

PC45MR-5 PC55MR-5

EPA Tier 4 Final Engine

Australian - NZ specifications

COMPACT HYDRAULIC EXCAVATOR



The photo shows Japanese specification.

HORSEPOWER

PC45MR-5

Gross: 29.1 kW 39 HP/2400 min-1 Net: 28.3 kW 38 HP/2400 min-1

PC55MR-5

Gross: 29.1 kW 39 HP/2400 min-1 Net: 28.3 kW 38 HP/2400 min-1

OPERATING WEIGHT

PC45MR-5: 4860 kg (Canopy) 4980 kg (Cab)

PC55MR-5: 5140 kg (Canopy) 5260 kg (Cab)

BUCKET CAPACITY

PC45MR-5: 0.055 - 0.16 m³ PC55MR-5: 0.055 - 0.18 m³

Introducing the environmentally-friendly next-generation compact hydraulic excavator Compliant with U.S. EPA Tier 4 Final emission regulations



The photo shows Japanese specification.

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Ecology & Economy Features

- U.S. EPA Tier 4 Final emission regulations-compliant engine
- 5% reduction in fuel consumption per hour (Compared with Komatsu's current models)
- Selectable two working modes

Information & Communication Technology (ICII)

- Multi-function monitor for displaying much information
- High resolution 3.5" Liquid Crystal Display (LCD) color monitor

Safety Features

- Two-post canopy compliant with ROPS (ISO 3471) and OPG top guard (ISO 10262) standards
- Lock lever and lock lever auto lock function
- Engine shutdown secondary switch
 Seat belt caution indicator
 NEW

Workability & Durability Features

- Automatic travel speed change increases work efficiency and makes gear changes smoother
- Dial type fuel controls
- Strengthened boom cylinder guard and relocated working light for reduced damage

Combrieble Exitates

- Spacious and comfortable operator's compartment
- Multiple accessories around the operator's seat
 Newly designed cab
 Newly designed cab

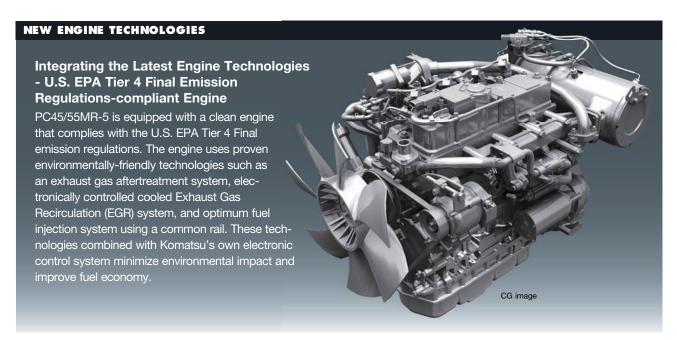
*Matnonance Exit*utes.

- Tilt-up floor mechanism and wide cover for easy maintenance
- Various maintenance information is displayed on the monitor **ENEW**

JKOMITRAXX

3

ECOLOGY & ECONOMY FEATURES



Clean and Economical

Komatsu Diesel Particulate Filter (KDPF)

Special catalyst and fuel injection are used to burn and remove particulate matter (PM) deposited in the filter.

Heavy-duty cooled Exhaust Gas Recirculation (EGR) system

Part of the exhaust gas is reused for combustion to reduce NOx emissions.

Heavy-duty High-Pressure Common Rail (HPCR) fuel injection system

Injection of pressurized fuel is optimally controlled by the computer for near-complete combustion to reduce particulate matter (PM) and fuel consumption.

Electronic control system

The engine and hydraulic system are optimally controlled according to the operating conditions. The hydraulic loss reduction mechanism also helps reduce both fuel consumption and environmental impact.

Fuel consumption

Comparison with Komatsu's current models

5% reduction/hour

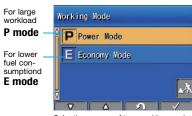
The above data may differ from actual fuel consumption depending on the type of work.

The fuel consumption data is based on in-house comparison test results.

Selectable Two Working Modes

Powerful P mode for production and economical E mode

for lower fuel consumption can be easily selected on the monitor panel depending on application.

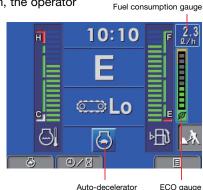


Selection screen of two working modes

ECO Gauge and Fuel Consumption Gauge

The monitor screen is provided with an ECO gauge and also a fuel consumption gauge which is displayed continuously. In addition, the operator

can set a desired fuel consumption target value (Within the range of the green display), enabling the machine to be operated with better fuel economy.

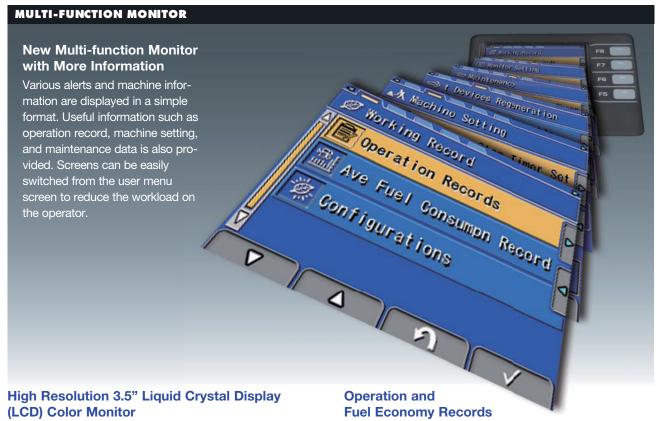


Auto-decelerator and Auto Idle Shutdown

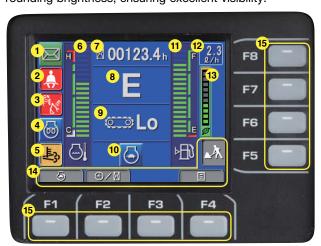
Auto-decelerator and auto idle shutdown functions are provided as standard. The auto-decelerator function automatically reduces the engine speed a few seconds after the work equipment levers are moved to the neutral position. The auto idle shutdown function* automatically stops the engine after a preset time to reduce unnecessary fuel consumption.

* Default setting is OFF.

ICT



The high resolution Liquid Crystal Display (LCD) color monitor is less affected by the viewing angle and surrounding brightness, ensuring excellent visibility.



8 Working mode

9 Travel mode10 Auto-decelerator

11 Fuel gauge

13 ECO gauge

14 Guidance icons

15 Function switches

12 Fuel consumption gauge

Indicators, basic operation switches

- 1 Message
 2 Seat belt
- 3 Work equipment lock
- 4 Engine preheating
- 5 KDPF* regeneration or
- KDPF* regeneration disable
- 6 Engine coolant temperature gauge7 Service meter, clock
- * Komatsu Diesel Particulate Filter

Operation and fuel economy records can be checked on the monitor, helping improve overall fuel economy.





Record in Last 1 week

Operation record

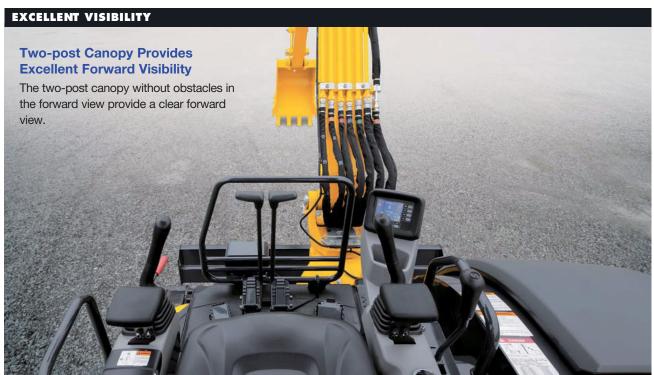
Fuel economy record



The photo shows North American specification.

SAFETY FEATURES





The photo shows North American specification.

Lock Lever and Lock Lever Auto Lock Function

The engine can be started only in the lock position. The function to detect the neutral position of the work equipment lever prevents accidental operation due to touching the work equipment lever when the lock lever is released. If the lock lever is released with the work equipment lever not in the neutral position, the work equipment automatically stops to prevent accidents.





Engine Shutdown Secondary Switch

Engine shutdown secondary switch at base of seat is added to shutdown engine.



Short Tail Swing for Operation in Confined Areas

The short tail swing radius with minimum rear overhang from the track (60mm for PC45MR-5 and 140mm for PC55MR-5) allows the operator to concentrate on work in confined areas without worrying about the counterweight clearance.

Seat Belt Indicator

A warning indicator on the monitor appears when the seat belt is not engaged.



Retractable Seat Belt



Other Equipment

Hose covers

Pressure hoses are provided with protective covers.



Reflector



Thermal guard Fan guard Accumulator Travel alarm

WORKABILITY & DURABILITY FEATURES



Automatic Travel Speed Change and Travel Switch

The travel speed selector switch installed on the blade control lever allows the operator to engage high speed travel. Once engaged, the travel speed automatically shift up or down within the selected speed range.

Travel switch



Dial Type Fuel Control

The dial type fuel control makes operation and engine speed adjustment much easier.



Easy Scraping Toward the Machine

The distance between the blade and bucket teeth has been optimized for easy scraping toward the machine.



Large Vertical Pin and Steel Bushing

A large vertical pin and steel bushing are used at the boom foot for improved durability. An abrasion-resistant steel bushing further improves service life.



Attachment Selector Valve

Allows the operator to switch between oneway (Breaker) and twoway auxiliary hydraulic flow (Thumb).



Strengthened Boom Cylinder Guard

A strengthened boom cylinder guard helps protect the boom cylinder from damage.



A working light for work equipment is located at the boom base for better protection.



Working Light on Canopy or Cab

A working light provides good illumination working at night.







Large Transport Tie Down Points

Large transport tie down points are provided on the track frame and blade for securing the machine during transport.





COMFORTABLE FEATURES



The photo shows North American specification.

Standard Accessories 12 V external power outlet Accessory case Wrist rest Large cup holder (For canopy)

Spacious and Comfortable Operator's Compartment

The two-post canopy provides spacious leg room and a wide forward view without blind spots. The newly



Seat with a semi-high back

designed high-quality interior and semi-high back reclining seat help keep the operator comfortable.

OPTIONAL ENCLOSED CAB

Newly Designed Cab Provides Excellent Visibility and Wide Operator Space.

Visibility is improved by employing large-sized flat glass. Width is also increased to realize wide operator space.
This cab conforms to ROPS (ISO 3471) and OPG (Top guard)
Level I (ISO 10262).

Rear left of cab protrudes from track by 00 mm (PC45MR-5) or 00 mm (PC55MR-5) when upper structure swings.

Newly designed large-sized door

Cab entrance area is increased 17% (Compared with Komatsu's current models) by employing newly designed large-sized door.





Standard Accessories for Cab

Sliding window glass (Right side)



Front window with power assist



Rear view mirrors



Cup holder (For cab)



Reinforced front glass Heater with fresh air input Escape hammer/ Room lamp/Hanger

Optional Accessories for Cab

Large-capacity air conditioner with fresh air filter

The large-capacity air conditioner, high defrosting performance, and optimum air outlet design keep a comfortable environment in the cab all year round.



Ashtray



Additional working light



MAINTENANCE FEATURES



Large fuel filter and fuel pre-filter with water separator

A large filter with enhanced filtering performance is used. The fuel pre-filter with a water separator removes water and dirt in fuel to prevent fuel system troubles.







Fuel pre-filter (With water separator)

Washable floormat

The washable floormat with flange is easy to clean.



Long-life oil, filter

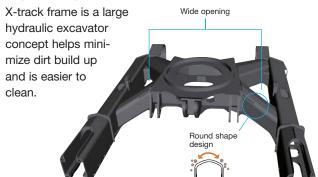
Long-life oil and a high-performance filter are used. The replacement interval for the engine oil and engine oil filter is 500 hours, and those for the hydraulic oil and hydraulic oil filter are 2,000 hours and 1,000 hours, respectively. These long replacement intervals reduce costs and contribute to effective use of resources.



Hydraulic oil filter

High strength X-track frame

KOMATSU



Maintenance Information Is Displayed in a Simple Format on the Monitor

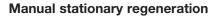
"Maintenance time caution lamp" display

When the remaining time to maintenance becomes less than 30 hours*, the maintenance time monitor appears. Pressing the key switches the monitor to the maintenance screen.

* The setting can be changed within the range between 10 and 200 hours.







When it is necessary to carry out a manual stationary regeneration of the KDPF*, the operator can easily accomplish this through monitor screen. A soot level indicator is displayed to show how much soot trapped in the KDPF*.





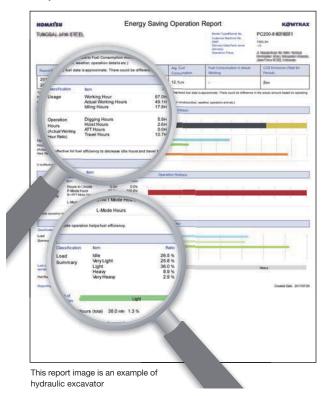
KOMTRAX



The Komatsu remote monitoring and management technology provides insightful data about your equipment and fleet in user-friendly format.

Energy Saving Operation Report

KOMTRAX delivers the energy-saving operation report based on the operating information such as fuel consumption, load summary and idling time, which helps you efficiently run a business.



Equipment Management Support

Through the web application, a variety of search parameters are available to quickly find information about specific machines based on key factors. Moreover, KOMTRAX finds out machines with problems from your fleet and shows you through an optimal interface.



Periodic maintenance

The report contents and data depend on the machine model.

Optimal Strategy for Efficient Work

The detailed information that KOMTRAX puts at your fingertips helps you manage your fleet conveniently on the web anytime, anywhere. It gives you the power to make better daily and long-term strategic decisions.





SPECIFICATIONS



ENGINE

Model Komatsu 4D88E-7
Type
Aspiration Cooled EGR
Number of cylinders
Bore88 mm
Stroke
Piston displacement 2.189 L
Horsepower:
SAE J1995
ISO 9249 / SAE J1349 Net 28.3 kW 38 HP
Rated rpm
Fan drive method for radiator cooling Mechanical
Governor All-speed control, electronic

U.S. EPA Tier 4 Final and EU Stage 3A emissions certified.



HYDRAULICS
Type Hydraulic Mechanical Intelligence New Design (HydrauMind) Number of selectable working modes
Pumps for
Type Fixed displacement gear
Maximum flow
Hydraulic motors:
Travel 2 x axial piston motors with parking brake
Swing 1 x axial piston motor with swing holding brake Relief valve setting:
Implement circuits26.5 MPa 270 kg/cm ²
Travel circuit
Swing circuit
Pilot circuit
Blade circuits (Raise, Lower)
Hydraulic cylinders:
(Number of cylinders – bore x stroke x rod diameter)
Boom
Arm (PC45MR-5)
(PC55MR-5)
Bucket (PC45MR-5)
Boom swing (PC45MR-5) 1–90 mm x 630 mm x 50 mm
(PC55MR-5) 1–95 mm x 630 mm x 50 mm
Blade



DRIVES AND BRAKES

Steering control	Two levers with pedals
Drive method	
Maximum drawbar pull.	42 kN 4280 kg
Gradeability	30°
Maximum travel speed:	High4.6 km/h
(Auto-shift)	Low 2.6 km/h
Service brake	Hydraulic lock
Parking brake	Mechanical disc brake



SWING SYSTEM

Drive method	Hydrostatic
Swing reduction	Planetary gear
Swing circle lubrication	Grease-bathed
Service brake	Hydraulic lock
Swing lock	Mechanical disc brake
Swing speed	9 min ⁻¹



UNDERCARRIAGE

Center frame X-frame
Track frame
Seal of track Sealed track
Track adjuster
Number of shoes (Each side)
Number of carrier rollers (Each side)
Number of track rollers (Each side) 4



COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank	. 65 L
Coolant	8.9 L
Engine	7.5) L
Final drive (Each side)	0.7 L
Hydraulic tank	(20) L



OPERATING WEIGHT (APPROXIMATE)

Operating weight including 2640 mm (PC45MR-5), 2900 mm (PC55MR-5) one-piece boom, 1375 mm (PC45MR-5), 1640 mm (PC55MR-5) arm, ISO 7451 heaped 0.14 m³ (PC45MR-5), 0.16 m³ (PC55MR-5) bucket, blade, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

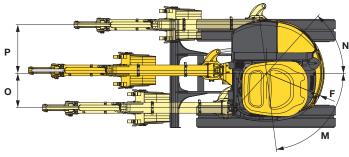
	PC45MR-5				
		Canopy, r Shoe	ROPS Cab, Rubber Shoe		
Shoes	Operating Ground Weight Pressure		Operating Weight	Ground Pressure	
400 mm	4860 kg 26.4 kPa 0.27 kg/cm ²		4980 kg	27.3 kPa 0.28 kg/cm ²	

	PC55MR-5				
		Canopy, r Shoe	ROPS Cab, Rubber Shoe		
Shoes	Operating Ground Weight Pressure		Operating Weight	Ground Pressure	
400 mm	5140 kg	28.9 kPa 0.29 kg/cm ²	5260 kg	29.5 kPa 0.30 kg/cm ²	

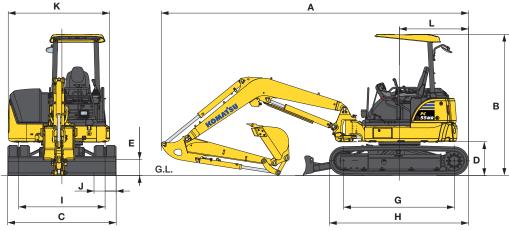


DIMENSIONS

Mod	el	PC45MR-5	PC55MR-5			
Boom Length		2640 mm	2900 mm			
Arm Length		1375 mm	1640 mm			
Α	Overall length		5220 mm	5550 mm		
В	Overall height	Canopy	2550 mm	2550 mm		
В	Overall neight	Cab	2590 mm	2590 mm		
C	Overall width		1960 mm	1960 mm		
D	Ground clearance, cou	nterweight	610 mm	610 mm		
E	Ground clearance (minimum)		290 mm	290 mm		
F	Tail swing radius		1040 mm	1120 mm		
G	Track length on ground		2000 mm	2000 mm		
Н	Track length		2520 mm	2520 mm		
I	Track gauge		1560 mm	1560 mm		
J	Shoe width		400 mm	400 mm		
K	Machine upper width		Machine upper width		1835 mm	1835 mm
L	Distance, swing center to rear end		1265 mm	1265 mm		
M/N	Boom swing angle deg.		LH85/RH50	LH85/RH50		
0	Bucket offset LH		630 mm	630 mm		
Р	Bucket offset RH		880 mm	880 mm		



With rubber shoe





BACKHOE BUCKET

Bucket Capa	city (Heaped)	Wie	dth	Weight	Number	PC45MR-5	PC55MR-5
ISO 7451, PCSA	CECE	Without Side Cutters	With Side Cutters	With Side Cutters	of Teeth		
0.055 m ³	0.05 m ³	300 mm	370 mm	89 kg	3	0	0
0.11 m ³	0.10 m ³	425 mm	500 mm	94 kg	3	0	0
0.14 m ³	0.13 m ³	525 mm	600 mm	109 kg	4	•	X
0.16 m ³	0.14 m ³	580 mm	650 mm	110 kg	4	0	•
0.18 m ³	0.16 m ³	625 mm	700 mm	121 kg	5	Х	0

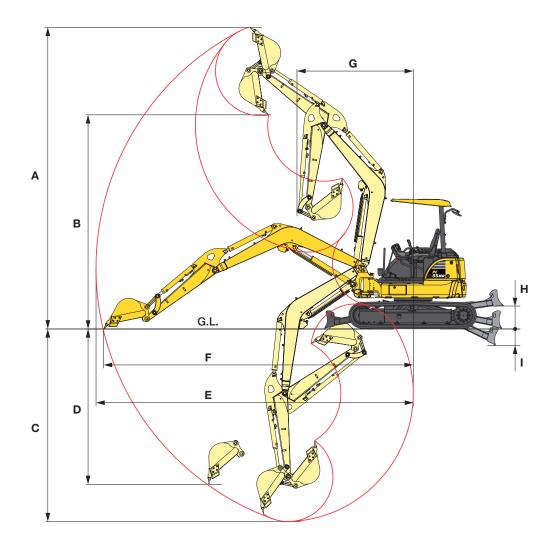
- : Standard equipment
- O: Optional equipment
- X : Not available



WORKING RANGE

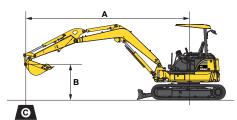
Mod	el	PC45MR-5	PC55MR-5
Boor	n Length	2640 mm	2900 mm
Arm Length		1375 mm	1640 mm
A	Maximum digging height	5500 mm	5915 mm
В	Maximum dumping height	3775 mm	4200 mm
С	Maximum digging depth	3300 mm	3770 mm
D	Maximum vertical wall digging depth	2730 mm	3030 mm
E	Maximum digging reach	5735 mm	6220 mm
F	Maximum digging reach at ground	5575 mm	6075 mm
G	Minimum swing radius (When boom swing)	2290 (1760) mm	2285 (1760) mm
Н	Maximum blade lift	430 mm	430 mm
I	Maximum blade depth	330 mm	330 mm
ISO 6015 Rating	Bucket digging force	33.9 kN 3460 kg	39.0 kN 3980 kg
ISO (Arm crowd force	20.3 kN 2070 kg	23.9 kN 2440 kg

With rubber shoe





LIFTING CAPACITY WITH LIFTING MODE



- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front

PC45MR-5 Canopy Boom: 2640 mm Arm: 1375 mm Bucket: 0.14 m³ ISO 7451 heaped Shoe width: 400 mm Rubber shoe Blade on ground							
A	€Max	cimum	3.0 m		2.0 m		
В	Cf	Cs	Cf	Cs	Cf	Cs	
3.0 m	925 kg	565 kg	_	_	_	_	
2.0 m	930 kg	465 kg	1240 kg	1075 kg	_	_	
1.0 m	1010 kg	430 kg	1895 kg	975 kg	_	_	
0 m	1150 kg	435 kg	2295 kg	915 kg	1205 kg	1205 kg	
-1.0 m	1245 kg	495 kg	2305 kg	900 kg	2500 kg	1755 kg	

PC55MR-5 Canopy Boom: 2900 mm Arm: 1640 mm Bucket: 0.16 m³ ISO 7451 heaped Shoe width: 400 mm Rubber shoe Blade on ground						
B A	€Maximum		3.0 m		2.0 m	
	Cf	Cs	Cf	Cs	Cf	Cs
3.0 m	830 kg	530 kg	_	_	_	_
2.0 m	865 kg	450 kg	1170 kg	1170 kg	_	_
1.0 m	915 kg	420 kg	1825 kg	1095 kg	_	_
0 m	975 kg	425 kg	2225 kg	1020 kg	1265 kg	1265 kg
-1.0 m	1045 kg	465 kg	2265 kg	1000 kg	2445 kg	1945 kg

Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE standard No.J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.





STANDARD EQUIPMENT

ENGINE

- Air cleaner, double element with auto dust evacuator
- Cooling fan, suction type

ELECTRICAL SYSTEM

- Alternator, 12 V/55 A
- Auto-decelerator
- Battery, 1 x 12 V/72 Ah
- Starting motor 12 V/1.7 kW
- Working light on boom
- · Working light on canopy or cab

HYDRAULIC SYSTEM

· Auxiliary hydraulics with selector valve

GUARDS AND COVERS

- Fan guard structure
- Thermal guard

UNDERCARRIAGE

- Shoes
- 400 mm rubber shoe

OPERATOR ENVIRONMENT

- 1 x 12 V power supply
- Automatic two-speed travel control
- High resolution 3.5" LCD color monitor
- Lock lever auto lock function
- Rear view mirrors (RH, LH, rear)
- Retractable seat belt, 50 mm
- Suspension seat
- Travel alarm
- Two-post ROPS (ISO 3471) canopy

WORK EQUIPMENT

- Arm
- 1375 mm arm assembly with piping (PC45MR-5)
- 1640 mm arm assembly with piping (PC55MR-5)
- Backfill blade
- Boom
- 2640 mm boom assembly with piping (PC45MR-5)
- 2900 mm boom assembly with piping (PC55MR-5)

OTHER EQUIPMENT

- Auto idle shutdown function
- KOMTRAX
- Swing holding brake



OPTIONAL EQUIPMENT

HYDRAULIC SYSTEM

• Pattern change valve (ISO - backhoe)

UNDERCARRIAGE

- Shoes
 - 400 mm road liner shoe
 - 400 mm steel shoe

OPERATOR ENVIRONMENT

- Cab
 - Heater with defroster (Standard)
 - Air conditioner with defroster (Optional)
- Working light, left side (Standard)
- Additional working light, right side (Optional)
- AM/FM radio & auxiliary input
 (3.5 mm jack) ready (Optional)
- Proportional switch (For attachment line)
- Retractable seat belt, 78 mm

WORK EQUIPMENT

· Wide variety of attachments

OTHER EQUIPMENT

· Battery disconnect switch



AUSTRALIAN - NZ SPECIFICATIONS

ENGINE

• Air pre-cleaner

HYDRAULIC SYSTEM

• Pattern change valve (ISO - backhoe)

OPERATOR ENVIRONMENT

- Cab
- Air conditioner with defroster
- Two front working lights
- AM/FM radio & auxiliary input (3.5 mm jack)
- Proportional switch (For attachment line)
- Retractable seat belt, 78 mm

OTHER EQUIPMENT

Quick coupler unit

www.Komatsu.com.au Printed in Australia

