	-323 kg	-711 lb
All-Wheel Drive	873 kg	1,921 lb
Moldboard		
4267 mm × 610 mm × 22 mm (14 ft × 24 in × $\frac{7}{8}$ in)	147 kg	323 lb
4267 mm × 686 mm × 25 mm (14 ft × 27 in × 1 in)	284 kg	625 lb
Guards		
Transmission	121 kg	266 lb
Front Fender	121 kg	266 lb
Blade Extension	113 kg	249 lb
Grader Bit	181 kg	400 lb
Mid-Mount Scarifier Package	917 kg	2,017 lb
Front Lift Group	680 kg	1,500 lb
Counterweight	427 kg	939 lb
Push Plate	895 kg	1,969 lb
Rear Ripper	1104 kg	2,429 lb
Front Scarifier	434 kg	956 lb

Type	Closed - Cer	nter
Type Circuit	Parallel	
Pump	Type – Variable Pistor	
Output* – @ 1,800 rpm	24 192 kPa 0-171 L/min	3,509 ps 0-45.2 gal/min

<sup>\*</sup>Depending on system requirements.

Service Refill Capacities			
Fuel Tank	378 L	100 gal	
Circle Drive	7 L	1.8 gal	
Engine Crankcase	30 L	7.9 gal	
Transmission and Differential	74 L	19.5 gal	
Cooling System	57 L	15 gal	
Hydraulic System	55 L	14.5 gal	
DEF Tank	12.5 L	3.3 gal	
Front Wheel Spindle Bearing (each)	0.5 L	0.13 gal	
All-Wheel Drive (AWD) Gearbox	7 L	1.8 gal	

Drawbar Circle Moldboard	ing yan besidak balan kupa			
Range of Motion	Standard		Top Adjust	
Lift Cylinders	2		2	
Maximum Depth of Cut	735 mm	28.9 in	715 mm	28.1 in
Maximum Lift Above Ground	480 mm	18.9 in	480 mm	18.9 in
Throat Clearance	119 mm	4.7 in	166 mm	6.5 in
Circle Center Shift Cylinder				
Center Shift Right	728 mm	28.7 in	728 mm	28.7 in
Center Shift Left	752 mm	29.6 in	695 mm	27.4
Moldboard Side Shift Cylinder				
Side Shift Left	663 mm	26.1 in	661 mm	26 in
Side Shift Right	512 mm	20.2 in	515 mm	20.3 in
Blade Tip Cylinder				
Maximum Blade Tip Forward	40°		40°	
Maximum Blade Tip Backward	5°		5°	
Circle Drive	360° of Blad	360° of Blade Rotation		
Link Bar	7 Positions to adjust the drawbar circle moldboard range of motion			
Drawbar Shoes	6 with replaceable wear strips			

	Standard		Option 1		Option 2	
Width	3.7 m	12 ft	4.3 mm	14 ft	4.3 mm	14 ft
Height	594 mm	23.4 in	635 mm	25 in	682 mm	26.9 in
End Bit	152 mm	6 in	152 mm	6 in	152 mm	6 in
Cutting Edge	152 mm	6 in	203 mm	8 in	203 mm	8 in
Arc Radius	413 mm	16.3 in	413 mm	16.3 in	413 mm	16.3 in
Throat Clearance	124 mm	4.9 in	124 mm	4.9 in	89 mm	3.5 in

<sup>• 3.7</sup> m (12 ft) moldboard is standard.

Circle	D-11-1D: F
Sections	Rolled Ring Forging
Number of Teeth	64
Rotation	360°

# Maximum Shoulder Reach Outside of Tires Blade 3.7 m (12 ft) 4.3 m (14 ft) Right 1928 mm 76 in 2233 mm 88 in Left 1764 mm 69.4 in 2201 mm 86.7 in

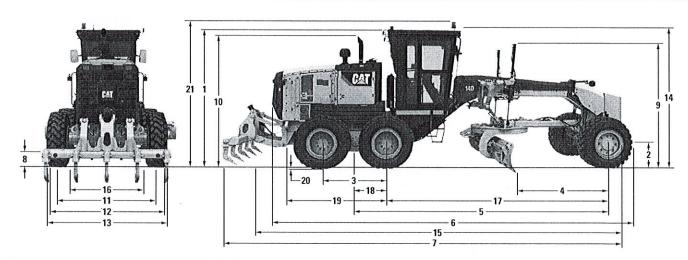
• An additional 300 mm (11.8 in) of reach can be achieved to the right or left by changing the side shift mounting bracket on the 4.3 m (14 ft) blade.

Ripping Depth Maximum	426 mm	16.8 in
Ripper Shank Holder	5	
Ripper Shank Holder Spacing	533 mm	21 in
Penetration Force	9440 kg	20,812 lb
Pryout Force	11 877 kg	26,184 lb
Pryout Force (All-Wheel Drive)	13 650 kg	30,093 lb
Machine Length Increase, Beam Raised	1031 mm	40.6 in

Scarifier	enderster en	aj kodine in	
Front, V-Type: Working Width	1205 mm	47.4 in	
Front, V-Type: 5 or 11 Tooth			
Working Width	1031 mm	40.6 in	
Scarifying Depth, Maximum	467 mm	18.4 in	
Scarifier Shank Holders	11		
Scarifier Shank Holder Spacing	116 mm	4.6 in	
Rear			
Working Width	2133 mm	84 in	
Scarifying Depth, Maximum	426 mm	16.8 in	
Scarifier Shank Holders	9		
Scarifier Shank Holder Spacing	267 mm	10.5 in	
Electrical			
Starting System Type	Direct Elec	tric	
Heavy Duty Battery			
CCA at 18°	1,125 amp		
Volts	12V		
Quantity	2		
Extreme Duty Battery			
CCA at 18°	1,400 amp		
Volts	12V		
Quantity	2		
Standard Alternator	115 amps at 24V		
Heavy Duty Alternator	150 amps at 24V		

### **Dimensions**

All dimensions are approximate.



Width

Basic Blade Width

Length of Machine*	10 100 mm	397.6 in
Maximum Height	3354 mm	148.8 in

*Typically equipped with push block an	and ripper.	
--	-------------	--

1 Height – Top of Cab	3354 mm	132 in
2 Height – Front Axle Center	604 mm	23.7 in
3 Length – Between Tandem Axles	1497.5 mm	59 in
4 Length		
Front Axle to Moldboard (Non AWD)	2592 mm	102 in
Front AWD Axle to Moldboard (AWD)	2557 mm	100.7 in
5 Length		
Front Axle to Mid Tandem (Non AWD)	6169 mm	242.9 in
Front AWD Axle to Mid Tandem (AWD)	6134 mm	241.5 in
6 Length		
Front Tire to Rear of Machine (Non AWD)	8897 mm	350.3 in
Front Tire to Rear of Machine (AWD)	8862 mm	348.9 in
7 Length – Push Plate to Ripper	10 100 mm	397.6 in
8 Ground Clearance at Rear Axle	337 mm	13.3 in
9 Height to Top of Cylinders	3043 mm	119.8 in

10	Height to Exhaust Stack	3275 mm	128.9 in
11	Width – Tire Center Lines	2110 mm	83.1 in
12	Width – Outside Rear Tires	2464 mm	97 in
13	Width		
	Outside Front Tires (Non AWD)	2480 mm	97.6 in
	Outside Front Tires (AWD)	2594 mm	102.1 in
14	Maximum Height – with Attachments (Beacon in Shipment Position)	3413 mm	134.4 in
15	Length - Push Plate to Raised Ripper	9778 mm	385 in
16	Width – Inside Rear Tires	1711 mm	67.4 in
17	Length		
	Front Axle to Articulation Hitch (Non AWD)	5325 mm	209.6 in
	Front Axle to Articulation Hitch (AWD)	5290 mm	208.3 in
18	Length Rear Axle to Articulation Hitch	844 mm	33.2 in
19	Length – Rear Axle to Rear of Frame	1705 mm	67.1 in
20	Height – Tire Deflection at Performance Weight	65 mm	2.6 in
21	Maximum Height – with Attachments (Beacon in Operating Position)	3780 mm	149 in

2480 mm

3556 mm

97.6 in

140 in

### **140 Standard and Optional Equipment**

### **Standard and Optional Equipment**

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

	Standard	Optional
ENGINE	78755	
Cat C9.3 engine	✓	
Tier 4 Final diesel engine	✓	
Snow precleaner		✓
ECO mode	✓	
Extreme duty starter		1
50° C (122° F) ambient capacity	✓	
Reversing fan		✓
All-Wheel Drive (AWD)		✓
Differential lock/unlock	✓	
Engine idle shutdown timer	✓	
Transmission, autoshift		✓
MOLDBOARD	<b>经营销货</b>	ha a pa
Standard drawbar circle moldboard	✓	
Circle drive slip clutch	✓	
Top adjust drawbar circle moldboard		✓
Circle saver		✓
ELECTRICAL		
Sealed alternator	✓	
Reversing lights	✓	
Breaker panel	✓	
1,125 CCA heavy duty batteries	✓	
1,400 CCA extreme duty batteries		✓
Electric starter	✓	

	Standard	Optional
CAB		
Vinyl seat	✓	
ROPS, standard sound suppression	✓	
Air suspension adjustable seat		✓
Information display screen	✓	
Open ROPS cab		1
Heating, ventilation, and air conditioning (HVAC) system	✓	
Defrost fans		✓
Halogen lighting	<b>✓</b>	
Cup and bottle holders	✓	
Implement lockout		1
Adjustable control console	✓	
Interior lights	✓	
LED lighting		✓
Entertainment Radio Ready	✓	
Coat hook	✓	
USB/auxiliary radio		✓
Steering wheel	✓	
Communication radio mounting		✓
Lever controls	✓	
Heated mirrors		<b>✓</b>
Electric throttle control	1	
Front windshield wiper	<b>√</b>	
Rear wiper		/
Rear window screen		<b>/</b>
Cab storage	<b>✓</b>	

(continued on next page)

### 140 Standard and Optional Equipment

### Standard and Optional Equipment (continued)

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

	Standard	Optional
SAFETY AND SECURITY		
Parking brake	✓	
Back up alarm	<b>✓</b>	
Signaling/warning horn	<b>✓</b>	
Warning beacon		<b>✓</b>
Rearview mirror	<b>✓</b>	
Rearview camera		✓
Hydraulic brakes	<b>√</b>	
Secondary steering system	<b>√</b>	
Side view mirrors	<b>✓</b>	
Strategically placed walkways and grab rails	<b>✓</b>	
SERVICE AND MAINTENANCE		
Ground level fuel fill	✓	
Grouped location for engine oil and fuel filters	<b>✓</b>	Name
Extended Life Coolant	<b>✓</b>	
Radiator, cleanout access	<b>√</b>	
CAT CONNECT TECHNOLOGY	Marie Ballin	
Cat GRADE with Cross Slope		✓
Cat GRADE with Cross Slope Indicate		<b>√</b>
Digital Blade Slope Meter		✓
Cat GRADE Attachment Ready Option (ARO)		1
Product Link <sup>TM</sup>	<b>√</b>	
Stable blade		1
Remote services		<b>✓</b>

	Standard	Optional
GUARDS		
Front fenders for All-Wheel Drive		✓
Rear fenders		✓
Front axle guard for All-Wheel Drive		✓
Transmission		1
Cover, under cab platform		1
ATTACHMENTS		0.944
Counterweight		✓
Push block		1
Front lift group		1
Ripper		<b>✓</b>
Scarifier		1
Auxiliary hydraulic lines		<b>/</b>
V-plow		1
One-way plow		<b>✓</b>

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

© 2018 Caterpillar All rights reserved

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

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEXQ2467 (09-2018) Build Number: 13A (North America)



#### MOTOR GRADERS **BID SPECIFICATION FOR 140 OR EQUIVALENT** Bid specs are intended for use by North American buyers only and are subject to change. Model configuration may change depending on country of use. Please contact your local Caterpillar dealer for the most up-to-date specifications for your area Category Specification BASIC SPECIFICATIONS Machine shall be designed and built by the manufacturer. Base Machine Weight shall not be less than 31,508 lb (14,212 kg). Weight shall include: standard machine configuration, BASIC SPECIFICATIONS lubricants, coolants, full fuel tank and operator of 200 lbs (91 kg) Max saleable weight of the machine shall not be less than 50,420 lb (22,870 kg). Weight shall be the heaviest possible BASIC SPECIFICATIONS combination of compatible attachments, also including lubricants, full fuel tank and operator of 200 lbs (91 kg). BASIC SPECIFICATIONS Machine length from the front outside edge tire to end of tow hitch shall not be less than 334.8 in (8,504 mm). BASIC SPECIFICATIONS Machine Wheel Base (distance from front axle to mid tandem) shall not be less than 239.6 in (6,086 mm). BASIC SPECIFICATIONS Machine length from counterweight to ripper shall not exceed 394.2 in (10,013 mm) BASIC SPECIFICATIONS Machine height to top of the cab shall not exceed 132 in (3,354 mm) BASIC SPECIFICATIONS Front frame shall be a flanged box section construction which removes welds from high stress areas BASIC SPECIFICATIONS The rear frame shall have two box section channels with an integrated bumper BASIC SPECIFICATIONS A standard rear hitch shall be provided. **ENGINE** Engine shall be designed and built by the manufacturer. **ENGINE** Engine shall be a turbo-charged, direct injection, four stroke, 6-cylinder diesel engine. **ENGINE** Engine shall be electronically controlled for more efficient fuel injection and fuel burn. **ENGINE** Engine displacement shall not be less than 7.2L (439 in3). Engine will increase its low idle speed to 1,000 rpm when the battery voltage is below 24.5 volts for more than 5 ENGINE minutes to ensure adequate system voltage and battery reliability. Engine shall develop a rated net flywheel power of a least 171 HP (128 kW) in 1st <mark>gear and 191 HP (143 kW</mark>) in 4th gear **ENGINE** through 8th gear. ENGINE Rated engine power shall not be achieved at an engine speed greater than 2000 rpm. ENGINE Peak engine power shall not be achieved at an engine speed greater than 2000 rpm. ENGINE Engine shall be isolation/resilient mounted to minimize sound and vibration. **ENGINE** Engine shall be certified EPA Tier 3 and European Union Stage IIIa Altitude deration will not occur at altitudes less than 10,000 ft (3048 m). The deration rate above 3048 m (10,000 ft) shall be ENGINE 1.5% per 305 m (1000 ft). **ENGINE** Engine shall allow for at least 500 hours of operation between oil changes. Engine enclosure and daily service points shall be accessible from ground level, and grouped on the left side of the **ENGINE ENGINE** Ether starting aid shall be available and must automatically meter ether injection to prevent engine damage. **ENGINE** Engine shall automatically lower engine torque and alert the operator if critical conditions are detected. **ENGINE** Engine compartment doors shall be lockable without the use of external locks. ENGINE A jacket water heater shall be available to assist in cold weather starting POWERTRAIN/TRANSMISSION Transmission shall be designed and built by the machine manufacturer. POWERTRAIN/TRANSMISSION Transmission shall be a direct drive, power shift, countershaft type. POWERTRAIN/TRANSMISSION Transmission shall not have less than 8 forward speeds and 6 reverse speeds. POWERTRAIN/TRANSMISSION Transmission shall have 5 working gears between 0-10.8 mph (0-17.4 km/h), for dirt applications. POWERTRAIN/TRANSMISSION Differential Lock/Unlock shall be electro-hydraulically controlled, as a standard feature. POWERTRAIN/TRANSMISSION Differential Lock/Unlock shall not have speed restrictions for engaging/disengaging. POWERTRAIN/TRANSMISSION Differential Lock/Unlock shall be a multi-disc design. POWERTRAIN/TRANSMISSION Final drive shall be a planetary design. POWERTRAIN/TRANSMISSION A programmable auto-shift transmission option shall be available. POWERTRAIN/TRANSMISSION Machine shall be equipped with an electronic inching pedal for improved modulation and machine control. POWERTRAIN/TRANSMISSION Transmission shall be isolated/resilient mounted to reduce sound and vibration BRAKES Service brakes shall be multi-disc, oil-cooled and completely sealed. BRAKES Service brakes shall be air actuated, utilizing dual independent brake circuits BRAKES Entire braking system shall meet all requirements of ISO 3450: 1996. Service brakes shall provide a minimum of 3,712 in2 (23,948 cm2) of total friction material surface area used at each of the **BRAKES** four tandem wheels to eliminate braking loads on the power train. BRAKES Parking brake shall be multi-disc, oil-cooled, air actuated and sealed Hydraulics system shall be a closed center, load sensing type, with a variable displacement, prop<mark>ortional</mark> priority HYDRAULIC SYSTEM pressure axial piston-type pump HYDRAULIC SYSTEM Standard hydraulic implement pump shall produce between 0 and 20.9 gallon/min (79.0 L/min) of max oil flow. Optional high flow implement pump shall produce between 0 and 55.5 gallon/min (210.0 L/min) of max oil flow. HYDRAULIC SYSTEM Implement valves shall be proportional priority pressure compensating for consistent response, when multi-HYDRAULIC SYSTEM functioning any combination of implement controls and independent of engine speed. HYDRAULIC SYSTEM Hydraulic system shall be fully sealed, using Duo-cone and O-ring seals to prevent contamination and spillage. HYDRAULIC SYSTEM All implement hydraulic connections shall have O-ring face seals for leak prevention. Lock valves shall be integrated into the main implement valve to prevent cylinder drift. HYDRAULIC SYSTEM HYDRAULIC SYSTEM The maximum hydraulic system pressure shall be no more than 3,698.5 psi (25,500 kPa). HYDRAULIC SYSTEM The hydraulic stand-by pressure shall be no more than 522 psi (3600 kPa). FRONT AXLE AND TANDEMS Front axle shall be an arched design for maximum ground clearance.

Category	Specification
FRONT AXLE AND TANDEMS	Front axle oscillation shall be no less than 32 degrees total, per side 16 degrees up, 16 degrees down.
FRONT AXLE AND TANDEMS	Front wheel steering angle shall be no less than 47.5 degrees left or right.
FRONT AXLE AND TANDEMS	Front wheel spindle bearings shall be a large diameter roller bearing.
FRONT AXLE AND TANDEMS	Front wheel spindle maintenance intervals shall be no less than 2000 hrs.  Mechanical steering stops located at each wheel and steering cylinder relief valves shall be present to prevent steering
FRONT AXLE AND TANDEMS	system damage during normal operation.
FRONT AXLE AND TANDEMS	Maximum front wheel lean shall be no less than 18 degrees left or right.
FRONT AXLE AND TANDEMS	Machine turning radius shall not exceed 24 ft 9 in (7.5 m) using front steering, full articulation and unlocked differential.
FRONT AXLE AND TANDEMS	Steering tie rod ends shall be heat induction hardened.
FRONT AXLE AND TANDEMS	Tandem chain pitch shall not be less than 2.0 in (50.8 mm).
FRONT AXLE AND TANDEMS	Distance between center of tandem wheels shall be no less than 60 in (1523 mm).
FRONT AXLE AND TANDEMS	Tandems shall be capable of oscillating 15 degrees front tandem up and 25 degrees front tandem down, with ful machine articulation and having no interference between tandem wheel and machine structure.
OPERATORS STATION	An enclosed cab with ROPS (Rollover Protective Structure) according to ISO 3471: 1986-1997shall be provided.
OPERATORS STATION	FOPS (Falling Object Protective Structure) shall be provided according to ISO 3449.
OPERATORS STATION	Cab shall be isolation-mounted to the front frame section of the machine.
OPERATORS STATION OPERATORS STATION	Cab doors shall have a hold-open clasp with a ground-level release and in addition to, a release in the cab.  Cab shall have fixed front window of laminated glass with intermittent wiper.
OPERATORS STATION OPERATORS STATION	Wipers shall be available on rear windows.
OPERATORS STATION	A rear sun shade shall be available.
OPERATORS STATION	A rear defroster fan shall be available.
OPERATORS STATION	Left and right side cab doors shall be standard.
OPERATORS STATION	Operator cab fresh air-filter shall be accessible for clean out and replacement, from behind the operator's seat
OPERATORS STATION	A 25,000 BTU/h (12.3 kW) heater with integral pressurizer and four-speed fan shall be standard
OPERATORS STATION	Machine shall have no less than 14 adjustable vents, positioned to direct air to front windows and operator.
OPERATORS STATION	Auxiliary controls shall be available for control of attachment implements and/or work tools  An instrument cluster shall be provided that includes a differential lock, throttle lock, brake air, coolant temperature, fuel
OPERATORS STATION	articulation angle gauge.
OPERATORS STATION	Digital machine hour meter shall be provided.
OPERATORS STATION	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.
OPERATORS STATION	Radio ready arrangement including 24V to 12V converter, two speakers, antenna and wiring shall be standard.
OPERATORS STATION	Machine shall have the AccuGrade™ system fully integrated into the machine design with integral hydraulic and electrical components as part of optional performance package with high flow implement pump
OPERATORS STATION	AccuGrade™ automatic blade control system attachment ready option shall be available from the factory. This option sh Include additional mounting brackets and electrical harnesses for easy installation of the electronics kit.
DRAWBAR, CIRCLE & MOLDBOARD	Moldboard shall have a bank slope angle capability of at least 90 degrees to both sides.
DRAWBAR, CIRCLE & MOLDBOARD	There will de no more than 6 replaceable wear inserts between the circle and drawbar
DRAWBAR, CIRCLE & MOLDBOARD	Drawbar wear strips shall be replaceable drop-in inserts, made from nylon composite material.
DRAWBAR, CIRCLE & MOLDBOARD	Circle outside diameter shall be no less than 60.2 in (1530 mm).
DRAWBAR, CIRCLE & MOLDBOARD	Circle shall be a single piece, rolled-ring forging, with raised wear surfaces on the top and bottom.
DRAWBAR, CIRCLE & MOLDBOARD	Circle teeth contact surfaces shall be induction-hardened on the front 240 degrees of the circle.
DRAWBAR, CIRCLE & MOLDBOARD	Moldboard shall have a hydraulic tip control through a range of 40 degrees fore and 5 degrees aft.
DRAWBAR, CIRCLE & MOLDBOARD	The standard moldboard shall be at least 12 ft (3657 mm) long, 24 in (610 mm) high and no less than 7/8 in (22 mm) this
DRAWBAR, CIRCLE & MOLDBOARD	A 14 ft (4267 mm) long, 24 in (610 mm) high and no less than 7/8in (22 mm) thick moldboard shall be available.
DRAWBAR, CIRCLE & MOLDBOARD	The standard mounting hardware for cutting edges and end bits shall be 3/4 in (19 mm)
DRAWBAR, CIRCLE & MOLDBOARD	Moldboard slide rails shall be constructed of a heat-treated, high carbon steel.
DRAWBAR, CIRCLE & MOLDBOARD	Slide rails shall be hardened and continuously welded
DRAWBAR, CIRCLE & MOLDBOARD	Throat clearance with standard moldboard shall be at least 4.7 in (120 mm).
DRAWBAR, CIRCLE & MOLDBOARD	Blade lift and center shift cylinders shall have replaceable bronze-alloy wear inserts in the ball sockets with removable shims to insure the ability to remove free play throughout the useful wear insert life.
	The state of the s

# MOTOR GRADERS BID SPECIFICATION FOR 140 OR EQUIVALENT Bid specs are intended for use by North American buyers only and are subject to change. Model configuration may change depending on country of use. Please contact your local Caterpillar dealer for the most up-to-date specifications for your area.

Category	Specification
DRAWBAR, CIRCLE & MOLDBOARD	The moldboard retention system shall have two retention points located on the left and right side of the moldboard. The surface area shall not be less than 58016 mm² (89.92 in²)
DRAWBAR, CIRCLE & MOLDBOARD	The drawbar shall feature welded protective wear plates to prevent lift group contact with the primary drawbar structure.
ELECTRICAL	Machine shall have, 750 CCA heavy-duty maintenance-free batteries standard.
ELECTRICAL	Machine shall have 190 amp-hour, 1400 CCA extra heavy-duty batteries available.
ELECTRICAL	Machine shall have an 115-amp alternator as standard.
ELECTRICAL	Starting system shall be a 24V direct electric type.
ELECTRICAL	A 24 V to 12 V converter with 10-amp capacity shall be standard.
ELECTRICAL	Electrical system shall have a master disconnect switch with a removable key (in addition to the ignition switch), accessible from the ground level.
ELECTRICAL	A 24V to 12V converter with 25-amp capacity shall be available.
ELECTRICAL	White reversing lamps and red stop lamps shall be standard.
ELECTRICAL	High and low bar headlights with front turn signals shall be available.
SERVICEABILITY	A guard shall be available to protect the machine's transmission from debris.
SERVICEABILITY	A guard shall be available to suppress sound from the engine.
SERVICEABILITY	A two-way communication tool shall give service technicians easy access to stored diagnostic data and allow configuration of machine parameters.
SERVICEABILITY	Machine shall provide 3 points of contact on all areas of the machine, for mounting and dismounting.
SERVICEABILITY	The articulation joint shall have mechanical locking device to prevent frame articulation while servicing or transporting machine.
SERVICEABILITY	Left and right side tandem case assemblies shall be covered with punched steel plate to provide an adequate platform for standing and walking.
SERVICEABILITY	High-speed engine oil drain system shall be made optional
SERVICEABILITY	Sampling ports shall be accessible from the tandem level and provide access to the engine, hydraulic, coolant, and fuel ports.
MINIMUM SERVICE FILL CAPACITIES	Standard fuel tank capacity shall not be less than 86.6 gallons (305 L).
MINIMUM SERVICE FILL CAPACITIES	Standard cooling system capacity shall not be less than 10.6 gallons (40 L).
MINIMUM SERVICE FILL CAPACITIES	Standard hydraulic tank capacity shall not be less than 14.5 gallons (55 L).
MINIMUM SERVICE FILL CAPACITIES	Standard engine oil capacity shall not be less than 4.8 gallons (18 L).
MINIMUM SERVICE FILL CAPACITIES	Standard tandem housing capacity shall not be less than 16.9 gallons (64 L) each.
MINIMUM SERVICE FILL CAPACITIES	Standard front wheel spindle bearing housing shall not be less than 0.1 gallons (0.5 L).
MINIMUM SERVICE FILL CAPACITIES	Standard circle drive housing capacity shall not be less than 1.9 gallons (7 L)
SAFETY AND ENVIRONMENTAL	Machine shall have back-up lights and sounding alarm as standard when reverse gears are selected.
SAFETY AND ENVIRONMENTAL	A circle drive slip clutch shall be provided as standard, to reduce horizontal moldboard impact damage.
SAFETY AND ENVIRONMENTAL	Blade lift accumulators shall be available, to reduce vertical impact damage.
SAFETY AND ENVIRONMENTAL	An external emergency kill switch shall be available for ground level engine shut down.
SAFETY AND ENVIRONMENTAL	Electrical system shall have a master disconnect switch with a removable key and lock (in addition to the ignition switch).
SAFETY AND ENVIRONMENTAL	A guard shall be available to protect the machine's transmission from debris.
SAFETY AND ENVIRONMENTAL	Machine shall provide dual exits allowing for emergency egress should one side become obstructed
SAFETY AND ENVIRONMENTAL	Machine shall have laminated glass for the front windows and doors to protect the operator from shattered glass.
ADDITIONAL FEATURES	A rear ripper/scarifier shall be available.
ADDITIONAL FEATURES	Rear ripper shall have five ripper shank holders and 9 scarifier shank holders.
ADDITIONAL FEATURES	Rear ripper shall have a working penetration of maximum 18.2 in (462 mm) and a penetration force of at least 19,166 lb (8694 kg)
ADDITIONAL FEATURES	A front lift group shall be available
ADDITIONAL FEATURES	A front scarifier and mid-mount scarifier shall be available.
ADDITIONAL FEATURES ADDITIONAL FEATURES	A snow wing frame ready option shall be available.  Rear fenders shall meet ISO-3457 requirements and shall not interfere with the ability to fully open any cab or engine
	enclosure, or service access doors.  An integrated communication tool providing flow of vital machine data and location shall be available. This system shall give automatic updates on machine parameters such as machine hours, machine condition, location, fault codes and
TADDITIONAL FEATURES	Talle agreement abando ou month of baronness agent as majorine month massine account and a second se
ADDITIONAL FEATURES	alarms.  All core machine systems shall be electronically connected optimizing performance and preventing machine damage



# CATERPILLAR 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:

This warranty does not apply to new replacement engines.

This warranty does not apply to selected models or new replacement engines designated by Caterpillar in India and China.

(In other areas different warranties may apply. Copies of applicable warranties may be obtained by writing to Caterpillar Inc., 100 N.E. Adams St., Peoria, IL 61629.)

- 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, or Cat Work Tools, which 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.

Note: 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.

# 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, except in the case of a new replacement engine originally installed by other than a Cat dealer or source approved by Caterpillar. In this

case, labor is limited to repair only, and removal and installation is the user's responsibility.

# 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 data

'continued on the reverse side....)

### 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 renair
- ns, 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.

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 ONTHE 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.

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

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

Solomon Islands, and Tahiti, 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.

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.

TO THE EXTENT PERMITTED UNDER THE MANDATORY RIGHTS, IF CATERPILLAR IS THE SUPPLIER TO THE USER, CATERPILLAR'S LIABILITY SHALL BE LIMITED AT ITS OPTION TO (a) IN THE CASE OF SERVICES, THE SUPPLICE SUPPLIES 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 OR THE ACQUISITION OF EQUIVALENT GOODS.

CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ONTHE 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.

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 urther information concerning either the location to submit claims or Caterpillar as the issuer of his warranty, write Caterpillar Inc., 100 N. E. Adams St., Peoria, IL USA 61629.

# CONTROL YOUR COSTS MINIMIZE YOUR RISKS

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







# WHAT YOU DO

- Operate equipment according to the Cat Operation & Maintenance Manual (OMM)
- Have recommended preventive maintenance performed at intervals specified in the 0MM
- Upon request, provide proof of preventive maintenance compliance (receipts, copies of work orders, invoices)
- Promptly provide the machine for repair in the event of a covered failure

### WHAT WE DO

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

### t you against and workmanship. tion Plan, you can nd maintenance ne.

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

Camshaft & Camshaft Bearings

fiming / Accessory Gears

Engine - Internal Components

Axles
Axle Seals
Final Drive & Wheel
Final Drive Case / Bore
Final Drive Chain
Final Drive Gears
Axle Shaft
Drive Axle Oil Pump

Fuel Pump / Governor Drive

Fan & Fan Drive

Oil Hoses / Lines (non-hydrostatic)

Cylinder Block

AC Compressor / Condenser Electronic Control Modules

Turbocharger

Oil Pan Group

Oil Pump

Rocker Shaft Assembly

Push Rod

Balancer

Senders / Solenoids / Sensors

Lift / Transfer Pump

njectors

Flywheel & Torque Converter

**Thermostat** 

Engine Oil Filter Mount

Valve Spring & Guide

Rocker Arm

Fuel Injection Pumps

Water Pump

Fan Motor

Oil Cooler Manifolds

Inlet / Exhaust Valve Valve Cover & Base

Timing Chain / Belt

Transmissions
Hydraulic Controls
Transmission Oil Filter Base
Transmission Gears
Final Drives/Planetary
Drive Shafts
Transfer Case

Crankshaft, Main Bearings & Rod

Bearings

Piston & Connecting Rod

Piston Rings

Steering Clutch Steering Clutch & Brake Control Valve

Hydraulic Oil Coolers

### covered failure

# If a component is not listed, it may not be include:

EXCLUSIONS

- > Improper or abusive use of the machine
- > Lubricating oil, antifreeze, filters, consumables and other maintenance items replaced during the covered component repair, unless such items are rendered unusable by a covered component failure
- > 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
- Any incidental / consequential damages or costs incurred as a result of a covered component failure.
- > Modifications unless approved by Caterpillar

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



### **Employment Eligibility Verification**

Weston. Teresa Morton User lo TMOF\$402 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 Rescurces

View Essential Resources

Take Tutorial

View User Manual

Contact Us

Company Information

Company Name:

Thompson Tractor Co., Inc.

Company ID Number:

Doing Business As (DBA)

Name:

**DUNS Number:** 

Physical Location:

Address 1:

Address 2:

City:

State:

Zip Code:

County:

2401 Pinson Highway

Birmingham

47130

ΑL

35217

**JEFFERSON** 

1,000 to 2,499

Mailing Address:

Address 1: P.O. Box 10367

Address 2:

City:

Birmingham

State: AL

Zip Code: 35202-0367

Additional Information:

Employer Identification Number: 630377478

Administrator:

Organization Designation:

**Employer Category:** 

Total Number of Employees:

Parent Organization:

NAICS Code:

423 - MERCHANT WHOLESALERS, DURABLE GOODS

View / Edit

Total Hiring Sites:

40

View / Edit

Total Points of Contact:

View / Edit

View MOU

### Form (Rev. October 2007) Dopartment of the Treasury Internal Revenue Socies

### Request for Taxpayer Identification Number and Certification

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

	Name (as shown on your income tax return)		
.; .;	Thompson Tractor Co., Inc. DBA Thompson Power System	is, Thompson	Lift Truck Co
раде	Business name, if different from above		
uo b	and The Cat Rent Store		T
Print or type Specific Instructions	Check appropriate box: Individual/Sole proprietor Corporation Partnership  Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership)  Other (see instructions)	ership) ►	Exempt payer
Str	Address (number, street, and apt. or suite no.)	equester's name and	address (optional)
Print c Inst	P O Box 10367 2401 Pinson Hwy. Tarrant, AL 35217		
Ċ.	City, state, and ZIP code		
Spo	Birmingham, AL 35202-0367		
9	List account number(s) here (optional)		
S	Lockbox Remit To: P O Box 934065, Atlanta, GA 311	93-4005	
	Taxpayer Identification Number (TIN)		
L 1 1	your TIN in the appropriate box. The TIN provided must match the name given on Une 1 to p withholding. For individuals, this is your social security number (SSN). However, for a residual security number (SSN). However, for a residual security number (SSN).	ent	urity number
Dackup with locating. For introduced, this is you see the Part I instructions on page 3. For other entities, it is alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see How to get a TIN on page 3. Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.		11 13	or
		Employer	identification number
			377478
numbe		1.03 ; (	

Under penalties of perfury, I certify that:

- 1. The number shown on this form is my porrect taxpayer identification number (or I am walting for a number to be issued to ma), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- 3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions, You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have falled to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an inclinidual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

arrangement (IRA), and generally, payments other than interest and dividents, you are not required to sign and dividents. Sign Signature of Here U.S. person Funda X Duntax, Controller Date Definition of a U.S. person. For federal tax purposes, you are

### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

### Purpose of Form

A person who is required to file an Information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- 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.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- . An Individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- · An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301 7701-7)

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required 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 a partner is a foreign person, and pay the withholding tax. Therefore, if 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 income.

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 following cases:

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

THU T-VERBATROCRAMFORDAMENT VERBUCATION

MEMORANDIM OF INDERSTANDING

### **ARTICLE I**

### PURPOSE AND AUTHORITY

This Memorandum of Understanding (MOU) sets forth the points of agreement between the Social Security Administration (SSA), the Department of Homeland Security (DHS) and Thompson Tractor Co., Inc. (Employer) regarding the Employer's participation in the Employment Eligibility Verification Program (E-Verify). E-Verify is a program in which the employment eligibility of all newly hired employees will be confirmed after the Employment Eligibility Verification Form (Form I-9) has been completed.

Authority for the E-Verify program is found in Title IV, Subtitle A, of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Pub. L. 104-208, 110 Stat. 3009, as amended (8 U.S.C. § 1324a note).

### ARTICLE II

#### **FUNCTIONS TO BE PERFORMED**

### A. RESPONSIBILITIES OF THE SSA

- 1. Upon completion of the Form I-9 by the employee and the Employer, and provided the Employer complies with the requirements of this MOU, SSA agrees to provide the Employer with available information that allows the Employer to confirm the accuracy of Social Security Numbers provided by all newly hired employees and the employment authorization of U.S. citizens.
- 2. The SSA agrees to provide to the Employer appropriate assistance with operational problems that may arise during the Employer's participation in the E-Verify program. The SSA agrees to provide the Employer with names, titles, addresses, and telephone numbers of SSA representatives to be contacted during the E-Verify process.
- 3. The SSA agrees to safeguard the information provided by the Employer through the E-Verify program procedures, and to limit access to such information, as is appropriate by law, to individuals responsible for the verification of Social Security Numbers and for evaluation of the E-Verify program or such other persons or entities who may be authorized by the SSA as governed by the Privacy Act (5 U.S.C. § 552a), the Social Security Act (42 U.S.C. 1306(a)), and SSA regulations (20 CFR Part 401).
- 4. SSA agrees to establish a means of automated verification that is designed (in conjunction with DHS's automated system if necessary) to provide confirmation or tentative nonconfirmation of U.S. citizens' employment eligibility and accuracy of SSA records for both citizens and aliens within 3 Federal Government work days of the initial inquiry.

5. SSA agrees to establish a means of secondary verification (including updating SSA records as may be necessary) for employees who contest SSA tentative nonconfirmations that is designed to provide final confirmation or nonconfirmation of U.S. citizens' employment eligibility and accuracy of SSA records for both citizens and aliens within 10 Federal Government work days of the date of referral to SSA, unless SSA determines that more than 10 days may be necessary. In such cases, SSA will provide additional verification instructions.

### B. RESPONSIBILITIES OF THE DEPARTMENT OF HOMELAND SECURITY

- 1. Upon completion of the Form I-9 by the employee and the Employer and after SSA verifies the accuracy of SSA records for aliens through E-Verify, DHS agrees to provide the Employer access to selected data from DHS's database to enable the Employer to conduct:
  - Automated verification checks on newly hired alien employees by electronic means, and
  - Photo verification checks (when available) on newly hired alien employees.
- 2. DHS agrees to provide to the Employer appropriate assistance with operational problems that may arise during the Employer's participation in the E-Verify program. DHS agrees to provide the Employer names, titles, addresses, and telephone numbers of DHS representatives to be contacted during the E-Verify process.
- 3. DHS agrees to provide to the Employer a manual (the E-Verify Manual) containing instructions on E-Verify policies, procedures and requirements for both SSA and DHS, including restrictions on the use of E-Verify. DHS agrees to provide training materials on E-Verify.
- 4. DHS agrees to provide to the Employer a notice, which indicates the Employer's participation in the E-Verify program. DHS also agrees to provide to the Employer anti-discrimination notices issued by the Office of Special Counsel for Immigration-Related Unfair Employment Practices (OSC), Civil Rights Division, and U.S. Department of Justice.
- 5. DHS agrees to issue the Employer a user identification number and password that permits the Employer to verify information provided by alien employees with DHS's database.
- 6. DHS agrees to safeguard the information provided to DHS by the Employer, and to limit access to such information to individuals responsible for the verification of alien employment eligibility and for evaluation of the E-Verify program, or to such other persons or entities as may be authorized by applicable law. Information will be used only to verify the accuracy of Social Security Numbers and employment eligibility, to enforce the Immigration and Nationality Act and federal criminal laws, and to ensure accurate wage reports to the SSA.
- 7. DHS agrees to establish a means of automated verification that is designed (in conjunction with SSA verification procedures) to provide confirmation or tentative nonconfirmation of employees' employment eligibility within 3 Federal Government work days of the initial inquiry.

8. DHS agrees to establish a means of secondary verification (including updating DHS records as may be necessary) for employees who contest DHS tentative nonconfirmations and photo non-match tentative nonconfirmations that is designed to provide final confirmation or nonconfirmation of the employees' employment eligibility within 10 Federal Government work days of the date of referral to DHS, unless DHS determines that more than 10 days may be necessary. In such cases, DHS will provide additional verification instructions.

### C. RESPONSIBILITIES OF THE EMPLOYER

- 1. The Employer agrees to display the notices supplied by DHS in a prominent place that is clearly visible to prospective employees.
- 2. The Employer agrees to provide to the SSA and DHS the names, titles, addresses, and telephone numbers of the Employer representatives to be contacted regarding E-Verify.
- 3. The Employer agrees to become familiar with and comply with the E-Verify Manual.
- 4. The Employer agrees that any Employer Representative who will perform employment verification queries will complete the E-Verify Tutorial before that individual initiates any queries.
  - A. The employer agrees that all employer representatives will take the refresher tutorials initiated by the E-Verify program as a condition of continued use of E-Verify.
  - B. Failure to complete a refresher tutorial will prevent the employer from continued use of the program.
- 5. The Employer agrees to comply with established Form I-9 procedures, with two exceptions:
  - If an employee presents a "List B" identity document, the Employer agrees to only accept "List B" documents that contain a photo. (List B documents identified in 8 C.F.R. § 274a.2 (b) (1) (B)) can be presented during the Form I-9 process to establish identity).
  - If an employee presents a DHS Form I-551 (Permanent Resident Card) or Form I-766 (Employment Authorization Document) to complete the Form I-9, the Employer agrees to make a photocopy of the document and to retain the photocopy with the employee's Form I-9. The employer will use the photocopy to verify the photo and to assist the Department with its review of photo non-matches that are contested by employees. Note that employees retain the right to present any List A, or List B and List C, documentation to complete the Form I-9. DHS may in the future designate other documents that activate the photo screening tool.
- 6. The Employer understands that participation in E-Verify does not exempt the Employer from the responsibility to complete, retain, and make available for inspection Forms I-9 that relate to its employees, or from other requirements of applicable regulations or laws, except for the following modified requirements applicable by reason of the Employer's participation in E-Verify: (1) identity documents must have photos, as described in paragraph 5 above; (2) a

rebuttable presumption is established that the Employer has not violated section 274A(a)(1)(A) of the Immigration and Nationality Act (INA) with respect to the hiring of any individual if it obtains confirmation of the identity and employment eligibility of the individual in compliance with the terms and conditions of E-Verify; (3) the Employer must notify DHS if it continues to employ any employee after receiving a final nonconfirmation, and is subject to a civil money penalty between \$500 and \$1,000 for each failure to notify DHS of continued employment following a final nonconfirmation; (4) the Employer is subject to a rebuttable presumption that it has knowingly employed an unauthorized alien in violation of section 274A(a)(1)(A) if the Employer continues to employ any employee after receiving a final nonconfirmation; and (5) no person or entity participating in E-Verify is civilly or criminally liable under any law for any action taken in good faith on information provided through the confirmation system. DHS reserves the right to conduct Form I-9 compliance inspections during the course of E-Verify, as well as to conduct any other enforcement activity authorized by law.

- 7. The Employer agrees to initiate E-Verify verification procedures within 3 Employer business days after each employee has been hired (but after both sections 1 and 2 of the Form I-9 have been completed), and to complete as many (but only as many) steps of the E-Verify process as are necessary according to the E-Verify Manual. The Employer is prohibited from initiating verification procedures before the employee has been hired and the Form I-9 completed. If the automated system to be queried is temporarily unavailable, the 3-day time period is extended until it is again operational in order to accommodate the Employer's attempting, in good faith, to make inquiries during the period of unavailability. In all cases, the Employer must use the SSA verification procedures first, and use DHS verification procedures and photo screening tool only after the the SSA verification response has been given.
- 8. The Employer agrees not to use E-Verify procedures for pre-employment screening of job applicants, support for any unlawful employment practice, or any other use not authorized by this MOU. The Employer must use E-Verify for all new employees and will not verify only certain employees selectively. The Employer agrees not to use E-Verify procedures for reverification, or for employees hired before the date this MOU is in effect. The Employer understands that if the Employer uses E-Verify procedures for any purpose other than as authorized by this MOU, the Employer may be subject to appropriate legal action and the immediate termination of its access to SSA and DHS information pursuant to this MOU.
- 9. The Employer agrees to follow appropriate procedures (see Article III.B. below) regarding tentative nonconfirmations, including notifying employees of the finding, providing written referral instructions to employees, allowing employees to contest the finding, and not taking adverse action against employees if they choose to contest the finding. Further, when employees contest a tentative nonconfirmation based upon a photo non-match, the Employer is required to take affirmative steps (see Article III.B. below) to contact DHS with information necessary to resolve the challenge.
- 10. The Employer agrees not to take any adverse action against an employee based upon the employee's employment eligibility status while SSA or DHS is processing the verification request unless the Employer obtains knowledge (as defined in 8 C.F.R. § 274a.1 (l)) that the employee is not work authorized. The Employer understands that an initial inability of the SSA or DHS automated verification to verify work authorization, a tentative nonconfirmation, or the finding of

- a photo non-match, does not mean, and should not be interpreted as, an indication that the employee is not work authorized. In any of the cases listed above, the employee must be provided the opportunity to contest the finding, and if he or she does so, may not be terminated or suffer any adverse employment consequences until and unless secondary verification by SSA or DHS has been completed and a final nonconfirmation has been issued. If the employee does not choose to contest a tentative nonconfirmation or a photo non-match, then the Employer can find the employee is not work authorized and take the appropriate action.
- 11. The Employer agrees to comply with section 274B of the INA by not discriminating unlawfully against any individual in hiring, firing, or recruitment or referral practices because of his or her national origin or, in the case of a protected individual as defined in section 274B(a)(3) of the INA, because of his or her citizenship status. The Employer understands that such illegal practices can include selective verification or use of E-Verify, discharging or refusing to hire eligible employees because they appear or sound "foreign", and premature termination of employees based upon tentative nonconfirmations, and that any violation of the unfair immigration-related employment practices provisions of the INA could subject the Employer to civil penalties pursuant to section 274B of the INA and the termination of its participation in E-Verify. If the Employer has any questions relating to the anti-discrimination provision, it should contact OSC at 1-800-255-7688 or 1-800-237-2515 (TDD).
- 12. The Employer agrees to record the case verification number on the employee's Form I-9 or to print the screen containing the case verification number and attach it to the employee's Form I-9.
- 13. The Employer agrees that it will use the information it receives from the SSA or DHS pursuant to E-Verify and this MOU only to confirm the employment eligibility of newly-hired employees after completion of the Form I-9. The Employer agrees that it will safeguard this information, and means of access to it (such as PINS and passwords) to ensure that it is not used for any other purpose and as necessary to protect its confidentiality, including ensuring that it is not disseminated to any person other than employees of the Employer who are authorized to perform the Employer's responsibilities under this MOU.
- 14. The Employer acknowledges that the information which it receives from SSA is governed by the Privacy Act (5 U.S.C. § 552a (i) (1) and (3)) and the Social Security Act (42 U.S.C. 1306(a)), and that any person who obtains this information under false pretenses or uses it for any purpose other than as provided for in this MOU may be subject to criminal penalties.
- 15. The Employer agrees to allow DHS and SSA, or their authorized agents or designees, to make periodic visits to the Employer for the purpose of reviewing E-Verify -related records, i.e., Forms I-9, SSA Transaction Records, and DHS verification records, which were created during the Employer's participation in the E-Verify Program. In addition, for the purpose of evaluating E-Verify, the Employer agrees to allow DHS and SSA or their authorized agents or designees, to interview it regarding its experience with E-Verify, to interview employees hired during E-Verify use concerning their experience with the pilot, and to make employment and E-Verify related records available to DHS and the SSA, or their designated agents or designees. Failure to comply with the terms of this paragraph may lead DHS to terminate the Employer's access to E-Verify.

### ARTICLE III

### REFERRAL OF INDIVIDUALS TO THE SSA AND THE DEPARTMENT OF HOMELAND SECURITY

### A. REFERRAL TO THE SSA

- 1. If the Employer receives a tentative nonconfirmation issued by SSA, the Employer must print the tentative nonconfirmation notice as directed by the automated system and provide it to the employee so that the employee may determine whether he or she will contest the tentative nonconfirmation.
- 2. The Employer will refer employees to SSA field offices only as directed by the automated system based on a tentative nonconfirmation, and only after the Employer records the case verification number, reviews the input to detect any transaction errors, and determines that the employee contests the tentative nonconfirmation. The Employer will transmit the Social Security Number to SSA for verification again if this review indicates a need to do so. The Employer will determine whether the employee contests the tentative nonconfirmation as soon as possible after the Employer receives it.
- 3. If the employee contests an SSA tentative nonconfirmation, the Employer will provide the employee with a referral letter and instruct the employee to visit an SSA office to resolve the discrepancy within 8 Federal Government work days. The Employer will make a second inquiry to the SSA database using E-Verify procedures on the date that is 10 Federal Government work days after the date of the referral in order to obtain confirmation, or final nonconfirmation, unless otherwise instructed by SSA or unless SSA determines that more than 10 days is necessary to resolve the tentative nonconfirmation.
- 4. The Employer agrees not to ask the employee to obtain a printout from the Social Security Number database (the Numident) or other written verification of the Social Security Number from the SSA.

### B. REFERRAL TO THE DEPARTMENT OF HOMELAND SECURITY

- 1. If the Employer receives a tentative nonconfirmation issued by DHS, the Employer must print the tentative nonconfirmation notice as directed by the automated system and provide it to the employee so that the employee may determine whether he or she will contest the tentative nonconfirmation.
- 2. If the Employer finds a photo non-match for an alien who provides a document for which the automated system has transmitted a photo, the employer must print the photo non-match tentative nonconfirmation notice as directed by the automated system and provide it to the employee so that the employee may determine whether he or she will contest the finding.
- 3. The Employer agrees to refer individuals to DHS only when the employee chooses to contest a tentative nonconfirmation received from DHS automated verification process or when

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

without changes to E-Verify, the Department reserves the right to require employers to take mandatory refresher tutorials.

Termination by any party shall terminate the MOU as to all parties. The SSA or DHS may terminate this MOU without prior notice if deemed necessary because of the requirements of law or policy, or upon a determination by SSA or DHS that there has been a breach of system integrity or security by the Employer, or a failure on the part of the Employer to comply with established procedures or legal requirements. Some or all SSA and DHS responsibilities under this MOU may be performed by contractor(s), and SSA and DHS may adjust verification responsibilities between each other as they may determine.

Nothing in this MOU is intended, or should be construed, to create any right or benefit, substantive or procedural, enforceable at law by any third party against the United States, its agencies, officers, or employees, or against the Employer, its agents, officers, or employees.

Each party shall be solely responsible for defending any claim or action against it arising out of or related to E-Verify or this MOU, whether civil or criminal, and for any liability wherefrom, including (but not limited to) any dispute between the Employer and any other person or entity regarding the applicability of Section 403(d) of IIRIRA to any action taken or allegedly taken by the Employer.

The employer understands that the fact of its participation in E-Verify is not confidential information and may be disclosed as authorized or required by law and DHS or SSA policy, including but not limited to, Congressional oversight, E-Verify publicity and media inquiries, and responses to inquiries under the Freedom of Information Act (FOIA).

The foregoing constitutes the full agreement on this subject between the SSA, DHS, and the Employer.

The individuals whose signatures appear below represent that they are authorized to enter into this MOU on behalf of the Employer and DHS respectively.

To be accepted as a participant in E-Verify, you should only sign the Employer's Section of the signature page. If you have any questions, contact E-Verify Operations at 888-464-4218.

Employer Thompson Tractor Co., Inc.

Frank M Wright		
Name (Please type or print)	Title	
Electronically Signed	07/11/2007	
Signature	Date	

Department of Homeland Security - Verification Division

INFORMATION REQUIRED			
FOR THE E-VERIFY PROGRAM			
Information relating to your Company:			
Company Name:	Thompson Tractor Co., Inc.		
Company Facility Address:	2401 Pinson Highway		
•	Birmingham, AL 35217		
	A CONTROL OF THE PROPERTY OF T		
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:			

Fax Number:

(205) 849 - 4565

Telephone Number: E-mail Address:

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

Name: Telephone Number: E-mail Address:

Fax Number:

(205) 849 - 4854

Frank M Wright (205) 849 - 4267 frankwright@thompsontractor.com

Telephone Number:

Telephone Number:

E-mail Address:

E-mail Address:

Name:

(205) 849 - 4279

kimberlystark@thompsontractor.com

Frank M Wright (205) 849 - 4267 frankwright@thompsontractor.com

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	n Administrator(s) for your Company on policy questions or operational problems:		
Name: Kimberl	y A Stark		

Fax Number:

Fax Number:

(205) 849 - 4565

(205) 849 - 4854

Company ID Number: 47130		
USCIS Verification Division		
Name (Please type or print)	Title	
Electronically Signed	07/11/2007	
Signature	Date	