

WB140-2, WB140PS-2
WB150-2, WB150PS-2

KOMATSU[®]

Utility

FLYWHEEL HORSEPOWER

64.1 kW **86 HP** @ 2200 rpm

73 kW **98 HP** @ 2200 rpm

OPERATING WEIGHT

7525-8600 kg

16,600-18,875 lb



FEATURING:

- HydraMind™ Hydraulic System for unmatched power and control
- Superior lift capacities and breakout forces
- Ergonomically designed cab
- Powershift Transmission (PS Series only)



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BACKHOE LOADERS

Backhoe loaders engineered with Komatsu quality and technology.

Over 35 years of experience and technology is manufactured into every backhoe loader.

Komatsu's ISO certification and critical quality control ensure that every backhoe loader will satisfy the most demanding customer. From design to production, from sales to service, **Komatsu means total quality.**

Built with proven HydraMind™ excavator technology.

Komatsu backhoe loaders are the only machines that combine the versatility of a backhoe loader with the performance of an excavator.

Komatsu's exclusive HydraMind™ hydraulic system is the ultimate combination of power and precision creating one of the most productive backhoe loaders in the world.

- Features include:
- Closed center Load Sensing System (CLSS)
 - Load Independent Flow Divider (LIFD) hydraulic valve block
 - 2 working modes for backhoe operations
 - Speed-Up function for loader operations



Komatsu's smooth and precise HydrauMind™ hydraulic system offers maximum performance and precise control during backhoe operations.

Tremendous hydraulic power under your complete control.

Komatsu's superior lift capacities and breakout forces are achieved exclusively through the HydrauMind hydraulic system. This system consists of a single variable flow axial piston pump and an "intelligent" hydraulic circuit that allows the machine to adapt instantaneously to the specific operation

being carried out. The Closed center Load Sensing System (CLSS), together with the variable flow pump, means that only the amount of oil necessary for ensuring high operating pressure is generated and used. This guarantees greater efficiency, lower fuel consumption and quiet operation. Even novice operators can work with unequalled precision and control with this state-of-the-art hydraulic system.



Another Komatsu innovation is the **Load Independent Flow Divider (LIFD)** hydraulic valve block. The speed of each movement is completely independent from that of the others, and the proportions between the various movements remain constant even when the load resistance varies, resulting in shorter cycle times and greater productivity.

The HydrauMind system is also equipped with two working modes: **"Economy" mode** and **"Power" mode**. The "economy" mode is used for general operations and precision work, while ensuring maximum power and fuel economy. The "Power" mode lets the operator maximize the hydraulic power, increasing the performance of the machine and achieving unequalled results.

KOMATSU QUALITY

Utility

Unique design of the front loader offers better performance and versatility.

The front loader has superb breakout forces and lift capacity due in part to the unique design of the loader. The new geometry of the loader arms allows for parallel lift, enabling the machine to be used in a "tool carrier" capacity. In addition, the geometry reduces stress in the loader arms, improves dump height, and visibility. A dedicated "speed up" switch, located on the multi-function control lever, increases front loader speed by the push of a button. These features combined with the advanced hydraulic system make the front loader of the Komatsu more versatile than conventional Backhoe Loaders.



Versatility to meet every need.

In addition to the power and performance offered by the Komatsu Backhoe Loaders, they can accommodate a wide array of front and rear attachments, making the machine an even more versatile tool to meet just about any jobsite requirement. ***Be sure to check with your local Komatsu dealer for details.***



Machines designed specifically for the operator.

Komatsu's ergonomic innovations create the perfect operating environment.

The performance and productivity of the backhoe loader also depends on the operator. The person who works many hours each day at the controls of a machine is well aware of this, and so is Komatsu. That is why our backhoe loaders have been designed by the operator, for the operator. Anyone who's not already a skilled operator will soon become one with the Komatsu backhoe loader.

- We ergonomically designed the controls offering ease of operation, using a hydraulic system that responds smoothly and precisely.
- The cab allows for all-around visibility and is extremely quiet.
- The ergonomically designed suspension seat is very comfortable and fully adjustable.

Multi-function loader control lever's cutting edge design allows for fingertip operation of all key loader functions.

- Transmission disconnect
- Auxiliary hydraulic control
- Rear differential lock
- Hydraulic speed up function
- Kick down (PS version only)



Low lever efforts allow for PPC-like feel during backhoe operation.



All-around visibility, compactness and maximum accessibility for maintenance.

No other backhoe loader offers comparable visibility: maximum glass surface, extended front windshield, a slim and strong cab frame, a sharply sloping front hood, exhaust pipe located in line with the ROPS post and the specially designed profiles of the excavation tools.



Komatsu's engines and transmissions achieve high standards in power and productivity.

Powered by a new generation of Komatsu engines.

The WB140-2/WB140PS-2 are equipped with an 86 HP turbo charged engine and the WB150-2/WB150PS-2 are equipped with an 98 HP turbo charged engine.

The large cubic displacement of these engines, 4.4 liters, ensures high torque and power, and above all, exceptional reliability.



Environmentally friendly.

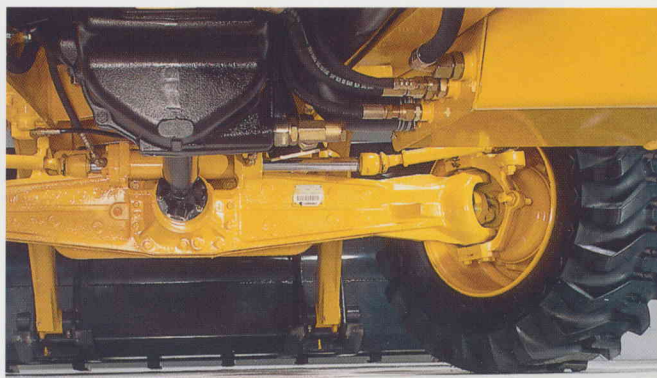
The noise level of the Komatsu backhoe loaders and their exhaust emissions are among the lowest possible today, thanks to the use of new generation Komatsu engines. Oil change intervals have been doubled, saving the operator both time and money.

Komatsu Backhoe Loaders use service brakes with multiple wet discs and independent circuits operated by two separate pedals.

The integral braking system automatically activates four wheel drive when the two pedals are activated together with a total friction of 358 in³. Komatsu offers superior braking, positive feel and greater life from brake components.

A high steering angle combined with excellent maneuverability result in fast cycle times for the operator.

The hydraulically controlled steering circuit is fed via a load sensing priority valve, which allows smooth and precise operation. Even in confined spaces, the Komatsu backhoe loaders move in an efficient and agile way, thanks to a high steering angle of 50°. In addition, the double acting steering cylinder is housed in a protected position behind the front axle. Reliability of the system is guaranteed in all conditions.



WB140-2 and WB150-2 are equipped with Power Shuttle transmissions and "Power shift" inverters.

They have four forward and four reverse synchronized gears with a top speed of 23.5 mph. The "Power Shuttle" transmission of the Komatsu backhoe loaders is simple and reliable, ensuring excellent cycle times and remarkable tractive effort. It helps maximize productivity, and protects your investment. The power and efficiency of the transmission is increased by the use of industry proven Heavy Duty axles, with planetary hub reduction and an electrohydraulically operated mechanical differential lock.



WB140PS and WB150PS come equipped with an electronically controlled, full powershift transmission.

Komatsu's Electronic Gear Management (EGM)[™] system allows the operator to utilize the Powershift transmission in either manual or automatic mode

The Komatsu Powershift transmission has been designed to safely allow the operator to perform all functions efficiently. In addition to offering two modes of operation, the Powershift comes standard with:

- Self diagnostics system
- Anti-theft system
- Engagement and automatic disengagement of four wheel drive
- Kick down switch



The WB140PS-2 and WB150PS-2 feature an electronically-controlled, full Powershift transmission, with 4 forward and 3 reverse gears and a top speed of 24.9 mph.

The full Powershift transmission allows the driving direction and gears to be changed at full power without disengaging the drive. These backhoe loaders are ideal for digging or loading applications with the front loader or for long-distance travel where continual gear changes are necessary.

When the operation, conditions, or individual needs change, the operator can customize the gear selection to automatic or manual mode by using two push buttons on the controller.

In automatic mode, no shifting inputs are required—gear change is handled automatically by the EGM[™] system. This state-of-the-art feature allows the operator to maximize productivity.



SPECIFICATIONS



ENGINE - EPA CERTIFIED

A new generation engine developed to comply with stricter emissions controls.

Model

WB140-2/WB140PS-2 (Turbocharged) . . . Komatsu S4D106-1FH

WB150-2/WB150PS-2 (Turbocharged) . . . Komatsu S4D106-1FA

Type vertical, 4-cycle water-cooled diesel engine

Displacement **269 in³** (4412 cm³)

Cylinder bore x stroke **4.2" x 4.9"** (106x125 mm)

No. of cylinders 4

Compression ratio 17:1

Combustion direct injection (DI)

Rated power (**WB140-2/WB140PS-2**)

SAE J 1349 **86 HP** / 64.1 kW / 2200 rpm

Max. torque **243 ft. lb.** / 330 Nm / 1500 rpm

Rated power (**WB150-2/WB150PS-2**)

SAE J 1349 **98 HP** / 73 kW / 2200 rpm

Max. torque **276 ft. lb.** / 375 Nm / 1500 rpm

Air Cleaner dry, dual element with dust evacuator and indicator

ELECTRICAL SYSTEM:

Electric circuit with protected connections in all exposed areas.

Voltage 12 V

Battery 155 Ah (660 cca)

Alternator 80 A

Electric starting 3 kW



HYDRAULIC SYSTEM

The HydraMind hydraulic system affords the operator very precise backhoe movements. This system is energy efficient and incorporates two different working modes: economy and constant power. The advanced hydraulic system includes the "speed up" function to increase the working speed of the front loader.

System HydraMind

Type Closed center Load Sensing System (CLSS) with economy/power selector switch

Pump type Variable displacement axial piston

Pump control system Load Sensing set to adjust the hydraulic power

Main Valve "load independent flow divider" LIFD modular type

Max delivery **43.6 gpm** / 165 l/min

Work pressure (**WB140-2/WB140PS-2**) **3000 psi** / 207 bar
(**WB150-2/WB150PS-2**) **3200 psi** / 221 bar



TRANSMISSION

WB140-2/WB150-2

Switching between 2WD and 4WD is achieved through an electro-hydraulic system. The transmission is operated through a torque converter and a power shift reversing shuttle; the mechanical 4-speed gearbox is synchronized.

Travel speed:

SPEED	FORWARD / REVERSE mph (km/h)	
1st	3.9 (6.3)	
2nd	7.1 (11.4)	
3rd	13.2 (21.3)	
4th	23.5 (37.8)	

WB140PS-2/WB150PS-2

Electronically-controlled, four-wheel-drive, full powershift transmission. EGM™ (Electronic Gear Management) gear controls for changing driving direction and gears, in automatic or manual mode, at full power without disengaging the drive.

Travel speed:

SPEED	FORWARD mph (km/h)	REVERSE mph (km/h)
1st	4 (6.5)	4 (6.5)
2nd	7.1 (12.0)	7.5 (12.0)
3rd	14.3 (23.0)	14.3 (23.0)
4th	24.9 (40.0)	



AXLES & BRAKES

Oil immersed disc brakes are actuated by individual braking on each rear wheel. Total integral braking on the 4 wheels is activated by operating the two pedals at the same time.

Disc diameter **10.6"** (270 mm)

Total friction area **358 in²** (2310 cm²)

The parking (safety) brake acts on the service brakes through a hand operated lever.

AXLES:

Heavy duty axles with planetary reduction gears in the wheel hubs. Front axle total oscillation angle is 20°. Differential lock in the rear axle controlled by electro-hydraulic system with a switch on loader lever.

Max. front strength (Dynamic) **14,175 lb.** (6300 daN)

Max. rear strength (Dynamic) **27,000 lb.** (12000 daN)



STEERING

The front wheels are controlled by a hydrostatic load sensing steering priority valve system.

Turning radius at outer edge of front tire **14'1"** (4300 mm)

Turning radius at outer edge of front tire (using brakes) **11'2"** (3400 mm)



REFILL CAPACITIES & WEIGHTS

CAPACITIES:

	gallons	liters
Engine oil (WB140-2/WB140PS-2)	2.1	(7.9)
Engine oil (WB150-2/WB150PS-2)	2.3	(8.6)
Cooling system	4.8	(18)
Diesel tank	34.3	(130)
Hydraulic oil tank	24.3	(92)
Front axle oil	2.3	(8.5)
Rear axle oil	5.8	(22)
Gearbox oil	4.2	(16)

WEIGHTS: (STANDARD MACHINE)

WB140-2/WB140PS-2 **16,600 lb.** (7525 kg)

WB150-2/WB150PS-2 **17,400 lb.** (7890 kg)

OPERATING WEIGHT INCREASE

Multipurpose bucket **550 lb.** (250 kg)

Telescopic arm **572 lb.** (260 kg)

Pallet forks **440 lb.** (200 kg)



LOADER

The new design of the front loader allows for better tensile strength distribution and parallel movements when lifting and lowering the bucket. Due to the linkage geometry, the greasing points have been dramatically reduced.

Standard bucket width **7'9"** (2355 mm)

Capacity **1.25 yd³** (0.95 m³)

STD bucket weight **1025 lb.** (465 kg)

Lifting capacity at maximum height:

(**WB140-2/WB140PS-2**) **8270 lb.** (3675 daN)

(**WB150-2/WB150PS-2**) **8925 lb.** (3965 daN)

Lifting capacity at ground level:

(**WB140-2/WB140PS-2**) **10,580 lb.** (4700 daN)

(**WB150-2/WB150PS-2**) **11,420 lb.** (5075 daN)

Breakout force:

(**WB140-2/WB140PS-2**) **12,790 lb.** (5685 daN)

(**WB150-2/WB150PS-2**) **13,825 lb.** (6145 daN)



BACKHOE

The new boom has a rounded profile and a reinforced structure built with cast ends, allowing 180° rotation while always maintaining high rotation torque.

Bucket breakout force:

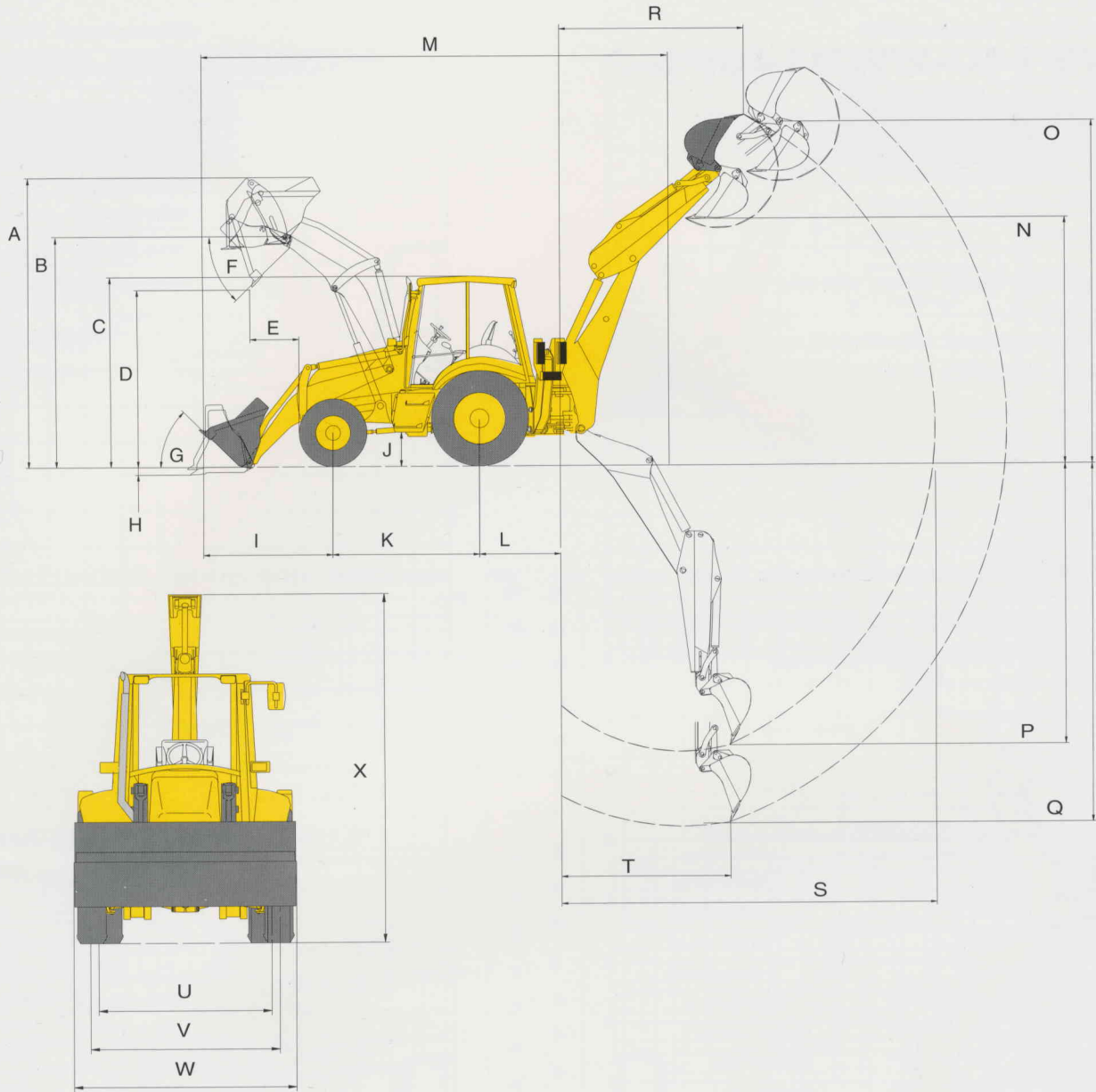
(**WB140-2/WB140PS-2**) **13,515 lb.** (6005 daN)

(**WB150-2/WB150PS-2**) **14,685 lb.** (6525 daN)

Dipper digging force:

(**WB140-2/WB140PS-2**) **8,825 lb.** (3925 daN)

(**WB150-2/WB150PS-2**) **9,350 lb.** (4155 daN)



DIMENSIONS

	WB140-2	WB150-2	WB140-2	WB150-2
	WB140PS-2	WB150PS-2	WB140PS-2	WB150PS-2
A. max. height	13'9" (4185 mm)	13'9" (4185 mm)	16'2" (4930 mm)	16'11" (5155 mm)
B. pin height	11'0" (3365 mm)	11'0" (3365 mm)	18'4" (5595 mm)	18'4" (5595 mm)
C. cab height	9'0" (2750 mm)	9'0" (2750 mm)	14'6" (4420 mm)	15'6" (4725 mm)
D. dumping height	9'0" (2750 mm)	9'0" (2750 mm)	14'8" (4475 mm)	14'8" (4475 mm)
E. dumping reach (45°)	2'2" (670 mm)	2'2" (670 mm)	18'3" (5565 mm)	18'3" (5565 mm)
F. dumping angle	45°	45°	14'7" (4445 mm)	15'7" (4750 mm)
G. rollback angle	45°	45°	14'9" (4500 mm)	14'9" (4500 mm)
H. digging depth	4" (90 mm)	4" (90 mm)	18'4" (5590 mm)	18'4" (5590 mm)
I. bucket reach (in transport)	6'10" (2080 mm)	6'10" (2080 mm)	9'5" (2860 mm)	10'2" (3100 mm)
J. ground clearance	1'1" (320 mm)	1'1" (320 mm)	12'6" (3810 mm)	12'6" (3810 mm)
K. wheel base	7'1" (2170 mm)	7'1" (2170 mm)	18'1" (5520 mm)	18'9" (5715 mm)
L. backhoe swing center distance	3'10" (1175 mm)	3'10" (1175 mm)	21'7" (6575 mm)	21'7" (6575 mm)
M. transport length	24" (7310 mm)	24" (7310 mm)	9'0" (2750 mm)	9'0" (2750 mm)
N. max dumping height	11'5" (3490 mm)	12'2" (3710 mm)	5'11" (1800 mm)	5'11" (1800 mm)
– with telescopic arm	13'8" (4160 mm)	13'8" (4160 mm)	6'2" (1890 mm)	6'2" (1890 mm)
O. max digging height			18'1" (5520 mm)	18'9" (5715 mm)
– with telescopic arm			21'7" (6575 mm)	21'7" (6575 mm)
P. digging depth SAE			9'0" (2750 mm)	9'0" (2750 mm)
– retracted telescopic arm			5'11" (1800 mm)	5'11" (1800 mm)
– extended telescopic arm			6'2" (1890 mm)	6'2" (1890 mm)
Q. max digging depth			7'9" (2355 mm)	7'9" (2355 mm)
– retracted telescopic arm			11'8" (3550 mm)	11'8" (3550 mm)
– extended telescopic arm				
R. reach at max height				
– with telescopic arm				
S. max reach from swing center				
– with telescopic arm				
T. digging reach				
U. rear tread				
V. front tread				
W. overall width (with bucket)				
X. transport hoe height				

* specifications are accurate at time of printing

LIFTING CAPACITY



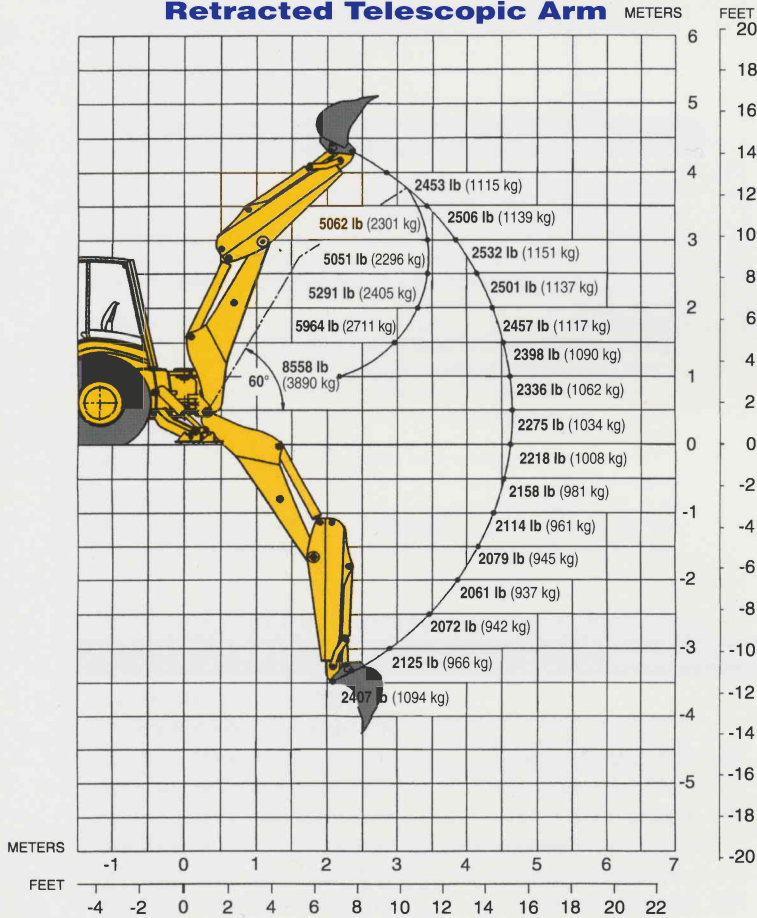
WB140-2/WB140PS-2

PRESSURE: 3000 psi
211 kg/cm²

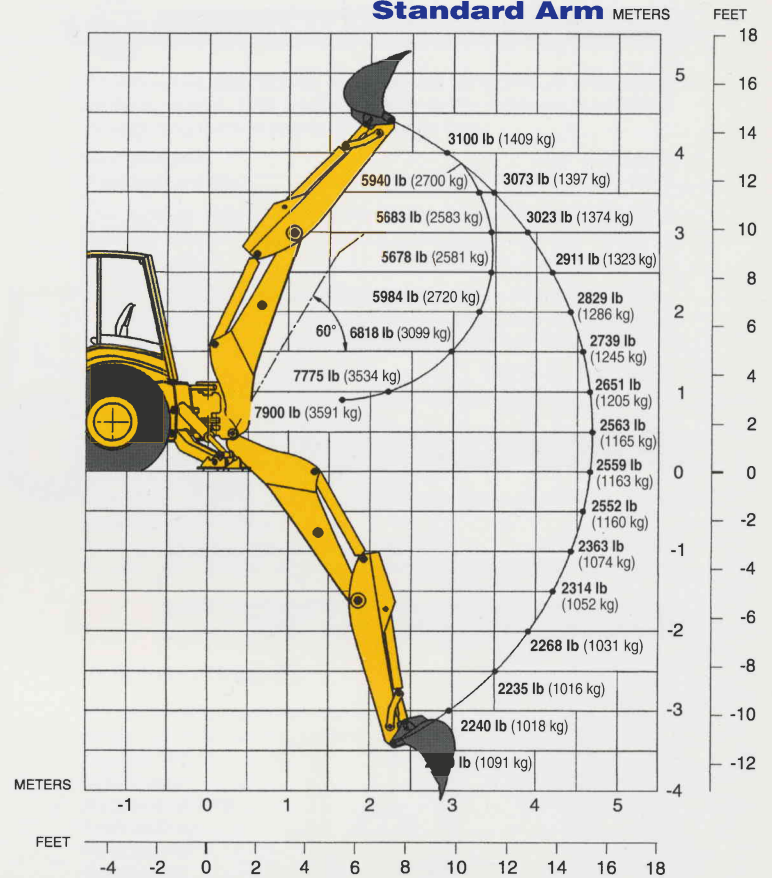
Lift capacity figures comply with SAE J31.

Units are equipped with standard equipment and 24" heavy duty backhoe bucket.

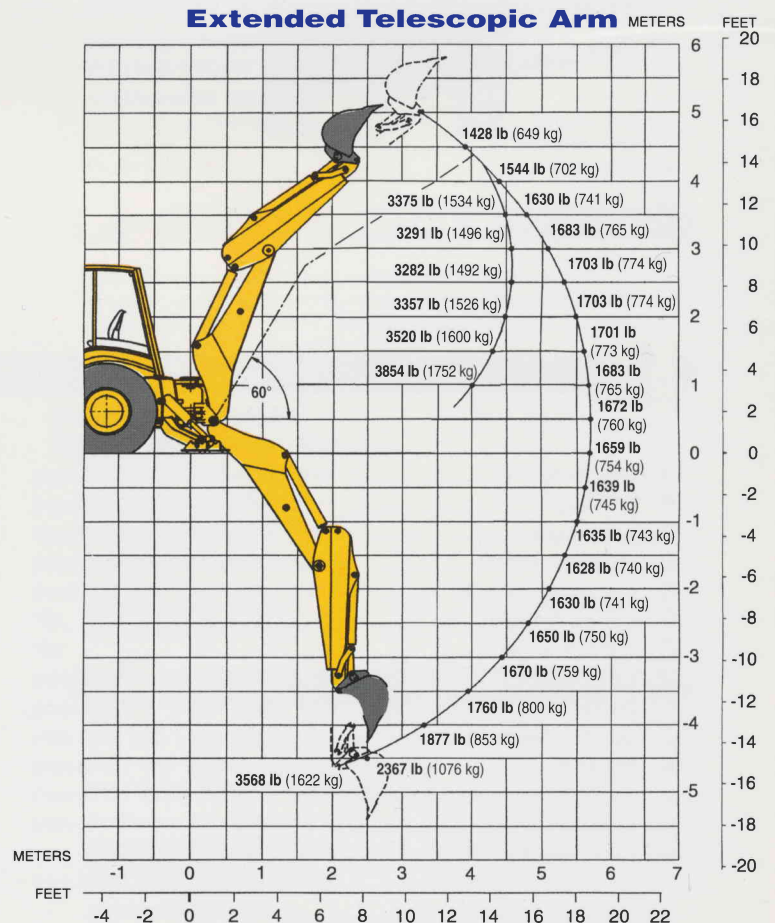
Retracted Telescopic Arm METERS



Standard Arm METERS



Extended Telescopic Arm METERS



LIFTING CAPACITY



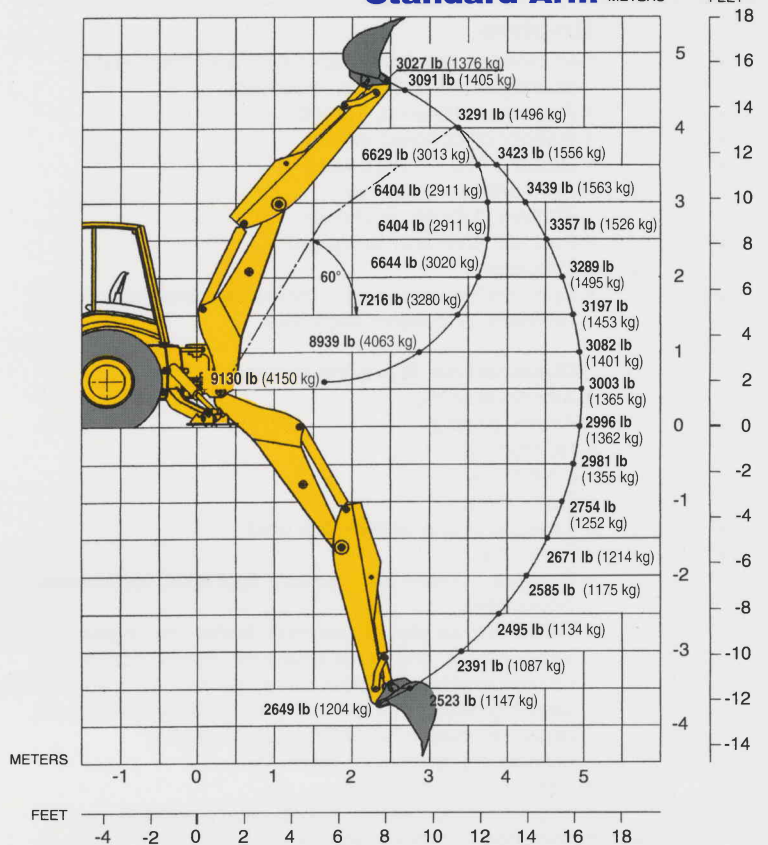
WB150-2/WB150PS-2

PRESSURE: 3200 psi
225 kg/cm²

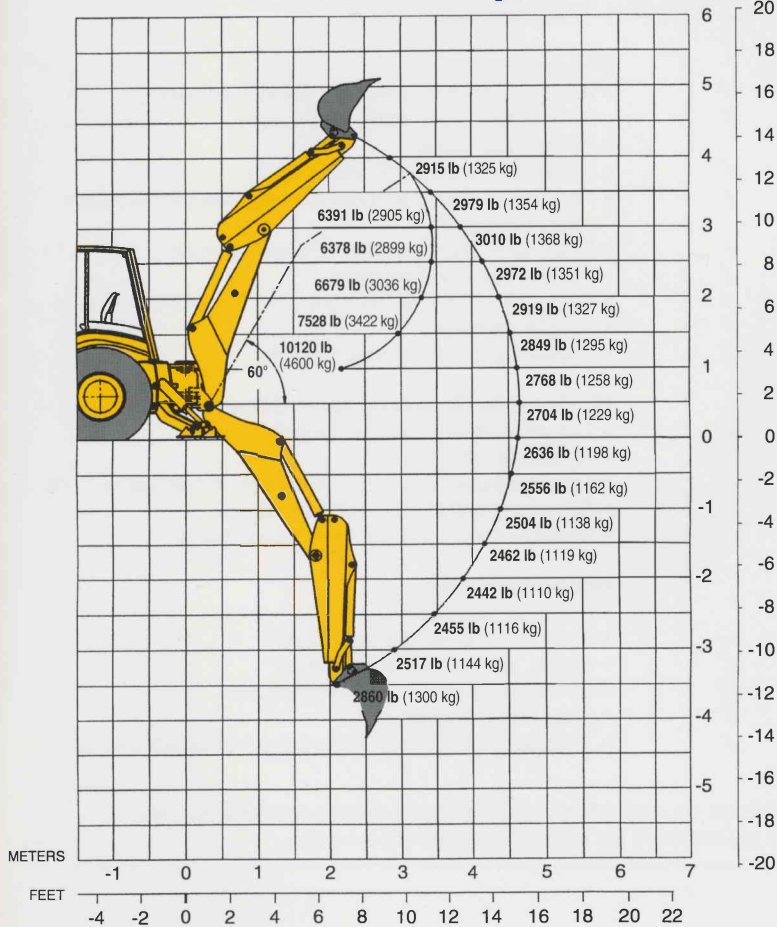
Lift capacity figures comply with SAE J31.

Units are equipped with standard equipment and 24" heavy duty backhoe bucket.

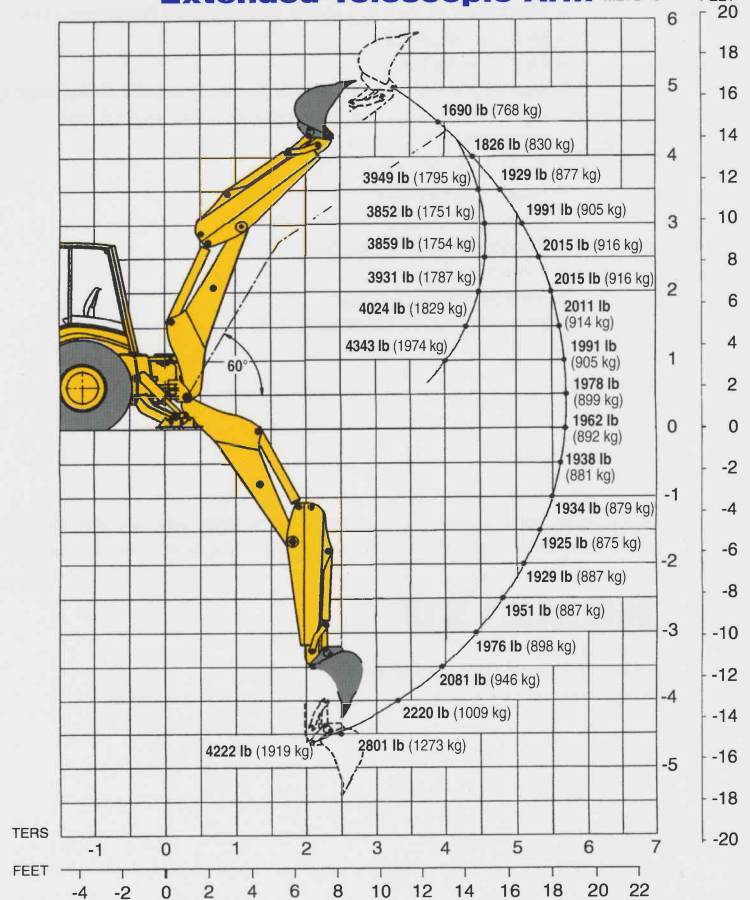
Standard Arm METERS



Retracted Telescopic Arm METERS



Extended Telescopic Arm METERS



EQUIPMENT LIST



Std Opt

Std Opt

Engine

- ✓ • Air cleaner, dry type, radial seal with secondary cartridge and condition indicator
- ✓ • Alternator, 80 amp, 12 volt
- ✓ • Battery disconnect switch
- ✓ • Battery, 155 Ah (660 cca)
- ✓ • Cold area arrangement (Battery, 185 Ah, 850 cca)
- ✓ • Fan, suction, and fan guard
- ✓ • Precleaner
- ✓ • Spin-on fuel, engine oil, hydraulic transmission oil filters, and water separator

Operator Environment

- ✓ • Air conditioning
- ✓ • Alarm, backup
- ✓ • ROPS/FOPS Cab
- ✓ • Coat hook
- ✓ • Cup holders
- ✓ • Exhaust in line with ROPS post
- ✓ • Floor mat
- ✓ • Gauges: coolant temperature, fuel level, tachometer, hourmeter
- ✓ • Indicators: air cleaner service, brake on, engine coolant temperature, engine oil pressure, torque converter oil temperature, 4 wheel drive, low fuel, hydraulic oil level, warning direction indicator, park brake engagement, brake oil level, differential lock, glow plug preheating, generator warning
- ✓ • Instrument panel lights
- ✓ • Key start/stop system with auxiliary position
- ✓ • Komatsu backhoe controls
- ✓ • Komatsu excavator (ISO) controls
- ✓ • Komatsu excavator and backhoe conversion kit
- ✓ • Mechanical locks, loader control and backhoe control
- ✓ • Mirrors, exterior
- ✓ • Mirror, interior
- ✓ • Multi-function control lever (transmission disconnect, optional hydraulics, differential lock, speed up)
- ✓ • ROPS/FOPS canopy
- ✓ • Seat belt, 3" retractable
- ✓ • Seat, suspension with armrests
- ✓ • Storage compartment, internal
- ✓ • Throttles, hand and foot
- ✓ • Tilt steering
- ✓ • Vandalism protection
- ✓ • Warning horn, front, electric

Loader

- ✓ • Attachments, front loader
- ✓ • Auxiliary hydraulic valve; with piping
- ✓ • General purpose front bucket 1.25 yd³ (0.95 m³)
- ✓ • Multi-purpose bucket, 1.03 yd³
- ✓ • Lift cylinder lock
- ✓ • Load Stabilizer System
- Loader float feature
- Parallel lift
- Return to dig

Backhoe

- ✓ • Anti-burst/anti-drift valves (outriggers)
- ✓ • Attachments, backhoe
- ✓ • Auxiliary hydraulic valve; with piping
- ✓ • Backhoe buckets (12", 16", 18", 24", 30", 36')
- Backhoe, center mount, 2 lever control
- Boom transport lock
- Load Independent Flow Divider hydraulic valve block
- ✓ • Outrigger cylinder guards
- Stabilizer shoes, grouser type
- ✓ • Stabilizer shoes, reversible
- Swing transport lock
- ✓ • Telescopic arm

Power Train

- Brakes, wet disc with dual pedals and lock
- Differential lock (100% rear axle)
- ✓ • Drive shaft guard
- Kickdown switch (PS series only)
- Park brake (automatically disengages transmission when engaged)
- Powershift Transmission (PS series only)
- Power shuttle transmission
- Tires 14-17.5 (10PR) front 19.5L-24 (10PR) rear
- Torque converter
- Transmission disconnect switch

Hydraulic System and Steering

- Closed center Load Sensing System
- Hydraulic oil cooler
- Load Independent Flow Divider hydraulic valve block
- Steering, hydrostatic, load sensing
- Variable displacement axial piston pump

Miscellaneous

- ✓ • External tool box
- ✓ • Front counterweight, additional
- Lights, working (2 front, 2 rear)
- O-ring face seal hose connections
- Stop and tail lights (2)
- Tilttable engine hood, with maintenance access door

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

KOMATSU®

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