# BID SUBMITTAL FORM Alabama County Joint Bidding Program uinment - Bid Items: 3.65 CV Wheel Leader Ont

Heavy Equipment – Bid Items: 3.65 CY Wheel Loader Option A

Company Name: THOMPSON TRACTOR COMPANY	
Address: P.O. BOX 10367	
BIRMINGHAM, AL 35202-0367	
Bid Submitted by:JAY SMITH	
(Name of company representative)	
Title: SALES OPERATIONS MANAGER e-mail address: JAYSMITH@THOMP	SONTRACTOR.COM
Phone: (205) 849-4242 Fax: (205) 849-4394	
By submitting this bid, we agree:	Initials
The equipment model number identified below meets the bid specs for this bid item	245
That the bid price will be honored for all counties for the period from Jan. 1, 2021 to Dec. 31, 2021.	<u>U</u> 5
The equipment will be delivered at the bid price to all counties participating in the joint bid program.	<u></u>
The company acknowledges the freight preparation and delivery price is to be included in the total bid price for the standard machine.	915
The company representative listed above will be the contact person for purchasing this bid item under the joint bid program.	DE
The bid is accompanied by a current catalog or model specification document for the model number identified below.	JAC
The bid is accompanied by a copy of the manufacturer's standard warranty as required in the bid specifications.	Ste
The bid includes the e-verify documentation required by Alabama law.	SE
If awarded the bid, a performance bond will be provided upon request.	15
The bid documents include the Manufacturer's Suggested Retail Price Sheet (MSRP) for the Standard Machine.	ONE .

Total Bid Price for Standard Machine: \$198,617 (Total Bid Price for Standard Machine Includes Freight Preparation, Delivery and Standard Warranty Costs) *
Freight Preparation and Delivery: \$5,485(Included in Standard Machine Bid Price)
Manufacturer's Suggested Retail Price for Standard Machine: \$ 280,715
Equipment Model #:CATERPILLAR 938M
Description: WHEEL LOADER
Signature of company representative submitting bid:

Title: SALES OPERATIONS MANAGER

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

### **BID SUBMITTAL FORM: OPTION COST SHEET**

By submitting this bid, we agree:	
To offer any available options at the percent difference between the Manufacturer's Suggested Retail Price Sheet and the actual bid price on the Standard Machine*	5
The bid documents include the Manufacturer's Suggested Retail Price Sheet (MSRP) for the Standard Machine	?
Equipment Model #:CATERPILLAR 938M	
Description: WHEEL LOADER	
Signature of company representative submitting bid:	_
Title: SALES OPERATIONS MANAGER	

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

### 938M 3.65 CYD WL OPTION A

938M	3.65 CY WHEEL LOADER OPTION A	2021 Pricing
541-2673	938M WHEEL LOADER	\$242,036
430-2943	PREP PACK FOR UNITED STATES	\$0
333-6858	STANDARD STEERING	\$0
349-8014	OPEN REAR DIFFERENTIAL	\$0
536-5320	STANDARD ENVIRONMENT (dustbowl precleaner & standard fan)	\$0
454-0612	STANDARD WEATHER	\$0
527-0422	ENGINE ARRANGEMENT	\$0
536-5341	2 VALVE PIN-ON HYDRAULICS, STANDARD LIFT	\$0
536-5284	STANDARD HYDRAULICS	\$0
536-5329	NO AUXILIARY LINES	\$0
536-5339	NO JUMPER LINES	\$0
488-1112	STANDARD HALOGEN LIGHTS	\$0
541-3066	HALOGEN ROADING LIGHTS	\$0
549-0451	DELUXE CAB	\$4,212
563-5967	DELUXE AIR SUSPENSION SEAT	\$1,092
372-1868	BLUETOOTH RADIO	\$0
565-0908	CELLULAR PRODUCT LINK PL641	\$0
366-6882	20.5-R25 MX * XHA2 * L3 MICHELIN TIRES	\$13,686
366-8150	STANDARD FENDERS	\$0
467-7990	HEAVY COUNTERWEIGHT	\$2,733
491-7922	TOOLBOX	\$513
0P-2491	SERIALIZED TECHNICAL MEDIA KIT	\$0
430-2860	RIDE CONTROL	\$4,125
349-8163	CRANKCASE GUARD	\$978
345-2828	3.80 YD3 PIN ON GP BUCKET	\$10,413
345-2758	BOLT ON CUTTING EDGE	\$926
	TOTAL BID PRICE FOR STANDARD MACHINE	\$198,617
	FREIGHT PREPARATION AND DELIVERY	\$5,485
TOTAL	MANUFACTURER'S SUGGESTED RETAIL PRICE FOR STANDARD MACHINE	\$280,715

### BID SPECIFICATIONS FOR 3.65 CY WHEEL LOADER – OPTION A

### **GENERAL**

These specifications shall be construed as the minimum acceptable standards for a 3.65-yard wheel loader. 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 wheel loader 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 specification is not intended to restrict the bidder or any seller or manufacturer, but is intended solely for the purpose of indicating the type, size and quality of equipment considered best adapted to the uses of counties participating in this joint bid.

### **BID SUBMITTAL FORM**

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

### **BID PRICE**

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

### **MANUALS**

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

### REPLACEMENT PARTS AVAILABILITY

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

### **DUMP CLEARANCE**

The wheel loader dump clearance shall be no less than 9' 3" at full height and 45-degree dump angle.

Yes <u>X</u> No \_\_\_ Page #\_\_ **3** O

### **GENERAL OPERATING SPECIFICATIONS AND DIMENSIONS**

Straight static tipping load shall be at least **25,800 lbs**. and the Full turn static tipping load shall be at least **21,900 lbs** with machine equipped with ROPS cab and a minimum **3.65 cubic yard** General Purpose bucket.

Breakout force shall not be less than **29,000 lbs.** with the minimum 3.65 cubic yard General Purpose bucket.

Yes \_ X No \_ \_ Page #\_ 2 2

Machine ground clearance shall not be less than 1'3".

Yes <u>X</u> No \_\_\_ Page #\_\_/&\_\_

### **BRAKES**

-Machine shall have oil cooled multiple disc-type, adjustment-free service brakes, which are inboard mounted and sealed.

Yes X No Page # 15, 35

### STEERING/HITCH

Machine shall have center-point articulation with an articulation angle of at least ±40°.

Yes K No Page # 16

### **OIL SAMPLES**

Oil sample analysis shall be provided, at no cost to the county, through the standard periods. Oil sample kits are to be provided and are to include a sample gun. Oil sampling ports shall be standard for quick and clean access to various machine oils (such as hydraulic, engine oil, transmission).

Yes KNo \_\_\_ Page #\_\_\_\_\_

### FRONT AND REAR FRAMES/STRUCTURES

Machine shall be equipped with a rear towing and retrieval connection.

Yes <u>×</u> No \_\_\_ Page #\_\_**3**5\_\_

Machine shall have lifting/tie down eyes for transportation.

Yes K No Page # BID spec p 5 Machine shall be equipped with outside toolbox.

### **ENGINE AND RELATED COMPONENTS**

Engine shall be fully equipped, six cylinder, four stroke diesel type with all necessary operating accessories.

Yes No \_\_\_\_\_ No \_\_\_\_\_ Page#\_ / \$, 35

Engine Shall be designed and manufactured by the machine manufacturer

Yes <u></u> No \_\_\_\_ Page #\_\_ /, <u>5</u>

Engine shall meet or exceed current U.S. EPA Tier IV emissions levels.

Yes X No \_\_\_ Page #\_\_ 1, 5, 13

Engine shall have a total displacement of not less than 425 cubic inches

Yes <u></u> No \_\_\_ Page #\_\_\_/3\_\_

Engine shall develop at least **182 net HP** at no more than 1800 RPM. Standard engine equipment for rating shall include fan, air cleaner, water pump, lubrication oil pump, fuel pump, muffler and alternator.

Yes No Page #\_/3

Engine shall develop at least **640 lb-ft** maximum net torque at no less than 1400 RPM.

Yes <u></u> No \_\_\_ Page #\_ **/ 3**\_\_\_

The cooling fan for the engine coolant, A/C system, hydraulic oil, and inlet air shall be hydraulically driven, electronically controlled, and temperature sensing. It shall also compensate for horsepower draw and adjust engine fuel setting to result in a constant net horsepower.

Yes 🔀 No \_\_\_\_\_\_

The coolant level shall be able to be checked via a ground-level sight gauge.

Yes K No Page # / 2

Machine shall be equipped with 24V electric system for starting and operating, with a minimum 65-amp alternator.

Yes K No Page # 35

### **GENERAL MACHINE CONFIGURATION**

Machine basic operating weight shall not be less than **36,000 lbs**. Comparably equipped weight includes lubricants, coolant, full fuel tank, operator, General Purpose bucket with bolt-on cutting edge, 20.5-R25 tires and ROPS cab.

Machine shall be equipped with a minimum **3.65 cubic yard** ISO/SAE heaped General Purpose bucket with bolt-on cutting edge.

Machine shall have 20.5 R25 L3 XHA traction-type tires.

Machine shall have four front and two rear working lights and two rear stop and taillights.

Machine shall have front fenders and rear platform extensions.

Machine shall have a back-up alarm

### **OPERATOR'S STATION**

Integral ROPS and sound suppressed cab shall be standard and shall meet both current OSHA and MSHA standards for operator and spectator sound.

Machine shall be equipped with a multilevel warning system, which will signal machine and component malfunctions. System should differentiate between major and minor malfunctions. Warning system shall record occurrences of periodic malfunctions.

Instrument gauges shall include digital gear range indicator, engine coolant temperature, fuel level, hydraulic oil temperature, speedometer, and transmission oil temperature.

Operator's seat shall be air suspension-type with adjustments for height, weight, fore/aft and suspension dampening, and adjustable armrests on left and right.

Cab shall have internally and externally-mounted rearview mirrors.

Yes K No \_\_\_\_\_\_ Page #\_ حجر عرب

Cab shall have air conditioner, heater

Yes No No Page # 8,9, 35

Machine shall be equipped with a Fire Extinguisher

Yes No Page # VENDOR PURCHISE

Machine shall be equipped with retractable 3" seat belt.

Yes No Page # 35

### TRANSMISSION/POWERTRAIN

Transmission and other major power train components, such as the axles, shall be designed and manufactured by the equipment manufacturer.

Yes \_ KNo \_\_\_\_\_ /5
Page #\_\_\_\_ /0 \_\_ /5

Automatic transmission shall be of countershaft power shift design.

Yes No Page # BID SPEC & 2

Transmission shall be electronically controlled for smooth clutch modulation.

Yes No SAC A 2

Transmission shall automatically select gears above first. The operator shall be able to select the highest gear to which the transmission will automatically shift.

Yes No No Page # 20 spec p2

Transmission shall offer full manual shifting option as well as auto shifting.

Yes No Page # Bis spec p. 2

Machine shall be have a minimum of **4-forward** and **4-reverse** gears and be able to achieve a speed of at least **25 mph in both forward and reverse**.

Yes No Page #\_ 15

Rear axle shall not have more than 20° total oscillation.

Yes No Page #\_ /+

Wheel loader shall be equipped with a crankcase guard.

Yes \_ No \_\_\_ Page #\_\_//\_

### **HYDRAULICS**

Hydraulic pressure taps shall be provided for checking pressure in the hydraulic implements and steering systems.

Yes No Page # BID Spec p 2

Steering hydraulic system shall have a dedicated pump and be independent of the implement hydraulics.

Yes No Page #\_\_\_/7

Hydraulic total cycle time shall be no more than 11 seconds, measured with a rated bucket load.

Yes \_KNo \_\_ Page #\_ 1 <del>'</del>

Machine shall have a ground-level hydraulic sight gauge showing hydraulic fluid level.

Yes No Page # 12

Shall have a minimum flow of 50 gallons/minute.

Yes X No Page # / H

# 926M, 930M, 938M Wheel Loaders

GAT\*



	926M	930M	938M
Engine Model*	Cat® C7.1 ACERT™	Cat C7.1 ACERT	Cat C7.1 ACERT
Maximum Rated Gross Power:	20.00 May		THE CONTRACT STREET
ISO 14396	114 kW (153 hp)	122 kW (164 hp)	140 kW (188 hp)
ISO 14396 (DIN)	114 kW (155 hp)	122 kW (166 hp)	140 kW (190 hp)
Bucket Capacity	1.9-5.0 m³ (2.5-6.5 yd³)	2.1-5.0 m³ (2.7-6.5 yd³)	2.5-5.0 m³ (3.3-6.5 yd³)
Full Turn Tip Load	7524 kg (16,587 lb)	8469 kg (18,670 lb)	10 028 kg (22,107 lb)
Operating Weight	13 050 kg (28,770 lb)	14 007 kg (30,879 lb)	16 427 kg (36,216 lb)

<sup>\*</sup>Engine meets U.S. EPA Tier 4 Final/EU Stage IV emission standards.

### **Making Your Choice Easy**

### **Efficiently Powerful**

Experience Hybrid like fuel efficiency with an intelligent hydrostatic power train and industry leading fuel savings. For your toughest and most demanding applications a new Performance Mode will boost the power and hydraulic speed.

### Work Made Easy

Move more with Caterpillar's patented quick loading Performance Series buckets and optimized Z-bar linkage. The parallel lift and high tilt forces allow you to safely handle loads. Multi-function work has never been easier with dedicated pumps and a flow sharing implement valve.

### **Enjoy All Day Comfort**

Have a seat in the M Series Small Wheel Loader and enjoy, whisper quiet sound levels, all around visibility and seat mounted joystick controls. The large spacious cab combined with Caterpillar's exclusive hydraulic cylinder damping make this the most comfortable seat on your job site.

### **Customize Your Experience**

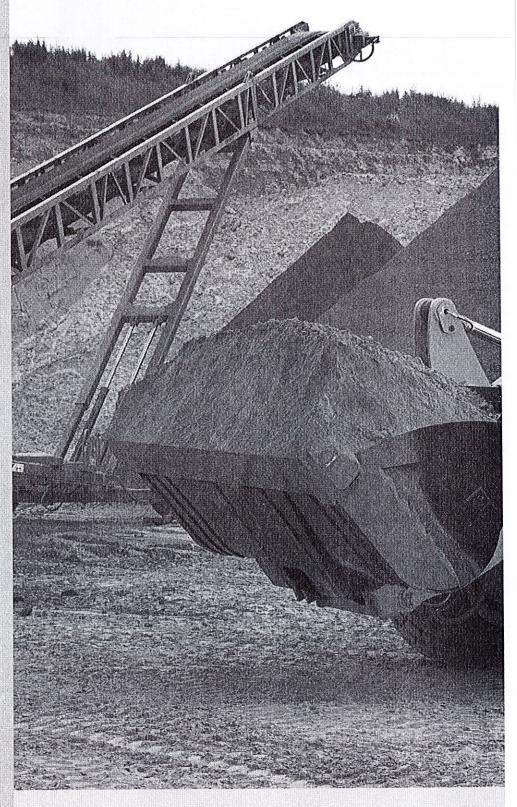
Meet your application requirements and individual preferences with Caterpillar's industry first Power Train Modes. Fine tune machine performance with adjustments at your fingertips through soft touch buttons and secondary display.

### **Configured for Success**

A complete range of optional equipment gives you the versatility to configure an M Series Small Wheel Loader to be successful in your business.

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Environmental and customer friendly up to 95% recyclable content by weight



The Cat 926M, 930M and 938M Small Wheel Loaders set the standard for productivity, fuel efficiency and operator comfort. The improved optimized Z-bar loader linkage delivers the quick loading performance of a traditional Z-bar with the parallelism and load handling capability of a tool carrier. A high torque, low speed C7.1 ACERT engine works in concert with an intelligent hystat power train to deliver fuel efficiency as standard. Meets Tier 4 Final/Stage IV emission standards with an environmentally friendly, Clean Emission Module designed to manage itself so you can concentrate on your work. Experience the new industry benchmark.



# **Efficiently Powerful**

Experience hybrid-like fuel efficiency with more power when you need it.

### Intelligent Power Management

The Caterpillar exclusive Intelligent Power Management system has been further enhanced to monitor operator input and power availability to keep the machine working at peak efficiency and provide the operator with greater customization to suit their application.

### **Power on Demand**

A choice of Power Modes allows you to choose between maximum fuel efficiency or boosted power along with hydraulic speed.



### Standard Power Mode

- Saves up to 10% fuel compared to K Series Cat loader.
- Delivers equal performance compared to K Series Cat Loader.
- Reduces cab sound levels down to a whisper quiet 64 dB(A) typical.
- Biggest gains seen during load and carry, snow removal and roading applications.

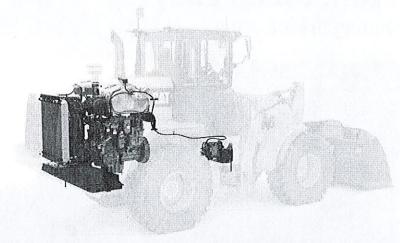
### **Performance Power Mode**

- Enabled at the push of a button (HP+).
- Boosts engine power by up to 10% and engine speed by over 12%.
- · Increases hydraulic cycle times and productivity.

### Six Cylinders of Efficient Power

The Cat C7.1 ACERT engine provides cleaner, quieter operation while delivering superior performance and durability through a high torque, low speed design. The engine meets Tier 4 Final and Stage IV emission standards with a Clean Emissions Module that is designed to manage itself so you can concentrate on your work.

- No downtime for regeneration with a passive low temperature system that keeps you on the job.
- Fit for Life Diesel Particulate Filter (DPF) that is designed to exceed the engine overhaul life.
- Extended fluid fill intervals with minimal use of Diesel Exhaust Fluid (DEF) also referred to as Adblue™ with up to four fuel tank fills per DEF fill.
- Configurable auto idle shut down based on time and ambient temperature to further reduce fuel burn and keep operating costs low.

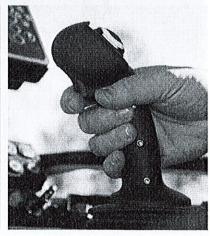




### **Power to the Ground**

Lock up and go with fully locking front differential axles that can be engaged on the move at full torque with the pull of a trigger on the seat mounted joystick. Maximize your traction with optional Limited Slip Differential on the rear axle to keep you climbing.

Independent service brakes on front and rear axles provide robust stopping performance while a push button electronic park brake allows you to safely secure the machine with ease.



# **Work Made Easy**

Getting the job done.





### **Optimized Z-bar Linkage**

The Caterpillar patented optimized Z-bar linkage combines the digging efficiency of a traditional Z-bar with integrated tool carrier capabilities for great performance and versatility.

- Perfect Parallelism functionality available in Fork Mode gives truly predictable performance while high tilt forces throughout the working range help you safely and confidently handle loads with precise control.
- Visibility to bucket corners and fork tips at ground level remain excellent while sight lines at maximum lift are improved with a Generation II lift arm design.
- Lift higher and reach further with optional High Lift linkage available on all three models.

### **Quick Loading Performance Series Buckets**

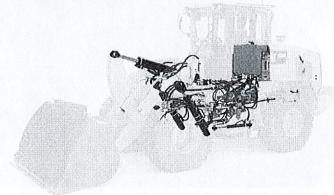
Performance Series Buckets deliver up to 10% higher fill factors and better material retention for significant productivity and fuel efficiency improvements. The buckets feature a longer floor to take a bigger bite of the pile, an open throat to heap higher and curved side bars to help with material retention. This optimized shape is echoed across the General Purpose, Light Material and High Dump bucket families.



### **Smooth and Predictable Multi-Function Performance**

M Series machines feature an electro-hydraulic control system that is governed by the Intelligent Power Management system for peak efficiency. The load-sensing, variable flow system senses work demand and adjusts flow and pressure to match the operators request.

- Multi-Function without compromise through dedicated hydraulic systems featuring one pump for the Intelligent Hydrostatic drive, a 2nd pump for the implements, and a 3rd pump for the steering system. Drive, Lift and Steer simultaneously with smooth predictable control. The M Series simply does what you ask it to.
- Programmable in-cab kick-outs are easy to set on the go for tilt, lower and lift. This feature is ideal for applications where the work cycle is repeatable allowing you to quickly return to programmed set points such as ground and level.
- Fine tune hydro-mechanical performance with fully adjustable
   3rd and 4th function flow through the secondary display (when equipped) for a perfect marriage between machine and work tool.







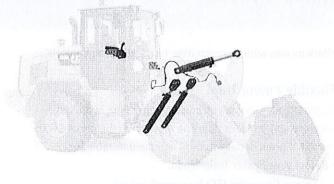
### Have a Seat and Experience:

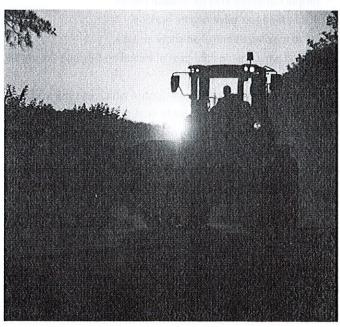
- Seat-mounted controls featuring a low effort joystick for lift and tilt functions along with integrated Forward/Neutral/Reverse switch, differential lock trigger and optional third and fourth auxiliary functions.
- Superior all around visibility with single piece front windshield, new parabolic external mirrors, redesigned Generation II linkage and clean hydraulic lines routing.
- Automatic climate control with heated rear glass and external mirrors for a quick defrost.
- Fully adjustable controls including steering column, joystick and seat suspension.
- Information at a glance with large primary LCD display and optional secondary display.
- An extra eye on the job site with optional rearview camera and integrated object detection.
- A heated and cooled seat option for added comfort in a wide range of climates.



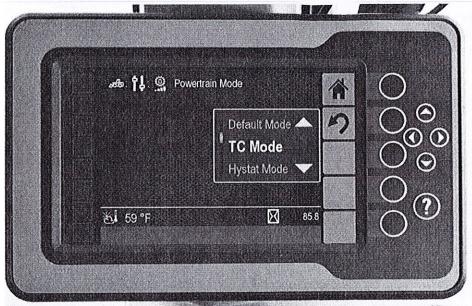
### Enjoy coming to work with:

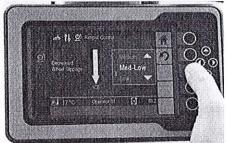
- A spacious, safe, quiet operator environment featuring ergonomic controls, seat belt notification and optional bluetooth radio with integrated microphone plus an MP3 port.
- Easy access to vital machine parameters with the optional\*
   secondary display that works in conjunction with the standard soft
   touch panel to allow real time adjustments to machine features
   and an integrated help button with over 25 languages.
- Comfortable soft stops at cylinder end stroke conditions and programmed kick-out points with Caterpillar's exclusive electrohydraulic cylinder snubbing.
- An even smoother ride with optional Ride Control when working unloaded and loaded with excellent material retention.
- Early starts and late finishes are made easier with optional LED lighting package that includes engine compartment lighting to illuminate the way for checking oil, and coolant level along with re-fueling the machine in dark conditions.

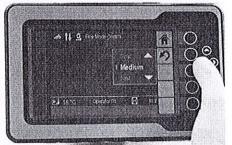


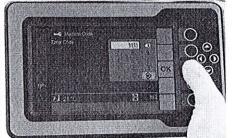


<sup>\*</sup>Standard in Europe









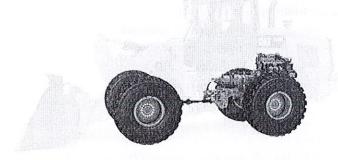
# Customize Your Experience Make it yours.

Work as one with your machine by customizing controls.

### Flexible Power Train

A smooth, step-less electronically controlled hydrostatic transmission provides adjustable power to the ground with excellent groundspeed control and customizable feel.

- · Select your Power Train Mode:
  - Torque Converter (TC) for smooth rollout.
- Hystat for aggressive engine braking.
- Ice to maximize control on snow and ice.
- Default which blends the best of Hystat and Torque Converter characteristic.
- Reduce tire wear using Rimpull control which enables you to match available tractive power to underfoot conditions.
- Fine tune ground speed when using work tools such as brooms, snow blowers and brush cutters with Creeper Control.
- Set Directional Shift Response, soft and smooth for material handling applications or sharp for aggressive operation.



### Adjustable Electro-Hydraulic Controls

Easily customize hydraulic performance to meet your needs.

- Optimize hydraulic modulation with Fine Mode control when working with forks, material handling arms, and large tools.
- Quicker hydraulic response for fine grading at speed and agriculture applications through Lift and Tilt response settings.
- Fully adjustable ride control activation speed along with 3rd and 4th function auxiliary flows.

### **Operator Profiles and Coded Start**

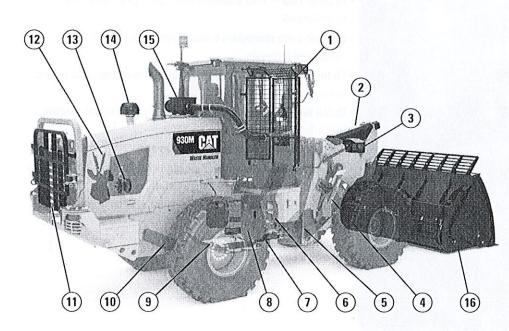
 The M Series Wheel Loaders will remember you and your personal settings with unique operator codes to make this machine truly yours and keep it secure.

# **Configured for Success**

Ready to work for you.

### The Way You Want It

A complete range of optional equipment and work tools give you the versatility to configure an M Series wheel loader to be successful in your business. Get with your Cat dealer to configure yours.



### **Guards**:

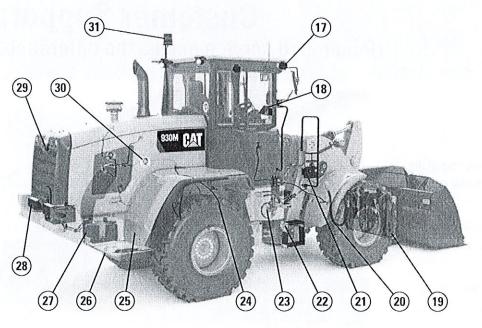
- 1) Windshield
- 2) Tilt cylinder
- 3) Lights
- 4) Fender deflectors
- 5) Drive shaft
- 6) Hitch
- 7) Steering cylinders
- 8) Side power train
- 9) Lower power train
- 10) Crank case
- 11) Rear radiator (930M and 938M only)

### **Debris Packages:**

- 12) Reversing fan
- 13) Sealed alternator
- 14) Turbine precleaner
- 15) RESPA precleaner

### **Work Tools:**

16) Full range of attachments



### Other Options:

- 17) LED auxiliary lights
- 18) Secondary display\*
- 19) Coupler: Fusion and ISO
- 20) Auxiliary hydraulics: 3rd and 4th
- 21) Autolube
- 22) Windshield washing platform
- 23) Ride control
- 24) Elevated breathers: axles and gear box
- 25) Fenders: extended and full coverage
- 26) Counterweights: heavy and Log/Agg
- 27) Cold start package
- 28) Rear object detection
- 29) Rearview camera\*
- 30) Blue Angel certification
- 31) Beacon

<sup>\*</sup>Standard equipment in Europe

# Service

# Schedule your downtime to maximize your up time.

Get up and running quickly with ground level, daily service access and optional engine compartment lighting. Three large service doors can be opened and closed in any order to give full access to filters and service points. Extended service intervals on hydraulic and power train filters reduce service time and maximize uptime. Additional service features include:



- Product Link™ PRO standard with three year subscription to VisionLink®.
- Maintenance reminders through secondary display at scheduled intervals.
- Fit for Life Diesel Particulate Filter that is designed to exceed the engine overhaul life.
- Quick fuel filter service with Caterpillar's exclusive electric fuel priming pump.
- Jump start studs as standard equipment.
- Extended cleanouts with single plane cooling system and wide spaced 6 fins per inch coolers as standard.
- Integrated Autolube (optional) with adjustable greasing frequency.

# **Customer Support**

Unmatched service makes the difference.

### **Renowned Cat Dealer Support**

**Rely on your Cat dealer** to help you every step of the way with new or used machine sales, rental or rebuild options to meet your business needs.

Maximize your machine uptime with unsurpassed worldwide parts availability, trained technicians and customer support agreements.

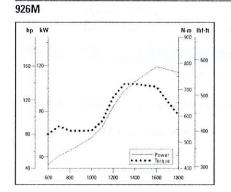
Let us earn your business. Experience an M Series Small Wheel Loader and join the Caterpillar family.

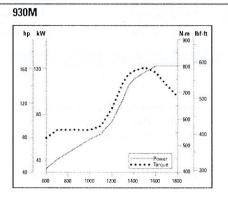


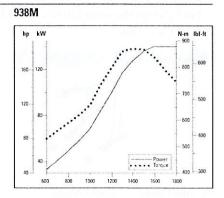
Engine		ind d		tier is	1100		14 654					
Cat C7.1 ACERT		926	6M			930	M			938	3M	
Power Mode		mance P+)		dard	(H	mance P+)	200	ldard	(H	mance P+)		idard
	Rang	ge 1-4	Rang	e 1-3*	Rang	je 1-4	Rang	e 1-3*	Rang	je 1-4	Rang	e 1-3*
Maximum Rated Gross Power	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp	kW	hp
Maximum Engine Speed	1,800	0 rpm	1,600	) rpm	1,800	rpm (	1,600	) rpm	1,80	) rpm	1,600	0 rpm
ISO 14396	114	153	109	146	122	164	119	160	140	188	129	173
ISO 14396 (DIN)	114	155	109	148	122	166	119	162	140	190	129	175
Rated Net Power	1,800	0 rpm	1,600	) rpm	1,800	) rpm	1,600	) rpm	1,80	) rpm	1,600	0 rpm
SAE J1349 at Minimum Fan Speed	110	148	105	141	117	157	115	154	136	182	125	168
ISO 9249 (1977)/EEC 80/1269 at Minimum Fan Speed	111	149	106	142	119	160	116	156	137	184	126	169
ISO 9249 (DIN) at Minimum Fan Speed	111	151	106	144	119	162	116	158	137	186	126	171
Maximum Gross Torque	N⋅m	lbf-ft	N⋅m	lbf-ft	N⋅m	lbf-ft	N⋅m	lbf-ft	N-m	lbf-ft	N⋅m	lbf-ft
ISO 14396	721	531	721	531	804	592	804	592	879	648	879	648
Maximum Net Torque							e de la	211	11075		1111376	iti la lu
SAE J1349	694	511	694	511	768	566	768	566	843	621	843	621
ISO 9249 (1977)/EEC 80/1269	702	517	702	517	776	572	776	572	852	628	852	628
Displacement	42	7 in³	7.0	11 L	427	7 in³	7.0	1 L	42	7 in <sup>3</sup>	7.0	)1 L
Bore	4	in	105	mm	4	in	105	mm	4	in	105	mm
Stroke	5	in	135	mm	5	in	135	mm	5	in	135	mm

- \* Range 4 power and torque is equal to Performance Mode with Caterpillar Power by Range technology.
- Net power ratings are tested at the reference conditions for the specified standard and denote power available at the flywheel when the engine is equipped with alternator, air cleaner, emission components and fan at specified speed.
- No derating required up to 3000 m (10,000 ft) altitude. Auto derate protects hydraulic and transmission systems.
- The Cat C7.1 ACERT engine meets Tier 4 Final/Stage IV off-highway emission standards.

### **Engine Torque**







### Cab



- ROPS: SAE J1040 MAY94, ISO 3471-1994.
- FOPS: SAE J/ISO 3449 APR98, Level II, ISO 3449 1992 Level II.
- The declared dynamic operator around pressures levels per ISO 6396:2008\* while running in Performance Power Mode:
- Standard cab: 68 ±3 dB(A) and Deluxe cab: 66 ±2 dB(A)
- \*The measurements were conducted with the cab doors and windows closed and at 70% of maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

### **Loader Hydraulic System**



- Implement system uses a dedicated load sensing variable displacement pump with dual double acting lift cylinders and a single double acting tilt cylinder.
- Flow values listed are for a machine running in Performance Power Mode (1,800 rpm).
- \* 3rd and 4th function flow is fully adjustable from 20% to 100% of maximum flow through the secondary display when equipped.

	926M		930M		938M	
Maximum Flow - Implement Pump	150 L/min	40 gal/min	190 L/min	50 gal/min	190 L/min	50 gal/min
3rd Function Maximum Flow*	150 L/min	40 gal/min	190 L/min	50 gal/min	190 L/min	50 gal/min
4th Function Maximum Flow*	150 L/min	40 gal/min	160 L/min	42 gal/min	160 L/min	42 gal/min
Maximum Working Pressure – Implement Pump	26 000 kPa	3,771 psi	25 000 kPa	3,626 psi	28 000 kPa	4,061 psi
Relief Pressure – Tilt Cylinder	28 000 kPa	4,061 psi	28 000 kPa	4,061 psi	30 000 kPa	4,351 psi
3rd and 4th Function Maximum Working Pressure	26 000 kPa	3,771 psi	25 000 kPa	3,626 psi	28 000 kPa	4,061 psi
3rd and 4th Function Relief Pressure	28 000 kPa	4,061 psi	28 000 kPa	4,061 psi	30 000 kPa	4,351 psi
Lift Cylinder: Double Acting						
Bore Diameter	110 mm	4.3 in	120 mm	4.7 in	120 mm	4.7 in
Rod Diameter	60 mm	2.4 in	65 mm	2.6 in	65 mm	2.6 in
Stroke	728 mm	28.7 in	728 mm	28.7 in	789 mm	31.1 in
Tilt Cylinder: Double Acting						
Bore Diameter	130 mm	5.1 in	150 mm	5.9 in	150 mm	5.9 in
Rod Diameter	70 mm	2.8 in	90 mm	3.5 in	90 mm	3.5 in
Stroke	555 mm	21.9 in	555 mm	21.9 in	555 mm	21.9 in
Cycle Times: Performance (HP+) at 1,800 rpm/ Standard Power Mode at 1,600 rpm						
Raise (Ground Level to Maximum Lift)	5.5/6.2 seconds		5.1/5.7 seco	nds	5.5/6.2 seconds	
Dump (at Maximum Lift Height)	1.5/1.7 seco	nds	1.5/1.7 seco	nds	1.5/1.7 seco	nds
Float Down (Maximum Lift to Ground Level)	2.6/2.6 seco	nds	2.7/2.7 seco	nds	2.7/2.7 seco	nds
Total Cycle Time	9.6/10.5 sec	onds	9.3/10.1 seconds 9.7/10.6 se		9.7/10.6 sec	onds

### Steering



- Steering system uses a dedicated load sensing variable displacement pump with dual double acting cylinders.
- Flow values listed are for a machine running in Performance Power Mode (1,800 rpm).

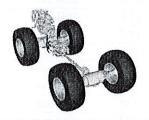
•						
	926M		930 <b>M</b>		938M	
Steering Cylinder: Double Acting						
Bore Diameter	70 mm	2.8 in	70 mm	2.8 in	80 mm	3.1 in
Rod Diameter	40 mm	1.6 in	40 mm	1.6 in	50 mm	2 in
Stroke	438 mm	17.2 in	438 mm	17.2 in	399 mm	15.7 in
Maximum Flow – Steering Pump	130 L/min	34 gal/min	130 L/min	34 gal/min	130 L/min	34 gal/min
Maximum Working Pressure – Steering Pump	24 130 kPa	3,500 psi	24 130 kPa	3,500 psi	24 130 kPa	3,500 psi
Maximum Steering Torque						1
0° (Straight Machine)	50 375 N·m	37,155 lbf-ft	50 375 N·m	37,155 lbf-ft	57 630 N·m	42,506 lbf-ft
40° (Full Turn)	37 620 N·m	27,747 lbf-ft	37 620 N·m	27,747 lbf-ft	42 570 N·m	31,398 lbf-ft
Steering Cycle Times (Full Left to Full Right)						
Minimum RPM: Pump Flow Limited	2.8 seconds		2.8 seconds		3.1 seconds	
Maximum RPM: 90 rpm Steering Wheel Speed	2.4 seconds		2.4 seconds		2.3 seconds	

### **Transmission**



\* Creeper control allows maximum speed range adjustability from 1 km/h (0.6 mph) to 13 km/h (8 mph) in Range 1 through the secondary display when equipped. Factory default is 7 km/h (4.4 mph).

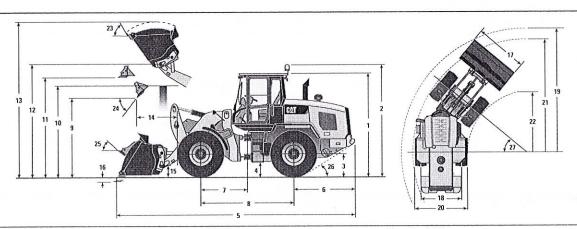
0.6-8 mph 8 mph 17 mph 25 mph	930M 1-13 km/h 13 km/h 27 km/h 40 km/h	0.6-8 mph 8 mph 17 mph 25 mph	938M 1-13 km/h 13 km/h 27 km/h 40 km/h	0.6-8 mph 8 mph 17 mph 25 mph
8 mph 17 mph	13 km/h 27 km/h 40 km/h	8 mph 17 mph	13 km/h 27 km/h 40 km/h	8 mph 17 mph
8 mph 17 mph	13 km/h 27 km/h 40 km/h	8 mph 17 mph	13 km/h 27 km/h 40 km/h	8 mph 17 mph
17 mph	27 km/h 40 km/h	17 mph	27 km/h 40 km/h	17 mph
	40 km/h	<u></u>	40 km/h	
25 mph	, companies	25 mph		25 mph
	930M		n in 196 meti	espej
	930M			
			938M	
51.5 gal	195 L	51.5 gal	195 L	51.5 gal
5.0 gal	19 L	5.0 gal	19 L	5.0 gal
7.9 gal	30 L	7.9 gal	32 L	8.5 gal
5.3 gal	20 L	5.3 gal	20 L	5.3 gal
2.2 gal	8.5 L	2.2 gal	11 L	2.9 gal
5.5 gal	26 L	6.9 gal	35 L	9.2 gal
5.5 gal	25 L	6.6 gal	35 L	9.2 gal
42.3 gal	165 L	43.6 gal	170 L	44.9 gal
23.8 gal	90 L	23.8 gal	90 L	23.8 gal
	5.0 gal 7.9 gal 5.3 gal 2.2 gal 5.5 gal 5.5 gal 42.3 gal	5.0 gal 19 L 7.9 gal 30 L 5.3 gal 20 L 2.2 gal 8.5 L 5.5 gal 26 L 5.5 gal 25 L 42.3 gal 165 L	5.0 gal     19 L     5.0 gal       7.9 gal     30 L     7.9 gal       5.3 gal     20 L     5.3 gal       2.2 gal     8.5 L     2.2 gal       5.5 gal     26 L     6.9 gal       5.5 gal     25 L     6.6 gal       42.3 gal     165 L     43.6 gal	5.0 gal     19 L     5.0 gal     19 L       7.9 gal     30 L     7.9 gal     32 L       5.3 gal     20 L     5.3 gal     20 L       2.2 gal     8.5 L     2.2 gal     11 L       5.5 gal     26 L     6.9 gal     35 L       5.5 gal     25 L     6.6 gal     35 L       42.3 gal     165 L     43.6 gal     170 L



- Power train is governed by the Caterpillar exclusive Intelligent Power Management system to deliver peak performance and efficiency.
- \* Differential front locking axle can be engaged on the go at full torque to 10 km/h (6.2 mph) on the 926M/930M and up to 20 km/h (12.4 mph) on the 938M.

	926M	930M	938M
Front Axle	Fixed	Fixed	Fixed
Traction Aid (standard)	Locking differential	Locking differential	Locking differential
Rear Axle	Oscillating	Oscillating	Oscillating
Oscillation Angle by Tire Size			
17.5 R25	± 13.5 degrees		
20.5 R25, 550/65, 600/65, 650/65	± 10.5 degrees	± 10.5 degrees	± 10.5 degrees
23.5 R25			± 7 degrees
Flexports, 750/65, 620/65, Skidder	± 7 degrees	± 7 degrees	± 7 degrees
Traction Aid (optional)	Limited slip differential	Limited slip differential	Limited slip differential
Brakes		***************************************	
Service	Inboard wet disc	Inboard wet disc	Outboard wet disc
Park	Spring applied hydraulically released	Spring applied hydraulically released	Spring applied hydraulically released

### **Dimensions with Bucket**



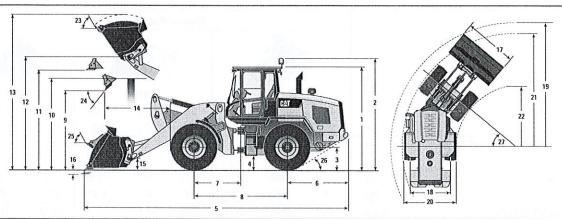
*Vary with bucket.		Standard Lift						
**Vary with tire.	926	926 <b>M</b>		М	938M			
** 1 Height: Ground to Cab	3340 mm	10'11"	3340 mm	10'11"	3340 mm	10'11"		
** 2 Height: Ground to Beacon	3707 mm	12'1"	3707 mm	12'1"	3707 mm	12'1"		
** 3 Height: Ground Axle Center	685 mm	2'2"	685 mm	2'2"	685 mm	2'2"		
** 4 Height: Ground Clearance	397 mm	1'3"	397 mm	1'3"	386 mm	1'3"		
* 5 Length: Overall	7451 mm	24'5"	7530 mm	24'8"	7656 mm	25'1"		
6 Length: Rear Axle to Bumper	1986 mm	6'6"	1993 mm	6'6"	1968 mm	6'5"		
7 Length: Hitch to Front Axle	1500 mm	4'11"	1500 mm	4'11"	1525 mm	5'0"		
8 Length: Wheel Base	3000 mm	9'10"	3000 mm	9'10"	3050 mm	10'0"		
* 9 Clearance: Bucket at 45°	2885 mm	9'5"	2828 mm	9'3"	2834 mm	9'3"		
** 10 Clearance: Load over Height	3330 mm	10'11"	3331 mm	10'11"	3354 mm	11'0"		
** 11 Clearance: Level Bucket	3580 mm	11'8"	3580 mm	11'8"	3641 mm	11'11"		
** 12 Height: Bucket Pin	3907 mm	12'9"	3907 mm	12'9"	3969 mm	13'0"		
** 13 Height: Overall	5076 mm	16'7"	5147 mm	16'10"	5273 mm	17'3"		
* 14 Reach: Bucket at 45°	1024 mm	3'4"	1064 mm	3'5"	1146 mm	3'9"		
15 Carry Height: Bucket Pin	460 mm	1'6"	460 mm	1'6"	473 mm	1'6"		
** 16 Dig Depth	100 mm	3.9"	100 mm	3.9"	101 mm	3.9"		
17 Width: Bucket	2550 mm	8'4"	2550 mm	8'4"	2750 mm	9'0"		
18 Width: Tread Center	1930 mm	6'3"	1930 mm	6'3"	2083 mm	6'10"		
19 Turning Radius: Over Bucket	5924 mm	19'5"	5946 mm	19'6"	6134 mm	20'1"		
20 Width: Over Tires	2540 mm	8'4"	2540 mm	8'4"	2693 mm	8'10"		
21 Turning Radius: Outside of Tires	5402 mm	17'8"	5402 mm	17'8"	5546 mm	18'2"		
22 Turning Radius: Inside of Tires	2851 mm	9'4"	2851 mm	9'4"	2843 mm	9'3"		
23 Rack Angle at Full Lift	54	0	54°		54°			
24 Dump Angle at Full Lift	50	0	49°		49	0		
25 Rack Angle at Carry	45	0	45	0	46	0		
26 Departure Angle	33	0	33	0	33	0		
27 Articulation Angle	40	0	40	0	40	0		

Unless otherwise noted, all Standard Lift dimensions and specifications listed are for a machine configured with the following:

Optional Equipment			iveshaft Guards			
Tires – Michelin	20.5R25 (L	-3) XHA2	20.5R25 (L	3) XHA2	20.5R25 (L	-3) XHA2
Pressure in Front Tires	4.14 bar	60 psi	4.14 bar	60 psi	4.48 bar	65 psi
Pressure in Rear Tires	2.76 bar	40 psi	2.76 bar	40 psi	2.76 bar	40 psi
0 11 0	.,,				11	

Counterweight Group Heavy Heavy Heavy

### **Dimensions with Bucket**



*Vary with bucket.			High	Lift		
**Vary with tire.	926	М	930	М	938	М
** 1 Height: Ground to Cab	3340 mm	10'11"	3340 mm	10'11"	3340 mm	10'11"
** 2 Height: Ground to Beacon	3707 mm	12'1"	3707 mm	12'1"	3707 mm	12'1"
** 3 Height: Ground Axle Center	685 mm	2'2"	685 mm	2'2"	685 mm	2'2"
** 4 Height: Ground Clearance	397 mm	1'3"	397 mm	1'3"	386 mm	1'3"
* 5 Length: Overall	8093 mm	26'6"	8324 mm	27'3"	8397 mm	27'6"
6 Length: Rear Axle to Bumper	1986 mm	6'6"	1993 mm	6'6"	1968 mm	6'5"
7 Length: Hitch to Front Axle	1500 mm	4'11"	1500 mm	4'11"	1525 mm	5'0"
8 Length: Wheel Base	3000 mm	9'10"	3000 mm	9'10"	3050 mm	10'0"
* 9 Clearance: Bucket at 45°	3378 mm	11'0"	3421 mm	11'2"	3415 mm	11'2"
** 10 Clearance: Load over Height	3550 mm	11'7"	3540 mm	11'7"	3561 mm	11'8"
** 11 Clearance: Level Bucket	4073 mm	13'4"	4173 mm	13'8"	4222 mm	13'10"
** 12 Height: Bucket Pin	4400 mm	14'5"	4500 mm	14'9"	4550 mm	14'11"
** 13 Height: Overall	5569 mm	18'3"	5740 mm	18'9"	5853 mm	19'2"
* 14 Reach: Bucket at 45°	1261 mm	4'1"	1385 mm	4'6"	1413 mm	4'7"
15 Carry Height: Bucket Pin	644 mm	2'1"	684 mm	2'2"	682 mm	2'2"
** 16 Dig Depth	135 mm	5.3"	135 mm	5.3"	135 mm	5.3"
17 Width: Bucket	2550 mm	8'4"	2550 mm	8'4"	2750 mm	9'0"
18 Width: Tread Center	1930 mm	6'3"	1930 mm	6'3"	2083 mm	6'10"
19 Turning Radius: Over Bucket	6234 mm	20'5"	6328 mm	20'9"	6490 mm	21'3"
20 Width: Over Tires	2540 mm	8'4"	2540 mm	8'4"	2693 mm	8'10"
21 Turning Radius: Outside of Tires	5402 mm	17'8"	5402 mm	17'8"	5546 mm	18'2"
22 Turning Radius: Inside of Tires	2851 mm	9'4"	2851 mm	9'4"	2843 mm	9'3"
23 Rack Angle at Full Lift	51	0	53	o	53	0
24 Dump Angle at Full Lift	49	0	48	o	47	0
25 Rack Angle at Carry	49	0	50	0	50	10
26 Departure Angle	33	33	0	33	0	
27 Articulation Angle	40	o	40	o	40	0

Unless otherwise noted, all High Lift dimensions and specifications listed are for a machine configured with the following:

Optional Equipment Full Fluids, 80 kg (176 lb) Operator, Secondary Steering, Ride Control, Crankcase, Power Train and Driveshaft Guards, Bucket with Bolt-on Cutting Edge Tires - Michelin 20.5R25 (L-3) XHA2 20.5R25 (L-3) XHA2 20.5R25 (L-3) XHA2 Pressure in Front Tires 4.14 bar 4.14 bar 4.48 bar 60 psi 60 psi 65 psi Pressure in Rear Tires 2.76 bar 40 psi 2.76 bar 40 psi 2.76 bar 40 psi

Counterweight Group Heavy Heavy Standard

						General	Purpose				
			11/27		<u>.</u>		12	1			
				Pin On	= 45	-	Fusion		ISO 2	3727	High Lift
	Capacity – rated	m³	1.9	2.1	2.3	1.9	2.1	2.3	2.1	2.3	-
		yd³	2.5	2.7	3.0	2.5	2.7	3.0	2.7	3.0	_
	Capacity – rated at 110% fill factor	$m^3$	2.1	2.3	2.5	2.1	2.3	2.5	2.3	2.5	
		yd³	2.7	3.0	3.3	2.7	3.0	3.3	3.0	3.3	_
17	Width: bucket	mm	2550	2550	2550	2550	2550	2550	2550	2550	-
		ft/in	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	-
	Nominal material density,	kg/m³	1889	1696	1529	1800	1612	1457	1530	1383	_
	110% fill factor	lb/yd3	3,223	2,879	2,584	3,072	2,736	2,462	2,598	2,338	11 <u>22</u> )
9	Clearance: full lift, 45° dump	mm	2912	2855	2807	2885	2828	2779	2727	2677	+493
		ft/in	9'6"	9'4"	9'2"	9'5"	9'3"	9'1"	8'11"	8'9"	+1'7"
14	Reach: full lift, 45° dump	mm	992	1033	1070	1024	1064	1102	1190	1227	+237
	*	ft/in	3'3"	3'4"	3'6"	3'4"	3'5"	3'7"	3'10"	4'0"	+9"
	Reach: 2130 mm (7'0") clearance,	mm	1547	1560	1573	1566	1578	1590	1649	1657	+572
	45° dump	ft/in	5'0"	5'1"	5'1"	5'1"	5'2"	5'2"	5'4"	5'5"	+1'10"
	Reach: level arm, level bucket	mm	2278	2350	2413	2320	2392	2455	2553	2616	+523
	***************************************	ft/in	7'5"	7'8"	7'11"	7'7"	7'10"	8'0"	8'4"	8'6"	+1'8"
16	Dig depth	mm	100	100	100	100	100	100	94	94	+35
		in	3.9"	3.9"	3.9"	3.9"	3.9"	3.9"	3.7"	3.7"	+1.4"
5	Length: overall	mm	7409	7481	7544	7451	7523	7586	7679	7742	+642
-		ft/in	24'3"	24'6"	24'9"	24'5"	24'8"	24'10"	25'2"	25'4"	+2'1"
13	Height: overall	mm	5052	5122	5180	5076	5147	5205	5255	5313	+493
	Treight. Overtail	ft/in	16'6"	16'9"	16'11"	16'7"	16'10"	17'0"	17'2"	17'5"	+1'7"
19	Turning radius: over bucket	mm	5912	5933	5951	5924	5946	5964	5975	5995	+311
	Turning rudius, ever euchet	ft/in	19'4"	19'5"	19'6"	19'5"	19'6"	19'6"	19'7"	19'8"	+1'0"
	Tipping load – straight, ISO 14397-1*	kg	9179	9115	9008	8786	8701	8621	8268	8190	-2171
	Tipping road straight, 155 T 157 T	lb	20,235	20,094	19,859	19,370	19,182	19,005	18,227	18,056	-4,786
	Tipping load – straight, rigid tire**	kg	9561	9494	9384	9152	9064	8980	8612	8531	-2262
	Typing road straight, right the	lb	21,078	20,931	20,687	20,177	19,982	19,797	18,987	18,808	-4,985
	Tipping load – full turn, ISO 14397-1*	kg	7894	7836	7737	7524	7445	7371	7070	6999	-1911
	Tipping foad – fun turn, 130 1437/-1	lb	17,403	17,276	17,057	16,587	16,414	16,251	15,587	15,429	-4,213
	Tipping load – full turn, rigid tire**		8398	8336	8231	8004	7921	7842	7522	7445	-2033
	ripping toad - run turn, rigid the	kg Ib	18,514	18,378	18,145	17,646	17,461	17,288	16,582	16,414	-4,482
	Breakout force		10 685	9966	9388	10 229	9552	9023	8235	7822	-494
	Dicarout force	kg Ib	23,557	21,972	20,697	22,550	21,059	19,893	18,154	17,245	-1,089
-	Operating weight		12 696	12 715	12 778	13 050	13 094	13 132	13 060	13 098	+278
	Operating weight	kg									
		lb	27,989	28,031	28,171	28,770	28,867	28,950	28,792	28,876	+613

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

	.sorapa	O burgued				Light N	laterial				
			nZ7		7	7					
	JUNE 1975 1977			Pin On			Fusion		ISO 2	23727	High Lift
//	Capacity – rated	m³	3.1	3.5	3.8	3.1	3.5	3.8	3.5	4.1	_
	r _ 71r	yd³	4.1	4.6	5.0	4.0	4.6	5.0	4.6	5.4	
	Capacity - rated at 110% fill factor	m <sup>3</sup>	3.4	3.9	4.2	3.4	3.9	4.2	3.9	4.5	
		yd³	4.5	5.0	5.5	4.4	5.0	5.5	5.0	5.9	-
17	Width: bucket	mm	2750	2750	2750	2750	2750	2750	2750	2750	
		ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	_
	Nominal material density,	kg/m³	1094	951	860	1058	904	817	864	709	
	110% fill factor	lb/yd³	1,828	1,614	1,441	1,785	1,534	1,369	1,466	1,194	- T-
9	Clearance: full lift, 45° dump	mm	2703	2631	2573	2672	2600	2543	2527	2407	+505
		ft/in	8'10"	8'7"	8'5"	8'9"	8'6"	8'4"	8'3"	7'10"	+1'7"
14	Reach: full lift, 45° dump	mm	1066	1138	1196	1094	1167	1225	1206	1326	+256
	The state of the s	ft/in	3'5"	3'8"	3'11"	3'7"	3'9"	4'0"	3'11"	4'4"	+10"
	Reach: 2130 mm (7'0") clearance,	mm	1509	1538	1559	1521	1549	1569	1538	1571	+592
	45° dump	ft/in	4'11"	5'0"	5'1"	4'11"	5'0"	5'1"	5'0"	5'1"	+1'11"
-	Reach: level arm, level bucket	mm	2500	2603	2685	2543	2645	2726	2724	2894	+523
		ft/in	8'2"	8'6"	8'9"	8'4"	8'8"	8'11"	8'11"	9'5"	+1'8"
16	Dig depth	mm	100	100	100	100	100	100	125	125	+35
		in	3.9"	3.9"	3.9"	3.9"	3.9"	3.9"	4.9"	4.9"	+1.4"
5	Length: overall	mm	7632	7734	7816	7674	7776	7858	7875	8045	+642
		ft/in	25'0"	25'4"	25'7"	25'2"	25'6"	25'9"	25'10"	26'4"	+2'1"
13	Height: overall	mm	5179	5284	5356	5204	5309	5383	5385	5552	+493
		ft/in	16'11"	17'4"	17'6"	17'0"	17'5"	17'7"	17'8"	18'2"	+1'7"
19	Turning radius: over bucket	mm	6068	6099	6124	6082	6112	6138	6126	6183	+313
		ft/in	19'10"	20'0"	20'1"	19'11"	20'0"	20'1"	20'1"	20'3"	+1'0"
	Tipping load – straight, ISO 14397-1*	kg	8719	8566	8424	8359	8181	8042	7824	7543	-2100
		lb	19,221	18,884	18,570	18,428	18,035	17,730	17,248	16,628	-4,630
	Tipping load – straight, rigid tire**	kg	9082	8923	8775	8707	8522	8378	8150	7857	-2188
		lb	20,022	19,671	19,344	19,196	18,786	18,469	17,967	17,321	-4,823
	Tipping load – full turn, ISO 14397-1*	kg	7463	7321	7190	7124	6957	6830	6652	6390	-1851
		lb	16,452	16,139	15,852	15,706	15,337	15,058	14,664	14,088	-4,080
	Tipping load – full turn, rigid tire**	kg	7939	7788	7649	7579	7401	7266	7076	6798	-1969
	1 2 E	lb	17,503	17,169	16,863	16,708	16,316	16,019	15,600	14,987	-4,341
	Breakout force	kg	8616	7890	7768	8301	7609	7490	7094	5961	-423
		lb	18,995	17,393	17,124	18,301	16,774	16,513	15,638	13,141	-932
	Operating weight	kg	13 006	13 092	13 158	13 337	13 455	13 521	13 375	13 538	+278
		lb	28,674	28,862	29,008	29,403	29,663	29,808	29,487	29,847	+613

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

						General	Purpose				
			11/1		.}		7		172	2707	11: 1 1:6
				Pin On			Fusion		ISO 2		High Lift
	Capacity – rated	$m^3$	2.1	2.3	2.5	2.1	2.3	2.5	2.1	2.3	
		yd³	2.7	3.0	3.3	2.7	3.0	3.3	2.7	3.0	
	Capacity – rated at 110% fill factor	m³	2.3	2.5	2.8	2.3	2.5	2.8	2.3	2.5	
		yd³	3.0	3.3	3.6	3.0	3.3	3.6	3.0	3.3	
17	Width: bucket	mm	2550	2550	2550	2550	2550	2550	2550	2550	
		ft/in	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	_
	Nominal material density,	kg/m³	1921	1733	1571	1833	1658	1505	1742	1575	-
	110% fill factor	lb/yd³	3,260	2,929	2,645	3,112	2,803	2,535	2,957	2,662	_
9	Clearance: full lift, 45° dump	mm	2855	2807	2761	2828	2779	2733	2727	2677	+593
		ft/in	9'4"	9'2"	9'0"	9'3"	9'1"	8'11"	8'11"	8'9"	+1'11"
14	Reach: full lift, 45° dump	mm	1033	1070	1109	1064	1102	1140	1190	1227	+320
		ft/in	3'4"	3'6"	3'7"	3'5"	3'7"	3'8"	3'10"	4'0"	+13"
	Reach: 2130 mm (7'0") clearance,	mm	1560	1573	1587	1578	1590	1603	1649	1657	+717
	45° dump	ft/in	5'1"	5'1"	5'2"	5'2"	5'2"	5'3"	5'4"	5'5"	+2'4"
	Reach: level arm, level bucket	mm	2350	2413	2475	2392	2455	2517	2553	2616	+653
		ft/in	7'8"	7'11"	8'1"	7'10"	8'0"	8'3"	8'4"	8'6"	+2'1"
16	Dig depth	mm	100	100	100	100	100	100	94	94	+35
		in	3.9"	3.9"	3.9"	3.9"	3.9"	3.9"	3.7"	3.7"	+1.4"
5	Length: overall	mm	7488	7551	7613	7530	7593	7655	7686	7749	+794
		ft/in	24'6"	24'9"	24'11"	24'8"	24'10"	25'1"	25'2"	25'5"	+2'7"
13	Height: overall	mm	5122	5180	5239	5147	5205	5264	5255	5313	+593
		ft/in	16'9"	16'11"	17'2"	16'10"	17'0"	17'3"	17'2"	17'5"	+1'11"
19	Turning radius: over bucket	mm	5933	5951	5970	5946	5964	5983	5975	5995	+384
		ft/in	19'5"	19'6"	19'7"	19'6"	19'6"	19'7"	19'7"	19'8"	+1'3"
	Tipping load – straight, ISO 14397-1*	kg	10 370	10 258	10 119	9941	9855	9734	9450	9367	-2823
		lb	22,862	22,615	22,309	21,915	21,726	21,460	20,834	20,651	-6,222
	Tipping load – straight, rigid tire**	kg	10 802	10 685	10 541	10 355	10 265	10 140	9844	9758	-2940
		1b	23,814	23,557	23,239	22,828	22,631	22,354	21,702	21,511	-6,482
	Tipping load – full turn, ISO 14397-1*	kg	8873	8769	8639	8469	8390	8278	8047	7971	-2471
		lb	I .	19,332	19,045	18,670	18,497	18,249	17,740	17,572	-5,448
	Tipping load – full turn, rigid tire**	kg	9439	9329	9190	9009	8926	8806	8560	8480	-2629
		lb	20,810	20,566	20,260	19,862	19,678	19,414	18,872	18,694	-5,795
	Breakout force	kg	12 891	12 158	11 488	12 371	11 698	11 080	10 707	10 182	-299
	00.00000000000000000000000000000000000	lb	28,419	26,803	25,326	27,274	25,790	24,427	23,604	22,448	-658
98770	Operating weight	kg	13 627	13 691	13 789	14 007	14 044	14 127	13 973	14 011	+232
		lb	30,042	30,182	30,400	30,879	30,962	31,144	30,804	30,888	+511
		10	50,072	50,102	20,100	1 20,017	20,702	,	1,	,000	1

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

						Light N	laterial				
			EZU.			J.					
	Manual Assessment to proper			Pin On			Fusion		ISO 2	23727	High Lift
	Capacity – rated	$\mathrm{m}^3$	3.5	3.8	4.2	3.5	3.8	4.2	3.5	5.0	-
		yd³	4.6	5.0	5.5	4.6	5.0	5.5	4.6	6.5	-
	Capacity – rated at 110% fill factor	$m^3$	3.9	4.2	4.6	3.9	4.2	4.6	3.9	5.5	-
		yd³	5.0	5.5	6.0	5.0	5.5	6.0	5.0	7.2	_
17	Width: bucket	mm	2750	2750	2750	2750	2750	2750	2750	2750	
		ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	
	Nominal material density,	kg/m³	1083	981	874	1034	936	834	989	665	-
	110% fill factor	lb/yd³	1,838	1,643	1,484	1,755	1,568	1,416	1,678	1,120	Sig=
9	Clearance: full lift, 45° dump	mm	2631	2573	2510	2600	2543	2480	2527	2357	+607
		ft/in	8'7"	8'5"	8'2"	8'6"	8'4"	8'1"	8'3"	7'8"	+1'11"
14	Reach: full lift, 45° dump	mm	1138	1196	1259	1167	1225	1287	1206	1377	+342
		ft/in	3'8"	3'11"	4'1"	3'9"	4'0"	4'2"	3'11"	4'6"	+13"
	Reach: 2130 mm (7'0") clearance,	mm	1538	1559	1579	1549	1569	1588	1538	1581	+746
	45° dump	ft/in	5'0"	5'1"	5'2"	5'0"	5'1"	5'2"	5'0"	5'2"	+2'5"
	Reach: level arm, level bucket	mm	2603	2685	2773	2645	2726	2815	2724	2966	+653
		ft/in	8'6"	8'9"	9'1"	8'8"	8'11"	9'2"	8'11"	9'8"	+2'1"
16	Dig depth	mm	100	100	100	100	100	100	125	125	+35
		in	3.9"	3.9"	3.9"	3.9"	3.9"	3.9"	4.9"	4.9"	+1.4"
5	Length: overall	mm	7741	7823	7911	7783	7865	7953	7882	8124	+794
		ft/in	25'4"	25'7"	25'11"	25'6"	25'9"	26'1"	25'10"	26'7"	+2'7"
13	Height: overall	mm	5284	5356	5445	5309	5383	5471	5385	5840	+593
		ft/in	17'4"	17'6"	17'10"	17'5"	17'7"	17'11"	17'8"	19'1"	+1'11"
19	Turning radius: over bucket	mm	6099	6124	6152	6112	6138	6166	6126	6208	+386
		ft/in	20'0"	20'1"	20'2"	20'0"	20'1"	20'2"	20'1"	20'4"	+1'3"
	Tipping load – straight, ISO 14397-1*	kg	9796	9643	9512	9395	9247	9118	8988	8667	-2712
		lb	21,596	21,260	20,969	20,713	20,386	20,102	19,814	19,107	-5,978
	Tipping load – straight, rigid tire**	kg	10 204	10 045	9908	9787	9632	9498	9362	9028	-2825
		lb	22,496	22,145	21,843	21,576	21,235	20,940	20,639	19,904	-6,227
et esta	Tipping load – full turn, ISO 14397-1*	kg	8337	8198	8077	7960	7825	7707	7613	7313	-2377
	1	lb	18,378	18,072	17,805	17,549	17,251	16,990	16,783	16,121	-5,241
	Tipping load – full turn, rigid tire**	kg	8869	8721	8592	8468	8325	8199	8099	7780	-2529
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	lb	19,552	19,226	18,942	18,669	18,352	18,075	17,854	17,150	-5,575
	Breakout force	kg	10 278	10 140	9024	9926	9792	8740	9293	7810	-250
	2.23.000	lb	22,658	22,354	19,895	21,883	21,588	19,267	20,488	17,218	-551
	Operating weight	kg	14 004	14 070	14 134	14 367	14 433	14 497	14 288	14 510	+232
	operating weight	va	14 004	140/0	14 134	14 30/	14 433	14 47/	14 200	14 310	T232

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

						General	Purpose				
			11/21			Į.	17				
				Pin On			Fusion		ISO 2	3727	High Lift
	Capacity – rated	m³	2.5	2.7	2.9	2.5	2.7	2.9	2.5	2.7	-
		yd³	3.3	3.5	3.8	3.3	3.5	3.8	3.3	3.5	_
	Capacity - rated at 110% fill factor	$m^3$	2.8	3.0	3.2	2.8	3.0	3.2	2.8	3.0	-
		yd³	3.6	3.9	4.2	3.6	3.9	4.2	3.6	3.9	_
17	Width: bucket	mm	2750	2750	2750	2750	2750	2750	2750	2750	-
		ft/in	9'0"	9'0"	9'0"	9'0''	9'0"	9'0"	9'0"	9'0"	_
	Nominal material density,	kg/m³	1912	1755	1622	1823	1673	1546	1751	1605	-
	110% fill factor	lb/yd³	3,220	2,947	2,716	3,070	2,809	2,589	2,949	2,695	
9	Clearance: full lift, 45° dump	mm	2869	2822	2786	2834	2787	2751	2739	2691	+581
	1871	ft/in	9'4"	9'3"	9'1"	9'3"	9'1"	9'0"	8'11"	8'9"	+1'10"
14	Reach: full lift, 45° dump	mm	1108	1146	1178	1146	1185	1216	1264	1302	+267
		ft/in	3'7"	3'9"	3'10"	3'9"	3'10"	3'11"	4'1"	4'3"	+11"
	Reach: 2130 mm (7'0") clearance,	mm	1637	1652	1664	1658	1672	1684	1725	1736	+666
	45° dump	ft/in	5'4"	5'5"	5'5"	5'5"	5'5"	5'6"	5'7"	5'8"	+2'2"
	Reach: level arm, level bucket	mm	2452	2514	2563	2504	2566	2615	2655	2717	+607
	-	ft/in	8'0"	8'2"	8'4"	8'2"	8'5"	8'6"	8'8"	8'10"	+1'11"
16	Dig depth	mm	100	100	100	101	101	101	94	94	+35
		in	3.9"	3.9"	3.9"	4"	4"	4"	3.7"	3.7"	+1.4"
5	Length: overall	mm	7604	7666	7715	7656	7718	7767	7802	7864	+740
		ft/in	24'11"	25'1"	25'3"	25'1"	25'3"	25'5"	25'7"	25'9"	+2'5"
13	Height: overall	mm	5242	5301	5348	5273	5332	5379	5375	5434	+581
		ft/in	17'2"	17'4"	17'6"	17'3"	17'5"	17'7"	17'7"	17'9"	+1'10"
19	Turning radius: over bucket	mm	6117	6136	6150	6134	6152	6167	6160	6180	+357
		ft/in	20'0"	20'1"	20'2"	20'1"	20'2"	20'2"	20'2"	20'3"	+1'2"
	Tipping load – straight, ISO 14397-1*	kg	12 344	12 245	12 161	11 820	11 721	11 641	11 349	11 245	-3607***
		lb	27,214	26,995	26,810	26,057	25,840	25,663	25,019	24,791	-7,952
	Tipping load – straight, rigid tire**	kg	12 859	12 755	12 668	12 312	12 210	12 126	11 822	11 714	-3757***
		lb	28,348	28,120	27,928	27,143	26,917	26,732	26,062	25,824	-8,284
	Tipping load – full turn, ISO 14397-1*	kg	10 517	10 426	10 350	10 028	9938	9864	9632	9536	-3125***
		lb	23,186	22,986	22,817	22,107	21,909	21,747	21,234	21,024	-6,890
	Tipping load – full turn, rigid tire**	kg	11 189	11 092	11 011	10 668	10 572	10 494	10 246	10 145	-3325***
1420gmm-	79	lb	24,666	24,453	24,274	23,518	23,307	23,135	22,589	22,366	-7,330
	Breakout force	kg	13 813	13 082	12 552	13 170	12 498	12 009	11 583	11 039	-502
		lb	30,451	28,841	27,673	29,035	27,553	26,474	25,537	24,336	-1,107
-	Operating weight	kg	16 001	16 046	16 082	16 427	16 472	16 508	16 316	16 367	-102***
		lb	35,276	35,374	35,455	36,216	36,313	36,393	35,970	36,083	-224

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

<sup>\*\*\*938</sup>M High Lift is configured with standard counterweight.

						Light IV	laterial				
			TAIN		1	1					
			1	Pin On			Fusion		ISO 2	3727	High Lift
	Capacity – rated	m <sup>3</sup>	3.8	4.2	5.0	3.8	4.2	5.0	4.2	5.0	-
		yd³	5.0	5.5	6.5	5.0	5.5	6.5	5.4	6.5	-
	Capacity - rated at 110% fill factor	$m^3$	4.2	4.6	5.5	4.2	4.6	5.5	4.5	5.5	_
		yd³	5.5	6.0	7.2	5.5	6.0	7.2	5.9	7.2	-
17	Width: bucket	mm	2750	2750	2750	2750	2750	2750	2750	2750	-
		ft/in	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	9'0"	-
	Nominal material density,	kg/m³	1198	1068	897	1141	1019	853	1005	822	- 37
	110% fill factor	lb/yd³	2,007	1,813	1,510	1,912	1,730	1,437	1,693	1,384	-
9	Clearance: full lift, 45° dump	mm	2633	2571	2571	2596	2534	2534	2468	2417	+598
	(F) 101	ft/in	8'7"	8'5"	8'5"	8'6"	8'3"	8'3"	8'1"	7'11"	+1'11"
14	Reach: full lift, 45° dump	mm	1232	1294	1294	1268	1331	1331	1362	1413	+292
		ft/in	4'0"	4'2"	4'2"	4'1"	4'4"	4'4"	4'5"	4'7"	+11"
	Reach: 2130 mm (7'0") clearance,	mm	1631	1654	1654	1644	1666	1666	1650	1664	+695
	45° dump	ft/in	5'4"	5'5"	5'5"	5'4"	5'5"	5'5"	5'4"	5'5"	+2'3"
	Reach: level arm, level bucket	mm	2723	2812	2812	2775	2864	2864	2932	3004	+607
		ft/in	8'11"	9'2"	9'2"	9'1"	9'4"	9'4"	9'7"	9'10"	+1'11"
16	Dig depth	mm	100	100	100	101	101	101	125	125	+35
		in	3.9"	3.9"	3.9"	4"	4"	4"	4.9"	4.9"	+1.4"
5	Length: overall	mm	7875	7964	7964	7928	8016	8016	8105	8177	+740
		ft/in	25'10"	26'1"	26'1"	26'0"	26'3"	26'3"	26'7"	26'9"	+2'5"
13	Height: overall	mm	5418	5507	5786	5450	5539	5820	5614	5902	+581
		ft/in	17'9"	18'0"	18'11"	17'10"	18'2"	19'1"	18'5"	19'4"	+1'10"
19	Turning radius: over bucket	mm	6198	6227	6227	6216	6244	6244	6258	6282	+365
		ft/in	20'4"	20'5"	20'5"	20'4"	20'5"	20'5"	20'6"	20'7"	+1'2"
	Tipping load – straight, ISO 14397-1*	kg	11 794	11 637	11 636	11 289	11 151	11 120	10 728	10 713	-3443***
		lb	26,002	25,654	25,653	24,887	24,582	24,515	23,652	23,617	-7,591
	Tipping load – straight, rigid tire**	kg	12 286	12 122	12 121	11 759	11 615	11 583	11 175	11 159	-3586***
		lb	27,085	26,723	26,722	25,924	25,607	25,537	24,637	24,601	-7,907
	Tipping load – full turn, ISO 14397-1*	kg	10 015	9870	9866	9542	9416	9383	9059	9040	-2986***
		lb	22,078	21,758	21,750	21,037	20,759	20,686	19,972	19,930	-6,583
-	Tipping load – full turn, rigid tire**	kg	10 654	10 499	10 495	10 152	10 017	9982	9638	9617	-3177***
		· lb	23,487	23,147	23,138	22,380	22,084	22,007	21,247	21,202	-7,004
	Breakout force	kg	11 603	10 331	10 292	11 122	9942	9888	9023	8977	-437
		lb	25,581	22,775	22,690	24,519	21,918	21,798	19,891	19,791	-963
	Operating weight	kg	16 270	16 347	16 394	16 694	16 757	16 835	16 653	16 713	-102***
		lb	35,870	36,039	36,143	36,802	36,943	37,114	36,713	36,845	-224

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

<sup>\*\*\*938</sup>M High Lift is configured with standard counterweight.

## **Bucket Selection Tables**

### **General Purpose Bucket Selection – Standard Lift**

Ma	ter	ial	Туј	)e	1100425942394700431	Sand, Dry and Loss	Clay, Natural Bed, Dry	Clay and Gravel, Wet	Gypsum, Clushed Granie, Broked Clavie, Broked	Sand and Gravel, Dry	115% 50% Rock, 50% Earth	110% Sand Wet	110% Gravel, Pitrun 115% 75% Rox,	Sand and Gravel, Wet				Load Turn*
Fill	Fa	cto	r %	)		105%	110% 105% 105%	110% 105% 115%	105% 105% 110%	105%	115%	110%	110%	110%				
		Em	yd3	Counter		1400 (2,359)	1475 (2,485)	1550 (2,612)	1625 (2,738)	1700 (2,865)	1775 (2,991)	1850 (3,117)	1925 (3,244)	2000 (3,370)	<b>2075</b> (3,496)	2150 (3,623)	kg	lb
926M	Pin On	2.3 2.1 1.9	(3.0) (2.7) (2.5)	Log/Ag Heavy Log/Ag Heavy Log/Ag Heavy	1	115%	115% 110%	115% 110% 105%		5% 110 105%	Jane		110% 105%	105% 100%	100	6	8318 7894 8257 7836 8156 7737	(18,338) (17,403) (18,204) (17,275) (17,980) (17,057)
8	Fusion	2.3 2.1 1.9	(3.0) (2.7) (2.5)	Log/Ag Heavy Log/Ag Heavy Log/Ag Heavy	)	115%	115% 110% 105%	115% 110% 105% 100%	115%		•	110%	105% 100%	100%			7942 7524 7862 7445 7783 7371	(17,509 (16,587 (17,333 (16,413 (17,159 (16,250
		E E	yd3	Counte			1475 (2,485)	1550 (2,612)	1625 (2,738)	1700 (2,865)	1775 (2,991)	1850 (3,117)	1925 (3,244)	<b>2000</b> (3,370)	2075 (3,496)	2150 (3,623)	kg	lb
930M	Pin On	2.5 2.3 2.1	(3.3) (3.0) (2.7)	Log/Ag Heavy Standal Log/Ag Heavy Standal Log/Ag Heavy Standal	d a series g d a series	15%	1	15% 110 15% 110 10% 105	105	115% 115% 110% 53% 4 1	115% 100% 110% 105%	115% 110% 105% 105% 100%	110% 105% (h) 13	105 100		100%	9295 8873 8366 9186 8769 8262 9055 8639 8135	(20,491 (19,561 (18,444 (20,252 (19,332 (18,213 (19,962 (19,044 (17,934
	Fusion	2.5 2.3 2.1	(3.3) (3.0) (2.7)	Log/Ag Heavy Log/Ag Heavy Log/Ag Heavy	g g	115%	115% 110%	115% 110% 105%	115% 110% 105% 100%	115% 110% 105% 100%	115% 110% 105% 100%	110% 105% 100%	105% 100%	10	0%		8883 8469 8804 8390 8690 8278	(19,58: (18,67) (19,41) (18,49) (19,15) (18,24)
		m³	yd3	Counte		1	1475 (2,485)	1550 (2,612)	1625 (2,738)	1700 (2,865)	1775 (2,991)	1850 (3,117)	1925 (3,244)	2000 (3,370)	2075 (3,496)	2150 (3,623)	kg	lb
		2.5	(3.3)	Log/Ag Heavy Standa	g d	(2,003)	(2,403)	(2,012)	(2,700)		115% 110%	115% 110% 110% 105%	110% 105%	105%		0%	10 925 10 517 10 015 10 832	(24,085 (23,186 (22,075 (23,88
938M	Pin On	2.9 2.7	_	Log/Ag Heavy Standa Log/Ag Heavy Standa	d g		1 5% 110%	115% 115% 15% 110%	115% 110% 110% 105%	110% 105% 105% 100%	105%	100%					10 426 9925 10 753 10 350 9854	(22,98 (21,88 (23,70 (22,81 (21,72
	Fusion	2.9 2.7 2.5	(3.8) (3.5) (3.3)	Log/Ag Heavy Log/Ag Heavy Log/Ag Heavy	g g		115% 15% 110%	115% 110% 105%	115% 110% 105% 100%	115% 110% 105% 100%	115% 110% 105% 100%	110% 105% 100%	105%	100%			10 430 10 028 10 341 9938 10 266 9864	(22,99- (22,10) (22,79- (21,90) (22,63) (21,74-

Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate fill factors greater than 100% ISO rated. Refer to the expected fill factor % per material type at the top of the table and find a matching counterweight and fill factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

### **Bucket Selection Tables**

### **Light Material Bucket Selection – Standard Lift**

Ma	ıte	eri	al	Туј	)e			Bull Grain Construction and	Manuel Mackey Coal Bilminous	Woist "Washed	Coal Bituminous, Raw	105% Sugar Raw Can	105% fertilizer, Mixed		110% Gysum, Pulverized	Gast.	110% Earth, Loam Dry 105% Salt, Fine 110% Heaven	y Welaj Scrap, Loose		Load Turn*
Fill	F	ac	cto	r %	)			110% 115% 115%	110% 110% 110%		110%	105%	105%	110%	110%	110%	110% 105% 110%			
			Ë	yd3		nter- ight	kg/m³ lb/yd³	805 (1,356)	850 (1,432)	895 (1,508)	940 (1,584)	985 (1,660)	1030 (1,736)	1075 (1,811)	1120 (1,887)	1165 (1,963)	1210 (2,039)	1255 (2,115)	kg	lb
926M	0 -:0	0_	3.8 3.5 3.1	(5.0) (4.6) (4.1)	He Log He Log	/Agg avy /Agg avy /Agg avy		, 115% 11	115% 11 115% 11 0% 105%	0% 1059	% 105% 6 100	Parties	115% 105% 0%	115% 110% 100%	110% 105%	105% 100%	100	%	7880 7463 7735 7321 7600 7190	(17,372) (16,453) (17,052) (16,140) (16,755) (15,850)
6		Fusion	3.8 3.5 3.1	(5.0) (4.6) (4.1)	He Log He Log	/Agg avy /Agg avy /Agg avy	1104	115% 115% 1059	110% 10	6 105° 5% 100°	% 100%	1 105%	115% % 1 100%	110% 05%	105% 100%	100%			7533 7124 7364 6957 7235 6830	(16,607) (15,705) (16,234) (15,337) (15,950) (15,057)
			Ê	yd3	Cou	nter- ight	kg/m³ lb/yd³	805 (1,356)	850 (1,432)	895 (1,508)	940 (1,584)	985 (1,660)	1030 (1,736)	1075 (1,811)	1120 (1,887)	1165 (1,963)	1210 (2,039)	1255 (2,115)	kg	Ib
930M	0 ::0	Pin On	4.2 3.8 3.5	(5.5) (5.0) (4.6)	He Star Log He Star Log	/Agg avy dard /Agg avy dard /Agg avy		115% Pa 1	115% 115% 110% 05% (bo)	115% 110% 110% 105%	115% 115% 110% 105% 105% 100%	115% 110% 110% 105% 100%	115% % 110° 105% 105% 100%	CONTRACTOR OF THE PROPERTY OF THE PARTY OF T		, 105% 10%	100%		8750 8337 7840 8603 8198 7706 8484 8077 7585	(19,290) (18,379) (17,284) (18,966) (18,073) (16,989) (18,704) (17,806) (16,722)
		Fusion	4.2 3.8 3.5	(5.5) (5.0) (4.6)	He Log He Log	/Agg avy /Agg avy /Agg avy	115%	115%	115 110% 105%	115% 1105% 100%	115% 110% 105% 100%	115% 1109 105% 100%	6 105 100	5% 10	05% 00%	100%	2		8365 7960 8231 7825 8106 7707	(18,441) (17,548) (18,145) (17,251) (17,870) (16,991)
			Ē	уdз	Cou		kg/m³ lb/yd³	805 (1,356)	850 (1,432)	895 (1,508)	940 (1,584)	985 (1,660)	1030 (1,736)	1075 (1,811)	1120 (1,887)	1165 (1,963)	1210 (2,039)	1255 (2,115)	kg	1b
			3.8	(2.0)	Log	/Agg avγ	5.46974		(1,702)	(1,300)	(1,304)	(1,000)	(1,750)	5%	115%	115% 110%	110%	105%	10 412 10 015 9523	(22,954) (22,079) (20,994)
938M	0	۵.	5.0 4.2	(6.5) (5.5)	He Star Log	dard /Agg avy	1154		115% 5% 1109 105%	110% 6 105°	115% 105% 100%	115% 110% 100%	115% 110% 105%	110% 105%	105% 100%	100%			10 265 9870 9383 10 260 9866 9380	(22,630) (21,759) (20,685) (22,619) (21,750) (20,679)
		Fusion	5.0 4.2 3.8	(6.5) (5.5) (5.0)	Log He Log He Log	/Agg avy /Agg avy /Agg avy	1159	115%	110% 6 105%	105% 100%	115% 100%	115% 110%	110% 105%	115% 105% 100%	115% 110% 100%	110%	105% 100%	100%	9933 9542 9811 9416 9770 9383	(21,898) (21,036) (21,629) (20,759) (21,539) (20,685)

Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate fill factors greater than 100% ISO rated. Refer to the expected fill factor % per material type at the top of the table and find a matching counterweight and fill factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

# **Bucket Selection Tables**

### **General Purpose Bucket Selection – High Lift**

Mate	eria	ΙΤ	ype			Fertilizer, Mixed	(021,1	110% Sysum Pulverized 110% Peat, Wet	(021,	110% Earth, Loam, Dry 105% Salt, Fine 110% Hear.	Cayl Melal Scrap Loose	Shale		105% Sand, Dry and Logs.	Clay, M.	adilital Bell Dry		Load Turn*
Fill F	act	or	%			105%	110%	110%	110%	110% 105% 110%		110%		105% 105%	110%			
		E	yd3	Counter- weight	kg/m³ lb/yd³	1030 (1,736)	1075 (1,811)	1120 (1,887)	1165 (1,963)	1210 (2,039)	1255 (2,115)	1300 (2,191)	1345 (2,266)	1390 (2,342)	1435 (2,418)	1480 (2,494)	kg	lb
Ħ	Jn O	1.9	(2.5)	Log/Agg Heavy Log/Agg	Not Avail					Charles 12			115%	110%	105%	6 100%	5970	(13,161)
dh	Pin On	2.3 2.1	(3.0) (2.7)	Heavy Log/Agg	Not Avail	able				1	110%	105%	100%				5926 5837	(13,065)
926M High Lift		1.9	(2.5)	Log/Agg Heavy	Not Avail		115%	110%	105%	100%	115%	110%	105	%	100%		5628	(12,407)
26N	Fusion	2.1	(2.7)	Log/Agg Heavy	Not Avail			115%	110%	105%	100	  % 					5561	(12,259)
တ		2.3	(3.0)	Log/Agg Heavy	Not Avail	Committee of the Control of the	[ 6 10	5%	100%		<u></u>	<u> </u>	<u></u>				5497	(12,118)
		Ê	yd³	Counter- weight	kg/m³ lb/yd³	1030 (1,736)	1075 (1,811)	1120 (1,887)	1165 (1,963)	1210 (2,039)	1255 (2,115)	1300 (2,191)	1345 (2,266)	1390 (2,342)	1435 (2,418)	1480 (2,494)	kg	lb
لسف		2.1	(2.7)	Log/Agg Heavy Standard	Not Avail	able	Name of the second			115%	110%	  15%   105%	110%	105%	161	00%	6384 5989	(14,074) (13,203)
	Pin On	2.3	(3.0)	Log/Agg Heavy Standard	Not Avail	able	115%		115% 115%	110%	105%	10	0% 		4-4		6297 5906	(13,883) (13,021)
930M High Lift		2.5	(3.3)	Log/Agg Heavy	Not Avail	able 115 110%	% 110%			0% 				75			6185 5795	(13,635) (12,775)
S		2.1	(2.7)	Log/Agg Heavy	Not Avail					115%	110%	10	5%	100%			6014	(13,259)
93	Fusion	2.3	(3.0)	Log/Agg Heavy Log/Agg	Not Avail	Busilie.	1159	 % 110% 	 	5% 	100%						5952	(13,122)
		2.5	(3.3)	Heavy	115%	110%	105%	100%	· · · · · · · · · · · · · · · · · · ·	<u> </u>				<u></u>			5860	(12,919)
		E E	yd3	Counter- weight	kg/m³ lb/yd³	1030 (1,736)	1075 (1,811)	1120 (1,887)	1165 (1,963)	1210 (2,039)	1255 (2,115)	1300 (2,191)	1345 (2,266)	1390 (2,342)	1435 (2,418)	1480 (2,494)	kg	lb
بر		2.5	(3.3)	Log/Agg Heavy Standard	7	able	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1	15%	110%	105%		146		7370	(16,248)
三	Pin On	2.7	(3.5)	Log/Agg Heavy Standard	Not Avail Not Avail		PH P	115%	11	0%	105%	e ivi			Jan Alles		7301	(16,095)
Hig		2.9	(3.8)	Log/Agg Heavy Standard	Not Avail Not Avail	lable	11	J%	105%	100%							7244	(15,970)
938M High		2.5	(3.3)	Log/Agg Heavy Standard	Not Avail Not Avail	lable		(A) (A) (A)	115%	f10%	E Su	<b>15</b> 14	90%				6940	(15,300)
S	Fusion	2.7	(3.5)	Log/Agg Heavy Standard	Not Avail Not Avail	lable lable	115%					-					6869	(15,143)
		5.9	(3.8)	Log/Agg Heavy Standard	Not Avail Not Avail	lable											6815	(15,024)

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<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections I thru 6, which requires 2% verification between calculation and testing.

# **Bucket Selection Tables**

# **Light Material Bucket Selection - High Lift**

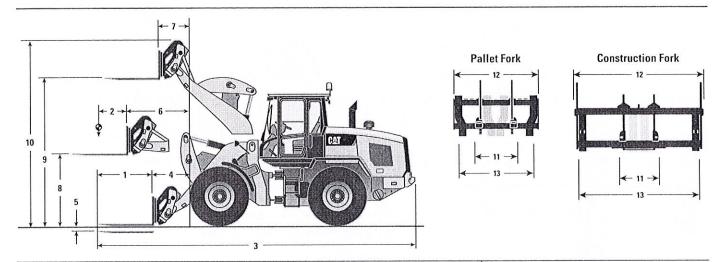
Mat	laterial Type ill Factor %			Mulch, Wet	115% Municipal Solid Waste 110% F.	115% Compacied Solid Waste	Buckwheat Bulk	f /	110% Asphalt Cushed	100% Com Shelled, Bulk 105% Glass, Semi Cluck	Daire	100% ///-	110% Constitution and Demolition	110% ManureMuck, Wet		Load Turn*		
Fill	Fac	tor	%			115%	115%	115% 100%	100%		110%	100%		100%	110%	110%		
		Ē	yd3	Counter- weight	kg/m³ lb/yd³	550 (927)	580 (977)	610 (1,028)	640 (1,078)	670 (1,129)	700 (1,180)	730 (1,230)	760 (1,281)	790 (1,331)	820 (1,382)	850 (1,432)	kg	lb
926M High Lift		3.1	(4.1)	Log/Agg Heavy	Not Availa	ble							115%	110%	105%	100%	5587	(12,317)
5	Pin On	3.5	(4.6)	Log/Agg Heavy	Not Availa	ble			115	 5% 11	D%	105%	100%			=	5467	(12,052)
Ĭ	_	3.8	(2.0)	Log/Agg Heavy	Not Availa	ble	1	 15% 110%	105%	6 100%	6						5358	(11,812)
2		3.1	(4.1)	Log/Agg Heavy	Not Availa	ible					115	i% 110	1%	105%	100%		5273	(11,625)
126	Fusion	3.5	(4.6)	Log/Agg Heavy	Not Availa	ible		115%	110%	105%	100%						5124	(11,296)
<b>.</b> ,	Œ	3.8	(2.0)		Not Availa	ible 115%	110%	105%	100%	2011	ide'i			-			5024	(11,075)
		ĨE	yd3	Counter-	kg/m³	550	580	610	640	670	700	730	760	790	820	850	kg	lb
				weight Log/Agg	Ib/yd³ Not Availa	(927) ible	(977)	(1,028)	(1,078)	(1,129)	(1,180)	(1,230)	(1,281)	(1,331)	(1,382)	(1,432)		
共		3.5	(4.6)	Heavy Standard					B.H.	115%	115 110%	5% 110 1057a	0%	105%	100%		5929 5544	(13,071) (12,222)
Ξ	Pin On	3.8	(2.0)	Log/Agg Heavy	Not Availa	ible		4050	115%	110%	105%	100%		_			5822	(12,834)
High	Д.	2	2)		Not Availa	ible				195%	166-2						5442	(11,996)
Z		4.2	(5.5)	Heavy Standard	115	% 118%	115% 105%	110% 10	5% 100	J%							5729 5342	(12,629) (11,777)
930M High Lift	_	3.5	(4.6)	Log/Agg Heavy	Not Availa					115%	110%	105%	100%				5586	(12,315)
O)	Fusion	3.8	(2.0)	Heavy	Not Availa			115%	110%	105%	100%					117.13	5480	(12,080)
		4.2	(5.5)	Log/Agg Heavy	Not Availa		1059	% 100%		1 619 11 2 3 3							5384	(11,870)
		Ë	yd3	Counter- weight	kg/m³ lb/yd³	550 (927)	580 (977)	610 (1,028)	640 (1,078)	670 (1,129)	700 (1,180)	730 (1,230)	760 (1,281)	<b>790</b> (1,331)	820 (1,382)	850 (1,432)	kg	lb
		3.8	(2.0)	Log/Agg Heavy	Not Availa Not Availa	ible						- 100	.,,==,	.,,,	1,,,,,,			
¥	=	m		Standard Log/Agg	Not Availa	CHACAL		10000000	1000	77.202		73 A 10	1159	311	0%	105%	6977	(15,381)
	Pin On	4.2	(5.5)	Heavy Standard	Not Availa			e i i e e e		indayini	115%	110%	106%	100%			6863	(15,129)
वि		5.0	(6.5)		Not Availa Not Availa				11111									
I				Standard Log/Ago	Not Availa		115%	110%	105%	100%			-				6840	(15,079)
938M High		3.8	(2.0)	Heavy Standard	Not Availa		Att Carrie	5000000	1 (1 (a) ( ) ( ) ( ) ( )		ex an ex de	115%	110%	105%		IV.	6559	(14,459)
සි	Fusion	4.2	(2.5)	Log/Agg Heavy	Not Availa Not Availa													
	£			Standard	-	14.00	de te da		115%	110%	105%	) lei					6460	(14,240)
		5.0	(6.5)	Heavy	Not Availa	ble	100	Par i i i i i i i i i i									6410	(14,131)

Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate fill factors greater than 100% ISO rated. Refer to the expected fill factor % per material type at the top of the table and find a matching counterweight and fill factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

# **Operating Specifications**

# **Operating Specifications with Forks**



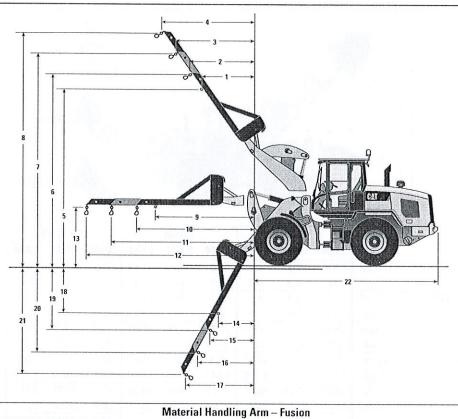
		Pa	allet For	k – Fusic	n			Const	ruction	Fork – Fu	ısion	
	92	6 <b>M</b>	93	M	938	BM	926	вM	930	M	938	BM
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in
1 Fork tine length	1220	4'0"	1220	4'0"	1220	4'0"	1524	5'0"	1524	5'0"	1524	5'0"
2 Load center	610	2'0"	610	2'0"	610	2'0"	762	2'6"	762	2'6"	762	2'5"
3 Length: overall	7875	25'10"	7882	25'10"	7942	26'0"	8298	27'2"	8305	27'2"	8366	27'5"
4 Reach: ground	926	3'0"	926	3'0"	961	3'1"	1045	3'5"	1045	3'5"	1081	3'6"
5 Dig depth	47	1.9"	47	1.9"	44	1.7"	120	4.7"	120	4.7"	119	4.7"
6 Reach: level arm	1569	5'1"	1569	5'1"	1617	5'3"	1627	5'4"	1627	5'4"	1675	5'5"
7 Reach: full lift	767	2'6"	767	2'6"	814	2'8"	825	2'8"	825	2'8"	872	2'10"
8 Clearance: level arm	1792	5'10"	1792	5'10"	1830	6'0"	1729	5'8"	1729	5'8"	1766	5'9"
9 Clearance: full lift	3693	12'1"	3693	12'1"	3758	12'3"	3630	11'10"	3630	11'10"	3693	12'1"
10 Height: overall	4676	15'4"	4676	15'4"	4740	15'6"	4935	16'2"	4935	16'2"	0	0'0"
11 Minimum fork spacing	300	0'11"	300	0'11"	300	0'11"	300	0'11"	300	0'11"	300	0'11"
12 Carriage width	1566	5'1"	1566	5'1"	1566	5'1"	2498	8'2"	2498	8'2"	2498	8'2"
13 Maximum fork spacing	1550	5'1"	1550	5'1"	1550	5'1"	2375	7'9"	2375	7'9"	2375	7'9"
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Tipping load – straight, ISO 14397-1*	6756	14,895	7689	16,951	9274	20,445	6049	13,335	6919	15,254	8405	18,528
Tipping load – full turn, ISO 14397-1*	5807	12,801	6577	14,499	7909	17,437	5168	11,394	5887	12,978	7136	15,731
Operating weight	12 759	28,129	13 671	30,140	15 932	35,123	13 094	28,866	14 006	30,877	16 266	35,861
Rated load % of full turn tip:												
50% of tip: SAE J1197**	2903	6,400	3288	7,249	3955	8,718	2584	5,697	2943	6,489	3568	7,865
60% of tip: rough terrain EN474-3**	3484	7,680	3946	8,699	4746	10,462	3101	6,836	3532	7,786	4281	9,438
80% of tip: firm and level EN474-3**	4645	10,240	5261	11,599	6327	13,949	4135	9,115	4709	10,382	5708	12,584

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Full compliance to EN474-3 and SAE J1197.

# **Operating Specifications**

# **Operating Specifications with Material Handling Arm**



					M	laterial Ha
	926	Л	930	И	938N	Λ
1	2113 mm	6'11"	2113 mm	6'11"	2144 mm	7'0"
2	2333 mm	7'7"	2333 mm	7'7"	2362 mm	7'8"
3	2919 mm	9'6"	2919 mm	9'6"	2943 mm	9'7"
4	3505 mm	11'6"	3505 mm	11'6"	3525 mm	11'6"
5	5257 mm	17'2"	5257 mm	17'2"	5343 mm	17'6"
6	5568 mm	18'3"	5568 mm	18'3"	5655 mm	18'6"
7	6112 mm	20'0"	6112 mm	20'0"	6204 mm	20'4"
8	6657 mm	21'10"	6657 mm	21'10"	6754 mm	22'1"
9	3354 mm	11'0"	3354 mm	11'0"	3403 mm	11'1"
10	3727 mm	12'2"	3727 mm	12'2"	3775 mm	12'4"
11	4527 mm	14'10"	4527 mm	14'10"	4575 mm	15'0"

iy Ai	III - Fusion					
	926N	1	930N	1	9381	Λ
12	5327 mm	17'5"	5327 mm	17'5"	5376 mm	17'7"
13	1854 mm	6'0"	1854 mm	6'0"	1890 mm	6'2"
14	863 mm	2'9"	863 mm	2'9"	906 mm	2'11"
15	1045 mm	3'5"	1045 mm	3'5"	1089 mm	3'6"
16	1276 mm	4'2"	1276 mm	4'2"	1324 mm	4'4"
17	1507 mm	4'11" .	1507 mm	4'11"	1559 mm	5'1"
18	1975 mm	6'5"	1975 mm	6'5"	1983 mm	6'6"
19	2310 mm	7'6"	2310 mm	7'6"	2316 mm	7'7"
20	3076 mm	10'1"	3076 mm	10'1"	3081 mm	10'1"
21	3842 mm	12'7"	3842 mm	12'7"	3846 mm	12'7"
22	5730 mm	18'9"	5737 mm	18'9"	5762 mm	18'10"

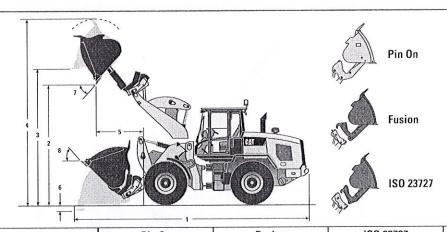
	92	6 <b>M</b>	93	0 <b>M</b>	93	BM
Operating weight	12 626 kg	27,835 lb	13 538 kg	29,847 lb	15 799 kg	34,830 lb
Rated load* (50% of full turn tip** SAE J1197)						
Fixed tab (9)	2081 kg	4,588 lb	2356 kg	5,193 lb	2844 kg	6,269 lb
Minimum extension (10)	1908 kg	4,205 lb	2159 kg	4,760 lb	2610 kg	5,753 lb
Middle extension (11)	1618 kg	3,567 lb	1832 kg	4,037 lb	2217 kg	4,887 lb
Maximum extension (12)	1405 kg	3,097 lb	1590 kg	3,505 lb	1927 kg	4,248 lb

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Full compliance to EN474-3 and SAE J1197.

# **Operating Specifications**

# **Operating Specifications with High Dump Buckets**



Rated Capacity			Pin On			2000 LISSON 1000 ILDAN	<b>Fusion</b>		13	SO 23727			High Li	
Capacity			926M	930M	938M	926M	930M	938M	926M	930M	938M	926M	930M	938M
Capacity	Rated Capacity	m³	3.0	3.5	4.1	3.0	3.5	4.1	3.0	3.5	4.1	-	_	-
Fill Factor		$yd^3$	4.0	4.6	5.4	3.9	4.6	5.4	3.9	4.6	5.4	_		-
Bucket Width mm	Capacity – Rated at 110%	m <sup>3</sup>	3.3	3.9	4.5	3.3	3.9	4.5	3.3	3.9	4.5	200	-	_
Nominal Material Density   Rfm   83"   811"   911"   83"   811"   911"   83"   811"   911"   83"   811"   911"	Fill Factor	$yd^3$	4.4	5.0	5.9	4.3	5.0	5.9	4.3	5.0	5.9	_		-
Nominal Material Density   Rg/m²   962   946   1062   954   915   916   885   867   878             1   10% Fill Factor   1b/yd³   1,604   1,605   1,790   1,615   1,553   1,544   1,498   1,473   1,480             1   Length: Overall   mm   7907   7914   8044   7913   7986   8126   8176   8183   8131   6424   7974   7477   7477   7477   2511"   262"   262"   267"   269"   2610"   273"   421"   422"   425"   4255   4254   4255   4254   4255   4332   4354   4399   4523   4539   440   4568   4545   4318   4318   4319   4329	Bucket Width	mm	2528	2728	3030	2528	2728	3032	2528	2728	3032	_		1922
110% Fill Factor   1b/yd   1,604   1,605   1,790   1,615   1,553   1,544   1,498   1,473   1,480		ft/in	8'3"	8'11"	9'11"	8'3"	8'11"	9'11"		8'11"	9'11"		_	_
Length: Overall	Nominal Material Density	kg/m³	962	946	1062	954	915	916		867		-	20	-
Purp	110% Fill Factor	lb/yd3	1,604	1,605	1,790	1,615	1,553							
Number   March   Mar	1 Length: Overall	mm	7907	7914	8044	7913			-			000000000000000000000000000000000000000	40 9000000	
Full Lift Rolled Out ft/in   1311"   1311"   1311"   1410"   142"   143"   145"   1410		ft/in	25'11"	25'11"	26'4"	25'11"	26'2"	26'7"	26'9"	26'10"	27'3"	+2'1"	+2'7"	
Search   S	2 Dump Clearance:	mm	4252	4252	4264	4275	4332	4354			10000000	ji sa je dan	0.000.00	
Hyin   I50"   I50"   I51"   I51"   I51"   I51"   I56"   I57"   I510"   I61"   I51"   I56"   I57"   I510"   I61"   I55"   I10"   I15"   I510"	Full Lift Rolled Out	ft/in	13'11"	13'11"	13'11"	14'0"	14'2"	14'3"	14'5"	14'10"	14'10"		O 02 (2007)	
Height: Overall	3 Clearance: Level Bucket	mm	4592	4592		1					100000000000000000000000000000000000000	the same same	W 5000000	
Fill (III)         206"         207"         2010"         206"         208"         211"         210"         21'6"         21'8"         +1'5"         +1'10"         +1'9"           5 Reach: Full Lift Rolled Out         mm         1425         1425         1489         1421         1458         1530         1613         1561         1626         +253         +329         +278           6 Dig Depth         mm         80         80         96         100         100         116         94         94         109         +35         +35         +35           7 Maximum Dump Angle         degree         52         52         51         50         49         49         55         48         48              8 Rack Angle at Carry         degree         52         52         51         50         49         49         55         48         48              8 Rack Angle at Carry         degree         43         43         55         45         45         46         43         43         44              1 piping Load -         kg         7560         <		ft/in	15'0"	15'0"	15'2"	15'1"	15'1"	15'6"	15'7"	15'10"	16'1"			
5         Reach: Full Lift Rolled Out         mm         1425         1425         1489         1421         1458         1530         1613         1561         1626         +253         +329         +278           6         Dig Depth         mm         80         80         96         100         100         116         94         94         109         +35         +35         +35         +35           7         Maximum Dump Angle         degree         52         52         51         50         49         49         55         48         48              8         Rack Angle at Carry         degree         43         43         55         45         45         46         43         43         44              8         Rack Angle at Carry         degree         43         43         55         45         45         46         43         43         44              8         Rack Angle at Carry         degree         43         43         55         45         45         46         43         43         44	4 Height: Overall	mm	6255	6298	6367	6268		6446	6413	6555				
6 Dig Depth         ft/in         4'8"         4'8"         4'10"         4'7"         4'9"         50"         5'3"         5'1"         5'4"         +0'9"         +1'0"         +0'10"           6 Dig Depth         mm         80         80         96         100         100         116         94         94         109         +35         +35         +35           7 Maximum Dump Angle         degree         52         52         52         51         50         49         49         55         48         48         -         -         -         -           8 Rack Angle at Carry         degree         43         43         55         45         45         46         43         44         -         -         -         -           Tipping Load -         kg         7560         8637         11 395         7465         8389         9903         6941         7967         9494         -1946         -2473         -3161****           Straight ISO 14397-1*         1b         16,666         19,04         25,120         16,457         18,495         21,832         15,301         17,564         20,931         -4,209         -5,450         -6,966 <t< td=""><td>in the second se</td><td>ft/in</td><td>20'6"</td><td>20'7"</td><td>20'10"</td><td>20'6"</td><td>20'8"</td><td>21'1"</td><td>21'0"</td><td></td><td>21'8"</td><td>+1'5"</td><td>+1'10"</td><td></td></t<>	in the second se	ft/in	20'6"	20'7"	20'10"	20'6"	20'8"	21'1"	21'0"		21'8"	+1'5"	+1'10"	
Maximum Dump Angle   Maximum Angle   Maximum Angle   Maximum Dump Angle   Maximum Angle	5 Reach: Full Lift Rolled Out	mm	1425	1425	1489			1530				0	11. (2000)	
in         3.2"         3.8"         3.9"         3.9"         4.6"         3.7"         3.7"         4.3"         +1.4"         +1.4"         +1.4"           7         Maximum Dump Angle         degree         52         52         51         50         49         49         55         48         48              8         Rack Angle at Carry         degree         43         43         55         45         45         46         43         43         44              Tipping Load –         kg         7560         8637         11 395         7465         8389         9903         6941         7967         9494         -1946         -2473         -3161***           Straight ISO 14397-1*         lb         16,666         19,041         25,120         16,457         18,495         21,832         15,301         17,564         20,931         -4,290         -5,570         -6,966           Tipping Load –         kg         7875         8997         11 869         7776         8739         10 315         7230         8299         9890         -2027         -2576         -3292****           Straigh		ft/in	4'8"	4'8"	4'10"	4'7"	4'9"	5'0"	5'3"	5'1"	5'4"	+0'9"	+1'0"	
7 Maximum Dump Angle         degree         52         52         51         50         49         49         55         48         48         —         —         —           8 Rack Angle at Carry         degree         43         43         55         45         45         46         43         43         44         —         —         —           Tipping Load — Straight ISO 14397-1*         lb 16,666         19,041         25,120         16,457         18,495         21,832         15,301         17,564         20,931         —4,290         —5,450         —6,966           Tipping Load — Straight Rigid Tire**         lb 17,360         19,834         26,167         17,143         19,265         22,741         15,938         18,295         21,803         —4,469         —5,677         —7,256           Tipping Load — Straight Rigid Tire**         lb 17,360         19,834         26,167         17,143         19,265         22,741         15,938         18,295         21,803         —4,469         —5,677         —7,256           Tipping Load — Straight Rigid Tire**         lb 14,117         16,051         21,119         13,886         15,528         18,223         12,884         14,726         17,462         —3,784         <	6 Dig Depth	mm	80	80					94		000000	10000000		
8 Rack Angle at Carry         degree         43         43         55         45         45         46         43         43         44         -         -         -           Tipping Load -         kg         7560         8637         11 395         7465         8389         9903         6941         7967         9494         -1946         -2473         -3161***           Straight ISO 14397-1*         lb         16,666         19,041         25,120         16,457         18,495         21,832         15,301         17,564         20,931         -4,290         -5,450         -6,966           Tipping Load -         kg         7875         8997         11 869         7776         8739         10 315         7230         8299         9890         -2027         -2576         -3292***           Straight Rigid Tire**         lb         17,360         19,834         26,167         17,143         19,265         22,741         15,938         18,295         21,803         -4,469         -5,677         -7,256           Tipping Load -         kg         6404         7281         9580         6299         7043         8266         5844         6680         7921         -1717         -2171		in	3.2"	3.2"	3.8"	3.9"	3.9"	4.6"	3.7"	3.7"	4.3"	+1.4"	+1.4"	+1.4"
Tipping Load — kg 7560 8637 11 395 7465 8389 9903 6941 7967 9494 — 1946 — 2473 — 3161***  Straight ISO 14397-1* lb 16,666 19,041 25,120 16,457 18,495 21,832 15,301 17,564 20,931 — 4,290 — 5,450 — 6,966  Tipping Load — kg 7875 8997 11 869 7776 8739 10 315 7230 8299 9890 — 2027 — 2576 — 3292***  Straight Rigid Tire** lb 17,360 19,834 26,167 17,143 19,265 22,741 15,938 18,295 21,803 — 4,469 — 5,677 — 7,256  Tipping Load — kg 6404 7281 9580 6299 7043 8266 5844 6680 7921 — 1717 — 2171 — 2742***  Full Turn ISO 14397-1* lb 14,117 16,051 21,119 13,886 15,528 18,223 12,884 14,726 17,462 — 3,784 — 4,784 — 6,043  Tipping Load — kg 6812 7746 10 191 6701 7493 8794 6217 7106 8426 — 1826 — 2309 — 2917**  Full Turn Rigid Tire** lb 15,018 17,076 22,467 14,773 16,519 19,386 13,706 15,666 18,577 — 4,026 — 5,089 — 6,429  Breakout Force kg 6560 8584 9491 6727 8373 8959 5500 7258 7845 — 361 — 219 — 369  lb 14,463 18,925 20,923 14,829 18,458 19,750 12,125 16,000 17,295 — 795 — 482 — 812  Operating Weight kg 13 531 14 534 17 014 13 834 14 836 17 427 13 793 14 795 17 327 +278 +232 — 102***	7 Maximum Dump Angle	degree	52	52	51	50		49	55	48	48		-	_
Straight ISO 14397-1*         lb 16,666 19,041 25,120 16,457 18,495 21,832 15,301 17,564 20,931 -4,290 -5,450 -6,966           Tipping Load – straight Rigid Tire**         kg 7875 8997 11 869 7776 8739 10 315 7230 8299 9890 -2027 -2576 -3292***           Straight Rigid Tire**         lb 17,360 19,834 26,167 17,143 19,265 22,741 15,938 18,295 21,803 -4,469 -5,677 -7,256           Tipping Load – kg 6404 7281 9580 6299 7043 8266 5844 6680 7921 -1717 -2171 -2742***           Full Turn ISO 14397-1*         lb 14,117 16,051 21,119 13,886 15,528 18,223 12,884 14,726 17,462 -3,784 -4,784 -6,043           Tipping Load – kg 6812 7746 10 191 6701 7493 8794 6217 7106 8426 -1826 -2309 -2917***           Full Turn Rigid Tire**         lb 15,018 17,076 22,467 14,773 16,519 19,386 13,706 15,666 18,577 -4,026 -5,089 -6,429           Breakout Force         kg 6560 8584 9491 6727 8373 8959 5500 7258 7845 -361 -219 -369           Ib 14,463 18,925 20,923 14,829 18,458 19,750 12,125 16,000 17,295 -795 -482 -812           Operating Weight         kg 13 531 14 534 17 014 13 834 14 836 17 427 13 793 14 795 17 327 +278 +232 -102****	8 Rack Angle at Carry	degree	43										_	
Tipping Load — kg 7875 8997 11 869 7776 8739 10 315 7230 8299 9890 -2027 -2576 -3292***  Straight Rigid Tire** lb 17,360 19,834 26,167 17,143 19,265 22,741 15,938 18,295 21,803 -4,469 -5,677 -7,256  Tipping Load — kg 6404 7281 9580 6299 7043 8266 5844 6680 7921 -1717 -2171 -2742***  Full Turn ISO 14397-1* lb 14,117 16,051 21,119 13,886 15,528 18,223 12,884 14,726 17,462 -3,784 -4,784 -6,043  Tipping Load — kg 6812 7746 10 191 6701 7493 8794 6217 7106 8426 -1826 -2309 -2917**  Full Turn Rigid Tire** lb 15,018 17,076 22,467 14,773 16,519 19,386 13,706 15,666 18,577 -4,026 -5,089 -6,429  Breakout Force kg 6560 8584 9491 6727 8373 8959 5500 7258 7845 -361 -219 -369  lb 14,463 18,925 20,923 14,829 18,458 19,750 12,125 16,000 17,295 -795 -482 -812  Operating Weight kg 13 531 14 534 17 014 13 834 14 836 17 427 13 793 14 795 17 327 +278 +232 -102***	Tipping Load –	kg	7560	8637	11 395	7465	8389	9903	6941	7967		-1946	-2473	
Straight Rigid Tire**         lb         17,360         19,834         26,167         17,143         19,265         22,741         15,938         18,295         21,803         -4,469         -5,677         -7,256           Tipping Load –         kg         6404         7281         9580         6299         7043         8266         5844         6680         7921         -1717         -2171         -2742***           Full Turn ISO 14397-1*         lb         14,117         16,051         21,119         13,886         15,528         18,223         12,884         14,726         17,462         -3,784         -4,784         -6,043           Tipping Load –         kg         6812         7746         10 191         6701         7493         8794         6217         7106         8426         -1826         -2309         -2917***           Full Turn Rigid Tire**         lb         15,018         17,076         22,467         14,773         16,519         19,386         13,706         15,666         18,577         -4,026         -5,089         -6,429           Breakout Force         kg         6560         8584         9491         6727         8373         8959         5500         7258         7845	Straight ISO 14397-1*	lb	16,666	19,041	25,120	16,457	18,495	21,832						
Tipping Load – kg 6404 7281 9580 6299 7043 8266 5844 6680 7921 -1717 -2171 -2742***  Full Turn ISO 14397-1* lb 14,117 16,051 21,119 13,886 15,528 18,223 12,884 14,726 17,462 -3,784 -4,784 -6,043  Tipping Load – kg 6812 7746 10 191 6701 7493 8794 6217 7106 8426 -1826 -2309 -2917**  Full Turn Rigid Tire** lb 15,018 17,076 22,467 14,773 16,519 19,386 13,706 15,666 18,577 -4,026 -5,089 -6,429  Breakout Force kg 6560 8584 9491 6727 8373 8959 5500 7258 7845 -361 -219 -369  lb 14,463 18,925 20,923 14,829 18,458 19,750 12,125 16,000 17,295 -795 -482 -812  Operating Weight kg 13 531 14 534 17 014 13 834 14 836 17 427 13 793 14 795 17 327 +278 +232 -102***	Tipping Load –	kg	7875	8997	11 869	7776	8739	10 315	7230			202300000000000000000000000000000000000		-3292***
Full Turn ISO 14397-1* lb 14,117 16,051 21,119 13,886 15,528 18,223 12,884 14,726 17,462 -3,784 -4,784 -6,043  Tipping Load - kg 6812 7746 10 191 6701 7493 8794 6217 7106 8426 -1826 -2309 -2917**  Full Turn Rigid Tire** lb 15,018 17,076 22,467 14,773 16,519 19,386 13,706 15,666 18,577 -4,026 -5,089 -6,429  Breakout Force kg 6560 8584 9491 6727 8373 8959 5500 7258 7845 -361 -219 -369  lb 14,463 18,925 20,923 14,829 18,458 19,750 12,125 16,000 17,295 -795 -482 -812  Operating Weight kg 13 531 14 534 17 014 13 834 14 836 17 427 13 793 14 795 17 327 +278 +232 -102***	Straight Rigid Tire**	lb	17,360	19,834	26,167	17,143	19,265	22,741	15,938	18,295		-4,469	-5,677	
Tipping Load – kg 6812 7746 10 191 6701 7493 8794 6217 7106 8426 -1826 -2309 -2917**  Full Turn Rigid Tire** lb 15,018 17,076 22,467 14,773 16,519 19,386 13,706 15,666 18,577 -4,026 -5,089 -6,429  Breakout Force kg 6560 8584 9491 6727 8373 8959 5500 7258 7845 -361 -219 -369  lb 14,463 18,925 20,923 14,829 18,458 19,750 12,125 16,000 17,295 -795 -482 -812  Operating Weight kg 13 531 14 534 17 014 13 834 14 836 17 427 13 793 14 795 17 327 +278 +232 -102***	Tipping Load –	kg	6404	7281	9580	6299		8266	5844			10.000		-2742***
Full Turn Rigid Tire**  1b 15,018 17,076 22,467 14,773 16,519 19,386 13,706 15,666 18,577 -4,026 -5,089 -6,429  Breakout Force kg 6560 8584 9491 6727 8373 8959 5500 7258 7845 -361 -219 -369  1b 14,463 18,925 20,923 14,829 18,458 19,750 12,125 16,000 17,295 -795 -482 -812  Operating Weight kg 13 531 14 534 17 014 13 834 14 836 17 427 13 793 14 795 17 327 +278 +232 -102***	Full Turn ISO 14397-1*		14,117	16,051	21,119	13,886	15,528	18,223	12,884	14,726				
Breakout Force kg 6560 8584 9491 6727 8373 8959 5500 7258 7845 -361 -219 -369  1b 14,463 18,925 20,923 14,829 18,458 19,750 12,125 16,000 17,295 -795 -482 -812  Operating Weight kg 13 531 14 534 17 014 13 834 14 836 17 427 13 793 14 795 17 327 +278 +232 -102***	Tipping Load –	kg	6812	7746	10 191	6701	7493	8794	6217					
1b   14,463   18,925   20,923   14,829   18,458   19,750   12,125   16,000   17,295   -795   -482   -812	Full Turn Rigid Tire**	lb	15,018	17,076	22,467	14,773		19,386	13,706	15,666		-		
Ib     14,463     18,925     20,923     14,829     18,458     19,750     12,125     16,000     17,295     -795     -482     -812       Operating Weight     kg     13 531     14 534     17 014     13 834     14 836     17 427     13 793     14 795     17 327     +278     +232     -102****	Breakout Force	kg	6560	8584	9491	6727	8373	8959	1					
			14,463	18,925	20,923	14,829	18,458	19,750	12,125	16,000	17,295	-795	-482	
	Operating Weight								1			11.000.00.100.0	+232	-102***
			29,830	32,042	37,509	30,499	32,706	38,419	30,409	32,616	38,199	612	511	-224

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

<sup>\*\*</sup>Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

<sup>\*\*\*938</sup>M High Lift is configured with standard counterweight.

# **Bucket Selection Tables**

# **High Dump Bucket Selection – Standard Lift**

Ma	ter	ial	Τy <sub>l</sub>	)e		115% Mulch, Wer 115% M	110% Flour, Wheat 115% Compacted Soli.	ariey, Bulk	Soy Beans, Bulk Corn Shelled, Bulk	Bulk Grain Cushed Construction	110% ManueMuck, Wet 110% Coal Biumious	Coal Bitumino.	105% Sugar, Raw Co.	105% Fertilizer, Mixed	110% Coal Anthracite, Washed			Load Turn*
Fill	Fa	cto	r %	)		115% 115%	110% 115% 100%	110%	100% 100% 105%	100% 110% 115%	110% 110% 110%	110%	105%	%501	110%			
		E I	yd3	Counter- weight	kg/m³ lb/yd³	560 (944)	620 (1,045)	680 (1,146)	740	800	860	920	980	1040	1100	1160	kg	lb
		3.0	(3.9)	Log/Agg	10/90-	(944)	(1,045)	(1,146)	(1,247)	(1,348)	(1,449)	(1,550) 1	(1,651) 15% 110%	(1,752) 105%	100%	(1,955)	6792	(14,973)
	00			Heavy Log/Agg	1	,	Voissone			115% 1	119 10% 105%	5% 110% 100%	105%	100%			6404 6720	(14,118) (14,815)
-	Pin On	3.5	(4.6)	Heavy				, 110% 105%	115%		05% 100% I					Market 1	6328	(13,950)
926M		4.1	(5.4)	Log/Agg Heavy	1	, 11	115% 15% 110% 10		100%								6298 5913	(13,883) (13,035)
22		3.0	(3.9)	Log/Agg Heavy				775			115%	115% 110%	110% 105% 1	105% 1 00%	00%		6690 6299	(14,748) (13,886)
	Fusion	3.5	(4.6)	Log/Agg					115		105% 100	Water Comment of the				100	6482	(14,290)
	£	4.1	(5.4)	Heavy Log/Agg	1000		115% 110	% 105% 10	15% 110% 10%	105% 1	00%						6097 6076	(13,441)
	_	4	(5	Heavy			110% 105%	100%			<u> </u>						5689	(12,542)
		H <sub>3</sub>	yd³	Counter- weight	kg/m³ lb/yd³	560 (944)	620 (1,045)	680 (1,146)	740 (1,247)	800 (1,348)	860 (1,449)	920 (1,550)	980 (1,651)	1040 (1,752)	1100 (1,854)	1160 (1,955)	kg	lb
		3.0	(3.9)	Log/Agg Heavy				a rows			115%		10% 105 05% 1009				7672 7281	(16,913) (16,051)
	_	,	<u></u>	Standard	(DISE					115%	110% 10	<b>- 1</b> 01%					6811	(15,015)
guana	Pin On	3.5	(4.6)	Log/Agg Heavy		SPIAN AREA		115%	115% 110 110% 105%	% 105% 100%	100%	113 81120	11.5.77%				7241 6855	(15,962) (15,113)
3	-			Standard Log/Agg		115%	115% 110% 105%	110% 100%	15								6396 7020	(14,100) (15,476)
930M		4.1	(5.4)	Heavy Standard	115 10	% 110% 0% 105% 105	105% 100%						10000000				6636 6180	(14,629) (13,624)
		3.5	(4.6)	Log/Agg Heavy	10000			105, 60			115°		105%	100%			7427	(16,373)
	Fusion	4.1	(5.4) (4	Log/Agg		,		11	15% 110% 105	work-november broken men be	15% 110%	105%	100%				7043 7011	(15,527) (15,456)
	Fus			Heavy Log/Agg		115% 11	115% 1 10% 105% 10	, 110% 00%	105% 100%	6						N. C.	6634 6860	(14,625) (15,123)
		5.0	(6.5)	Heavy	11!	5% 110%105%											6481	(14,288)
		Ē	yd3	Counter- weight	kg/m³ lb/yd³	560 (944)	620 (1,045)	680 (1,146)	740 (1,247)	800 (1,348)	860 (1,449)	920 (1,550)	980 (1,651)	1040 (1,752)	1100 (1,854)	1160 (1,955)	kg	lb
			0	Log/Agg Heavy		1.79	in a filter					4.694	115%		% 1059 05% 1009		9988 9580	(22,018) (21,120)
5	Pin On	4.1	(5.4)	Standard	<b>JUNIO</b>				2450	4050		115%	110%	1985 - 1981 	1		9077	(20,012)
938M	Δ.	5.0	(6.5)	Log/Agg Heavy				115%	115% 110% 110% 105%		00%						8750 8384	(19,290) (18,483)
ဘ				Standard Log/Agg		100000000000000000000000000000000000000	1	5% 110%	105% 100%		115%	110%	105% 1	00%			7930 8635	(17,482)
	Fusion	4.1	(5.4)	Heavy			1			C1884 C178 C178 C178 C178 C178 C178 C178 C178	5% 110%	105%	100%	100			8266	(19,036) (18,222)
	Ę	5.0	(6.5)	Log/Agg Heavy			11.00	115% 115% 110%	110% 105 6 105% 100					Legan			8480 8112	(18,695) (17,883)

Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate fill factors greater than 100% ISO rated. Refer to the expected fill factor % per material type at the top of the table and find a matching counterweight and fill factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

# **Bucket Selection Tables**

# **High Dump Bucket Selection - High Lift**

Vlat	teri	al '	Тур	e	100000	Paper, Semi Compacted	Food Scraps		Won.		Music.		Asphalt, Crushed	Source	100% Corn Shelled Bulk 105% Glass, Semi Crush	100% Bulk Grain		₋oad ¯urn*
Fill	Fac	cto	r %			115%	115%	110%	110%	115%	115%	110% 115% 100%	110%	100%	100% 105%	100%		
		Ę	yd3	Counter- weight	kg/m³ lb/yd³	345 (581)	390 (657)	<b>435</b> (733)	480 (809)	525 (885)	570 (960)	615 (1,036)	660 (1,112)	705 (1,188)	750 (1,264)	795 (1,340)	kg	lb
E		3.0	(3.9)	Log/Agg	Not Availal								115% 11	D% 105%	6 100%		4736	(10,441)
	Pin On	3.5	(4.6)		Not Availa	ble						en para tura		1/6	100%		200	
5	Pir		(5.4) (4	Heavy Log/Agg	Not Availa	ble	ľ			11	5% 110%	105% 10	00%				4655	(10,262)
E		4.1		Heavy	 		1	115% 110%	105% 100%								4272	(9,418)
YZOW MIGN LIT	u.	3.0	(3.9)	Log/Agg Heavy	Not Availa				I		515,610	11	15% 110%	   105%   10 	1 0% 		4584	(10,105)
Z	Fusion	3.5	(4.6)	Heavy	Not Availa					115% 11	  0% 105% 	100% 					4424	(9,753)
		4.1	(5.4)	Log/Agg Heavy	Not Availa	ble	115%	110% 105%	100%		,						4043	(8,912)
		Ë	yd³	Counter- weight	kg/m³ lb/yd³	345 (581)	390 (657)	<b>435</b> (733)	480 (809)	525 (885)	570 (960)	<b>615</b> (1,036)	660 (1,112)	705 (1,188)	750 (1,264)	795 (1,340)	kg	lb
Ę		3.5	(4.6)	Log/Agg Heavy Standard	Not Availa	S. S. M.			30. 30742		115% 11	115% 11 1% 105%	105%	100%			5110 4746	(11,265) (10,463)
5	Pin On	4.1	(5.4)	Log/Agg Heavy Standard	-			115%	115% 110%		00%						4723 4362	(10,412) (9,617)
SSUM HIGH LITE		5.0	(6.5)	Log/Agg Heavy Standard	Not Availa		 15% 110%105% 	100%							1 - 1/		4560 4200	(10,053) (9,259)
S		3.5	(4.6)	Log/Agg Heavy	Not Availa	ble				AFA GESSIE	115%	110% 1	05% 100%				4872	(10,740)
ກ	Fusion	4.1	(2.4)	Log/Agg Heavy	Not Availa	ble		115%	110% 105%	6 100%							4494	(9,906)
	正	5.0	(6.5)	Log/Agg Heavy	Not Availa		110%105% 10										4370	(9,634)
		Ë	yd3	Counter- weight	kg/m³ lb/yd³	345 (581)	390 (657)	<b>435</b> (733)	480 (809)	<b>525</b> (885)	570 (960)	615 (1,036)	660 (1,112)	705 (1,188)	750 (1,264)	795 (1,340)	kg	lb
Ë		_	€	Log/Agg	Not Availa	ble	(037)	(733)	(003)	(003)	1000/	(1,000)	1,,,,,,,	(1,100)	(1,20.1)	11,0.07		
	n On	4.1	(5.4)	Heavy Standard		Note:	27(244)	Mark.		4.00	Sec. 15 W	11.8	115% 11	0% 185%	1137		6412	(14,136)
938M High	Pin	5.0	(6.5)	Log/Agg Heavy Standard	Not Availa Not Availa				115% 110%	1075							5700	(12,566)
Σ		4.1	(5.4)	Log/Agg Heavy	Not Availa Not Availa													
<u> </u>	=	4	(2	Standard	the second	in Maria		distantia	on residence	NEW YORK	115% 1109	100%	Officer				5527	(12,184)
200	Fusion			Log/Agg	Not Availa			-	T				1	1		1	1	

Material density, fill factor, and counterweight options are key variables when choosing the appropriate size of the bucket. The long floor and open throat design of the Performance Series Buckets along with the aggressive rack angles of the optimized linkage will demonstrate fill factors greater than 100% ISO rated. Refer to the expected fill factor % per material type at the top of the table and find a matching counterweight and fill factor along the side for proper bucket sizing.

<sup>\*</sup>Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

# **Supplemental Specifications**

# **Optional Equipment**

		92	6 <b>M</b>			93	DM			93	8 <b>M</b>	
		ating ight		j load – turn		ating ight		g load – turn	1500	ating ight		g load – turn
Change with options removed:	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Heavy counterweight	N/A	N/A	N/A	N/A	-320	-705	-502	-1,107	-320	-705	-494	-1,089
Guard, crankcase	-11	-23	-16	-34	-11	-23	-13	-29	-11	-24	-17	-36
Guard, power train lower	-77	-170	-77	-168	-77	-170	-69	-151	-68	-150	-67	-146
Guard, driveshaft	-44	-96	-12	-26	-44	-96	-12	-26	-45	-100	-12	-27
Secondary steer	-69	-152	-75	-165	-69	-152	-73	-160	-69	-152	-74	-163
Ride control	-49	-108	-27	-59	-49	-108	-26	-57	-49	-108	-27	-59
Change with options added:												
Logger/Aggregate counterweight	+298	+656	+417	+919	+298	+656	+415	+914	+299	+659	+402	+886
Guard, front window	+34	+74	+17	+37	+34	+74	+18	+39	+34	+74	+18	+39
Guard, rear waste gate	N/A	N/A	N/A	N/A	+264	+582	+456	+1,005	+284	+626	+478	+1,053
Guard, power train side	+11	+24	+10	+22	+11	+24	+9	+19	+11	+24	+10	+22
Cold start package	+54	+119	+104	+229	+54	+119	+74	+163	+54	+119	+101	+222
Roading fenders	+18	+39	+28	+61	+18	+39	+24	+52	+18	+39	+28	+61

# **Tire Options**











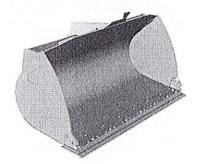
		92	6M			930	M			938	BM	
Change with tire option as	550/8	55 R25	17.5 R	25 (L-3)	600/6	55 R25	20.5R	25 (L-5)	23.5R	25 R25*	Flex	ort**
compared to 20.5R25 L3 tire	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Vertical heights	-70	-2.8"	65	-2.6"	-15	-0.6"	+35	+1.4"	65	-2.6"	+59	+2.3"
Reach: bucket at 45°	+43	+1.7"	+73	+2.9"	+29	+1.1"	-21	-0.8"	-63	-2.5"	-23	-0.9"
Width: Over tires	+10	+0.4"	-69	-2.7"	+98	+3.9"	0	0"	+38	+1.5"	-12	-0.5"
Turning radius: Outside of tires	+0	+0"	-45	-1.8"	+42	+1.7"	+1	0"	+14	+0.6"	+23	+0.9"
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Tipping load – straight	-83	-182	-212	-466	+9	+19	+444	+978	+486	+1,071	+1564	+3,447
Tipping load – full turn	-72	-157	-183	-403	+8	+17	+384	+846	+421	+927	+1352	+2,979
Operating weight	-126	-277	-322	-709	+14	+30	+678	+1,494	+748	+1,648	+2405	+5,300

<sup>\*938</sup>M compatible with standard counterweight for general construction and heavy counterweight for Aggregate or Forest Handlers.

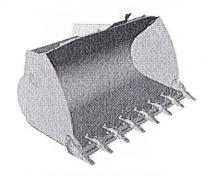
<sup>\*\*938</sup>M compatible with standard counterweight (Flexport) only.

# **Supplemental Specifications**

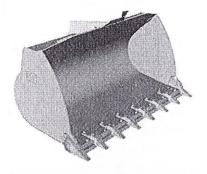
# **Ground Engagement Options**







Long Teeth and Segments



**Short Teeth and Segments** 

		92	6M			93	0M			93	8M	
Change with Ground Engagement option compared to Bolt-on		eth and nents		eeth and nents	9	eth and nents		eeth and nents		eth and nents	7.11.11.11.11	eeth and nents
Cutting Edge	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Dig depth	+12	+0.5"	+5	+0.2"	+11	+0.4"	+5	+0.2"	+11	+0.4"	+5	+0.2"
Length: overall	+146	+5.7"	+121	+4.8"	+146	+5.7"	+121	+4.8"	+146	+5.7"	+121	+4.8"
Dump clearance	-103	-4.1"	-82	-3.2"	-104	-4.1"	-83	-3.3"	-105	-4.1"	-84	-3.3"
Reach	+104	+4.1"	+89	+3.5"	+103	+4.1"	+88	+3.5"	+102	+4"	+87	+3.4"
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Tipping Load – straight	-148	-325	-142	-311	-150	-329	-143	-315	-138	-305	-132	-291
Tipping Load – full turn	-145	-318	-139	-305	-146	-322	-140	-309	-136	-298	-130	-285
Breakout force	-121	-266	-115	-254	-121	-266	-115	-254	-112	-245	-106	-234
Operating weight	+120	+264	+116	+255	+120	+264	+116	+255	+111	+244	+106	+233

# 926M, 930M, 938M Standard and Optional Equipment

# **Standard Equipment**

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

# **POWER TRAIN**

- · Axle seal guards
- · Auto idle shut down feature
- Cat C7.1 ACERT engine
- Power Modes (Standard and Performance)
- Power by Range (High Power in Range 4)
- Turbocharged and aftercooled
- -Diesel particulate filter (Fit for Life)
- Coolant protection to -34° C (-29° F)
- · Differential lock in front axle
- · Dry type air cleaner
- · Enclosed wet disc full hydraulic brakes
- · Fuel priming pump, automatic
- · Fuel water separator
- · Hydraulically driven demand cooling fan
- · Intelligent hydrostatic transmission
- Power train modes
- Directional Shift Aggressiveness
- Rimpull control, adjust wheel torque
- Creeper control, adjust ground speed
- · Lubed for life driveshafts
- · Parking brake, electric
- · Wide spaced 6 fins per inch cooling package
- S·O·S<sup>SM</sup> sampling ports
- · Throttle lock and maximum speed limiter

### HYDRAULICS

- · Automatic lift, lower and tilt kickouts
- Bucket and Fork Modes, adjustable in-cab
- Cylinder damping at kickout and end stops
- · Fine Mode control in Fork Mode
- · Hydraulic Response setting
- · Load sensing hydraulics and steering
- · Seat-mounted hydraulic joystick controls

### **ELECTRICAL**

- · Alternator, 115-amp, heavy duty
- 12V power supply in cab (2)
- · Batteries, 1,000 CCA (2) 24 volt system
- · Back-up alarm
- · Emergency shutdown switch
- · Heavy duty gear reduction starter
- · Product Link PRO with subscription
- · Remote jump start post
- · Resettable critical function breakers

### OPERATOR ENVIRONMENT

- 75 mm (3 in) retractable seat belt, with audible alarm and indicator
- · Automatic temperature control
- · Cab, enclosed and pressurized
- · Cup holders
- · External heated mirrors with lower parabolic
- · Ground level cab door release

- · Gauges
- Digital hour, odometer, tachometer, ground speed and direction indicator
- Engine coolant temperature gauge
- -Fuel and Diesel Exhaust Fluid level
- Hydraulic oil temperature gauge
- · Hydraulic control lockout
- · Interior cab lighting, door and dome
- Interior rearview mirrors (2)
- · Lunch box storage
- · Operator warning system indicators
- · Radio ready speakers
- · Rear window defrost, electric
- · Seat-mounted controls, adjustable
- · Sliding glass on the side windows
- Column mounted multi function control lights, wipers, turn signal
- · Suspension seat, fabric
- · Tilt and telescopic steering wheel
- · Wet arm wiper/washer, front and rear

### OTHER STANDARD EQUIPMENT

- Large-access enclosure doors
- · Parallel lift loader linkage
- · Recovery hitch with pin
- Remote mounted lubrication points
- · Lockable compartments and enclosures

# **Optional Equipment**

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

- · Antifreeze/coolant, extended-life
- · Auto lube, integrated in secondary display
- · Auxiliary flow, third and fourth function
- · Axles, differential, limited slip, rear
- · Beacon light, strobe
- · Cab, deluxe (standard in Europe):
- Automatic blower control
- Electrically adjustable heated mirrors (2)
- LED interior lighting
- Secondary display to adjust settings
- Ride control adjustable speed activation
- Preventative maintenance reminders
- · Integrated help function (26 languages)
- -Sunscreen, front and rear
- · Camera, rearview (standard in Europe)
- · Cold start package:
- Ether starting aid, block heater and additional batteries, 1,000 CCA (4 total)

- Counterweight, (heavy and logger)
- Coupler, (Fusion and ISO 23727)
- · Debris packages (low, medium, high)
- · Fenders (extended cover and full coverage)
- Guards
- Power train, (lower, side, driveshaft and crankcase)
- Windshield and lights
- -Cylinders, tilt and steering
- Rear radiator, heavy duty
- · Linkage, high lift
- Lights, auxiliary, halogen or LED with engine compartment lights
- · Object Detection
- · Radio packages:
- -Radio ready with Bluetooth
- Radio, AM/FM with Bluetooth and clock
  Radio, AM/FM with CD player deluxe, weatherband, Bluetooth and clock

- · Seats:
- Deluxe seat fully adjustable fabric air suspension seat with mid seat backrest
- Premium seat fully adjustable leather and fabric air suspension with high backrest and air lumbar support. Heated and cooled bottom cushion and backrest.
- · Steering:
- Dual mode and Secondary
- Tires:
- -Bias ply, 17.5, 20.5-25, Skidder
- Radial, 17.5, 20.5, 23.5, 550/65, 600/65, 650/65 R25
- Flexport, 620/65, 750/65 Agriculture
- Work tools

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AEHQ7475 (06-2015)



		938 WHEEL LOADER GOVBIDSPEC.COM
BID	SPECIF	ICATION FOR 938 OR EQUIVALENT
BAS	IC SPF	CIFICATIONS
Υ	N	Engine net power according to ISO 9249 shall be at least 180 hp (134 kW).
· Y	 N	Engine gross power according to SAE J1995 shall be at least 197 hp (147 kW).
'	 N	Basic operating weight shall be no less than 35,273 lb (16,004 kg). Weight shall be based o
		standard machine configuration (with 20.5-R25 L2 tires and 3.25 cubic yard general purpose quick coupler bucket with bolt-on edges).
Y	N	Machine height to top of ROPS shall be 11'0" (3356 mm).
Υ	N	Machine height to top of hood shall be 7'11" (2415 mm).
Υ	N	Ground clearance with 20.5-R25 tires shall be 1'3" (397 mm).
Υ	N	Machine wheelbase shall be 9'11" (3020 mm).
Υ	N	B-Pin maximum height shall be at least 12'10" (3933 mm).
Υ	N	Maximum bucket capacity shall be at least 3.66 cubic yards (3.0 cubic meters).
ENG	SINE	
Υ	N	Engine shall be EPA Tier III compliant.
Y	N	Engine shall be fully equipped, six cylinder, four stroke diesel type with all necessary operating accessories.
Υ	N	Engine shall be configured to provide constant net horsepower at full parasitic load.
Υ	N	Engine electronic control modules and sensors shall be completely sealed against moisture and dust.
Y	N	Deutsche connectors and electrical wire braiding shall ensure that electrical connections resist corrosion and premature wear.
Υ	N	An electrical disconnect switch shall be standard.
Y	N	Engine shall have a total displacement of no less than 402.8 cubic inches (6.6 liters).
Υ	N	Engine bore shall be 4.1" (105 mm) and stroke shall be 5" (127 mm).
Y	N	Net Peak torque at 1400 rpm shall be 620 ft-lb (840 N-m).
Y	N	Engine shall have four idle control settings to help maximize fuel efficiency: hibernate allows idle speed to drop after a preset time, work provides flexibility in working engine idle speeds warm-up helps keep the engine from dropping below a set temperature in cold conditions, and low voltage mode prevents battery drain due to high electrical loads from attachments.
Y	N	Machine shall have a 24-volt starting and charging system with a minimum 65-amp alternator.
Y	N	Electric fuel priming pump shall be standard.
Υ	N	A heavy-duty electric starter shall be standard.
Υ	N	Machine shall have a 24-volt starting receptacle as standard.
Υ	N	Cooling system shall be isolated from the engine compartment by a non-metallic shield.
Υ	N	Standard radiator shall be a square-wave core design with 6-fins-per-inch.
γ>	N	Variable speed fan shall draw air in from the rear of the machine and exhaust out the
		sides and top of the hood.
Y_>	N	Engine shall be enclosed in a non-metallic, one-piece tilting hood that allows
V	- L	complete and unrestricted access to the engine and related components.
Υ	N	Wheel loader can be equipped with an engine coolant heater to be powered by a 120 V
V	N	external electric power source.  Engine shall have available an externally mounted pre-cleaner.
	''\	_ Linging shall have available an externally mounted pre-cleaner.

TRAN	NSMISSI	ON/POWERTRAIN
Y	_ N	Transmission and other major powertrain components, such as the axles, shall be designed and manufactured by the equipment manufacturer.
Y	_ N	Automatic transmission shall be of countershaft powershift design.
Y	N	Transmission shall be electronically controlled for smooth clutch modulation.
Y	_ N	Machine shall have a fuel economy mode that allows the transmission to upshift at lower RPM's.
Y	_ N	Machine shall four speeds forward with a maximum of 26.8 mph (43.2 km/h) and three speeds reverse with a minimum of 15.8 mph (25.5 km/h).
Y	_ N	Machine shall have an electronically controlled, variable on-demand speed fan.
Y	_ N	Machine shall be equipped with a bottom crankcase and fuel tank guards.
Y	N	Transmission shall have a cooler bypass valve enabling faster warm-up in low ambient conditions- providing smoother shifts in cold weather.
Υ 🛰	N	Transmission shall automatically select gears above first. The operator shall be able to select the highest gear to which the transmission will automatically shift.
YX	Y N Machine shall have a transmission gear kick-down button capable of making	
\ \ \ \ \		third, third to second and second to first gear shifts in automatic mode.
Y	N	Transmission shall offer full manual shifting for first, second, third and fourth gear.
Y_>	_N	Final drives shall be of planetary design and outward mounted.
Y	_ N	Control throttle shifting shall regulate engine speed during high-energy directional changes for smoother shifting and longer component life.
Y×	_ N	Machine shall provide a transmission neutralizer that also incorporates downshifting logic and is adjustable through the machine graphical display.
	ERING	
Y	_ N	Machine shall have center-point articulation with an articulation angle of at least ±40°.
Y	_ N	Machine shall have full hydraulic load sensing steering piston pump.
Y	_ N	Machine turning diameter shall not exceed 39' 2" (11,946 mm) as measured at the outside tip of the manufacturer's general purpose bucket.
BRA	/EQ	
V	N	Machine shall have oil cooled 2 disc-type per wheel, adjustment-free service brakes which
-		are outboard mounted and sealed from water, mud and dust.
YX	N	Service brake actuation shall be of independent front and rear hydraulic circuits
>	/	providing effective braking in the event of partial system malfunction.
Y	_ N	Service brakes shall have a sealed brake wear indicator with an external port that allows a visual brake wear pin inspection.
		anows a visual brake wear pin inspection.
HADI	RALILIC	SYSTEM
Y	N	Machine shall feature load-sensing hydraulics to automatically adjust to operating conditions
-		and provide only hydraulic flow required by the implement.
Y	_ N	Hydraulic pump output for the bucket/work tool system shall be 77.9 gal/min (295 L/min).
Υ	_ N	Hydraulic system shall be filtered and completely sealed.
Y _>	< N	Hydraulic pressure taps shall be provided for checking pressure in the hydraulic
		implement and steering systems.
Y	_ N	A third hydraulic valve with control lever and hydraulic lines to the end of the lift arms for
		operating auxiliary equipment shall be available.
Y	_ N	Hydraulic cycle time shall be no more than 10.4 seconds.
Y	_ N	Loader shall have automatic bucket positioner and lift kick-out. Bucket positioner and lift kick-out shall be adjustable to different bucket angles and lift heights, respectively.

1	N	Available joystick with integrated F-N-R switch shall be available.
YX	N	Locking devices shall be capable of temporarily disabling the levers which control the
		hydraulics.
A X/L I		
AXLE Y		W/book looder shall been an order it and by smile to be a substitute t
T	N	Wheel loader shall have an axle oil cooler available for applications where extreme braking or operating needs heat axle oil quickly.
Υ	N	Axles shall be axle oil cooler ready with pre-dilled and tapped axle housings along with pre-
	`	routed internal steel lines and mounting hardware.
Υ	N_	Wheel loader shall have a front hydraulic locking differential
Y N Wheel loader shall have available an automatic hydraulic locking front/i		
		differentials.
Y	N	Wheel loader shall have standard front and rear axle temperature monitoring.
Y	N	Rear axle shall not have less than a 24-degree total oscillation.
OPF	RATOR	S STATION
Y	N	Integral ROPS and sound suppressed cab shall be standard.
· Υ		Cab shall include a heater and defroster.
·	 N	Cab shall not have any curved glass.
·	\ < N	Cab shall have pressurized and filtered air circulation system.
<u> </u>	N	A STATE OF THE STA
' Y≫		Cab shall be mounted on the rear frame of the machine.  Machine shall be equipped with a multilevel warning system, which shall signal
Y	N	machine and component malfunctions. System should differentiate between major and minor malfunctions. Warning system shall record occurrences of periodic malfunctions.  Machine shall be equipped with a graphical display system (Messenger) that provides
		onboard machine diagnostics, machine system parameters, settings, and operator specific profiles.
Y	_ N	Single lever joystick control of implement levers with integrated switch for transmission
		forward-neutral-reverse shift capabilities shall be available.
Y_>	<b>≤</b> N	forward-neutral-reverse shift capabilities shall be available.  A single control lever mounted on the steering column shall actuate directional and
<b>Y_&gt;</b> Y	<b>≤</b> N	forward-neutral-reverse shift capabilities shall be available.  A single control lever mounted on the steering column shall actuate directional and gear changes.
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YYYYYYYYY	N N N N N N N N N N N N N N N N N N N	forward-neutral-reverse shift capabilities shall be available.  A single control lever mounted on the steering column shall actuate directional and gear changes.  Machine bucket/work tool controls shall have available a two-lever design.  Transmission shall have a software feature that allows operator to vary shift points by adjusting value in the graphical machine display.  Steering wheel, gauge panel, and transmission control lever shall be adjustable as a single unit.  Operator's seat shall be a cloth-covered suspension-type with adjustments for height, weight fore/aft, and suspension dampening.  Seat shall include adjustable armrests on left and right.  Cab shall be pre-wired with electric voltage converter, speakers, and antenna for installation of an entertainment radio.  Cab shall be equipped with a wiring harness having a harness connector to simplify servicing by avoiding the need to cut electrical wires when removing the cab.  Operator's compartment can include a retractable 2" (51 mm) wide seat belt.  Cab shall have windshield wipers with an in-the-blade washer delivery system for the front and rear windows. Front wipers shall have intermittent capability.
YYYYYYYYY	N N N N N N N N N N N N N N N N N N N	forward-neutral-reverse shift capabilities shall be available.  A single control lever mounted on the steering column shall actuate directional and gear changes.  Machine bucket/work tool controls shall have available a two-lever design.  Transmission shall have a software feature that allows operator to vary shift points by adjusting value in the graphical machine display.  Steering wheel, gauge panel, and transmission control lever shall be adjustable as a single unit.  Operator's seat shall be a cloth-covered suspension-type with adjustments for height, weightfore/aft, and suspension dampening.  Seat shall include adjustable armrests on left and right.  Cab shall be pre-wired with electric voltage converter, speakers, and antenna for installation of an entertainment radio.  Cab shall be equipped with a wiring harness having a harness connector to simplify servicing by avoiding the need to cut electrical wires when removing the cab.  Operator's compartment can include a retractable 2" (51 mm) wide seat belt.  Cab shall have windshield wipers with an in-the-blade washer delivery system for the front

Y	_ N	Machine shall have a back-up alarm.		
Y_>	N	Machine shall have sloped hood for improved rearward visibility and improved work		
~		environment safety.		
Y	N	Machine shall have audible alarm and warning light to alert the operator if the service		
		brake actuating pressure drops below a safe operating level. If service brake		
		actuating pressure drops below a safe operating level, the secondary brake shall be applied automatically.		
Y	N	Machine shall have two brake pedals. Left brake pedal to switch between a		
		brake/neutralizer or brake only function through the machine graphical display.		
Y	_ N	Directional signals shall be standard.		
<b>Y</b>	N	Machine shall be available with an outside toolbox.		
Υ	_ N	Machine shall be available with rear vision camera with 7" in cab monitor.		
I OAI	DER LINI	KAGF		
Υ	N	Loader linkage shall be parallel lift type with high breakout force.		
Υ	N	Loader bucket tilt lever shall be of a cast design for durability and strength.		
Y	N	Full turn static tipping load shall be at least 21,179 lb (9,610 kg).		
Υ	 N	Breakout force shall not be less than 30,239 lb (134.6 kN).		
Y	 N	Dump clearance at full lift and 45° discharge shall be a minimum of 9'0" (2733 mm) when		
		equipped with a 3.25 cubic yard (2.5 cubic meter) quick coupler bucket with bolt-on cutting edge.		
Y	_ N	Minimum bucket rack-back angle shall be at least 50 degrees in carry position.		
WOR	RK TOOL	OPTIONS		
Υ	_ N	Loader bucket shall have bolt-on bottom wear plates.		
SERV	VICEABII	ITY		
Y	N	Oil sampling ports shall be standard for quick and clean access to various machine oils		
		(such as hydraulic, transmission and engine oil).		
Y	_ N	S.O.S sampling ports shall be accessible from ground level		
Y	_ N	Sight gauges for the transmission oil, hydraulic oil and radiator coolant shall be easy to see and will eliminate the risk of contaminants entering the system during daily checks.		
Y	_ N	Machine shall have maintenance-free batteries located in a built-in battery box.		
Y	_ N	Machine shall have electrically actuated fuel priming pump to simplify fuel filter changes.		
Y	_ N	Grill, a/c condenser and hydraulic oil cooler should swing open for easy access.		
Y	_ N	Powertrain shall use a vertically mounted filter to minimize oil spillage during filter change.		
Y	_ N	Articulation joint shall have a single mechanical locking device to prevent frame articulation		
V	N	while servicing or transporting machine.  Transmission oil and hydraulic filters shall be located behind the hinged, right-side access		
'	_ '\	platform in an enclosed compartment. The hydraulic oil tank shall be drainable from this		
100		location.		
Y×	N	Standard Ecology Drains on engine, transmission, and hydraulic oil shall allow clean		
		draining of fluids with minimal spillage.		
MINIM	MUM SEI	RVICE FILL CAPACITIES		
Υ	_ N	Cooling system shall have a capacity of 9.5 gal (36 L).		
Y	_ N	Fuel tank shall have a capacity of 65.3 gal (247 L).		
Y	N	Transmission shall have a capacity of 11.4 gal (43 L).		

N	Crankcase shall have a capacity of 4.6 gal (17.4 L).	
	=	
N	Hydraulic System (including tank) shall have a capacity of 23.5 gal (89L).	
	OPERATING COSTS	
N	Engine shall have a recommended 500 hour oil change interval for lower operating maintenance costs	
N	Extended life coolant shall be standard for lower service intervals and reduced maintenance costs.	
IONAL	FEATURES	
N	Wheel loader shall have an automatic bucket suspension system available that uses an accumulator in the lift arm circuit to reduce material spillage when traveling over rough or uneven surfaces.	
N	The distance from the bottom of the upper hitch pin to the top of the lower hitch pin shall no be less than 23" (584 mm) for torsion stress distribution and better hitch bearing durability.	
N	Articulation joint shall have double tapered roller bearings in the upper and lower hitch for extended life.	
N	Machine shall be equipped with a rear retrieval connection.	
N	Machine shall be equipped with a standard counterweight 2,959 lb (1,342 kg).	
N	Machine shall have lifting/tie down eyes for transportation.	
N	Machine shall have available a machine electronic security system that can lock out unauthorized usage of the machine.	
N	Machine should have standard a satellite-based system available that allows real-time retrieval of machine information and location.	
ecs are	e intended for use by North American buyers only and are subject to change. Model	
	NG & O	



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

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 clata

'continued on the reverse side....)

# imitations

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.
- ssory items, Failures resulting from user's delay in making the product ar, 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, Flji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the Solomon Islands, and Tahiti, the following is applicable:

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

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

CATERPILLAR IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ONTHE PART OF ANY OF ITS EMPLOYEES, AGENTS, OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

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

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

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 ONTHE PART OF ANY OF ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

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

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

This warranty covers every major component of the products. Claims under this warranty should be submitted to a place of business of a Cat dealer or other source approved by Caterpillar. For 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.

# CONTROL YOUR COSTS **MINIMIZE YOUR RISKS**

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





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

# WHAT WE DO





# WHAT YOU DO

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

# **EXCLUSIONS**

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

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

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

Engine - Internal Components

Oil Cooler

Manifolds

an Motor

Water Pump

-uel Injection Pumps

Senders / Solenoids / Sensors .ift / Transfer Pump njectors

Flywheel & Torque Converter **Thermostat** 

AC Compressor / Condenser Engine Oil Filter Mount **Turbocharger** 

Jil Hoses / Lines (non-hydrostatic) Electronic Control Modules Cylinder Block

Piston Rings Piston

Crankshaft, Main Bearings & Rod Piston & Connecting Rod Bearings

Aydrostatic Pumps & Camshaft & Camshaft Bearings Fuel Pump / Governor Drive Timing / Accessory Gears Rocker Shaft Assembly Valve Spring & Guide nlet / Exhaust Valve /alve Cover & Base Timing Chain / Belt

Rocker Arm

Push Rod

Balancer

Oil Pan Group Oil Pump

Fan & Fan Drive

Transmission Oil Filter Base Final Drives/Planetary Fransmission Gears Hydraulic Controls **Fransmissions** Fransfer Case Drive Shafts

Drive (pilot / eh) Control Valves inkage / lines Connected to Bevel and Transfer Case Final Drive Case / Bore Final Drive & Wheel Drive Axle Oil Pump Final Drive Gears Final Drive Chain **Drive Motors** Hystat Pump Axle Seals Axle Shaft

Steering Clutch & Brake Control Valve Steering Clutch

Hydraulic Oil Coolers



# **Employment Eligibility Verification**



User to . TMOPS-102 Last Logar 09:22 AM - 01/06/2012 Log Out

View / Edit

Click any for help

Home

My Cases

New Case
View Cases

Search Cases

My Profile

Edit Profile

Change Password

Change Security Questions

My Company

Edit Company Profile

Add New User

View Existing Users

Close Company Account

My Reports

View Reports

My Roseurces

View Essential Resources

Take Tutorial

View User Manual

Contact Us

Company Information

Company Name:

Thompson Tractor Co., Inc.

47130

Doing Business As (DBA) Name:

DUNS Number:

Physical Location:

Company ID Number:

Address 1:

Address 2:

City:

State:

Zip Code:

County:

.........

2401 Pinson Highway

Birmingham

AL

35217

**JEFFERSON** 

1,000 to 2,499

Mailing Address:

Address 1: P O. Box 10367

Address 2:

City: E

Birmingham

State: AL

Zip Code: 35202-0367

Additional Information:

Employer Identification Number: 630377478

Total Number of Employees:

Parent Organization:

Administrator:
Organization Designation:

**Employer Category:** 

NAICS Code:

423 - MERCHANT WHOLESALERS, DURABLE GOODS

View / Edit

**Total Hiring Sites:** 

40

View / Edit

View / Edit

Total Points of Contact:

UCM World

# (Rev. October 2007) Department of the Treasury

# Request for Taxpayer Identification Number and Certification

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

2.5	Name (as shown on your income tax return) Thompson Tractor Co., Inc. DBA Thompson Power Syste	ms, Thompso	n Lift Truck Co.	
Print or type Instructions on page	Business name, if different from above and The Cat Rent Store			
	Check appropriate box: Individual/Sole proprietor Corporation Partnership Umited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) Other (see instructions)	dnership) ►	Exempt payce	
IS IS	Address (number, street, and apt. or suite no.)	Requester's name and	address (optional)	
Print or ic Instruc	P O Box 10367 2401 Pinson Hwy. Tarrant, AL 35217			
ŞĊ	City, state, and ZIP code			
g	Birmingham, AL 35202-0367			
99	List account number(s) here (optional)			
S	Lockbox Remit To: P O Box 934065, Atlanta, GA 31	193-4005		
	Taxpayer Identification Number (TIN)			
Enter your TIN in the appropriate box. The TIN provided must match the train given in the Till of a vision backup withholding. For individuals, this is your social security number (SSN). However, for a resident like the propriets of disregarded entity, see the Part Linstructions on page 3. For other entities, it is			curity number	
			or	
Note.	If the account is in more than one name, see the chart on page 4 for guidelines on whose or to enter.	Employer	identification number 0377478	
Raye	Certification			
Enter y backut alien, s your en Note.	City, state, and ZIP code  Birmingham, AL 35202-0367  List account number(s) here (optional)  Lockbox Remit To: P 0 Box 934065, Atlanta, GA 3.1  Taxpayer Identification Number (FIN)  your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entity memory is a number, see How to get a TIN or II the account is in more than one name, see the chart on page 4 for guidelines on whose at to enter.	sident es, it is i page 3.	or	

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my porrect taxpayer Identification number (or I am walting for a number to be issued to ma), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a fallure 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 inclividual 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 Signature of Controller Date > Here U.S. person > Definition of a U.S. person. For federal tax purposes, you are

# General Instructions

Section references are to the Internal Revenue Code unless

# 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.

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
- · 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

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

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

THE FACEBLY PROCRAMFOR EMPLOYMENT VERBICATION

MEMORANDI MOFUNDI RSTANDING

# ARTICLE I

# PURPOSE AND AUTHORITY

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

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

# ARTICLE II

### FUNCTIONS TO BE PERFORMED

# A. RESPONSIBILITIES OF THE SSA

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

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

# B. RESPONSIBILITIES OF THE DEPARTMENT OF HOMELAND SECURITY

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

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

# C. RESPONSIBILITIES OF THE EMPLOYER

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

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

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

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

# ARTICLE III

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

# A. REFERRAL TO THE SSA

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

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

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

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

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

### ARTICLE IV

### SERVICE PROVISIONS

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

# ARTICLE V

### **PARTIES**

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

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

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

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

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

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

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

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

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

Employer Thompson Tractor Co., Inc.

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

Department of Homeland Security - Verification Division

Telephone Number: E-mail Address:

Name:

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:			
Telephone Number: (205) 84	ly A Stark 9 - 4279 Fax Number: (205) 849 - 4565 ystark@thompsontractor.com		

Fax Number:

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

(205) 849 - 4854

	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	r: <u>630377478</u>		
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:			
Telephone Number: (205)	erly A Stark 849 - 4279 Fax Number: (205) 849 - 4565 erlystark@thompsontractor.com		

Fax Number:

(205) 849 - 4854

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

Name:

Telephone Number: E-mail Address:

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