

KOMATSU®

D155A-6

HORSEPOWER

Gross: 268 kW 360 HP @ 1900 rpm

Net: 264 kW 354 HP @ 1900 rpm

OPERATING WEIGHT

41700 kg 91,930 lb

BLADE CAPACITY

Semi-U DOZER: 9.4 m³ 12.3 yd³

D
155A

CRAWLER DOZER



Photo may include optional equipment.

WALK-AROUND

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

OPERATING WEIGHT
41700 kg 91,930 lb

BLADE CAPACITY
Semi-U DOZER: 9.4 m³ 12.3 yd³

Large blade capacity:

9.4 m³ 12.3 yd³ (Semi-U dozer) and 11.9 m³ 15.6 yd³ (U dozer)
See page 4.

Automatic transmission increases speed and power to improve productivity.
See page 4.

SAA6D140E-5 turbocharged after-cooled diesel engine provides an output of 264 kW 354 HP with excellent productivity. This engine is EPA Tier 2 and EU Stage 2 emissions equivalent.
See page 5.

Hydraulic drive radiator cooling fan controlled automatically, reduces fuel consumption and operating noise levels.
See page 5.

Gull-wing engine side covers for easy and efficient engine servicing.
See page 8.

Blade tilt lines completely protected.
See page 8.

Low drive, rugged undercarriage outstanding durability even traveling over severe rocky terrain.
See page 5.

PCCS (Palm Command Control System)

- Electronic controlled PCCS travel control
 - Hydraulic controlled PCCS blade/ripper control
 - Fuel control dial
 - Automatic/manual gearshift selectable mode
 - Gearshift pattern preset function
 - ECMV (Electronic Controlled Modulation Valve) controlled transmission
- See page 6.

Torque converter

having ample power-transmitting capacity in reserve.
See page 4.

New integrated ROPS cab includes:

- Large quiet operator environment
 - Comfortable ride with new cab damper
 - Excellent visibility without ROPS post
 - Two-position seat
 - High capacity air conditioning system (optional)
 - Pressurized cab (optional)
 - Adjustable armrests and suspension seat (optional)
- See page 7.

Large TFT LCD monitor

- Easy-to-see and use 7" large multi-color monitor
 - Can be displayed in 10 languages for global support
 - Advanced monitoring system for early troubleshooting
- TFT : Thin Film Transistor
LCD : Liquid Crystal Display
See page 7.



Photo may include optional equipment.

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

Wet disc brakes require less maintenance.
See page 8.

Filtration Further enhanced reliability of the machine against fuel contamination thanks to the improvement in filtration.
See page 9.

Modular power train for increased serviceability and durability. Forward mounted pivot shafts isolate final drives from blade loads.
See page 8.

High-rigidity, simple hull frame and monocoque track frame with pivot shaft for greater reliability.
See page 8.

Rippers (optional):

- Variable multi-shank
 - Variable giant
- Newly designed ripper offers excellent ripper visibility and dynamic ripping operation.
See page 4.

PRODUCTIVITY FEATURES

Automatic transmission with torque converter

Greater power train efficiency is achieved by the new automatic gearshift transmission. 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)

Automatic/manual gearshift selectable mode

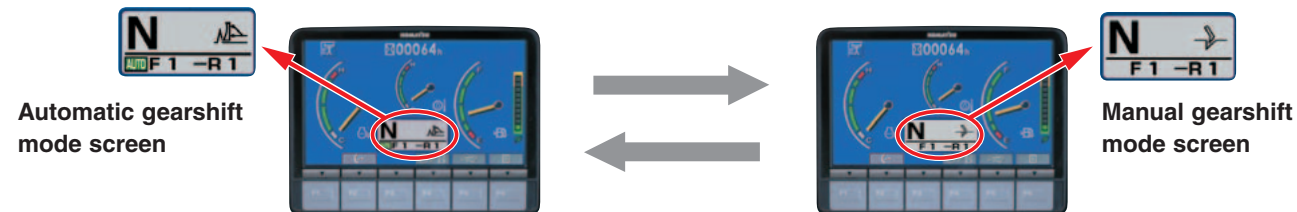
Automatic or manual gearshift modes can be selected with ease to suit the work at hand by simply pressing the switch on the multi-monitor (selection at neutral).

- **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 automatically selects 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.



Large blade capacity

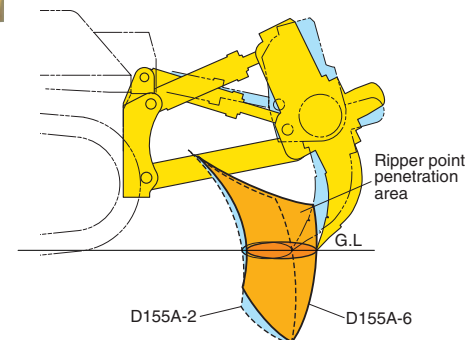
Capacity of **9.4 m³** 12.3 yd³ (Semi-U dozer) and **11.9 m³** 21.7 yd³ (U dozer) yield outstanding production. High-tensile-strength steel is incorporated into the front and sides of the blade for increased durability.



Ripper performance

Ripper cylinders are reduced from four to two, greatly improving rear visibility during ripping.

Also, expanded ripper movement offers a wider range of operation.



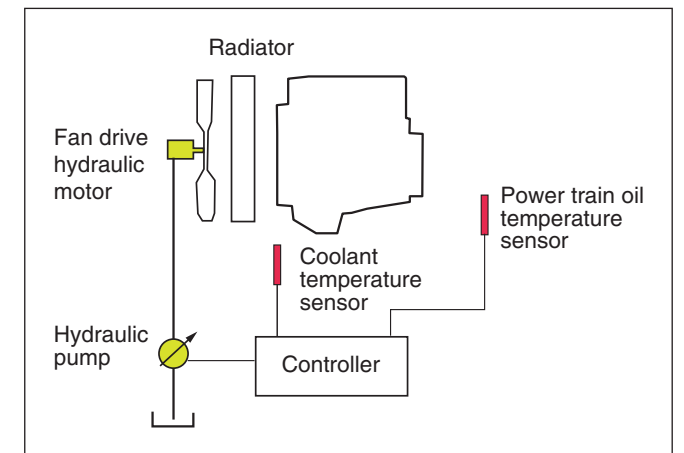
Engine

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 D155A superior in both ripping and dozing operations. The engine is EPA Tier 2 and EU Stage 2 emissions equivalent, and features direct fuel injection, turbocharger and air-to-air aftercooling to maximize power. To minimize noise and vibration, the engine is mounted to the main frame with rubber cushions.

Hydraulic driven engine cooling fan

Fan rotation is automatically controlled depending on coolant and hydraulic oil temperature, saving fuel consumption and providing great productivity with a quiet operating environment.

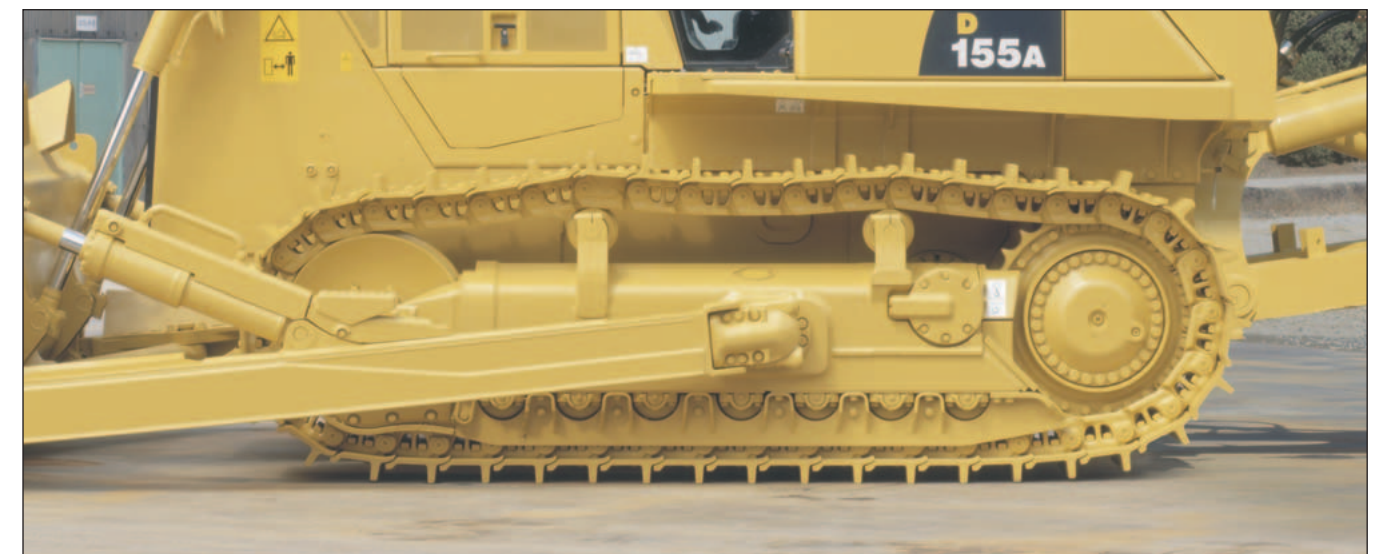


Undercarriage

Field-proven low-drive, rigid type undercarriage

Komatsu's unique low-drive undercarriage features less shoe slippage compared with other types of undercarriage. The undercarriage follows the ground firmly for increased drawbar pull. Large strengthened shoes have been proven to be highly durable in various job sites all over the world.

Length of track on ground: **3150 mm** (10'4")



CONTROL FEATURES

WORKING ENVIRONMENT

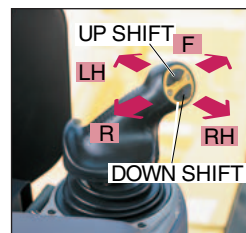


Human-Machine Interface PCCS (Palm Command Control System)

Komatsu's ergonomically designed control system "PCCS" creates an operating environment with "complete operator control."

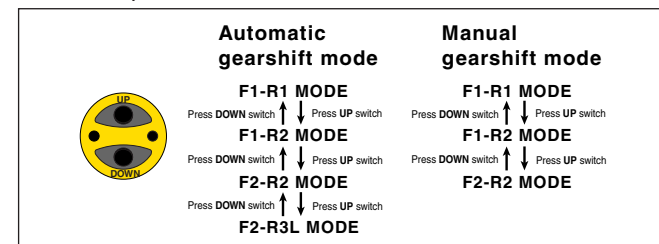
Palm command electronic controlled travel control joystick

Palm command travel joystick provides the operator with a relaxed posture and superb fine control. 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) controlled transmission and brakes

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

Palm command PPC controlled blade/ripper control joystick

Blade control joystick uses a PPC (Proportional Pressure Control) valve and blade control joystick ergonomics are similar to the travel control joystick. PPC control combined with the highly reliable Komatsu hydraulic system enables superb fine control.



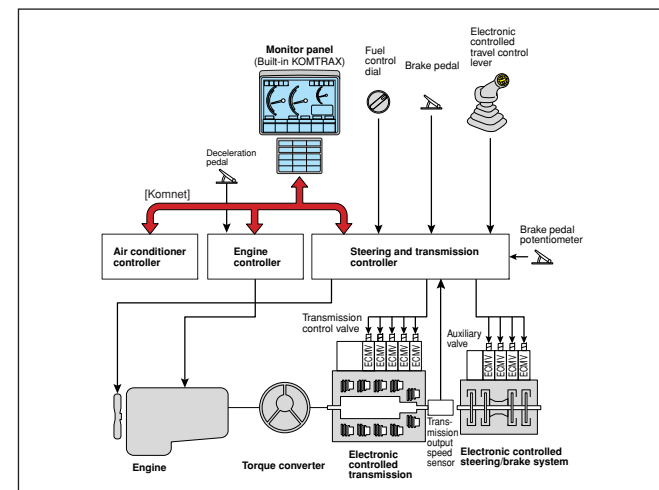
Fuel control dial

Engine revolution is controlled by an electronic signal, providing ease of operation, eliminating maintenance of linkage and joints.

Height adjustable armrest (Optional)

Armrest is height adjustable without any tools, providing the operator with firm arm support.

Outline of electronic control system

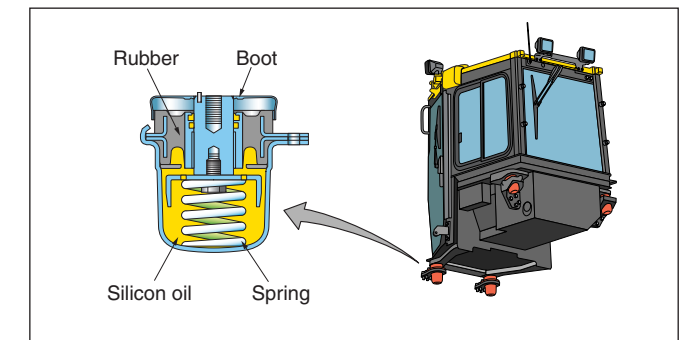


New integrated ROPS cab (Optional)

A newly designed cab is integrated with ROPS. High rigidity and superb sealing performance sharply reduce noise and vibration for the operator and helps prevent dust from entering the cab. The result is relaxed operation in a comfortable environment for the operator. In addition, side visibility is increased because external ROPS structure and posts are not required. Outstanding visibility has been achieved.

Comfortable ride with cab damper mounting

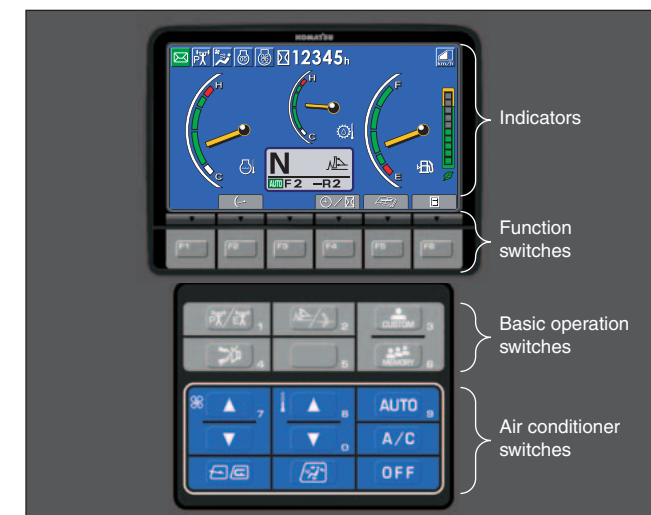
The D155A-6's cab mount uses a cab damper which provides excellent shock and vibration absorption capacity with its long stroke. Cab damper mounts soften shocks and vibration while traveling over adverse conditions, which conventional mounting systems are unable to absorb. The cab damper spring isolates the cab from the machine body, suppressing vibration and providing a quiet, comfortable operating environment.



Large multi-lingual LCD color monitor

A large user-friendly color monitor enables, 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.



MAINTENANCE FEATURES

Preventative maintenance

Preventative maintenance is the only way to ensure long service life from your equipment. That's why Komatsu designed the D155A-6 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Multi-monitor with troubleshooting function to keep operator informed

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. Replacement times for oil and filters are also indicated.



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.



Measures against poor quality fuel

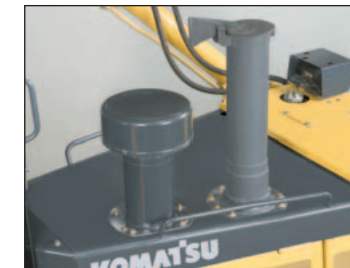
In order to help protect the engine against dust and water contained in the fuel, the machine is equipped with a new high efficient main fuel filter and a large water separator. In addition, fuel tank drain valve, water drain valve of the water separator and fuel drain valve are concentrated at one place.



Large water separator

Dust-proof measures

Large fresh air pre-cleaner is also provided as optional equipment. The hydraulic tank and the fuel tank are equipped with a high-filtration breather with pressure valve to help prevent dust from entering.



Large fresh air pre-cleaner



High-filtration breather

Low maintenance costs

Reliable simple hull frame

Simple hull structure main frame design increases durability and reduces stress concentration at critical areas. The monocoque 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.

Flat face O-ring seals

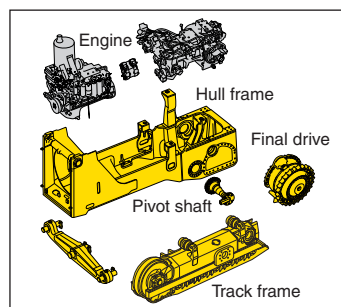
Flat face O-ring seals are used to securely seal all hydraulic hose connections and to help prevent oil leakage.

Enclosed hydraulic piping

Hydraulic piping for the blade tilt cylinder is completely housed in the push arm, helping protect it from damage.

Modular power train design

Power train components are sealed in a modular design, making servicing work clean, smooth and easy.



Disc brakes

Wet disc brakes require less maintenance.



SPECIFICATIONS



ENGINE

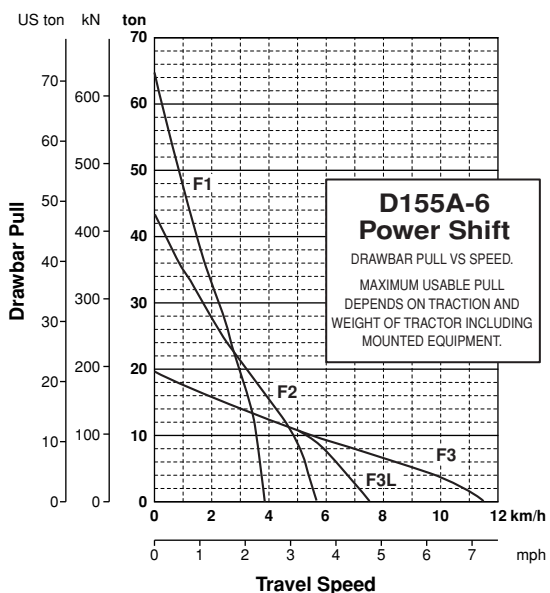
Model Komatsu SAA6D140E-5
 Type 4-cycle, water-cooled, direct injection
 Aspiration Turbocharged, air-to-air aftercooled
 Number of cylinders 6
 Bore x stroke 140 mm x 165 mm 5.51" x 6.50"
 Piston displacement 15.24 ltr 930 in³
 Governor All-speed and mid-range, electronic
 Horsepower
 SAE J1995 Gross 268kW 360HP
 ISO 9249 / SAE J1349* Net 264kW 354HP
 Rated rpm 1900rpm
 Fan drive type Hydraulic
 Lubrication system
 Method Gear pump, force lubrication
 Filter Full-flow
 *Net horsepower at the maximum speed of radiator cooling fan 239kW 320HP
 EPA Tier 2 and EU Stage 2 emissions equivalent.



TORQFLOW TRANSMISSION

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

Travel speed	Forward	Reverse
1st	3.9 km/h 2.4 mph	4.7 km/h 2.9 mph
2nd	5.7 km/h 3.5 mph	6.8 km/h 4.2 mph
3rd L	7.5 km/h 4.7 mph	9.2 km/h 5.7 mph
3rd	11.4 km/h 7.1 mph	13.7 km/h 8.5 mph



FINAL DRIVES

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



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.

Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gearshift lock lever also applies parking brakes.

Minimum turning radius 2.14 m 7'0"



UNDERCARRIAGE

Suspension Oscillation-type with equalizer bar and forward mounted pivot shafts
 Track roller frame Monocoque, high-tensile-strength steel construction

Track shoes
 Lubricated tracks. Unique dust seals for helping prevent entry of foreign abrasives into pin-to-bushing clearance for extended service. Track tension easily adjusted with grease gun.

Number of shoes (each side) 41
 Grouser height 80 mm 3.1"
 Shoe width (standard/maximum) 560 mm 22"/710 mm 28"
 Ground contact area 35280 cm² 5,468 in²
 Ground pressure (tractor only) 90.2 kPa 0.92 kg/cm² 13.1 psi
 Number of track rollers (each side) 7
 Number of carrier rollers (each side) 2



COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank 625 ltr 165 U.S. gal
 Coolant 82 ltr 21.7 U.S. gal
 Engine oil 37 ltr 9.8 U.S. gal
 Damper 1.5 ltr 0.4 U.S. gal
 Transmission, bevel gear and steering system 90 ltr 23.8 U.S. gal
 Final drive (each side) 31 ltr 8.2 U.S. gal



OPERATING WEIGHT

Tractor weight 32300 kg 71,200 lb
 Including rated capacity of lubricant, coolant, full fuel tank, operator and standard equipment

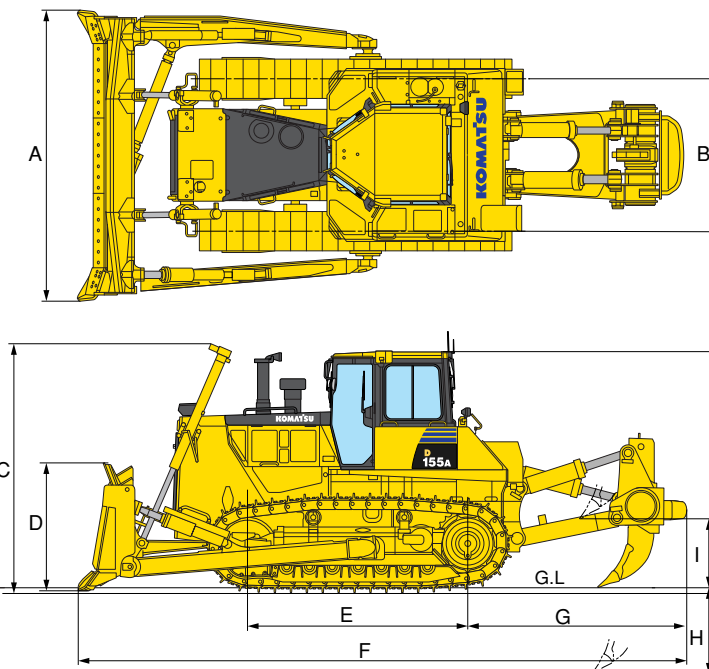
Operating weight 41700 kg 91,930 lb
 Including Strengthened Semi U, giant ripper, cab, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

Ground pressure 115.8 kPa 1.18 kg/cm² 16.8 psi



DIMENSIONS

A	4130 mm	13'7"
B	2140 mm	7'
C	3510 mm	11'6"
D	1790 mm	5'10"
E	3150 mm	10'4"
F	8680 mm	28'6"
G	3100 mm	10'2"
H	1370 mm	4'6"
I	900 mm	2'11"
J	3395 mm	11'2"



HYDRAULIC 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 200 ltr/min 52.8 U.S. gal/min for implement at rated engine rpm.

Relief valve setting . . . for implement 27.5 MPa 280 kg/cm² 3,980 psi
 Control valves:
 Spool control valve for Semi-U tilt dozer and Full-U tilt dozer.

Positions: Blade lift Raise, hold, lower, and float
 Blade tilt Right, hold, and left

Additional control valve required for variable digging angle multi-shank ripper and giant ripper.

Positions: Ripper lift Raise, hold, and lower and float
 Ripper tilt Increase, hold, and decrease

Hydraulic cylinders Double-acting, piston

	Number of cylinders	Bore
Blade Lift	2	110 mm 4.33"
Blade Tilt	1	160 mm 6.30"
Ripper Lift	1	180 mm 7.09"
Ripper Tilt	1	200 mm 7.87"

Hydraulic oil capacity (refill):
 Semi-U tilt dozer 85 ltr 22.5 U.S. gal
 U-tilt dozer 85 ltr 22.5 U.S. gal
 Ripper equipment (additional volume):
 Multi-shank ripper 37 ltr 9.8 U.S. gal
 Giant ripper 37 ltr 9.8 U.S. gal



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 help prevent damage.

	Overall length with dozer	Blade capacity	Blade length x height	Maximum lift above ground	Maximum drop below ground	Maximum tilt adjustment	Additional weight
Semi-U Tilt Dozer	6010 mm 19'9"	9.4 m ³ 12.3 yd ³	4130 mm x 1790 mm 13'7" x 5'10"	1250 mm 4'1"	590 mm 1'11"	950 mm 3'1"	4960 kg 10,940 lb
Strengthened Semi-U Tilt Dozer	6010 mm 19'9"	9.4 m ³ 12.3 yd ³	4130 mm x 1790 mm 13'7" x 5'10"	1250 mm 4'1"	590 mm 1'11"	950 mm 3'1"	5620 kg 12,390 lb
Full-U Tilt Dozer	6430 mm 21'1"	11.9 m ³ 15.6 yd ³	4225 mm x 1790 mm 13'10" x 5'10"	1250 mm 4'1"	590 mm 1'11"	970 mm 3'2"	5630 kg 12,410 lb
Angle Dozer	6580 mm 21'7"	4.6 m ³ 6.0 yd ³	4850 mm x 1170 mm 15'11" x 3'10"	1560 mm 5'1"	660 mm 2'2"	520 mm 1'8"	5170 kg 11,400 lb



STANDARD EQUIPMENT FOR BASE MACHINE

- Air cleaner, double element with dust indicator
- Alternator, 60 ampere
- Backup alarm
- Batteries, 2 x 12V 170 Ah
- Blower cooling fan
- Color monitor
- Decelerator pedal
- Fenders
- Horn, warning
- Hydraulics for dozer
- Lighting system (includes 2 front, 1 rear)
- Muffler with rain cap
- Open ROPS
- 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: **430 kg** 948 lb
- All-weather, enclosed pressurized cab
- Dimensions:
 - Length: **1735 mm** 5'8"
 - Width: **1755 mm** 5'9"
 - Height from floor: **1635 mm** 5'4"
- Meets ISO 3471, SAE J/ISO 3471 ROPS standards, and ISO 3449 FOPS standard.

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: 45°
- Maximum digging depth: **900 mm** 2'11"
- Maximum lift above ground: **950 mm** 3'1"

Variable giant ripper

- Additional weight (including hydraulic control unit): **3380 kg** 7,450 lb
- Beam length: **1410 mm** 4'8"
- Hydraulically-controlled parallelogram-type ripper with one shank. Digging angle infinitely adjustable. Standard digging angle: 45°
- Maximum digging depth: **1370 mm** 4'6"
- Maximum lift above ground: **945 mm** 3'1"

Shoes

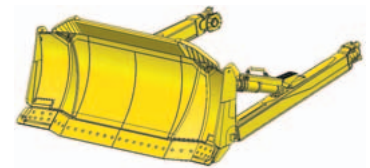
Shoes (optional)	Additional weight		Ground contact area	
560 mm 22" single-grouser shoes	-0 kg	-0 lb	35280 cm²	5,468 in ²
610 mm 24" single-grouser shoes	+200 kg	+440 lb	38430 cm²	5,957 in ²
660 mm 26" single-grouser shoes	+410 kg	+900 lb	41580 cm²	6,445 in ²
710 mm 28" single-grouser shoes	+610 kg	+1,340 lb	44730 cm²	6,933 in ²
560 mm 22" extreme service shoes	+450 kg	+990 lb	35280 cm²	5,468 in ²
610 mm 24" extreme service shoes	+690 kg	+1,520 lb	38430 cm²	5,957 in ²
660 mm 26" extreme service shoes	+920 kg	+2,030 lb	41580 cm²	6,445 in ²

Other

- Air conditioner
- Cab heater and defroster
- Engine side cover
- Large pre-cleaner
- Locks, filler caps and covers
- Rear view monitoring system
- Rigid drawbar
- Tool kit

SIGMADOZER

	Overall length with dozer	Blade capacity	Blade length x height	Maximum lift above ground	Maximum drop below ground	Maximum tilt adjustment	Additional weight
SIGMADOZER	6125 mm 20'1"	9.4 m³ 12.3 yd ³	4060 mm x 1850 mm 13'4" x 6'1"	1320 mm 4'4"	617 mm 2'	920 mm 3'	4940 kg 10,890 lb
Strengthened SIGMADOZER	6125 mm 20'1"	9.4 m³ 12.3 yd ³	4060 mm x 1850 mm 13'4" x 6'1"	1320 mm 4'4"	617 mm 2'	920 mm 3'	5360 kg 11,820 lb



SIGMADOZER

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