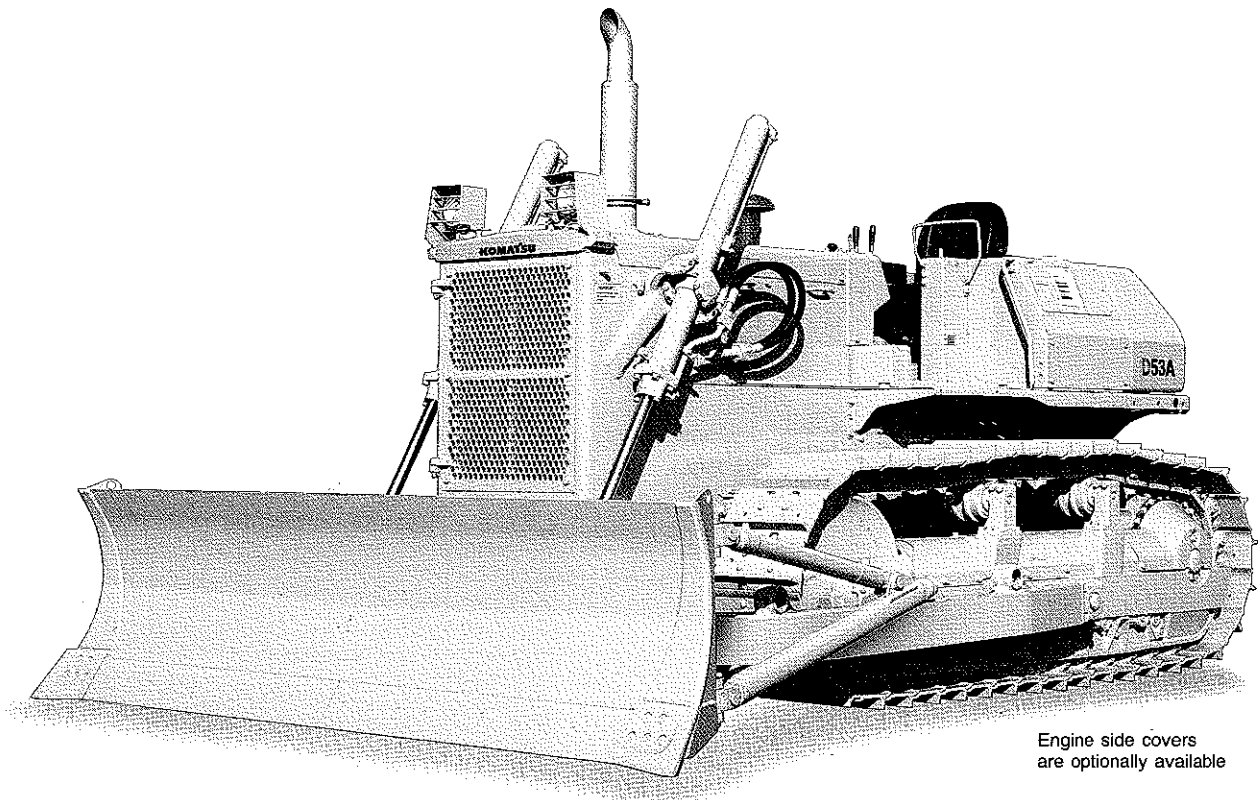


# BULLDOZER

# D53A-17

FLYWHEEL HORSEPOWER: **124 HP** 92.5 kW 1900 RPM  
OPERATING WEIGHT (TRACTOR): **10770 kg** 23,740 lb  
(ANGLED ODOZER): **12800 kg** 28,220 lb



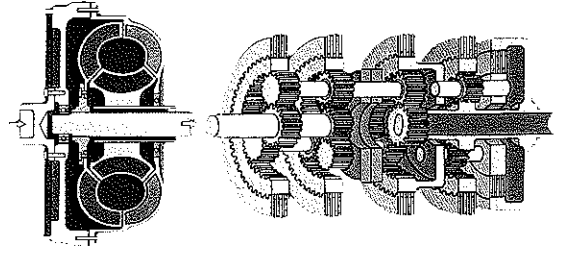
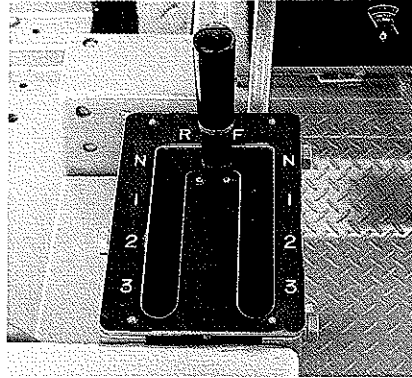
Engine side covers  
are optionally available

- **Extended track length** attains the D53A low ground pressure, high stability and powerful traction for precise leveling operation and high gradeability.
- **Komatsu 6D125E diesel engine** delivers a lugging 124 HP (92.5 kW). Direct-injection system for fuel savings and cleaner exhaust.
- **TORQFLOW transmission** not only assures smooth and responsive power shifting, but also makes it possible to take instant speed and directional changes by a single lever.
- **Wet-type steering clutches and brakes** for extended service life. They are interconnected, enabling to perform quick lever-controlled steering actions.
- **Floating seals** in idlers and rollers keep dirt out and lubricant in for durable operation.
- **Lubricated track links** extend track life.
- **Floating type operator's compartment** for low operating noise and vibration.
- **Simple maintenance** is promoted through adoption of spin-on type fuel and full-flow filters, air cleaner with automatic dust evacuator and dust indicator, and others.
- **Comfortable operator's seat** is adjustable in fore/aft for best matched operator's stance.

# KOMATSU

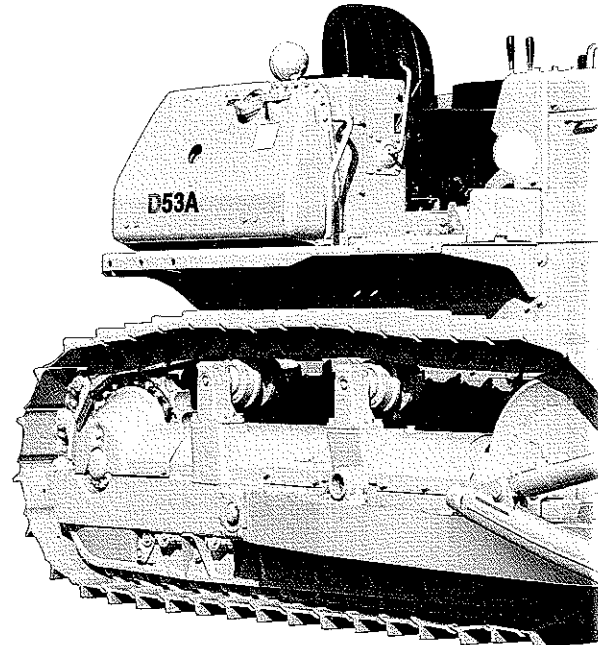
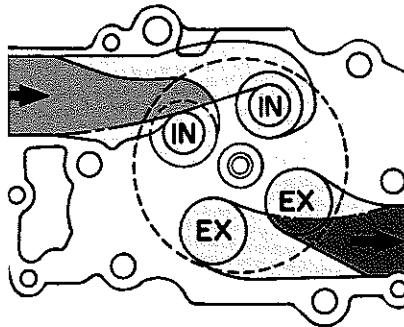
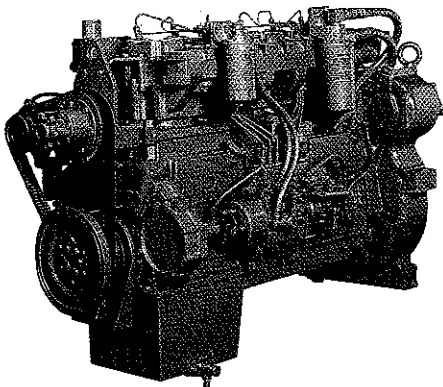
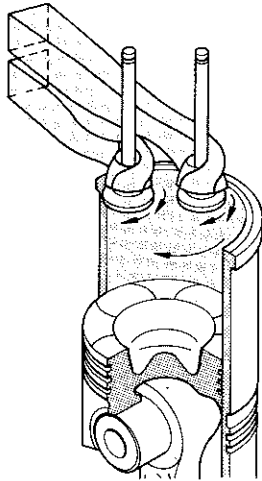
## Light-touch control systems increase operator comfort and productivity.

The D53A is equipped with Komatsu's TORQFLOW transmission, assuring smooth gear shifts and powerful traction. It consists of a 3-element, single-stage, single-phase torque converter and a hydraulically-actuated planetary-gear transmission with multiple-disc clutch packs. This unique system assures light-touch, ultra-smooth gear-shifting through the 3 forward and 3 reverse gears to decrease operating fatigue. Forward/reverse directional changes are also made instantly.



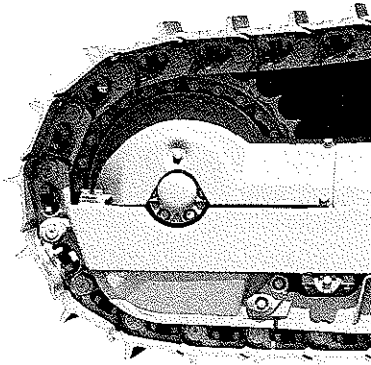
## The Komatsu-built power train maximizes production while assuring excellent fuel economy.

The Komatsu 6D125E diesel engine delivers 124 HP at 1900 RPM. Two intake and two exhaust valves are provided on each cylinder. This four-valve design, plus a high-pressure, direct-injection fuel system and 3-piston rings assure reduced frictional loss and contribute to reduced fuel consumption. In addition, the large piston displacement ensures that the D53A can doze in the toughest operating conditions.



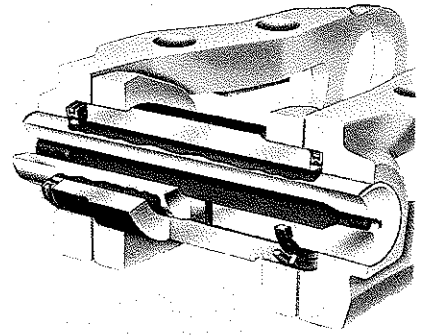
## Designed for maximum durability, reliability and maintainability.

Since each component is produced under the world's strictest quality control, reliability and durability are assured. Maintainability is also a factor contributing to machine efficiency and economy, and the D53A offers you more.



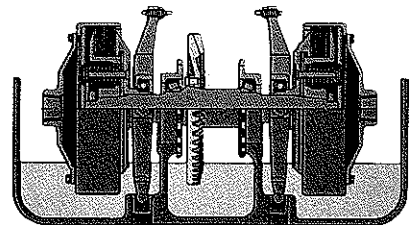
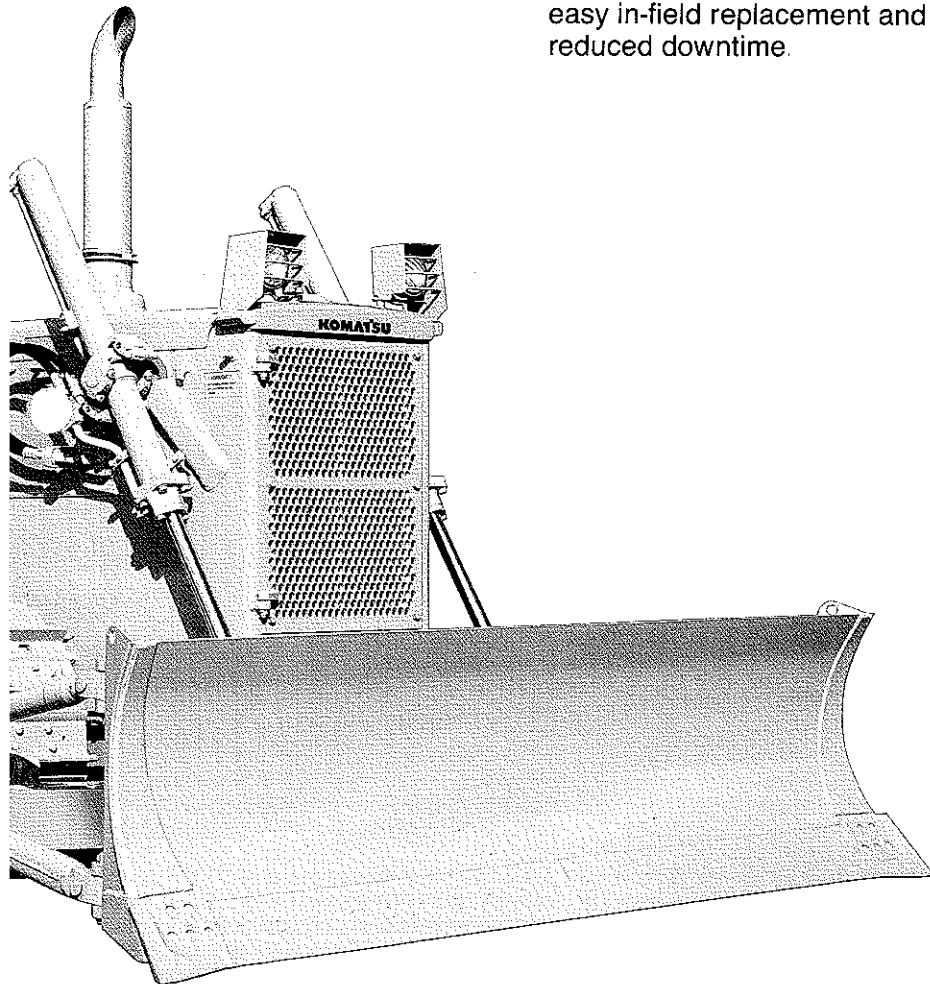
### Segmented sprockets:

Sprockets are segmented into several pieces and installed on the sprocket hub. Therefore, a worn segment can be replaced without removing the track frame. This results in quick and easy in-field replacement and reduced downtime.



### Lubricated track links:

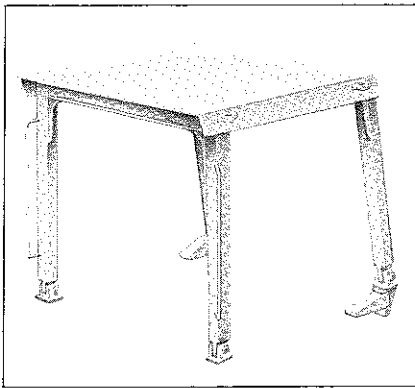
Since the clearance between the link pin and bushing is lubricated, wear and pitch elongation are minimized for extended service life. With lubricated track, power loss due to friction of pin and bushing is reduced, increasing operating comfort and performance. Split master links are also provided to facilitate easy track assembly and disassembly.



### Wet type steering clutches and brakes:

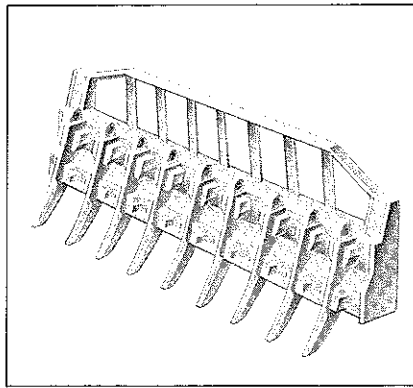
The D53A has interconnected, lever-operated, wet steering clutches and brakes for long service life and reliability. The self-adjusting steering clutches are multiple-disc type with a hydraulic booster, insuring light-touch lever movements, while the brakes are the contracting-band type that facilitate easy lining replacement.

# Attachments



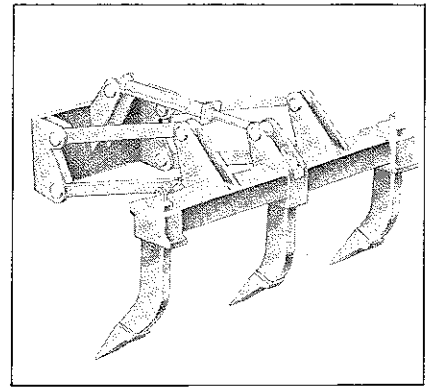
### ROPS CANOPY

Meets ISO 3471, SAE J1040a and SAE J395a ROPS standards  
 Additional weight 785 kg (1 730 lb)  
 • ROPS cab  
     Additional weight 1050 kg (2 320 lb)  
 • Head guard  
     Additional weight 270 kg (600 lb)  
 • CANOPY  
     Additional weight 90 kg (200 lb)



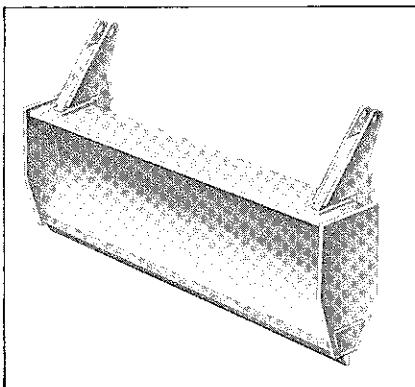
### ANGLE-RAKEDOZER

Overall length (with dozer equipment) 5025 mm (16'6")  
 Additional weight (including hydraulic control unit and counterweight) 3020 kg (6 660 lb)  
 Dozer length x height 3460 mm x 1595 mm (11'4" x 5'3")  
 No. of rakes 9  
 Max. lift above ground 850 mm (2'9")  
 Max. drop below ground 775 mm (2'7")



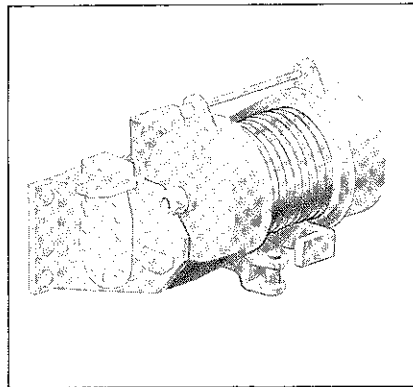
### MULTISHANK RIPPER

Rigid, hydraulically controlled parallelogram-type ripper with 3 shanks.  
 Digging angle adjustable in 2 stages  
 Digging depth adjustable in 3 stages  
 Additional weight (including hydraulic control unit and 3 shanks) 1700 kg (3 750 lb)  
 Beam length 1755 mm (5'9")  
 Max. lift above ground 525 mm (1'9")  
 Max. digging depth 565 mm (1'10")



### TRIMMINGDOZER

With hydraulic cylinders that swing back and forth. Useful for scraping coal and ore in ship holds  
 Additional weight 2170 kg (4 780 lb)  
 Blade dimensions:  
 Length x height 2890 mm x 930 mm (9'6" x 3'1")  
 Max. lift above ground 1690 mm (5'7")  
 Max. drop below ground 730 mm (2'5")  
 Additional ground pressure 0.10 kg/cm<sup>2</sup> (1.42 PSI/9.8 kPa)



### TOWING WINCH

Type Single-drum reversible, gear-driven  
 Additional weight 1030 kg (2 270 lb)  
 Cable dia. x length 20 mm x 50 m (0.79" x 164')  
 Line pull:  
     Bare drum 18800 kg (41 450 lb/184 kN)  
     Full drum 9700 kg (21 380 lb/95 kN)

### OPTIONAL SHOES:

	Additional weight kg (lb)	Ground contact area cm <sup>2</sup> (sq. in.)	Additional ground pressure kg/cm <sup>2</sup> (PSI/kPa)
400 mm (15.7") single-grouser shoe	-122 (-269)	18920 (2 933)	+0.07 (1 00/6.9)
510 mm (20.1") single-grouser shoe	+100 (+220)	24120 (3 739)	-0.04 (0.57/3.9)
460 mm (18.1") single-grouser shoe with holes	-60 (-132)	21760 (3 373)	0
460 mm (18.1") triple-grouser shoe with holes	+29 (+64)	21760 (3 373)	0

This specification sheet may contain attachment and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

**KOMATSU**

# D53A SPECIFICATIONS



## ENGINE

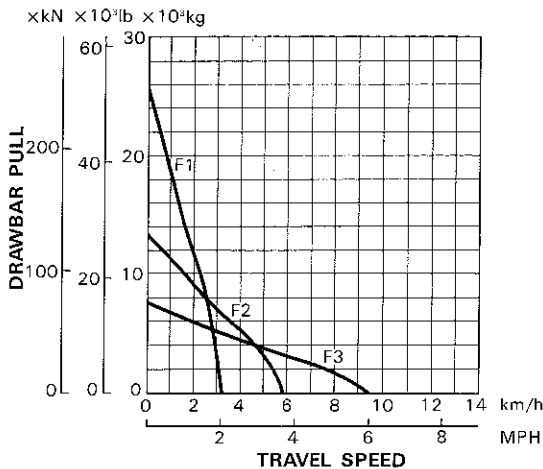
Komatsu 6D125E, 4-cycle, water-cooled diesel engine. 6 cylinders of 125 mm (4.92") bore x 150 mm (5.91") stroke and 11.04 ltr. (674 cu.in) piston displacement. Flywheel horsepower: 124 HP (92.5 kW) at 1900 RPM (SAE J1349) Max. torque . . . 62.5 kg-m (452 ft-lb/613 N-m) at 1300 RPM Direct-injection fuel system with mechanical all-speed governor. Gear-pump-driven force-lubrication with full-flow filter, which is a spin-on type for easy element replacement. Dry-type air cleaner with automatic dust evacuator for longer element service. Air cleaner clogging is known instantly with the dust indicator provided on the instrument panel. Corrosion resistor prevents rust and scale from being generated in the coolant. 24-volt electric starting system with 35A alternator and 7.5 kW starter motor. Electrical intake-air heater facilitates engine starts in cold temperatures.



## TORQFLOW TRANSMISSION

Komatsu's unique TORQFLOW transmission consists of a water-cooled 3-element, single-stage, single-phase torque converter and a planetary-gear, multiple-disc clutch transmission, both of which are hydraulically actuated and force-lubricated for optimum heat dissipation. Allows single-lever control of all speeds (3 forward and 3 reverse) and directional changes. Gearshift lock lever and neutral safety switch prevent the machine from accidental starts.

Travel speeds	km/h (MPH)	
Gear	Forward	Reverse
1st	0-3.2 (2.0)	0-3.9 (2.4)
2nd	0-5.9 (3.7)	0-7.1 (4.4)
3rd	0-9.8 (6.1)	0-11.9 (7.4)



Usable pull will depend upon traction and weight of equipped tractor.



## STEERING

Wet, multiple-disc type steering clutches are hand-operated, spring applied and hydraulically boosted for reduced control efforts. Self-adjusting type for minimized maintenance. Wet, contracting-band type steering brakes are foot-operated and are hydraulically boosted for reduced control effort. Steering clutches and brakes are interconnected with linkages, allowing the operator to make responsive steering actions with the steering levers. Even when steering resistance is large, combined actuation of a lever and a brake pedal make steering easy.

Min. turning radius, tractor . . . . . 2.9 m (9'6")



## FINAL DRIVE

Spur gear, double-reduction final drive minimizes harmful ground shocks transmitted to the internal power-train components. Segmented sprocket rims are bolt-on type for easy on-field replacement.



## UNDERCARRIAGE

**Suspension** . . . . . Oscillating type equalizer bar  
**Track roller frame** . . . . . Box-section, high-tensile-strength steel construction for maximum rigidity

### Rollers and idlers

Lubricated idlers, track and carrier rollers are sealed with floating seals. Segmented type track roller guards on each side protect track roller from damage caused by external obstacles.

Number of carrier rollers, each side . . . . . 2  
 Number of track rollers, each side . . . . . 6

### Track shoes

Assembled single-grouser shoes. Lubricated track links. Dust seals prevent entry of foreign abrasives from entering into pin-to-bushing clearance for extended track service life. Track tension is easily adjusted with grease gun.

Number of shoes, each side . . . . . 41  
 Grouser height . . . . . 50 mm (2.0")  
 Shoe width, standard . . . . . 460 mm (18.1")  
 Ground contact area, standard shoe . . . . . 21760 cm<sup>2</sup> (3,372 sq. in.)  
 Ground pressure, standard shoe . . . . . 0.49 kg/cm<sup>2</sup> (7.00 PSI/48.1 kPa)



## COOLANT & LUBRICANT CAPACITY (refilling)

	Liters	U.S. gallons
Coolant . . . . .	52	13.7
Fuel tank . . . . .	250	66.1
Engine . . . . .	26	6.9
Damper case . . . . .	1.3	0.3
Torque converter, transmission . . . . .	34	9.0
Bevel gear case, steering case . . . . .	58	15.3
Final drive, each side . . . . .	13	3.4
Hydraulic oil . . . . .	65	17.2



## OPERATING WEIGHT (approximate)

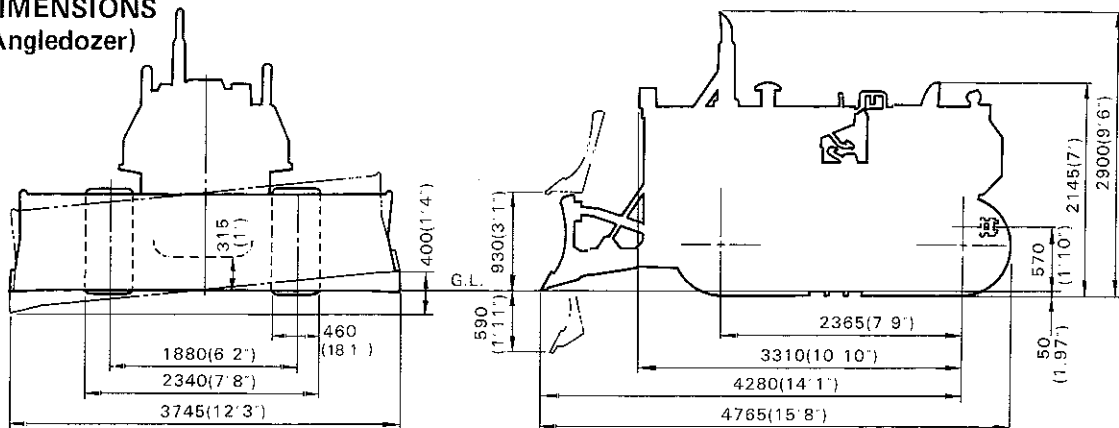
Tractor weight, including rated capacity of lubricant, coolant, full fuel tank, optional hitch and standard equipment . . . . . 10770 kg (23,740 lb)

## STANDARD EQUIPMENT

TORQFLOW transmission. 24 V, 35 A alternator. 24 V, 7.5 kW starter motor. Blower fan. Wet-type steering clutches and brakes. In-line radiator. Dry-type air cleaner with automatic dust evacuator and dust indicator. Hydraulic track adjusters. 460 mm (18.1") single-grouser shoe, lubricated tracks. 24 V (12 V x 2)/150 Ah batteries, 6-roller track frames. Segmented track roller guards. Lighting system (incl. two front and one rear lights). Segmented sprockets. Lower guards (3 pieces). Oil-suspension seat.



## DIMENSIONS (Angledozer)



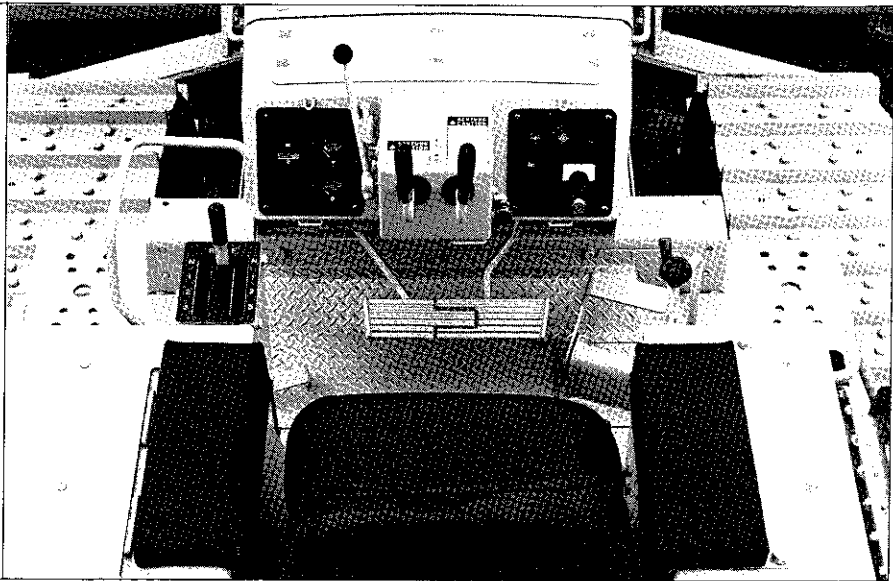
Ground clearance . . . . . 315 mm (1')

Unit: mm (ft in)



## CONTROLS

Comfortable operation is assured by human-engineered arrangement of control levers, pedals, instruments and operator seat. Walk-through operator compartment makes getting on/off easy. Employment of suspended type pedals eliminates gap to the floor, reducing noise leakage. Color-coded meters and gauges with universal symbols assure quick reading. Dust indicator on the instrument panel allows the operator to check the air-cleaner clogging conditions without leaving his seat. Padded operator seat is fore/aft adjustable.



## HYDRAULIC SYSTEM

### Hydraulic control unit

All spool-type control valves housed into the hydraulic tank. Gear-type pumps with output 181 ltr (47.8 U.S. gal)/min. at rated RPM.

Relief valve setting . . . . . 140 kg/cm<sup>2</sup> (2000 PSI/13.7 MPa)

Hydraulic tank capacity . . . . . 87 ltr. (23.0 U.S. gal)

### Control valves

- One control valve for angledozer or straightdozer  
Positions: Lift cylinders . . . . . Raise, hold, lower and float
- Two control valves for straight-tilt dozer.

Positions: Lift cylinders . . . . . Raise, hold, lower and float  
Tilt cylinder . . . . . Right, hold and left

- Additional control valve for ripper

Positions: Ripper cylinder . . . . . Raise, hold and lower

Hydraulic cylinders . . . . . Double-acting piston type

	Number of cylinders	Bore mm (in.)
Lift cylinders	2	90 (3.54)
Tilt cylinder	1	160 (6.30)
Ripper cylinder	1	160 (6.30)



## DOZER EQUIPMENT

Four types of dozer equipment are available to meet specific job requirements. Use of high-tensile-strength steel in moldboard for strengthened blade construction. Hydraulic pipings for blade tilting are housed inside the dozer frame and protected from damage.

	Overall length with dozer	Blade length x height	Max. lift above ground	Max. drop below ground	Max. tilt adjustment	Additional weight		Additional ground pressure
						Dozer equipment	Hydraulic control unit	
Angledozer	4765 mm (15'8")	3745 mm x 875 mm (12'3" x 2'10")	930 mm (3'1")	590 mm (1'11")	400 mm (1'4")	1680 kg (3,700 lb)	360 kg (790 lb)	0.1 kg/cm <sup>2</sup> (1.4 PSI/9.8 kPa)
Strengthened angledozer	4770 mm (15'8")	3745 mm x 875 mm (12'3" x 2'10")	930 mm (3'1")	590 mm (1'11")	400 mm (1'4")	1740 kg (3,840 lb)	360 kg (790 lb)	0.1 kg/cm <sup>2</sup> (1.4 PSI/9.8 kPa)
Straightdozer	4640 mm (15'3")	3185 mm x 955 mm (10'5" x 3'2")	935 mm (3'1")	550 mm (1'10")	400 mm (1'4")	1530 kg (3,370 lb)	360 kg (790 lb)	0.1 kg/cm <sup>2</sup> (1.4 PSI/9.8 kPa)
Straight-tilt dozer	4640 mm (15'3")	3185 mm x 970 mm (10'5" x 3'2")	935 mm (3'1")	550 mm (1'10")	680 mm (2'3")	1580 kg (3,480 lb)	370 kg (820 lb)	0.1 kg/cm <sup>2</sup> (1.4 PSI/9.8 kPa)