



# DOZER SHOVEL

# D57S-1

FLYWHEEL HORSEPOWER: 135 HP (101 kW)/1900 RPM  
OPERATING WEIGHT: 15280 kg (33,690 lb)  
BUCKET CAPACITY: 1.8 m<sup>3</sup> (2.4 cu.yd)



- **Sturdy Komatsu S4D130-1A diesel engine:** This turbo-charged engine delivers 135 HP (101 kW) and a torque rise of 24% for greater lugging ability. No fuel-injection adjustment required up to altitudes of 3000 m (9,840 ft).
- **Smooth TORQFLOW transmission:** Assures single-lever control of 3 forward and 3 reverse speeds and directional changes.
- **Inching pedal:** Enables convenient, precise approach to dump trucks and obstacles. Also provides dynamic digging when depressed halfway and then abruptly released.
- **Effortless digging/loading operation:** Automatic kickout device stops bucket at desired height, electric automatic bucket positioner sets bucket at optimum digging angle.
- **Comfortable, responsive operation:** Provided by such features as walk-through operator's compartment, adjustable oil-suspension seat, rubber-pad-mounted engine and completely enclosed engine compartment, and suspended foot brake pedals.
- **Wet-type damper:** Assures more efficient transmission of engine power to the TORQFLOW transmission, while absorbing internal power-train and external shocks, to increase power-train reliability and durability.
- **Interconnected steering clutches and brakes:** Enable one-pedal control of desired steering or braking action. Oil-cooled for years of dependable service.
- **Tough undercarriages:** Unique Komatsu dust seals between track links and pins to prevent dirt and mud from entering pin-to-bushing clearances for longer track service. Floating seals in track and carrier rollers and idlers to keep dirt out and lubricant in for reduced maintenance and extended undercarriage life.

 **KOMATSU**

# D57S SPECIFICATIONS



## ENGINE

Komatsu S4D130-1A 4-cycle, water-cooled turbocharged diesel engine of 4 cylinders with 130 mm (5.12") bore x 160 mm (6.30") stroke and 8.495 ltr (518 cu.in.) piston displacement.

Flywheel horsepower . . . . . 135 HP (101 kW)/1900 RPM  
Max. torque . . . . . 63 kg-m (456 lb-ft/617 N-m)/1400 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, 85°F) and barometric conditions (745 mmHg, 29.38"Hg).*

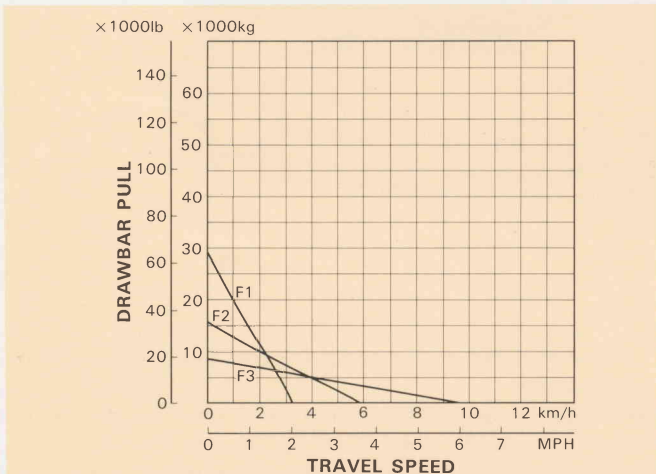
Precombustion chamber. Mechanical all-speed governor. Gear-pump-driven forced lubrication with full-flow and bypass filters. Dry-type air cleaner with precleaner for longer element service and dust indicator for simplified maintenance. Electrical 24-volt starting system. The engine has a rubber pad mounting to reduce operational noise.



## TORQFLOW TRANSMISSION

Komatsu's unique TORQFLOW transmission consisting of water-cooled, 3-element, single-stage, single-phase torque converter and planetary-gear, multiple-disc clutch transmission. Hydraulically actuated and force-lubricated for optimum heat dissipation. Offers single-lever control of speeds (3 forward and 3 reverse) and directional changes. Optimum machine speed obtainable at all times to match job. Gear-shift lock lever and neutral safety switch to prevent machine from accidental starts.

Travel speeds	Forward	Reverse
1st	0-3.1 km/h (1.9 MPH)	0-3.8 km/h (2.4 MPH)
2nd	0-5.7 km/h (3.5 MPH)	0-6.9 km/h (4.3 MPH)
3rd	0-9.5 km/h (5.9 MPH)	0-11.5 km/h (7.1 MPH)



Usable pull will depend upon traction and weight of equipped tractor.



## STEERING

Wet, foot-operated, multiple-disc steering clutches are the spring-loaded, hydraulically actuated and self-adjusting type. Wet, contracting-band, foot-operated steering brakes for extended service life of the components.

Steering clutches and brakes interconnected for easy steering. Inching pedal simplifies operation in confined worksites, material loading and precision approaches to dump trucks.

Min. turning radius . . . . . 2.6 m (8'6")



## FINAL DRIVE

Spur gear, double-reduction final drive minimizes transmission of shocks to power-train components. Segmented sprocket rims are bolt-on type for easy on-field replacement.



## UNDERCARRIAGE

**Suspension** . . . . . Oscillation-type equalizer bar  
**Track roller frame** . . . . . Box-section, high-tensile-strength-steel construction

### Rollers and idlers

Lubricated idlers, track and carrier rollers are sealed with floating seals. Segmented-type track roller guard protects track rollers from damage caused by obstacles outside.

Number of track rollers (each side) . . . . . 6  
Number of carrier rollers (each side) . . . . . 1

### Track shoes

Assembled triple-grouser shoes. Unique W-shaped dust seals for preventing entry of dust into pin-to-bushing clearances for extended service. Track tension easily adjusted with grease gun.

Number of shoes (each side) . . . . . 39  
Grouser height . . . . . 26 mm (1.0")  
Shoe width (standard) . . . . . 400 mm (15.7")  
Ground contact area . . . . . 19400 cm<sup>2</sup> (3,007 sq.in)  
Ground pressure . . . . . 0.79 kg/cm<sup>2</sup> (11.2 PSI/77.5 kPa)



## HYDRAULIC SYSTEM

### Hydraulic control unit

All valves built into the hydraulic tank. Gear-type hydraulic pump mounted on torque converter housing with capacity (discharge flow) of 227 ltr (60 U.S. Gal)/min.

- Relief valve setting . . . 155 kg/cm<sup>2</sup> (2,200 PSI/15.2 MPa)
- Two control valves for bucket movement

Positions: Bucket lift . . . . . Raise, hold, lower and float  
Bucket dump . . . . . Dump, hold and tilt

### Hydraulic cylinders

Double-acting, piston type

	Number of cylinders	Bore
Bucket lift	2	150 mm (5.9")
Bucket dump	2	140 mm (5.5")



## BUCKET EQUIPMENT

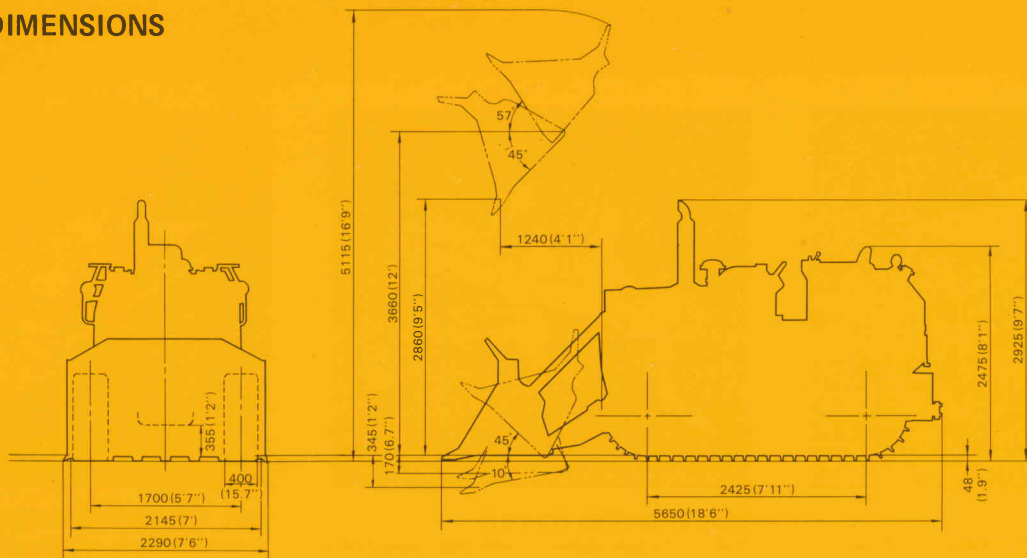
All bucket movements—raising, lowering, dumping and tilting—can be carried out with a single bucket control lever. Automatic bucket positioner using an electromagnetic valve, assures accurate bucket positioning. Bucket lever lock provided to prevent accidental bucket movement.

Bucket linkages are sealed and require no daily maintenance. Long intervals between greasing and fewer greasing points, result in easy maintenance.

Bucket capacity . . . . . 1.8 m<sup>3</sup> (2.4 cu.yd)  
Max. loading capacity . . . . . 3600 kg (7,940 lb)  
Dumping reach . . . . . 1240 mm (4'1")  
Dumping clearance . . . . . 2860 mm (9'5")  
Max. digging depth . . . . . 345 mm (1'2")  
Bucket tilt-back angle at ground . . . . . 45°  
No. of teeth . . . . . 7  
Bucket width . . . . . 2290 mm (7'6")



## DIMENSIONS



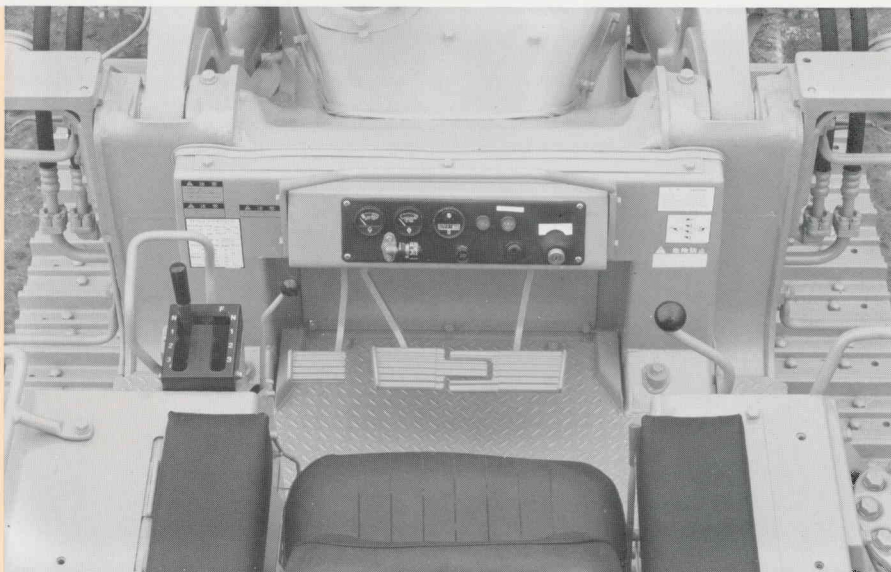
Ground clearance . . . . . 355 mm (1'2")

Unit: mm (ft.in)



## CONTROL FEATURES

All the control levers, pedals, meters and gauges are rationally arranged for easy control. Mono-lever bucket control for raising, lowering, dumping and tilting. Walk-through operator's compartment for easy getting on/off. Comfortable oil-suspension seat can be adjusted fore/aft and up/down. Inter-connected steering clutches and brakes are hydraulically actuated for easy, effortless steering control. All braking actions are controlled with one foot (joint brake pedals).



## COOLANT & LUBRICANT CAPACITY

Coolant . . . . .	58 ltr (15.3 U.S. Gal)
Fuel tank . . . . .	280 ltr (74.0 U.S. Gal)
Engine . . . . .	33 ltr ( 8.7 U.S. Gal)
Torque converter, transmission . . . . .	28 ltr ( 7.4 U.S. Gal)
Bevel gear case, steering case . . . . .	56 ltr (14.8 U.S. Gal)
Final drive (each side) . . . . .	14 ltr ( 3.7 U.S. Gal)
Hydraulic oil . . . . .	125 ltr (33.0 U.S. Gal)
Damper . . . . .	1.3 ltr ( 0.3 U.S. Gal)



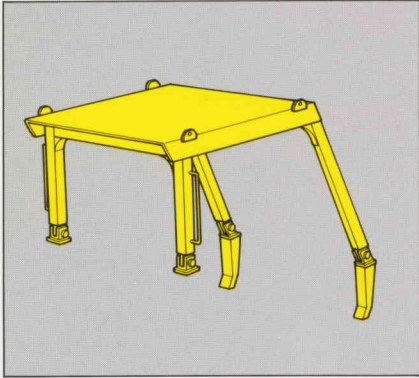
## OPERATING WEIGHT (approximate)

Operating weight includes the rated capacity of lubricant and coolant, full fuel tank and the standard equipment . . . . . 15280 kg (33,690 lb)

## STANDARD EQUIPMENT

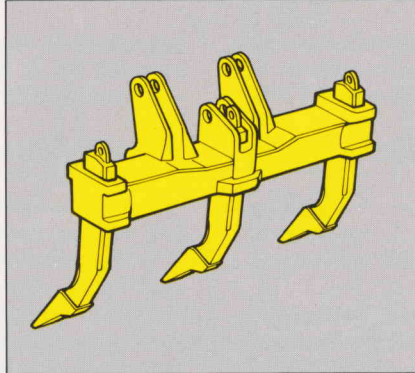
- F3/R3 TORQFLOW transmission
- 400 mm (15.7") triple-grouser shoes
- Hydraulic track adjusters
- 24 V, 13 A alternator
- 24 V, 7.4 kW electric starting motor
- Wet-type steering clutches and brakes
- In-line radiator
- Dry-type air cleaner
- 24 V (12 V x 2), 150 Ah batteries
- Inching pedal
- 6-roller track frame
- Lighting system (including one rear and two front lights),
- Automatic bucket positioner
- Segmented sprockets
- Lower guards
- End track roller guards
- Blower fan
- Oil-suspension seat
- Perforated radiator mask (hinged type)
- Tool kit

# ATTACHMENTS



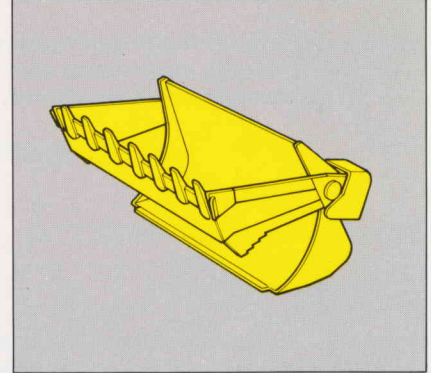
## ROPS CANOPY

Meets ISO 3471, SAE J1040c ROPS standards and ISO 3449 FOPS standard.  
 Additional weight . . . . . 550 kg (1,210 lb)  
 • ROPS cab also available.  
 Additional weight . . . . . 910 kg (2,010 lb)



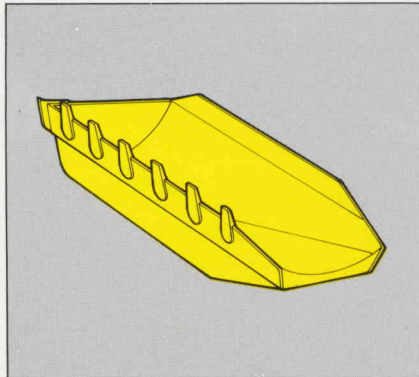
## MULTI-SHANK RIPPER

Rigid, hydraulically controlled parallelogram-type ripper with 3 shanks.  
 Digging angle adjustable in 2 stages  
 Additional weight (including hydraulic control unit and 3 shanks) . . . 1460 kg (3,220 lb)  
 Beam length . . . . . 1755 mm (5'9")  
 Max. lift above ground . . . . . 505 mm (1'8")  
 Max. digging depth . . . . . 530 mm (1'9")



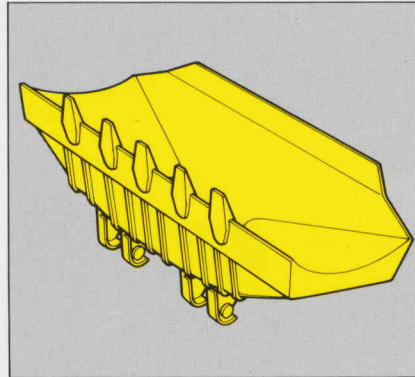
## MULTIPURPOSE BUCKET

A bucket/blade combination usable as a bucket, blade, scraper or cramshell for all-around loading, topsoil stripping and debris cleaning.  
 Additional weight (including hydraulic control unit) . . . . . 840 kg (1,850 lb)  
 Bucket capacity . . . . . 1.6 m<sup>3</sup> (2.1 cu.yd)  
 Bucket width . . . . . 2295 mm (7'6")  
 Max. loading capacity . . . 3200 kg (7,055 lb)  
 Dumping clearance . . . . . 2780 mm (9'1")  
 Dumping reach . . . . . 1235 mm (4'1")



## SIDE-DUMP BUCKET

In addition to regular forward dumping, it permits side dumping without the need to maneuver the machine accordingly.  
 Additional weight (including hydraulic control unit) . . . . . 1160 kg (2,560 lb)  
 Bucket capacity . . . . . 1.6 m<sup>3</sup> (2.1 cu.yd)  
 Bucket width . . . . . 2395 mm (7'10")  
 Dumping clearance:  
 Front dump at 45° discharge angle . . . . . 2735 mm (9')  
 Side dump at 42° discharge angle to the right . . . . . 3805 mm (12'6")  
 Dumping reach:  
 Front dump at 45° discharge angle . . . . . 1340 mm (4'5")  
 Side dump at 42° discharge angle to the right . . . . . 400 mm (1'4")



## THREE-WAY BUCKET

Enables forward, right and left-side dumping.  
 Additional weight (including hydraulic control unit) . . . . . 1430 kg (3,150 lb)  
 Bucket capacity . . . . . 1.6 m<sup>3</sup> (2.1 cu.yd)  
 Bucket width . . . . . 2500 mm (8'2")  
 Max. loading capacity . . . 3200 kg (7,055 lb)  
 Dumping clearance:  
 Front dump at 45° discharge angle . . . . . 2710 mm (8'11")  
 Side dump at 45° discharge angle to the left or right . . . . . 3840 mm (12'7")  
 Dumping reach:  
 Front dump at 45° discharge angle . . . . . 1370 mm (4'6")  
 Side dump at 42° discharge angle to the left or right . . . . . 400 mm (1'4")

Materials and specifications are subject to change without notice.

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1 - OCT. 1993