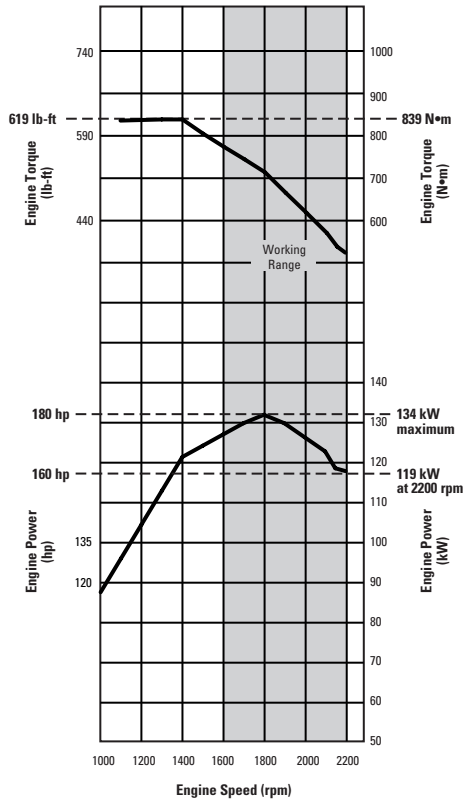


938G Series II Wheel Loader

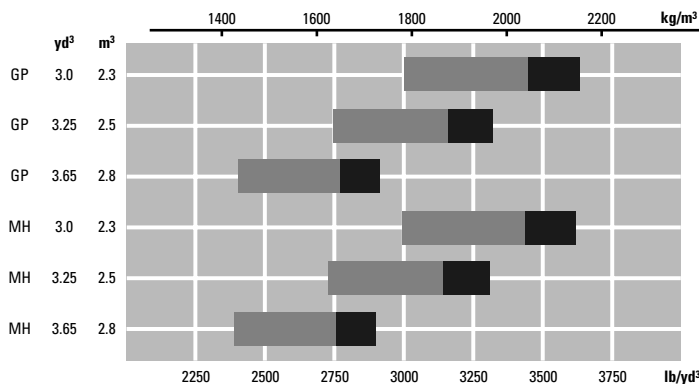


938G Series II Wheel Loader

Operation Specifications

| | | General Purpose Buckets | | | | | | | | |
|---|-----------------|-------------------------|--------------------|--------|--------------------|--------------------|--------|---------------|--------------------|--------|
| | | Bolt-on edges | | | Teeth and segments | | | Teeth | | |
| | | Bolt-on edges | Teeth and segments | Teeth | Bolt-on edges | Teeth and segments | Teeth | Bolt-on edges | Teeth and segments | Teeth |
| Rated capacity | m ³ | 2.3 | 2.3 | 2.1 | 2.5 | 2.5 | 2.3 | 2.8 | 2.8 | 2.7 |
| | yd ³ | 3.01 | 3.01 | 2.75 | 3.27 | 3.27 | 3.01 | 3.66 | 3.66 | 3.53 |
| Struck capacity | m ³ | 1.97 | 1.97 | 1.87 | 2.1 | 2.1 | 2.0 | 2.41 | 2.41 | 2.04 |
| | yd ³ | 2.58 | 2.58 | 2.45 | 2.75 | 2.75 | 2.62 | 3.15 | 3.15 | 2.67 |
| Width | mm | 2706 | 2777 | 2777 | 2706 | 2777 | 2777 | 2706 | 2777 | 2777 |
| | ft/in | 8'9" | 9'1" | 9'1" | 8'11" | 9'1" | 9'1" | 8'11" | 9'1" | 9'1" |
| Dump clearance at full lift and 45° discharge | mm | 2890 | 2786 | 2786 | 2849 | 2743 | 2743 | 2771 | 2664 | 2664 |
| | ft/in | 9'6" | 9'2" | 9'2" | 9'4" | 9'0" | 9'0" | 9'1" | 8'9" | 8'9" |
| Reach at full lift and 45° discharge | mm | 984 | 1089 | 1089 | 1010 | 1114 | 1114 | 1068 | 1170 | 1170 |
| | ft/in | 3'3" | 3'7" | 3'7" | 3'4" | 3'8" | 3'8" | 3'6" | 3'10" | 3'10" |
| Reach with lift arms horizontal and bucket level | mm | 2180 | 2327 | 2327 | 2230 | 2377 | 2377 | 2330 | 2447 | 2447 |
| | ft/in | 7'2" | 7'8" | 7'8" | 7'4" | 7'10" | 7'10" | 7'8" | 8'0" | 8'0" |
| Digging depth | mm | 50 | 50 | 25 | 50 | 50 | 25 | 50 | 50 | 25 |
| | in | 1.9" | 1.9" | 0.9" | 1.9" | 1.9" | 0.9" | 1.9" | 1.9" | 0.9" |
| Overall length | mm | 7181 | 7339 | 7339 | 7231 | 7389 | 7389 | 7331 | 7489 | 7489 |
| | in | 282.7" | 288.9" | 288.9" | 284.6" | 290.9" | 290.9" | 288.6" | 294.8" | 294.8" |
| Overall height with bucket at full raise | mm | 5140 | 5140 | 5140 | 5188 | 5188 | 5188 | 5284 | 5284 | 5284 |
| | ft/in | 16'10" | 16'10" | 16'10" | 17'0" | 17'0" | 17'0" | 17'4" | 17'4" | 17'4" |
| Loader clearance circle with bucket in carry position | mm | 11 932 | 12 084 | 12 084 | 11 958 | 12 108 | 12 108 | 12 008 | 12 160 | 12 160 |
| | ft/in | 39'2" | 39'8" | 39'8" | 39'3" | 39'9" | 39'9" | 39'5" | 39'11" | 39'11" |
| Static tipping load, straight* | kg | 10 883 | 10 753 | 10 782 | 10 809 | 10 679 | 10 884 | 10 657 | 10 527 | 10 727 |
| | lb | 23,992 | 23,706 | 23,770 | 23,829 | 23,543 | 23,995 | 23,494 | 23,208 | 23,648 |
| Static tipping load, articulated at full 40° turn* | kg | 9683 | 9552 | 9591 | 9613 | 9483 | 9678 | 9470 | 9340 | 9530 |
| | lb | 21,347 | 21,058 | 21,144 | 21,193 | 20,906 | 21,336 | 20,877 | 20,591 | 21,010 |
| Breakout force | kN | 125.9 | 124.9 | 134.4 | 119.9 | 119.0 | 128.2 | 109.4 | 108.6 | 116.3 |
| | lb | 28,303 | 28,079 | 30,214 | 26,955 | 26,752 | 28,821 | 24,594 | 24,414 | 26,145 |
| Operating weight* | kg | 13 348 | 13 456 | 13 363 | 13 381 | 13 489 | 13 396 | 13 452 | 13 560 | 13 467 |
| | lb | 29,427 | 29,665 | 29,460 | 29,500 | 29,738 | 29,533 | 29,656 | 29,894 | 29,689 |

Pin-On Bucket Selection Guide



Material Density

% = Bucket Fill Factor



938G Series II Wheel Loader

| | | | Material Handling Buckets | | | | | | | | | Refuse Bucket |
|---------------|--------------------|--------|---------------------------|--------------------|--------|---------------|--------------------|--------|---------------|--------------------|--------|---------------|
| Bolt-on edges | Teeth and segments | Teeth | Bolt-on edges | Teeth and segments | Teeth | Bolt-on edges | Teeth and segments | Teeth | Bolt-on edges | Teeth and segments | Teeth | Teeth |
| 3.0 | 3.0 | 2.9 | 2.3 | 2.3 | 2.1 | 2.5 | 2.5 | 2.3 | 2.8 | 2.8 | 2.7 | 4.2 |
| 3.92 | 3.92 | 3.79 | 3.00 | 3.00 | 2.75 | 3.27 | 3.27 | 3.00 | 3.66 | 3.66 | 3.53 | 5.49 |
| 2.66 | 2.66 | 2.55 | 1.98 | 1.98 | 1.89 | 2.13 | 2.13 | 2.03 | 2.42 | 2.42 | 2.32 | 3.73 |
| 3.48 | 3.48 | 3.34 | 2.59 | 2.59 | 2.47 | 2.79 | 2.79 | 2.66 | 3.17 | 3.17 | 3.03 | 4.88 |
| 2692 | 2692 | 2692 | 2706 | 2777 | 2777 | 2706 | 2777 | 2777 | 2706 | 2777 | 2777 | 2738 |
| 8'10" | 8'10" | 8'10" | 8'11" | 9'1" | 9'1" | 8'11" | 9'1" | 9'1" | 8'11" | 9'1" | 9'1" | 9'0" |
| 2702 | 2604 | 2604 | 2827 | 2713 | 2713 | 2791 | 2678 | 2678 | 2721 | 2607 | 2607 | 2501 |
| 8'10" | 8'7" | 8'7" | 9'3" | 8'11" | 8'11" | 9'2" | 8'9" | 8'9" | 8'11" | 8'7" | 8'7" | 8'2" |
| 1091 | 1208 | 1208 | 886 | 980 | 980 | 922 | 1016 | 1016 | 992 | 1086 | 1086 | 1133 |
| 3'7" | 4'0" | 4'0" | 2'11" | 3'3" | 3'3" | 3'0" | 3'4" | 3'4" | 3'3" | 3'7" | 3'7" | 3'9" |
| 2387 | 2539 | 2539 | 2180 | 2327 | 2327 | 2230 | 2377 | 2377 | 2330 | 2477 | 2477 | 2585 |
| 7'10" | 8'4" | 8'4" | 7'2" | 7'8" | 7'8" | 7'4" | 7'10" | 7'10" | 7'8" | 8'2" | 8'2" | 8'6" |
| 111 | 111 | 86 | 50 | 50 | 25 | 50 | 50 | 25 | 50 | 50 | 25 | 106 |
| 4.3" | 4.3" | 3.3" | 1.9" | 1.9" | 0.9" | 1.9" | 1.9" | 0.9" | 1.9" | 1.9" | 0.9" | 4.1" |
| 7437 | 7590 | 7590 | 7181 | 7339 | 7339 | 7231 | 7389 | 7389 | 7331 | 7489 | 7489 | 7631 |
| 292.7" | 298.8" | 298.8" | 282.7" | 288.9" | 288.9" | 284.6" | 290.9" | 290.9" | 288.6" | 294.8" | 294.8" | 300.4" |
| 5194 | 5194 | 5194 | 5129 | 5129 | 5129 | 5176 | 5176 | 5176 | 5272 | 5272 | 5272 | 5541 |
| 17'0" | 17'0" | 17'0" | 16'10" | 16'10" | 16'10" | 17'0" | 17'0" | 17'0" | 17'4" | 17'4" | 17'4" | 18'2" |
| 12 076 | 12 156 | 12 156 | 11 932 | 12 084 | 12 084 | 11 958 | 12 108 | 12 108 | 12 008 | 12 160 | 12 160 | 12 216 |
| 39'7" | 39'11" | 39'11" | 39'2" | 39'8" | 39'8" | 39'3" | 39'9" | 39'9" | 39'5" | 39'11" | 39'11" | 40'1" |
| 10 618 | 10 429 | 10 635 | 10 844 | 10 717 | 10 917 | 10 757 | 10 629 | 10 827 | 10 586 | 10 456 | 10 653 | 9086 |
| 23,408 | 22,991 | 23,446 | 23,906 | 23,626 | 24,067 | 23,715 | 23,432 | 23,869 | 23,338 | 23,051 | 23,485 | 20,031 |
| 9450 | 9261 | 9458 | 9651 | 9524 | 9714 | 9569 | 9441 | 9629 | 9408 | 9278 | 9464 | 8004 |
| 20,833 | 20,416 | 20,851 | 21,276 | 20,996 | 21,415 | 21,096 | 20,813 | 21,228 | 20,741 | 20,454 | 20,864 | 17,645 |
| 105.0 | 103.2 | 110.5 | 126.0 | 125.0 | 135.2 | 119.9 | 119.1 | 128.3 | 109.5 | 108.7 | 116.4 | 84.9 |
| 23,605 | 23,200 | 24,841 | 28,326 | 28,101 | 30,394 | 26,955 | 26,775 | 28,843 | 24,617 | 24,437 | 26,168 | 19,086 |
| 13 325 | 13 435 | 13 342 | 13 336 | 13 444 | 13 351 | 13 370 | 13 478 | 13 385 | 13 437 | 13 545 | 13 452 | 14 113 |
| 29,376 | 29,619 | 29,414 | 29,400 | 29,638 | 29,433 | 29,475 | 29,713 | 29,508 | 29,623 | 29,861 | 29,656 | 31,113 |

938G Series II Wheel Loader

Operation Specifications

| | | Quick Coupler Buckets | | | | | | | | | High Lift Delta** |
|---|-----------------|-----------------------|--------------------|--------|---------------|--------------------|--------|---------------|--------------------|--------|-------------------|
| | | Bolt-on edges | Teeth and segments | Teeth | Bolt-on edges | Teeth and segments | Teeth | Bolt-on edges | Teeth and segments | Teeth | |
| Rated capacity | m ³ | 2.4 | 2.4 | 2.3 | 2.7 | 2.7 | 2.5 | 2.9 | 2.9 | 2.7 | |
| | yd ³ | 3.14 | 3.14 | 3.00 | 3.53 | 3.53 | 3.27 | 3.79 | 3.79 | 3.53 | |
| Struck capacity | m ³ | 2.02 | 2.02 | 1.92 | 2.35 | 2.35 | 2.25 | 2.48 | 2.48 | 2.36 | |
| | yd ³ | 2.64 | 2.64 | 2.51 | 3.07 | 3.07 | 2.94 | 3.24 | 3.24 | 3.09 | |
| Width | mm | 2692 | 2692 | 2692 | 2692 | 2692 | 2692 | 2692 | 2692 | 2692 | |
| | ft/in | 8'10" | 8'10" | 8'10" | 8'10" | 8'10" | 8'10" | 8'10" | 8'10" | 8'10" | |
| Dump clearance at full lift and 45° discharge | mm | 2776 | 2680 | 2680 | 2720 | 2622 | 2622 | 2686 | 2588 | 2588 | 423 |
| | ft/in | 9'1" | 8'10" | 8'10" | 8'11" | 8'7" | 8'7" | 8'10" | 8'6" | 8'6" | 1'5" |
| Reach at full lift and 45° discharge | mm | 1007 | 1122 | 1122 | 1074 | 1190 | 1190 | 1115 | 1231 | 1231 | 121 |
| | ft/in | 3'4" | 3'8" | 3'8" | 3'6" | 3'11" | 3'11" | 3'8" | 4'0" | 4'0" | 5" |
| Reach with lift arms horizontal and bucket level | mm | 2275 | 2425 | 2425 | 2361 | 2514 | 2514 | 2415 | 2567 | 2567 | 390 |
| | ft/in | 7'6" | 7'11" | 7'11" | 7'9" | 8'3" | 8'3" | 7'11" | 8'5" | 8'5" | 1'3" |
| Digging depth | mm | 108 | 108 | 83 | 108 | 108 | 83 | 108 | 108 | 83 | 58 |
| | in | 4.2" | 4.2" | 3.2" | 4.2" | 4.2" | 3.2" | 4.2" | 4.2" | 3.2" | 2" |
| Overall length | mm | 7323 | 7473 | 7473 | 7410 | 7562 | 7562 | 7463 | 7616 | 7616 | 490 |
| | in | 288.3" | 294.2" | 294.2" | 291.7" | 291.7" | 291.7" | 293.8" | 299.8" | 299.8" | 1'7" |
| Overall height with bucket at full raise | mm | 5037 | 5037 | 5037 | 5145 | 5145 | 5145 | 5013 | 5013 | 5013 | 423 |
| | ft/in | 16'6" | 16'6" | 16'6" | 16'11" | 16'11" | 16'11" | 16'5" | 16'5" | 16'5" | 1'5" |
| Loader clearance circle with bucket in carry position | mm | 12 018 | 12 094 | 12 094 | 12 060 | 12 140 | 12 140 | 12 088 | 12 168 | 12 168 | 520 |
| | ft/in | 39'5" | 39'8" | 39'8" | 39'7" | 39'10" | 39'10" | 39'8" | 39'11" | 39'11" | 1'8" |
| Static tipping load, straight* | kg | 10 489 | 10 325 | 10 527 | 10 392 | 10 211 | 10 415 | 10 297 | 10 128 | 10 333 | (2916) |
| | lb | 23,124 | 22,762 | 23,208 | 22,910 | 22,533 | 22,961 | 22,700 | 22,328 | 22,780 | (6429) |
| Static tipping load, articulated at full 40° turn* | kg | 9329 | 9165 | 9358 | 9223 | 9057 | 9252 | 9148 | 9030 | 9176 | (2643) |
| | lb | 20,566 | 20,205 | 20,630 | 20,333 | 19,967 | 20,397 | 20,167 | 19,907 | 20,229 | (5829) |
| Breakout force | kN | 115.9 | 114.4 | 123.1 | 107.0 | 105.6 | 113.1 | 102.3 | 100.8 | 107.8 | (5.3) |
| | lb | 26,055 | 25,718 | 27,674 | 24,055 | 23,740 | 25,426 | 22,998 | 22,661 | 24,234 | (1191) |
| Operating weight* | kg | 13 402 | 13 512 | 13 419 | 13 457 | 13 567 | 13 474 | 13 476 | 13 586 | 13 493 | 347 |
| | lb | 29,546 | 29,788 | 29,583 | 29,667 | 29,910 | 29,705 | 29,709 | 29,951 | 29,746 | 765 |

* Static tipping loads and operating weights are based on standard machine configuration (with standard 20.5-R25 L3 tire), full fuel tank, 80 kg operator, plus air conditioning, power train and crankcase guards and ride control attachment.

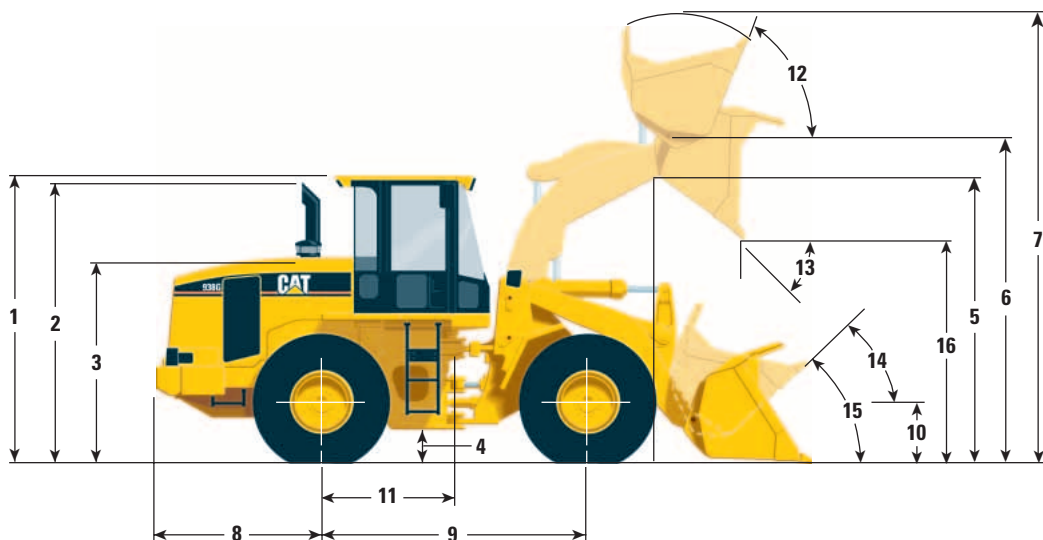
Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standards J732C governing loader ratings.

** Tipping load changes for 2.8 m³ (3.65 yd³) GP bucket. Tipping load deltas vary depending on bucket selected.

938G Series II Wheel Loader

Dimensions

All dimensions are approximate.



| | | | |
|---|--|---------|--------|
| 1 | Height to top of ROPS | 3300 mm | 10'10" |
| 2 | Height to top of exhaust pipe | 3227 mm | 10'7" |
| 3 | Height to top of hood | 2359 mm | 7'9" |
| 4 | Ground clearance/ Standard tire 20.5-R25 (L-2) See Chart below for other tires | 399 mm | 1'4" |
| 5 | Lift arm clearance @ maximum lift | 3435 mm | 11'3" |
| 6 | Bucket Pin height @ maximum lift | 3843 mm | 12'7" |
| | Bucket Pin height, optional high lift | 4266 mm | 14'0" |
| 7 | Overall height – bucket raised | 5284 mm | 17'4" |

| | | | |
|----|---|---------|-------|
| 8 | Center line of rear axle to edge of counterweight | 1857 mm | 6'1" |
| 9 | Wheelbase | 3020 mm | 9'11" |
| 10 | Height to center line of axle | 688 mm | 2'3" |
| 11 | Center line of rear axle to hitch | 1510 mm | 4'11" |
| 12 | Rack back @ maximum lift | 65° | |
| 13 | Dump angle @ maximum lift | 49° | |
| 14 | Rack back @ carry | 50° | |
| 15 | Rack back @ ground | 44° | |
| 16 | Dump clearance @ maximum lift and 45° dump | 2771 mm | 9'1" |

Tires

Tread width for all tires is 2020 mm (80")

| | | Width over tires | | Change in vertical dimensions | | Change in operating weight without ballast | | Change in static tipping load – straight | |
|------------------|---------------|------------------|--------|-------------------------------|--------|--|------|--|------|
| | | mm | inches | mm | inches | kg | lb | kg | lb |
| 20.5-25, (L-3) | Bridgestone | 2596 | 102 | -9 | -0.4 | +209 | +461 | N/A | N/A |
| 550/65R25, (L-3) | Michelin | 2569 | 101 | -80 | -3.1 | +43 | +95 | 0 | 0 |
| 20.5-25, (L-2) | Goodyear | 2607 | 103 | +24 | +0.9 | -60 | -132 | -44 | -97 |
| 20.5-25 (L-3) | Goodyear | 2602 | 102 | -22 | -0.9 | -86 | -190 | +64 | +141 |
| 20.5-R25 (L-2) | Michelin XTLA | 2601 | 102 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20.5-R25 (L-3) | Michelin XHA | 2594 | 102 | +6 | +0.2 | -170 | -375 | +129 | +284 |
| 20.5-R25 (L-3) | Goodyear GP2B | 2595 | 102 | +10 | +0.4 | +127 | +280 | +98 | +216 |

NOTE:

Tire options include tires and rims.

In certain applications (such as load-and-carry work) the loader's productive capabilities might exceed the tires' tonnes-km/h (ton-mph) capabilities. Caterpillar recommends consulting a tire supplier to evaluate all conditions before selecting a tire model.