

D87E-2
D87P-2



KOMATSU[®]

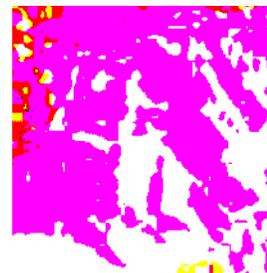
FLYWHEEL HORSEPOWER

172 kW **230 HP** @ 2100 rpm

OPERATING WEIGHT

D87E-2: 23998 kg **52,885 lb**

D87P-2: 25909 kg **57,120 lb**



D87E/P-2

CRAWLER DOZER

D87E/P-2 Crawler Dozer

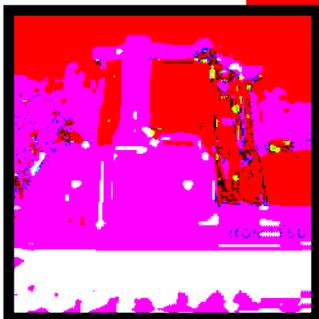
WALK-AROUND



Newly designed 5-sided, 2-door deluxe interior cab for improved visibility and operator comfort.

Double reduction with outboard planetary final drive.

Optional adjustable parallelogram, multi-shank ripper.



Reduced maintenance with hydraulic reservoir sight gauge, radiator sight gauge, and spin-off filters.

Newly designed two-post ROPS improves operator visibility as well as interchangeability of open ROPS to cab units.



Power shift, countershaft transmission provides three forward and three reverse speeds.

D87E/P-2

CRAWLER DOZER

All instruments and electrical function switches are located on resiliently mounted instrument panel.



Gull-wing engine side doors for easy and safer servicing.

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BLADE CAPACITY
D87E Semi-U: 7.04 m³ **9.2 yd³**
D87P Straight: 6.03 m³ **7.89 yd³**

Two-speed steering allows for a full power turn for better load retention.



Sound deflector nose deflects radiator exhaust noise away from operator.

STEERING

Two-Speed Steering

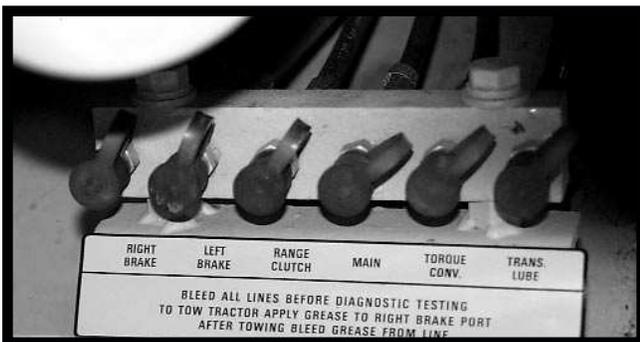
Two-speed steering allows for a full power turn for better load retention, less sprocket and bushing wear, better ripping performance, and firm directional control during slope work and corner loading. The two-speed geared steering feature translates into higher production, all day long, and lower undercarriage costs due to increased traction and less track slippage. The steering controls located to the operator's left offer very short strokes and hydraulic boosters for easy control. By pulling back a single lever to the detent position, gradual turning is provided. Pulling both levers leads to speed reduction. Further rearward movement of the lever disengages the steering clutches and the brake is applied at full rearward position providing a full pivot turn.



Without two-speed steering



With two-speed steering



Diagnostic Center

The diagnostic center is easily accessible upon opening the left-hand access door. It includes six remotely located pressure check ports. Main, Torque Converter, Transmission Lube, Range Clutch, Right Brake & Left Brake pressure measurements can be taken for fast troubleshooting and remedy.

ENGINE AND TORQUE CONVERTER

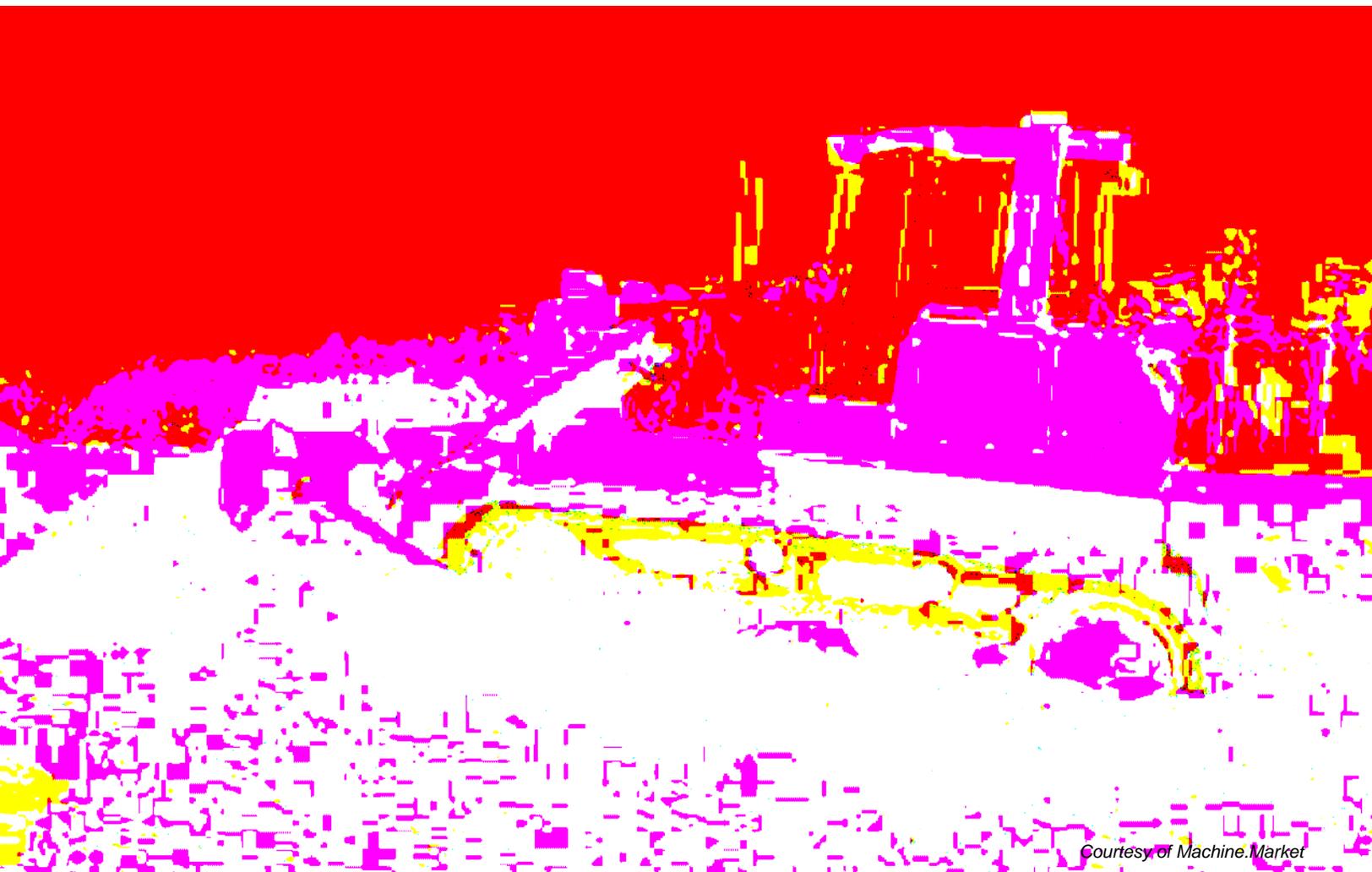
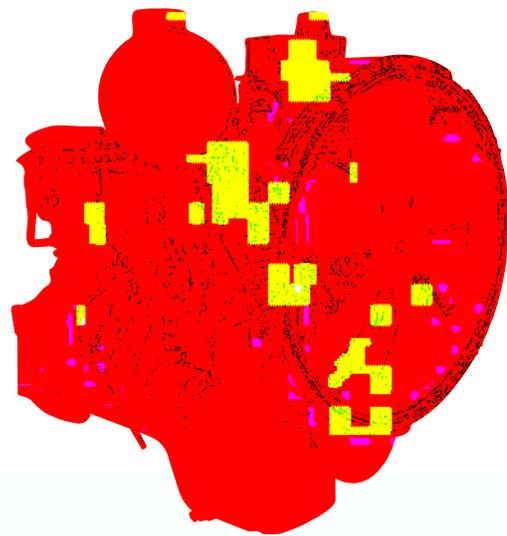
Komatsu S6D125E-2 Turbocharged Diesel Engine

Powerful Engine

A powerful S6D125E-2 turbocharged diesel engine provides a massive output of 172 kW **230 HP**. The engine power is transmitted smoothly to the final drives via a high-efficiency torque converter. And this engine also meets current emissions standards, without sacrificing power or machine productivity.

Gull-Wing Engine Side Covers

The gull-wing engine side covers open widely, using a gas spring cylinder so the engine and the auxiliary components can be checked easily.



SPECIFICATIONS



ENGINE

Model..... Komatsu S6D125E-2
 Type..... 4-stroke cycle, water-cooled, emissionized, turbocharged diesel engine
 Number of cylinders..... 6
 Bore..... 125 mm **4.92"**
 Stroke..... 150 mm **5.91"**
 Piston displacement..... 11.04 ltr **674 in³**
 Gross horsepower*..... 184.2 kW **247 HP** @ 2100 rpm
 Net flywheel horsepower**..... 172 kW **230 HP** @ 2100 rpm
 Net maximum torque..... 102 kg-m **737 ft-lb** @ 1400 rpm

Direct injection fuel system. All-speed mechanical governor.
 Forced lubrication driven by gear pump. Full-flow for lube purification. Dry-type air cleaner with automatic dust evacuator and dust indicator. 7.5 kW/**24 V** electrical starter motor. **50 A** alternator. 122 Ah/**2 x 12 V** batteries.

* Gross horsepower output for complete engine operating under SAE J1995 conditions.

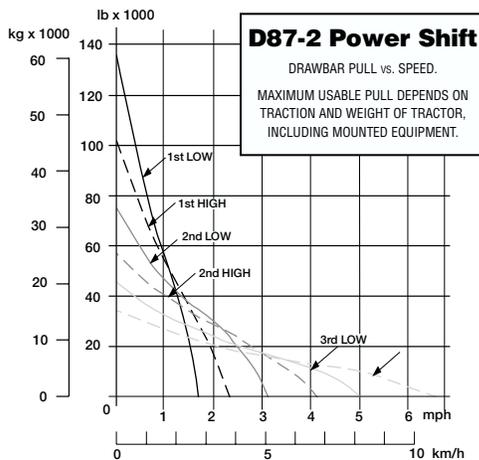
** Net flywheel horsepower output for standard engine (SAE J1349) including air cleaner, alternator (not charging), water pump, lubricating oil pump, fuel pump, muffler, and fan.



TRANSMISSION

Modular countershaft-type power shift, hydraulically controlled and actuated. Single-stage 356 mm **14"** torque converter with a 2.6:1 stall ratio drive transmission through a double universal joint.

Travel Speed	Range	Forward		Reverse	
		km/h	mph	km/h	mph
1st	Low	2.7	1.7	3.4	2.1
	High	3.7	2.3	4.4	2.7
2nd	Low	5.0	3.1	6.0	3.7
	High	6.6	4.1	7.7	4.8
3rd	Low	8.1	5.0	9.5	5.9
	High	10.3	6.4	12.1	7.5



High-low in each gear is power shifted with the steering levers.



STEERING

Two-speed gear steering module provides gradual turns while maintaining *full power to both tracks* plus conventional clutch-brake for pivot turns. The steering system is coupled to a three-speed transmission and torque converter for 6 speeds forward and reverse. Steering module can be removed complete for ease of serviceability.

Hand levers located to the operator's left, hydraulically actuated, oil-cooled, adjustment-free, steering planetary gears, multiple-disc clutches and brakes in one control for each track. Single foot pedal applies for parking or downhill speed control.



FINAL DRIVE

Double-reduction with outboard planetary final drive stage provides desired gear reduction at the sprocket. Ring-type sprocket distributes wear evenly over track bushing, letting every tooth ride free one-half of the time to reduce wear. Final drive and sprockets are replaceable without removing track frames.



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Coolant..... 58.7 ltr **15.5 U.S. gal**
 Fuel tank..... 490 ltr **130 U.S. gal**
 Engine oil..... 30 ltr **7.9 U.S. gal**
 Torque converter, transmission, bevel gear, and steering system..... 131 ltr **34.5 U.S. gal**
 Final drive (each side)..... 38 ltr **10 U.S. gal**
 Blade hydraulic oil capacity..... 133 ltr **35 U.S. gal**



OPERATING WEIGHT (APPROXIMATE)

Operating weight:

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

D87E-2..... 23998 kg **52,885 lb**
 D87P-2..... 25909 kg **57,120 lb**



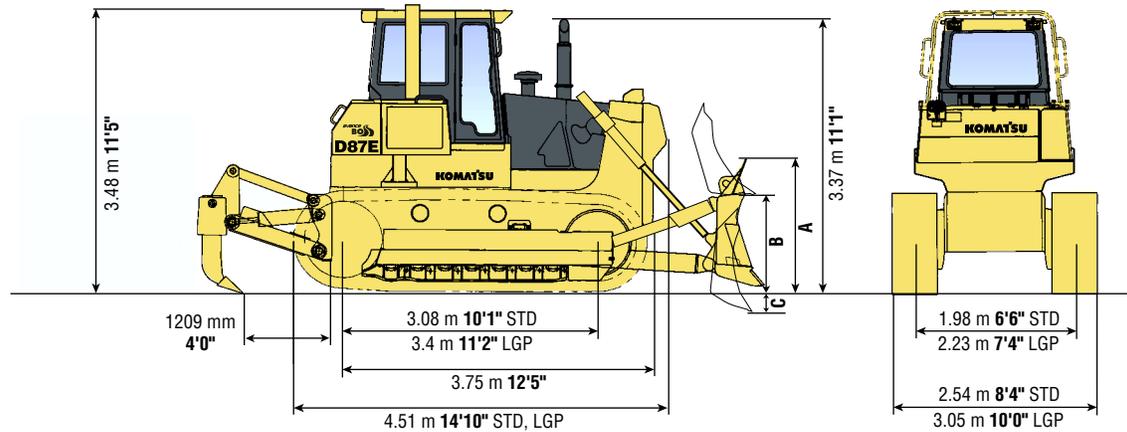
UNDERCARRIAGE

Suspension..... Oscillation, equalizer bar
 Track roller frame..... Welded-strengthened box section
 Rollers and idlers..... Lifetime lubricated carrier/track rollers are induction-hardened for a long life
 Number of track rollers (each side)..... 7 STD/7 LGP
 Number of carrier rollers (each side)..... 2
 Track shoes..... Lubricated tracks. Single-grouser shoes.
 Track tension is easily adjusted with a grease gun.

Type	D87E-2	D87P-2
Track shoe width	560 mm 22"	914 mm 36"
Strutted track link pitch	216 mm 8.5"	216 mm 8.5"
Track shoes, each side	42	45
Ground contact area	3.5 m ² 5,333 in²	6.21 m ² 9,625 in²
Ground pressure	66 kPa 9.5 psi	40.1 kPa 5.81 psi
Grouser height	67 mm 2.63"	67 mm 2.63"
Track adjustment	full hydraulic	full hydraulic
Ground clearance	480 mm 18.1"	480 mm 18.1"
Fixed drawbar height from ground to centerline of 89 mm 3.5" clevis	569 mm 22.4"	610 mm 24"



DIMENSIONS



Ground clearance 460 mm **18.1"**



BLADE

Type of Blade	D87E Semi-U	
Blade capacity SAE J1266	7.04 m ³	9.2 yd³
Maximum usable track shoe width	660 mm	26"
Blade dimensions	Width over end bits	3480 mm 11'5"
	Height, struts centered	A 1600 mm 5'2.5"
Maximum lift	Semi-U B	1.18 m 3'11"
Maximum drop below ground level	C	439 mm 17.3"
Maximum tilt adjustment		670 mm 26.3"
Maximum pitch of blade		9°
Weight of blade equipment	2902 kg	6,390 lb
Length with drawbar and blade	(E)	6.12 m 20'1"
Length with blade and counterweight		6.12 m 20'1"
Length with blade and ripper	(E)	7.29 m 23'11"
Width over trunnions		2.89 m 9'6"

Type of Blade	D87P Straight	
Blade capacity SAE J1266	6.03 m ³	7.89 yd³
Maximum usable track shoe width	914 mm	36"
Blade dimensions	Width over end bits	4370 mm 14'4"
	Height, struts centered	A 1350 mm 4'5"
Maximum lift	Straight B	1.26 m 4'2"
Maximum drop below ground level	C	660 mm 26.1"
Maximum tilt adjustment		660 mm 26.1"
Maximum pitch of blade		9°
Weight of blade equipment	2756 kg	6,075 lb
Length with drawbar and blade	(P)	5.68 m 18'8"
Length with blade and counterweight		5.68 m 18'8"
Length with blade and ripper		—
Width over trunnions		3.32 m 10'11"



HYDRAULIC SYSTEM

Multiple pump, gear, driven from torque converter.
 Output at 6.89 MPa **1,000 psi** and 2330 engine rpm
 I. 145 ltr/min **37.5 U.S. gal/min**
 II. 62.4 ltr/min **16.5 U.S. gal/min**
 Output at 2.06 MPa **300 psi** and 2330 engine rpm
 III. 35.1 ltr/min **9.4 U.S. gal/min**
 Relief valve setting
 Blade lift and ripper 16.6 MPa **2,400 psi**
 Tilt 17.9 MPa **2,500 psi**
 Cylinders, bore and stroke
 Blade lift (all) 114.3 mm x 1066.8 mm **4.5" x 42.0"**
 Tilt (all) 165.1 mm x 146.5 mm **6.5" x 5.73"**
 Reservoir with sight gauge, right fender mounted
 system capacity, includes cylinders and lines 133 ltr **35 U.S. gal**



RIPPER (E ONLY)

Type Multi-shank
 Tool beam
 Overall width 2.13 m **7'0"**
 Cross section, height and width 305 mm x 381 mm **12" x 15"**
 Ground clearance under tool beam
 Ripper raised 1295 mm **4'3"**
 Ripper lowered 178 mm **7"**
 Shank
 Number of shanks per ripper, maximum 3
 Spacing center to center 991 mm **3'3"**
 Penetration maximum 610 mm **24"**
 Ground clearance, maximum, raised 686 mm **27"**
 Shank positions (vertical) 2
 Weight
 Complete, including one shank 2900 kg **6,400 lb**
 Each additional shank 190 kg **420 lb**
 Penetration force 89 kN **20,100 lb**
 Pryout force 175 kN **39,300 lb**



STANDARD EQUIPMENT

- Air cleaner, dry type with outer and inner elements and service indicator
- Alarm, back-up
- Alternator, **50 A**
- Antifreeze, -37°C -34°F
- Batteries (2), **12 V** (625 cca @ 0°F), maintenance-free
- Brakes, foot, hydraulic boosted
- Canopy, ROPS/FOPS (SAE J1040) with seat belt (SAE J386) **3"** retractable
- Decelerator, foot pedal
- Drawbar, rigid, hitch (LGP)
- Engine enclosures:
 - perforated side doors and hood, gull-wing style
- Exhaust pipe extension
- Filter, transmission
- Fuel strainer
- Guards, crankcase with front pull hook, fan, alternator fan belt, instrument panel, radiator, rock deflector sprocket, sprocket drive seal, transmission, track roller (center only—for LGP)
- Heat exchanger, engine oil, torque converter, transmission oil
- Hinged mask door
- Hood side doors, gull-wing style
- Horn, electric
- Hour meter
- Hydraulic control, 240 ltr/min **63.4 U.S. gal/min** pump, 1 valve, 1 lever
- Lights with guards, 2 front, 1 rear
- Muffler
- Power train diagnostic center
- Radiator, isolation mounted, sound deflection style
- Receptacle, starting/charging
- Seat, suspension type, adjustable with armrests
- Starting **24 V** battery
- Steering, two-speed, left-hand controls
- Toolbox
- Torque converter, hydraulic, single stage
- Track adjusters, hydraulic
- Track chain, seated and lubricated (LTS) with split master link, 42 or 45 links
- Track chain guides, integral
- Track frame, 7 roller (E), 7 roller (P), 1981 mm **78"** STD, 2230 mm **88"** LGP gauge, oscillating type, Lifespan lubricated rollers and idlers
- Track shoes, 559 mm **22"** on E, 914 mm **36"** on P
- Transmission, power shift, 3 speeds forward, 3 reverse, high/low range
- Water filter and conditioner
- Water separator, fuel system



OPTIONAL EQUIPMENT

- Batteries (2), cold start, **12 V** (950 cca @ 0°F)
- Bulldozer: Semi-U with tilt
 - Straight with tilt—for LGP
- Cab, with sound suppression, 4 wipers, dome light, and tinted safety glass
 - Air conditioner/heater/pressurizer/defroster
 - Heater/pressurizer/defroster
 - ROPS for CAB or forestry attachment
- Drawbar, heavy-duty, counterweight
- Forestry attachment—large FOPS roof plus front and rear sweeps
- Guards:
 - Crankcase, severe service with hook
 - Track roller, full length
 - Track roller, standard
 - Transmission, severe service
- Hydraulic valve, three-spool for ripper
- Lights, 2 front and 2 rear on cab or canopy
- Radiator, armored core
- Remote start system
- Ripper, multi-shank beam/provision for 3 shanks, without hydraulic pitch
 - Hydraulic pitch for ripper
 - Ripper shank with pin
- Side screens
- Sweeps and screens
- Tools, 17 items in metal box
- Track shoes for E
 - 610 mm **24"** clipped corner
 - 660 mm **26"** clipped corner
- Track shoes, swamp-type for P
 - 864 mm **34"** cast
- Vandalism protection

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