**Optional Equipment**

- Vandalism protection kit including window covers.
- Intake air pre-cleaner.
- Exhaust spark arrestor.
- Strobe light.
- Block heater.
- Auxiliary Hydraulics - Additional hosing and piping for hydraulic powered attachments.

**Attachments**

- Quick change and reversible buckets fabricated of steel plate, with high strength, low alloy cutting edges and wear strips. Capabilities shown are in heaped cu. yd.

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**Upperstructure Engine**

- Detroit Diesel OM904 Tier-3 diesel, 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled. Vertical casiter style lube filter attached to engine. Remote mount primary fuel/water separator.
- Gross Rating: 170 HP @ 2000 RPM (129kW)
- Maximum slope: 30°
- Maximum flow 30 GPM (114 L/min)
- Maximum pressure 4800 psi (33,095 kPa)

**Controls**

- Two electronic joysticks (hoist and bucket, telescope and swing), one rocker switch (tilt) control upperstructure. Joysticks mounted on arm pods, independently adjustable for individual operator comfort and convenience. Quick change joystick pattern switch located on instrumental panel. Joysticks are self-centering; when controls are released, power for movement disengages and swing and tilt brake set automatically.
- Two Electronic foot pedals (with handles) control crawler travel speed and direction, joystick steering, and crawler brakes. Toggle switch on arm pod allows selection of 2 crawler speed ranges.

**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, tube 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.

**Swing**

- Pneumatic swing circuit with axial piston motor. Planetary transmission.
- Swing speed 8.0 rpm.

**Swing Brake**

- Automatic spring-actuated hydraulic wet disc parking brake. Dynamic braking is provided by the hydraulic system.

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**GRADALL XL 3200 III HYDRAULIC EXCAVATOR**

**SPECIFICATIONS**

- Four hydraulic motors
- Swing, Steel GBM; tilt, 21 hp (16 kW); propel motors, 120 hp (89 kW) each.

**Operating pressures:**

- Hoist: 4,900 psi (331 BAR)
- Tilt: 2,500 psi (172 BAR)
- Swing: 3,000 psi (207 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)

**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.

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www.gradall.com

Certified ISO 9001

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**Attachments**

- Excavating bucket
  - 2 propel motors, 120 hp (89 kW) each.
  - Swivel, 51 hp (38 kW); tilt, 21 hp (16 kW); four hydraulic motors.

**PUMPS**

- One load-sensing, axial piston pump.
- Oil flow 0-100 GPM (0-378 L/min).
- One gear pump, pilot, 6GPM (00L/min).
- Pressure-compensated, load-sensing by-pass and relief valves.

**SYSTEM MONITOR**

- Electronic monitor in cab indicates low hydraulic fluid level, high hydraulic fluid temperature, system working pressure, system pilot pressure.

**SYSTEM SPECIFICATIONS**

- Four cylinders
  - 1 tool: 400-109 mm x 76 mm, 259-765 mm stroke.
  - 2 tools: 350-109 mm x 89 mm x 65 mm, 310-739 mm stroke.
  - 1 telescope: 3’2” (973 mm x 98 mm x 65 mm, 11-325 mm stroke.

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**Swing**

- Pneumatic swing circuit with axial piston motor. Planetary transmission.
- Swing speed 8.0 rpm.

**Swing Brake**

- Automatic spring-actuated hydraulic wet disc parking brake. Dynamic braking is provided by the hydraulic system.

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**Optional Equipment**

- Vandalism protection kit including window covers.
- Intake air pre-cleaner.
- Exhaust spark arrestor.
- Strobe light.
- Block heater.
- Auxiliary Hydraulics - Additional hosing and piping for hydraulic powered attachments.

**Attachments**

- Quick change and reversible buckets fabricated of steel plate, with high strength, low alloy cutting edges and wear strips. Capabilities shown are in heaped cu. yd.
Crawler Drive
Dual range, high torque piston motor powers each track. Three-stage planetary drive with integral speed limiting valve and automatic spring-set/hydraulic release wet disc parking brake.

Travel Speed on flat, level surface:
- High Speed: 3.4 mph (5.5 km/h)
- Low Speed: 1.9 mph (3.1 km/h)
Automatic two-speed control shifts crawler drive into low speed under difficult travel conditions. Manual override switch for loading the machine for transport.

Gradeability
58%, limited by engine lubrication requirements.

Load Point

Function Forces
Rated Boom Force: 22.075 lbs (9.95 kN)
Rated Bucket Breakout Force: 19.503 lbs (8.8 kN)

Drawbar Pull
- 38.624 lbs (17.0 kN)

Individual Track Control
Tackles counter-rotate to pivot machine about the swing centerline. Electronically operated travel alarm signals crawler movement in either direction.

Weight
Approximate working weight with 36" (914mm) excavating bucket, fuel tank half full, and no operator:
- 23'6" (7.19m): 39,340 lbs (17,800 kg)
- 19'7" (6.0m): 36,775 lbs (16,680 kg)

Dimensions

<table>
<thead>
<tr>
<th>Load Point Height</th>
<th>Load Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>15' (4.5m)</td>
<td>10' (3.0m)</td>
</tr>
<tr>
<td>OVER</td>
<td>END</td>
</tr>
<tr>
<td>1500</td>
<td>1440</td>
</tr>
</tbody>
</table>

*Note: Bucket adjustment values are 87% of the actual bucket weights.*
The above loads are in compliance with the SAE standard J907 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

Loads shown in shaded areas indicate the load is limited by tipping rather than hydraulic lifting capacity.

The rated lift capacity is based on the machine being equipped with 6,000 lb (2,724 kg) counterweight, standard boom, standard tires, no auxiliary hydraulic, and no bucket.

Adjust the listed rated capacities by subtracting the value listed for bucket/attachment used:

- **8065-6007 60'' (152cm)**
  - Ditching: 807 lbs (366 kg)
  - Digging: 807 lbs (366 kg)
  - Excavating: 660 lbs (300 kg)
  - Loading: 807 lbs (366 kg)

- **8065-6006 66'' (168cm)**
  - Ditching: 892 lbs (405 kg)
  - Digging: 862 lbs (391 kg)
  - Excavating: 674 lbs (306 kg)

- **8065-6116 72'' (183cm)**
  - Ditching: 814 lbs (369 kg)
  - Digging: 814 lbs (369 kg)

- **8065-6022 30'' (762mm)**
  - Loading: 603 lbs (274 kg)
  - Pavement: 1262 lbs (573 kg)

- **8065-6024 36'' (914mm)**
  - Loading: 603 lbs (274 kg)
  - Blade: 620 lbs (285 kg)

- **8065-6009 Single Tooth Ripper**
  - 567 lbs (253 kg)

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.

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**Dimensions**

**Approximate working weight with 36'' (914mm) excavating bucket, fuel tank half full, and no operator:**

<table>
<thead>
<tr>
<th>Pad Size</th>
<th>Weight</th>
<th>Bearing Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>22'6''</td>
<td>6500 lbs (2957 kg)</td>
<td>75 psi (517 kPa)</td>
</tr>
<tr>
<td>19'7''</td>
<td>6775 lbs (3078 kg)</td>
<td>80 psi (552 kPa)</td>
</tr>
</tbody>
</table>

**Rated Bucket Breakout Force:** 19,500 lb (86 kN)

**Rated Boom Force:**

- 22,075 lbs (9984 kg)

**Rated Bucket Force:**

- 22,075 lbs (9984 kg)

**Drawbar Pull:** 36254 lb (16,410 kg)

**Individual Track Control**

Traction counter-rotate to pivot machine about the swing centerline.

Electronically operated travel alarm signals crawler movement in either direction.

**Function Forces**

**Crawler Drive**

Dual range, high torque piston motor powers each track. Three-stage planetary drive with integral speed limiting valve and automatic spring-set hydraulic release wet disc parking brake.

**Travel Speed**

On flat, level surface:

- **High Speed:** 3.4 mph (5.5 km/h)
- **Low Speed:** 1.9 mph (3.1 km/h)

Automatic two-speed control shifts crawler drive into low speed under difficult travel conditions. Manual override switch for loading the machine for transport.

**Gradeability**

58%, limited by engine lubrication requirements.

**Weights**

**Drawbar Pull**

36254 lb (16,410 kg)

**Individual Track Control**

Traction counter-rotate to pivot machine about the swing centerline.

Electronically operated travel alarm signals crawler movement in either direction.

**Function Forces**

**Rated Boom Force:** 22,075 lbs (9984 kg)

**Rated Bucket Breakout Force:** 19,500 lb (86 kN)

**Loads shown in shaded areas indicate the load is limited by tipping rather than hydraulic lifting capacity.**

**The above loads are in compliance with the SAE standard J907 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.**

**Dimensions Shown with 8045-6022 36'' (914mm) excavating bucket**

**A** Overall length with bucket: 246' (75)

**A1** Overall length without bucket: 213' (65)

**B1** Overall height with bucket: 10'9" (3.3)

**B** Overall height without bucket: 10'1" (3.1)

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

**D** Minimum clearance, upperstructure to undercarriage: 5' (1.5)

**E** Swing clearance, rear of upperstructure: 7'6" (2.3)

**F** Top of cab to: groundline: 9'10" (3.0)

**G** Clearance, upperstructure to groundline: 3'5" (1.0)

**J1** Axis of rotation to centerline of drive sprockets: 4'7" (1.4)

**J2** Nominal distance between centerlines of drive sprockets and idler: 9'2" (2.8)

**J3** Axis of rotation to end of track assembly: 5'10" (1.8)

**J4** Nominal overall length of track assembly: 11'9" (3.6)

**K** Length of crawler (Standard): 8'6" (2.6)

**L** Length of crawler (Optional): 8'2" (2.5)

**M** Ground clearance (per SAE J1234): 18" (454 mm)

**N** Track gauge, roller centerline to roller centerline: 6" (0.15)

**O** Width of crawler track assembly (Standard): 23.6" (600 mm)

**P** Width of crawler track assembly (Optional): 19.7" (500 mm)

**Q** Height: 10'1" (3.1)

**R** Height: 10'9" (3.3)

**S** Height: 10'2" (3.1)

**T** Width of crawler (Standard): 8'6" (2.6)

**U** Minimum telescoping boom length (boom pivot to bucket pivot): 11'9" (3.6)

**V** Minimum telescoping boom length (boom pivot to bucket pivot): 10'1" (3.0)

**W** Minimum bucket height: 20'1" (6.1)

**X** Minimum clearance of bucket teeth with bucket pivot at maximum height: 9'10" (3.0)

**Y** Minimum clearance of fully curled bucket at maximum boom height (165° pivot): 9'8" (2.9)

**Z** Minimum clearance of bucket teeth at maximum boom height: 9'3" (2.8)

**BB** Minimum height of working equipment with bucket below groundline: 14'2" (4.3)

**BH** Radius of bucket teeth at maximum height (165° pivot): 23'9" (7.2)

**BJ** Minimum radius of bucket teeth at maximum bucket pivot height (165° pivot): 17'1" (5.2)

**Transport dimensions without attachment**

- **Length:** 21'3" (6.5)
- **Height:** 10'1" (3.1)
- **Width:** 6'6" (1.9)

**Metric units are meters (m) unless noted.**

**Machines shown may have optional equipment.**
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**Optional Equipment**

- Vandalism protection kit including window covers.
- Intake air pre-cleaner.
- Exhaust spark arrester.
- Strobe light.
- Block heater.
- Auxiliary Hydraulics - Additional hosing and piping for hydraulic powered attachments.
- Auxiliary Hydraulics - Block heater.
- Auxiliary Hydraulics - Strobe light.
- Vandalism protection kit including window covers.

**Attachments**

- Quick change and reversible buckets fabricated of steel plate, with high strength, low alloy cutting edges and wear strips.
- Standard attachments available for wide range of applications. Capabilities shown are in heaped cu. yd.

**Quick change and reversible buckets**

- 8045-6020: 24" (610mm) Excavating bucket
  - Cu: 0.31 m³
  - Yd: 3/8
  - 8045-6021: 30" (762mm) Excavating bucket
  - Cu: 0.31 m³
  - Yd: 1/2
  - 8045-6022: 36" (914mm) Excavating bucket
  - Cu: 0.54 m³
  - Yd: 5/8
  - 8045-6023: 42" (1072mm) Excavating bucket
  - Cu: 0.64 m³
  - Yd: 3/4
  - 8045-6024: 48" (1220mm) Excavating bucket
  - Cu: 0.76 m³
  - Yd: 1

**Fixed thumb grapple**

- 8045-5006

**Telescopic attachment**

- 8065-6024: 8' (2.4m) Grading blade

**XL 3200 HYDRAULIC EXCAVATOR**

**Upperstructure Engine**

- Detroit Diesel OM904 Tier-3 diesel, 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled. Vertical canister style filter attached to engine. Remote mount primary fuel/water separator.
- Gross Rating: 170 HP @ 2000 RPM (129kW)
- 498 ft. lb. Torque @ 1200-1600 RPM

**Four hydraulic motors**

- Swing, 51hp (38 kW); tilt, 21 hp (16 kW); propel motors, 120 hp (89 kW) each.

**Operating pressures:**

- Hoist: 4,900 psi (33 1B AR)
- Swing: 3,000 psi (207 BAR)
- Tilt: 2,500 psi (1 72BAR)
- Tool: 4,900 psi (33 1B AR)
- Telescope: 4,900 psi (33 1B AR)
- Prop: 4,900 psi (33 1B AR)
- Pilot System: 550 psi (38 BAR)

** oil flow 0-100 GPM (0-378 L/min).**

- Pressure-compensated, load-sensing valves with circuit reliefs in all circuits.

**Filtration System**

- Reservoir system 65 gallons (246 L). Pressurized reservoir with visual oil level gauges.

**Operator Cab**

- All-weather cab with tinted safety glass windows, skylight, four-way adjustable operator’s seat, AM/FM radio, filtered fresh air heater, defroster, and A/C. Four electronic joysticks (hoist and bucket, telescope and swing), three hydraulic joysticks for movement disengages and swing self-centering; when controls are released, power for movement disengages and swing and tilt brake set automatically.

**Engine Controls and Instrumentation**

- Key operated ignition/starter switch, throttle, and main battery disconnect switch. Engine controls 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.

**Swing**

- Hydrostatic swing with axial piston motor. Planetary transmission.
- Swing speed 8.0 rpm.

**Swing Brake**

- Automatic spring-apply/hydraulic release wet disc parking brake. Dynamic braking is provided by the hydraulic system.