VOLVO EXCAVATORS

ECR145D, ECR235D

14.4-27.7 t / 31,640-60,980 lb, 114-173 hp

A PASSION FOR PERFORMANCE.

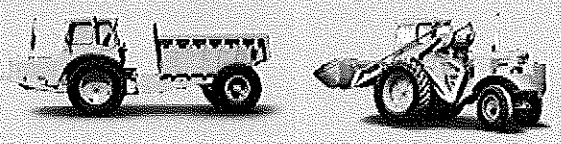
At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



You learn a lot in 175 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

We have a passion for performance.

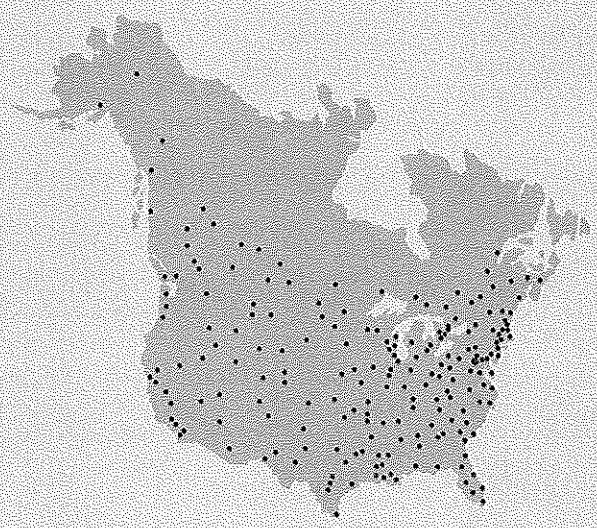
A strong, dedicated, capable dealer network.

Our dealers are strategically located throughout North America to provide the equipment you need and the parts and service support you demand for a productive and profitable operation.

The strength of our dealer network is enhanced with extensive individualized product and product support training at our state-of-the-art Technical Training Center in Asheville and through hands-on training. At our nearby 80-acre Product Demonstration Center, visitors operate equipment from our entire product line under a variety of simulated working conditions. Both facilities are in year-round use by our dealers and customers – more than 2,000 visit each year. **Building the best starts right here.**

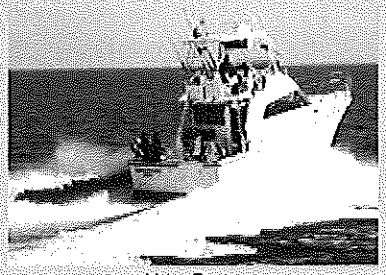
The products designed and manufactured by Volvo Construction Equipment have their beginnings at the most advanced Research & Design centers in the industry. Volvo CE machines are designed in 11 R&D centers and produced in 15 manufacturing facilities across the world.

The major R&D center and manufacturing plant in the Americas is located in Shippensburg, Pennsylvania. This facility has been in operation for over 30 years and – with its recently added 200,000 sq. ft. expansion – now covers 570,000 sq. ft. on an 80 acre campus. Dedicated work teams and highly advanced technologies and techniques using the Volvo Production System ensure continuous quality improvements, labor savings and cost control to reach the high quality that our customers have come to expect from Volvo.



Mack Trucks

Volvo Construction Equipment


Volvo Penta

Volvo Trucks

Renault Trucks

UD Trucks

Volvo Buses

Volvo Aero

Volvo Financial Services

ENGINEERED FOR EFFICIENCY.

Fuel efficiency is at the heart of Volvo's ECR145D and ECR235D. Featuring the Tier 4 Interim engine, ECO mode and improved hydraulics, these machines deliver reduced fuel consumption and cycle times, as well as increased digging performance. Save time and money with Volvo.

Efficient engine

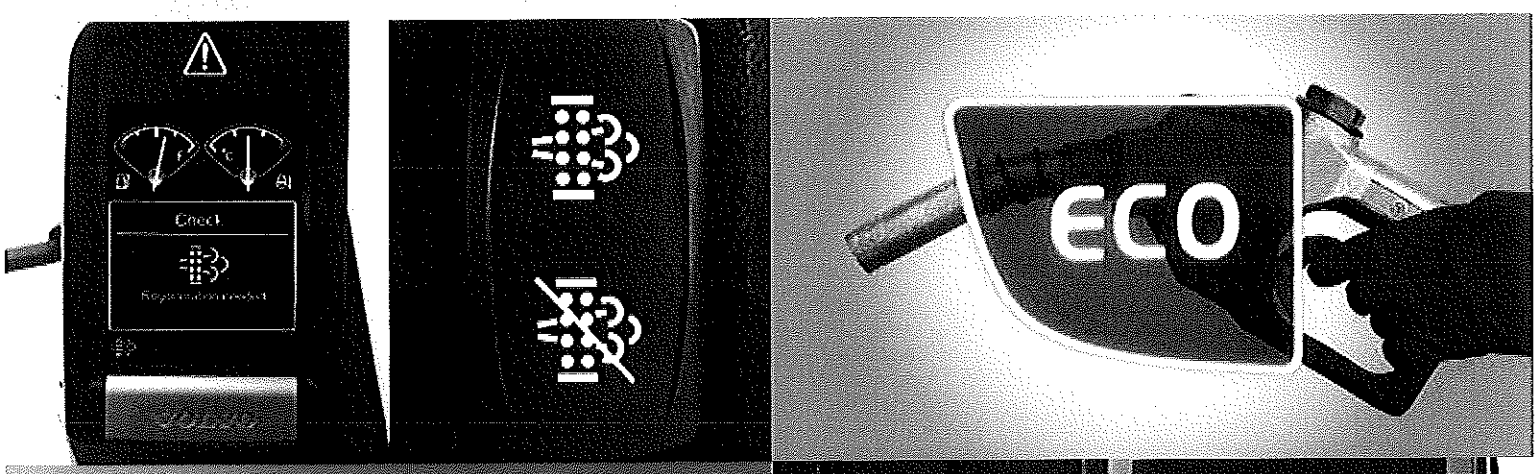
Volvo's fuel efficient Tier 4 Interim diesel engine gives you more power, while consuming less fuel. Benefit from reduced operating costs as well as low emission levels for ultimate efficiency and environmental care.

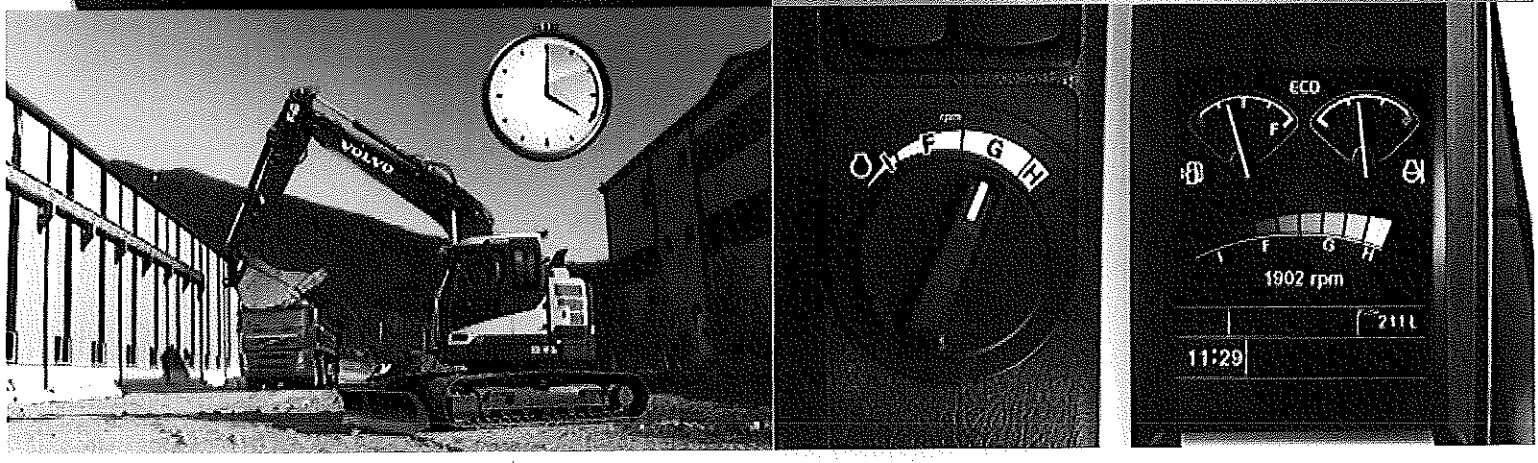
Regeneration

Soot collected by the Diesel Particulate Filter is oxidized every eight hours, depending on application. Volvo's unique, operator controlled, 25 minute system does not interrupt operation, performance or productivity. For increased safety, regeneration can be postponed.

ECO mode

Volvo's unique ECO mode features sophisticated electronic pump control technology for increased fuel efficiency. It can be used in-conjunction with any working mode. There is no loss of performance in the majority of operating conditions.





Auto idling system

Reduces rpm to idle when the controls are inactive for a specified time – between 3-20 seconds. The length of time is set up via the I-ECU monitor. This system delivers reduced fuel consumption and running costs.

Work modes

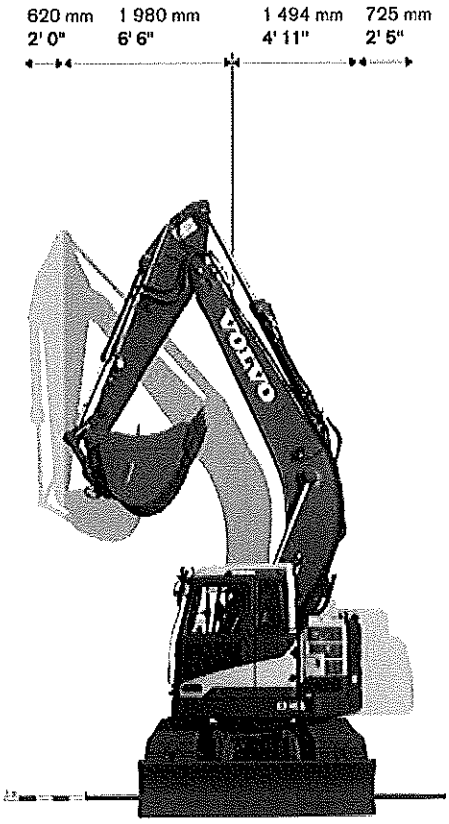
For added versatility operators can select the best work mode for the task at hand to ensure optimum performance and fuel efficiency. Easily choose the correct mode, within the throttle control, according to your working conditions.

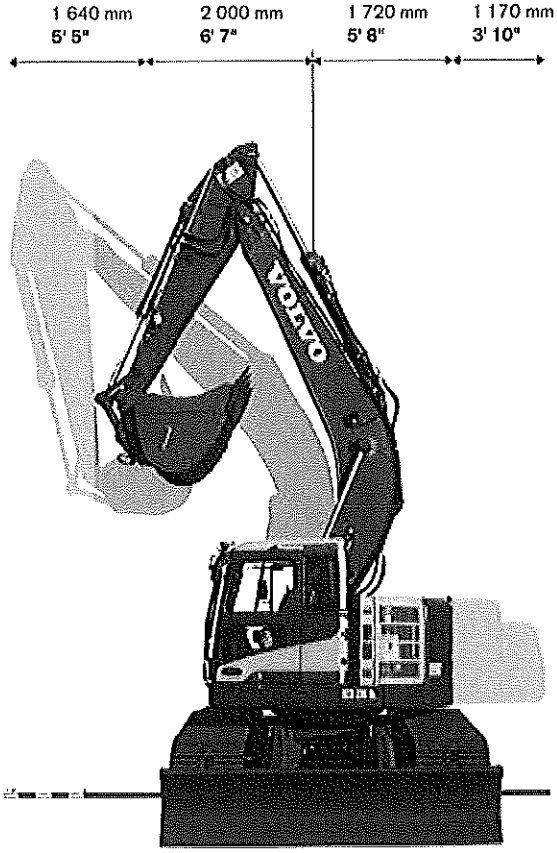
GET THE JOB DONE.

Get productive with these short swing radius machines – perfect for maneuvering in and out of confined areas with ease. Featuring class-leading digging depth with a 2,4 m **(8 ft)** flat level and superior stability, you can achieve more with Volvo.

Compact swing radius

Short front and rear radius ensures safe and easy operation within a confined space – reducing the risk of damage to the rear compartments in urban construction.





Narrow design

These machines feature a narrow design compared to the classic crawler excavators but still maintain the stability, balance and performance that you would expect from a conventional model. The boom is positioned in the center of the machine.

MORE POWER. MORE SPEED.

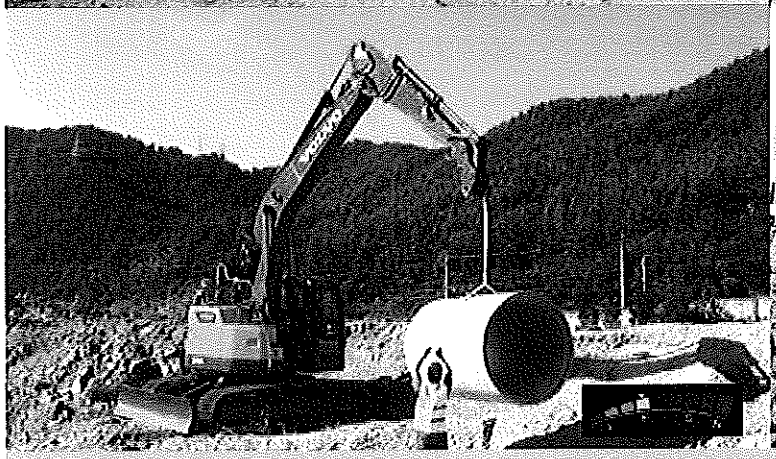
Volvo understands that machines need to perform day in, day out. With strong digging power and various work modes the ECR145D and ECR235D are ideally suited to extracting hard and compact materials. Additional pump flow provides faster cycle times. Trust Volvo to increase your productivity.

Idle (I) Mode

For reduced fuel consumption and more environmental care, the higher I-stage of the Idle Mode is used for auto idling – which is highly recommended when truck loading. The second stage (lower I-stage) is typically used for warm up and cool down.

Heavy (H) Mode

H Mode is used for high productivity in intensive and bulk earthmoving applications. It is used for hard digging, trenching and truck loading from deep trenches.



Fine (F) Mode

The Fine control mode provides high hydraulic pressure setting same as power boost function for maximum lifting capability. It is also used for precise grading operation.

General (G) Mode

The General Mode features three different stages of speed. The highest G setting is recommended for maximum fuel saving and good productivity in digging and truck loading. The middle and low G settings can be used for ditching, levelling, slope finishing and spreading where moderate speed is needed.

WORK IN COMFORT.

Space matters – especially in the cab. That's why Volvo has designed a premier operator environment with built in safety, comfort and all-round visibility. Featuring ample leg room and easy to access controls for increased productivity. See everything from all angles in the Volvo's spacious cab.

Industry-leading cab

Volvo's spacious convex cab design is Roll Over Protective Structure (ROPS) certified for increased peace of mind in the unlikely event of machine roll over. The cab features a sliding door and a tilting type left-hand console for easy entry and exit to the machine.

I-ECU monitor

Large color monitor provides excellent clarity in all lighting conditions. Using a control panel, the operator and service technician can make quick visual and diagnostic checks, increasing uptime and productivity. The monitor also displays camera images – up to four at a time.

Visibility

Slim cab pillars and large expanses of glass ensure excellent all-round visibility. Enhanced vision delivers improved safety and also allows operators to increase their productivity.

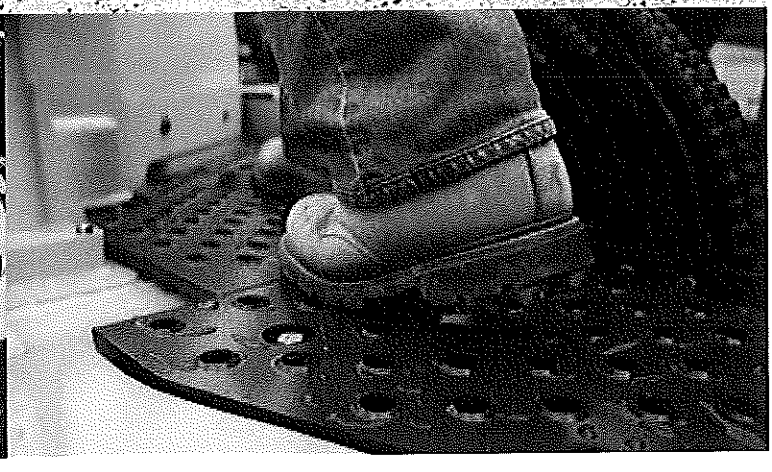
Seat

Featuring nine different adjustments for superb operator comfort and reduced vibration, Volvo's superior seat provides comfort to all operators – resulting in more productivity.

Control panel

Optimally positioned control panel ensures there is no need for operators to move or lean forward to change settings or navigate through the I-ECU monitor. This increases operator comfort and safety.

MORE UPTIME.

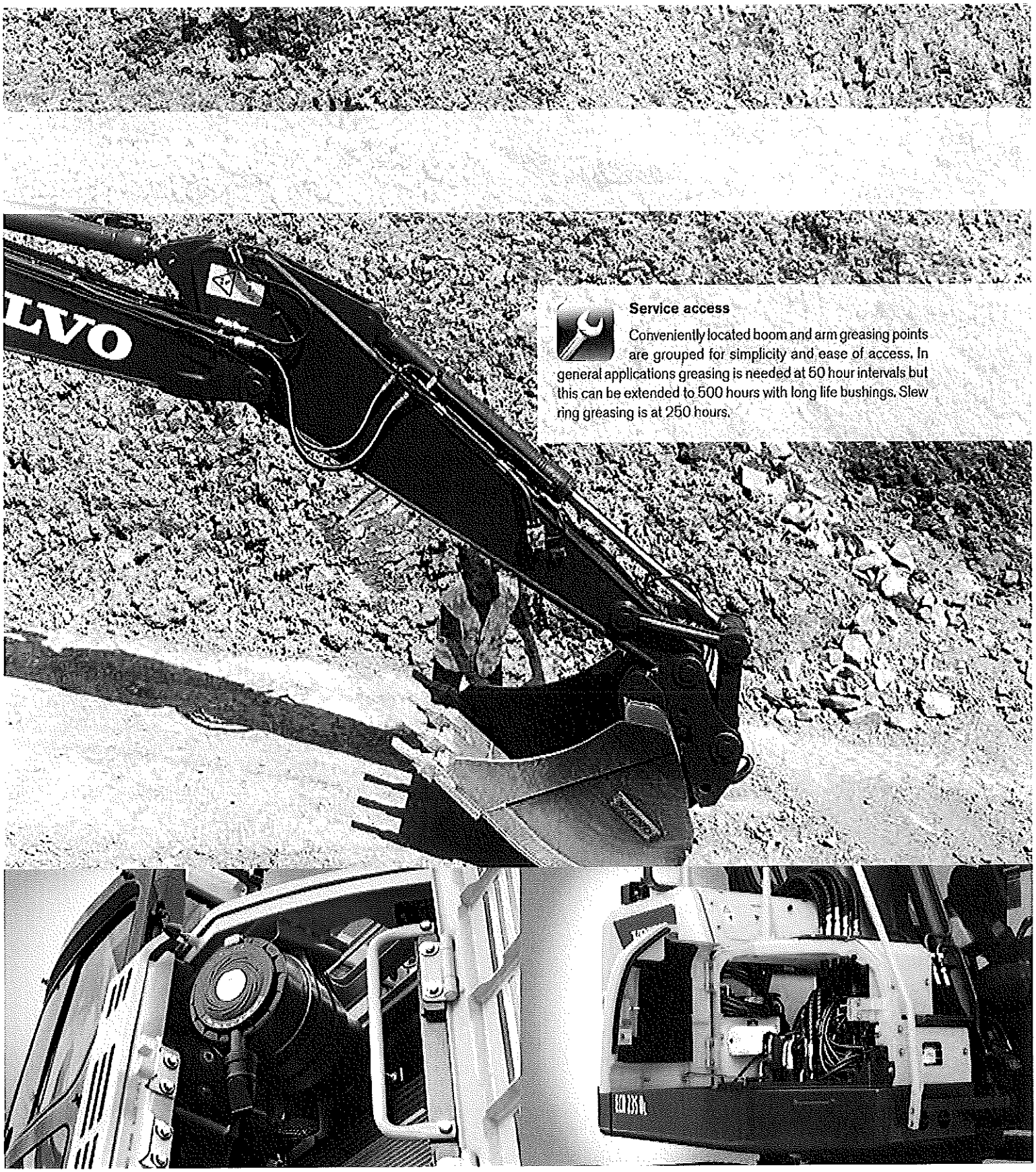


Service points

Large, wide compartment doors provide ground level access (wherever possible) to grouped filters and greasing points, reducing maintenance downtime. Excellent centralized access for quick servicing and increased uptime.

Anti-slip plates

Added operator and service mechanic safety from punched anti-slip plate on the superstructure. This provides superb grip, especially in wet or icy conditions.



Service access

Conveniently located boom and arm greasing points are grouped for simplicity and ease of access. In general applications greasing is needed at 50 hour intervals but this can be extended to 500 hours with long life bushings. Slew ring greasing is at 250 hours.

Air filters

Conveniently located air filter elements offer easy access for more machine uptime. The primary air filter removes all major particles and may be cleaned up to five times or used for one year. A secondary protective filter is in place in case of malfunction.

Main control valve

Access to the main control valve is available at ground level, minimizing the amount of service downtime.

PROFILING YOUR NEW EXCAVATOR.

Boom and arm

Available with a mono or two piece boom, and with different arm configurations, for increased flexibility and versatility.

CareTrack

Volvo's telematics system guides machine owners towards optimized productivity and their next service – remotely.

Power and speed

Perform at a higher level with increased digging power and faster cycle times for greater productivity.

Swing radius

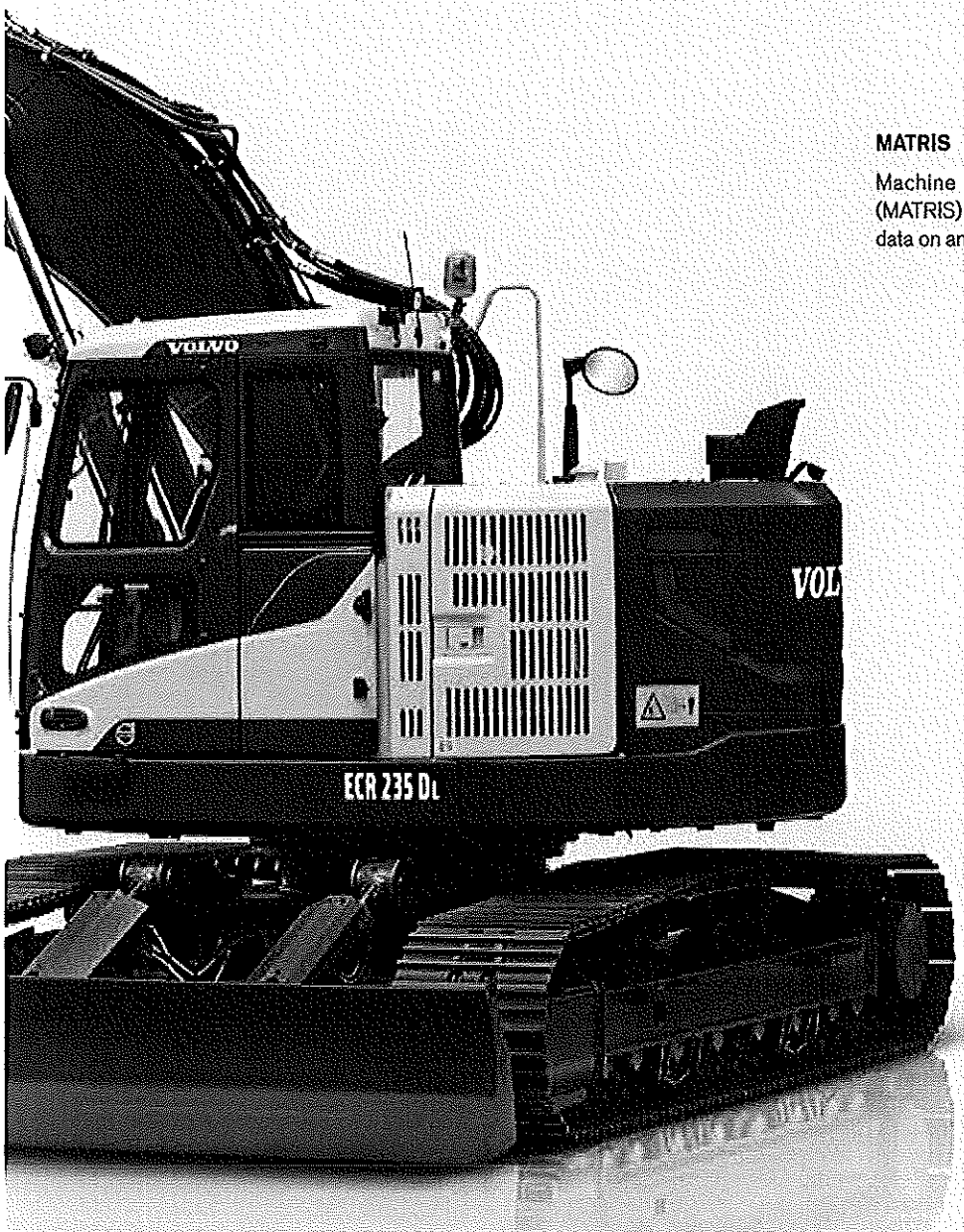
Short front and rear radius ensures safe and easy operation within a confined space.

ECO mode

Volvo's unique ECO mode improves fuel efficiency without sacrificing performance.

Undercarriage

Three-piece, high tensile steel undercarriage is designed and built to withstand the toughest conditions.



Volvo cab

Spacious, convex cab design with excellent all-round visibility and easy to access controls. ROPS certified.

MATRIS

Machine Tracking Information System (MATRIS) displays machine performance data on an easy to understand graph.

Efficient engine

Volvo's fuel efficient Tier 4 Interim diesel engine gives you more power while consuming less fuel.

Service access

Premium service access from large opening doors and grouped service points.

Auxiliary hydraulics

Optional, additional auxiliary hydraulic piping kits allow other hydraulic attachments like hydraulic breakers and rotating grabs to be operated.

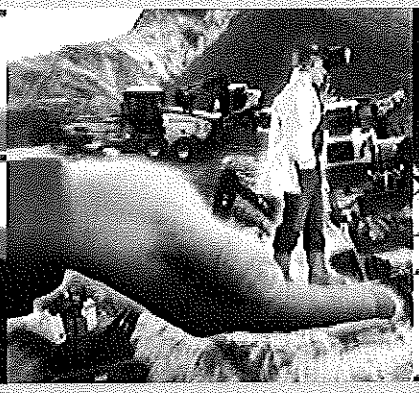
Reinforced frames

Reinforced undercarriage and superstructure for improved durability and reliability.

STRENGTH TO SUPPORT YOU AND YOUR BUSINESS.

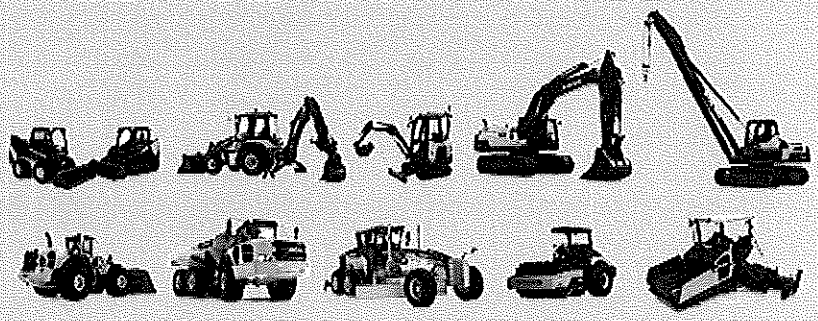
The day you receive your new Volvo short swing radius crawler excavator is just the start of your working relationship with Volvo. From service and maintenance to our CareTrack telematics system – Volvo has a comprehensive and sophisticated aftermarket portfolio to continuously add value to your business.

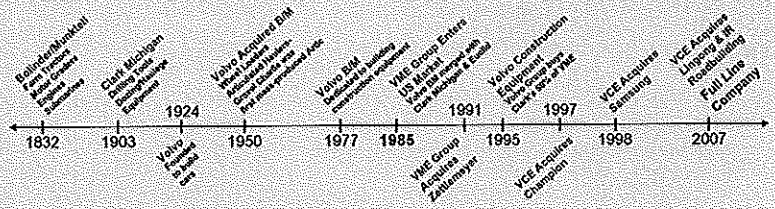
CareTrack - Volvo's telematics system works with our exclusive machine tracking info system, MATRIS, using guided diagnostics to track and analyze machines remotely - minimizing costs and maximizing uptime.



Customer Support Agreements - Gives you peace of mind by reducing total ownership costs, maximizing uptime, and distributing maintenance and major repair costs.

Attachments - Providing customers with a wide variety of attachments keep your machine working and open up new job opportunities.





Volvo designed and built your machines, so no-one knows how to keep them working in top condition more than us. When it comes to your machine, our Volvo trained technicians are the experts.

Our technicians work with industry leading diagnostic tools and techniques, using only Genuine Volvo Parts to deliver the highest levels of quality and service. Talk to your Volvo dealer about how genuine Volvo services can best provide the service and maintenance plan that is the right fit for you and your business.

State-of-the-art machines require state-of-the-art support and your Volvo dealer can provide a catalogue of services designed to get the most out of your machine, helping you maximise uptime, productivity and residual value. Your Volvo dealer can provide a number of sophisticated support offers, including:

Service plans ranging from routine wear inspections, through to comprehensive maintenance and repair agreements.

Analysis and diagnostics to help you understand how your machine is running, highlight potential maintenance issues and identify where performance can be improved.

Eco Operator training courses can help your operators work towards a safer, more productive and fuel efficient performance.

VOLVO ECR145D, ECR235D IN DETAIL.

Engine

The latest generation, Volvo engine Tier 4 Interim emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. The engine uses precise, high-pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance. Air Filter: 2-stage air cleaner. Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

ECR145D		
Engine Tier 4 Interim	Volvo	D4H
Max power at	r/s / r/min	33 / 2,000
Net, ISO 9249/SAE J1349	kW / hp	84 / 113
Gross, ISO 14396/SAE J1995	kW / hp	85 / 114
Max torque at	Nm / r/min	535 / 1,500
	lb. ft	395
No. of cylinders		4
Displacement	l	4.0
	cu. in	246
Bore	mm	101
	cu. in	3.98
Stroke	mm	126
	cu. in	4.96

ECR235D		
Engine Tier 4 Interim	Volvo	D6H
Max power at	r/s / r/min	30 / 1,800
Net, ISO 9249/SAE J1349	kW / hp	128 / 172
Gross, ISO 14396/SAE J1995	kW / hp	129 / 173
Max torque at	Nm / r/min	849 / 1,350
	lb. ft	626
No. of cylinders		6
Displacement	l	5.7
	cu. in	348
Bore	mm	98
	cu. in	3.86
Stroke	mm	126
	cu. in	4.96

Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard. Contronics provides advanced monitoring of machine functions and important diagnostic information on the I-ECU.

		ECR145D	ECR235D
Voltage	V	24	24
Batteries	V	2 x 12	2 x 12
Battery capacity	Ah	100	150
Alternator	V / Ah	28 / 110	28 / 110

Swing system

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

		ECR145D	ECR235D
Max. slew speed	r/min	12.2	11.2
Max. slew torque	kN m	41.9	82.5
	lbf. ft	30,912	60,866

Drive

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

Max. drawbar pull	kN	119	200
	lb	26,756	44,969
Max. travel speed	km/h	3.2/5.5	3.1/5.5
	mph	2.0/3.4	1.9 3.4
Gradeability	°	35	35

Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.

Track pads		2 x 46	2 x 49
Link pitch	mm	171.5	190
	in	6.8	7.5
Shoe width, triple grouser	mm	500/600/750	600/700/ 800/900
	in	20/24/30	24/28/32/36
Shoe width, triple grouser (HD)	mm	600/700	600
	in	24/28	24
Shoe width, rubber grouser	mm	500	600
	in	20	24
Shoe width, double grouser	mm	–	700
	in	–	28
Bottom rollers		2 x 7	2 x 8
Top rollers		2 x 1	2 x 2

VOLVO ECR145D, ECR235D IN DETAIL.

Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode," is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and swing priority along with boom, arm and bucket regeneration provides optimum performance.
The following important functions are included in the system :
Summation system: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.
Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations.
Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.
Swing priority: Gives priority to swing functions for faster simultaneous operations.
Regeneration system: Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.
Power boost: All digging and lifting forces are increased.
Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

		ECR145D	ECR235D
Main pump, Type 2 x variable displacement axial piston pumps			
Maximum flow	l/min	2 x 124	2 x 207
	gpm	**2 x 33**	**2 x 55**
Pilot pump, Type Gear pump Maximum flow	l/min / gpm	20 / **5.3**	18 / **4.8**

Hydraulic motors

Travel: Variable displacement axial piston motor with mechanical brake.
Slew: Fixed displacement axial piston motor with mechanical brake

Relief valve setting			
Implement	MPa	32.3/34.3	34.3/36.3
	psi	**4,690/4,980**	**4,980/5,260**
	kg/cm²	330/350	350/370
Travel circuit	MPa	34.3	34.3
	psi	**4,980**	**4,980**
	kg/cm²	350	350
Slew circuit	MPa	26.5	27.9
	psi	**3,840**	**4,050**
	kg/cm²	270	285
Pilot circuit	MPa	3.9	3.9
	psi	**570**	**570**
	kg/cm²	40	40

Hydraulic cylinders

		ECR145D	ECR235D
Mono boom		2	2
Bore x Stroke	ø x mm	105 x 1 055	130 x 1 420
	ø x in	**4.1 x 41.5**	**5.1 x 55.9**
1st boom of 2 piece boom		2	2
Bore x Stroke	ø x mm	110 x 980	130 x 1 345
	ø x in	**4.3 x 38.6**	**5.1 x 53.0**
2nd boom of 2 piece boom		1	1
Bore x Stroke	ø x mm	160 x 765	160 x 1 070
	ø x in	**6.3 x 30.1**	**6.3 x 42.1**
Arm		1	1
Bore x Stroke	ø x mm	120 x 1 045	135 x 1 540
	ø x in	**4.7 x 41.1**	**5.3 x 60.6**
Bucket		1	1
Bore x Stroke	ø x mm	100 x 865	120 x 1 065
	ø x in	**3.9 x 34.1**	**4.7 x 41.9**
Dozer blade		2	2
Bore x Stroke	ø x mm	130 x 270	140 x 320
	ø x in	**5.1 x 10.6**	**5.5 x 12.6**

Service refill capacities

Fuel tank	l / gal	210 / **55**	321 / **85**
Hydraulic system, total	l / gal	200 / **53**	280 / **74**
Hydraulic tank	l / gal	59 / **16**	113 / **30**
Engine oil	l / gal	15.5 / **4.1**	25 / **6.6**
Engine coolant	l / gal	26.0 / **6.9**	30.0 / **7.9**
Swing reduction unit	l / gal	3.9 / **1.0**	7 / **1.8**
Travel reduction unit	l / gal	2 x 2.2 / **2 x 0.6**	2 x 5 / **2 x 1.3**

Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door. Integrated air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents. Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety

Sound Level

Sound level in cab according to ISO 6396			
LpA (standard)	dB(A)	71	71
LpA (high capacity)	dB(A)	72	72
External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009			
LwA (standard)	dB(A)	100	101
LwA (high capacity)	dB(A)	101	102

SPECIFICATIONS.

MAXIMUM PERMITTED BUCKETS

ECR145DL with 600 mm (24") shoe

Boom, Direct Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	0,88	1.14	750	0.98	0,73	0.95	600	0.78	0,63	0.82	500	0.65	0,85	1.11	700	0.92	0,73	0.95	600	0.78	0,63	0.82	500	0.65
GP bucket 1,8 t/m³ (3,030 lb/yd³)	0,78	1.01	650	0.85	0,65	0.85	550	0.72	0,55	0.72	450	0.59	0,75	0.98	650	0.85	0,65	0.85	550	0.72	0,55	0.72	450	0.59
HD bucket 1,8 t/m³ (3,030 lb/yd³)	0,75	0.98	750	0.98	0,63	0.82	600	0.78	0,53	0.69	500	0.65	0,73	0.95	700	0.92	0,63	0.82	600	0.78	0,53	0.69	500	0.65
HD bucket 2,0 t/m³ (3,370 lb/yd³)	0,7	0.92	700	0.92	0,58	0.75	550	0.72	0,5	0.65	500	0.65	0,68	0.88	650	0.85	0,58	0.75	550	0.72	0,5	0.65	500	0.65

ECR145DL with 600 mm (24") shoe

Boom, S6 Quick Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	0,83	1.08	700	0.92	0,68	0.88	550	0.72	0,58	0.75	500	0.65	0,83	1.08	700	0.92	0,68	0.88	550	0.72	0,58	0.75	500	0.65
GP bucket 1,8 t/m³ (3,030 lb/yd³)	0,75	0.98	600	0.78	0,6	0.78	500	0.65	0,5	0.65	400	0.52	0,73	0.95	600	0.78	0,6	0.78	500	0.65	0,5	0.65	400	0.52
HD bucket 1,8 t/m³ (3,030 lb/yd³)	0,7	0.92	700	0.92	0,58	0.75	550	0.72	0,48	0.62	450	0.59	0,68	0.88	650	0.85	0,58	0.75	550	0.72	0,48	0.62	450	0.59
HD bucket 2,0 t/m³ (3,370 lb/yd³)	0,65	0.85	650	0.85	0,53	0.69	500	0.65	0,45	0.59	450	0.59	0,63	0.82	600	0.78	0,53	0.69	500	0.65	0,45	0.59	450	0.59

ECR145DL with 600 mm (24") shoe

Boom, U Quick Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	0,8	1.05	650	0.85	0,65	0.85	550	0.72	0,55	0.72	450	0.59	0,78	1.01	650	0.85	0,65	0.85	550	0.72	0,55	0.72	450	0.59
GP bucket 1,8 t/m³ (3,030 lb/yd³)	0,7	0.92	600	0.78	0,58	0.75	500	0.65	0,48	0.62	400	0.52	0,7	0.92	550	0.72	0,58	0.75	500	0.65	0,48	0.62	400	0.52
HD bucket 1,8 t/m³ (3,030 lb/yd³)	0,68	0.88	650	0.85	0,55	0.72	550	0.72	0,45	0.59	450	0.59	0,65	0.85	650	0.85	0,55	0.72	550	0.72	0,45	0.59	450	0.59
HD bucket 2,0 t/m³ (3,370 lb/yd³)	0,63	0.82	600	0.78	0,5	0.65	500	0.65	0,43	0.56	400	0.52	0,6	0.78	600	0.78	0,5	0.65	500	0.65	0,43	0.56	400	0.52

ECR145DL with 700 mm (28") shoe

Boom, Direct Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	0,88	1.14	750	0.98	0,73	0.95	600	0.78	0,63	0.82	500	0.65	0,88	1.14	750	0.98	0,73	0.95	600	0.78	0,63	0.82	500	0.65
GP bucket 1,8 t/m³ (3,030 lb/yd³)	0,78	1.01	650	0.85	0,65	0.85	550	0.72	0,55	0.72	450	0.59	0,78	1.01	650	0.85	0,65	0.85	550	0.72	0,55	0.72	450	0.59
HD bucket 1,8 t/m³ (3,030 lb/yd³)	0,75	0.98	750	0.98	0,63	0.82	600	0.78	0,53	0.69	500	0.65	0,75	0.98	750	0.98	0,63	0.82	600	0.78	0,53	0.69	500	0.65
HD bucket 2,0 t/m³ (3,370 lb/yd³)	0,7	0.92	700	0.92	0,58	0.75	550	0.72	0,5	0.65	500	0.65	0,7	0.92	700	0.92	0,58	0.75	550	0.72	0,5	0.65	500	0.65

ECR145DL with 700 mm (28") shoe

Boom, S6 Quick Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	0,83	1.08	700	0.92	0,68	0.88	550	0.72	0,58	0.75	500	0.65	0,83	1.08	700	0.92	0,68	0.88	550	0.72	0,58	0.75	500	0.65
GP bucket 1,8 t/m³ (3,030 lb/yd³)	0,75	0.98	600	0.78	0,6	0.78	500	0.65	0,5	0.65	400	0.52	0,75	0.98	600	0.78	0,6	0.78	500	0.65	0,5	0.65	400	0.52
HD bucket 1,8 t/m³ (3,030 lb/yd³)	0,7	0.92	700	0.92	0,58	0.75	550	0.72	0,48	0.62	450	0.59	0,7	0.92	700	0.92	0,58	0.75	550	0.72	0,48	0.62	450	0.59
HD bucket 2,0 t/m³ (3,370 lb/yd³)	0,65	0.85	650	0.85	0,53	0.69	500	0.65	0,45	0.59	450	0.59	0,65	0.85	650	0.85	0,53	0.69	500	0.65	0,45	0.59	450	0.59

ECR145DL with 700 mm (28") shoe

Boom, U Quick Fit	4,6 m (15' 1") Mono-Boom												4,72 m (15' 6") 2-piece Boom											
Arm	2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")				2,1 m (6' 11")				2,5 m (8' 2")				3,0 m (9' 10")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	0,8	1.05	650	0.85	0,65	0.85	550	0.72	0,55	0.72	450	0.59	0,8	1.05	650	0.85	0,65	0.8	550	0.72	0,55	0.72	450	0.59
GP bucket 1,8 t/m³ (3,030 lb/yd³)	0,7	0.92	600	0.78	0,58	0.75	500	0.65	0,48	0.62	400	0.52	0,7	0.92	600	0.78	0,58	0.75	500	0.65	0,48	0.62	400	0.52
HD bucket 1,8 t/m³ (3,030 lb/yd³)	0,68	0.88	650	0.85	0,55	0.72	550	0.72	0,45	0.59	450	0.59	0,68	0.88	650	0.85	0,55	0.72	550	0.72	0,45	0.59	450	0.59
HD bucket 2,0 t/m³ (3,370 lb/yd³)	0,63	0.82	600	0.78	0,5	0.65	500	0.65	0,43	0.56	400	0.52	0,63	0.82	600	0.78	0,5	0.65	500	0.65	0,43	0.56	400	0.52

Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.
2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.
3. Bucket widths are less than bucket's tip radius.

SPECIFICATIONS.

MAXIMUM PERMITTED BUCKETS

ECR235DL with 600 mm (24") shoe

Boom, Direct Fit	5,7 m (18' 8") Mono-Boom								5,76 m (18' 10") 2-piece Boom							
Arm	2,5 m (8' 2")				2,9 m (9' 6")				2,5 m (8' 2")				2,9 m (9' 6")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	1,48	1.93	1 250	1.64	1,33	1.73	1 100	1.44	1,4	1.83	1 150	1.50	1,28	1.67	1 100	1.44
GP bucket 1,8 t/m³ (3,030 lb/yd³)	1,3	1.70	1 100	1.44	1,18	1.54	1 000	1.31	1,23	1.60	1 050	1.37	1,15	1.50	950	1.24
HD bucket 1,8 t/m³ (3,030 lb/yd³)	1,25	1.64	1 250	1.64	1,13	1.47	1 100	1.44	1,18	1.54	1 150	1.50	1,08	1.41	1 050	1.37
HD bucket 2,0 t/m³ (3,370 lb/yd³)	1,15	1.50	1 150	1.50	1,05	1.37	1 050	1.37	1,1	1.44	1 100	1.44	1,0	1.31	1 000	1.31

ECR235DL with 600 mm (24") shoe

Boom, U Quick Fit	5,7 m (18' 8") Mono-Boom								5,76 m (18' 10") 2-piece Boom							
Arm	2,5 m (8' 2")				2,9 m (9' 6")				2,5 m (8' 2")				2,9 m (9' 6")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	1,35	1.77	1 150	1.50	1,2	1.57	1 000	1.31	1,25	1.64	1 050	1.37	1,15	1.50	950	1.24
GP bucket 1,8 t/m³ (3,030 lb/yd³)	1,2	1.57	1 000	1.31	1,05	1.37	900	1.18	1,1	1.24	950	1.24	1,03	1.34	850	1.11
HD bucket 1,8 t/m³ (3,030 lb/yd³)	1,13	1.47	1 100	1.44	1,0	1.31	1 000	1.31	1,05	1.37	1 050	1.37	0,98	1.28	950	1.24
HD bucket 2,0 t/m³ (3,370 lb/yd³)	1,05	1.37	1 050	1.37	0,93	1.21	900	1.18	0,98	1.28	950	1.24	0,90	1.18	900	1.18

ECR235DL with 600 mm (24") shoe

Boom, S1 Quick Fit	5,7 m (18' 8") Mono-Boom								5,76 m (18' 10") 2-piece Boom							
Arm	2,5 m (8' 2")				2,9 m (9' 6")				2,5 m (8' 2")				2,9 m (9' 6")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	1,4	1.83	1 150	1.50	1,25	1.64	1 050	1.37	1,3	1.70	1 100	1.44	1,2	1.57	1 000	1.31
GP bucket 1,8 t/m³ (3,030 lb/yd³)	1,23	1.60	1 050	1.37	1,1	1.44	900	1.18	1,15	1.50	950	1.24	1,05	1.37	900	1.18
HD bucket 1,8 t/m³ (3,030 lb/yd³)	1,18	1.54	1 150	1.50	1,05	1.37	1 050	1.37	1,1	1.44	1 100	1.44	1,0	1.31	1 000	1.31
HD bucket 2,0 t/m³ (3,370 lb/yd³)	1,08	1.41	1 050	1.37	0,98	1.28	950	1.24	1,03	1.34	1 000	1.31	0,93	1.21	900	1.18

ECR235DL with 700 mm (28") shoe

Boom, Direct Fit	5,7 m (18' 8") Mono-Boom								5,76 m (18' 10") 2-piece Boom							
Arm	2,5 m (8' 2")				2,9 m (9' 6")				2,5 m (8' 2")				2,9 m (9' 6")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	1,5	1.96	1 250	1.64	1,33	1.73	1 100	1.44	1,43	1.86	1 200	1.57	1,3	1.70	1 100	1.44
GP bucket 1,8 t/m³ (3,030 lb/yd³)	1,33	1.73	1 100	1.44	1,18	1.54	1 000	1.31	1,25	1.64	1 050	1.37	1,15	1.50	950	1.24
HD bucket 1,8 t/m³ (3,030 lb/yd³)	1,25	1.64	1 250	1.64	1,13	1.47	1 100	1.44	1,18	1.54	1 150	1.50	1,1	1.44	1 100	1.44
HD bucket 2,0 t/m³ (3,370 lb/yd³)	1,18	1.54	1 150	1.50	1,05	1.37	1 050	1.37	1,1	1.44	1 100	1.44	1,03	1.34	1 000	1.31

ECR235DL with 700 mm (28") shoe

Boom, U Quick Fit	5,7 m (18' 8") Mono-Boom								5,76 m (18' 10") 2-piece Boom							
Arm	2,5 m (8' 2")				2,9 m (9' 6")				2,5 m (8' 2")				2,9 m (9' 6")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	1,35	1.77	1 150	1.50	1,2	1.57	1 000	1.31	1,28	1.67	1 050	1.37	1,18	1.54	1 000	1.31
GP bucket 1,8 t/m³ (3,030 lb/yd³)	1,2	1.57	1 000	1.31	1,05	1.37	900	1.18	1,13	1.47	950	1.24	1,03	1.34	850	1.11
HD bucket 1,8 t/m³ (3,030 lb/yd³)	1,15	1.50	1 150	1.50	1,0	1.31	1 000	1.31	1,08	1.41	1 050	1.37	0,98	1.28	950	1.24
HD bucket 2,0 t/m³ (3,370 lb/yd³)	1,08	1.41	1 050	1.37	0,93	1.21	900	1.18	1,0	1.31	1 000	1.31	0,93	1.21	900	1.18

ECR235DL with 700 mm (28") shoe

Boom, S1 Quick Fit	5,7 m (18' 8") Mono-Boom								5,76 m (18' 10") 2-piece Boom							
Arm	2,5 m (8' 2")				2,9 m (9' 6")				2,5 m (8' 2")				2,9 m (9' 6")			
Max. bucket	capacity		weight		capacity		weight		capacity		weight		capacity		weight	
	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb	m³	yd³	kg	lb
GP bucket 1,5 t/m³ (2,530 lb/yd³)	1,4	1.83	1 200	1.57	1,25	1.64	1 050	1.37	1,33	1.73	1 100	1.44	1,23	1.60	1 000	1.31
GP bucket 1,8 t/m³ (3,030 lb/yd³)	1,25	1.64	1 050	1.37	1,1	1.44	900	1.18	1,18	1.54	1 000	1.31	1,08	1.41	900	1.18
HD bucket 1,8 t/m³ (3,030 lb/yd³)	1,18	1.54	1 150	1.50	1,05	1.37	1 050	1.37	1,1	1.44	1 100	1.44	1,03	1.34	1 000	1.31
HD bucket 2,0 t/m³ (3,370 lb/yd³)	1,1	1.44	1 100	1.44	0,98	1.28	950	1.24	1,03	1.34	1 000	1.31	0,95	1.24	950	1.24

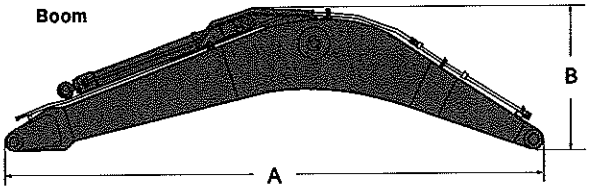
Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.
2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.
3. Bucket widths are less than bucket's tip radius.

MACHINE WEIGHTS AND GROUND PRESSURE

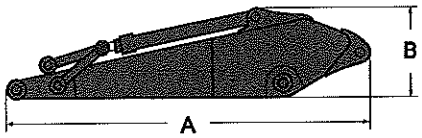
Description	Shoe width		Operating weight		Ground pressure		Overall width		Operating weight		Ground pressure		Overall width	
Units	mm	in	kg	lb	kPa	psi	mm	in	kg	lb	kPa	psi	mm	in
ECR145DL			4,6 m (15' 1") boom, 2,5 m (8' 2") arm, 419 kg (912 lb) bucket, 3 200 kg (7,060 lb) counterweight						4,72 m (15' 6") 2 piece boom, 2,5 m (8' 2") arm, 419 kg (912 lb) bucket, 3 200 kg (7,060 lb) counterweight					
Triple grouser	500	20	14 960	32,990	44.5	6.5	2 490	8' 2"	15 360	33,870	45.7	6.6	2 490	8' 2"
	600	24	15 160	33,430	37.6	5.5	2 590	8' 6"	15 560	34,310	38.6	5.6	2 590	8' 6"
	750	30	15 540	34,270	30.8	4.5	2 740	9' 0"	15 940	35,150	31.6	4.6	2 740	9' 0"
Triple grouser HD	600	24	15 230	33,580	37.8	5.5	2 590	8' 6"	15 630	34,460	38.8	5.6	2 590	8' 6"
	700	28	15 430	34,020	32.8	4.8	2 690	8' 10"	15 830	34,910	33.7	4.9	2690	8' 10"
Rubber grouser	500	20	15 000	33,080	44.7	6.5	2 490	8' 2"	15 400	33,960	45.8	6.6	2 490	8' 2"
ECR145DL with Dozer Blade			4,6 m (15' 1") boom, 2,5 m (8' 2") arm, 419 kg (912 lb) bucket, 3 200 kg (7,060 lb) counterweight						4,72 m (15' 6") 2 piece boom, 2,5 m (8' 2") arm, 419 kg (912 lb) bucket, 3 200 kg (7,060 lb) counterweight					
Triple grouser	500	20	15 830	34,910	47.1	6.8	2 490	8' 2"	16 230	35,790	48.3	7.0	2 490	8' 2"
	600	24	16 040	35,370	39.8	5.8	2 590	8' 6"	16 440	36,250	40.8	5.9	2 590	8' 6"
	750	30	16420	36,210	32.6	4.7	2 740	9' 0"	16 820	37,090	33.4	4.8	2 740	9' 0"
Triple grouser HD	600	24	16 110	35,520	40.0	5.8	2 590	8' 6"	16 510	36,400	41.0	5.9	2 590	8' 6"
	700	28	16 310	35,960	34.7	5.0	2 690	8' 10"	16 710	36,850	35.5	5.2	2 690	8' 10"
Rubber grouser	500	20	15 870	34,990	47.2	6.9	2 490	8' 2"	16 270	35,880	48.4	7.0	2 490	8' 2"
ECR235DL			5,7 m (18' 8") boom, 2,9 m (18' 8") arm, 693 kg (1,530 lb) bucket, 6 400 kg (14,110 lb) counterweight						5,76 m (18' 11") 2-piece boom 2,9 m (18' 8") arm, 693 kg (1,530 lb) bucket, 6 400 kg (14,110 lb) counterweight					
Triple grouser	600	24	24 650	54,350	51.1	7.4	2 990	9' 10"	25 230	55,630	52.3	7.6	2 990	9' 10"
	700	28	25 100	55,350	44.6	6.5	3 090	10' 2"	25 680	56,620	45.6	6.6	3 090	10' 2"
	800	32	25 380	55,960	39.4	5.7	3 190	10' 6"	25 960	57,240	40.4	5.9	3190	10' 6"
	900	36	25 670	56,600	35.5	5.1	3 290	10' 10"	26 250	57,880	36.3	5.3	3 290	10' 10"
Triple grouser HD	600	24	24 820	54,730	51.4	7.5	2 990	9' 10"	25 400	56,010	52.6	7.6	2 990	9' 10"
Double grouser	700	28	25 380	55,960	45.1	6.5	3 090	10' 2"	25 960	57,240	46.1	6.7	3 090	10' 2"
Rubber grouser	600	24	24 940	54,990	51.7	7.5	2 990	9' 10"	25 520	56,270	52.9	7.7	2 990	9' 10"
ECR235DL with Dozer Blade			5,7 m (18' 8") boom, 2,9 m (18' 8") arm, 693 kg (1,530 lb) bucket, 6 400 kg (14,110 lb) counterweight						5,76 m (18' 11") 2-piece boom 2,9 m (18' 8") arm, 693 kg (1,530 lb) bucket, 6 400 kg (14,110 lb) counterweight					
Triple grouser	600	24	26 030	57,400	53.9	7.8	2 990	9' 10"	26 610	58,680	55.1	8.0	2 990	9' 10"
	700	28	26 500	58,430	47.1	6.8	3 090	10' 2"	27 080	59,710	48.1	7.0	3 090	10' 2"
	800	32	26 790	59,070	41.6	6.0	3 190	10' 6"	27 370	60,350	42.5	6.2	3 190	10' 6"
	900	36	27 080	59,710	37.4	5.4	3 290	10' 10"	27 660	60,990	38.2	5.5	3 290	10' 10"
Triple grouser HD	600	24	26 200	57,770	54.3	7.9	2 990	9' 10"	26 780	59,050	55.5	8.0	2 990	9' 10"
Double grouser	700	28	26 780	59,050	47.6	6.9	3 090	10' 2"	27 360	60,330	48.6	7.0	3 090	10' 2"
Rubber grouser	600	24	26 320	58,040	54.5	7.9	2 990	9' 10"	26 900	59,310	55.7	8.1	2 990	9' 10"

DIMENSIONS

Boom



Arm

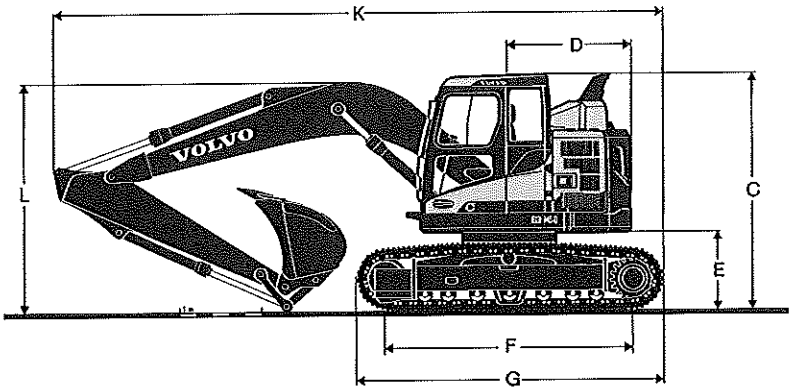


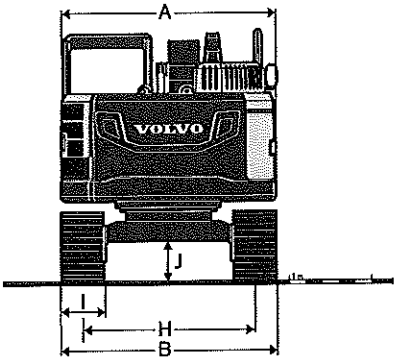
		ECR145D		ECR235D	
Description	Unit	mono	2-piece	mono	2-piece
Boom	m (in)	4,6 (15' 1")	4,72 (15' 6")	5,7 (18' 8")	5,76 (18' 11")
Length (A)	mm (in)	4 770 (15' 8")	4 885 (16' 0")	5 910 (19' 5")	5 965 (19' 7")
Height (B)	mm (in)	1 370 (4' 6")	1 135 (3' 9")	1 770 (5' 10")	1 300 (4' 3")
Width	mm (in)	545 (1' 9")	545 (1' 9")	670 (2' 2")	670 (2' 2")
Weight	kg (lb)	1 130 (2,490)	1 450 (3,200)	2 000 (4,410)	2 570 (5,670)

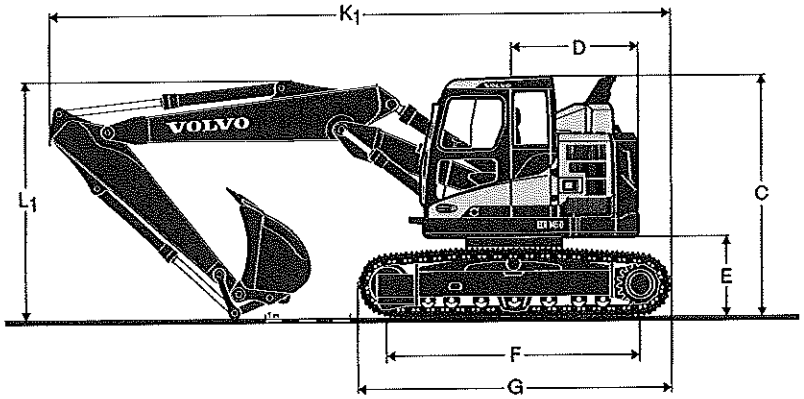
		ECR145D			ECR235D	
Description	Unit					
Arm	m (in)	2,1 (6' 11")	2,5 (8' 2")	3,0 (9' 10")	2,5 (8' 2")	2,9 (9' 6")
Length (A)	mm (in)	2 790 (9' 2")	3 195 (10' 6")	3 690 (12' 1")	3 525 (11' 7")	3 910 (12' 10")
Height (B)	mm (in)	680 (2' 3")	675 (2' 3")	750 (2' 6")	860 (2' 10")	860 (2' 10")
Width	mm (in)	275 (0' 11")	275 (0' 11")	275 (0' 11")	440 (1' 5")	440 (1' 5")
Weight	kg (lb)	560 (1,230)	624 (1,380)	684 (1,510)	975 (2,150)	1 000 (2,200)

SPECIFICATIONS.

DIMENSIONS ECR145DL



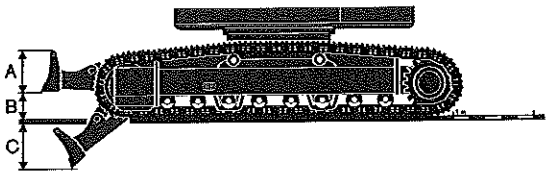




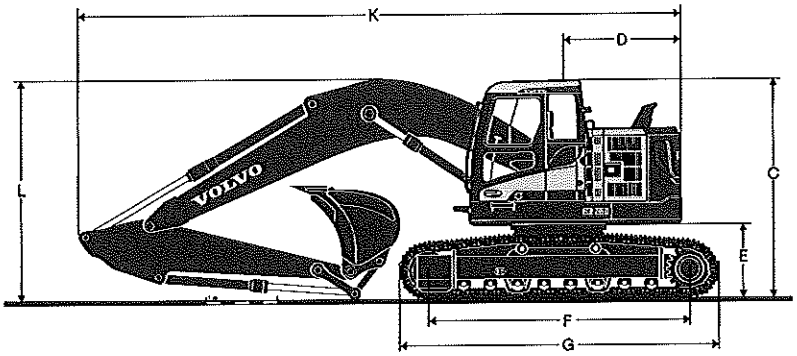
Description	Unit	ECR145DL					
Boom	m, ft-in	4,6 (15' 1") mono or 4,72 (15' 6") 2-piece					
Arm	m, ft-in	2,1	6' 11"	2,5	8' 2"	3,0	9' 10"
A. Overall width of upper structure	mm, ft-in	2 490	8' 2"	2 490	8' 2"	2 490	8' 2"
B. Overall width	mm, ft-in	2 690	8' 10"	2 690	8' 10"	2 690	8' 10"
C. Overall height of cab	mm, ft-in	2 855	9' 4"	2 855	9' 4"	2 855	9' 4"
D. Tail slew radius	mm, ft-in	1 494	4' 11"	1 494	4' 11"	1 494	4' 11"
E. Counterweight clearance *	mm, ft-in	900	2' 11"	900	2' 11"	900	2' 11"
F. Tumbler length	mm, ft-in	3 040	10' 0"	3 040	10' 0"	3 040	10' 0"
G. Track length	mm, ft-in	3 750	12' 4"	3 750	12' 4"	3 750	12' 4"
H. Track gauge	mm, ft-in	1 990	6' 6"	1 990	6' 6"	1 990	6' 6"
I. Shoe width	mm, ft-in	700	2' 4"	700	2' 4"	700	2' 4"
J. Min. ground clearance *	mm, ft-in	430	1' 5"	430	1' 5"	430	1' 5"
K. Overall length	mm, ft-in	7 400	24' 3"	7 405	24' 4"	7 345	24' 1"
K¹. Overall length	mm, ft-in	7 505	24' 7"	7 470	24' 6"	7 370	24' 2"
L. Overall height of boom	mm, ft-in	2 745	9' 0"	2 865	9' 5"	3 270	10' 9"
L¹. Overall height of boom	mm, ft-in	2 665	8' 9"	2 860	9' 5"	3 350	11' 0"

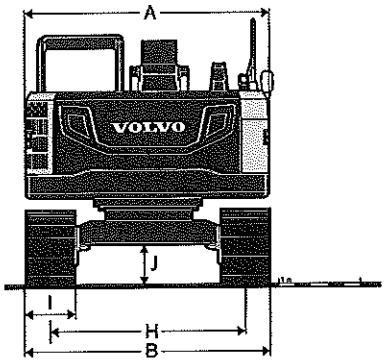
* Without shoe grouser

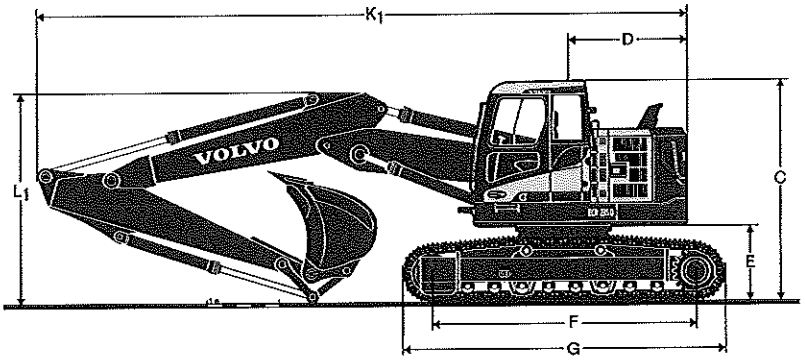
Front dozer blade	Unit	ECR145D
A. Height	m, (ft-in)	580 (1' 11")
Width	mm, (ft-in)	2 690 (8' 10")
B. Lift height	mm, (ft-in)	590 (1' 11")
C. Digging depth	mm, (ft-in)	570 (1' 10")



DIMENSIONS ECR235DL



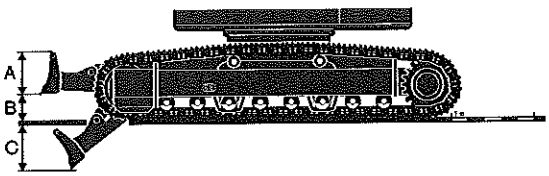




Description	Unit		ECR235DL		
Boom	m, ft-in		5,7 (18' 8") mono or 5,76 (18' 11") 2-piece		
Arm	m, ft-in	2,5	8' 2"	2,9	9' 6"
A. Overall width of upper structure	mm, ft-in	2 990	9' 10"	2 990	9' 10"
B. Overall width	mm, ft-in	3 090	10' 2"	3 090	10' 2"
C. Overall height of cab	mm, ft-in	3 040	10' 0"	3 040	10' 0"
D. Tail slew radius	mm, ft-in	1 720	5' 8"	1 720	5' 8"
E. Counterweight clearance *	mm, ft-in	1 025	3' 4"	1 025	3' 4"
F. Tumbler length	mm, ft-in	3 660	12' 0"	3 660	12' 0"
G. Track length	mm, ft-in	4 460	14' 8"	4 460	14' 8"
H. Track gauge	mm, ft-in	2 390	7' 10"	2 390	7' 10"
I. Shoe width	mm, ft-in	700	2' 4"	700	2' 4"
J. Min. ground clearance *	mm, ft-in	460	1' 6"	460	1' 6"
K. Overall length	mm, ft-in	9 080	29' 9"	8 985	29' 6"
K¹. Overall length	mm, ft-in	9 120	29' 11"	9 100	29' 10"
L. Overall height of boom	mm, ft-in	3 235	10' 7"	3 080	10' 1"
L¹. Overall height of boom	mm, ft-in	3 005	9' 10"	2 905	9' 6"

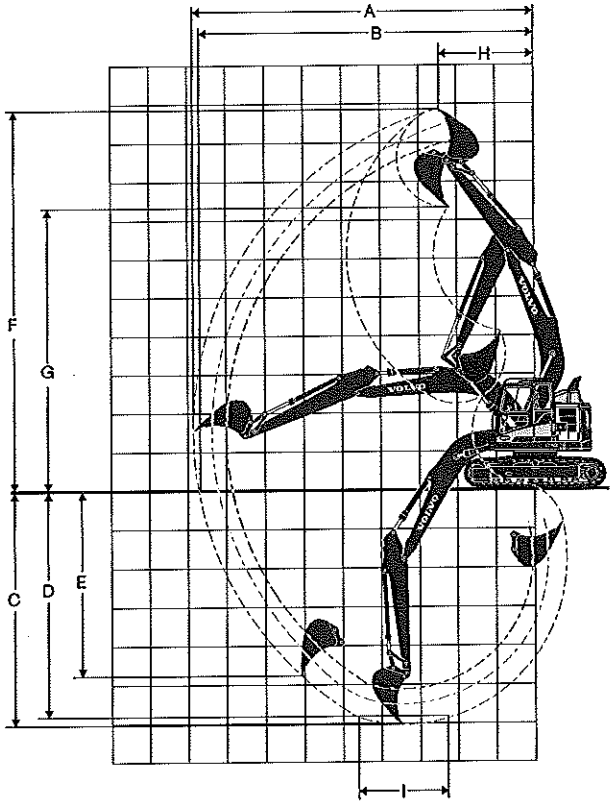
* Without shoe grouser

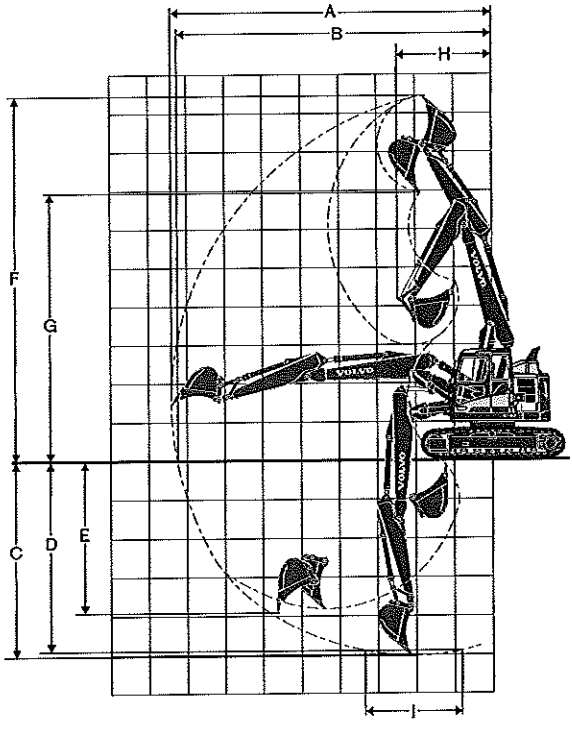
Front dozer blade	Unit	ECR235D
A. Height	m, (ft-in)	600 (1' 12")
Width	mm, (ft-in)	3 090 (10' 2")
B. Lift height	mm, (ft-in)	610 (2' 0")
C. Digging depth	mm, (ft-in)	480 (1' 7")



SPECIFICATIONS.

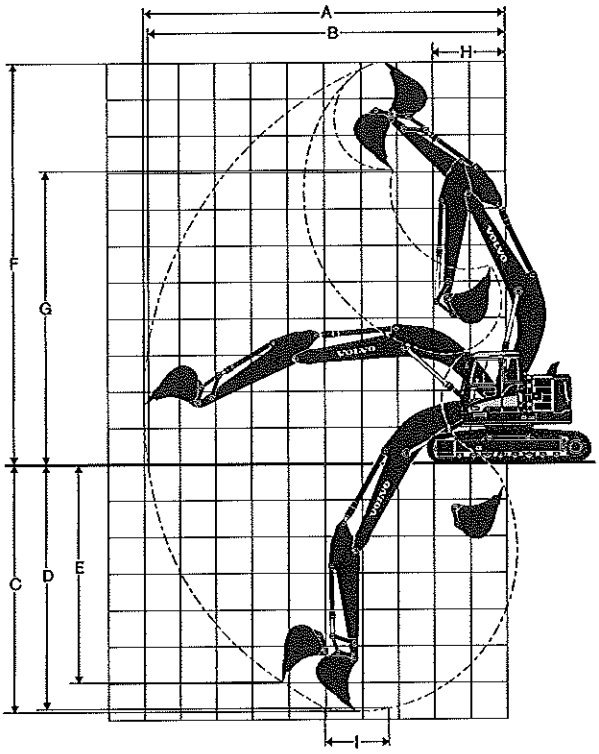
WORKING RANGES ECR145D

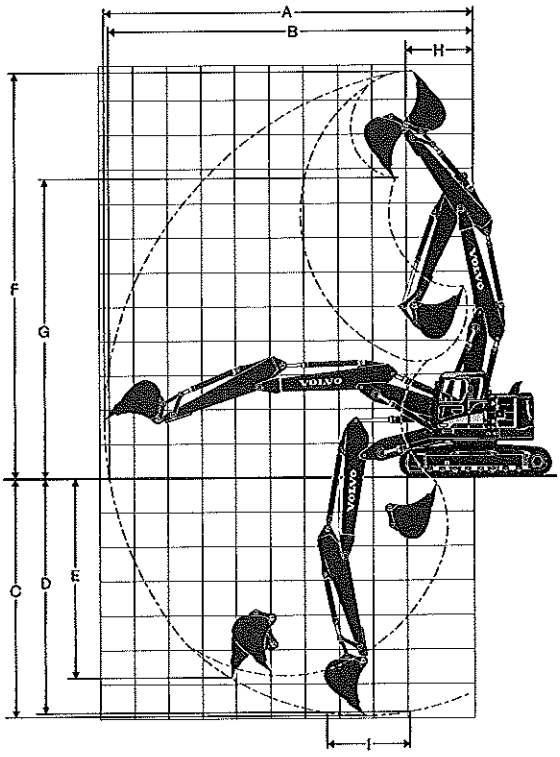




Description			Unit	ECR145DL											
Boom			m, ft-in	4,6 (15' 1") mono						4,72 (15' 6") 2-piece					
Arm			m, ft-in	2,1	6' 11"	2,5	8' 2"	3,0	9' 10"	2,1	6' 11"	2,5	8' 2"	3,0	9' 10"
A. Max. digging reach			mm, ft-in	7 980	26' 2"	8 350	27' 5"	8 840	29' 0"	8 210	26' 11"	8 600	28' 3"	9090	29' 10"
B. Max. digging reach on ground			mm, ft-in	7 830	25' 8"	8 210	26' 11"	8 700	28' 7"	8 060	26' 5"	8 450	27' 9"	8 960	29' 5"
C. Max. digging depth			mm, ft-in	5 110	16' 9"	5 510	18' 1"	6 010	19' 9"	5 220	17' 2"	5 620	18' 5"	6 120	20' 1"
D. Max. digging depth (I = 2,440 m, (8') level)			mm, ft-in	4 860	15' 11"	5 290	17' 4"	5 830	19' 2"	5 100	16' 9"	5 510	18' 1"	6 020	19' 9"
E. Max. vertical wall digging depth			mm, ft-in	3 920	12' 10"	4 290	14' 1"	4 810	15' 9"	4 120	13' 6"	4 480	14' 8"	4 970	16' 4"
F. Max. cutting height			mm, ft-in	9 100	29' 10"	9 420	30' 11"	9 860	32' 4"	9 390	30' 10"	9 740	31' 11"	10 210	33' 6"
G. Max. dumping height			mm, ft-in	6 570	21' 7"	6 900	22' 8"	7 330	24' 1"	6 850	22' 6"	7 210	23' 8"	7 680	25' 2"
H. Min. front swing radius			mm, ft-in	1 800	5' 11"	1 980	6' 6"	2 340	7' 8"	2 230	7' 4"	2 470	8' 1"	2 890	9' 6"
Digging forces with direct fit bucket															
Bucket radius			mm, ft-in	1 270	4' 8"	1 270	4' 8"	1 270	4' 8"	1 270	4' 8"	1 270	4' 8"	1 270	4' 8"
Breakout force - bucket	Normal	SAE	kN, lb	80.8	18,150	80.8	18,150	80.8	18150	80.8	18,150	80.8	18,150	80.8	18,150
	Power boost		kN, lb	85.7	19,250	85.7	19,250	85.7	19,250	85.7	19,250	85.7	19,250	85.7	19,250
	Normal	ISO	kN, lb	91.0	20,470	91.0	20,470	91.0	20,470	91.0	20,470	91.0	20,470	91.0	20,470
	Power boost		kN, lb	96.6	21,720	96.6	21,720	96.6	21,720	96.6	21,720	96.6	21,720	96.6	21,720
Tearout force - dipper arm	Normal	SAE	kN, lb	69.6	15,640	62.2	13,980	55.4	12,450	69.6	15,640	62.2	13,980	55.4	12,450
	Power boost		kN, lb	73.8	16,590	66.1	14,860	55.8	12,540	73.8	16,590	66.1	14,860	55.8	12,540
	Normal	ISO	kN, lb	71.3	16,040	63.6	14,300	56.4	12,680	71.3	16,040	63.6	14,300	56.4	12,680
	Power boost		kN, lb	75.8	17,030	67.4	15,150	59.8	13,440	75.8	17,030	67.4	15,150	59.8	13,440
Rotation angle, bucket			°	178		178		178		178		178		178	

WORKING RANGES ECR235D





Description			Unit	ECR235DL							
Boom			m, ft-in	5,7 (18' 8") mono				5,76 (18' 11") 2-piece			
Arm			m, ft-in	2,5	8' 2"	2,9	9' 6"	2,5	8' 2"	2,9	9' 6"
A. Max. digging reach			mm, ft-in	9 500	31' 2"	9 880	32' 5"	9 680	31' 9"	10 070	33' 0"
B. Max. digging reach on ground			mm, ft-in	9 330	30' 7"	9 720	31' 11"	9 510	31' 2"	9 910	32' 6"
C. Max. digging depth			mm, ft-in	6 310	20' 8"	6 710	22' 0"	5 910	19' 5"	6 310	20' 8"
D. Max. digging depth (I = 2,440 m, (8') level)			mm, ft-in	6 080	19' 11"	6 510	21' 4"	5 800	19' 0"	6 210	20' 4"
E. Max. vertical wall digging depth			mm, ft-in	5 180	17' 0"	5 650	18' 6"	4 850	15' 11"	5 270	17' 3"
F. Max. cutting height			mm, ft-in	10 620	34' 10"	10 940	35' 11"	11 170	36' 8"	11 530	37' 10"
G. Max. dumping height			mm, ft-in	7 600	24' 11"	7 910	25' 11"	8 130	26' 8"	8 510	27' 11"
H. Min. front swing radius			mm, ft-in	2 280	7' 6"	2 000	6' 7"	2 150	7' 1"	2 010	6' 7"
Digging forces with direct fit bucket											
Bucket radius			mm, ft-in	1 525	5' 3"	1 525	5' 3"	1 525	5' 3"	1 525	5' 3"
Breakout force - bucket	Normal	SAE	kN, lb	126.3	28,400	126.3	28,400	126.3	28,400	126.3	28,400
	Power boost		kN, lb	133.5	30,020	133.5	30,020	133.5	30,020	133.5	30,020
	Normal	ISO	kN, lb	142.1	31,930	142.1	31,930	142.1	31,930	142.1	31,930
	Power boost		kN, lb	150.2	33,760	150.2	33,760	150.2	33,760	150.2	33,760
Tearout force - dipper arm	Normal	SAE	kN, lb	117.1	26,330	101.2	22,760	117.1	26,330	101.2	22,760
	Power boost		kN, lb	123.8	27,830	107.0	24,060	123.8	27,830	107.0	24,060
	Normal	ISO	kN, lb	120.4	27,060	103.7	23,320	120.4	27,060	103.7	23,320
	Power boost		kN, lb	127.3	28,610	109.7	24,650	127.3	28,610	109.7	24,650
Rotation angle, bucket			°	175		175		175		175	

EQUIPMENT.

STANDARD EQUIPMENT

	ECR145D	ECR235D
Engine		
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Stage IIIB/ Tier 4 Interim requirements	•	•
Air filter with indicator	•	•
Air intake heater	•	•
Electric engine shut-off	•	•
Fuel filter and water separator	•	•
Fuel filter pump: 35 l/min **(9 gpm)**, with automatic shut-off	•	•
Alternator, 80 A	•	•
Electric/Electronic control system		
Contronics	•	•
– Advanced mode control system	•	•
– Self-diagnostic system	•	•
Machine status indication	•	•
Engine speed sensing power control	•	•
Automatic idling system	•	•
One-touch power boost	•	•
Safety stop/start function	•	•
Adjustable LCD color monitor	•	•
Master electrical disconnect switch	•	•
Engine restart prevention circuit	•	•
High-capacity halogen lights:	•	•
– Frame-mounted 2	•	•
– Boom-mounted 2	•	•
Batteries,		
2 x 12 V / 100 Ah (ECR145D)	•	
2 x 12 V / 150 Ah (ECR235D)		•
Start motor, 24 V / 5.5 kW	•	•
Travel alarm	•	•
Hydraulic system		
Overload warning device	•	•
Automatic sensing hydraulic system	•	•
– Summation system	•	•
– Boom priority	•	•
– Arm priority	•	•
– Swing priority	•	•
ECO mode fuel saving technology	•	•
Boom, arm and bucket regeneration valves	•	•
Swing anti-rebound valves	•	•
Boom and arm holding valves	•	•
Multi-stage filtering system	•	•
Cylinder cushioning	•	•
Cylinder contamination seals	•	•
Auxiliary hydraulic valve	•	•
Automatic two-speed travel motors	•	•
Hydraulic oil, long life oil, ISO VG 46	•	•
Frame		
Access way with handrail	•	•
Tool storage area	•	•
Punched metal anti-slip plates	•	•
Undercover (heavy-duty)	•	•
Full height counterweight:		
3 200 kg **(7,060 lb)**	•	
6 400 kg **(14,110 lb)**		•
Cab and interior		
ROPS (ISO12117-2) certified cab	•	•
Silicon oil and rubber mounts with spring	•	•
Travel pedals and hand levers	•	•
Adjustable operator seat and joystick control console	•	•
Control joysticks with 4 switches each	•	•
Heater & air-conditioner, automatic	•	•
Flexible antenna	•	•
AM/FM stereo with CD player and MP3 input	•	•
Hydraulic safety lock lever	•	•
Cab, all-weather sound suppressed, includes:	•	•
– Cup holders	•	•
– Door locks	•	•
– Tinted glass	•	•
– Floor mat	•	•
– Horn	•	•
– Large storage area	•	•
– Pull-up type front window	•	•
– Removable lower windshield	•	•
– Seat belt	•	•
– Safety glass	•	•
– Sun screens, front, roof, rear	•	•
– Rain shield	•	•
– Windshield wiper with intermittent feature	•	•
Opening roof hatch	•	•
Rear view camera	•	•
Master key	•	•
Undercarriage		
Undercover (heavy-duty)	•	•
Hydraulic track adjusters	•	•
Greased and sealed track link	•	•
Track Guard	•	•
Track shoes		
600 mm with triple grousers	•	•
Digging equipment		
Boom: 4,6 m **(15' 1")** monoblock	•	
Arm: 2,5 m **(8' 2")**	•	
Boom: 5,7 m **(18' 8")** monoblock		•
Arm: 2,9 m **(9' 6")**		•
Manual centralized lubrication	•	•

OPTIONAL EQUIPMENT

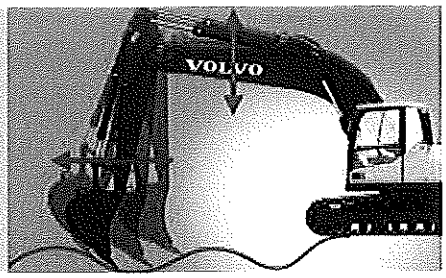
	ECR145D	ECR235D
Engine		
Block heater: 120 V, 240 V	•	•
Diesel coolant heater, 5 kW	•	•
Water separator with heater	•	•
Auto engine shutdown	•	•
Electric		
Extra lights:	•	•
– Cab-mounted 2	•	•
– Boom-mounted 2	•	•
– Counterweight-mounted 1	•	•
Anti-theft system	•	•
Rotating warning beacon	•	•
Hydraulic system		
Hose rupture valve: boom	•	•
Hose rupture valve: arm	•	•
Boom float function with HRV	•	•
Boom float function without HRV	•	•
Hydraulic piping:		
– Attachment management system (up to 18 programmable memories)	•	•

OPTIONAL EQUIPMENT

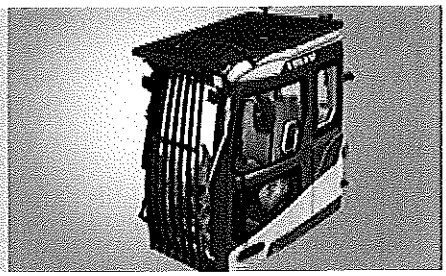
	ECR145D	ECR235D
– Hammer & shear, 1 and 2 pump flow	•	•
– Hammer & shear: variable flow and pressure pre-setting	•	•
– Slope & rotator	•	•
– Grapple	•	•
– Oil leak (drain) line	•	•
– Quick coupler piping	•	•
Volvo hydraulic quick coupler S6	•	
Volvo hydraulic quick coupler S1		•
Volvo hydraulic quick coupler U14	•	
Volvo hydraulic quick coupler U21		•
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, longlife oil 32	•	•
Hydraulic oil, longlife oil 46	•	•
Hydraulic oil, longlife oil 68	•	•
Cab and interior		
Fabric seat with heater	•	•
Fabric seat with heater and air suspension	•	•
Pilot control pattern change	•	•
Falling object guard (FOG)	•	•
– Cab-mounted	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Smoker kit (ashtray and lighter)	•	•
Safety net for front window	•	•
Anti-vandalism kit	•	•
Specific key	•	•
Undercarriage		
Full track guard		•
Track shoes		
500 mm **(20")** / 750 mm **(30")** with triple grousers	•	
600 mm **(24")** / 700 mm **(28")** with HD triple grousers.	•	
500 mm **(20")** with rubber shoe	•	
700 mm **(28")** / 800 mm **(32")** / 900 mm **(36")** with triple grousers		•
700 mm **(28")** with HD triple grousers.		•
700 mm **(28")** with double grousers		•
600 mm **(24")** with rubber shoe		•
Digging equipment		
Boom: 4,72 m **(15' 6")** 2 piece boom	•	
Boom: 5,76 m **(18' 11")** 2 piece boom		•
Arm: 2,1 m **(6' 11")**, 3,0 m **(9' 10")**	•	
Arm: 2,5 m **(8' 2")** HD		•
Linkage with lifting eye	•	•
Extended greasing bushing	•	•
Service		
Tool kit, daily maintenance	•	•
Tool kit, Compact	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT

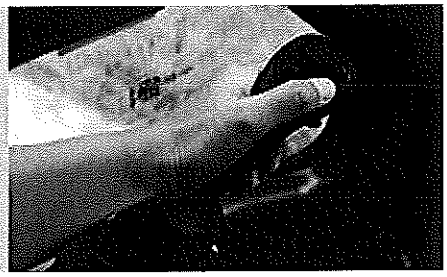
Boom float



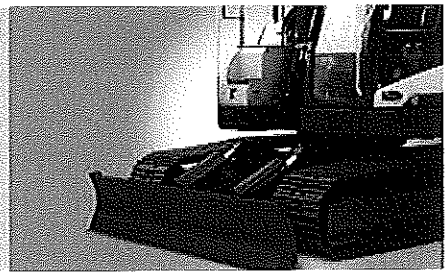
Falling object guard



Proportional joystick

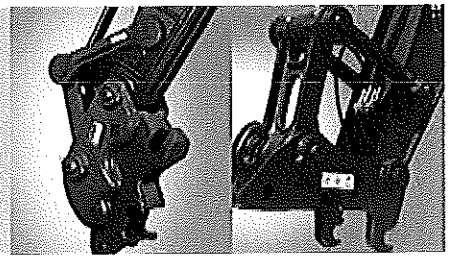


Dozer blade



Two piece boom

UQF/SQF quick couplers



VOLVO EXCAVATORS

ECR58D, ECR88D

5.7-9.6 t (12,550 - 20,950 lbs) 49-68 hp

A PASSION FOR PERFORMANCE.

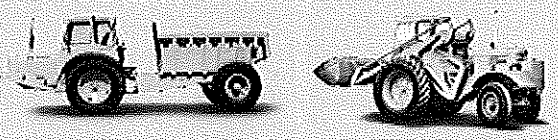
At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



You learn a lot in 180 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

We have a passion for performance.

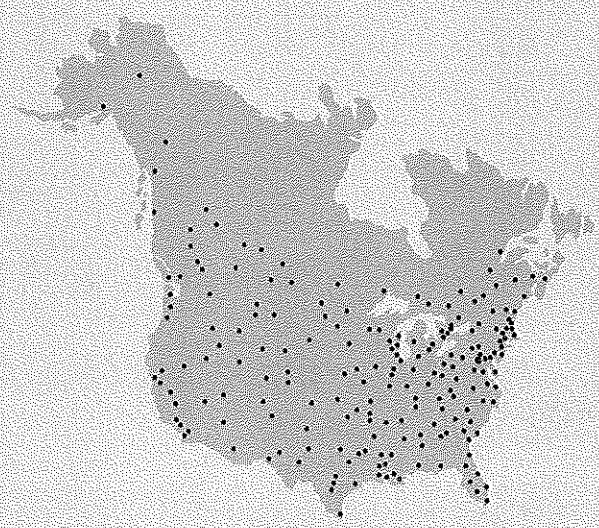
A strong, dedicated, capable dealer network.

Our dealers are strategically located throughout North America to provide the equipment you need and the parts and service support you demand for a productive and profitable operation.

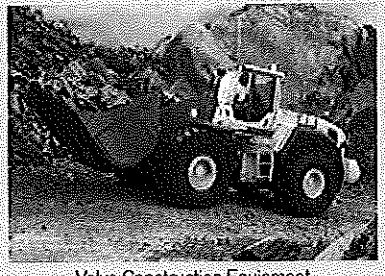
The strength of our dealer network is enhanced with extensive individualized product and product support training at our state-of-the-art Technical Training Center in Asheville and through hands-on training. At our nearby 80-acre Product Demonstration Center, visitors operate equipment from our entire product line under a variety of simulated working conditions. Both facilities are in year-round use by our dealers and customers – more than 2,000 visit each year. **Building the best starts right here.**

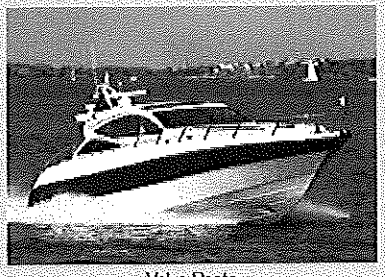
The products designed and manufactured by Volvo Construction Equipment have their beginnings at the most advanced Research & Design centers in the industry. Volvo CE machines are designed in 11 R&D centers and produced in 15 manufacturing facilities across the world.

The major R&D center and manufacturing plant in the Americas is located in Shippensburg, Pennsylvania. This facility has been in operation for over 30 years and – with its recently added 200,000 sq. ft. expansion – now covers 570,000 sq. ft. on an 80 acre campus. Dedicated work teams and highly advanced technologies and techniques using the Volvo Production System ensure continuous quality improvements, labor savings and cost control to reach the high quality that our customers have come to expect from Volvo.



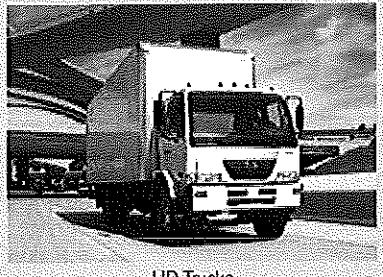
Mack Trucks


Volvo Construction Equipment


Volvo Penta

Volvo Trucks

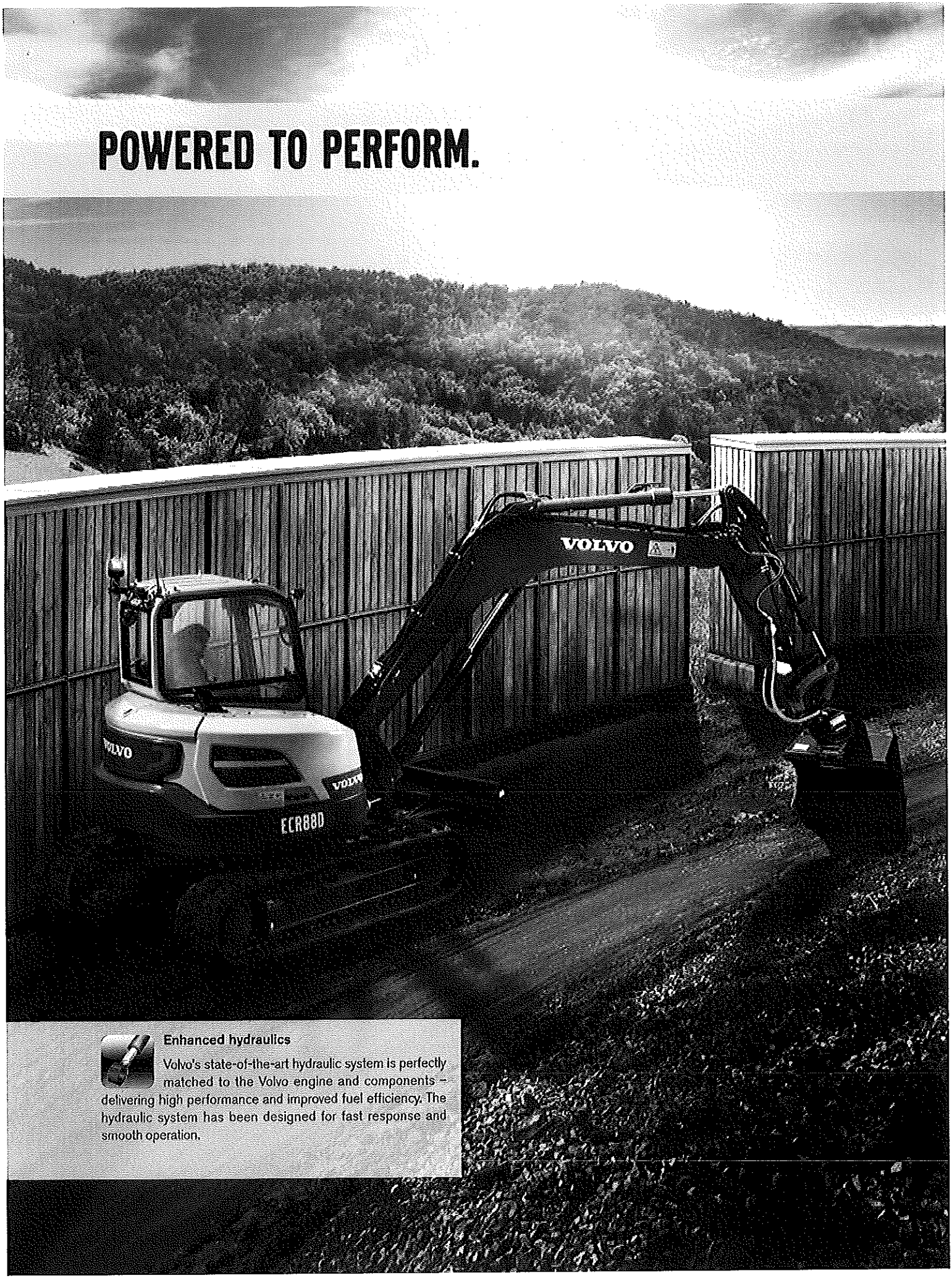
Renault Trucks


UD Trucks

Volvo Buses

Volvo Financial Services

POWERED TO PERFORM.



Enhanced hydraulics

Volvo's state-of-the-art hydraulic system is perfectly matched to the Volvo engine and components – delivering high performance and improved fuel efficiency. The hydraulic system has been designed for fast response and smooth operation.

Volvo proudly introduces the new ECR58D and ECR88D compact short swing radius excavators. Featuring a powerful Volvo engine and perfectly matched hydraulic system, each machine delivers high performance, excellent control and low fuel consumption, whether working in road construction, utilities, landscaping or any other application.

Tier 4f engine

Volvo's premium Tier 4f engine delivers superior performance and low fuel consumption. The engine features an Exhaust After Treatment System (EATS) to lower emissions and a regeneration process that does not interrupt operation, performance or productivity.

Slew and boom offset

Slew and boom offset movements are controlled simultaneously for easy and fast positioning of the machine. Joystick control enables precise, smooth and effortless command of the slew and boom offset.

Tractive force

Change text to: Increased tractive effort through high system pressure delivers impressive performance when dozing or travelling over rough terrain

STABILITY YOU CAN COUNT ON.

If you're looking for the performance of a conventional excavator but need to work in confined areas, the Volvo ECR series has the machine for you. With a "new" wraparound counterweight and "re-designed" heavy duty undercarriage these ECRs have an impressive lift capacity, reducing the requirement for an expensive larger model. Volvo offers customers built-in serviceability with safe and convenient maintenance access for maximum uptime.

Single pivot pin

Volvo uses a single pivot design that achieves maximum support between main frame and front equipment, This concept increases, stability, durability and lifetime of the components.

Service access

For safe and easy access, all service check points are located under the wide-opening engine hood and are accessed from ground level. Grouped filters ensure regular maintenance is straightforward and uptime is maximized.

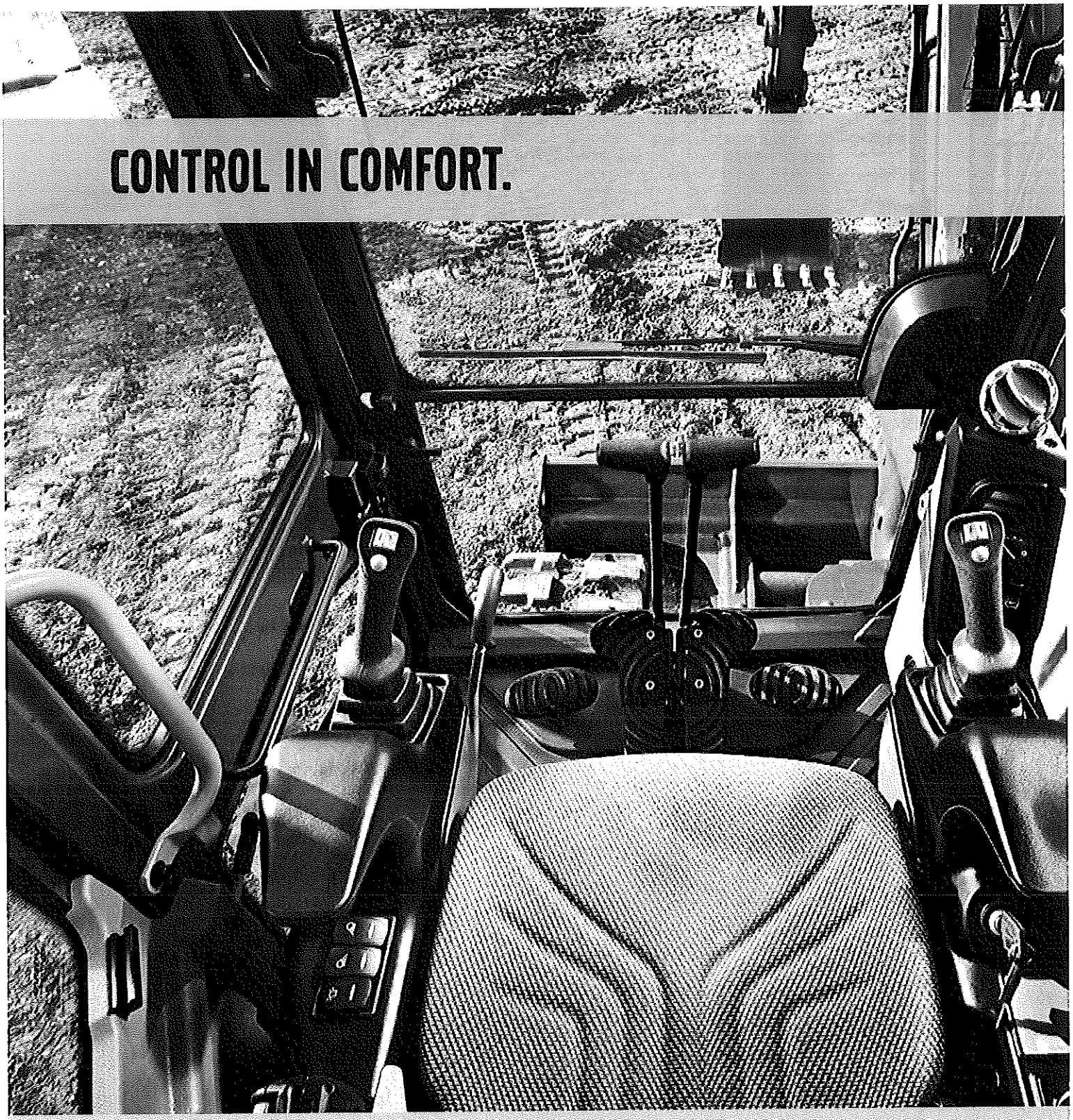
MATRIS and VCADS Pro

For increased uptime, Volvo's high-tech, computer-based MATRIS tool allows you to monitor machine usage and analyze machine operation. VCADS Pro analysis and programming software provides fast diagnostics.

Stability

Design improvements including a heavier wraparound counterweight have shifted the center of gravity towards the rear of the machine. Together with a strong undercarriage, this delivers superior stability while lifting bigger loads.

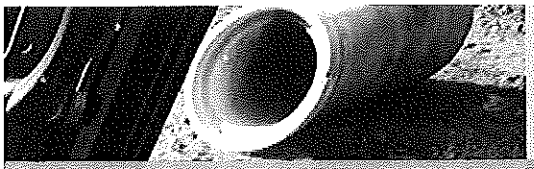
CONTROL IN COMFORT.

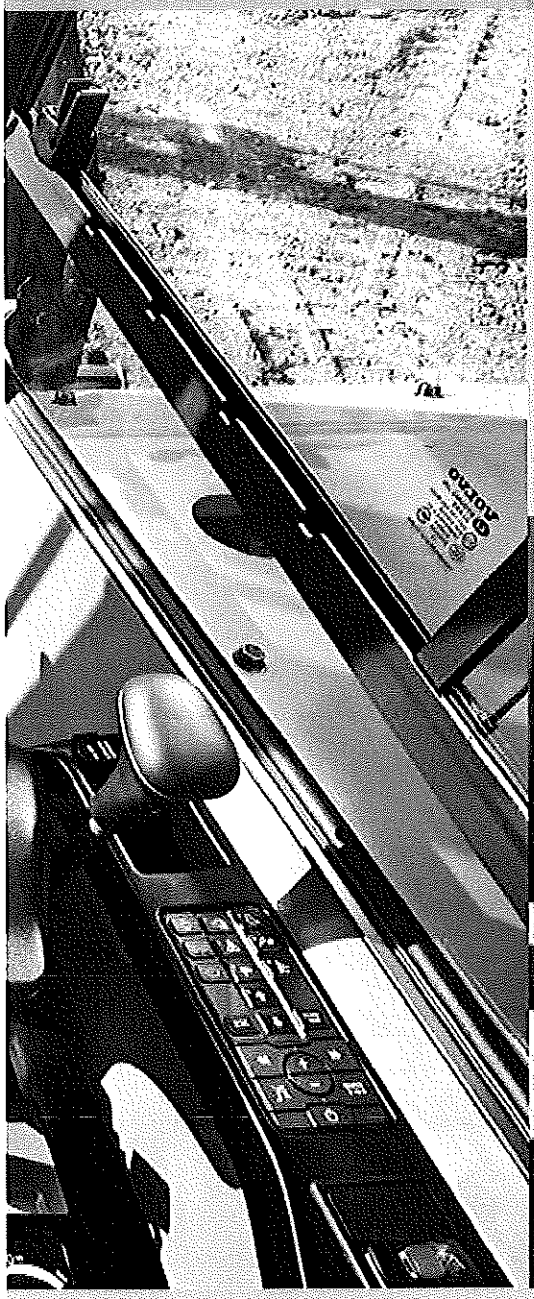


Volvo Cab

All-around visibility from slim cab pillars and large expanses of glass is at the center of Volvo's cab design. The ROPS certified cab features vibration and noise isolation, ergonomic controls and an adjustable seat for increased comfort, reduced fatigue and increased productivity.

At Volvo we know that when operators are comfortable they experience less fatigue and work more productively. That's why the premium, Volvo designed cab provides superior visibility, a safe and spacious working environment and easy to access controls. Step inside and see the results for yourself.



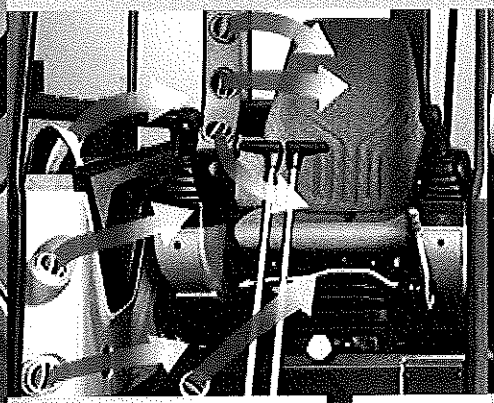


Climate control

Control your climate with Volvo's powerful, industry-leading climate control system. With seven well-spaced vents quickly heating or cooling the cab, this air circulation and defrosting system increases comfort and productivity.

Keypad

The majority of switches are integrated in one centralized keypad on the right-hand console. The operator can easily control the I-ECU monitor and audio system for increased comfort.



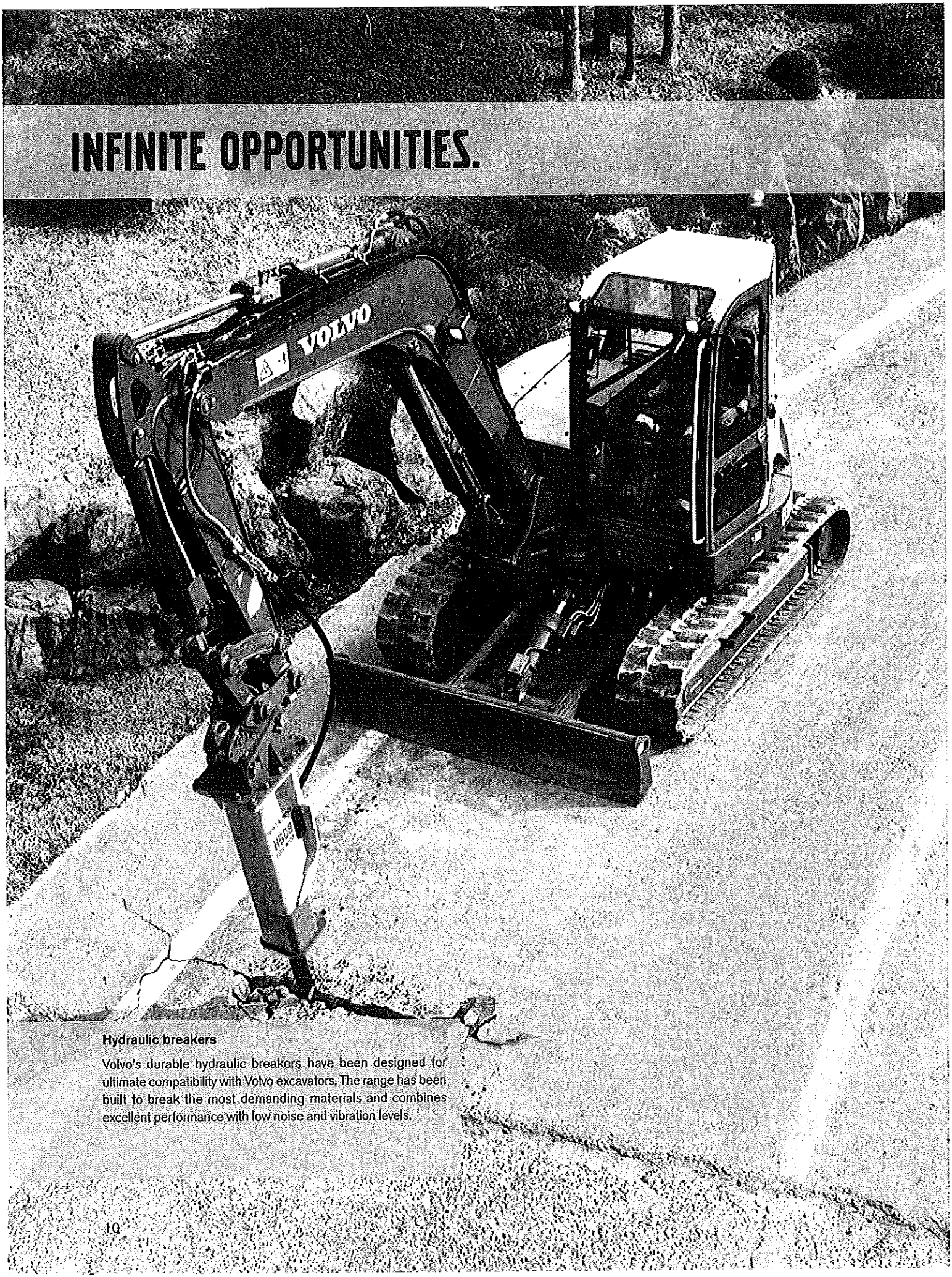
Proportional joysticks

Via the joystick controls, the operator can easily adjust the direction and amount of hydraulic flow sent to the attachment. Benefit from the correct speed and power for optimal attachment operation.

Storage

The Volvo cab features ample storage locations for personal belongings including a storage box, side pocket, phone storage, cup holder and a pocket behind the seat.

INFINITE OPPORTUNITIES.



Hydraulic breakers

Volvo's durable hydraulic breakers have been designed for ultimate compatibility with Volvo excavators. The range has been built to break the most demanding materials and combines excellent performance with low noise and vibration levels.

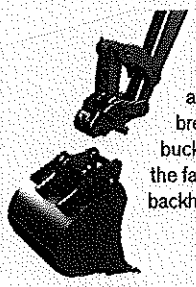
Get the most out of your compact short swing radius excavator and access more segments and applications with Volvo's comprehensive range of attachments – designed to work in perfect harmony with Volvo machines. Increase your versatility, effectively perform a variety of tasks and experience new levels of productivity with the right attachment for your specific requirements.

Interfaces

Direct fit

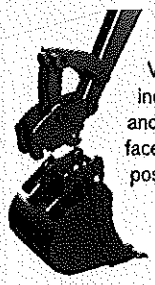
For maximum productivity when only operating in one application, Volvo's direct fit attachments provide the best performance and shortest tip radius.

Volvo mechanical attachment carrier



Volvo's dedicated attachment carrier pick up Volvo hydraulic attachments including breakers, thumbs and buckets for use in both the face shovel and normal backhoe position.

Volvo hydraulic attachment carrier

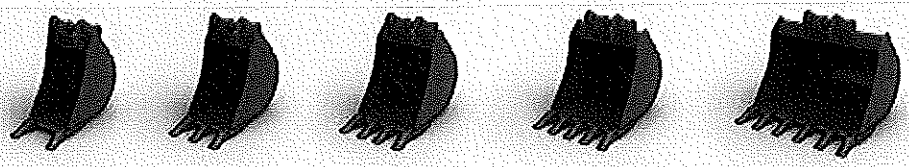


Volvo's universal pin grabber attachment carrier picks up Volvo hydraulic attachments including breakers, thumbs and buckets for use in both the face shovel and normal backhoe position.

Buckets

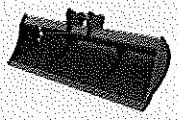
General purpose buckets

The perfect tool for trenching and handling in a variety of soil conditions. Available in different widths.



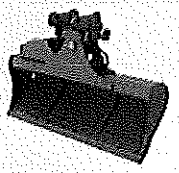
Fixed ditching buckets

Ideal for ditch cleaning, grading, landscaping and backfilling.

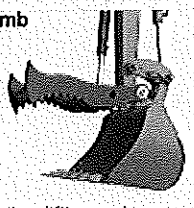


Tiltable ditching bucket

This bucket can be tilted 45o to each side making it a flexible and versatile solution for grading, landscaping, ditch cleaning and backfilling.



Volvo hydraulic thumb



Designed to work with both Volvo direct fit buckets and with quick coupler in various materials. Used for piling, placing, loading, lifting and carrying.

Volvo Tooth System and wear parts

General purpose

Self-sharpening, general purpose tooth with good penetration and long service life.

Twin pick

Twin pick point with sharp, dual point profile. Ideal for compact or frozen ground.

Pick point

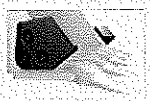
Intended for use in extremely compact materials.

Spade nose

Designed for finishing work such as leveling, grading, cleaning and backfilling.

Bottom leg adapter

A long (one and a half) bottom leg adapter for welding to both sides of the cutting edge.



Side cutter

Side cutters ensure longer bucket life by protecting the side plates and corner welds.

TAKE A CLOSER LOOK AT THE ECR58D.

Auto-idle

Engine speed is reduced to idle when the controls are inactive for more than five seconds or the left-hand console is raised – reducing fuel consumption and noise.

Hydraulics

The hydraulic system is perfectly matched to the engine and components for fast response and smooth operation.

Optional hydraulics

For increased versatility, auxiliary hydraulic systems are available to enable the operation of a wide range of attachments.

MATRIS and VCADS Pro

The MATRIS tool monitors machine usage and operation. VCADS Pro analysis and programming software provides fast diagnostics.

Dozer Blade with Float Function

The dozer blade float function 'floats' the dozer blade over the ground for improved leveling control and fuel efficiency.

Cab

Volvo's purpose designed cab offers excellent all-round viability, enhanced by the slim cab pillars and large windows.

Service access

All service check points are accessed from ground level. Grouped filters make regular maintenance easy.

Volvo engine

Tier 4f compliant Volvo Engine delivers superior performance with low fuel consumption.

Stability

A heavy wraparound counterweight and a strong undercarriage deliver superior stability and the ability to lift bigger loads.

Undercarriage

Durable and strong X-shape undercarriage ensures superior stability and increases machine lifetime.

Single pivot pin

Volvo uses a single pivot design that achieves maximum support between main frame and front equipment, This concept increases, stability, durability and lifetime of the components

ECR88D – BUILT TO GET THE JOB DONE.

Auto-Idle

Engine speed is reduced to idle when the controls are inactive for more than five seconds or the left-hand console is raised – reducing fuel consumption and noise.

Hydraulics

The hydraulic system is perfectly matched to the engine and components for fast response and smooth operation.

Optional hydraulics

For increased versatility, auxiliary hydraulic systems are available to enable the operation of a wide range of attachments.

MATRIS and VCADS Pro

The MATRIS tool monitors machine usage and operation. VCADS Pro analysis and programming software provides fast diagnostics.

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Cab

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Volvo engine

Premium Tier 4f Volvo Engine delivers superior performance with low fuel consumption.

Service access

All service check points are accessed from ground level. Grouped filters make regular maintenance easy.

Stability

A heavy counterweight and a strong undercarriage deliver superior stability and the ability to lift bigger loads.

Undercarriage

Durable and strong X-shape undercarriage ensures superior stability and increases machine lifetime.

Single pivot pin

Volvo uses a single pivot design that achieves maximum support between main frame and front equipment, This concept increases, stability, durability and lifetime of the components

ADDING VALUE TO YOUR BUSINESS.

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to increasing the positive return on your investment and maximizing uptime.

Customer Support Agreements

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.

Service Network

In order to respond to your needs faster, a Volvo expert is on the way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.

Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.

VOLVO ECR58D IN DETAIL.

Engine

The new, Tier 4f compliant diesel engine is equipped with four-cylinder, vertical, in-line, turbocharged, air to air intercooler, and water cooled.

Model		Volvo	D2.6H	
Max. power at	r/s / r/min		33.3 / 2,000	
Net (ISO 9249/SAEJ1349)	kW / hp		35 / 47	
Gross (SAE J1995)	kW / hp		36.5 / 49	
Max. torque	Nm/r/min		210/1,300	
	lb.ft/r/min		155/1,300	
No. of cylinders			4	
Displacement	l	cu.in	2.615	160
Bore	mm	in	87	3.43
Stroke	mm	in	110	4.33

Electrical system

Voltage	V	12
Battery capacity	V / Ah	1 x 12 / 100
Alternator	V / Ah	12 / 70
Starter motor output	V / kW	12 / 3

Hydraulic system

Closed-Center Load-Sensing (CCLS) system with load independent functions.

Main pump: Variable-displacement pump				
Maximum flow	l/min	gpm	1 x 126	1 x 33
Pilot pump: Gear pump				
Maximum flow	l/min	gpm	1 x 14	1 x 4
Relief valve setting				
Implement	Mpa	psi	23.5	3,410
Travel circuit	Mpa	psi	23.5	3,410
Swing circuit	Mpa	psi	20.6	2,990
Pilot circuit	Mpa	psi	3.4	500

Swing system

Direct drive swing with radial piston motor-maintenance free type (no reduction gear) and automatic holding brake anti-rebound valve.

Max. swing speed		r/min	9.22	
Max. swing torque	kNm	lb.ft	13.2	9,710

Undercarriage

Robust X-shaped frame with track chains.

Track shoes			2 x 39	
Link pitch	mm	in	135	5.3
Shoe width - steel	mm	in	380/500	15/20
Shoe width - rubber	mm	in	400	16
Bottom rollers			2 x 5	
Top rollers			2 x 1	

Travel system

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released.

Travel speed (low / high)	km/h	mph	2.1 / 4.2	1.3 / 2.6
Max. drawbar pull	kN	lb	49	10,970
Gradeability		°	35	

Service refill capacities

Fuel tank	l	gal	65	17
Hydraulic system, total	l	gal	90	24
Hydraulic tank	l	gal	52	14
Engine oil	l	gal	11.9	3.1
Engine coolant	l	gal	8	2.1
Travel reduction unit	l	gal	2 x 1.6	2 x 0.4

Sound Level

Sound level in cab according to ISO 6396

LpA (standard)	dB(A)	73

External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC

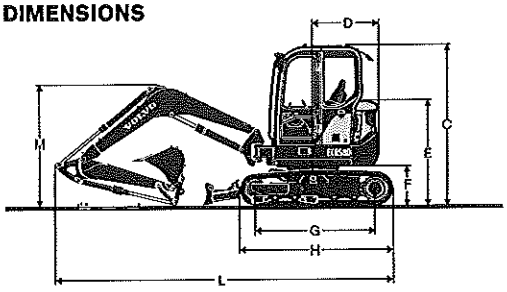
LpA (standard)	dB(A)	97

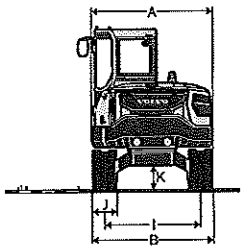
Buckets

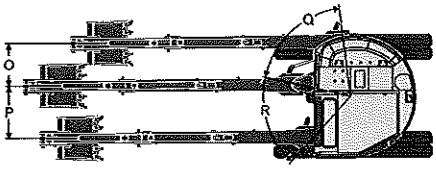
	Width		Weight		Capacity	
	mm	in	kg	lb	l	cu.in
Direct bucket	355	14	97	210	70	4,270
	450	18	93	210	99	6,040
	600	24	116	260	144	8,970
	750	30	131	290	190	11,590
	900	35	149	330	235	14,340
Quick coupler bucket	450	18	105	230	99	6,040
	600	24	132	290	144	8,970
	750	30	151	330	190	11,590

SPECIFICATIONS.

DIMENSIONS



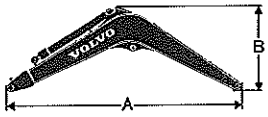




Machine							
Boom		m	ft-in	2.9	9' 6"	2.9	9' 6"
Arm		m	ft-in	1.54	5' 1"	1.94	6' 4"
A	Overall width of upper structure	mm	ft-in	2 000	6' 7"	2 000	6' 7"
B	Overall width	mm	ft-in	2 000	6' 7"	2 000	6' 7"
C	Overall height of cab	mm	ft-in	2 615	8' 7"	2 615	8' 7"
D	Tail swing radius	mm	ft-in	1 060	3' 6"	1 060	3' 6"
E	Overall height of engine hood	mm	ft-in	1 710	5' 7"	1 710	5' 7"
F	Counterweight clearance *	mm	ft-in	670	2' 2"	670	2' 2"
G	Tumbler length	mm	ft-in	1 950	6' 5"	1 950	6' 5"
H	Track length	mm	ft-in	2 495	8' 2"	2 495	8' 2"
I	Track gauge	mm	ft-in	1 600	5' 3"	1 600	5' 3"
J	Shoe width	mm	ft-in	400	1' 4"	400	1' 4"
K	Min. ground clearance *	mm	ft-in	360	1' 2"	360	1' 2"
L	Overall length	mm	ft-in	5 550	18' 3"	5 580	18' 4"
M	Overall height of boom	mm	ft-in	2 000	6' 7"	2 200	7' 2"
O	Boom swing distance	mm	ft-in	695	2' 3"	695	2' 3"
P	Boom swing distance	mm	ft-in	860	2' 10"	860	2' 10"
Q	Boom swing angle	°		70		70	
R	Boom swing angle	°		60		60	

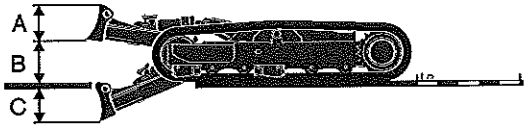
* Without shoe grouser

Boom and Arm



				Boom		Arm		
		m	ft-in	2.9	9' 6"	1.54	5' 1"	1.94	6' 4"
A	Length	mm	ft-in	3 008	9' 10"	2 023	6' 8"	2 423	7' 11"
B	Heigth	mm	ft-in	1 024	3' 4"	459	1' 6"	473	1' 7"
	Width	mm	ft-in	300	1' 0"	295	1' 0"	295	1' 0"
	Weight	kg	lb	300	660	180	400	225	500

Boom: Includes cylinder, piping and pin, excludes boom cyl. Pin. Arm: Includes cylinder, linkage and pin.



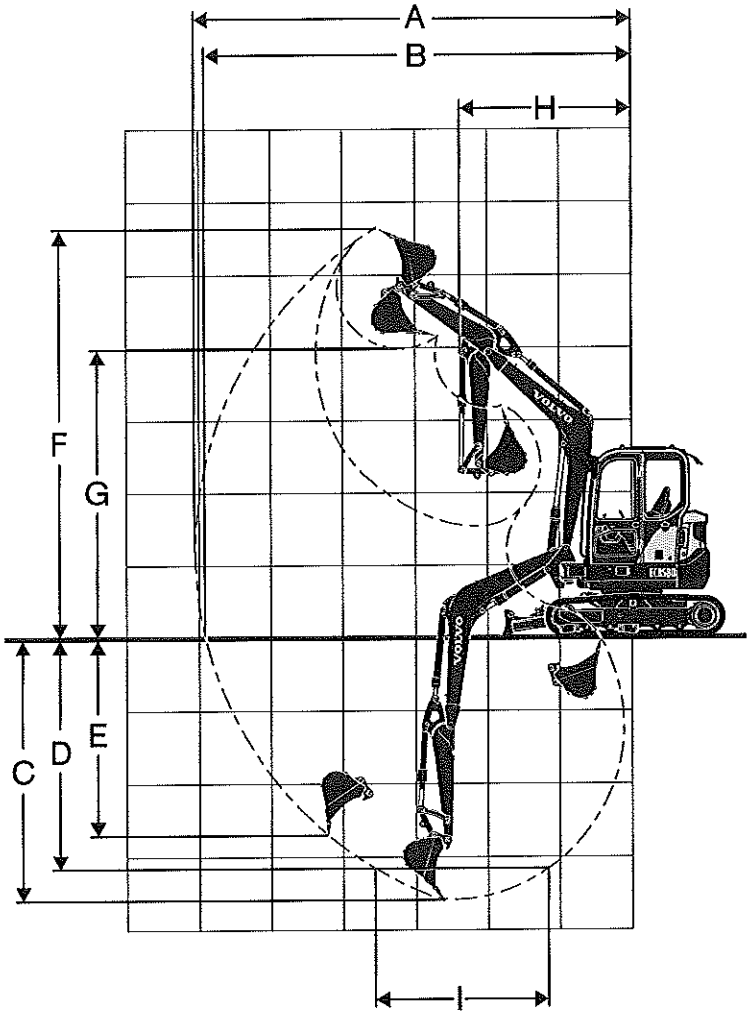
Dozer blade					
A	Height	mm	ft-in	373	1' 3"
	Width	mm	ft-in	2 000	6' 7"
B	Lifting height	mm	ft-in	442	1' 5"
C	Digging depth	mm	ft-in	457	1' 6"

MACHINE WEIGHTS AND GROUND PRESSURE

	Shoe width		Operating weight		Ground pressure	
	mm	in	kg	lb	kPa	psi
Mono boom 2.9 m 9' 6", Arm 1.54 m 5' 1", Bucket 129 kg (142 l) 280 lb, Counterweight 580 kg 1,280 lb						
Steel track	380	15	5 940	13,100	35.7	5.2
	500	20	6 040	13,320	27.6	4.0
Rubber track	400	16	5 820	12,830	33.2	4.8
Rubber pad	400	16	5 975	13,170	33.8	4.9
Mono boom 2.9 m 9' 6", Arm 1.94 m 6' 4", Bucket 129 kg (142 l) 280 lb, Counterweight 580 kg 1,280 lb						
Steel track	380	15	6 000	13,230	36.0	5.2
	500	20	6 100	13,450	27.9	4.0
Rubber track	400	16	5 880	12,960	33.6	4.9
Rubber pad	400	16	6 035	13,310	34.1	4.9

ECR58D SPECIFICATIONS.

WORKING RANGES



Description		Unit					
Boom		m	ft-in	2.9	9' 6"	2.9	9' 6"
Arm		m	ft-in	1.54	5' 1"	1.94	6' 4"
A	Max. digging reach	mm	ft-in	6 000	19' 8"	6 370	20' 11"
B	Max. digging reach on ground	mm	ft-in	5 850	19' 2"	6 230	20' 5"
C	Max. digging depth	mm	ft-in	3 540	11' 7"	3 940	12' 11"
D	Max. digging depth (l=2.44 mm / 8' level)	mm	ft-in	3 100	10' 2"	3 550	11' 8"
E	Max. vertical wall digging depth	mm	ft-in	2 310	7' 7"	2 680	8' 10"
F	Max. cutting height	mm	ft-in	5 570	18' 3"	5 810	19' 1"
G	Max. dumping height	mm	ft-in	4 040	13' 3"	4 280	14' 1"
H	Min. front swing radius	mm	ft-in	2 410	7' 11"	2 450	8' 0"
Digging forces with direct fit bucket							
Breakout force (bucket)	SAE J1179	kN	lb	34.6	7,780	34.6	7,780
	ISO 6015	kN	lb	39.8	8,950	39.8	8,950
Tearout force (arm)	SAE J1179	kN	lb	26.1	5,870	22.1	4,970
	ISO 6015	kN	lb	26.6	5,980	22.5	5,060
Rotation angle, bucket		°		195		195	

LIFTING CAPACITY ECR58D

Lifting capacity at the arm end without bucket.
For lifting capacity including bucket. Simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting point			1.0 m, 3.3 ft		2.0 m, 6.6 ft		3.0 m, 9.9 ft		4.0 m, 13.2 ft		5.0 m, 16.5 ft		Max. reach		
	m	ft		Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Max.
	4.0		kg	-	-	-	-	-	-	*1 110	1 000	-	-	*1 130	930	4.2 m
		13.2	lb	-	-	-	-	-	-	*2,470	2,190	-	-	*2,500	2,080	13.6 ft
	3.0		kg	-	-	-	-	-	-	*1 130	990	-	-	*1 100	720	4.8 m
		9.9	lb	-	-	-	-	-	-	*2,490	2,170	-	-	*2,440	1,600	15.7 ft
	2.0		kg	-	-	-	-	*1 790	1 490	*1 310	950	*1 120	660	*1 110	630	5.1 m
Boom 2.9 m, 9' 6"		6.6	lb	-	-	-	-	*3,900	3,270	*2,880	2,080	*2,470	1,440	*2,460	1,400	16.8 ft
Arm 1.54 m, 5' 1"	1.0		kg	-	-	-	-	*2 320	1 380	*1 520	900	*1 180	640	*1 130	600	5.2 m
Shoe 400 mm, 16"		3.3	lb	-	-	-	-	*5,060	3,020	*3,330	1,970	*2,590	1,400	*2,510	1,330	17.0 ft
CWT 580 kg / 1,280 lb	0.0		kg	-	-	-	-	*2 450	1 330	*1 620	870	*1 170	630	*1 160	620	5.0 m
Dozer blade down		0.0	lb	-	-	-	-	*5,360	2,900	*3,540	1,900	-	-	*2,570	1,380	16.5 ft
	-1.0		kg	*2 460	*2 460	*3 140	2 670	*2 250	1 320	*1 520	860	-	-	*1 180	710	4.6 m
		-3.3	lb	*5,440	*5,440	*7,000	5,830	*4,930	2,900	*3,310	1,890	-	-	*2,610	1,580	15.0 ft
	-2.0		kg	-	-	*2 590	*2 590	*1 680	1 360	-	-	-	-	*1 140	970	3.8 m
		-6.6	lb	-	-	*5,650	*5,650	*3,660	2,970	-	-	-	-	*2,520	2,170	12.3 ft
	4.0		kg	-	-	-	-	-	-	*1 110	940	-	-	*1 130	880	4.2 m
		13.2	lb	-	-	-	-	-	-	*2,470	2,060	-	-	*2,500	1,960	13.6 ft
	3.0		kg	-	-	-	-	-	-	*1 130	930	-	-	930	680	4.8 m
		9.9	lb	-	-	-	-	-	-	*2,490	2,040	-	-	2,050	1,500	15.7 ft
	2.0		kg	-	-	-	-	*1 790	1 400	1 220	890	850	620	820	590	5.1 m
Boom 2.9 m, 9' 6"		6.6	lb	-	-	-	-	*3,900	3,070	2,670	1,950	1,860	1,350	1,810	1,310	16.8 ft
Arm 1.54 m, 5' 1"	1.0		kg	-	-	-	-	1 810	1 290	1 170	840	830	600	780	560	5.2 m
Shoe 400 mm, 16"		3.3	lb	-	-	-	-	3,960	2,820	2,560	1,850	1,820	1,310	1,740	1,250	17.0 ft
CWT 580 kg / 1,280 lb	0.0		kg	-	-	-	-	1 760	1 240	1 130	810	820	590	810	580	5.0 m
Dozer blade up		0.0	lb	-	-	-	-	3,840	2,710	2,480	1,780	-	-	1,800	1,290	16.5 ft
	-1.0		kg	*2 460	*2 460	*3 140	2 460	1 750	1 230	1 130	800	-	-	930	670	4.6 m
		-3.3	lb	*5,440	*5,440	*7,000	5,380	3,840	2,700	2,470	1,760	-	-	2,060	1,470	15 ft
	-2.0		kg	-	-	*2 590	2 520	*1 680	1 270	-	-	-	-	*1 140	910	3.8 m
		-6.6	lb	-	-	*5,650	5,510	*3,660	2,780	-	-	-	-	*2,520	2,030	12.3 ft
	5.0		kg	-	-	-	-	-	-	-	-	-	-	*1 050	*1 050	3.6 m
		16.5	lb	-	-	-	-	-	-	-	-	-	-	*2,340	*2,340	11.7 ft
	4.0		kg	-	-	-	-	-	-	*910	*910	-	-	*960	780	4.6 m
		13.2	lb	-	-	-	-	-	-	*2,030	*2,030	-	-	*2,120	1,730	15.2 ft
	3.0		kg	-	-	-	-	-	-	*970	*970	*960	680	*910	620	5.2 m
		9.9	lb	-	-	-	-	-	-	*2,150	*2,150	*2,130	1,480	*2,000	1,380	17.1 ft
	2.0		kg	-	-	-	-	*1 490	*1 490	*1 170	960	*1 020	660	*910	550	5.5 m
Boom 2.9 m, 9' 6"		6.6	lb	-	-	-	-	*3,260	*3,260	*2,570	2,090	*2,250	1,440	*2,020	1,220	18.0 ft
Arm 1.94 m, 6' 4"	1.0		kg	-	-	-	-	*2 090	1 370	*1 400	890	*1 110	630	*970	530	5.6 m
Shoe 400 mm, 16"		3.3	lb	-	-	-	-	*4,560	3,010	*3,080	1,950	*2,440	1,380	*2,150	1,170	18.3 ft
CWT 580 kg / 1,280 lb	0.0		kg	-	-	*1 500	*1 500	*2 370	1 280	*1 560	840	*1 160	610	*1 040	540	5.4 m
Dozer blade down		0.0	lb	-	-	*3,350	*3,350	*5,190	2,810	*3,410	1,850	*2,550	1,330	*2,290	1,190	17.8 ft
	-1.0		kg	*1 960	*1 960	*2 680	2 530	*2 310	1 260	*1 550	820	*1 080	600	*1 070	600	5.0 m
		-3.3	lb	*4,330	*4,330	*5,980	5,520	*5,060	2,770	*3,380	1,810	-	-	*2,360	1,330	16.5 ft
	-2.0		kg	*3 090	*3 090	*3 180	2 590	*1 920	1 290	*1 260	840	-	-	*1 070	770	4.3 m
		-6.6	lb	*6,870	*6,870	*6,920	5,660	*4,190	2,820	*2,730	1,850	-	-	*2,370	1,700	14.1 ft
	-3.0		kg	-	-	*1 450	*1 450	-	-	-	-	-	-	*890	*890	2.9 m
		-9.9	lb	-	-	*3,080	*3,080	-	-	-	-	-	-	*1,940	*1,940	9.5 ft
	5.0		kg	-	-	-	-	-	-	-	-	-	-	*1 050	*1 050	3.6 m
		16.5	lb	-	-	-	-	-	-	-	-	-	-	*2,340	*2,340	11.7 ft
	4.0		kg	-	-	-	-	-	-	*910	*910	-	-	*960	730	4.6 m
		13.2	lb	-	-	-	-	-	-	*2,030	*2,030	-	-	*2,120	1,630	15.2 ft
	3.0		kg	-	-	-	-	-	-	*970	950	870	630	810	580	5.2 m
		9.9	lb	-	-	-	-	-	-	*2,150	2,080	1,910	1,390	1,790	1,300	17.1 ft
	2.0		kg	-	-	-	-	*1 490	1 430	*1 170	900	850	620	720	520	5.5 m
Boom 2.9 m, 9' 6"		6.6	lb	-	-	-	-	*3,260	3,140	*2,570	1,970	1,860	1,350	1,600	1,140	18.0 ft
Arm 1.94 m, 6' 4"	1.0		kg	-	-	-	-	1 810	1 280	1 160	830	820	590	690	490	5.6 m
Shoe 400 mm, 16"		3.3	lb	-	-	-	-	3,960	2,810	2,540	1,830	1,800	1,290	1,530	1,090	18.3 ft
CWT 580 kg / 1,280 lb	0.0		kg	-	-	*1 500	*1 500	1 710	1 190	1 110	790	800	560	710	500	5.4 m
Dozer blade up		0.0	lb	-	-	*3,350	*3,350	3,750	2,620	2,430	1,720	1,750	1,240	1,570	1,110	17.8 ft
	-1.0		kg	*1 960	*1 960	*2 680	2 320	1 690	1 170	1 090	770	800	560	790	560	5.0 m
		-3.3	lb	*4,330	*4,330	*5,980	5,070	3,700	2,570	2,390	1,680	-	-	1,750	1,240	16.5 ft
	-2.0		kg	*3 090	*3 090	*3 180	2 390	1 720	1 200	1 110	790	-	-	1 010	710	4.3 m
		-6.6	lb	*6,870	*6,870	*6,920	5,210	3,760	2,620	2,430	1,720	-	-	2,230	1,590	14.1 ft
	-3.0		kg	-	-	*1 450	*1 450	-	-	-	-	-	-	*890	*890	2.9 m
		-9.9	lb	-	-	*3,080	*3,080	-	-	-	-	-	-	*1,940	*1,940	9.5 ft

Notes: 1. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 3. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

VOLVO ECR88D IN DETAIL.

Engine

The new, Tier 4f compliant diesel engine is equipped with four-cylinder, vertical, in-line, turbocharged, air to air intercooler, and water cooled.

Model		Volvo	D2.6H
Max. power at		r/s / r/min	33.3 / **2,000**
Net (ISO 9249/SAEJ1349)		kW / hp	41 / **55**
Gross (SAE J1995)		kW / hp	43 / **58**
Max. torque		Nm/r/min	220/1 300
		lb. ft/r/min	**162/1,300**
No. of cylinders			4
Displacement	l	cu. in	2.615 / 160
Bore	mm	in	87 / 3.43
Stroke	mm	in	110 / 4.33

Electrical system

Voltage	V	12
Battery capacity	V / Ah	1 x 12 / 100
Alternator	V / Ah	12 / 70
Starter motor output	V / kW	12 / 3

Hydraulic system

Closed-Center Load-Sensing (CCLS) system with load independent functions.

Main pump: Variable-displacement pump			
Maximum flow	l/min	gpm	1 x 169 / **1 x 45**
Pilot pump: Gear pump			
Maximum flow	l/min	gpm	1 x 14 / **1 x 4**
Relief valve setting			
Implement	Mpa	psi	29.4 / **4,270**
Travel circuit	Mpa	psi	29.4 / **4,270**
Swing circuit	Mpa	psi	24.5 / **3,560**
Pilot circuit	Mpa	psi	3.4 / **500**

Swing system

Direct drive swing with radial piston motor-maintenance free and automatic holding brake anti-rebound valve.

Max. swing speed		r/min	9.28
Max. swing torque	kNm	lb/ft	22.9 / **16,910**

Undercarriage

Robust X-shaped frame with sealed and greased track chains.

Track shoes			2 x 39
Link pitch	mm	in	154 / **6.1**
Shoe width - steel	mm	in	450 / 600 / **18 / 24**
Shoe width - rubber	mm	in	450 / **18**
Bottom rollers			2 x 5
Top rollers			2 x 1

Travel system

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released.

Travel speed (low / high)	km/h	mph	2.6 / 4.9 / **1.6 / 3.0**
Max. drawbar pull	kN	lb	65 / **14,610**
Gradeability		°	35

Service refill capacities

Fuel tank	l	gal	110 / **29**
Hydraulic system, total	l	gal	140 / **37**
Hydraulic tank	l	gal	84 / **22**
Engine oil	l	gal	11.9 / **3.1**
Engine coolant	l	gal	9.3 / **2.5**
Travel reduction unit	l	gal	2 x 1.6 / **2 x 0.4**

Sound Level

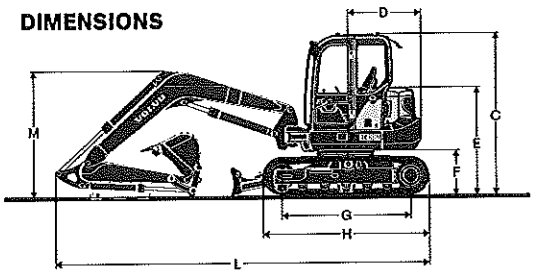
Sound level in cab according to ISO 6396		
LpA (standard)	dB(A)	73
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
LpA (standard)	dB(A)	97

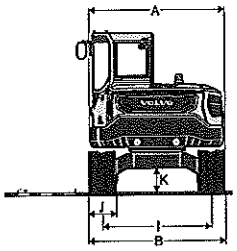
Buckets

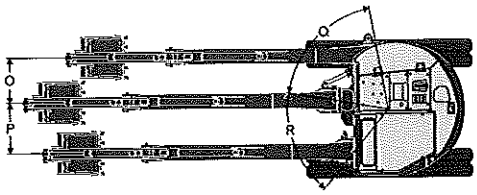
	Width		Weight		Capacity	
	mm	in	kg	lb	l	cu. in
Direct bucket	300	**12**	111	**250**	79	**4,820**
	450	**18**	139	**310**	143	**8,730**
	600	**24**	162	**360**	200	**12,200**
	750	**30**	182	**400**	266	**16,230**
	900	**35**	205	**450**	333	**20,320**
Quick coupler bucket	450	**18**	132	**290**	143	**8,730**
	600	**24**	156	**340**	200	**12,200**
	700	**28**	171	**380**	244	**14,890**
	850	**33**	191	**420**	310	**18,920**

SPECIFICATIONS.

DIMENSIONS







Machine								
Boom		m	ft-in	3.55		11' 8"	3.55	11' 8"
Arm		m	ft-in	1.7		5' 7"	2.1	6' 11"
A	Overall width of upper structure	mm	ft-in	2 210		7' 3"	2 210	7' 3"
B	Overall width	mm	ft-in	2 300		7' 7"	2 300	7' 7"
C	Overall height of cab	mm	ft-in	2 715		8' 11"	2 715	8' 11"
D	Tail swing radius	mm	ft-in	1 290		4' 3"	1 290	4' 3"
E	Overall height of engine hood	mm	ft-in	1 180		3' 10"	1 180	3' 10"
F	Counterweight clearance *	mm	ft-in	760		2' 6"	760	2' 6"
G	Tumbler length	mm	ft-in	2 200		7' 3"	2 200	7' 3"
H	Track length	mm	ft-in	2 830		9' 3"	2 830	9' 3"
I	Track gauge	mm	ft-in	1 850		6' 1"	1 850	6' 1"
J	Shoe width	mm	ft-in	450		1' 6"	450	1' 6"
K	Min. ground clearance *	mm	ft-in	405		1' 4"	405	1' 4"
L	Overall length	mm	ft-in	6 370		20' 11"	6 420	21' 1"
M	Overall height of boom	mm	ft-in	2 115		6' 11"	2 230	7' 4"
O	Boom swing distance	mm	ft-in	760		2' 6"	760	2' 6"
P	Boom swing distance	mm	ft-in	860		2' 10"	860	2' 10"
Q	Boom swing angle	°			70			70
R	Boom swing angle	°			60			60

* Without shoe grouser

Boom and Arm

				Boom		Arm		
		m	ft-in	3.55	11' 8"	1.7	5' 7"	2.1	6' 11"
A	Length	mm	ft-in	3 690	12' 1"	2 283	7' 6"	2 684	8' 10"
B	Height	mm	ft-in	1 244	4' 1"	518	1' 8"	562	1' 10"
	Width	mm	ft-in	335	1' 1"	305	1' 0"	305	1' 0"
	Weight	kg	lb	530	1,170	280	620	340	750

Boom: Includes cylinder, piping and pin, excludes boom cyl. Pin. Arm: Includes cylinder, linkage and pin.

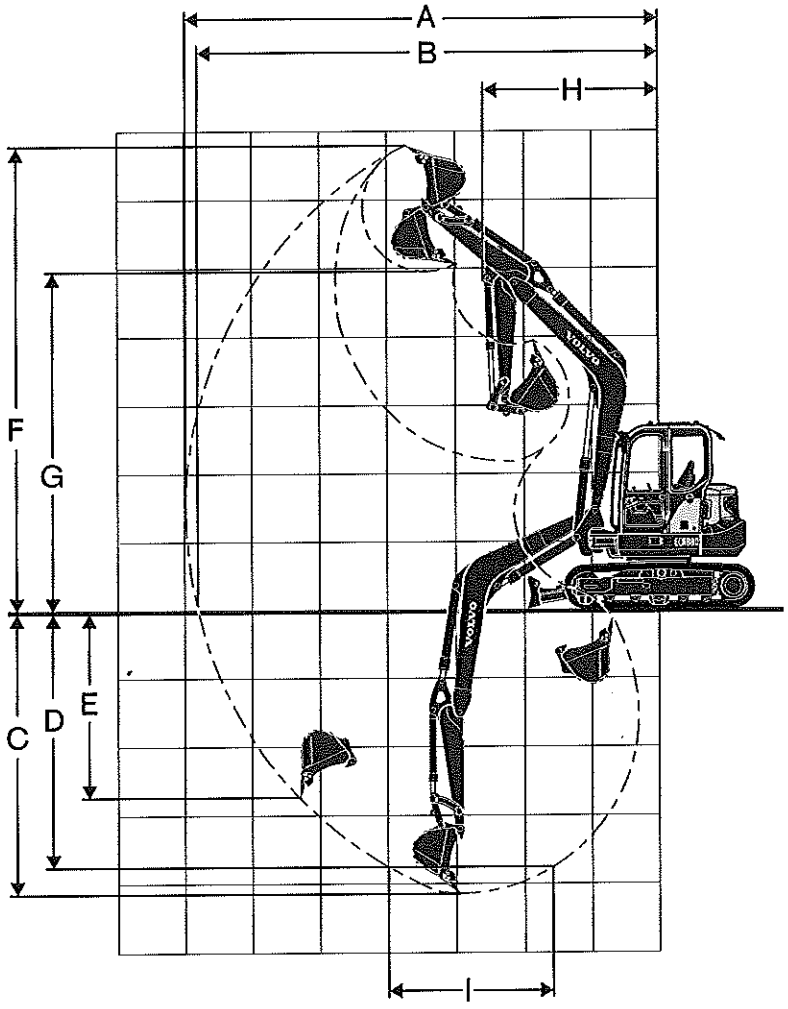
Dozer blade					
A	Height	mm	ft-in	470	1' 7"
	Width	mm	ft-in	2 300	7' 7"
B	Lifting height	mm	ft-in	518	1' 8"
C	Digging depth	mm	ft-in	433	1' 5"

MACHINE WEIGHTS AND GROUND PRESSURE

	Shoe width		Operating weight		Ground pressure	
	mm	in	kg	lb	kPa	psi
Mono boom 3.55 m 11' 8", Arm 1.7 m 5' 7", Bucket 188 kg (266 l) 410 lb, Counterweight 1 480 kg 3 260 lb						
Steel track	450	18	9 010	19,860	40.5	5.9
	600	24	9 180	20,240	30.9	4.5
Rubber track	450	18	8 810	19,420	39.6	5.7
Rubber pad	450	18	9 030	19,910	40.4	5.9
Mono boom 3.55 m 11' 8", Arm 2.1 m 6' 11", Bucket 188 kg (266 l) 410 lb, Counterweight 1 480 kg 3,260 lb						
Steel track	450	18	9 090	20,040	40.9	5.9
	600	24	9 260	20,410	31.2	4.5
Rubber track	450	18	8 890	19,600	40.0	5.8
Rubber pad	450	18	9 110	20,080	40.8	5.9

ECR88D SPECIFICATIONS.

WORKING RANGES



Description		Unit					
Boom		m	ft-in	3.55	**11' 8"**	3.55	**11' 8"**
Arm		m	ft-in	1.7	**5' 7"**	2.1	**6' 11"**
A	**Max. digging reach**	mm	ft-in	6 970	**22' 10"**	7 350	**24' 1"**
B	**Max. digging reach on ground**	mm	ft-in	6 800	**22' 4"**	7 180	**23' 7"**
C	**Max. digging depth**	mm	ft-in	4 130	**13' 7"**	4 530	**14' 10"**
D	**Max. digging depth (l=2.44 m / 8' level)**	mm	ft-in	3 750	**12' 4"**	4 200	**13' 9"**
E	**Max. vertical wall digging depth**	mm	ft-in	2 820	**9' 3"**	3 200	**10' 6"**
F	**Max. cutting height**	mm	ft-in	6 790	**22' 3"**	7 050	**23' 2"**
G	**Max. dumping height**	mm	ft-in	4 960	**16' 3"**	5 220	**17' 2"**
H	**Min. front swing radius**	mm	ft-in	2 560	**8' 5"**	2 640	**8' 8"**
Digging forces with direct fit bucket							
Breakout force (bucket)	SAE J1179	kN	lb	50.7	**11,400**	50.4	**11,330**
	ISO 6015	kN	lb	57.2	**12,860**	56.8	**12,770**
Tearout force (arm)	SAE J1179	kN	lb	38.9	**8,740**	33.8	**7,600**
	ISO 6015	kN	lb	39.8	**8,950**	34.4	**7,730**
Rotation angle, bucket		°		190		190	

LIFTING CAPACITY ECR88D

Lifting capacity at the arm end without bucket.
For lifting capacity including bucket. Simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting point			1.0 m, 3.3 ft		2.0 m, 6.6 ft		3.0 m, 9.9 ft		4.0 m, 13.2 ft		5.0 m, 16.5 ft		6.0, 19.8 ft		Max. reach		
	m	ft		Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Max.
	5.0		kg	-	-	-	-	-	-	*1 520	*1 520	-	-	-	-	*1 600	*1 600	4.6 m
		16.5	lb	-	-	-	-	-	-	*3,380	*3,380	-	-	-	-	*3,550	*3,550	14.9 ft
	4.0		kg	-	-	-	-	-	-	*1 580	*1 580	*1 540	1 390	-	-	*1 560	1 230	5.3 m
		13.2	lb	-	-	-	-	-	-	*3,470	*3,470	*3,400	3,050	-	-	*3,450	2,740	17.5 ft
	3.0		kg	-	-	-	-	*2 490	*2 490	*1 890	*1 890	*1 640	1 360	-	-	*1 540	1 060	5.8 m
		9.9	lb	-	-	-	-	*5,420	*5,420	*4,150	*4,150	*3,610	2,980	-		*3,400	2,340	19.0 ft
Boom 3.55 m, 11' 8"	2.0		kg	-	-	-	-	*3 700	2 830	*2 330	1 840	*1 830	1 310	*1 590	980	*1 580	980	6.0 m
Arm 1.7 m, 5' 7"		6.6	lb	-	-	-	-	*8,040	6,200	*5,100	4,040	*4,010	2,870	-	-	*3,490	2,160	19.7 ft
Shoe 450 mm, 18"	1.0		kg	-	-	-	-	-	-	*2 690	1 750	*2 000	1 260	*1 630	960	*1 620	950	6.0 m
CWT 1 480 kg /		3.3	lb	-	-	-	-	*5,550	*5,550	*5,870	3,830	*4,380	2,770	-	-	*3,580	2,110	19.7 ft
3,260 lb	0.0		kg	-	-	-	-	*3 800	2 640	*2 810	1 700	*2 070	1 230	-	-	*1 670	990	5.8 m
Dozer blade down		0.0	lb	-	-	-	-	*8,570	5,760	*6,150	3,720	*4,540	2,700	-	-	*3,680	2,180	19.1 ft
	-1.0		kg	-	-	*3 560	*3 560	*3 840	2 640	*2 690	1 690	*1 970	1 220	-	-	*1 700	1 100	5.4 m
		-3.3	lb	-	-	*7,910	*7,910	*8,410	5,780	*5,890	3,690	*4,300	2,680	-	-	*3,760	2,430	17.7 ft
	-2.0		kg	-	-	*4 790	*4 790	*3 200	2 690	*2 270	1 710	-	-	-	-	*1 710	1 370	4.7 m
		-6.6	lb	-	-	*10,470	*10,470	*6,990	5,870	*4,950	3,750	-	-	-	-	*3,760	3,030	15.4 ft
	-3.0		kg	-	-	-	-	*1 880	*1 880	-	-	-	-	-	-	*1 500	*1 500	3.4 m
		-9.9	lb	-	-	-	-	*4,040	*4,040	-	-	-	-	-	-	*3,290	*3,290	11.2 ft
	5.0		kg	-	-	-	-	-	-	*1 520	*1 520	-	-	-	-	*1 600	1 520	4.6 m
		16.5	lb	-	-	-	-	-	-	*3,380	*3,380	-	-	-	-	*3,550	3,400	14.9 ft
	4.0		kg	-	-	-	-	-	-	*1 580	*1 580	*1 540	1 320	-	-	1 470	1 160	5.3 m
		13.2	lb	-	-	-	-	-	-	*3,470	*3,470	*3,400	2,880	-	-	3,270	2,580	17.5 ft
	3.0		kg	-	-	-	-	*2 490	*2 490	*1 890	1 850	1 630	1 290	-	-	1 270	1 000	5.8 m
		9.9	lb	-	-	-	-	*5,420	*5,420	*4,150	4,040	3,560	2,820	-	-	2,820	2,210	19.0 ft
Boom 3.55 m, 11' 8"	2.0		kg	-	-	-	-	3 440	2 650	2 210	1 740	1 580	1 240	1 180	920	1 180	920	6.0 m
Arm 1.7 m, 5 '7"		6.6	lb	-	-	-	-	7,530	5,800	4,850	3,800	3,450	2,710	-	-	2,610	2,030	19.7 ft
Shoe 450 mm, 18"	1.0		kg	-	-	-	-	-	-	2 120	1 640	1 630	1 190	1 160	900	1 160	900	6.0 m
CWT 1 480 kg /		3.3	lb	-	-	-	-	*5,550	5,450	4,640	3,600	3,340	2,600	-	-	2,550	1,980	19.7 ft
3,260 lb	0.0		kg	-	-	-	-	3 240	2 460	2 070	1 590	1 490	1 160	-	-	1 200	930	5.8 m
Dozer blade up		0.0	lb	-	-	-	-	7,080	5,380	4,520	3,490	3,270	2,530	-	-	2,650	2,050	19.1 ft
	-1.0		kg	-	-	*3 560	*3 560	3 250	2 470	2 050	1 580	1 480	1 150	-	-	1 330	1 030	5.4 m
		-3.3	lb	-	-	*7,910	*7,910	7,100	5,400	4,490	3,460	3,250	2,510	-	-	2,940	2,280	17.7 ft
	-2.0		kg	-	-	*4 790	*4 790	*3 200	2 510	2 080	1 610	-	-	-	-	1 650	1 280	4.7 m
		-6.6	lb	-	-	*10,470	*10,470	*6,990	5,490	4,550	3,520	-	-	-	-	3,660	2,850	15.4 ft
	-3.0		kg	-	-	-	-	*1 880	*1 880	-	-	-	-	-	-	*1 500	*1 500	3.4 m
		-9.9	lb	-	-	-	-	*4,040	*4,040	-	-	-	-	-	-	*3,290	*3,290	11.2 ft
	6.0		kg	-	-	-	-	-	-	-	-	-	-	-	-	*1 510	*1 510	4.0 m
		19.8	lb	-	-	-	-	-	-	-	-	-	-	-	-	*3,350	*3,350	12.8 ft
	5.0		kg	-	-	-	-	-	-	-	-	*1 380	*1 380	-	-	*1 320	*1 320	5.1 m
		16.5	lb	-	-	-	-	-	-	-	-	*3,080	3,060	-	-	*2,930	*2,930	16.6 ft
	4.0		kg	-	-	-	-	-	-	-	-	*1 340	*1 340	-	-	*1 230	1 070	5.8 m
		13.2	lb	-	-	-	-	-	-	-	-	*2,960	*2,960	-	-	*2,710	2,380	18.9 ft
Boom 3.55 m, 11' 8"	3.0		kg	-	-	-	-	-	-	*1 650	*1 650	*1 470	1 370	*1 390	990	*1 210	940	6.2 m
Arm 2.1 m, 6' 11"		9.9	lb	-	-	-	-	-	-	*3,610	*3,610	*3,230	2,990	*3,080	2,170	*2,660	2,070	20.3 ft
Shoe 450 mm, 18"	2.0		kg	-	-	-	-	*3 160	2 900	*2 100	1 850	*1 680	1 310	*1 470	970	*1 240	870	6.4 m
CWT 1 480 kg		6.6	lb	-	-	-	-	*6,870	6,350	*4,600	4,060	*3,690	2,860	*3,230	2,120	*2,730	1,920	20.9 ft
3,260 lb	1.0		kg	-	-	-	-	*3 630	2 660	*2 520	1 740	*1 890	1 250	*1 560	940	*1 320	850	6.4 m
Dozer blade down		3.3	lb	-	-	-	-	*8,300	5,830	*5,500	3,810	*4,130	2,730	*3,410	2,050	*2,920	1,870	21.0 ft
	0.0		kg	-	-	-	-	*3 940	2 580	*2 730	1 670	*2 010	1 200	*1 590	920	*1 480	870	6.2 m
		0.0	lb	-	-	-	-	*8,870	5,640	*5,980	3,650	*4,410	2,630	*3,470	2,010	*3,270	1,920	20.4 ft
	-1.0		kg	*2 660	*2 660	*3 090	*3 090	*4 000	2 570	*2 720	1 640	*2 000	1 180	-	-	*1 550	950	5.8 m
		-3.3	lb	*5,890	*5,890	*6,860	*6,860	*8,740	5,610	*5,950	3,590	*4,370	2,590	-	-	*3,420	2,100	19.1 ft
	-2.0		kg	*3 980	*3 980	*4 940	*4 940	*3 490	2 600	*2 440	1 650	*1 720	1 200	-	-	*1 580	1 140	5.2 m
		-6.6	lb	*8,830	*8,830	*11,000	*11,000	*7,630	5,680	*5,320	3,620	*3,740	2,630	-	-	*3,480	2,530	17.0 ft
	-3.0		kg	-	-	*3 870	*3 870	*2 510	*2 510	*1 650	*1 650	-	-	-	-	*1 530	*1 530	4.1 m
		-9.9	lb	-	-	*8,390	*8,390	*5,450	*5,450	*3,550	*3,550	-	-	-	-	*3,370	*3,370	13.5 ft
	6.0		kg	-	-	-	-	-	-	-	-	-	-	-	-	*1 510	*1 510	4.0 m
		19.8	lb	-	-	-	-	-	-	-	-	-	-	-	-	*3,350	*3,350	12.8 ft
	5.0		kg	-	-	-	-	-	-	-	-	*1 380	1 330	-	-	*1 320	1 280	5.1 m
		16.5	kg	-	-	-	-	-	-	-	-	*3,080	2,890	-	-	*2,930	2,840	16.6 ft
	4.0		lb	-	-	-	-	-	-	-	-	*1 340	1 330	-	-	*1 230	1 010	5.8 m
		13.2	lb	-	-	-	-	-	-	-	-	*2,960	2,900	-	-	*2,710	2,250	18.9 ft
	3.0		kg	-	-	-	-	-	-	*1 650	*1 650	*1 470	1 290	1 200	930	1 130	880	6.2 m
Boom 3.55 m, 11' 8"		9.9	lb	-	-	-	-	-	-	*3,610	*3,610	*3,230	2,820	2,620	2,040	2,510	1,950	20.3 ft
Arm 2.1 m, 6' 11"	2.0		kg	-	-	-	-	*3 160	2 720	*2 100	1 750	1 570	1 230	1 170	910	1 050	810	6.4 m
Shoe 450 mm, 18"		6.6	lb	-	-	-	-	*6,870	5,950	*4,600	3,820	3,440	2,690	2,560	1,990	2,330	1,800	20.9 ft
CWT 1 480 kg /	1.0		kg	-	-	-	-	3 270	2 480	2 110	1 630	1 510	1 170	1 140	880	1 030	790	6.4 m
3,260 lb		3.3	lb	-	-	-	-	7,150	5,440	4,610	3,580	3,300	2,570	2,500	1,930	2,280	1,750	21.0 ft
Dozer blade up	0.0		kg	-	-	-	-	3 180	2 400	2 030	1 560	1 460	1 130	1 120	860	1 060	810	6.2 m
		0.0	lb	-	-	-	-	6,950	5,260	4,450	3,420	3,210	2,470	2,450	1,880	2,350	1,800	20.4 ft
	-1.0		kg	*2 660	*2 660	*3 090	*3 090	3 170	2 390	2 010	1 540	1 440	1 110	-	-	1 160	890	5.8 m
		-3.3	lb	*5,890	*5,890	*6,860	*6,860	6,930	5,230	4,390	3,360	3,160	2,430	-	-	2,570	1,970	19.1 ft
	-2.0		kg	*3 980	*3 980	*4 940	*4 940	3 200	2 420	2 020	1 550	1 460	1 120	-	-	1 390	1 070	5.2 m
		-6.6	lb	*8,830	*8,830	*1,1000	*1,1000	7,000	5,300	4,420	3,390	3,200	2,460	-	-	3,070	2,370	17.0 ft
	-3.0		kg	-	-	*3 870	*3 870	*2 510	2 500	*1 650	1 610	-	-	-	-	*1 530	*1 530	4.1 m
		-9.9	lb	-	-	*8,390	*8,390	*5,450	*5,450	*3,550	3,530	-	-	-	-	*3,370	*3,370	13.5 ft

Notes: 1. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 3. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

EQUIPMENT.

STANDARD EQUIPMENT

	ECR58D	ECR88D
Engine		
Low-emission Volvo T4f diesel engine	•	•
Standard cooling system	•	•
Two-stage air filter	•	•
Fuel filter and water separator	•	•
Alternator, 70 A	•	•
Electric/Electronic control system		
Safe engine start function	•	•
Automatic idling system	•	•
Halogen working lights;		
Cab-mounted 2 (front)	•	•
Battery, 12 V / 100 Ah	•	•
Start motor, 12 V / 3 kW	•	•
Travel alarm	•	•
Monitor and keypad	•	•
Master electrical disconnect switch	•	•
Hydraulic system		
Automatic two speed travel motors	•	•
Cylinder cushioning	•	•
Hydraulic fluid mineral 46	•	•
Pilot control pattern change	•	•
Single (Hammer) and Double Acting (Thumb) Hydraulics	•	•
X1 Flow Control through I ECU	•	•

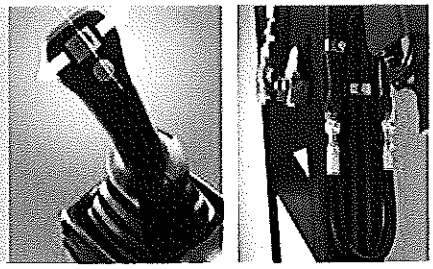
	ECR58D	ECR88D
Cab and Interior		
Canopy	•	•
PVC operator seat with suspension	•	•
Seat belt, 2 inch retractable	•	•
Control joystick	•	•
Master key	•	•
Hour meter (non analog)	•	•
Frame		
580 kg (1,280 lb) counterweight	•	
1 480 kg (3,260 lb) counterweight		•
Under cover	•	•
Dozer Blade with float function	•	•
Undercarriage		
Track link	•	
Greased and sealed track link		•
400 mm (16") rubber track	•	
450 mm (18") rubber track		•
Digging equipment		
Boom: 2.9 m (9' 6"), Arm: 1.54 m (5' 1")	•	
Boom: 3.55 m (11' 8"), Arm: 1.7 m (5' 7")		•
Linkage	•	•
Service		
Tool kit-daily maintenance	•	•

OPTIONAL EQUIPMENT

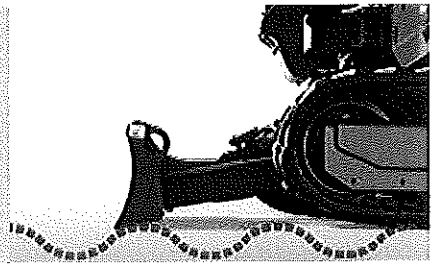
	ECR58D	ECR88D
Electric/Electronic control system		
Fuel filler pump: 35 l/min (9 gpm), with automatic shut-off	•	•
Extra working lights;	•	•
Cab-mounted 1 (rear), Boom-mounted 1	•	•
Caretrack	•	•
Air compressor	•	•
Travel alarm		•
Anti theft, code-lock	•	•
Rotating warning beacon	•	•
Hydraulic system		
Hydraulic piping:	•	•
Hammer & shear hydraulic piping (max. flow: 70 lpm / 18 gpm, max. pressure: 26.5 Mpa / 3,840 psi)	•	
Hammer & shear hydraulic piping (max. flow: 90 lpm / 24 gpm, max. pressure: 32.4 Mpa / 4,690 psi)		•
Slope & rotator (max. flow: 35 lpm / 9 gpm, max. pressure: 14.7 Mpa / 2,130 psi)	•	•
Grapple	•	•
Attachment carriers	•	•
Hose rupture valve for boom	•	•
Overload warning device	•	•
Hydraulic oil, ISO VG 32, 68	•	•
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, longlife oil 46	•	•
Cab and interior		
Cab	•	•
Carecab includes CareTrack connection	•	•
Fabric operator seat with suspension	•	•
Heater and air-conditioner	•	•
Control joystick, X3 proportional	•	•
Seat belt, 3 inch retractable	•	•
AM/FM stereo	•	•
AM/FM stereo with CD player and USB input	•	•
Mechanical hour meter	•	•
Cab mounted FOG (Falling Object Guard)	•	•
FOPS (Falling Object Protection Structure)	•	•
Sun screen, front/roof	•	•
Safety net	•	•
Frame		
Rearview mirror	•	•
Undercarriage		
380 mm (15"), 500 mm (20") steel track	•	
450 mm (18"), 600 mm (24") steel track		•
400 mm (16") rubber pad	•	
450 mm (18") rubber pad		•
Digging equipment		
Boom: 3.85 m (12' 8") 2 piece		•
Arm: 1.94 m (6' 4")	•	
Arm: 2.1 m (6' 11")		•
Service		
Tool kit, full scale	•	•
Spare parts	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Slope and rotator piping

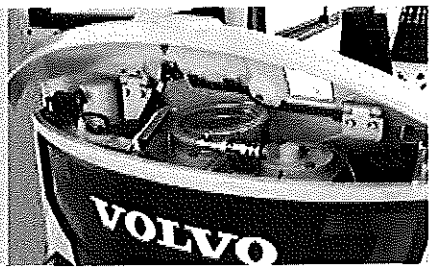


Dozer float



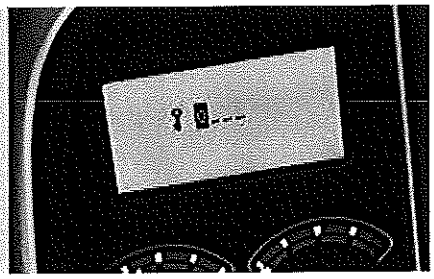
Caretrack

Fuel filler pump



Mechanical hour meter

Anti-theft



VOLVO

Volvo Construction Equipment North America, Inc.

Warranty – Disclaimers – Limitations
Limited Warranty

Volvo Construction Equipment North America, Inc. ("Volvo CE") hereby extends to its authorized dealers ("Dealer") and the Dealer's end-use customers ("Customer", and both Dealer and Customer are referred to herein as a "Buyer"), who purchase a new Volvo construction equipment machine ("Machine") or new Volvo part ("Part", both of which are referred to herein as a "Product") from Volvo, the following limited warranty:

Subject to the exceptions and limitations set forth below, Volvo CE or Dealer will repair or replace any part of a new Machine or new Part which proves to be defective in material or workmanship during the following periods (the "Warranty Period"):

Volvo wheel loaders: 12 months/1500 hours, whichever first occurs;
Volvo articulated haulers: 12 months/1500 hours, whichever first occurs;
Volvo hydraulic excavators: 12 months/1500 hours, whichever first occurs;
Volvo motor graders: 12 months/1500 hours, whichever first occurs;
Volvo compactors: 12 months/1500 hours, whichever first occurs;
Volvo pavers: 12 months/1500 hours, whichever first occurs;
Volvo compact wheel loaders (up to 100 net hp.): 12 months/unlimited hours;
Volvo skid steer loaders: 12 months/unlimited hours;
Volvo compact hydraulic excavators (less than 11 metric tons): 12 months/unlimited hours;
Volvo backhoe loaders: 12 months/unlimited hours;
Volvo engines: 12 months/2500 hours, whichever first occurs;
Volvo parts: 6 months/1500 hours, whichever first occurs;
Volvo remanufactured components: 12 months/2500 hours, whichever first occurs.
Volvo Hammer: 12 months

The Warranty Period commences immediately following the delivery of said Product to the Buyer who first puts said Product into use. The foregoing limited warranty shall include the labor cost to accomplish the repair or replacement of the defective part provided that the repair or replacement was performed by a Dealer.

The foregoing warranty does not cover: (i) any Product found to have been damaged by abuse, accident, other casualty or a failure to maintain or use the warranted Product in accordance with the applicable manuals or instructions (Buyer is required to use only original equipment manufacturer filters during the Warranty Period); (ii) the labor costs to repair or replace defective Parts after the expiration of the Warranty Period of the Machine in which such Part is located; (iii) overtime labor premiums; (iv) costs and expenses associated with the transportation of Dealer's service personnel to and from the location of the warranted Product; (v) any parts, components, attachments or accessories for which Buyer receives a separate warranty by the manufacturer or producer thereof (in specified cases said warranty may be administered by Volvo CE); (vi) maintenance items or ground engaging parts that have achieved their normal service life.

DISCLAIMER OF IMPLIED WARRANTIES AND LIMITATION OF REMEDIES

THE FOREGOING WARRANTY TO BUYER IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

REMEDIES AVAILABLE TO BUYER ARE LIMITED TO MAKING A CLAIM UNDER THE FOREGOING WARRANTY AND ARE EXCLUSIVE AND EXPRESSLY LIMITED TO OBTAINING THE PARTS AND LABOR IN ACCORDANCE WITH THE TERMS OF SAID WARRANTY.

ADDITIONAL LIMITATIONS OF LIABILITY