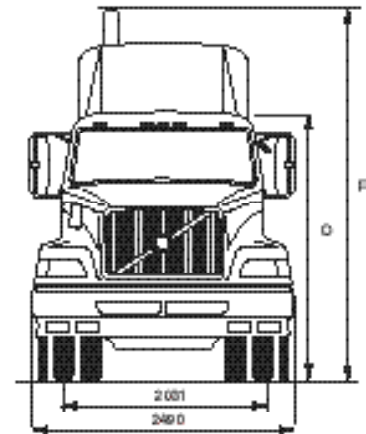
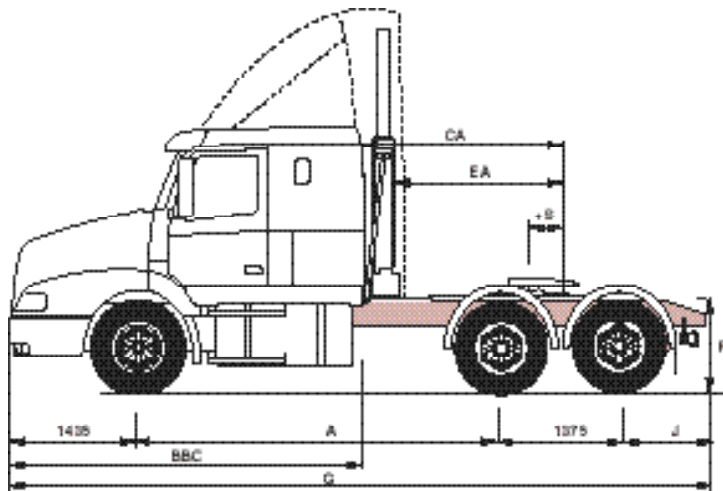
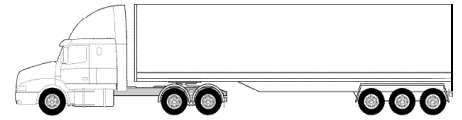


VOLVO NH 565 PRIME MOVER

Rear Air Suspension



Dimensions, mm		Cab*	L1H1	L1H1	L3H1
A	Wheelbase	3400	3800	4500	
TW	Theoretical wheelbase	4087	4487	5187	
CA	Centre of bogie axle group to back of cab	2397	2797	2687	
EA	Centre of bogie axle group to battery box / exhaust	1757	2157	2012	
BBC	Bumper to back of cab	3120	3120	3935	
G	Overall chassis length	7210	7610	8310	
J	Rear overhang	1000	1000	1000	
S	Calculate the chassis weight of the actual specification, then calculate "S"	315	350	325	
S=(Payload front axle x theor. wheelbase ÷ payload total)					
P	Exhaust height to top of pipe - unladen	4300	4300	4300	
O	Cab height to top of roof - unladen	2975	2975	2975	
R	Turntable mounting angle to ground above centre bogie - unladen	1080	1080	1080	
* L1H1 = Day cab L3H1 = Sleeper cab					

* Chassis height can vary ±25mm

Turning Diameter:

Turning circle diameter kerb to kerb	13988	15168	17182
Turning circle diameter wall to wall	15870	17056	19130

Weights:

Chassis weight, Front	4670	4687	4724
Chassis weight, Rear	4120	4125	4156
Chassis weight, Total	8790	8812	8880
Front suspension rating	6700	6700	6700
Max. rear suspension bogie rating	17000	17000	17000
Gross vehicle mass rating (GVM)*	23700	23700	23700
Gross combination mass rating (GCM)**	125200	125200	125200

* 21,000 kg bogie rating and 27,700 kg GVM with RAL21.

** GCM rating is dependant on the aftermarket fitment of ADR approved towing equipment.

Weight Modification KG: (tolerance ± 1.5%)

	Front	Rear	Total		Front	Rear	Total
CTEV87 (Spoke)	+ 0	- 350	- 350	L3H1 cab (ilo L1H1)	+ 175	+ 90	+ 265
CTEV87 (Disc)	+ 20	- 343	- 323	Aero-kit L3H1	+ 41	+ 27	+ 68
RADD-A8 RAL21	+ 28	+ 92	+ 120	Aero-kit L1H1	+ 32	+ 23	+ 55
Fuel 2 x 505L fuel (full)	+ 564	+ 256	+ 820	Chassis skirts	+ 47	+ 31	+ 78
Fuel 2 x (500+415)L fuel (full)	+ 900	+ 750	+ 1650	Steel disc wheels	+ 20	- 159	- 139
Fuel 4 x 500L fuel (full)	+ 930	+ 865	+ 1795	Alloy disc wheels (ilo spoke)	- 10	- 276	- 286
Aux Bunk Air Cond	+ 17	+ 9	+ 26				

Chassis weights include:

Engine CU15A565, Gearbox VT2514OD, rear axle CTN372, FRAME88, rear bogie RADD-A8 bogie load RAL17, spoke wheels 8.25-22.5 with 295 / 80R22.5 front tyres and 11R22.5 rear, plastic rear bogie mudguards, oil and coolant, no fuel, tools, spare wheel.

NH 565 Prime Mover Rear Air Suspension

Driveline

ENGINE - Cummins Signature 565

Six cylinder turbocharged intercooled diesel engine with dual overhead camshafts and variable output turbo. One camshaft dedicated to the injectors with the second used to optimise valve timing and exhaust brake. Cummins Interbrake managing brake, engine and accessory functions.

■ Vertical dual exhausts

■ CU15A565

421 kW (565 hp)..... 1600 - 1900 rpm
2508 Nm (1850 lb.ft)..... 1100 - 1500 rpm
Economy speed range: 1200 - 1600 rpm
Max engine speed..... 1900 rpm
Engine brake power at 1900 rpm..... 448 kW
Bore & Stroke..... 137 x 169 mm
Displacement..... 15 litres
Oil volume..... 53 litres
Cooling Volume..... 55 litres

CLUTCH

■ CL40D - O

Organic twin plate clutch with servo assistance and reduced clutch forces.
Diameter..... 400 mm
Total Area..... 3063 cm²

GEARBOX

■ VT25140D

New generation easy shift gearbox. 14 Forward speeds, 12 synchronized plus 2 crawler. Range change gearbox with splitter. Oil to water transmission cooler standard. Ratios:

Low Range: **1** **2** **3 Reverse**
Low split 8.92:1 5.74:1 3.75:1 12.09:1
High split 7.15:1 4.68:1 3.00:1 9.69:1

High Range:

Low split 2.38:1 1.53:1 1.00:1 3.22:1
High split 1.91:1 1.23:1 .8:1 2.58:1

Crawler: **Low** 16.41:1 **High** 13.16:1
Oil Capacity..... 13 litres

FINAL DRIVE

■ **CTN372** Hub reduction hypoid axles. Differential lock and power divider lock.

Ratios..... 3.76, 4.12, 4.55
Axle rating..... 26,000 kg
Technical GCM..... 125,200 kg

○ **CTEV87** Single reduction hypoid axles. Differential lock and power divider lock.

Ratios..... 3.56, 3.78
Axle rating..... 23,000 kg
Technical GCM..... 68,000 kg

GCM Available on application approval.

Driveline Combinations

GCM	68t	69t-125.2t
Recommended ratios	3.76	4.12

STEERING

Power steering with variable ratio.
Maximum wheel lock angle..... 50°
Number of turns of steering wheel..... 4.5
Steering wheel diameter..... 450 mm

■ = Standard equipment.

○ = Factory mounted optional equipment

Chassis

FRAME

Constant frame width of 850 mm made of high strength steel. Flange width 90 mm. Paint finish black acran 2-pack standard. Section Height..... 300 mm

■ FRAME88

Web & flange thickness..... 8 mm

○ FRAME77

Web & flange thickness..... 7 mm

WHEELBASE	TYPE
3400	FRAME77
3800	FRAME88
4500	FRAME88

FRONT AXLE

Front axle is equipped with grease lubricated tapered unit bearings premounted in the hub for extended service life.

Front axle rating..... 7,100 kg

SUSPENSION

Front

Parabolic leaf spring with double-action hydraulic shock absorbers and high stiffness anti-roll bar.

Spring length..... 1890 mm

Spring width..... 100 mm

Rear

Air suspended 8 bag system with electro-pneumatic dump valve for trailer coupling. Four double acting hydraulic shock absorbers.

■ RADD-A8 / RAL17

Anti-roll bar on second drive axle

Roll bar diameter..... 1 x 65 mm

Rating..... 17,000 kg

○ RADD-A8/RAL21

Anti-roll bar on first and second axle.

Roll bar diameter..... 2 x 65 mm

Rating..... 21,000 kg

BRAKES

Dual - circuit compressed air braking system with spring brake cylinder on the front and first drive axles. Steel air tanks and single tower air drier. Trailer park valve. Gear driven compressor. Volvo Z-cam brakes with asbestos free lining and load sensing valve on drive axle.

Friction area:

Front (FAL6.7)..... 2750 cm²

Bogie axles..... 2 x 3140 cm²

■ 2 cyl. comp..... 1060 l/min

■ Front brake lining width..... 150 mm

■ Rear brake lining width..... 200 mm

■ Brake drum diameter..... 410 mm

○ Anti lock brake system with 12V trailer supply. (without loadsensing valve)

Trailer options

○ Trailer brake connections - pogo stick suzi coil with push on connections and electrical lead.

FUEL TANKS

Cylindrical aluminium tanks.

■ Lockable cap

Chassis

Tank Layout

■ Dual tanks with steps..... 1000 L
Capacity LHS and RHS..... 500 L
Diameter..... 660 mm

Battery box <WB4500..... In frame
Battery box <WB4500.... across frame

○ Quad tanks with steps WB4500+.. 1830 L
Capacity LHS and RHS.... 415 + 505L
Diameter..... 660 mm
Battery box..... In frame

○ Quad tanks WB4500+..... 2000 L
Capacity LHS and RHS.... 505 + 500L
Diameter..... 660 mm
Battery box..... In frame
Steps in front tanks only not available with skirts.

WHEELS & TYRES

■ Spoke wheels

Six spoke spider hubs with demountable rims and steel belted radial tyres (10 off).

■ Plastic rear bogie mudguards.

Rim size: 8.25 inch width x 22.5 inch dia.

○ Steel Disc wheels

10 stud ISO 335mm pitch circle diameter.

Rim size: 8.25 inch width x 22.5 inch dia.

○ Steel Disc wheels - wide steer

10 stud ISO 335mm pitch circle diameter.

Rim size: 11.75 inch width x 22.5 inch dia.

○ Alloy Disc wheels

Alcoa aluminium polished both sides.

10 stud recessed nut ISO 335 mm pitch circle diameter.

Rim size: 8.25 inch width x 22.5 inch dia.

○ Alloy disc wheels

Alcoa aluminium (non polished).

Rim size: 8.25 inch width x 22.5 inch dia.

Front Tyres:

■ 295/80R22.5..... 8.25 inch rim width

○ 11R22.5..... 8.25 inch rim width

○ 385/65R22.5..... 11.75 inch rim width

Rear Tyres:

■ 11R22.5..... 8.25 inch rim width

○ 295/80R22.5..... 8.25 inch rim width

○ Spare wheel and tyre

ELECTRICAL EQUIPMENT

Voltage..... 24V

Cranking current..... 560 A

Reserve capacity..... 180 min

Alternator..... 100 A (2400W)

Starter motor..... 7.76kW (10.4hp)

Semi-trailer lighting voltage supply.... 12 V

In cab accessory socket voltage..... 12V

Circuit protection-automatic circuit breakers.

Battery Box across frame on all models.

Electrical master switch.

Cab

■ Sleeper cab with plush trim

○ Day cab with vinyl trim

○ Sleeper cab with vinyl trim

For more detail information see separate Cab Specification sheet.

POWER TAKE OFFS

A full range of clutch independent and gearbox mounted power take offs together with a choice of hydraulic pumps are available.