### D37E-5/D37P-5

KOMATSU

**HORSEPOWER 75 HP** 56.0 kW

**OPERATING WEIGHT** 15,080 - 16,450 lb





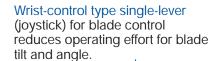


D37-5

CRAWLER DOZER

## D37E-5/D37P-5 WALK-AROUND

### **Operator Oriented Design for Easy Operation**



## A HYDROSHIFT transmission allows quick speed and Wrist-control type single-lever (joystick) for steering/speed/ directional changes (F3/R3). directional change for easy and smooth operation. KOMATSU HOMATSU Efficient Turbochanged provides powerful and fuel-saving operation.

#### **Simplified Maintenance**

- Spin-on filters, air cleaner with dust evacuator.
- Easy-to-drain fuel tank minimizes maintenance.
- Automatic fan belt tensioner and radiator coolant reservoir facilitate simplified maintenance.

Long tracks provide greater stability and superior grading ability.

Inching pedal permits precise movement in tight quarters and allows for full hydraulic response and tractive effort at reduced ground speeds.

### **OPERATOR'S COMPARTMENT**



#### **Responsive Operation**

Joysticks are the logical choice for providing smooth, precise control in order to gain maximum productivity. Their operation mirrors the natural motion of the activity the operator wishes to perform.



The left joystick controls all speed and directional changes including:

- 1st to 3rd
- Forward and reverse
- Right and left steering

#### Easy-to-see instrument panel

Ergonomically arranged instruments make it easier to check the machine condition. In addition, fuel meter and dust indicator warning lights are installed on the panel for easier servicing.



#### Walk-through operator's compartment

The operator's compartment has a complete walk-through design for easier access and exit.



The right joystick controls all the blade functions including:

- Lifting/Digging
- Tilting
- Angling

## VERSATILE OPERATION AND SUPERIOR PRODUCTIVITY

#### **Efficient HYDROSHIFT transmission**

The D37-5 is equipped with Komatsu's unique HYDROSHIFT transmission, for smooth gear shifts, powerful traction and low fuel consumption.

The power train includes a damper and planetary type powershift transmission. HYDROSHIFT efficiently converts engine power to traction with minimal power loss through a direct-drive transmission. It offers smooth, easy shifting and good fuel efficiency.

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

#### Long track

The well positioned center of gravity provides good machine balance for grading and operation on slopes. In addition, the machine can travel over soft ground easily, and it can work productively in muddy areas.



#### Powerful, Fuel-Efficient, Clean Engine:

The Komatsu S4D102E engine is a fuel efficient, directinjection turbocharged diesel.

Efficient fuel combustion improves consumption and lowers emission. Meets 1998 EPA emission standards.

Features high horsepower output and torque rise for strong pushing capability without lugging down.

# SIMPLIFIED MAINTENANCE AND MAXIMUM DURABILITY, RELIABILITY

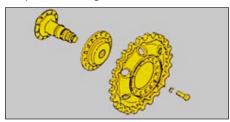
#### Simplified maintenance

Spin-on type filters are used throughout the machine, making it easy to replace filter elements.

Automatic fan belt tensioner eliminates troublesome belt adjustment.

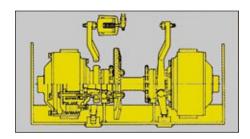
#### Radiator coolant reservoir

Makes it easier to check the coolant level and eliminates frequent refilling.



#### **Bolt-on type sprocket**

For easier replacement on the job-site when worn, and reduced down-time.



#### Wet type steering clutches and brakes

The D37-5 has interconnected, joystick-operated, wet steering clutches and brakes for long service life and reliability.

The self-adjusting steering clutches are multiple-disc type with Pressure Proportion Control (PPC) control, insuring light-touch lever movements. The brakes are wet contracting-band type that facilitate minimal lining replacements.

#### Lubricated track links

The clearance between the link pin and bushing is lubricated, wear and pitch elongation are minimized for extended service life. Power loss due to pin and bushing friction are reduced, increasing operation comfort and performance.

#### D37E-5/D37P-5 SPECIFICATIONS



#### **ENGINE**

Model	Komatsu S4D102E-1
Type4-c	ycle, water-cooled, direct injection
Aspiration	Turbocharged
No. of cylinders	4
	<b>4.02"</b> 102 mm
Stroke	<b>4.72"</b> 120 mm
Piston Displacement	<b>240 in</b> <sup>3</sup> 3.9 ltr.
Gross Horsepower*	<b>79 HP</b> 59.0 kW @ <b>2500 RPM</b>
	<b>75 HP</b> 56.0 kW @ <b>2500 RPM</b>
	217 ft-lb 294 Nm @ 1400 RPM
	All-speed, mechanical
*DCAE 1100E!!!!	

<sup>\*</sup>Per SAE J1995 conditions.

<sup>\*\*</sup>Engine equiped with air cleaner, alternator (not charging), muffler and fan. (SAE J1349)



#### **DAMPER**

Wet-type damper, with built-in torsion and friction springs, absorbs engine torque vibrations as well as stress from external impacts.



#### **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 (3 forward and 3 reverse).

#### D37E-5

Travel speed	Forward	Rated drawbar pull	Reverse
1st	1.4 MPH	17,680 lb	1.6 MPH
	2.3 km/h	8020 kg	2.5 km/h
2nd	2.5 MPH	9,470 lb	2.8 MPH
	4.1 km/h	4300 kg	4.5 km/h
3rd	4.3 MPH	5,150 lb	4.7 MPH
	6.9 km/h	2340 kg	7.5 km/h

#### D37P-5

Travel speed	Forward	Rated drawbar pull	Reverse
1st	1.4 MPH	17,590 lb	1.6 MPH
	2.3 km/h	7980 kg	2.5 km/h
2nd	2.5 MPH	9,390 lb	2.8 MPH
	4.1 km/h	4260 kg	4.5 km/h
3rd	4.3 MPH	5,070 lb	4.7 MPH
	6.9 km/h	2290 kg	7.5 km/h



#### **STEERING**

Single steering lever controls all direction movement. Wet, multiple-disc steering clutches are PPC controlled and interconnected with wet, 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.



#### **FINAL DRIVE**

Spur gear, single-reduction final drives. Bolt-on type sprockets for easy replacement.



#### UNDERCARRIAGE

Suspension	Rigid type
Track roller frame	High-tensile-strength
	steel construction.
Rollers and idlers	Lubricated idlers, track and carrier
	rollers are sealed with floating seals.
Track shoes	Single-grouser shoes
	nt entry of dust into pin-to-bushing
clearances for extended s	ervice. Track tension is easily adjust-
ed with a grease gun.	-

	D37E-5	D37P-5
No. of shoes	41	41
No. of track rollers	6	6
No. of carrier rollers	1	1
Track gauge	<b>4'9</b> " 1450 mm	<b>5'5</b> " 1650 mm
Grouser height	<b>1.9</b> " 47 mm	<b>1.9</b> " 47 mm
Shoe width (standard)	<b>13.0</b> " 330 mm	23.6" 600 mm
Ground contact area	2,235 in <sup>2</sup>	4,064 in <sup>2</sup>
	14420 cm <sup>2</sup>	26220 cm <sup>2</sup>
Ground pressure (tractor)	<b>5.6 PSI</b> 0.39 kg/cm <sup>2</sup>	<b>3.4 PSI</b> 0.24 kg/cm <sup>2</sup>



#### COOLANT & LUBRICANT CAPACITY (refilling)

Coolant5.8 U.S. gal	22 ltr.
Fuel tank30.4 U.S. gal	115 ltr.
Engine3.7 U.S. gal	14 ltr.
Damper case	1.5 ltr.
Transmission	13 ltr.
Bevel gear case/Steering clutch12.4 U.S. gal	47 ltr.
Final drive (each side)	
(1450 mm track gauge)2.5 U.S. gal	9.5 ltr.
(1650 mm track gauge)3.2 U.S. gal	12 ltr.



#### **OPERATING WEIGHT (approximate)**

rail raci tarik, itor o.	
D37E-5 <b>15,08</b> 0	<b>0 lb</b> 6855 kg
D37P-5	<b>0 lb</b> 7477 kg



#### **HYDRAULIC SYSTEM**

**Hydraulic control unit:** Gear-type hydraulic pump mounted on rear of engine with capacity (discharge flow) of **25.2 U.S. gal/min** 95.5 ltr., at rated engine RPM.

Relief valve setting 2,490 PSI, 175 kg/cm<sup>2</sup>

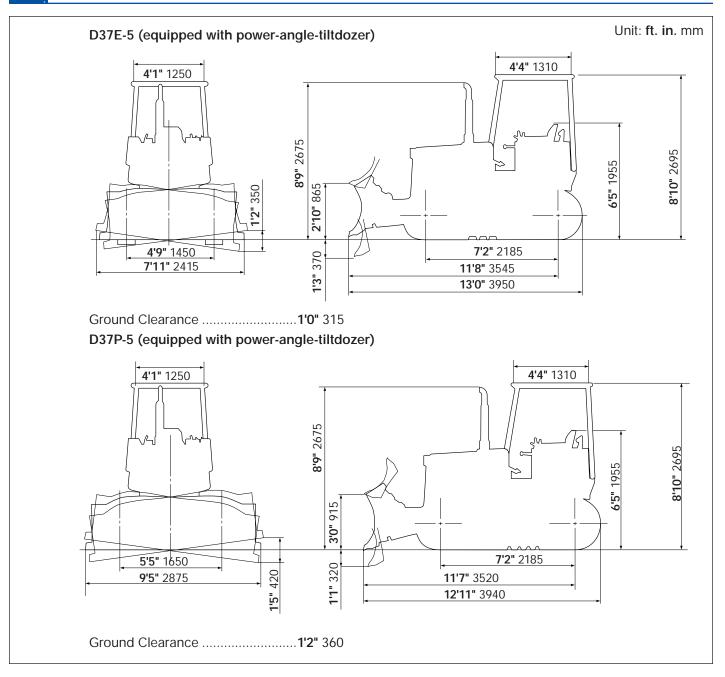
#### Control valves

Three control valves for power-angle-tiltdozer

Additional control valve required for ripper

Positions: Ripper......Raise, hold and lower **Hydraulic cylinders**: Double-acting, piston type

	Number of cylinders	Bore
Blade lift	2	3.54" 90 mm
Blade tilt	1	3.54" 90 mm
Blade angling	2	3.54" 90 mm





#### DOZER EQUIPMENT

Use of high-tensile-strength steel in moldboard for extended service life. Hydraulic hoses for blade angle and tilt are protected with steel plates.

	Overall	Blade C	Capacity	Blade	Max. lift	Max. drop	Max. tilt	Addition	al weight	Additional
	length with dozer	SAE	*LH <sup>2</sup>	length x height	above ground	below ground	adjustment	Blade	Hydraulic control unit	ground pressure
D37E-5	<b>13'0"</b> 3950 mm	<b>1.95 yd</b> <sup>3</sup> 1.49 m <sup>3</sup>	<b>2.79 yd</b> <sup>3</sup> 2.13 m <sup>3</sup>	<b>7'11" x 3'1"</b> 2415 mm x 940 mm	<b>2'10"</b> 865 mm	<b>1'3"</b> 370 mm	<b>1'2"</b> 350 mm	<b>1,900 lb</b> 860 kg	<b>400 lb</b> 180 kg	<b>1.00 PSI/</b> 0.07 kg/cm <sup>2</sup>
D37P-5	<b>12'11"</b> 3940 mm	2.11 yd <sup>3</sup> 1.62 m <sup>3</sup>	3.00 yd <sup>3</sup> 2.30 m <sup>3</sup>	<b>9'5" x 2'11"</b> 2875 mm x 895 mm	<b>3'0"</b> 915 mm	<b>1'1"</b> 320 mm	<b>1'5"</b> 420 mm	<b>1,980 lb</b> 900 kg	<b>400 lb</b> 180 kg	0.57 PSI/ 0.04 kg/cm <sup>2</sup>

#### STANDARD EQUIPMENT FOR BASE MACHINE

#### **Engine and Its Related** Items:

- Air cleaner, dry, double element type with dust indicator
- Automatic deaeration for fuel line
- Decelerator pedal
- Engine, KOMATSU S4D102E-1, 75HP (56.0 kW), turbocharged, direct injection, diesel
- Exhaust pipe, curved
- Fan, blower
- Fuel hose, general purpose

#### **Electric System:**

- Alternator, 25 Ampere, (24V)
- Back-up alarm
- Batteries, 2 x 12V, 70AH
- Lights (2 front & 1 rear)

- Starting motor, 4.5 kW (24V)
- Wire harness, standard capacity

#### **Power Train and Controls:**

- Sprockets, one piece
- Mono-lever steering with **PPC**
- Transmission, F3-R3 **Undercarriage:**
- Idler with recoil spring
- Track frames, 6 roller
- Track frame covers, standard (D37P-5)
- Track roller guards, end section
- Track shoe assembly, 13" (330 mm) (D37E-5), 23.6" (600 mm) (D37P-5) single grouser shoes with sealed and lubricated link assembly

#### **Guards and Covers:**

- · Crankcase and transmission guards, pull hook installable
- Engine hood and side panels
- Fenders, standard type
- Final drive case wear guards
- Radiator guard door, single, bolt-on type
- Rear cover, standard type
- ROPS mounting brackets

#### Operator Environment:

- Seat, suspension type
- Seat belt

#### **Hydraulics and Controls:**

- For inside PAT dozer
- Blade cylinder hoses, standard type
- Mono-lever controls for blade

#### Vandalism Protection:

 Filler cap locks and cover locks

#### Other Standard **Equipment:**

- Marks and plates, English
- \*ROPS canopy or ROPS cab must be ordered for all machines.
- \*Dozer assembly and rear mounted equipment are not included.

#### OPTIONAL EQUIPMENT

- Fire extinguisher
- Front pull hook, for use with under guard
- Front sweeps
- Front, rear, and side screens
- Full length, segmented track roller guards
- Heater-defroster for cab
- Hitch
- Hydraulics for Ripper
- Instrument panel lock cover
- Power angle tilt dozer
- Radiator reservoir tank
- Radiator guard door, hinged, severe service
- Reversible cooling fan
- Swing type drawbar
- Tank guard

#### **ROPS Cab\***

Meets ISO 3471, SAE J1040a and SAE J365a standards. Includes: floor mat, front & rear wipers, and electric fan.

Additional ground pressure

D37E 0.58 psi 0.041 kg/cm<sup>2</sup> D37P **0.33 psi** 0.023 kg/cm<sup>2</sup>

#### ROPS Canopy\*

Meets ISO 3471, SAE J1040a and SAE J395a standards. Additional weight (to tractor) ..................505 lb 230 kg Additional ground pressure D37E 0.36 psi 0.025 kg/cm<sup>2</sup> D37P 0.20 psi 0.014 kg/cm<sup>2</sup>

\*Note: ROPS Cab or ROPS Canopy must be ordered for all machines.

#### **Optional Ripper**

Туре	Multi-Shank
No. of Shanks	3 (5 shanks attachable)
Additional weight (to bare tractor)	<b>970 lb</b> 440 kg
Max. lift above ground	1'5" 440 mm
Max. digging depth	<b>1'0"</b> 310 mm
Digging Angle (degree)	50° (at 1' depth)
Beam length	<b>5'0"</b> 1529 mm
Additional length	<b>2'7</b> " 785 mm

#### Optional shoes

Model	D37E-5	D37P-5
Type of shoe	15.8" 400 mm single-grouser shoe	23.6" 600 mm circular arc shoe
*Additional weight	<b>+198 lb</b> +90 kg	<b>+33 lb</b> +15 kg
Ground contact area	<b>2,709 in²</b> 17480 cm²	<b>4,064 in</b> <sup>2</sup> 26220 cm <sup>2</sup>
*Additional ground pressure (tractor)	<b>-0.85 PSI</b> -0.06 kg/cm²	±0
*Additional height		<b>1"</b> 20 mm

<sup>\*</sup>Addition to tractor.

## **SUPPORT**

Count on Komatsu and your local distributor for the support you deserve. Our success depends on satisfying your need for productive equipment and supporting that equipment. That's why we have one of the largest and strongest heavy-equipment distributor organizations in North America. Their personnel are not only trained to help you select the equipment that is best-matched for your business but to support that equipment.



**Finance** Through its finance company, Komatsu can offer you a wide variety of financing alternatives designed to meet your needs. Programs include municipal leases

for governmental agencies, conditional sales contracts, and leases with \$1 purchase options for customers interested in owning their equipment.

Ask your distributor about Komatsu leasing. We offer finance and operating leases and the unique *Advantage Lease* which offers you predetermined purchase, return, and renewal options.



**Parts** Three computer-linked parts distribution centers provide fast access to anywhere in the U.S. and Canada. Most parts are available overnight. Plus, Komatsu distribu-

tors keep a large assortment of commonly used parts in stock for immediate access.



**Remanufactured parts** Save money and still have the same warranty as new parts at a fraction of the cost with likenew remanufactured parts.



**Maintenance** Take advantage of the experience we have gained and ask your distributor about our factory-supported programs including: regular scheduled maintenance, oil and wear analysis, diagnostic

inspections, undercarriage inspections, training, special service tools, parts programs, and even a special software program to help your distributor keep track of and manage service-related data.

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Komatsu America International Company 440 N. Fairway Dr., Vernon Hills, IL 60061