



STANDARD EQUIPMENT FOR BASE MACHINE

- Air cleaner, double element with dust indicator
- Alternator, 35 ampere/24V
- Batteries, 112 Ah/2 x 12V
- Blower cooling fan
- Decelerator pedal
- Engine hood
- Engine side covers, gull-wing
- Fenders
- Lighting system, (includes 2 front, 1 rear)
- Locks, filler caps and covers
- Mono-lever steering
- Muffler with curved exhaust pipe
- Radiator guard door, flat
- Radiator reserve tank
- Rear cover
- ROPS mounting brackets
- Starting motor, 7.5 kW/24V
- Seat, adjustable
- Track roller guard, end sections
- Track shoe assembly
 - Heavy-Duty sealed and lubricated track
 - 560 mm 22" single grouser shoe
- Underguards, oil pan and transmission
- Wet, multiple-disc steering clutch/blake

STEEL CAB

- Additional weight **285 kg** 630 lb
- All-weather, enclosed pressurized cab
- Dimensions:
 - Length: **1765 mm** 5'9"
 - Width: **1720 mm** 5'8"
 - Height: **1625 mm** 5'4"
 - Height from floor to ceiling: **1515 mm** 5'0"

ROPS CANOPY FOR CAB

- Additional weight **250 kg** 550 lb
- Meets ISO 3471, SAE J/ISO 3471 ROPS standards, and ISO 3449 FOPS standard.
- Roof dimensions:
 - Length: **1270 mm** 4'2"
 - Width: **1490 mm** 4'11"
 - Height from operator compartment floor: **1705 mm** 5'7"



OPTIONAL EQUIPMENT

- AR track assembly (abrasion resistant bushings)
- Backup alarm
- Electronic instrument monitor panel
- Front pull hook
- Hitch type drawbar
- High mount foot rests
- Pressure check ports for power train
- Radiator core protective grid
- Rigid type drawbar
- Underguard, heavy-duty
- 7 track roller

ROPS CANOPY (without cab)

- Additional weight **340 kg** 750 lb
- Meets ISO 3471 SAE J/ISO3471 ROPS standards, and ISO 3449 FOPS standard.
- Roof dimensions:
 - Length: **1830 mm** 6'0"
 - Width: **1600 mm** 5'3"
 - Height from operator compartment floor: **1705 mm** 5'7"

MULTI-SHANK RIPPER

- Additional weight (including hydraulic control unit): **1645 kg** 3,630 lb
- Beam length: **2170 mm** 7'1"
- Maximum digging depth: **665 mm** 2'2"
- Maximum lift above ground: **565 mm** 1'10"

SHOES

Shoe	Additional weight	Ground contact area
610 mm 24.0" single-grouser shoe	+110 kg +240 lb	32635 cm² 5,058 in ²

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KOMATSU®

D68ESS-12

HORSEPOWER

Gross: **130 kW** 175 HP @ 1850 rpm

Net: **116 kW** 155 HP @ 1850 rpm

OPERATING WEIGHT

16650 kg 36,710 lb

D 68ESS



Photo may include optional equipment.

CRAWLER DOZER

WALK-AROUND

The **Komatsu S6D114E-1A diesel engine** provides an output of **116 kW** 155 HP with excellent productivity.

Gull-wing engine side covers for easy and safer servicing.

High capacity **Straight tilt dozer, Mechanical angle dozer** combined the highest power in its class with outstanding productivity.

Left hand **joystick** controls all tractor motion. Right hand joystick controls all blade movements.

Electronic monitoring system prevents minor problems from developing into major ones.



Wet, multiple-disc brakes eliminates brake-band adjustments for maintenance-free operation.

Bolt-on segmented sprocket teeth for easy in-the-field replacement

Komatsu torqflow transmission offers single lever control of speed (3 forward and 3 reverse) and directional changes.

Forward mounted **pivot shafts** isolate final drives from blade loads.

Modular power train for increased serviceability and durability.

Photo may include optional equipment.

HORSEPOWER
Gross: 130 kW 175 HP @ 1850 rpm
Net: 116 kW 155 HP @ 1850 rpm
OPERATING WEIGHT
16650 kg 36,710 lb
BLADE CAPACITY
Straight Tilt Dozer:
3.0 m³ 3.9 yd³
Mechanical Angle Dozer:
2.6 m³ 3.4 yd³

OPERATOR'S COMPARTMENT

All steering, direction, and speed changes are made by a left-hand single joystick control. If the operator wants to move the machine forward and to the left, he simply moves the joystick forward and to the left. If he desires a gear change, he merely twists his wrist. The machine responds to the movement of the lever providing the operator with the feeling of natural control with Komatsu's joystick.

Low-noise design

For smoother riding comfort, power train components and hydraulic control valves are mounted to the frame with rubber pads to soften vibration and shut out noise. Since the D68ESS employs joysticks, the walk-through operator compartment is uncluttered for smooth entry and exit. An adjustable seat with backrest is standard equipment.

Three-stage height adjustable armrests

Three-stage height adjustable arm rests and relocated fuel control lever provide comfortable operation and increased leg space.



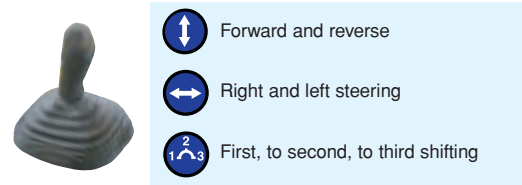
Electronic monitoring system

An electronic monitoring system prevents minor problems from developing into major ones. All meters and gauges are controlled by a microcomputer, which provides a wide indication range for an easier, more precise reading.

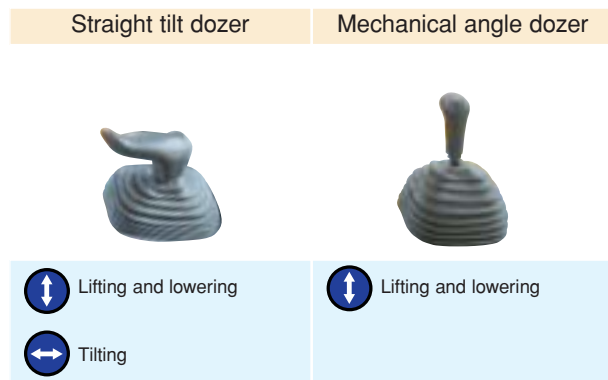


Photo may include optional equipment.

Steering functions (left hand)



Blade functions (right hand)



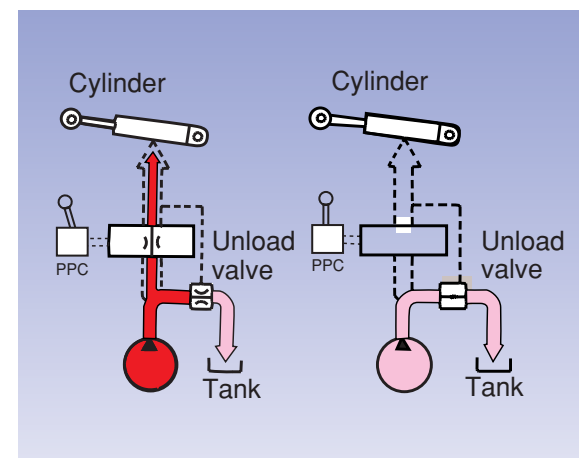
Easy-to-operate work equipment control lever

With the Closed-center Load Sensing (CLSS) hydraulic system, blade lever stroke is directly proportional with blade speed, regardless of the load and travel speed. This results in superb, fine controllability.

Benefits of CLSS

- More precise and responsive operation due to the pressure compensation valve.
- Reduced fuel consumption by discharging only the required amount of oil from the pump.
- The work equipment moves smoothly for operations such as side-cutting even when priority is given to steering.

CLSS for D68ESS-12



RELIABILITY FEATURES

Field-proven engine

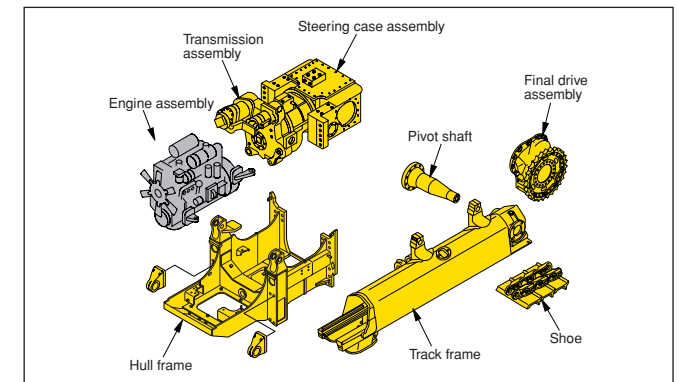
Powerful S6D114E-1A diesel engines provides a massive output of **116 kW** 155 HP. The engine power is transmitted smoothly to the final drives via a high-efficiency torque converter.

Modular designed power train units

The modular design allows easy removal and installation of any individual unit for shorter downtime.

Flat bottom frame

A flat bottom frame, the monocoque track frames and forward-mounted pivot shafts provide good maneuverability in muddy terrain by preventing mud from building up under the frame.



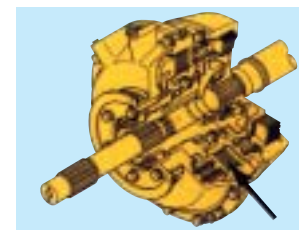
Sturdy design

Because fewer components mean greater reliability, we've designed a simple hull frame made of a thick, single plate. Track frames have a large-section construction for maximum rigidity. Even the box-section construction of the blade back beam is reinforced, all with durability in mind.

EASY MAINTENANCE

Wet, multiple-disc brakes

Eliminate brake-band adjustments for maintenance-free operation.



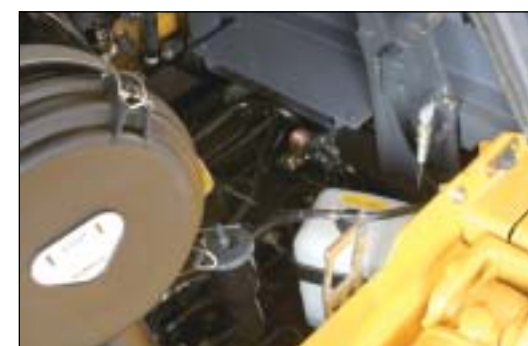
Oil pressure check ports

Oil pressure check ports for the power train are centralized on the right hand side of the operator



Coolant reservoir

A radiator coolant reservoir makes it easier to check the coolant level and eliminates frequent refilling.



Front radiator mask

Openable and closable radiator mask facilitates radiator cleaning.



Gull-wing engine side covers

A gas-spring cylinder opens the gull-wing engine side covers widely, allowing the engine and auxiliary components to be easily checked.



SPECIFICATIONS

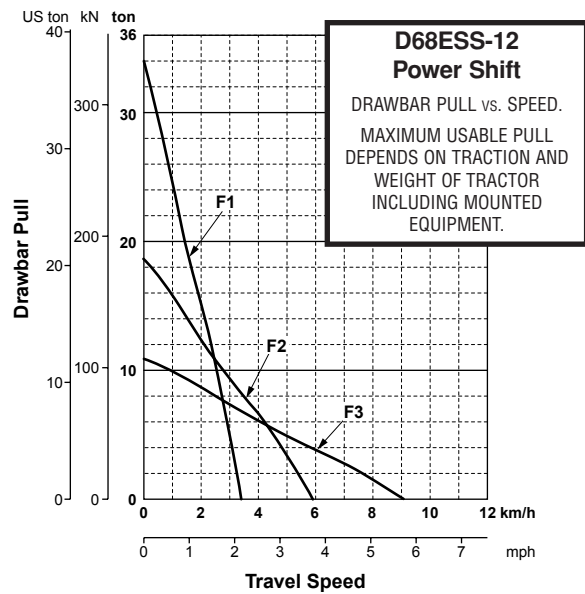
ENGINE

Model Komatsu S6D114E-1A
 Type 4-stroke cycle, water-cooled, direct injection
 Aspiration Turbocharged
 Number of cylinders 6
 Bore x stroke **114 mm x 135 mm** 4.49" x 5.31"
 Piston displacement **8.27 ltr** 5.05 in³
 Governor All-speed, Mechanical
 Horsepower
 SAE J1995 Gross **130kW** 175HP
 ISO 9249 / SAE J1349 Net **116kW** 155HP
 Rated rpm 1850rpm
 Fan drive type Mechanical
 Lubrication system
 Method Gear pump, forced lubrication
 Filter Full-flow
 Net maximum torque **824 N·m 84 kg·m** 608 lb ft @ 1300 rpm

TORQFLOW TRANSMISSION

Komatsu's 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. Joystick control of gears (3 forward and 3 reverse) and directional steering changes. Gearshift lock lever and neutral safety switch prevent machine from accidental starts.

Travel speed	Forward	Reverse
1st	0-3.4 km/h 0-2.1 mph	0-4.4 km/h 0-2.7 mph
2nd	0-5.8 km/h 0-3.6 mph	0-7.5 km/h 0-4.7 mph
3rd	0-9.0 km/h 0-5.6 mph	0-11.0 km/h 0-6.8 mph



FINAL DRIVES

Double-reduction final drives of spur gear and planetary gears to minimize transmission of shocks to power train components. Segmented sprocket are bolt-on for easy in-the-field replacement.

STEERING SYSTEM

Joystick controls for all directional movements. Pushing the joystick forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the joystick to the left to make a left turn. Tilt it to the right for a right turn.

Wet, multiple-disc steering clutches are hydraulically loaded and hydraulically released. Wet, multiple-disc pedal-controlled steering brakes are spring-actuated and hydraulically released. Steering brakes also function as service and parking brakes. Minimum turning radius* **3.2 m 10'6"**
 *As measured by track marks on ground.

UNDERCARRIAGE

Suspension Oscillation with equalizer bar and forward mounted pivot shafts
 Track roller frame Monocoque, large section, durable construction
 Track shoes Lubricated tracks. Unique dust seals for preventing entry of foreign abrasives into pin-to-bushing clearances for extended service. Track tension is easily adjusted with a grease gun.
 Number of carrier rollers (each side) 2
 Number of track rollers (each side) 6
 Number of shoes (each side) 39
 Grouser height **65 mm 2.6"**
 Shoe width **560 mm 22"**
 Track gauge **1925 mm 6'4"**
 Length of track on ground **2725 m 8'11"**
 Ground contact area **30520 cm² 4,730 in²**
 Ground pressure **53.9 kPa 0.55 kg/cm² 7.82 psi**

COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank **315 ltr** 83.3 U.S. gal
 Coolant **44 ltr** 11.6 U.S. gal
 Engine oil **19 ltr** 5.0 U.S. gal
 Damper **1.3 ltr** 0.3 U.S. gal
 Transmission, bevel gear, and steering system **44 ltr** 11.6 U.S. gal
 Final drive (each side) **28.5 ltr** 7.5 U.S. gal

OPERATING WEIGHT (APPROXIMATE)

Tractor weight:
 Including rated capacity of lubricant, coolant, full fuel tank, operator and standard equipment. **14640 kg 32,280 lb**

Operating weight:
 Including straight tilt dozer, cab, operator, standard equipment, and rated capacity of lubricants, coolant, and full fuel tank
 **16650 kg 36,710 lb**

HYDRAULIC SYSTEM

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

Hydraulic control units:
 All spool control valves externally mounted beside the hydraulic tank.
 Type of pump: Gear pump
 Capacity (discharge flow at rated engine rpm): **134 ltr/min** 35.4 U.S. gal/min
 Relief valve setting **20.6 MPa** 210 kg/cm² 2,990 psi

Hydraulic cylinders Double-acting, piston

	Number of cylinders	Bore
Blade lift	2	110 mm 4.33"
Blade tilt	1	140 mm 5.51"

Control valves:
 Spool control valve for mechanical angle power tilt dozer.
 Positions: Blade lift Raise, hold, lower, and float
 Blade tilt Right, hold, and left
 Additional control valve for multi-shank ripper
 Positions: Ripper lift Raise, hold, and lower

Hydraulic oil capacity (refilling):
 Straight tilt dozer **48.0 ltr 12.7 U.S. gal**

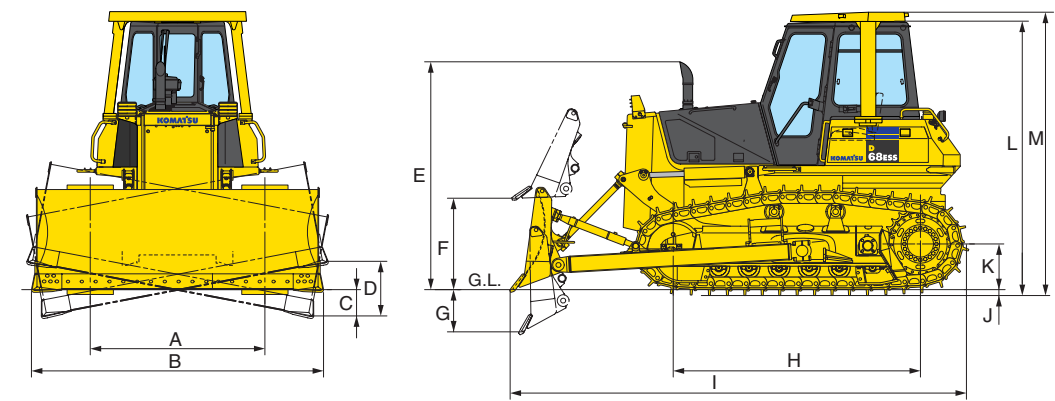
DOZER EQUIPMENT

Use of high tensile strength steel in moldboard for strengthened blade construction.

	Overall length with dozer	Blade capacity*	Blade length x height	Maximum lift above ground	Maximum drop below ground	Maximum tilt adjustment	Angling angle	Additional weight
Straight Tilt Dozer	5053 mm 16'6"	3.0 m³ 3.9 yd ³	3200 mm x 1100 mm 10'6" x 3'7"	1005 mm 3'4"	460 mm 1'6"	600 mm 2'	-	1770 kg 3,900 lb
Mechanical Angle Dozer	5413 mm 17'9"	2.6 m³ 3.4 yd ³	3980 mm x 950 mm 13'1" x 3'1"	1130 mm 3'8"	540 mm 1'9"	200 mm 8"	25 degree	2710 kg 5,980 lb

Remarks: * Blade capacities are based on the SAE recommendation practice J1265.

DIMENSIONS



Ground clearance **.390 mm 1'3"**

Dimension with straight tilt dozer.

A	1925 mm 6'4"	H	2725 mm 8'11"
B	3200 mm 10'6"	I	5070 mm 16'8"
C	290 mm 11"	J	65 mm 2.6"
D	600 mm 2'0"	K	505 mm 1'8"
E	2770 mm 9'1"	L	3025 mm 9'10"
F	1005 mm 3'4"	M	3140 mm 10'4"
G	460 mm 1'6"		