

# 621C/XR/XT

## Articulated Wheel Loader



### ENGINE

Model..... Case 6T-590  
Type..... 4-stroke, turbocharged  
Cylinders..... 6  
Bore / Stroke ..... 4.02" x 4.72"  
(102 X 120 mm)  
Displacement ..... 359 in<sup>3</sup> (5.9 L)  
Fuel injection..... Direct  
Fuel..... #2 Diesel  
Fuel filter..... Replaceable, full flow  
spin-on cartridge  
Air filter..... Dry type element  
w/warning restriction indicator  
Radiator  
Core type ..... Square Wave™  
Core size area..... 5.1 ft<sup>2</sup> (0.47 m<sup>2</sup>)  
Rows of tubes..... 4  
Fan  
Style..... 6 blade pusher  
Diameter ..... 23.6" (600 mm)  
Ratio ..... 1.1:1  
Water pump  
Style ..... Integral  
Engine oil  
Pump..... Deep sump plate cooler  
with pressurized  
under-piston nozzles  
Pump operating angle ratings  
Side-to-side ..... Rated 45°  
Fore and aft..... Rated 45°  
Oil filtration..... Replaceable,  
full flow spin-on cartridge  
Engine speeds (rpm)  
Rated speed, full load ..... 2200  
Low idle..... 725 - 775  
High idle, no load ..... 2305 - 2385  
Horsepower  
Gross..... 139 (104 kW) @ 2000 rpm  
Net ..... 130 (97 kW) @ 2000 rpm  
Peak torque @ 1400 rpm  
Gross..... 423 lb·ft (574 N·m)  
Net ..... 413 lb·ft (560 N·m)  
Torque rise ..... 31%

NOTE: Gross horsepower and torque per SAE J1995. Net horsepower and torque per SAE J1349.

### DRIVETRAIN

Transmission ..... 4F/3R Proportional  
w/Electronic Control Module  
torque sensing autoshift / manual  
shift and modulation  
Gears ..... Helical cut  
Gear ratios Forward Reverse  
1st..... 4.012 ..... 3.804  
2nd ..... 2.024 ..... 1.919  
3rd ..... 1.088 ..... 1.031  
4th ..... 0.619 ..... NA  
Torque converter  
Stall ratio..... 2.83:1  
Differential..... Limited slip  
w/45% transfer on front  
and rear axles  
Rear axle oscillation ..... 24° total  
Front and rear axle  
Differential ratio ..... 3.444  
Planetary ratio..... 6.353  
Final axle ratio ..... 21.88  
Planetaries..... Outboard  
Service brakes ..... Hydraulically  
actuated maintenance-free  
multiple wet disc w/accumulator  
to all four wheels  
Brake surface area.... 312 in<sup>2</sup> per hub  
(0.20 m<sup>2</sup>)  
Parking brakes ..... Spring applied  
hydraulic release disc on  
transmission output shaft  
Travel speeds – mph (km/h)  
w / 20.5-25 L3 Tires  
Forward Reverse  
1st ..... 4.4 (7.1) ..... 4.6 (7.4)  
2nd ..... 8.4 (13.5) ..... 8.8 (14.2)  
3rd ..... 14.6 (23.5) ... 15.5 (25.0)  
4th..... 23.3 (37.5)..... NA

NOTE: Travel speeds at full engine throttle.

### ELECTRICAL

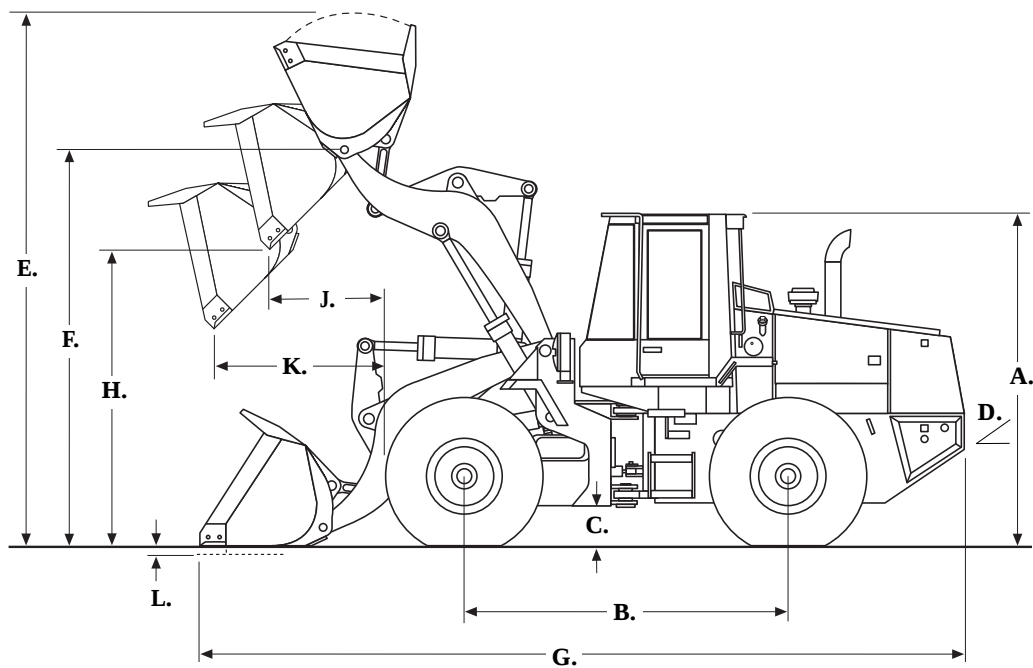
Voltage..... 24 Volts, negative ground  
Alternator ..... 65 amp  
Batteries ..... (2) 700 CCA  
Optional batteries..... (2) 900 CCA

### HYDRAULICS

Pump..... Dual, vane-type tandem  
Loader/steering section  
Section displacement ... 4.85 in<sup>3</sup>/rev  
42.9 gpm @ 2200 rpm @ 2250 psi  
(163 L / min @ 2200 rpm @ 155 bar)  
Loader section  
Section displacement ..... 2.1 in<sup>3</sup>/rev  
18.6 gpm @ 2200 rpm @ 2250 psi  
(70 L / min @ 2200 rpm @ 155 bar)  
Loader control valve .... Open-center,  
sectional 2-, 3- or 4-spool with  
pilot control for lift, tilt  
and auxiliary hydraulics,  
electromagnetic detents in  
float, raise and rollback  
Loader auxiliary hydraulics  
22.4 to 61.5 gpm  
(85 to 233 L / min)  
Steering ..... Hydraulic center-pivot  
articulating w/on-demand oil flow  
Flow ..... 42.9 gpm @ 2200 rpm  
@ 2250 psi  
(163 L / min @ 2200 rpm @ 155 bar)  
Main relief pressure..... 2250 psi  
(155 bar)  
Filtration ..... 10-micron,  
full flow replaceable  
cartridges on return line, condition  
indicator light for filter  
Oil cooler ..... Return line

### CYLINDERS

Lift cylinder  
Bore diameter..... 5.0" (127 mm)  
Rod diameter ..... 3.0" (76 mm)  
Stroke ..... 32.82" (834 mm)  
Dump cylinder (Z-Bar, XR)  
Bore diameter..... 6.0" (152 mm)  
Rod diameter ..... 3.0" (76 mm)  
Stroke ..... 21.43" (544 mm)  
Dump cylinders (XT)  
Bore diameter ..... 4.5" (114 mm)  
Rod diameter ..... 2.25" (57 mm)  
Stroke..... 39.41" (1.0 m)



## DIMENSIONS

Height to –

|                            |                 |
|----------------------------|-----------------|
| A. Top of ROPS cab .....   | 128.2" (3.26 m) |
| Top of steering wheel..... | 100.1" (2.54 m) |
| Drawbar .....              | 39.5" (1.0 m)   |
| B. Wheelbase .....         | 114" (2.9 m)    |
| C. Ground clearance.....   | 16.8" (425 mm)  |
| D. Angle of departure..... | 34°             |

Width –

|                                |                 |
|--------------------------------|-----------------|
| Overall* w/o bucket .....      | 95.8" (2.43 m)  |
| Centerline tread .....         | 74" (1.88 m)    |
| Turning radius* – outside..... | 204.5" (5.19 m) |

Turning angle –

|                   |     |
|-------------------|-----|
| From center ..... | 40° |
| Total angle ..... | 80° |

|                                    |     |
|------------------------------------|-----|
| Rear axle oscillation, total ..... | 24° |
|------------------------------------|-----|

NOTE: \*Dimensions taken with 20.5-25 12PR L2 tires. Additional dimensions on pages 3, 4.

## WEIGHT ADJUSTMENTS

| Select Options                                 | Weight Adjustment           | Tipping Load Adjustment Straight | Tipping Load Adjustment 40° Turn |
|------------------------------------------------|-----------------------------|----------------------------------|----------------------------------|
| Rated weight to adjust (see note** below)..... | 26,311 lb (11 935 kg) ..... | 20,696 lb (9388 kg) .....        | 17,452 lb (7916 kg)              |
| 1,500 lb (680 kg) counterweight                |                             |                                  |                                  |
| ILO 2,500 lb (1134 kg) counterweight .....     | -1,000 lb (-454 kg).....    | -2,037 lb (-924 kg).....         | -1,645 lb (-746 kg)              |
| 3,500 lb (1588 kg) counterweight               |                             |                                  |                                  |
| ILO 2,500 lb (1134 kg) counterweight (XR)..... | +1,000 lb (+454 kg) ....    | +1,862 lb (+844 kg) ....         | +1,502 lb (+681 kg)              |
| ROPS canopy.....                               | -295 lb (-134 kg).....      | -264 lb (-120 kg).....           | -236 lb (-107 kg)                |
| Heavy-duty batteries (2) .....                 | +120 lb (+54 kg).....       | +243 lb (+110 kg) .....          | +195 lb (+88 kg)                 |
| 17.5-25 12PR L2 tires .....                    | -1,056 lb (-479 kg).....    | -626 lb (-284 kg).....           | -483 lb (-219 kg)                |
| 17.5-25 12PR L3 tires .....                    | -848 lb (-385 kg).....      | -427 lb (-194 kg).....           | -335 lb (-152 kg)                |
| 17.5-R25 XTLA tires.....                       | -916 lb (-415 kg).....      | -497 lb (-225 kg).....           | -396 lb (-180 kg)                |
| 17.5-R25 XHA tires .....                       | -692 lb (-314 kg).....      | -269 lb (-122 kg).....           | -192 lb (-87 kg)                 |
| 20.5-25 12PR L3 tires.....                     | +328 lb (+149 kg) .....     | +589 lb (+267 kg) .....          | +622 lb (+282 kg)                |
| 20.5-25 16PR L2 tires.....                     | +56 lb (+25 kg) .....       | +181 lb (+82 kg) .....           | +227 lb (+103 kg)                |
| 20.5-R25 XTLA tires.....                       | +100 lb (+45 kg).....       | -11 lb (-5 kg).....              | -92 lb (-42 kg)                  |
| 20.5-R25 XHA tires .....                       | +480 lb (+218 kg) .....     | +417 lb (+189 kg) .....          | +349 lb (+158 kg)                |
| 555/70R25 XLD 70-1 tires.....                  | +180 lb (+82 kg) .....      | +75 lb (+34 kg).....             | -77 lb (-35 kg)                  |

NOTE: \*\*Unit equipped with Z-Bar loader arms, 2.25 yd<sup>3</sup> (1.72 m<sup>3</sup>) general purpose pin on bucket, 20.5-25 12PR L2 tires, ROPS cab with heater, 2,500 lb (1134 kg) counterweight, standard batteries, front and rear fenders, full fuel and 175 lb (79 kg) operator. Adjust select options from rated weight.

# PERFORMANCE DATA

|                                                        | 2.25 yd <sup>3</sup> (1.72 m <sup>3</sup> )<br>Bucket Only  | 2.25 yd <sup>3</sup> (1.72 m <sup>3</sup> )<br>Bucket w/Bolt-on Edge | 2.25 yd <sup>3</sup> (1.72 m <sup>3</sup> )<br>Bucket w/Teeth |
|--------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------|
| <b>621C Z-Bar</b>                                      |                                                             |                                                                      |                                                               |
| SAE bucket capacity – struck.....                      | 1.98 yd <sup>3</sup> (1.51 m <sup>3</sup> )                 | 2.06 yd <sup>3</sup> (1.57 m <sup>3</sup> )                          | 1.98 yd <sup>3</sup> (1.51 m <sup>3</sup> )                   |
| Heaped .....                                           | 2.32 yd <sup>3</sup> (1.77 m <sup>3</sup> )                 | 2.41 yd <sup>3</sup> (1.84 m <sup>3</sup> )                          | 2.32 yd <sup>3</sup> (1.77 m <sup>3</sup> )                   |
| Bucket width – outside.....                            | 99.9" (2.54 m)                                              | 99.9" (2.54 m)                                                       | 101.5" (2.58 m)                                               |
| Inside .....                                           | 97.0" (2.46 m)                                              | 97.0" (2.46 m)                                                       | 97.0" (2.46 m)                                                |
| Bucket weight.....                                     | 1,704 lb (773 kg)                                           | 2,107 lb (956 kg)                                                    | 1,906 lb (865 kg)                                             |
| E. Operating height – fully raised w/spillguard.....   | 192.0" (4.88 m)                                             | 192.0" (4.88 m)                                                      | 192.0" (4.88 m)                                               |
| F. Hinge pin height – fully raised .....               | 145.5" (3.7 m)                                              | 145.5" (3.7 m)                                                       | 145.5" (3.7 m)                                                |
| G. Overall length – bucket level on ground .....       | 266.7" (6.77 m)                                             | 269.2" (6.84 m)                                                      | 275.9" (7.01 m)                                               |
| Dump angle – fully raised .....                        | 50°                                                         | 50°                                                                  | 50°                                                           |
| H. Dump height – fully raised, 45° dump .....          | 114.5" (2.91 m)                                             | 112.7" (2.86 m)                                                      | 108.0" (2.74 m)                                               |
| J. Bucket reach – fully raised, 45° dump.....          | 37.7" (958 mm)                                              | 38.0" (965 mm)                                                       | 42.8" (1.08 m)                                                |
| K. Bucket reach – 7'0" (2.13 m) height, 45° dump ..... | 57.4" (1.46 m)                                              | 57.0" (1.45 m)                                                       | 59.5" (1.51 m)                                                |
| Operating load – SAE.....                              | 8,726 lb (3958 kg)                                          | 8,478 lb (3846 kg)                                                   | 8,555 lb (3880 kg)                                            |
| Maximum material density – SAE .....                   | 3,761 lb/yd <sup>3</sup> (2231 kg/m <sup>3</sup> )          | 3,518 lb/yd <sup>3</sup> (2087 kg/m <sup>3</sup> )                   | 3,688 lb/yd <sup>3</sup> (2188 kg/m <sup>3</sup> )            |
| Tipping load – SAE                                     |                                                             |                                                                      |                                                               |
| Straight.....                                          | 20,696 lb (9388 kg)                                         | 20,198 lb (9162 kg)                                                  | 20,355 lb (9233 kg)                                           |
| 40° turn .....                                         | 17,452 lb (7916 kg)                                         | 16,957 lb (7692 kg)                                                  | 17,111 lb (7761 kg)                                           |
| Lift capacity –                                        |                                                             |                                                                      |                                                               |
| Full height .....                                      | 10,468 lb (4747 kg)                                         | 10,056 lb (4560 kg)                                                  | 10,254 lb (4650 kg)                                           |
| Maximum reach.....                                     | 16,400 lb (7438 kg)                                         | 15,985 lb (7249 kg)                                                  | 16,180 lb (7338 kg)                                           |
| Ground.....                                            | 25,720 lb (11 664 kg)                                       | 25,156 lb (11 409 kg)                                                | 25,300 lb (11 474 kg)                                         |
| Breakout force – dump cylinder .....                   | 25,100 lb (11 383 kg)                                       | 23,692 lb (10 745 kg)                                                | 24,561 lb (11 139 kg)                                         |
| Maximum rollback –                                     |                                                             |                                                                      |                                                               |
| Ground.....                                            | 39°                                                         | 40°                                                                  | 40°                                                           |
| Carry position .....                                   | 46°                                                         | 46°                                                                  | 46°                                                           |
| @ Maximum reach.....                                   | 57°                                                         | 57°                                                                  | 57°                                                           |
| @ Full height .....                                    | 63°                                                         | 63°                                                                  | 63°                                                           |
| L. Dig depth.....                                      | 2.3" (59 mm)                                                | 3.4" (86 mm)                                                         | 3.3" (84 mm)                                                  |
| Maximum grading angle w/bucket – back dragging.....    | 61°                                                         | 61°                                                                  | 61°                                                           |
| Loader clearance circle.....                           | 445.9" (11.33 m)                                            | 447.3" (11.36 m)                                                     | 452.4" (11.49 m)                                              |
| <b>621C XR</b>                                         |                                                             |                                                                      |                                                               |
| E. Operating height – fully raised w/spillguard.....   | 203.2" (5.16 m)                                             | 203.1" (5.15 m)                                                      | 203.2" (5.16 m)                                               |
| F. Hinge pin height – fully raised .....               | 156.6" (3.98 m)                                             | 156.6" (3.98 m)                                                      | 156.6" (3.98 m)                                               |
| G. Overall length – bucket level on ground .....       | 275.7" (7.0 m)                                              | 277.9" (7.06 m)                                                      | 284.6" (7.23 m)                                               |
| Dump angle – fully raised .....                        | 49°                                                         | 49°                                                                  | 49°                                                           |
| H. Dump height – fully raised, 45° dump .....          | 125.7" (3.19 m)                                             | 123.9" (3.15 m)                                                      | 119.2" (3.03 m)                                               |
| J. Bucket reach – fully raised, 45° dump.....          | 36.0" (914 mm)                                              | 36.4" (925 mm)                                                       | 41.1" (1.04 m)                                                |
| K. Bucket reach – 7'0" (2.13 m) height, 45° dump.....  | 64.8" (1.65 m)                                              | 64.4" (1.64 m)                                                       | 67.1" (1.7 m)                                                 |
| Operating load – SAE.....                              | 7,772 lb (3525 kg)                                          | 7,529 lb (3415 kg)                                                   | 7,606 lb (3450 kg)                                            |
| Maximum material density – SAE .....                   | 3,350 lb/yd <sup>3</sup> (1988 kg/m <sup>3</sup> )          | 3,124 lb/yd <sup>3</sup> (1853 kg/m <sup>3</sup> )                   | 3,278 lb/yd <sup>3</sup> (1945 kg/m <sup>3</sup> )            |
| Tipping load – SAE                                     |                                                             |                                                                      |                                                               |
| Straight.....                                          | 18,479 lb (8382 kg)                                         | 17,990 lb (8160 kg)                                                  | 18,146 lb (8231 kg)                                           |
| 40° turn .....                                         | 15,545 lb (7051 kg)                                         | 15,058 lb (6830 kg)                                                  | 15,212 lb (6900 kg)                                           |
| Lift capacity –                                        |                                                             |                                                                      |                                                               |
| Full height .....                                      | 10,595 lb (4805 kg)                                         | 10,180 lb (4617 kg)                                                  | 10,378 lb (4707 kg)                                           |
| Maximum reach.....                                     | 15,720 lb (7129 kg)                                         | 15,305 lb (6941 kg)                                                  | 15,500 lb (7030 kg)                                           |
| Ground.....                                            | 22,480 lb (10 195 kg)                                       | 21,975 lb (9966 kg)                                                  | 22,123 lb (10 033 kg)                                         |
| Breakout force – dump cylinder .....                   | 25,002 lb (11 339 kg)                                       | 23,616 lb (10 710 kg)                                                | 24,144 lb (11 105 kg)                                         |
| Loader clearance circle.....                           | 453.9" (11.53 m)                                            | 455.4" (11.57 m)                                                     | 460.9" (11.71 m)                                              |
|                                                        | 2.25 yd <sup>3</sup> (1.72 m <sup>3</sup> )<br>Bucket Only* | 2.5 yd <sup>3</sup> (1.91 m <sup>3</sup> )<br>Bucket Only*           | 2.5 yd <sup>3</sup> (1.91 m <sup>3</sup> )<br>Bucket w/Edge*  |
| <b>621C XT</b>                                         |                                                             |                                                                      |                                                               |
| E. Operating height – fully raised w/spillguard.....   | 199.8" (5.07 m)                                             | 201.2" (5.11 m)                                                      | 198.7" (5.05 m)                                               |
| F. Hinge pin height – fully raised .....               | 152.2" (3.87 m)                                             | 152.2" (3.87 m)                                                      | 152.2" (3.87 m)                                               |
| G. Overall length – bucket level on ground .....       | 283.8" (7.21 m)                                             | 285.9" (7.26 m)                                                      | 284.9" (7.36 m)                                               |
| Dump angle – fully raised .....                        | 52°                                                         | 52°                                                                  | 52°                                                           |
| H. Dump height – fully raised, 45° dump .....          | 114.6" (2.91 m)                                             | 113.0" (2.87 m)                                                      | 113.6" (2.89 m)                                               |
| J. Bucket reach – fully raised, 45° dump .....         | 44.8" (1.14 m)                                              | 46.1" (1.17 m)                                                       | 43.8" (1.11 m)                                                |
| K. Bucket reach – 7'0" (2.13 m) height, 45° dump.....  | 66.4" (1.69 m)                                              | 66.9" (1.7 m)                                                        | 64.9" (1.65 m)                                                |
| Operating load – SAE.....                              | 7,860 lb (3565 kg)                                          | 7,741 lb (3511 kg)                                                   | 7,849 lb (3560 kg)                                            |
| Maximum material density – SAE .....                   | 3,191 lb/yd <sup>3</sup> (1893 kg/m <sup>3</sup> )          | 2,789 lb/yd <sup>3</sup> (1665 kg/m <sup>3</sup> )                   | 2,659 lb/yd <sup>3</sup> (1577 kg/m <sup>3</sup> )            |
| Tipping load – SAE                                     |                                                             |                                                                      |                                                               |
| Straight.....                                          | 18,968 lb (8604 kg)                                         | 18,717 lb (8490 kg)                                                  | 18,944 lb (8593 kg)                                           |
| 40° turn .....                                         | 15,720 lb (7130 kg)                                         | 15,482 lb (7022 kg)                                                  | 15,697 lb (7120 kg)                                           |
| Lift capacity –                                        |                                                             |                                                                      |                                                               |
| Full height.....                                       | 9,066 lb (4112 kg)                                          | 8,911 lb (4042 kg)                                                   | 9,047 lb (4104 kg)                                            |
| Maximum reach.....                                     | 14,799 lb (6713 kg)                                         | 14,687 lb (6662 kg)                                                  | 14,792 lb (6710 kg)                                           |
| Ground.....                                            | 26,387 lb (11 969 kg)                                       | 26,356 lb (11 955 kg)                                                | 26,043 lb (11 813 kg)                                         |
| Breakout force – dump cylinder .....                   | 23,392 lb (10 610 kg)                                       | 22,253 lb (10 094 kg)                                                | 21,570 lb (9784 kg)                                           |
| Loader clearance circle.....                           | 459.6" (11.67 m)                                            | 460.8" (11.7 m)                                                      | 461.9" (11.73 m)                                              |

| <b>2.5 yd<sup>3</sup> (1.91 m<sup>3</sup>)<br/>Bucket Only</b>    | <b>2.5 yd<sup>3</sup> (1.91 m<sup>3</sup>)<br/>Bucket w/Bolt-on Edge</b> | <b>2.5 yd<sup>3</sup> (1.91 m<sup>3</sup>)<br/>Bucket w/Teeth</b>  | <b>2.0 yd<sup>3</sup> (1.53 m<sup>3</sup>)<br/>4 IN 1®/Bucket Only</b>                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.15 yd <sup>3</sup> (1.64 m <sup>3</sup> )                       | 2.21 yd <sup>3</sup> (1.69 m <sup>3</sup> )                              | 2.15 yd <sup>3</sup> (1.64 m <sup>3</sup> )                        | 1.77 yd <sup>3</sup> (1.35 m <sup>3</sup> )                                                                                                                                                                                                                                                                                                                                                     |
| 2.5 yd <sup>3</sup> (1.91 m <sup>3</sup> )                        | 2.6 yd <sup>3</sup> (1.99 m <sup>3</sup> )                               | 2.5 yd <sup>3</sup> (1.91 m <sup>3</sup> )                         | 2.16 yd <sup>3</sup> (1.65 m <sup>3</sup> )                                                                                                                                                                                                                                                                                                                                                     |
| 103.1" (2.62 m)                                                   | 103.1" (2.62 m)                                                          | 103.9" (2.64 m)                                                    | 100.0" (2.54 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| 99.5" (2.53 m)                                                    | 99.5" (2.53 m)                                                           | 99.5" (2.53 m)                                                     | 96.9" (2.46 m)                                                                                                                                                                                                                                                                                                                                                                                  |
| 2,029 lb (920 kg)                                                 | 2,522 lb (1144 kg)                                                       | 2,244 lb (1018 kg)                                                 | 2,724 lb (1236 kg)                                                                                                                                                                                                                                                                                                                                                                              |
| 193.9" (4.93 m)                                                   | 193.8" (4.92 m)                                                          | 193.9" (4.93 m)                                                    | 190.6" (4.84 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| 145.4" (3.69 m)                                                   | 145.4" (3.69 m)                                                          | 145.4" (3.69 m)                                                    | 145.4" (3.69 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| 267.7" (6.8 m)                                                    | 270.6" (6.87 m)                                                          | 277.2" (7.04 m)                                                    | 270.9" (6.88 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| 50°                                                               | 50°                                                                      | 50°                                                                | 50°                                                                                                                                                                                                                                                                                                                                                                                             |
| 113.8" (2.89 m)                                                   | 111.7" (2.84 m)                                                          | 107.0" (2.72 m)                                                    | 111.3" (2.83 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| 38.3" (973 mm)                                                    | 38.7" (983 mm)                                                           | 43.7" (1.11 m)                                                     | 36.8" (935 mm)                                                                                                                                                                                                                                                                                                                                                                                  |
| 57.8" (1.47 m)                                                    | 57.2" (1.45 m)                                                           | 59.9" (1.52 m)                                                     | 55.1" (1.4 m)                                                                                                                                                                                                                                                                                                                                                                                   |
| 8,629 lb (3914 kg)                                                | 8,322 lb (3775 kg)                                                       | 8,491 lb (3851 kg)                                                 | 7,905 lb (3585 kg)                                                                                                                                                                                                                                                                                                                                                                              |
| 3,452 lb/yd <sup>3</sup> (2048 kg/m <sup>3</sup> )                | 3,201 lb/yd <sup>3</sup> (1899 kg/m <sup>3</sup> )                       | 3,396 lb/yd <sup>3</sup> (2015 kg/m <sup>3</sup> )                 | 3,659 lb/yd <sup>3</sup> (2171 kg/m <sup>3</sup> )                                                                                                                                                                                                                                                                                                                                              |
| 20,532 lb (9313 kg)                                               | 19,915 lb (9033 kg)                                                      | 20,255 lb (9188 kg)                                                | 18,939 lb (8591 kg)                                                                                                                                                                                                                                                                                                                                                                             |
| 17,258 lb (7828 kg)                                               | 16,643 lb (7549 kg)                                                      | 16,982 lb (7703 kg)                                                | 15,809 lb (7171 kg)                                                                                                                                                                                                                                                                                                                                                                             |
| 10,151 lb (4604 kg)                                               | 9,648 lb (4375 kg)                                                       | 9,931 lb (4504 kg)                                                 | 9,403 lb (4264 kg)                                                                                                                                                                                                                                                                                                                                                                              |
| 16,093 lb (7298 kg)                                               | 15,583 lb (7067 kg)                                                      | 15,870 lb (7197 kg)                                                | 15,297 lb (6937 kg)                                                                                                                                                                                                                                                                                                                                                                             |
| 25,471 lb (11 552 kg)                                             | 24,772 lb (11 235 kg)                                                    | 25,106 lb (11 386 kg)                                              | 23,735 lb (10 764 kg)                                                                                                                                                                                                                                                                                                                                                                           |
| 24,262 lb (11 033 kg)                                             | 22,712 lb (10 300 kg)                                                    | 24,178 lb (10 965 kg)                                              | 23,142 lb (10 495 kg)                                                                                                                                                                                                                                                                                                                                                                           |
| 39°                                                               | 40°                                                                      | 40°                                                                | 41°                                                                                                                                                                                                                                                                                                                                                                                             |
| 46°                                                               | 46°                                                                      | 46°                                                                | 46°                                                                                                                                                                                                                                                                                                                                                                                             |
| 57°                                                               | 57°                                                                      | 57°                                                                | 57°                                                                                                                                                                                                                                                                                                                                                                                             |
| 63°                                                               | 63°                                                                      | 63°                                                                | 63°                                                                                                                                                                                                                                                                                                                                                                                             |
| 2.4" (61 mm)                                                      | 3.6" (91 mm)                                                             | 3.4" (86 mm)                                                       | 5.3" (135 mm)                                                                                                                                                                                                                                                                                                                                                                                   |
| 61°                                                               | 61°                                                                      | 61°                                                                | 61°                                                                                                                                                                                                                                                                                                                                                                                             |
| 449.3" (11.41 m)                                                  | 451.0" (11.46 m)                                                         | 455.4" (11.57 m)                                                   | 448.5" (11.39 m)                                                                                                                                                                                                                                                                                                                                                                                |
| 205.1" (5.21 m)                                                   | 205.0" (5.2 m)                                                           | 205.0" (5.2 m)                                                     | 201.8" (5.13 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| 156.6" (3.98 m)                                                   | 156.6" (3.98 m)                                                          | 156.6" (3.98 m)                                                    | 156.6" (3.98 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| 276.6" (7.03 m)                                                   | 279.3" (7.09 m)                                                          | 286.0" (7.26 m)                                                    | 279.5" (7.1 m)                                                                                                                                                                                                                                                                                                                                                                                  |
| 49°                                                               | 49°                                                                      | 49°                                                                | 49°                                                                                                                                                                                                                                                                                                                                                                                             |
| 125.0" (3.18 m)                                                   | 122.9" (3.12 m)                                                          | 118.2" (3.0 m)                                                     | 122.4" (3.11 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| 36.6" (930 mm)                                                    | 37.0" (940 mm)                                                           | 42.0" (1.07 m)                                                     | 35.1" (892 mm)                                                                                                                                                                                                                                                                                                                                                                                  |
| 65.1" (1.65 m)                                                    | 64.6" (1.64 m)                                                           | 67.5" (1.71 m)                                                     | 62.5" (1.59 m)                                                                                                                                                                                                                                                                                                                                                                                  |
| 7,661 lb (3475 kg)                                                | 7,360 lb (3338 kg)                                                       | 7,526 lb (3414 kg)                                                 | 7,001 lb (3176 kg)                                                                                                                                                                                                                                                                                                                                                                              |
| 3,064 lb/yd <sup>3</sup> (1818 kg/m <sup>3</sup> )                | 2,831 lb/yd <sup>3</sup> (1679 kg/m <sup>3</sup> )                       | 3,010 lb/yd <sup>3</sup> (1786 kg/m <sup>3</sup> )                 | 3,241 lb/yd <sup>3</sup> (1923 kg/m <sup>3</sup> )                                                                                                                                                                                                                                                                                                                                              |
| 18,280 lb (8292 kg)                                               | 17,675 lb (8017 kg)                                                      | 18,009 lb (8169 kg)                                                | 16,840 lb (7638 kg)                                                                                                                                                                                                                                                                                                                                                                             |
| 15,322 lb (6950 kg)                                               | 14,719 lb (6676 kg)                                                      | 15,052 lb (6827 kg)                                                | 14,002 lb (6351 kg)                                                                                                                                                                                                                                                                                                                                                                             |
| 10,278 lb (4661 kg)                                               | 9,774 lb (4432 kg)                                                       | 10,059 lb (4562 kg)                                                | 9,525 lb (4320 kg)                                                                                                                                                                                                                                                                                                                                                                              |
| 15,410 lb (6989 kg)                                               | 14,902 lb (6758 kg)                                                      | 15,188 lb (6888 kg)                                                | 14,622 lb (6631 kg)                                                                                                                                                                                                                                                                                                                                                                             |
| 22,211 lb (10 073 kg)                                             | 21,584 lb (9789 kg)                                                      | 21,904 lb (9934 kg)                                                | 20,761 lb (9415 kg)                                                                                                                                                                                                                                                                                                                                                                             |
| 24,166 lb (10 959 kg)                                             | 22,645 lb (10 270 kg)                                                    | 24,102 lb (10 931 kg)                                              | 23,113 lb (10 482 kg)                                                                                                                                                                                                                                                                                                                                                                           |
| 457.3" (11.62 m)                                                  | 459.1" (11.66 m)                                                         | 463.9" (11.78 m)                                                   | 456.7" (11.6 m)                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>2.25 yd<sup>3</sup> (1.72 m<sup>3</sup>)<br/>Bucket Only**</b> | <b>2.5 yd<sup>3</sup> (1.91 m<sup>3</sup>)<br/>Bucket Only**</b>         | <b>2.5 yd<sup>3</sup> (1.91 m<sup>3</sup>)<br/>Bucket w/Edge**</b> | NOTE: *XT lift arm with buckets for JRB 416 coupler. **XT lift arm with buckets for ACS Pro Series 2000® size 30HD coupler. Performance data unit equipped with 20.5-25 12PR L2 tires, ROPS cab w/heater and A/C, 3,500 lb (1588 kg) counterweight, standard batteries, front and rear fenders, full fuel and 175 lb (79 kg) operator. Specifications per SAE J732, J1234, J695, J742 and J818. |
| 197.9" (5.03 m)                                                   | 201.8" (5.13 m)                                                          | 200.6" (5.1 m)                                                     |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 152.2" (3.87 m)                                                   | 152.2" (3.87 m)                                                          | 152.2" (3.87 m)                                                    |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 280.3" (7.12 m)                                                   | 283.3" (7.2 m)                                                           | 284.2" (7.22 m)                                                    |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 52°                                                               | 52°                                                                      | 52°                                                                |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 116.8" (2.97 m)                                                   | 114.6" (2.91 m)                                                          | 113.7" (2.89 m)                                                    |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 39.9" (1.01 m)                                                    | 42.0" (1.07 m)                                                           | 41.5" (1.05 m)                                                     |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 62.5" (1.59 m)                                                    | 63.6" (1.62 m)                                                           | 62.7" (1.59 m)                                                     |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 7,568 lb (3433 kg)                                                | 7,389 lb (3352 kg)                                                       | 7,417 lb (3364 kg)                                                 |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 3,102 lb/yd <sup>3</sup> (1840 kg/m <sup>3</sup> )                | 2,588 lb/yd <sup>3</sup> (1535 kg/m <sup>3</sup> )                       | 2,703 lb/yd <sup>3</sup> (1604 kg/m <sup>3</sup> )                 |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 18,306 lb (8304 kg)                                               | 17,196 lb (8127 kg)                                                      | 18,003 lb (8166 kg)                                                |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 15,136 lb (6865 kg)                                               | 14,778 lb (6703 kg)                                                      | 14,834 lb (6728 kg)                                                |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 8,715 lb (3953 kg)                                                | 8,509 lb (3860 kg)                                                       | 8,414 lb (3817 kg)                                                 |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 14,579 lb (6612 kg)                                               | 14,444 lb (6551 kg)                                                      | 14,278 lb (6476 kg)                                                |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 26,056 lb (11 817 kg)                                             | 26,205 lb (11 884 kg)                                                    | 25,555 lb (11 592 kg)                                              |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 26,783 lb (12 149 kg)                                             | 24,668 lb (11 189 kg)                                                    | 22,413 lb (10 166 kg)                                              |                                                                                                                                                                                                                                                                                                                                                                                                 |
| 458.1" (11.64 m)                                                  | 459.8" (11.68 m)                                                         | 457.7" (11.63 m)                                                   |                                                                                                                                                                                                                                                                                                                                                                                                 |

## **INSTRUMENTATION**

Electronic Information Center  
Displays / Gauges –  
Speedometer  
Tachometer  
Direction selected F-N-R  
Transmission modes –  
Auto shift / Manual shift  
Gear selected  
Gear position  
Turn signal indicator  
Engine coolant temperature  
Engine oil pressure  
Fuel level  
Transmission oil temperature  
Hydraulic oil temperature  
Voltmeter  
Hourmeter  
Indicator lights –  
Beacon\*  
Work lights  
Loader control lockout  
Low coolant  
Brake pressure  
Master indicator  
Auxiliary steering\*  
Parking brake  
Air conditioning\*  
Hydraulic oil filter  
Transmission filter  
Air filter  
Audible alarms –  
Caution alarm  
Critical alarm  
Backup alarm  
Horn

NOTE: \*If equipped with option.

## **OPERATOR ENVIRONMENT**

ROPS canopy  
Key start  
Articulated power steering  
w/tilt column  
Fully adjustable, vinyl suspension  
seat  
Foot throttle  
2-Lever loader control w/wrist rest  
Cup holder  
Coat hook  
(2) Interior rear-view mirrors  
2" (51 mm) retractable seat belt  
Storage tray behind seat  
Lunch box retainer strap

## **LOADER**

Z-bar loader linkage  
2-lever control for lift and tilt  
Positive hold float  
Automatic return-to-dig  
Automatic height control  
Automatic return-to-travel  
Automatic self-leveling on XT  
Brake pedal transmission disconnect  
Bucket position indicator

## **CYCLE TIME**

Raise w/rated bucket load..... 5.4 sec  
Dump w/rated bucket load  
Z-Bar, XR ..... 1.5 sec  
XT ..... 1.7 sec  
Lower (empty)  
Power down ..... 5.0 sec  
Float down ..... 4.4 sec

## **SERVICE CAPACITIES**

Fuel tank ..... 51 gal (193 L)  
Hydraulic system  
Total ..... 40.5 gal (153.3 L)  
Reservoir ..... 23.8 gal (90.1 L)  
Transmission  
Service w/filter ..... 2 gal (7.4 L)  
Front and rear axle  
Differential (each) ..... 10 qt (9.5 L)  
Planetaries (each) ..... 6 qt (5.5 L)  
Total axle (each) ..... 22 qt (20.8 L)  
Engine oil w/filter ..... 16 qt (15.1 L)  
Cooling system ..... 7 gal (26.5 L)

## **OPERATING WEIGHTS**

### **Z-Bar**

Unit equipped with ROPS cab  
with heater and A/C, 2,500 lb (1134 kg)  
counterweight, 20.5-25 12PR L2 tires,  
front and rear fenders, 2.25 yd<sup>3</sup>  
(1.72 m<sup>3</sup>) general purpose loader  
bucket w/edge, full fuel, 175 lb (79 kg)  
operator ..... 26,714 lb (12 117 kg)

### **XR**

Unit equipped with ROPS cab  
with heater and A/C, 2,500 lb (1134 kg)  
counterweight, 20.5-25 12PR L2 tires,  
front and rear fenders, 2.25 yd<sup>3</sup>  
(1.72 m<sup>3</sup>) general purpose loader  
bucket w/edge, full fuel, 175 lb (79 kg)  
operator ..... 27,091 lb (12 288 kg)

### **XT**

Unit equipped with ROPS cab  
with heater and A/C, 3,500 lb (1588 kg)  
counterweight, 20.5-25 12PR L2 tires,  
front and rear fenders, 2.25 yd<sup>3</sup>  
(1.72 m<sup>3</sup>) ACS loader bucket w/edge  
and coupler, full fuel, 175 lb (79 kg)  
operator ..... 28,810 lb (13 068 kg)

# STANDARD EQUIPMENT

## OPERATOR'S COMPARTMENT

See page 5

### ENGINE

Case 6T-590 diesel  
Turbocharger  
Automatic fan belt tensioner  
Integral engine oil cooling  
Fuel filter w/water trap  
Air intake pre-cleaner  
Dual element air cleaner  
65 amp alternator  
(2) 700 CCA 12-volt batteries  
Liquid-cooled radiator  
Non spark-arresting muffler

### LOADER

See page 5

## DRIVETRAIN

4-wheel drive  
4F/3R Selectable autoshift / manual shift transmission  
Electronic Control Module – Programmable, computer controlled proportional shifting with programmable gear selection  
On-board diagnostics  
Single lever electronic shift control  
Downshift button  
Torque converter  
Outboard planetary axles  
Limited-slip differentials  
Transmission oil cooler  
Brake pedal transmission disconnect  
Hydraulic wet disc brakes  
Electric parking brake  
Limp-Home Mode  
Fully pressurized lubrication

## HYDRAULICS

2-spool loader control valve  
Full-flow oil cooler  
Flow-amplified, wide-angle steering  
(7) Diagnostic quick couplers

### OTHER

Front and rear fenders  
Lights –  
2 Front headlights  
2 Front flood  
2 Front working  
2 Rear tail and stop  
2 Rear flood  
Front and rear turn signal/flash  
Counterweights  
Z-bar: 1,500 lb (680 kg)  
XR/XT: 2,500 lb (1134 kg)  
Drawbar hitch  
Articulation locking bar

# OPTIONAL EQUIPMENT

## OPERATOR'S COMPARTMENT

Cab with –  
Pressurized, air filtering  
Anti-glare window strip and visor  
Defroster  
Cloth covered mechanical suspension seat  
(2) interior rear-view mirrors  
Side windows, partial/fully opening  
Dome light  
Wipers, rear and intermittent front  
Windshield washers, front and rear  
Rubber floor mat  
Cloth covered air-suspension seat  
3" (76 mm) retractable seat belt  
Sound suppression package  
Cab heater  
Cab air-conditioning w/heater  
Radio or radio/cassette  
Radio-ready (12- or 24-volt)  
Auxiliary power (12-volt)  
Lighter (24-volt)  
West Coast mirrors  
Rotating beacon

## ENGINE

Cold weather ether starting aids  
Engine block heater

### LOADER

XR Extended Reach Loader Arms  
XT Tool-Carrier Loader Arms  
Hydraulic attachment coupler  
Attachment auxiliary hydraulics  
Loader controls –  
2-spool, 1-lever  
3-spool, 2-lever  
3-spool, 3-lever  
4-spool, 2-lever  
Lever conversion kits –  
To 1-, 2- or 3-lever  
Buckets (see page 3, 4)

### HYDRAULICS

Auxiliary hydraulics  
Ride Control  
Auxiliary steering  
3- or 4-spool loader valves with 2- or 3- lever loader control

## TIRES

17.5-25 12PR L2 bias (dirt/traction)  
17.5-25 12PR L3 bias (rock)  
17.5-R25 XTLA radial (dirt/traction)  
17.5-R25 XHA radial (rock)  
20.5-25 12PR L2 bias (dirt/traction)  
20.5-25 12PR L3 bias (rock)  
20.5-25 16PR L2 bias (dirt/traction)  
20.5-R25 XTLA radial (dirt/traction)  
20.5-R25 XHA radial (rock)  
555/70R25 XLD 70-1 radial (rock)

### OTHER

Heavy-duty batteries (2) 900 CCA  
1,000 lb (680 kg) counterweight\*  
Sound package to 72 dBA  
Armor core radiator  
Special paint  
Tie-down brackets

NOTE: \*Additional to standard counterweight for Z-Bar, XR and XT models.

NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

IMPORTANT: Case Corporation reserves the right to change these specifications without notice and without incurring any obligation relating to such change.

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### CASE CORPORATION

700 STATE STREET  
RACINE, WI 53404 U.S.A.

### CASE CANADA CORPORATION

450 SHERMAN AVENUE NORTH  
HAMILTON, ON L8N 4C4 CANADA