

| <b>ENGINE</b>                  |                                                          |
|--------------------------------|----------------------------------------------------------|
| Type .....                     | John Deere 4045T with altitude-compensating turbocharger |
| Rated power .....              | 90 SAE net hp (66 kW) @ 2,200 rpm                        |
| Cylinders.....                 | 4                                                        |
| Displacement .....             | 276 cu. in. (4.5 L)                                      |
| Maximum net torque .....       | 260 lb.-ft. (353 Nm) @ 1,400 rpm                         |
| Fuel consumption, typical..... | 2.0 to 3.0 gal./hr. (7.6 to 11.4 L/h)                    |
| Cooling fan.....               | suction-type                                             |
| Electrical system .....        | 24 volt with 45-amp alternator                           |
| Batteries (two 12 volt) .....  | reserve capacity: 180 min.                               |
| Off-level capacity .....       | 100% (45 deg.)                                           |

## HYDRAULIC SYSTEM

|                           |                                                                            |
|---------------------------|----------------------------------------------------------------------------|
| Main pumps.....           | two variable-displacement axial-piston                                     |
| Minimum flow.....         | 2 x 12 gpm (2 x 46 L/min.)                                                 |
| Maximum flow .....        | 2 x 26.7 gpm (2 x 101 L/min.)                                              |
| Pilot pump .....          | one gear                                                                   |
| Maximum rated flow .....  | 8.7 gpm (32.9 L/min.)                                                      |
| Pressure setting .....    | 540 psi (3723 kPa)                                                         |
| System operating pressure |                                                                            |
| Implement circuits.....   | 4,980 psi (34 336 kPa)                                                     |
| Travel circuits.....      | 4,980 psi (34 336 kPa)                                                     |
| Swing circuits.....       | 4,550 psi (31 371 kPa)                                                     |
| Oil filtration.....       | one 10-micron full-flow return filter with by-pass<br>one pilot oil filter |

## CYLINDERS

|                   |                    |
|-------------------|--------------------|
| Boom (2)          |                    |
| Bore .....        | 4.13 in. (105 mm)  |
| Rod diameter..... | 2.76 in. (70 mm)   |
| Stroke .....      | 37.0 in. (939 mm)  |
| Arm (1)           |                    |
| Bore .....        | 4.33 in. (110 mm)  |
| Rod diameter..... | 3.15 in. (80 mm)   |
| Stroke .....      | 44.7 in. (1135 mm) |
| Bucket (1)        |                    |
| Bore .....        | 3.74 in. (95 mm)   |
| Rod diameter..... | 2.56 in. (65 mm)   |
| Stroke .....      | 34.4 in. (875 mm)  |

## SWING MECHANISM

|                   |                            |
|-------------------|----------------------------|
| Swing speed ..... | 0–12.7 rpm                 |
| Swing torque..... | 22,415 lb.-ft. (30 414 Nm) |

## UNDERCARRIAGE

|                                 |                        |
|---------------------------------|------------------------|
| Carrier rollers (per side)..... | 1                      |
| Track rollers (per side) .....  | 7                      |
| Shoes (per side).....           | 44                     |
| Track guides.....               | front                  |
| Track adjustment.....           | hydraulic              |
| Travel speed                    |                        |
| Low .....                       | 0–2.0 mph (0–3.2 km/h) |
| High .....                      | 0–3.4 mph (0–5.5 km/h) |
| Drawbar pull .....              | 22,050 lb. (10 000 kg) |

## GROUND PRESSURE DATA

|                                                |                                                                             |
|------------------------------------------------|-----------------------------------------------------------------------------|
| Average ground pressure                        |                                                                             |
| 24-in. (600 mm) triple semi-grouser shoes..... | 4.55 psi (31.4 kPa); recommended for rocky terrain, hard ground, and stumps |
| 28-in. (700 mm) triple semi-grouser shoes..... | 3.96 psi (27.3 kPa); recommended for general conditions and soft terrain    |
| 20-in. (500 mm) rubber track .....             | 5.26 psi (36.3 kPa); not to be used in rocky conditions or on side slopes   |

## CAPACITIES

120

|                                            |                 |
|--------------------------------------------|-----------------|
| Fuel tank .....                            | 66 gal. (250 L) |
| Cooling system .....                       | 23 qt. (22 L)   |
| Engine lubrication, including filter ..... | 13.8 qt. (13 L) |
| Hydraulic tank .....                       | 20 gal. (76 L)  |
| Hydraulic system .....                     | 35 gal. (134 L) |
| Swing gearbox .....                        | 2.6 qt. (2.8 L) |
| Propel gearbox (each) .....                | 3.4 qt. (3.2 L) |
| Pump drive gearbox .....                   | 0.8 qt. (0.8 L) |

## OPERATING WEIGHTS

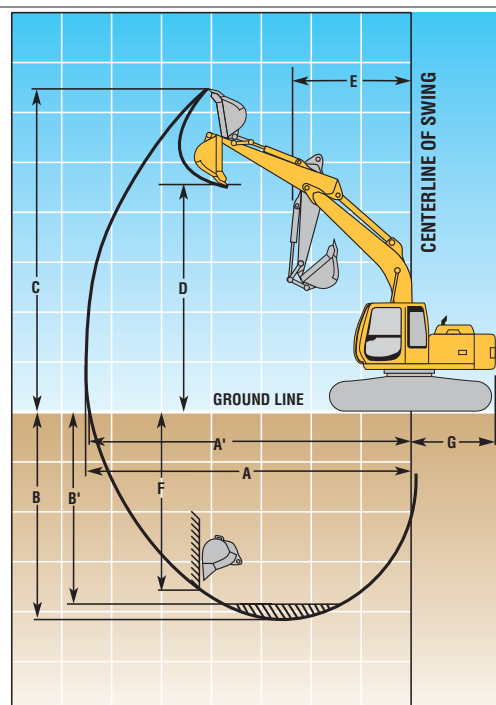
|                                                                                                                                                                                                                                                                              |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| With full fuel tank; 175-lb. (79 kg) operator; 0.79-cu. yd. (0.60 m <sup>3</sup> ), 42-in. (1067 mm), 925-lb. (420 kg) bucket; 9 ft. 11 in. (3.01 m) arm; 4,974-lb. (2256 kg) counterweight; 11 ft. 9 in. (3.58 m) undercarriage length with 6 ft. 6 in. (1.99 m) wide gauge |                        |
| 24-in. (600 mm) triple semi-grouser shoes .....                                                                                                                                                                                                                              | 26,790 lb. (12 152 kg) |
| 28-in. (700 mm) triple semi-grouser shoes .....                                                                                                                                                                                                                              | 27,200 lb. (12 338 kg) |
| 20-in. (500 mm) rubber track .....                                                                                                                                                                                                                                           | 26,090 lb. (11 836 kg) |

## COMPONENT WEIGHTS

|                                                                                                         |                      |
|---------------------------------------------------------------------------------------------------------|----------------------|
| Upperstructure (less front attachments and 4,974-lb. [2256 kg] counterweight with full fuel tank) ..... | 7,199 lb. (3265 kg)  |
| Undercarriage equipped with                                                                             |                      |
| 24-in. (600 mm) triple semi-grouser shoes .....                                                         | 9,625 lb. (4366 kg)  |
| 28-in. (700 mm) triple semi-grouser shoes .....                                                         | 10,035 lb. (4552 kg) |
| 20-in. (500 mm) rubber track .....                                                                      | 8,929 lb. (4050 kg)  |
| One-piece boom (with arm cylinder) .....                                                                | 2,022 lb. (917 kg)   |
| Arm with bucket cylinder and linkage                                                                    |                      |
| 8 ft. 3 in. (2.52 m) .....                                                                              | 1,219 lb. (553 kg)   |
| 9 ft. 11 in. (3.01 m) .....                                                                             | 1,398 lb. (634 kg)   |
| Boom lift cylinders (2) total weight .....                                                              | 472 lb. (214 kg)     |
| Counterweight .....                                                                                     | 4,974 lb. (2256 kg)  |

## OPERATING INFORMATION

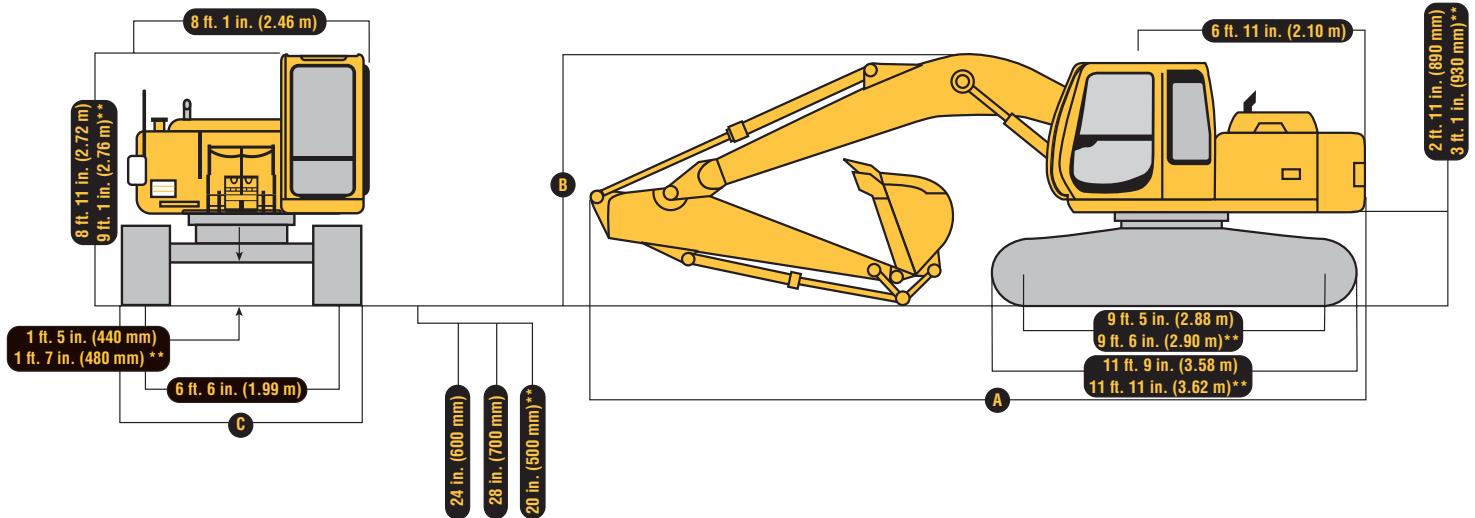
|                                                                                                             | Arm Length<br>8 ft. 3 in. (2.52 m) | Arm Length<br>9 ft. 11 in. (3.01 m) |
|-------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------|
| Arm force with 0.79-cu. yd. (0.60 m <sup>3</sup> ) 42-in. (1067 mm) general-purpose bucket .....            | 13,475 lb. (6112 kg)               | 12,040 lb. (5461 kg)                |
| Bucket digging force with 0.79-cu. yd. (0.60 m <sup>3</sup> ) 42-in. (1067 mm) general-purpose bucket ..... | 19,640 lb. (8909 kg)               | 19,640 lb. (8909 kg)                |
| Lifting capacity over front @ ground level 20-ft. (6.1 m) reach .....                                       | 5,725 lb. (2597 kg)                | 5,681 lb. (2597 kg)                 |
| <b>A</b> Maximum reach .....                                                                                | 26 ft. 9 in. (8.145 m)             | 28 ft. 3 in. (8.615 m)              |
| <b>A'</b> Maximum reach @ ground level .....                                                                | 26 ft. 4 in. (8.015 m)             | 27 ft. 10 in. (8.495 m)             |
| <b>B</b> Maximum digging depth .....                                                                        | 17 ft. 10 in. (5.445 m)            | 19 ft. 6 in. (5.935 m)              |
| With rubber track .....                                                                                     | 17 ft. 8 in. (5.405 m)             | 19 ft. 4 in. (5.895 m)              |
| <b>B'</b> Maximum digging depth @ 8-ft. (2.44 m) flat bottom .....                                          | 17 ft. 2 in. (5.235 m)             | 18 ft. 11 in. (5.755 m)             |
| With rubber track .....                                                                                     | 17 ft. 0 in. (5.195 m)             | 18 ft. 9 in. (5.715 m)              |
| <b>C</b> Maximum cutting height .....                                                                       | 27 ft. 8 in. (8.425 m)             | 28 ft. 9 in. (8.755 m)              |
| With rubber track .....                                                                                     | 27 ft. 6 in. (8.465 m)             | 28 ft. 11 in. (8.795 m)             |
| <b>D</b> Maximum dumping height .....                                                                       | 20 ft. 7 in. (6.265 m)             | 21 ft. 8 in. (6.595 m)              |
| With rubber track .....                                                                                     | 20 ft. 9 in. (6.305 m)             | 21 ft. 10 in. (6.635 m)             |
| <b>E</b> Minimum swing radius .....                                                                         | 7 ft. 8 in. (2.33 m)               | 8 ft. 6 in. (2.59 m)                |
| <b>F</b> Maximum vertical wall .....                                                                        | 16 ft. 0 in. (4.885 m)             | 17 ft. 7 in. (5.355 m)              |
| With rubber track .....                                                                                     | 15 ft. 10 in. (4.845 m)            | 17 ft. 5 in. (5.315 m)              |
| <b>G</b> Tail swing radius .....                                                                            | 7 ft. 0 in. (2.13 m)               | 7 ft. 0 in. (2.13 m)                |



## DIMENSIONS

**120**

- A** With 8 ft. 3 in. (2.52 m) arm .....24 ft. 10 in. (7.58 m)  
 With 9 ft. 11 in. (3.01 m) arm .....24 ft. 10 in. (7.59 m)
- B** With 8 ft. 3 in. (2.52 m) arm .....8 ft. 10 in. (2.68 m)  
 With 9 ft. 11 in. (3.01 m) arm\* .....8 ft. 9 in. (2.67 m)
- C** With 24-in. (600 mm) semi-grouser shoes .....8 ft. 6 in. (2.59 m)  
 With 28-in. (700 mm) semi-grouser shoes .....8 ft. 10 in. (2.69 m)  
 With 20-in. (500 mm) rubber track .....8 ft. 2 in. (2.49 m)



\*Arm pinned in shipping position.

\*\*With 20-in. (500 mm) rubber track.

## LIFT CAPACITIES

**Boldface italic** type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook, machine equipped with 0.79-cu. yd. (0.60 m<sup>3</sup>), 42-in. (1067 mm) wide, 925-lb. (420 kg) bucket; and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. Lift capacities are based on SAE standard J1097.

| Load Point Height                                               | 5 ft. (1.52 m)       |                      | 10 ft. (3.05 m)      |                     | 15 ft. (4.57 m)     |                     | 20 ft. (6.10 m)     |              | 25 ft. (7.62 m)     |              |
|-----------------------------------------------------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|--------------|---------------------|--------------|
|                                                                 | Over Front           | Over Side            | Over Front           | Over Side           | Over Front          | Over Side           | Over Front          | Over Side    | Over Front          | Over Side    |
| <i>With 8 ft. 3 in. (2.52 m) arm and 24 in. (600 mm) shoes</i>  |                      |                      |                      |                     |                     |                     |                     |              |                     |              |
| 15 ft. (4.57 m)                                                 |                      |                      |                      |                     | <b>5,716 (2572)</b> | <b>5,716 (2572)</b> | <b>4,791 (2156)</b> | 4,170 (1877) |                     |              |
| 10 ft. (3.05 m)                                                 |                      |                      | <b>7,552 (3398)</b>  | <b>7,552 (3398)</b> | <b>7,308 (3289)</b> | 6,647 (2991)        | 6,060 (2727)        | 4,050 (1823) |                     |              |
| 5 ft. (1.52 m)                                                  |                      |                      |                      |                     | 9,360 (4212)        | 6,129 (2758)        | 5,833 (2625)        | 3,840 (1728) |                     |              |
| Ground Line                                                     |                      |                      | <b>9,079 (4086)</b>  | <b>9,079 (4086)</b> | 8,905 (4007)        | 5,722 (2575)        | 5,626 (2532)        | 3,648 (1642) |                     |              |
| -5 ft. (-1.52 m)                                                | <b>6,487 (2919)</b>  | <b>6,487 (2919)</b>  | <b>16,664 (7499)</b> | 10,654 (4794)       | 8,714 (3921)        | 5,551 (2498)        | 5,520 (2484)        | 3,550 (1598) |                     |              |
| -10 ft. (-3.05 m)                                               | <b>12,195 (5488)</b> | <b>12,195 (5488)</b> | <b>15,590 (7016)</b> | 10,820 (4869)       | 8,752 (3938)        | 5,585 (2513)        |                     |              |                     |              |
| <i>With 9 ft. 11 in. (3.01 m) arm and 24 in. (600 mm) shoes</i> |                      |                      |                      |                     |                     |                     |                     |              |                     |              |
| 15 ft. (4.57 m)                                                 |                      |                      |                      |                     |                     |                     | <b>4,694 (2112)</b> | 4,344 (1955) |                     |              |
| 10 ft. (3.05 m)                                                 |                      |                      |                      |                     | <b>5,585 (2513)</b> | <b>5,585 (2513)</b> | <b>5,555 (2500)</b> | 4,192 (1886) | <b>2,984 (1343)</b> | 2,722 (1225) |
| 5 ft. (1.52 m)                                                  |                      |                      |                      |                     | <b>8,979 (4041)</b> | 6,307 (2838)        | 5,951 (2678)        | 3,949 (1777) | 4,070 (1832)        | 2,639 (1188) |
| Ground Line                                                     |                      |                      | <b>11,364 (5114)</b> | 10,795 (4858)       | 9,005 (4052)        | 5,811 (2615)        | 5,699 (2565)        | 3,716 (1672) | 3,968 (1786)        | 2,544 (1145) |
| -5 ft. (-1.52 m)                                                | <b>6,249 (2812)</b>  | <b>6,249 (2812)</b>  | <b>15,526 (6987)</b> | 10,542 (4744)       | 8,722 (3925)        | 5,558 (2501)        | 5,545 (2495)        | 3,573 (1608) |                     |              |
| -10 ft. (-3.05 m)                                               | <b>13,466 (6060)</b> | <b>13,466 (6060)</b> | <b>16,786 (7554)</b> | 10,635 (4786)       | 8,691 (3911)        | 5,530 (2489)        | 5,540 (2493)        | 3,568 (1606) |                     |              |
| -15 ft. (-4.57 m)                                               |                      |                      | <b>12,634 (5685)</b> | 10,999 (4950)       | <b>8,518 (3833)</b> | 5,737 (2582)        |                     |              |                     |              |
| <i>With 8 ft. 3 in. (2.52 m) arm and 28 in. (700 mm) shoes</i>  |                      |                      |                      |                     |                     |                     |                     |              |                     |              |
| 20 ft. (6.10 m)                                                 |                      |                      |                      |                     | <b>5,258 (2366)</b> | <b>5,258 (2366)</b> |                     |              |                     |              |
| 15 ft. (4.57 m)                                                 |                      |                      |                      |                     | <b>5,696 (2563)</b> | <b>5,696 (2563)</b> | <b>4,752 (2138)</b> | 4,238 (1907) |                     |              |
| 10 ft. (3.05 m)                                                 |                      |                      | <b>7,315 (3292)</b>  | <b>7,315 (3292)</b> | <b>7,222 (3250)</b> | 6,753 (3039)        | 6,161 (2772)        | 4,121 (1854) |                     |              |
| 5 ft. (1.52 m)                                                  |                      |                      |                      |                     | 9,515 (4282)        | 6,234 (2805)        | 5,934 (2670)        | 3,911 (1760) |                     |              |
| Ground Line                                                     |                      |                      | <b>8,922 (4015)</b>  | <b>8,922 (4015)</b> | 9,054 (4074)        | 5,823 (2620)        | 5,725 (2576)        | 3,718 (1673) |                     |              |
| -5 ft. (-1.52 m)                                                | <b>6,308 (2839)</b>  | <b>6,308 (2839)</b>  | <b>16,424 (7391)</b> | 10,821 (4869)       | 8,858 (3986)        | 5,647 (2541)        | 5,616 (2527)        | 3,617 (1628) |                     |              |
| -10 ft. (-3.05 m)                                               | <b>12,186 (5484)</b> | <b>12,186 (5484)</b> | <b>15,659 (7047)</b> | 10,983 (4942)       | 8,891 (4001)        | 5,677 (2555)        |                     |              |                     |              |

## LIFT CAPACITIES (continued)

**Boldface italic** type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook, machine equipped with 0.79-cu. yd. (0.60 m<sup>3</sup>), 42-in. (1067 mm) wide, 925-lb. (420 kg) bucket; and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. Lift capacities are based on SAE standard J1097.

| Load Point<br>Height                                     | 5 ft. (1.52 m)       |                      | 10 ft. (3.05 m)      |               | 15 ft. (4.57 m)     |                     | 20 ft. (6.10 m)     |              | 25 ft. (7.62 m)     |              |
|----------------------------------------------------------|----------------------|----------------------|----------------------|---------------|---------------------|---------------------|---------------------|--------------|---------------------|--------------|
|                                                          | Over Front           | Over Side            | Over Front           | Over Side     | Over Front          | Over Side           | Over Front          | Over Side    | Over Front          | Over Side    |
| With 9 ft. 11 in. (3.01 m) arm and 28 in. (700 mm) shoes |                      |                      |                      |               |                     |                     |                     |              |                     |              |
| 15 ft. (4.57 m)                                          |                      |                      |                      |               |                     |                     | <b>4,545 (2045)</b> | 4,292 (1931) |                     |              |
| 10 ft. (3.05 m)                                          |                      |                      |                      |               | <b>5,410 (2435)</b> | <b>5,410 (2435)</b> | <b>5,397 (2429)</b> | 4,143 (1864) | <b>2,796 (1258)</b> | 2,651 (1193) |
| 5 ft. (1.52 m)                                           |                      |                      |                      |               | <b>8,779 (3951)</b> | 6,301 (2835)        | 5,934 (2670)        | 3,901 (1755) | 4,022 (1810)        | 2,570 (1157) |
| Ground Line                                              |                      |                      | <b>11,167 (5025)</b> | 10,873 (4893) | 9,044 (4070)        | 5,800 (2610)        | 5,681 (2556)        | 3,666 (1650) | 3,920 (1764)        | 2,473 (1113) |
| -5 ft. (-1.52 m)                                         | <b>5,887 (2649)</b>  | <b>5,887 (2649)</b>  | <b>15,143 (6814)</b> | 10,606 (4773) | 8,754 (3939)        | 5,540 (2493)        | 5,523 (2485)        | 3,520 (1584) |                     |              |
| -10 ft. (-3.05 m)                                        | <b>13,074 (5883)</b> | <b>13,074 (5883)</b> | <b>16,732 (7529)</b> | 10,691 (4811) | 8,717 (3922)        | 5,507 (2478)        | 5,513 (2481)        | 3,511 (1580) |                     |              |
| -15 ft. (-4.57 m)                                        |                      |                      | <b>12,664 (5699)</b> | 11,047 (4971) | <b>8,509 (3829)</b> | 5,705 (2567)        |                     |              |                     |              |

With 8 ft. 3 in. (2.52 m) arm and 20 in. (500 mm) rubber track

|                   |                      |                      |                      |                     |                     |                     |                     |              |  |  |
|-------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|--------------|--|--|
| 15 ft. (4.57 m)   |                      |                      |                      |                     | <b>5,708 (2569)</b> | <b>5,708 (2569)</b> | <b>4,808 (2164)</b> | 4,062 (1828) |  |  |
| 10 ft. (3.05 m)   |                      |                      | <b>7,576 (3409)</b>  | <b>7,576 (3409)</b> | <b>7,310 (3289)</b> | 6,489 (2920)        | 5,898 (2654)        | 3,941 (1773) |  |  |
| 5 ft. (1.52 m)    |                      |                      |                      |                     | 9,117 (4103)        | 5,970 (2687)        | 5,671 (2552)        | 3,730 (1679) |  |  |
| Ground Line       |                      |                      | <b>9,045 (4070)</b>  | <b>9,045 (4070)</b> | 8,663 (3898)        | 5,563 (2503)        | 5,463 (2458)        | 3,538 (1592) |  |  |
| -5 ft. (-1.52 m)  | <b>6,543 (2944)</b>  | <b>6,543 (2944)</b>  | <b>16,696 (7513)</b> | 10,378 (4670)       | 8,473 (3813)        | 5,394 (2427)        | 5,358 (2411)        | 3,440 (1548) |  |  |
| -10 ft. (-3.05 m) | <b>12,471 (5612)</b> | <b>12,471 (5612)</b> | <b>15,568 (7006)</b> | 10,545 (4745)       | 8,512 (3830)        | 5,429 (2443)        |                     |              |  |  |

With 9 ft. 11 in. (3.01 m) arm and 20 in. (500 mm) rubber track

|                   |                      |                      |                      |               |                     |                     |                     |              |                     |              |
|-------------------|----------------------|----------------------|----------------------|---------------|---------------------|---------------------|---------------------|--------------|---------------------|--------------|
| 15 ft. (4.57 m)   |                      |                      |                      |               |                     |                     | <b>4,694 (2112)</b> | 4,232 (1904) |                     |              |
| 10 ft. (3.05 m)   |                      |                      |                      |               | <b>5,585 (2513)</b> | <b>5,585 (2513)</b> | <b>5,555 (2500)</b> | 4,080 (1836) | <b>2,984 (1343)</b> | 2,636 (1186) |
| 5 ft. (1.52 m)    |                      |                      |                      |               | <b>8,979 (4041)</b> | 6,146 (2766)        | 5,786 (2604)        | 3,837 (1727) | 3,946 (1776)        | 2,553 (1149) |
| Ground Line       |                      |                      | <b>11,364 (5114)</b> | 10,511 (4730) | 8,760 (3942)        | 5,650 (2543)        | 5,535 (2491)        | 3,604 (1622) | 3,844 (1730)        | 2,458 (1106) |
| -5 ft. (-1.52 m)  | <b>6,249 (2812)</b>  | <b>6,249 (2812)</b>  | <b>15,526 (6987)</b> | 10,258 (4616) | 8,477 (3815)        | 5,397 (2429)        | 5,380 (2421)        | 3,460 (1557) |                     |              |
| -10 ft. (-3.05 m) | <b>13,466 (6060)</b> | <b>13,466 (6060)</b> | <b>16,786 (7554)</b> | 10,350 (4658) | 8,446 (3801)        | 5,369 (2416)        | 5,375 (2419)        | 3,456 (1555) |                     |              |
| -15 ft. (-4.57 m) |                      |                      | <b>12,634 (5685)</b> | 10,715 (4822) | <b>8,518 (3833)</b> | 5,576 (2509)        |                     |              |                     |              |

## BUCKETS

A full line of buckets is offered to meet a wide variety of applications. Buckets have an adjustable bushing for side clearance, with the exception of the ditching bucket. Tooth selection includes either the John Deere Fanggs® tooth or the ESCO Vertalok tooth. Replaceable cutting edges are available through John Deere parts. Optional side cutters add 6 inches (150 mm) to bucket widths.

| Type Bucket     | Bucket Width |      | Bucket Capacity* |                | Weight |     | Bucket Dig Force |       | Arm Dig Force 8 ft. 3 in. (2.52 m) |      | Arm Dig Force 9 ft. 11 in. (3.01 m) |      | Bucket Tip Radius |      | No. Teeth |
|-----------------|--------------|------|------------------|----------------|--------|-----|------------------|-------|------------------------------------|------|-------------------------------------|------|-------------------|------|-----------|
|                 | in.          | mm   | cu. yd.          | m <sup>3</sup> | lb.    | kg  | lb.              | kN    | lb.                                | kN   | lb.                                 | kN   | in.               | mm   |           |
| General-Purpose | 18           | 460  | 0.34             | 0.26           | 723    | 328 | 17,087           | 76.0  | 12,889                             | 57.3 | 11,575                              | 51.5 | 50.0              | 1270 | 3         |
| Plate Lip       | 24           | 610  | 0.50             | 0.38           | 893    | 405 | 17,087           | 76.0  | 12,889                             | 57.3 | 11,575                              | 51.5 | 50.0              | 1270 | 4         |
|                 | 30           | 760  | 0.64             | 0.49           | 1,066  | 484 | 17,087           | 76.0  | 12,889                             | 57.3 | 11,575                              | 51.5 | 50.0              | 1270 | 4         |
|                 | 36           | 915  | 0.78             | 0.60           | 1,081  | 490 | 17,087           | 76.0  | 12,889                             | 57.3 | 11,575                              | 51.5 | 50.0              | 1270 | 5         |
|                 | 42           | 1065 | 0.79             | 0.60           | 926    | 420 | 19,640           | 87.4  | 13,475                             | 59.9 | 12,040                              | 53.6 | 43.5              | 1105 | 6         |
|                 | 42           | 1065 | 0.92             | 0.70           | 1,244  | 564 | 17,087           | 76.0  | 12,889                             | 57.3 | 11,575                              | 51.5 | 50.0              | 1270 | 6         |
|                 | 48           | 1220 | 1.06             | 0.81           | 1,441  | 654 | 17,087           | 76.0  | 12,889                             | 57.3 | 11,575                              | 51.5 | 50.0              | 1270 | 7         |
| Heavy-Duty      | 18           | 460  | 0.34             | 0.26           | 869    | 394 | 17,035           | 75.8  | 12,865                             | 57.2 | 11,590                              | 51.6 | 50.0              | 1270 | 3         |
| Plate Lip       | 24           | 610  | 0.50             | 0.38           | 938    | 425 | 17,035           | 75.8  | 12,865                             | 57.2 | 11,590                              | 51.6 | 50.0              | 1270 | 4         |
|                 | 30           | 760  | 0.62             | 0.47           | 1,122  | 509 | 17,035           | 75.8  | 12,865                             | 57.2 | 11,590                              | 51.6 | 50.0              | 1270 | 4         |
|                 | 36           | 915  | 0.78             | 0.60           | 1,298  | 589 | 17,035           | 75.8  | 12,865                             | 57.2 | 11,590                              | 51.6 | 50.0              | 1270 | 5         |
| Ditching        | 48           | 1220 | 0.67             | 0.51           | 841    | 381 | 23,020           | 102.4 | 14,090                             | 62.7 | 12,555                              | 55.8 | 37.0              | 940  | 0         |
|                 | 60           | 1525 | 0.90             | 0.69           | 937    | 425 | 23,020           | 102.4 | 14,090                             | 62.7 | 12,555                              | 55.8 | 37.0              | 940  | 0         |

\*All capacities are SAE heaped ratings.

**BUCKET SELECTION CHART**

|                                                                                       | <i>General-Purpose Bucket*</i>                    | <i>Heavy-Duty Bucket*</i>                        |
|---------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
| Material (loose weight)                                                               |                                                   |                                                  |
| Wood chips – 700 lb./cu. yd. (420 kg/m <sup>3</sup> ) .....                           | 3.25 cu. yd. (2.5 m <sup>3</sup> )                | —                                                |
| Peat, dry – 750 lb./cu. yd. (440 kg/m <sup>3</sup> ) .....                            | 2.75 cu. yd. (2.1 m <sup>3</sup> )                | —                                                |
| Cinders – 950 lb./cu. yd. (560 kg/m <sup>3</sup> ) .....                              | 2.00 cu. yd. (1.5 m <sup>3</sup> )                | —                                                |
| Peat, wet – 1,170 lb./cu. yd. (690 kg/m <sup>3</sup> ) .....                          | 1.75 cu. yd. (1.3 m <sup>3</sup> )                | —                                                |
| Topsoil – 1,600 lb./cu. yd. (950 kg/m <sup>3</sup> ) .....                            | 1.38 cu. yd. (1.1 m <sup>3</sup> )                | —                                                |
| Coal – 1,780 lb./cu. yd. (1050 kg/m <sup>3</sup> ) .....                              | 1.25 cu. yd. (1.0 m <sup>3</sup> )                | —                                                |
| Caliche – 2,100 lb./cu. yd. (1250 kg/m <sup>3</sup> ) .....                           | 0.88 to 0.63 cu. yd. (0.7 to 0.5 m <sup>3</sup> ) | 0.75 to 0.5 cu. yd. (0.6 to 0.4 m <sup>3</sup> ) |
| Earth, loam – 2,100 lb./cu. yd. (1250 kg/m <sup>3</sup> ) .....                       | 0.88 cu. yd. (0.7 m <sup>3</sup> )                | 0.75 cu. yd. (0.6 m <sup>3</sup> )               |
| Shale – 2,250 lb./cu. yd. (1330 kg/m <sup>3</sup> ) .....                             | 0.88 cu. yd. (0.7 m <sup>3</sup> )                | 0.75 cu. yd. (0.6 m <sup>3</sup> )               |
| Sand, dry – 2,400 lb./cu. yd. (1420 kg/m <sup>3</sup> ) .....                         | 0.88 cu. yd. (0.7 m <sup>3</sup> )                | 0.75 cu. yd. (0.6 m <sup>3</sup> )               |
| Clay, dry – 2,500 lb./cu. yd. (1480 kg/m <sup>3</sup> ) .....                         | 0.88 to 0.63 cu. yd. (0.7 to 0.5 m <sup>3</sup> ) | 0.75 cu. yd. (0.6 m <sup>3</sup> )               |
| Earth, dry – 2,550 lb./cu. yd. (1510 kg/m <sup>3</sup> ) .....                        | 0.75 to 0.63 cu. yd. (0.6 to 0.5 m <sup>3</sup> ) | 0.63 cu. yd. (0.5 m <sup>3</sup> )               |
| Limestone, broken or crushed – 2,600 lb./cu. yd. (1540 kg/m <sup>3</sup> ) .....      | 0.75 to 0.5 cu. yd. (0.6 to 0.4 m <sup>3</sup> )  | 0.63 to 0.5 cu. yd. (0.5 to 0.4 m <sup>3</sup> ) |
| Earth, wet – 2,700 lb./cu. yd. (1600 kg/m <sup>3</sup> ) .....                        | 0.75 cu. yd. (0.6 m <sup>3</sup> )                | 0.63 cu. yd. (0.5 m <sup>3</sup> )               |
| Clay, wet – 2,800 lb./cu. yd. (1660 kg/m <sup>3</sup> ) .....                         | 0.75 cu. yd. (0.6 m <sup>3</sup> )                | 0.63 cu. yd. (0.5 m <sup>3</sup> )               |
| Rock, granite, blasted and broken – 2,800 lb./cu. yd. (1660 kg/m <sup>3</sup> ) ..... | 0.88 to 0.63 cu. yd. (0.7 to 0.5 m <sup>3</sup> ) | 0.75 to 0.5 cu. yd. (0.6 to 0.4 m <sup>3</sup> ) |
| Sand, moist – 2,850 lb./cu. yd. (1690 kg/m <sup>3</sup> ) .....                       | 0.75 cu. yd. (0.6 m <sup>3</sup> )                | 0.63 cu. yd. (0.5 m <sup>3</sup> )               |
| Sand and gravel, dry – 2,900 lb./cu. yd. (1720 kg/m <sup>3</sup> ) .....              | 0.75 cu. yd. (0.6 m <sup>3</sup> )                | 0.63 cu. yd. (0.5 m <sup>3</sup> )               |
| Sand, wet – 3,100 lb./cu. yd. (1840 kg/m <sup>3</sup> ) .....                         | 0.63 cu. yd. (0.5 m <sup>3</sup> )                | 0.50 cu. yd. (0.4 m <sup>3</sup> )               |
| Sand and gravel, wet – 3,400 lb./cu. yd. (2020 kg/m <sup>3</sup> ) .....              | 0.63 cu. yd. (0.5 m <sup>3</sup> )                | 0.50 cu. yd. (0.4 m <sup>3</sup> )               |

\*Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Larger buckets may be possible when using light buckets, for flat and level operations, less compacted materials, and volume loading applications such as mass excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications and uneven surfaces. Bucket capacity indicated is SAE heaped.

|                                                                                                        | 120 |                                                                                     | 120 |                                                               | 120 |
|--------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------|-----|---------------------------------------------------------------|-----|
| <b>ENGINE</b>                                                                                          |     | Right- and left-hand mirrors                                                        | ●   | Mode selectors (illuminated)                                  | ●   |
| Auto-idle system                                                                                       | ●   | Toolbox                                                                             | ●   | Power modes – three                                           | ●   |
| Automatic belt tension device                                                                          | ●   |                                                                                     |     | Travel modes – two with automatic shift                       | ●   |
| Batteries (two 12 volt), 180-min. reserve capacity (1,250 CCA)                                         | ●   | <b>FRONT ATTACHMENTS</b>                                                            |     | Work modes – four                                             | ●   |
| Dual element dry-type air filter                                                                       | ●   | Bucket-to-arm clearance adjustable bushing (except ditching buckets)                | ●   | Monitor system with alarm features                            | ●   |
| Electric fuel shutoff                                                                                  | ●   | Centralized lubrication system                                                      | ●   | Auto-idle indicator light                                     | ●   |
| Enclosed fan guard (conforms to SAE J1308)                                                             | ●   | Dirt seals on all bucket pins                                                       | ●   | Engine air cleaner restriction indicator light                | ●   |
| Engine coolant to –34°F (–37°C)                                                                        | ●   | No-boom-arm                                                                         | ●   | Engine coolant temperature indicator light with audible alarm | ●   |
| Fuel filter with water separator                                                                       | ●   | Arm, 8 ft. 3 in. (2.52 m)                                                           | ●   | Engine oil pressure indicator light with audible alarm        | ●   |
| Full-flow oil filter                                                                                   | ●   | Arm, 9 ft. 11 in. (3.01 m)                                                          | ●   | Fluid level                                                   |     |
| Radiator trash screen                                                                                  | ●   | Attachment quick couplers                                                           | ●   | Engine coolant level indicator light                          | ●   |
| Underhood muffler with vertical curved end exhaust stack                                               | ●   | Boom cylinder with plumbing to mainframe                                            | ●   | Engine oil level indicator light                              | ●   |
| Electric ether starting aid                                                                            | ■   | Buckets                                                                             | ■   | Hydraulic oil level indicator light                           | ●   |
| Engine coolant heater                                                                                  | ■   | Ditching                                                                            | ■   | Low alternator charge indicator light                         | ●   |
|                                                                                                        |     | General purpose                                                                     | ■   | Low fuel indicator light                                      | ●   |
| <b>HYDRAULIC SYSTEM</b>                                                                                |     | General-purpose high capacity                                                       | ■   | Motion alarm with cancel switch (conforms to SAE J994)        | ●   |
| Reduced-drift valve for boom down, arm in Spring-applied, hydraulically-released automatic swing brake | ●   | Heavy duty                                                                          | ■   | Propel pedals and levers                                      | ●   |
| Auxiliary hydraulic and electric pilot controls                                                        | ●   | Heavy-duty high capacity                                                            | ■   | Seat belt, 2 in. (51 mm), retractable                         | ●   |
| Auxiliary hydraulic lines                                                                              | ■   | Severe-duty cast lip                                                                | ■   | Seat belt, 3 in. (76 mm), retractable                         | ■   |
| Hydraulic filter restriction indicator kit                                                             | ■   | Severe-duty plate lip                                                               | ■   | Tinted glass                                                  | ●   |
| Load-lowering control device                                                                           | ■   | Side cutters and teeth                                                              | ■   | Air conditioning                                              | ■   |
|                                                                                                        |     | Heavy-duty grapple                                                                  | ■   | AM/FM radio                                                   | ■   |
| <b>UNDERCARRIAGE</b>                                                                                   |     | Hydraulic bucket material clamps                                                    | ■   | Circulation fan                                               | ■   |
| Planetary drive                                                                                        | ●   | Slide-Loc hydraulic coupler                                                         | ■   | Pilot control pattern selector                                | ●   |
| Propel motor shields                                                                                   | ●   |                                                                                     |     | Protection screens for cab front, rear, and side              | ■   |
| Track guides, front idler                                                                              | ●   | <b>OPERATOR'S STATION</b>                                                           |     | Window vandal protection covers                               | ■   |
| Triple semi-grouser shoes, 24 in. (600 mm)                                                             | ●   | Adjustable seat with independent control positions (levers-to-seat, seat-to-pedals) | ●   | 24- to 12-volt D.C. radio convertors                          | ■   |
| Triple semi-grouser shoes, 28 in. (700 mm)                                                             | ●   | Deluxe suspension cloth seat with adjustable armrests                               | ●   |                                                               |     |
| Rubber track, 20 in. (500 mm)                                                                          | ■   | Front windshield wiper with intermittent speed                                      | ●   | <b>ELECTRICAL</b>                                             |     |
| Two-speed propel with automatic shift                                                                  | ■   | Gauges (illuminated)                                                                | ●   | Blade-type multi-fused circuits                               | ●   |
| Upper carrier roller (1)                                                                               | ●   | Engine coolant                                                                      | ●   | By-pass start safety cover on starter                         | ●   |
|                                                                                                        |     | Fuel                                                                                | ●   | Positive terminal battery covers                              | ●   |
| <b>UPPERSTRUCTURE</b>                                                                                  |     | Heater, 20,000 Btu/hr. (5.9 kW) with blower fan                                     | ●   | Cab extension wiring harness                                  | ■   |
| Counterweight, 4,974 lb. (2256 kg)                                                                     | ●   | Horn, electric on left control lever                                                | ●   |                                                               |     |
| Ignition key locks                                                                                     | ●   | Hourmeter, electric                                                                 | ●   | <b>LIGHTS</b>                                                 |     |
| Cab door / Engine hood / Fuel cap / Service doors / Toolbox / Vandal covers                            | ●   | Hydraulic shutoff lever, all controls                                               | ●   | Halogen work lights                                           | ●   |
|                                                                                                        |     | Interior light                                                                      | ●   | One mounted on boom                                           | ●   |
|                                                                                                        |     |                                                                                     |     | One mounted on frame                                          | ●   |

**KEY:** ● Standard equipment ■ Optional or special equipment

See your John Deere dealer for further information.

## CONTROL OWNING AND OPERATING COSTS

Total Repair Cost Management (TRCM) is part of John Deere's proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

**OilScan® Plus program** – tells you what's going on inside *all* of your machine's major components so you'll know if there's a problem *before* you see a decline in performance. OilScan Plus oil analysis is included in most SECURE®-Extended warranty and preventive-maintenance agreements.

**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.

**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.



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 6270B, using No. 2-D fuel at 35 API gravity. No derating is required up to 10,000 ft. (3050 m) altitude. Gross power is without cooling fan.

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 42-in. (1067 mm) bucket, 28-in. (700 mm) track shoes, 4,974-lb. (2256 kg) counterweight, full fuel tank, and 175-lb. (79 kg) operator.

