

KOMATSU®

NET HORSEPOWER

29.5 kW **40 HP** @ 2450 rpm

OPERATING WEIGHT

D21A-8: 3940 kg **8,690 lb**

D21P-8: 4240 kg **9,350 lb**

D21A-8 D21P-8

D
21

CRAWLER DOZER



Photos may include optional equipment.

WALK-AROUND

Responsive Operation

A single joystick on the left controls all speed and directional changes including:

- 1st to 2nd
- Forward and reverse
- Right and left steering

A single joystick on the right controls all blade functions including:

- Lifting/Digging
- Angling
- Tilting

This left and right joystick system offers precise control and response for shorter cycle times.



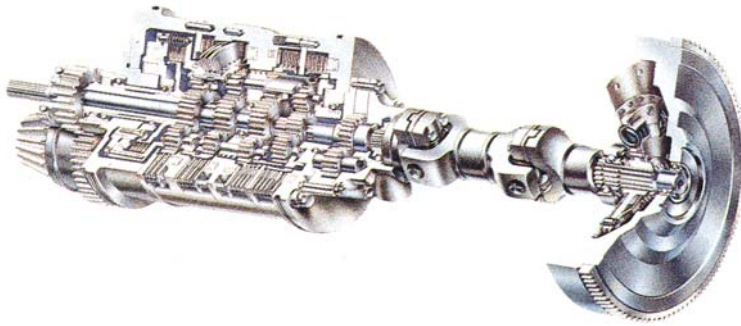
Easy-to-see instrument panel

Ergonomically arranged meters and lamps make it easier to check the machine condition. In addition, fuel meter and dust indicator lamp installed on the panel for easy servicing.

Walk-through operator's compartment

The operator's compartment has a complete walk-through design, making for easy getting on and off.



**FLYWHEEL HORSEPOWER**29.5 kW **40 HP** @ 2450 rpm**OPERATING WEIGHT**D21A-8: 3940 kg **8,690 lb**D21P-8: 4240 kg **9,350 lb****BLADE CAPACITY**D21A-8: 0.57m³ **0.75 yd³**D21P-8: 0.68m³ **0.89 yd³****Efficient HYDROSHIFT transmission**

The D21-8 is equipped with Komatsu's unique HYDROSHIFT transmission, assuring smooth gear shifts, powerful traction and low fuel consumption.

It consists of a damper and planetary gear packs. The HYDROSHIFT transmission makes two previously incompatible factors compatible: It efficiently converts engine power to traction with minimal power loss through a damper and it offers smooth, easy shifting through a powershift transmission.

Unlike ordinary powershift transmissions with torque converters, traction does not decrease, even when the engine is running at partial throttle.

Long track

The long track and well-positioned center of gravity give good machine balance and make grading operations and operations on slopes easy. In addition, the machine can travel over soft ground easily, and it can escape from muddy areas without problem.

Single-lever steering/speed/directional change

All the directional changes are carried out with a single lever, ensuring smooth turns and superior productivity.

Fuel-efficient 4D94LE-2 engine

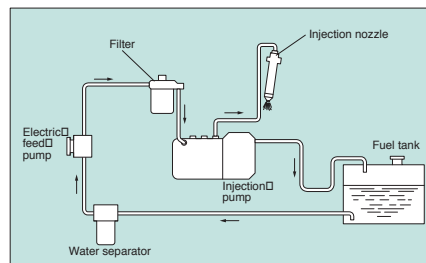
The Komatsu 4D94LE-2 features a direct-injection fuel system. Intake air is swirled into the combustion chamber where it is mixed with injected, atomized fuel, providing optimum combustion. This fuel system not only contributes to greater power and fuel savings, but also ensures reduced noise and cleaner exhaust. A cushion mounted engine reduces noise and vibration.

Simplified maintenance

Spin-on type filters are used throughout the machine, making it easy to replace filter elements. Air cleaner with automatic evacuator extends cleaning interval of the air cleaner.

Automatic de-airation system with electric feed pump

Ejects air in the fuel system, simply turning on the ignition key when restarting the engine.



Photos may include optional equipment.

**Lifetime lubricated
idlers, track rollers and links**

SPECIFICATIONS



ENGINE

Model	Komatsu 4D94LE-2
Type	Water-cooled, diesel
Aspiration	Naturally aspirated
Number of cylinders	4
Bore	94 mm 3.70"
Stroke	110 mm 4.33"
Piston displacement	3.053 ltr 186 in³
Gross horsepower	32.2 kW 43.1 HP @ 2450 rpm
Net flywheel horsepower*	

SAE J1349	29.5 kW 40 HP @ 2450 rpm
DIN 6270	29.5 kW 40 PS @ 2450 rpm
Net maximum torque	152 Nm 15.5 kg/m 112 ft.lb @ 1300 rpm
Governor	All-speed, mechanical
Filter	Full-flow

Direct injection fuel system. All-speed mechanical governor. Pump driven forced lubrication. Dry-type air cleaner with automatic dust evacuator for longer element service and dust indicator lamp for simplified maintenance. 2.3 kW/12 V electrical starter motor. 40 A/12 V alternator. 80 Ah/1 x 12 V battery.

* Net flywheel horsepower output for standard engine (SAE J1349) including air cleaner, alternator (not charging), water pump, lubricating oil pump, fuel pump, muffler, and fan.



KOMATSU HYDROSHIFT TRANSMISSION

The unique Komatsu HYDROSHIFT transmission with planetary gears is hydraulically-controlled and force-lubricated. Efficient power flow and simplified direction and speed changes (2 forward and 2 reverse).

Travel Speed	Forward	Rated Drawbar Pull	Reverse
1st	2.6 km/h 1.6 mph	3410 kg 7,520 lb /33.4 kN	3.3 km/h 2.1 mph
2nd	4.4 km/h 2.7 mph	1890 kg 4,170 lb /18.5 kN	5.6 km/h 3.5 mph

Maximum drawbar pull:

D21A-8	4520 kg	9,970 lb /44.3kN
D21P-8	4480 kg	9,880 lb /43.9 kN



STEERING SYSTEM

Single steering lever controls all direction movement. Dry, multiple-disc steering clutches are PPC controlled and interconnected with dry, contracting-band, steering brakes to allow easy, light-touch steering/braking actions. A PPC valve built into the steering circuit facilitates smooth shockless steering control. Inching pedal assures smooth, easy starting and stopping, precise inching approaches to obstacles and impact digging.

Minimum turning radius:

D21A-8.....	2.0 m 6'7"
D21P-8.....	2.3 m 7'7"

(As measured by track marks on the ground)



FINAL DRIVE

Spur gear, single-reduction final drives.



UNDERCARRIAGE

Suspension. Rigid type
Track roller frame Solid, high-tensile-strength steel construction
Rollers and idlers. Lubricated idlers, track and carrier
rollers are sealed with floating seals
Track shoes Single-grouser shoes (D21A-8)
Single-grouser shoes (D21P-8)
Unique dust seals prevent entry of dust into pin-to-bushing clearances for
extended service. Track tension is easily adjusted with a grease gun.

	D21A-8	D21P-8
Number of carrier rollers (each side)	1	1
Number of track rollers (each side)	5	5
Number of shoes (each side)	37	37
Grouser height	39 mm 1.5"	39 mm 1.5"
Shoe width (standard)	300 mm 11.8"	510 mm 20"
Ground contact area	10110 cm ² 1,570 in²	17190 cm ² 2,664 in²
Ground pressure (tractor)	32.9 kPa 0.34 kgf/cm ² 4.77 psi	20.6 kPa 0.21 kgf/cm ² 3.0 psi



COOLANT AND LUBRICANT CAPACITY (REFILL)

Coolant	10 ltr	2.6 U.S. gal
Fuel tank	60 ltr	15.9 U.S. gal
Engine	6.6 ltr	1.7 U.S. gal
Damper case	0.7 ltr	0.2 U.S. gal
Transmission	11 ltr	2.9 U.S. gal
Bevel gear case	13 ltr	3.4 U.S. gal
Final drive each side (D21A-8)	6 ltr	1.6 U.S. gal
Final drive each side (D21P-8)	8 ltr	2.1 U.S. gal
Hydraulic tank	21 ltr	5.5 U.S. gal



OPERATING WEIGHT (APPROXIMATE)

Tractor weight:

Including rated capacity of lubricant, coolant, full fuel tank, operator, and standard equipment.

D21A-8	3390 kg	7,475 lb
D21P-8	3360 kg	8,070 lb

Operating weight:

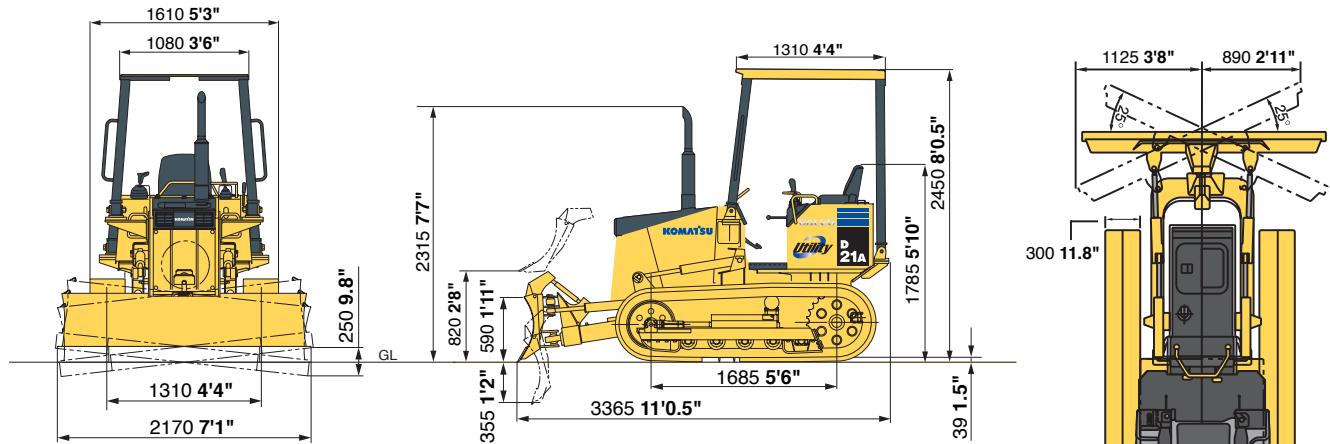
Including power angle tilt dozer, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

D21A-8	3940 kg	8,690 lb
D21P-8	4240 kg	9,350 lb

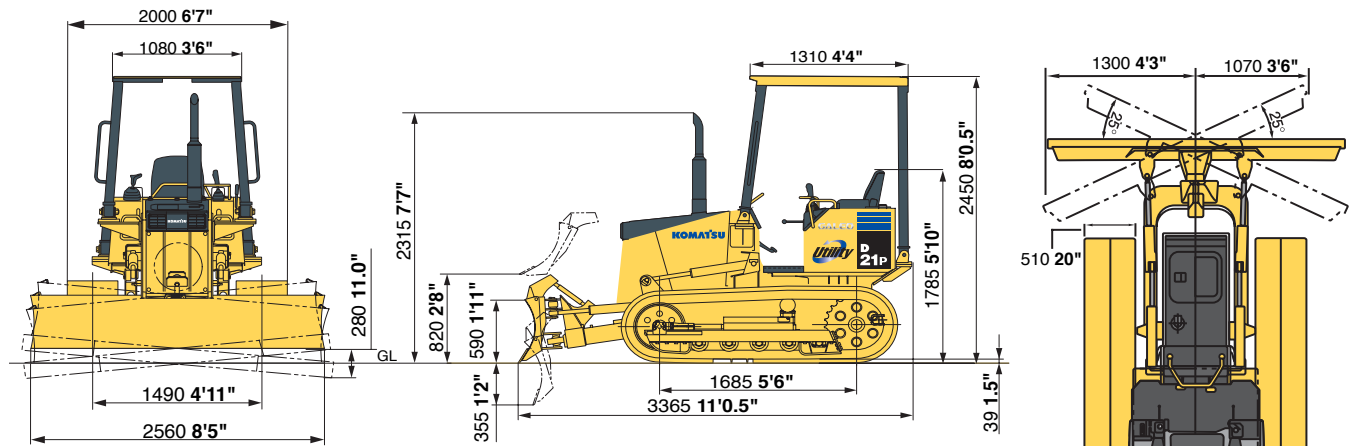


DIMENSIONS

D21A-8



D21P-8



HYDRAULIC SYSTEM

Hydraulic control unit: Gear-type hydraulic pump mounted on rear of engine with capacity (discharge flow) of 59 ltr. **15.6 U.S. gal/min.** at rated engine RPM.

Relief valve setting 15.2 MPa/155kg/cm² **2,200 psi**

Hydraulic cylinders: double-acting, piston type

Control valves:

Three control valves for power angle tilt dozer.

Positions:

Blade lift Raise, hold, lower, and float
 Blade tilt Right, hold, and left
 Blade angle Right, hold, and left

	Number of Cylinders	Bore
Blade lift	2	70 mm 2.76"
Blade tilt	1	80 mm 3.15"
Blade angle	2	70 mm 2.76"



DOZER EQUIPMENT (POWER ANGLE TILT DOZER)

Use of high-tensile-strength steel in moldboard for extended service. Hydraulic hoses for blade angling and tilting are covered with steel plates and protected from damage.

	Overall Length With dozer	Blade capacity		Blade length x height	Max. lift above ground	Max. drop below ground	Max. tilt adjustment	Additional weight		Additional ground pressure
		SAE	*LH ²					Blade	Hydraulic control unit	
D21A-8	3365 mm	0.57 m ³	0.76 m ³	2170 mm x 590 mm	820 mm	355 mm	250 mm	480 kg	70 kg	5.3 kPa
	11'0.5"	0.75 yd ³	0.99 yd ³	7'1" x 1'11"	2'8"	1'2"	9.8"	1,060 lb	150 lb	0.054 kg/cm ² 0.77 psi
D21P-8	3365 mm	0.68 m ³	0.89 m ³	2560 mm x 590 mm	820 mm	355 mm	280 mm	510 kg	70 kg	3.3 kPa
	11'0.5"	0.89 yd ³	1.16 yd ³	8'5" x 1'11"	2'8"	1'2"	11"	1,120 lb	150 lb	0.03 kg/cm ² 0.48 psi

* (L: Blade length) x (H: Blade height)²



STANDARD EQUIPMENT

- Alternator, 12 V, 40 A
- Back-up alarm
- Batteries, 12 V, 64 Ah (5 hrs rate capacity)
- Blower fan
- Crankcase guard
- Dry-type air cleaner with automatic dust evacuator and dust indicator lamp
- Dry-type, interconnected steering clutches and brakes
- Electric starting motor, 12 V, 2.3 kW
- End track guiding guards
- Hydraulic track adjusters
- Hitch
- Inching pedal
- Lighting system (including 2 front and 1 rear lights)
- Lubricated track links
- Power angle tilt dozer, inside arms
- Muffler
- ROPS/FOPS Level 2 canopy*
- Seat belt, 76 mm **3"**
- Suspension seat
- Shoes, 300 mm **11.8"** single-grouser(D21A-8)
- Shoes, 510 mm **20"** single-grouser (D21P-8)
- Single-lever control for blade
- Single-lever steering
- Transmission, F2- R2
- Vandalism protection locks and filler cap locks
- 5-roller track frames



OPTIONAL EQUIPMENT

- 3-point hitch with swing drawbar
- Air conditioner for cab
- Decelerator pedal
- Hydraulics for three point hitch
- Perforated radiator mask
- Swing drawbar
- Track-roller guards, full length

*ROPS canopy meets all OSHA/MSHA standards and regulations criteria.

*ROPS canopy must be ordered for all machines.

Optional shoes

Model	Type of shoe	*Additional weight	Ground contact area	*Additional ground pressure (tractor)
D21A-8	300 mm 11.8" triple-grouser shoe with hole	+20 kg +44 lb	10110 cm ² 1,570 in²	+0.002 kg/cm ² +0.03 PSI +0.2 kPa
	300 mm 11.8" rubber shoe	-75 kg -165 lb	10110 cm ² 1,570 in²	-0.007 kg/cm ² -0.1 PSI -0.7 kPa
	340 mm 13.4" single-grouser shoe	+30 kg +66 lb	11460 cm ² 1,780 in²	-0.04 kg/cm ² -0.57 PSI -3.9 kPa
D21P-8	510 mm 20" circular arc shoe	+80 kg +176 lb	17190 cm ² 2,664 in²	+0.005 kg/cm ² +0.07 PSI +0.5 kPa
	500 mm 20" rubber shoe	+50 kg +110 lb	16850 cm ² 2,612 in²	+0.008 kg/cm ² +0.11 PSI +0.8 kPa

*Including Dozer equipment

KUSS160-02

©2007 Komatsu America Corp. Printed in USA

K05(5M) C

05/07 (EV-1)

KOMATSU®



www.KomatsuAmerica.com

Komatsu America Corp. is an authorized licensee of Komatsu Ltd. Materials and specifications are subject to change without notice
KOMATSU® is a registered trademark of Komatsu Ltd., Japan