



### Chassis Dimensions [mm]

WB Wheelbase	4300	4350	4600	4900	5100	5600	6000
A Overall Chassis Length	9405	9455	9855	10305	10655	11405	12055
D Centre of rear axle to front of body	3157	3207	3457	3757	3957	4457	4857
N Rear Overhang (Min)	975	975	975	975	975	1225	1225
N Rear Overhang (Max)	2375	2375	2525	2675	2825	3075	3325
T Theoretical Wheelbase	3843	3893	4143	4443	4643	5143	5543
Y Centre of Gravity for Payload (Min)	-82	-75	-37	8	39	115	175
Y Centre of Gravity for Payload (Max)	1258	1282	1410	1563	1667	1923	2130

### Chassis Weights [kg]

Front Axles	7070	7065	7030	7000	6980	6940	6915
Rear Bogie	2200	2200	2270	2340	2400	2495	2575
Kerb Weight	9270	9265	9300	9340	9380	9435	9490
Payload (including body, driver, fuel etc)	19080	19085	19050	19010	18970	18915	18860

### Turning Diameter [mm]

Turning Circle Diameter Kerb to Kerb	17500	17700	18500	19500	20100	21800	23100
Turning Circle Diameter Wall to Wall	19200	19300	20100	21100	21800	23400	24700

### Plated Weights [kg]

	Plated	Design
Gross Vehicle Weight	28350	35000
Gross Combination Weight	44000	44000
Front Axles	16000	16000
Rear Bogie	19000	19000

### Important Notes

#### Chassis Dimensions

Cab Height: -263 mm for L1EH1.  
 Front Axle to Back of Cab: -434 mm for L1EH1.  
 D-measure includes a front clearance of 50 mm and for rigid trucks also a subframe of 100 mm.  
 Height can vary  $\pm 20$  mm for leaf and  $\pm 10$  mm for air suspension.  
 All dimensions are for unladen chassis and any tag axles down.  
 Rear overhang used for vehicle weight calculation is the maximum rear overhang (N Max) for selected wheelbase.

Weight and dimensions are based upon the following tyres:

Front Axle Tyres:	315/80R22.5
Drive Axle Tyres:	315/80R22.5
Trailing/Pusher Axle Tyres:	315/80R22.5

Chassis weight includes oil, water, AdBlue, 70 litres fuel and without driver.  
 Kerb weight can vary  $\pm 1.5\%$ .

Turning diameters are theoretically calculated.

Legal weights can differ from country to country.

For more detailed weight information, including optional equipment weights, ask your Volvo sales contact to enter your specification into the Volvo Weight Information system (WIS).

Do NOT use this drawing for bodybuilding. Refer to Volvo Bodybuilder Instructions and chassis assembly drawing 3199929.

### CORE COMPONENTS

- **CHH-STD** Chassis frame height standard 1000mm nominal above ground level
- **L1EH1** Day cab - with steel safety cage design  
Designed and built to Swedish impact and ECE R29 regulations
- **L2H1** Sleeper cab - with steel safety cage design  
Designed and built to Swedish impact and ECE R29 regulations
- **L2H2** Globetrotter cab - with steel safety cage design  
Designed and built to Swedish impact and ECE R29 regulations
- **L2H3** Globetrotter XL Cab - with steel safety cage design  
Designed and built to Swedish impact and ECE R29 regulations
- **EU5EEV** Euro 5 EEV Enhanced Environmental Vehicle
- **EU5SCR-M** Euro 5 Mandatory engine emission level.
- **D13C420** D13C420 12.8l engine developing 420hp at 14-1900rpm.  
Peak torque 2100Nm at 1000-1400rpm.
- **D13C460** D13C460 12.8l engine developing 460hp at 14-1900rpm.  
Peak torque 2300Nm at 1100-1400rpm.
- **D13C500** D13C500 12.8l engine developing 500hp at 14-1900rpm.  
Peak torque 2500Nm at 1100-1400rpm.
- **D13C540** D13C540 12.8l engine developing 540hp at 1450-1900rpm.  
Peak torque 2600Nm at 1100-1400rpm.
- **EBR-EPG** Exhaust brake controlled by steering column switch, D9 engine with manual box has switch on dash.
- **EBR-EPGC** Exhaust pressure governor for I shift gearbox
- **EBR-VEB** Volvo engine brake and exhaust pressure governor
- **EBR-VEB+** Volvo engine brake + and exhaust pressure governor, enhanced performance from additional exhaust rocker control.
- **AT2412D** AT2412D 12-speed "I-shift" automated mechanical gearbox suitable for gross train weights up to 44tonne only refer to sales engineering when used in conjunction with a PTO
- **AT2612D** AT2612D 12-speed "I-shift" automated mechanical gearbox suitable for gross train weights up to 60tonne only refer to sales engineering when used in conjunction with a PTO
- **ATO2612D** ATO2612D 12-speed "I-shift" overdrive automated mechanical gearbox suitable for gross train weights up to 60tonne refer to sales engineering when used in conjunction with a PTO
- **VT2214B** VT2214B Manual 14-speed range & splitter gearbox
- **VT2514B** VT2514B Manual 14-speed range & splitter gearbox
- **VT2814B** VT2814B Manual 14-speed range & splitter gearbox
- **VTO2214B** VTO2214B Manual 14-speed range & splitter gearbox with overdrive top gear
- **VTO2514B** VTO2514B Manual 14-speed range & splitter gearbox with overdrive top gear
- **VTO2814B** VTO2814B Manual 14-speed range & splitter gearbox with overdrive top gear
- **TP-DICON** I-shift software - Distribution and Construction
- **TP-FUEC** I-shift software - Long Haul, Fuel & economy
- **AMSO-AUT** Enhanced I-shift software with manual shift available in auto mode  
Kickdown facility on accelerator pedal
- **AMSO-BAS** Basic I-shift software without kickdown on accelerator pedal
- **AVO-BAS** Basic application software
- **AVO-ENH** Enhanced software for off road driveability and starting
- **CD38B-O** Twin plate 380mm (15") clutch
- **CD40B-O** Twin plate 394mm (16") clutch
- **CS43B-O** Single plate 430mm (17") clutch
- **CS43B-OR** Single plate 430mm (17") reinforced clutch
- **FAL16.0** Front axles design capacity 16 tonnes (2 x 8.0t front axles)
- **FAL18.0**
- **FST-PAR** Parabolic front springs

■ Standard Equipment      □ Optional Equipment

For more detailed information about cab and powertrain equipment, please refer to separate specification sheets.

For all possible options and combinations of options please consult your Volvo sales contact who can create a specification to match your requirements using the Volvo Sales Support system (VSS).

The factory reserves the right to modify design and change equipment without previous notification. The specification can vary from country to country.

- **FSTAB** Front anti-roll bar
- **FSTAB2** Front anti-roll bar medium stiffness
- **BOGLIFT** Rear bogie fitted with lifting push/tag axle
- **RADT-A8** Eight bag air suspended tag axle rear bogie
- **RS1356SV** RS1356SV single reduction rear axle with GCW capacity 56tonne design with differential lock
- **RS1370HV** RS1370HV hub reduction 13tonne drive axle with GCW capacity of 70tonnes with differential lock
- **RAL18** Rear bogie design capacity 18 tonnes
- **RAL19** Rear bogie design capacity 19 tonnes
- **RAL20.5**
- **RSTAB1** Rear anti-roll bar
- **RSTAB3** Rear stiff anti-roll bar
- **RSTAB4** Rear extra stiff anti-roll bar
- **TAG-FIXD** Fixed tag axle twin tyres (4 tyres on complete axle)
- **TAG-FIXS** Fixed tag axle single tyres (2 tyres on complete axle)
- **TRAL63** 6.28 (push)/ 11.72 (drive) tonnes load distribution
- **TRAL67** Tag axle load, 6.70 tonnes
- **TRAL71** 7.1/11.5 bogie load distribution
- **TRAL75** 7.5/11.5 bogie load distribution
- **TRAL95** Equally split rear bogie
- **TAD-HD** Heavy duty RADT-A8 tag axle
- **RALIM115** Rear axle load limiter, 11.5 tonnes
- **RALIM15** 15.0 Tonnes rear axle load limiter
- **RALIM95** Rear axle load limiter, 9.5 tonnes

### PACKAGES

- **DRIVE** Driving package
- **DRIVE+** Driving package plus
- **1BED** Living package with single bed:
- **1BED+** Living package with single bed plus:
- **2BED** Living package with two beds:
- **2BED+** Living package with two beds plus:
- **AUDADV** Audio advanced
- **AUDADV P** Audio advanced power
- **AUDBAS** Audio basic
- **AUDMED** Audio medium
- **VISI** Visibility package
- **VISI+** Visibility plus package
- **PSAFE** Active safety package
- **PSAFE+** Active safety plus package
- **PEPROT** Personal protection package

### TRUCK USE

- **TIPP-PRE** Tipper vehicle preparation
- **UNIFORM** Basic platform vehicle
- **ADR2** ADR package for transportation of dangerous goods on road (Note does NOT include safe loading pass package if required this is quoted separately)
- **PSS-DUAL** Dual power steering system
- **PSS-SING** Single power steering system
- **PSCOOL** Power steering cooler
- **STWPOS-L** Left hand drive

### CHASSIS

- **BRAKE-DV** Disc brakes
- **EBS-MED** EBS medium package including "hill" hold function
- **ABS-EBS** ABS Anti-lock/electronic brake system
- **SUSPL-EC** Remote electronic control on wander-lead for air suspension levelling
- **FRAME88** Frame thickness 8mm

- **FIL-EEEB** Inner liner from end of engine to end of bogie
- **FIL-EEEF** Inner liner from end of engine to end of frame
- **FIL-TXEB** Inner liner from gearbox member to end of bogie
- **FRAMEHIG** Frame section height 300mm
- **BBOX-L** Battery box located on left hand side
- **2BATT170** 2 x 170 Ah capacity batteries
- **2BATT225** 2 x 225 Ah capacity batteries
- **BAMAFREE**
- **R330A71** Right aluminium 710 mm D-shaped fuel tank, 330 litres volume  
Min volume 315l  
Max volume 810l
- **ADTL35** 35 litre plastic AdBlue tank on left hand side.
- **FCAP-L** Locking fuel filler cap
- **ESH-LEFT** Horizontal silencer, left exhaust outlet
- **ESH-VERT** Horizontal silencer, vertical exhaust outlet
- **ESV-VERT** Vertical silencer, vertical exhaust outlet
- **EXSH-STX** Additional exhaust heat shield
- **SWCP-LB** Spare wheel carrier on left side of chassis under battery box
- **SWCP-T** Spare wheel supplied temporarily strapped to chassis
- **SWCP-TP** Temporary spare wheel carrier on top of chassis frame
- **WHC-TRP2** Two wheel chocks delivered loose in cab
- **WHCHOCK2** Two wheel chocks
- **TB-L80** Toolbox 800 mm, left side
- **TB-R80** Toolbox 800 mm, right side
- **SUP-BAS** Side guard protection
- **CHAIN-S** Snow chains
- **HOOK-SC** Snow chain hooks
- **RFEC-S** Rear frame end, straight cut for regular paltform applications.
- **RFEC-U** Rear frame end, upper cut for tipper applications.
- **TOWMBRH** Towing member, high position, mounted in centre of frame
- **TOWMBRL1** Towing member, low mounted under the frame (position 1).
- **TOWMBRM** Towing member, medium hieght, mounted in line with frame lower flange.
- **C-RI4040** Towing coupling, Ringfeder 4040 G-150
- **C-RI4045** Towing coupling, Ringfeder 4045 G-150
- **C-RI5055** Towing coupling, Ringfeder 5055 G-150
- **C-RO500G** Rockinger 500 G6 for 50mm eyes
- **C-VBG750** VBG 750 coupling (centre axle trailer)  
Contact VBG on 01925 234111 to validate the coupling rating for the application
- **C-VBG850** VBG 8500 is intended for conventional trailers only (wheel at each corner)equipped with a 50mm eye.
- **TOWR-ONE** Towing hitch attached to rear crossmember
- **RUP-FIX2** Fixed rear underrun protection - aluminium
- **RUP-FOSL** Folding and sliding rear underrun protection - aluminium
- **TRP-RUP** Transport mounted rear underrun protection
- **RFEND-T** Rear mudwings, transport mounted

### WHEELS & TYRES

- **WT-AL** Unpolished "Alcoa" aluminium wheels with long stud fixing
- **WT-ALDP** Dura-Bright "Alcoa" aluminium rims with long stud fixing
- **WT-ALDPD** Dura-Bright "Alcoa" aluminium rims with countersunk hole fixing for short studs
- **WT-ALDU** Unpolished "Alcoa" aluminium wheels with countersunk hole fixing for short studs
- **WT-ALP** Polished "Alcoa" aluminium wheels with long stud fixing
- **WT-ALPDU** Polished "Alcoa" aluminium wheels with countersunk hole fixing for short studs
- **WT-ST** Steel wheels
- **SPWT-D** Spare wheel & tyre with rear tyre pattern
- **SPWT-F** Spare wheel & tyre with front tyre pattern

- Standard Equipment
- Optional Equipment

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- **WCAP** Aerodynamic hub caps

### DRIVELINE EQUIPMENT

- **2COM1080** Two cylinder, air compressor, 1080 litres per minute
- **2COMP900** Two cylinder, air compressor, 900 litres per minute
- **AIRIN-FR** Front air intake fitted to the underside of cab engine tunnel
- **AIRIN-HI** Roof mounted air intake behind cab on left hand side
- **AIRIN-LO** Low level air intake behind cab on left hand side
- **ACL1ST-S** Two stage air filter
- **24AL120B** 120 amp heavy duty alternator
- **24AL150B**
- **24ALT-XB** 110 amp heavy duty alternator
- **CCV-C** Closed crankcase engine ventilation
- **CCV-OX** Closed crankcase ventilation for cold markets
- **COOLC40** Cooling capacity 40° C, ATB
- **COOLC48** Cooling capacity 48° C, ATB
- **TC-MAOH2** Oil cooler/mechanical transmission, air/oil, extra high performance  
Transmission oil cooler - water to oil
- **TC-MWO** Oil cooler/mechanical transmission, water/oil, high performance
- **TC-MWOH2**
- **AF-E** Auxiliary fuel filter, electrically heated
- **EST-AID** Air inlet manifold starting heater element
- **PTER-DIN** Rear engine mounted PTO with DIN5462 (female) splined shaft for a close coupled pump  
Rear engine mounted power-take-off with SAE 1410 flange
- **PTER1400**
- **HPE-F101** Parker F1-101, fixed displacement, single flow, engine mounted hydraulic pump
- **HPE-F41** Parker F1-41, fixed displacement, single flow, engine mounted hydraulic pump
- **HPE-F51** Parker F1-51, fixed displacement, single flow, engine mounted hydraulic pump
- **HPE-F61** Parker F1-61, fixed displacement, single flow, engine mounted hydraulic pump
- **HPE-F81** Parker F1-81, fixed displacement, single flow, engine mounted hydraulic pump
- **HPE-T53** Parker F2-53/53, Fixed displacement, Twin flow engine mounted hydraulic pump
- **HPE-T70** Parker F2-70/35, Fixed displacement, Twin flow engine mounted hydraulic pump
- **HPE-V120** Parker VP1-120, variable displacement, single flow, engine mounted hydraulic pump
- **HPE-V45** Parker VP1-45, variable displacement, single flow, engine mounted hydraulic pump
- **HPE-V75** Parker VP1-75, variable displacement, single flow, engine mounted hydraulic pump
- **PTR-D** Gearbox PTO for plug-in pump, 0.71xeng speed
- **PTR-DH** Gearbox driven high speed PTO for one plug-in hydraulic pump
- **PTR-DM** Gearbox driven medium speed PTO for one plug-in hydraulic pump
- **PTR-F** Gearbox driven PTO with rear flange connection
- **PTRD-D** Gearbox driven HIGH SPEED PTO for two plug-in hydraulic pumps
- **PTRD-F** PTO with 1 DIN + 1 flange connection rear, manual gearbox
- **APF-BAS** I-shift basic PTO functions
- **APF-ENH** I-shift enhanced PTO functions
- **HPG-F101** Parker F1-101 gearbox mounted, fixed displacement, single flow, hydraulic pump
- **HPG-F41** Parker F1-41 gearbox mounted, fixed displacement, single flow, hydraulic pump
- **HPG-F51** Parker F1-51 gearbox mounted, fixed displacement, single flow, hydraulic pump
- **HPG-F61** Parker F1-61 gearbox mounted, fixed displacement, single flow, hydraulic pump
- **HPG-F81** Parker F1-81 gearbox mounted, fixed displacement, single flow, hydraulic pump
- **HPG-V120** Parker VP1-120 variable displacement, single flow, gearbox

mounted hydraulic pump

## CAB EXTERIOR

- **BUMP-P** Three piece plastic front bumper without spoiler
- **BUMP-S** Three piece steel front bumper without spoiler
- **GUARD-EH** Guard plate for cooling pipes and oil sump
- **CABS-FUA** Air suspended cab with automatic height/level control
- **CABS-MEC** Coil spring cab suspension with shock absorbers
- **CABS-REA** Cab suspension, rear air and front mechanical
- **BUMP-SP** Front bumper spoiler
- **AD-ROOF** Roof air deflector
- **AD-ROOFB** Roof air deflector with illumination panel
- **AD-SIDEL** Side air deflector extension panels
- **AD-SIDES** Short cab side air deflector for rigid bodywork

## SUPERSTRUCTURE PREPARATIONS

- **TBC-DUO** Duomatic type air line connectors
- **TBC-EC** Palm coupling type air line connectors
- **RTRCON14** Trailer cable connection 14-pin connector. For extreme conditions
- **RTRCON15** 15pin suzie with 15pin socket on rigid plus ABS/EBS suzie. Required for ADR operations.
- **RTRCON7** Trailer cable connections, UADR
- **RTRCON77** 24N & 24S suzie with 15pin connector on rigid plus ABS/EBS suzie.
- **RTRCONPK** Trailer cable connections preparation kit including electrical cables and trailer brake piping from cab to the rear axle(s).
- **TD-BAS** Trailer detection WITHOUT LED sensing
- **TD-LED** Trailer detection with LED sensing
- **TRBR-EBS** Electronic trailer brake control
- **TAILPREP** Taillift preparation kit - cab switch and warning in driver display
- **WPRE-BOC** Wire preparation back of cab
- **BODATF2** Lower front body mounts, torsionally-flexible for platform body
- **BODATSF2** Lower front body mounts, semi-torsionally flexible body for van or curtainsided body
- **BODATTS** Pre-punched holes for TANKER flexible body attachments - mountings not supplied.

# VOLVO

Volvo Truck Corporation

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