**HORSEPOWER**

- Gross: 143 kW @ 2100 rpm
- Net: 142 kW @ 2100 rpm

**BUCKET CAPACITY**

- 2.7–4.0 m³ (3.5–5.2 yd³)

**WA380-6**

**STANDARD EQUIPMENT**

- 2-spool valve for boom and bucket controls
- Alternator, 60 A
- Auto shift transmission with mode select system
- Back-up alarm
- Back-up lamp
- Batteries, 136 Ah x 12 V
- Boom kick-out
- Bucket positioner
- Counterweight
- Directional signal
- Engine, Komatsu SAA6D107E-1 diesel

**OPTIONAL EQUIPMENT**

- 3-spool valve
- Additional counterweight
- Air conditioner
- AM/FM radio
- AM/FM stereo radio cassette
- Auto air conditioner
- Batteries, 140 Ah x 12 V
- Bucket teeth (bolt-on type)
- Counterweight for log

**WEIGHT CHANGES**

<table>
<thead>
<tr>
<th>Tires or Attachments</th>
<th>Operating Weight</th>
<th>Tipping Load Straight</th>
<th>Tipping Load Full Turn</th>
<th>Width Over Tires</th>
<th>Ground Clearance</th>
<th>Change in Vertical Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kg</td>
<td>lb</td>
<td>kg</td>
<td>lb</td>
<td>kg</td>
<td>lb</td>
</tr>
<tr>
<td>20.5–25-16PR(L-3)</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>23.5–25-16PR(L-3)</td>
<td>+970</td>
<td>+2,140</td>
<td>+770</td>
<td>+1,700</td>
<td>+680</td>
<td>+1,300</td>
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<tr>
<td>Install additional counterweight</td>
<td>+340</td>
<td>+750</td>
<td>+900</td>
<td>+1,985</td>
<td>+750</td>
<td>+1,665</td>
</tr>
</tbody>
</table>

**Materials and specifications are subject to change without notice.**

*Photo may include optional equipment.*
Increased Reliability
- Reliable Komatsu designed and manufactured components
- Sturdy main frame
- Maintenance-free, fully hydraulic, wet disc service and parking brakes
- Hydraulic hoses use flat face O-ring seals
- Cathion electrodeposition process is used to apply primer paint
- Powder coating process is used to apply on main structure
- Sealed DT connectors for electrical connections
See page 6.

High Productivity & Low Fuel Consumption
- High performance SAA6D107E-1 engine
- Low fuel consumption
- Dual-mode engine power select system
- Automatic transmission with shift timing select system
- Variable displacement piston pump & CLSS
See pages 4 and 5.

Excellent Operator Environment
- Automatic transmission with ECV
- Electrically controlled transmission lever
- Variable transmission cut-off system
- Telescopic/tilt steering column
- Fingertip control levers
- Low-noise designed cab
- Pillar-less large ROPS/FOPS cab-integrated
- Easy entry/exit, rear-hinged doors
See pages 8 and 9.

Harmony with Environment
- Meets EPA Tier 3 and EU Stage 3A emission regulations
- Low exterior noise
- Low fuel consumption

Easy Maintenance
- "EMMS" (Equipment Management Monitoring System)
- Easy access, gull-wing type engine side doors
- Automatic Reversible Fan (option)
See page 7.
**High Productivity and Low Fuel Consumption**

**High Performance SAA6D107E-1 Engine**
Electronic Heavy Duty Common Rail fuel injection system provides optimum combustion of fuel. This system also provides fast throttle response to match the machine’s powerful tractive effort and fast hydraulic response.

Net: 142 kW 191 HP

**Low Emission Engine**
This engine meets EPA Tier 3 emission regulations and EU Stage 3A emission regulations, without sacrificing power or machine productivity.

**Low Fuel Consumption**
The fuel consumption is reduced greatly because of the low-noise, high-torque engine and the large-capacity torque converter with maximum efficiency in the low-speed range.

**Dual-Mode Engine Power Select System**
This wheel loader offers two selectable operating modes—E and P. The operator can adjust the machine’s performance with the selection switch.

- **E Mode:** This mode provides maximum fuel efficiency for most of general loading.
- **P Mode:** This mode provides maximum power output for hard digging operation or hill climb.

**Automatic Transmission With Mode Select System**
This operator controlled system allows the operator to select manual shifting or two levels of automatic shifting (low, and high).
Auto L mode is for fuel saving operation with the gear shift timing set at lower speeds than Auto H mode. Therefore Auto L mode keeps the engine run in a relatively low rpms range for fuel conservation while yielding adequate tractive force by depressing the accelerator pedal.

**Variable displacement piston pump & CLSS**
New design variable displacement piston pump combined with the Closed-center Load Sensing System delivers hydraulic flow just as the job requires preventing wasting hydraulic pressure. Minimized waste loss contributes to better fuel economy.

- **New Variable Displacement Piston Pump:** The pump delivers only necessary amounts minimizing waste loss.
- **Fixed Displacement Piston Pump:** The pump delivers the maximum amount at any time and the unused flow is disposed.

**Maximum Dumping Clearance and Reach**
The long lift arms provide high dumping clearances and maximum dumping reach. The operator can even level loads on the body of a dump truck easily and efficiently.

**Dumping Clearance:** 2885 mm 9’6”
**Dumping Reach:** 1210 mm 4’0”
(3.3 m³ 4.3 yd³ bucket with B.O.C.)
Komatsu Components
Komatsu manufactures the engine, torque converter, transmission, hydraulic units, electric parts, and even each bolt on this wheel loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.

Wet multi-disc brakes and fully hydraulic braking system mean lower maintenance costs and higher reliability. Wet disc brakes are fully sealed. Contaminants are kept out, reducing wear and resulting maintenance. Brakes require no adjustments for wear, meaning even lower maintenance. The new parking brake is also an adjustment-free, wet multi-disc for high reliability and long life. Added reliability is designed into the braking system by the use of two independent hydraulic circuits. Provides hydraulic backup should one of the circuits fail. Fully hydraulic brakes mean no air system to bleed, or the condensation of water in the system that can lead to contamination, corrosion, and freezing.

High-rigidity Frames and Loader Linkage
The front and rear frames and the loader linkage have got more torsional rigidity to secure resistance against stresses increased due to the use of a larger bucket. Frame and loader linkage are designed to accommodate actual working loads, and simulated computer testing proves its strength.

Flat Face-to-Face O-Ring Seals
Flat face-to-face O-ring seals are used to securely seal hydraulic hose connections and to prevent oil leakage. In addition, buffer rings are installed to the head side of the all-hydraulic cylinders to lower the load on the rod seals and maximize the reliability.

Cathion Electrodeposition Primer Paint/ Powder Coating Final Paint
Cathion electrodeposition paint is applied as a primer paint and powder coating is applied as topcoat to the exterior metal sheet parts. This process results in a beautiful rust-free machine, even in the most severe environments. Some external parts are made of plastic providing long life and high impact resistance.

Sealed DT Connectors
Main harnesses and controller connectors are equipped with sealed DT connectors providing high reliability, water resistance and dust resistance.

EMMS (Equipment Management Monitoring System)
Monitor is mounted in front of the operator for easy view, allowing the operator to easily check gauges and warning lights. A specially designed two-spoke steering wheel allows the operator to easily see the instrument panel.

Maintenance Control and Troubleshooting Functions
- Action code display function: If the loader has any troubles, the monitor displays action details on the character display at the center bottom of the monitor.
- Monitor function: Controller monitors engine oil level, pressure, coolant temperature, air cleaner clogging, etc. If controller finds abnormalities, all of these are displayed on LCD.
- Replacement time notice function: Monitor informs replacement time of oil and filters on LCD when it reaches replacement intervals.
- Trouble data memory function: Monitor stores abnormalities for effective troubleshooting.

Ease of Radiator Cleaning
If the machine is operating in adverse conditions, the operator can reverse the hydraulic cooling fan from inside the cab by turning on a switch on the control panel.

Gull-wing Type Engine Side Doors Open Wide
The operator can open and close each gull-wing type engine side door easily with the assistance of a gas spring to perform daily service checks from the ground.

Automatic Reversible Fan (option)
The engine fan is driven hydraulically. It can be operated in reverse automatically. When switch is automatic position. The fan revolves in reverse for 2 minutes every 2 hours intermittently. (Default setting)
Automatic Transmission with ECMV
Automatic transmission with ECMV automatically selects the proper gear speed based on travel speed, engine speed, and other travel conditions. The ECMV ( Electronically Controlled Modulation Valve) system engages the clutch smoothly to prevent lags and shocks when shifting. This system provides efficient machine operation and a comfortable ride.

- **Kick-down switch:** Consider this valuable feature for added productivity. With the touch of a finger, the kick-down switch automatically downshifts from second to first when beginning the digging cycle. It automatically upshifts from first to second when the direction control lever is placed in reverse. This results in increased rim pull for better bucket penetration and reduced cycle times for higher productivity.

- **One push power-up function:** The kick-down switch also functions as a power-up switch in first gear. The first time the kick-down switch is depressed it functions as a kick-down and gear speed is reduced. When the machine is in E operation mode and first gear, pressing the kick-down switch a second time changes the operation mode to P allowing increased power for heavy digging operation. The operation mode returns to E when machine gear speed changes or direction changes to reverse.

- **Hold switch:** Auto shift is selected and if the operator turns on this switch when the lever is at the 3rd or 4th gear speed position, the transmission is fixed to that gear speed.

Electronically Controlled Transmission Lever
Easy shifting and directional changes with Komatsu two-lever electronic shifting. Change direction or shift gears with a touch of the fingers without removing the shifting hand from the steering wheel. Solid state electronics and conveniently located direction and gear shift controls make this possible. Automatic shifts in ranges two through four keep production high and manual shifting at a minimum.

Variable Transmission Cut-off System
The operator can continuously adjust the transmission cut-off pressure desired for the left brake pedal using switch located on the right-side control panel. The operator can improve the working performance by setting the cut-off pressure properly depending on working condition.

- High cut-off pressure for digging operations.
- Low cut-off pressure for truck-loading operations.

Fingertip Work Equipment Control levers with Large size arm rest
New PPC control levers are used for the work equipment. The operator can easily operate the work equipment with fingertip control, reducing operator fatigue and increasing controllability. The PPC control lever column can be slid forward or rearward and the large size arm rest can be adjusted up or down to provide the operator with a variety of comfortable operating positions.

Telescopic/Tilt Steering Column
The operator can tilt and telescope the steering column to provide a comfortable working position.

Low-noise Design
Noise at operator’s ear noise level : 72 dB(A)
Dynamic noise level (outside): 108 dB(A)
The large cab is mounted with Komatsu’s unique ROPS/FOPS viscous mounts. The low-noise engine, hydraulically driven fan, and hydraulic pumps are mounted with rubber cushions, and the cab sealing is improved to provide a quiet, low-vibration, dustproof with pressurizing, and comfortable operating environment. Also, exterior noise is lowest in this class.

Pillar-less Large Cab
A wide pillar-less flat glass provides excellent front visibility. The wiper arm covers a large area to provide great visibility even on rainy days. The cab area is the largest in its class providing maximum space for the operator. Increased seat reclining and slide adjustment to backward by introducing front mounted air conditioner unit.

Rear-hinged Full Open Cab Doors
The cab door hinges are installed to the rear side of the cab providing a large opening angle for the operator to enter and exit. The steps are designed like a staircase, so that the operator can get on and off the cab easily.
**ENGINE**

- Model: Komatsu SAA6D107E-1
- Type: Turbocharged, aftercooled
- Number of cylinders: 6
- Bore x stroke: 107 mm x 124 mm, 4.2" x 4.88"
- Piston displacement: 6.69 ltr, 408 in³
- Governor: All-speed, electronic
- Horsepower: SAE J1995: Gross 143 kW (192 HP)
  - Net: 142 kW (191 HP)
- Rated rpm: 2100 rpm
- Fan drive method for radiator cooling: Hydraulic
- Fuel system: Direct injection
- Lubrication system: Gear pump, force-lubrication
- Filter: Full-flow type
- Air cleaner: Dry type with double elements and dust evacuating, plus dust indicator

*Net horsepower at the maximum speed of radiator cooling fan is 133 kW 179 HP.*

**TRANSMISSION**

- Torque converter:
  - Type: 3-element, single-stage, single-phase
  - Type: Automatic full-powershift, countershaft type
- Travel speed: km/h mph

**AXLES AND FINAL DRIVES**

- Drive system: Four-wheel drive
- Front: Fixed, semi-floating
- Rear: Center-pin support, semi-floating, 26 total oscillation
- Reduction gear: Spiral bevel gear
- Differential/gear load in lb: Conventional type
- Final reduction gear: Planetary gear, single reduction

**SAFETY BRIDGES**

- Service brakes: Hydraulically actuated, wet disc brake
- Parking brake: Wet disc brake
- Emergency brake: Parking brake is commonly used

**HYDRAULIC SYSTEM**

- Steerng system:
  - Hydraulic pump: 138 ltr/min, 36.5 U.S. gal/min at rated rpm
  - Relief valve setting: 24.5 MPa, 250 kgf/cm², 3,565 psi
  - Hydraulic cylinders:
    - Type: Double-acting, piston type
    - Number of cylinders: 2
  - Bore x stroke: 75 mm x 442 mm, 3.0" x 17.4"

**STEERING SYSTEM**

- Type: Articulated type, full hydraulic power steering
- Minimum turning radius at the center of outside tire: 8320 mm 20'9"

**SERVICE REPAIR CAPACITIES**

- Cooling system: 30.5 ft³, 81 U.S. gal
- Fuel tank: 300 ltr, 79.3 U.S. gal
- Engine: 23 ft³, 61.6 U.S. gal
- Hydraulic system: 139 ft³, 36.6 U.S. gal
- Axle (front and rear): 40 ft³, 10.6 U.S. gal
- Torque converter and transmission: 38 ft³, 10.0 U.S. gal

**BUCKET SELECTION GUIDE**

- Bore on bolt: 5.1" x 133 kW 179 HP

**DAMNERS**

- Measured with 20.5-25-16PR (L3) tires, ROPS/FOPS cab
- Full fuel tank, coolant, full fuel tank, ROPS cab, and operator. Machine stability and operating weight affected by counterweight, tire size, and other attachments.
- Material density: Material density: kg/m³

**SPECIFICATIONS**

- Keyboard: Guide:
  - Light Material Bucket:
    - Cutting Edges: 4.3 yd³
    - Cutting Segments: 3.5 yd³
  - Teeth: 3.8 yd³
  - Buckets:
    - Light Material Bucket:
      - Cutting Edges: 1.2 yd³
      - Cutting Segments: 0.8 yd³
      - Teeth: 1.0 yd³

- Full fuel tank, coolant, full fuel tank, ROPS cab, and operator. Machine stability and operating weight affected by counterweight, tire size, and other attachments.

- All dimensions, weights, and performance values based on SAE J732c and J742b standards.