

BID SUBMITTAL FORM
Alabama County Joint Bidding Program
BID ITEM – HIGHWAY SPEED TRUCK MOUNTED EXCAVATOR - 4WD

Company Name: TRACTOR & EQUIPMENT CO. INC.
Address: P.O. BOX 12326
BIRMINGHAM, AL 35212
Bid Submitted by: JOE PATTON
(Name of company representative)
Title: V.P. e-mail address: jpatton@TEC1943.com
Phone: (205) 591-2131 Fax: (205) 591-8321

By submitting this bid, we agree:

Initials

The equipment model number identified below meets the bid specs for this bid item

JP

That the bid price will be honored for all counties for the period from Jan. 1, 2024 to Dec. 31, 2024.

JP

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

JP

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

JP

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

JP

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

JP

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

JP

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

JP

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

JP

Total Bid Price for Standard Machine: \$ 370,128.00
(Total Bid Price for Standard Machine Includes Freight Preparation, Delivery and Standard Warranty Costs)*

Freight Preparation and Delivery: \$ 4500.00
(Included in Standard Machine Bid Price)

Manufacturer's Suggested Retail Price for Standard Machine: \$ 397,140.00

Equipment Model #: GRADALL MODEL D174

Description: Highway SPEED Truck Mounted EXCAVATOR - 4WD

Signature of company representative submitting bid: 

Title: V.P.

* **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.

* THIS BID PRICE INCLUDES A 2 YEAR
MANUFACTURER'S STANDARD WARRANTY *

* TEE DOES NOT CHARGE ANY TRAVEL TIME
OR MILEAGE ON A WARRANTY CLAIM *

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*

9P

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

9P

Equipment Model #: GRADALL MODEL D174

Description: Highway Speed Truck Mounted Excavator - 4WD

Signature of company representative submitting bid: 

Title: V.P.

***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.

* THIS BID PRICE INCLUDES A 2 YEAR
MANUFACTURER'S STANDARD WARRANTY *

* TEC DOES NOT CHARGE ANY TRAVEL TIME
OR MILEAGE ON A WARRANTY CLAIM *

HIGHWAY SPEED TRUCK MOUNTED EXCAVATOR - 4WD

GENERAL:

It is the intent of this specification to describe a carrier mounted, single engine, full hydraulic telescoping boom excavator capable of excavating, grading, sloping, backfilling, etc., equivalent to a **Gradall model D174**. The unit shall be current production and the manufacturer's printed literature shall be submitted with the bid.

The excavator shall consist of a revolving upper-structure mounted on a rubber-tired highway speed carrier complete with remote control as follows:

Rotating Structure

The Upper-structure shall be supported on the carrier by an internal swing bearing and shall be capable of continuous swing at not less than **8 RPM**. The counterweight shall weigh not more than **4,500 pounds** and the tail swing shall not exceed **6' 7"**. The swing system shall incorporate a spring set, hydraulic release swing parking brake. Anti-slip paint is required on all walking surfaces.

Yes ☒ No ☐
Page # 1

Boom

The boom shall be triangular in cross section and shall consist of a main section and a telescoping section. Adjustable boom rollers shall be furnished on both boom sections. The telescope section shall be equipped with pin-on buckets and shall telescope hydraulically through a distance of not less than **10' 3"**. The boom assembly shall be supported by a cradle that provides for the tilt of the entire boom assembly and attachment through an arc of not less than **220°** about its longitudinal axis. The boom shall rise through an arc of not less than **30°** and lower not less than **60°**. The attachment shall open and close through an arc of not less than **165°**.

Yes ☒ No ☐
Page # 1/3

Hydraulic System

Power for the hydraulic system shall be supplied by the carrier engine. There shall be one-piston pump providing not less than **58 GPM @ 3800 PSI**. The pump shall be engaged with a PTO to the transmission. The system shall provide for simultaneous boom, swing and remote functions, quick disconnect type pressure check ports, minimum **51 HP** swing motor, minimum **21 HP** tilt motor and appropriate relief valves, oil cooler and filter with service indicator. The pressurized reservoir shall be of minimum **62-gallon** capacity and shall be equipped with sight level gauges. System operating pressure shall not exceed **3,800 PSI**.

Yes ☒ No ☐
Page # 1

Cab & Controls

The operator's cab shall be all weather with safety glass windows and skylight. The cab shall be complete with front window that rolls overhead for storage, wiper washer, AC, AM/FM radio, four-way adjustable seat, acoustical treatment, signal horn, filtered heater and defroster. The controls shall be self-centering dead-man type consisting of 2 electronic joysticks mounted on the armrests. Engine controls shall include key type ignition switch with neutral start and throttle. There shall be warning lights for low air, low DEF, engine maintenance, hydraulic filter condition and level. There shall be an automatic engine shutdown for low oil pressure or high coolant temperature. Remote carrier propels, steering and automatic digging brake shall be controlled by two-foot pedals and two joystick mounted switches. The hydraulic remote-control system shall be complete with an emergency brake control and travel alarm.

Yes ☒ No ☐
Page # 1-2

Carrier

The carrier shall be a **4x4** rubber tired type, **8' 6"** wide with a **36,200-lb.** gross vehicle axle weight rating. The frame shall be the manufacture's standard, reinforced with Steel frame insert (**1/4" full C-channel**) from beyond the front spring hanger in the front and extending throughout the total length of the frame to the rear. There shall be a separate sub-frame for Upper-structure mounting. The wheelbase of the unit shall be a minimum of **15' 10"** and the frame width a minimum of **34"**. There shall be a minimum **80-gallon** fuel tank and a minimum **13-gallon DEF tank**. The carrier shall be equipped with transmission operated remote control.

Yes ☒ No ☐
Page # 1-3

Engine

The carrier shall be powered by current emissions certified "Clean Idle" liquid cooled turbo charged air after cooled diesel engine with a minimum **300 HP @ 2600 RPM**. The engine shall be equipped with an exhaust brake, an electric grid air warmer, two stage dry type air cleaner, spin on fuel filter, oil filter. The electrical system shall be 12-volt and incorporate a **160-amp** alternator.

Yes ☒ No ☐
Page # 1

Transmission

The carrier shall be equipped with a **5-speed** Automatic transmission, Allison 3500RDS, having **5 forward** speeds and **1 reverse** speed. Max road speed shall be **55 mph**.

Yes ☒ No ☐
Page # 2

Axles and Suspension

The front axle shall be rated at **13,200 lb.** minimum. The front suspension shall be leaf type and shall be complete with automatic lockout cylinders.

Yes ☒ No ☐
Page # 2

The rear axle shall be rated at **23,000 lb.** minimum with a **6.14 ratio** and single reduction. The axle shall be equipped with a cab controlled differential lock.

Yes ☒ No ☐
Page # 2

Brakes

The carrier shall be equipped with anti-lock braking system to include four-wheel cam type air brakes and automatic slack adjusters. The system shall include spring set brakes incorporating emergency and parking brakes on the rear axle. The system shall include a minimum **18.7 C.F.M.** air compressor and desiccant type air dryer with automatic purge valve and thermostatically controlled heater.

Yes ☐ No ☐
Page #

Wheels and Tires

The wheels shall be 10-stud hub piloted disc. The front tires shall be **M/S11R22.5 14 ply** with mud and snow traction tread. The four rear tires shall be **M/S11R22.5 14 ply** with mud and snow traction tread.

Yes ☒ No ☐
Page # 2

Steering

Carrier steering shall be integral hydraulic power steering.

Yes ☒ No ☐
Page # 2

Cab

The carrier cab shall be a two man, isolation mounted cab. The cab shall include a driver's high back air suspension seat, **3-point** driver and passenger seat belts, adjustable tilt and telescoping steering column, tinted safety glass windows, acoustical lining, and heater/defroster and Air Conditioner. Both side windows must open for ventilation and be adjustable.

Yes ☒ No ☐
Page # 1-2

The cab instrument panel shall include the following equipment: Gauges for oil pressure, coolant temperature, dual air tank pressures, fuel level, indicator for DEF level, low DEF level warning light/alarm, voltmeter, hour meter, speedometer and odometer and intake air restriction indicator. The carrier shall be complete with electronic cruise control, AM/FM radio, headlights, tail lights, stoplights, back-up lights, identification light clusters, turn indicators, hazard warning, electric windshield wiper and washer, back-up alarm and plain and convex mirrors on both sides.

Yes ☒ No ☐
Page # 1-2

Operating Weight

Working weight, including 60" excavating bucket and half-full fuel tanks shall exceed 34,500 pounds.

Yes ☒ No ☐

Page # 4

Digging Specifications with 60" Excavating Bucket

Maximum Digging Depth: 13' 0"
Maximum Surface Reach: 24' 9"
Boom Tilt (Total Arc/CW Arc/CCW Arc): 220°/110°/110°
Minimum Reach (Cleanup - Bucket level, ground level boom retracted): 6' 5"
Maximum Digging Depth (165° Pivot): 13' 0"
Minimum Boom Arc: +30°, -60° level
Tail Swing: 6' 7"
Maximum Height with Bucket Below ground level: 14' 7"
Maximum Loading Height 16' 10"
Bucket Pivot 165°

Yes ☒ No ☐

Page # 3

Lifting Capacity without bucket, at ground level

	Over-End	Over-Side
15' 0" Radius	4,760 lbs.....	4,760 lbs.
20' 0" Radius	3,365 lbs.....	3,365 lbs.
22' 9" Max Radius	2,950 lbs.	2,950 lbs.

Yes ☒ No ☐

Page # 3

Travel Dimensions with 60" Excavating Bucket

Width 8' 6"
Height with bucket 12' 9"
Length 27' 1"

Yes ☒ No ☐

Page # 3

The equipment shall be capable of performing all functions without the use of outriggers.

Yes ☒ No ☐

Page # 2

INVITATION TO BID HEAVY EQUIPMENT

NOTICE OF BID OPENING

NOTICE IS HEREBY GIVEN that the Association of County Commissions of Alabama, which administers the Alabama County Joint Bid Program on behalf of Alabama's county governing bodies, shall receive and open bids for the purchase of zero (0) or more items of heavy road equipment at its office located at 2 North Jackson Street, Montgomery, Alabama, at **10:00 a.m. on Friday, October 27, 2023**. Bid specifications are available at <http://www.alabamacounties.org/heavy-equipment/> for each of the following items:

Backhoes
Track Mount Excavators
Compact Track Mount Excavators
Mini Track Excavator
Wheeled Excavators
Highway Speed Truck Excavators
Motorgraders
Heavy Duty Hydrostatic Bulldozers
Mulching Dozer
Wheel Loaders
Heavy Duty Dump Chassis'
Lowboy Tractors
Skid Steer Attachments
Asphalt Milling Attachments

Ride-on Industrial Boom Mowers
Rubber Tire Roller
7.5 Ton Single Drum Vibratory Roller
One-man Pothole Patchers
Trailer Mounted Patcher s
Trailer Mount Mastic Patcher/Crack Sealer
Asphalt Storage Tanks
Half Round End Dump Trailer
Lowboy Trailers
16' Steel Dump Bodies (Automatic and Manual)

Time is of the essence in submitting bids and only bids received in the Association office by 10:00 a.m. Central Time on Friday, October 27, 2023 will be opened and considered. Bidders and any other interested individuals are invited to attend the bid opening.

NOTICE OF BID OPENING PROCEDURES

All bids for **Heavy Equipment** will be opened and the name(s) of the bidders read aloud on the morning of the bid opening on Friday, **October 27, 2023 at 10:00 a.m.** at 2 North Jackson Street, Montgomery, AL. The specifics of each bid submitted will be compiled by the Association staff thereafter and will be available, **upon written or emailed request**, one week after the bid opening. Requests should be emailed to jointbid@alabamacounties.org.

THE INVITATION PACKAGE

The invitation package for each item to be bid includes: this invitation to bid, the written bid specifications for the particular item of heavy road equipment, and a Bid Submittal Form to be used in submitting a bid for that particular item. Bidders should verify that they have received all pages of the invitation package. If there are any omissions, the bidder should contact **Kenya Howard** in the Association office by mail, fax, or e-mail (jointbid@alabamacounties.org) to request missing pages. It is the responsibility of the bidder to make this request in sufficient time to prepare and submit the bid in time for the bid opening. Bidders should carefully read and comply with all parts of the invitation package, including all attachments and/or any addendum.

PREPARING AND SUBMITTING BIDS

All bids must be typed or hand written in ink on the attached Bid Submittal Form. **The completed Bid Submittal Form shall be placed in front of and separated from all other documents included in the bid packet, such that it will be the first document viewed upon opening the bid packet.**

Bids submitted in pencil and bids not submitted on the Bid Submittal Form will **not** be considered. All bids shall include a current catalog or model specification document for the equipment model number being offered for consideration. Bids submitted without such documentation will **not** be considered. Only information contained on the attached Bid Submittal Form and in the model specification document will be considered in evaluating bids.

Each separate requirement in the bid specification includes a block for indicating whether or not the item bid meets the specification. The bidder shall indicate compliance with each requirement by checking "Yes" or "No" in the block to the right of each bid specification. In addition, the bidder shall indicate the page number in the supplied manufacturer's equipment literature on which compliance with the specification can be verified. Failure to complete this portion of the bid form may result in the subject bid not being considered.

Each bid for one of the heavy equipment items included in the bid package must be submitted on the Bid Submittal Form for that item and forwarded in a separate envelope with the bid item and item number clearly identified on the outside of the envelope. Envelopes containing a "no bid" shall also include the words "NO BID" on the outside of the envelope. Facsimiles and e-mails will not be accepted. Bids submitted by "Express/Overnight" services must be in a separate inner envelope or package sealed and identified as stated above. All bids must be received in the Association office prior to the bid opening. Bids received after the deadline will be returned unopened.

The County Joint Bid Program reserves the right to require a performance bond from successful bidders as permitted under Alabama law. However, **no bid bond is required for this bid offering.**

All bids should be mailed or hand-delivered to:

**ATTN: Joint Bid Program
Association of County Commissions of Alabama or ACCA
2 North Jackson Street, FL 7, Montgomery, Alabama 36104 (Physical Address)
P.O. Box 5040, Montgomery, Alabama 36103 (Mailing Address)**

BID SPECIFICATIONS

Please note that each piece of heavy equipment available for bid may include several different sizes and categories of machines. You should read each set of specifications very carefully as the differences vary depending upon the piece and size of equipment.

The award will be based on the total cost of the **Standard Machine** bid by the lowest responsible bidder. Each Bid shall include a **Manufacturer's Suggested Retail Price Sheet (MSRP)** for each machine bid. The percent difference between the Manufacturer's Suggested Retail Price (MSRP) for the standard machine as specified by these bid specifications and the actual price bid by the vendor will be calculated and that percentage discount shall be applied to any options an individual county may choose to add to the machine.

Once the bids have been awarded, any county participant purchasing under this program may, at its discretion, add any of the vendor's available options at the same discount off the Manufacturer's Suggested Retail Price Sheet as was applied to the Standard Machine Price Bid.

Any use of specific names and/or model numbers in the attached specifications is not intended to restrict the bidder or any seller or manufacturer, but is included solely for the purpose of indicating the type, size, and quality of materials, product services, or equipment considered best adapted to the use of the counties participating in the joint bid program.

ACQUISITION AND FINANCING OPTIONS

The awarded Vendor will provide the equipment, including any options required by the purchaser, at the awarded price as contracted through the Joint Bid Program. The purchaser may secure its own financing to acquire the equipment or execute any financial options available under Alabama law with the awarded Vendor in order to acquire the equipment.

BIDDER QUALIFICATIONS

All bidders and all program participants must be in compliance with any applicable federal, state, county and municipal laws, regulations, resolutions and ordinances, including but not limited to, licensing, permitting, and taxation requirements. All bidders should be prepared to submit evidence or documentation as proof that they are properly licensed and permitted under any applicable laws upon request. Such evidence or documentation may be submitted with the bid. Additionally, all bidders shall provide proof that they are in compliance with the e-verify requirements of Alabama's Immigration Law (Ala. Code § 31-13-1 et seq., as amended by Act No. 2012-491).

BID AWARD

The Houston County Commission will serve as the awarding authority for all bids and will award all contracts at a regular meeting of the Houston County Commission. Any and all bids submitted in compliance with this invitation to bid shall be considered, and award will be made to the lowest responsible bidder meeting bid specifications as determined by the awarding authority in compliance with Alabama law. All bids will be reviewed and evaluated by a committee created for that purpose, which committee will make comments and recommendations to the awarding authority regarding the award. All factors contained in each invitation package will be evaluated in determining the successful bidder, and any omissions of the stated requirements may be cause for rejection of the bid submitted. The awarding authority reserves the right to reject any and all bids, to waive any informality in bids, and to accept in whole or in part such bid or bids solely at its discretion.

The contract period will be one year with an option to renew for a second and third year under identical price, terms, and conditions upon the mutual consent of the vendor and the awarding authority. Any renewal contract shall be approved in writing by the vendor and the awarding authority no later than 90 days prior to the expiration of the existing contract.

CONTACT REGARDING BIDS AND INVITATION

Contact initiated by a potential bidder with any county official, county employee, or member of the Association staff shall only be as specifically set out in this Invitation to Bid. Any questions related to the bid or the County Joint Bid Program shall be directed to Association staff in writing under the procedures set out in this Invitation to Bid. Additionally, a bidder may contact the Association in writing to request an appointment to review bid specifications following the bid opening. **However, there shall be no communication with any county official or county employee regarding this bid between the date of this invitation and the date of bid award.** Any contact other than as set out here shall be deemed as an attempt to unduly influence the bid award, and shall be grounds for rejection of the bid submitted by the bidder initiating such other contact.

Any questions or problems related to downloading or obtaining copies of this Invitation to Bid should be directed to **Kenya Howard** at jointbid@alabamacounties.org or **334-263-7594**.

Any other questions or requests for additional information regarding this invitation or the bid specifications shall be submitted **in writing** no later than five (5) days prior to bid opening to:

ATTN: **Patrick McDougald**
Association of County Commissions of Alabama
P.O. Box 5040
Montgomery, Alabama 36103
E-mail: pattymackdaddy@gmail.com

GRADALL®

D174

HYDRAULIC
EXCAVATOR



D174 HIGHWAY SPEED HYDRAULIC EXCAVATOR

SPECIFICATIONS

Engine

- Cummins ISB 6.7. 660 ft lb Torque @ 1600 rpm. 300 hp @ 2600 rpm

Intake: Electric grid air warmer

Air Filter

- 2-stage dry type with safety element, ejector valve and service indicator

Electrical System

- 12 volt, 160 amp alternator with integral voltage regulator. 2 SAE Group 31 1900 CCA batteries

Fuel Tank Capacity: 80 gal (303 L)

DEF Tank Capacity: 13 gal (49 L)

Gear Speeds (with 11R22.5 tires)

Gear	1	2	3	4	5	REV
MPH	10.6	21.7	31.6	48.7	60	9.74
Km/hr	(17.0)	(34.9)	(50.9)	(78.4)	(97)	(15.2)

Upperstructure Cab

- All-weather cab isolated from frame on rubber mounts
- Tinted safety glass windows
- Skylight
- Acoustical lining
- Four-way adjustable seat
- Dome light
- Filtered air heater and defroster
- Air conditioning
- AM/FM radio
- Heat source is provided by a fast response, closed circuit hydraulic heater with 20,000 BTU/Hr. capacity
- Front window slides to overhead storage
- Rearview mirrors on right and left sides of the machine
- Windshield wiper and washer
- Operator's seat belt

Upperstructure Controls

- Two electronic joysticks control (hoist, bucket, telescope and swing)
- One rocker switch (tilt) control
- Joysticks are mounted on arm pods that are adjustable for individual operator comfort and convenience
- Quick change joystick pattern using interactive display
- Two foot pedals for remote control of undercarriage travel and brakes
- Steering is handled with a rocker switch on top of the left hand joystick
- Forward and reverse travel selected with right-hand joystick button
- Self-centering joysticks and pedals; when controls are released, power for movement disengages and swing and travel brakes set automatically

System Monitor

- Top selector buttons include
 - Joystick pattern, hour meter and indicator lamps
- Bottom selector buttons include
 - Engine speed control, auto idle select
 - A/C on select and heater temperature control

The display shows as follows

- Park brake
- Low air brake pressure
- Malfunction indicator lamp (mil)
- Hydraulic oil level warning
- Hydraulic oil filter warning
- Engine stop lamp
- Amber warning lamp (engine)
- Wait to start lamp
- Diesel particulate filter lamp
- High exhaust system temperature
- Engine speed
- Fuel level
- DEF level
- Transmission gear request
- Transmission gear status
- Transmission oil temp
- Hydraulic oil temp
- Mode status (travel/remote)
- Check transmission lamp
- Cab blower fan

Boom

- Two piece triangular telescoping boom
- Adjustable boom rollers with eccentric shafts
- 220° boom tilt
- 90° boom pivot angle

Hydraulic System

Pumps

- One load-sensing bent axis piston pump; 0-58 GPM (0-219 L/min) total

SYSTEM SPECIFICATIONS

Four Double Acting Cylinders

- 2 hoist cylinders: 3.25" bore x 2.25" rod x 28.5" stroke (83 mm x 57 mm x 724 mm)
- 1 tool cylinder: 4.5" bore x 2.5" rod x 18.88" stroke (114 mm x 63.5 mm x 479 mm)
- 1 boom cylinder: 3.25" bore x 2.25" rod x 123" stroke (83 mm x 57 mm x 3124 mm)

Two Hydraulic Motors

- Swing, 51 hp (38kW); Tilt, 21 hp (16kW)

Operating Pressures

- Hoist..... 3,800 psi (262 BAR)
- Tilt 2,500 psi (172 BAR)
- Swing 3,800 psi (262 BAR)
- Tool 3,800 psi (262 BAR)
- Telescope 3,800 psi (262 BAR)
- Pilot system..... 550 psi (38 BAR)

Oil Capacity

- Reservoir 62 gallons (235 L)
- System 68 gallons (257 L)
- Pressurized reservoir with visual oil level gauge

Filtration System

- 5 micron return filter
- 10 micron pilot filter
- Fin and tube-type oil cooler with thermostatically controlled cooling fan
- Pressure-compensated, load-sensing valves with circuit reliefs in all circuits

Undercarriage

- 4 x 4
- Wheelbase: 190" (4.83 m)
- Width 102" (2.6 m)

Transmission

- Allison 3500 RDS automatic

Gross Vehicle Axle Weight Rating

- 36,200 lb (16,420 kg)

Front Axle

- 13,200 lb (5987 kg) rating

Rear Axle

- 23,000 lb (10,433 kg) rating 6.14 ratio
- Single reduction with driver controlled differential lock.

Suspension

- Front: leaf springs with automatic lock-out cylinders
- Rear: solid mount

Brakes

- Front: Meritor "Q+" Series
 - Cam-Master Size: 16.5" x 5" (419 mm x 127 mm)
 - ABS Brakes
 - Automatic slack adjusters.
- Rear: Meritor "Q+" Series
 - Cam-Master Size: 16.5" x 7" (419 mm x 178 mm)
 - Automatic Slack Adjusters
- Spring brake system incorporates emergency and parking brakes on the rear axle

Wheels

- Hub piloted disc 10-stud
- 11.25" (286 mm) bolt circle

Tires

- Front: M/S11R22.5 16-ply mud and snow traction tread
- Rear: M/S11R22.5 16-ply mud and snow traction tread

Steering

- Integral hydraulic power steering

Standard Chassis Equipment

- Halogen headlights
- Tail lights
- Back-up lights and alarm
- Stoplights
- Identification lights front and rear
- Directional lights
- Four-Way hazard lights
- Front tow hooks
- Desiccant type air dryer with automatic purge valve

Chassis Cab

- Two-person cab
- Sun visor
- Gauges:
 - Oil pressure
 - Coolant temperatures
 - Air tank pressures
 - Fuel level
 - DEF level
 - Voltmeter
 - Speedometer with odometer
 - Tachometer
 - Hour meter
- Engine and transmission monitor lights
- Engine shutdown controlled by engine electronics
- Indicator lights and controls for rear axle differential lock
- Park brake control
- Tinted safety glass
- Roll up and down windows
- Instrument panel lights
- Windshield wiper/washer
- West coast style mirror system with plane and convex mirrors

- Fresh air heater and defroster
- Thermostatically controlled heater
- Dome light
- Air suspension seat with seat belt both driver and passenger
- Key ignition switch with neutral start
- AM/FM bluetooth radio
- Dual electric horns
- Center storage console
- 12 volt power supply in dash
- Aluminum kick plates on insides of both chassis doors

Swing

- Priority swing circuit with axial piston motor
- Planetary transmission

Swing speed: 8 rpm

Swing Brake

- Automatic spring-set/hydraulic release wet-disc swing brake
- Dynamic braking is provided by the hydraulic system

Hydraulic Remote Control

- Upperstructure powered by chassis hydraulics through PTO
- Travel and brake pedals in the upperstructure cab
- Steering controlled with rocker switch on left-hand joystick
- Digging brakes and front axle lockout cylinders set automatically with travel pedal in neutral
- Parking brakes controlled by toggle
- Electrically operated alarm mounted on undercarriage signal remote control movement in either direction, reverse movement when driven from undercarriage cab

GRADALL Model D174 4x4 Lift Capacity Over Side or Rear - LB. (kg)

LOAD POINT HEIGHT		LOAD RADIUS					
		15' 6" (4.7 m)		20' 6" (6.2 m)		Maximum radius	
		Over End	Over Side	Over End	Over Side	Over End	Over Side
ABOVE GROUND LEVEL	19' 7" (6.0 m)					3000 (1360)	3000 (1360)
	15' 6" (4.7 m)	4660 (2115)	4660 (2115)	3180 (1440)	3180 (1440)	2880 (1305)	2880 (1305)
	10' 6" (3.2 m)	5390 (2445)	5390 (2445)	3530 (1600)	3530 (1600)	2880 (1305)	2880 (1305)
	BOOM LEVEL 9' 2" (2.8 m)	5490 (2490)	5490 (2490)	3580 (1625)	3580 (1625)	2885 (1310)	2885 (1310)
	5' 6" (1.7 m)	5480 (2485)	5480 (2485)	3615 (1640)	3615 (1640)	2905 (1320)	2905 (1320)
AT GROUND LEVEL		4760 (2160)	4760 (2160)	3365 (1525)	3365 (1525)	2950 (1340)	2950 (1340)
BELOW GROUND LEVEL	4' 6" (1.4 m)	3690 (1675)	3690 (1675)			2955 (1340)	2955 (1340)
	9' 6" (2.9 m)	2695 (1220)	2695 (1220)			2690 (1220)	2690 (1220)
	10' 3" (3.1 m)					2580 (1170)	2580 (1170)

NOTE: The above loads are in compliance with the SAE standard J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

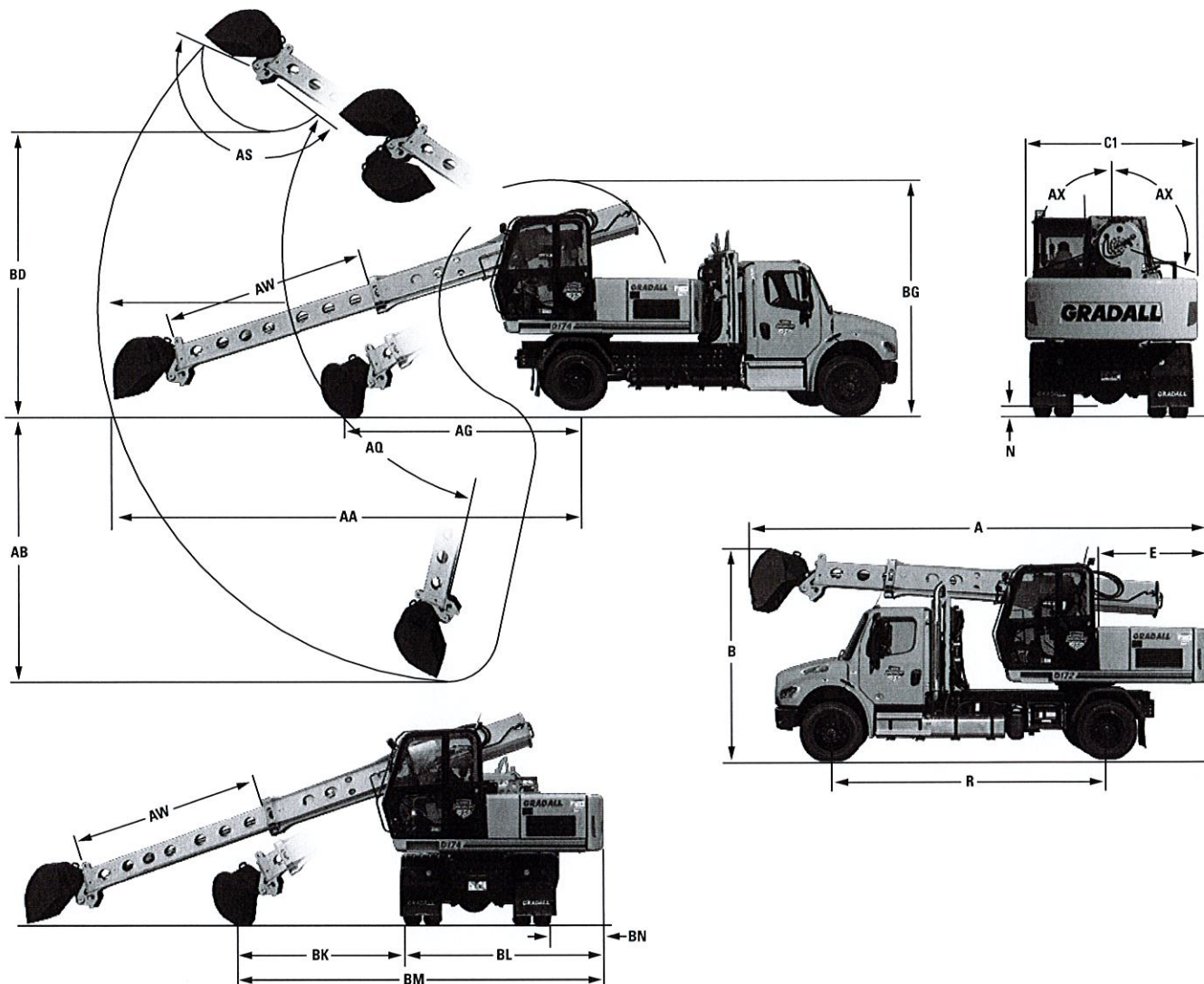
The rated lift capacity is based on the machine being equipped with 4,500 lb (2041 kg) counterweight, standard boom, standard tires, no auxiliary hydraulics and no bucket.

NOTE: Bucket adjustment values are 87% of the actual bucket weights.

The load point is located on the bucket pivot point, including load listed for maximum radius.

Do not attempt to lift or hold any load greater than these rated values at specified load radii and heights. The weight of slings and any auxiliary devices must be deducted from the rated load to determine the net load that may be lifted.

ATTENTION: All rated loads are based on the machine being stationary and level on a firm supporting surface. For safe working loads, the user must make allowance for his particular job conditions such as soft or uneven ground, out of level conditions, side loads, hazardous conditions, experience of personnel, etc. The operator and other personnel must fully acquaint themselves with the Operator's Manual furnished by the manufacturer before operating this machine. Rules for safe operation of equipment must be adhered to at all times.



Dimensions

4 x 4

A	27'1" (8.3 m)	Overall length (boom in rack) with bucket
B	12'9" (3.8 m)	Overall height (boom in rack) with bucket
C1	8'6" (2.6 m)	Width of upperstructure
E	6'7" (2.0 m)	Swing clearance, rear of upperstructure
N	10" (254 mm)	Ground clearance (per SAE J1234)
R	15'10" (4.8 m)	Wheelbase
AA	24'9" (7.5 m)	Maximum radius at ground line (165° pivot)
AB	13'0" (4.0 m)	Maximum digging depth (165° pivot)
AG	11'0" (3.4 m)	Minimum level cut radius with bucket flat on ground line
AQ	30° Up & 60° Down	Boom pivot angle

4 x 4

AS	165°	Bucket pivot angle
AW	10'3" (3.1 m)	Telescoping boom travel
AX	110°	Bucket tilt angle (both sides of center)
BD	16'10" (5.1 m)	Minimum clearance of bucket teeth, with bucket pivot at maximum height
BG	14'7" (4.5 m)	Maximum height of working equipment with bucket below ground line
BK	6'5" (2.0 m)	Minimum bucket cleanup
BL	10'8" (3.3 m)	Swing lane clearance
BM	17'7" (5.4 m)	Minimum machine swing radius at ground level
BN	30" (762 mm)	Passenger side swing clearance

Function Forces

Rated boom force:

16,387 lb (72.9 kN)

Rated bucket breakout force:

11,400 lb (50.7 kN)

Weight

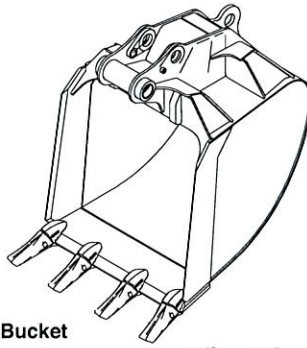
- Approximate working weight, including a 60" (1.54 m) bucket, fuel tank half full
- 4 x 4: 34,500 lb (15,650 kg)

Optional Equipment

- Set of five working lights
- Passenger side door step
- Auxiliary hydraulics
- Rear step

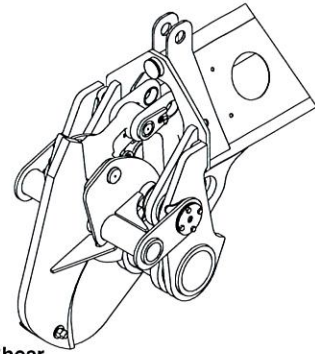
Attachments

- Buckets fabricated of steel plate, with high strength, low alloy cutting edges and wear strips
- Standard attachments available for wide range of applications



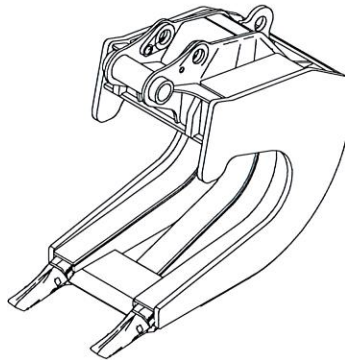
Excavating Bucket

8215-6008	36" (914 mm)	yd ³	m ³
	785 lbs (356 kg)	5/8	0.54



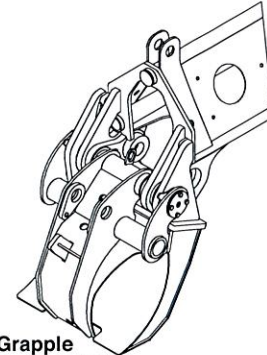
Tree Limb Shear

8215-5004 770 lbs (349 kg)



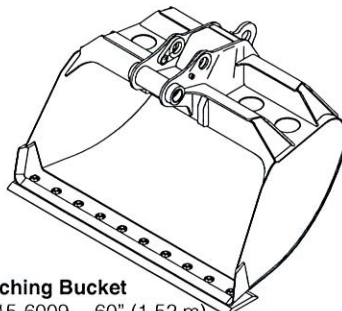
Pavement Removal Bucket

8215-6004	24" (0.610 m)
	1284 lbs (582 kg)



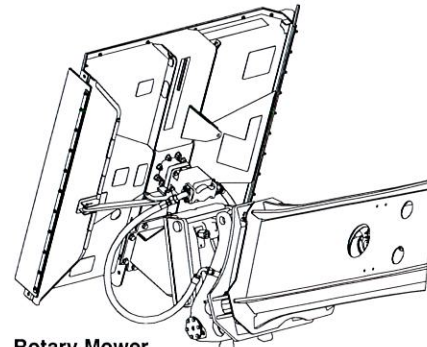
Fixed Thumb Grapple

8215-5003 530 lbs (240 kg)



Ditching Bucket

8215-6009	60" (1.52 m)
	784 lbs (356 kg)
8215-5001	60" (1.52 m)
	914 lbs (415 kg)



Rotary Mower

8215-5005	50" (1.27 m)
	1290 lbs (585 kg)

Flail Mower

8215-5006	40" (1.02 m)
	1053 lbs (478 kg)

It is Gradall Policy to continually improve its products. Therefore designs, materials and specifications are subject to change without notice and without incurring any liability on units already sold. Units shown may have optional equipment.

GRADALL®

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Form No. 12202 12/22
Printed in USA



Company ID Number:571783

Client Company ID Number:1453697

Information Required for the E-Verify Program	
Information relating to your Company:	
Company Name	Tractor & Equipment Co Inc
Company Facility Address	5336 Messer Airport Highway Birmingham, AL 35212
Company Alternate Address	PO Box 12326 Birmingham, AL 35202
County or Parish	Jefferson
Employer Identification Number	63-0211767
North American Industry Classification Systems Code	Merchant Wholesalers, Durable Goods (423)
Parent Company	
Number of Employees	500 to 999
Number of Sites Verified for	22