

PC120-6

KOMATSU

NET HORSEPOWER

87 HP 64 kW

OPERATING WEIGHT

26,530 lb

12030 kg



HYDRAULIC EXCAVATOR

avance

PC120-6

The Avance cab interior is spacious and provides a comfortable working environment.



PC120-6 HYDRAULIC EXCAVATOR

Net Horsepower:
87 HP 64 kW @ 2,300 RPM

Operating Weight:
26,530 lb
12030 kg

Bucket Capacity:
0.48 - 1.00 yd³
0.37 - 0.76 m³

1. ADJUSTABLE MONITOR
2. STARTER SWITCH
3. FUEL CONTROL DIAL
4. INCLINED DASHBOARD
5. ADJUSTABLE ARMRESTS
6. OPTIONAL AIR CONDITIONING
7. FULLY ADJUSTABLE SEAT
8. HOT / COLD STORAGE COMPARTMENTS
9. LOW EFFORT JOYSTICKS
10. OPERATOR WEIGHT ADJUSTMENT

COMFORTABLE CAB



MULTI-POSITION CONTROLS

The multiple position, pressure proportional control levers allow the operator to work in comfort while maintaining precise control.

A double slide mechanism allows the seat and controllers to move together or independently, allowing the operator to position the controllers for maximum productivity and comfort.

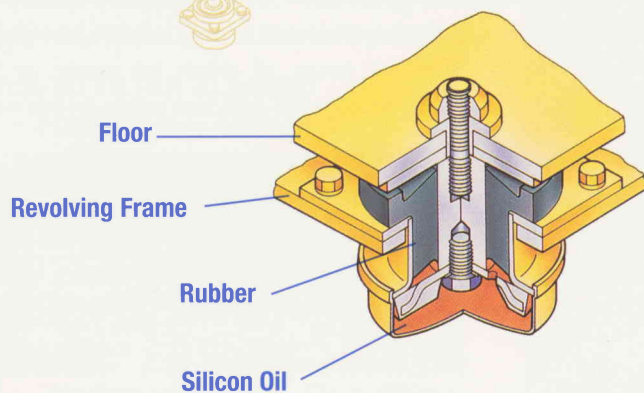
The multi-position diagnostic monitor is easily reached and can be rotated to remove glare. Plus, the inclined dashboard makes the switches and fuel control dials easier to view and use.

CAB MOUNTS

The cab rests on viscous damping mounts to reduce vibration and noise from the machine body. Operator fatigue is reduced.

NOISE

The noise levels at the operator's ear have been decreased by improving the cab mounts. In addition, a mixed-flow fan reduces fan speed and channels air around the engine, reducing noise.



SELF-DIAGNOSTIC MONITOR

Self-Diagnostic System ...

The PC120-6 features the most advanced diagnostic system in the industry. Komatsu's exclusive system identifies 119 items, reduces diagnostic time, and helps you maintain maximum production. The LCD portion of the monitor has four different display modes that aid in identifying potential problems before they become major problems:



Diagnostic Display Modes:

1 *Time Display* mode is the default mode and shows the time and hour meter reading.

2 The *User Code Display* mode displays a trouble code and sounds an alarm when a problem has been detected.

3 The *Trouble Data Memory* mode monitors 32 separate items and stores up to 20 abnormalities over 999 hours for effective troubleshooting.

4 The *Operation Data* mode monitors 20 separate current operating conditions including system pressure and rpms to keep your machine operating at peak performance. In addition, 44-bit patterns allow you to diagnose electrical connections.

Together these modes allow you to troubleshoot 119 different problems to minimize downtime.

Working Mode

Power Up/Speed Down

Travel Speeds

Active mode + power up

The exclusive Active Power Max mode, which is turned on via a switch on the monitor panel and on the left control lever, increases engine speed, and the hydraulic relief pressure, for more powerful and faster operation.

WORKING MODE SELECTION

The **Avance** excavator is equipped with five working modes. Each mode is designed to match engine speed, pump speed, and system pressure with the current application.

Working Mode	Application	Advantage
H/O	Heavy-Duty	<ul style="list-style-type: none"> • Max. Production/Power • Fast Cycle Times • Power Up/Speed Down Available
G/O	General	<ul style="list-style-type: none"> • Good Cycle Times • Good Fuel Economy • Power Up/Speed Down Available
F/O	Finishing	<ul style="list-style-type: none"> • Smooth Finishing Capability • Arm in 1/2 Speed
L/O	Lifting	<ul style="list-style-type: none"> • Powerful Lifting • Power Max. Pressure 100% of the Time • Reduced Speed • Precision Control
B/O	Breaker Operations	<ul style="list-style-type: none"> • Optimum Engine RPM, Hydraulic Flow and Pressure

POWER UP/SPEED DOWN SWITCH*

A button on top of the left joystick provides an instant burst of power at either full speed or half speed depending on the selection made on the monitor.

Selection	Application	Result
Power Up	Tough Digging Operations	Increase implement force by 9% for 8.5 seconds.
Speed Down	Delicate Operations	Speed is reduced by 1/2. Increase implement force by 9% as long as joystick button is pressed.

*Available in H/O, G/O and Active mode only.

HYDRAUMIND



ENGINE

The new Komatsu S4D102E meets emission regulations, including CARB. A new hydraulic pump produces the same power as in the previous model at reduced engine speed. The new engine provides improved emissions without sacrificing valuable hydraulic power. Also, noise levels are reduced for improved operator comfort.

HYBRID FILTER ELEMENT

The PC120-6 has a cool-running hydraulic system with the most extensive filtration system available. It uses a new high-performance filter glass for improved cleanliness and extended replacement interval. The wide variety of attachments available today means you put more stress on your excavator than ever before.

Power, versatility, maneuverability, controllability—you name it. Never has there been an excavator so easy to operate, so natural, so intuitive, so responsive.

HydraMind allows the load-sensing and pressure compensating valves to automatically adjust to individual work applications. Adjustments are sensed by the valves. Electronic controls maximize the engine horsepower so full horsepower is available at all times.

FOR EXAMPLE... when the ground condition changes while digging, you don't have to think about changing lever strokes because HydraMind instantly, silently, and automatically sends just the right amount of oil to the actuators at just the right pressure to accommodate the change.

When you move the boom, arm, and bucket at the same time, all the equipment works naturally, with the optimum combination of speed and power as if it were a human hand.

HydraMind also makes it easy to change or add valves and work equipment.



PC120-6
HYDRAULIC EXCAVATOR

PC120-6

WALK-AROUND

Since its original introduction, the PC120-6 has set new standards for productivity and control. The improved PC120-6 introduces several outstanding new features to provide the operator with a faster, quieter and easier-to-service machine.

Cast steel is used for critical parts on both the boom and arm for increased durability.

Komatsu distributors offer a wide variety of attachments that take advantage of the PC120-6's exceptional versatility.

Cushioned cylinders not only minimize shock but provide fast cycle times.

One-piece top and bottom plates for both the boom and arm provide maximum strength.

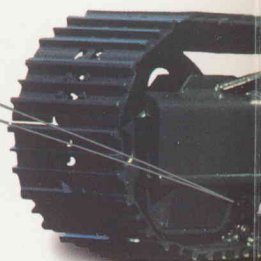
Windshield Wiper is mounted to the cab for better visibility and easier window opening.

Advanced Monitor Features

- Self-diagnosis of 119 different problems.
- 5 working modes as standard, including breaker mode for maximum productivity
- Active-mode for increased implement speed.
- Oil maintenance reminder



Large undercarriage components are sealed for maximize durability.



**Komatsu offers
over 20 different
excavator models.**

AVANCE



Large boom cylinders provide maximum lift capacity.

Comfortable Cab Komatsu's low-noise cab design uses viscous cab mounts for reduced noise and vibration.

Protected Hydraulic Circuit The cool-running hydraulic system is protected with the most extensive filtration system available.

Emissionized engine, at 87 hp, it is the highest horsepower in its class.

Three-speed travel for smooth and efficient job site travel.



SPECIFICATIONS



ENGINE

Model Komatsu S4D102E-1-A
 Type 4 cycle, water-cooled, direct-injection
 Aspiration Turbocharged
 No. of cylinders 4
 Bore **4.02"** 102 mm
 Stroke **4.72"** 120 mm
 Piston displacement **239 in³** 3.92 ltr.
 Flywheel horsepower:
87 HP 64 kW at **2300 RPM** (SAE J1349)
 Governor All-speed, mechanical



HYDRAULIC SYSTEM

Type HydrauMind (Hydraulic Mechanical Intelligence New Design) system.
 Closed-center system with load-sensing valves and pressure-compensated valves.
 No. of selectable working modes 5
 Main pump:
 Type Variable-displacement piston pump
 Pumps for Boom, arm, bucket, swing, and travel circuits
 Maximum flow **1 x 59.7 gpm** 1 x 226 ltr.
 Sub-pump for control circuit Gear pump
 Hydraulic motors:
 Travel 2 x Axial piston motor with parking brake
 Swing 1 x Axial piston motor with swing holding brake
 Relief valve setting:
 Implement circuits **4,620 PSI** 325 kg/cm²
 Travel circuit **5,050 PSI** 355 kg/cm²
 Swing circuit **3,910 PSI** 275 kg/cm²
 Pilot circuit **430 PSI** 30 kg/cm²
 Service valve **3,980 PSI** 280 kg/cm²

Hydraulic cylinders:
 Number of cylinders – bore x stroke
 Boom 2 – **4.1" x 39.0"** 105 mm x 990 mm
 Arm 1 – **4.5" x 46.3"** 115 mm x 1175 mm
 Bucket 1 – **3.7" x 34.8"** 95 mm x 885 mm
 Service valves maximum flow:
 First valve **59.7 gpm** 226 l/m
 Second valve **29.9 gpm** 113 l/m
 Third valve **29.9 gpm** 113 l/m



DRIVES & BRAKES

Steering control Two levers with pedals
 Drive method Fully hydrostatic
 Travel motor Axial piston motor, in-shoe design
 Reduction system Eccentric differential, planetary reduction
 Max. drawbar pull **22,490 lb.** 10200 kg
 Max. travel speed (High) **3.4 MPH** 5.5 km/h
 Max. travel speed (Mid) **2.2 MPH** 3.6 km/h
 Max. travel speed (Low) **1.7 MPH** 2.7 km/h
 Service brake Hydraulic lock
 Parking brake Oil disc brake



SWING SYSTEM

Driven by Hydraulic motor
 Swing reduction Planetary double reduction
 Swing circle lubrication Grease-bathed
 Swing lock Oil disc brake
 Swing speed 12.0 RPM



UNDERCARRIAGE

Center frame X-frame
 Track frame Box-section type
 Seal of track Sealed track
 Track adjuster Hydraulic type
 No. of shoes 42 each side
 No. of carrier rollers 1 each side
 No. of track rollers 7 each side



COOLANT & LUBRICANT CAPACITY (refilling)

Fuel tank **60.8 U.S. gal** 230 ltr.
 Radiator **4.8 U.S. gal** 18.2 ltr.
 Engine **4.2 U.S. gal** 16.0 ltr.
 Final drive, each side **0.7 U.S. gal** 2.5 ltr.
 Swing drive **0.7 U.S. gal** 2.5 ltr.
 Hydraulic tank **26.4 U.S. gal** 100 ltr.



OPERATING WEIGHT (approximate)

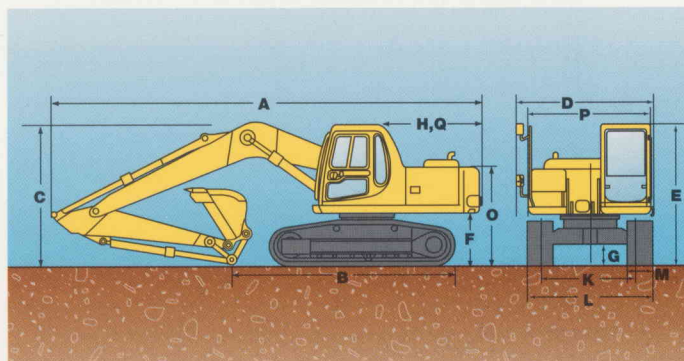
Operating weight, including **15'1"** 4600 mm one-piece boom, **8'2"** 2500 mm arm, SAE heaped **0.65 yd³** 0.50 m³ back-hoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment.

Triple-Grouser Shoes	PC120-6	
	Operating Weight	Ground Pressure
20" 500 mm	26,530 lb 12030 kg	5.69 PSI 0.40 kg/cm ²
24" 600 mm	26,950 lb 12220 kg	4.83 PSI 0.34 kg/cm ²
28" 700 mm	27,340 lb 12400 kg	4.27 PSI 0.30 kg/cm ²
30" 750 mm	27,540 lb 12490 kg	3.98 PSI 0.28 kg/cm ²

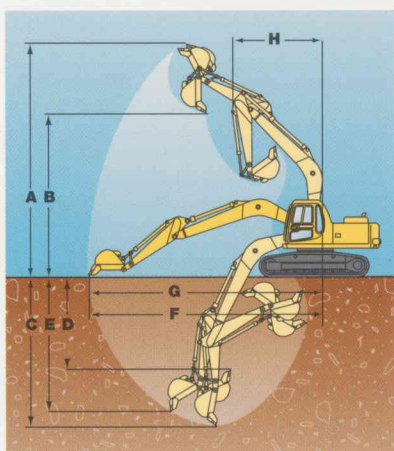


DIMENSIONS

	6'11" 2.1 m arm	8'2" 2.5 m arm	9'10" 3.0 m arm
A Overall length	24'11" 7590 mm	24'11" 7595 mm	24'8" 7510 mm
B Length on ground (transport)	14'10" 4515 mm	13'11" 4250 mm	13'5" 4090 mm
C Overall height (to top of boom)	8'7" 2620 mm	8'11" 2715 mm	10'1" 3075 mm
D Overall width	8'2" 2490 mm		
E Overall height (to top of cab)	8'11" 2715 mm		
F Ground clearance, counterweight	2'10" 855 mm		
G Min. ground clearance	1'4" 400 mm		
H Tail swing radius	7'0" 2130 mm		
I Length of track on ground	9'0" 2750 mm		
J Track length	11'5" 3480 mm		
K Track gauge	6'5" 1960 mm		
L Width of crawler	8'1" 2460 mm		
M Shoe width	20" 500 mm		
N Grouser height	1" 25 mm		
O Machine cab height	5'11" 1805 mm		
P Machine cab width	8'1" 2455 mm		
Q Distance, swing center to rear end	6'11" 2110 mm		



WORKING RANGE & BUCKET/ARM COMBINATION



	6'11" 2.1 m arm	8'2" 2.5 m arm	9'10" 3.0 m arm
A Max. digging height	27'5" 8345 mm	28'3" 8610 mm	29'5" 8970 mm
B Max. dumping height	19'4" 5905 mm	20'3" 6170 mm	21'5" 6535 mm
C Max. digging depth	16'9" 5115 mm	18'1" 5520 mm	19'9" 6015 mm
D Max. vertical wall digging depth	14'10" 4520 mm	16'2" 4940 mm	17'7" 5360 mm
E Max. digging depth of cut for 8' level	16'0" 4875 mm	17'5" 5315 mm	19'2" 5835 mm
F Max. digging reach	26'0" 7925 mm	27'2" 8290 mm	28'10" 8785 mm
G Max. digging reach at ground	25'7" 7795 mm	26'10" 8170 mm	28'5" 8665 mm
H Min. swing radius	7'6" 2290 mm	7'8" 2330 mm	8'2" 2485 mm
Bucket digging force [☆]	18,740 lb* 8500 kg	18,740 lb 8500 kg	18,740 lb 8500 kg
Arm crowd force	16,530 lb 7500 kg	13,890 lb 6300 kg	11,570 lb 5250 kg

[☆]At power max



BACKHOE BUCKET AND ARM COMBINATION

BUCKET TYPE	CAPACITY	WIDTH OUTSIDE LIP	WEIGHT	TEETH	ARMS		
					6'11" 2.1 m	8'2" 2.5 m	9'10" 3.0 m
STANDARD PLATE	0.48 yd ³ 0.37 m ³	24" 610 mm	822 lb 373 kg	4	○	○	○
	0.62 yd ³ 0.47 m ³	30" 762 mm	921 lb 418 kg	4	○	○	X
	0.75 yd ³ 0.57 m ³	36" 914 mm	1,034 lb 469 kg	5	○	○	X
	0.88 yd ³ 0.67 m ³	42" 1067 mm	1,138 lb 516 kg	6	□+	—	X
	1.00 yd ³ 0.76 m ³	48" 1219 mm	1,228 lb 557 kg	6	—	X	X
HEAVY DUTY PLATE	0.48 yd ³ 0.37 m ³	24" 610 mm	1,088 lb 494 kg	4	○	○	○
	0.62 yd ³ 0.47 m ³	30" 762 mm	1,203 lb 546 kg	4	○	○	X
	0.75 yd ³ 0.57 m ³	36" 914 mm	1,356 lb 615 kg	5	○	○	X
	0.88 yd ³ 0.67 m ³	42" 1067 mm	1,468 lb 667 kg	5	□+	—	X
	1.00 yd ³ 0.76 m ³	45" 1219 mm	1,529 lb 694 kg	5	—	X	X

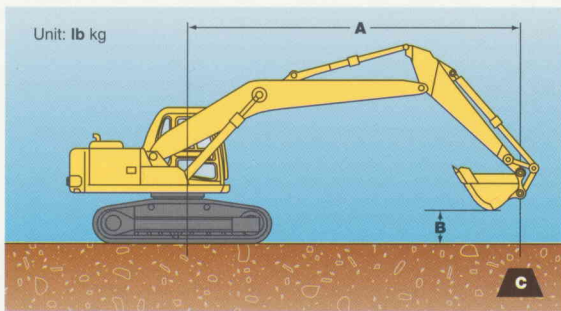
○ - Used with weights up to 3,040 lb/yd³ □ - Used with weights up to 2,520 lb/yd³ X - Not useable + - Light duty applications only

GUIDELINES FOR MATCHING ESCO BUCKETS WITH APPLICATIONS

STANDARD DUTY PLATE BUCKET	HEAVY DUTY PLATE BUCKET
<ul style="list-style-type: none"> General purpose. Truck loading. Mass excavation. General excavation in loam soil, sandy soils, or soils containing very little rock. 	<ul style="list-style-type: none"> General excavation in compact soils or dense clay. Excavation in gravel or loosely embedded to moderate rock conditions.



LIFTING CAPACITY



- Equipment:**
- Boom: **18'8"** 5700 mm
 - Bucket: **1.00 yd³** 0.76 m³
 - Shoes: **31.5"** 800 mm
 - Lifting Mode

- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ☉: Rating at maximum reach

Arm: 6'11" 2100 mm										Unit: lb kg	
B	A	5' 1.5 m		10' 3.0 m		15' 4.5 m		20' 6.0 m		☉ MAX.	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
20'	6.0 m					*7,300	6,900			*4,800	*4,800
						*3300	3150			*2200	*2200
15'	4.5 m					*7,700	6,800	*5,400	4,100	*4,500	3,900
						*2050	1800	*2450	1850	*2050	1800
10'	3.0 m			*12,800	12,400	9,100	6,400	5,600	3,900	*4,600	3,300
				*5800	5650	4100	2900	2550	1800	*2100	1500
5'	1.5 m			17,000	10,900	8,500	5,900	5,400	3,700	4,300	3,000
				7700	4950	3850	2650	2450	1700	1950	1350
0'	0.0 m			16,200	10,300	8,100	5,500	5,200	3,600	4,400	3,000
				7350	4650	3700	2500	2350	1600	1950	1350
-5'	-1.5 m	*12,700	*12,700	16,200	10,200	8,000	5,400	5,100	3,500	4,900	3,400
		*5750	*5750	7350	4650	3600	2450	2300	1600	2200	1500
-10'	-3.0 m	*20,800	*20,800	*15,900	10,400	8,100	5,500			6,500	4,400
		*9450	*9450	*7200	4750	3650	2500			2950	2000

*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.

Arm: 8'2" 2500 mm										Unit: lb kg	
B	A	5' 1.5 m		10' 3.0 m		15' 4.5 m		20' 6.0 m		☉ MAX.	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
20'	6.0 m									*3,900	*3,900
										*1750	*1750
15'	4.5 m					*6,800	*9,600	5,800	4,100	*3,600	3,500
						*3100	*3100	2600	1930	*1650	1600
10'	3.0 m			*11,100	11,100	*8,500	6,500	5,600	4,000	*3,700	2,900
				*5050	5050	*3850	2950	2550	1800	*1700	1350
5'	1.5 m			*16,900	11,200	8,600	6,000	5,400	3,800	3,900	2,700
				*7650	5100	3900	2700	2450	1700	1750	1200
0'	0.0 m			16,300	10,300	8,100	5,500	5,200	3,600	3,900	2,700
				7400	4700	3700	2500	2350	1600	1800	1200
-5'	-1.5 m	*11,300	*11,300	16,100	10,100	7,900	5,300	5,000	3,500	4,400	3,000
		*5150	*5150	7300	4600	3600	2400	2300	1550	2000	1350
-10'	-3.0 m	*18,000	*18,000	16,200	10,300	7,900	5,400			5,500	3,800
		*8150	*8150	7350	4650	3600	2450			2500	1700
-15'	-4.5 m			*11,400	10,700					*8,000	6,700
				*5150	4850					*3650	3000

*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.

Arm: 9'10" 3000 mm										Unit: lb kg	
B	A	5' 1.5 m		10' 3.0 m		15' 4.5 m		20' 6.0 m		☉ MAX.	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
20'	6.0 m							*4,100	*4,100	*3,200	*3,200
								*1850	*1850	*1450	*1450
15'	4.5 m							5,900	4,200	*3,000	*3,000
								2650	1900	*1350	*1350
10'	3.0 m					*7,500	6,600	5,700	4,000	*3,000	2,500
						*3400	3000	2550	1800	*1350	1150
5'	1.5 m			*15,000	11,500	8,700	6,000	5,400	3,700	*3,200	2,300
				*6800	5250	3950	2750	2450	1700	*1450	1050
0'	0.0 m			16,400	10,400	8,100	5,500	5,100	3,500	3,500	2,300
				7400	4700	3700	2500	2300	1600	1550	1050
-5'	-1.5 m	*9,800	*9,800	15,900	10,000	7,800	5,200	5,000	3,400	3,800	2,500
		*4450	*4450	7200	4500	3550	2400	2250	1500	1700	1150
-10'	-3.0 m	*15,300	*15,300	15,900	10,000	7,800	5,200	5,000	3,400	4,600	3,100
		*6950	*6950	7200	4550	3500	2350	2250	1500	2100	1400
-15'	-4.5 m			13,600	10,400	8,000	5,400			7,000	4,800
				6150	4700	3650	2450			3200	2200

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HYDRAULIC EXCAVATOR



STANDARD EQUIPMENT

- Air cleaner, double element
- Alternator, 25A
- Auto de-airation system for fuel line
- Batteries, 2x12V/110Ah
- Boom holding valve
- Cab which includes: antenna; ashtray; cigarette lighter; floor mat; front windshield wiper and washer; heater (2000 kcal)/defroster, luggage box; seat, fully adjustable with suspension, double slide mechanism and seat belt; window guard (RH)
- Cooling fan, mixed flow with fan guard
- Corrosion resistor
- Counterweight, **4,850 lb** 2200 kg
- Dustproof net for radiator and oil cooler
- Electronic monitor
- Fuel tank sight gauge protection
- Hydraulic Control:
 - Auto-deceleration
 - Auto engine warm-up
 - Engine overheat prevention
- Power maximizing system
- Speed down system
- Working mode selection
- Pump/engine room partition cover
- Rear view mirror (RH & LR)
- Shoes, **19.7"** 500 mm, Triple grouser
- Starting Motor, 5.5 kW
- Swing back prevention valve
- Turbocharger exhaust manifold cover
- Travel alarm
- Working mode selection



OPTIONAL EQUIPMENT

- Air conditioner with heater
Cooling, **17,100 BTU** 4300 kcal/h
Heating, **15,870 BTU** 4000 kcal/h
- Arm
 - **6'11"** 2.1 m
 - **6'11"** 2.1 m with piping
 - **8'2"** 2.5 m
 - **8'2"** 2.5 m with piping
 - **8'2"** 2.5 m heavy-duty
 - **8'2"** 2.5 m heavy-duty with piping
 - **9'10"** 3.0 m
- Arm holding valve
- Boom, one piece
 - **15'1"** 4.6 m
 - **15'1"** 4.6 m, with heavy-duty piping
- Front window guard, full length
- Head guard for cab
- Heater, large capacity, (3300 kcal)
- Hydraulic control unit
 - 1 additional actuator
 - 2 additional actuators
 - 3 additional actuators
- Service valve
- Shoes, triple grouser
 - **23.6"** 600 mm
 - **27.6"** 700 mm
 - **29.5"** 750 mm
- Swing-back reducing valve
- Track guiding guards, center
- Under cover for track frame center
- **Option for Esco bucket** (sold only with bucket)
 - Lug blushing
 - Play adjustment mechanism

SUPPORT

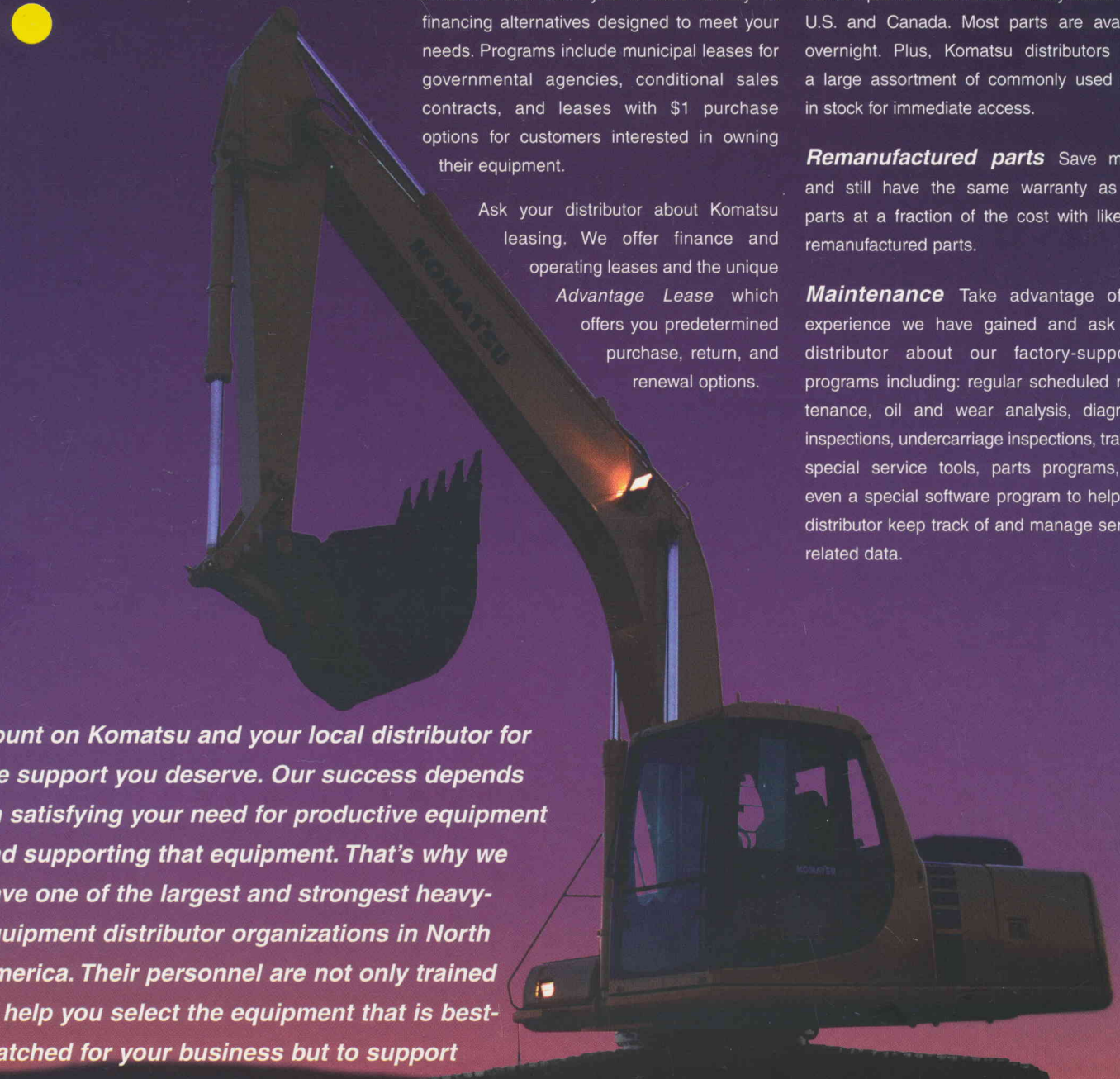
Finance Through its finance company, Komatsu can offer you a wide variety of financing alternatives designed to meet your needs. Programs include municipal leases for governmental agencies, conditional sales contracts, and leases with \$1 purchase options for customers interested in owning their equipment.

Ask your distributor about Komatsu leasing. We offer finance and operating leases and the unique *Advantage Lease* which offers you predetermined purchase, return, and renewal options.

Parts Three computer-linked parts distribution centers provide fast access to anywhere in the U.S. and Canada. Most parts are available overnight. Plus, Komatsu distributors keep a large assortment of commonly used parts in stock for immediate access.

Remanufactured parts Save money and still have the same warranty as new parts at a fraction of the cost with like-new remanufactured parts.

Maintenance Take advantage of the experience we have gained and ask your distributor about our factory-supported programs including: regular scheduled maintenance, oil and wear analysis, diagnostic inspections, undercarriage inspections, training, special service tools, parts programs, and even a special software program to help your distributor keep track of and manage service-related data.



Count on Komatsu and your local distributor for the support you deserve. Our success depends on satisfying your need for productive equipment and supporting that equipment. That's why we have one of the largest and strongest heavy-equipment distributor organizations in North America. Their personnel are not only trained to help you select the equipment that is best-matched for your business but to support that equipment.

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