

SWAMP BULLDOZER

D41P-3

FLYWHEEL HORSEPOWER: 67 kW (90 HP SAE)/2350 RPM OPERATING WEIGHT (TRACTOR): 9090 kg (STRAIGHT-TILTDOZER): 10500 kg



- Power-efficient HYDROSHIFT transmission: Komatsu's unique HYDROSHIFT transmission consists of a damper and a planetary-gear type, hydraulically-actuated transmission. This HYDROSHIFT transmission assures not only efficient power transmitting ability for reduced fuel costs but also single-lever control of travel speed and F/R directional changes for easy operation.
- Excellent performance on swampy ground: Komatsu's exclusive circular arc shoes allow a minimum of soilsticking. Together with a long length of track on ground, they reduce ground pressure for ample flotation and drawbar pull.
- Powerful, economical engine: Komatsu-built 6D105 engine delivers an ample 67 kW (90 HP SAE) power. Due to its large torque rise of 44% more sustained power is attained even during low engine revolutions. Direct-injection system with Microturbulence Combustion. Chamber (MTCC) saves fuel and distributes clean exhaust. Fuel adjustments are unnecessary for altitudes up to 2300 m.
- Simple controls: Lever controlled steering clutches are interconnected with steering brakes for easy, quick steering

- control. Inching pedal facilitates precise inching approach toward obstacles.
- Tough, stable undercarriage: One-class larger track components, double-reduction final drive, floating seals, etc. extend undercarriage durability. Long length of track on ground, low centre of gravity, and equalizer bar minimize machine pitching and rolling for stable, precise operations.
- High operating efficiency: Large blade capacity and smooth blade movements by a single lever achieve efficiency on all jobs.
- Minimal maintenance: Komatsu dust seals protect pinto-bushing clearances from abrasive dirt for long track life. Floating seals in track and carrier rollers, front idlers and final drives limit maintenance to a simple overhaul for extended undercarriage use. Daily check points are centrally located for quick and easy checks.
- Low-noise operation: Rubber-pad mounting for engine and hood, double walls between engine room and instrument panel all help to reduce noise.



D41P SPECIFICATIONS



ENGINE

Komatsu 6D105-1, 4-cycle, water-cooled diesel engine with 6 cylinders of 105 mm bore x 125 mm stroke and 6.49 l piston displacement.

Flywheel horsepower 67 kW (90 HP SAE) at 2350 RPM

Performance of standard engine equipped with fan, air cleaner, alternator, water pump lubricating oil pump, muffler and fuel pump under SAE standard ambient temperature (29.4 C) and barometric conditions (745 mm Hg).

Direct-injection system of Microturbulence Combustion Chamber (MTCC) design saves fuel and cleans exhaust gas. Engine is rubber-pad mounted on the main frame, reducing vibration and stress. Mechanical all-speed governor. Trochoid-pumpdriven forced lubrication with full-flow filters. Dry-type air cleaner with automatic dust evacuator (with dust indicator) for simple maintenance. Electrical 24-volt starting system.



DAMPER

Wet, spring-friction-type damper comfortably absorbs shock and vibration from engine and assures efficient power flow.



TRANSMISSION

Komatsu's unique HYDROSHIFT transmission consists of planetary gears and is hydraulically-actuated and forced-lubricated. Efficient power flow and simple direction and speed changes (3 forward and 3 reverse) are assured with a single lever. Inching pedal enables precise approach to targets and obstacles. It also offers dynamic digging force when depressed halfway and then abruptly released. Optional decelerator pedal assures convenient, smooth digging operations.

| Travel speeds | Forward | Rated d | Reverse | |
|------------------|----------|---------|-----------|------------|
| 1st | 2.4 km/h | 84 kN | (8580 kg) | 3.0 km/h |
| 2nd | 4.4 km/h | 42 kN | (4310 kg) | 5.5 km/h |
| 3rd | 7,6 km/h | 20 kN | (2070 kg) | 9.4 km/h |
| Max. drawbar pul | I | | . 123 kN | (12500 kg) |



STEERING

Wet, multiple-disc, spring-applied, hand-operated steering clutches are hydraulically boosted and self-adjusting. Wet, contracting-band, foot-operated steering brakes are easy to control and extend the service life of all components. Steering clutches and brakes are interconnected for positive, easy

Min. turning radius 3.0 m



FINAL DRIVE

Spur gear, double-reduction final drive minimizes shock to power-train components.



UNDERCARRIAGE

| Suspension Oscillation-type equalizer ba Track roller frame Box-section, high-tensile strength-steel construction |
|---|
| Rollers and idlers: Lubricated idlers, track and carrier rollers sealed with floating seals. |
| Number of track rollers (each side) Number of carrier rollers (each side) Track shoes: Due to the wide design of the circular-arc swamp |
| shoes, low ground pressure for high flotation characteristics and better traffic are achieved. The soles have a unique CIRCULAF ARC shape to minimize mud-sticking and clogging – so slipping and side-skidding during dozing and steering operations are prevented and damage to or the scratching of the ground surface is minimized. Unique W-shape dust seals, which preven |
| the entry of dust into pin-to-bushing clearances, extend service Track tension is easily adjusted with a grease gun. 710 mm (2'4") single-grouser shoe is also available. |
| Number of shoes (each side) 40 Grouser height 85 mm Shoe width (standard) 720 mm Ground contact area 37300 cm |
| Ground pressure |



COOLANT & LUBRICANT CAPACITY (refilling)

| Coolant | 331 |
|-----------------------------------|------|
| Fuel tank | 2451 |
| Engine | 231 |
| Damper | 1.61 |
| Transmission | 211 |
| Bevel gear case & steering clutch | 611 |
| Final drive (each side) | 141 |



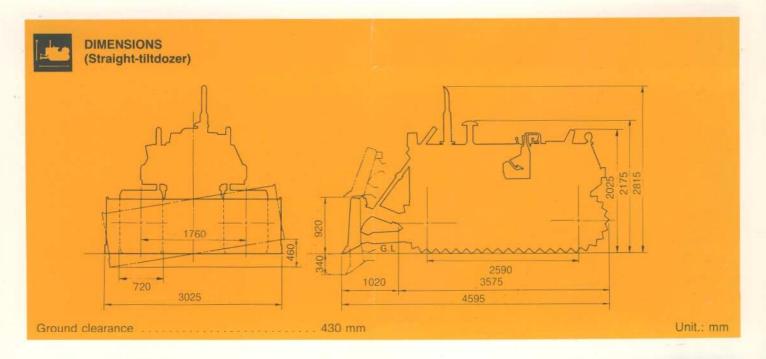
OPERATING WEIGHT (approximative)

Operating weight includes rated capacity of lubricant, coolant

STANDARD EQUIPMENT

- HYDROSHIFT transmission
- Inching pedal
- 720 mm circular arc shoes shoes
- Hydraulic track adjusters
- 24 V, 25 A alternator
- 24 V, 5.5 kW electric starting motor
- Wet-type steering clutches and brakes
- In-line radiator
- Dry-type air cleaner with automatic dust evacuator and dust indicator

- 24 V (12 V × 2), 120 Ah batteries
- 6-roller track frames
- Lighting system (including one rear and two front lights)
- Monocast sprockets
- Lower guards (2 pieces)
- End track guiding guards
- Tool kit





CONTROL

All control levers, pedals, meters and gauges are logically arranged for easy control. Walk-through operator compartment facilitates easy boarding and exiting. Comfortable seat is adjustable to fore/aft positions. Interconnected steering clutches and brakes are hydraulically actuated for easy, effortless steering control.





HYDRAULIC SYSTEM

Hydraulic control unit: All valves are externally mounted. Gear-type hydraulic pump mounted in front of the engine has a capacity (discharge flow) of 86 l/min.

Control valve:

One control valve for straightdozer

Positions: Blade lift Raise, hold, lower and float

Two control valves for straight-tiltdozer

Positions: Blade lift Raise, hold, lower and float

Blade tilt Right, hold and left

Hydraulic cylinders: Double-action, piston type

| | Number of cylinders | |
|------------|---------------------|--------|
| Blade lift | 2 | 70 mm |
| Blade tilt | 1 | 100 mm |

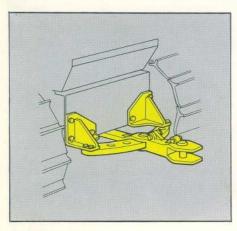


DOZER EQUIPMENT

High-tensile-strength steel used in moldboard for extended service. Blade tilt hose pipings are mounted inside dozer frame and protected from damage.

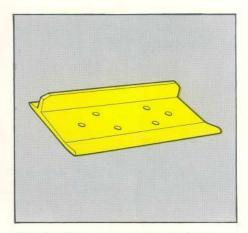
| | Overall | Blade | Max. lift | Max. drop | Max. tilt | Addition | Additional | | |
|------------------------|----------------------|------------------|-----------------|-----------------|------------|--------------------|------------------------|----------------------------|--|
| | length with dozer | length × width | above ground | below ground | adjustment | Dozer equipment | Hydraulic control unit | ground pressure | |
| Straight- tiltdozer | 4595 mm | 3025 mm × 890 mm | 920 mm | 340 mm | 460 mm | 1130 kg | 280 kg | 3.73 kPa (0.038 kg/cm²) | |
| Straight- dozer | 4575 mm | 3025 mm × 890 mm | 920 mm | 335 mm | 400 mm | 1120 kg | 190 kg | 3.43 kPa (0.035 kg/cm² | |

ATTACHMENTS



Swing drawbar:

| Additional weight | | | | | | | | | | | | | |
|----------------------|---|-----|---|----|----|----|------|-----|------|-----|---|-----|------|
| Type | ÷ | | P | ir | ۱- | fi | Χŧ | ed | , | S | W | ing | type |
| Dimensions: | | | | | | | | | | | | | |
| Width | | | | | 00 | | | | . *: | 040 | | 820 | mm |
| Hole diameter of pin | | | | | | | | | | | | | |
| Number of pin holes | | 130 | | 09 | | | W 00 | 000 | | | * | | 5 |
| Swing radius | | | | | | | | | | | | | |
| Offset range | | | | | | | | | | | | | |



710 mm (2'4") single-grousser shoes (for tractor):

| Tractor operating weight 9340 kg |
|---|
| Overall length 3550 mm |
| Overall width 2470 mm |
| Overall height, to top of exhaust |
| pipe 2795 mm |
| Ground contact area 36800 cm ² |
| Ground pressure . 24.5 kPa (0.25 kg/cm²) |
| Ground clearance 360 mm |