

**VOLVO BACKHOE LOADER**

**BL70**



**MORE CARE. BUILT IN.**



# LOADS OF PERFORMANCE, BY DESIGN.

More care. Built in. It's the Volvo way and it's the BL70 Backhoe Loader. Part of Volvo's compact global range, with Compact Wheel Loaders, Compact Excavators and Skid Steer Loaders, the BL70 offers a high performance backhoe, durable loader and Volvo comfort, serviceability and safety.

## Your inspiration, our passion

For over 80 years, Volvo Construction Equipment has delivered productive machines that help make you more profitable. The Volvo BL70 Backhoe Loader is the continuation of this legacy, and it's been built for you from the ground up. Designed and built with direct input from backhoe customers at every phase of the development, the Volvo BL70 is everything you've ever wanted in a machine – a backhoe with the power and performance of a Volvo Excavator, a loader with the strength and simplicity of a Volvo Wheel Loader, a comfortable operator's station and serviceability features that ensure long, productive machine life.

## Terrain tested toughness

To ensure the BL70 Backhoe Loader meets the strict Volvo quality standards applied to all our products, the machine has gone through rigorous tests to prepare it for the day-to-day assault of deep trenching, heavy lifting, loading, craning and more.

And because it was designed and built from the ground up – not simply remodeled over time – it functions as a cohesive unit to make you more productive than ever.

## Proven power, proven performance

The Volvo BL70 is equipped with a proven D5D CDE3, 90 net HP, 293 cu/in displacement, Volvo turbocharged engine, which is Tier 3 compliant and certified meeting U.S. EPA, Tier 3/UE Stage 3 emission requirements. It delivers reliable, responsive power with low emissions. It provides excellent fuel economy, which combined with the closed-center, variable displacement hydraulic pump, makes the BL70 extremely fuel efficient.

The standard Powershuttle gearbox features four fully synchronized gear and electrohydraulic switching between forward and reverse. For increased balance, the transmission is mounted directly to the engine.

The optional Powershift transmission has four forward and reverse speeds and features a standard kick down for fast, smooth shifting from second to first gear. For ease of operation, a forward/reverse switch is integrated on the loader joystick. A fully automatic mode is activated in fourth gear for effortless transport.

## Long life on the job

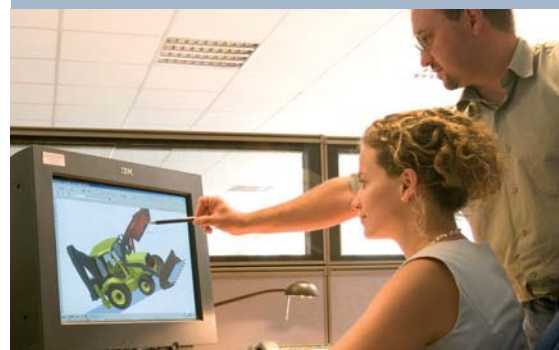
The Volvo BL70's undercarriage and frame are designed and built strong for maximum performance and long life. Every hydraulic line, fitting, pin and bolt is corrosion protected, and all hydraulic fittings employ O-ring face seal technology to ensure dry hydraulic joints. All electrical components are of the highest quality and all connections feature a waterproof, snap-together design. The rear kingpost area is accented by a stout, 1.5" double clevis mainframe, a heavy-duty, spring-applied hydraulic-release boom lock and high-mounted dual swing cylinders. Control valve hoses are routed through the cast iron kingpost and hydraulic lines are routed within the profile of the boom and dipper for protection and visibility.



- The Volvo engine delivers proven power.

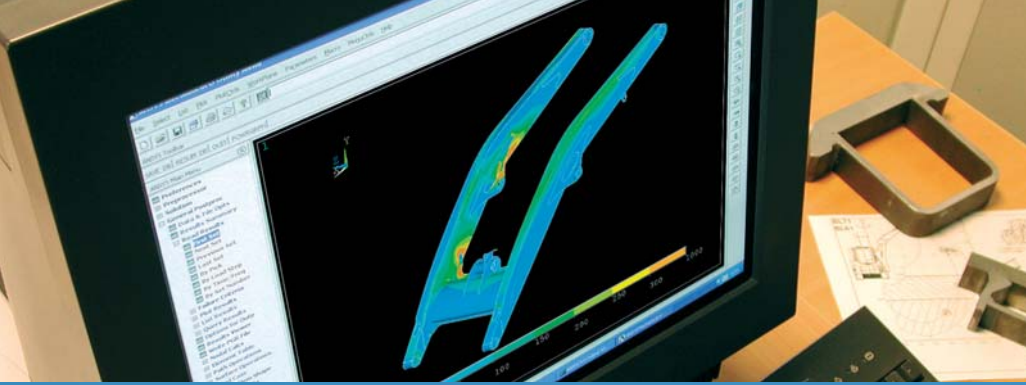


- Quick, easy backhoe attachment bracket.



- Quality and safety ensured with state of the art technology.





- Designed and built for your work.
- Toughness you can see and feel.



# GET READY TO BREAK NEW GROUND.

The Volvo BL70 Backhoe Loader was born to dig – and it's ready to tackle the toughest jobs around. Versatile and strong, the BL70's backhoe will help you dig into greater profits. A perfect combination of power and precision, the Volvo BL70 is the ideal solution for all your applications.

## **Built to last**

The Volvo BL70 features a closed-box construction boom with fewer components and welds – for superior strength. The cast iron kingpost provides strength and durability, yet flexible movement.

## **Always ready to perform**

The BL70 delivers everyday dependability. Its high-performance backhoe has a 14'9" (4496 mm) dig depth and 13296 lbf (59.1 kN) of bucket breakout force. The BL70 can be ordered with standard pilot controls or optional mechanical controls. Pilot control joysticks reduce fatigue and increase productivity. Pilot controls include the ISO/SAE pattern change valve inside the cab, allowing a quick change from backhoe to excavator control. The pilot joysticks include roller switches for fingertip control of auxiliary functions and attachments such as thumbs, augers and the extendible dipper. Roller switches are easy to operate and eliminate the need for floor space-consuming foot pedals. Pilot control towers have infinite adjustment and operational comfort. The curved boom provides excellent visibility, easy truck loading and outstanding lift capacity. For safety, the boom lock can be spring-applied and hydraulically-released. There's also a locking pin to secure the swing.

## **Load-sensing hydraulic system**

The load-sensing system combined with the variable displacement axial piston pump, regulates oil flow to the control valve, ensuring it meets requirements. When no work demand is detected, pump flow and horsepower requirement is reduced to conserve fuel.

The system's advantages:

- High forces at any engine speed
- Cooler hydraulics
- Increased fuel efficiency
- Quieter operation
- Less component wear.

## **Flow-sharing system**

The flow-sharing system automatically balances flow and pressure between hydraulic functions. When using two or more functions simultaneously, the proportionally-shared flow functions in proportion to joystick movement, guaranteeing smooth, no-delay operation.

## **Stabilizer pads**

Recently re-engineered stabilizer legs/pads maximize ground contact. The standard flip-over pads work in both dirt and paved surfaces. The new pads are stronger and larger for improved grip. An optional stabilizer cylinder guard adds protection.

## **Added versatility**

For versatility, there's a wide assortment of attachments. You can also get an auxiliary hydraulic circuit to operate attachments, such as a hammer or a MP bucket. Other optional features include an extendible dipper.



- ROPS/FOPS certified safety cage.



- High-mounted dual swing cylinders: out of the dirt.



- Flip-over pads gives you good gripping whatever the ground.





- Roller switch operated extendable dipper.
- Curved, narrow boom: capacity and visibility.
- Powerful backhoe bucket dig force.



- Flow sharing load-sensing hydraulics.



# MAKE EVERY LOAD COUNT.

When it's time to backfill a trench or load a truck, you want it done fast and efficient. Volvo took what it learned from over 50 years of producing its Wheel Loaders to develop a loader that makes you more productive – with faster cycle times, outstanding lift capacity and easy operation.

## The capacity to load more

The BL70 features a standard 1.3 yd<sup>3</sup> GP bucket that moves more with every load, for faster cycle times and greater productivity. For extra flexibility and versatility, an optional Multi-Purpose Bucket performs up to nine functions. Both are available with a choice of bolt-on teeth or reversible, bolt-on cutting edge.

## Strength you can see

The recently redesigned, reinforced loader arms increased the arm section size, while retaining the box-weld construction with large cross member. This provides strength without excessive weight for greater lifting capacity and visibility. Other recent improvements include the feedback link on the self-leveling system and larger pin size for the MP bucket lower cylinder pivot.

## Enhanced vision

Work faster and safer with the BL70. The loader, configured along a sloped hood line for optimum visibility, features a center-mounted bucket cylinder for a better view to the bucket corners. Even the hood paint helps eliminate glare.

## Pick up the pace

The single, center-mounted dump cylinder provides over 12,445 lb of breakout force, for speed, ease and no hesitation. There's also less hydraulic flow required for faster dump times. The patented self-leveling system offers faster, smoother operation and better spoil retention.

## Loads of possibilities

The loader attachment bracket provides quick and easy change out from one attachment to another – without leaving the seat. There's no need to switch machines. The BL70 loader attachment bracket is designed to also use many attachments from other Volvo compacts and mid-range Volvo wheel loaders.

## Take control of every load

The state-of-the-art loader is pilot operated and the multi-function control lever simplifies loading. The comfort-grip joystick allows for precision operation with minimal effort of all loader functions: raise, lower, tilt, return-to-dig and float. Simply push the joystick roller switch forward and backward to open and close the multi-purpose bucket. There's also a transmission forward/reverse button and disconnect button on the joystick to help cycle times.

## Lighter machine weight and optimized weight distribution.

Machine weight has been recently reduced, while weight distribution and stability have been optimized by shifting weight to the front – arriving at an ideal 30% front - 70% rear weight distribution.



- Boom suspension system.



- Single center-mounted dump cylinder.



- Multi-function control lever.





- Designed and built for your work.
- 1.3 cu/yd MP bucket.



- Versatile loader attachment bracket.
- Pallet fork option for added versatility.



# TAKE COMFORT IN THE DETAILS.

Volvo understands you work long, hard hours. We also know that you don't always work in ideal conditions. That's why we spent so much time developing the operator's station that gives you the comfort you deserve – and the ease of operation you demand. Get comfortable with Volvo production.

## Easy, comfortable operation

Once inside the cab, you'll find that all function controls are ergonomically placed on the right side console to reduce fatigue and maximize productivity through easy access. Comfortable grips and responsive handling allow operators to easily raise, lower, tilt, return-to-dig and float with precision and speed.

## See your productivity rise

Flat windows assure no distortion. The front and rear side windows can also be partially or fully opened for comfort and ventilation. A one-piece, floor-to-ceiling rear window opens easily via gas cylinders, allowing excellent visibility to the working area. The rear window stores easily overhead, and provides a slight overhang to protect the operator's feet from rain. And with four front and four rear work lights provided standard, you get excellent visibility, even in low-light conditions.

## It's all right where you want it

The comfortable, roomy operator's station offers a tilt steering column that adjusts to fit any sized operator. In addition, the front console contains well-placed, well-lit display indicators right in your field of vision. Separate heating and air-conditioning systems offer the ultimate in operator comfort and convenience. Both systems feature strategically positioned adjustable ducts and individual fan and temperature controls – allowing you to extend your operating season by working comfortably – regardless of the weather. There are even ample storage areas for tools, gloves, chains and more. And for easy clean up, the removable, cushioned floor mat is channeled so the water runs out the doors.

## At the seat of comfort

Get more comfort features – regardless of your size – with a cushioned suspension seat with multiple adjustments, including height and fore and aft movement. There's also an optional air-ride, heated suspension seat with arm rests for even more comfort. An optional Boom Suspension System offers a smoother overall ride and can help assure material retention in the loader bucket.

## Take control of your comfort

Increase backhoe production with standard joystick pilot controls. The joystick control columns are independent from the seat, but you can control the joysticks with your wrists, while your forearms rest comfortably on the seat armrests and your back is against the backrest. This allows the operator to enjoy ergonomic comfort, greater precision and the ease of operation of a hydraulic excavator. Joystick control columns are fully adjustable. For easy use of the optional extended dipper, simply push the roller switch integrated on the right hand side joystick. A pattern change valve lets you change from standard backhoe to excavator control based on operator preference.



- Air-conditioning circulates through eight air vents.



- Tilting steering column.



- Easily rotate the seat with one hand.





- Optional mechanical controls if desired.
- Precise, easy pilot control comfort is standard.
- Plenty of floor space and storage.



# BL70 BACKHOE LOADER.

## Redesigned boom & dipper

- Design of the boom has been simplified by employing common top and bottom pivot forgings, which allow better weld penetration and therefore stronger boom and longer life. The narrow width of the boom provides excellent visibility to the trench.
- The extendible dipper now features increased clearance between inner dipper and telescopic cylinder for trouble free operation.

## Great visibility

- The new lower hood line improves visibility to the front of the machine and enables a better view of the loader attachment bracket when engaging and disengaging buckets and attachments.
- The hood has been redesigned and features internal braces to prevent expansion and its new shape improves the machine curb appeal.



## Service & Parking brakes

- Service brakes have been hugely improved and require only light pedal effort to stop the machine. Much larger brake plates have been introduced and are now mounted outboard for easier serviceability.
- Parking brake is independent of the service brakes and is mechanically applied and adjusted through a hand-lever.

## Stab & street pads

- Stabilizer legs and flip-over pads have been designed to maximize ground contact, provide good gripping in hard surfaces and longer wear life.
- An optional stabilizer cylinder guard is available for added protection to the cylinder rod.





#### **High steering torque**

- Steering torque has been increased resulting from the introduction of a larger cylinder that delivers 30% more power, therefore providing easier steering with a full loader bucket, as well as less operator effort and fatigue.

#### **Fuel-efficient low-emissions, high-performance engine**

- The new D5D Tier 3 compliant Volvo engine, is a low-emission engine that delivers high HP, increased torque, while providing excellent fuel efficiency and reliability.

#### **Cooling package**

- With the introduction of Tier 3 engine, the cooling capacity has been increased to conform to the new engine requirements and also to enable trouble free operation in high ambient, high humidity conditions.

#### **Redesigned drive line**

- The drive line now features a centered drive shaft to the front axle, which can be protected by a drive-shaft guard.
- The rear axle housing, gearing and mounting has been massively reinforced for increased reliability and longer life.

#### **Redesigned loader arm & buckets**

- The BL70 loader arms have been reinforced by increasing the section height of the loader arm, to provide even more strength without excessive weight for greater lifting capacity.
- A wide range of loader buckets, such as pin-on and hook-on GP and MP, including a heavy-duty bucket are now available, all of them with standard integrated spill guard to protect the single bucket cylinder rod.

# UP AND RUNNING – SAFE AND SOUND.

If it's not running, you're losing money. That's why Volvo made the BL70 so easy to service and so safe to operate. Reliable, productive machines, easy access serviceability and safety that puts your mind at ease. These are Volvo priorities and they are the cornerstones of the Volvo BL70.

## Open wide

Easy maintenance means more uptime and greater profits. For easy, total access to the engine compartment, simply release the hood latch and lift the tilt-up hood with one hand. Fluid fills and checks are on the left side of the engine and all engine filters are on the right side.

The tilting hydraulic/transmission oil cooler allows easy access and cleaning.

## More care. Built in.

The Volvo BL70 was designed for fast and simple maintenance with 50-hour greasing intervals, ground-level fluid checks grouped for easy maintenance and common filter access points.

## Safe on the outside

The Volvo BL70 has a variety of features that make it safer to service, transport and operate. The integrated, heavy-duty loader safety strut holds the loader safely in the raised position. When you want to dig or transport the machine, the stabilizers add extra safety with locking anti-drift valves.

## Extended Service Intervals

Service intervals have been extended for fuel filters, engine coolant, engine secondary air filters and coolant level check, to further reduce operating costs. An optional cyclonic pre-cleaner is now available for improved engine performance and protection in dusty conditions.

## Safe on the inside

Entering and exiting the machine is simplified with three steps and easy-to-reach handrails. Climb aboard and work confidently with a retractable seat belt, rearview mirror and a mechanical parking brake. Enjoy excellent all-around visibility from large, flat windows and narrow cab pillars. Instrumentation provides audio and visual warnings of machine functions. The interlocking brake pedals give you the option of single or double pedal braking, for tighter turning and sure stopping power.

## Protect your investment

A single key operates all locks: doors, ignition, hood, fuel cap and toolbox for simplicity and vandal protection. A standard battery disconnect switch prevents unwanted machine use and adds more safety. ROPS units also feature a standard lockable instrument panel to protect from vandals and the elements.

## Performance for the long haul

Volvo Backhoe Loaders are backed by a standard warranty to keep you running. And with the strongest global dealer network always ready to assist you with parts and service, extended warranty programs and more, you have everything you need for maximum uptime, greater productivity and increased profitability. Contact your local dealer, and get started today!



- Rear-tilting one-piece hood.



- Tilting cooler/radiator access for easy cleaning.



- Integrated safety strut.





- Entry and exit: quick, safe and easy.
- Plenty of storage for tools and more.
- Optional multi-purpose bucket.





# SPECIFICATIONS

## Engine

Low-emission 90 net hp direct-injection, turbocharged, 4-cylinder, liquid-cooled Volvo diesel engine with a 28% torque rise.

Model	Volvo D5D	
Displacement	293 cu in	(4.8 l)
Compression ratio	18:1	
Rated speed	2200 rpm	
Maximum torque @ 1600 rpm	295 lbf ft	(400 Nm)

## Electrical system

Weatherproof connections. Standard 12-Volt, 690 CCA battery with dual-battery option. Standard 95-amp alternator.

## Drivetrain

Foot-operated differential lock allows 100% full lock on rear axle. Final reduction in wheel hubs by a three pinion outboard planetary drive.

## Travel speed

Maximum speed, forward/reverse

1	3.3 mph	(5.2 km/h)
2	5.2 mph	(8.4 km/h)
3	10.6 mph	(17 km/h)
4	21.2 mph	(34 km/h)

## Brakes

Multi-plate, oil immersed, servo power assisted, self-adjusting outboard disc brakes with four wheel drive automatically engaged in third and fourth gear. Independent, interlocking, twin serrated brake pedals.

## Steering

Hydrostatic steering with protected double acting single cylinder behind the front axle with remote grease fitting for axle pivot pin.

## Four Wheel drive

Turns lock to lock	4	
Steering angle of	55°	
Turning Radius over the wheels	10'9"	(3.3 m)
Turning radius over the loader bucket	16'0"	(4.9 m)
Axle oscillation	16°	(8° each side)

## Hydraulic system

Closed-center, load-sensing, flow-sharing with a variable-displacement axial-piston pump powering the digging elements and attachments.

Max. flow	42.3 us Gal/min	(160 l/min)
Working pressure	3626 psi	(250 bar)
System capacity	29.1 us gal	(110 l)

## Weight

4WD cab machine with Multi-purpose loader bucket, 24 in. heavy-duty backhoe bucket, counterweight, 175 lb operator, full fuel tank and extendible dipper.

Operating weight min - max	17248 lb - 21727 lb (7824 kg - 9810 kg)
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## Transmission

Completely sealed 12.2 in. diameter torque converter mounted to engine flywheel with a flexplate. Powershuttle gear box with four forward and four reverse fully synchronized gears. Electrohydraulic forward/reverse switch on the loader joystick. Forward/reverse lever on steering column.

## Service fill capacities

Cooling system	5.5 us gal	(21 l)
Fuel tank	31.7 us gal	(120 l)
Engine oil (w/filter)	3.7 us gal	(14 l)
Rear axle - Differential oil capacity	3.83 us gal	(14.5 l)
Front axle - Differential oil capacity	1.72 us gal	(6.5 l)
Hydraulic reservoir	10.8 us gal	(41 l)
Hydraulic system	29.1 us gal	(110 l)

## Backhoe performance

High-performance backhoe is closed-box welded, narrow and curved, and includes a switch-activated boom lock and manual swing locking pin. Cast iron swing post. Cushioned swing, boom and bucket cylinders. Extendible dipper increases the reach by 39 in. Externally adjustable nylatron extendible dipper wear pads. Pilot joystick controls (backhoe or excavator pattern). Weekly (50-hour) greasing intervals.

## Standard dipper

Bucket width	24 in	(610 mm)
Bucket capacity	7.1 cu ft	(0.20 m³)
Bucket digging force (SAE)	13296 lb	(59.1 kN)
Dipper digging force (SAE)	8715 lb	(38.8 kN)
Bucket rotation	194°	

## Extendible Dipper

Bucket width	24 in	(610 mm)
Bucket capacity	7.1 cu ft	(0.20 m³)
Bucket digging force (SAE)	13296 lb	(59.1 kN)
Dipper digging force (SAE)	Ret 8715 lb (38.8 kN)	Ext 6402 lb (28.5 kN)
Bucket rotation	194°	

## Loader performance

Volvo patented single, low-effort, pilot-operated joystick controls all loader functions. Loader features a single cylinder and is self-leveling with float and return-to-dig. Loader is box weld constructed with large diameter cross member and friction welded dual lift cylinders. Optional Boom Suspension System (ride control). 1.3 cu. yd., 92.5 in. wide, general purpose or multi-purpose buckets with optional teeth and reversible bolt-on cutting edges. Integral safety strut. Weekly (50 hour) greasing intervals.

Lift capacity at full height (GP bucket)	7320 lbf	(3320 kg)
Bucket breakout force (GP bucket)	12445 lbf	(55.4 kN)
Loader arm breakout force	12072 lbf	(53.7 kN)

Cycle Times:

Raise to full height	4.6 sec
Dump time	1.8 sec
Curl time	2.3 sec
Lower	3.1 sec

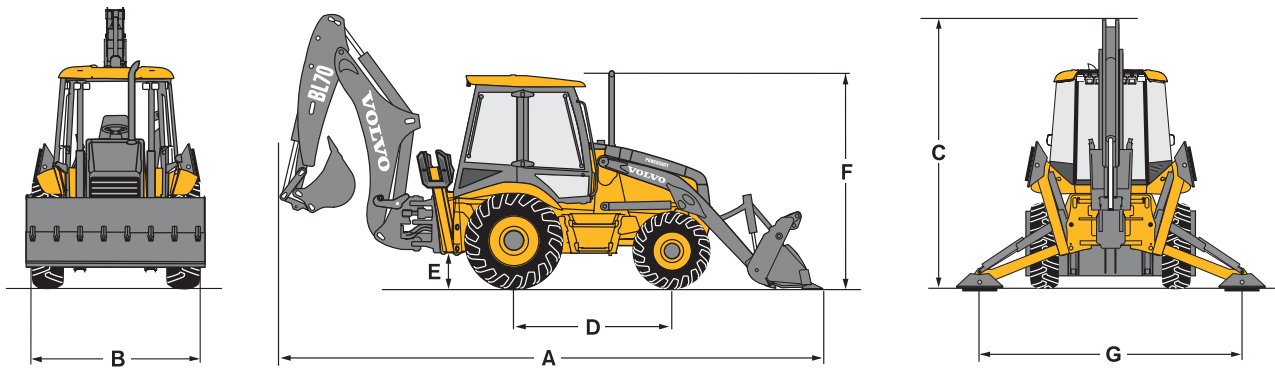
## Tires (Standard)

Rear:	19.5Lx24
Front:	12.5/80-18

## Noise level

Inside cab	74 dba
Outside cab	102 dba



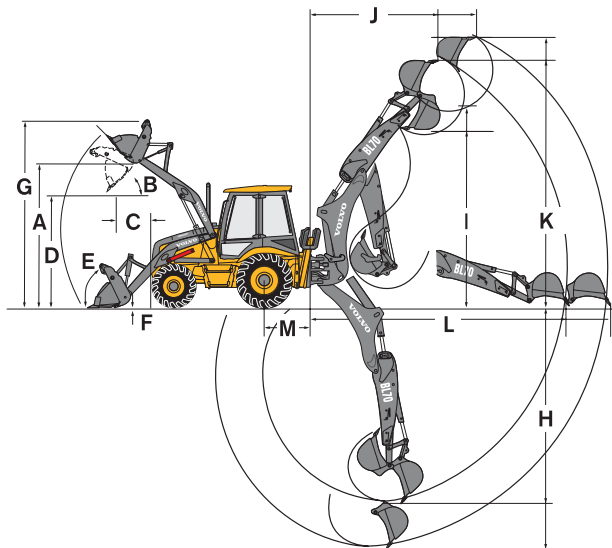


### Dimensions

A - Overall length	23'11"	(7289 mm)
B - Overall width	7'9"	(2350 mm)
C - Overall height	12'2"	(3706 mm)
D - Wheelbase 4WD	7'4"	(2229 mm)
E - Ground clearance	1'1"	(318 mm)
F - Height to top of ROPS (cab and canopy)	9'6"	(2889 mm)
G - Stabiliser spread at ground level	12'9"	(3886 mm)

Loader buckets	Width	Weight	Capacity
General Purpose bucket	92.5 in (2350 mm)	992 lb (450 kg)	1.3 cu yd (1000 l)
Multipurpose bucket	92.5 in (2350 mm)	1728 lb (784 kg)	1.3 cu yd (1000 l)

Excavator bucket	Width	Weight	Capacity	Nbr. Teeth
Heavy-Duty backhoe bucket	12 in (300 mm)	251 lb (114 kg)	2.8 cu ft (0.08 m³)	3
	18 in (450 mm)	308 lb (140 kg)	4.8 cu ft (0.14 m³)	4
	24 in (610 mm)	368 lb (167 kg)	7.1 cu ft (0.2 m³)	5
	36 in (910 mm)	473 lb (215 kg)	11.6 cu ft (0.33 m³)	6
Grading bucket	48 in (1215 mm)	298 lb (135 kg)	5.7 cu ft (0.16 m³)	0
	60 in (1515 mm)	348 lb (158 kg)	7.4 cu ft (0.21 m³)	0



### Loader dimensions

A - Height to hinge pin	11'2"	(3404 mm)
B - Dump angle	49°	
C - Dump reach at 45°	2'9"	(830 mm)
D - Dump height at 45°	8'9"	(2662 mm)
E - Bucket rollback at ground level	45°	
F - Dig depth below grade	0'8"	(211 mm)
G - Overall operating height, fully raised MP bucket	14'6"	(4413 mm)

### Backhoe dimensions - Standard dipper

H* - Maximum digging depth (SAE)	14'9"	(4496 mm)
Digging depth SAE 8ft (2.44 m) flat bottom	13'6"	(4115 mm)
Digging depth SAE 2ft (0.61 m) flat bottom	14'8"	(4470 mm)
J - Loading reach at maximum height	9'6"	(2898 mm)
K - Operating height	18'	(5486 mm)
L - Reach from swing post at ground level	19'3"	(5858 mm)
M - Rear axle to swing post axis distance	3'9"	(1149 mm)
Bucket digging force	13296 lb	(59.1 kN)
Dipper digging force	8715 lb	(38.8 kN)

### Backhoe dimensions - Extendible dipper

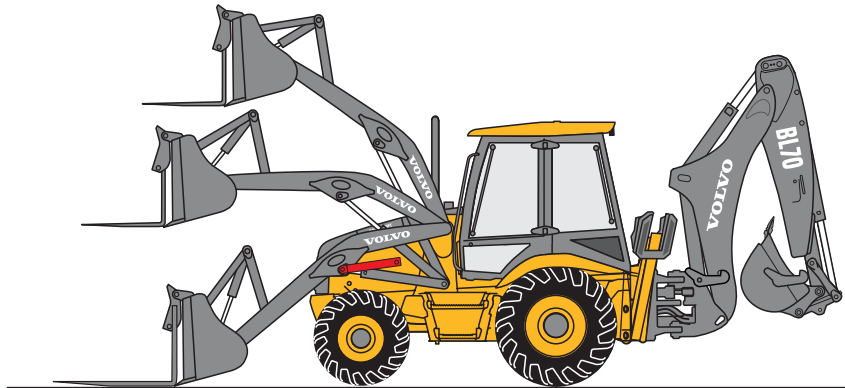
H* - Maximum digging depth (SAE)	Ret -	14'9"	(4496 mm)
	Ext -	18'3"	(5562 mm)
Digging depth SAE 8 ft (2.44 m) flat bottom	Ret -	13'6"	(4115 mm)
	Ext -	17'3"	(5258 mm)
Digging depth SAE 2 ft (610 mm) flat bottom	Ret -	14'8"	(4470 mm)
	Ext -	18'2"	(5537 mm)
I - Loading Clearance	Ret -	12'3"	(3736 mm)
	Ext -	14'3"	(4344 mm)
J - Loading height	Ret -	9'6"	(2898 mm)
	Ext -	12' 5"	(3778 mm)
K - Operating height	Ret -	18'	(5486 mm)
	Ext -	20'	(6094 mm)
L - Reach from swing post at ground level	Ret -	19'3"	(5858 mm)
	Ext -	22'3"	(6827 mm)
Bucket breakout force		13296 lb	(59.1 kN)
Dipper breakout force	Ret -	8715 lb	(38.8 kN)
	Ext -	6402 lb	(28.5 kN)
Bucket rotation		194°	
Swing torque		19177 lbf ft	(26 kNm)

\*with Quick Attach

# LOADER LIFT CAPACITY

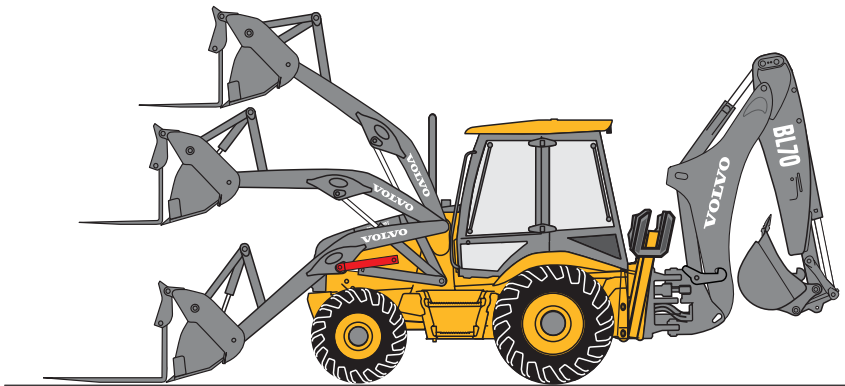
## Operating Specifications with flip-over forks on a GP bucket

Fork Tine Length:	42 in	(1070 mm)
Operating load	3920 lb	(1780 Kg)
SAE load center	1 ft 8 in	(500 mm)



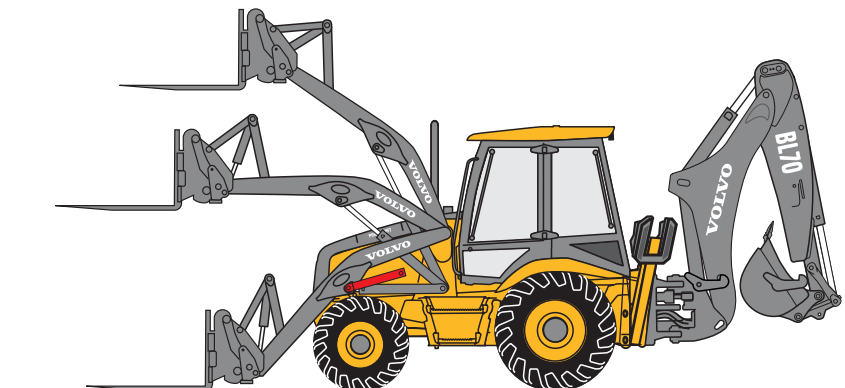
## Operating Specifications with flip-over forks on a MP bucket

Fork Tine Length:	42 in	(1070 mm)
Operating load	3620 lb	(1640 Kg)
SAE load center	1 ft 8 in	(500 mm)



## Operating Specifications with pallet-forks on loader attachment bracket

Fork Tine Length:	48 in	(1220 mm)
Operating load	5860 lb	(2660 Kg)
SAE load center	1 ft 8 in	(500 mm)





# BACKHOE LIFT CAPACITY

Lift capacity figures comply with SAE J31.

All figures are stated in pounds (kilograms).

The large arc indicates boom-lift.

The small arc indicates dipper-lift with the boom at 63°.

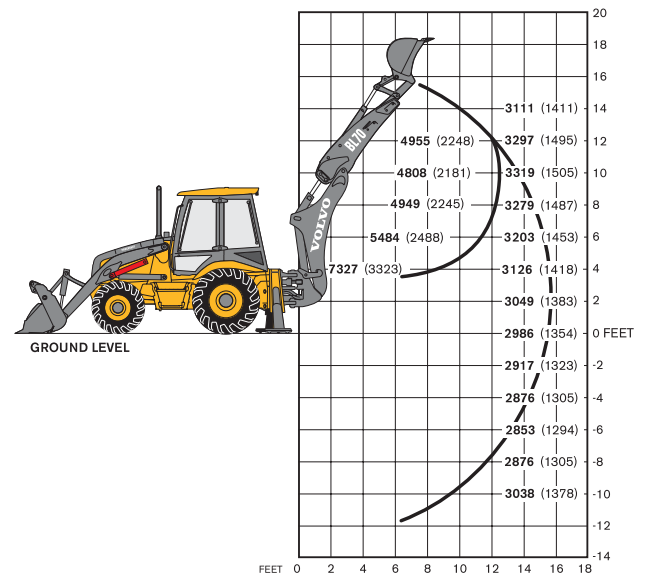
## BL70 Backhoe with Standard Dipper

Equipped with 24" heavy-duty backhoe bucket,

1.3 cu. yd. heavy-duty loader bucket,

12.5/80x18 front tires,

19.5L-24 rear tires



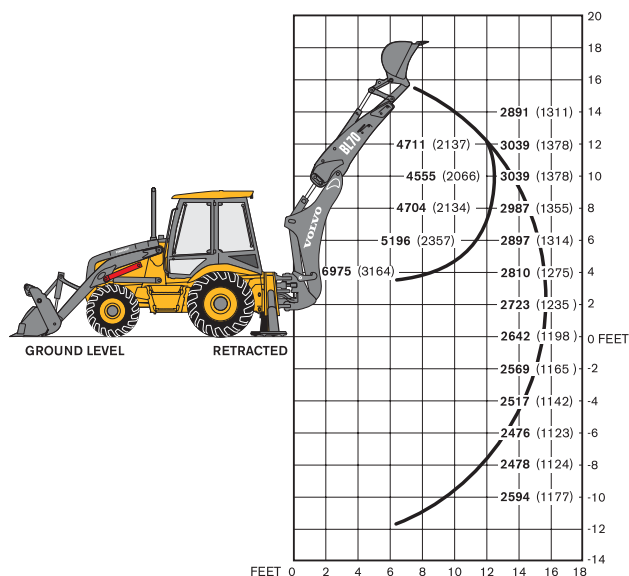
## BL70 Backhoe with Extendible Dipper, Retracted

Equipped with 24" heavy-duty backhoe bucket,

1.3 cu. yd. heavy-duty loader bucket,

12.5/80x18 front tires,

19.5L-24 rear tires



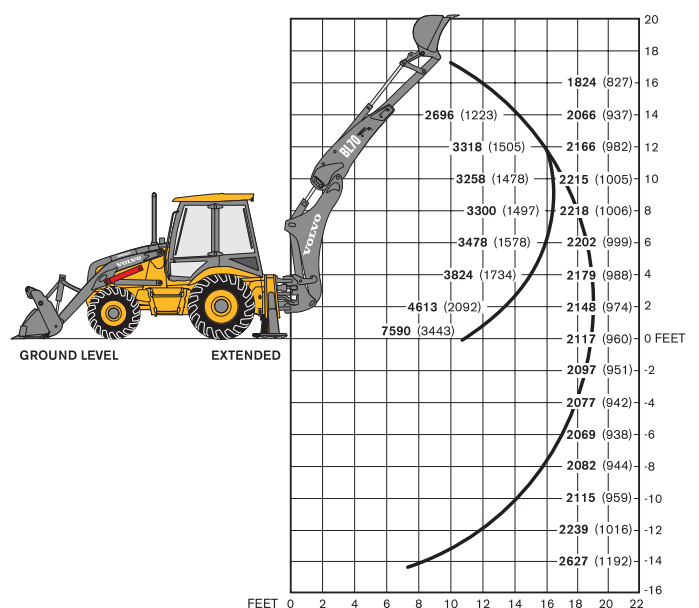
## BL70 Backhoe with Extendible Dipper, Extended

Equipped with 24" heavy-duty backhoe bucket,

1.3 cu. yd. heavy-duty loader bucket,

12.5/80x18 front tires,

19.5L-24 rear tires



## STANDARD EQUIPMENT

### General

One-piece, unitized mainframe and componentized driveline.

Machine tie down and lift points, cast iron front bumper.

Resilient rear fenders, right-side mounted fuel tank, and tool box.

Flip-open, rear-tilting, one-piece hood for ease of service. Sealed loader and backhoe pins and bushings provide 50-hour lubrication interval.

Machine includes operator manual, AEM safety manual, service and safety decals.

### Cab

Meets SAE ROPS/FOPS requirements, dual entry, serrated steps and easy-to-reach handrails, deluxe trim, heavy-duty cloth suspension seat with armrests and 2 in. retractable seat belt, tilt steering column, sunvisor, hand and foot throttle, padded floor mat, interior rearview mirror, and dome light. Four front and four rear work lights, back-up alarm, horn with front/rear facing access, warning buzzer, hazard flashers and turn signals. 12-Volt mobile power socket, cup holders, coat hook, storage trays. Heater/defroster system, cab pressurization, front/rear windshield wiper/washer, four flat tinted side windows that open fully or partially, one piece slide-open rear window. Sound levels 102 outside, 74 inside.

### Canopy

Meets SAE ROPS/FOPS requirements, dual entry, serrated steps and easy-to-reach handrails, heavy-duty vinyl suspension seat with armrests and 2 in. retractable seat belt, tilt steering column, hand and foot throttle, padded floor mat, interior rearview mirror. Four front and four rear work lights, back-up alarm, horn with front/rear facing access, hazard flashers and turn signals. One 12-Volt mobile power sockets, cup holders, and storage trays. Sealed switches on right side instrument panel with lockable vandal guard.

### Loader

Fabricated arms with dual lift cylinders and single, center-mounted dump cylinder, optional choice of buckets, with pilot-operated joystick. Transmission disconnect and forward/reverse transmission direction change buttons on joystick in addition to a powershift direction lever on steering column.

Hydro-mechanical self-leveling system, loader arm float and bucket return-to-dig.

### Engine

Volvo 293 cu in (4.8 l), 90 SAE Net HP, turbocharged diesel engine which meets or exceeds EPA Tier 3 compliance requirements. Self-cleaning, dual element air cleaner, spin-on fuel filter, fuel and water separator, high ambient tilting cooling package, front grill, key-activated manifold cold start assist, anti-freeze protection. 500 hour service interval.

### Transmission

Four speeds forward and four speeds reverse. Synchronized shifting in all gears, powershift direction change, 12.2 in (310 mm) diameter torque converter, transmission disconnect switch on loader control lever and transmission shift lever, 100% foot activated differential lock, spin-on oil filter.

### Rear Axle

Double reduction with outboard planetary drive. Switch activated differential lock. Ten-bolt pattern wheel hub.

### Front Axle - 4WD

Cast iron bar axle with centrally-mounted and protected double-acting steering cylinder. Remote grease fitting for axle pivot pin. Double reduction with outboard planetary drive. Hydrostatic power steering utilizes main hydraulic pump via priority valve. Eight-bolt pattern wheel hub.

### Brakes

External, multi-disc, oil immersed, hydraulically actuated and power assisted self adjusting service brakes. Brake pedals operable either independently or interlocked. External parking brake. 4WD units equipped with 4WD assist braking in third and fourth gears.

### Electrical System

12-Volt system. Meets IP65 water ingress test standard, 95 amp alternator, one 690 CCA low maintenance battery.

Four front adjustable 55 watt halogen work lights and four rear adjustable 55 watt halogen work lights.

Central fuse panel plus fuses and relays within tool box. Neutral start circuit and weatherproof connectors.

### Instrumentation and Controls

Right side instrument panel with switches and visual warning system.

Instruments to monitor the following machine functions: engine coolant temperature, engine rpm, machine hours, fuel level, engine preheating, engine oil pressure, air cleaner restriction, transmission oil temperature, service indicator, battery charging, hydraulic filter restriction, and hydraulic oil temperature.

### Hydraulic System

Closed-center, load-sensing, flow sharing system with variable displacement axial piston pump, maximum flow of 42 gal (160 l) per minute and system pressure of 3626 psi (250 bar).

O-ring face seal hydraulic fittings, lockable hydraulic tank cap.

Hoses and tubing designed for long life and ease of service.

### Backhoe

Pilot-operated controls (switchable between SAE backhoe and ISO excavator pattern). Centermount standard dipper with 14'5" (4394 mm) maximum dig depth, optional extendible dipper with 17'11" (5461 mm) maximum dig depth, switch activated boom lock, and manual swing lock. State-of-the-art, high-performance backhoe, wide stance stabilizers with flipover pads and anti-drift valves, twin cylinder swing system, five ton lift eye, and optional choice of buckets.

### Security

Single key system for ignition, cab doors, fuel tank and tool box.

### Warranty

12 month limited warranty included. Variety of optional Component Assurance Programs available.



## OPTIONAL EQUIPMENT

### Operator's Area

Boom Suspension System (ride control)  
Rotating beacon with in-cab switch.  
AM-FM stereo radio with speakers.  
Air-conditioning for cab.  
Front windshield and wiper for canopy.  
Sun visor kit for canopy.  
3 in. wide retractable seat belt.  
Exterior rearview mirrors.  
Mechanical backhoe controls in lieu of pilot controls.

### Fully automatic Powershift transmission

### Backhoe Attachments

Backhoe bucket attachment bracket, mechanical.

### Backhoe Auxiliary Hydraulics

Hydraulic breaker circuit kit (Includes valve, control switch, boom pipework and machine end quick couplers).  
Rigid Hammer Lines.  
Bi-directional hydraulics.

### Loader Attachments

Multipurpose loader bucket.  
Loader attachment bracket.  
Fork kit for general purpose loader bucket.  
Flip-over fork kit for multipurpose loader bucket.

### Loader Auxiliary Hydraulics

Required for multi-purpose bucket, loader attachment bracket, and other hydraulic attachments.

Loader hydraulics and loader arm pipework for operation of multipurpose bucket.

### Cutting Edges and Teeth

Bucket teeth, bolt-on, set of eight.  
Reversible, bolt-on cutting edge for bucket.

### Miscellaneous

Anti theft device.  
Hand held hydraulic circuit.  
Special paint.  
Special quantities (Call Volvo Order Desk).



## BACKHOE PART

### Backhoe bucket:

Ditch bucket 48" (1200mm).  
Ditch bucket 59" (1500mm).  
Trench bucket Heavy duty 12" (305mm), 18" (450mm), 24" (700mm), 36" (910mm).  
Trench bucket Standard duty 12" (305mm), 16" (400mm), 18" (450mm), 24" (700mm), 36" (910mm).

### Pin-on Backhoe Attachment Bracket

Mechanical.

### Hydraulic breaker

Hydraulic breaker HB440

### Breaker HB440 tools



## LOADER PART

### Loader bucket, direct pin-on:

GP bucket 1.3 cu yd (1 m³).  
GP bucket 1.3 cu yd (1 m³) with fork retention.  
MP bucket 1.3 cu yd (1 m³).

### Loader Attachment Bracket (LAB)

Volvo TPV hydraulic attachment bracket allows easy and fast attachments interchangeability.

### Loader bucket, LAB:

GP bucket 1.3 cu yd (1 m³).  
MP bucket 1.3 cu yd (1 m³).

### Bolt-on teeth

### Bolt-on edges

### Forks:

Flip over pallet forks.  
Fork kit loader attachment bracket 40" (1000mm)  
Fork kit loader attachment bracket 48" (1200mm)



Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different - **More care. Built in.**



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