Product: PL4608 Volvo Pipelayers Service Manual
Full Download: https://www.arepairmanual.com/downloads/pl4608-volvo-pipelayers-service-manual/

Document Title: **Machine view**	Function Group: **000**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Machine view

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

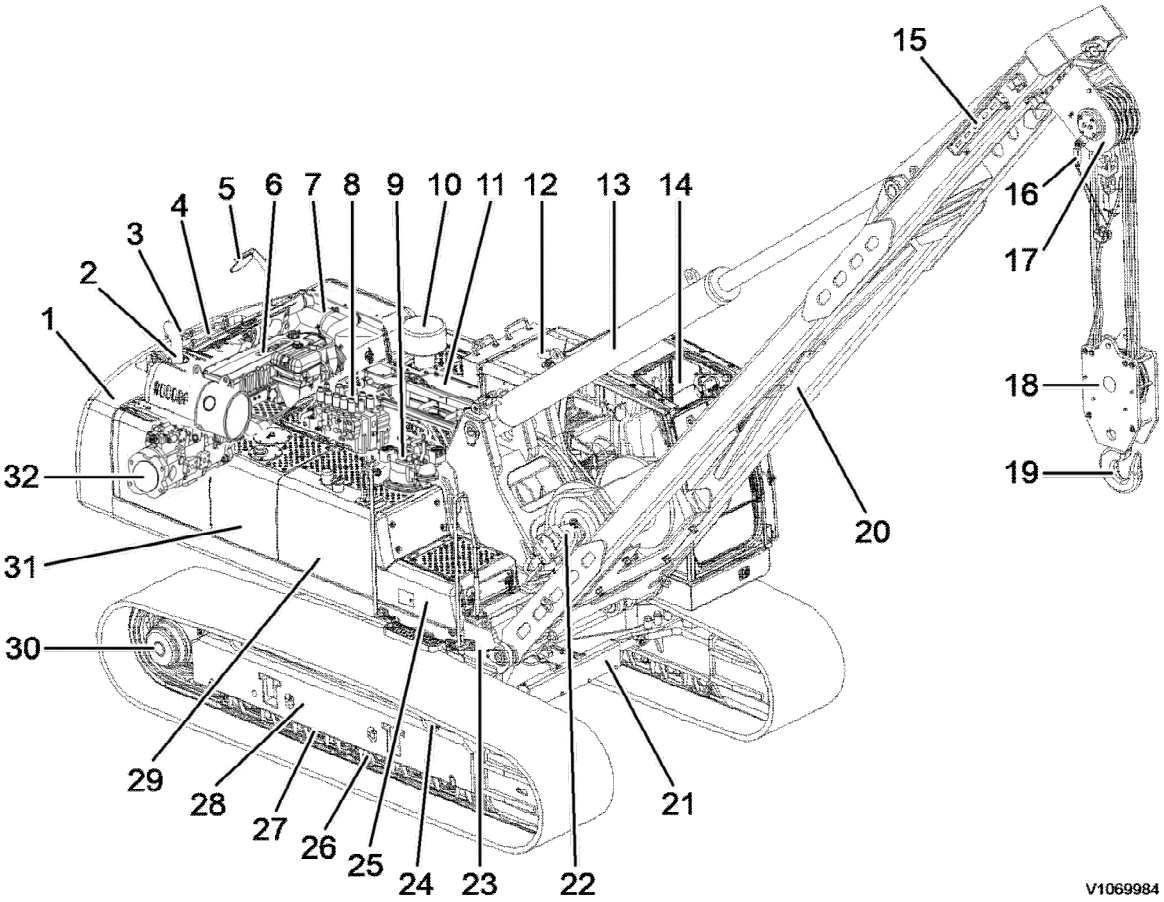

Figure 1
Component position

1	Counterweight	17	Flag block
2	Muffler	18	Load block
3	Rear view camera	19	Lifting hook
4	support and link	20	Boom
5	Rear view mirror	21	Track retractable cylinder
6	Engine	22	Winch and motor
7	Radiator and charged air cooler	23	Adapter
8	Main control valve	24	Top roller

Sample manual. Download All 2041 pages at:
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9	Slew motor and gearbox	25	Battery
10	Air cleaner	26	Track guard
11	Oil cooler	27	Bottom roller
12	Elevating cab structure	28	Additional counterweight
13	Boom cylinder	29	Fuel tank
14	Operator cab	30	Track motor and gearbox
15	Light bar	31	Hydraulic tank
16	Anti-two block switch	32	Main pump

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Document Title: **Product plates**	Function Group: **000**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Product plates

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Please refer to the figure below to locate the machine product plate (1), engine product plate, cab product plate (3) and winch product plate (4).
Always use the Product Identification Number (PIN) provided on the vehicle and/or engine plates for troubleshooting purposes and/or when ordering spare parts.

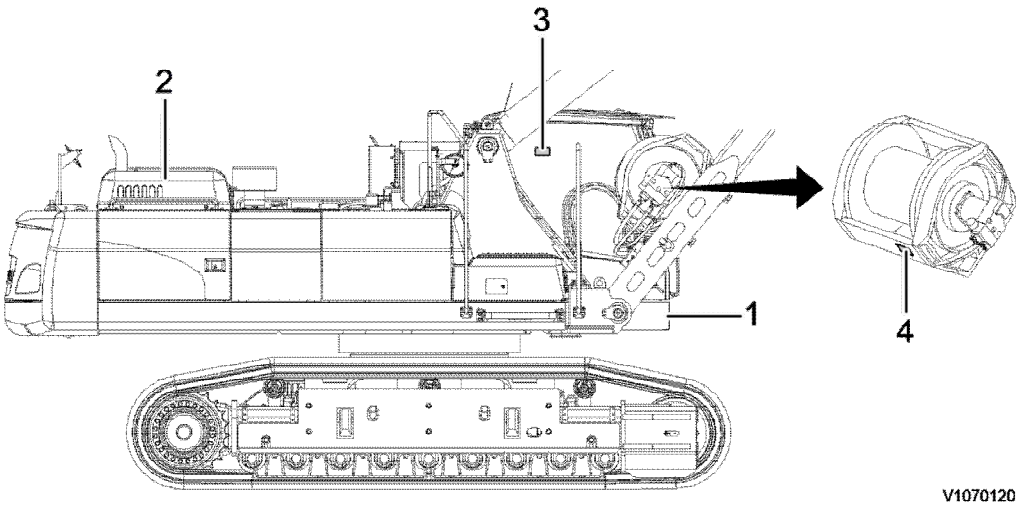

Figure 1
Product plate

Machine product plate

This plate with Product Identification Number, PIN, for the complete machine indicates the model designation, serial number and when applicable, machine weight, engine power, manufacturing year and CE approval. The plate is positioned on the right side of the upper frame.

Engine product plate

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

Winch product plate

The winch product plate is located on the face of the tie bar on the winch and indicates the product model and serial number.

Cab product plate

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

VOLVO

Service Information

Document Title: **Volvo standard tightening torques**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Volvo standard tightening torques

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 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

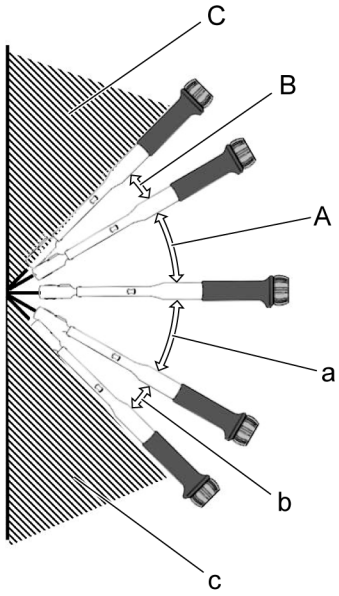

Figure 1
Tool access angle

A: +0˚ ~ +30˚

B: +30˚ ~ +45˚

C: +45˚

a: -0˚ ~ -30˚

b: -30˚ ~ -45˚

c: -45˚

ORFS female swivel fitting

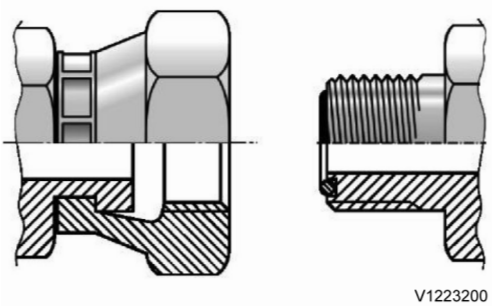

Figure 2

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

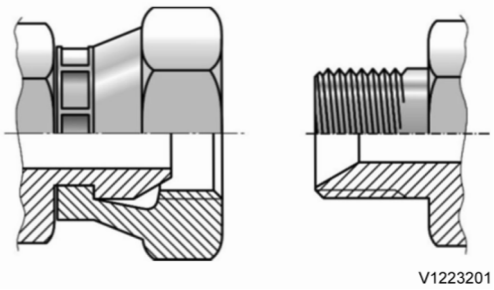

Figure 3

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: **4/25/2026**
Profile: **PL4608 Volvo**			

Measurement conversion tables

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 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)					

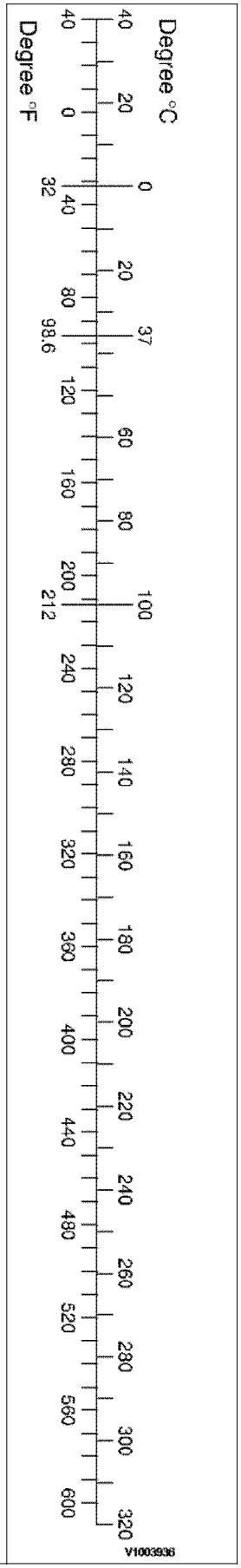
Pressure

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

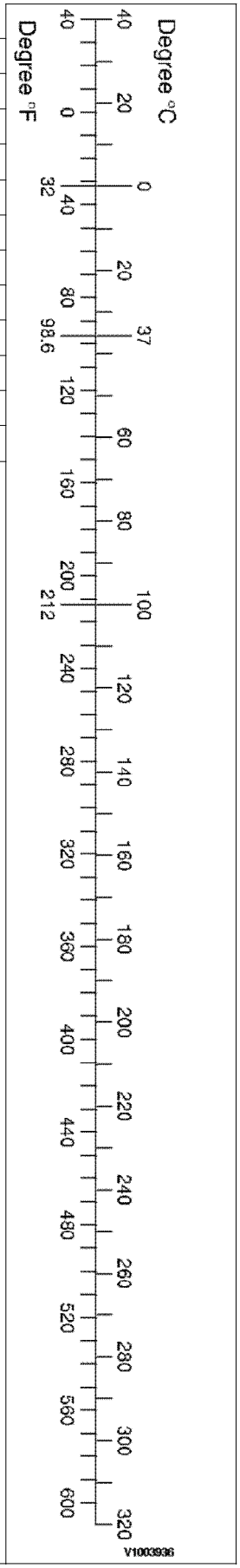


Approximate conversions

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: **4/25/2026**
Profile: **PL4608 Volvo**			

Specification, filling capacities

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Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Refill capacities

		Approximate refill capacities
Reservoir	**Kind of fluid**	**Litres (US gal)**
Engine oil pan	Engine oil	42 (11)
Hydraulic oil tank	Hydraulic oil	270 (71)
Hydraulic system, total	Hydraulic oil	525 (139)
Slew gearbox (each)	Gear oil	6.0 (1.6)
Track gearbox (each)	Gear oil	6.0 (1.6)
Fuel tank	Diesel fuel	685 (181)
Slew ring gear	Grease	45 (11.8)
Cooling system	Coolant	60 (16)
Oil bath pre-cleaner	Engine oil	8.5 (2.25)

- Specified capacity: Total amount of oil including oil for components and oil in piping.
- Refill capacity: Amount of oil needed to refill reservoir during periodic inspection and maintenance.

Document Title: **Engine, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Engine, specifications

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Specifications

Item		**Unit**	**Specifications**
Make		–	Volvo
Model		–	D12DEAE3
Type		–	4–stroke, 6–cylinder, straight, water cooled, direct injection, diesel engine, turbocharged, inter cooled
Rated output (Net)		kW (HP) (PS) / rpm	235 (316) (320) / 1800
Maximum torque (Net)		Nm (kgf m) (lbf ft) / rpm	1500 (153) (1107) / 1350
Number of cylinder		–	6
Bore × Stroke		mm (inch)	131 × 150 (5.1 × 5.9)
Total displacement		Liter (US gal)	12.13 (3.2)
Compression ratio		–	18.1 : 1
Low idle (No–load)		rpm	800 ± 40
High idle (No–load)			1900 ± 40
Firing order		–	1 – 5 – 3 – 6 – 2 – 4
Nozzle pressure		MPa (psi) (bar)	26 (3771) (260)
Valve clearance	Intake	mm (inch)	0.2 (0.0079)
	Exhaust		0.7 (0.0275)

Document Title: **Engine, weight**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Engine, weights

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Engine, dry, approx.	1250 kg (2756 lbs)

Document Title: **Valve clearance, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Valve system specifications

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Intake, mm (inch)	**Exhaust, mm (inch)**
0.2 (0.008)	0.7 (0.0275)

VOLVO

Service Information

Document Title:	Function Group:	Information Type:	Date:
Valve mechanism, tightening torques	**030**	**Service Information**	**4/25/2026**
Profile: **PL4608 Volvo**			

Valve mechanism, tightening torques

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Lock nut, valve adjusting screw	60 ±10°
Lock nut, double rocker arm	25 ±3 Nm (18 ±2 lbf ft)
Drain nipple, double rocker arm	6 ±1 Nm (4,4 ±0,7 lbf ft)

Document Title: **Valve mechanism, double rocker arm**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Valve mechanism, double rocker arm

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Valve mechanism	
Inlet valves, valve clearance	0.20 mm
Exhaust valves (IEGR), valve clearance	0.70 mm
Clearance between double rocker arm and base circle on camshaft.	Measure with gauge 88820003

Clearance measured between double rocker arm and base circle on camshaft.

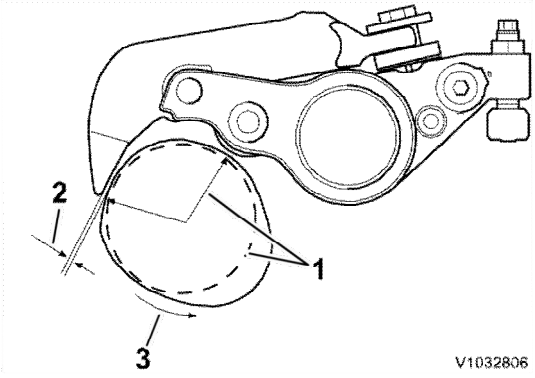

Figure 1
Checking clearance between double rocker arm and base circle

1. Base circle
2. Clearance
3. Camshaft's rotational direction

Checking and adjusting internal double rocker arm

Checking and adjustment, if needed, of the double rocker arm's clearance shall take place after 1000 hours. Thereafter together with Valves, adjusting every 4000 hours.

Document Title: **Lubrication system, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Lubrication system, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Specifications

Item		**Unit**	**Specifications**
Type		–	Gear driven
Lubrication		–	Forced circulation
Oil pressure	Regulator valve	kgf/cm^2 (psi)	4.9 (70)
Oil filters	Full-flow filters	EA	2
	By-pass filter	EA	1
Engine oil pan capacity (Low/high)		Liter	34 / 39
		gal	9 / 10.3

VOLVO

Service Information

Document Title: **Fuel system, tightening torques**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Fuel system, tightening torques

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Bolt, yoke, unit injector.	
First tightening: step 1 step 2	 20 Nm (14.8 lbf ft) 60°
Bolt, yoke, unit injector **(new copper sleeve or new cylinder head)**. First tightening: step 1 step 2 Loosen the bolt for the unit injector's attaching yoke before the second tightening. Second tightening: step 1 step 2	 20 Nm (14.8 lbf ft) 180° 20 Nm (14.8 lbf ft) 60°
Lock nut for adjusting screw, unit injector	52 Nm (38.4 lbf ft)
Banjo screw, fuel hose M10 M12 M14 M16	 12 ±2 Nm (8.8 ±1.5 lbf ft) 20 ±3 Nm (14.8 ±2.2 lbf ft) 35 ±5 Nm (25.8 ±3.7 lbf ft) 40 ±5 Nm (29.5 ±3.7 lbf ft)

Document Title: **Fuel tank, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Fuel tank, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Fuel tank	
Volume	685 litres (181 US gal)
Weight	285 kg (628 lbs)

Document Title: **Fuel filler pump, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Fuel filler pump, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Specifications

	50 LPM + auto shut-off
Rated voltage	24 V
Output flow	50 liter/min (13.2 gal/min) at 3 m head

Document Title: **Cooling system, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Cooling system, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Specifications

Item		**Unit**	**Specifications**
Radiator	Core size (W × H × D)	mm	607.5 × 1000 × 145.4
		in	23.9 × 39.4 × 5.7
Charge air cooler	Core size (W × H × D)	mm	299.8 × 1006 × 145.4
		inch	11.8 × 39.6 × 5.7
Complete cooling system weight		kg (lb)	130 (287)

Document Title: **Coolant pump, thermostat, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Coolant pump, thermostat, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Coolant pump, type	Belt-driven centrifugal pump
Thermostat, type	Piston thermostat
Quantity	1
Coolant thermostat begins to open at	83 °C (181 °F)
Coolant thermostat fully open at	95 °C (203 °F)
Coolant thermostat stroke distance	8 mm (0.32 in)

Document Title: **Engine - Pump control, specification**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Engine - Pump control, specification

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 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	200 / variable	120.2 (867.8)	0.23 (32.7)	222 (298)
Heavy	H		1800 / above 1700	230 / variable	114.2 (824.5)		
General	G1	8	1700 / above 1600	270 / variable	108.2 (781.2)		
	G2	7	1600 / above 1500				
	G3	6	1500 / above 1400				
Fine	F1	5	1400 / -	430	84.2 (607.9)		
	F2	4	1300 / -				
	F3	3	1200 / -				
Idle	I1	2	1000 / -	565	-	2.73 (395.4)	
	I2	1	800 / -				

North America

Mode		**Engine speed control switch**		**Power shift valve current (mA)**	**Max pump input torque, kgf m (lbf ft)**	**Power shift valve 2nd pressure, MPa (psi)**	**Power, kW (HP)**
		Switch steps	**Engine speed (rpm) No-load / Load**				
Heavy	H	9	1900 / above 1800	200 / variable	120.2 (867.8)	0.23 (32.7)	222 (298)
General	G1	8	1800 / above 1700	230 / variable	114.2 (824.5)		
	G2	7	1700 / above 1600	270 / variable	108.2 (781.2)		
	G3	6	1600 / above 1500				
Fine	F1	5	1400 / -	430	84.2 (607.9)		
	F2	4	1300 / -				
	F3	3	1200 / -				
Idle	I1	2	1000 / -	565	-	2.73 (395.4)	
	I2	1	800 / -				

Document Title: **Engine speed control switch, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Engine speed control switch, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Item	**Specification**
Power supply	DC 24 V
Duty	10 - 90% 5V
Type	PWM signal generator

Document Title: **Electrical system, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Electrical system, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Electrical system	
System voltage	24 V

Document Title: **Instrument control unit I-ECU, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Instrument control unit I-ECU, specifications

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Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

Instrument control unit, I-ECU connector, specifications

Items	Connectors
IA	18 pin Terminal: AMP 174935-1 Housing: AMP 368509-1
IB	14 pin Terminal: AMP 174934-1 Housing: AMP 368508-1

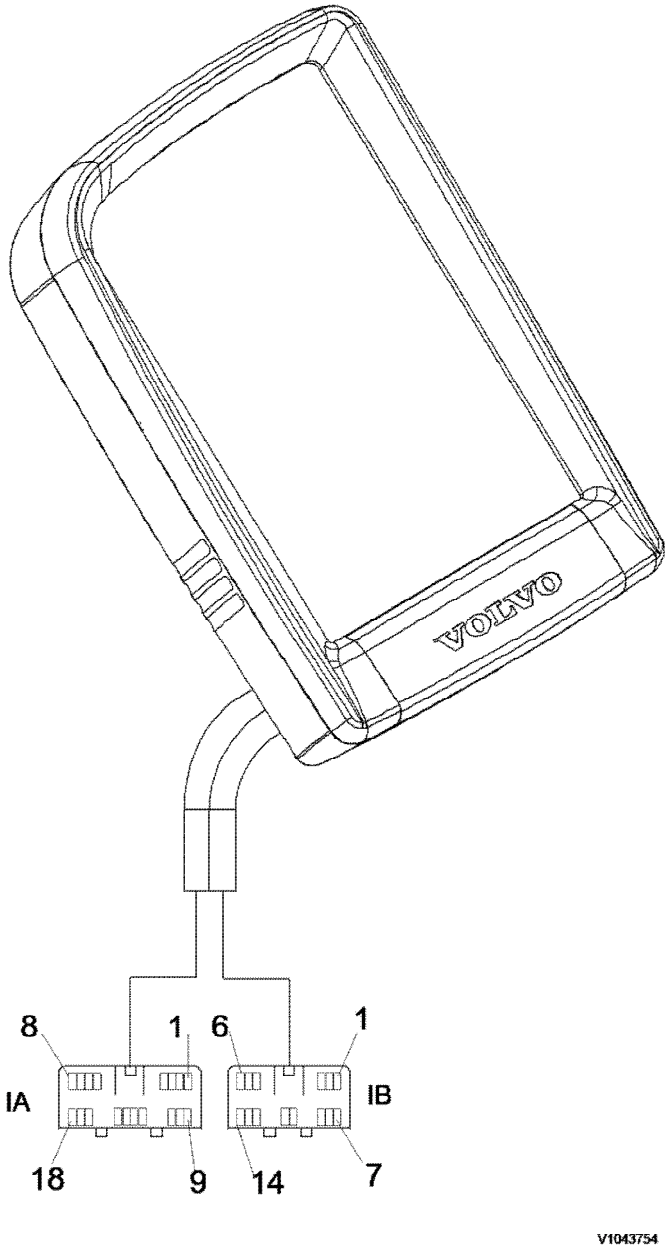

Figure 1
I-ECU, connector

IA	Connector, IA
IB	Connector, IB

Document Title: **Engine control unit E-ECU, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **4/25/2026**
Profile: **PL4608 Volvo**			

Engine control unit E-ECU, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
PL4608 Volvo			

E-ECU pin, specifications

No	Description	No	Description
A7	Feed to sensor	B3	Engine oil level, low
A11	Sensors ground	B4	Engine oil level, high
A12	Injector cylinder 2	B7	Preheating diagnostics coil
A15	Switch ground	B8	Water in fuel, signal
A16	Injector cylinder 2A	B10	Switch ground
A20	Injector cylinder 1	B11	Engine oil pressure, signal
A22	Boost pressure signal	B15	Emergency switch (IVS)
A24	Injector cylinder 1A	B16	Fuel pressure, signal
A28	Injector cylinder 3	B17	Fee to sensor
A29	Air cleaner indicator	B18	Signal ground to sensor
A31	Oil temperature, signal	B23	Coolant level, signal
A32	Injector cylinder 3A	B25	Preheating relay (coil)
A33	SAE J1587 A information bus	B27	Coolant temperature, engine, signal
A34	SAE J1587 B information bus	B28	Crankcase pressure, signal
A36	Injector cylinder 6	B29	Starter control
A37	Engine crank speed , plus (-)	B30	Solenoid valve for on/off
A38	Engine crank speed , minus (-)	B31	Ambient air temperature
A40	Injector cylinder 6A	B51	SAE J1939 H control bus
A44	Injector cylinder 5	B55	SAE J1939 H control bus
A45	Engine camshaft speed, plus (+)	B57	Voltage feed (ECU supply)
A46	Engine camshaft speed, minus (-)	B58	ECU ground
A47	Boost temperature, signal	B59	ECU ground
A48	Injector cylinder 5A	B60	Voltage feed (ECU supply)
A52	Injector cylinder 4	B61	ECU ground
A56	Injector cylinder 4A		
A57	ECU ground		
A59	Injector cylinder 1 - 3 (sv) - ground		
A60	Injector cylinder 4 - 6 (sv) - ground		
A61	Injector cylinder 4 - 6 (ncv) - ground		
A62	Injector cylinder 1 - 3 (ncv) - ground		

Product: PL4608 Volvo Pipelayers Service Manual
Full Download: https://www.arepairmanual.com/downloads/pl4608-volvo-pipelayers-service-manual/

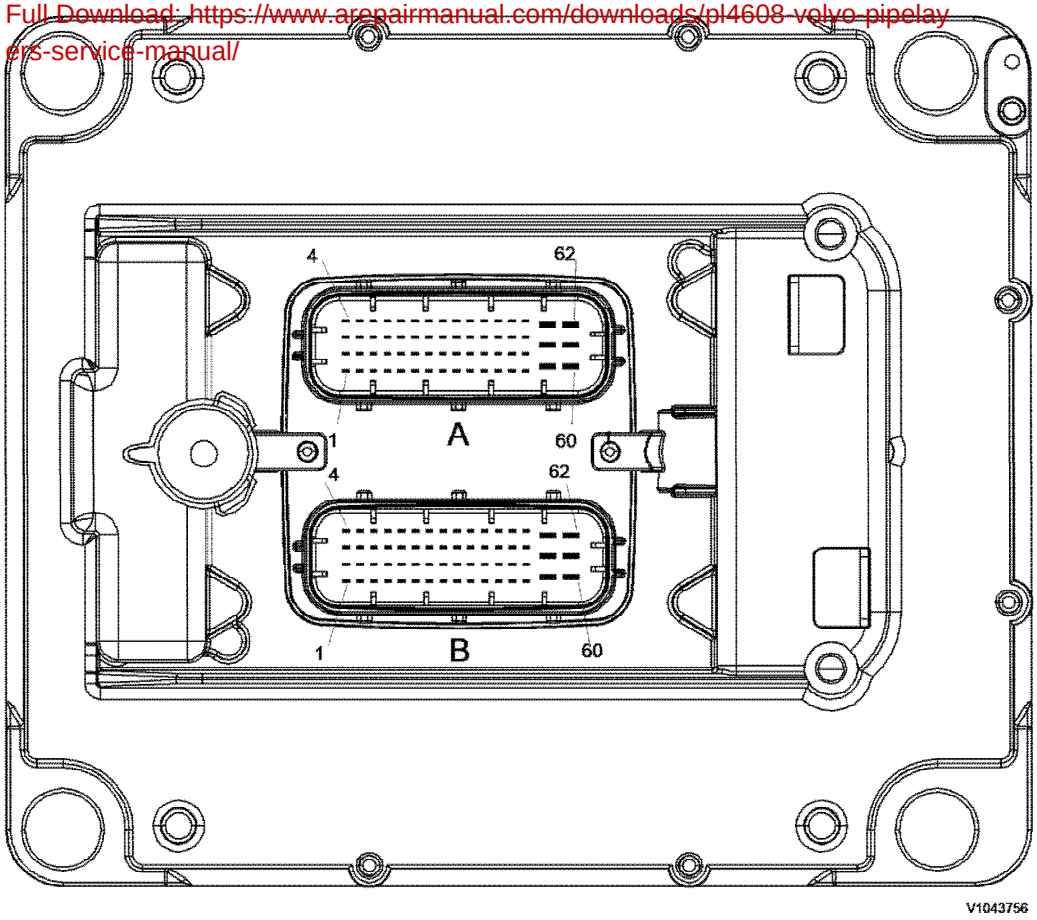

Figure 1
E-ECU, connectors

A	62 pin Tyco Connector, A
B	62 pin Tyco Connector, B

Sample manual. Download All 2041 pages at:
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