**Engine**

- Volvo TAD571 VE Tier 4f, 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled
- Vertical canister style lube filter 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)

**Net Rating:** 153 hp @ 2200 rpm (114kW)

**Max Torque:** 590 ft lb @ 1100-1500 rpm (800Nm)

**Net Rating:** 153 hp @ 2200 rpm (114kW)

**Torque:** 590 ft lb Torque @ 1100-1500 rpm (800Nm)

**82 gallons (310 L)**

**30° Maximum slope:**

- 24 volt starter
- 100 amp alternator
- Two SAE #C31-S 1000 CCA batteries
- Two-stage dry type air cleaner with centrifugal pre-cleaner and safety element
- Vacuum valve and service indicator
- Block heater

**Fuel tank capacity:** 82 gallons (310 L)

**Operator Cab**

- All-weather cab
- Tinted safety glass windows
- Acoustical lining
- Four-way adjustable seat
- AM/FM radio
- Filtered fresh air heater
- Defroster
- Air conditioner
- Front window has heat resistant glass
- Rearview mirrors on right and left sides
- Seat belt
- Swing lights

**Hydraulic System**

- Variable viscous fan clutch system
- Vacuator valve and service indicator
- Two-stage dry type air cleaner with centrifugal pre-cleaner and safety element
- Vacuum valve and service indicator
- Block heater

**Engine Controls and Instrumentation**

- Key operated ignition/starter switch, throttle and main battery disconnect switch
- Air cleaner condition indicator
- Electronic monitor indicates fuel level, low battery charge, lube oil pressure, high coolant temperature, engine rpm and engine hours
- Fuel saving auto idle feature sends engine rpm to idle when control circuits are in neutral for seven seconds

**Boom**

- Spin lock cylinders.
- Two piece triangular telescoping boom
- Adjustable boom rollers with eccentric shafts
- 360° continuous boom tilt
- 105° boom pivot angle
- Auxiliary hydraulics

**Three Hydraulic Motors**

- Swing, 64 hp (48 kW)
- Tilt, 50 hp (37 kW)
- Propel, 113 hp (84 kW) each

**Operating Pressures:**

- Hoist.......................4,900 psi (331 BAR)
- Tilt.........................4,900 psi (331 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 (280 BAR)

**Filtration System**

- Reservoir system 65 gallons (246 L)
- Electronic monitor in cab indicates
- Oil Capacity

**Eight Micron Filter:**

- System pilot pressure
- System working pressure
- High hydraulic fluid temperature
- Low hydraulic fluid level
- Blade & Stabilizers

**Pumps**

- Gear pump (steering, brake/pilot)
- One load-sensing, axial piston pump; oil flow 0-110 gpm (0-435 L/min)
- Two single-acting axle oscillation cylinders:
- One telescope: 3.5” ID, 2.559” rod
- One tool: 5.0” ID, 3.0” rod
- Two hoist cylinders: 4.25” ID, 3.15” rod
- Two piece triangular telescoping boom
- Adjustable boom rollers with eccentric shafts
- 360° continuous boom tilt
- 105° boom pivot angle
- Auxiliary hydraulics

**Undercarriage**

- Two single-acting axle oscillation cylinders:
- 4,528” ID, 4,528” rod (115 mm x 115 mm), 6.25” (159 mm) stroke

- Electronic monitored travel alarm signals excavator movement

**Torque:**

- 590 ft lb Torque @ 1100-1500 rpm (800Nm)

**Undercarriage**

- Six Cylinders
- One tool: 5.0” ID, 3.0” rod
- One hoist cylinders: 4.25” ID, 3.15” rod
- One single-acting axle oscillation cylinders: 4,528” ID, 4,528” rod (115 mm x 115 mm), 6.25” (159 mm) stroke

**Travel speed on flat surface - MPH (kmh):**

<table>
<thead>
<tr>
<th>Gear</th>
<th>Creep Mode</th>
<th>Standard Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Gear</td>
<td>1.8 mph (2.9 kmh)</td>
<td>5.7 mph (9.2 kmh)</td>
</tr>
<tr>
<td>Second Gear</td>
<td>6.3 mph (10.1 kmh)</td>
<td>12 mph (19.3 kmh)</td>
</tr>
</tbody>
</table>
Overall length with attachment open (Travel Position): 26'0" (7.9)
A
Overall length without attachment (Travel Position): 23'10" (7.3)
B
Overall height with attachment open (Travel Position): 11'6" (3.5)
B1
Overall height without attachment (Travel Position): 11'2" (3.4)
C1
Width of upperstructure: 9'0" (2.7)
D
Minimum clearance, upperstructure to undercarriage: 3" (78 mm)
E
Swing clearance, rear of upperstructure: 8'0" (2.4)
F
Top of cab guard to groundline: 11'1" (3.4)
G
Clearance, upperstructure to groundline: 4'2" (1.3)
H1
Height of optional folding lift yoke lowered: 1'9" (0.5)
H2
Height of pin of optional folding lift yoke: 3'7" (1.1)
H3
Overall height of optional folding lift yoke: 4'0" (1.2)
H4
Height to pin of optional rigid lift yoke: 2'8" (0.8)
H5
Overall height of optional rigid lift yoke: 3'0" (0.9)
J1
Axis of rotation to centerline of drive sprockets: 3'6" (1.1)
J2
Wheelbase of undercarriage: 8'9" (2.6)
J3
Axis of rotation to front of undercarriage: 7'0" (2.1)
J4
Nominal overall length of undercarriage: 12'3" (3.7)
J5
Axis of rotation to front option attachment pin: 6'9" (1.4)
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)
J10
Overall width of undercarriage: 9'1" (2.8)
K
Overall width outrigger (up position): 8'4" (2.5)
K1
Overall width blade: 9'0" (2.7)
K2
Overall width outrigger (down position): 10'8" (3.2)
L
Overall width option attachment (up position): 8'4" (2.5)
L1
Overall width attachment (down position): 10'8" (3.2)
N
Ground clearance (per SAE J1234): 11" (275 mm)
N1
Ground clearance (outrigger option): 12" (300 mm)
Z
Blade above ground (option): 18" (455 mm)
Z1
Maximum lift of blade (option): 70" (166 mm)
Z2
Maximum lift of outrigger (option): 60" (142 mm)
AA
Maximum radius at groundline (Scaling Hook): 31'3" (9.5)
AB
Maximum depth: 22'1" (6.7)
AH
Minimum radius at groundline: 12'2" (3.7)
AK
Boom pivot to groundline: 6'5" (2.0)
AL
Boom pivot to axis of rotation: 1'11" (585 mm)
AP
Attachment tooth radius (scaling hook): 3'10" (1.2)
AQ
Boom pivot angle: 30° Up and 75° Down
AS
Attachment pivot angle: 165°
AU
Maximum telescoping boom length (boom pivot to attachment pivot): 261" (7.9)
AV
Minimum telescoping boom length (boom pivot to attachment pivot): 137" (4.1)
AW
Telescoping boom travel: 126" (3.8)
AX
Boom tilt angle (continuous): 360°
BA
Maximum radius of working equipment: 31'11" (9.7)
BB
Maximum height of working equipment: 251" (7.8)
BD
Minimum clearance of attachment with pivot at maximum height: 175" (6.3)
BF
Minimum clearance of attachment at maximum boom height: 112" (3.4)
BG
Maximum height of working equipment with attachment below groundline: 141" (4.5)
BH
Radius of attachment tooth at maximum height: 24'1" (7.3)

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.

Dimensions

Swing
- Prioriy 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 is provided by the hydraulic system

Function Forces
Rated Boom Force: 22,075 lbs (98.2 kN)
Rated Ripper Tooth Force: 25,405 lbs (113 kN)
Boom Rotating Torque: 25,800 ft lb (34,980 Nm)
Boom Rotating Speed: 7.0 rpm

Weight
- Approximate working weight with 36" (914 mm) excavating bucket, fuel tank half full:
  - 46,580 lbs (21,128 kg)
Outriggers: 2,720 lbs (1,234 kg)
Blade: 1,529 lbs (671 kg)