

BID SUBMITTAL FORM
Alabama County Joint Bid Program
Heavy Equipment – Bid Item: 21 Ton Wheel Excavator

Company Name: THOMPSON TRACTOR COMPANY

Address: P.O. BOX 10367
BIRMINGHAM, AL35202-0367

Bid Submitted by: JAY SMITH
(Name of company representative)

Title: SALES OPERATIONS MANAGER E-mail address: JAYSMITH@THOMPSONTRACTOR.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

JAS

That the bid price will be honored for all counties for the period from Jan. 1, 2022 to Dec. 31, 2022.

JAS

The equipment will be delivered at the bid price to all counties participating in the joint bid program.

JAS

The company acknowledges the freight preparation and delivery price is to be included in the total bid price for the standard machine.

JAS

The company representative listed above will be the contact person for purchasing this bid item under the joint bid program.

JAS

The bid is accompanied by a current catalog or model specification document for the model number identified below.

JAS

The bid is accompanied by a copy of the manufacturer's standard warranty as required in the bid specifications.

JAS

The bid includes the e-verify documentation required by Alabama law.

JAS

If awarded the bid, a performance bond will be provided upon request.

JAS

The bid documents include the **Manufacturer's Suggested Retail Price Sheet (MSRP) for the Standard Machine.**

JAS


Total Bid Price for Standard Machine: \$ 276,502
(Total Bid Price for Standard Machine Includes Freight Preparation, Delivery and Standard Warranty Costs)*

Freight Preparation and Delivery: \$ 8,183
(Included in Standard Machine Bid Price)

Manufacturer's Suggested Retail Price for Standard Machine: \$ 377,913

Equipment Model #: CATERPILLAR M320

Description: WHEELED EXCAVATOR

Signature of company representative submitting bid: 

Title: SALES OPERATIONS MANAGER

* **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*

JS

The bid documents include the **Manufacturer's Suggested Retail Price Sheet (MSRP)** for the Standard Machine

JS

Equipment Model #: CATERPILLAR M320

Description: WHEELED EXCAVATOR

Signature of company representative submitting bid: _____

Jay Smith

Title: SALES OPERATIONS MANAGER

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

BID SPECIFICATIONS FOR 21 TON WHEELED EXCAVATOR

GENERAL

These specifications shall be construed as the minimum acceptable standards for a 21-ton wheeled excavator. 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 wheeled excavator 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 and 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 the 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. If any 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 maximum of 36 hours within notification by county.

Yes No

Page # _____

or

Attachment

WEIGHT

Minimum **41,400 lbs.**

Yes No
Page # 1, 21

ENGINE

Six (6) cylinders, turbo charged, diesel engine with minimum of **174 NET** flywheel Horsepower. Displacement minimum of **268 Cu. In.**

Yes No
Page# 1, 21

Oil and fuel filters of spin-on type, vertically mounted, accessible from ground level

Yes No
Page # 16

Automatic engine speed control

Yes No
Page # 32

Factory installed fuel line water separator

Yes No
Page # 5

Variable speed on-demand fan type cooling system

Yes No
Page # 5

Engine designed and produced by equipment manufacturer

Yes No
Page # 1, 5, 21

TRANSMISSION

Two-speed powershift, all-wheel drive in both speed ranges with creeper speed

Yes No
Page # 33

Maximum travel speed not less than **21 mph**

Yes No
Page # 1

Travel speed lock

Yes No
Page # 13

HYDRAULICS

Variable displacement, closed center, load sensing hydraulic system

Yes No
Page # 32

Minimum **71-gallon** hydraulic oil system

Yes No
Page # 22

Travel circuit maximum pressure not less than **5,075 psi**

Yes No
Page # 22

Implement circuit maximum pressure not less than **5,075 psi**

Yes No
Page # 22

High pressure hydraulics circuit capable of powering high speed cutting attachment

Yes No
Page # 22, 22, 34

Single rocker pedal controls

Yes No
Page # 7

AXLES/BRAKES

Front steering axle pivotally mounted to the frame and free to oscillate not less than 8° in either direction

Yes No
Page # 21

Minimum Turning Radius (Outside of Tire) **21- ft**

Yes No
Page # 21

Minimum **14"** ground clearance

Yes No
Page # 21

Minimum tractive force/drawbar pull **23,380 lb**

Yes No
Page # 21

Dig and Go Auto Axle Lock

Yes No
Page # 9

ELECTRONICS, ELECTRONIC CONTROLS, ELECTRIC SYSTEM

Electronic fluid level check at machine start-up with operator warning for the following fluids: engine coolant, hydraulic oil

Yes No
Page # 33

Lighter/Power Supply

Yes No
Page # 33

24 volt electrical starting system

Yes No
Page # 33

Alternator rated at not less than 115 amps

Yes No
Page # 32

Two 12 Volt Heavy Duty, Maintenance Free Batteries

Yes No
Page # 32

Central diagnostic function to record system parameters and faults

Yes No
Page # 17

Cab monitor warning display when oil and filter maintenance interval is due

Yes No
Page # 33

Cab monitor text warning messages of problems and international fault codes display

Yes No
Page # 33

Central diagnostic function to record system parameters and faults

Yes No
Page # 17

Master electrical disconnect switch that cuts all electrical power to all circuits

Yes No
Page # 19

BOOM STICK AND PERFORMANCE

One piece boom with **9'2"** minimum stick length

Maximum reach at ground level not less than **31' 5"**

Yes No
Page # 34

Maximum digging depth not less than **20'-7"**

Yes No
Page # 1, 24

Maximum bucket digging force with standard trenching bucket not less than **30,700 lbs.**

Yes No
Page # 1, 24

Maximum stick digging force not less than **20,300 lbs.**

Yes No
Page # ~~24~~ 29

Maximum lifting capacity at ground level 20' from machine with load over front and two stabilizers down not less than **15,900 lbs.**

Yes No
Page # ~~29~~ 29

Anti-drift valves for stick and bucket cylinders

Yes No
Page # 32

SWING MECHANISM

Max. Swing Speed not less than **9 rpm**

Yes No
Page # 21

Swing Torque not less than **36,500 ft-lb**

Yes No
Page # 21

CAB

Road, tail, and turn lights

Yes No
Page # 32

Falling objects guard

Yes No
Page # 33

Suspension seat with lumbar support

Yes No
Page # 33

Sliding door window

Yes No
Page # 32

Control levers mounted to suspension seat

Yes No
Page # 16

Shock reducing dampening mounts

Yes No
Page # 16, 33

Factory installed CD/MP3/radio

Yes No
Page # 33

Factory installed air conditioning with easy removable primary filter

Yes No
Page # 16, 33

All hydraulic controls locked out when console is in raised position.

Yes No
Page # 18, 33

Console must be in raised position for engine start-up

Yes No
Page # 18, 33

Back-up alarm

Yes No
Page # 19, 34

Rear View and side view Cameras

Yes No
Page # 33

Retractable seat belt

Yes No
Page # 33

GENERAL:

Anti-skid, punched steel star plate covering the entire normal walking surface of the upper structure

Yes No
Page # 18, 19

Centralized maintenance and greasing points accessible from ground level

Yes No
Page # 14, 33

Wiper and washer for lower windshield

Yes No
Page # 7, 33

Fuel capacity not less than 124 gal.

Yes No
Page # 21

Bucket:

Standard with no bucket. Buckets will be considered optional attachments.

M320 WHEELED EXCAVATOR

M320	21 TON WHEELED EXCAVATOR	2022 Pricing
604-9937	M320 WHEELED EXCAVATOR CFG4	\$300,830
	553-0169 M320 07A WHEEL EXCAVATOR	
	553-0170 COMMON ARRANGEMENT	
	558-7123 1 PIECE BOOM	
	563-5765 QUICK COUPLER CONTROL, PG, 1PC, GRADE	
	558-9523 AUTOLUBE	
	559-5055 LINKAGE, BKT, A-LUBE, GRADE	
	583-3846 PRODUCT LINK WIRING	
	585-8747 COUNTERWEIGHT	
	581-3651 ALARM, TRAVEL	
	583-3840 LIGHTS, CHASSIS	
	589-1744 RADIO MODULE, PL243 CELLULAR	
553-8758	NO CAT GRADE CONTROL	\$0
558-9532	9'6" STICK	\$4,690
558-7126	RIDECONTROL, BLCV & DRIFT VALVE	\$3,702
565-4313	21.7 MPH SPEED	\$0
496-8300	FRONT & REAR OUTRIGGERS	\$29,588
548-1811	NO FENDERS	\$0
474-7236	11.00-20 DUEL BRIDGESTONE TIRES	\$7,738
566-3000	HIGH PRESSURE CIRCUITS	\$9,402
491-9770	DELUXE CAB	\$10,150
539-9003	2-SLIDER JOYSTICKS	\$2,777
555-7286	NETWORK MANAGER	\$0
563-5769	REAR & RIGHT HAND SIDE CAMERAS	\$868
527-9744	MIRRORS	\$0
521-6833	N.A. DECALS	\$0
0G-9240	STORAGE PROTECTION	\$434
564-8368	AUTOLUBE	\$1,399
544-0785	LINES FOR 2ND HIGH PRESSURE CIRCUIT	\$567
520-7563	JOYSTICK STEERING CONTROLLER	\$0
528-6146	GRADE SENSOR	\$0
567-0427	BEACON ON TOP OF CAB	\$334
527-7970	PEDAL	\$1,154
564-1979	SMARTBOOM CHECK VALVE PACKAGE	\$3,219
563-5780	QUICK COUPLER STICK LINES	\$1,061
	TOTAL BID PRICE FOR STANDARD MACHINE	\$276,502
	FREIGHT PREPARATION AND DELIVERY	\$8,183
	TOTAL MANUFACTURER'S SUGGESTED RETAIL PRICE FOR STANDARD MACHINE	\$377,913

M320F

Wheeled Excavator



Engine

Engine Model	Cat® C7.1 ACERT™	
Emissions	U.S. EPA Tier 4 Final	
Net Power (Maximum)		
ISO 9249 at 1,550 rpm	126 kW	169 hp
ISO 9249/SAE J1349 (metric)		171 hp (PS)
ISO 13496 at 1,550 rpm (gross)	129.4 kW	174 hp

Weights

Operating Weight	18 500-	40,785-
	20 650 kg	46,385 lb

Bucket Specifications

Bucket Capacities	0.35-1.18 m ³	0.46-1.54 yd ³
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Working Ranges

Maximum Reach at Ground Level	9580 mm	31'5"
Maximum Digging Depth	6330 mm	20'9"

Drive

Maximum Travel Speed	35 km/h	22 mph
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M320F Features

Made to keep your costs down.

Not only does the machine give you all the versatility you need, but it does so while providing a great deal of precision and speed with an absolute minimum fuel consumption – and zero impact on your efficiency.

Made to make operation easy and pleasant.

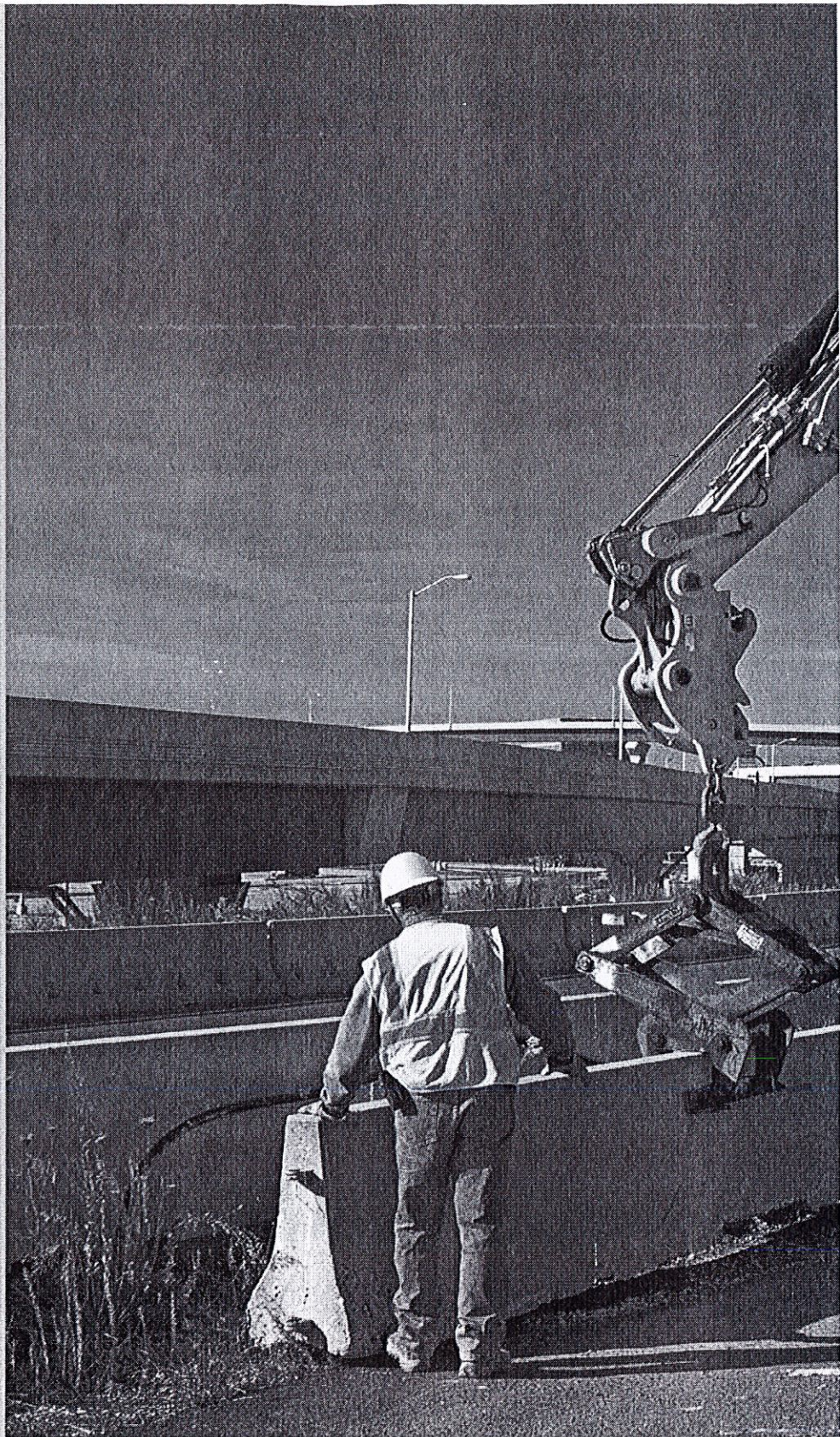
Have a seat, you will be impressed by the quietness and comfort of the cab. Feel relaxed, we help you make sure you're safe.

Enjoy integrated technologies; they act transparently.

When you add the ground level grouped service points that make your maintenance quick and easy and multiple Cat work tools that help you do all kinds of jobs, you simply won't find a better machine.

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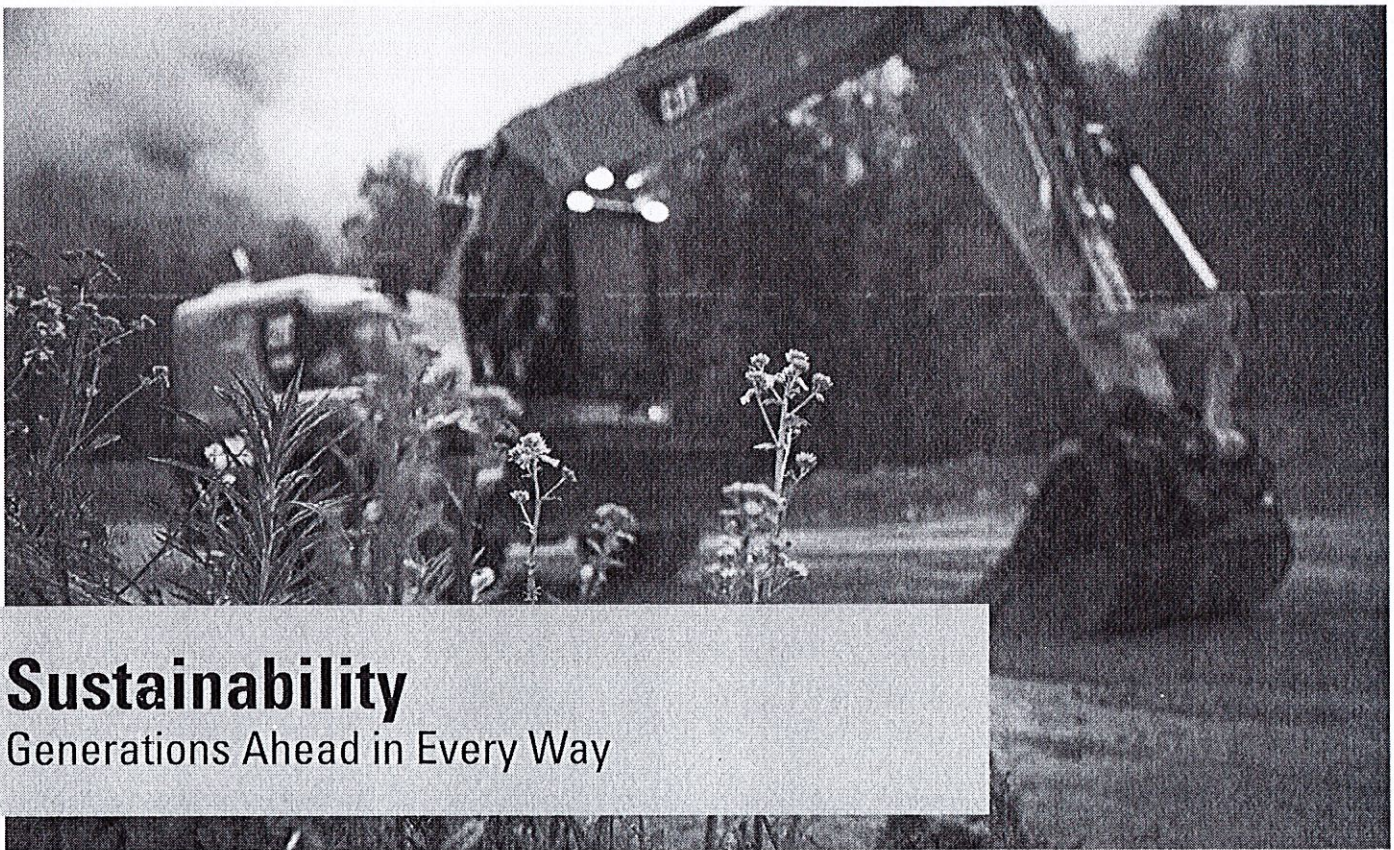
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The new F Series generation is here to help you take on the wide variety of challenges you face every day, more easily and with more pleasure.

F Series – Easier Than Ever.



Sustainability

Generations Ahead in Every Way

Fuel Efficiency and Reduced Exhaust Emissions

The engine meets Tier 4 Final emission standards, performs the same amount of work, while burning significantly less fuel than the previous model, which means more efficiency, less resources, and fewer CO₂ emissions.

Quiet Operation

Outstandingly low sound levels, you won't believe your machine is running.

Transparent Technologies and Longer Service Intervals

- The new Eco Modes, Auto Engine Speed Control and Engine Idle Shutdown help further reduce your overall fuel consumption.
- Product Link™ allows remote monitoring of the machine and helps improve overall efficiency.
- Your Cat dealer can help extend service intervals, meaning fewer fluids and disposals, all adding up to lower costs.

Biodiesel and Biodegradable Hydraulic Oil

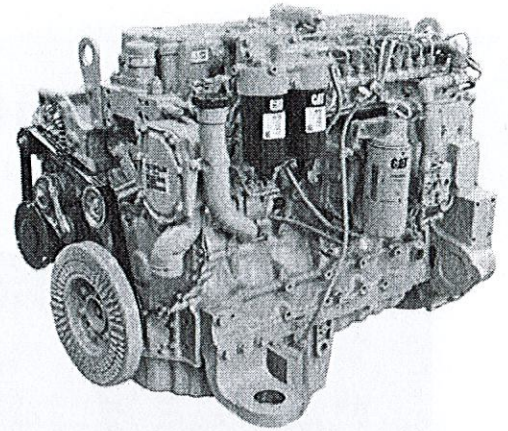
- The M320F has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or up to B20 biodiesel fuel blended with ULSD.
- Cat BIO HYDO™ Advanced HEES™ reduces the impact on the environment.

Cat Certified Used

This program is a key element in the range of solutions offered by Caterpillar and Cat dealers to help customers achieve growth at the lowest cost while eliminating waste. Used equipment is inspected, guaranteed and ready for work and customers will benefit from a Caterpillar warranty.

Engine

Power, Reliability, and Fuel Economy



The Power and Performance You Need

Constant Power Strategy

Provides a quick response to changing loads, while delivering the same amount of power regardless of operating conditions.

A Transparent Emission Solution That Works.

The Cat C7.1 ACERT engine meets today's Tier 4 Final emission standards, and it does so without interrupting your job process. It is designed to be:

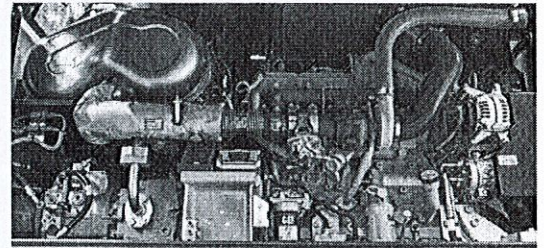
- **Transparent:** no operator intervention
- **Durable:** fit for life Diesel Particulate Filter
- **Efficient:** no work interruption, even in case of extended idling time
- **Simple:** minimum maintenance. Longitudinal engine installation, which further simplifies maintenance.

Biodiesel Not a Problem

The engine can run on up to B20 biodiesel fuel that meets ASTM 6751 standards – all to give you more potential fuel-saving flexibility.

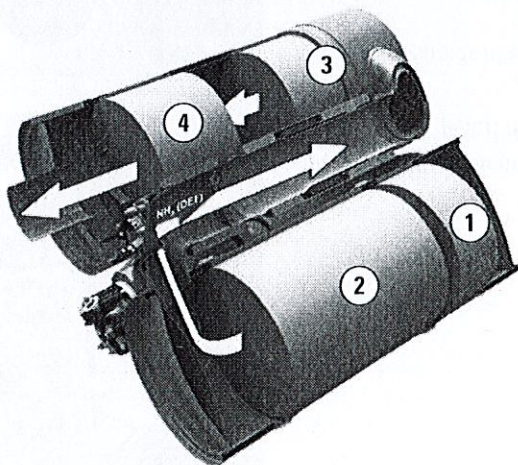
Proven Technology

To assure that our technology will meet your expectations for reliable trouble-free service, we subjected these engines and technologies to extensive operating hours of test and validation.



Built-in Fuel Savers That Add Up

- Automatic Engine Speed Control: lowers engine speed when it is not needed.
- NEW Engine Idle Shutdown (when activated): turns the engine off when it's been idling for more than a pre-set amount of time.
- NEW Cooling System: variable speed and on-demand fan optimizing consumption.
- NEW enhanced Eco Mode: reduces engine speed while delivering the same power.
- Automatic shift to Travel Mode when you start riding: optimizes driveline performance while preserving fuel.



1) DOC 2) DPF 3) SCR Catalyst 4) AMOX

Premium Comfort

Keeps Operators Productive All Shift Long



Legacy from the Renowned Cat Wheeled Excavators

Designed for the operator, our cabs are unique.

Ergonomic Layout

- Frequently used switches are centralized, kept to the minimum and ideally located close to the joysticks.
- Storage compartments are useful... when well designed. The lunch box provides sufficient room to store a hard hat. Several other areas include drink, phone, or key holders.

Comfortable Seat Options

Our seats provide all the comfort needed for a long day of work, including FULL adjustment. All seats are heated and air suspended. Automatic weight adjustment and air cooled seats are available.

Safety – Not an Option

ROPS/FOGS cabs, seat belt alarm, safety bar, sideview camera ... among others.

Details That Make the Difference

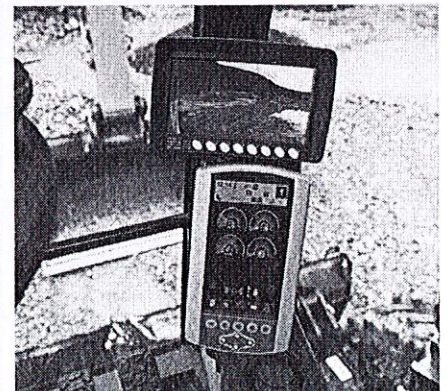
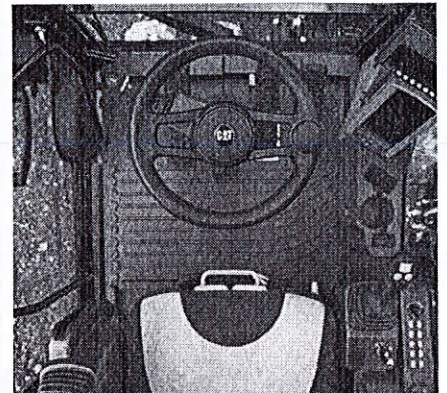
Have a look at the cab; you will see it is through details that we improve pleasure of operating.

Smart Controls to Reduce Fatigue

- Features like ride control, SmartBoom or Joystick Steering will be precious to increase your productivity.
- New technologies that work transparently like the swing and auto travel lock or the automatic brake and axle lock, reduce the number of tasks you need to do.

Plug, Charge and Play Your Devices

- The 12V 10A power supply socket is conveniently located for charging your laptop, or a tablet.
- A CD/MP3 Radio with speakers and USB port is available.





Simplicity and Functionality

For Ease of Operation

A Cab Just for You – Fully Adjustable

- Joystick consoles, in height and angle
- Steering column adjustment, not only tilting fore/aft but also in height
- Hydraulic sensitivity of the machine to make it more or less aggressive
- Joystick controls, buttons and thumb wheels
- Automatic air conditioning

Incredibly Low Sound Levels, Less Fatigue

Increased cab pressure, preventing from dust entry, combined with the new design contributes to reducing sound. Add in new hydro mounts to fix the cab on the frame and you have a cab that's as quiet as any of today's premium cars.

Outstanding Visibility: See the Difference!

- Standard LED working lights and halogen roading lights
- Standard LED dome light
- All glass areas have been drastically increased
- Choice of 70/30 front windshield or one-piece windshield
- New wide angle mirrors including a lower mirror for better visibility to the ground
- Parallel intermittent (four speeds) wipers covering the whole windshield

Standard Rear and Side Wide Angle Cameras

Cameras let you see what's going on around. The image from the side camera is displayed on an additional wide color screen, offering the full view from the front to the rear of the machine. The rear camera is integrated into the counterweight for enhanced protection.

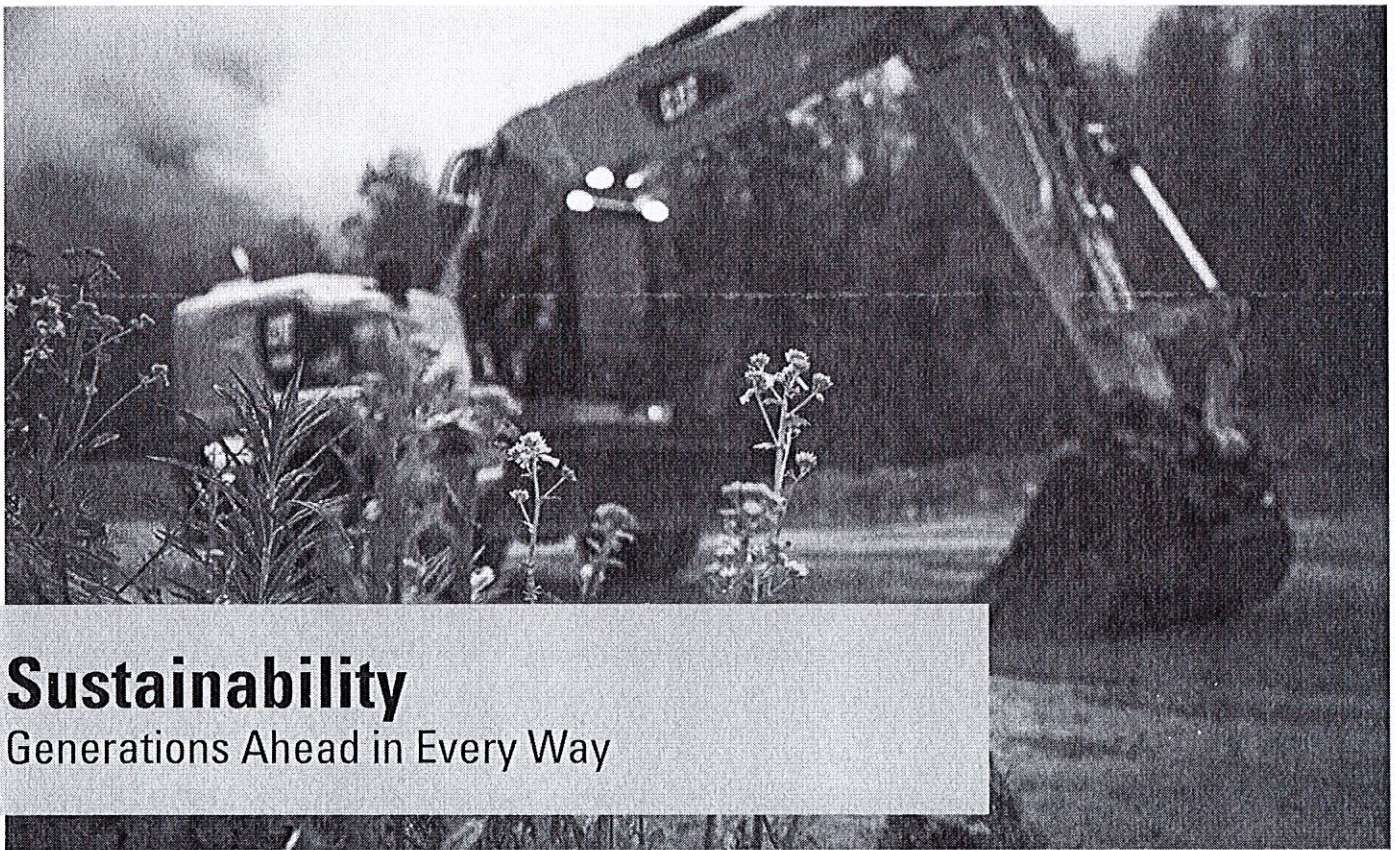
Large Color Monitor

Easy to read and in local language, the high resolution LCD monitor will keep you aware of any important information. "Quick Access" buttons allow a quick selection of favorite functions. The tool select function lets you preset up to ten different hydraulic attachments for quick tool changes.



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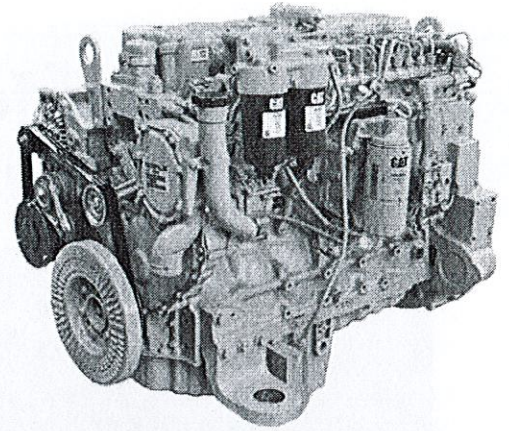
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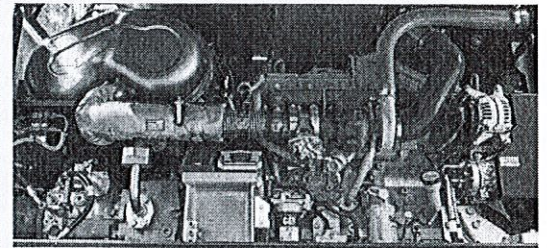
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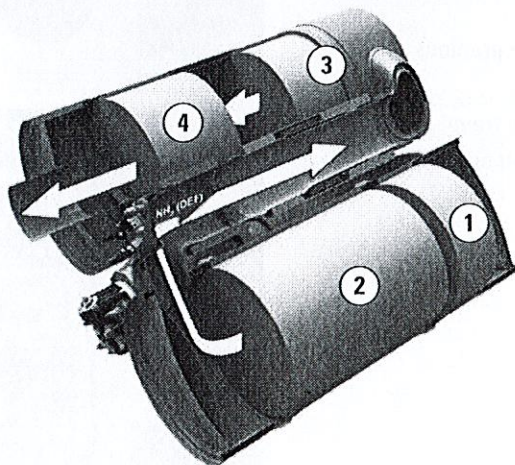
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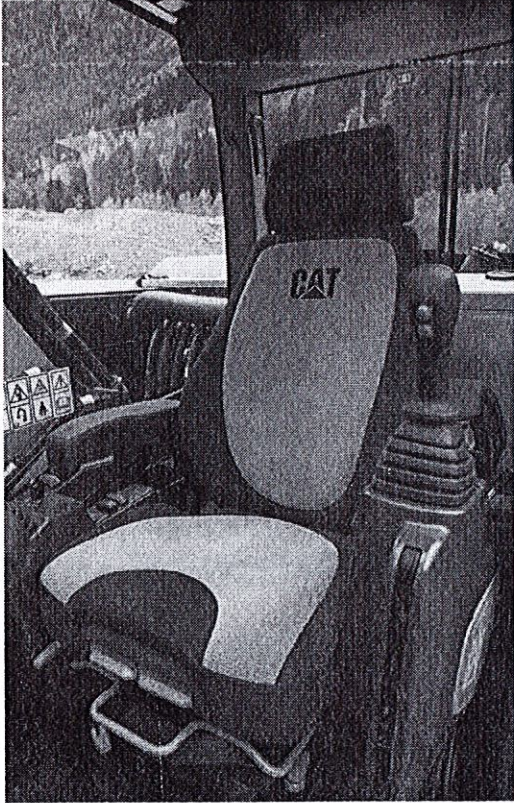
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- NEW enhanced Eco Mode: reduces engine speed while delivering the same power.
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- Frequently used switches are centralized, kept to the minimum and ideally located close to the joysticks.
- Storage compartments are useful... when well designed. The lunch box provides sufficient room to store a hard hat. Several other areas include drink, phone, or key holders.

Comfortable Seat Options

Our seats provide all the comfort needed for a long day of work, including FULL adjustment. All seats are heated and air suspended. Automatic weight adjustment and air cooled seats are available.

Safety – Not an Option

ROPS/FOGS cabs, seat belt alarm, safety bar, sideview camera ... among others.

Details That Make the Difference

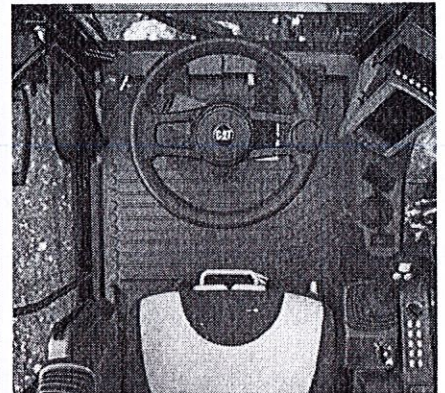
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- The 12V 10A power supply socket is conveniently located for charging your laptop, or a tablet.
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Simplicity and Functionality

For Ease of Operation

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- Steering column adjustment, not only tilting fore/aft but also in height
- Hydraulic sensitivity of the machine to make it more or less aggressive
- Joystick controls, buttons and thumb wheels
- Automatic air conditioning

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Increased cab pressure, preventing from dust entry, combined with the new design contributes to reducing sound. Add in new hydro mounts to fix the cab on the frame and you have a cab that's as quiet as any of today's premium cars.

Outstanding Visibility: See the Difference!

- Standard LED working lights and halogen roading lights
- Standard LED dome light
- All glass areas have been drastically increased
- Choice of 70/30 front windshield or one-piece windshield
- New wide angle mirrors including a lower mirror for better visibility to the ground
- Parallel intermittent (four speeds) wipers covering the whole windshield

Standard Rear and Side Wide Angle Cameras

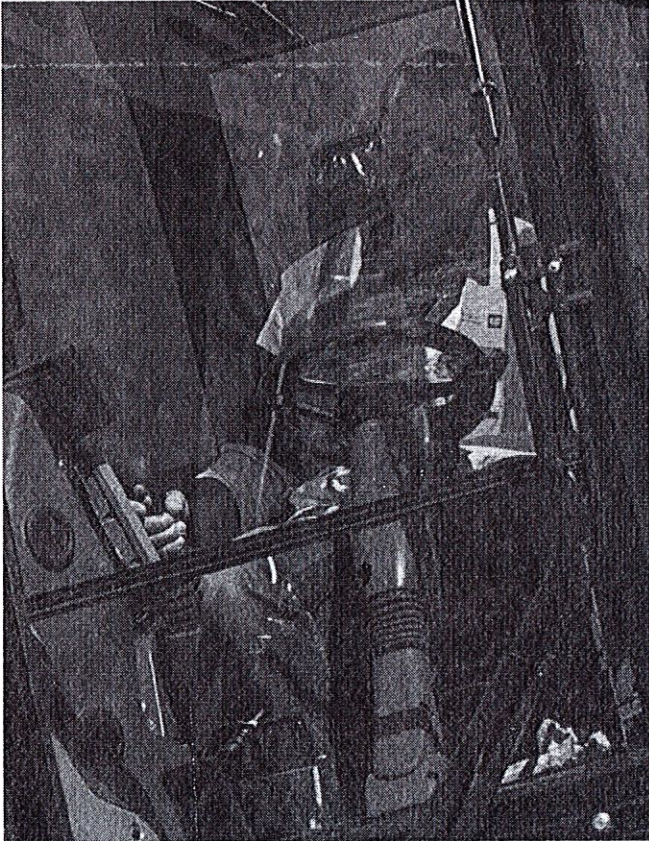
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The Next Generation

Easier Than Ever



Make the Move to the Next Generation

Refinements. From the whole design to the smallest details. Convenient features, new advanced and transparent technologies, not only to reduce emissions but to further improve your daily experience when working with our products.

Easier Than Ever

Work like no other with our wheeled excavators. The F Series generation is made to help you take on the wide variety of the challenges you face every day, more easily and with more pleasure, to keep you on the road to your success.

Cruise Control

Focus on the Road, Not on Your Foot

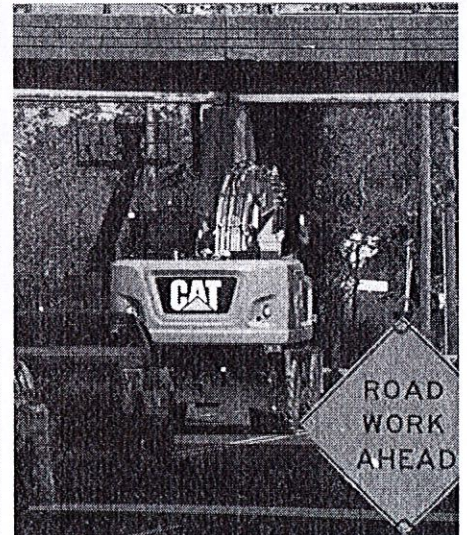


Cruise Control

No need to press the pedal all the time.

- Choose the very speed you wish
- Press the quick access button on the monitor
- Enjoy the ride

It's as Easy as That.



Smart Technologies

Press Go and Relax

Swing and Auto Travel Lock: As Fast, As Easy, As Safe

No need for the operator to bend to engage the swing lock pin.

- Just press a button,
- Align the upper to the lower frame,
- Enjoy the ride: a green indicator confirms the swing and the implements have been automatically locked.

It's As Easy As That.

Integrated Pin Code – Switch Off and Relax

No need to buy an optional security system to protect your equipment against theft.

- The pin code is integrated into the monitor (standard)
- Entering the right code allows the engine to start

The Machine Security System (MSS – optional) adds even more protection when needed.



Dig and Go

Auto Axle Lock

Presses the pedal for you, reducing the number of actions you need to do

The machine automatically detects when the service brake and axle need to be locked (like when digging), or unlocked (roading), hence removing the need for the operator to systematically press the pedal.

Brake and axle are released automatically by pressing the travel pedal again.



Hydraulics

Fast, Precise, Flexible

When it comes to moving material quickly, you need efficient hydraulics – the type the F Series can deliver.

Efficient Design, Smart and Fast

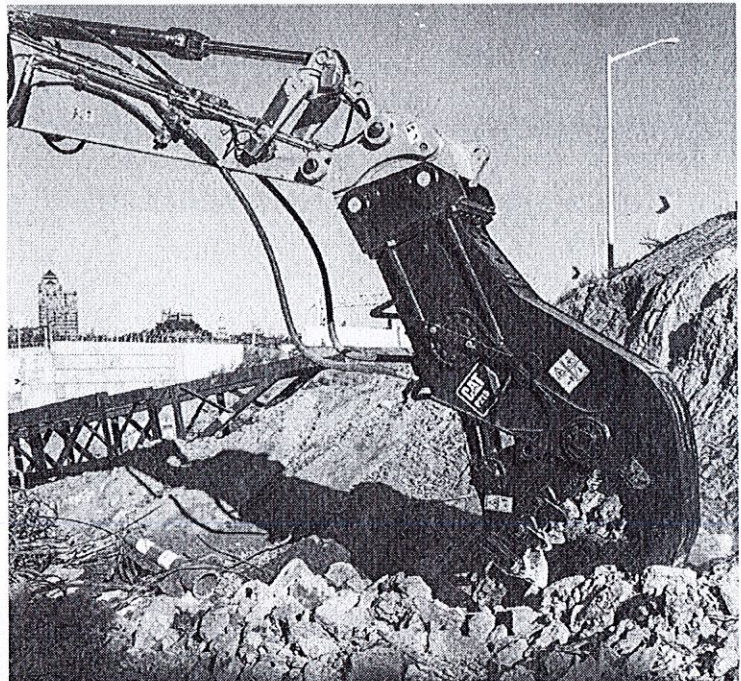
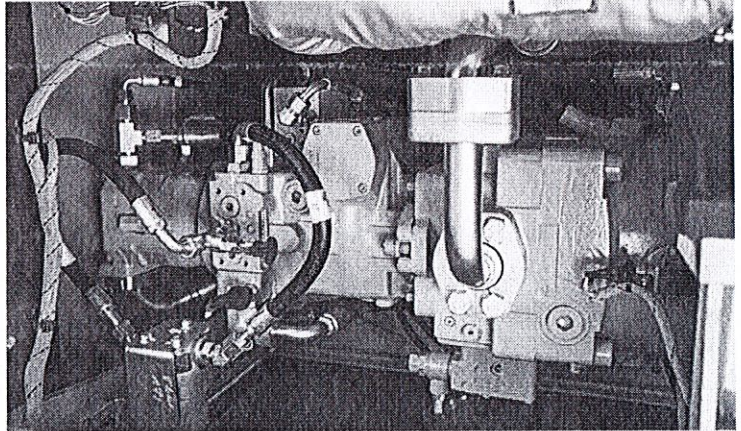
- **Simple Design:** The new hydraulic valve compartment and routings offer a simple and clean design to help ensure durability. Everything is reachable from ground level.
- **Smart Main Hydraulics:** The system allows reducing the load on the engine when not needed, which translates into lower fuel consumption.
- **Dedicated Secondary Hydraulics:** A closed hydraulic circuit is dedicated to the swing only. Having two separate pumps, one for the swing and the other for the other functions allows faster and smoother combined movements.

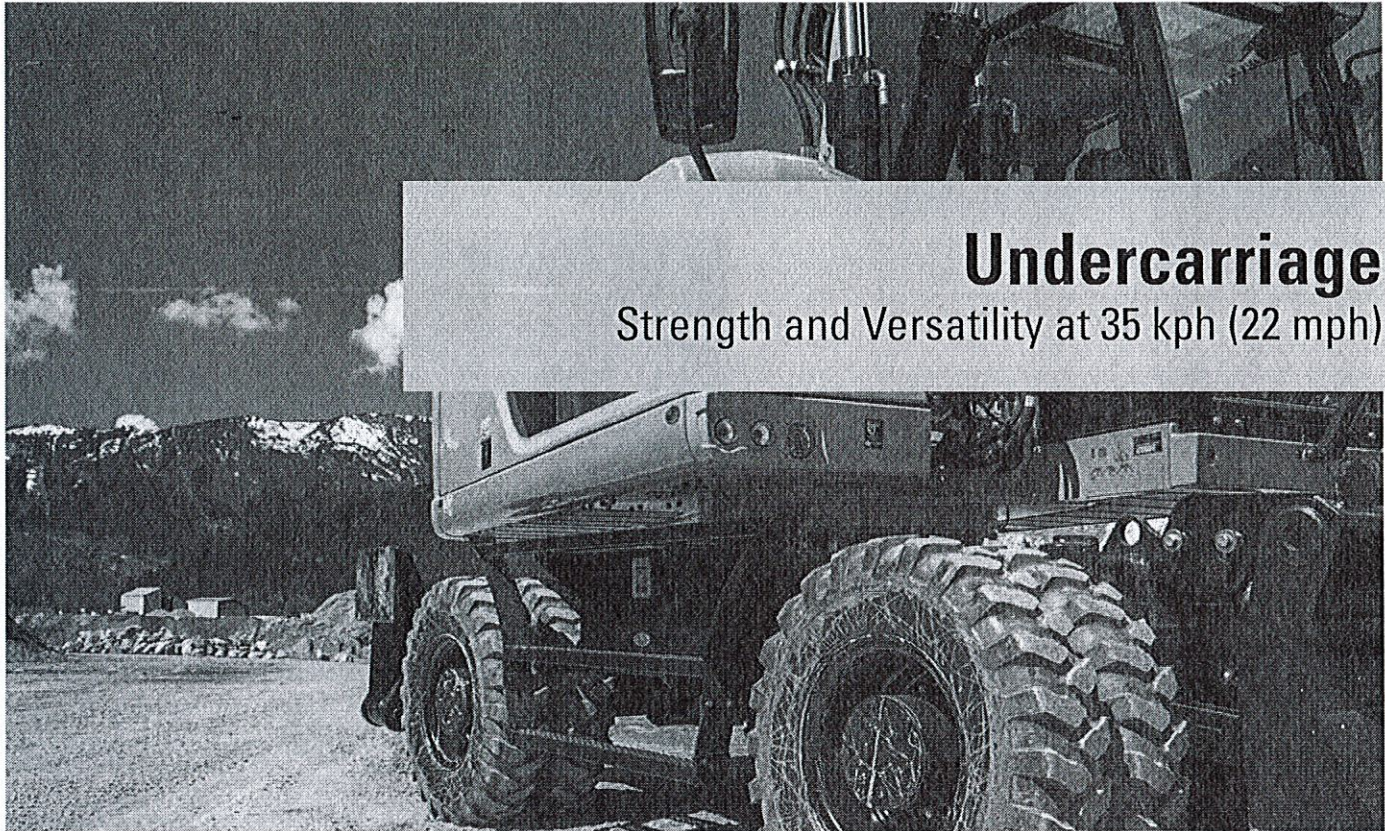
Control Like No Other

- **Electronic Pump Control** – Controllability is one of the main attributes of Cat excavators, and one of the key contributors to this is the Electronic Pump Control (EPC) that's designed to improve response time and precision. It puts flow exactly where you need it, when you need it, which means a much smoother operation and greater efficiency.
- **Adjustable Hydraulic Sensitivity** – Allows you to adjust the aggressiveness of the machine according to the application.
- **Stick Regeneration Circuit** – Increases efficiency and helps enhance controllability for higher productivity.

Proportional Auxiliary Hydraulics, Tremendous Versatility

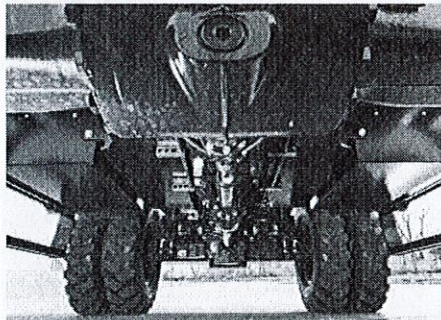
Medium pressure function (for tilting buckets or rotating tools), high pressure lines and circuit, hydraulic quick coupler circuit: they all come standard, which allows you to switch from one work tool to another, without the need to add lines and hydraulic circuits.





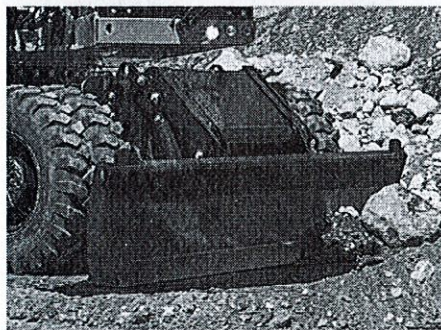
Undercarriage

Strength and Versatility at 35 kph (22 mph)



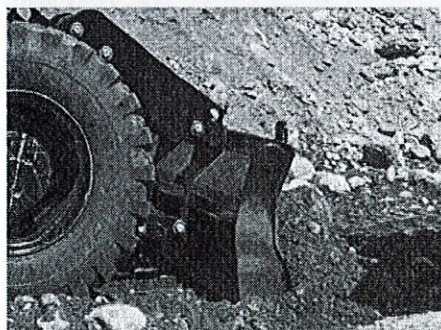
Heavy Duty Axles

Long life with effective heavy duty axles. The transmission is mounted directly on the rear axle for protection and optimum ground clearance. The front axle offers wide oscillating and steering angles. The drive shaft offers longer service intervals (1,000 hours).



Fenders (optional)

Fenders provide excellent coverage of all tires, protecting the machine and surroundings from mud and stones being thrown up.



Joystick Steering

Keep both hands on the joysticks even when simultaneously moving the implements and repositioning the machine, by the use of the slider switch on the right joystick.

Blade Design

- Optimized design to provide rigidity, stability and ease of maintenance.
- Parallel kinematic to keep the blade parallel to the ground, in every height position
- A profile that allows material to roll better and minimizes material packing

Booms and Sticks

Options To Take on Your Far-reaching
or Up-close Tasks

Rugged Performance

Booms and sticks are welded, box section structures with thick, multi-plate fabrications in high stress areas for the tough work you do.

Flexibility

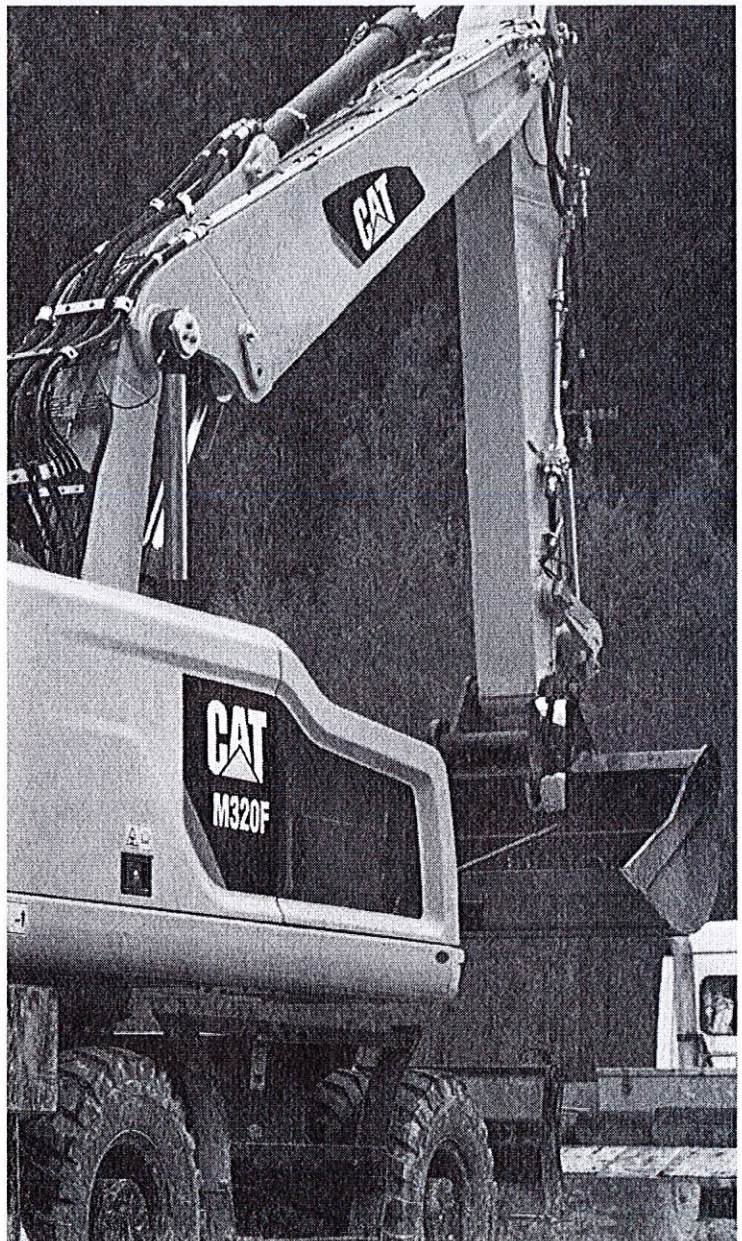
The choice of various booms and sticks provides the right balance of reach and digging forces for all applications.

Sticks

- **Medium stick** – 2500 mm (8'2") for greater crowd force and lift capacity
- **Long stick** – 2800 mm (9'2") for greater depth and reach

Booms

- **Variable Adjustable (VA)** – improved right side visibility and roading balance. When working in tight quarters or lifting heavy loads, the VA boom offers the best flexibility.
- **One-Piece Boom** – Fits best for all standard applications such as truck loading and digging. A unique straight section in the curve of the side plate reduces stress flow and helps increase boom life.



SmartBoom

Reduces Stress and Vibration

Rock Scraping

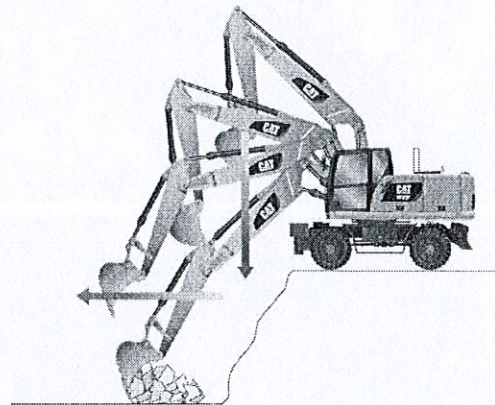
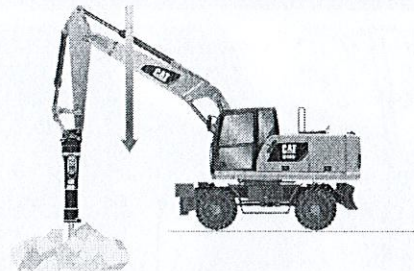
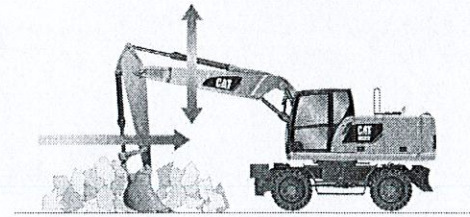
Scraping rock and finishing work is easy and fast. SmartBoom simplifies the task and allows more focus on stick and bucket, while the boom freely goes up and down without using pump flow.

Hammer Work

The front parts automatically follow the hammer while penetrating the rock. Blank shots or excessive force on the hammer are avoided resulting in longer life for the hammer and the machine. Similar advantages with vibratory plate compactors.

Truck Loading

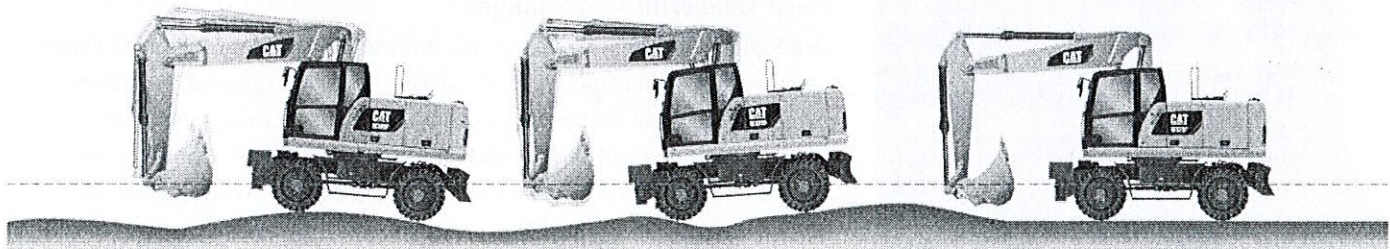
Loading trucks from a bench is more productive and fuel efficient as the return cycle is reduced while the boom down function does not require pump flow.

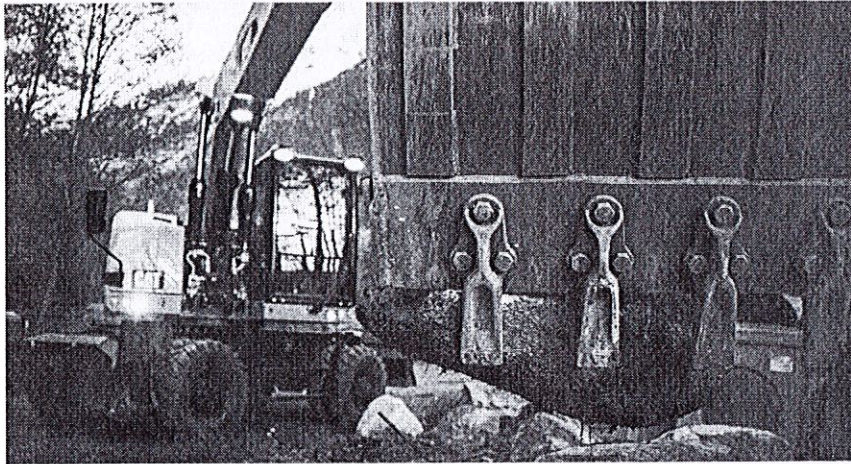
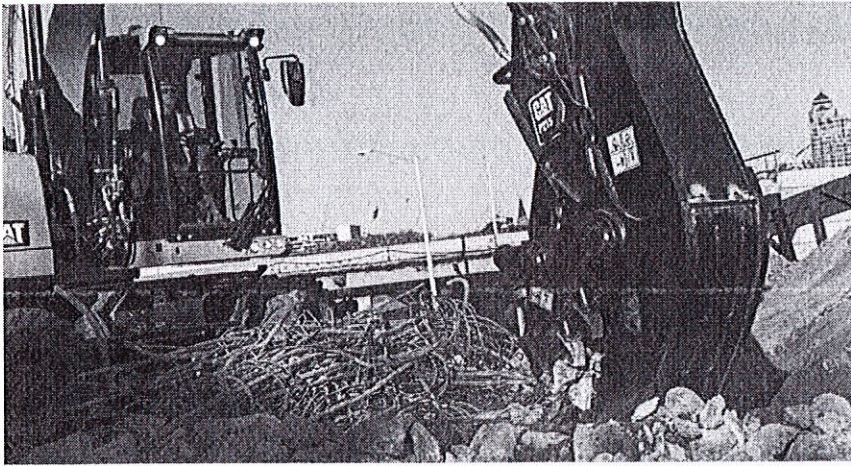


Ride Control

Fast Travel Speed with More Comfort

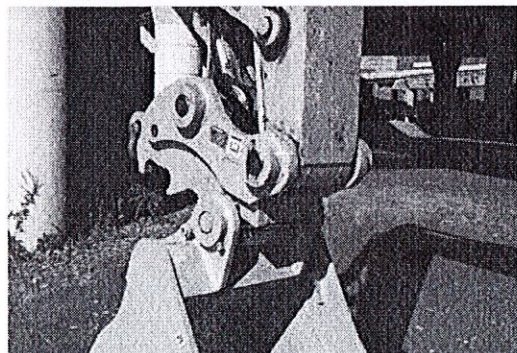
The ride control system lets you travel faster over rough terrain with improved ride quality for the operator. Accumulators are acting as shock absorbers to dampen the front part motion. It can be activated through a button located on the soft switch panel in the cab.





Attachments

Get the Most Out of Your Equipment



Save Time with Tool Changes

Job Site Confidence ... From the operator's seat, visual and audible indicators help assure that the attachment is coupled. Your Cat excavator hydraulics, mechanisms inside the coupler, and digging forces all work together to assure the attachment stays engaged. The Cat Pin Grabber coupler is the secure way to decrease downtime by allowing quick attachment change, and increase job site flexibility.

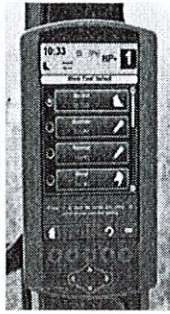
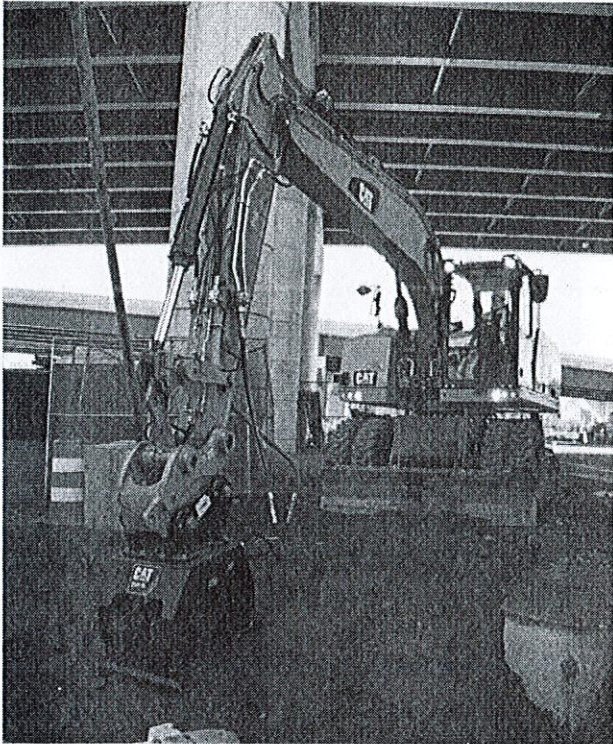
NEW! Tilt-Rotator-Ready Option.

This option provides a factory-installed on-board platform for a Rototilt® tiltrotator.

Tiltrotators eliminate the need to constantly reposition the machine, by providing a tilting and rotary connection with any attachment.

The wheeled excavator Tilt-Rotator-Ready Package includes all that you need, with lines, circuits, software and advanced joysticks. This is a perfectly integrated interface between the machine and this tool.

Tiltrotator parameters can be set directly from the machine monitor.



Power Match

Match your Cat hydraulic attachments to your Cat machine, and get the most out of the standard, built-in software. Attachment changes have never been easier!

Get the Most from Your Machine

If you have multiple tasks to get done, the M320F can help. And you can easily expand all the possibilities it offers by utilizing any of the variety of Cat attachments.

Dig, Load, Finish and Compact

A wide range of buckets offers solutions for digging, trenching, loading and finishing works. The addition of a Cat Compactor will introduce your machine to utility work, site prep, road repair and pipeline work.

Move and Handle Material

Choose from one of three different thumb styles to work with your bucket and you have the instant ability to move and handle brush, rocks and debris.

Demolish and Break

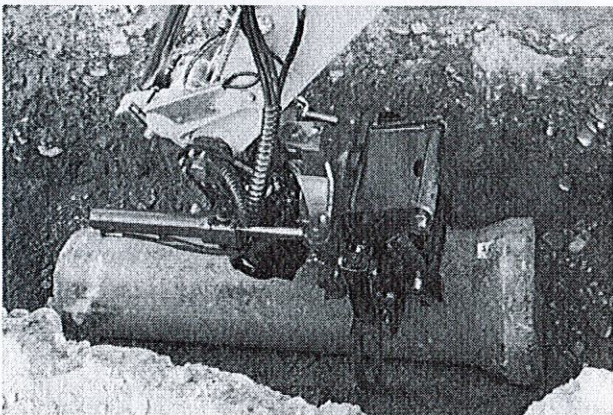
Our hammer includes a buffer to improve your comfort and protect your machine from vibration. Fully enclosed, it is ideal when working in noise regulated areas.

Sort and Load

Demolition and Sorting Grapples bring your machine into demolition and waste handling opportunities. Jaws open wide to move volumes, yet are nimble enough to pull a single copper wire out of a pile. Their 360° rotation capability allows you to place the grapple where you want it without moving the machine.

Scrap and Recycle

Shears also have the ability to rotate 360°. A pulverizer allows you to crush and reduce concrete.



Serviceability

When Uptime Counts

Convenient Access Built In

You can reach routine maintenance items like fuel and engine oil filters and fluid taps at ground level while fuel and DEF tank with engine air filter are accessible from the safety of the slip-resistant new service platform. Compartments feature wide composite service doors, designed to be more resistant to shocks, which all include gas struts to facilitate the opening. Components are now gathered in specific dedicated compartments, like the special electrical compartments.

A Smart Design for Any Temperature

The side-by-side coolers and axial fan design allows greater cooling performance. The system is completely separated from the engine compartment to reduce noise and heat and all radiators are gathered in the same compartment while featuring easy-to-clean cores with a tilting device that requires no tool to unlock.

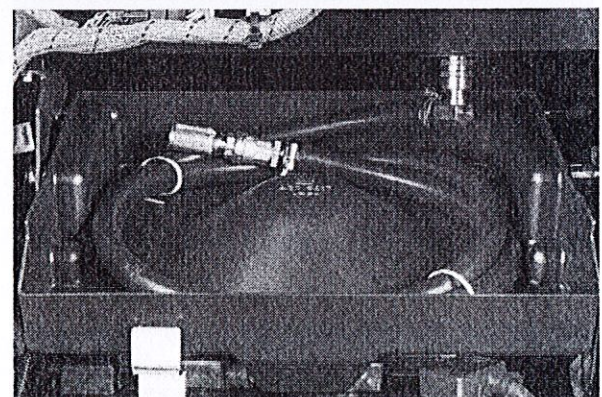
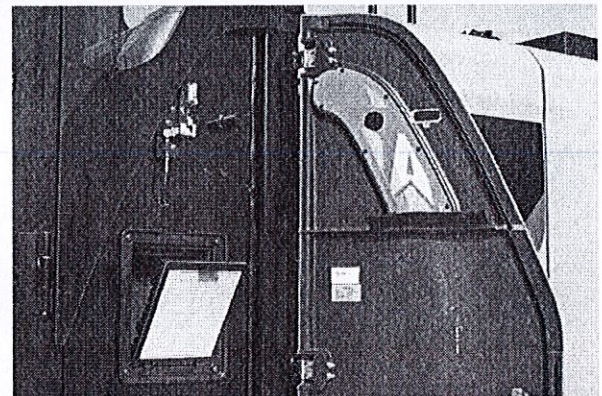
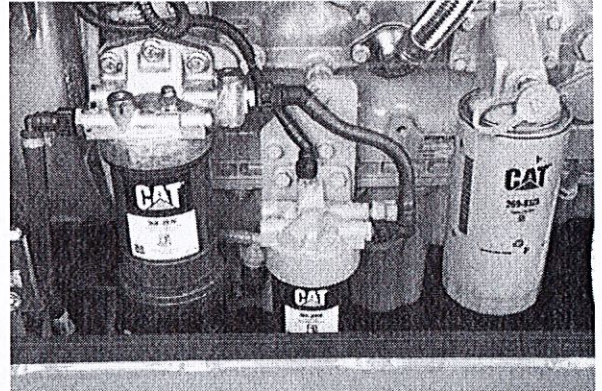
A Fresh Idea

Ventilation inside the cab allows outside air to enter through a fresh air filter. The filter is located on the side of the cab to make it easy to reach, and it is protected by a lockable door that can be opened with the ignition key.

Lube and Fuel Standard Features

An electric lubricator system is an available time-saving standard feature for greasing the whole upper carriage. Greasing points for the undercarriage are kept to a minimum and grouped. The new drive shaft extends greasing intervals from 500 hours to 1,000 hours and allows simultaneous greasing with the lower axle bearing. An electric refueling pump is also standard. The hose is stored in a dedicated tray, for more cleanliness. Add in the electric lift pump removing the need to prime the system manually, the standard fuel and water separator and you get a machine that does the fastidious maintenance works for you.

Keep it simple.



Integrated Technologies

It Pays to Know



Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:



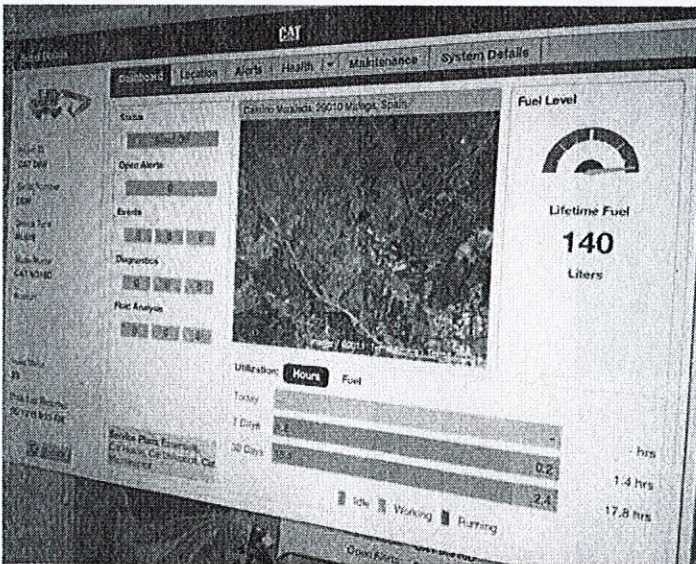
Equipment Management – increase uptime and reduce operating costs.



Productivity – monitor production and manage job site efficiency.



Safety – enhance job site awareness to keep your people and equipment safe.



Featured Cat Connect technologies include the following:

Link

Link technologies provide wireless capability to machines to enable two-way transfer of information collected by on-board sensors, control modules, and other Cat Connect technologies.

Manage Your Machine Remotely

Cat Product Link is a system that is deeply integrated into the machine monitoring system to take the guesswork out of managing your equipment. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes and shares it with you through VisionLink® to help you maximize efficiency, improve productivity, and lower operating costs.

CAT® CONNECT



EQUIPMENT MANAGEMENT



PRODUCTIVITY



SAFETY



SUSTAINABILITY

Safety

Your Safety Is NOT Optional

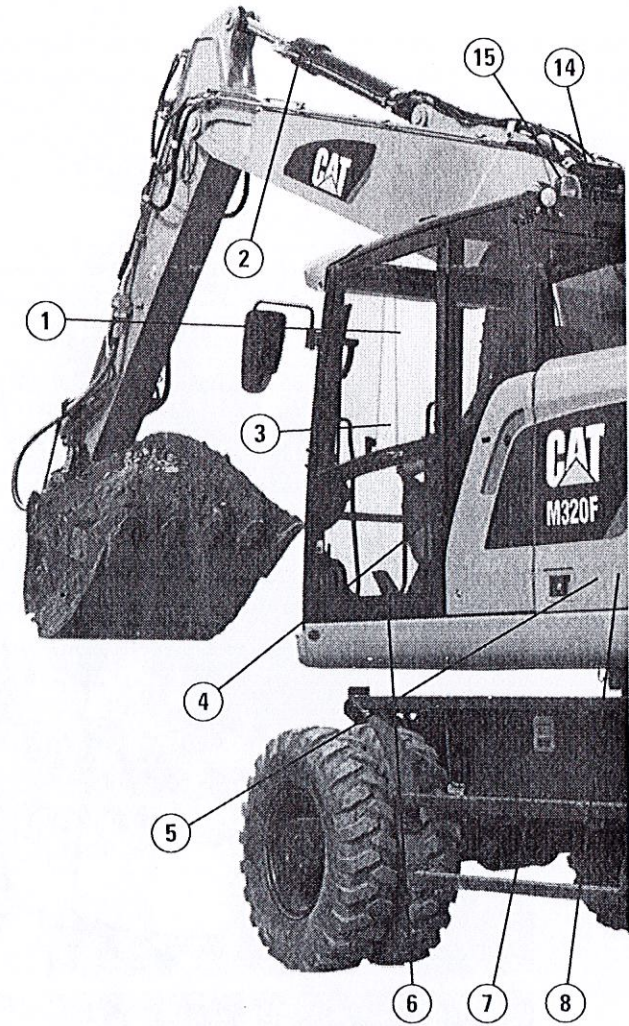
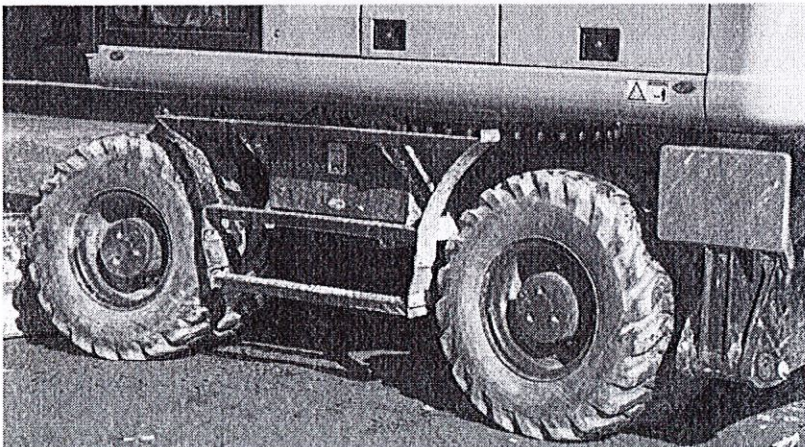
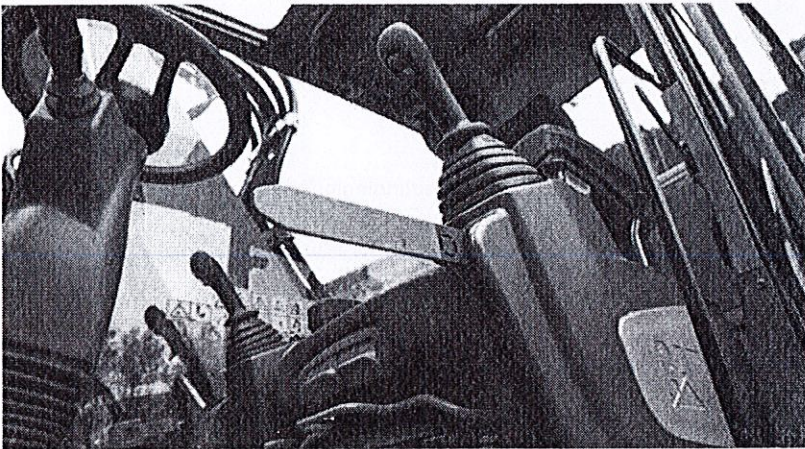
Cab Ingress

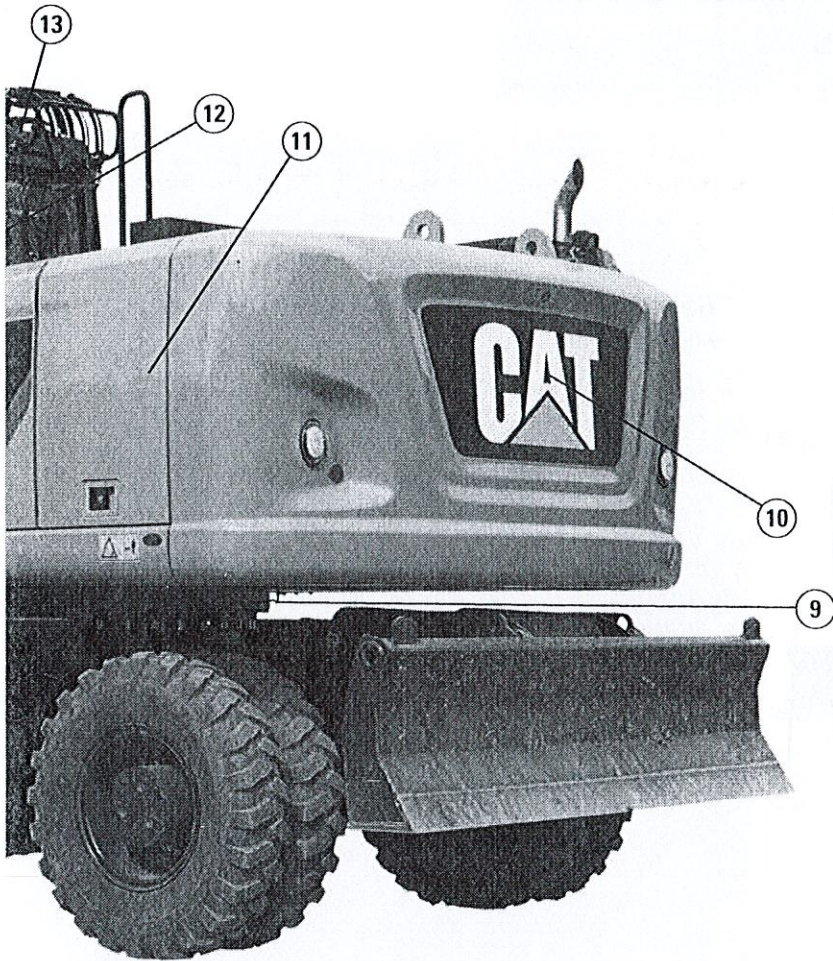
We bring a solution to allow you to safely climb into the cab:

- Three longer access steps, aligned with the cab entry
- Anti-skid plates on all walkways and steps reducing slipping hazards
- Convenient door handrail
- Tilttable console to make sure the way in and out is free of obstacle

Safe and Quiet Cab

The cab provides you with a safe environment. It also contributes to your comfort with limited vibrations and drastically reduced sound levels.





Embedded Features

Smart embedded devices help enforce safe behavior:

- 1) Laminated windshield and skylight window. One-piece 10 mm (0.4") windshield and skylight fulfilling EN356 P5A standards.
- 2) Lowering check valves
- 3) Safety seat belt indicator
- 4) Safety lever
- 5) Emergency shut-off switch
- 6) Automatic brake and axle lock
- 7) Punched, anti-slippery walking surfaces
- 8) Battery disconnect switch
- 9) Swing and implement electronic lock
- 10) Travel alarm
- 11) All doors equipped with gas struts cylinders
- 12) Emergency hammer and exit
- 13) ROPS compliant and front/top guards compatible cab
- 14) Sound proofing
- 15) Beacon available

NEW! Quick coupler control switch, ISO 13031 compliant

Smart Lighting

- LED lights for all working lights for enhanced night-time visibility
- Halogen lights for front roading lights
- LED dome light for better illumination inside the cab
- NEW! Dedicated LED lights for both rear and side cameras

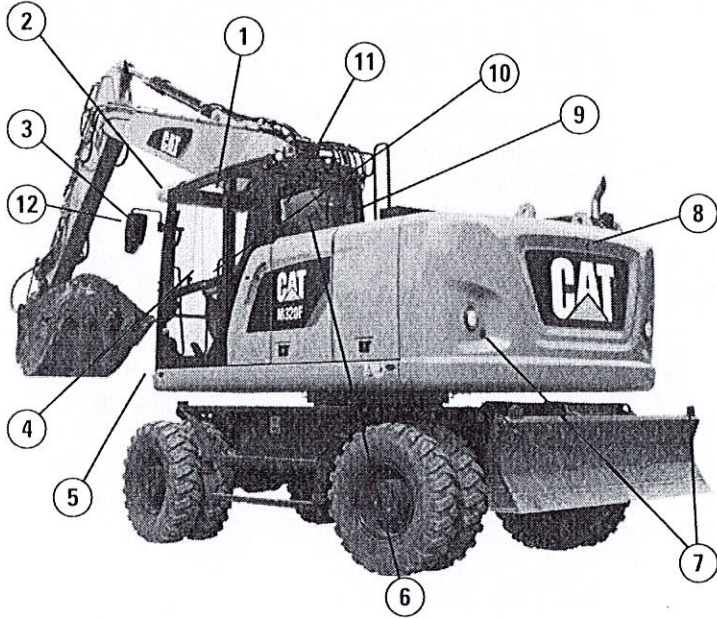


Great Views

- Enlarged glass gives you excellent visibility to the front, top, rear, and sides, even to the right
- Standard rearview camera gives you a clear field of view behind the machine
- Standard sideview camera, to check nothing is hidden to you from the front right hand side to the rear of the machine
- NEW! Monitor split-screen to easily check cameras rearview and sideview on the same display
- Lenses of all the cameras are wide angle and heated
- All mirrors are wide angle and allow view not only around the machine but also to the ground

Unmatched Visibility

Make Sure Nothing Is Hidden to You



Visibility all around is critical, especially for machines which go on public roads.

- 1) Increased skylight and windshield glass areas
- 2) Improved lighting with standard LED lights for all working lights
- 3) Optional electrically adjustable and heated mirrors
- 4) Great left hand side visibility with all glass door
- 5) Halogen roading lights
- 6) Wide rear window
- 7) Red reflectors, on counterweight and rear blade/outriggers
- 8) Standard wide rearview camera with LED light
- 9) Standard wide sideview camera with LED light
- 10) Split-screen display of both cameras on the same monitor
- 11) Large right hand side window
- 12) Mirrors, wide angle, with additional lower mirror for ground visibility

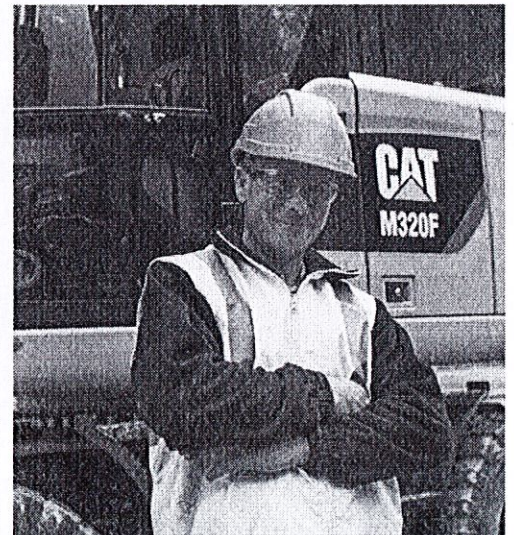
Complete Customer Care

Your Cat Dealer Will Support You Like No Other

Support You Can Count On

From helping you to choose the right machine to knowledgeable on-going support, Cat dealers provide the best-in-sales and services.

- **Best long-term investment** with financing options and services
- **Productive operation** with training programs
- **Preventive maintenance** and guaranteed maintenance contracts
- **Uptime**, with best-in-class parts availability
- **Repair, rebuild, or replace?** Your dealer can help evaluate the best option.



M320F Wheeled Excavator Specifications

Engine

Engine Model	Cat C7.1 ACERT ⁽¹⁾	
Ratings	1,550 rpm	
Engine Gross Power (maximum)		
ISO 14396	129.4 kW	174 hp
ISO 14396 (metric)	176 hp	
Net Power (Rated) ⁽²⁾		
ISO 9249/SAE J1349	126 kW	169 hp
ISO 9249/SAE J1349 (metric)	171 hp	
80/1269/EEC	126 kW	169 hp
Net Power (maximum)		
ISO 9249/SAE J1349	126 kW	169 hp
ISO 9249/SAE J1349 (metric)	171 hp	
80/1269/EEC	126 kW	169 hp
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in ³
Maximum Torque at 1,400 rpm	830 N·m	612.0 lbf-ft
Number of Cylinders	6	

⁽¹⁾ Meets Tier 4 Final/Stage IV emission standards.

⁽²⁾ Rated speed 1,550 rpm. Constant power from 1,500-1,550 rpm.

- Net power advertised is the power available at the flywheel when engine is equipped with air cleaner, CEM exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed.
- No deratings required up to 3000 m (9,842 ft) altitude. Automatic derating occurs after 3000 m (9,842 ft).

Transmission

Forward/Reverse		
1st Gear	10 kph	6.2 mph
2nd Gear	35 kph	21.7 mph
Creeper Speed		
1st Gear	3 kph	1.9 mph
2nd Gear	12 kph	7.5 mph
Drawbar Pull	104 kN	23,380 lbf
Maximum Gradeability (at 18 500 kg/40,785 lb)	65%	

Swing Mechanism

Maximum Swing Speed	9 rpm	
Maximum Swing Torque	48 kN·m	35,403 lbf-ft

Undercarriage

Axle Clearance	360 mm	14.2 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	±8.5°	
Minimum Turning Radius		
Standard Axle		
Outside of Tire	6400 mm	21.0 ft
End of VA Boom	7000 mm	23.0 ft
End of One-Piece Boom	8300 mm	27.2 ft
Maximum Towable Trailer Mass*	8000 kg	17,637 lb

*Not available in Australia and New Zealand.

Service Refill Capacities

Fuel Tank (total capacity)	415 L	109.6 gal
Diesel Exhaust Fluid Tank	34.5 L	9.1 gal
Cooling System	46.9 L	12.4 gal
Engine Crankcase	18.5 L	4.9 gal
Rear Axle Housing (differential)	14 L	3.7 gal
Front Steering Axle (differential)	10.5 L	2.8 gal
Final Drive	2.5 L	0.7 gal
Powershift Transmission	2.5 L	0.7 gal

Weights

Operating Weights*	19 520 kg-	43,034-
	20 220 kg	44,577 lb
Weights		
VA Boom		
Rear Dozer, Front Outriggers	20 020 kg	44,136 lb
Front and Rear Outriggers	20 220 kg	44,577 lb
One-Piece Boom		
Rear Dozer, Front Outriggers	19 520 kg	43,034 lb
Front and Rear Outriggers	19 720 kg	43,475 lb
Sticks**		
Medium, 2500 mm (8'2")	870 kg	1,918 lb
Long, 2800 mm (9'2")	910 kg	2,006 lb
Counterweight		
Standard	3700 kg	8,157 lb
Optional	4200 kg	9,259 lb

*Operating weight includes medium stick, 3700 kg (8,157 lb) counterweight, full fuel tank, operator, quick coupler (245 kg/540 lb), bucket (695 kg/1,532 lb) and dual pneumatic tires. Weight varies depending on configuration.

**Includes cylinder, bucket linkage, pins and standard hydraulic lines.

M320F Wheeled Excavator Specifications

Hydraulic System

Tank Capacity	153 L	40.4 gal
System	315 L	83.2 gal
Maximum Pressure		
Implement Circuit		
Normal	350 bar	5,076 psi
Heavy Lift	370 bar	5,366 psi
Travel Circuit	350 bar	5,076 psi
Auxiliary Circuit		
High Pressure	350 bar	5,076 psi
Medium Pressure	185 bar	2,683 psi
Swing Mechanism	310 bar	4,496 psi
Maximum Flow		
Implement/Travel Circuit	290 L/min	76.6 gal/min
Auxiliary Circuit		
High Pressure	250 L/min	66.0 gal/min
Medium Pressure	49 L/min	12.9 gal/min
Swing Mechanism	108 L/min	28.5 gal/min

Tires

Standard	10.00-20 (Dual Pneumatic)
Optional	11.00-20 (Dual Pneumatic) 445/70/R19.5 TL XF (Single Pneumatic) 10.00-20 (Dual Solid Rubber)*

*Not available in Australia and New Zealand.

Blade

Blade Type	Parallel
Width	2550 mm 100.4 in
Blade Roll-Over Height	576 mm 22.7 in
Blade Total Height	680 mm 26.7 in
Maximum Lowering Depth from Ground	130 mm 5.1 in
Maximum Raising Height above Ground	495 mm 1 ft 7 in

Emissions and Safety

Engine Emissions	Tier 4 Final/Stage IV
Diesel Exhaust Fluid	Must meet ISO 22241
Fluids (Optional)	
Biodiesel up to B20	Meets EN14214 or ASTM D6751 with EN590 or ASTM D975 Standard Mineral diesel fuels
Vibration Levels	
Maximum Hand/Arm	
ISO 5349:2001	<2.5 m/s ² <8.2 ft/s ²
Maximum Whole Body	
ISO/TR 25398:2006	<0.5 m/s ² <1.6 ft/s ²
Seat Transmissibility Factor	
ISO 7096:2000-spectral class EM5	<0.7

Standards

ROPS	ROPS (Rollover Protective Structure) offered by Caterpillar meets ROPS criteria ISO 12117-2:2008
Operator Protective Structure: Top/Front Guards	FOPS (Falling Object Protective Structure) meets FOPS criteria ISO 10262:1998 and SAE J1356:2008
Cab/Sound Levels	Meets appropriate standards as listed below

Sound Performance

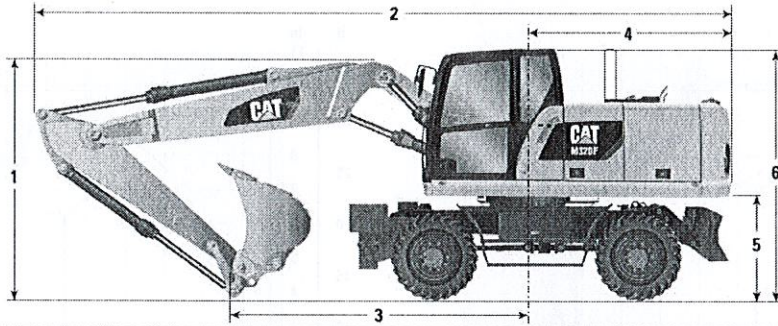
Operator Sound	
2000/14/EC	71 dB(A)
Spectator Sound	
2000/14/EC	99 dB(A)

- Operator Sound – The operator sound level is measured according to the procedures specified in 2000/14/EC, for a cab offered by Caterpillar, when properly installed and maintained and tested with the door and windows closed.
- Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2000/14/EC.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained for doors/windows open) for extended periods or in noisy environment(s).

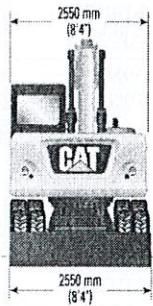
M320F Wheeled Excavator Specifications

Dimensions

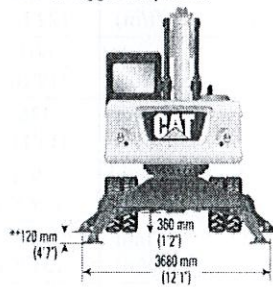
All dimensions are approximate. Values are with 10.00-20 pneumatic tires.



Stick Length	mm (ft/in)	Variable Adjustable Boom		One-Piece Boom		
		2500 (8'2")	2800 (9'2")	2500 (8'2")	2800 (9'2")	
1 Shipping Height with Falling Object Guard and Handrails Lowered (highest point between boom and cab)	mm (ft/in)	3330 (10'11")		3320 (10'11")		
2 Shipping Length	mm (ft/in)	9025 (29'7")	9025 (29'7")	8915 (29'3")	8890 (29'2")	
3 Support Point	mm (ft/in)	3495 (11'6")	3315 (10'11")	3640 (11'11")	3500 (11'6")	
4 Tail Swing Radius	mm (ft/in)	2570 (8'5")				
5 Counterweight Clearance	mm (ft/in)	1280 (4'2")				
6 Cab Height – No Falling Object Guard, Handrails Lowered	mm (ft/in)	3190 (10'6")				
	With Handrails not Lowered	mm (ft/in)	3260 (10'9")			
	With Falling Object Guard	mm (ft/in)	3320 (10'11")			
7 Overall Machine Width	Width with Outriggers on Ground	mm (ft/in)	3680 (12'1")			
	Width with Outriggers Up	mm (ft/in)	2550 (8'4")			
	Width with Blade	mm (ft/in)	2250 (8'4")			
8 Maximum Outriggers Depth	mm (ft/in)	120 (4.7")				



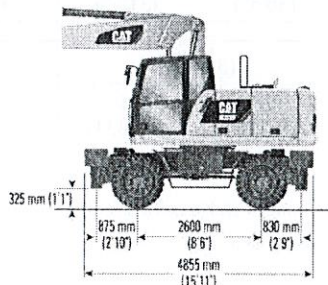
** Maximum tire clearance with outrigger fully down



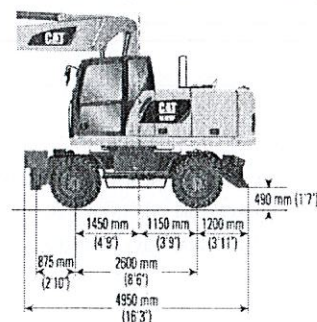
Roading position with 2500 mm (8'2") stick



Undercarriage with 2 sets of outriggers

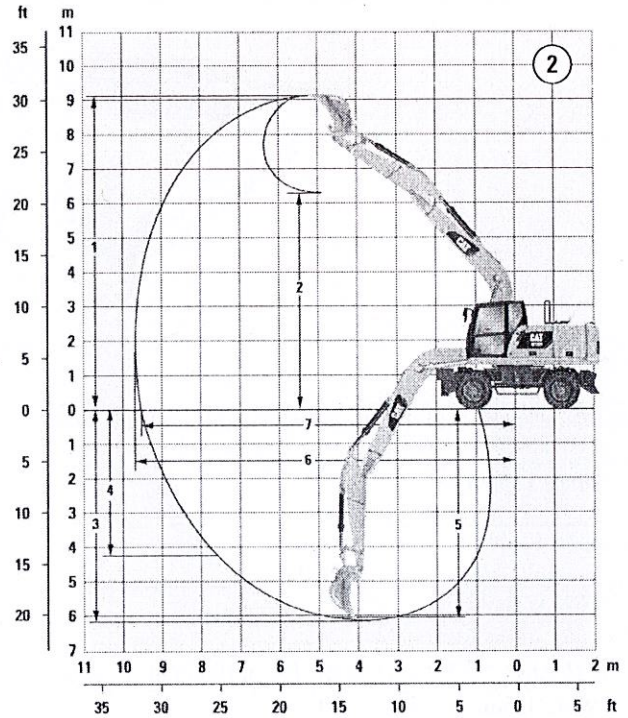
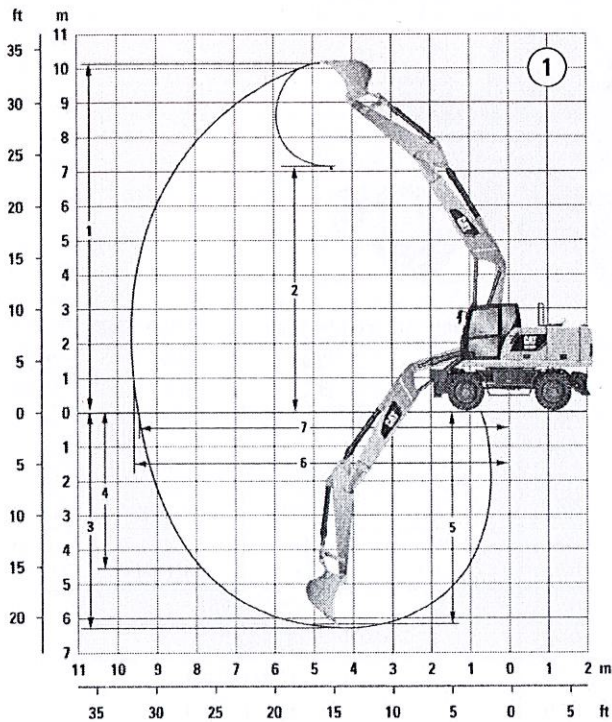


Undercarriage with 1 set of outriggers and dozer



M320F Wheeled Excavator Specifications

Working Ranges



		①		②	
		Variable Adjustable Boom		One-Piece Boom	
Stick Length	mm (ft/in)	2500 (8'2")	2800 (9'2")	2500 (8'2")	2800 (9'2")
1 Digging Height	mm (ft/in)	9950 (32'8")	10 165 (33'4")	8940 (29'4")	9095 (29'10")
2 Dump Height	mm (ft/in)	6970 (22'10")	7180 (23'7")	6140 (20'2")	6290 (20'8")
3 Digging Depth	mm (ft/in)	6035 (19'10")	6330 (20'9")	5980 (19'7")	6280 (20'7")
4 Vertical Wall Digging Depth	mm (ft/in)	4260 (13'11")	4510 (14'10")	3935 (12'11")	4225 (13'10")
5 Depth 2.5 m (8'2") in Straight Clean-Up	mm (ft/in)	5930 (19'5")	6235 (20'5")	5755 (18'11")	6070 (19'11")
6 Reach	mm (ft/in)	9450 (31'0")	9735 (31'11")	9470 (31'1")	9750 (32'0")
7 Reach at Ground Level	mm (ft/in)	9270 (30'5")	9565 (31'5")	9295 (30'6")	9580 (31'5")
Bucket Forces (ISO 6015)	kN (lbf)	137 (30,799)		137 (30,799)	
Stick Forces (ISO 6015)	kN (lbf)	93 (20,907)	86 (19,334)	93 (20,907)	86 (19,334)

Working Range dimensions refer to stick nose pin, with pneumatic tires.

Range values are calculated with GD Bucket, 1200 mm (48 in), 0.98 m³ (1.28 yd³) with tips K080 and quick coupler with a tip radius of 1535 mm (5'0").

Bucket and Stick force values are calculated with heavy lift on (no quick coupler) and a tip radius of 1298 mm (4'3").

M320F Wheeled Excavator Specifications

Bucket Specifications and Compatibility







Contact your Cat dealer for special bucket requirements.

Without Quick Coupler							Variable Adjustable Boom								One-Piece Boom								
Counterweight							3.7 mt (8,157 lb)								3.7 mt (8,157 lb)								
Stick Length							2500 mm (8'2")				2800 mm (9'2")				2500 mm (8'2")				2800 mm (9'2")				
	Width		Capacity		Weight		Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	
	mm	in	m ³	yd ³	kg	lb																	
General Duty (GD)	600	24	0.41	0.54	474	1,042																	
	750	30	0.56	0.73	522	1,148																	
	900	36	0.70	0.92	583	1,283																	
	1050	42	0.83	1.09	632	1,390																	
	1200	48	1.00	1.31	695	1,530																	
	1300	51	1.09	1.43	724	1,593																	
	1400	55	1.18	1.54	756	1,664																	
Heavy Duty (HD)	900	36	0.70	0.92	626	1,378																	
	1100	43	0.83	1.09	669	1,472																	
	1200	48	1.00	1.31	733	1,613																	
	1300	51	1.09	1.43	763	1,679																	

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

	Maximum material density 2100 kg/m ³ (3,500 lb/yd ³)
	Maximum material density 1800 kg/m ³ (3,000 lb/yd ³)
	Maximum material density 1500 kg/m ³ (2,500 lb/yd ³)
	Maximum material density 1200 kg/m ³ (2,000 lb/yd ³)
	Maximum material density 900 kg/m ³ (1,500 lb/yd ³)
	Not recommended

Caterpillar recommends using appropriate attachments to maximize the value customers receive from our products. Use of attachments, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of an attachment resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

M320F Wheeled Excavator Specifications

Bucket Specifications and Compatibility







Contact your Cat dealer for special bucket requirements.

With Pin Grabber Coupler							Variable Adjustable Boom								One-Piece Boom				
Counterweight							3.7 mt (8,157 lb)								3.7 mt (8,157 lb)				
Stick Length							2500 mm (8'2")				2800 mm (9'2")				2500 mm (8'2")		2800 mm (9'2")		
	Width		Capacity		Weight		Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizers lowered	Fully stabilized	
	mm	in	m ³	yd ³	kg	lb													
General Duty (GD)	600	24	0.41	0.54	474	1,042													
	750	30	0.56	0.73	522	1,148													
	900	36	0.70	0.92	583	1,283													
	1050	42	0.83	1.09	632	1,390													
	1200	48	1.00	1.31	695	1,530													
	1300	51	1.09	1.43	724	1,593													
	1400	55	1.18	1.54	756	1,664													
Heavy Duty (HD)	900	36	0.70	0.92	626	1,378													
	1100	43	0.83	1.09	669	1,472													
	1200	48	1.00	1.31	733	1,613													
	1300	51	1.09	1.43	763	1,679													

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

-  Maximum material density 2100 kg/m³ (3,500 lb/yd³)
-  Maximum material density 1800 kg/m³ (3,000 lb/yd³)
-  Maximum material density 1500 kg/m³ (2,500 lb/yd³)
-  Maximum material density 1200 kg/m³ (2,000 lb/yd³)
-  Maximum material density 900 kg/m³ (1,500 lb/yd³)
-  Not recommended

Caterpillar recommends using appropriate attachments to maximize the value customers receive from our products. Use of attachments, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a attachment resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

M320F Wheeled Excavator Specifications

Attachments Matching Guide

When choosing between various attachment models that can be installed onto the same machine configuration, consider attachment application, productivity requirements, and durability. Refer to attachment specifications for application recommendations and productivity information.

		(1)		(2)		(3)		(1)		(2)		(3)	
		2500 mm (8'2")	2800 mm (9'2")	2500 mm (8'2")	2800 mm (9'2")	2500 mm (8'2")	2800 mm (9'2")	2500 mm (8'2")	2800 mm (9'2")	2500 mm (8'2")	2800 mm (9'2")	2500 mm (8'2")	2800 mm (9'2")
Stick Length													
Variable Adjustable Boom		With 3.7 mt (8,157 lb) Counterweight						With 4.2 mt (9,259 lb) Counterweight					
Hydraulic Hammer	H115Es												
	H120Es												
	H130Es												
Multi-Processor	MP318 CC, D, U Jaws												
	MP318 S Jaw												
Crusher	P315												
Pulverizer	P215												
Demolition and Sorting Grapple	G315B												
Scrap and Demolition Shear	S320B												
	S325B												
Compactor Plate	CVP75												
Orange Peel Grapple (4 or 5 Tines)	GSH15B 400 L (½ yd³)	These attachments, along with trash grapples, thumbs and rakes are available for the M320F. Consult your Cat dealer for proper match.											
	GSH15B 500 L (¾ yd³)												
	GSH15B 600 L (¾ yd³)												
	GSH15B 800 L (1 yd³)												
One-Piece Boom		With 3.7 mt (8,157 lb) Counterweight						With 4.2 mt (9,259 lb) Counterweight					
Hydraulic Hammer	H115Es												
	H120Es												
	H130Es												
Multi-Processor	MP318 CC and U Jaws												
	MP318 D Jaw												
	MP318 P Jaw												
	MP318 S Jaw												
Crusher	P315												
Pulverizer	P215												
Demolition and Sorting Grapple	G315B												
Scrap and Demolition Shear	S320B												
	S325B												
Compactor Plate	CVP75												
Pin Grabber Coupler	Cat PG												


(1) Dozer lowered


(2) 2 sets outriggers lowered


(3) Dozer and outrigger lowered


 Attachment is a match

 Pin-on only

 Over the front only

 Boom Mount

 Over the front only with Pin Grabber coupler

 Not recommended

Offerings not available in all areas. Matches are dependent on Wheeled Excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper attachment match.

M320F Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom

All values are in kg, bucket cylinder and bucket linkage installed, attachment: none, with counterweight (4200 kg), heavy lift on.

Long Stick 2800 mm	Load at maximum reach (stick nose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Undercarriage configuration												mm
						3000 mm			4500 mm			6000 mm			7500 mm			
						Stick	Bucket	Quick Coupler	Stick	Bucket	Quick Coupler	Stick	Bucket	Quick Coupler	Stick	Bucket	Quick Coupler	
6000 mm	Rear dozer up																	
	Rear dozer down																	
	Dozer and stabilizer down																	
	2 sets of stabilizers down																	
4500 mm	Rear dozer up																	
	Rear dozer down																	
	Dozer and stabilizer down																	
	2 sets of stabilizers down																	
3000 mm	Rear dozer up																	
	Rear dozer down																	
	Dozer and stabilizer down																	
	2 sets of stabilizers down																	
1500 mm	Rear dozer up																	
	Rear dozer down																	
	Dozer and stabilizer down																	
	2 sets of stabilizers down																	
0 mm	Rear dozer up																	
	Rear dozer down																	
	Dozer and stabilizer down																	
	2 sets of stabilizers down																	
-1500 mm	Rear dozer up																	
	Rear dozer down																	
	Dozer and stabilizer down																	
	2 sets of stabilizers down																	
-3000 mm	Rear dozer up																	
	Rear dozer down																	
	Dozer and stabilizer down																	
	2 sets of stabilizers down																	

* Limited by hydraulic rather than tipping load.























Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M320F Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom

All values are in lb, bucket cylinder and bucket linkage installed, attachment: none, with counterweight (9,259 lb), heavy lift on.

Long Stick 9'2"	 Undercarriage configuration	 Load at maximum reach (stick nose/bucket pin)			 Load over front			 Load over rear			 Load over side			 Load point height			ft
		10 ft		15 ft		20 ft		25 ft									
																	
20 ft	Rear dozer up																
	Rear dozer down																
	Dozer and stabilizer down																
	2 sets of stabilizers down																
15 ft	Rear dozer up				*14,200	13,000	11,300	11,500	8,200	7,200							
	Rear dozer down				*14,200	*14,200	12,600	11,400	*12,700	8,000	*7,000	*7,000	5,400	*6,000	*6,000	*6,300	*6,300
	Dozer and stabilizer down				*14,200	*14,200	*14,200	*12,700	*12,700	11,800	*7,000	*7,000	*7,000	*6,000	*6,000	*6,000	*6,000
	2 sets of stabilizers down				*14,200	*14,200	*14,200	*12,700	*12,700	*12,700	*7,000	*7,000	*7,000	*6,000	*6,000	*6,000	*6,000
10 ft	Rear dozer up				17,300	12,000	10,400	11,000	7,800	6,800	7,800	5,500	4,700	*6,000	4,900	4,300	4,300
	Rear dozer down				17,200	*18,000	11,600	11,000	*14,000	7,600	7,800	*11,200	5,300	*6,000	*6,000	4,800	4,800
	Dozer and stabilizer down				*18,000	*18,000	17,700	*14,000	*14,000	11,300	*11,200	*11,200	8,000	*6,000	*6,000	*6,000	*6,000
	2 sets of stabilizers down				*18,000	*18,000	*18,000	*14,000	*14,000	13,400	*11,200	*11,200	9,400	*6,000	*6,000	*6,000	*6,000
5 ft	Rear dozer up				16,200	11,000	9,400	10,600	7,300	6,300	7,600	5,300	4,600	*6,400	4,700	4,000	4,000
	Rear dozer down				16,100	*20,900	10,600	10,500	*15,300	7,100	7,500	11,400	5,100	*6,400	*6,400	4,500	4,500
	Dozer and stabilizer down				*20,900	*20,900	16,600	*15,300	*15,300	10,800	*12,400	11,500	7,800	*6,400	*6,400	*6,400	*6,400
	2 sets of stabilizers down				*20,900	*20,900	20,100	*15,300	*15,300	12,900	*12,400	11,800	9,200	*6,400	*6,400	*6,400	*6,400
0 ft	Rear dozer up				15,500	10,400	8,900	10,200	7,000	6,000	7,400	5,100	4,400	6,900	4,800	4,100	4,100
	Rear dozer down				15,400	*21,900	10,000	10,100	*15,900	6,800	7,400	11,200	4,900	6,900	*7,000	4,600	4,600
	Dozer and stabilizer down				*21,900	*21,900	15,900	*15,900	*15,900	10,400	*12,200	11,300	7,600	*7,000	*7,000	*7,000	*7,000
	2 sets of stabilizers down				*21,900	*21,900	19,400	*15,900	*15,900	12,500	*12,200	11,600	9,000	*7,000	*7,000	*7,000	*7,000
-5 ft	Rear dozer up	*20,400	19,200	15,700	15,300	10,200	8,700	10,000	6,800	5,900				7,600	5,200	4,500	4,500
	Rear dozer down	*20,400	*20,400	18,200	15,200	*20,700	9,800	10,000	*15,200	6,600				7,600	*8,300	5,100	5,100
	Dozer and stabilizer down	*20,400	*20,400	*20,400	*20,700	*20,700	15,700	*15,200	*15,200	10,300				*8,300	*8,300	7,800	7,800
	2 sets of stabilizers down	*20,400	*20,400	*20,400	*20,700	*20,700	19,100	*15,200	*15,200	12,300				*8,300	*8,300	*8,300	*8,300
-10 ft	Rear dozer up	*23,700	19,500	16,000	15,400	10,300	8,800	10,100	6,900	6,000				9,200	6,400	5,500	5,500
	Rear dozer down	*23,700	*23,700	18,500	15,300	*17,300	9,900	10,100	*12,200	6,700				9,200	*10,400	6,200	6,200
	Dozer and stabilizer down	*23,700	*23,700	*23,700	*17,300	*17,300	15,800	*12,200	*12,200	10,400				*10,400	*10,400	9,500	9,500
	2 sets of stabilizers down	*23,700	*23,700	*23,700	*17,300	*17,300	*17,300	*12,200	*12,200	*12,200				*10,400	*10,400	*10,400	*10,400

* Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M320F Wheeled Excavator Specifications

Lift Capacities – One-Piece Boom

All values are in kg, bucket cylinder and bucket linkage installed, attachment: none, with counterweight (4200 kg), heavy lift on.

Long Stick 2800 mm	Load at maximum reach (stick nose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Undercarriage configuration												mm							
						3000 mm			4500 mm			6000 mm			7500 mm										
						Up	Down	2 sets down	Up	Down	2 sets down	Up	Down	2 sets down	Up	Down	2 sets down		Up	Down	2 sets down				
6000 mm	Rear dozer up																								
	Rear dozer down																								
	Dozer and stabilizer down																								
	2 sets of stabilizers down																								
4500 mm	Rear dozer up																								
	Rear dozer down																								
	Dozer and stabilizer down																								
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	Dozer and stabilizer down																								
	2 sets of stabilizers down																								
-1500 mm	Rear dozer up																								
	Rear dozer down																								
	Dozer and stabilizer down																								
	2 sets of stabilizers down																								
-3000 mm	Rear dozer up																								
	Rear dozer down																								
	Dozer and stabilizer down																								
	2 sets of stabilizers down																								
-4500 mm	Rear dozer up																								
	Rear dozer down																								
	Dozer and stabilizer down																								
	2 sets of stabilizers down																								

* Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M320F Wheeled Excavator Specifications

Lift Capacities – One-Piece Boom

All values are in lb, bucket cylinder and bucket linkage installed, attachment: none, with counterweight (9,259 lb), heavy lift on.

Long Stick 9'2"	Undercarriage configuration	Load at maximum reach (stick nose/bucket pin)			Load over front			Load over rear			Load over side			Load point height			ft			
		5 ft			10 ft			15 ft			20 ft			25 ft						
		Stick	Quick Coupler	Bucket	Stick	Quick Coupler	Bucket	Stick	Quick Coupler	Bucket	Stick	Quick Coupler	Bucket	Stick	Quick Coupler	Bucket				
25 ft	Rear dozer up																	*7,400	*7,400	*7,400
	Rear dozer down																	*7,400	*7,400	*7,400
	Dozer and stabilizer down																	*7,400	*7,400	*7,400
	2 sets of stabilizers down																	*7,400	*7,400	*7,400
20 ft	Rear dozer up																	*6,600	*6,600	5,900
	Rear dozer down									*11,000	8,400	7,400						*6,600	*6,600	6,500
	Dozer and stabilizer down									*11,000	8,200							*6,600	*6,600	6,200
	2 sets of stabilizers down									*11,000	9,300	7,700						*6,600	*6,600	6,200
15 ft	Rear dozer up																	*6,600	*6,600	*6,600
	Rear dozer down									11,400	8,200	7,200						*7,400	5,600	4,900
	Dozer and stabilizer down									11,400	*12,400	8,000						*7,400	*7,400	5,500
	2 sets of stabilizers down									11,400	9,100	7,500						*7,400	6,300	5,200
10 ft	Rear dozer up																	*6,400	*6,400	*6,400
	Rear dozer down									17,100	12,000	10,400						*6,400	5,500	4,800
	Dozer and stabilizer down									17,000	*17,800	11,500						*6,400	*6,400	5,300
	2 sets of stabilizers down									17,100	13,200	10,800						*6,400	6,200	5,100
5 ft	Rear dozer up																	*6,500	*6,500	*6,500
	Rear dozer down									16,100	11,000	9,500						*6,500	5,600	4,900
	Dozer and stabilizer down									16,000	*20,900	10,600						*6,500	*6,500	5,300
	2 sets of stabilizers down									16,100	12,300	9,900						*6,900	*6,900	6,900
0 ft	Rear dozer up																	*6,900	*6,900	*6,900
	Rear dozer down									*20,900	*20,900	19,900						*15,300	*15,300	12,800
	Dozer and stabilizer down									11,500	11,500	11,500						*12,400	11,700	9,200
	2 sets of stabilizers down									11,500	11,500	11,500						*11,500	*11,500	9,200
-5 ft	Rear dozer up																	7,600	5,200	4,500
	Rear dozer down									*12,400	*12,400	*12,400						*20,300	19,300	15,900
	Dozer and stabilizer down									*12,400	*12,400	*12,400						*20,300	20,300	18,300
	2 sets of stabilizers down									*12,400	*12,400	*12,400						*20,300	20,300	16,700
-10 ft	Rear dozer up																	7,600	5,900	4,800
	Rear dozer down									*25,300	19,700	16,200						*25,300	25,300	18,600
	Dozer and stabilizer down									*25,300	25,300	18,600						*25,300	21,900	17,000
	2 sets of stabilizers down									*25,300	25,300	18,600						*25,300	25,300	15,400
-15 ft	Rear dozer up																	9,200	6,400	5,500
	Rear dozer down									*11,400	10,900	9,300						*11,400	11,400	10,500
	Dozer and stabilizer down									*11,400	11,400	9,800						*11,400	11,400	9,800
	2 sets of stabilizers down									*11,400	11,400	9,800						*11,400	11,400	9,800

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M320F Wheeled Excavator Standard Equipment

Standard Equipment

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

ELECTRICAL

- Alternator, 115A
- Lighting
 - LED light package, including all working lights (compatible with falling object guard). Working lights include cab mounted lights (two front, one rear), one on the counterweight for the rear camera and one on the right for the sideview camera.
 - Boom LED working light
 - Cab interior LED light
 - Rooding lights two front, halogen
 - Rooding lights two rear, LED modules
- Main shut-off switch
- Maintenance free batteries, heavy duty
- Signal/warning horn
- Electrical refueling pump

ENGINE

- Cat C7.1 engine with ACERT Technology meets Tier 4 Final/Stage IV emission standards
- Aftertreatment technologies including the Cat Clean Emission Module package (CEM)
- Automatic Engine Speed Control (AESC), including one touch low idle
- Engine Idle Shutdown (EIS)
- Power mode selector
- Altitude 3000 m (9,842 ft) capability without de-rate
- Automatic starting aid
- Fuel/water separator with water in fuel switch
- Electric fuel priming pump

HYDRAULICS

- Adjustable hydraulic sensitivity
- Auxiliary boom and stick lines
- All Cat XT™-6 ES hoses
- Anti-drift valves for bucket and tool control/multi-function circuits
- Basic control circuits:
 - Medium pressure
 - Two-way, medium pressure circuit, for rotating or tilting of attachments
 - Tool control/multi function
 - One/two-way high pressure for hammer application or opening and closing of attachments
 - Programmable flow and pressure for up to 10 attachments – selection via monitor
 - Quick coupler circuit and lines for hydraulic quick coupler (either pin grabber or dedicated/CW Quick Couplers, controlled by a dedicated switch)
- Boom Lowering Check Valve (BLCV), including overload warning device
- Electronic Pump Control (EPC)
- Heavy lift mode
- Load-sensing hydraulic system
- Separate swing pump
- Stick Lowering Check Valve (SLCV)
- Stick regeneration circuit

(continued on next page)

M320F Wheeled Excavator Standard Equipment

Standard Equipment (continued)

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

OPERATOR STATION

- Reinforced (ROPS) cab structure compliant with 2006/42/EC and tested according to ISO 12117-2:2008
- Adjustable armrests
- Air conditioner, heater and defroster with automatic climate control
- Cigarette lighter (24 volt)
- Beverage cup/can holder
- Bolt-on Falling Object Guards (FOGS) capability
- Bottle holder
- Bottom mounted intermittent (four speeds) wiping system that covers the upper and lower windshield glass
- Cameras
 - Rear mounted wide angle camera (integrated into the counterweight)
 - Right side wide angle camera, mounted on the cooling hood
 - Both cameras are displayed side by side on a dedicated large color monitor
- Coat hook
- Cruise Control System
- Fastened seat belt warning signal
- Floor mat, washable, with storage compartment
- FM Radio with CD player, speakers and USB port
- Fully adjustable suspension seat
- Instrument panel and full graphic and color display
 - Information and warning messages in local language
 - Gauges for fuel level, engine coolant, Diesel Exhaust Fluid (DEF) and hydraulic oil temperature
 - Filters/fluids change intervals
 - Indicators for headlights, turning signal, low fuel, engine dial setting
 - Clock with 10-day backup battery
- Interior LED lighting with door switch
- Joystick pilot operated with one proportional slider
 - Joystick pattern, changeable
- Laminated upper front windshield
- Left side console, tiltable, with lock out for all controls
- Literature holder in right hand side panel
- Mobile phone holder
- Parking brake
- Pin-code, engine start prevention
- Power supply, 12V-10A
- Rain protector*
- Rear window (tempered glass)/emergency exit, with hammer
- Retractable seat belt, integrated into the seat
- Safety lever, integrated into the left console
- Sealed cab with positive filtered ventilation
- Skylight, laminated glass
- Sliding door windows
- Steering column, adjustable height and angle
- Storage area suitable for a lunch box
- Sunshade for windshield and skylight

UNDERCARRIAGE

- All wheel drive
- Automatic brake/axle lock
- Creeper speed
- Electronic swing and travel lock
- Heavy-duty axles, advanced disc brake system and travel motor, adjustable braking force
- Oscillating front axle, lockable, with remote greasing point
- Steps with box in undercarriage (left and right)
- Two-piece drive shaft, with 1,000 hours greasing intervals
- Two speed hydrostatic transmission
- Spacer rings for tires

OTHER EQUIPMENT

- Auto-lube, centralized greasing (implement and swing gear)
- Automatic swing brake
- Bucket linkage for digging sticks
- Counterweight, 3700 kg (8,157 lb)
- Engine emergency shutoff switch
- Mirrors, wide angle, frame and cab
- Product Link
- S-O-SSM sampling valves for engine oil, hydraulic oil and coolant

*Not compatible with the falling objects guards

M320F Wheeled Excavator Optional Equipment

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

AUXILIARY CONTROLS AND LINES

- Basic control circuits:
 - Second high pressure
 - Additional two-way, high pressure circuit, for tools requiring a second high or medium pressure function
- SmartBoom

FRONT LINKAGE

- Booms
 - One-piece boom, 5350 mm (17'6")
 - VA boom (two piece), 5260 mm (17'3")
- Sticks
 - 2500 mm (8'2")
 - 2800 mm (9'2")

ELECTRICAL

- Travel alarm
- Rotating beacon on cab

OPERATOR STATION

- Advanced joysticks with two proportional sliders
- Joystick steering
- Seat, adjustable high-back, with vertical and horizontal air-suspension and head rest
 - comfort, automatic weight adjustment, mechanical lumbar support, heated
 - deluxe seat adds automatic height and weight adjustment, pneumatic lumbar support, premium fabric, heated and ventilated
- Windshield
 - One-piece impact resistant, laminated windshield and skylight (EN356 P5A standards)
 - 70/30 split, openable
- Mirrors electrically adjustable and heated, frame and cab
- High pressure auxiliary pedal
- Falling Objects Guards (top and front)

UNDERCARRIAGE

- Front blade (parallel)/rear outriggers
- Front blade (parallel)/rear outriggers, with trailer-ready package*
- Front outriggers/rear blade (parallel)
- Front and rear outriggers

OTHER EQUIPMENT

- Cat Machine Security System (MSS)
- Cooling protection package for dusty applications (includes fine mesh for enhanced radiator protection and engine air precleaner)*
- Kit, Cooling Protection Package
- Counterweight, 4200 kg (9,259 lb)
- Fenders, front and rear
- Ride Control
- Tires (see pg. 22)
- Attachments (see pg. 25-27)
- Tilt-Rotator-Ready Package

*Not available in Australia and New Zealand

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

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

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

AEHQ7965
(Americas North, Australia,
New Zealand)



Effective with sales to the first user on or after November 1, 2010

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 repair.

- Failures resulting from user's delay in making the product available after being notified of a potential product problem.
- Failures resulting from unauthorized repair or adjustments, and unauthorized fuel setting changes.

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

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

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

CATERPILLAR IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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

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

For products operating in Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the 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 SUPPLY OF THE SERVICES AGAIN OR THE PAYMENT OF THE COST OF HAVING THE SERVICES SUPPLIED AGAIN, AND (b) IN THE CASE OF GOODS, THE REPAIR OR REPLACEMENT OF THE GOODS, THE SUPPLY OF EQUIVALENT GOODS, THE PAYMENT OF THE COST OF SUCH REPAIR OR REPLACEMENT OR THE ACQUISITION OF EQUIVALENT GOODS.

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

CATERPILLAR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES UNLESS IMPOSED UNDER MANDATORY RIGHTS.

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

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



Employment Eligibility Verification

Welcome
Teresa Martin

User ID
T:MOP9402

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

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Company Information

Company Name: Thompson Tractor Co., Inc.

[View / Edit](#)

Company ID Number: 47130

Doing Business As (DBA) Name:

DUNS Number:

Physical Location:

Address 1: 2401 Pinson Highway

Address 2:

City: Birmingham

State: AL

Zip Code: 35217

County: JEFFERSON

Mailing Address:

Address 1: P O. Box 10367

Address 2:

City: Birmingham

State: AL

Zip Code: 35202-0367

Additional Information:

Employer Identification Number: 630377478

Total Number of Employees: 1,000 to 2,499

Parent Organization:

Administrator:

Organization Designation:

Employer Category:

NAICS Code: 423 - MERCHANT WHOLESALERS, DURABLE GOODS

[View / Edit](#)

Total Hiring Sites: 40

[View / Edit](#)

Total Points of Contact: 3

[View / Edit](#)

[View MOU](#)

Request for Taxpayer Identification Number and Certification

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

Print or type
See Specific Instructions on page 2:

Name (as shown on your income tax return) Thompson Tractor Co., Inc. DBA Thompson Power Systems, Thompson Lift Truck Co.	
Business name, if different from above and The Cat Rent Store	
Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶	<input checked="" type="checkbox"/> Exempt payee
<input type="checkbox"/> Other (see instructions) ▶	
Address (number, street, and apt. or suite no.) P O Box 10367 2401 Pinson Hwy. Tarrant, AL 35217	Requester's name and address (optional)
City, state, and ZIP code Birmingham, AL 35202-0367	
List account number(s) here (optional) Lockbox Remit To: P O Box 934065, Atlanta, GA 31193-4005	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident 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.

Social security number : : :
or
Employer identification number 63 : 0377478

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. 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 failed 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 individual 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.

Sign Here	Signature of U.S. person ▶ <i>Linda K. Dunbar, Controller</i>	Date ▶
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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:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

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

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.

Company ID Number: 47130

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

4. If the employee contests a tentative nonconfirmation issued by DHS, the Employer will provide the employee with a referral letter and instruct the employee to contact the Department through its toll-free hotline within 8 Federal Government work days.

5. If the employee contests a tentative nonconfirmation based upon a photo non-match, the Employer will provide the employee with a referral letter to DHS. DHS will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.

6. The Employer agrees that if an employee contests a tentative nonconfirmation based upon a photo non-match, the Employer will send a copy of the employee's Form I-551 or Form I-766 to DHS for review by:

- Scanning and uploading the document, or
- Sending a photocopy of the document by an express mail account (furnished and paid for by DHS).

7. The Employer understands that if it cannot determine whether there is a photo match/non-match, the Employer is required to forward the employee's documentation to DHS by scanning and uploading, or by sending the document as described in the preceding paragraph, and resolving the case as specified by the Immigration Services Verifier at DHS who will determine the photo match or non-match.

ARTICLE IV

SERVICE PROVISIONS

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

ARTICLE V

PARTIES

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

Company ID Number: 47130

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

Signature

07/11/2007

Date

Department of Homeland Security – Verification Division

Company ID Number: 47130

**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

Company Alternate Address: P.O. Box 10367
Birmingham, AL 35202-0367

County or Parish: JEFFERSON

Employer Identification Number: 630377478

North American Industry Classification Systems Code: 423

Parent Company: _____

Number of Employees: 1,000 to 2,499 Number of Sites Verified for: 5

Are you verifying for more than 1 site? If yes, please provide the number of sites verified for in each State.

- GEORGIA 5 site(s)

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

Name: **Kimberly A Stark**
Telephone Number: **(205) 849 - 4279** Fax Number: **(205) 849 - 4565**
E-mail Address: **kimberlystark@thompsontractor.com**

Name: **Frank M Wright**
Telephone Number: **(205) 849 - 4267** Fax Number: **(205) 849 - 4854**
E-mail Address: **frankwright@thompsontractor.com**

Company ID Number: 47130

USCIS Verification Division

Name (Please type or print)

Title

Electronically Signed

07/11/2007

Signature

Date