ENGINE POWER
1.411 kW / 1.892 HP @ 1.800 rpm

OPERATING WEIGHT
max. 220.550 kg

BUCKET CAPACITY
18.0 - 35.0 m³
Excellent Operator Environment

- Automatic transmission with ECMV (Electronically Controlled Modulation Valve)
- AJSS (Advanced Joystick Steering System)
- Engine RPM set system with auto decel
- Variable transmission cut-off system
- Roomy, quiet cab with power windows
- Low vibration & noise
- Pillar-less large cab with ROPS/FOPS canopy
- Comfortable operator’s seat
- Trainer seat (optional)
See pages 10 and 11.

High Productivity & Low Fuel Consumption

- High performance SSDA16V160E-2 engine
- Low fuel consumption
- The largest bucket in its class
- Extra dumping clearance and reach
- Hi-cab
- Remote boom positioner
- Selectable traction power
See pages 4, 5, 6 and 5.

Harmony with Environment

- EPA Tier 2 emission certified
- Low fuel consumption
**High Reliability & Durability**
- Reliable Komatsu designed and manufactured components
- High-rigidity frames
- Low maintenance brake system
- Hydraulic hoses use flat face o-ring seals

See pages 8 and 9.

- Cation electrodeposition process is used to apply primer paint
- Powder coating process is used to apply main structure paint
- Sealed DT connectors for electrical connections

**Easy Maintenance**
- Tire saver
- Long oil replacement interval
- Oil sealed loader linkage pins
- Centralized filter layout
- Quick fluid change-out system

See pages 12 and 13.

- Auto-greasing system
- EMMS (Equipment Management Monitoring System)
- KOMTRAX Plus

- Maintenance accessibility
- Safety features
- Rear access stairs
High Performance SSDA16V160E-2 Engine
Economical Komatsu SSDA16V160E-2 diesel engine provides power with reserve margins to move giant 20.0 m³ (26.2 yd³) loads. Equipped with an electronic governor for low fuel consumption and electronic acceleration pedal and rpm set for easy operation.

Net power: 1316 kW (1765 HP)
Max torque: 8.15 kNm (831 kgfm) 6,010 ft lb

Low Emission Engine
This engine is EPA Tier 2 emission certified without sacrificing power or machine productivity.

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

The Largest Bucket in Its Class
The WA1200-6 is equipped with the largest bucket in its class at 20.0 m³ (26.2 yd³). Komatsu's bucket is designed for easy loading with little spillage. This, combined with the highest traction and breakout force available, makes a loader which achieves high bucket fill factors and maximum production, able to outproduce other loaders.

Bucket capacities
20.0 m³ (26.2 cu.yd)

<table>
<thead>
<tr>
<th>Boom</th>
<th>Bucket Capacity</th>
<th>Dump Clearance</th>
<th>Dump Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Boom</td>
<td>20.0 m³ (26.2 yd³)</td>
<td>6305 mm (20'8&quot;)</td>
<td>2890 mm (9'6&quot;)</td>
</tr>
<tr>
<td>High Lift Boom (optional)</td>
<td>18.0 m³ (23.5 yd³)</td>
<td>7065 mm (23'2&quot;)</td>
<td>2930 mm (9'7&quot;)</td>
</tr>
</tbody>
</table>
Hi-cab
To enhance the loading performance when using larger buckets with the extra dumping clearance and reach, the hi-cab is standard equipment. From his vantage point, 6380 mm 20’11” from the ground, the seated operator has a safe, unobstructed full view of the bucket and the inside of a 220-tonne truck body.

Matching with Dump Trucks
Aggressive loading and maximum fill factors lead to exceptional productivity in the toughest mining conditions.

The WA1200-6 equipped with a 20.0 m³ 26.2 yd³ bucket can load a 140-tonne truck in four passes. Due to its extra dumping clearance and reach it is able to load 180-tonne trucks in five passes. The high lift version can load 290-tonne plus trucks.
High Breakout Force / Traction Force
Komatsu wheel loaders have high-tensile steel Z-bar loader linkages for maximum rigidity and maximum breakout force. Sealed loader linkage pins extend greasing intervals.

**Breakout force:**
1275 kN 130000 kg 286,600 lb
20.0 m³ 26.2 yd³  Rock bucket (spade nose with teeth)

**Traction force:**
992 kN 101200 kg 223,100 lb

Excellent Stability
The WA1200-6 has the widest tread in its class 4,300mm (14’1”) and a long 7,100mm (23’4”) wheelbase, for maximum machine stability.

Static tipping load
(with 60/80 R57 tires / bucket 20.0 m³ 26.2 yd³)

**Straight:** 121930 kg 268,800 lb
**40˚ full turn:** 107060 kg 236,000 lb

Remote Boom Positioner
The highest and lowest position of the bucket can be set from the operator’s seat to match the height of any truck body. Where the positioner is set will stop the bucket smoothly without shock.

Selectable Traction Power and Travel Speed
- **Maximum traction control:** Traction can be set at any level within 20 - 100% with the „TRACTION CONTROL DIAL“ located on the left front. You can set the maximum traction force according to the condition of the road, material and type of work. It greatly increases fuel efficiency and extends the service life of tires.
- **Maximum speed control:** With the „VEHICLE SPEED DIAL“, you can set the maximum vehicle speed of 1st. and 2nd. at any level from 3km/h to max. This means the operator can set the cycle time between the material and the dump truck. As the loading cycle time is shortened, productivity is improved.

Dual-mode Active Working System
This system provides the most efficient hydraulic flow for your operation. The active working switch has two modes: powerful loading or normal loading.

**Powerful loading mode**

- **Digging / Scooping**
  - The driving force gets more power for digging and scooping material. The boom is raised faster for shorter cycle times. This combination makes this mode efficient for digging blasted rock or hard ground.

- **Raising the boom**
  - It does not cut off often, so the boom is raised faster. This mode is efficient for loading loose material that does not require traction force.
PNC (Pump Neutral Cut) Control System for Hydraulic Pump

The variable displacement piston pump combined with the PNC (Pump Neutral Cut) system, use only the required amount of oil flow for the work, so it does not waste oil pressure. This function reduces the fuel rate by controlling the pump discharge, when not operating the work equipment.

Variable Displacement Steering Pump + CLSS

The variable displacement steering pump, combined with the Closed-center Load Sensing System, delivers just the hydraulic flow the steering requires. This prevents wasted hydraulic pressure and contributes to increased fuel economy.

Modulated Clutch System

When approaching the dump truck,
1) The current system requires the engine rpm to be increased to raise the bucket faster. Now, the modulated clutch is controlled automatically to raise the bucket faster, while reducing forward travel speed. This reduction in travel speed eliminates the braking requirement and the time to approach the dump truck is shortened.
2) This combination also reduces torque waste and smooths the operation.

E ↔ P Control of Engine

The engine output function has „2 mode“ of Economy or Power. They are selected and controlled automatically. P mode is selected only when digging and approaching the dump truck. This „2 mode“ engine control contributes not only to the reduction of the fuel rate but also to the improvement of reliability and durability.
**High Reliability & Durability**

**Reliable Komatsu Designed and Manufactured Components**
All components within the power train, from bolts to final gearing, are all Komatsu-designed. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.

**Engine pre-lube System**
Engine durability is achieved by raising the oil pressure before starting. When the key is turned, the pre-lubrication pump sends oil from the pan to the filter. When the set oil pressure is reached, then the starter motor engages to start the engine.

**Low Maintenance Brake System**
The WA1200-6 uses Komatsu-designed sealed wet disc brakes. This proven design, coupled with a brake oil cooling system, provides reliable and durable final drive braking while downhill traveling with full loads and in all load and carry operations.

**High-rigidity Frames and Loader Linkage**
The front, rear frames and the loader linkage have increased torsional rigidity for stress resistance. Frame and loader linkage are designed and computer tested for proven strength to accommodate actual working loads.

**High-rigidity Frame**
To increase frame reliability, steel castings have been incorporated at all pivot points to eliminate long weld lengths.

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

**Sweeper Wing (Large size Tire Guard)**

To prevent tire damage, the WA1200-6 provides a Sweeper Wing (Large size Tire Guard) on both sides of bucket.

**Cation Electrodeposition Primer Paint/ Powder Coating Final Paint**

Cation electrodeposition paint is applied as a primer paint and powder coating is applied as topcoat to the exterior sheet metal parts. This process results in a durable paint finish, even in the most severe environments.

**Optional Preparation of Teeth According to Usage**

- **Hensley teeth**: Teeth of the Hensley company was optional prepared.
- **Large-scale teeth**: Large-scale teeth was optional prepared.
Easy Operation

Automatic Transmission with ECMV (Electronically Controlled Modulation Valve)

Automatic transmission with ECMV automatically selects the proper gear speed based on travel speed, engine speed, and other travel conditions. The ECMV engages the clutch smoothly to help prevent lag and shock when shifting. This system provides efficient machine operation for a comfortable ride.

- **Kick-down switch:**
  Powerful scooping is available by shifting down to the 1st. speed, by pressing the kick down switch on the upper boom lever, when the lever is at the 2nd. position.

- **Vehicle speed control ON/OFF switch:** By turning the „Vehicle speed control ON/OFF switch” on the boom lever side to ON, the machine travels with vehicle speed limited to the maximum speed having been set with the „Vehicle speed control ON/OFF switch”. When the „Vehicle speed control switch” is on, it is indicated by a light under the „Vehicle speed control dial”.

- **Transmission shifting switch:** Manual operation is available by shifting „Transmission shifting switch” to MANUAL. When traveling on a slope and you do not want to shift gears, you can select the appropriate gear.

AJSS (Advanced Joystick Steering System)

AJSS is a feedback steering system which has been incorporated to allow steering, forward and reverse direction to be controlled by wrist and finger. With the feedback function, the machine steering angle is exactly the same angle as the lever tilt angle.

Engine RPM Set System with Auto Decel

Engine Low idle RPM can be easily preset using a push button switch. The system provides auto decel for better fuel consumption.

Variable Transmission Cut-off System

Transmission cut-off position of the left brake pedal is optionally adjustable by switch operation at operator’s seat. By adjusting the cut-off position according to the type of work, the inching operation becomes easy and increases efficiency.

1) When loading, adjust the cut-off pressure to low. Then the impact of braking is low to prevent spillage.
2) When traveling, adjust the cut-off pressure to high. Load applied to brake will be lighter by using engine brake while decelerating.

Comfortable Operator’s Seat

The operator’s seat has a reclining/air suspension design with headrest to support the operator comfortably during long operation. Also, it is easy to adjust seat height with air suspension.

Trainer Seat (optional)

For operator instruction, a trainer seat is offered as an option. The seat belt is attached to the trainer seat the same way as the operator seat. The trainer seat can be folded up when not in use.
Comfortable Operation

Roomy, Quiet Cab with Power Windows
The cab is large, with a comfortably spacious interior and power windows. Also, a wide viewing angle is guaranteed because the cab is pillar-less. By adopting a high-capacity air conditioner, Komatsu ensures operator comfort, no matter the exterior conditions. Other features designed with operators in mind include a lunchbox storage space.

Low Vibration & Noise
The cab rests on Komatsu viscous damping mounts (rubber and silicon oil) to reduce vibration and noise.

Overhead Panel
Controls for the AM/FM radio, window wiper and washer, cab lights, and air conditioner are all neatly arranged in an overhead console easily within the seated operator’s reach.

Pillar-less Large Cab with ROPS / FOPS Canopy
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.

Cab Air Conditioning
Large capacity air conditioning system combined with carefully placed vents provide optimum cool air flow. Defroster vents are designed to keep the rear window frost-free during cold weather operation. With a simple touch of his hand the operator can easily select from the five operating modes and four fan speeds on the overhead control panel.
**Tire Saver**
The tire saver is quite effective for extending the service life of tires. It senses the tire that slips with a speed sensor, then controls the torque converter with the modulated clutch and stops the tire slip.

**Long Oil Replacement Interval**
Adoption of hybrid elements, that catch the fine and coarse contamination, has extended the interval between replacing elements.

**Lubricated Pins for Loader Links**
All of the loader links have lubricated pins, for much improved serviceability.

**Centralized Filter Layout**
Torque converter / transmission oil filters have been centrally located for ease of replacement from the ground.

**EMMS (Equipment Management Monitoring System)**
Monitor is mounted in front of the operator for easy viewing, allowing the operator to easily check gauges and warning lights.

**Fluid Drain from the Ground**
Hydraulic oil, transmission/torque converter oil, engine oil, and engine coolant can all be changed from the ground. A fast-fill fuel system is also included as standard equipment.

**Auto-Greasing System**
Except for the drive shaft, greasing is automatically done to the regular points with a preset amount and interval.

**Exhaust Heat Shields**
Safety Features

• Emergency brakes:
  If the brake oil pressure is too low, the parking brake is automatically engaged for accident prevention.

• Emergency steering:
  If the steering pump is disabled, an emergency steering pump provides hydraulic flow.

• Emergency engine stop switch:
  The stop switches that operation is possible from the ground are installed in four places and the inside of the cab.

Maintenance

Accessibility

For safe maintenance operations, main points are equipped with a step and safety handrail.

Rear Access Stairs

For safely boarding and exiting the machine, rear access stairs with a safety handrail are provided. The step width, clearance and angle have been designed for safety. The step angle has been reduced from 60 to 45 degrees. A step light provides light for night boarding. The emergency ladder is on the right side of the machine.

KOMTRAX Plus

KOMTRAX Plus is a management system for large mining equipment, which enables detailed monitoring of the fleet via satellite. Komatsu and distributors can analyze “vehicle health”, other operating conditions and provide this information to the job site, using the Internet from a remote location, on a near-real time basis. As a result, customers receive timely vehicle maintenance, reduced maintenance expenses, downtime costs and avoid mechanical trouble.
### ENGINE

Model: Komatsu SSDA16V160E-2
Type: Water-cooled, 4-cycle
Number of cylinders: 16
Bore x stroke: 159 mm x 190 mm (6.26” x 7.48”)
Piston displacement: 60.0 ltr (3661 in³)
Governor: Electronic fuel control

### HYDRAULIC SYSTEM

Rated capacity (discharge flow) @1800 engine rpm
Loader pump: 1018 ltr/min 269 gal/min
Switch pump: 633 ltr/min 167 gal/min
Relief valve setting: 31.4MPa 320 kg/cm² 4,550 psi

<table>
<thead>
<tr>
<th>Hydraulic Cylinders</th>
<th>Number of Cylinders</th>
<th>Bore</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>360 mm 14.2”</td>
<td>1835 mm 72.2”</td>
</tr>
<tr>
<td>Bucket</td>
<td>2</td>
<td>300 mm 11.8”</td>
<td>985 mm 38.8”</td>
</tr>
<tr>
<td>Steering</td>
<td>2</td>
<td>225 mm 8.9”</td>
<td>660 mm 26.0”</td>
</tr>
</tbody>
</table>

Control positions:
- Bucket: Raise, hold, lower, and float
- Bucket: Tilt-back, hold, and dump

### TRANSMISSION

Type: 3-element, single-stage, single-phase
Transmission: Full-powershift, planetary type with modulated clutch
Travel speed: km/h mph

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward</td>
<td>6.1</td>
<td>11.1</td>
<td>18.7</td>
</tr>
<tr>
<td>Reverse</td>
<td>6.3</td>
<td>11.4</td>
<td>19.3</td>
</tr>
</tbody>
</table>

### AXLES AND FINAL DRIVES

Drive system: Four-wheel drive
Front: Fixed, full-floating
Rear: Center-pin support, full-floating, 16" total oscillation
Reduction gear: Spiral bevel gear
Differential gear: Straight bevel gear
Final reduction gear: Planetary gear, double reduction, oil bath

### BRAKES

Service brakes: Hydraulically actuated, wet, multi-disc brakes actuated on four wheels.
Parking brake: Wet, multi-disc, hydraulically-released, spring applied in the transmission.
Emergency brake: Parking brake is commonly used

### STEERING SYSTEM

Type: Articulated type, full-hydraulic power steering
Steering angle: 40° each direction
Turning radius outside corner of bucket and teeth: 14330 mm 47’0"

### SERVICE REFILL CAPACITIES

Select proper tires based on job requirements.
Standard rim size: 60/80 R57

### TIRE SELECTION GUIDE

Bucket fill factor

<table>
<thead>
<tr>
<th>m³</th>
<th>yd³</th>
<th>Bucket capacity (spade nose)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.58</td>
<td>45.8</td>
<td>Coal Bucket (spade nose without teeth)</td>
</tr>
<tr>
<td>2.08</td>
<td>26.2</td>
<td>Rock Bucket (spade nose with teeth)</td>
</tr>
</tbody>
</table>

Material density: kg/m³ lb/yd³

1011 1348 1685 2023 2360 2698 3035 3372

---

Select proper tires based on job requirements.
Standard rim size: 60/80 R57

### STEERING SYSTEM

Type: Articulated type, full-hydraulic power steering
Steering angle: 40° each direction
Turning radius outside corner of bucket and teeth: 14330 mm 47’0”

### BUCKET CONTROLS

Control positions:
- Boom: Raise, hold, lower, and float
- Bucket: Tilt-back, hold, and dump

### ROPS / FOPS & CAB

Structure complies with ISO 3471 ROPS (Roll-Over Protective Structure) standards, as well as ISO 3449 FOPS (Falling Object Protective Structure) standards. The cab is mounted on viscous damping mounts and is well insulated.
Operating weight are affected by counterweight, or ballast, tire size, and other attachments.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS canopy, air conditioner, bucket and operator. Machine stability and operating weight are affected by counterweight, or ballast, tire size, and other attachments.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>60/80 R57</th>
<th>58/55-57-84PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket width with tire protector</td>
<td>6550 mm</td>
<td>–</td>
</tr>
<tr>
<td>–</td>
<td>216”</td>
<td>216”</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Bucket capacity:

<table>
<thead>
<tr>
<th>Capacity</th>
<th>60/80 R57</th>
<th>58/55-57-84PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spade nose with teeth</td>
<td>20.0 m³</td>
<td>20.0 m³</td>
</tr>
<tr>
<td>–</td>
<td>20.0 m³</td>
<td>20.0 m³</td>
</tr>
</tbody>
</table>

Breakout force:

<table>
<thead>
<tr>
<th>Force</th>
<th>60/80 R57</th>
<th>58/55-57-84PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0˚</td>
<td>1275 kN</td>
<td>1275 kN</td>
</tr>
<tr>
<td>45˚</td>
<td>1275 kN</td>
<td>1275 kN</td>
</tr>
</tbody>
</table>

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

*1 Measured with bucket at carry position, outside corner of bucket

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS canopy, air conditioner, bucket and operator. Machine stability and operating weight are affected by counterweight, or ballast, tire size, and other attachments.

Use either counterweight or ballast, not both. Apply the following weight changes to operating weight and static tipping load.
### 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>STD Boom</td>
<td>Hi-Lift Boom</td>
<td>STD Boom</td>
<td>Hi-Lift Boom</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>kg</td>
<td>lb</td>
<td>kg</td>
<td>lb</td>
<td>ft in</td>
<td>ft in</td>
</tr>
<tr>
<td>60/80 R57</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5820 19&quot;* 760 2'6&quot; 0 0</td>
</tr>
<tr>
<td>58/85-57-84PR</td>
<td>+820</td>
<td>+1810</td>
<td>+600 +1320 +540 +1190</td>
<td>+520 +1150 +470 +1040</td>
<td>5720 18'9&quot; 765 2'6&quot; +5 +0.2&quot;</td>
<td></td>
</tr>
</tbody>
</table>