Document Title: **Machine view**	Function Group: **000**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Machine view

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

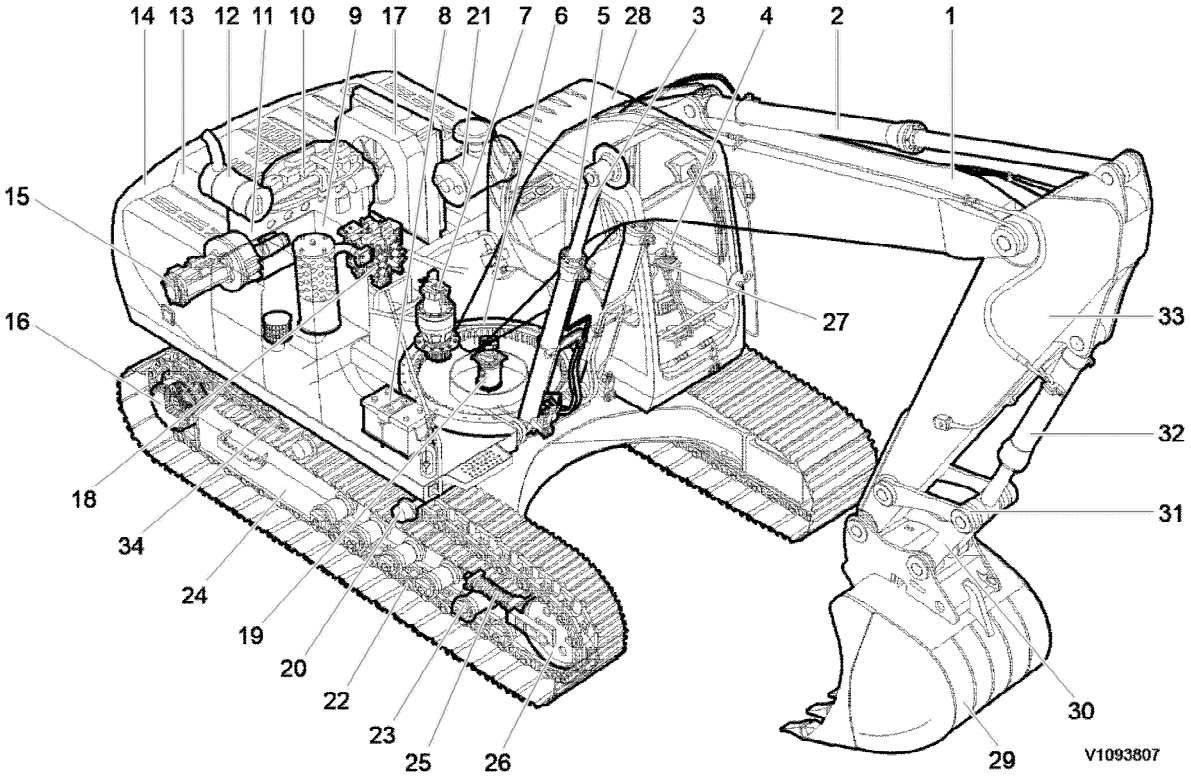

Figure 1
Location of components

1	Boom	13	Cowl	25	Recoil spring
2	Arm cylinder	14	Counterweight	26	Idler
3	Boom cylinder	15	Hydraulic pump	27	Control pedal (travel)
4	Control lever	16	Track motor and gearbox	28	Operator cab
5	Operator's seat	17	Radiator and oil cooler	29	Bucket
6	Slew ring gear	18	Main control valve	30	Connecting rod
7	Slew motor and gearbox	19	Center passage	31	Link
8	Battery	20	Top roller	32	Bucket cylinder
9	Fuel tank	21	Air cleaner	33	Arm
10	Engine	22	Track link	34	Track link
11	Hydraulic tank	23	Bottom roller		

12	Muffler	24	Bottom frame		

Document Title: **Product plates**	Function Group: **000**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Product plates

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

When ordering spare parts, and in all telephone enquiries or correspondence the model designation and the Product Identification Number (PIN) must always be quoted.

Product plate

The product plate on the machine shows the manufacturer's name and address, model designation, PIN, machine weight, engine output, production year and year of delivery. There is also room for the CE mark. The plate is positioned under the boom on the superstructure frame.

Models (General application)

Volvo Crawler excavators and Wheel excavators are available in different sizes from 5 ton to 95 ton. Some machines can be equipped with different Attachments, Demolition, High Reach Demolition, Pipe Layer, Rotating Pipelayer Kit machine and Dozer blade.

EC	Excavator Crawler	EW	Excavator Wheel
ECR	Excavator Crawler Short-Swing-Radius	AG	Agricultural machines
PL	Pipe Layer	FE	Feller Bunchers
L, LC	Long Crawler	NLD	Narrow Crawler Demolition
N, NC	Narrow Crawler	HR	High Reach Demolition
NL, NLC	Narrow Long Crawler	F, FX	Forestry Application
LM, LCM	Long Crawler Marsh	LD, LCD	Long Crawler Demolition
LR	Long Reach Boom & Arm	LC4	Long Crawler 4
LHDS	Long Crawler Heavy Duty Shanghai	LS	Long Crawler Shanghai
LHDC	Long Crawler Heavy Duty Changwon	NH	Narrow Heavy Duty
LRC4	Long Reach Crawler 4 (Boom & Arm)		

Supplementary PIN plate (EU countries only)

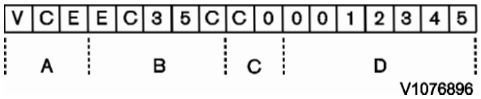

Figure 1

Example of 17 digit PIN number on PIN plate

A. World Manufacturing Code
B. Machine description
C. Check letters
D. Serial number

The supplementary plate contains information about machine mass in kg, engine net power in Kw, manufacturing year,

machine serial number and a CE-mark.

Machine mass

The machine mass in kg on the supplementary PIN plate is based on:

- cab or canopy
- most used track type
- most usual bucket (without load)
- full fuel tank

For safety reasons, 103 % of the machine mass will be shown on the supplementary PIN plate.

Engine

The engine product plate contains type designation and part and serial numbers and is positioned on the engine inside the rear engine cover on the right side of the machine.

Attachment quick coupler

The attachment quick coupler nameplate is attached on the outside of the attachment quick coupler. (shows part number and weight)

Bucket

The bucket nameplate is attached on the top of the bucket. (shows the bucket model order No, Serial number, bucket part number, rated capacity, weight, cutting width, tooth part number and adapted part number)

Cab

The nameplate is attached on the inside of the cab and indicates the product number, serial number, model type, and weight.

Document Title: **Volvo standard tightening torques**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Volvo standard tightening torques

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

The tightening torques in the following tables apply to bolts and nuts with tensile strength. The tables should be used as a general instruction for tightening bolts and nuts without specified values. The charts contains values for course thread bolts and nuts.
Torque values should be increased with ≈10%, for flange bolts.
All standard torques for bolts are without surface treatment.
The standard torque for bolts lubricated with oil should be reduced with 20% of the given value.

Standard tightening torque charts

Bolt size Metric Coarse Threads	**Tensile strength 8.8**		**Tensile strength 10.9**	
	(Nm)	**(lbf ft)**	**(Nm)**	**(lbf ft)**
M5	6	4	8	6
M6	10	7	14	11
M8	25	18	35	26
M10	50	37	70	52
M12	87	64	122	90
M14	139	103	195	144
M16	213	157	299	220
M18	293	216	413	305
M20	416	307	585	432
M24	719	530	1010	745
M27	1060	782	1490	1100
M30	1140	840	2025	1493
M36	2500	1844	3600	2653

Bolt size Inch SAE Coarse Threads	**Tensile strength 5**		**Tensile strength 8**	
	(lbf ft)	**(Nm)**	**(lbf ft)**	**(Nm)**
1/4	10	13,6	14	19
5/16	21	28,5	29	39,3
3/8	37	50,2	52	70
7/16	59	80	84	114
1/2	90	122	128	174
9/16	130	176	184	250
5/8	180	244	254	345

3/4	320	434	451	612
7/8	515	700	728	988
1	775	1052	1091	1480
1 1/8	953	1290	1545	2100
1 1/4	1344	1823	2180	2960
1 3/8	1600	2170	2650	3600
1 1/2	2000	2714	3200	4340

Hydraulic connections, general

Before fitting pipe couplings, plugs and hoses:

- Make sure that the sealing surfaces are clean and free from pores or scratches.
- Check elastic seal rings for defects.
- Oil in threads, sealing surfaces and contact surfaces except for ORFS-connections (ORFS = O-Ring Face Seal).

Applying Torque correction factor by tool angle

Correction factor		
Tool angle	**ORFS**	**Stud-end**
Allowable tolerance	±10%	- 0%, +10%
±0˚ ~ ±30˚	5% over torque	
±30˚ ~ ±45˚	20% over torque	
±45˚	NOT allowable	

Tool access angle

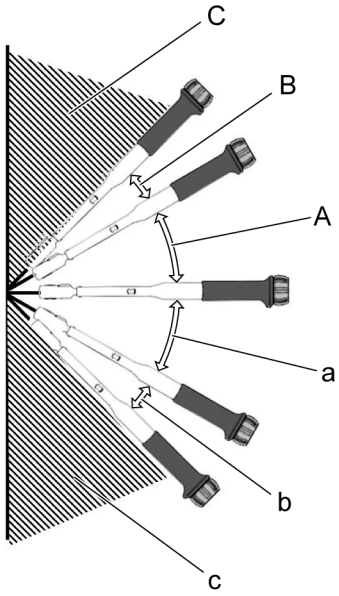


Figure 1
Tool access angle

A: +0˚ ~ +30˚

B: +30˚ ~ +45˚

C: +45˚

a: -0˚ ~ -30˚

b: -30˚ ~ -45˚

c: -45˚

ORFS female swivel fitting

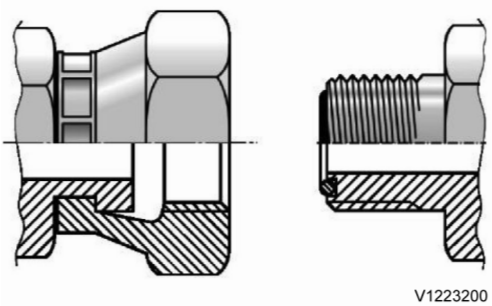


Figure 2

Threads type	Assembly position	Threads	Standard torque		±0˚ ~ ±30˚		±30° ~ ±45°	
			(Nm)	(lbf ft)	(Nm)	(lbf ft)	(Nm)	(lbf ft)
UN-UNF	ORFS	UNF 9/16-18	29 ±3	21.4 ±2.2	30.5 ±3.1	22.1 ±2.2	36.5 ±3.7	26.9 ±2.7
		UN 11/16-16	44 ±4	32.5 ±3.0	46.2 ±4.6	34.1 ±3.4	55.4 ±5.5	40.9 ±4.1
		UN 13/16-16	63 ±6	46.5 ±4.4	66.2 ±6.6	48.8 ±4.9	79.4 ±7.9	58.6 ±5.9
		UNS 1-14	106 ±8	78.2 ±5.9	111.3 ±11.1	82.1 ±8.2	133.6 ±13.4	98.5 ±9.9
		UN 1 3/16-12	140 ±12	103.3 ±8.9	147.0 ±14.7	108.4 ±10.8	176.4 ±17.6	130.1 ±13.0
		UN 1 7/16-12	175 ±15	129.1 ±11.1	183.8 ±18.4	135.6 ±13.6	220.5 ±22.1	162.6 ±16.3
		UN 1 11/16-12	270 ±20	199.1 ±14.8	283.5 ±28.4	209.1 ±20.9	340.2 ±34.0	250.9 ±25.1
	Stud-end	UNF 7/16-20	21 +2.1	15.4 +1.5	22.1 +2.2	16.3 +1.6	26.5 +2.7	19.5 +2.0
		UNF 1/2-20	37 +3.7	27.3 +2.7	38.9 +3.9	28.7 +2.9	46.6 +4.7	34.4 +3.4
		UNF 9/16-18	47 +4.7	34.7 +3.5	49.4 +4.9	36.4 +3.6	59.2 +5.9	43.7 +4.4
		UNF 3/4-16	81 +8.1	59.7 +6.0	85.1 +8.5	62.8 +6.3	102.1 +10.2	75.3 +7.5
		UNF 7/8-14	141 +14.1	104.0 +10.4	148.1 +14.8	109.2 +10.9	177.7 +17.8	131.1 +13.1
		UN 1 1/16-12	189 +18.9	139.4 +13.9	198.5 +19.9	146.4 +14.6	238.1 +23.8	175.6 +17.6
		UN 1 5/16-12	284 +28.4	209.5 +21.0	298.2 +29.8	219.9 +22.0	357.8 +35.8	263.9 +26.4
		UN 1 5/8-12	347 +34.7	255.9 +25.6	364.4 +36.4	268.8 +26.9	437.2 43.7	322.5 +32.3

	UN 1 7/8-12	425 +42.5	313.5 +31.4	446.3 +44.6	329.2 +32.9	535.5 +53.6	395.0 +39.5

G thread 30˚ cone female swivel fitting

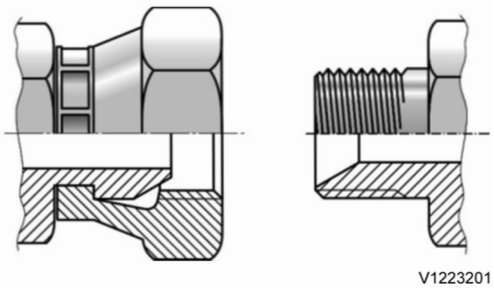


Figure 3

Threads type	Assembly position	Threads	Standard torque		±0˚ ~ ±30˚		±30° ~ ±45°	
			(Nm)	(lbf ft)	(Nm)	(lbf ft)	(Nm)	(lbf ft)
PF	ORFS	G 1/4-19	25 ±2.5	18.4 ±1.8	26.3 ± 2.6	19.4 ±1.9	31.5 ±3.2	23.2 ±2.3
		G 3/8-19	49 ±4.9	36.1 ±3.6	51.5 ± 5.2	38.0 ±3.8	61.7 ±6.2	45.5 ±4.6
		G 1/2-14	59 ±5.9	43.5 ±4.4	62.0 ± 6.2	45.7 ±4.6	74.3 ±7.4	54.8 ±5.5
		G 3/4-11	119 ±11.9	87.8 ±8.8	125.0 ±12.5	92.2 ±9.2	149.9 ±15.0	110.6 ±11.1
		G 1-11	140 ±14	103.3 ±10.3	147.0 ±14.7	108.4 ±10.8	176.4 ±17.6	130.1 ±13.0
		G 1 1/4-11	173 ±17.3	127.6 ±12.8	181.7 ±18.2	134.0 ±13.4	218.0 ±21.8	160.8 ±16.1
		G 1 1/2-11	205 ±20.5	151.2 ±15.1	215.3 ±21.5	158.8 ±15.9	258.3 ±25.8	190.5 ±19.1
	Stud-end	G 1/8-19	22 +2.2	16.2 +1.6	23.1 +2.3	17.0 +1.7	27.7 +2.8	20.4 +2.0
		G 1/4-19	52 +5.2	38.4 +3.8	54.6 +5.5	40.3 +4.0	65.5 +6.6	48.3 +4.8
		G 3/8-19	85 +8.5	62.7 +6.3	89.3 +8.9	65.9 +6.6	107.1 +10.7	79.0 +7.9
		G 1/2-14	105 +10.5	77.4 +7.7	110.3 +11.0	81.4 +8.1	132.3 +13.2	97.6 +9.8
		G 3/4-11	210 +21	154.9 +15.5	220.5 +22.1	162.6 +16.3	264.6 +26.5	195.2 +19.5
		G 1-11	400 +40	295.0 +29.5	420.0 +42.0	309.8 +31.0	504.0 +50.4	371.7 +37.1
		G 1 1/4-11	525 +52.5	387.2 +38.7	551.3 +55.1	406.6 +40.7	661.5 +66.2	487.9 +48.8
		G 1 1/2-11	630 +63.1	464.7 +46.5	661.5 +66.2	487.9 +48.8	793.8 +79.4	585.5 +58.6

Document Title: **Measurement conversion tables**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Measurement conversion tables

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Length

Unit	**cm**	**m**	**km**	**in**	**ft**	**yd**	**mile**
cm	1	0.01	0.00001	0.3937	0.03281	0.01094	0.000006
m	100	1	0.001	39.37	3.2808	1.0936	0.00062
km	100000	1000	1	39370.7	3280.8	1093.6	0.62137
in	2.54	0.0254	0.000025	1	0.08333	0.02777	0.000015
ft	30.48	0.3048	0.000304	12	1	0.3333	0.000189
yd	91.44	0.9144	0.000914	36	3	1	0.000568
mile	160930	1609.3	1.6093	63360	5280	1760	1
1 mm = 0.1 cm, 1 mm = 0.001 m							

Area

Unit	**cm^2**	**m^2**	**km^2**	**a**	**ft^2**	**yd^2**	**in^2**
cm^2	1	0.0001	-	0.000001	0.001076	0.000012	0.155000
m^2	10000	1	0.000001	0.01	10.764	1.1958	1550.000
km^2	-	1000000	1	10000	1076400	1195800	-
a	0.01	100	0.0001	1	1076.4	119.58	-
ft^2	-	0.092903	-	0.000929	1	0.1111	144.000
yd^2	-	0.83613	-	0.008361	9	1	1296.00
in^2	6.4516	0.000645	-	-	0.006943	0.000771	1
1 ha = 100 a, 1 $mile^2$ = 259 ha = 2.59 km^2							

Volume

Unit	**cm^3 = cc**	**m^3**	**Liter**	**in^3**	**ft^3**	**yd^3**
cm^3 = m liter	1	0.000001	0.001	0.061024	0.000035	0.000001
m^3	1000000	1	1000	61024	35.315	1.30796
Liter	1000	0.001	1	61.024	0.035315	0.001308
in^3	16.387	0.000016	0.01638	1	0.000578	0.000021
ft^3	28316.8	0.028317	28.317	1728	1	0.03704
yd^3	764529.8	0.76453	764.53	46656	27	1
1 gal(US) = 3785.41 cm^3 = 231 in^3 = 0.83267 gal(UK)						

Weight

Unit	**g**	**kg**	**t**	**oz**	**lb**
g	1	0.001	0.000001	0.03527	0.0022
kg	1000	1	0.001	35.273	2.20459
t	1000000	1000	1	35273	2204.59
oz	28.3495	0.02835	0.000028	1	0.0625
lb	453.592	0.45359	0.000454	16	1
1 tonne(metric) = 1.1023 ton(US) = 0.9842 ton(UK)					

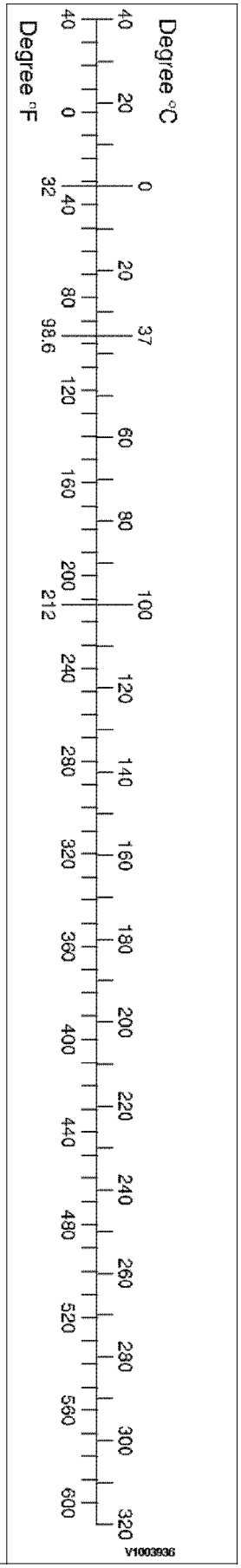
Pressure

Unit	**kgf/cm²**	**bar**	**Pa=N/m²**	**kPa**	**lbf/in²**	**lbf/ft²**
kgf/cm²	1	0.98067	98066.5	98.0665	14.2233	2048.16
bar	1.01972	1	100000	100	14.5037	2088.6
Pa=N/m²	0.00001	0.001	1	0.001	0.00015	0.02086
kPa	0.01020	0.01	1000	1	0.14504	20.886
lbf/in²	0.07032	0.0689	6894.76	6.89476	1	144
lbf/ft²	0.00047	0.00047	47.88028	0.04788	0.00694	1
1 kgf/cm² = 735.56 Torr(mmHg) = 0.96784 atm						

Approximate conversions

SI	Conversion	Non-SI	Conversion	SI
Unit	Factor	Unit	Factor	Unit
Torque				
newton meter (N·m)	x 10.2	= kgf·cm	x 0.8664	= (lbf·in)
newton meter (N·m)	x 0.74	= lb·ft	x 1.36	= N·m
newton meter (N·m)	x 0.102	= kgf·m	x 7.22	= (lbf·ft)
Pressure (Pa = N/m²)				
kilopascal (kPa)	x 4.0	= in. H_2O	x 0.249	= kPa
kilopascal (kPa)	x 0.30	= in. Hg	x 3.38	= kPa
kilopascal (kPa)	x 0.145	= psi	x 6.89	= kPa
(bar)	x 14.5	= psi	x 0.069	= (bar)
(kgf/cm²)	x 14.22	= psi	x 0.070	= (kgf/cm²)
(newton/mm²)	x 145.04	= psi	x 0.069	= (bar)
megapascal (MPa)	x 145	= psi	x 0.00689	= MPa
Power (W = J/s)				
kilowatt (kW)	x 1.36	= PS (cv)	x 0.736	= kW
kilowatt (kW)	x 1.34	= HP	x 0.746	= kW
kilowatt (kW)	x 0.948	= Btu/s	x 1.055	= kW
watt (W)	x 0.74	= ft·lb/s	x 1.36	= W

Note: ( ) non-si unit

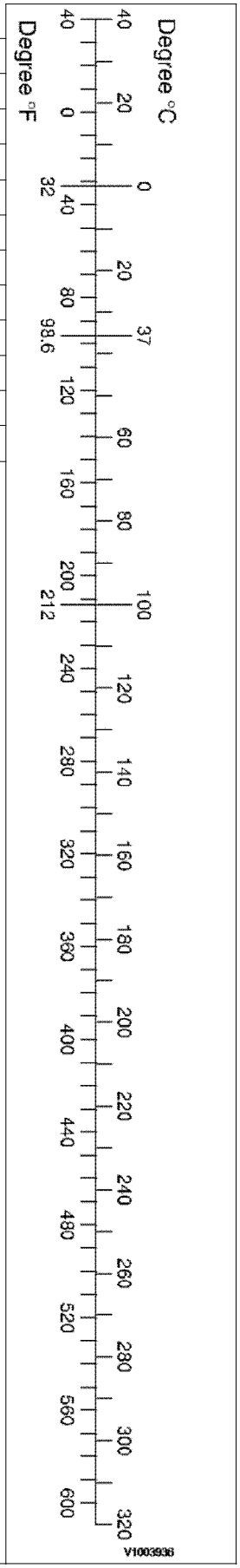


Approximate conversions

SI	Conversion	Non-SI	Conversion	SI
Unit	Factor	Unit	Factor	Unit

Energy (J = N·m)				
kilojoule (kJ)	x 0.948	= Btu	x 1.055	= kJ
joule (J)	x 0.239	= calorie	x 4.19	= J
Velocity and Acceleration				
meter per sec² (m/s²)	x 3.28	= ft/s²	x 0.305	= m/s²
meter per sec (m/s)	x 3.28	= ft/s	x 0.305	= m/s
kilometer per hour (km/h)	x 0.62	= mph	x 1.61	= km/h
Horse power/torque				
BHP x 5252 rpm = TQ (lb·ft)			TQ x rpm 5252 = B.H.P.	
Temperature				
°C = (°F - 32) /1.8	°F = (°C x 1.8) + 32			
Flow Rate				
liter/min (dm³/min)	x 0.264	= US gal/min x 3.785		= liter/min

Note: ( ) non-si unit



Document Title: **Specification, filling capacities**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Specification, filling capacities

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Refill capacities

Reservoir	**Kind of fluid**	**Approximate refill capacities**
		Liters (US gal)
Engine oil pan with filter	Engine oil	25 (6.61)
Hydraulic oil tank	Hydraulic oil	150 (40)
Hydraulic system, total	Hydraulic oil	295 (78)
Slew gearbox	Gear oil	8.6 (2.3)
Track gearbox	Gear oil	5.8 (1.5)
Fuel tank	Diesel fuel	350 (92.5)
Slew ring gear	Grease	20 (5.3)
Pin and bushing	Grease	-
Cooling system	Coolant	32 (8.45)

Document Title: **Engine, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Engine, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Specifications

Item	**Unit**	**Specifications**
Type	-	4-stroke, 6-cylinder, water cooled, vertical in line, direct injection, turbocharged and air to air aftercooled diesel engine
Fuel injection type	-	Deutz common rail system
Number of cylinders	-	6, vertical in-ine
Total displacement	cc (cu in)	5700 (348)
Bore x stroke	mm (in)	98 x 126 (3.86 x 4.96)
Rotational direction		Facing flywheel, counterclockwise
Compression ratio	-	18:1
Compression pressure	bar (MPa)	30 – 38 (3.0 – 3.8)
Injection order	-	1-5-3-6-2-4
Lubrication	-	Forced circulation
Rated output (Net)	kW (HP) / rpm	110 (148) / 1800
Maximum torque	Nm (lbf ft) / rpm	730 (538) / 1350
Low idle (no load)	rpm	800 ±40
High idle (no load)	rpm	1900 ±40

Document Title: **Engine, weight**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Engine, weights

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Engine, dry, approx.	550 kg (1212.5 lbs)

VOLVO

Service Information

Document Title: **Valve clearance, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Valve system specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Valves	
Valve head diameter:	
inlet	44.4 ±0.1 mm (1.75 ±0.004 in)
exhaust	38.7 ±0.1 mm (1.52 ±0.004 in)
Valve stem, diameter:	
inlet	7.94 – 0.04 mm (0.31 –0.0015 in)
exhaust	7.94 – 0.04 mm (0.31 –0.0015 in)
Valve clearance, cold engine, value when adjusting:	
inlet	To zero clearance, then 75° counter-clockwise
exhaust	To zero clearance, then 120° counter-clockwise
Clearance between control valve piston and rocker arm	To zero clearance, then 144° counter-clockwise
Measurement between valve disc and cylinder head's face:	
inlet	0.9 +0.15 –0.1 mm (0.035 +0.006 –0.0039 in)
exhaust	0.9 +0.15 –0.1 mm (0.035 +0.006 –0.0039 in))
Valve head edge, thickness:	
inlet	2.36 mm (0.09 in)
exhaust	1.8 mm (0.07 in)

Valve guides	
Max. clearance valve stem - guide, wear tolerance:	
Inlet	0.07 — 0.13 mm (0.0027 — 0.0052 in)
Outlet	0.07 — 0.13 mm (0.0027 — 0.0052 in)

Valve springs	
Inlet/exhaust	
Length, unloaded	59 ±1.9 mm (2.32 ±0,039 in)
Diameter, thread	4 ±0.03 mm (0.157 ±0,012 in)

Rocker arm	
Hole diameter inlet, exhaust	21.02 +0.033 (0.828 +0.0013 in)
Tapp	21 –0.021 (0.827 –0.0008 in)

Valve seat	
Valve seat diameter:	

Inlet	46.09 –0.02 mm
Outlet	39.99 –002 mm
Valve seat angle:	
Inlet	30°
Outlet	45°

Document Title: **Flywheel, weight**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Flywheel, weight

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Flywheel, approx.	55 kg (112 lbs)

Document Title: **Lubrication system, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Lubrication system, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Oil temperature, normal	80 °C (176 °F)
Oil temperature, max.	125 °C (257 °F)
Oil pressure, > 1100 rpm	0.45 MPa (4.5 bar, 65 psi)
Oil pressure, low idle	0.08 MPa (0.8 bar, 11.6 psi)
Pressure regulating valve, opening pressure	0.4 ±0.04 MPa (4 ±0.4 bar, 58 ±5.8 psi)
Overflow valve, opening pressure	0.25 ±0.05 MPa (2.5 ±0.5 bar, 36.2 ±7.3 psi)

Document Title: **Fuel pressure, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Fuel pressure, specifications

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Fuel feed pressure	
Minimum pressure in engine starting condition	0.35 ±0.05 MPa, 51 ±7 psi, 3.5 ±0.5 bar
Minimum pressure in engine running condition	0.6 ±0.05 MPa, 87 ±7 psi, 6.0 ±0.5 bar
Maximum pressure in the pump pressure relive valve	1.15 ±0.15 MPa, 167 ±22 psi, 11.5 ±1.5 bar

Fuel control unit (FCU) pressure	
Pressure in engine starting condition	0.07 ±0.04 MPa, 10 ±6 psi, 0.7±0.4 bar
Pressure without load in engine running condition	0.1 ±0.01 MPa, 15 ±2 psi, 1 ±0.1 bar
Pressure with load in engine running condition	0.09–0.21 MPa, 13–31 psi, 0.9–2.1 bar
Pressure without regulation in engine running condition	0.45 ±0.02 MPa, 65 ±3 psi, 4.5 ±0.2 bar

High pressure fuel pump output pressure at testing condition	
Output pressure	55 ±5 MPa, 7979 ±725 psi, 550 ±50 bar

Fuel rail pressure	
Pressure in engine starting condition	30 ±5 MPa, 4352 ±725 psi, 300 ±50 bar (at charge air pressure 0 MPa, 0 psi, 0 bar)
Pressure with rail PRV open in running conditions	70 ±5 MPa, 10153 ±725 psi, 700 ±50 bar
Pressure with **load above 60%** in engine running condition	80–150 MPa, 11606–21762 psi, 800–1500 bar (at charge air pressure 0.05–0.25 MPa, 7.3–36.3 psi, 0.5–2.5 bar)

VOLVO

Service Information

Document Title: **Fuel system, tightening torques**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Fuel system, tightening torques

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

NOTICE

Regarding bolted joints which are not listed here, see "Volvo standard tightening torques"

Fuel rail, attaching bolts	30 Nm (22 lbf ft)
Electrical cables, attaching bolts	1.4 ±0.1 Nm (1.03 lbf ft)
Fuel delivery line (between fuel rail and injector) Step 1: Step 2:	 10 Nm (7.4 lbf ft) 60°+15°
Injector, yoke Step 1: Step 2:	 5 Nm (3.7 lbf ft) 120°+5°
Fuel control valve (FCV)	30 Nm (22 lbf ft)
Return line to control valve	39 Nm (28.8 lbf ft)
Fuel feed filter, attaching bolts	30 Nm (22 lbf ft)
Feed line to control valve (from fuel filter)	49 Nm (39.1 lbf ft)
Feed pipe (on control valve)	34 Nm (25.1 lbf ft)
High-pressure pump, attaching bolts Step 1: Step 2:	 10 Nm (7.4 lbf ft) 50 Nm (36.9 lbf ft)
Safety valve (PRV), fuel rail	100 Nm (73.8 lbf ft)
High-pressure sensor, fuel rail	70 Nm (51.6 lbf ft)

Document Title: **Fuel filler pump, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Fuel filler pump, specifications

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Specifications

	35 LPM
Rated voltage	24 V
Current draw	10 A (at 3 mtrs head)
Output flow	35 liter/min (9.2 gal/min) at 3 m head
Head	6 m (Maximum total head)
Temperature range	-30°C ~ +80°C

Document Title: **Cooling system, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Cooling system, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Specifications

Item		**Unit**	**Specifications**
Radiator	Core type	–	4–Row CF (wave fin)
	Core size (W × H × D)	mm	720 × 293 × 145.4
		in	28.35 × 11.54 ×5.72
	Dry weight	kg (lb)	41.5 (91.5)
Hydraulic oil cooler	Core type	–	1–Row CF (wave fin)
	Core size (W × H × D)	mm	735 ×320.4 ×145.4
		inch	28.94 ×12.60 ×5.72
	Dry weight	kg (lb)	33.5 (73.9)
Charge air cooler	Core type	–	1–Row CF (wave fin)
	Core material	–	Aluminium
	Tube type	–	Extrusion type
	Core size (W × H × D)	mm	729 ×155 × 145.4
		inch	28.7 × .61 ×5.7
	Dry weight	kg (lb)	12 (26.5)

Document Title: **Engine - Pump control, specification**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Engine - Pump control, specification

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Except North America

Mode		**Engine speed control switch**		**Proportional solenoid valve current (mA)**	**Max pump input torque, kgf m (lbf ft)**	**Proportional solenoid valve 2nd pressure, MPa (psi)**	**Power, kW (HP)**
		Switch steps	**Engine speed (rpm) No-load / Load**				
Power maximum	P	9	1900 / above 1800	245 / variable	56 (404.3)	0.44 (64.0)	102.9 (138)
Heavy	H		1800 / above 1700	275 / variable	55 (397.1)	0.59 (85.3)	
General	G1	8	1700 / above 1600	320 / variable	52 (375.4)	0.90 (130.9)	
	G2	7	1600 / above 1500				
	G3	6	1500 / above 1400				
Fine	F1	5	1400 / -	505	41 (296.0)	2.24 (324.3)	
	F2	4	1300 / -				
	F3	3	1200 / -				
Idle	I1	2	1000 / -	595	29 (209.4)	3.00 (435.2)	
	I2	1	800 / -				

North America

Mode		**Engine speed control switch**		**Proportional solenoid valve current (mA)**	**Max pump input torque, kgf m (lbf ft)**	**Proportional solenoid valve 2nd pressure, MPa (psi)**	**Power, kW (HP)**
		Switch steps	**Engine speed (rpm) No-load / Load**				
Heavy	H	9	1900 / above 1800	245 / variable	56 (404.3)	0.44 (64.0)	102.9 (138)
General	G1	8	1800 / above 1700	275 / variable	55 (397.1)	0.59 (85.3)	
	G2	7	1700 / above 1600	320 / variable	52 (375.4)	0.90 (130.9)	
	G3	6	1600 / above 1500				
Fine	F1	5	1400 / -	505	41 (296.0)	2.24 (324.3)	
	F2	4	1300 / -				
	F3	3	1200 / -				
Idle	I1	2	1000 / -	595	29 (209.4)	3.00 (435.2)	
	I2	1	800 / -				

Document Title: **Instrument control unit I-ECU, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Instrument control unit I-ECU, specifications

Showing Selected Profile

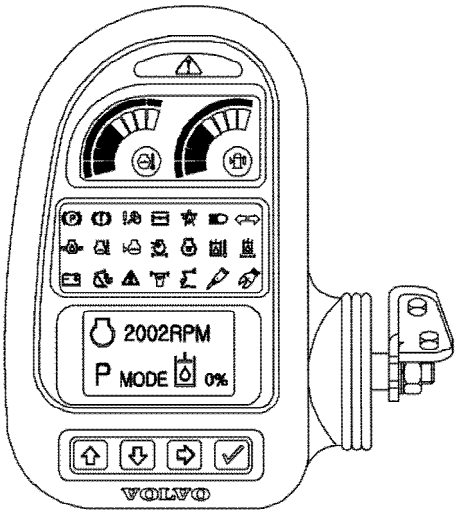
Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Instrument control unit, I-ECU connector, specifications

Connector	Counterpart connector
Housing: AMP 174657-2 Terminal: AMP 171661-1 Wire seal: AMP 172888-2	Housing: AMP 174655-2 Terminal: AMP 171662-1 Wire seal: AMP 172888-2

Connector pin, specifications

No	Description	No	Description
1	CAN_H (J1939_H)	6	Battery power 24 V
2	CAN_L (J1939_ L) (BL)	7	Working light
3	J1587_ A (Y/R)	8	Auto/manual switch input
4	J1587_ B (Y/SB)	9	Turn signal (LH/RH)
5	Power for clock 24 V (R)	10	Battery ground



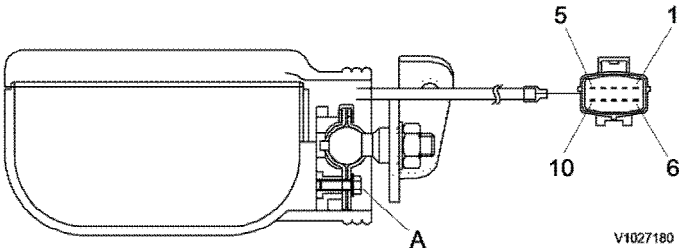


Figure 1
I-ECU, connector

Tightening torque (A) : 0,5 Kgf m (0,4 lbf ft)

VOLVO

Service Information

Document Title: **Engine control unit E-ECU, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Engine control unit E-ECU, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Engine control unit, E-ECU connector, specifications

Connector	**Specifications**
Engine connector	AMP 346244-1
Cab connector	AMP 346245-5

E-ECU pin, specifications

No	**Description**	**No**	**Description**
A7	Feed to sensor (5 V)	B3	Engine oil level, low
A11	Signal ground to sensor	B4	Engine oil level, high
A12	Actuator MPROP common rail	B7	Preheating diagnostics coil
A15	Ambient filter ground	B8	Water in fuel, signal
A16	Actuator MPROP common rail ground	B10	Switch ground
A19	Rail pressure sensor	B11	Engine oil pressure, signal
A22	Boost pressure signal	B15	Emergency switch (IVS)
A29	Air cleaner indicator	B16	Fuel pressure, signal
A31	Oil temperature signal	B17	Feed to sensor
A33	SAE J1587 B information bus	B18	Signal ground to sensor
A34	SAE J1587 A information bus	B23	Coolant level, signal
A36	Injector cylinder 6	B25	Preheating relay (coil)
A37	Engine crank speed, plus (+)	B27	Coolant temperature, engine, signal
A38	Engine crank speed, minus (-)	B30	IEGR solenoid valve for on / off (T3 only)
A40	Injector cylinder 5	B31	Ambient air temperature sensor
A44	Injector cylinder 4	B51	SAE J1937 H control bus
A45	Engine camshaft speed, plus (+)	B55	SAE J1937 HL control bus
A47	Boost temperature, signal	B57	Voltage feed (ECU supply)
A48	Injector cylinder 3	B58	ECU ground
A52	Injector cylinder 2	B59	ECU ground
A56	Injector cylinder 1	B60	Voltage feed (ECU supply)
A57	ECU ground	B61	ECU ground
A59	Injector cylinder 1 ~ 3 (sv) — ground		
A60	Injector cylinder 4 ~ 6 (sv) — ground		

Document Title: **Battery, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Battery, specifications

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Battery, specifications

Items	**Specifications**
Quantity	2 in series
Voltage	12 V
Capacity	150 Ah / battery
Cold-cranking ampere CCA	860 A

Document Title: **Starter motor, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Starter motor, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Item	**Specifications**
Type	DC 24V, 5.5 kW (7.4 hp)
Weight	9.2 kg (20.2 lb)

Document Title: **Preheating, specification**	Function Group: **030**	Information Type: **Service Information**	Date: **7/30/2025**
Profile: **EC200B Volvo**			

Preheating, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
EC200B Volvo			

Item	**Specifications**
Output	2.5 kW (3.4 hp)