XL 4300 V
ROUGH TERRAIN WHEELED EXCAVATOR

SPECIFICATIONS

Engine
• Volvo TAD571 VE, Tier 4f, 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled
• Vertical canister style lube and main fuel filters and fuel/water separation with manual feed pump attached to engine
• Water in fuel indicator and alarm
Gross Rating: 173 hp @ 2200 rpm (129kW), 590 ft lb torque @ 1100-1500 rpm (800Nm)
Net Rating: 153 hp @ 2200 rpm (114kW)
• Variable viscous fan clutch system
• Vertical stacked hydraulic oil cooler, charge air cooler and radiator
• Block heater
Maximum slope: 30°
• 24 volt starter
• 100 amp alternator
• Two SAE #C31-S 1000 CCA batteries
• Two-stage air cleaner with high-efficiency pre-cleaner
• Vacuator valve
• Remote service indicator
Fuel tank capacity: 99 gal (375 L)

Controls
• Two electronic joysticks (hoist and bucket, telescope and swing)
• One rocker switch (tilt) control
• Joysticks mounted on arm pods
• Quick change joystick pattern switch (Gradall, SAE, Deere)
• Self-centering joysticks and pedals, when controls are released, power for movement disengages and swing and tilt brake set automatically
• Tilting/telescoping steering column
• Hydraulic foot pedal controls braking functions
• Travel speed is regulated with an electronic foot pedal control
• Switch on the FWD/REV selector provides 1st/2nd gear selection
• Independent rocker switches control stabilizers, axle oscillation, park brake and hazard lights
• Switch on column provides marker lights, high/low headlights and direction indicators

Hydraulic System
Pumps
• One load-sensing, axial piston pump; oil flow 0-110 gpm (0-416 L/min)
• Tandem gear pump (steering, brake/pilot) 10 gpm (38 L/min), 6 gpm (23 L/min)
System Monitor
• Electronic monitor in cab indicates
  - Low hydraulic fluid level
  - High hydraulic fluid temperature
  - System working pressure
  - System pilot pressure

SYSTEM SPECIFICATIONS
Six Cylinders
• One tool cylinder: 5.0” ID, 3.0” rod (127 mm x 76 mm), 25.9” (658 mm) stroke
• Two hoist cylinders: 4.25” ID, 3.15” rod (108 mm x 80 mm), 31.0” (787 mm) stroke
• One telescope: 3.5” ID, 2.559” rod (89 mm x 65 mm), 12’6” (3.81 m) stroke
• Two single-acting axle oscillation cylinders 4.528” ID, 4.528” rod (115 mm x 115 mm), 6.25” (159 mm) stroke

Three Hydraulic Motors
• Swing, 64 hp (48 kW)
• Tilt, 21 hp (16 kW)
• Propel, 113 hp (84 kW)

Operating Pressures:
• Hoist.................................4,900 psi (331 BAR)
• Tilt.................................2,500 psi (172 BAR)
• Swing.................................4,200 psi (290 BAR)
• Tool.................................4,900 psi (331 BAR)
• Telescope.........................4,900 psi (331 BAR)
• Propel..............................4,900 psi (331 BAR)
• Pilot System.......................550 psi (38 BAR)
• Braking & Steering..............2,400 psi (165 BAR)
• Blade & Stabilizers.............4,000 psi (207 BAR)

Oil Capacity
• Reservoir system 65 gallons (246 L)
• Pressurized reservoir with visual oil level gauges

Filtration System
• 10 micron return filter
• 10 micron pilot filter
• Fin and tube-type oil cooler with thermal by-pass and relief valves
• Pressure-compensated, load-sensing valves with circuit reliefs in all circuits

Operator Cab
• All-weather cab
• Tinted safety glass windows
• Skylight
• Acoustical lining
• Four-way adjustable seat
• AM/FM radio
• Filtered fresh air heater
• Defroster
• Air conditioning
• Front window slides to overhead storage
• Mirrors on right and left sides
• Seat belt
• Windshield wiper and washer
• LED high/low beam headlights
• LED parking lights
• LED brake lights
• LED four-way hazard lights
• LED turn indicator lights
• LED work lights
• LED swing lights
• Axle oscillation lock switch

Boom
• Two piece triangular telescoping boom
• Adjustable boom rollers with eccentric shafts
• 220” boom tilt
• 105” boom pivot angle
• Auxiliary hydraulics
They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. NOTE: 25' 5" (7.75 m) Minimum Turning Radius: 25' 5" (7.75 m)  

Undercarriage Drive  
- Variable displacement high torque piston motor powers two-speed power shift transmission  
- Speed mode selection can also be done while moving  
- Electronically operated travel alarm signals  

Gradeability  
- 58%, limited by engine lubrication requirements

Traction Effort  
- 27,861 (123 kN)

Travel speed on flat, level surface–mph km/hr:  
- Creeper Mode  
  - First Gear: 1.4 mph (2.2 kmh)  
  - Second Gear: 5.5 mph (8.9 kmh)  
- Standard Mode  
  - First Gear: 1.4 mph (2.2 kmh)  
  - Second Gear: 4.6 mph (7.4 kmh)

Swing  
- Priority swing circuit with axial piston motor  
- Planetary transmission  

Swing speed: 70 rpm  

Swing Brake  
- Automatic spring-set/hydraulic release wet disc parking brake  
- Dynamic braking provided by the hydraulic system

Function Forces  

Rated Bucket Breakout Force: 25,405 lbs (113 kN)  
Rated Boom Force: 22,075 lbs (98.2 kN)

Weight  
- Approximate working weight with 36" (914 mm) excavating bucket, fuel tank half full  
- 43,580 lb (19,768 kg)  
- Outriggers: 2,720 lb (1,234 kg)  
- Blade: 1,529 lb (694 kg)

### GRADALL Model XL 4300 V Excavator Rated Lift Capacity - LB (KG)

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>LOAD RADIUS</th>
<th>10' 0&quot; (3.0 m)</th>
<th>15' 0&quot; (4.6 m)</th>
<th>20' 0&quot; (6.1 m)</th>
<th>25' 0&quot; (7.6 m)</th>
<th>Maximum</th>
<th>Over End</th>
<th>Over Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Ground Level</td>
<td>20' 0&quot; (6.1 m)</td>
<td>10160 (4610)</td>
<td>11600 (5210)</td>
<td>5200 (2360)</td>
<td>5200 (2360)</td>
<td>23' 4&quot; (71 m)</td>
<td>4980 (2260)</td>
<td>4980 (2260)</td>
</tr>
<tr>
<td>15' 0&quot; (4.6 m)</td>
<td>12020 (5430)</td>
<td>12200 (5490)</td>
<td>5715 (2590)</td>
<td>5585 (2525)</td>
<td>27&quot; 0&quot; (6.9 m)</td>
<td>5045 (2240)</td>
<td>4880 (2215)</td>
<td></td>
</tr>
<tr>
<td>10' 0&quot; (3.0 m)</td>
<td>12375 (5515)</td>
<td>12375 (5515)</td>
<td>7930 (3600)</td>
<td>5930 (2670)</td>
<td>27&quot; 3&quot; (7.0 m)</td>
<td>5000 (2205)</td>
<td>4800 (2175)</td>
<td></td>
</tr>
<tr>
<td>8' 6&quot; (2.6 m)</td>
<td>12540 (5690)</td>
<td>12540 (5690)</td>
<td>8195 (3715)</td>
<td>6200 (2800)</td>
<td>27&quot; 2&quot; (6.9 m)</td>
<td>5005 (2270)</td>
<td>4715 (2140)</td>
<td></td>
</tr>
<tr>
<td>5' 0&quot; (1.5 m)</td>
<td>11990 (5575)</td>
<td>11990 (5575)</td>
<td>7945 (3600)</td>
<td>5650 (2550)</td>
<td>26&quot; 5&quot; (6.7 m)</td>
<td>5140 (2330)</td>
<td>4840 (2190)</td>
<td></td>
</tr>
<tr>
<td>At Ground Level</td>
<td>15' 6&quot; (4.6 m)</td>
<td>10180 (4620)</td>
<td>10180 (4620)</td>
<td>7945 (3600)</td>
<td>5650 (2550)</td>
<td>24&quot; 7&quot; (6.8 m)</td>
<td>5185 (2340)</td>
<td>5185 (2340)</td>
</tr>
<tr>
<td>10' 0&quot; (3.0 m)</td>
<td>6710 (3045)</td>
<td>6710 (3045)</td>
<td>6905 (3100)</td>
<td>5670 (2660)</td>
<td>21&quot; 3&quot; (5.5 m)</td>
<td>5540 (2510)</td>
<td>5540 (2510)</td>
<td></td>
</tr>
<tr>
<td>8' 6&quot; (2.6 m)</td>
<td>4470 (2030)</td>
<td>4470 (2030)</td>
<td>5220 (2370)</td>
<td>5220 (2370)</td>
<td>15&quot; 6&quot; (3.9 m)</td>
<td>5205 (2360)</td>
<td>5205 (2360)</td>
<td></td>
</tr>
</tbody>
</table>

**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 8,800 lb (4,014 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 loads 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. The user must make allowance for 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 read and understand the operator manual before operating this machine. Rules for safe operation of equipment must be adhered to at all times.
Dimensions

A Overall length with bucket open (travel position): 26'3" (8.0)
A1 Overall length without bucket (travel position): 22'11" (7.0)
A3 Overall length with bucket open (shipment position): 26'6" (8.1)
A4 Overall length with bucket closed (shipment position): 23'9" (7.2)
A5 Overall length without bucket (shipment position): 23'3" (7.1)

B Overall height with bucket open (travel position): 12'10" (3.9)
B1 Overall height without bucket (travel position): 11'10" (3.6)
B2 Overall height with bucket open (shipment position): 11'6" (3.5)
B3 Overall height without bucket (shipment position): 10'11" (3.3)

C1 Width of upperstructure: 8'6" (2.6)

D Minimum clearance, upperstructure to undercarriage: 3" (78 mm)

E Swing clearance, rear of upperstructure: 80' (2.4)

F Top of cab to groundline: 10'7" (3.2)

G Clearance, upperstructure to groundline: 42' (1.3)

J1 Axis of rotation to centerline of fixed axle: 3/6 (1.1)
J2 Wheelbase of undercarriage: 8'9" (2.7)
J3 Axis of rotation to front of undercarriage: 70' (2.1)
J4 Nominal overall length of undercarriage: 123' (3.7)
J5 Axis of rotation to front option attachment pin: 6'9" (2.1)
J6 Axis of rotation to rear option attachment pin: 4'9" (1.4)
J7 Outrigger length, attachment pin to pad in up position: 2'7" (0.8)
J8 Outrigger length, attachment pin to pad in down position: 3'3" (1.0)
J9 Blade length, attachment pin across blade in up position: 3'4" (1.0)
K Overall width undercarriage: 9'1" (2.8)
K1 Overall width outrigger (up position): 8'4" (2.5)
K2 Overall width blade: 9'0" (2.7)
L Overall width outrigger (down position): 10'8" (3.3)
N Ground clearance (per SAE J1234): 11' (275 mm)
N1 Ground clearance (outrigger option): 12' (300 mm)

Z Blade above ground (option): 1'8" (505 mm)
Z1 Depth below ground level of blade (option): 7' (166 mm)
Z2 Depth below ground level of outrigger (option): 6' (142 mm)
AA Maximum radius at groundline: 30'4" (9.2)
AB Maximum digging depth: 21'3" (6.5)
AC Maximum depth for 8' level cut: 19'6" (5.9)
AD Minimum radius for 8' level cut at depth AC: 7'3" (2.2)
AF Maximum depth of vertical wall which can be excavated: 3'5" (1.0)
AG Minimum level cut radius with bucket flat on groundline: 126' (3.8)
AH Minimum radius at groundline: 84' (2.5)
AK Boom pivot to groundline: 65' (2.0)
AL Boom pivot to axis of rotation: 11' (3.4)
AP Bucket tooth radius: 310' (1.2)
AQ Boom pivot angle: 30° Up and 75° Down
AR Bucket pivot angle: 165°
AU Maximum telescoping boom length (boom pivot to bucket pivot): 25'3" (7.7)
AV Minimum telescoping boom length (boom pivot to bucket pivot): 12'9" (3.9)
AW Telescoping boom travel: 126' (3.8)
AX Bucket tilt angle (both sides of center): 110°
BA Maximum radius of working equipment: 310' (9.5)
BB Maximum height of working equipment: 242" (7.4)
BC Maximum bucket tooth height: 224" (6.8)
BD Minimum clearance of bucket teeth with bucket pivot at maximum height: 170' (5.2)
BE Minimum clearance of fully curved bucket at maximum boom height: 112' (3.4)
BF Minimum clearance of bucket teeth at maximum boom height: 109' (3.3)
BG Maximum height of working equipment with bucket below groundline: 149' (4.5)
BH Radius of bucket teeth at maximum height: 264" (6.8)
BJ Minimum radius of bucket teeth at maximum bucket pivot height: 198' (6.0)

Specifications subject to change without notice. Metric units are meters (m) unless noted. Machines shown may have optional equipment.
Optional Equipment
- Vandalism protection kit including window covers
- Strobe light
- ROPS protective cab

Attachments
- Quick change and reversible buckets fabricated using steel plate with high strength, low alloy cutting edges and wear strips
- Standard attachments available for wide range of applications
- Capacities shown are in heaped cubic yard

Excavating Bucket
- 8045-6020 24" (610 mm) 3/8 0.31
  603 lbs (274 kg)
- 8045-6021 30" (762 mm) 1/2 0.41
  660 lbs (300 kg)
- 8045-6022 36" (914 mm) 5/8 0.54
  741 lbs (336 kg)
- 8045-6023 42" (107 mm) 3/4 0.64
  841 lbs (382 kg)
- 8045-6024 48" (1.22 m) 1
  957 lbs (434 kg)
- 8065-6117 48" (1.5 m) 1.15
  959 lbs (435 kg)

Grading Blade
- 8065-6024 8" (2.4 m) 1
  630 lbs (285 kg)

Dredging Bucket
- 8065-6013 72" (1.83 m) 1 1/8 0.87
  1,114 lbs (505 kg)

Trenching Bucket
- 8065-6104 15" (381 mm) 1/5 0.15
  897 lbs (407 kg)
- 8065-6012 21" (533 mm) 1/4 0.19
  982 lbs (445 kg)

Pavement Removal Bucket
- 8065-6102 40" (1.0 m) 1262 lbs (573 kg)
- 8065-6115 18" (0.457 m) 929 lbs (421 kg)
- 8065-6116 24" (0.610 m) 1,219 lbs (553 kg)
- 8065-6114 28" (0.711 m) 1,310 lbs (594 kg)

Ditching Bucket
- 8065-6040 30" (0.762 m) 3/8 0.3
  521 lbs (236 kg)
- 8065-6007 60" (1.52 m) 7/8 0.73
  807 lbs (366 kg)
- 8065-6006 66" (1.68 m) 1 0.76
  892 lbs (405 kg)
- 8065-6002 72" (1.83 m) 1 1/8 0.87
  944 lbs (428 kg)
- 8065-6118 72" (1.6 m) 16 1.22
  1,148 lbs (521 kg)

Boom Extension
- 8065-5028 4' (1.2 m) 1,090 lbs (495 kg)
- 8065-5029 6' (1.8 m) 1,250 lbs (560 kg)
- 8065-5030 8' (2.4 m) 1,389 lbs (631 kg)

Telesick
- 8075-5045 3,600 lbs (1,633 kg)

Tree Limb Shear
- 8045-5052 1,948 lbs (884 kg)

Fixed Thumb Grapple
- 8075-5023 1,574 lbs (714 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.