

Item # 64

Volvo ECR88D Compact Excavator

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Model: Volvo ECR88D

Description	Article
Volvo Compact Excavator ECR88D	ECR88D
Offset Boom, 140"	CE12005
Arm, 66.9" w/ thumb bracket	CE13018
Dozer Blade with Float Function	CE15023
18" rubber tracks	CE21007
Engine for NA	CE30013
Auto idling	CE31001
Engine Auto Shutdown	CE31002
Standard Cooling Package for Engine and Work Hydraulics	CE32001
Enclosed Cab	CE40022
PVC seat Mech susp w/o heater	CE41007
Seat belt, 3" retractable	CE42003
Pilot controls	CE43001
Heat & AC	CE44006
Rearview mirror	CE45010
Hour meter, analog	CE45012
Universal key	CE46002
Joystick w/o X3	CE47011
Work light, additional rear	CE50002
Travel alarm (switchable)	CE51001
Hydraulic oil ISO VG46 14°F to 86°F (-10°C to 30°C)	CE60003
Hammer/Shear pipe on base mach	CE62015
Tool kit - daily maintenance	CE70002
Manual + parts CD,English	CE71003
Lifetime Frame	CE72001
Decals NA	CE80002
36 inch, .436yd, GP trenching bucket, VTS Tooth System (6 teeth)	CE8293216



Volvo Construction Equipment

ECR88D

Volvo Excavators 8,6-9,5 t / 19,010-20,950 lb 58 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 customers around the globe. 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

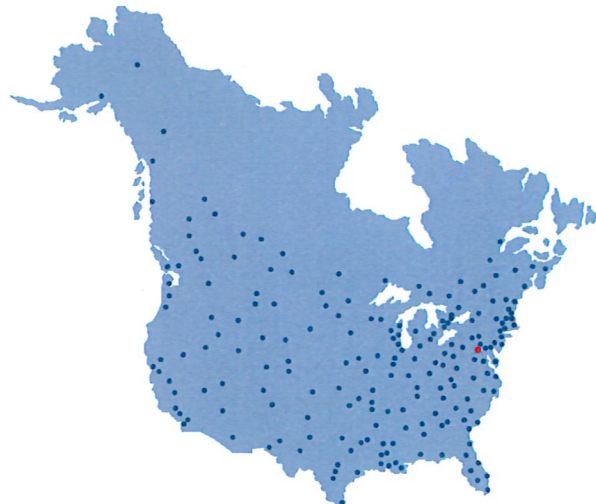
Our dealers are strategically located throughout North America to provide the equipment you need and the parts and service support you demand for a productive and profitable operation.

The strength of our dealer network is enhanced with extensive individualized product support training at our best-in-class Customer Center in Shippensburg and through hands-on training. Using a great Product Demonstration Center featuring a dedicated area for most common applications, visitors operate equipment from our entire product line under a variety of simulated working conditions. This facility is in year-round use by our dealers and customers.

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.

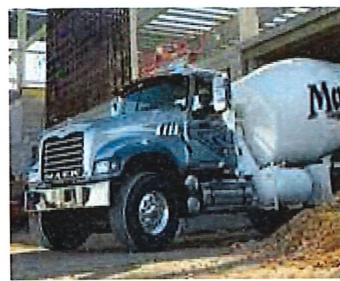




Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Financial Services

Powered to perform

Volvo proudly introduces the new ECR88D compact short swing radius excavator. Featuring a powerful Volvo engine and perfectly matched hydraulic system, this machine delivers high performance, excellent control and low fuel consumption. Sustain optimum power and productivity with Volvo.

Volvo engine

Volvo's premium Tier 4f / Stage V 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

High system pressure delivers impressive tractive force when climbing gradients or traveling over rough terrain. For improved performance, the ECR88D boasts a 16% improvement in tractive force compared to the previous model.





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.



STABILITY

Design improvements including a 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.

Stability you can count on

Whether you're working in the road construction, utilities, landscaping or any other application, the ECR88D will give you access to more jobsites, where you can work closer to obstacles, safely. With a heavy counterweight and strong undercarriage, this machine delivers superior stability. And with easy service access you'll enjoy maintenance made easy with Volvo.

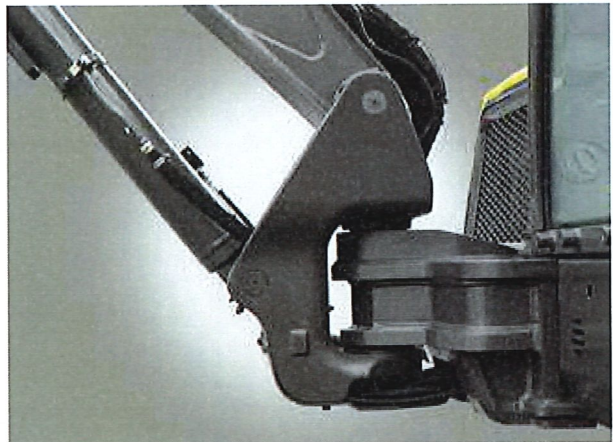
Service access

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.



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.



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.

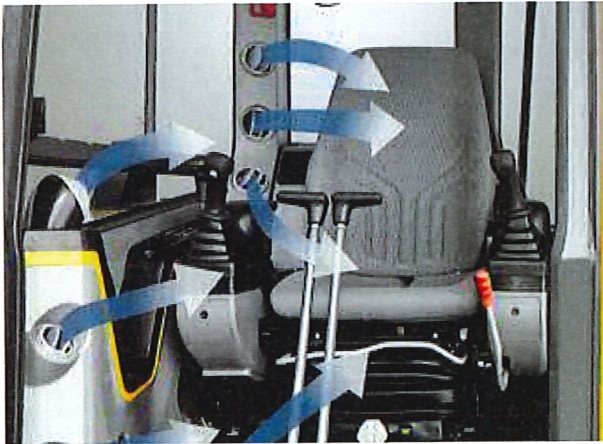


Visibly better

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 an additional glove-box, side pocket, phone storage, cup holder and a pocket behind the seat.





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.



ATTACHMENTS VERSATILITY

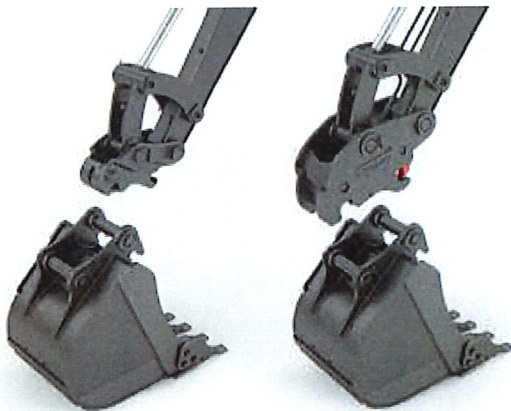
The machine's attachment can be easily changed to save time and costs. Its design, hydraulics, piping and in-cab controls combined with Volvo's attachments range allows the ECR88D to take on a variety of tasks. Volvo attachments work in harmony with the machine to deliver maximum productivity.

One machine, many job sites

Volvo offers a wide range of durable attachments that are suitable for any job site, including utilities, building, agriculture, landscaping and forestry. Volvo attachments are an integrated part of the excavator for which they're intended – delivering maximum productivity and versatility.

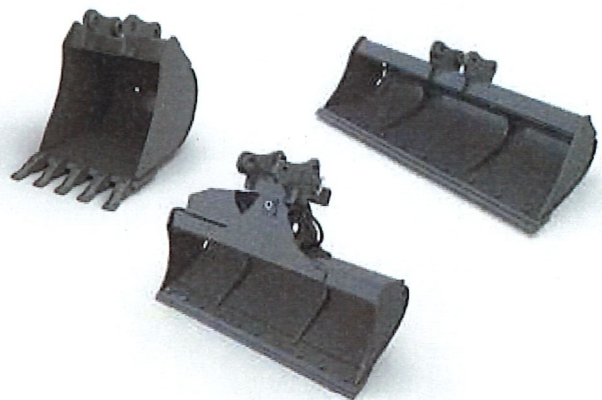
Quick coupler

Both the mechanical and the hydraulic quick couplers allow a complete range of buckets to be changed quickly and efficiently.



Buckets

A complete range of buckets from general purpose reinforced buckets to ditching buckets, allow the ECR88D to work on many job sites for a wide range of applications. The durable buckets are built to work in loose gravel, crushed rock, dirt and soil.



Thumb

Designed to work with both Volvo direct fit buckets and Volvo quick coupler, the Volvo thumb makes handling material easy for tasks including piling, placing, loading, lifting and carrying.



Steelwrist tiltrotator

A Volvo compact excavator together with a Steelwrist® tiltrotator delivers the ultimate combination of high productivity, safety, precision and control. Steelwrist tiltrotators provide a superior tilt angle and the compact design with low build height results in improved digging performance and higher fuel efficiency. Get more done with your machine, without changing attachment or machine position.



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.

ENHANCED HYDRAULICS

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

STABILITY

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

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.

Optional dozer floating

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



VOLVO CAB

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

VOLVO ENGINE

Tier 4f compliant 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.

Auto engine shutdown

The auto engine shutdown provides lower fuel costs, less noise, much lower maintenance costs and a greater resale value.

ECO mode

The ECO mode provides optimal working performance together with fuel saving.

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 maximising uptime.

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.



Genuine Volvo Parts

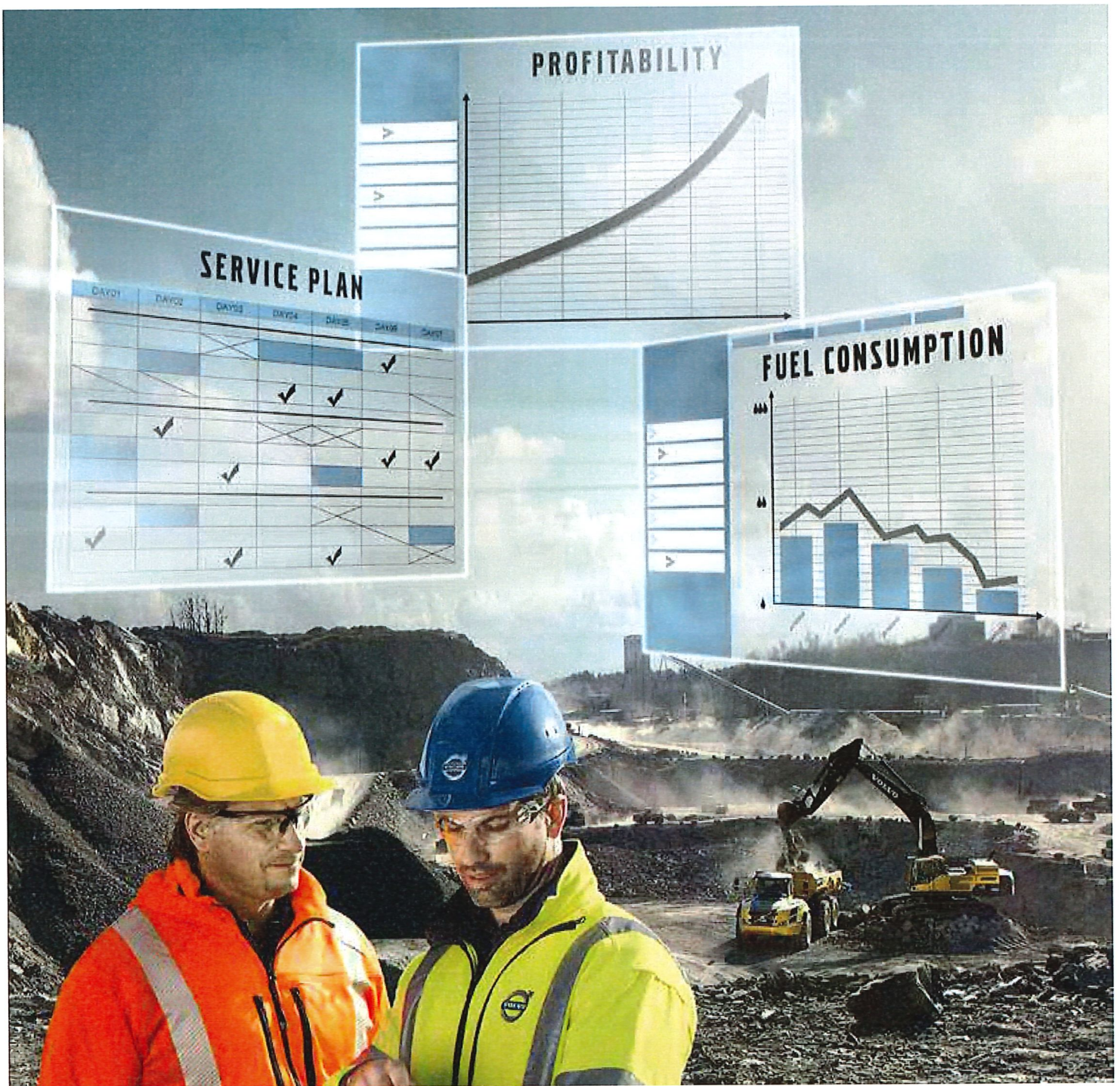
Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the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



Service Network

In order to respond to your needs faster, a Volvo expert is on their 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.





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.

Volvo ECR88D in detail

Engine

The new Tier 4f / Stage V compliant diesel engine is equipped with in-line, turbocharged and water cooled.

Model	Volvo	D2.6H
Max. power at	r/min (r/s)	2,000 (33.3)
Net (ISO 9249/SAE J1349)	kW (hp)	41 (55)
Gross (SAE J1995)	kW (hp)	43 (58)
Max. torque	Nm (ft lbf)	220 (162)
at engine speed	r/min	1,300
No. of cylinders		4
Displacement	l (in³)	2.62 (160)
Bore	mm (in)	87 (3.4)
Stroke	mm (in)	110 (4.3)

Electrical system

Voltage	V	12
Batteries	V	1 x 12
Battery capacity	Ah	100
Alternator	V/Ah	12/70
Starter motor output	V - kW	12 - 2.5

Hydraulic system

Open-center, negative hydraulic system providing accurate controllability

Main pump: Variable-displacement pump

Maximum flow	l/min (gal/min)	2 x 68 + 54 (2 x 18 + 14)
Pilot pump: Gear pump		
Maximum flow	l/min (gal/min)	13 (3.4)
Relief valve setting pressure		
Implement	MPa (psi)	29.4 (4,264)
Travel circuit	MPa (psi)	29.4 (4,264)
Swing circuit	MPa (psi)	24.5 (3,553)
Pilot circuit	MPa (psi)	3.4 (493)

Swing system

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

Max. swing speed	r/min	9
Max. swing torque	kNm (ft lbf)	22.9 (16,890)

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 (17.7 / 23.6)
Shoe width - rubber	mm (in)	450 (17.7)
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	km/h (mi/h)	2.6 (1.6)
Travel speed high	km/h (mi/h)	4.9 (3)
Max. drawbar pull	kN (lbf)	65 (14,613)
Gradeability	°	35

Service Refill

Fuel tank	l (gal)	110 (29)
Hydraulic system, total	l (gal)	140 (37)
Hydraulic tank	l (gal)	84 (22)
Engine oil	l (gal)	10 (2.6)
Engine coolant	l (gal)	9.3 (2.5)
Travel reduction unit	l (gal)	2 x 1.6 (2 x 0.4)

Cab

Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO₂-eq

Sound Level

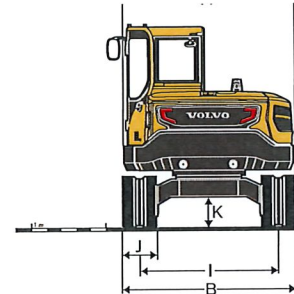
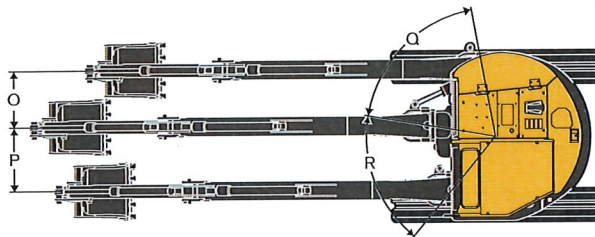
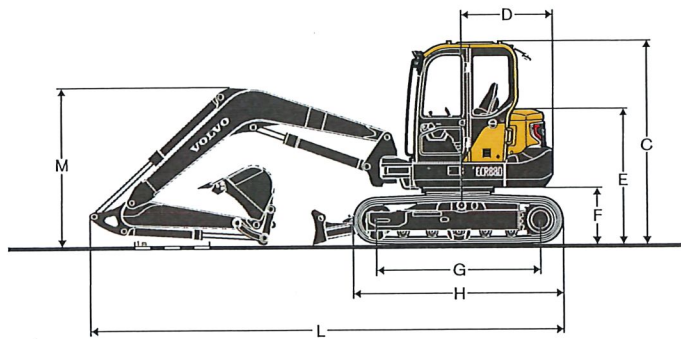
Sound level in cab according to ISO 6396

LpA	dB(A)	73
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
LwA	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


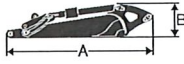
Machine

		m	ft in	3.55	11'8"	3.55	11'8"
Boom							
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

Specifications

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.

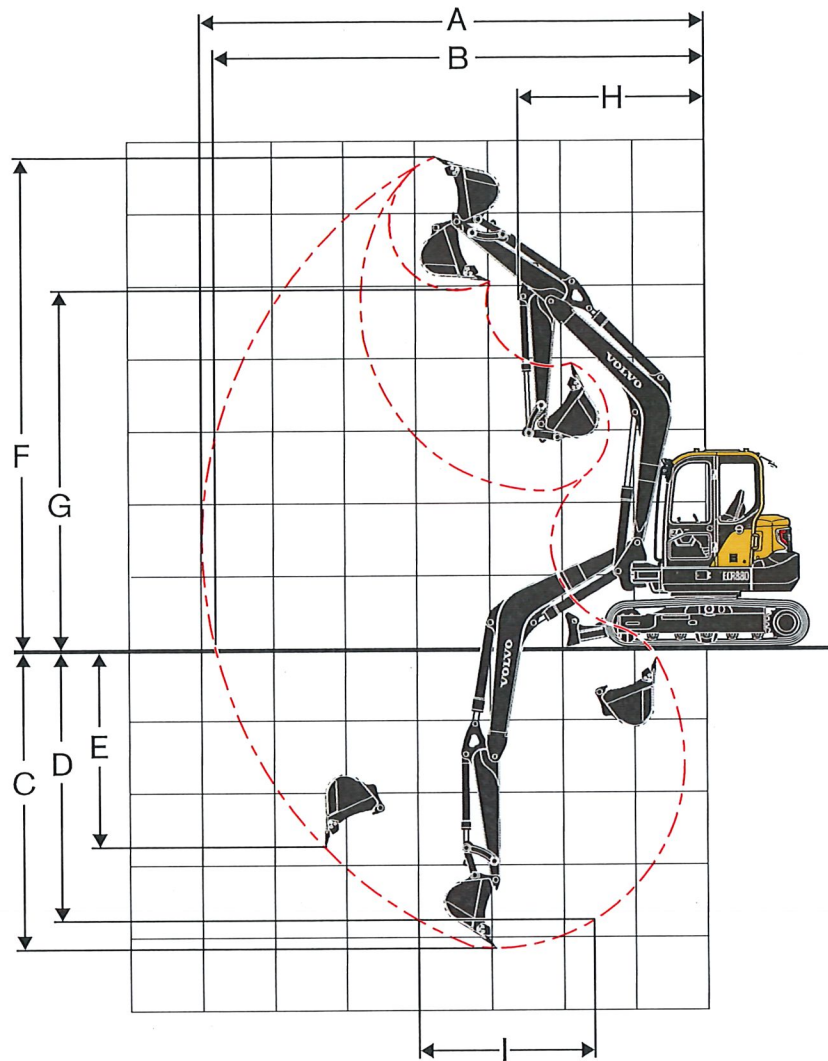
Dozer blade

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 lb) 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 lb) 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



WORKING RANGES

Description		Unit					
		m	ft in	3.55	11'8"	3.55	11'8"
Boom							
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=2.44m / 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	

Specifications

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.
Boom 3.55m, 11'8" Arm 1.7m, 5'7" Shoe 450mm, 18" CWT 1 480kg / 3,260lb Dozer blade down	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
	2.0	kg					*3,700	2,830	*2,330	1,840	*1,830	1,310	*1,590	980	*1,580	980	6.0 m
		6.6 lb					*8,040	6,200	*5,100	4,040	*4,010	2,870			*3,490	2,160	19.7 ft
	1.0	kg							*2,690	1,760	*2,000	1,260	*1,630	960	*1,620	950	6.0 m
		3.3 lb							*5,550	*5,550	*5,870	3,830	*4,380	2,770	*3,580	2,110	19.7 ft
	0.0	kg					*3,800	2,640	*2,810	1,700	*2,070	1,230			*1,670	990	5.8 m
		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
Boom 3.55m, 11'8" Arm 1.7m, 5'7" Shoe 450mm, 18" CWT 1 480kg / 3,260lb Dozer blade up	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
	2.0	kg					3,440	2,650	2,210	1,740	1,580	1,240	1,180	920	1,180	920	6.0 m
		6.6 lb					7,530	5,800	4,850	3,800	3,450	2,710			2,610	2,030	19.7 ft
	1.0	kg							2,120	1,640	1,530	1,190	1,160	900	1,160	900	6.0 m
		3.3 lb							*5,550	5,450	4,640	3,600	3,340	2,600	2,550	1,980	19.7 ft
	0.0	kg					3,240	2,460	2,070	1,590	1,490	1,160			1,200	930	5.8 m
		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	3,260	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

Notes: 1. The above loads are in compliance with SAE J1,097 and ISO 1,0567 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.

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.
Boom 3.55m, 11'8" Arm 2.1m, 6'11" Shoe 450mm, 18" CWT 1 480kg / 3,260lb Dozer blade down	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
	3.0	kg							*1,650	*1,650	*1,470	1,370	*1,390	990	*1,210	940	6.2 m
		9.9 lb							*3,610	*3,610	*3,230	2,990	*3,080	2,170	*2,660	2,070	20.3 ft
	2.0	kg					*3,160	2,900	*2,100	1,850	*1,680	1,310	*1,470	970	*1,240	870	6.4 m
		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
	1.0	kg					*3,630	2,660	*2,520	1,740	*1,890	1,250	*1,560	940	*1,320	850	6.4 m
		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 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
Boom 3.55m, 11'8" Arm 2.1m, 6'11" Shoe 450mm, 18" CWT 1 480kg / 3,260lb Dozer blade up	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
		9.9 lb							*3,610	*3,610	*3,230	2,820	2,620	2,040	2,510	1,950	20.3 ft
	2.0	kg					*3,160	2,720	*2,100	1,750	1,570	1,230	1,170	910	1,050	810	6.4 m
		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
	1.0	kg					3,270	2,480	2,110	1,630	1,510	1,170	1,140	880	1,030	790	6.4 m
		3.3 lb					7,150	5,440	4,610	3,580	3,300	2,570	2,500	1,930	2,280	1,750	21.0 ft
	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 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	*11,000	*11,000	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 J1,097 and ISO 1,0567 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

Engine

Low-emission Tier 4f / Stage V diesel engine
Standard cooling system
Two-stage air filter
Fuel filter and water separator
Alternator, 70 A
Full auto regeneration
ECO mode

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 / 2.5 kW
Travel alarm
Monitor and keypad
Master electrical disconnect switch

Frame

1 480kg (3,260lb) counterweight
Under cover
Dozer blade

Undercarriage

Greased and sealed track link
450mm rubber track

Hydraulic system

Automatic two speed travel motors
Cylinder cushioning
Hydraulic fluid mineral 46
Pilot control pattern change

Cab and interior

Canopy
PVC operator seat with suspension
Seat belt, 2 inch retractable
Seat belt alarm
Control joystick
Master key
Hour meter (non analog)

Digging equipment

Boom: 3.55m (11'8"), Arm: 1.7m (5'7")
Linkage

Service

Tool kit-daily maintenance

Official approval

Object handling device conforming to ISO20474-1 and ISO20474-5 standards (when equipped)
FOPS Level 2 conforming to ISO3449 standard (when equipped)
ROPS conforming to ISO12117-2 standards
TOPS conforming to ISO12117 and EN13531 standards
FOG Level 2 conforming to ISO10262 standard and SAE J1356 standard (when equipped)

OPTIONAL EQUIPMENT

Electric / Electronic control system

Fuel filler pump: 35 l/min, with automatic shut-off
Auto engine shutdown
LED light
Extra working lights:
Cab-mounted 1 (rear), Boom-mounted 1

* Caretrack

* Travel alarm

Anti theft, code-lock
Rotating warning beacon

Undercarriage / Superstructure

450mm (18"), 600mm (24") steel track
450mm (18") rubber pad
Heavy counterweight
Wide dozer blade for 600mm (24") shoe

Frame

Rearview mirror
Dozer blade with floating function

Hydraulic system

Hydraulic piping:
Breaker & shear
- Max. flow: 68 l/min (18 gal/min)
- Pressure: 21.6 MPa (3,132 psi) (X1 single) / 29.4 Mpa (4,264psi) (X1 double)

Slope & rotator
- Max. flow: 28 l/min (7.4 gal/min)
- Pressure: 14.7 MPa (2,130 psi)

Grapple

Quick coupler

Hose rupture valve for boom and arm

Overload warning device

Hydraulic oil, ISO VG 32, 68

Hydraulic oil, biodegradable 46

Hydraulic oil, longlife oil 46

Cab and interior

Cab

Carecab

Fabric operator seat with suspension

Heater and air-conditioner

Control joystick, X3 proportional

Seat belt, 3 inch retractable

Rain visor

Boom swing pedal

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

Digging equipment

Arm: 2.1m (6'11")

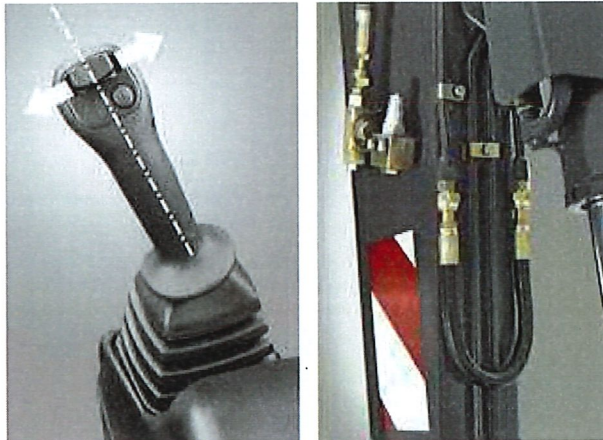
Service

Tool kit, full scale

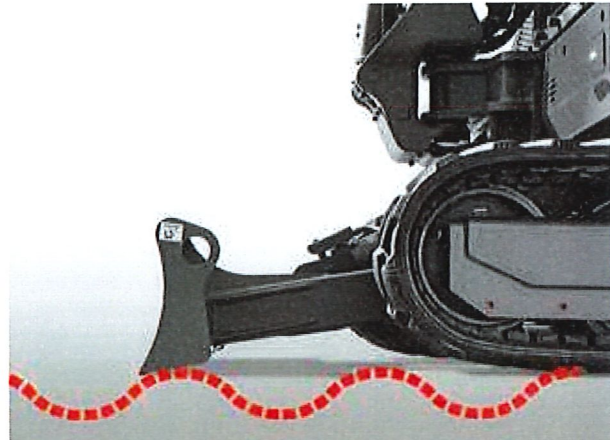
Spare parts

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Slope and rotator piping



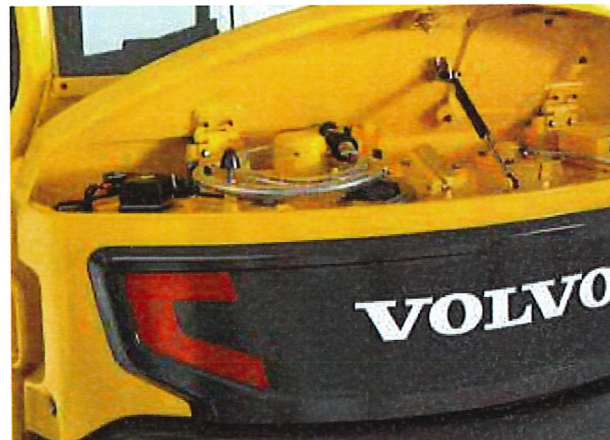
Dozer float



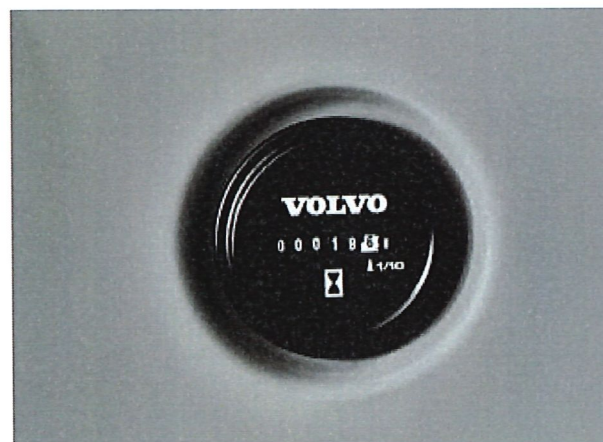
Caretrack



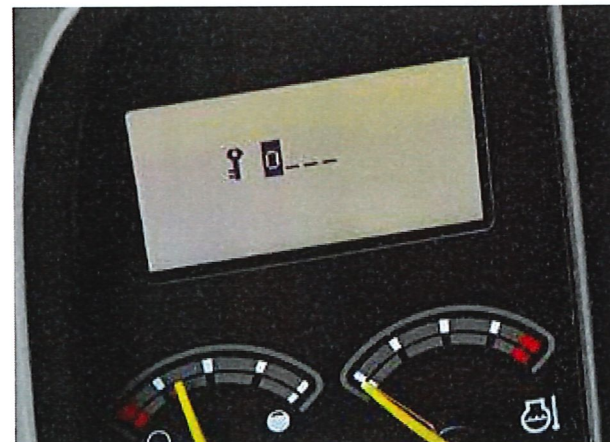
Fuel filler pump



Mechanical hour meter



Anti-theft



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

VOLVO

Volvo Construction Equipment

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VOLVO

Volvo Construction Equipment North America Warranty – Disclaimers – Limitations Limited Warranty

Volvo Construction Equipment North America ("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/2500 hours, whichever first occurs
- Volvo articulated haulers: 12 months/2500 hours, whichever first occurs
- Volvo hydraulic excavators: 12 months/2500 hours, whichever first occurs
- Volvo motor graders: 12 months/2500 hours, whichever first occurs
- Volvo compactors: 12 months/2500 hours, whichever first occurs
 - 24 month unlimited hours on DD90 and larger compactors
- Volvo pavers: 12 months/2500 hours, whichever first occurs
 - 24 month unlimited hours on 6000 / 7000 series pavers
- Volvo milling: 12 months/2500 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; Lifetime arm for one-sided
- 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 Attachments: 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.

Warranty – Disclaimers – Limitations

LIMITATIONS OF LIABILITY AND DAMAGES

Regardless of whether a claim against Volvo CE or Dealer is based on the foregoing warranty or is an action in contract, tort (negligence or strict liability) or otherwise, their respective liability for losses, damages or expenses of any kind arising from the design, manufacture, repair or sale of the Products is limited, unless otherwise prohibited by law, to an amount not exceeding the cost performing the obligations contained in the foregoing warranty, and in no event shall their respective or joint liability exceed the value of the Product or part thereof giving rise to such liability.

CONSEQUENTIAL AND SIMILAR DAMAGES NOT RECOVERABLE

Except for performing the obligations of the foregoing warranty in accordance with its terms, Volvo CE and Dealer shall have no liability for loss, damage, or expense, directly or indirectly, attributable to a loss of use of a Product, loss or damage to property other than the Product, loss or damage to the Product or any part thereof or any other economic or commercial loss, including, without limitation, lost profits or special or consequential damages (except liability for any type of consequential damages which by law may not be disclaimed). The parties intend that this prohibition against consequential and similar damages will survive and be effective even if the limitation of remedies in the foregoing sections is found to fail of its essential purpose under section 2-719 of the Uniform Commercial Code.

ALLOCATION OF RISK

The foregoing warranty disclaimers, limitations of liability and limitation of remedies are bargained allocations of risks among (i) the Customer who purchased the Product; (ii) the Dealer who sold the Product, and (iii) Volvo CE, which is a third party beneficiary of the contract of sale between the Customer and the Dealer. The Buyer of the Product accepts the foregoing warranty and the other bargained for allocations of risk as part of the agreed price for the purchase of the Product to which the foregoing warranty applies. Volvo CE is prepared to offer different warranties and other allocations of risk for other prices. However, any such change in the warranty or the allocation of risks must be confirmed in writing by Volvo CE.

STATUTE OF LIMITATIONS

Any action by a Buyer of a Product for breach of contract, for breach of warranty arising under, or for a cause of action arising out of the sale of a Product, whether based on contract, tort (negligence or strict liability) or otherwise, shall be commenced within one (1) year after the cause of action has accrued. Any such cause of action shall be deemed to have accrued at the earlier of (i) the discovery of the defect or breach, or (ii) the expiration of the applicable Warranty Period.