

# PC40-5

## HYDRAULIC EXCAVATOR



Canopy is optionally available.  
Model shown may include other optional equipment.

## KOMATSU VANGUARD SERIES

- Komatsu-built 3D95S engine delivers high output for powerful excavation even at partial throttle.
- The 90° boom offset mechanism, the first in this class, is ideal for side digging.
- Extra small min. swing radius makes the PC40 an efficient machine in tight quarters.
- A wide working range makes excavation easy and efficient.
- High travel speed and powerful traction for boosted working efficiency.
- Low noise operation is assured by Komatsu 3D95S engine and noise absorbing materials inside the machine cab for minimized operator's fatigue.
- The control valve operated swing hydraulic system assures smooth swing starts and stops.
- All controls are easily made by manipulating the long control levers.
- A newly designed wide operator's cab (optional) offers comfortable controls.
- Maintenance is facilitated by a full-open machine cover.
- Colored, low-profile machine design is newly employed.

# SPECIFICATIONS



## ENGINE

Komatsu 3D95S, 4-cycle, water-cooled, overhead-valve, diesel engine. 3 cylinders, 95 mm (3.74") bore × 95 mm (3.74") stroke and 2.02 ltr. (123 cu.in) piston displacement. Flywheel horsepower:

38 HP (28.7 kW) at 2600 RPM (SAE J1349)

39 PS (28.7 kW) at 2600 RPM (DIN 6270 NET)

Swirl combustion chamber system. All-speed mechanical governor. Force-lubrication driven by gear pump. Full-flow filter for lube purification. Dry-type air cleaner. 12 V/2 kW electrical starter motor. 12 V/35 A alternator. 12 V/70 Ah battery.



## HYDRAULIC SYSTEM

### Hydraulic pumps

- Three-tandem gear pumps power the boom, arm, bucket, travel, swing, blade and boom offset circuits.

Capacity (discharge flow) at engine 2600 RPM . . . 36 ltr. (9.6 U.S. gal)/min. × 2 + 26 ltr. (6.7 U.S. gal)/min. × 1

### Hydraulic motors

Travel . Two axial piston motors with counter balance valve

Swing . . . . . One axial piston motor with brake valve

### Relief valve setting

Implement circuits . . . 210 kg/cm<sup>2</sup> (2987 PSI/20.6 MPa)

Travel circuits . . . . . 210 kg/cm<sup>2</sup> (2987 PSI/20.6 MPa)

Swing circuits . . . . . 195 kg/cm<sup>2</sup> (2773 PSI/19.1 MPa)

### Control valves

2-spool, 3-spool and 4-spool control valves.

### Hydraulic cylinders

Cylinder	Numbers	Bore
Boom	1	90 mm (3.5")
Arm	1	80 mm (3.1")
Bucket	1	80 mm (3.1")
Boom offset	1	90 mm (3.5")
Blade	1	90 mm (3.5")



## STEERING

Steering/traveling controls are activated with hand levers. Pushing both levers moves machine forward. Pulling them back makes machine go into reverse. Setting one lever in neutral and the other in forward enables machine to make a pivot turn. Pushing one forward while pulling the other backward makes machine counterrotate on the spot.



## DRIVES

Fully hydrostatic type. Each track is independently driven by an axial-piston motor. Power goes through spur eccentric single-reduction gear to track. Travel motors are neatly installed within track shoe's width (in-shoe design).

Max. drawbar pull . . . . . 2600 kg (5,730 lb/25.5 kN)

Max. travel speed: Low . . . . . 2.1 km/h (1.3 MPH)

High . . . . . 3.6 km/h (2.2 MPH)



## BRAKES

Hydraulic lock type travel motors equipped with brake valve. When travel/steering levers are positioned in neutral, brakes automatically lock. Brake valve limits travel speed during descent.



## SWING SYSTEM

Hydraulic motor-driven through spur reduction gears. Single-row shear type ball bearings with induction-hardened internal gears are built into swing circle. Grease bathed swing pinion. Pin-lock type swing lock is provided. Swing speed is proportional to swing control lever stroke.

Swing speed . . . . . 10 RPM

Tail swing radius . . . . . 1485 mm (4' 10")

Min. swing radius . . . . . 2180 mm (7' 2") (work equipment, fully retracted)

**Boom swing:** Boom can be swung 50° to left and 90° to right by boom offset cylinder independent of upper structure swinging.

Boom offset distance: Left . . . . . 710 mm (2' 4")

Right . . . . . 455 mm (1' 6")



## BLADE

Welded, unitized construction of blade and frame.

Blade width × height . . . 1840 mm (6') × 350 mm (1' 2")

Blade cutting angle . . . . . 62°

Max. lift above ground . . . . . 290 mm (1')

Max. drop below ground . . . . . 395 mm (1' 4")



## UNDERCARRIAGE

Box-section track frames. Sealed track. Lubricated rollers and idlers. Hydraulic track adjusters with shock absorbing springs. Assembled track-type tractor shoes with triple grousers.

Shoe width . . . . . 400 mm (15.7")

Grouser height . . . . . 18 mm (0.71")

Number of shoes . . . . . 37 each side

Number of track rollers . . . . . 4 each side

Ground pressure . . . . . 0.24 kg/cm<sup>2</sup> (3.4 PSI/23.5 kPa)



## COOLANT & LUBRICANT CAPACITY (refilling)

	Liter	U.S. gallon
Fuel tank	45	11.9
Radiator	6	1.6
Engine	4.0	1.1
Final drive, each side	0.5	0.1
Swing drive	1.7	0.4
Hydraulic tank	45	11.9



## OPERATING WEIGHT (approximate)

Operating weight including 2650 mm (8' 8") one-piece boom, 1430 mm (4' 8") arm, heaped 0.22 m<sup>3</sup> (0.29 cu.yd) backhoe bucket, operator, lubricant, coolant and full fuel tank: 3910 kg (8,620 lb)

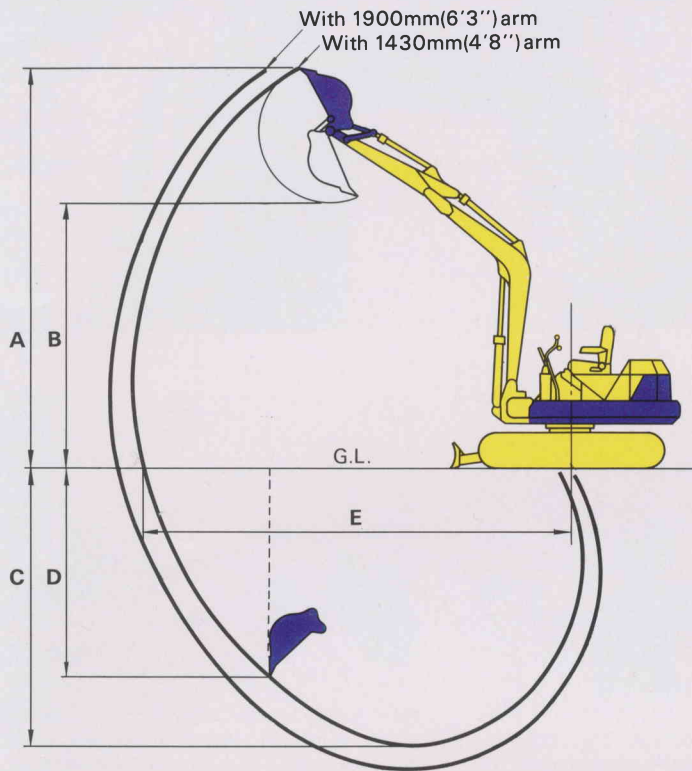
(\* Heaped capacity = struck capacity × 2)

## STANDARD EQUIPMENT

12 V/2 kW electric starting motor, 35 A alternator, dry type air cleaner, muffler, counterweight, 400 mm triple grouser shoes, lubricant track rollers and idlers, hydraulic track adjusters, shock absorbing recoil springs, fully hydraulic drive, dozer blade, suction fan, 12 V/70 Ah battery, working light, track guard (end section), operator's seat, engine water temperature gauge, caution lamp for engine oil pressure, service meter, alternator charging lamp, electric fuel gauge, hydraulic oil level sight gauge.



## WORKING RANGE



Arm length		with 1430 mm (4'8'') arm	with 1900 mm (6'3'') arm
A	Max. digging height	5.05 m (16'7'')	5.05 m (16'7'')
B	Max. dumping height	3.34 m (11')	3.40 m (11'2'')
C	Max. digging depth	3.50 m (11'6'')	4.00 m (13'1'')
D	Max. vertical wall digging depth	2.75 m (9')	3.10 m (10'2'')
E	Max. digging reach at ground level	5.45 m (17'11'')	5.85 m (19'2'')
Bucket digging force		3150 kg (6,940 lb/30.9 kN)	3150 kg (6,940 lb/30.9 kN)

**Track shoes:** Choose the ideal shoes depending on your job requirements.

Type of shoes	Ground pressure kg/cm <sup>2</sup> (PSI/kPa)
400 mm (15.7'') flat shoes	0.23 (3.27/23)
400 mm (15.7'') triple grouser shoes (holed)	0.24 (3.41/24)
480 mm (18.9'') triple grouser shoes	0.20 (2.84/20)
550 mm (21.7'') triple grouser shoes	0.18 (2.56/18)
400 mm (15.7'') rubber pad shoes	0.89 (12.7/87)
550 mm (21.7'') circular arc shoes	0.17 (2.41/17)

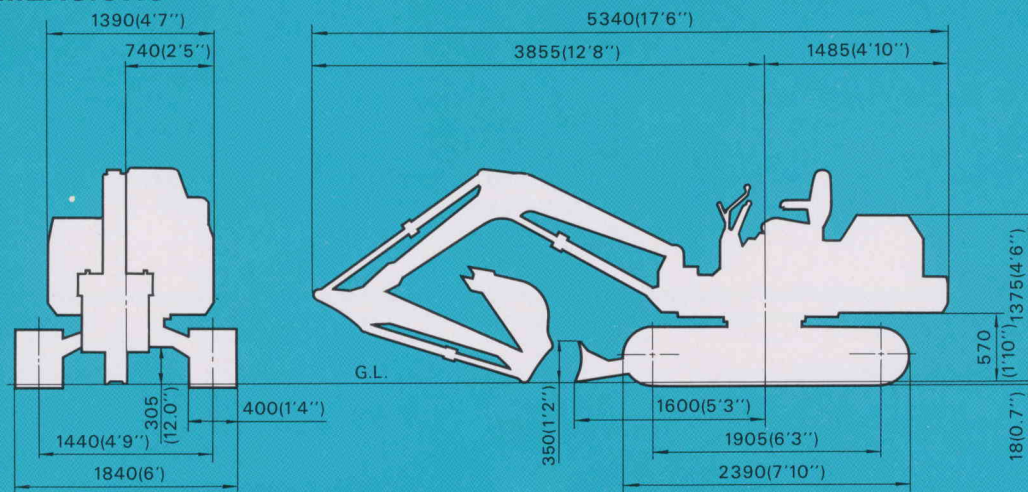
## BACKHOE BUCKETS

Capacity: m <sup>3</sup> (cu.yd)			
Heaped (struck × 2)	0.08 (0.10)	0.22 (0.29)	0.26 (0.34)
JIS, CECE heaped	0.05 (0.07)	0.13 (0.17)	0.16 (0.21)
SAE, PCSA heaped	0.06 (0.08)	0.15 (0.20)	0.19 (0.25)
Struck	0.04 (0.05)	0.11 (0.14)	0.13 (0.17)
Bucket width: mm (in)			
without side cutters	300 (11.8'')	600 (23.6'')	700 (27.6'')
with side cutters	—	630 (24.8'')	—
No. of bucket teeth	3	4	5
Bucket type	Narrow bucket	Std. bucket	Light-duty bucket



## DIMENSIONS

Unit: mm (ft.in)

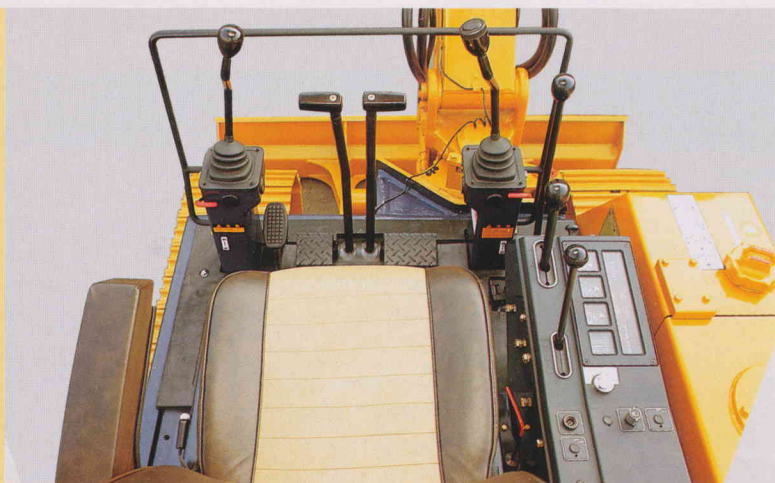


With 2650 mm (8'8'') one-piece boom, 1430 mm (4'8'') arm, \*heaped 0.22 m<sup>3</sup> (0.29 cu.yd) backhoe bucket.

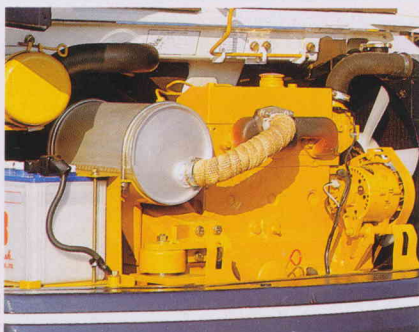


## CONTROLS

Human-engineered layout of controls, meters and gauges. Two long control levers, which are employed in the larger class models, ensure quick response and fine controlling of the work equipment. Travel/steering levers positioned alongside each other. Operator's fatigue is greatly minimized thanks to the quiet Komatsu-built 3-cylinder engine and noise absorbing materials attached inside the machine cab.



## PRODUCTIVE FEATURES



**Komatsu-built 3D95S engine** provides a tenacious power of 38 HP (28.7 kW) at 2600 RPM, and assures powerful excavation even at partial throttle, without the fear of stalling.



**Convenient boom offset:** The boom itself can be swung 90° to right side. As a result, PC40-5 is excellent in side digging in adjacent to the wall. In addition, it also can be swung 50° to left side. This means that PC40-5 can complete quick dig/load operation in extra tight quarters without swinging the upper structure.



**Wide working range:** Equipped with the long boom and arm, the PC40-5 attains a wide working range. This, plus large breakout force make it easy to conduct any type of excavation work.



**Extra small min. swing radius** makes the PC40 an efficient machine in tight quarters.



**Comfortable cab** is optionally available. This wide cab isolates the operator from the external elements such as dust, rain, noise and others. It also offers an ample workspace for relaxed controls and assures a panoramic view.



**Full-open machine cover** allows quick access to internal components such as engine, hydraulic equipment, etc. for both quick checking and repairing.

This specification sheet may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

**KOMATSU**

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