

VOLVO BACKHOE LOADER

BL60



MORE CARE. BUILT IN.



BUILT FROM EXPERIENCE.

For over 80 years, people have looked to Volvo Construction Equipment for productive, profitable machines. The tradition continues with the Volvo BL60 Backhoe Loader. It's loaded in all the right places, building direct customer feedback with years of Volvo loader and excavator expertise.

Designed to fit your needs

Although the blueprints for the Volvo BL60 Backhoe Loader were drafted by a skilled team of Volvo engineers, the inspiration for its design was taken from construction industry professionals just like you. By incorporating direct customer input into every phase of development, Volvo engineers were able to create a reliable, value-priced machine that delivers increased profitability to operations of all size.

Tried and tested

To ensure the BL60 Backhoe Loader meets the strict quality standards applied to all Volvo products, the machine was put through rigorous onsite tests to prepare it for the daily assault of deep trenching, heavy lifting, loading, craning and more. But the real strength of its design is derived from its well-matched Volvo components - from loader to bucket - designed, built and functioning as one focused system. The result is reliable, productive operation year after year.

Proven power plant

The Volvo BL60 is equipped with a proven Volvo turbo diesel engine that delivers 86 hp (64 kW) of consistent and responsive power. The machine's Powershuttle gearbox features four fully synchronized gears and electro-hydraulic switching between forward and reverse. And, for better balance, the transmission is mounted directly to the engine.

Durability through and through

The undercarriage and frame of the Volvo BL60 are built tough for extended 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 Volvo engine delivers proven power.



- More care, built in from the ground up.



- Durable undercarriage and frame.



- Chassis integrated tie down hooks.
- Durable box-welded construction.
- 2303 kg loader lift capacity.



A BETTER WAY TO DIG.

It's all here: customer-driven design, power and reliability. And with dig depths, breakout forces and operating capacities rated higher than virtually every competitive model in its price class, the Volvo BL60 rises to your challenges - every day. It's a better way, and it's all Volvo.

Built to perform

The Volvo BL60's boom features a closed, box-welded construction with fewer components - and fewer welds - to give it superior strength. The swing post is composed of cast iron, which allows for flexible movement and swing while still maintaining uncompromising strength and durability.

Power to execute

To dig into those tough sites, the BL60's backhoe provides a 4388 mm (dig depth and 52.8 kN) of bucket dig force. The machine's narrow, curved boom provides excellent visibility and outstanding load capacity to simplify digging and loading operations. For safe travel on roads, the boom can be hydraulically locked, and there's a locking pin to secure the swing arm in place.

Flexible operation

Today's jobsite demands that backhoe loaders adapt to the work at hand. That's why the BL60 has optional features like an extendible dipper and a mechanical attachment bracket. And for added versatility and comfort, operators can choose between excavator or backhoe control patterns.

Performance under pressure

The Volvo BL60's box-welded loader bucket is powered by a large, reinforced torque tube and friction-welded dual lift cylinders. The loader is configured along a sloped hood line to provide optimum visibility. In addition, flow-sharing hydraulics and self-leveling provide fast, efficient cycle times. And the loader features a center-mounted bucket cylinder for a better view of the bucket corners and more power for digging.

More room to work

The Volvo BL60's 764 l General Purpose Standard Bucket helps you move more material with every load, for faster cycle times, greater productivity and increased profitability. For added versatility, an optional Multi-Purpose Bucket lets you perform up to nine separate functions. And no matter which configuration you choose, both can be outfitted with optional bolt-on teeth or a reversible cutting edge.



- S-style boom enhances visibility.



- Integrated, heavy-duty safety struts.



- Attachment bracket provides total versatility.



- Sloped hood offers optimum visibility.
- Fully opening one-piece windshield.
- 52.8 kN backhoe digging force.



YOUR SAFETY - OUR PRIORITY.

When you work in unforgiving terrains, safety is a necessity, not a luxury. The Volvo BL60 delivers the features you need. From easily accessible service points and integrated loader safety strut, to the retractable seatbelt and mechanical parking brake, the BL60 is built for safe operation.

Set your sights on any job

Whether you choose the ROPS or cab version, the Volvo BL60 operator station was built for your work. With strategically placed posts and wide, flat cab windows, you get unobstructed, panoramic views of the site from virtually any working angle. In addition, cab windows can be opened fully or partially for increased ventilation.

Take control of the site

The Volvo BL60's controls are ergonomically placed to reduce fatigue and maximize productivity. Comfortable grips and responsive handling allow operators to raise, lower, tilt, return-to-dig and float with precision and speed. Well-lit display indicators are configured on the right side console for easy access. The console features a lockable guard to prevent damage and theft. Additional lockable storage for tools, gloves and manuals is also provided.

Entering and exiting the machine is simplified with easy-to-reach handrails and serrated steps on either side of the machine. And for added safety in low-light conditions, the BL60 is equipped with two front and two rear halogen working lights, hazard flashers, and a back-up alarm.

A higher level of comfort

Extend your operating season with a standard heater/defrost system. And with the optional Care Cab, get more comfort features like a cushioned, adjustable suspension seat and provisions for a radio.

More care, built in

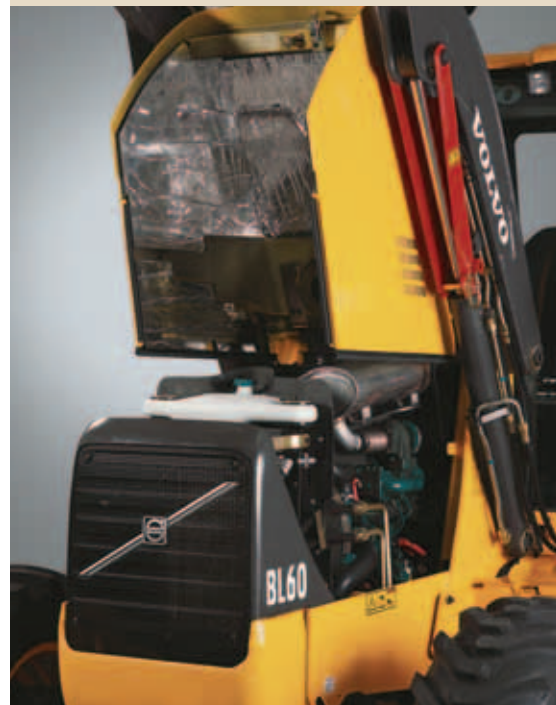
To provide maximum uptime and machine life, the Volvo BL60's design allows for fast and convenient maintenance with 50-hour greasing intervals, a tilt-up hood, ground-level fluid checks, common filter access points, reliable and fixed-flow hydraulics. It doesn't get any simpler: quality components, thoughtfully arranged to make servicing easy. That's what Volvo likes to call more care, built in.

Designed to go the distance

When you can't afford to lose a single day's work to service or repairs, it pays to go with a name you can trust. Volvo Backhoe Loaders are backed by a standard Volvo warranty and a reliable dealer/service network to keep you up and running. Contact your local Volvo dealer to learn about the benefits of available extended warranty programs.



- Entry and exit: quick, safe and easy.



- Rear-tilting one-piece hood.



- Ground-level service; long intervals.



- Ergonomic controls reduce fatigue.
- ROPS/FOPS certified safety cage.
- A spacious cab with a comfortable seat.



SPECIFICATIONS

Engine

Low-emission 62 kW (83 net hp), turbocharged 4-cylinder liquid-cooled Volvo diesel engine with a 28% torque rise.

Model	Volvo D4D
Displacement	4,04 l
Compression ratio	19:1
Rated speed	2200 rpm
Maximum torque @ 1500 rpm	390 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	5,5 km/h
2	8,8 km/h
3	17,7 km/h
4	35,4 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. Parking brake engaged by a mechanical lever.

Steering

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

Two Wheel drive

Turns lock to lock	4,25
Steering angle of	56°

Turning circle over the wheels

With brakes	6,2 m
Without brakes	7,8 m

Turning circle over the loader bucket

With brakes	9,4 m
Without brakes	10,6 m

Four Wheel Drive

Turns lock to lock	4
Steering angle of	55°

Turning circle over the wheels

With brakes	6,6 m
Without brakes	9,2 m

Turning circle over the loader bucket

With brakes	9,8 m
Without brakes	11,6 m

Hydraulic system

Open-center, flow-sharing with single gear type pump powering the digging elements and attachments.

Max. flow	114 l/min
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Working pressure,

Excavator	250 bar
Loader	220 bar
System capacity	110 l

Weight

2WD canopy machine with general purpose loader bucket with 24 in. heavy-duty backhoe bucket, 740 lb. counterweight, 175 lb. operator, full fuel tank, and standard dipper.

Operating weight	7100 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. Electro-hydraulic forward/reverse switch on the steering column.

Service fill capacities

Cooling system	19 l
Fuel tank	120 l
Engine oil (w/filter)	14 l

Rear axle

Differential oil capacity	14,5 l
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Front axle (4WD)

Differential oil capacity	6,5 l
Hydraulic reservoir	41 l
Hydraulic system	110 l

Backhoe performance

High-performance backhoe is closed box welded, narrow and curved, and includes a hydraulic 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. Manually and externally adjustable nylon extendible dipper wear pads.

Standard dipper

Bucket width	610 mm
Bucket capacity	0,20 m ³
Bucket digging force (SAE J1179)	52,8 kN
Dipper digging force (SAE J1179)	32,6 kN
Bucket rotation	194°

Extendible dipper

Bucket width	610 mm
Bucket capacity	0,20 m ³
Bucket digging force (SAE J1179)	52,8 kN
Dipper digging force (SAE J1179)	
Ret.	32,6 kN
Ext.	23,9 kN
Bucket rotation	194°

Loader performance

Volvo patented single, low-effort levers control 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 torque tube 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

(with 1.3 cu. yd general purpose bucket)

	2303 kg
Bucket breakout force	43,9 kN
Loader arm breakout force	40,5 kN

Cycle Times:

Raise to full height	4,1 sec
Dump time	2,4 sec
Culr time	1,9 sec
Lower	3,4 sec

Tires

Rear tires:

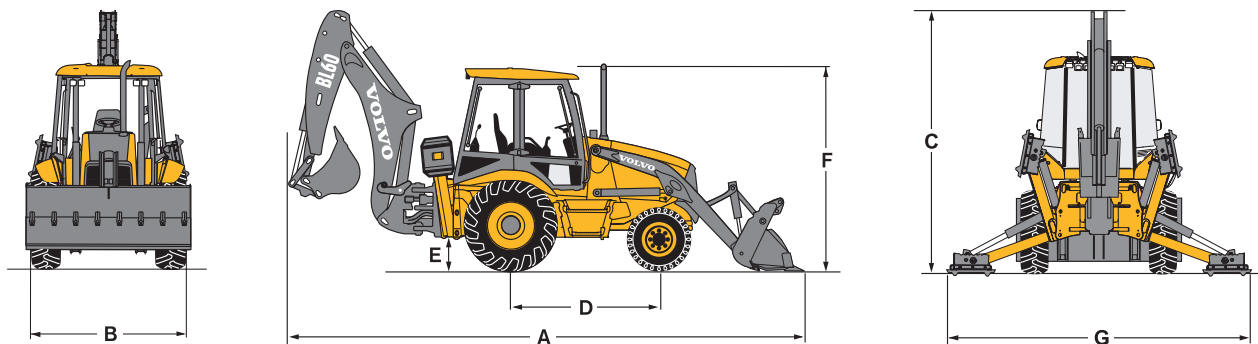
19,5Lx24
or Goodyear 19,5Lx24, 12 PR IT525 (option)

2WD Front:

Goodyear 11Lx16, 12 PR, Laborer Tread

4WD Front:

12Lx16,5
or Goodyear 12Lx16,5, 12 PR,
Sure Grip Lug (option)

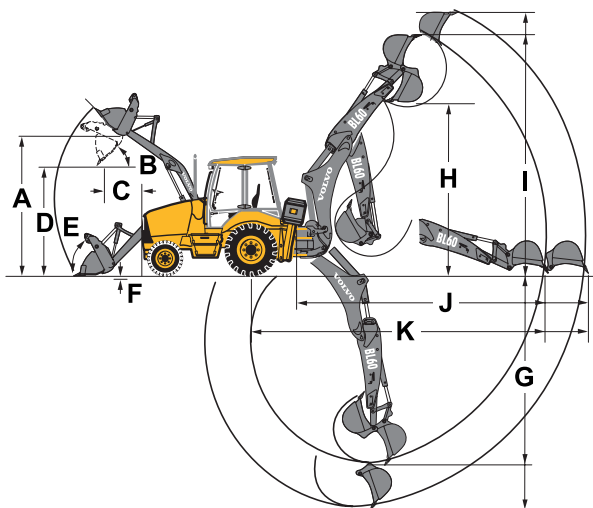


Dimensions - Transport Position

A - Overall length	7319 mm
B - Overall width	2459 mm
Stabiliser width	2459 mm
C - Overall height	3707 mm
D - Wheelbase 4WD	2184 mm
E - Ground clearance - frame	345 mm
F - Height to top of ROPS (cab and canopy)	2888 mm
G - Width over extended stabilizers	3908 mm

Loader buckets	Width	Weight	Capacity
General Purpose bucket	2350 mm	450 kg	764 l
Multi-purpose bucket	2350 mm	784 kg	1000 l

Backhoe buckets	Width	Weight	Capacity	Nbr. Teeth
	Heavy-Duty backhoe bucket	300 mm	114 kg	0,08 m ³
Heavy-Duty backhoe bucket	450 mm	140 kg	0,14 m ³	4
	610 mm	167 kg	0,2 m ³	5
	910 mm	215 kg	0,33 m ³	6
Grading bucket	1215 mm	135 kg	0,16 m ³	0
	1515 mm	158 kg	0,21 m ³	0



Loader dimensions

A - Height to hinge pin	3324 mm
B - Dump angle	50°
C - Dump reach	899 mm
D - Dump height (@ 45° dump angle)	2582 mm
E - Bucket rollback	48°
F - Dig depth below grade	292 mm
Bucket breakout force	43,9 kN

Backhoe dimensions - Standard dipper

G - Maximum digging depth (SAE)	4388 mm
Digging depth SAE 0,61 m flat bottom	4260 mm
Digging depth SAE 2,50 m flat bottom	3918 mm
H - Loading height	3942 mm
I - Operating height	5595 mm
J - Reach from swing post	5819 mm
K - Reach from rear axle	6960 mm
Bucket digging force (SAE J1179)	52,8 kN
Dipper digging force (SAE J1179)	32,6 kN

Backhoe dimensions - Extendible dipper

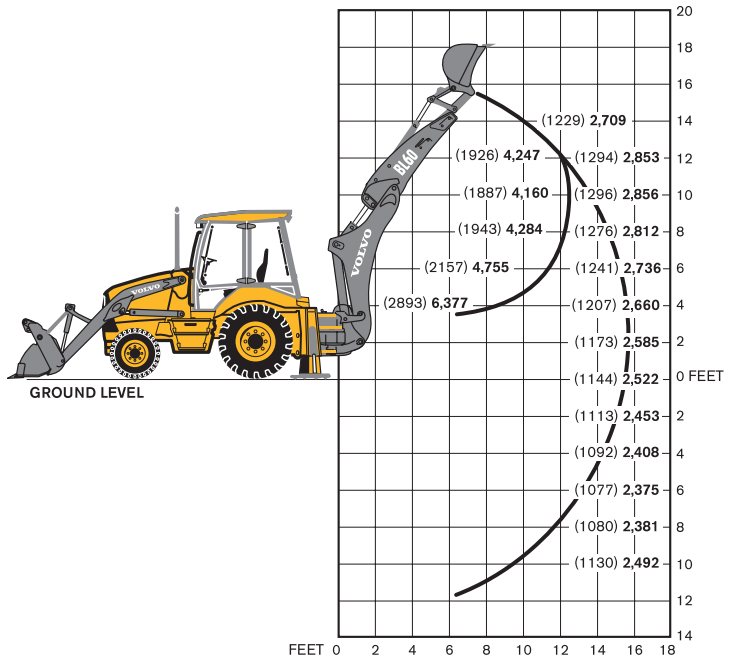
G - Maximum digging depth (SAE)	Ret - 4388 mm
	Ext - 5448 mm
Digging depth SAE 0,61m flat bottom	Ret - 4260 mm
	Ext - 5322 mm
H - Loading height	Ret - 3942 mm
	Ext - 4576 mm
I - Operating height	Ret - 5595 mm
	Ext - 6230 mm
J - Reach from swing post	Ret - 5819 mm
	Ext - 6796 mm
K - Reach from rear axle	Ret - 6960 mm
	Ext - 7937 mm
Bucket digging force (SAE J1179)	52,8 kN
Dipper digging force (SAE J1179)	Ret - 32,6 kN
	Ext - 23,9 kN
Bucket rotation	194°
Swing torque	26 kN-m

LIFTING 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 degrees.

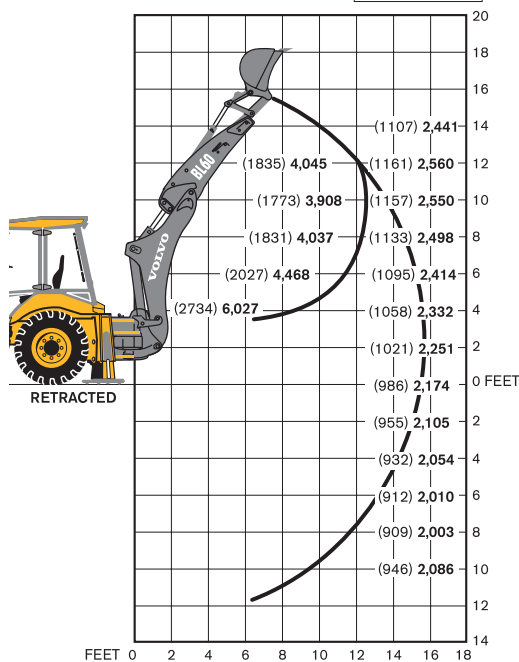
BL60 Backhoe with Standard Dipper

Equipped with 24" heavy-duty backhoe bucket,
 1.3 cu. yd. heavy-duty loader bucket,
 11-16 SL front tires, 19,5L-24 rear tires



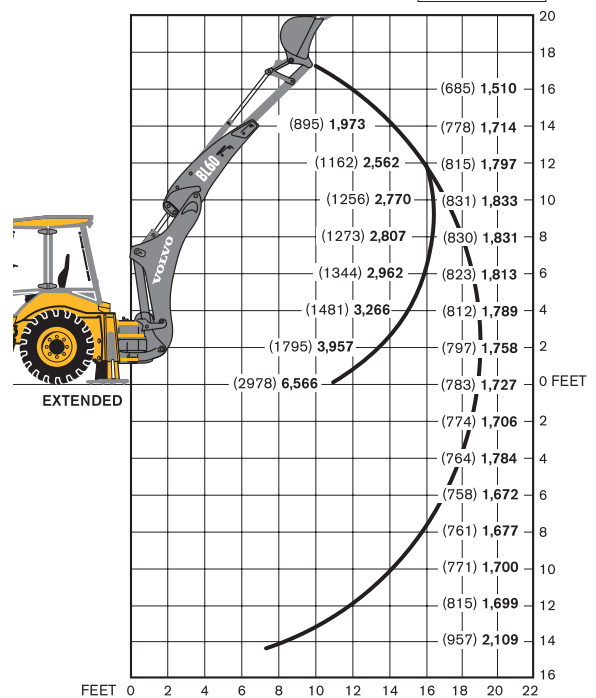
BL60 Backhoe with Extendible Dipperstick, Retracted

Equipped with 24" heavy-duty backhoe bucket,
 1.3 cu. yd. heavy-duty loader bucket,
 11-16 SL front tires, 19,5L-24 rear tires



BL60 Backhoe with Extendible Dipperstick, Extended*

Equipped with 24" heavy-duty backhoe bucket,
 1.3 cu. yd. heavy-duty loader bucket,
 11-16 SL 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, tool box. Flip-open, rear-tilting, one-piece hood for ease of service. Sealed 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, suspended cloth seat and 51 mm retractable seat belt, fixed steering column, hand and foot throttle, interior rearview mirror, domelight. Two front and two 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, 4 flat, tinted side windows that open fully or partially, one-piece slide-open rear window.

Canopy

Meets SAE ROPS/FOPS requirements, dual entry, serrated steps and easy to reach handrails, non-suspended vinyl seat and 51 mm retractable seat belt, fixed steering column, hand and foot throttle, interior rearview mirror. Two front and two rear work lights, back-up alarm, horn with front/rear facing access, hazard flashers and turn signals. 12 volt mobile power socket 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. Two spool loader valve. Transmission disconnect on loader lever. Forward/reverse transmission direction

lever on steering column. Mechanical self-leveling system, loader arm float and bucket return-to-dig.

Engine

Volvo 4,04 l, 83 SAE Net hp, turbocharged diesel engine which meets or exceeds EPA 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.

Front Axle - 2WD

Curved, cast iron bar axle with centrally-mounted and protected steering cylinder. Remote grease fitting for axle pivot pin. Hydrostatic power steering utilizes main hydraulic pump via priority valve. Eight-bolt pattern wheel hub.

Front Axle - 4WD

Double reduction with outboard planetary drive. Hydrostatic power steering utilizes main hydraulic pump via priority valve. Eight-bolt pattern wheel hub.

Transmission

Four speeds forward and four speeds reverse. Synchronized shifting in all gears, powershift direction change, 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.

Brakes

Internal, multi-disc, oil-immersed, hydraulically-actuated and power-assisted self-adjusting service brakes. Brake pedals operable either independently or locked together. Internal 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. Two front-adjustable 55 watt halogen work lights and two rear-adjustable 55 watt halogen work lights. Central fuse panel plus fuses and relays within battery box. Neutral start circuit and weatherproof connectors.

Instrumentation & Controls

Right side instrument panel with audible 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

Open-center, flow-sharing system with gear pump, maximum flow of 110 l per minute and system pressure of 250 bar. O-ring face seal hydraulic fittings, locking hydraulic tank cap. Hoses and tubing designed for long life and ease of service.

Backhoe

Centermount, standard dipper with 4315 mm maximum dig depth, optional extendible dipper with 5338 mm maximum dig depth, choice of 2 lever "SAE Backhoe" or "SAE Excavator" pattern controls, hydraulic boom lock, and manual swing lock. State-of-the-art, high-performance backhoe, wide stance stabilizers with dirt pads and anti-drift valves, twin cylinder swing system, optional choice of buckets and control patterns.

Security

Single key system for ignition, cab doors, fuel cap, canopy unit vandal cover (on ROPS units), tool box and engine compartment.

Warranty

12 month limited warranty included. Variety of optional Customer Assurance Plans available.

OPTIONAL EQUIPMENT

Operator's Area

Boom Suspension System (ride control). Rotating beacon with in-cab switch. AM-FM stereo cassette radio with speakers for cab. Air-conditioning for cab. Front windshield and wiper for canopy. 76 mm wide retractable seat belt. Exterior rearview mirrors. Tilt steering column. Additional work lights. Floor mat (canopy). Vandal guard for cab. Cup holder (canopy). Tool kit.

Plastic roof (canopy). Sun visor.

Backhoe Attachment Bracket

Mechanical attachment bracket. Lift eye. Plastic pads for standard pad. Flip over stabilizer pads.

Backhoe Auxiliary Hydraulics

Hydraulic breaker circuit kit. Includes valve, control switch, boom pipework and machine end quick couplers.

Loader Attachments

Fork kit for General Purpose loader bucket. Fork kit for Multi-purpose loader bucket.

Loader Hydraulics Required with Multi-purpose bucket

Loader hydraulics and loader arm pipework for operation of multi-purpose bucket.

Cutting Edges and Teeth

Bucket teeth, bolt-on, set of 8. Bolt-on cutting edge for bucket, reversible.

Miscellaneous

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



Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from an engineering heritage of over 170 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.**



All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

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