



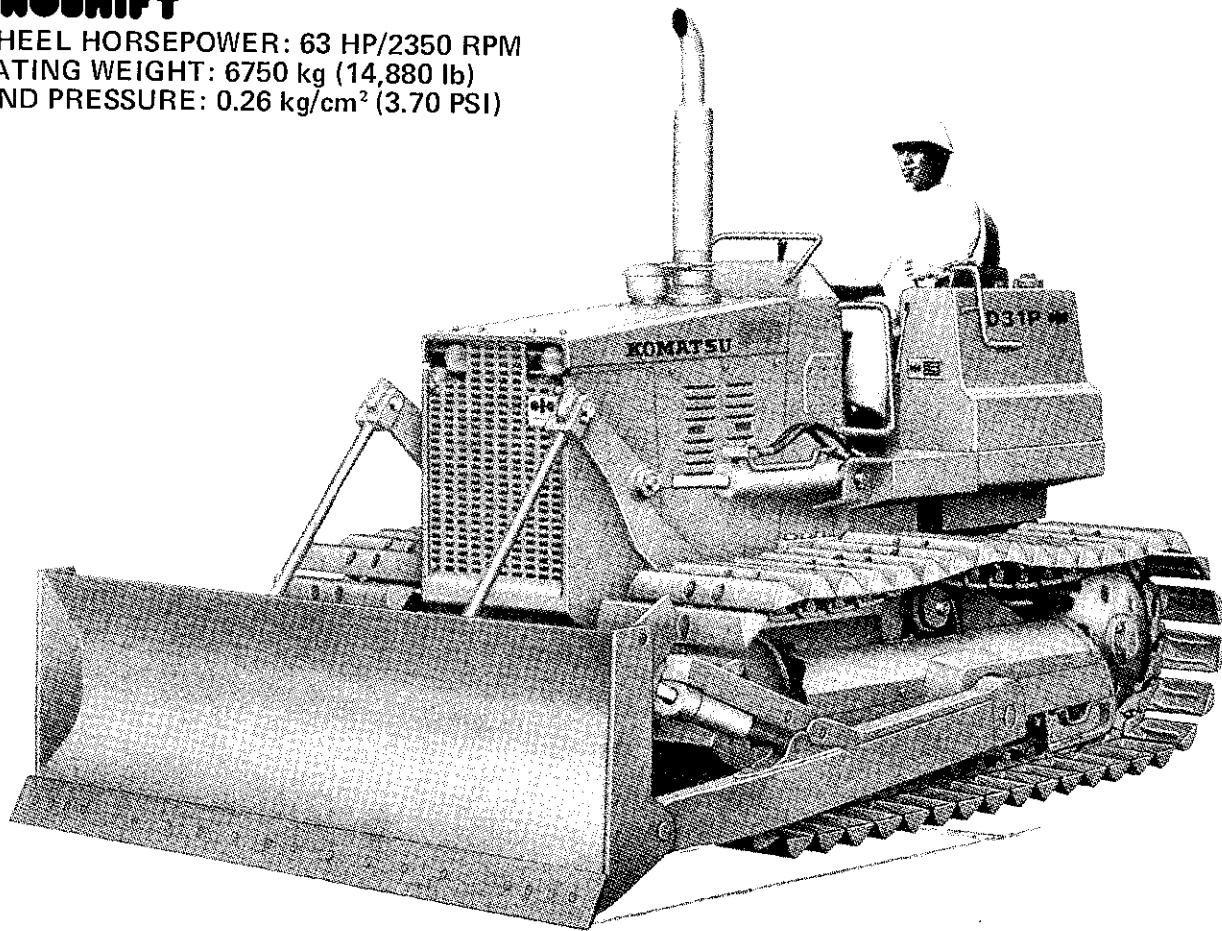
KOMATSU
Shaping the world of tomorrow

D31P-16

SWAMP BULLDOZER

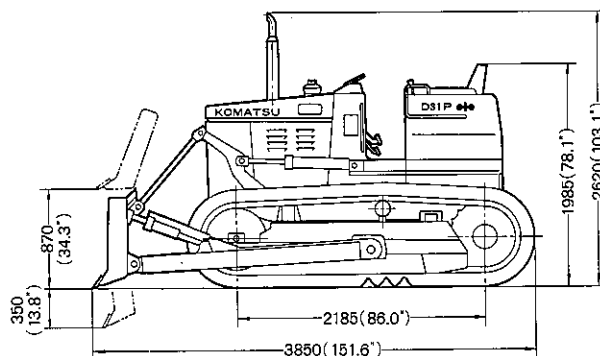
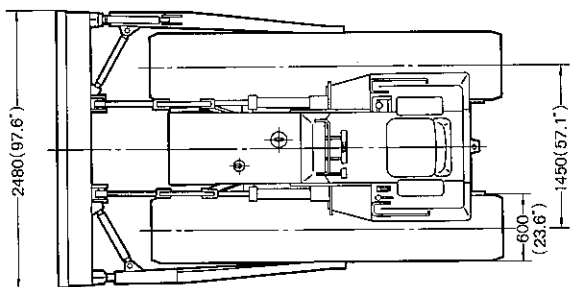
HYDROSHIFT

FLYWHEEL HORSEPOWER: 63 HP/2350 RPM
OPERATING WEIGHT: 6750 kg (14,880 lb)
GROUND PRESSURE: 0.26 kg/cm² (3.70 PSI)



- Excellent performance on swampy ground through KOMATSU's exclusive swamp shoes for minimal mud sticking and skidding, which, together with a long track frame, increase ground contact area and reduce ground pressure for ample flotation and drawbar pull.
- Sturdy, direct-injection KOMATSU diesel engine delivers 63 flywheel horsepower with minimal fuel consumption. A 30% torque rise gives greater lugging power.
- Light-touch, single-lever HYDROSHIFT with choice of 3 forward and 3 reverse speeds and directional changes for smooth operation and easy maneuverability.
- Inching pedal facilitates precise, safe approach to obstacles, etc. Push the pedal down half-way to release the clutch for dynamic dozing and digging operations.
- Floating seals in track and carrier rollers and idlers to keep dirt out and lubricant in for reduced maintenance cost and extended undercarriage life.
- Unique KOMATSU dust seals between track links and pins to prevent abrasive dirt or mud from entering pin-to-bushing clearances and lengthening link pitch, thus assuring longer track service.
- Powerful tiltdozer hydraulically actuated with frame outside the track to provide the most effective penetration of rocks and hard ground.
- Quick and convenient steering control by two pedals through the interconnection of the steering clutches and steering brakes.

D31P-16 SPECIFICATIONS



■ TRACTOR

ENGINE:

Model	KOMATSU 4D105-3
Type	Water cooled, 4-cycle, overhead valve, direct-injection type, diesel
No. of cylinders—bore x stroke	4—105 mm x 125 mm (4.13" x 4.92")
Piston displacement	4330 cc (264 cu.in.)
Performance:	
Flywheel horsepower	63 HP/2350 RPM
Max. torque	25 kg.m (180 ft.lb)/1400 RPM
Fuel consumption ratio	170 g (0.37 lb)/HP.h
Fuel system:	
Fuel oil	Diesel gas oil ASTM Specification D975-60T No. 2D
Governor	Mechanical, all-speed control
Lubrication system:	
Lubrication method	Trochoid pump, forced lubrication
Filter	Full-flow type
Oil cooler	Water cooled
Cooling system	Forced circulation by centrifugal water pump, pusher type fan
Air cleaner	Dry, horizontal type with pre-cleaner
Starting method:	
Type	By electric starting motor
Starting motor	24 V, 5.2 KW
Alternator	24 V, 25 A
Battery	24 V (12 V x 2)—120 Ah

PERFORMANCE:

	Travel speed	Rated drawbar pull
Forward 1st	2.2 km/h (1.4 MPH)	6190 kg (13,650 lb)
2nd	3.9 km/h (2.4 MPH)	3490 kg (7,690 lb)
3rd	6.5 km/h (4.0 MPH)	2100 kg (4,630 lb)
Reverse 1st	2.4 km/h (1.5 MPH)	
2nd	4.3 km/h (2.7 MPH)	
3rd	7.1 km/h (4.4 MPH)	
Max. drawbar pull		8050 kg (17,750 lb)
Gradeability		30°

POWER TRANSMITTING SYSTEM:

Damper	Wet, spring friction type
Transmission:	
Type	Planetary gear, hydraulically actuated, forced lubrication
Gearshift	3 forward, 3 reverse
Bevel gear	Spiral bevel gear
Steering system:	
Steering clutch	Dry, multiple disc, spring loaded, foot operated, with hydraulic booster
Steering brake	Dry, contracting band, foot operated, interconnected with steering clutch
Final drive	Spur gear, single reduction

UNDERCARRIAGE:

Suspension system	Rigid type
No. of rollers:	
Carrier roller	1 (each side)
Track roller	6 (each side)
Shoe:	
Type	Assembled, swamp shoe
Grouser height	77.5 mm (3.1")
No. of shoes	41 mm (each side)
Pitch	154 mm (5.1")
Width	600 mm (23.6")

DIMENSIONS:

Overall length	3030 mm (119.3")
Overall width	2050 mm (80.7")
Overall height	2620 mm (103.1")
Track gauge	1450 mm (57.1")
Length of track on ground	2185 mm (86.0")
Ground contact area	26220 cm ² (4,064 sq.in.)
Ground pressure	0.22 kg/cm ² (3.13 PSI)
Ground clearance	385 mm (15.2")

HITCH (Optional):

Type	Pin, fixed type
Height of hitch above ground	475 mm (18.7")

POWER TAKE-OFF:

Location	Rear of steering case
Shaft revolutions	2350 RPM
Rotational direction	Clockwise (as viewed from drive side)

COOLANT AND LUBRICANT CAPACITY:

Cooling water	22 ltr (5.8 U.S. Gal)
Fuel tank	115 ltr (30.0 U.S. Gal)
Engine	13 ltr (3.4 U.S. Gal)
Damper case	1.0 ltr (0.26 U.S. Gal)
Transmission	13 ltr (3.4 U.S. Gal)
Bevel gear case	15 ltr (4.0 U.S. Gal)
Final drive case (each side)	8.5 ltr (2.2 U.S. Gal)

OPERATING WEIGHT

5760 kg (12,700 lb)

■ STRAIGHT-TILTDOZER EQUIPMENT

DIMENSIONS:

Overall length	3850 mm (151.6")
Overall width	2480 mm (97.6")
Overall height	2620 mm (103.1")
Ground pressure	0.26 kg/cm ² (3.70 PSI)

DOZER EQUIPMENT:

Type	Straight, hydraulic tilting
Weight	860 kg (1,900 lb)
Blade:	
Type	Right side with brace and left side with tilt-cylinder
Length	2480 mm (97.6")
Height	780 mm (30.7")
Digging angle	55°
Max. lift above ground	870 mm (34.3")
Max. drop below ground	350 mm (13.8")
Max. tilt adjustment	355 mm (14.0")

HYDRAULIC CYLINDER:

Type	Double acting, piston type
No. of cylinders—bore:	
Lift	2—90 mm (3.54")
Tilt	1—90 mm (3.54")

HYDRAULIC CONTROL UNIT:

Weight	140 kg (310 lb)
Max. oil pressure	175 kg/cm ² (2,490 PSI)

Hydraulic pump:

Type	Gear pump
Capacity	69 ltr (18.2 U.S. Gal)/min at engine 2350 RPM
Location	Rear of engine
Control valve:	
Type	Double, spool type
Position:	
Lift	Raise, hold, lower, float
Tilt	Right, hold, left

Hydraulic oil tank:

Type	Equipped with external control valve
Location	Right side of operator's seat
Filter	Full-flow type
Oil capacity	45 ltr (12 U.S. Gal)

OPERATING WEIGHT

6750 kg (14,880 lb)

STANDARD EQUIPMENT

- Adjustable seat
- Alternator, 25A
- Blower fan
- Dry-type air cleaner
- Electric starting motor, 24V
- Engine side cover
- Hydraulic track adjusters
- Inching pedal
- In-line radiator core
- Instrument panel lights
- Lifetime-lubricated rollers and idlers
- Lighting system (including 2-front and 1-rear light)
- Lower guard
- Muffler
- Pedal steering
- Planetary hydroshift transmission
- Precleaner
- Sealed track
- Swamp shoe, 600 mm (24")
- Track frame, 6-roller
- End track-guiding guards
- Tool kit and ordinary spare parts

Dimensions and operating weight include the hitch. Specifications are subject to change without notice.

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