

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

Company Name: Traxton & Equipment Company
Address: P.O. Box 12326
Birmingham, AL 35212
Bid Submitted by: JOE PATTON
(Name of company representative)
Title: VP 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

AP

That the bid price will be honored for all counties for the period from Jan. 1, 2021 to Dec. 31, 2021.

AP

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

AP

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

AP

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

AP

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

AP

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

AP

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

AP

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

AP


Total Bid Price for Standard Machine: \$ 278,275.⁰⁰
(Total Bid Price for Standard Machine Includes Freight Preparation, Delivery and Standard Warranty Costs)*

Freight Preparation and Delivery: \$ 4700.⁰⁰
(Included in Standard Machine Bid Price)

Manufacturer's Suggested Retail Price for Standard Machine: \$ 291,668.⁰⁰

Equipment Model #: GRADALL D154

Description: Highway SPEED Truck Mounted Excavator - 4WD

Signature of company representative submitting bid: 

Title: VP

* **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*

AP

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

AP

Equipment Model #: GRADALL D154

Description: Highway SPEED Truck Mounted EXCAVATOR - 4WD

Signature of company representative submitting bid: 

Title: VP

***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.

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 D154**. 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 # 2

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, 2

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

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 # 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 **250 HP @ 2300 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 **13,000 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 **6.43 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 # 2

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, a basic high back non-suspension passenger seat, **3 point** high visibility orange 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

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 # 3

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 (8' level bottom): 12' 5"
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 # 3

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

Model Options

D154 4x4 - \$291,668.00

Upperstructure

82139002K	Aux Hydraulics - Bi-Directional	\$4,015.00
	Beacon Warning Light LED Amber - Per PA DOT Spec EQN-120C	\$950.00
82179008K	Beacon, Single LED with Branch Guard - Upper	\$740.00
82189045K	Boom Rest Guard	\$525.00
82179016K	Camera System - Upper	\$3,250.00
80465068	Cigarette Lighter - Upper	\$21.00
80505005K	Escape Hammer	\$105.00
80865008K	Fire Extinguisher 10# - Upper	\$450.00
80483281	First Aid Kit	\$190.00
82169003K	Foot Pedal Operated Auxiliary Hydraulics - Uni-Directional Flow	\$640.00
80365084	Front Window Guard (Hinged) - Upper Cab	\$3,480.00
80769077K	Front Window Guard (Rigid) - Upper Cab	\$1,949.00
80789097K	Hand Signal Chart	\$284.00
82139003K	Low Pressure Aux. Return To Tank	\$430.00
82179010K	Lube Chart - Permanent Outside & Visible - Upper	\$380.00
	Paint, Special, Entire Unit -One Color (Please provide RAL # to factory)	\$7,500.00
82175006K	Rexroth Bodas Software & Cable Kit	\$1,857.00
80789100K	Slow Moving Vehicle Sign	\$250.00
80465058K	Sun Visor - Upper Cab	\$820.00
80755015K	Tool Hold Open Lock - Mechanical	\$290.00
80763114	Vandal Cover - Upper Cab	\$2,400.00
82179009K	Work Lights, LED	\$2,715.00

Chassis

82179007K	Beacon, Dual Beam, LED with Branch Guard - Chassis	\$1,030.00
82189058	Camera System	\$2,175.00
82189047K	Engine Block Heater	\$640.00
82189057K	Fire Extinguisher 10# - Chassis With Cover	\$240.00
82183033	Locking Def Cap w/ Key	\$150.00
82183032	Locking Fuel Cap w/ Key	\$205.00
82189037K	Lube Chart - Permanent Outside & Visible - Chassis	\$380.00
82189021K	Step, Driver's (LH) Side Rear	\$750.00
82189020K	Step, Passenger Side	\$1,000.00
82189022K	Step, Passenger Side (RH) Rear	\$750.00

Attachments

82155001	Bolt on Cutting Edge for 82156009 60" Ditch Bucket	\$745.00
82156015	Bucket - 24" Excavating	\$5,500.00
82156009	Bucket - Ditching - 60" Standard (order 82155001 for Bolt on Edge)	\$5,273.00
82156008	Bucket - Excavating 36"	\$6,025.00
82156004	Bucket - Pavement Removal 24"	\$7,877.00
80385171K	Emergency Kit - Flares & Triangles	\$160.00
82155006	Flail Mower, Tiger Brand 40" - Pin On	\$12,250.00
82155003	Grapple - Fix Thumb	\$7,500.00
82155004	Limb Shear	\$10,000.00
82155005	Rotary Mower, Tiger Brand 50" - Pin On	\$12,250.00

Manual Instructions

	Extra Set Of Keys (4): (2) Ignition & (2) Covers	\$20.00
	Printed Set Of Parts, Service & Operator's Manuals	\$260.00

GRADALL[®]

LIMITED WARRANTY

Gradall Industries, Inc. d/b/a Gradall ("Gradall") will repair or replace, at its option, any factory-installed part that is defective in materials or workmanship under normal use. Any needed part replacements will be made using new or remanufactured parts. This Limited Warranty is limited to repairing or replacing, at Gradall's option, any part proven defective under normal use; provided that the product has been properly registered with Gradall within thirty days after the in-service date and that all required reports are current. The warranty period begins on the product's in-service date, which is the first date the unit is either delivered to an end-user (the "Owner"), for purchase, rental or lease.

THIS WARRANTY EXTENDS ONLY TO THE ORIGINAL PURCHASER FROM GRADALL INDUSTRIES, INC. AND IS NON-TRANSFERABLE.

The Owner is responsible for all normal preventative maintenance and scheduled maintenance as detailed in the machine's Operator and Safety Manual. The Owner is also responsible for:

- Keeping the Operator and Safety Manual available to the operator of the product.
- Using the product in accordance with the Operator and Safety Manual.
- Releasing the product for warranty work.
- Reporting accidents immediately to Gradall.
- Using the product for safe, approved applications and using only approved accessories.
- Complying with factory initiated Field Campaigns.
- Using only approved components for maintenance and replacement parts.
- Ensuring that the operator of the product has been properly trained in the safe and proper use of the product.

This Limited Warranty is subject to those limitations and exclusions as listed in the Gradall Policies & Procedures Manual (41200037), which includes timelines and requirements for making claims under this Limited Warranty.

STANDARD WARRANTY

Gradall products carry the following warranties from the unit's in-service date for 2019 model-year (and beyond) machines:

- Standard Machines: 2 Years or 3000 hrs., whichever comes first.
 - Special Industrial Machines: . . 1 Year or 1500 hrs., whichever comes first.
- "Standard" and "Special Industrial" machine model designations are defined in the Gradall Policies & Procedures Manual (41200037)*

What is Not Covered

- Parts associated with unit maintenance are not warranted beyond 1 year of the product's in-service date.
- Items subject to normal wear and tear, noise, vibration, or deterioration are not warranted.
- This Limited Warranty does not cover damage caused by abusive usage or extreme applications.
- Any operation beyond the rated capacity or the improper use or application of the product or the substitution of parts not approved by Gradall or the failure to release the product for warranty work.
- Tires, engines and batteries are warranted by the applicable Manufacturer.
- Corrosion due to external forces or damage caused by stones, salt, gravel, accidents, chemicals or other forms of impact, industrial fallout or pollution, or previous repair.
- External surface rust left unrepaired due to neglect of the product.
- Chassis not manufactured by Gradall.



EXTENDED WARRANTY

An Extended Warranty may be purchased for a Gradall product at any time up to the end of the Standard Warranty period. A maximum of 1 extra year of Extended Warranty may be purchased for a maximum warranty period of 3 years.

What is Not Covered

- Items subject to service, maintenance, or normal wear, including but not limited to O-rings, Seals, Hoses, Paint, Tires, Belts, or Filters.
- Items supported by separate warranties such as the Engine or Transmission.
- Extended Warranty is not available for Special Industrial Machines and/or Applications due to their extreme nature.

MISCELLANEOUS

- Proper venue for any lawsuits arising from or related to this Limited Warranty shall only be in Tuscarawas County, Ohio, and governing law shall be the laws of the State of Ohio.
- Gradall may waive compliance with any of the terms of this Limited Warranty, but no waiver of any terms shall be deemed to be a waiver of that term in the future or of any other term.
- If any provision of this Limited Warranty shall violate any applicable law and is held to be unenforceable, then the invalidity of such provision shall not invalidate any other provisions herein.

EXCEPT AS PROVIDED HEREIN, GRADALL MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE WITH RESPECT TO PRODUCTS OR PARTS FURNISHED BY GRADALL. EXCEPT AS PROVIDED HEREIN, GRADALL SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO OWNER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS, OR DAMAGE CAUSED OR ALLEGED TO BE CAUSED DIRECTLY OR INDIRECTLY BY THE PRODUCTS INCLUDING, BUT NOT LIMITED TO, ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES RESULTING FROM THE USE OR OPERATION OF THE PRODUCTS OR ANY BREACH OF THIS WARRANTY. GRADALL'S MAXIMUM LIABILITY UNDER THIS WARRANTY SHALL BE THE PURCHASE PRICE PAID TO GRADALL WITH RESPECT TO THE WARRANTED PRODUCT.

GRADALL®

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New Philadelphia, Ohio 44663

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www.gradall.com

Certified ISO 9001 • 01/20
Part No. 41200003



SPECIFICATION GUIDE

GRADALL®



EXCAVATORS

CROSSOVER • HIGHWAY
CRAWLER • ROUGH TERRAIN



GRADALL

DISCOVERY SERIES excavators by Gradall are the cost-effective solution for governments and contractors who need to get to jobs faster ... complete many different jobs with fewer men and machines ... while staying within a tight equipment budget. Available in two-wheel or four-wheel-drive, Discovery Series models feature the famous telescoping, tilting Gradall boom as well as a Freightliner truck chassis.



SERIES V EXCAVATORS feature an upgrade to Tier 4-final compliant diesel engines by Volvo Penta, meeting stringent government emissions standards. These XL Series excavators are proven performers for contractors and governments, putting rugged



Gradall booms to work on high performance excavation, demolition, loading and unloading as well as finished grading and spreading rip-rap.





CROSSOVER HIGHWAY SPEED EXCAVATORS

		D 152	D 154
OPERATING RANGE & PERFORMANCE	Max. Digging Depth	13' 6" (4.1 m)	13' 0" (4.0 m)
	Max. Radius at Groundline	24' 11" (7.6 m)	24' 9" (7.5 m)
	Max. Loading Height	16' 4" (5.0 m)	16' 10" (5.1 m)
	Max. Work Hgt., (Boom below grade)	14' 1" (4.3 m)	14' 7" (4.5 m)
	Boom Telescope	10' 3" (3.1 m)	10' 3" (3.1 m)
	Boom Tilt	220°	220°
	Bucket Pivot Angle	165°	165°
	Rated Boom Force	16,387 lb (72.9 kN)	16,387 lb (72.9 kN)
	Rated Bucket Breakout Force	11,400 lb (50.7 kN)	11,400 lb (50.7 kN)
	Max. Lift Capacity	5,950 lb (2,700 kg)	5,950 lb (2,700 kg)
	Operating Weight	32,200 lb (14,600 kg)	34,500 lb (15,650 kg)
	Swing Clearance	6' 7" (2.0 m)	6' 7" (2.0 m)
WEIGHTS & DIMENSIONS	Transport Length w/ Bucket	27' 1" (8.3 m)	27' 1" (8.3 m)
	Transport Height w/ Bucket	12' 3" (3.7 m)	12' 9" (3.8 m)
	Transport Width w/ Bucket	8' 6" (2.6 m)	8' 6" (2.6 m)
	Drive	4 x 2	4 x 4
	Gross Vehicle Axle Rating	33,000 lb (14,968 kg)	36,200 lb (16,420 kg)
UNDERCARRIAGE	Wheelbase	15' 0" (4.8 m)	15' 0" (4.8 m)
	Engine Standard	Cummins ISB 6.7	Cummins ISB 6.7
	HP @ RPM	220/2300	250/2300
	Travel Speed	55 mph (88.5 kph)	55 mph (88.5 kph)
	Ground Clearance	10" (250 mm)	10" (250 mm)
ATTACHMENTS	Trenching Buckets		
	Excavating Buckets	•	•
	Ditch Cleaning Buckets	•	•
	Dredging Buckets		
	Pavement Removal Buckets	•	•
	Grading Blades		
	Telestick		
	Boom Extensions		
	Flail Mowers	•	•
	Rotary Mowers	•	•
	Hydraulic Hammers		
	Grapples	•	•

D 152

32,200 lb (14,600 kg)
24' 11" (7.6 m) reach
13' 6" (4.1 m) dig depth



D 154

34,500 lb (15,650 kg)
24' 9" (7.5 m) reach
13' 0" (4.0 m) dig depth



SERIES

HIGHWAY SPEED WHEELED EXCAVATORS

		XL 3100 V	XL 4100 V	XL 5100 V
OPERATING RANGE & PERFORMANCE	Max. Digging Depth	18' 4" (5.6 m)	20' 3" (6.2 m)	24' 5" (7.4 m)
	Max. Radius at Groundline	27' 3" (8.3 m)	30' 3" (9.2 m)	33' 9" (10.3 m)
	Max. Loading Height	15' 5" (4.7 m)	17' 2" (5.2 m)	18' 11" (5.8 m)
	Max. Work Hgt., <i>(Boom below grade)</i>	14' 11" (4.5 m)	15' 0" (4.6 m)	15' 0" (4.6 m)
	Boom Telescope	11' 0" (3.4 m)	12' 6" (3.8 m)	14' 0" (4.3 m)
	Boom Tilt	220°	220°	220°
	Bucket Pivot Angle	165°	165°	165°
	Rated Boom Force	21,940 lb (97.6 kN)	21,940 lb (97.6 kN)	24,500 lb (109 kN)
	Rated Bucket Breakout Force	17,990 lb (80 kN)	24,900 lb (111 kN)	24,900 lb (111 kN)
	Max. Lift Capacity	7,870 lb (3,570 kg)	12,130 lb (5,390 kg)	13,213 lb (5,993 kg)
	Operating Weight	40,930 lb (18,566 kg)	49,684 lb (22,536 kg)	57,670 lb (26,159 kg)
	Swing Clearance	7' 6" (2.3 m)	8' 0" (2.4 m)	8' 6" (2.6 m)
WEIGHTS & DIMENSIONS	Transport Length w/ Bucket	27' 6" (8.4 m)	29' 6" (9.0 m)	30' 5" (9.3 m)
	Transport Height w/ Bucket	11' 11" (3.6 m)	11' 9" (3.6 m)	11' 9" (3.6 m)
	Transport Width w/ Bucket	8' 6" (2.6 m)	8' 6" (2.6 m)	8' 6" (2.6 m)
	Drive	4 x 2 or 4 x 4	6 x 4 or 6 x 6	6 x 4 or 6 x 6
	Gross Vehicle Axle Rating	41,250 lb (18,711 kg)	66,000 lb (29,937 kg)	66,000 lb (29,937 kg)
UNDERCARRIAGE	Wheelbase	13' 4" (4.1 m)	14' 2" (4.3 m)	14' 3" (4.3 m)
	Engine Standard	Volvo TAD572VE Tier 4f 5.1L	Volvo TAD871VE Tier 4f 7.7L	Volvo TAD873VE Tier 4f 7.7L
	HP @ RPM	215/2300	248/2200	315/2200
	Travel Speed	60 mph (96.6 kph)	59.9 mph (96.4 kph)	59.5 mph (95.8 kph)
	Ground Clearance	10" (254 mm)	10" (254 mm)	10" (254 mm)
ATTACHMENTS	Trenching Buckets	•	•	•
	Excavating Buckets	•	•	•
	Ditch Cleaning Buckets	•	•	•
	Dredging Buckets	•	•	•
	Pavement Removal Buckets	•	•	•
	Grading Blades	•	•	•
	Teleslick	•	•	•
	Boom Extensions	•	•	•
	Flail Mowers	•	•	•
	Rotary Mowers	•	•	•
	Hydraulic Hammers	•	•	•
	Grapples	•	•	•

XL 3100 V

40,930 lb (18,566 kg)
27' 3" (8.3 m) reach
18' 4" (5.6 m) dig depth



XL 4100 V

49,684 lb (22,536 kg)
30' 3" (9.2 m) reach
20' 3" (6.2 m) dig depth



XL 5100 V

57,670 lb (26,159 kg)
33' 9" (10.3 m) reach
24' 5" (7.4 m) dig depth



SERIES

CRAWLER EXCAVATORS

	XL 3200 V	XL 4200 V	XL 5200 V
OPERATING RANGE & PERFORMANCE	Engine Standard	Volvo TAD571 VE Tier 4f 5.1L	Volvo TAD571 VE Tier 4f 5.1L
	HP @ RPM	172/2,000	173/2,200
	Max. Digging Depth	19' 2" (5.8 m)	22' 0" (6.7 m)
	Max. Radius at Groundline	27' 5" (8.4 m)	30' 6" (9.3 m)
	Max. Loading Height	14' 9" (4.5 m)	16' 3" (5.0 m)
	Max. Work Hgt., (Boom below grade)	14' 0" (4.3 m)	14' 0" (4.3 m)
	Boom Telescope	11' 0" (3.4 m)	12' 6" (3.8 m)
	Boom Tilt	220°	220°
	Bucket Pivot Angle	165°	165°
	Rated Boom Force	22,075 lb (98.2 kN)	22,075 lb (98.2 kN)
	Rated Bucket Breakout Force	19,300 lb (86 kN)	25,405 lb (113 kN)
	Max. Lift Capacity	8,200 lb (3,720 kg)	12,590 lb (5,710 kg)
			13,764 lb (6,243 kg)
WEIGHTS & DIMENSIONS	Operating Weight	39,240 lb (17,799 kg)	46,862 lb (21,256 kg)
	Swing Clearance	7' 6" (2.3 m)	8' 0" (2.4 m)
	Transport Length w/ Bucket	24' 6" (7.5 m)	26' 6" (8.1 m)
	Transport Height w/ Bucket	10' 9" (3.3 m)	10' 9" (3.3 m)
	Transport Width w/ Bucket	8' 6" (2.6 m)	10' 6" (3.2 m)
UNDERCARRIAGE	Travel Speed	3.4 mph (5.5 kph)	3.4 mph (5.5 kph)
	Track Length	11' 9" (3.6 m)	13' 8" (4.2 m)
	Pad Width	23.6" (600 mm)	31.5" (800 mm)
	Ground Bearing Pressure	7.5 psi/51.7kPa	5.7 psi/39.3 kPa
	Ground Clearance	18" (454 mm)	18" (454 mm)
ATTACHMENTS	Trenching Buckets	•	•
	Excavating Buckets	•	•
	Ditch Cleaning Buckets	•	•
	Dredging Buckets	•	•
	Pavement Removal Buckets	•	•
	Grading Blades	•	•
	Telestick	•	•
	Boom Extensions	•	•
	Flail Mowers	•	•
	Rotary Mowers	•	•
	Hydraulic Hammers	•	•
	Grapples	•	•

XL 3200 V

39,240 lb (17,799 kg)
27' 5" (8.4 m) reach
19' 2" (5.8 m) dig depth



XL 4200 V

46,862 lb (21,256 kg)
30' 6" (9.3 m) reach
22' 0" (6.7 m) dig depth



XL 5200 V

54,452 lb (24,699 kg)
33' 11" (10.3 m) reach
25' 4" (7.7 m) dig depth



SERIES

ROUGH TERRAIN WHEELED EXCAVATORS

V

XL 3300 V

XL 4300 V

XL 5300 V

OPERATING RANGE & PERFORMANCE

Engine Standard	Volvo TAD571 VE Tier 4f 5.1L	Volvo TAD571 VE Tier 4f 5.1L	Volvo TAD571 VE Tier 4f 5.1L
HP @ RPM	172/2,000	173/2,200	173/2,200
Max. Digging Depth	18' 5" (5.6 m)	21' 3" (6.5 m)	24' 7" (7.5 m)
Max. Radius at Groundline	27' 3" (8.3 m)	30' 4" (9.2 m)	33' 10" (10.3 m)
Max. Loading Height	15' 6" (4.7 m)	17' 0" (5.2 m)	18' 8" (5.7 m)
Max. Work Hgt., (Boom below grade)	14' 9" (4.5 m)	14' 9" (4.5 m)	14' 9" (4.5 m)
Boom Telescope	11' 0" (3.4 m)	12' 6" (3.8 m)	14' 0" (4.3 m)
Boom Tilt	220°	220°	220°
Bucket Pivot Angle	165°	165°	165°
Rated Boom Force	22,075 lb (98.2 kN)	22,075 lb (98.2 kN)	24,941 lb (111 kN)
Rated Bucket Breakout Force	19,300 lb (86 kN)	25,405 lb (113 kN)	25,405 lb (113 kN)
Max. Lift Capacity	8,150 lb (3,695 kg)	12,540 lb (5,690 kg)	13,764 lb (6,243 kg)

WEIGHTS & DIMENSIONS

Operating Weight	39,295 lb (17,823 kg)	43,580 lb (19,768 kg)	51,216 lb (23,231 kg)
Swing Clearance	7' 6" (2.3 m)	8' 0" (2.4 m)	8' 6" (2.6 m)
Transport Length w/ Bucket	24' 6" (7.5 m)	26' 6" (8.1 m)	30' 5" (9.3 m)
Transport Height w/ Bucket	12' 10" (3.9 m)	12' 10" (3.9 m)	12' 11" (3.9 m)
Transport Width w/ Bucket	8' 6" (2.6 m)	9' 1" (2.8 m)	9' 1" (2.8 m)

UNDERCARRIAGE

Drive	4 x 4	4 x 4	4 x 4
Wheelbase	8' 9" (2.7 m)	8' 9" (2.7 m)	8' 9" (2.7 m)
Travel Speed	20 mph (32.2 kph)	17.5 mph (28.2 kph)	15.0 mph (24.1kph)
Ground Clearance	11" (275 mm)	11" (275 mm)	11" (275 mm)

ATTACHMENTS

Trenching Buckets	•	•	•
Excavating Buckets	•	•	•
Ditch Cleaning Buckets	•	•	•
Dredging Buckets	•	•	•
Pavement Removal Buckets	•	•	•
Grading Blades	•	•	•
Telestick	•	•	•
Boom Extensions	•	•	•
Flail Mowers	•	•	•
Rotary Mowers	•	•	•
Hydraulic Hammers	•	•	•
Grapples	•	•	•

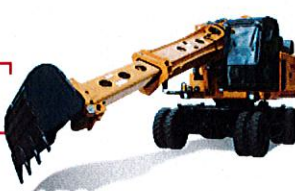
XL 3300 V

39,294 lb (17,823 kg)
27' 3" (8.3 m) reach
18' 5" (5.6 m) dig depth



XL 4300 V

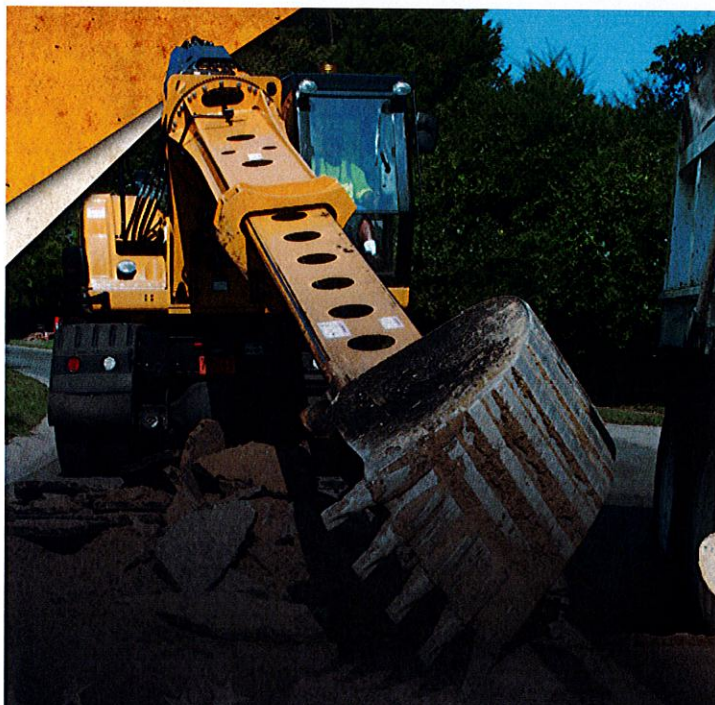
43,580 (19,768 kg)
30' 4" (9.2 m) reach
21' 3" (6.5 m) dig depth



XL 5300 V

51,216 lb (23,231 kg)
33' 10" (10.3 m) reach
24' 7" (7.5 m) dig depth





THE AMERICAN WAY TO GET MORE DONE

Gradall high-productivity, high-versatility excavators can do just about anything, just about anywhere. Our low-profile telescoping, full-tilting boom even allows Gradall excavators to work under bridges and in tunnels where others won't fit. Specify the only excavator that's made only in America.

GRADALL[®]

406 MILL AVE. SW, NEW PHILADELPHIA, OHIO 44663
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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.

Certified ISO 9001

Form No. 11802 5/18
Printed in USA



★ GRADALL ★

DISCOVERY

SERIES



HIGHER PRODUCTIVITY
WITH A LOWER EQUIPMENT INVESTMENT

Crossover Hydraulic Excavators for Governments
and Specialty Contractors

THE FIRST CROSSOVER HYDRAULIC EXCAVATOR

Gradall Industries introduces the cost-effective solution for governments and contractors who need to do more work with fewer machines on tight budgets.

Gradall's Discovery Series[®] excavators... the first crossover hydraulic excavators... combining the legendary benefits of Gradall's trademark full-tilting, telescoping boom with the proven over-the-road performance of a Freightliner chassis. All combined in one highly productive, cost-efficient package. Working closely with Freightliner, Gradall engineers have specifically designed Discovery Series Gradall excavators to deliver reliable, purpose-designed multi-task workhorses that are available only through Gradall distributors - and at a surprisingly low cost.



DESIGNED AND BUILT WITH AMERICAN INGENUITY

BENEFITS OF THE CROSSOVER:

- Compact, efficient design
- Short turning radius to work in tight areas
- Proven Freightliner chassis
- Full-size cabin with modern design
- Simplified and integrated electrical and hydraulic systems



EXCEPTIONAL MOBILITY... ...A LEGENDARY GRADALL ADVANTAGE TAKES A GIANT STEP FORWARD

From their earliest days, highway speed Gradall excavators impressed governmental entities and contractors because they could be driven by the operator. Traveling to jobsites at highway speeds, Gradalls get to work and then back to the safety of the equipment yard faster - all without the hassle and expense of a truck and a lowboy trailer.

Discovery Series models continue that tradition by integrating a popular Freightliner truck chassis with a highly productive Gradall excavator upperstructure. Operators are immediately comfortable driving Discovery Series excavators, and even repositioning them without leaving the upperstructure cab.

GRADALL ON-THE-GO:

- Get to jobsites quickly via interstate highways, city streets and county roads
- Convenient, productive repositioning from upperstructure cab
- No time lost to loading and transporting
- Reliable Freightliner trucks are preferred by many governmental fleets





THE GRADALL BOOM...

...carving out a worldwide reputation for versatility.

Now available in a high-value, budget-conscious design.

Gradall's legendary boom design efficiently positions attachments to achieve more productivity faster on a wider range of jobs. In effect, you can use just one machine to do the work of a backhoe, grader, excavator and a host of manual laborers.

The entire boom tilts 220° without sacrificing boom power - a common problem with conventional mini excavators using rotating boom-end devices.

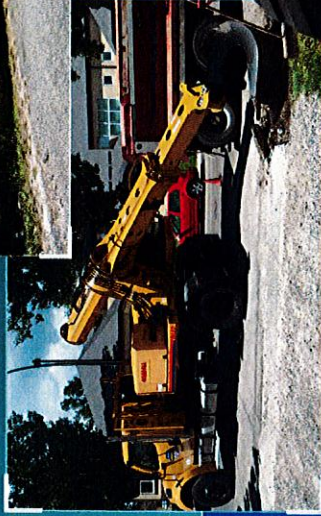
The rugged Gradall Discovery Series excavator has a strong boom with two overlapping sections that telescope out to 24 feet, 11 inches at grade - more reach and range than can be achieved with a tractor loader or compact excavator.

Plus, Discovery Series models benefit from the famous Gradall low-working-profile advantage. That's a low minimum working height that fits neatly under bridges, in tunnels, under trees and signage and into other low-overhead locations.

These are Gradall work sites where conventional digging machines simply cannot fit. Jobs conventional alternatives cannot reach. And machines with travel capabilities that simply don't compare.

GRADALL BOOM MOVEMENTS:

- Entire boom tilts 220° for full boom and bucket force
- Dig down at a 60° angle
- Raise up for truck loading and material placement
- Low working profile under bridges, trees and in tunnels
- Telescope to 24' 11" at grade
- Swing left and right



220°

TELESCOPING

24' 11"

MORE DIG FOR THE DOLLAR

DESIGNED INTO EVERY DETAIL

CHASSIS CAB

- Freightliner cab accommodates a driver and a passenger
- Ergonomically designed interior with extra sound-deadening
- Standard convenience features include dual reading lights, radio and adjustable tilting and telescoping steering with quick release

BOOM

- Full boom tilts 220°
- No loss of power to attachment tilting capability
- Rugged 24" 11" telescoping boom
- Low working profile under bridges, trees and in tunnels
- Full selection of attachments

EXCAVATOR

- Short tail swing won't obstruct traffic on narrow roads
- Stable, without the need for outriggers
- All new electric remote drive system for positioning the chassis
- No need for second engine

CHASSIS DESIGN

- Reinforced chassis with a modified suspension, specifically designed in a collaboration between Gradall and Freightliner engineers
- Travel at highway speeds
- Allison 5-speed automatic transmission
- No need for outriggers
- Up to a 55-degree wheel cut, providing excellent curb-to-curb maneuverability
- Powered by a single Cummins 6.7 liter engine - 30-state legal
- Fully supported by Freightliner distribution network

TYPICAL APPLICATIONS:

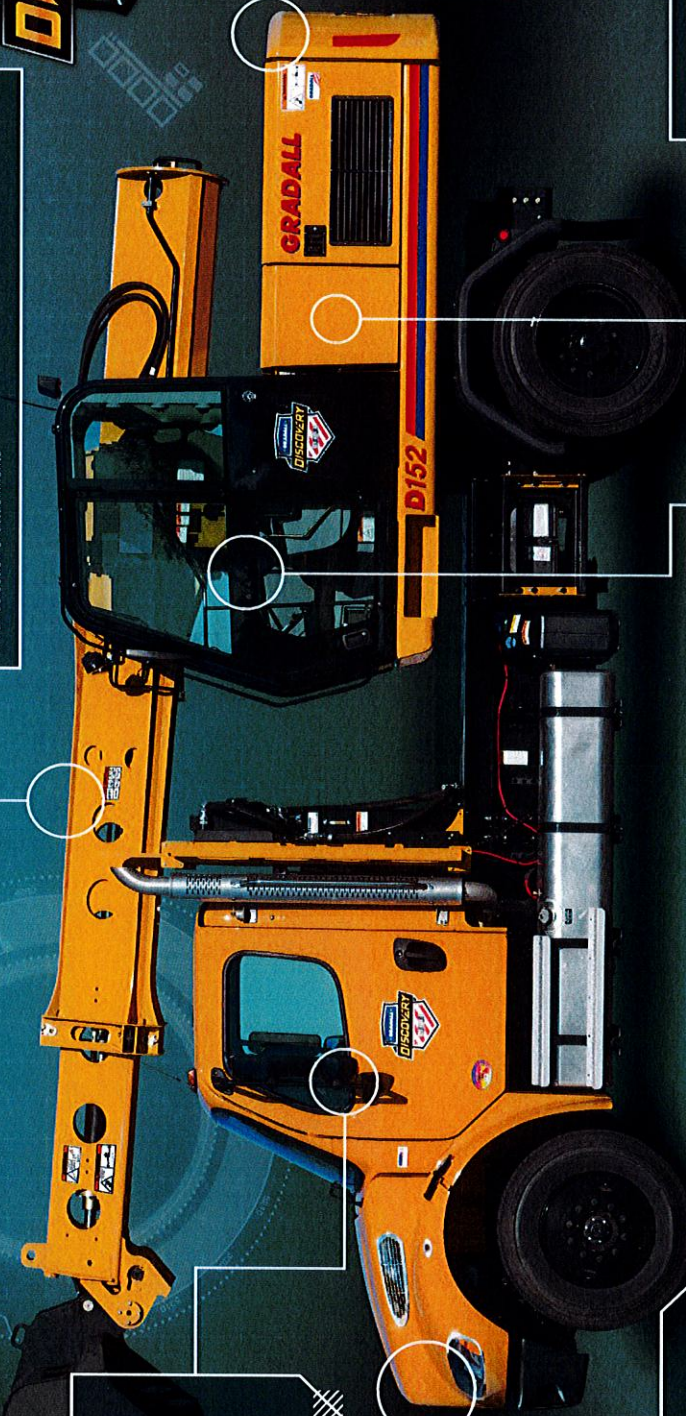
- Pitching
- Grading
- Culvert replacement
- Landscaping
- Mowing
- Vegetation control
- Curb, gutter, sidewalk replacement and removal

OPERATOR CAB

- Choose the Gradall, Deere or SAE joystick pattern using an in-cab switch
- Quiet, roomy cab with comfortable seating module
- Excellent job site visibility
- Standard air conditioning

ADVANCED SYSTEMS

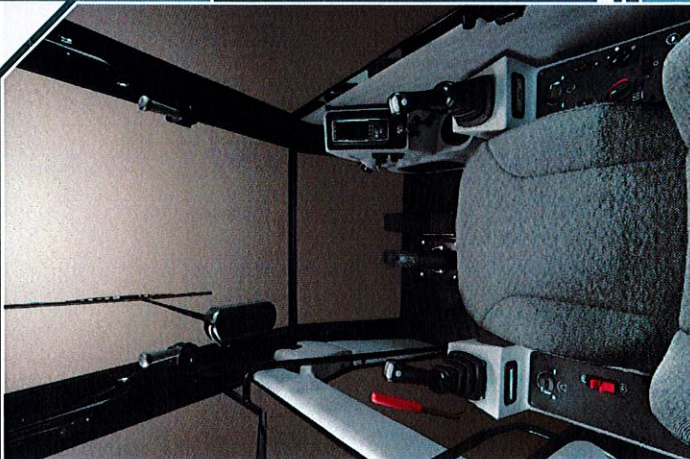
- Legendary Bosch Rexroth design and reliability
- All new, modern high-pressure hydraulic system is electronically controlled with pressure-compensated, load-sensing valves
- Combined electrical system for chassis and excavator delivers advanced, effective operation



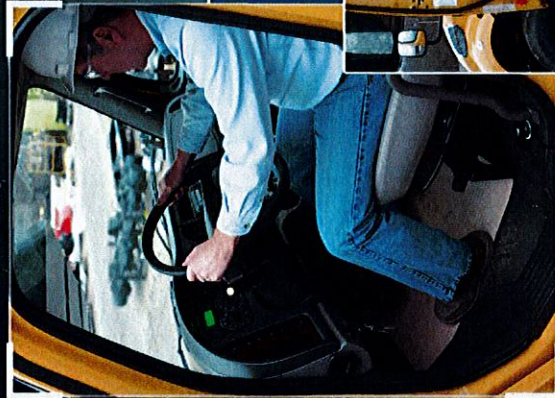
CABS DESIGNED FOR COMFORT AND EFFICIENCY

OPERATOR CAB

- All-electric joystick control system allows the operator to reposition the upperstructure and boom
- Monitor for critical functions is easy to read and reach
- In-cab switch lets operator choose Gradall, Deere or SAE joystick pattern, expanding familiarity
- High visibility cab has plenty of glass and exterior mirror to see job site
- During repositioning, accelerate up to 7 mph and brake with foot pedals
- Wide door and conveniently placed grab handles, both inside and out, make cab entry and exit easier



Spacious operator cab in the excavator upperstructure provides a comfortable, productive working environment. Cab feature easy accessibility, joystick controls that are integrated into the seating module, excellent visibility and a removable front window for fresh air as well as ease in monitoring the sounds on the job site.



Driving from one jobsite to another can be done comfortably and efficiently in a popular Freightliner chassis cab. The spacious environment accommodates a driver and a passenger with a range of preferred features.



CHASSIS CAB

- Freightliner day cab with air ride driver seat and fixed passenger seat
- Plenty of head and elbow room, wider and taller doors and non-slip steps for easy entry and exit
- Multiple exterior handles
- Ergonomically designed interior has an automotive style flat dash, easy-to-read LED back-lit gauges, easy-to-reach controls
- Standard convenience features including adjustable steering column, dual reading lights, cruise control and radio



- Large 2,500 square-inch tinted windshield and downward sloping aerodynamic hood offer a clear, wide-open view to the front and sides of the cab
- Excellent air flow throughout cab with advanced heating and air conditioning system
- NHSTA compliant high-visibility seat belts





DISCOVERY SERIES MODEL OPTIONS:

- Passenger side door step
- Rear step
- Auxiliary Hydraulics

GRADALL MODEL D152 4X2 & D154 4X4 LIFT CAPACITY OVER SIDE OR REAR - LB. (KG)

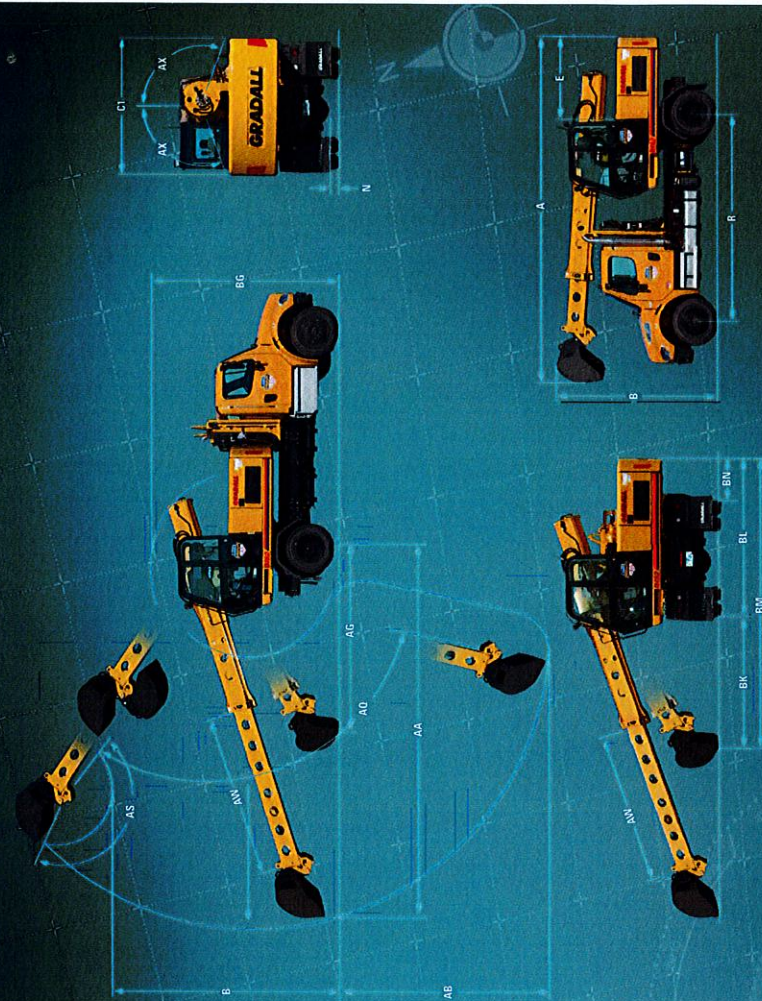
	LOAD POINT HEIGHT	LOAD RADIUS				MAXIMUM RADIUS	
		15' 0" (4.6 M)	20' 0" (6.1 M)	OVER SIDE	OVER END	OVER SIDE	OVER END
ABOVE GROUND LEVEL	19' 1" (5.8 M)					3000 (1360)	3000 (1360)
	15' 0" (4.6 M)	4660 (2115)	3180 (1440)	3180 (1440)	2880 (1305)	2880 (1305)	2880 (1305)
	10' 0" (3.0 M)	5390 (2445)	3530 (1600)	3530 (1600)	2880 (1305)	2880 (1305)	2880 (1305)
	BOOM LEVEL 8' 8" (2.7 M)	5490 (2490)	3580 (1625)	3580 (1625)	2885 (1310)	2885 (1310)	2885 (1310)
	5' 0" (1.5 M)	5480 (2485)	3615 (1640)	3615 (1640)	2905 (1320)	2905 (1320)	2905 (1320)
AT GROUND LEVEL		4760 (2160)	3365 (1525)	3365 (1525)	2950 (1340)	2950 (1340)	2950 (1340)
	5' 0" (1.5 M)	3690 (1675)	2695 (1220)	2695 (1220)	2580 (1170)	2580 (1170)	2580 (1170)
	10' 0" (3.0 M)	2695 (1220)	2580 (1170)	2580 (1170)	2580 (1170)	2580 (1170)	2580 (1170)
BELOW GROUND LEVEL	10' 9" (3.3 M)						

NOTE: The above loads are in compliance with the SAE standard J1057 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 counterweight, standard boom, standard tires, no auxiliary hydraulics, and no bucket. Adjust the listed rated capacities by subtracting the value for bucket attachment used.

Ditching - 789 lbs (358 kg)
Excavating - 789 lbs (357 kg)

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.



Shown with 8215-6006 60" (1.52 m) ditching bucket

4 x 2

4 x 4

4 x 2

4 x 4

A 27'1" (8.3 m) Overall length (boom in rack) with bucket

B 12'3" (3.7 m) Overall height (boom in rack) with bucket

C1 8'6" (2.6 m) Width of upper structure

E 6'7" (2.0 m) Swing clearance, rear of upper structure

N 10' (2.54 m) Ground clearance (per SAE J1234)

R 15'10" (4.8 m) Wheel base

AA 24'11" (7.6 m) Maximum radius at ground line (165° pivot)

AB 13'6" (4.1 m) Maximum digging depth (165° pivot)

AG 11'3" (3.5 m) Minimum level out radius with bucket flat on ground line

AO 30° Up & 60° Down Boom pivot angle

AS 165° Bucket pivot angle

AW 10'3" (3.1 m) Telescoping boom travel

AX 110° Bucket tilt angle (both sides of center)

BD 16'4" (5.0 m) Minimum clearance of bucket teeth with bucket pivot at maximum height

BG 14'1" (4.3 m) Maximum height of fork-like equipment with bucket below ground line

BK 6'8" (2.0 m) Minimum bucket cleanup

BL 10'8" (3.3 m) Swing lane clearance

BW 17'11" (5.5 m) Minimum machine swing radius at ground level

BN 30" (762 mm) Passenger side swing clearance

Rated boom force: 16,387 lb (87.8 kN)

Rated bucket breakout force: 11,400 lb (50.7 kN)

Weight: Approximate working weight, including a 60" (1.54 m) bucket, 11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

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11,400 lb (50.7 kN)

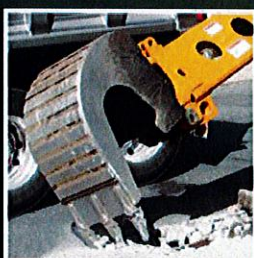
11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

11,400 lb (50.7 kN)

11,400 lb (50.7 kN)



Get an even greater RETURN ON YOUR INVESTMENT combining designed-in Gradall versatility with a range of ATTACHMENTS

Governmental entities as well as small and specialty contractors will appreciate their return on investment, thanks to Gradall's famous designed-in versatility and a host of attachments.

Not only can you drive your Discovery Series excavator quickly from one site to another, our attachment design lets you perform one or more jobs – ditching, concrete and asphalt repair, mowing and culvert replacement – in a single day.

High-pressure, load-sensing hydraulics adjust automatically to deliver the power you need to handle various jobs while also conserving fuel. Optional auxiliary hydraulics at the boom end further extend the range of available attachments.

TYPICAL ATTACHMENTS:

- Ditching Bucket
8215-6009 • 60" (1.52 m)
- Pavement Removal Bucket
8215-6004 • 24" (0.610 m)
- Excavating Bucket
8215-6008 • 36" (914 mm)
- Rotary Mower
8215-5005 • 50" (1.27 m)
- Flail Mower
8215-5006 • 40" (1.02 m)
- Fixed Thumb Grapple
8215-5003
- Tree Limb Shear
8215-5004

GRADALL

406 Mill Ave. SW, New Philadelphia, OH 44663

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FREIGHTLINER

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AALAND GROUP

MAKE
AMERICA

NJPA AWARDED

HGACBuy