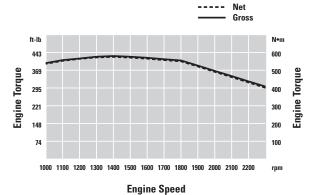
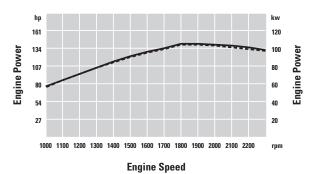
#### **Engine**

| <del></del>                   |                            |                     |  |
|-------------------------------|----------------------------|---------------------|--|
| Model                         | Caterpillar 3056E DIT ATAA |                     |  |
| Rated Net Power @ 2,300 rpm   |                            |                     |  |
| SAE J1349                     | 96 kW                      | 129 hp              |  |
| ISO 9249                      | 97 kW                      | 130 hp              |  |
| EEC 80/1269                   | 97 kW                      | 130 hp              |  |
| Maximum Net Power @ 1,900 rpm |                            |                     |  |
| SAE J1349                     | 102 kW                     | 137 hp              |  |
| ISO 9249                      | 103 kW                     | 138 hp              |  |
| EEC 80/1269                   | 103 kW                     | 138 hp              |  |
| Bore                          | 100 mm                     | 3.94 in             |  |
| Stroke                        | 127 mm                     | 5 in                |  |
| Displacement                  | 6 L                        | 366 in <sup>3</sup> |  |

- Net Power ratings are tested at the reference conditions for the specified standard.
- Net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler and fan at minimum speed.
- No derating required up to 3000 m (9,843 ft) altitude. Auto derate protects the engine, hydraulic and transmission systems.
- When the fan is at maximum speed Rated Net Power is 86 kW (115 hp) and Maximum Net Power is 96 kW (129 hp) at the flywheel per the SAE reference conditions.
- The Caterpillar 3056E DIT ATAAC engine meets Tier 2 off-highway emission regulations.
- Features:
- Electronically controlled rotary fuel pump
- Three-ring, controlled-expansion, lubricated pistons
- Gear-driven water and oil pumps
- One-piece cast iron cylinder heads with two valves per cylinder
- Fuel priming pump and fuel/water separator
- S•O•S sampling port for engine oil
- Replaceable dry liners
- Cast aluminum valve cover
- Radiator can be easily accessed for cleaning

### **Engine Torque**





## Weights

|  | Operating Weight | 11 340 kg | 24,990 lb |
|--|------------------|-----------|-----------|
|--|------------------|-----------|-----------|

Specifications shown are for 924G with optional counterweight, standard lubricants, full fuel tank, Cat with A/C, sliding glass, Cat Contour Seat, Limited Slip axles with dual disc rear, 4L 4V hydraulics, heavy duty cooler, supplemental steering, roading fenders, reversing fan, back-up alarm, guards, ride control, radio, 1.8 m³ (2.3 yd³) bucket with bolt-on cutting edge, 80 kg (176 lb) operator and 20.5 R25 radial (L-3) XHA tires.

### Steering

| Minimum turning radius (over tire)                           | 5070 mm    | 200 in       |
|--|------------|--------------|
| Steering angle, each direction                               | 40°        |              |
| Steering cylinders, two, bore                                | 70 mm      | 2.75 in      |
| Hydraulic output at 2,300 engine rpm and 6900 kPa (1000 psi) | 106 L/min  | 27.7 gal/min |
| Maximum working pressure                                     | 20 685 kPa | 3,000 psi    |

- Center-point frame articulation.
- Front and rear wheels track.
- Variable displacement piston pump provides steering power at all engine and ground speeds.
- Tilt steering console.
- High-impact rubber steering stops.
- Secondary steering system meets roading regulations in various countries and ISO 5010.

#### **Loader Hydraulic System** Output at 2,300 engine rpm and 152 L/min 39.5 gal/min 6900 kPa (1000 psi) with SAE 10W oil at 65°C (150°F) Maximum working pressure 25 900 kPa 3,755 psi Hydraulic cycle time: Raise 5.1 Seconds 1.4 Seconds Dump Lower, empty, float down 2.4 Seconds 8.9 Seconds Total Lift cylinders, double acting: Bore 101.6 mm 4 in Stroke 810 mm 31.9 in Tilt cylinder, double acting: Bore 133.4 mm 5.25 in Stroke 945 mm 37.2 in

- Load-sensing system provides only the flow and pressure needed to move the load.
- Variable-displacement axial piston implement pump.
- · Low effort, hydraulic joystick controls.
- Electronic pilot shut-off switch disables implement functions for added safety.
- Hydraulic couplings with 0-ring face seals.
- Improved Ride Control system available to provide improved ride with less spillage from bucket during load & carry operations and better hard bank capability.

| Service Refill Capacities         |       |          |
|-----------------------------------|-------|----------|
| Fuel tank                         | 225 L | 59.4 gal |
| Cooling system                    | 40 L  | 10.6 gal |
| Crankcase                         | 16 L  | 4.2 gal  |
| Transmission                      | 23 L  | 6.1 gal  |
| Differentials and final drives:   |       |          |
| Front                             | 21 L  | 5.5 gal  |
| Rear                              | 21 L  | 5.5 gal  |
| Hydraulic system (including tank) | 125 L | 33 gal   |
| Hydraulic tank                    | 70 L  | 18.5 gal |

| Tranomiooron             |                         |          |
|--------------------------|-------------------------|----------|
| Standard transmission, m | nax travel speeds:      |          |
| Forward 1                | 6.7 kph                 | 4.2 mph  |
| Forward 2                | 12.2 kph                | 7.6 mph  |
| Forward 3                | 21.8 kph                | 13.5 mph |
| Forward 4                | 38.5 kph                | 23.9 mph |
| Reverse 1                | 6.7 kph                 | 4.2 mph  |
| Reverse 2                | 12.2 kph                | 7.6 mph  |
| Reverse 3                | 21.8 kph                | 13.5 mph |
| Optional low speed trans | mission, max travel spe | eds:     |
| Forward 1                | 3.7 kph                 | 2.3 mph  |
| Forward 2                | 7.5 kph                 | 4.7 mph  |
| Forward 3                | 19.6 kph                | 12.2 mph |

39 kph

4.1 kph

8.1 kph

21.2 kph

24.2 mph

2.5 mph

13.2 mph

5 mph

- Electronically-controlled Caterpillar countershaft transmission with full on-the-go directional and speed change capability.
- High-energy friction materials and thick reaction plates for better tolerance of heat.
- High-contact ratio spur gears are precision ground and heat treated for quiet, reliable operation.
- · Electronic autoshift is standard.

Transmission

Forward 4

Reverse 1

Reverse 2

Reverse 3

- Button on implement control lever allows downshifting on demand.
- Computer controlled modulation provides smoother transitions.
- Optional low speed transmission available for better match with attachments requiring high hydraulic flow.

### Axles

#### Features:

- Fixed front, oscillating rear (±12° with 17.5 25 L-2 tires).
- Caterpillar axle with fully-enclosed brakes and final drives.
- Patented Duo-Cone Seals between axle and housing.
- · Rear wheel can raise or drop a total of:
  - 423 mm (16.6 in) with 17.5 tires, or
- 326 mm (12.8 in) with 20.5 tires
- Limited Slip Differentials are optional on front, rear or both axles.
- · Rear axle trunnion has remote lubrication fitting.
- Planetary final drives are lubricated from the main oil sump.
- · High contact gearset reduces noise levels during meshing.

#### **Tires**

#### Choice of:

- 17.5 25, 12PR (L-2)
- 17.5 25, 12PR (L-3)
- 17.5 R25, radial (L-2)
- 17.5 R25, radial (L-3)
- 550/65 R25, radial (L-2)
- 550/65 R25, radial (L-3)
- 20.5 25, 12PR (L-2)
- 20.5 25, 12PR (L-3)
- 20.5 R25, radial (L-2)
- 20.5 R25, radial (L-3)
- Other tire choices are available, contact your Cat Dealer for details.
- In certain applications, the loader's productive capabilities may exceed the tire's tonnes-km/h (ton-mph) capabilities.
  Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

#### **Brakes**

#### Features:

- Service brake:
- Inboard oil-immersed disc brakes on front and rear axles are standard.
- Completely enclosed and sealed.
- Adjustment-free.
- Separate circuits for front and rear.
- Dual pedal braking system.
- Fully integrated with hydraulic system, no air system required.
- · Secondary brake:
  - Indicator light alerts operator if brake pressure drops.
  - Continually-charged nitrogen accumulators provide emergency stopping power in case of engine power loss.
- Parking brake:
  - Mechanical, shoe-type brake.
- Mounted on drive line for positive manual operation.
- Application of parking brake neutralizes the transmission.
- · Optional heavy-duty brakes with integrated oil cooler.

| Ca | L  |
|----|----|
| υä | IJ |

| ROPS | SAE J1040 MAY94,       |
|------|------------------------|
|      | ISO 3471-1994          |
| FOPS | SAE J231 JAN81,        |
|      | ISO 3449-1992 Level II |

- Caterpillar cab and Rollover Protective Structure (ROPS) are standard in North America and Europe.
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed as per work cycle procedures specified in ANSI/SAE J1166 May 90, results in operator sound exposure Leq (equivalent sound pressure level) of 74 dB(A).
- As manufactured by Caterpillar, this machine's exterior sound power level meets the criteria spelled out in the European Directives noted on the certificate of conformance and the accompanying labeling.

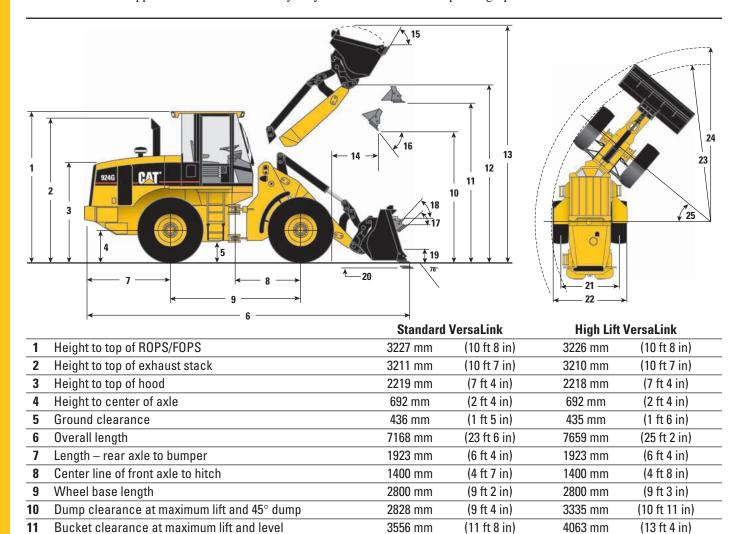
#### **Bucket Controls**

#### Features:

- · Lift circuit:
- Four positions: raise, hold, lower and float.
- Adjustable automatic kickout from horizontal to full tilt.
- · Tilt circuit:
- Three positions: tilt back, hold and dump.
- Two-speed dump for quick dumping with bucket and precise load control with forks or other work tools.
- Adjustable automatic bucket positioner to desired loading angle.
- Does not require visual spotting.
- Controls:
- Choice of two low effort control systems: a joystick or a two-lever control of lift and tilt circuits.
- Optional third and fourth function hydraulic circuits available with individual lever controls for remote hydraulic functions.
- Controls can be disabled for roading.

## **Dimensions with Bucket**

All dimensions are approximate. Dimensions may vary with bucket. Refer to Operating Specifications.



Dimensions listed are for 924G with optional counterweight, standard lubricants, full fuel tank, Cat with A/C, sliding glass, Cat Contour Seat, Limited Slip axles with dual disc rear, 4L 4V hydraulics, heavy duty cooler, supplemental steering, roading fenders, reversing fan, back-up alarm, guards, ride control, radio, 1.8 m³ (2.3 yd³) bucket with bolt-on cutting edge, 80 kg (176 lb) operator and 20.5 R25 radial (L-3) XHA tires. Refer to Operating Specifications for bucket variations.

3881 mm

5178 mm

992 mm

435 mm

64 mm

58°

45°

50°

51°

(12 ft 8 in)

(16 ft 11 in)

(3 ft 3 in)

(1 ft 5 in)

(2.5 in)

4387 mm

5684 mm

993 mm

592 mm

75 mm

62°

45°

50°

54°

(14 ft 5 in)

(18 ft 8 in)

(3 ft 4 in)

(1 ft 11 in)

(3 in)

|    |                                    | 17.5-25 12P | R (L-2) Tires                                  | 20.5-25 12PR (L-2) Tires |               |  |
|----|------------------------------------|-------------|--|--------------------------|---------------|--|
| 21 | Width at tread center              | 1880 mm     | (6 ft 2 in)                                    | 1880 mm                  | (6 ft 2 in)   |  |
| 22 | Overall width over tires           | 2356 mm     | (7 ft 9 in)                                    | 2466 mm                  | (8 ft 1 in)   |  |
| 23 | Minimum turning radius over tire   | 5070 mm     | (16 ft 8 in)                                   | 5135 mm                  | (16 ft 10 in) |  |
| 24 | Minimum turning radius over bucket |             | See Operating Specifications with Bucket Chart |                          | (19 ft 2 in)  |  |
| 25 | Steering angle – left/right        | 4           | 40°  |                          | )°            |  |
|    | Change in vertical dimension       | -68         | (-3)   | no change                | no change     |  |

12

13

14

15

16

**17** 

18

19

20

Bucket pin height at maximum lift

Rack back angle at maximum lift

Dump angle at maximum lift

Rack back angle at ground

Rack back angle at carry

Carry height

Digging depth

Reach at maximum lift and 45° dump

Overall height - bucket raised

## **Standard VersaLink**

Operating Specifications with Bucket

| ш  | look-on Buckets   |                                |                  | General Purpose  |                  |                   | Waste/Ag         | Woodchip         |                         |                         |
|----|---|--------------------------------|------------------|------------------|------------------|-------------------|------------------|------------------|-------------------------|-------------------------|
|    | ing Quick Coupler   |                                |                  | t-On<br>g Edge   |                  | n Teeth<br>ments* |                  | t-On<br>eth*     | Bolt-On<br>Cutting Edge | Bolt-On<br>Cutting Edge |
|    | Rated bucket capacity (§)                                       | m³<br>yd³                      | 1.8<br>2.3       | 2.1<br>2.7       | 1.8<br>2.3       | 2.1<br>2.7        | 1.7<br>2.2       | 2.0<br>2.6       | 2.8<br>3.6              | 5.0<br>6.5              |
|    | Struck capacity (§)   | $\frac{\text{Ju}}{\text{m}^3}$ | 1.5              | 1.7              | 1.5              | 1.7               | 1.4              | 1.6              | 2.3                     | 4.1                     |
|    | Struck capacity (8)   | yd <sup>3</sup>                | 2.0              | 2.2              | 2.0              | 2.2               | 1.4              | 2.1              | 3.0                     | 5.4                     |
|    | Bucket width  | mm<br>ft/in                    | 2550<br>8'4"     | 2550<br>8'4"     | 2585<br>8'6"     | 2585<br>8'6"      | 2585<br>8'6"     | 2585<br>8'6"     | 2550<br>8'4"            | 3392<br>11'2"           |
| 10 | Dump clearance at full lift and 45° discharge (§)               | mm<br>ft/in                    | 2828<br>9'4"     | 2759<br>9'1"     | 2724<br>9'0"     | 2655<br>8'9"      | 2724<br>9'0"     | 2655<br>8'9"     | 2623<br>8'8"            | 2512<br>8'3"            |
| 14 | Reach at full lift<br>and 45° discharge (§)                     | mm<br>ft/in                    | 992<br>3'4"      | 1060<br>3'6"     | 1095<br>3'8"     | 1163<br>3'10"     | 1095<br>3'8"     | 1163<br>3'10"    | 1198<br>4'0"            | 1158<br>3'10"           |
|    | Reach at 45° discharge<br>and 2130 mm (7'0")<br>clearance (§)   | mm<br>ft/in                    | 1515<br>5'0"     | 1545<br>5'1"     | 1558<br>5'2"     | 1583<br>5'3"      | 1558<br>5'2"     | 1583<br>5'3"     | 1596<br>5'3"            | 1477<br>4'11"           |
|    | Reach with lift arms<br>horizontal and<br>bucket level          | mm<br>ft/in                    | 2295<br>7'7"     | 2392<br>7'11"    | 2441<br>8'1"     | 2538<br>8'4"      | 2441<br>8'1"     | 2538<br>8'4"     | 2585<br>8'6"            | 2659<br>8'9"            |
| 20 | Digging depth (§)   | mm<br>in                       | 64<br>2.5"       | 72<br>2.8"       | 64<br>2.5"       | 72<br>2.8"        | 39<br>1.5"       | 47<br>1.9"       | 89<br>3.5"              | 64<br>2.5"              |
| 6  | Overall length  | mm<br>ft/in                    | 7168<br>23'7"    | 7272<br>23'11"   | 7168<br>23'7"    | 7418<br>24'5"     | 7291<br>24'0"    | 7397<br>24'4"    | 7479<br>24'7"           | 7531<br>24'9"           |
| 13 | Overall height with bucket at full raise (§)                    | mm<br>ft/in                    | 5178<br>16'11"   | 5288<br>17'5"    | 5178<br>17'0"    | 5288<br>17'5"     | 5178<br>17'0"    | 5288<br>17'5"    | 5410<br>17'9"           | 5671<br>18'8"           |
| 24 | Loader clearance radius<br>with bucket in carry<br>position (§) | mm<br>ft/in                    | 5603<br>18'5"    | 5631<br>18'6"    | 5662<br>18'7"    | 5690<br>18'8"     | 5662<br>18'7"    | 5690<br>18'8"    | 5689<br>18'8"           | 6081<br>19'11"          |
|    | Static tipping load straight (§)                                | kg<br>lb                       | 8286<br>18,268   | 8195<br>18,067   | 8120<br>17,902   | 7969<br>17,569    | 8299<br>18,296   | 8134<br>17,932   | 7946<br>17,518          | 7682<br>16,936          |
|    | Static tipping load<br>full 40° turn (§)                        | kg<br>lb                       | 7232<br>15,944   | 7144<br>15,750   | 7065<br>15,576   | 6919<br>15,254    | 7234<br>15,948   | 7083<br>15,615   | 6910<br>15,234          | 6708<br>14,789          |
|    | Breakout force (§)  | kg<br>lb                       | 9956<br>21,949   | 9130<br>20,128   | 9835<br>21,682   | 8970<br>19,775    | 10 545<br>23,247 | 9617<br>21,201   | 7806<br>17,209          | 7222<br>15,921          |
|    | Operating weight  | kg<br>lb                       | 11 335<br>24,990 | 11 383<br>25,096 | 11 470<br>25,288 | 11 567<br>25,502  | 11 384<br>25,098 | 11 433<br>25,206 | 11 497<br>25,347        | 11 861<br>26,150        |

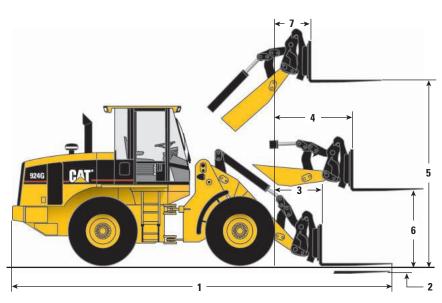
Specifications shown are for 924G with optional counterweight, standard lubricants, full fuel tank, Cat with A/C, sliding glass, Cat Contour Seat, Limited Slip axles with dual disc rear, 4L 4V hydraulics, heavy duty cooler, supplemental steering, roading fenders, reversing fan, back-up alarm, guards, ride control, radio, 1.8 m³ (2.3 yd³) bucket with bolt-on cutting edge, 80 kg (176 lb) operator and 20.5 R25 radial (L-3) XHA tires.

<sup>\*</sup> Dimensions are measured to the tip of the bucket teeth to provide accurate clearance data. SAE standards specifies the cutting edge.

<sup>(§)</sup> Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers (SAE), including SAE Standards J732 JUN92 and J742 FEB85 governing loader ratings.

## **Dimensions with Pallet Forks**

All dimensions are approximate. Dimensions vary with fork length. Refer to Operating Specifications chart below.



|   | Standard VersaLink |                |              |  |  |  |  |  |  |
|---|--------------------|----------------|--------------|--|--|--|--|--|--|
|   | Fork Tine Length   |                |              |  |  |  |  |  |  |
|   | 1200 mm (3 ft 11   | in) 1350 mm    | (4 ft 5 in)  |  |  |  |  |  |  |
| 1 | 7607 mm (25 ft 0   | in) 7772 mm    | (25 ft 6 in) |  |  |  |  |  |  |
| 2 | 32 mm (1 in)       | 32 mm          | (1 in)       |  |  |  |  |  |  |
| 3 | 932 mm (3 ft 1 i   | n) 947 mm      | (3 ft 1 in)  |  |  |  |  |  |  |
| 4 | 1561 mm (5 ft 1 i  | n) 1576 mm     | (5 ft 2 in)  |  |  |  |  |  |  |
| 6 | 1790 mm (5 ft 10   | in) 1790 mm    | (5 ft 10 in) |  |  |  |  |  |  |
| 5 | 3637 mm (11 ft 11  | in) 3652 mm    | (12 ft 0 in) |  |  |  |  |  |  |
| 7 | 762 mm (2 ft 6 i   | n) 762 mm      | (2 ft 6 in)  |  |  |  |  |  |  |
|   | High               | Lift VersaLink |              |  |  |  |  |  |  |
| 1 | 8104 mm (26 ft 7   | in) 8269 mm    | (27 ft 2 in) |  |  |  |  |  |  |
| 2 | 42 mm (2 in)       | 42 mm          | (2 in)       |  |  |  |  |  |  |
| 3 | 1428 mm (4 ft 8 i  | n) 1443 mm     | (4 ft 9 in)  |  |  |  |  |  |  |
| 4 | 1952 mm (6 ft 5 i  | n) 1967 mm     | (6 ft 5 in)  |  |  |  |  |  |  |
| 5 | 4144 mm (13 ft 7   | in) 4159 mm    | (13 ft 8 in) |  |  |  |  |  |  |
| 6 | 1790 mm (5 ft 10   | in) 1790 mm    | (5 ft 10 in) |  |  |  |  |  |  |
| 7 | 762 mm (2 ft 6 i   | n) 762 mm      | (2 ft 6 in)  |  |  |  |  |  |  |

# **Operating Specifications with Pallet Forks**

|   | Fork Tine Length |              |           |             |  |
|---|------------------|--------------|-----------|-------------|--|
| Standard VersaLink:   | 1200 mm          | (3 ft 11 in) | 1350 mm   | (4 ft 5 in) |  |
| Operating load:   |                  |              |           |             |  |
| Per SAE J1197 FEB91 (50% of FTSTL)                            | 2719 kg          | (5994 lb)    | 2606.5 kg | (5746 lb)   |  |
| Per EN 474-3, rough terrain (60% of FTSTL)                    | 3263 kg          | (7193 lb)    | 3128 kg   | (6896 lb)   |  |
| Per EN 474-3, firm & level ground (80% of FTSTL)              | 4350 kg          | (9591 lb)    | 4170 kg   | (9194 lb)   |  |
| Load center   | 600 mm           | (1323 in)    | 675 mm    | (1488 in)   |  |
| Static tipping load with level arms and forks, straight*      | 6209 kg          | (13,689 lb)  | 5960 kg   | (13,140 lb) |  |
| Static tipping load with level arms and forks, full 40° turn* | 5438 kg          | (11,989 lb)  | 5213 kg   | (11,493 lb) |  |
| Operating weight*   | 11 042 kg        | (24,344 lb)  | 11 102 kg | (24,476 lb) |  |
| High Lift VersaLink:  |                  |              |           |             |  |
| Operating load:   |                  |              |           |             |  |
| Per SAE J1197 FEB91 (50% of FTSTL)                            | 2325 kg          | (5125 lb)    | 2232 kg   | (4921 lb)   |  |
| Per EN 474-3, rough terrain (60% of FTSTL)                    | 2789 kg          | (6150 lb)    | 2678 kg   | (5905 lb)   |  |
| Per EN 474-3, firm & level ground (80% of FTSTL)              | 3719 kg          | (8199 lb)    | 3571 kg   | (7873 lb)   |  |
| Load center   | 600 mm           | (23.6 in)    | 675 mm    | (26.6 in)   |  |
| Static tipping load with level arms and forks, straight*      | 5330 kg          | (11,751 lb)  | 5108 kg   | (11,261 lb) |  |
| Static tipping load with level arms and forks, full 40° turn* | 4649 kg          | (10,249 lb)  | 4464 kg   | (9841 lb)   |  |
| Operating weight*   | 11 128 kg        | (24,533 lb)  | 11 188 kg | (24,665 lb) |  |

<sup>\*</sup> Static tipping and operating weights shown are for 924G with optional counterweight, standard lubricants, full fuel tank, Cat with A/C, sliding glass, Cat Contour Seat, Limited Slip axles with dual disc rear, 4L 4V hydraulics, heavy duty cooler, supplemental steering, roading fenders, reversing fan, back-up alarm, guards, ride control, radio, 1.8 m³ (2.3 yd³) bucket with bolt-on cutting edge, 80 kg (176 lb) operator and 20.5 R25 radial (L-3) XHA tires. Tipping load is defined by SAE J732 JUN92.