

# MICHIGAN

# L140



## MICHIGAN L140 – HIGH PRODUCTIVITY, HIGH CAPACITY

Michigan's experience of 30-plus years has produced a product line of 11 loaders with bucket capacities that range from 0,76 m<sup>3</sup> (1.00 yd<sup>3</sup>) to 9,56 m<sup>3</sup> (12.50 yd<sup>3</sup>).

The Michigan L140, with its state-of-the art technology, is fitted with 3,06 m<sup>3</sup> (4.00 yd<sup>3</sup>) to 3,82 m<sup>3</sup> (5.00 yd<sup>3</sup>) buckets. It is powered by a Cummins LT-10-225HT engine with a gross governed hp rating of 168 kW (225 hp).

The power of this fuel-efficient engine is well-matched to the powertrain, producing balanced and responsive hydraulics, and optimum rimpull for maximum traction.

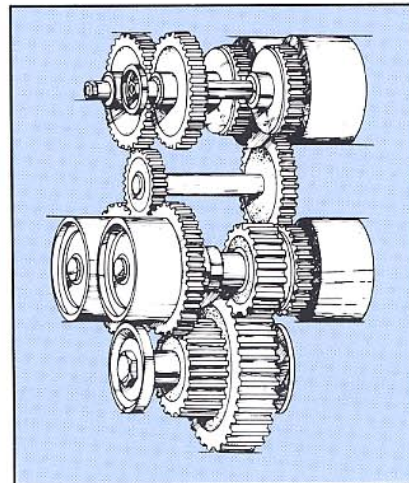
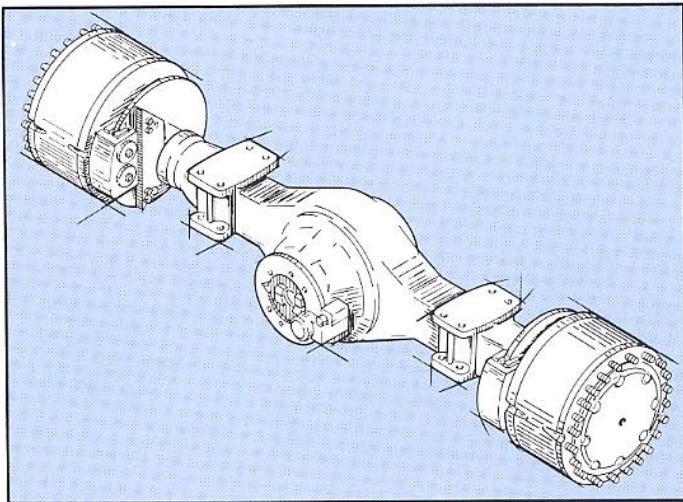
The operator commands the L140 from a filtered, heated and pressurized integral ROPS cab that is ergonomically designed with fingertip controls, providing all the conditions necessary to allow the operator to work at his highest efficiency.

The L140, with an operating weight of 19 151 kg (42,220 lb) is well suited to truck loading, stockpiling, load & carry and excavation operations, and to heavy-duty primary production requirements such as feeding crushers & batch plants.

### DRIVETRAIN

Transmission – Powershift

- 4 speeds forward – 4 reverse
- Constant mesh – countershaft design
- Full directional clutch modulation in forward & reverse for faster cycles
- Uncomplicated design – reliable and easy to maintain



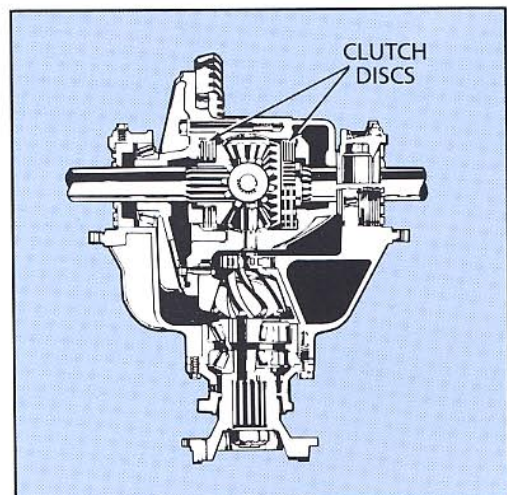
### AXLES – STRONG AND PROVEN

- Single piece cast housings for high strength – long life
- Outboard mounted final drives with needle bearings minimize friction and power loss

### LIMITED SLIP DIFFERENTIALS

Limited slip differentials are standard in both axles. Limited slip proportions power to the wheels with the best available traction, minimizing wheel spin and ensuring the best traction under slippery conditions.

The outboard-mounted planetary drives efficiently transmit power from the axles to the wheels.



## **INSTRUMENTS & CONTROLS**

### **VISIBLE & ACCESSIBLE**

The instrument panel has all of the instruments and controls located directly in front of the operator. Boom and bucket controls are comfortably located at the operator's right. The fingertip controls are power assisted and require minimal effort and movement to operate. Instruments on the right monitor engine oil pressure, engine coolant temperature, transmission oil temperature, fuel gauge and electrical system voltage. The ignition switch and parking brake release are located on the right side panel. On the left panel are switches for fan speed, temperature control, working lights, cold start and a test switch for secondary steering (optional). A lamp warning system monitors pressure in the front and rear brake circuits and application of parking brake.

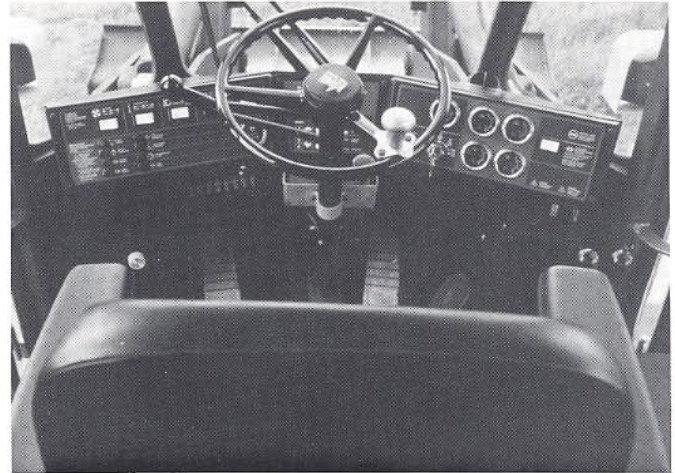
### **BRAKES**

- Service brakes are the outboard-mounted, all hydraulic, dry disc type, dual circuit axle-by-axle system for secondary braking capability. Dead-engine braking is provided by nitrogen-charged accumulators.
- Parking brake is mounted on the front axle input shaft. It is spring applied, hydraulically released.

### **SERVICEABILITY**

- Boom & bucket pins are fully sealed to provide a recommended service interval of 100 hours.
- Sight-gauges permit easy checking of oil levels.
- Quick-connect hydraulic test ports permit easy checking of machine functions.

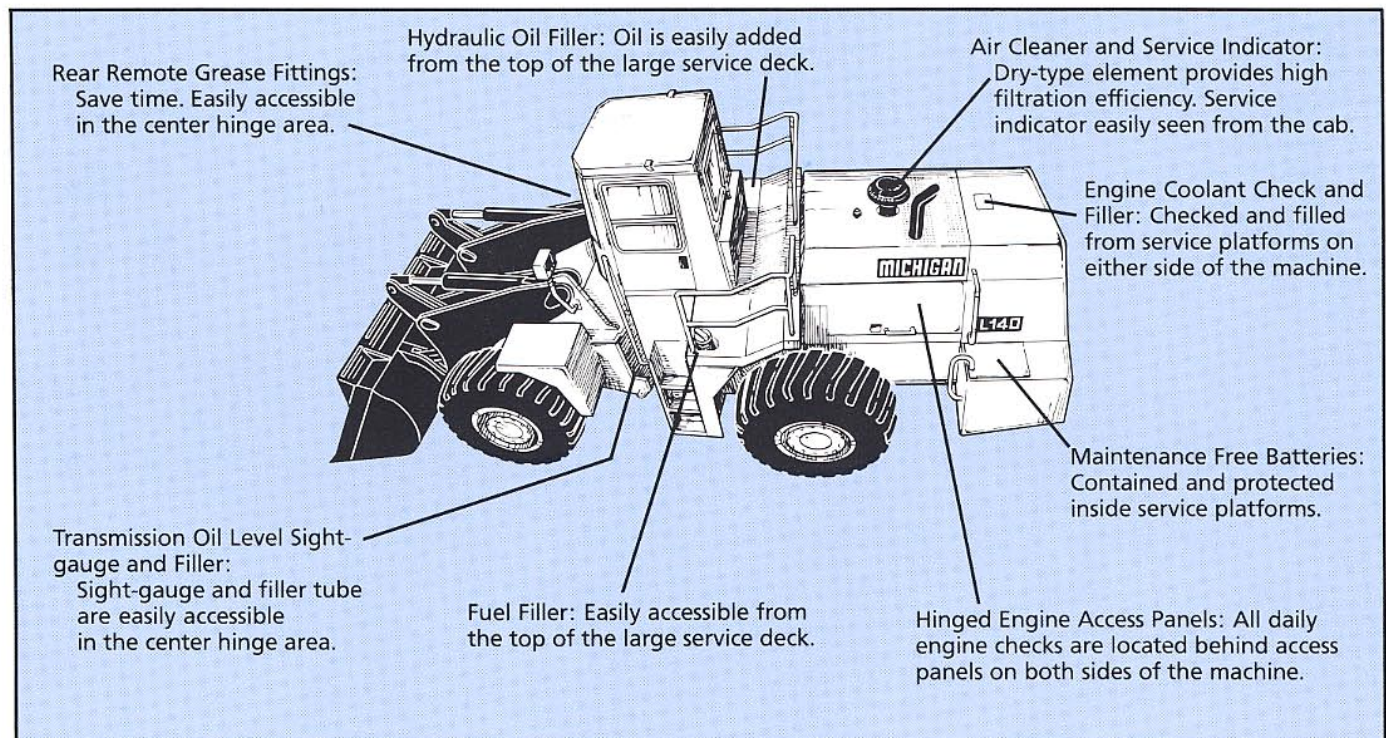
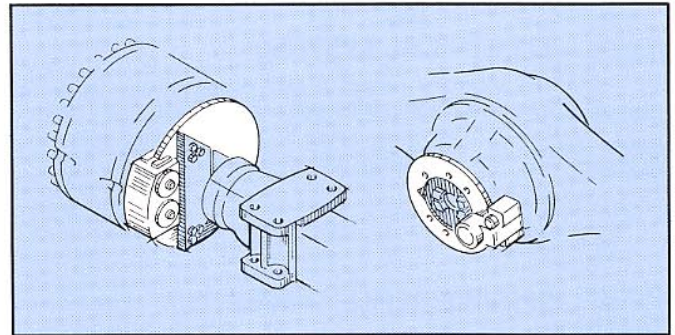
Hydraulic Oil Level Sight Gauge: Located on the front side of the hydraulic tank.



### **CAB**

#### **SOUND INSULATED AND COMFORTABLE**

The integral ROPS cab is ergonomically designed to provide high operator comfort and efficiency. A six-way adjustable suspension seat is standard equipment for maximum operator comfort.





## ENGINE

The engine is a direct-injection, 4-stroke, turbo-charged and after-cooled diesel engine.

|                      |                      |                 |      |      |
|----------------------|----------------------|-----------------|------|------|
| Engine make, model   | Cummins LT-10-225 HT |                 |      |      |
| Max rating* at       | rps                  | rpm             | 33,3 | 2000 |
| SAE J1349            | kW                   | hp              | 168  | 225  |
| Flywheel rating** at | rps                  | rpm             | 33,3 | 2000 |
| SAE J1349            | kW                   | hp              | 151  | 203  |
| DIN 70020/6271       | kW                   | hp              |      |      |
| Max. torque at       | rps                  | rpm             | 21,7 | 1300 |
| SAE J1349 Gross      | Nm                   | lbf ft          | 1017 | 750  |
| SAE J1349 Net        | Nm                   | lbf ft          |      |      |
| DIN 70020/6271       | Nm                   | lbf ft          |      |      |
| No. of cylinders     |                      |                 | 6    |      |
| Displacement, total  | dm <sup>3</sup> ,l   | in <sup>3</sup> | 10,0 | 611  |
| Bore                 | mm                   | in              | 125  | 4.92 |
| Stroke               | mm                   | in              | 136  | 5.35 |

### Air cleaning:

1. Cyclone precleaner with automatic dust ejector.
2. Paper filter with indicator.
3. Replaceable safety filter.

\*Max. rating – Rating of engine equipped only with components essential for engine function, such as injection pump, oil pump and water pump.

\*\*Flywheel rating – Net rating measured with fan, intake and exhaust system, cooling system and alternator mounted.



## ELECTRICAL SYSTEM

The electrical system is well protected by circuit breakers. Pre-wired for optional equipment.

|            |   |     |
|------------|---|-----|
| Voltage    | V | 24  |
| Alternator | A | 100 |



## SERVICE REFILL CAPACITIES

|                       |                    |        |      |      |
|-----------------------|--------------------|--------|------|------|
| Crankcase             | dm <sup>3</sup> ,l | US gal | 34,1 | 9.0  |
| Fuel tank (usable)    | dm <sup>3</sup> ,l | US gal | 284  | 75.0 |
| Fuel tank (total)     | dm <sup>3</sup> ,l | US gal | 344  | 91.0 |
| Cooling system        | dm <sup>3</sup> ,l | US gal | 56,8 | 15.0 |
| Transmission, total   | dm <sup>3</sup> ,l | US gal | 39,8 | 10.5 |
| Front wheel hubs, ea. | dm <sup>3</sup> ,l | US gal | 5,7  | 1.5  |
| Rear wheel hubs, ea.  | dm <sup>3</sup> ,l | US gal | 5,7  | 1.5  |
| Hydraulic tank        | dm <sup>3</sup> ,l | US gal | 329  | 87.0 |
| Front differential    | dm <sup>3</sup> ,l | US gal | 32,2 | 8.5  |
| Rear differential     | dm <sup>3</sup> ,l | US gal | 32,2 | 8.5  |
| Midmount bearing      | dm <sup>3</sup> ,l | US gal | 1,9  | 0.5  |



## DRIVETRAIN

**Torque converter:** Clark high-efficiency, single-stage.

**Transmission:** Clark countershaft-type powershift transmission with directional clutch modulation.

**Axles:** Clark fully-floating axle shafts with planetary-type hub reductions. Single piece cast axle housings. Fixed front axle and oscillating rear axle.

**Differential:** Clark limited slip differentials on front and rear axles.

**Hub reduction:** Clark planetary drive with low-friction bearings in each wheel hub.

**Tires:** Tubeless type with nylon cord for wheel loaders/dozers. Optional tires available for different applications.

Torque converter make, model Clark, C5502-212

Torque multiplication 3.09:1

Transmission make, model Clark, R32425-6

Running speeds

|                     |      |        |         |      |
|---------------------|------|--------|---------|------|
| 1, forward/reverse  | km/h | mile/h | 6,0     | 3.7  |
| 2, forward/reverse  | km/h | mile/h | 11,3    | 7.0  |
| 3, forward/reverse  | km/h | mile/h | 18,7    | 11.6 |
| 4, forward/reverse  | km/h | mile/h | 32,0    | 19.9 |
| Measured with tires |      |        | 23.5-25 |      |

(16PR) L-3

Front axle make, model Clark, 16D2149

Rear axle make, model Clark, 16D2149

|                      |     |      |          |
|----------------------|-----|------|----------|
| Oscillation movement | +°  | 18.5 |          |
|                      | +mm | +in  | 358 14.1 |



## BRAKE SYSTEM

(SAE J1152) (ISO 3450)

**Pump:** Pressure compensated piston type.

**Service brakes:** Fully hydraulic system with outboard-mounted dry disc brakes. Application of left pedal shifts transmission from forward to neutral.

**Secondary:** Dual circuit axle-by-axle system. Manually activated by service brake pedals. Audible and visual low pressure alarm. Dead engine braking capability is provided by two nitrogen-charged accumulators.

**Parking brake:** Dry disc type mounted on front axle input shaft. Spring applied, hydraulically released; activated by switch on instrument panel.

**Filtration:** Full flow 10 micron filter.

|                    |     |     |       |      |
|--------------------|-----|-----|-------|------|
| Pump               |     |     |       |      |
| Pressure setting   | MPa | psi | 20,68 | 3000 |
| Brake disc         |     |     |       |      |
| diameter           | mm  | in  | 470   | 18.5 |
| thickness          | mm  | in  | 15,9  | .625 |
| Parking brake disc |     |     |       |      |
| diameter           | mm  | in  | 432   | 17   |
| thickness          | mm  | in  | 12,7  | .500 |



## STEERING SYSTEM

Articulated frame. Fully hydraulic steering system.

**Pump:** Gear-type, mounted on the torque converter.

**System supply:** Steering system supplied from separate steering pump.

**Cylinders:** Two double acting cylinders with chrome plated piston rods.

|                             |                        |           |       |      |
|-----------------------------|------------------------|-----------|-------|------|
| Steering cylinders, number  |                        |           | 2     |      |
| Bore                        | mm                     | in        | 88,9  | 3.50 |
| Stroke                      | mm                     | in        | 509   | 20.0 |
| Piston rod diameter         | mm                     | in        | 44,5  | 1.75 |
| Working relief pressure     | MPa                    | psi       | 13,10 | 1900 |
| Overload relief pressure    | MPa                    | psi       | 20,68 | 3000 |
| Pump                        |                        |           |       |      |
| Output                      | dm <sup>3</sup> /l/min |           | 83,3  |      |
|                             |                        | USgal/min |       | 22.0 |
| at pressure                 | MPa                    | psi       | 10,34 | 1500 |
| and engine speed (low idle) | rps                    | rpm       | 13,3  | 800  |
| Output                      | dm <sup>3</sup> /l/min |           | 212   |      |
|                             |                        | USgal/min |       | 56.0 |
| at pressure                 | MPa                    | psi       | 13,10 | 1900 |
| and engine speed            | rps                    | rpm       | 33,33 | 2000 |
| (governed)                  |                        |           |       |      |



## CAB

Integral ROPS cab (SAE J1040, ISO3471) Sound-insulating lining. Floor mats. Two lockable doors. Sliding self-locking windows. Tinted safety glass.

**Heater and defroster:** Heater provides filtered (10 microns) fresh air and has a three-speed fan and a defroster for the front and side windows.

**Operator's seat:** Fully adjustable suspension seat with seat belt (SAE J386).

|                             |       |       |      |        |
|-----------------------------|-------|-------|------|--------|
| Noise level in cab, max     | dB(A) |       | 85   |        |
| Heating capacity            | kW    | BTU/h | 13,2 | 45,000 |
| Air conditioning (optional) | kW    | BTU/h | 6,3  | 21,500 |



## HYDRAULIC SYSTEM

Closed and pressurized system with a sturdy plate-steel tank. Hydraulic oil is fully filtered. An access hole is provided in the tank for easy cleaning. An in-tank magnet provides extra protection.

**Main pump:** Gear-type, mounted on the torque converter.

**Valve:** Double acting 2 section valve with built-in pressure relief valve. Actuated by a pilot valve, it is mounted on front frame for easy access.

**Lift functions:** The valve has four positions: Raise, hold, lower and float. An automatic kickout detent is adjustable for any position between maximum reach and full lift height.

**Tilt functions:** The valve has three positions: Roll-back, hold and dump. Automatic bucket positioner adjustable to any desired loading angle.

**Cylinders:** Double-acting.

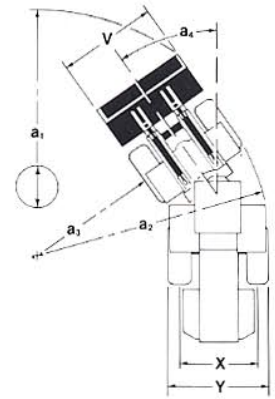
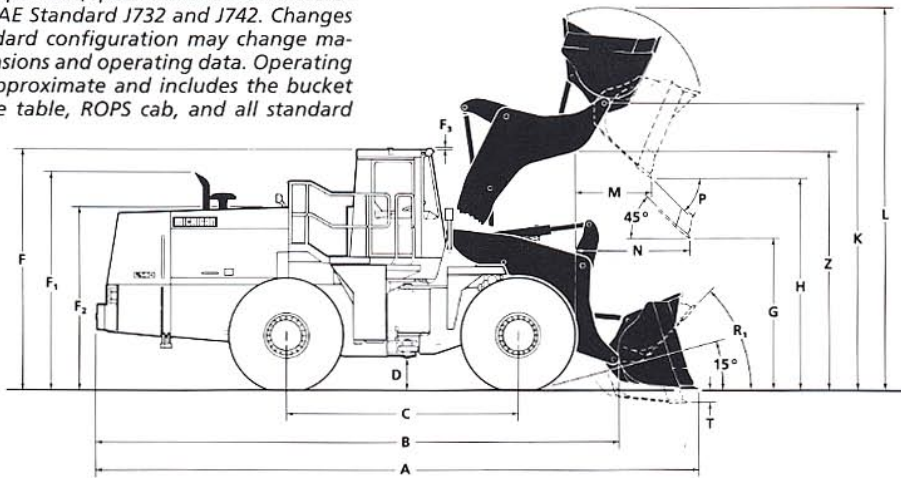
**Filters:** Full-flow 10 micron return filter (with two elements), located in hydraulic oil tank.

|                               |                        |           |       |      |
|-------------------------------|------------------------|-----------|-------|------|
| Main pump                     |                        |           |       |      |
| Output                        | dm <sup>3</sup> /l/min |           | 117   |      |
|                               |                        | USgal/min |       | 31.0 |
| at pressure                   | MPa                    | psi       | 10,34 | 1500 |
| and engine speed (low idle)   | rps                    | rpm       | 13,3  | 800  |
| Output                        | dm <sup>3</sup> /l/min |           | 295   |      |
|                               |                        | USgal/min |       | 78.0 |
| at pressure                   | MPa                    | psi       | 13,79 | 2000 |
| and engine speed              | rps                    | rpm       | 33,33 | 2000 |
| (governed)                    |                        |           |       |      |
| Overload relief pressure      | MPa                    | psi       | 18,98 | 2750 |
| Lifting cylinder, number      |                        |           | 2     |      |
| Bore                          | mm                     | in        | 152   | 6.00 |
| Piston rod diameter           | mm                     | in        | 69,9  | 2.75 |
| Stroke                        | mm                     | in        | 998   | 39.3 |
| Tilting cylinder, number      |                        |           | 2     |      |
| Bore                          | mm                     | in        | 127   | 5.00 |
| Piston rod diameter           | mm                     | in        | 69,9  | 2.75 |
| Stroke                        | mm                     | in        | 627   | 24.7 |
| Lifting time (with load, SAE) | s                      |           | 7.5   |      |
| Dump time (with load, SAE)    | s                      |           | 1.5   |      |
| Lowering time (empty)         | s                      |           | 2.0   |      |
| Total cycle time              | s                      |           | 11.0  |      |

## DIMENSIONS – MICHIGAN L140

Tires: 23.5-25 (16PR) L-3

Wherever applicable, specifications are in accordance with SAE Standard J732 and J742. Changes in the standard configuration may change machine dimensions and operating data. Operating weight is approximate and includes the bucket given in the table, ROPS cab, and all standard equipment.



### Bucket type

Standard Boom

1. General purpose
2. Spade-nose rock
3. Material handling
4. Light material

| MACHINE INFORMATION                                                       |                    | BUCKET TYPE |         |         |         |
|---------------------------------------------------------------------------|--------------------|-------------|---------|---------|---------|
|                                                                           |                    | 1           | 2       | 3       | 4       |
| Volume, heaped                                                            | m <sup>3</sup>     | 3,06        | 3,06    | 3,44    | 3,82    |
|                                                                           | yd <sup>3</sup>    | 4.00        | 4.00    | 4.50    | 5.00    |
| struck                                                                    | m <sup>3</sup>     | 2,60        | 2,66    | 2,95    | 3,21    |
|                                                                           | yd <sup>3</sup>    | 3.40        | 3.48    | 3.86    | 4.20    |
| Volumetric weight                                                         | kg/m <sup>3</sup>  | 1780        | 1780    | 1584    | 1424    |
|                                                                           | lb/yd <sup>3</sup> | 3000        | 3000    | 2670    | 2400    |
| Bucket weight                                                             | kg                 | 1524        | 1542    | 1551    | 1560    |
|                                                                           | lb                 | 3360        | 3400    | 3420    | 3440    |
| Operating capacity                                                        | kg                 | 5440        | 5440    | 5450    | 5440    |
|                                                                           | lb                 | 12,000      | 12,000  | 12,015  | 12,000  |
| Static tipping load, straight                                             | kg                 | 14 996      | 14 492  | 14 882  | 14 717  |
|                                                                           | lb                 | 33,061      | 31,950  | 32,819  | 32,444  |
| Full turn                                                                 | kg                 | 13 565      | 13 062  | 13 414  | 13 264  |
|                                                                           | lb                 | 29,905      | 28,797  | 29,572  | 29,242  |
| Breakout force                                                            | kN                 | 191,7       | 155,5   | 174,7   | 166,6   |
|                                                                           | lbf                | 43,100      | 34,955  | 39,265  | 37,460  |
| A                                                                         | mm                 | 8280        | 8687    | 8382    | 8484    |
|                                                                           | ft in              | 27'2"       | 28'6"   | 27'6"   | 27'10"  |
| B                                                                         | mm                 | 7213        | 7213    | 7213    | 7213    |
|                                                                           | ft in              | 23'8"       | 23'8"   | 23'8"   | 23'8"   |
| H ⊙ ⊗                                                                     | mm                 | 2985        | 2832    | 2883    | 2819    |
|                                                                           | ft in              | 9'9.5"      | 9'3.5"  | 9'5.5"  | 9'3"    |
| L                                                                         | mm                 | 5372        | 5525    | 5398    | 5525    |
|                                                                           | ft in              | 17'7.5"     | 18'1.5" | 17'8.5" | 18'1.5" |
| M □ ⊗                                                                     | mm                 | 1041        | 1245    | 1118    | 1181    |
|                                                                           | ft in              | 3'5"        | 4'1"    | 3'8"    | 3'10.5" |
| N □ ⊗                                                                     | mm                 | 1524        | 1727    | 1600    | 1676    |
|                                                                           | ft in              | 5'0"        | 5'8"    | 5'3"    | 5'6"    |
| P                                                                         | deg.               | 45          | 45      | 45      | 45      |
| R <sub>1</sub>                                                            | deg.               | 51          | 50      | 51      | 51      |
| a <sub>1</sub> Turning circle (over bucket)<br>(bucket in carry position) | mm                 | 14 884      | 14 884  | 14 935  | 14 986  |
|                                                                           | ft in              | 48'10"      | 48'10"  | 49'0"   | 49'2"   |
| Operating weight                                                          | kg                 | 19 151      | 19 182  | 19 178  | 19 187  |
|                                                                           | lb                 | 42,220      | 42,290  | 42,280  | 42,300  |

For bolt on cutting edge:

- Add 55,9mm (2.2in)  
○ Deduct 55,9mm (2.2in)

For bucket teeth:

- ⊗ Add 181,4mm (7.14in)  
⊙ Deduct 181,4mm (7.14in)

| MACHINE DIMENSIONS THAT DO NOT CHANGE REGARDLESS OF MACHINE CONFIGURATION |       |       |   |       |       |                |                    |      |  |
|---------------------------------------------------------------------------|-------|-------|---|-------|-------|----------------|--------------------|------|--|
| B                                                                         | mm    | 7213  | G | mm    | 2134  | X              | mm                 | 2235 |  |
|                                                                           | ft in | 23'8" |   | ft in | 7'0"  |                | ft in              | 7'4" |  |
| C                                                                         | mm    | 3251  | P | deg   | 45°   | a <sub>4</sub> | deg                | 35°  |  |
|                                                                           | ft in | 10'8" |   |       |       |                |                    |      |  |
| F <sub>3</sub>                                                            | mm    | 64    | V | mm    | 3150  |                | max. grading angle | 43°  |  |
|                                                                           | ft in | 2.5"  |   | ft in | 10'4" |                |                    |      |  |

| MACHINE DIMENSIONS |          | TIRES                 |                       |                       |                       |                       |  |
|--------------------|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
|                    |          | 23.5x25<br>(16PR) L-3 | 23.5x25<br>(20PR) L-4 | 23.5x25<br>(20PR) L-5 | 26.5x25<br>(14PR) L-2 | 26.5x25<br>(20PR) L-3 |  |
| D                  | mm ft in | 432 1'5"              | 470 1'6.5"            | 483 1'7"              | 457 1'6"              | 470 1'6.5"            |  |
| F                  | mm ft in | 3531 11'7"            | 3569 11'8.5"          | 3581 11'9"            | 3556 11'8"            | 3569 11'8.5"          |  |
| F <sub>1</sub>     | mm ft in | 3073 10'1"            | 3112 10'2.5"          | 3124 10'3"            | 3099 10'2"            | 3112 10'2.5"          |  |
| F <sub>2</sub>     | mm ft in | 2603 8'6.5"           | 2642 8'8"             | 2654 8'8.5"           | 2630 8'7.5"           | 2642 8'8"             |  |
| K                  | mm ft in | 4039 13'3"            | 4077 13'4.5"          | 4089 13'5"            | 4064 13'4"            | 4077 13'4.5"          |  |
| L                  | mm ft in | 5372 17'17.5"         | 5410 17'9"            | 5423 17'9.5"          | 5397 17'8.5"          | 5410 17'9"            |  |
| N                  | mm ft in | 1524 5'0"             | 1562 5'1.5"           | 1575 5'2"             | 1549 5'1"             | 1562 5'1.5"           |  |
| R <sub>1</sub>     | deg      | 51                    | 51                    | 51                    | 51                    | 51                    |  |
| T                  | mm ft in | 191 7.5"              | 152 6.0"              | 140 5.5"              | 165 6.5"              | 152 6.0"              |  |
| Y                  | mm ft in | 2870 9'5"             | 2870 9'5"             | 2870 9'5"             | 2908 9'6.5"           | 2908 9'6.5"           |  |
| Z                  | mm ft in | 3391 11'1.5"          | 3429 11'3"            | 3442 11'3.5"          | 3416 11'2.5"          | 3429 11'3"            |  |
| a <sub>2</sub>     | mm ft in | 13 157 43'2"          | 13 157 43'2"          | 13 157 43'2"          | 13 233 43'5"          | 13 233 43'5"          |  |
| a <sub>3</sub>     | mm ft in | 7417 24'4"            | 7417 24'4"            | 7417 24'4"            | 7417 24'4"            | 7417 24'4"            |  |

## ATTACHMENTS

| BUCKETS           |                     |                      |  | BOLT ON CUTTING EDGE |          |                    |  |
|-------------------|---------------------|----------------------|--|----------------------|----------|--------------------|--|
| General purpose   | 3,06 m <sup>3</sup> | 4.00 yd <sup>3</sup> |  | 3150 mm              | 124.0 in | cutting edge width |  |
| Spade-nose rock   | 3,06 m <sup>3</sup> | 4.00 yd <sup>3</sup> |  | 3150 mm              | 124.0 in | cutting edge width |  |
| Material handling | 3,44 m <sup>3</sup> | 4.5 yd <sup>3</sup>  |  | 3150 mm              | 124.0 in | cutting edge width |  |
| Light material    | 3,82 m <sup>3</sup> | 5.00 yd <sup>3</sup> |  | 3150 mm              | 124.0 in | cutting edge width |  |

| SUPPLEMENTAL OPERATING DATA   |            | Change in operating weight |            | Change in static tipping load at full turn |       | Change in static tipping load straight |       |
|-------------------------------|------------|----------------------------|------------|--------------------------------------------|-------|----------------------------------------|-------|
| 23.5-25 (16PR) L-2            | kg lb      | -195                       | -430       | -132                                       | -290  | -148                                   | -325  |
| 23.5-25 (20PR) L-2            | kg lb      | -136                       | -300       | -90,7                                      | -200  | -102                                   | -225  |
| 23.5-25 (16PR) L-3            | std. kg lb | 0                          | 0          | 0                                          | 0     | 0                                      | 0     |
| 23.5-25 (20PR) L-3            | kg lb      | +77,1                      | +170       | +52,2                                      | +115  | +59,0                                  | +130  |
| 23.5-25 (16PR) L-4            | kg lb      | +467                       | +1030      | +315                                       | +695  | +352                                   | +775  |
| 23.5-25 (20PR) L-4            | kg lb      | +526                       | +1160      | +356                                       | +785  | +397                                   | +875  |
| 23.5-25 (20PR) L-5            | kg lb      | +916                       | +2020      | +621                                       | +1370 | +690                                   | +1520 |
| 23.5R25 XRAT★                 | kg lb      | -27                        | -60        | -18                                        | -40   | -20                                    | -45   |
| 26.5-25 (14PR) L-2            | kg lb      | +191                       | +420       | +127                                       | +280  | +143                                   | +315  |
| 26.5-25 (20PR) L-2            | kg lb      | +299                       | +660       | +202                                       | +445  | +225                                   | +495  |
| 26.5-25 (14PR) L-3            | kg lb      | +508                       | +1120      | +345                                       | +760  | +383                                   | +845  |
| 26.5-25 (20PR) L-3            | kg lb      | +672                       | +1480      | +454                                       | +1000 | +504                                   | +1110 |
| 26.5R25 XRAT★                 | kg lb      | +363                       | +800       | +245                                       | +540  | +272                                   | +600  |
| Counterweight                 | kg lb      | +680                       | +1500      | +1385                                      | +3053 | +1580                                  | +3485 |
| Bucket teeth (std. opt.)      | kg lb      | +90,7                      | +200       | -102                                       | -224  | -102                                   | -224  |
| Emergency steering (electric) | kg lb      | +45,4                      | +100       | +46,7                                      | +103  | +51,8                                  | +114  |
| 3rd hydraulic control         | kg lb      | +27                        | +60        | 0                                          | 0     |                                        |       |
| Removal of cab                | kg lb      |                            |            | +99,8                                      | +220  | +111                                   | +245  |
| Air conditioning              | kg lb      |                            | +68,0 +150 | +99,8                                      | +220  | +111                                   | +245  |

## STANDARD EQUIPMENT

AIR CLEANER, DRY TYPE, DUAL ELEMENT  
ALTERNATOR, 24V. 100 AMP  
BATTERY DISCONNECT, LOCKABLE  
BOOM & BUCKET CONTROL LEVERS, CONSOLE MOUNTED, WITH FINGERTIP CONTROLS  
BOOM KICKOUT, AUTOMATIC, ADJUSTABLE  
BRAKES, 4-WHEEL HYDRAULIC, DRY DISC  
BRAKE SYSTEM, SECONDARY  
BUCKET LEVELER, AUTOMATIC  
CAB ACCESS STEPS & HANDRAILS (SAE J185)  
CAB, ROPS (SAE J1040) (ISO 3471)  
Acoustical Lining  
Air Ducting, Built-In  
Doors (2), Lockable With Self-Locking Sliding Glass Windows  
Door Hold-Open Struts (2)  
Electrical System: 24V. Circuit Breaker Protected, Prewired For Optional Accessories  
Environmental Control:  
Heater/Defroster/Pressurizer (45,000 Btu/hr) (13.2 kW)  
With Three-Speed Blower Fan, Filtered Air

Floor Mats  
Interior Dome Lights, Red And White  
Interior Rearview Mirror  
Safety Glass, Tinted  
Seat, Suspension, 6-Way Adjustable  
Seat Belt, (SAE J386)  
Steering Wheel Spinner Knob  
Sun Visor  
Windshield Washer, Front & Rear  
Windshield Wipers, Front & Rear  
COLD START AID, ETHER  
DIFFERENTIALS: LIMITED SLIP, FRONT & REAR  
DRAWBAR WITH PIN  
FENDERS, FRONT  
HYDRAULIC PRESSURE TEST PORTS, QUICK CONNECT  
INSTRUMENTS/GAUGES:  
Air Cleaner Restriction Indicator  
Engine Coolant Temperature Gauge  
Engine Oil Pressure Gauge  
Fuel Gauge, Tank And Dash Mounted  
Hourmeter  
Transmission/Torque Converter Fluid Temperature Gauge  
Voltmeter  
Sight Gauges:  
Hydraulic Fluid Level  
Transmission Fluid Level  
ISOLATION MOUNTS:  
Cockpit, Engine, Radiator, Transmission

LIGHTS:  
Work (70W) Halogen  
4 Front, 2 Rear  
Stop & Tail Combination, 2 Rear  
Turn Signals With Hazard Warning Switch  
MIRRORS, REARVIEW (2) EXTERIOR  
NEUTRAL START FEATURE  
SEALED PINS, 100 HOUR SERVICE INTERVAL  
SIDE PANELS, ENGINE HOOD  
STEERING FRAME LOCK  
TIRES: 23.5-25 (16PR) L-3  
TRANSMISSION: POWERSHIFT, WITH DIRECTIONAL CLUTCH MODULATION  
TRANSMISSION DECLUTCH  
VANDALISM LOCK, PROVISION FOR:  
Batteries, Engine Coolant  
Engine Oil, Fuel, Hydraulic Fluid  
Transmission/Torque Converter Fluid  
WARNING ALARMS:  
Horn, Electric  
Reverse Alarm (SAE J994)  
WARNING & MONITORING LIGHTS:  
Brake Pump/Differential Pressure  
Brake System, Front  
Brake System, Rear  
Parking Brake Applied

## OPTIONAL EQUIPMENT

Accessory Power Kit (12V/6 Amp)  
Air Conditioner (21 500 Btu) 6.3 kW  
Air-Precleaner Kit  
Beacon, Rotating Amber  
Cab (Delete)  
Cold Starting Aid, Engine Coolant & Oil Preheater  
Counterweight (1500 LB) 680 kg  
Coupler, Fast Fuel (Wiggins)  
Engine Shutdown To Idle Kit – High Coolant Temperature  
Low Engine Oil Pressure  
Engine Warning System (3 Function)  
High Coolant Temperature  
Low Coolant Level  
Low Engine Oil Pressure

Hydraulic Control Kit –  
3-Spool Valve,  
Piping & Controls  
Lifting Lug Kit  
Radiator Sand Grid  
Reversible Fan  
ROPS Canopy and Instrument Panel Guard (SAE J1040) (ISO 3471)  
Secondary Steering Kit, Electric

TIRE OPTIONS  
23.5-25 (16PR) L-2  
23.5-25 (16PR) L-4  
23.5-25 (20PR) L-2  
23.5-25 (20PR) L-3  
23.5-25 (20PR) L-4  
23.5-25 (20PR) L-5  
23.5R25 XRAT★  
26.5-25 (14PR) L-2  
26.5-25 (20PR) L-2  
26.5-25 (14PR) L-3  
26.5-25 (20PR) L-3  
26.5R25 XRAT★

Under our policy of continuous product improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

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