KOMATSU
KOMATSU MARKETING DIVISION

PC150-5

HYDRAULIC EXCAVATOR

Model shown may include optional equipment.

KOMATSU: The Quality is Standard.

FLYWHEEL HORSEPOWER: 99 HP @ 2000 RPM. BUCKET CAPACITY: .38-.86 m³ (.50-.1.12 yd³). OPERATING WEIGHT: 15380 kg (33,910 lb).

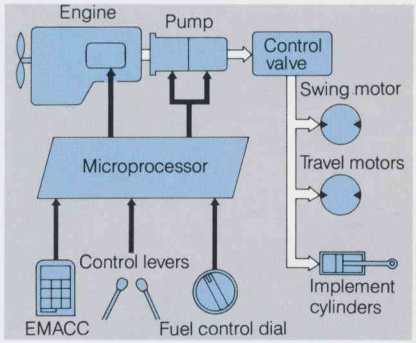
- Working mode selection system matches machine performance to actual job conditions
- OLSS system conserves fuel by preventing neutral, fine control and relief losses
- Autodecelerator lowers engine speed whenever the work equipment and travel controls are in neutral for additional fuel savings
- Hi-Lo travel speed system automatically selects the correct travel speed depending on ground conditions and operator selection
- Merged circuits reduce cycle times
- Straight travel circuit assures straight travel, even during simultaneous operations
- Spacious, well-ventilated cab, excellent visibility and adjustable wrist controls add to the operator's comfort and productivity
- Adjustable electronic monitor and control console puts all control and monitoring functions at your fingertips
- Long track length and a wide track gauge provide for greater stability and increased lifting capacities.

The New Frontier of Technology

UNEQUALLED PERFORMANCE AND FUEL ECONOMY

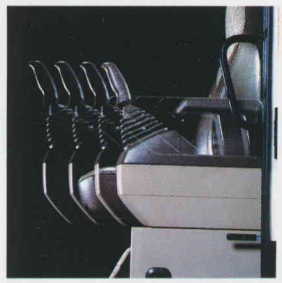
Working Mode Selection System
This system allows the operator to match machine performance and economy to the task at hand by selecting either the "Heavy Duty Operations," "General Operations," "Finishing Operations" or "Lifting Operations" mode. Just simply select the appropriate working mode and the microcomputer does the rest.

Pump and Engine Mutual Control System
A microprocessor automatically varies engine speed and pump output for maximum fuel efficiency without sacrificing productivity.



Electronic Monitor and Control Console (EMACC)
The EMACC puts all system controls and display functions within easy view and reach of the operator. The console can also be rotated through three positions to provide the best, glare-free viewing angle.

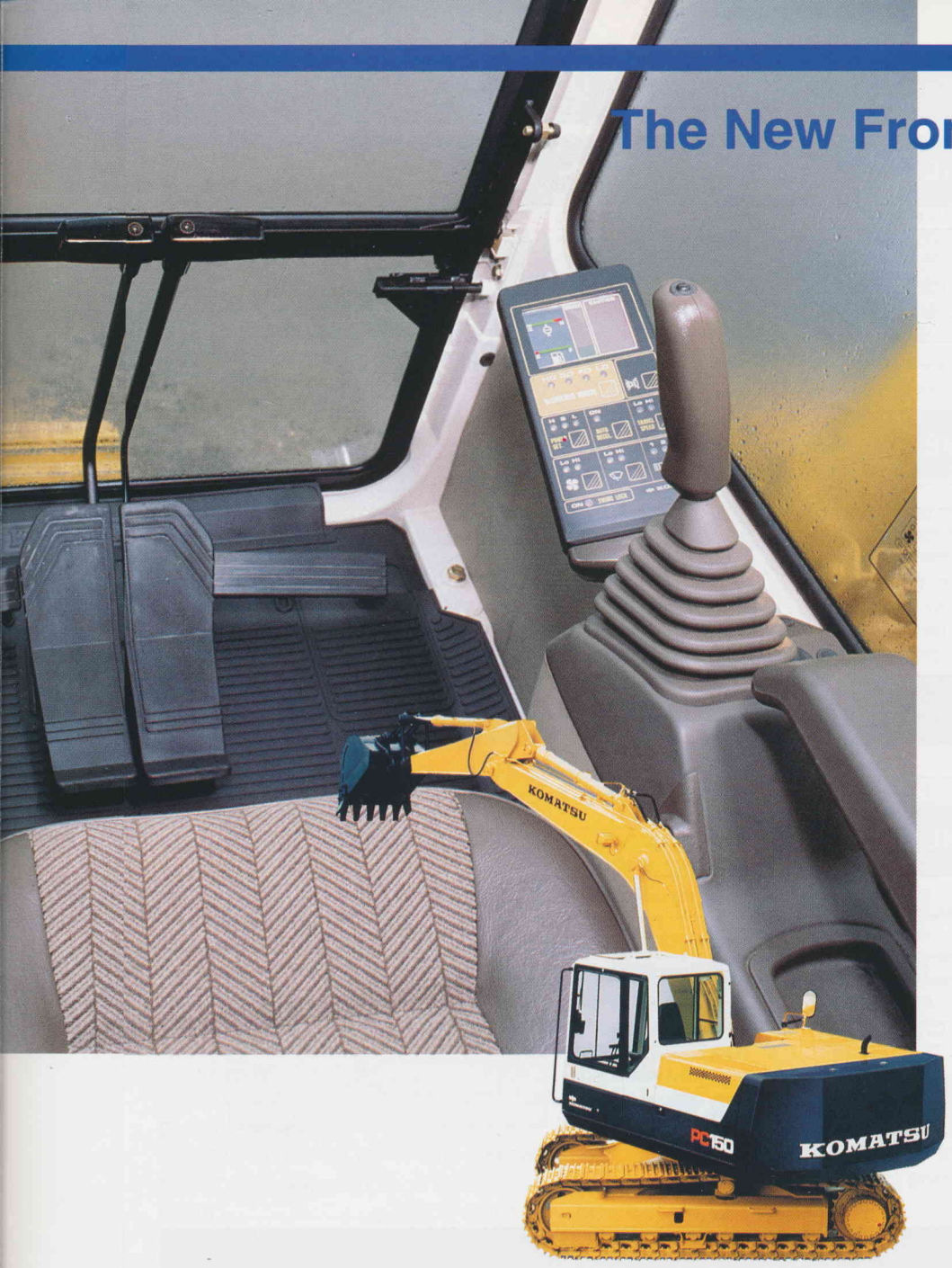
The EMACC Consists of:
- Working Modes
- Power Modes: Three modes (H, S and L) are automatically set in accordance with the working mode. Manual reset is also possible.
- Autodeceleration
- Monitor: constantly checks machine's condition
  Pre-start level checks
  Fuel gauge
  Coolant temperature gauge
- Caution items: coolant level and temperature, fuel level, oil pressure, and charge system
- Lo-Hi travel speed selector
- Swing lock indicator
- Wiper controls: intermittent or continuous
- Heater fan control



Adjustable wrist control lever

Adjustable Wrist Control Levers
Unitized wrist control levers and arm rests can be adjusted through three work positions for maximum operator comfort. The proportional pressure wrist controls reduce operating effort while assuring precise work equipment operations.

The New Frontier of Quality



Quality Improvements Include:
- Added filters and radiator dust-resistant screening to keep the hydraulic system clean and cool.
- Double lock electronic connectors and in-cab mounted electronic microprocessor provide increased reliability and protection from the elements.

Automatic Warm-Up System
Engine speed is automatically controlled by the microprocessor when coolant temperature is low for fast, fuel efficient and reliable engine warm-up.

Engine Overheat Prevention
Should the coolant temperature rise above desired levels, pump output and engine speed are reduced, preventing damage to the engine.

Other Performance-Proven Features
- OLSS (Open-Center Load Sensing System) reduces hydraulic losses.
- Autodeceleration boosts fuel economy.
- Swing holding brake makes working on slopes much easier.
- Car-like operator's cab
- X-leg frame for excellent stability.
- Merged circuits shorten cycle times.
- Straight travel circuits facilitate simultaneous work equipment/ travel operations.

EASY AND COMFORTABLE OPERATION

Automatic Hi-Lo Travel Speed
Travel speed is automatically shifted to either "Hi" or "Lo," depending on ground conditions and operator selection.

Fuel Control Dial
The easy to use dial makes adjusting the engine speed quick and effortless.

Engine Key Stop
To stop the engine, simply turn the ignition key to off.

Spacious Cab
The roomy, efficient cab design has a large glass area for excellent visibility, as well as sliding front and side windows for cross ventilation.

Adjustable Operator's Seat
The fully adjustable suspension seat provides outstanding comfort.

Boom Lock Valve
The boom circuit is equipped with a boom holding valve to prevent hydraulic drift of the work equipment.

Swing Lock
The swing can be locked for transport simply by flicking a switch.

SPECIFICATIONS

ENGINE

Komatsu S6D95L 4-cycle, water-cooled, turbocharged diesel engine with 6 cylinders, 95 mm **(3.74″)** bore × 115 mm **(4.53″)** stroke and 4.89 ltr **(298 in³)** piston displacement
Flywheel horsepower ..... **99 HP @ 2000 RPM**
The engine features direct injection for fuel economy, a mechanical all-speed governor, forced lubrication with a full-flow filter, dry-type air cleaner with dust indicator and automatic dust evacuator, 24 V/5.5 kw starting system with 25A alternator, 2 x 12V/110 Ah batteries.

HYDRAULIC SYSTEM

Two variable capacity piston pumps and independent swing operation assure smooth compound movements of the work equipment. The Pump and Engine Mutual Control (PEMC) system controls the engine speed and pump output for maximum fuel efficiency and productivity. The Open-center Load Sensing System (OLSS) controls the pumps for efficient use of engine power, reduced hydraulic losses during operation, and low fuel consumption.

Two variable-capacity piston pumps power boom, arm, bucket swing and travel circuits. One gear pump powers pilot control circuits.

Pump capacities (discharge flow @ 2000 engine RPM):
Piston ..... 2 x 138 ltr **(37 U.S. gal)** min
Gear ..... 49 ltr **(13 U.S. gal)** min

Hydraulic motors:
Travel .....Two axial piston motors with parking brake
Swing .....One axial piston motor with swing holding brake

Relief valve settings:
Implement circuits.....325 kg/cm² **(4,620 psi)**
Swing circuit .....230 kg/cm² **(3,270 psi)**
Pilot circuit.....30 kg/cm² **(430 psi)**
Travel circuit .....325 kg/cm² **(4,620 psi)**

Control valves:
5-spool and 6-spool valves with a service valve

No. of cylinders — bore × stroke:
Boom ..... 2-110 mm x 1170 mm **(4.3" x 3'10")**
Arm ..... 1-120 mm x 1350 mm **(4.7" x 4'5")**
Bucket ..... 1-100 mm x 1025 mm **(3.9" x 3'4")**

STEERING

Steering/traveling controls are activated with either hand levers or foot pedals. Pushing both levers (or pedals) moves machine forward. Pulling them back makes machine go into reverse. Setting one lever (or pedal) 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 drive with each track powered by an axial piston motor. Power goes through a double-reduction planetary gear to the track.
Maximum drawbar pull .....11600 kg **(25,570 lb)**
Maximum travel speed .....5.5 km/h **(3.4 MPH)**
Gradeability.....70% **(35°)**

BRAKES

Each travel motor is equipped with a brake valve that lessens shock when applied and limits speed during descent. The wet disc brakes are actuated on the final-drive input shaft and automatically lock when the travel/steering levers and/or pedals are in neutral.

SWING SYSTEM

The swing system is powered by a hydraulic driven motor through spur and planetary gears. Single-row, shear type ball bearings with induction-hardened internal gears are built into the swing circle. Grease-bathed swing pinion, electric swing lock and swing holding brake are provided. Swing speed is proportional to swing control lever stroke.
Max. swing speed .....12 RPM
Tail-swing radius .....2445 mm **(8′)**
Min. swing radius .....3000 mm **(9′10″)**
(work equipment, fully retracted)

UNDERCARRIAGE

X-leg type center frame is integrally welded with reinforced box-section track frames. The design includes sealed tracks, lubricated rollers and idlers, hydraulic track adjusters with shock absorbing springs, and assembled track-type tractor shoes with triple grousers.

STANDARD UNDERCARRIAGE
Shoe width ..... 500 mm **(19.7")**
Grouser height..... 26 mm **(1")**
Number of shoes (each side)..... 41
Number of carrier rollers (each side)..... 1
Number of track rollers (each side) 6
Ground pressure ..... .49 kg/cm²/**(6.97 psi)**

SERVICE REFILL CAPACITIES

Fuel Tank ..... 230 ltr **(60.8 U.S. gal)**
Coolant ..... 15.9 ltr **(4.2 U.S. gal)**
Engine ..... 17.5 ltr **(4.6 U.S. gal)**
Final drive (each side)..... 4 ltr **(1 U.S. gal)**
Swing drive..... 4.5 ltr **(1.2 U.S. gal)**
Hydraulic oil ..... 135 ltr **(35.7 U.S. gal)**

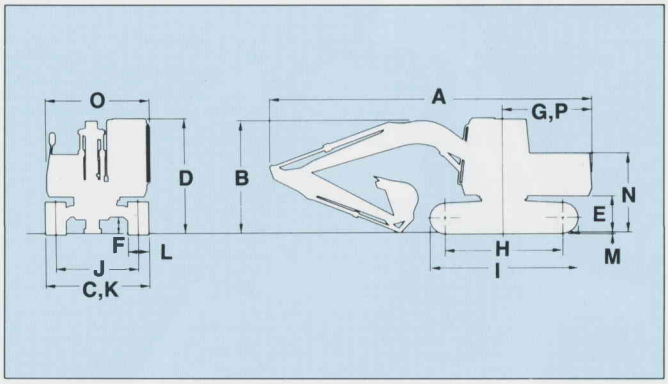
OPERATING WEIGHT

Including 5150 mm **(16'11")** one-piece boom, 2620 mm **(8'7")** arm, 0.52 m³ **(0.69 yd³)** backhoe bucket, operator, lubricant, coolant and full fuel tank..... 15380 kg **(33,910lb)**

DIMENSIONS

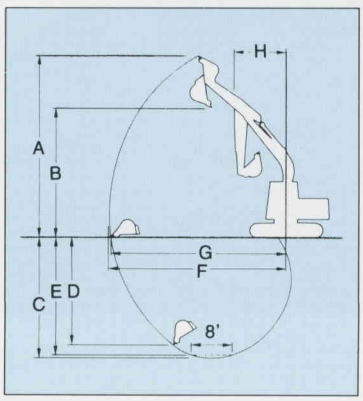
		2.25 m **(7'5")** arm	2.61 m **(8'7")** arm	2.90 m **(9'6")** arm
A	Overall length	8520 mm **(27'10")**	8500 mm **(27'11")**	8500 mm **(27'11")**
B	Overall height (to top of boom)	2870 mm **(9'5")**	2830 mm **(9'3")**	2920 mm **(9'7")**

C	Overall width	2490 mm **(8'2")**
D	Overall height (to top of cab)	2820 mm **(9'3")**
E	Ground clearance, counterweight	980 mm **(3'3")**
F	Min. ground clearance	440 mm **(17")**
G	Tail swing radius	2445 mm **(8'0")**
H	Length of track on ground	2880 mm **(9'5")**
I	Track length	2685 mm **(12'1")**
J	Track gauge	1990 mm **(6'6")**
K	Width of crawler	2490 mm **(8'2")**
L	Shoe width	500 mm **(19.7")**
M	Grouser height	26 mm **(1")**
N	Machine cab height	1960 mm **(6'5")**
O	Machine cab width	2475 mm **(8'1")**
P	Distance, swing center to rear end	2370 mm **(7'9")**



WORKING RANGE

		2.25 m **(7'5")** arm	2.61 m **(8'7")** arm	2.90 m **(9'6")** arm
A	Max. digging height	8790 mm **(28'10")**	8830 mm **(29'0")**	8950 mm **(29'4")**
B	Max. dumping height	6170 mm **(20'3")**	6220 mm **(20'5")**	6360 mm **(21'10")**
C	Max. digging depth	5660 mm **(18'7")**	6050 mm **(19'10")**	6340 mm **(20'10")**
D	Max. vertical wall digging depth	4890 mm **(16'1")**	5150 mm **(16'11")**	5385 mm **(17'8")**
E	Max. digging depth of cut for 8' level	5430 mm **(17'10")**	5800 mm **(19'0")**	6110 mm **(20'1")**
F	Max. digging reach	8680 mm **(28'6")**	8900 mm **(29'2")**	9235 mm **(30'4")**
G	Max. digging reach at ground	8520 mm **(27'11")**	8795 mm **(28'10")**	9080 mm **(29'9")**
H	Min. swing radius	3360 mm **(10'0")**	3000 mm **(9'9")**	3010 mm **(9'10")**
Bucket digging force		9000 kg **(19,845 lb)/88kN**	9000 kg **(19,845 lb)/88kN**	9000 kg **(19,845)/88kN**
Arm crowd force		7900 kg **(17,420 lb)/77kN**	7000 kg **(15,430 lb)70kN**	6300 kg **(13,890 lb)/65kN**



BUCKETS

TYPE	Capacity m³ **(yd³)** SAE, PCSA heaped	Width mm **(in)** Outside Lip	Width mm **(in)** With side cutters (Komatsu) With wear shrouds (ESCO)	Weight Kg **(lb)**	No. of Teeth	ARMS 2.25 m **(7'5")**	ARMS 2.61 m **(8'7")**	ARMS 2.90 m **(9'6")**
KOMATSU Mid-Heavy Duty	0.43 **(0.56)**	600 **(24)**	700 **(28)**	441 **(975)**	3	○	○	○
	0.52 **(0.69)**	700 **(28)**	825 **(32)**	530 **(1,103)**	4	○	○	○
	0.61 **(0.81)**	825 **(33)**	950 **(37)**	550 **(1,205)**	4	○	○	X
ESCO STDP	0.38 **(0.50)**	610 **(24)**	660 **(26)**	413 **(910)**	4	○	○	○
	0.57 **(0.75)**	762 **(30)**	813 **(32)**	456 **(1,006)**	4	○	○	○
	0.67 **(0.88)**	914 **(36)**	965 **(38)**	510 **(1,125)**	5	○	○	X
	0.86 **(1.12)**	1067 **(42)**	1118 **(44)**	557 **(1,227)**	6	□†	Δ†	X
ESCO HDP	0.38 **(0.50)**	610 **(24)**	660 **(26)**	516 **(1,138)**	4	○	○	○
	0.57 **(0.75)**	762 **(30)**	813 **(32)**	569 **(1,255)**	4	○	○	○
	0.67 **(0.88)**	914 **(36)**	965 **(38)**	634 **(1,398)**	5	○	○	X
	0.86 **(1.12)**	1067 **(42)**	1118 **(44)**	699 **(1,541)**	6	□†	Δ†	X
ESCO HDC	0.38 **(0.50)**	610 **(24)**	686 **(27)**	576 **(1,270)**	4	○	○	□
	0.57 **(0.75)**	737 **(29)**	813 **(32)**	639 **(1,408)**	4	○	○	X

○ - Can be used with a material weight up to 3,040 lb/yd³ Δ - Can be used with a material weight up to 2,020 lb/yd³ † - Light duty only
□ - Can be used with a material weight up to 2,520 lb/yd³ X - Not useable

STANDARD EQUIPMENT

- All-weather sound suppressed steel cab (with tinted safety glass windows, pull-up type front window with lock device, removable lower windshield, lattice guard, lockable door, floor mat, intermittent window wiper and washer, adjustable suspension seat with seat belt, adjustable armrest with control levers, cigarette lighter, ashtray, heater and defroster, glass protector brackets)
- Alternator 25 A
- Autodecelerator
- Automatic engine warm-up system
- Automatic deaeration system for fuel line
- Batteries 12 V/110 Ah x 2
- Boom holding valve
- Cooling suction fan
- Counterweight 2750 kg **(6,065 lb)**
- Dry-type air cleaner with auto dust evacuator and dust indicator
- Engine overheat prevention system
- Electric horn
- Electric starting motor
- Electronic Monitor and Control Console
  Gauges:
  – Coolant temp.
  – Fuel level
  Indicator lights:
  – Coolant level
  – Coolant temp.
  – Electric charge
  – Engine crankcase oil
  – Engine oil pressure
  – Engine preheating
  – Fuel level
  – Swing lock
- Electronic Open-Center Load Sensing System and Pump Engine Mututal Control system
- Fan guard
- 500 mm **(19'7")** triple-grouser shoes
- Hydraulic track adjusters
- Lights, 1 front (RH)
- Outside rearview mirror (RH)
- Power mode selection system
- Proportional Pressure hydraulic control
- Radiator & coil cooler with dustproof screen
- Revolving frame underguards
- Service meter
- Service valve
- Sight gauge protector
- Swing holding brake
- Track guiding guards (center section)
- Two speed travel
- Vandalism protection locks
- Working mode selection system

OPTIONAL EQUIPMENT

- Head guard
- Outside rearview mirror (LH)
- Piping for additional actuators
- Swing flasher

OPTIONAL SHOES

Shoe width	660 mm **(23.6")** triple grouser	700 mm **(27.6")** triple grouser	800 mm **(31.5")** triple grouser
Machine ground pressure	0.41 kg/cm² **(5.82 psi)**	0.36 kg/cm² **(5.11 psi)**	0.30 kg/cm² **(4.41 psi)**
Additional weight	230 kg **(510 lb)**	460 kg **(1,015 lb)**	687 kg **(1,525 lb)**
Shoe application code	Y	Z	Z

X - Rocky terrain, river banks & General terrain
Y - General or soft terrain
Z - Extremely soft terrain (swamps)

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