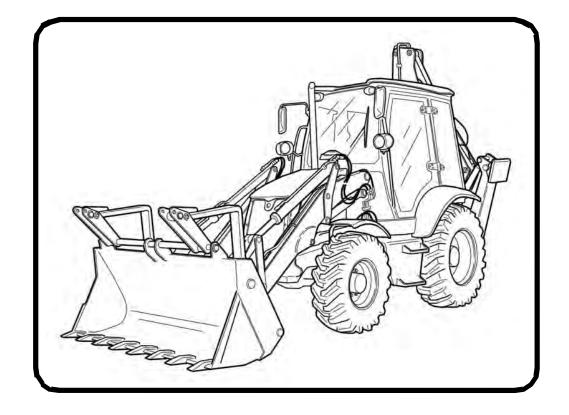


# **Service Manual** B730 & B750 Backhoe Loader

(B730) S/N B4B611001 & Above (B750) S/N B4BM11001 & Above





7310058enUS (02-17) (0)

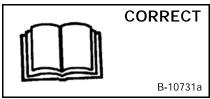
# **MAINTENANCE SAFETY**

# **WARNING**

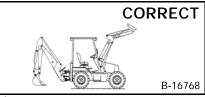
Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0807

Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.

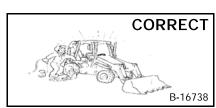


Never service the Bobcat Backhoe Loader without instructions.



Always use an approved lift arm support device when servicing the backhoe loader with the lift arms raised. Replace the lift arm support device if damaged or missing.

Disconnecting or loosening any hydraulic tubeline, hose, fitting component, or part failure can cause lift arms or backhoe boom to drop.



Cleaning and maintenance required daily.

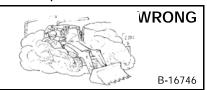
NEVER modify equipment or add

attachments not approved Bobcat.



Have good ventilation when welding or grinding painted

Wear dust mask when grinding painted parts. Toxic dust and gas can be produced.



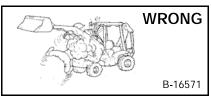
Vent exhaust to outside when engine must be run for service.

Exhaust system must be tightly sealed. Exhaust Fumes can kill without warning.



Never work on backhoe loader with lift arms raised unless supported by an approved lift arm support device.

arm support device. Always lower the backhoe bucket  $\frac{\omega}{\varpi}$  to the ground before doing any  $\frac{\omega}{\varpi}$ maintenance.



Stop, cool and clean engine of flammable materials before checking fluids.

Never service or adjust machine with the engine running unless instructed to do so manual.

Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate Avoid

the skin or eyes. Never fill fuel tank with engine running, while smoking or when near open flame.



Keep body, jewelry and clothing away from moving parts, electrical contact, hot parts and exhaust.

Wear eye protection to guard from battery acid, compressed springs, fluids under pressure and flying debris when engines are running or tools are used.
Use eye protection approved for type of welding.
Keep engine cover closed except

for service. Close and latch engine cover before operating the backhoe loader.



Lead-acid produce batteries flammable and explosive gases.

Keep arcs, sparks, flames and lighted tobacco away from batteries.

Batteries contain acid which burns eyes or skin on contact. Wear protective clothing. If acid contacts body, flush well with water. For eye contact flush well and get immediate medical and get attention.

Maintenance procedures which are given in the Operation & Maintenance Manual can be performed by the owner/operator without any specific technical training. Maintenance procedures which are **not** in the Operation & Maintenance Manual must be performed **ONLY BY QUALIFIED BOBCAT SERVICE PERSONNEL**. **Always use** genuine Bobcat replacement parts.

MSW46-0116

Thanks very much for your reading,

Want to get more information,

Please click here, Then get the complete
manual



# **NOTE:**

If there is no response to click on the link above, please download the PDF document first, and then click on it.

Have any questions please write to me: admin@servicemanualperfect.com



# **CONTENTS**

GENERAL INFORMATION	
LUBRICATION AND MAINTENANCE	20-01
HYDRAULIC SYSTEM	30-01
ELECTRICAL SYSTEM	40-01
AXLES	50-01
TRANSMISSION	60-01
ENGINE SERVICE	70-01
ALPHABETICAL INDEX	INDFX-01



6 of 674 1-4 B730 & B750 Service Manual

# **GENERAL INFORMATION**

MACHINE INFOMRATION	10-10-1
B730 Specification	10-10-1
B750 Specification	10-10-3
TECHNICAL PROPERTIES	10-20-1
B730 Specifications	
	10-20-1
	10-20-1
	10-20-1
,	10-20-1
	10-20-2
Tires	
	10-20-2
	10-20-2
	10-20-2
,	10-20-2
	10-20-3
<b></b>	10-20-3
	10-20-4
Engine	
======================================	10-20-4
	10-20-4
Transmission	
	10-20-5
Tires	
Loader	
Backhoe	
Cab / Canopy	10-20-5
Steering	
Capacities	
Weights	10-20-6
MAIN COMPONENTS	10-30-1
POSITION OF MACHINE	10-40-1
Loader Attachment Position	10-40-1
Backhoe Attachment Position	10-40-1
SAFETY INSTRUCTION	10-50-1
General Safety Information	10-50-2
Crushing And Burning Prevention	
Fire And Explosion Prevention	
Hydraulic Lines And Hoses	
,	
STORAGE	10-60-1
Preparing The Machine For Storage	10-60-1
Preparing The Machine For Work After A Long Period Of Storage	



8 of 674 10-02 B730 & B750 Service Manual

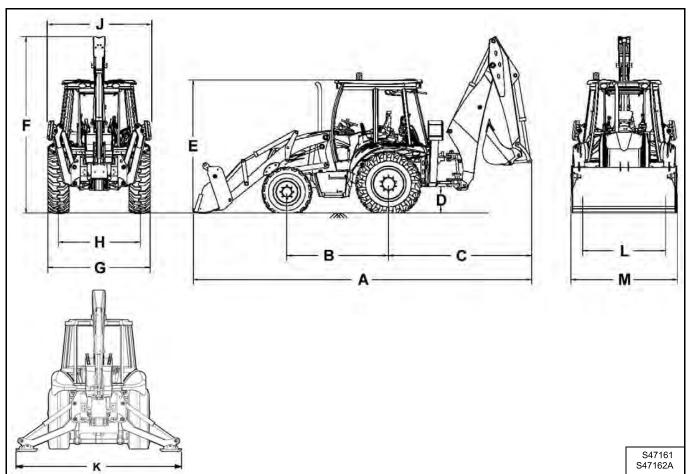
#### **MACHINE INFOMRATION**

## **B730 Specification**

These are backhoe loaders that are designed with operating weight up to 8.2 tons, rigid frame, bucket capacity of 0.2 m³ and shovel capacity of 1.1 m³. This machine is designed to dig and load in closed and open terrain.



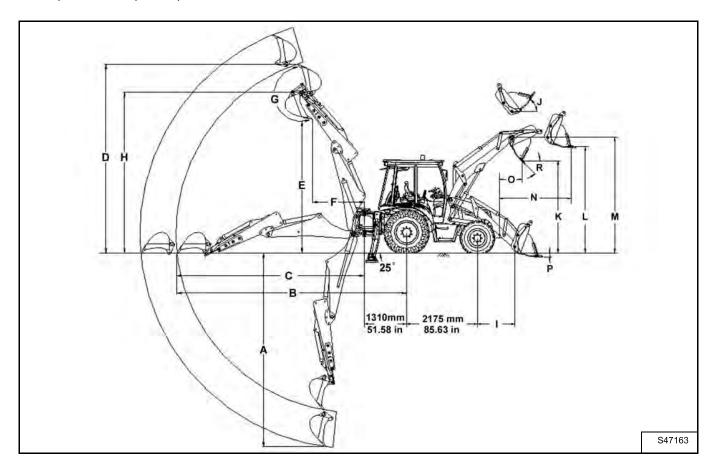
WARNING: Because of exhaust gas, use the machine only in well ventilated areas.



.	A Overall Machine Length In Travel Position	7585 mm (298,62 in)	G	Machine Width	2280 mm (89.76 in)
	B Wheelbase	2175 mm (85.63 in)	Н	Rear Wheel Track	1770 mm (69.68 in)
	C Backhoe Swing Centre Distance	3060 mm (120.47 in)	J	Stabilisers Up	2200 mm (86.61 in)
П	D Minimum Machine Height	290 mm (11.41 in)	K	Stabilisers Down	3685 mm (145.00 in)
	E Cab Height	2900 mm (114.17 in)	L	Front Wheel Track	1895 mm (74.61 in)
	Machine Height In Travel Position	3900 mm (153.54 in)	М	Overall Width With Bucket	2280 mm (89.76 in)

# MACHINE INFOMRATION (CONT'D)

# B730 Specification (Cont'd)

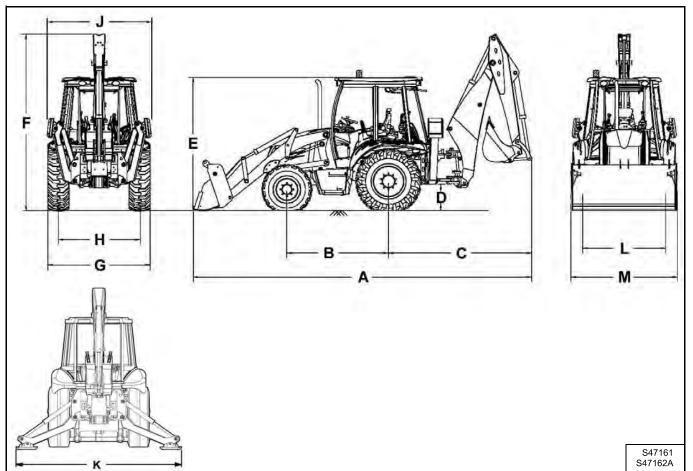


		Retracted	Extended			
Α	Maximum Dig Depth	4600 mm (181.10 in)	5800 mm (228.35 in)	I	Distance Between Hinge Pin And Front Axle Centre	1220mm (48.03 in)
В	Max Reach From Rear Axle Centre	7000mm (275.59 in)	8100 mm (318.90 in)	J	Max Rollback Angle, Fully Raised	59.2°
С	Max Reach From Swing Centre	5700 mm (224.41 in)	6800 mm (267.72 in)	K	Dump Height	2810 mm (110.63 in)
D	Maximum Digging Height	5600 mm (220.47 in)	6450 mm (253.94 in)	L	Load-over Height	3280 mm (129.13 in)
Е	Maximum Dumping Height	3850 mm (151.57 in)	4700 mm (185.04 in)	М	Height To Hinge Pin	3520 mm (138.58 in)
F	Loading Reach	1800 mm (70.87 in)	2650 mm (104.33 in)	Ν	Max Reach At Full Height	1070 mm (42.13 in)
G	Bucket Rotation Angle	200.4°	200.4°	0	Dumping Reach	620 mm (24.41 in)
Н	Max Bucket Hinge Pin Height	4750 mm (187.01 in)	5550 mm (218.50 in)	Р	Digging Depth	115 mm (4.53 in)
				R	Dump Angle	45°

# **MACHINE INFOMRATION (CONT'D)**

### **B750 Specification**

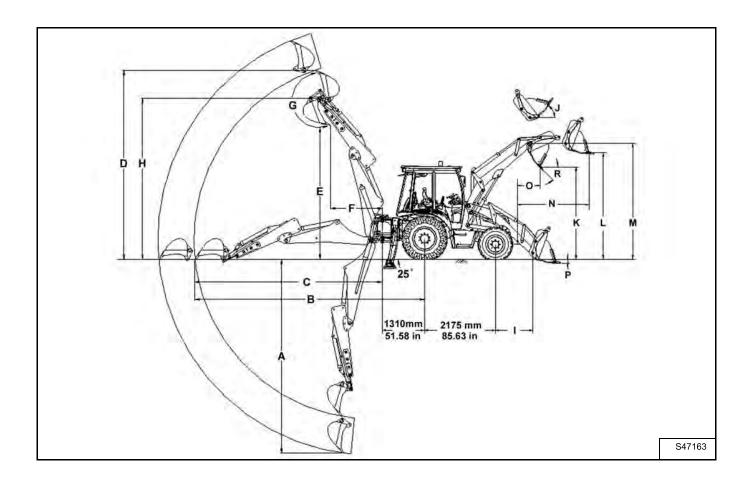
These are backhoe loaders that are designed with operating weight up to 8.2 tons, rigid frame, bucket capacity of 0.2 m³ and shovel capacity of 1.1 m³. This machine is designed to dig and load in closed and open terrain.



Α	Overall Machine Length In Travel Position	7735 mm (304.5 in)	G	Machine Width	2280 mm (89.76 in)
В	Wheelbase	2175 mm (85.63 in)	Н	Rear Wheel Track	1770 mm (69.68 in)
С	Backhoe Swing Centre Distance	3060mm (120.47 in)	J	Stabilisers Up Width	2200 mm (86.61 in)
D	Minimum Machine Height	310 mm (12.20 in)	K	Stabilisers Down Width	3685 mm (145.08 in)
Е	Cab Height	2900 mm (11.17 in)	L	Front Wheel Track	1895 mm (74.61 in)
F	Machine Height In Travel Position	3900 mm (153,54 in)	М	Overall Width With Bucket	2280 mm (89.76 in)

# MACHINE INFOMRATION (CONT'D)

# B750 Specification (Cont'd)



		Retracted	Extended			
Α	Maximum Dig Depth	4600 mm (181.10 in)	5800 mm (228.35 in)	I	Distance Between Hinge Pin And Front Axle Centre	1460mm (57.48 in)
В	Max Reach From Rear Axle Centre	7000mm (275.59 in)	8100 mm (318.90 in)	J	Max Rollback Angle, Fully Raised	59.2°
С	Max Reach From Swing Centre	5700 mm (224.41 in)	6800 mm (267.72 in)	K	Dump Height	2950 mm (116.14 in)
D	Maximum Digging Height	5600 mm (220.47 in)	6450 mm (253.94 in)	L	Loadover Height	3370 mm (132.68 in)
Е	Maximum Dumping Height	3850 mm (151.57 in)	4700 mm (185.04 in)	М	Height To Hinge Pin	3670 mm (144.49 in)
F	Loading Reach	1800 mm (70.87 in)	2650 mm (104.33 in)	N	Max Reach At Full Height	1125 mm (44.29 in)
G	Bucket Rotation Angle	200.4°	200.4°	0	Dumping Reach	685 mm (24.41 in)
Н	Max Bucket Hinge Pin Height	4750 mm (187.01 in)	5550 mm (218.50 in)	Р	Digging Depth	113 mm (4.45 in)
				R	Dump Angle	45°

12 of 674 **10-10-4 B730 & B750 Service Manual** 

### **TECHNICAL PROPERTIES**

# **B730 Specifications**

## **Engine**

Make & Model	PERKINS 1104C-44T	
Emission Type	Tier II	
Engine Type	4 Stroke diesel, Turbocharged	
Engine Power	74.5 kW/ 100 hp	
Rated Speed	2200 rpm	
Displacement	4.4 L (268.5 ci)	
Bore And Stroke	105 x 127 mm (4.13 x 5.00 in)	
Number Of Cylinder	4	
Maximum Torque	408 N•m (300.92 ft-lb)	
Cooling	Water cooled	

## **Electrical System**

Battery	12 volt / 120 Ah
Starter	3,2 kW (4.3 hp)
Alternator	75A

# **Hydraulic System**

Туре	Open center	,
Hydraulic Pump	Tandem Gear	-
Maximum Flow	90 + 64 Lpm (23.78 + 16.91 gpm)	
Maximum Pressure	22000 kPa (220 bar) (3191 psi)	
Hydraulic Oil Filter	Full flow filter in return line with integrated fine filter area	
Hydraulic Oil Cooler	Hydraulic and transmission oil cooler	•
Hydraulic Controls		1
Backhoe Control	Mechanical control lever	
Loader Control	Mechanical control lever	

### **Transmission**

Make	ZF					
Drive	4 Whe	4 Wheel Drive				
Туре	Powe	Powershift				
2WD / 4WD Selection	By switch on dash panel					
Transmission Disconnect	Push button and brake system					
Travel Speeds	Forward	Reverse				
1st	6,5 km/h (4.0 mph)	7,0 km/h (4.4 mph)				
2nd	11 km/h (6.8 mph) 12 km/h (7.5 mph)					
3rd	26 km/h (16.2 mph) 30 km/h (18.6 mph)					
4th	40 km/h (24.9 mph)					

# B730 Specifications (Cont'd)

### Axle / Brakes

Type (Front and Rear)	ZF
Front Axle Oscillation	20 degrees
Steering angle	52 degrees
Rear Axle	Electro-hydraulic operated differential lock, outboard planetary design, self-adjusting high torque internal wet service brake
Service Brake Type	Hydraulic wet multi - disc
Parking Brake Type	Mechanical control on rear axle

### **Tires**

Front 2WD / 4WD - standard	12.5 - 18
Rear - standard	16.9 - 28

### Loader

Bucket capacity	1.1 m³ (1.4 y³)
Breakout force - lift	81,5 kN (118322 lbf)
Breakout force shovel maximum	60,5 kN (13601 lbf)
Bucket width	2280 mm (69.76 in)
Lift height to hinge pin	3520 mm (138.58 in)
ROC (ISO 14397-1) Bucket Application	3413 kg (7524 lb)

### **Backhoe**

Maximum bucket break - out force	59,1 kN (13277 lbf)
Bucket capacity	0.2 m³ (0.26 y³)
Bucket width	600 mm (23.62 in)
Arm tear - out	
Retracted	31,8 kN (7140 lbf)
Extended (With Optional extendable arm)	22,4 kN (5033 lbf)

# Cab / Canopy

Cab	ROPS (ISO 3741) and FOPS (ISO 3449 Level II) type tinted safety glass giving total visibility, full opening rear-side windows, front and rear windshield wipers, fully adjustable front/rear and up/down seat, Fresh air heater/blower, full heat control
Canopy	ROPS (ISO 3741) and FOPS (ISO 3449 Level II), fully adjustable front/rear and up/down seat.

# Dealer Copy -- Not for Resale

# TECHNICAL PROPERTIES (CONT'D)

# B730 Specifications (Cont'd)

## Steering

Steering type	2 wheel hydraulic
Power steering	Hydrostatic
Turning circle - outer front tire clearance	9500 mm (31.2 ft)
Turning circle - outer bucket clearance	12,320 mm (40.4 ft)

# Capacities

	MAXIMUM CAPACITY	SERVICE CAPACITY
Engine oil (with filters)	8.4 I (8.9 qt)	8.0 I (8.5 qt)
Cooling system	25,0 I (6.6 U.S. gal)	25,0 I (6.6 U.S. gal)
Fuel tank	140,0 I (37 U.S. gal)	140,0 I (37 U.S. gal)
Hydraulic tank	75,0 I (19.8 U.S. gal)	90,0 I (23.8 U.S. gal)
Hydraulic system	130,0 I (34.3 U.S. gal)	130,0 I (34.3 U.S. gal)
Transmission	19,0 I (5.0 U.S. gal)	14,0 - 16 I (3.7 - 4.2 U.S. gal)
Axle oil		
Front	8,0 I (8.5 qt)	5,5 I (5.8 qt)
Rear	16,0 I (4.2 U.S. gal)	9,0 I (2.4 U.S. gal)
Brake oil	0,4 I (0.42 qt)	0,4 I (0.42 qt)

## Weights

Operating Weight	7800 kg (17196 lb)

## **B750 Specifications**

## **Engine**

Make & Model	PERKINS 1104C-44T	
Emission Type	Tier II	
Engine Type	4 Stroke diesel, Turbocharged	
Engine Power	74.5 kW/ 100 hp	
Rated Speed	2200 rpm	
Displacement	4.4 L (268.5 ci)	
Bore And Stroke	105 x 127 mm (4.13 x 5.00 in)	
Number Of Cylinder	4	
Maximum Torque	408 N•m (300.92 ft-lb)	
Cooling	Water cooled	

## **Electrical System**

Battery	12 volt / 120 Ah
Starter	3,2 kW (4.3 hp)
Alternator	75A

# Hydraulic System

Туре	Open Center	
Hydraulic Pump	Tandem Gear	
Maximum Flow	90 + 64 Lpm (23.78 + 16.91 gpm)	
Maximum Pressure	22000 kPa (220 bar) (3191 psi)	
Hydraulic Oil Filter	Full flow filter in return line with integrated fine filter area	
Hydraulic Oil Cooler	Hydraulic and transmission oil cooler	
Hydraulic Controls		
Backhoe Control	Pilot controls	
Loader Control	Pilot controls	

### **Transmission**

Make	ZF	
Drive	4 Wheel Drive	
2WD / 4WD Selection	By switch on dash panel	
Туре	Powershift	
Transmission disconnect	Push button and brake system	
Travel Speeds	Forward	Reverse
1st	6,5 km/h (4.0 mph)	7,0 km/h (4.4 mph)
2nd	11 km/h (6.8 mph)	12 km/h (7.5 mph)
3rd	26 km/h (16.2 mph)	30 km/h (18.6 mph)
4th	40 km/h (24.9 mph)	

# B750 Specifications (Cont'd)

### Axle / Brakes

Туре	ZF
Front Oscillation	20 degrees
Steering angle	52 degrees
Rear Axle	Electro-hydraulic operated differential lock, outboard planetary design, self-adjusting high torque internal wet service brake
Service Brake Type	Hydraulic wet multi - disc
Parking Brake Type	Mechanical control on rear axle

### Tires

Front 4WD - standard	14.5 - 20
Rear 4WD - standard	16,9 - 28

### Loader

Shovel capacity	1,1 m³ (1.4 y³)	
Breakout force - lift	56,1 kN (12612 lbf)	
Breakout force shovel maximum	81,6 kN (18344 lbf)	
Bucket width	2280 mm (89.76 in)	
Lift height to hinge pin	3670 mm (144.49 in)	
ROC (ISO 14397-1) Bucket Application	on 2905.5 kg (6505 lb)	

### **Backhoe**

Maximum bucket breakout	59,1 kN (13277 lbf)	
Arm breakout force		
Retracted	31,8 kN (7140 lbf)	
Extended (with optional extendable arm)	22,4 kN (5036 lbf)	
Bucket capacity	0,2 m³ (0.26 y³)	
Bucket width	600 mm (23.62 in)	

# Cab / Canopy

Cab	ROPS (ISO 3741) and FOPS (ISO 3449 Level II) type tinted safety glass giving total visibility, full opening rear-side windows, front and rear windshield wipers, fully adjustable front/rear and up/down seat, Fresh air heater/blower, full heat control
Canopy	ROPS (ISO 3741) and FOPS (ISO 3449 Level II), fully adjustable front/rear and up/down seat.

# Steering

Steering type	2 wheel steer hydrostatic
Power steering	Hydrostatic
Turning circle - outer front tire clearance	12,170 mm (39.9 ft)
Turning circle - outer bucket clearance	14,600 mm (47.9 ft)

# B750 Specifications (Cont'd)

# Capacities

	MAXIMUM CAPACITY	SERVICE CAPACITY
Engine oil (with filters)	8.4 I (8.9 qt)	8.0 I (8.5 qt)
Cooling system	25,0 I (6.6 U.S. gal)	25,0 I (6.6 U.S. gal)
Fuel tank	140,0 I (37 U.S. gal)	140,0 I (37 U.S. gal)
Hydraulic tank	75,0 I (19.8 U.S. gal)	90,0 I (23.8 U.S. gal)
Hydraulic system	130,0 I (34.3 U.S. gal)	130,0 I (34.3 U.S. gal)
Transmission	19,0 I (5.0 U.S. gal)	14,0 - 16 I (3.7 - 4.2 U.S. gal)
Axle oil		
Front	8,0 I (8.5 qt)	5,5 I (5.8 qt)
Rear	16,0 I (4.2 U.S. gal)	9,0 I (2.4 U.S. gal)
Brake oil	0,4 I (0.42 qt)	0,4 I (0.42 qt)

# Weights

Operating Weight	8000 kg (17637 lb)
------------------	--------------------