Engine 350C

**Type:** DaimlerChrysler OM442A

**Configuration:** V8, integral engine valve brake, camshaft-driven PTO

**Aspiration:** Turbocharged

**Cooling system:** Liquid cooled, with a crankshaft-driven viscous fan

**Rated power (conforms to SAE J1349):** 335 SAE net hp (250 kW) / 345 SAE gross hp (258 kW) @ 2,100 rpm

**Maximum net torque:** 1,184 lb.-ft. (1600 Nm) @ 1,000–1,500 rpm

**Displacement:** 892 cu. in. (14.6 L)

**Transmission**

- **Configuration:** Allison HD4560 engine mounted automatic planetary, hydraulically actuated multiple-disc clutches, electronic control over hydraulic actuation, hydrodynamic torque converter with lock-up

- **Stall torque ratio:** 1.91 to 1

- **Vehicle speeds (full load, 2% rolling resistance):**
  - **Forward (low range):** 3 mph (5 km/h)
  - **Reverse (low range):** 4 mph (7 km/h)
  - **Forward (high range):** 6 mph (9 km/h)
  - **Reverse (high range):** 11 mph (17 km/h)

**Transfer Box**

- **Configuration:** Remote two-speed, helical geared with lockable torque-proportioning interaxle differential

**Axles**

- **Differential type:** Spiral bevel gear with controlled traction

- **Final drive type:** Outboard heavy-duty planetary reduction hub

**Braking System**

- **Service brake:** Dual-circuit, air-over-hydraulic, dry-disc brakes on all six wheels

- **Park and secondary:** Spring-applied, air-released, automatic slack-adjusting mechanical caliper, driveline-mounted, dry disc

- **Auxiliary brake:** Automatic engine valve brake actuation (includes butterfly exhaust brake valve)

- **Maximum retardation:** 340 hp (250 kW)

**Pneumatic System**

- **Type:** Four-way pressure protected with air drier, heater and integral unloader valve

**System pressure:** 135 psi (930 kPa)

**Electrical System**

- **Voltage:** 24 volt

- **Battery type:** Twin maintenance free

- **Battery capacity:** 2 x 100 A.h.

- **Alternator rating:** 28 volt, 55 amp

**Steering System**

- **Type:** Hydromechanically articulated with two double-acting hydraulic cylinders

- **Angle:** 42 degrees side to side

- **Lock-to-lock turns:** 6

**Hydraulic System**

- **Type:** Closed-center, load-sensing system

- **Main pump:** Axial piston, variable displacement

- **Application:** Steering and body-tipping

- **Flow:** 58 gpm (220 L/min.) @ governed engine speed

- **Pressure:** 3625 psi (25,000 kPa)

- **Secondary pump:** Axial piston, variable displacement

- **Application:** Secondary steering, assist main steering

- **Flow:** 31 gpm (118 L/min.) @ full ground speed
Retardation
1. Read from total weight down to % total resistance (diagonal line). 2. From that point, read horizontally to curve with highest attainable speed range. 3. Read down to maximum descent speed.

*Gear 1 lock-up not engaged automatically, engages only when Gear 1 selected manually.

**2% rolling resistance assumed in chart.
**Gradeability**

1. Read from total weight down to % total resistance (diagonal line). 2. From that point, read horizontally to curve with highest attainable speed range. 3. Read down to maximum speed.

*Gear 1 lock-up not engaged automatically, engages only when Gear 1 selected manually.

**2% rolling resistance assumed in chart.
**Tires/Wheels**

<table>
<thead>
<tr>
<th>Type</th>
<th>350C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>26.5R25</td>
</tr>
<tr>
<td>Maximum ground pressure (loaded)</td>
<td>23 psi (156 kPa) middle</td>
</tr>
</tbody>
</table>

**Suspension**

- Front type: semi-independent axle movement, leading A-frame supported on oil/nitrogen suspension struts
- Rear type: load-equalizing pivoting walking beams on each axle with laminated suspension blocks

**Body**

- Struck capacity: 19.6 cu. yd. (15.0 m³)
- Heaped capacity: 25.6 cu. yd. (19.6 m³) @ 2 to 1 SAE ratio
- Rated payload: 70,547 lb. (32,000 kg)
- Power-down time: 10 sec.
- Raise time: 19 sec.
- Tipping angle: 70 degrees

**Service Capacities**

| Fuel tank | 106 gal. (400 L) | Hydraulic reservoir | 36.9 gal. (140 L) |
| Engine oil | 8.9 gal. (34 L) | Axle oil (front) | 11.8 gal. (45 L) |
| Engine coolant | 16.9 gal. (64 L) | Axle oil (middle) | 11.8 gal. (45 L) |
| Transmission fluid (refill) | 7.3 gal. (28 L) | Axle oil (rear) | 11.8 gal. (45 L) |
| Transfer case oil | 2.2 gal. (8.5 L) |

**Operating Weights**

| Empty (Front) | 29,829 lb. (13,530 kg) | Loaded (Front) | 42,276 lb. (19,176 kg) |
| Empty (Middle) | 15,058 lb. (6,830 kg) | Loaded (Middle) | 44,108 lb. (20,007 kg) |
| Empty (Rear) | 14,396 lb. (6,530 kg) | Loaded (Rear) | 43,446 lb. (19,707 kg) |
| Total | 59,282 lb. (26,890 kg) | Total | 129,830 lb. (58,890 kg) |

**SAE Turning Radius Dimensions**

- Inside turning circle radius: 16 ft. 1 in. (4919 mm)
- Outside turning circle radius: 29 ft. 9 in. (9093 mm)
ing a machine for a given period of time. They also help you avoid downtime by servicing major components at about 80 percent of their life cycle. This information can be used to preempt catastrophic failures and lets you avoid waste-disposal hassles.

Component life-cycle data – gives you vital information on the projected life span of components and lets you make informed decisions on machine maintenance by telling you approximately how many hours of use you can expect from an engine, transmission, or hydraulic pump. This information can be used to preempt catastrophic downtime by servicing major components at about 80 percent of their life cycle.

Preventive Maintenance (PM) agreements – give you a fixed cost for maintaining a machine for a given period of time. They also help you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles. The SECURE-Extended warranty – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage costs. Whether you work in a severe-service setting or just want to spread the risk of doing business, this is a great way to custom-fit coverage for your operation. And a SECURE-Extended contract also travels well because it’s backed by John Deere and is honored by all Deere construction dealers.

Customer Support Advisors (CSAs) – Deere believes the CSA program lends a personal quality to Total Repair Cost Management. Certified CSAs have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that’s right for your business and take the burden of machine maintenance off your shoulders.

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on a unit with ROPS cab; 26.5R25, radial earthmover tires; full fuel tank; 175-lb. (79 kg) operator; and standard equipment. Capacity and loaded weights are based on 2,800-lb./cu. yd. (1660 kg/m³) material.