### Engine
- **Manufacturer and Model**: John Deere PowerTech™ Plus 6090
- **Non-Road Emission Standards**: Certified to EPA Tier 3 emissions
- **Cylinders**: 6 inline
- **Valves per Cylinder**: 4
- **Displacement**: 549 cu. in. (9.0 L)
- **Net Peak Power at 2,000 rpm (ISO 9249)**: 285 hp (212 kW)
- **Rated Power with Full Fan Engagement**: 279 hp (208 kW)
- **Net Peak Torque at 1,200–1,400 rpm (ISO 9249)**: 789 lb.-ft. (1070 Nm)
- **Engine Bore and Stroke**: 4.66 x 5.35 in. (118.4 x 136.0 mm)
- **Aspiration**: Turbocharged and intercooled
- **Lubrication**: Pressure system with full-flow spin-on filter and oil-to-water cooler
- **Fuel System**: High-pressure common rail, 10/2-micron filtration, with water separator

### Cooling
- **Fan Drive**: Air-sensing viscous, direct drive
- **Engine Cooling**: Liquid cooled with single-pass radiator, remote pressurized coolant tank, and charge air cooler

### Powertrain
- **Transmission**: ZF 6HP592C Ecomat 2+ fully automatic engine-mounted planetary, with lockup torque converter, integral input retarder, and adaptive shift control
- **Controls**: Push-button gear select with gear-hold button and retarder aggressiveness setting
- **Stall Torque Ratio**: 2.4 to 1
- **Speeds**
  - **Forward**: 4 mph (7 km/h), 7 mph (11 km/h), 12 mph (19 km/h), 16 mph (26 km/h), 23 mph (37 km/h), 31 mph (50 km/h)
  - **Reverse**: 5 mph (8 km/h)

### Axles
- **Input Differential**: Limited slip
- **Transfer Case**: Single-speed inline helical with output differential
- **Output Differential**: Planetary, torque proportioning, pneumatically lockable
- **Nominal Output Torque Split**: 33 front / 67 rear

### Brake System
- **Service Brake**: Dual-circuit hydraulically actuated dry-disc calipers on all axles with mudguards
- **Park and Secondary Brake**: Spring-applied, air-released, driveline-mounted, dry disc
- **Auxiliary Brake**: Automatic hydraulic transmission retarder
- **Total Retarding Capacity (not including service brakes)**: 574 hp (428 kW)

### Hydraulics
- **Type**: Closed-center, load-sensing system
- **Main Pump**: Axial piston, variable displacement
- **Pump Flow at High Idle**: 48.6 gpm (184 L/m)
- **Pressure**: 3,625 psi (24 993 kPa)

### Electrical
- **Voltage**: 24 volt
- **Number of Batteries**: 2
- **Battery Capacity**: 950 CCA
- **Alternator**: 28 volt / 80 amp

### Steering System
- **Type**: 2 hydrostatically actuated, double-acting hydraulic cylinders; ground-driven secondary steering pump
- **Angle**: 42 deg. side to side
- **Lock-to-Lock Turns**: 4.7

### Pneumatic System
- **Type**: Engine-mounted compressor, air drier with heater, and integral unloader valve
- **System Pressure**: 117 psi (810 kPa)

### Suspension
- **Front**: Maintenance-free, rubber-mounted leading arm links and transverse link, supported by nitrogen/oil-filled struts
- **Rear**: Load-equalizing, pivoting walking beams with laminated rubber suspension blocks; each axle coupled to chassis by 4 interchangeable rubber-bushed links
**Water Tank System**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank Capacity</td>
<td>7,000 gal. (26,498 L)</td>
</tr>
<tr>
<td>Water Pump Flow at 100 psi</td>
<td>1,500 gpm (5,678 L/m)</td>
</tr>
</tbody>
</table>

**Tires/Wheels**

<table>
<thead>
<tr>
<th>Type and Size</th>
<th>Radial earthmovers 23.5R25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Ground Pressure</td>
<td>23.6 psi (162.7 kPa)</td>
</tr>
</tbody>
</table>

**Serviceability**

**Refill Capacities**

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Tank</td>
<td>90.0 gal. (340.0 L)</td>
</tr>
<tr>
<td>Engine Oil with Filter</td>
<td>6.7 gal. (25.5 L)</td>
</tr>
<tr>
<td>Engine Coolant</td>
<td>8.7 gal. (32.9 L)</td>
</tr>
<tr>
<td>Transmission Fluid (refill)</td>
<td>5.8 gal. (21.8 L)</td>
</tr>
<tr>
<td>Transfer Case Oil</td>
<td>5.0 qt. (4.7 L)</td>
</tr>
<tr>
<td>Hydraulic Reservoir</td>
<td>20.8 gal. (79.0 L)</td>
</tr>
<tr>
<td>Axle Oil (per axle)</td>
<td>5.8 gal. (22.0 L)</td>
</tr>
<tr>
<td>Final Drive</td>
<td>4.2 qt. (4.0 L)</td>
</tr>
</tbody>
</table>

**Operating Weights**

<table>
<thead>
<tr>
<th>Component</th>
<th>Empty</th>
<th>Loaded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>23,080 lb. (10,478 kg)</td>
<td>31,130 lb. (14,133 kg)</td>
</tr>
<tr>
<td>Rear</td>
<td>26,045 lb. (11,824 kg)</td>
<td>77,085 lb. (34,997 kg)</td>
</tr>
<tr>
<td>Total</td>
<td>49,125 lb. (22,303 kg)</td>
<td>108,215 lb. (49,130 kg)</td>
</tr>
<tr>
<td>Maximum Water Load</td>
<td>59,090 lb. (26,827 kg)</td>
<td></td>
</tr>
</tbody>
</table>

**Optional Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank Water-Level Gauge</td>
<td>30 lb. (14 kg)</td>
</tr>
<tr>
<td>Foam-Agent Injection</td>
<td>150 lb. (68 kg)</td>
</tr>
<tr>
<td>Conical Fill Port</td>
<td>150 lb. (58 kg)</td>
</tr>
<tr>
<td>Suction Loading</td>
<td>750 lb. (341 kg)</td>
</tr>
</tbody>
</table>

**Machine Dimensions**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Width</td>
<td>11 ft. 0 in. (3.35 m)</td>
</tr>
<tr>
<td>B Length</td>
<td>31 ft. 10 in. (9.70 m)</td>
</tr>
<tr>
<td>C Height</td>
<td></td>
</tr>
<tr>
<td>D Track Width</td>
<td>7 ft. 9 in. (2.36 m)</td>
</tr>
<tr>
<td>D Width Over Tires</td>
<td>9 ft. 8 in. (2.95 m)</td>
</tr>
<tr>
<td>E Rear Axle Centerline to Rear of Machine</td>
<td>7 ft. 9 in. (2.36 m)</td>
</tr>
<tr>
<td>F Front Axle to Rear Axle Centerline</td>
<td>7 ft. 9 in. (2.36 m)</td>
</tr>
<tr>
<td>G Mid Axle to Rear Axle Centerline</td>
<td>7 ft. 9 in. (2.36 m)</td>
</tr>
<tr>
<td>H Front Axle to Mid Axle Centerline</td>
<td>7 ft. 9 in. (2.36 m)</td>
</tr>
<tr>
<td>I Ground Clearance</td>
<td>7 ft. 9 in. (2.36 m)</td>
</tr>
<tr>
<td>J Front Axle Centerline to Front of Machine</td>
<td>7 ft. 9 in. (2.36 m)</td>
</tr>
<tr>
<td>K Approach Angle</td>
<td>30 deg.</td>
</tr>
<tr>
<td>L Departure Angle</td>
<td>25 deg.</td>
</tr>
</tbody>
</table>
### Additional equipment

#### 300 Engine
- Certified to EPA Tier 3 emissions
- John Deere PowerTech™ Plus 6090 — 9L inline 6
- Wet-sleeve cylinder liners
- Variable-geometry turbocharger
- External cooled EGR
- Dual-element air cleaner with dust-ejector valve
- Precleaner
- High-pressure common-rail fuel injection
- Fuel/water separator
- Air-borne particulate matter filter
- Integral air intake system
- Cold-start system
- Converter catalyst system
- Auxiliary exhaust gas recirculation (EGR)
- Variable-geometry turbocharger
- Variable nozzle ratio turbocharger
- Electronic engine control system
- Electronic throttle control system
- Low-emissions oil control system
- Fuel injection control system
- Emissions aftertreatment system

#### 300 Pneumatic System
- Engine-mounted compressor
- Air dryer with heater
- Integral unloader valve
- Air horn

#### 300 Electrical System
- 24-volt system voltage
- 80-amp alternator
- Solid-state electrical distribution system
- Battery disconnect
- Batteries, 2 x 950 CCA
- Drive lights
- Deluxe work lights
- LED rear turn signals/brake lights
- Electric horn in addition to air horn
- Reverse alarm
- Beacon wiring kit
- 24-volt to 12-volt 15-amp converter
- 24-volt to 12-volt 25-amp converter

#### 300 Hydraulic System
- Closed-center, load-sensing system
- Axial-piston, variable-displacement main pump

#### 300 Operator Station
- Ground-driven secondary steering pump
- ROPS/FOPS certification
- Keyless start with programmable security codes
- Tilt cab
- Air conditioner
- Heater
- AM/FM radio/CD player
- Rear window guard
- Wiper/washer with intermittent control
- Tilt and telescoping steering wheel
- Fully adjustable, air-suspension, heated, high-back cloth and leather seat
- Air-suspension, low-back, cloth seat
- 3-in. retractable operator seat belt
- Foldaway trainer seat with retractable seat belt
- 12-volt power outlet
- Cup holder
- Cooled/heated lunch box
- Ashtray and 12-volt cigarette lighter
- Electric adjustable and heated mirrors
- Deluxe monitor: Speedometer / Fuel gauge / Transmission oil temperature gauge / Engine coolant temperature gauge / Gear indicator / Tachometer / Battery voltage / Hour meter / Odometer / Fuel consumption / Trip counter / Trip timer / Trip distance / Metric/English units / Service codes/diagnostics / LED indicator lights and audible alarm / Multi-language capability / Tire-pressure-monitoring system warning

#### Water Tank System [Mega-supplied equipment ordered through your John Deere dealer]
- 7,000-gal. water tank
- 1,500-gal. pump
- Anti-surge stabilization system
- Spray heads, rear (4) and side (2), manually adjustable
- In-cab spray head, monitor, dump-bar controls
- In-cab water-level indicator gauge
- Pump protection for low water level
- Hydraulic monitor with in-cab joystick control
- Anti-siphon ground-level fill
- Gravity dump bar
- Hose reel with 50 ft. of 1-in. hose and nozzle
- Hose reel with 100 ft. of 1.5-in. hose and nozzle
- Intermittent-spray package
- Front spray bar
- Swivel couplings on forward spray bar
- Tank sight tube
- 550-gpm suction loading system (4 in.)
- Foam-injection system with separate-agent tank
- Epoxy-coated interior
- Conical manhole fill tube

**Mega standard equipment.

**Mega recommended equipment.

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**Key:** ● Standard ▲ Optional or special

See your John Deere dealer for further information.

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**Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO 9249. Specifications and designs subject to change without notice. Wherever applicable, specifications are in accordance with ISO standards. Except where otherwise noted, these specifications are based on a unit with standard equipment, 23.5R25 radial earthmover tires, ROPS cab, full fuel tank, and 175-lb. (79 kg) operator. Capacity and loaded weights are based on 2,800-lb./cu.-yd. (1660 kg/m³) material.**

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