



Document Title: Volvo standard tightening torques	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Volvo standard tightening torques

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F 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	200	271	284	388
3/4	270	365	384	520
7/8	340	460	484	653
1	410	550	584	790
1 1/8	500	670	704	950
1 1/4	590	790	834	1120
1 3/8	680	910	954	1290
1 1/2	770	1030	1074	1450
1 3/4	860	1150	1194	1620
2	950	1270	1314	1790
2 1/4	1140	1540	1584	2140
2 3/4	1330	1800	1844	2500
3	1520	2060	2104	2850
3 1/2	1710	2310	2344	3200
4	1900	2570	2604	3550
4 1/2	2090	2820	2664	3900
5	2280	3080	2724	4250
5 1/2	2470	3330	2784	4600
6	2660	3590	2844	4950
6 1/2	2850	3840	2904	5300
7	3040	4090	2964	5650
7 1/2	3230	4340	3024	6000
8	3420	4590	3084	6350
8 1/2	3610	4840	3144	6700
9	3800	5090	3204	7050
9 1/2	3990	5340	3264	7400
10	4180	5590	3324	7750
10 1/2	4370	5840	3384	8100
11	4560	6090	3444	8450
11 1/2	4750	6340	3504	8800
12	4940	6590	3564	9150
12 1/2	5130	6840	3624	9500
13	5320	7090	3684	9850
13 1/2	5510	7340	3744	10200
14	5700	7590	3804	10550
14 1/2	5890	7840	3864	10900
15	6080	8090	3924	11250
15 1/2	6270	8340	3984	11600
16	6460	8590	4044	11950
16 1/2	6650	8840	4104	12300
17	6840	9090	4164	12650
17 1/2	7030	9340	4224	13000
18	7220	9590	4284	13350
18 1/2	7410	9840	4344	13700
19	7600	10090	4404	14050
19 1/2	7790	10340	4464	14400
20	7980	10590	4524	14750
20 1/2	8170	10840	4584	15100
21	8360	11090	4644	15450
21 1/2	8550	11340	4704	15800
22	8740	11590	4764	16150
22 1/2	8930	11840	4824	16500
23	9120	12090	4884	16850
23 1/2	9310	12340	4944	17200
24	9500	12590	5004	17550
24 1/2	9690	12840	5064	17900
25	9880	13090	5124	18250
25 1/2	10070	13340	5184	18600
26	10260	13590	5244	18950
26 1/2	10450	13840	5304	19300
27	10640	14090	5364	19650
27 1/2	10830	14340	5424	20000
28	11020	14590	5484	20350
28 1/2	11210	14840	5544	20700
29	11400	15090	5604	21050
29 1/2	11590	15340	5664	21400
30	11780	15590	5724	21750
30 1/2	11970	15840	5784	22100
31	12160	16090	5844	22450
31 1/2	12350	16340	5904	22800
32	12540	16590	5964	23150
32 1/2	12730	16840	6024	23500
33	12920	17090	6084	23850
33 1/2	13110	17340	6144	24200
34	13300	17590	6204	24550
34 1/2	13490	17840	6264	24900
35	13680	18090	6324	25250
35 1/2	13870	18340	6384	25600
36	14060	18590	6444	25950
36 1/2	14250	18840	6504	26300
37	14440	19090	6564	26650
37 1/2	14630	19340	6624	27000
38	14820	19590	6684	27350
38 1/2	15010	19840	6744	27700
39	15200	20090	6804	28050
39 1/2	15390	20340	6864	28400
40	15580	20590	6924	28750
40 1/2	15770	20840	6984	29100
41	15960	21090	7044	29450
41 1/2	16150	21340	7104	29800
42	16340	21590	7164	30150
42 1/2	16530	21840	7224	30500
43	16720	22090	7284	30850
43 1/2	16910	22340	7344	31200
44	17100	22590	7404	31550
44 1/2	17290	22840	7464	31900
45	17480	23090	7524	32250
45 1/2	17670	23340	7584	32600
46	17860	23590	7644	32950
46 1/2	18050	23840	7704	33300
47	18240	24090	7764	33650
47 1/2	18430	24340	7824	34000
48	18620	24590	7884	34350
48 1/2	18810	24840	7944	34700
49	19000	25090	8004	35050
49 1/2	19190	25340	8064	35400
50	19380	25590	8124	35750
50 1/2	19570	25840	8184	36100
51	19760	26090	8244	36450
51 1/2	19950	26340	8304	36800
52	20140	26590	8364	37150
52 1/2	20330	26840	8424	37500
53	20520	27090	8484	37850
53 1/2	20710	27340	8544	38200
54	20900	27590	8604	38550
54 1/2	21090	27840	8664	38900
55	21280	28090	8724	39250
55 1/2	21470	28340	8784	39600
56	21660	28590	8844	39950
56 1/2	21850	28840	8904	40300
57	22040	29090	8964	40650
57 1/2	22230	29340	9024	41000
58	22420	29590	9084	41350
58 1/2	22610	29840	9144	41700
59	22800	30090	9204	42050
59 1/2	22990	30340	9264	42400
60	23180	30590	9324	42750
60 1/2	23370	30840	9384	43100
61	23560	31090	9444	43450
61 1/2	23750	31340	9504	43800
62	23940	31590	9564	44150
62 1/2	24130	31840	9624	44500
63	24320	32090	9684	44850
63 1/2	24510	32340	9744	45200
64	24700	32590	9804	45550
64 1/2	24890	32840	9864	45900
65	25080	33090	9924	46250
65 1/2	25270	33340	9984	46600
66	25460	33590	10044	46950
66 1/2	25650	33840	10104	47300
67	25840	34090	10164	47650
67 1/2	26030	34340	10224	48000
68	26220	34590	10284	48350
68 1/2	26410	34840	10344	48700
69	26600	35090	10404	49050
69 1/2	26790	35340	10464	49400
70	26980	35590	10524	49750
70 1/2	27170	35840	10584	50100
71	27360	36090	10644	50450
71 1/2	27550	36340	10704	50800
72	27740	36590	10764	51150
72 1/2	27930	36840	10824	51500
73	28120	37090	10884	51850
73 1/2	28310	37340	10944	52200
74	28500	37590	11004	52550
74 1/2	28690	37840	11064	52900
75	28880	38090	11124	53250
75 1/2	29070	38340	11184	53600
76	29260	38590	11244	53950
76 1/2	29450	38840	11304	54300
77	29640	39090	11364	54650
77 1/2	29830	39340	11424	55000
78	30020	39590	11484	55350
78 1/2	30210	39840	11544	55700
79	30400	40090	11604	56050
79 1/2	30590	40340	11664	56400
80	30780	40590	11724	56750
80 1/2	30970	40840	11784	57100
81	31160	41090	11844	57450
81 1/2	31350	41340	11904	57800
82	31540	41590	11964	58150
82 1/2	31730	41840	12024	58500
83	31920	42090	12084	58850
83 1/2	32110	42340	12144	59200
84	32300	42590	12204	59550
84 1/2	32490	42840	12264	59900
85	32680	43090	12324	60250
85 1/2	32870	43340	12384	60600
86	33060	43590	12444	60950
86 1/2	33250	43840	12504	61300
87	33440	44090	12564	61650
87 1/2	33630	44340	12624	62000
88	33820	44590	12684	62350
88 1/2	34010	44840	12744	62700
89	34200	45090	12804	63050
89 1/2	34390	45340	12864	63400
90	34580	45590	12924	63750
90 1/2	34770	45840	12984	64100
91	34960	46090	13044	64450
91 1/2	35150	46340	13104	64800
92	35340	46590	13164	65150
92 1/2	35530	46840	13224	65500
93	35720	47090	13284	65850
93 1/2	35910	47340	13344	66200
94	36100	47590	13404	66550
94 1/2	36290	47840	13464	66900
95	36480	48090	13524	67250
95 1/2	36670	48340	13584	67600
96				

Product: L120F Volvo Wheel Loaders Service Manual

Full Download: <https://www.arepairmanual.com/downloads/l120f-volvo-wheel-loaders-service-manual/>

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

Sample manual. Download All 2491 pages at:

<https://www.arepairmanual.com/downloads/l120f-volvo-wheel-loaders-service-manual/>

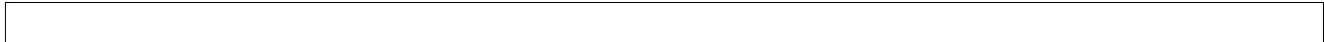
Document Title: Oil sump, tightening torque	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Oil sump, tightening torque

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Valid for serial numbers			
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L120F Volvo			

Oil sump	30±3 Nm (22±2 lbf ft)
<p>NOTE! Apply sealing compound in an even bead, thickness approx. 3.5 mm, to the sealing surface on the oil sump.</p> <p>See example in figure.</p>	



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Figure 1

Document Title: Lubrication specifications	Function Group: system, 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Lubrication system, specifications

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Model	Production site	Serial number start	Serial number stop
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Lubrication system	
Oil pressure maximum warm engine, high idling speed	400-500 kPa (4-5 bar) (58-72 psi)
Oil pressure minimum warm engine, low idling speed	60 kPa (0.6 bar) (8.7 psi)

Document Title: Fuel system, tightening torques	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Fuel system, tightening torques

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Model	Production site	Serial number start	Serial number stop
L120F 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)	25 Nm (18.4 lbf ft)
Injector, yoke	
Step 1:	5 Nm (3.7 lbf ft)
Step 2:	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:	10 Nm (7.4 lbf ft)
Step 2:	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: Thermostat, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Thermostat, specifications

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Model	Production site	Serial number start	Serial number stop
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Cooling system	
Thermostat starts to open at	83 °C (181.4 °F)
Thermostat fully open at	95 °C (203 °F)

Document Title: Engine, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Engine, specifications

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F Volvo			

General

Number of cylinders	6
Cylinder bore	108 mm (4.25 in)
Stroke	130 mm (5.12 in)
Displacement	7.15 litres (1.89 US gal)
Injection order	1-5-3-6-2-4
Low idle	780 ±50 rpm
High idle (run out speed)	2250 ±35 rpm
Weight, engine	685 kg (1510 lbs)

Stall speed torque converter⁽¹⁾

L110F ⁽²⁾ HTE205 (22724) HTE204 (22563)	2020–2110 rpm 2020–2110 rpm
L120F ⁽²⁾ HTE205 (22724) HTE205 (22564)	2070–2130 rpm 2070–2130 rpm

(1) Shall be performed on gear 2, APS-mode service (manual), and without using the hydraulics.

(2) The transmission part number can be found in the machine card in PROSIS.

Document Title: Speed sensor, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Speed sensor, specifications

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Speed sensor	
Crankshaft, clearance sensor — flywheel	0.6 ±0.1 mm (0.024 ±0.004 in)

Document Title: Valve mechanism, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Valve system specifications

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Model	Production site	Serial number start	Serial number stop
L120F Volvo			

Valve mechanism	
Valve arrangement	Top valves with IEGR-rocker arm
Inlet valves	To zero clearance, then 90° counter-clockwise
Exhaust valves	To zero clearance, then 150° counter-clockwise

IEGR-unit	
Adjusting screw	To zero clearance, then 144° counter-clockwise

Document Title: Engine, capacities	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Engine, capacities

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Model	Production site	Serial number start	Serial number stop
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Engine	
Engine oil incl. filter, total	22 l (5.8 US gal)
Change volume	21 litres (5.55 US gal)

Document Title: Fuel system, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Fuel system, specifications

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
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Injectors	
Type	Multi-hole nozzle (6 holes)
Opening pressure	Variable, controlled through mapping
Order of injection	1-5-3-6-2-4

High-pressure fuel pumps	
Quantity	2
Output pump pressure, low idle	55 ±5 MPa (550 ±50 bar) (7977 ± 725 psi)

Fuel rail, pressure [1]	
Start (starter motor)	31.5 ±3 MPa (315 ±30 bar)
Low idle	41.7 ±3 MPa (417 ±30 bar)
High idle	77.3 ±3 MPa (773 ±30 bar)
Stall speed	102.2 ±3 MPa (1022 ±30 bar)
Pressure relief valve (PRV) open, low idle	70 ±5 MPa (700 ±50 bar)

Fuel control valve's (FCV) output pressure[2]	
Start (starter motor)	0.06 ±0.02 MPa (0.6 ±0.2 bar)
Low idle	0.08 ±0.02 MPa (0.8 ±0.2 bar)
High idle	0.10 ±0.02 MPa (1.0 ±0.2 bar)
Stall speed	0.13 ±0.02 MPa (1.3 ±0.2 bar)
Without control (open circuit FCV), low idle	0.45 ±0.02 MPa (4.5 ±0.2 bar)

[1]Values are a measured average value and shall be used as a guideline value when checking, e.g., the fuel control valve (FCV)

[2]Values are a measured average value and shall be used as a guideline value when checking, e.g., the fuel control valve (FCV)

Document Title: Fuel tank, volume	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Fuel tank, volume

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
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Fuel tank	
Capacity, total	275 l (72.6 US gal)
Volume, usable	269 l (71.1 US gal)

Document Title: Fuel feed pump, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Fuel feed pump, specifications

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Fuel feed pump	
Type	Rotor pump
Feed pressure	500–700 kPa (5.0–7.0 bar) (72.5–101.5 psi) at 780–max. rpm

Document Title: Thermostat, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Thermostat, specifications

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Cooling system	
Thermostat starts to open at	83 °C (181.4 °F)
Thermostat fully open at	95 °C (203 °F)

Document Title: Cooling system, volume	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Cooling system, volume

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
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Cooling system	
Coolant, total	40 l (10.6 US gal)
Coolant, when changing	38 l (10.0 US gal)

Document Title: Reversible cooling fan, tightening torques	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Reversible cooling fan, tightening torques

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Tightening torque for directional valve

Directional valve for fan	
Nut for PWM2601	4–8 N m (2.95–5.9 lbf ft)
Nut for PWM2602	4–8 N m (2.95–5.9 lbf ft)

Document Title: Temperature limits for cooling fan speed, specifications.	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Temperature limits for cooling fan speed, specifications.

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Signals from the different sensors vary linearly between 0.0 and 1.0 depending on the temperature. The cooling fan signal with the highest value controls the requested cooling fan speed. If the engine speed is below 800 rpm, the value for the charge air will be 0 = 45 °C (113 °F)

System	Temperature interval
Coolant flowing out of the radiator	70–80 °C (158–176 °F)
Hydraulic system when the thermostat has opened, see Thermostat specifications	70–95 °C (158–203 °F)
Axles front and rear when the engine thermostat has opened, see Thermostat specifications	90–133 °C (194–271.4 °F)
Transmission	90–105 °C (194–221 °F)
Engine	85–95 °C (185–203 °F)
Charge air when induction air temperature is 25 °C (77 °F) or lower	45–60 °C (113–140 °F)
Charge air when induction air temperature is above 25 °C (77 °F)	Induction air temperature = T T+20 °C to T+35 °C (T+68 °F to T+95 °F)

Document Title: Cooling fan rpm, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Cooling fan rpm, specifications

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The VCADS Pro parameter GDR is used for setting the maximum cooling fan speed by selecting sound reduction level (A, B or C), depending on the requirements for cooling of engine, charge air, timing gears and hydraulic oil.

Cooling fan	
Basic speed	400 rpm
Speed at pressure test	1700 rpm

GDR	Max. fan speed at high idling	Description
A	1500 rpm	Low sound level
B	1700 rpm	Standard cooling
C	1850 rpm	Maximal cooling

Document Title: Engine, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Engine, tightening torques

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NOTICE

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

Engine mounting	
Engine member – Frame	160 Nm (118 lbf ft) +60°
Flywheel housing – Hydraulic transmission	60 Nm (44 lbf ft)
Front engine mount, rubber pads – engine member	85 Nm (63 lbf ft)
Front engine mount, rubber pads – engine mount	85 Nm (63 lbf ft)
Front engine mount, rubber pads – engine block	275 Nm (202 lbf ft)
Engine	
Valve cover	13 Nm (9.6 lbf ft)
IEGR-unit	30 Nm (22 lbf ft)
Lock nut, valve adjusting screw	20 ±2 Nm (14.8 ±1.5 lbf ft)
Lock nut, adjusting screw on IEGR-unit	20 Nm (14.8 lbf ft)
Belt pulley: step 1	40 Nm (33 lbf ft)
Belt pulley: step 2, angle tightening	60°
Belt pulley: step 3, angle tightening	60°
Vibration damper	70 Nm (52 lbf ft)
Connector ED, centre bolt	3.5 ±0.5 Nm (2.6 ±0.4 lbf ft)
Speed (rpm) sensor crankshaft, holder	9 Nm (6.6 lbf ft)

Document Title: Speed sensor, tightening torque	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Speed sensor, tightening torque

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NOTICE

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

Speed sensor	
Crankshaft sensor, holder	20 Nm (15 lbf ft)

Document Title: Turbocharger, tightening torques	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
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Turbocharger, tightening torques

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Stud bolt	40 ±4 Nm (30 ±3 lbf ft)
Nut	10 ±1 Nm (7.4 ±0.7 lbf ft)
Oil pressure pipe, attaching bolts	39 Nm (29 lbf ft)
Return pipe, attaching bolts	20 Nm (15 lbf ft)

Document Title: Battery, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo, L120F Volvo			

Battery, specifications

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Model	Production site	Serial number start	Serial number stop
L120F Volvo			
L120F Volvo			

Battery	
Total	2 batteries connected in series
Voltage	12 V
Battery capacity	140 Ah

Charge level	Voltage
Fully charged battery	12.78 V
Charge within 24 hours	12.54 V
Minimum charge to store machine for 30 days	12.64 V

Document Title: Battery, weight	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo, L120F Volvo			

Battery, weight

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F Volvo			
L120F Volvo			

Battery	
Weight, incl. electrolyte	40.3 kg (89 lb)

Document Title: Electrical specifications	Function Group: system, 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Electrical system, specifications

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F Volvo			

Electrical system	
System voltage	24 V

Document Title: Preheating, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Preheating, specifications

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F Volvo			

Preheating coil	
Output	4 kW

Document Title: Alternator 80 A, specification	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Alternator 80 A, specification

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F Volvo			

Alternator, 80 amp with regulator	
Type	Alternating current
Output (rated output)	2280 W
Voltage, at +20 °C (68 °F)	28.3 ± 0.3 V
Current, maximum	80 A
Resistance across rotor winding	8.0 ± 0.4 Ω
Resistance in stator winding	0.1 Ω

Document Title: Front and rear axles, tightening torque	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

Front and rear axles, tightening torque

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F Volvo			

NOTICE

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

Front axle AWB31		Rear axle AWB30
Front axle, front frame	1100 ± 100 Nm (811 ± 74 lbf ft)	-
Rear axle mounting, frame	-	500–550 Nm (370–405 lbf ft)
Differential carrier assembly		
Differential housing bolts	290–330 Nm (214–243 lbf ft)	
Crown wheel	150–180 Nm (110–132 lbf ft)	
Differential housing halves	120–150 Nm (89–110 lbf ft)	
Bearing caps	460–500 Nm (339–368 lbf ft)	
Diff. bearing adjusting nut	27–33 Nm (20–24 lbf ft)	
Striker plate bolt	25–29 Nm (18–21 lbf ft)	
Pinion nut	1200–1400 Nm (885–1032 lbf ft)	
Cover, differential carrier assembly	27–33 Nm (20–24 lbf ft)	
Hub reduction		
Attaching bolts	290–330 Nm (214–243 lbf ft)	
Hub nut	2500–3500 Nm (1844–2581 lbf ft)	
Rolling resistance of new bearings:	Noted value at bearing take-up plus 21–31 Nm (15–23 lbf ft)	
Rolling resistance, run-in bearings	Noted value at bearing take-up plus 5–8 Nm (4–6 lbf ft)	
Centre cover	40–50 Nm (30–36 lbf ft)	
Differential lock		
Stop bolt	27–33 Nm (20–24 lbf ft)	-
Cover	24–30 Nm (18–22 lbf ft)	-
Lock nut	24–30 Nm (18–22 lbf ft)	-

Document Title: Front and rear axles, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

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Front and rear axles, specifications

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F Volvo			

Front axle AWB 31	
Oil, type	Transmission oil, (97303, STD 1273.03)
Grease; hub seal, pinion shaft seal	Heat-resistant grease
Grease, other	Universal grease (97718)
Tooth backlash, crown wheel – pinion shaft	0.35–0.46 mm (0.013–0.018 in)

Rear axle AWB 30	
Oil, type	Transmission oil, (97303, STD 1273.03)
Grease; hub seal, pinion shaft seal	Heat-resistant grease
Grease, other	Universal grease (97718)
Tooth backlash, crown wheel – pinion shaft	0.28–0.41 mm (0.011–0.016 in)

Document Title: Front and rear axles, specifications	Function Group: 030	Information Type: Service Information	Date: 4/7/2026
Profile: L120F Volvo			

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Front and rear axles, specifications

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Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
L120F Volvo			

Oil, type	See Recommended lubricants, oils
Oil level: Max. min.	Lower edge of filler hole 5 mm (0.2 inch) below filler hole