

KOMATSU®

NET HORSEPOWER
125 kW **168 HP** @ 1850 rpm

OPERATING WEIGHT
D61EX-15 16890 kg **37,237 lb**
D61PX-15 18930 kg **41,735 lb**

D61EX-15 D61PX-15

With Tier 3 Engine and PLUS Undercarriage

D
61

CRAWLER DOZER



Photo may include optional equipment.

WALK-AROUND

Komatsu-integrated design for the best value, reliability, and versatility. Hydraulics, power train, frame, and all other major components are engineered by Komatsu. You get a machine with components designed to work together for higher production, greater reliability, and more versatility.

Hydraulic Driven Radiator Cooling Fan

controlled automatically, reduces fuel consumption and operating noise levels

SAA6D107E-1 turbocharged after-cooled diesel engine provides a net output of 125 kW **168 HP** with excellent productivity. This engine is EPA Tier 3 and EU Stage 3A emissions certified.

Gull-wing engine side doors for easy servicing

High capacity ***Power Angle Tilt dozer*** combined with the highest power in its class provides outstanding productivity.

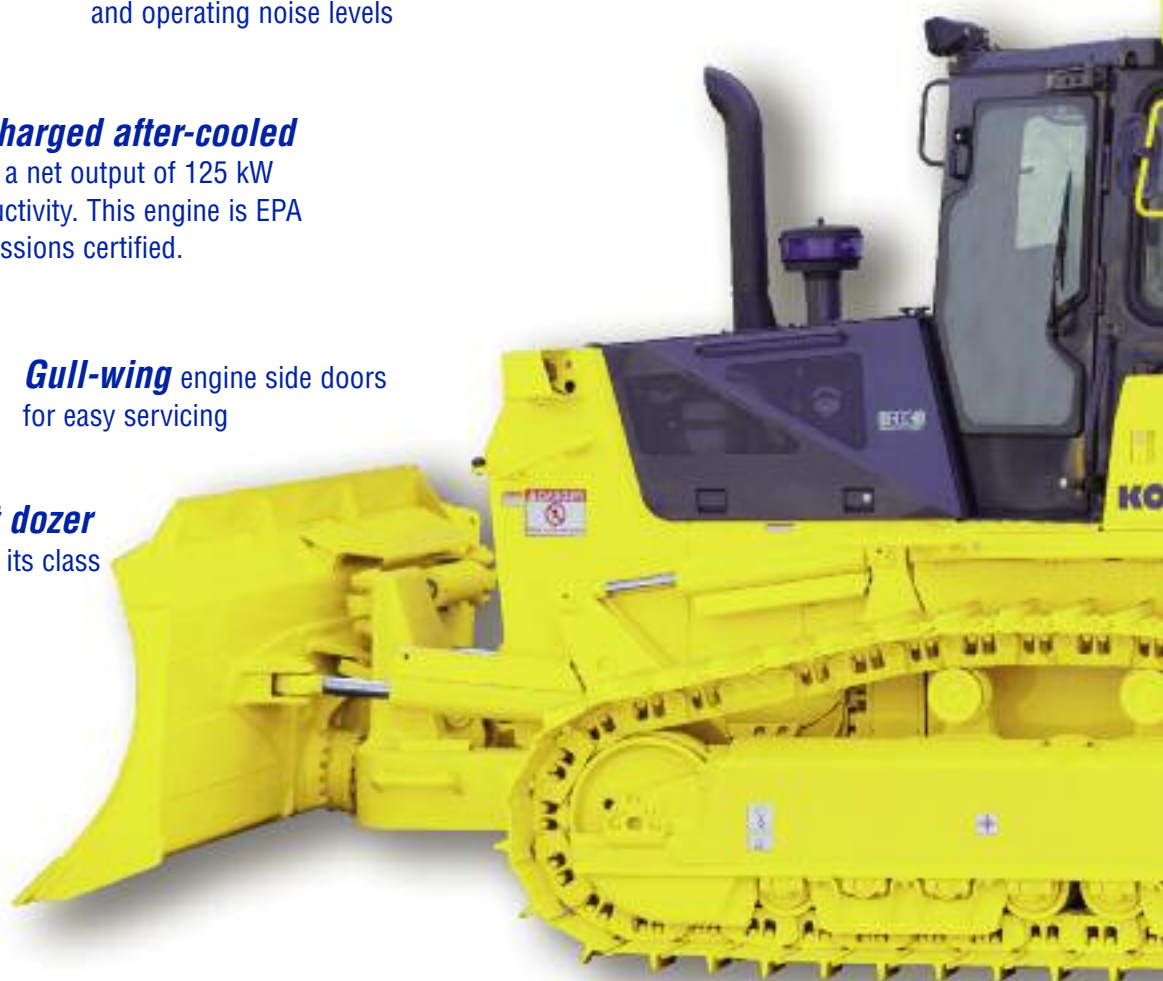
Blade tilt lines completely protected

Wet, multiple-disc brakes adjustment free for excellent service life

Forward mounted ***pivot shafts*** isolate final drives from blade loads



KOMTRAX equipped machines can send location, SMR and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.



Electronic Monitoring System provides critical information about the machine.

Hexagonal Designed Cab includes:

- Spacious interior
- Comfortable ride with new cab damper system
- Excellent visibility
- High capacity air conditioning system
- Palm Command Control System (PCCS) joysticks
- Pressurized cab
- Adjustable armrests



Komatsu Torqflow transmission

offers single lever control of speed (3 forward and 3 reverse) and directional changes

Hydrostatic Steering System (HSS)

provides smooth, quick, and powerful control in varying ground conditions

Parallel Link Undercarriage System (PLUS)

with rotating bushings and up to double the wear life.

Bolt-on segmented sprocket teeth

for easy in-the-field replacement



Photos may include optional equipment.

Modular power train for increased serviceability and durability

NET HORSEPOWER

125 kW **168 HP** @ 1850 rpm

OPERATING WEIGHT

D61EX-15: 16890 kg **37,237 lb**

D61PX-15: 18930 kg **41,735 lb**

BLADE CAPACITY

PAT Dozer:

D61EX-15: 3.4 m³ **4.5 yd³**

D61PX-15: 3.8 m³ **5.0 yd³**

PALM COMMAND CONTROL SYSTEM (PCCS)

Komatsu's ergonomically designed control system "PCCS" creates an operating environment with "complete operator control."

Human-Machine Interface

Palm Command Electronic Controlled Travel Control Joystick

Palm command travel joystick provides the operator with a relaxed posture and superb fine control with improved operator comfort. Transmission gear shifting is simplified with thumb push buttons.



Fully-adjustable Suspension Seat and Travel Control Console

The travel control console has adjustment fore and aft, and height.

Palm Command PPC Controlled Blade Control Joystick

Blade control joystick uses the Proportional Pressure Control (PPC) valve and joystick, similar to the travel control joystick. PPC control combined with the highly reliable Komatsu hydraulic system enables superb fine control.



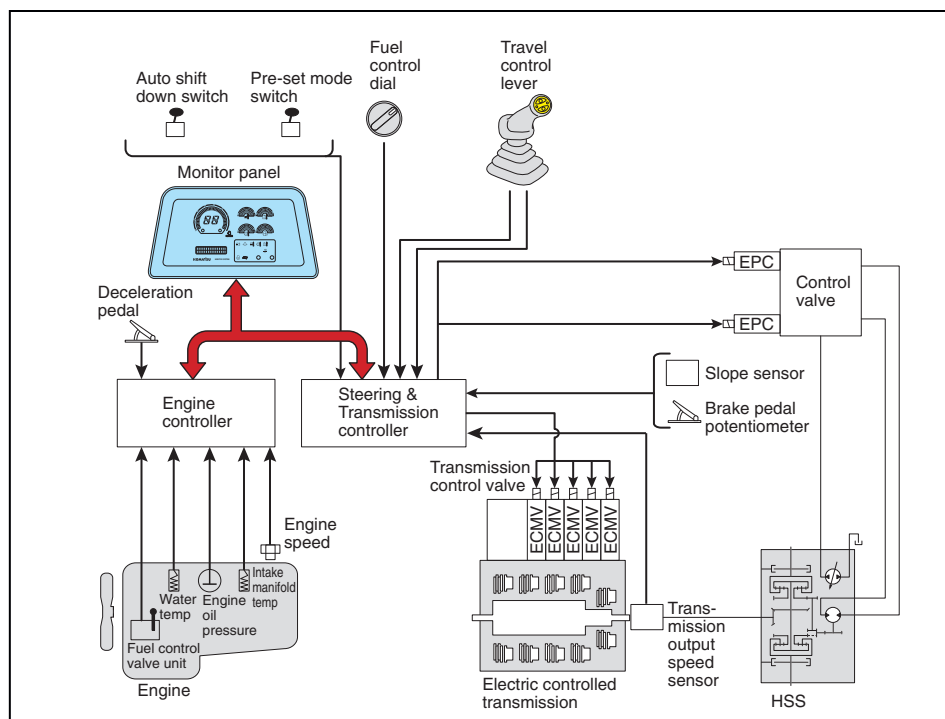
Fuel Control Dial

Engine speed is controlled by an electric signal, providing ease of operation, eliminating maintenance of linkage and joints.

Height Adjustable Armrest

Armrest height is adjustable without any tools, providing the operator with firm arm support in an ideal armrest.

Outline of Electronic Control System



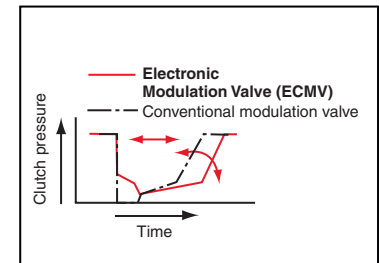
Power Train Electronic Control System

Smooth and Soft Operation

The D61 utilizes a newly designed power train electronic control system. The controller registers the amount of operator control (movements of lever and operation of switches) along with machine condition signals from each sensor, to calculate accurately the control of the transmission for optimal machine operation. The ease of operation and productivity of the new D61 is greatly improved through these new features.

Electronic Controlled Modulation Valve (ECMV) Transmission

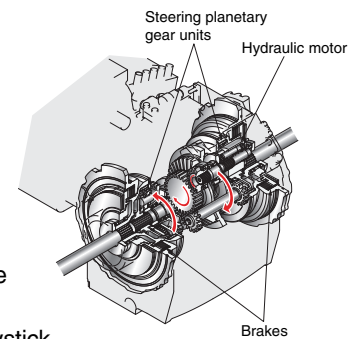
Controller automatically adjusts each clutch engagement depending on travel conditions such as gear speed, engine speed, and shifting pattern. This provides smooth clutch engagement, improved component reliability, improved component life and operator ride comfort.



Hydrostatic Steering System—Smooth, Powerful turning

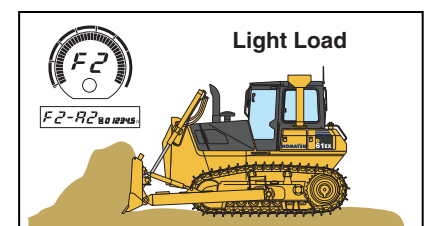
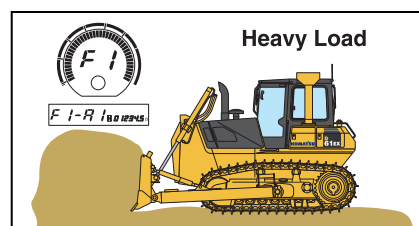
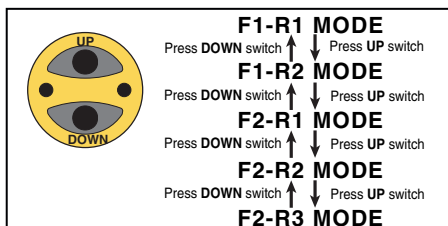
The Hydrostatic Steering System (HSS) is powered by an independent hydraulic pump with engine power transmitted to both tracks without power interruption on the inside track. When the machine turns, the outside track moves faster and the inside slower, for smooth, powerful turns. Counter-rotation is available for minimum turning radius providing excellent maneuverability. Smooth steering reduces machine vibration and increases operator comfort.

- Turning while dozing— the machine turns by driving the left and right tracks at different speeds allowing the machine to travel at the same speed and maintaining the power as in straight dozing.
- Side cutting— when side-loading the blade, straight travel can be maintained utilizing HSS.
- On downhill slopes— the machine doesn't require counter-steering. The joystick provides the same steering response on downhill slopes as on flat ground.
- Grading— can be done efficiently without damaging the ground, because the inside track is not locked during turning.



Shift Preset Function

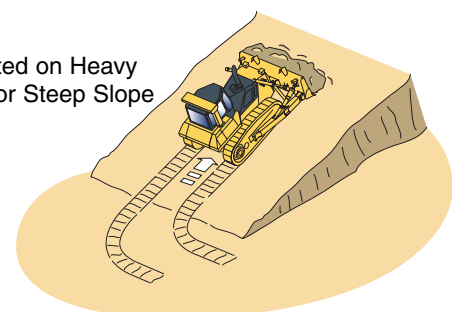
Preset travel speed selection function is provided as standard equipment. The preset switch enables the operator to select a combination of forward/reverse gear shifts, from 5 patterns; F1-R1, F1-R2, F2-R1, F2-R2 and F2-R3, by using the UP/DOWN shift switch, and once the shift pattern is selected, only forward / reverse direction control selection is required. Once F2-R2 pattern is selected, for example, 2nd gear is automatically selected when the travel control joystick is moved into forward/reverse. This function reduces gear shifting frequency during machine operation, and is especially helpful, when used in combination with the auto-downshift function.



Auto-Downshift Function

Controller monitors engine speed, travel gear and travel speed. When load is applied and machine travel speed is reduced, the controller automatically downshifts to optimize gear speed to provide high fuel efficiency and more power to push. This function provides comfortable operation and high productivity without manual downshifting. (This function can be deactivated with cancel switch.)

Actuated on Heavy Load or Steep Slope



PRODUCTIVITY FEATURES



Komatsu's new "ecot3" engines are designed to deliver optimum performance under the toughest of conditions, while meeting the latest environmental regulations. These engine are EPA Tier 3, EU Stage 3A emissions certified; "ecot3" - ecology and economy combine with Komatsu technology to create high performance engines without sacrificing power or productivity.

Engine

The Komatsu SAA6D107E-1 engine delivers a net output of 125 kW **168 HP** at 1850 rpm. This fuel efficient Komatsu engine, together with the heavy machine weights, make the D61EX/PX superior crawler dozers in both ripping and dozing operations. The engine is EPA Tier 3 and EU Stage 3A emission regulations certified, and features direct fuel injection, turbocharger, and an air-to-air and aftercooler to maximize fuel efficiency. To minimize noise and vibration, the engine is mounted to the main frame with vibration dampening rubber mounting cushions.

Hydraulically Driven Radiator Cooling Fan

Fan rotation is automatically controlled depending on coolant and hydraulic oil temperature, saving fuel consumption and providing great productivity with a quiet operating environment.



Photo may include optional equipment.

Work Equipment

Large Blade

Capacities of 3.4 m³ **4.5 yd³** (PAT dozer for D61EX) and 3.8 m³ **5.0 yd³** (PAT dozer for D61PX) yield outstanding production. High-tensile-strength steel has been incorporated into the front and sides of the blade for increased durability.



Clean and Quiet Design

Low Emissions

The SAA6D107E-1 engine is Environmental Protection Agency (EPA) Tier 3 and EU Stage 3A emissions regulations certified. It develops low emissions of NOx, hydrocarbon, and particle matter, without sacrificing power or machine productivity.

Quiet Design

The low-noise engine, hydraulically driven fan, and rubber-mounted power train provide quiet operation.

Use of Recyclable Parts

Recyclable parts are used to minimize the effects on the environment.

Extended Service Interval

Long-life consumable parts such as filters and elements are used to lengthen their replacement interval to lower the maintenance cost.

Undercarriage

Low Drive Undercarriage

Komatsu's design is extraordinarily tough and offers excellent grading ability and stability. The track seal life is increased by using large-size bulldozer type seals.



EX-Arrangement

Offers a standard track length, specially designed for applications where there are rough ground conditions, such as those found in quarries. The shoe width is small-to-medium, to gain the longest lifetime.

PX-Arrangement

The front idler is moved forward to increase the track length on the ground. Also, the shoe width is increased to have a larger ground contact area. This is specially designed to work in soft, unstable ground conditions.

Parallel Link Undercarriage System (PLUS)

Komatsu's new Parallel Link Undercarriage System (PLUS) provides less downtime plus longer wear with up to 40% lower undercarriage maintenance costs. Rotating bushings eliminate the cost and downtime for bushing turns, and strengthened rollers and links increase wear life up to two times. With PLUS, individual links can be replaced and no costly track tools are required. The track frames accommodate both PLUS and conventional systems.

Rotating Bushings

The cost and time for bushing turns are eliminated by using rotating bushings. In addition, lubrication between the pin and bushing increases wear life and F5 seals increase seal life.

Carrier Rollers

Increased wear material and increased hardness depth provide up to double the wear life.

Track Rollers

Flange height is increased by 33%, and the flange profile is matched to the new link shape.

Track Roller Guards

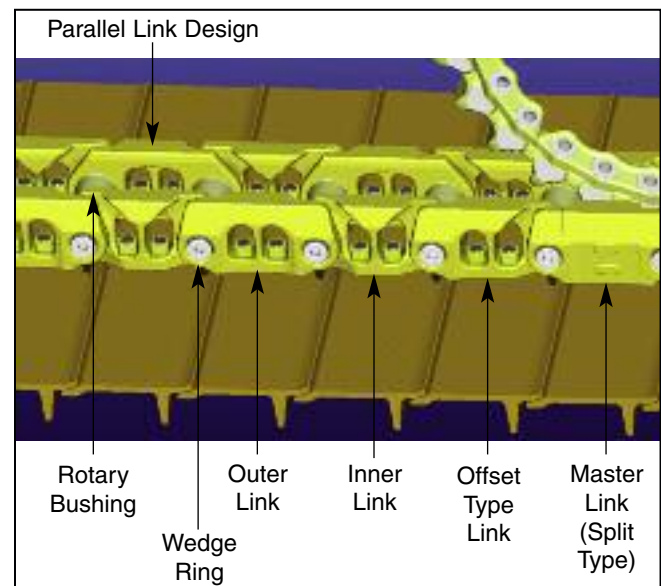
With the new design, guards contact the link instead of the pin, eliminating pin damage.

Links

The links are strutted for added strength with a 45% increase in wear material. Also, individual links can be replaced in the field.

Sprocket

The sprocket is designed to minimize material packing and segmented for simple replacement.



WORKING ENVIRONMENT

Operator Comfort

Operator comfort is essential for productive work. The D61 provides a quiet, comfortable environment where the operator can concentrate on the work at hand.



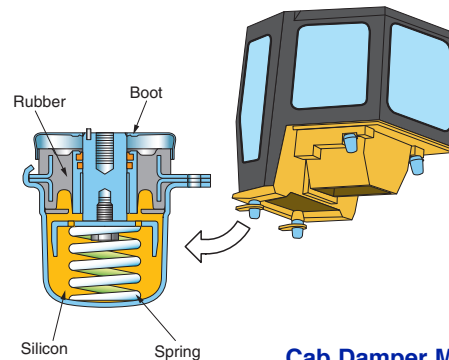
Hexagonal Pressurized Cab

- The cab's hexagonal design and large tinted glass windows provide excellent front, side, and rear visibility.
- Air filters and a higher internal air pressure combine to help prevent dust from entering the cab.



Comfortable Ride with New Cab Damper Mounting

The D61's cab mount uses a new cab damper which provides excellent shock and vibration absorption capacity with its long stroke. Cab damper mounts soften shocks and vibration, while traveling over adverse conditions, which conventional mounting systems are unable to absorb. The cab damper spring isolates the cab from the machine chassis, suppressing vibration, and providing a quiet, comfortable operating environment.



New Suspension Seat

A high back suspension seat is available. Fore and aft sliding rails and suspension spring have been newly designed to increase strength and rigidity. The new seat provides excellent support, improving riding comfort. Fore and aft seat travel is designed for almost all operator sizes. The air suspension seat has an automatic operator weight adjustment system and an air lumbar support to improve operator comfort.



EASY MAINTENANCE

Planned Maintenance

Planned maintenance is the only way to ensure long service life from your equipment. That's why Komatsu designed the D61 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

Centralized Service Station

To assure convenient maintenance, the transmission and HSS oil filters, power train oil level gauge, and hydraulic tank are located on the right side of the machine.



Monitor With Self-Diagnostic Function

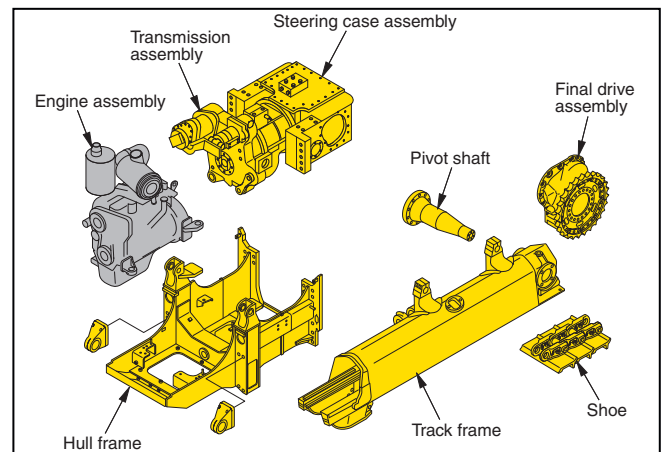
With the starting switch turned ON, check-before-starting and caution items appear on the lower right part of the monitor panel. If the monitor finds abnormalities, a corresponding warning lamp blinks and a warning buzzer sounds. Engine rpm and forward/reverse gear speed are displayed on the upper part of the monitor during operation. When abnormalities occur during operation, the action code and service meter are displayed. When a critical action code is displayed, the caution lamp blinks and a warning buzzer sounds. In addition, fault codes are indicated to aid troubleshooting and help reduce machine down time.

Easy Cleaning With Hydraulically Driven Radiator Fan

The radiator core and the core on the front side of the oil cooler can be easily cleaned by running the hydraulically driven radiator fan in reverse. Accordingly, the cleaning intervals of those cores can be increased.

Modular Power Train Design

Power train components are sealed in a modular design that allows the components to be dismantled and mounted without oil spillage.



Reliable Simple Structure

Simple hull structure main frame design increases durability and reduces stress concentration at critical areas. The track frame has a large cross section and utilizes pivot shaft mounting for greater reliability.

Adjustment-Free Disc Brakes

Wet disc brakes are adjustment-free and provide excellent service life.

Gull-Wing Engine Side Covers

Access to engine area is provided by large gull-wing doors, facilitating engine maintenance and filter replacement.



D61-15 CRAWLER DOZER

SPECIFICATIONS



ENGINE

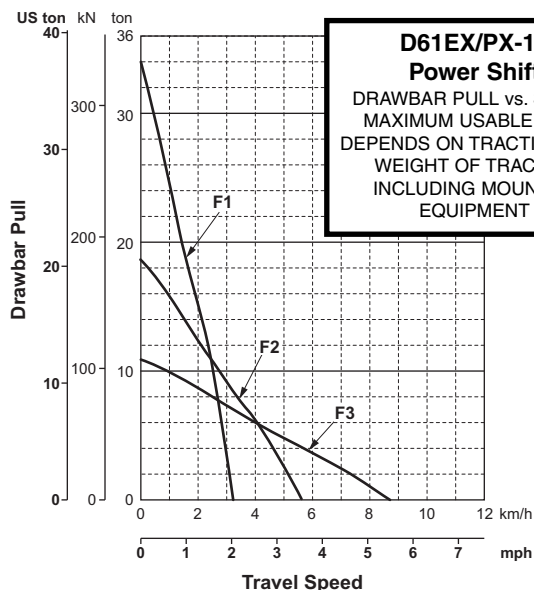
Model Komatsu SAA6D107E-1
 Type 4-cycle, water-cooled, direct injection
 Aspiration Turbocharged, air-to-air aftercooled
 Number of cylinders 6
 Bore x stroke 107 mm x 124 mm **4.21" x 4.88"**
 Piston displacement 6.69 ltr **408 in³**
 Governor All-speed, electronic
 Horsepower
 SAE J1995 Gross 127 kW **170 HP**
 ISO 9249 / SAE J1349 Net 125 kW **168 HP**
 Hydraulic fan at maximum speed Net 116 kW **155 HP**
 Rated rpm 1850 rpm
 Fan drive type Hydraulic
 Lubrication system
 Method Gear pump, force lubrication
 Filter Full-flow



TORQFLOW TRANSMISSION

Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase torque converter and a planetary gear, multiple-disc clutch transmission which is hydraulically-actuated and force-lubricated for optimum heat dissipation.

Travel speed	Forward	Reverse
1st	0-3.2 km/h 0-2.0 mph	0-4.3 km/h 0-2.7 mph
2nd	0-5.6 km/h 0-3.5 mph	0-7.2 km/h 0-4.5 mph
3rd	0-8.7 km/h 0-5.4 mph	0-11.0 km/h 0-6.8 mph



FINAL DRIVES

Spur gear, double-reduction final drives increase tractive effort. Segmented sprocket teeth are bolt-on for easy in-the-field replacement.



STEERING SYSTEM

Palm Command Control System (PCCS) lever controls for all directional movements. Pushing the PCCS lever forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the PCCS lever to left to make a left turn. Hydrostatic Steering System (HSS) is powered by steering planetary units and an independent hydraulic pump and motor. Counter-rotation turns are also available. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gear shift lock lever also applies parking brake.

Minimum turning radius:

D61EX-15	1.8 m 5'11"
D61PX-15	2.2 m 7'3"

As measured by track marks on ground.



UNDERCARRIAGE

Suspension Oscillation with equalizer bar and forward mounted pivot shafts
 Track roller frame Monocoque, large section, durable construction
 Number of carrier rollers (each side) 2
 Track assemblies: Lubricated tracks. Unique seals help prevent entry of foreign abrasive material into pin to bushing clearances to provide extended service life. Parallel Link Undercarriage System (PLUS) with rotating bushings and extended wear life for lower maintenance costs..

	D61EX-15	D61PX-15
Number of track rollers (each side)	7	8
Type of shoes (standard)	Single grouser PLUS	
Number of shoes (each side)	40	46
Grouser height	57.5 mm 2.3"	
Shoe width (standard)	600 mm 24"	860 mm 34"
Ground contact area	31200 cm ² 4,836 in²	54520 cm ² 8,451 in²
Ground pressure (with dozer, ROPS canopy)	53.1 kPa 0.54 kgf/cm ² 7.70 psi	34.0 kPa 0.35 kgf/cm ² 4.94 psi
Track gauge	1900 mm 6'3"	2140 mm 7'0"
Length of track on ground	2600 mm	3170 mm



COOLANT AND LUBRICANT CAPACITY (REFILL)

Coolant	32 ltr	8.5 U.S. gal
Fuel tank	390 ltr	103.0 U.S. gal
Engine oil	29 ltr	7.7 U.S. gal
Damper	1.1 ltr	0.3 U.S. gal
Transmission, bevel gear, and steering system	69 ltr	18.2 U.S. gal
Final drive (each side)	28.5 ltr	7.5 U.S. gal



OPERATING WEIGHT (APPROXIMATE)

Tractor weight:

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

D61EX-15	14100 kg 31,087 lb
D61PX-15	15840 kg 34,925 lb

Operating weight:

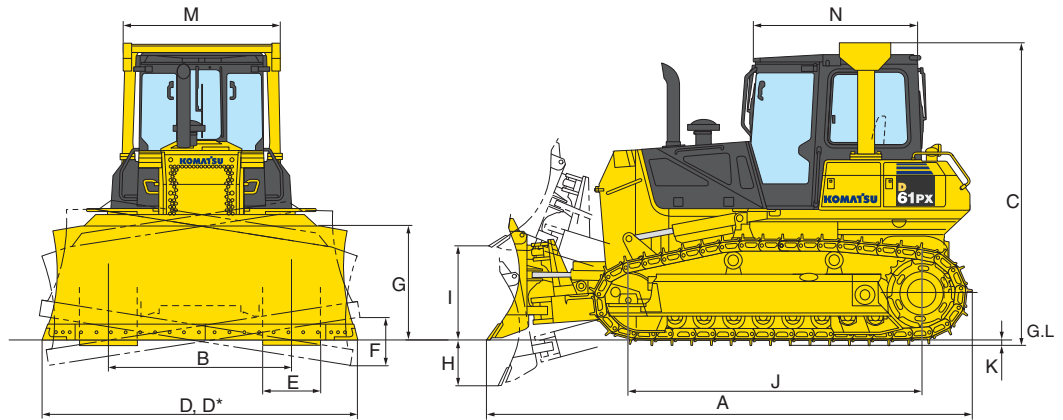
Including power angle tilt dozer, ROPS cab, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

D61EX-15	16890 kg 37,237 lb
D61PX-15	18930 kg 41,735 lb



DIMENSIONS

	D61EX-15 PAT		D61PX-15 PAT	
	mm	ft. in.	mm	ft. in.
A	5030	16'6"	5440	17'10"
B	1900	6'3"	2140	7'0"
C	3150	10'4"	3150	10'4"
D	3275	10'9"	3860	12'8"
D**	2965	9'9"	3500	11'6"
E	600	2'4"	860	3'4"
F	510	1'8"	600	2'0"
G	1200	3'11"	1160	3'10"
H	465	1'6"	580	1'11"
I	980	3'3"	1025	3'4"
J	2600	8'6"	3170	10'5"
K	57.5	2.3"	57.5	2.3"
M	1650	5'5"	1650	5'5"
M*	1825	6'0"	1825	6'0"



Dimensions with straight PAT blade (D61EX-15 and D61PX-15)
Ground clearance: 395 mm 1'4"

* ROPS canopy
** Blade angled for transport



HYDRAULIC SYSTEM

Closed-center Load Sensing System (CLSS) designed for precise and responsive control and for efficient simultaneous operation.

Hydraulic control unit:

All spool control valves externally mounted beside the hydraulic tank. Piston-type hydraulic pump with capacity (discharge flow) of 195 ltr/min **51.5 U.S. gal/min** at rated engine rpm.

Relief valve setting 20.6MPa 210 kg/cm² **2,990 psi**

Hydraulic cylinders Double-acting, piston

	Number of cylinders	Bore
Blade lift	2	110 mm 4.33"
Blade tilt	1	130 mm 5.12"
Blade angle	2	110 mm 4.33"

Hydraulic oil capacity (refilling):

Power angle tilt dozer 55.0 ltr **14.5 U.S. gal**

Control valves:

Spool control valve 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

Spool control valve for semi-U tilt dozer.

Positions:

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



DOZER EQUIPMENT

Use of high tensile strength steel in moldboard for strengthened blade construction.

	Overall Length With Dozer	Blade Capacity (SAE)	Blade Width x Height	Maximum Lift Above Ground	Maximum Drop Below Ground	Maximum Tilt Adjustment	Additional Weight
D61EX-15 Power Angle Tilt Dozer	5030 mm 16'6"	3.4 m ³ 4.5 yd³	3275 mm x 1200 mm 10'9" x 3'11"	980 mm 3'3"	465 mm 1'6"	510 mm 1'8"	2400 kg 5,290 lb
D61PX-15 Power Angle Tilt Dozer	5440 mm 17'10"	3.8 m ³ 5.0 yd³	3860 mm x 1160 mm 12'8" x 3'10"	1025 mm 3'4"	580 mm 1'11"	600 mm 2'0"	2700 kg 5,950 lb



STANDARD EQUIPMENT FOR BASE MACHINE

ENGINE AND RELATED ITEMS

- Air cleaner, dry, double element type
- Decelerator pedal
- Engine, KOMATSU SAA6D107E-1, net output of 128 kW **168 HP** direct injection, turbocharged, EPA Tier 3 emissions certified
- Engine key stop
- Engine pre-cleaner
- Engine throttle, dial
- Fan, hydraulic driven, electronic control, reversible
- Muffler with curved exhaust pipe
- Water separator

ELECTRIC SYSTEM

- Alternator, 60 amp (24 V)
- Back-up alarm
- Batteries, large capacity 170Ah/12v x 2
- Lights, (2 front on radiator guard, 2 rear on fuel tank)
- Sealed electrical connectors
- Starting motor, 5.5 kW

POWER TRAIN AND CONTROLS

- Hydrostatic Steering System (HSS)
- Palm Command Control System (PCCS) with electronic control
 - Forward reverse speed pre-set function
 - Auto downshift
- TORQFLOW transmission, torque converter

UNDERCARRIAGE

- Parallel Link Undercarriage System (PLUS)
- Sprockets, segmented, bolt-on style
- Track frames strengthened:
 - 7 roller, 2 carrier roller (D61EX-15)
 - 8 roller, 2 carrier roller (D61PX-15)
- Track roller guards, center and end section guiding guards
- Track shoe assembly PLUS, single grouser shoes with sealed and lubricated link assembly:
 - D61EX-15: 600 mm **24"**
 - D61PX-15: 860 mm **34"**

GUARDS AND COVERS

- Engine hood and gull-wing side panels
- Fenders, standard type
- Radiator guard door, hinged, strengthened perforated style
- Rear cover, strengthened type
- ROPS/FOPS*
- ROPS mounting brackets
- Underguards, crankcase, and transmission

OPERATOR ENVIRONMENT

- Cab damper mounts
- Cup holder
- Cigarette lighter (24 V, cab only)
- Floor mat
- High mounted footrests
- Instrument monitor panel, electronic with on-board diagnostics
- Provision for ROPS
- Rearview mirror
- Seat belt, 76 mm **3"** retractable

- Seat, air suspension type, fully adjustable, cloth, high back

HYDRAULICS AND CONTROLS

- Accumulator for Proportional Pressure Control (PPC)
- Blade cylinder hoses, standard type
- Hydraulics for PAT dozer
- Palm Command Control System (PCCS) for implement control

SPECIAL ARRANGEMENTS

- Hard water area arrangement (corrosion resistant)
- High altitude arrangement (no fuel adjustment up to 3000 m **9,840 ft**)
- North American arrangement:
 - 20°C **-4°F** through +50°C **+122°F** at sea level
- Water separator

VANDALISM PROTECTION

- Filler cap locks and cover locks
- Vandalism protection cover for instrument panel (for open ROPS only)

OTHER STANDARD EQUIPMENT

- KOMTRAX®
- Marks and plates, English
- Pullhook, front

* ROPS must be ordered; not included in base machine price.
ROPS/FOPS meets all OSHA/MSHA standards and regulations criteria.
FOPS Level 2

Dozer assembly and rear-mounted equipment are not included in base machine price.



OPTIONAL EQUIPMENT

TRACK ROLLER GUARDS

- Track roller guards, segmented, full length

OPERATOR ENVIRONMENT

- Forestry guards for cab and canopy

DRAWBAR

- Long drawbar 83.4 kg **184 lb**

REAR EQUIPMENT AND HYDRAULICS

- Rear hydraulics (D61EX/PX-15)
- Ripper, multi-shank 1645 kg **3,630 lb** (D61EX-15 only)
 - Beam length 2170 mm **7'1"**
 - Number of shanks (3)
 - Additional tractor length 1255 mm **4'1"**
 - Maximum digging depth 665 mm **2'2"**
 - Maximum lift above ground 565 mm **1'10"**

CAB EQUIPMENT

- ROPS for Cab* 220 kg **485 lb**
- Cab, steel* 490 kg **1080 lb** (includes A/C, heater, pressurizer, defroster, sun visor, lunch box holder, power supply, radio, air suspension (high back) seat)
- Working lights, 2 front, 2 rear

* Cab FOPS Level 2

ROPS/FOPS meets all OSHA/MSHA standards and regulations criteria.

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