

KOMATSU

Utility

WB
70A-1



WB70A-1

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ARTICULATED BACKHOE LOADER

NET HORSEPOWER
SAE J1349

52 kW - 70,8 HP

OPERATING WEIGHT

From 5.650 kg
to 6.400 kg

3 MACHINES IN 1

The WB70A-1 is the successful combination of three specific models in a single machine:

- BACKHOE LOADER
- WHEELED LOADER
- TOOL CARRIER

In fact, based on needs, the WB70A-1 can be transformed into a specific machine for digging, loading or construction site operations. Thanks to the use of the front hydraulic quick coupler, available on request, any kind of equipment can be connected in just a few seconds without having to vary the digging forces while using the loader.

Transmission

The hydrostatic transmission offers many advantages: continuous and constant traction, braking effect on slopes, operations carried out on wheels only without stabilizers and travel speed control that doesn't depend on engine rpm (thanks to the inch pedal).

Besides these features, the WB70A-1 today offers one of the highest speeds in its category. The main characteristic of this model is the $\pm 40^\circ$ central articulation, which, together with the 20° total oscillation of the frames (that can be locked from the cab), make the WB70A-1 unbeatable in terms of stability and adaptability to even the most irregular surfaces, thus allowing the load to be transported smoothly and safely under all operating conditions.

Excellent performance and high productivity

The "High-Flow" hydraulic system, the backhoe that's the end result of 35 years of experience, the front loader with "Z" kinematic motion and a sturdy structure put the WB70A-1 at the top of its category for any type of performance.

Engine power and digging forces make this machine a champion of productivity. Since the machine can operate with the front loader always aligned with the front wheels (a specific feature of wheeled loaders), greater thrusting forces are generated during loading along with higher stability during steering with no loader torsion.





Comfortable and environmentally-friendly

The ROPS and FOPS cab is roomy and comfortable, thanks to the efficient positioning of the controls, while excellent visibility is guaranteed by the wide glazed surfaces, the central position of the engine and the special configuration of the articulation. Ergonomic controls and reduced noise levels inside and outside the cab, together with the ventilation system with intake air filtering, provide the operator with a truly comfortable environment.

Versatility

Thanks to the exclusive KOMATSU coupling/uncoupling system, the operator can release the entire backhoe unit simply by moving a lever and disconnecting 2 pipes supplied with a rapid coupler. Therefore, the even more compact dimensions and improved manoeuvrability make the WB70A the best choice for working in limited spaces. A counterweight to increase machine stability is available upon request.

Maintenance

Owing to the position of the inspection points and the particularly safety-conscious overall design, the few routine maintenance operations required can be carried out without using special tools, while reducing time and costs and enhancing machine reliability at the same time.



SPECIFICATIONS



ENGINE

Model Komatsu
 Type 4D98E-1FA low emissions
 Max. power 52 kW / 70,8 HP
 Rated power:
 (SAE J 1349) 52 kW / 70,8 HP - 2.500 rpm
 (DIN 6271) 52 kW / 70 CV - 2.500 rpm
 (80/1269/EC) 51,1 kW / 68,8 HP - 2.500 rpm
 Max. torque (80/1269/EC) 251 Nm - 1.200 rpm
 Displacement 3.318 cm³
 Number of cylinders 4



OPERATING WEIGHT

Operating weight with backhoe (ISO 6016) 5.650 kg
 Weight with 4 in 1 bucket,
 double off-set and telescopic arm 6.400 kg
 Operating weight with counterweight (ISO 6016) 5.700 kg
 Weight with 4 in 1 bucket and counterweight 5.850 kg



HYDRAULIC SYSTEM

Two gear pumps with full flow to the backhoe.
 Max. delivery 116 /min
 Pressure 20 MPa (200 bar)
 Aluminium oil cooler.



ELECTRIC SYSTEM

Battery 12V - 120 Ah
 Alternator 60 A



STEERING

Hydrostatic with LOAD SENSING steering (Orbitrol) and priority valve.
 Frame articulation ± 40°
 Frame oscillation ± 10°
 The central oscillation can be hydraulically locked by means of an electrically controlled button.



TRANSMISSION

Hydrostatic, closed circuit transmission with variable displacement pump and motor and 2-speed gearbox. Hydraulic speed electrically operated selection with lever. Electrically operated gearbox selection with button.

-Forward and reverse working speeds:
 1st from 0 to 4,7 km/h
 2nd from 0 to 10,5 km/h
 -Forward and reverse travel speeds:
 3rd da 0 a 18 km/h
 4th da 0 a 39 km/h

An electro-hydraulically controlled button puts the transmission into neutral.

Inch pedal.



AXLES

Rigid axles with epicyclic reduction gears. Electro-hydraulically controlled differential locking on the rear axle.



BRAKES

SERVICE: hydraulically operated oil immersed disc brakes on both axles.
 PARKING: hand operated oil immersed multidisc brake acting on the transmission.



TYRES

Standard:
 Front / rear 12,5 x 20
 Optional:
 Front / rear 405/70 R18



CAB

Soundproof cab, ROPS homologated in conformity with the ISO 3471 rules and FOPS homologated in conformity with the ISO 3449 rules, flexibly mounted on the main frame by means of "Silent block"

- Two access doors with 180° opening
- 3-section rear door completely openable outwards
- Tempered safety glass
- Adjustable seat as regards height, springing and back inclination
- Adjustable steering wheel
- Lights for road circulation
- Front and rear working lights in the canopy
- Front and side dashboards complete with instruments and pilot lights for a constant control of the machine operation
- Front and rear windscreen wipers
- Heating

ROAD HOMOLOGATION



REFILLS

Fuel tank 70 /
 Hydraulic oil tank 65 /
 Diesel engine oil 10 /
 Brakes oil 0,5 /
 Axles oil
 - rear axle 5,2 /
 - front axle 4 /
 - epicyclic reduction gears 3,6 /
 Cooling system 15 /



LOADER

Bucket width 1.850 mm
 Standard bucket capacity (ISO 7546) 0,7 m³
 Lifting capacity
 at max. height (ISO 8313) 2.068 daN (2.110 kg)
 Lifting capacity
 at ground level (ISO 8313) 4.020 daN (4.100 kg)
 Breakout force (ISO 8313) 4.312 daN (4.400 kg)
 Values valid for machine provided with backhoe.

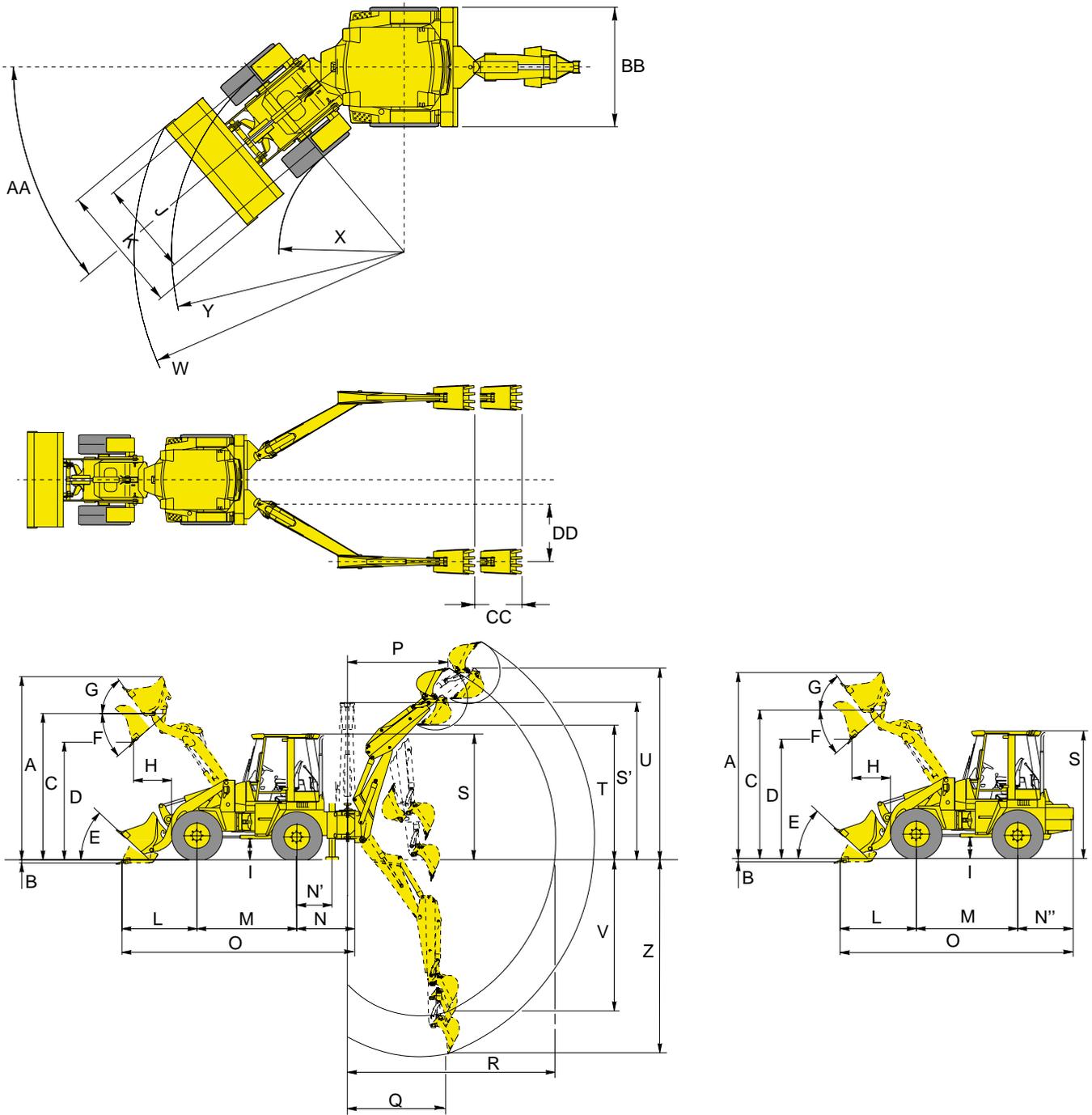


BACKHOE

Bucket breakout force (ISO 6015) 4.116 daN (4.200 kg)
 Arm breakout force (ISO 6015) 2.254 daN (2.300 kg)
 Bucket rotation 200°
 Backhoe mass with bucket 1.400 kg
 Backhoe quick release mechanism

WB70A-1 BACKHOE LOADER

DIMENSIONS



A.....3.885 mm	O.....5.270 mm
B.....110 mm	N'.....696 mm
C.....3.125 mm	N''.....1.140 mm
D.....2.480 mm	O''.....4.940 mm
E.....46°	S.....2.660 mm
F.....40°	J.....1.490 mm
G.....44°	K.....1.850 mm
H.....870 mm	X.....2.570 mm
I.....440 mm	Y.....3.950 mm
L.....1.650 mm	W.....4.380 mm
M.....2.150 mm	AA.....40°
N.....1.470 mm	BB.....820 mm

	OFFSET BOOM on std or telescopic configuration	STANDARD retracted arm	TELESCOPIC ARM max extension	
P.	1.130	1.095	1.551	mm
Q.	1.685	1.654	1.610	mm
R.	4.735	4.665	5.316	mm
S'.	3.150	3.091	3.091	mm
T.	3.150	3.100	3.611	mm
U.	4.110	4.052	4.564	mm
V.	3.740	3.675	4.390	mm
Z.	4.050	4.000	4.700	mm
CC.	-	-	720	mm
DD.	765	-	-	mm

WB70A-1 BACKHOE LOADER

STANDARD EQUIPMENT

- Front bucket with teeth
- Inch pedal
- Differential lock
- Backhoe unit quick coupling
- ROPS FOPS cab
- 3-element front hydraulic valve
- Adjustable seat
- Ventilation (filtered fresh air intake) and heater
- Hydrostatic transmission
- External rear-view mirror
- Transmission and oscillation locking systems
- Front equipment single-lever control
- KOMATSU low-emission engine
- 12.5 - 20 tyres

OPTIONAL EQUIPMENT

- Floating
- Front auxiliary hydraulic circuit (6-way valve)
- Hose burst valves:
 - loader arm
 - backhoe
- Telescopic arm
- Offset boom
- Telescopic arm + offset boom
- Rear counterweight instead of backhoe (1.400 kg)
- Rear cover
- Hydraulic hand hammer circuit
- Hydraulic circuit for grass-cutter (std arm)
- Hydraulic circuit for grass-cutter (telescopic arm)
- TUV + TBG version (20 km/h or 37 km/h)
- "Inching" manual command
- Optional tyres 405/70 -R18
- Fuel filling pump
- Radio
- Air cyclone pre-filter
- Backup alarm
- Biodegradable oil
- Loader attachments:
 - 4x1 bucket
 - hydraulic quick coupler
 - pallet forks
 - large bucket (2.000 mm)
 - cutting edge on teeth
 - bolt-on cutting edge
- Backhoe attachments:
 - range of buckets (300÷800 mm)
 - ditch cleaning bucket (1.400 mm)
 - ditch digging bucket (1.000 mm)

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COMPANY WITH
ENVIRONMENTAL MANAGEMENT
SYSTEM CERTIFIED BY DNV
ISO 14001