**STANDARD EQUIPMENT FOR BASE MACHINE**

- Air cleaner, double element with dust indicator
- Alternator, 50 ampere
- Batteries, 2 x 12V 170 Ah
- Blower cooling fan
- Color monitor
- Decelerator pedal
- Fenders
- Horn, warning
- Hydraulics for dozer
- Hydraulic steering (HSS) system
- Lighting system (includes 2 front, 1 rear)
- Muffler with rain cap
- Palm lever steering control
- Radiator with reserve tank
- Rear cover
- Starting motor, 11kW/24V
- Suspension seat
- Track roller guard, end sections
- Track shoe assembly
  - Sealed and lubricated track
- Underguards, oil pan and transmission
- 560 mm 22” single grouser shoe

**OPTIONAL EQUIPMENT**

**ROPS cab**
- Additional weight: 700 kg 1,545 lb
- All-weather, enclosed pressurized cab
- Dimensions:
  - Length: 1735 mm 5’8”
  - Width: 1755 mm 5’9”
  - Height from floor: 1635 mm 5’4”

**Variable multi-shank ripper**
- Additional weight (including hydraulic control unit): 3760 kg 8,290 lb
- Beam length: 2320 mm 7’7”
- Hydraulically-controlled parallelogram-type ripper with three shanks.
- Digging angle infinitely adjustable.
- Standard digging angle*: 49°
- Maximum digging depth: 900 mm 2’11”
- Maximum lift above ground: 950 mm 3’1”

**Variable giant ripper**
- Additional weight (including hydraulic control unit): 2440 kg 5,380 lb
- Beam length: 1400 mm 4’7”
- Hydraulically-controlled parallelogram-type ripper with one shank.
- Digging angle infinitely adjustable.
- Standard digging angle*: 49°
- Maximum digging depth: 1240 mm 4’1”
- Maximum lift above ground: 950 mm 3’1”

* Measured with ripper point on ground and shank vertical.

**Shoes**

<table>
<thead>
<tr>
<th>Shoes (optional)</th>
<th>Additional weight</th>
<th>Ground contact area</th>
</tr>
</thead>
<tbody>
<tr>
<td>560 mm 22” single grouser shoes</td>
<td>0 kg 0 lb</td>
<td>36680 cm² 5,685 in²</td>
</tr>
<tr>
<td>510 mm 24” single grouser shoes</td>
<td>+395 kg +870 lb</td>
<td>40690 cm² 6,546 in²</td>
</tr>
<tr>
<td>560 mm 26” single grouser shoes</td>
<td>+410 kg +895 lb</td>
<td>44230 cm² 7,034 in²</td>
</tr>
<tr>
<td>510 mm 28” single grouser shoes</td>
<td>+430 kg +945 lb</td>
<td>47180 cm² 7,589 in²</td>
</tr>
<tr>
<td>560 mm 30” single grouser shoes</td>
<td>+450 kg +995 lb</td>
<td>49720 cm² 8,136 in²</td>
</tr>
</tbody>
</table>

**Other**
- Air conditioner
- Backup alarm
- Cab heater and defroster
- Engine side cover
- Locks, filler caps and covers
- Rear view monitoring system
- Rigid drawbar
- Tool kit

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**HORSEPOWER**
- Gross: 268 kW 360 HP @ 1900 rpm
- Net: 264 kW 354 HP @ 1900 rpm

**OPERATING WEIGHT**
- 39500 kg 87,100 lb

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

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**Photo may include optional equipment.**
### Outstanding Productivity & Fuel Economy

**Innovative SIGMADOZER** reduces digging resistance and demonstrates smooth material roll up to increase blade load. Blade capacity 9.4 m³ / 12.3 yd³. See page 4.

**Automatic transmission with lockup torque converter** increases speed and power to improve fuel consumption and productivity. See page 5.

**SAA6D140E-5 turbocharged after-cooled diesel engine** provides an output of 264 kW / 354 HP with excellent productivity, while meeting EPA Tier 3 and EU stage 3A emission regulations. See page 6.

**Hydraulic drive radiator cooling fan** controlled automatically, reduces fuel consumption and operating noise levels. See page 6.

**Gull-wing engine side covers** for easy and efficient engine servicing. See page 9.

**Blade tilt lines** completely protected.

**Increased-track length, seven roller undercarriage** ensures outstanding grading ability and stability.

**Extra-low machine profile** provides excellent machine balance and low center of gravity.

**K-Bogie undercarriage system** improves traction, component durability, and operator comfort. See page 9.

**Modular power train** for increased serviceability and durability. Forward mounted pivot shafts isolate final drives from blade loads. See page 9.

**Wet disc brakes** require less maintenance.

**HSS (Hydrostatic Steering System)** provides smooth, quick, and powerful control in various ground conditions.

**Newly designed ripper** offers excellent ripper visibility. See page 8.

**High-rigidity, simple hull frame** and monocoque track frame with pivot shaft for greater reliability. See page 9.

**Large TFT LCD monitor**

- Easy-to-see and use 7” large multi-color monitor.
- Can be displayed in 10 languages for global support.

**TFT : Thin Film Transistor**

**LCD : Liquid Crystal Display**

See page 8.

**New integrated ROPS cab includes:**

- Large quiet operator environment
- Comfortable ride with new cab damper
- Excellent visibility without ROPS post
- High capacity air conditioning system (optional)
- Pressurized cab (optional)
- Adjustable armrests and suspension seat

See page 7.

**OUTSTANDING PRODUCTIVITY & FUEL ECONOMY**

**PCCS (Palm Command Control System)**

- Electronic controlled PCCS travel control
- Electronic controlled PCCS blade/ripper control
- Fuel control dial
- Automatic/manual gearshift selectable mode
- Gearshift pattern preset function
- ECMV controlled transmission

See page 7.

**Photos may include optional equipment.**

**See page 7.**
Outstanding fuel economy

Automatic transmission with lockup torque converter

A sharp reduction in fuel consumption and greater power train efficiency is achieved by the new automatic gearshift transmission and lock up torque converter. The automatic gearshift transmission selects the optimal gear range depending on the working conditions and load placed on the machine. This means the machine is always operating at maximum efficiency. (Manual gearshift mode is selectable with a switch)

Fuel consumption decreased by 10% (compared with our conventional model)

Lockup mechanism of torque converter is automatically actuated to transfer engine power directly to the transmission in usual dozing speed range. Locking up the torque converter eliminates loss of horsepower by 10%. Because the electronically controlled engine is extremely efficient, a decrease in fuel consumption is realized while also maintaining machine power.

Automatic/manual gearshift selectable mode

Automatic or manual gearshift modes can be selected with ease to suit the work at hand by simply pressing the switch on the multi-monitor (selection at neutral).

● Automatic gearshift mode
  The mode for general dozing. When a load is applied, the gear automatically shifts down, and when the load is off, it automatically shifts up to a set maximum gear speed. This mode economizes both fuel and production where the torque converter lockup mechanism is actuated according to load, automatically selecting the optimum gear speed.

● Manual gearshift mode
  The mode for dozing and ripping rough ground. When loaded, the gear automatically shifts down, but does not shift up when the load is off.

Outstanding productivity

Production increased by 15% (compared with our conventional model)

SIGMADOZER

Based on a completely new digging theory, SIGMADOZER dramatically improves dozing performance and increases productivity. A new frontal design concept adopted for digging and rolling up at the center of the blade increases soil holding capacity, simultaneously reducing sideways spillage. Reduced digging resistance produces smoother flow of earth, enabling the dozing of larger quantities of soil with less power. In addition, adoption of a new blade linkage system holds the blade closer to the tractor for improved visibility, enhanced digging force and reduced lateral sway of the blade. This is the new generation blade.

SIGMADOZER Semi-U blade
**ECOLOGY FEATURES**

**Engine**

*Fuel efficient electronic controlled engine*

The Komatsu SAA6D140E-5 engine delivers 264 kW (354 HP) at 1900 rpm. The fuel-efficient, powerful Komatsu engine makes the D155AX superior in both ripping and dozing operations. The engine is EPA Tier 3 and EU stage 3A emission regulation certified. The engine is turbocharged and features direct fuel injection and air-to-air aftercooler to maximize power, fuel efficiency and emission compliance. To minimize noise and vibration, the engine is mounted to the main frame with rubber cushions.

**Hydraulic drive radiator cooling fan**

The engine cooling fan rotation speed is electronically controlled. The fan rotation speed depends on engine coolant and hydraulic oil temperatures, the higher the temperature the higher the fan speed. This system increases fuel efficiency, reduces the operating noise levels and requires less horsepower than belt driven fan.

**Human-Machine Interface PCCS (Palm Command Control System)**

Komatsu’s ergonomically designed control system “PCCS” creates an operating environment with “complete operator control”.

**Fuel efficient electronic controlled joystick**

Palm command travel joystick provides the operator with a relaxed posture and superb fine control without operator fatigue. Transmission gear shifting is simplified with thumb push buttons.

**Gearshift pattern preset function**

When the gearshift pattern is set to either <F1-R2>, <F2-R2> or <F2-R3L> in automatic gearshift mode, the gear is automatically shifted, reducing round trip repetition work time and operator’s efforts.

**ECMV (Electronic Controlled Modulation Valve)**

Controller automatically adjusts each clutch engagement depending on travel conditions, providing smooth shockless clutch engagement, improved component life and operator ride comfort.

**Hydrostatic Steering System—smooth, powerful turning**

The engine power is transmitted to both tracks without power interruption on the inside track for smooth, powerful turns. Counter-rotation is available for minimum turning radius providing excellent maneuverability.

**Outline of electronic control system**

Komatsu develops and produces all major components, such as engines, electronics and hydraulic components in-house. With this “Komatsu Technology”, and adding customer feedback, Komatsu is achieving great advancements in technology. To achieve high levels of productivity and ecology, Komatsu developed the main components with an advanced control system. The result is a new generation of high performance and environment friendly machines.
New integrated ROPS cab
A newly designed cab is integrated with ROPS according to the latest computer analysis. High rigidity and superb sealing performance sharply reduce noise and vibration for the operator and prevents dust from entering the cab. Relaxed operation in comfortable environment. In addition, side visibility is increased because external ROPS structure and posts are not required. Outstanding visibility has been achieved.

Large multi-lingual LCD color monitor
A large user-friendly color monitor enables safe, accurate and smooth work. Improved screen visibility is achieved by use of TFT liquid crystal display that can easily be read at various angles and lighting conditions. Simple and easy to operate switches. Industry first function keys facilitate multi-function operations.

Display data in 10 languages to globally support operators around the world.

Comfortable ride with cab damper mounting
The D155AX-6's cab mount uses a cab damper which provides excellent shock and vibration absorption capacity with its long stroke. Cab damper mounts soften shocks and vibration while traveling over adverse conditions, which conventional mounting systems are unable to absorb. The cab damper spring isolates the cab from the machine body, suppressing vibration and providing a quiet, comfortable operating environment.

Low maintenance costs
Increased undercarriage component life
K-Bogie track rollers having a large oscillation travel always follow the track link even on uneven ground. This feature keeps the correct alignment between the rollers and links to contribute long undercarriage component life.

Reliable simple hull frame
Simple hull structure main frame design increases durability and reduces stress concentration at critical areas. The track frame has a large cross section and utilizes pivot shaft mounting for greater reliability.

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

Easy radiator cleaning with hydraulic drive fan
The radiator can be cleaned by utilization of the reversible, hydraulically driven cooling fan. The fan can be reversed from inside the cab by simply turning the switch to reverse.

Oil pressure checking ports
Pressure checking ports for power train components are centralized to promote quick and simple diagnosis.

Gull-wing engine side covers
The opening area is further enlarged when gull-wing engine side covers are opened, facilitating engine maintenance and filter replacement. Side covers have been changed to a thick one-piece structure with a bolt-on catch to improve durability.

Flat face O-ring seals
Flat face O-ring seals are used to securely seal all hydraulic hose connections and to prevent oil leakage.

Enclosed hydraulic piping
Hydraulic piping for the blade tilt cylinder is completely housed in the push arm, protecting it from damage.

Modular power train design
Power train components are sealed in a modular design that allows the components to be removed and installed without oil spillage, making servicing work clean, smooth and easy.

Maintenance free disc brakes
Wet disc brakes require less maintenance.

Preventative maintenance
Preventative maintenance is the only way to ensure long service life from your equipment. That’s why Komatsu designed the D155AX-6 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Multi-monitor with troubleshooting function to prevent critical machine troubles
Various meters, gauges, and warning functions are centrally arranged on the multi-monitor. Offers ease of start-up inspection and promptly warns the operator with a lamp and buzzer if any abnormalities should occur. In addition, countermeasures are indicated in 4 stage codes to ensure safety and prevent the machine from major problems. Replacement times for oil and filters are also indicated.

Ripper visibility
Ripper cylinders were reduced from four to two, greatly improving rear visibility during ripping. Also, expanded ripper movement offers a wider range of operation.

WORKING ENVIRONMENT
### Specifications

#### Engine
- Model: Komatsu SAA6D140E-5
- Type: 4-cylinder, water-cooled, direct injection
- Aspiration: Turbocharged, air-to-air aftercooled, cooled EGR
- Number of cylinders: 4
- Bore x stroke: 140 mm x 165 mm 5.5" x 6.5"
- Piston displacement: 15.24 liters 950 cu in
- Governor: All-speed and mid-range, electronic
- Horsepower: 360 HP
- ISO 9249 / SAE J1349: Net
- Fuel: 11.3 U.S. gal
- Rated rpm: 1900 rpm
- Fan: Single fan
- Lubrication: Hydraulic

#### Torque Flow Transmission
Komatsu’s automatic TORQUEFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase torque converter with backup clutch, and a planetary gear, multiple-disc clutch transmission which is hydraulically actuated and force-lubricated for optimum heat dissipation. Gearshift lock lever and neutral safety switch prevent machine from accidental starts.

#### Steering System
- PCCS lever controls for all directional movements. Pushing the PCCS lever forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the PCCS lever to the left to make a left turn. Tilt it to the right for a right turn.

Hydrostatic steering system (HSS) is powered by steering planetary units and an independent hydraulic pump and motor. Counter-rotation turns are also available. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gearshift lock lever also applies parking brakes. Minimum turning radius is 2.14 m 70°.

#### Undercarriage
- Suspension: Oscillation-type with equalizer bar and forward mounted pivot shafts
- Track roller frame: Monacoque, high-tensile-strength steel construction
- K-Bogie undercarriage
- Lubricated track rollers are resiliently mounted to the track frame with a boogie suspension system whose oscillating motion is cushioned by rubber pads.
- Track shoes
- Lubricated tracks. Unique dust seals for preventing entry of foreign abrasives into pin-to-bushing clearance for extended service. Track tension easily adjusted with grease gun.
- Number of shoes (each side): 42
- Ground height: 80 mm 3.1"
- Shoe width (standard/maximum): 560 mm 22"/710 mm 28"
- Ground contact area: 36680 cm² 5,685 sq in
- Ground pressure (tractor only): 82.4 kPa 0.84 kg/cm² 11.9 psi
- Number of track rollers (each side): 7
- Number of carrier rollers (each side): 2

#### Coolant and Lubricant Capacity (Refill)
- Fuel tank: 625 ltr
- Coolant: 82 ltr
- Engine oil: 37 ltr
- Damper: 1.5 ltr
- Transmission, bevel gear and steering system: 90 ltr
- Final drive (each side): 23.8 ltr

#### Operating Weight
- Tractor weight: 31000 kg 68,350 lb
- Inclunding rated capacity of lubricant, coolant, full fuel tank, operator and standard equipment
- Operating weight: 39500 kg 87,100 lb
- Including strengthened SIGMAOZER, giant ripper, ROPS cab, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.
- Ground pressure: 106 kPa 1.08 kg/cm² 15.4 psi

#### Dimensions

#### Hydraulics System
Closed-center load sensing system (CLSS) designed for precise and responsive control, and for efficient simultaneous operation.

- Hydraulic control unit:
  - All spool control valves externally mounted beside the hydraulic tank.
  - Variable piston pump with capacity discharge flow of 325 fl/min 85.9 U.S. gal/min for steering and 180 fl/min 47.6 U.S. gal/min for implement at rated engine rpm.
- Relief valve setting: 85 ltr/min for steering and 180 ltr/min for implement.

#### Dozer Equipment
Use of high-tensile-strength steel in moldboard for strengthened blade construction. Blade tilt hose piping is mounted inside the dozer push arm to protect from damage.

#### Hydraulic Oil Capacity (Refill)
- Semi-U tilt dozer...
- U-tilt dozer...
- Giant ripper...

#### Engine Power

#### Final Drives
Double-reduction, spur and planetary final drives increase tractive effort. Segmented sprockets are bolt-on for easy-in-the-field replacement.