

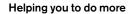
R100E

Volvo Rigid Haulers 95.0 t 1 065 hp



A passion for performance

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.



Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.





You learn a lot in 180 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

We have a passion for performance.













Volvo Trucks

Renault Truck

































Volvo Penta

Volvo Financial Services

UD Trucks

Drive your costs down

Drive your operating costs down with the all-new Volvo R100E. Built with highly efficient components, the rigid hauler offers long service intervals and component lifecycles. Get the most out of your investment with the fuel-efficient hauler, your partner for all mining and quarrying applications.

Designed for distance

Save time and money with the R100E. The heavy-duty machine is engineered to extend service intervals, helping you cut maintenance costs and optimize uptime. Achieve unbeatable long-term value and longevity of major components with our reliable hauler.



Heavyweight hauler

Go the extra mile with the optimally balanced R100E. Offering a low center of gravity and even weight distribution, the solid machine spreads the load impacts and structural stresses equally across the truck. The outcome is superb machine and tire longevity leading to significantly reduced operating costs. Leave it to Volvo to find the right balance.



Long life, low costs

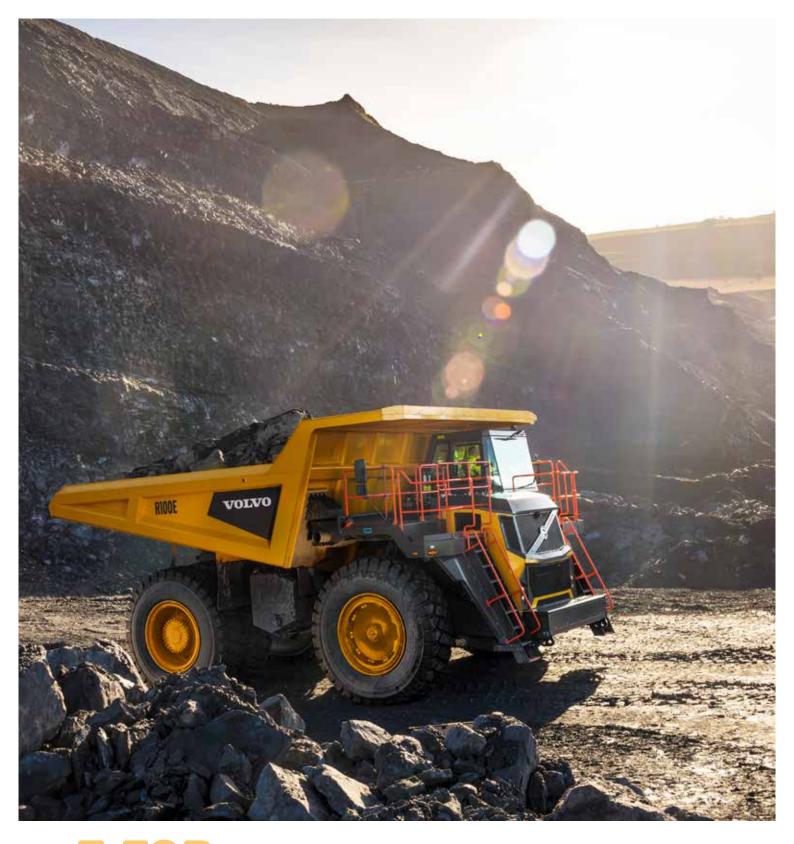
Component longevity is key to a low cost of operation. That's why your machine is rigorously tested under extreme working conditions to meet high component lifecycles industry standards. Do more in the long haul with the new E-Series rigid hauler promoting, as a standard, two retardation systems for high levels of safe performance, while safeguarding primary brake life.



Volvo Dynamic Shift

Haul it all thanks to our fully automatic adaptive transmission gearshift patterns, further enhanced and payload sensitive if equipped with our On-Board Weighing option. Adapting to varying conditions, Volvo Dynamic Shift delivers productive performance through a smooth, consistent ride and low fuel consumption.





E FOR EFFICIENCY

Move more with less fuel thanks to the latest technology built-into the R100E rigid hauler. The electronic integration between the engine and transmission achieve premium drivetrain performance, resulting in smooth gearshift quality and consistent machine momentum. Reduce your number one operating cost with Volvo.



FULLY Loaded

Offering a true 95-tonne payload, the R100E is designed to do more. Thanks to its optional exhaust-heated V-shaped body, the 60.4 m³ capacity hauler ensures optimum load retention and minimal material carry-back. For long lasting performance, the body is manufactured from high impact and high abrasion resistant steel. Enhance productivity with our 10-10-20 payload profile policy (please ask your local dealer for more detailed information).

Move more, earn more

Meet production targets faster with the largest rigid hauler in the Volvo portfolio. Offering the winning combination of power and performance, the 95-tonne machine hauls more tonnes per hour. Move more and earn more with Volvo.

Move more - faster

Get the job done with the R100E, powered by the premium engine. Delivering high torque capabilities, the combined drivetrain provides unparalleled pulling performance and class-leading rimpull for optimum travel time. Thanks to the fast body-tipping system, you can count on the R100E to achieve fast cycle times for an all-round efficient performance.



Up to the challenge

No terrain is too deep or steep for the R100E. Thanks to the complete drivetrain design and configuration, the hauler yields impressive tractive effort, enabling you to tackle tough job site conditions and navigate gradients effortlessly. With high drive axle multiplication, the machine delivers high levels of rimpull for excellent performance on steep slopes.



Real-time tonnage

Unlock the secret to your hauler's productivity using our optional On Board Weighing (OBW) technology from Volvo. The integrated system ensures the machine moves the optimum safe payload and logs all transported loads for complete production management. Analyze real-time data on the on-board display, which can be remotely monitored via CareTrack™, the Volvo telematics system.



Smart systems

Take your productivity to the next level thanks to smart systems – CareTrack™ and Volvo Site Simulation – for optimum site efficiency and minimal operational costs. To increase the productivity of your existing and future projects, utilize Volvo Site Simulation, which provides valuable information about your machinery, fleet choices and site configuration.



Safety at the center

Safety is built into every design element of Volvo machines – and the R100E rigid hauler is no exception. Featuring a ROPS/FOPS-certified cab, proven safety systems and straightforward service access, the R100E is safe from the inside out.

Solid stability

Featuring a low center of gravity, the rigid hauler is engineered to provide rock-solid stability. Conquer challenging conditions thanks to the expertly designed body and chassis, which work in harmony with the responsive suspension and steering geometry, for ultimate machine stability.



Total access

Whether operating or servicing your R100E, gain safe, simple and straightforward entry to the machine using anti-slip steps and secure walkways. From the wide platform or ground level, safely complete essential planned maintenance. For added protection and peace of mind – particularly during servicing – use integral safety locks to isolate the machine system.



Safety as standard

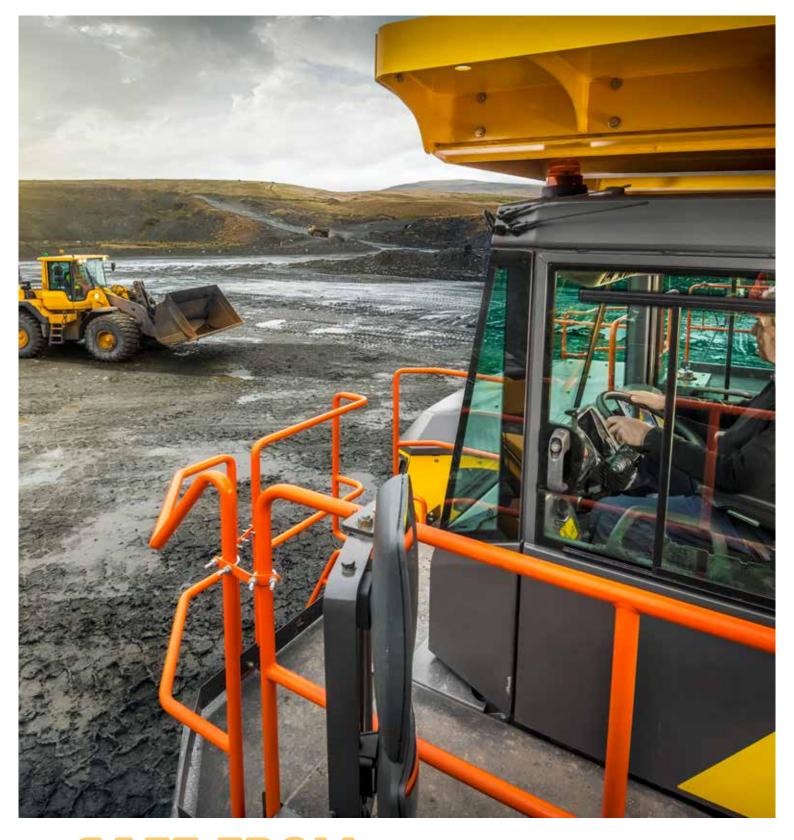
Rain or shine, know no limits with the Volvo R100E, promoting a transmission retarder as a standard. The proven feature provides excellent safe machine control in all downhill conditions, making it the ideal machine for all your mining and quarrying applications.



Always in control

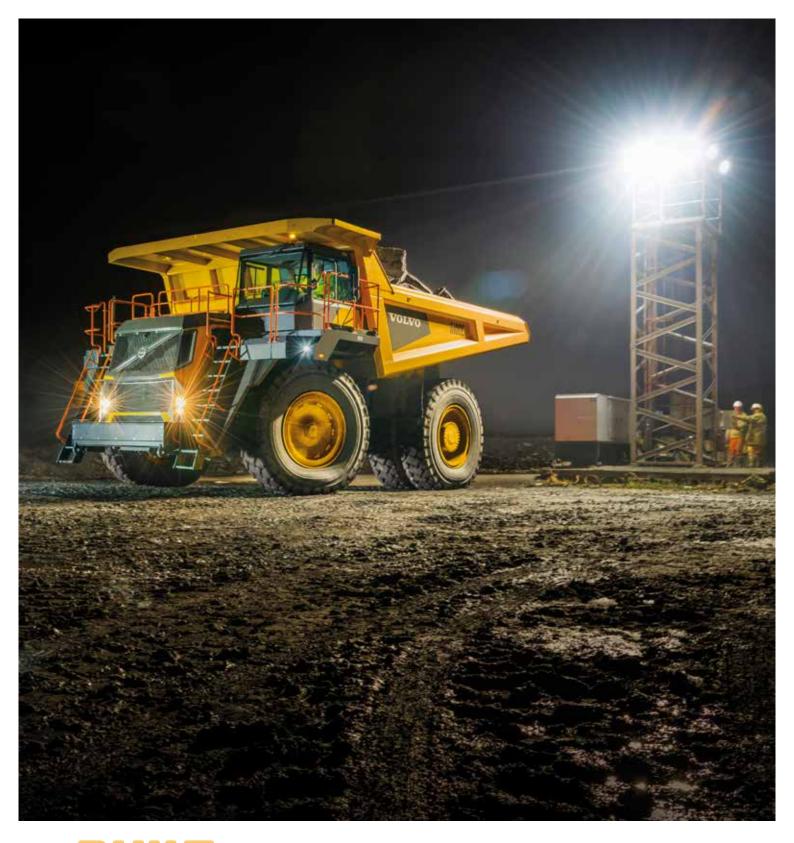
Operate with complete confidence thanks to a host of safety systems, such as the engine overspeed protection feature, engineered to automatically slow down the machine to within safe operating limits. Machine control is enhanced by the neutral coast inhibitor, which protects the hauler in downhill operations. For added security, the R100E features fail-safe braking and secondary steering systems.





SAFE FROM THE INSIDE OUT

There's no compromise when it comes to safety. That's why all machine systems on the R100E, such as the easily accessible emergency shutdown switches, have been designed and verified to protect the safety of you and your crew. From the ROPS/FOPS-certified cab, experience superb visibility, enhanced by Volvo Smart View, an integrated feature that helps you keep an eye on the surrounding job site traffic.



BUILT Ready

The robust and reliable R100E delivers superior, long lasting performance. Engineered with uptime in mind, the heavy-duty hauler is simple and uncomplicated in its design, and purpose-built to achieve optimum productivity shift after shift, day in and day out.

Access more uptime

Access more uptime with the R100E, designed to work for you. The simple and uncomplicated machine design is purpose-built to meet the demands of tough job site conditions. Featuring easy maintenance access, this rigid hauler ensures regular inspections are swift and efficient. Add a range of aftermarket solutions and the result is optimum machine availability.

Ease of serviceability

Ease of access not only optimizes safety, but it also maximizes machine uptime. All service points are strategically grouped and within reach from the ground and service platform. To simplify mechanical servicing, the hauler features common-sized bearings and direct bolt-on wheel rim connections. Inside the cab, access top-level diagnostic data using the operator-friendly dashboard for fast analysis and solutions.



Here to support you

The exclusive Volvo dealer network is here to support you whenever you need it. Volvo offers a number of services, local knowledge and global mining experience, including superb parts availability and telematics machine reports. Speak to your local Volvo dealer for more information about uptime-enhancing solutions, such as Volvo Services Agreements (VSA) and extended warranties.



Durable by design

Built to last, the R100E is durable by design. The high strength, flexible chassis structure and responsive MacPherson strut with lower wishbone connection absorb potentially damaging shocks and vibrations that can occur when operating. Regardless of environmental conditions, you can depend on the hydraulics to remain clean and protected against contamination for optimum machine availability.



Robust protection

Working in challenging conditions means every component must be protected. With the Volvo R100E, you can rely on a strong design and excellent build quality. Ensure long component lifecycle and machine uptime thanks to the latest generation transmission control system, neutral coast inhibitor and overspeed protection features.



Operator's choice

Not only a highly efficient machine, the R100E also brings operator productivity to the fore – starting with comfort and control. Offering 360° visibility, responsive steering, ergonomic controls, low noise and solid stability, the Volvo cab is as good as it gets.

Every angle in view

Take on the tough stuff from the comfort of the industry-leading cab, boasting an impressive 360° bird's eye view of the work zone thanks to Volvo Smart View. The operator seat is located to the left side of the cab, enabling you to observe all surrounding areas. Forward visibility is enhanced thanks to the large windscreen, offering excellent line of sight.



Tailor-made to meet your needs

Customize your comfort for increased productivity throughout the working day. The Volvo air suspension operator seat and tiltable, telescopic steering wheel can be fully adjusted to match your preferred operating position. With the standard Bluetooth enabled audio system, you can stay connected.



Comfortably productive

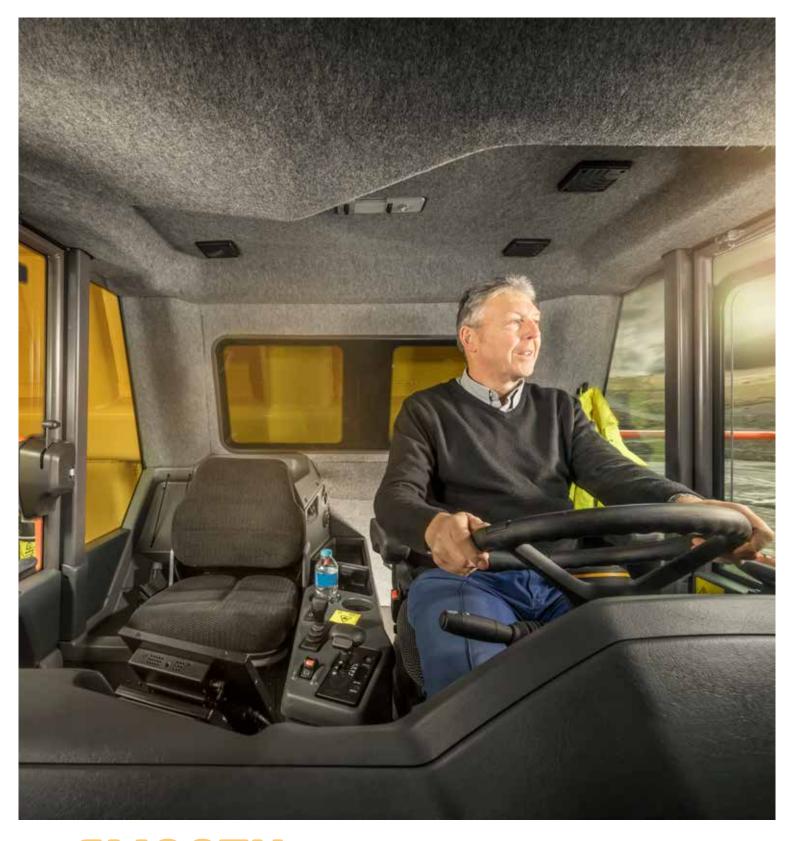
Get comfortable with doing more in the pressurized Volvo cab, offering all-around visibility, climate control, and ample storage and legroom. From the adjustable operator seat, easily access displays and responsive fingertip controls, ergonomically positioned to keep the focus on the operation.



Low noise, high comfort

Stay focused in the Volvo cab, offering remarkably low noise levels. Built-in sound insulation eliminates distracting noises, while the viscous isolated mounted cab and hydraulic suspension system minimizes ground vibrations and surrounding job site noise. Because a happy, comfortable operator enhances overall productivity and performance.

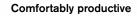




SMOOTH OPERATION

Enjoy superior ride quality and comfort in the robust R100E, equipped with responsive MacPherson strut with lower wishbone connection and viscous-mounted cab for minimal ground impact and vibrations. The responsive, low-effort steering system and geometry, combined with the suspension, optimizes maneuverability by minimizing lean on tight corners. With the R100E, heavy-duty hauling has never felt so easy.

Haul it all



control, ample space, as well as ergonomic displays and fingertip controls.

The pressurized cab offers superb visibility, climate

E FOR EFFICIENCY

Reduce your number one operating cost thanks to the latest technology built into the R100E rigid hauler.

Robust protection

Ensure long component lifecycle with the transmission control system, neutral coast inhibitor and overspeed protection.

Long life, low costs

The R100E offers a retarder, promoting extended service brake life, safety and performance.

BUILT READY

standard transmission

Achieve long lasting performance and uptime thanks to the simple and uncomplicated machine design.

Volvo Dynamic Shift

Haul it all thanks to fully automatic adaptive transmission gearshift patterns, payload sensitive if equipped with On-Board Weighing.



Designed for distance

Do more in the long haul with the R100E, offering long component lifecycles and extended service intervals.

Enjoy superior ride quality and comfort thanks to minimal ground impact and vibrations, and easy maneuverability.

Volvo R100E in detail

Engine					
Engine		Commiss OCTOD CAC TIEDO 700/AU			
Model		Cummins QST30 CAC, TIER2, 783KW			
Туре		Electronic controlled, four cycle, direct injection diesel, water cooled, turbo charged and charge air cooled. High-speed Electronic Control Module (ECM) is isolated from detrimental vibration loading. Fully-sealed wiring harness with fail-safe connectors integrates the ECM with the engine sensors for optimized engine performance, monitoring and protection.			
Cylinder/configuration		12 / V-Configuration			
Displacement	1	30.5			
Bore x Stroke	mm	140 x 165			
Max. power at	r/min	2 100			
Gross power (SAE J1995)	kW	783			
	hp	1 065			
Net power	kW	726			
	hp	987			
Max. torque at	r/min	1 300			
Gross torque	Nm	4 631			
Engine emissions		Meets USA EPA Tier 2/CARB 40CFR 1039 and CARB 40CFR 1068 non-road mobile machinery directive, Stage 2			
Electrical		24 volt negative ground. Four 12 volt 220 Ah batteries. Two 9 kW. 100 Amp alternator			
Altitude - electronic derate	m	2 500			
Steering System					
accumulator circuit provides ins responsive steering control. Secondary steering is provided	stant, unifor by an inde ary hydrauli electrical s	•			
Maximum tire steering angle	٥	39			
SAE turning radius	mm	11 496			
Clearing radius	mm	13 062			
Standard Differential ratio		gears in the wheel hubs where final torque multiplications takes place.			
Planetary reduction		13.75 : 1			
Overall drivetrain reduction		29.7 : 1			
Optional					
Differential ratio		Traction Bias Differential			
Planetary reduction		The automatic spin reducing function is provided by means of a multi-plate friction clutch mounted to one side of the gears in the differential assembly. The 2 side (pinion) gears have a friction link (bias torque) between them which reduces the risk of one wheel spinning freely should the truck encounter slippery or loose ground surface conditions.			
Frame					
The closed 'horse collar' allows	for flexibilities imposed b	h high-strength steel castings in key stress locations absorbing the worksite impacts for long durable lifecycles. ty in the frame to dissipate twists and loads while incorporating a reserve of structural strength well in excess of that by high impact loading and when travelling on uneven, high rolling resistance applications. ts off the frame.			
Body					
Manufactured from high abrasic Horizontal side stiffeners dissip	on and imp pate shock l ninimal stru	oor plate (Double V-type body) that provides excellent center of gravity for load profile stability on all hauling conditions. act resistant steel (Hardox 400) for superior lifecycle. loads across the entire side plate. ctural stress during empty and full transportation.			
Floor	mm	20			
Sides	mm	10			
Front	mm	10			
Body volume	111111				
Stuck	m³	41.1			
Heaped 2:1 (SAE)	m ³	60.4			
Tires and rims					
Tires type		27-49			
*		10.5			

19.5

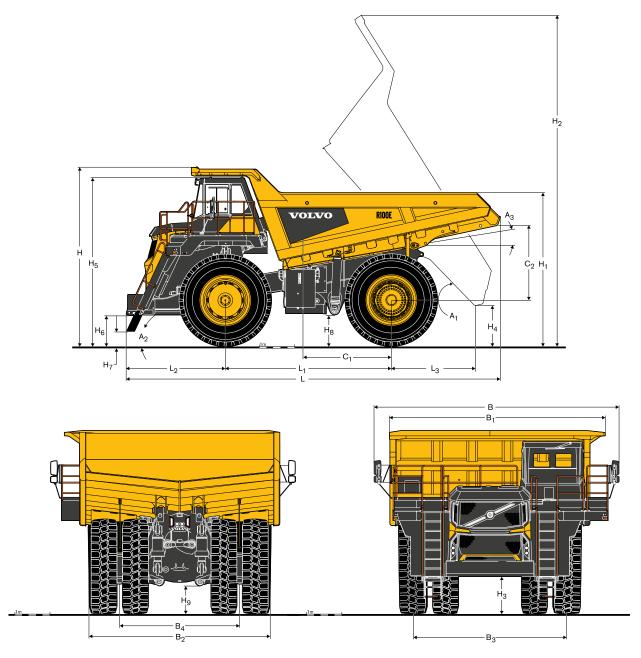
Rims

Drivetrain				
Transmission		Allison H8610 ORS		
nanamaalon		Planetary gear type transmission with integral torque converter and hydraulic fluid retarder. Electronically controlled		
A = = = = - -		connected to engine system via CANBUS.		
Assembly		Automatic lock up in all speed ranges.		
		Mounted mid-chassis for ease of access and excellent machine weight distribution.		
Electronic control		CEC5		
Maximum speed, forward/rev	verse			
1st gear	km/h	9/6		
2nd gear	km/h	16		
3rd gear	km/h	22		
4th gear	km/h	28		
5th gear	km/h	37		
6th gear	km/h	50		
Suspension				
Front: Independent self containe	ity. Rear: In	erson type, variable rate (Nitrogen/Oil) suspension struts with lower wishbone. Widely spaced for high levels of machine dependent self contained variable rate (Nitrogen/Oil) - invertly mounted - suspension struts connected to chassis via		
Maximum front strut stroke	mm	244.6		
Maximum rear strut stroke	mm	165.1		
Maximum rear axle oscillaton	0			
Brake system				
Fulfills ISO 3450 : 2011 for off-	-road mac	hinery		
Front brakes type		Independent hydraulic apply, dry disc single caliper. Incorporating independent nitrogen / hydraulic pressure accumulator instant braking response and reserve pressure.		
Front brake diameter	mm	965		
Front brakes lining area	cm ²	2 015		
Tion blakes lilling area	GIII-	Independent force cooled, oil immersed, multi-disc enclosed brakes. Twin piston, service and park /emergency brake.		
Rear brakes type		Emergency brake spring apply / hydraulic release (SAHR Brake). Service piston is used for rear brake retardation for saf machine control.		
Rear brake lining area	cm ²	87 567		
Hoist				
Hydraulic system conforms to I	SO 4406			
System relief pressure	MPa	190		
Pump output flow rate	l/min	554		
at	r/min	2 100		
Body raise time	s	11		
Body lower time	s	13		
Service refill		10		
Engine crankcase and filters		136		
	- 1	91		
Transmission and filters				
Cooling system		304		
Fuel tank		1 290		
Steering hydraulic system (total)) [61		
Body hydraulic tank	I	420		
Planetaries (total)		78		
Differential	ı	95		
Front ride strut (each)	I	34		
Rear ride strut (each)	I	36.6		
Power take off	- 1	4		
Weights				
Chassis with hoists	kg	53 350		
Body standard	kg	16 200		
Net weight	kg	69 550		
Maximum payload	kg			
Maximum gross weight*	kg	164 550		
Weight distribution (axles)	3	FRT / REAR		
- Empty	%	48 / 52		
- Loaded	%			
	ur options	, full fuel tank and target payload.		
Sound Level	100.05	00/045 10405		
Sound level in cab according to				
LpA	dB(A)	78		
External sound level according	to ISO 63	395/SAE J2104		

LwA

dB(A)

Specifications



DIMENSIONS					
Description		Unit			
Н	Overall height	mm	5 070		
H1	Loading height	mm	4 380		
H2	Raise height	mm	9 576		
Н3	Front axle ground clerance	mm	675		
H4	Tail clearance	mm	1 042		
H5	Cab height	mm	4 825		
Н6	Bumper ground clearance (no TH)	mm	956 (785 to tow hook)		
H7	Ladder ground clearance	mm	598		
H8	Frame ground clearance	mm	806		
H9	Rear axle ground clearance	mm	785		
В	Overall width	mm	6 986		
B1	Body width	mm	5706 (Not including cab guard)		
B2	Rear over tires	mm	5 042 (5 147 at SLW)		
В3	Front track	mm	4 403		
B4	Rear track	mm	3 420		
L	Overall length	mm	10 922		

DIMENSIONS						
Description		Unit				
L1	Wheel base	mm	4 850			
L2	Center front axle to bumper	mm	2 890			
L3	Center rear axle to tipped tail	mm	2 440			
SAETR	SAE turning radius	mm	11 494			
CTR	Clearance turning radius	mm	13 062.4			
A1	Body dump angle	0	47			
A2	Approach angle	٥	22.5 (19 to tow hooks)			
A3	Frame angle	0	10			
C1	C of G (horizontal) unladen	mm	2 298			
C2	C of G (vertical) unladen	mm	764			
C1	C of G (horizontal) laden	mm	1 611			
C2	C of G (verical) laden	mm	1 952			

Vehicle measurements assumptions / variables
Measurements to be taken on flat ground
Truck should be unladen
Bridgestone VRLS Tires should be used
Tire pressure should be set as per manual
Suspension should be set at normal operating height

Equipment

STANDARD EQUIPMENT

Engine

Air cleaner with aspirator (vacuum)

Turbocharged and charge air cooler

Direct drive fan

Electronically controlled with Shift Energy Management (SEM)

Engine safe mode

Fuel filter/water separator

Pre-lube system

Sump guard

Engine enclosures (rubber)

Drivetrain

Full automatic transmission with manual override

Shift Energy Management

Torque converter with automatic lockup

Volvo Dynamic Shift

Double reduction planetaries for increased rimpull

Electrical system

Alternator

Batteries

Battery disconnect switch (tag lock out)

Engine disconnect switch (tag lock out)

Emergency engine shutdown (ground level)

Direction indicators and hazard warning

Lights - side, tail, stop and headlights

LED tail lamps

Power ports - 12V and 24V

Reverse alarm

Reverse lights

CareTrack telematics

Brake system

Hydraulically operated system with independent front and rear control systems

Park brake - electric switch, spring applied hydraulic release

Secondary brake - pedal controlled, modulates rear park brake piston

Retardation - finger tip control of transmission retarder or lever mounted on the steering column giving modulated pressure control of the rear oil cooled brakes

Body

Rock ejectors

Safety

Volvo Smart View

Anti-slip steps and platforms

Body down indicator

Body - operator guard LHS

Body - up locking pins

Body - up reverse to neutral inhibitor

Body - up shift inhibitor

Brakes - independant front and rear systems

Secondary brake foot pedal

Emergency SAHR brake

Battery disconnect switch (tag lock out)

Engine diconnect switch (Tag lock out)

Emergency engine shutdown (ground level)

Cab - ROPS and FOPS

Electro magnetic compatibility

Handrails on steps and platform

Horn

Neutral start inhibitor

Engine overspeed protection

Neutral coast inhibit

Programmable max. travel speed

Operator safety belt

Operator's field of view

Rear view mirrors

Retarder - transmission

Retarder - rear brake

Secondary steering

Instructor's seat with safety belt

Vibration 2002/44/EC

Windscreen washers

Windscreen wipers

STANDARD EQUIPMENT

Comfort

Air suspended seat

Heating, Ventilation and Air Conditioning - HVAC

Interior lights

Radio - Bluetooth

USB power take-off

Cup holder

Insulation thermal and acoustic

Storage compartments

Sun visor

Tilt/telescopic steering wheel

Tinted glass

Operator information interface

MacPherson type front suspension with lower wishbone

Exterior

Mud flaps

Diagnostic terminal

Front and rear tow points

Service and maintenance

Pressure check points

Tires

Standard Bridgestone tires

OPTIONAL EQUIPMENT

Engine

Fast fuel

Clutch engine fan

Drivetrain

Traction bias differential Inline fuel heater

9000 series transmission

Transmission sump guard

Electrical system

Heated and adjustable electrical mirrors

Remote jump start points

Working light kit

LED headlamps

Cab

Cab heater (-40°C)

Body

Onboard Weighing System

Body Exhaust Heating

Body Extensions upon request

Body liner plates (available with full weight or half weight)

Safety

Fire suppression system

Orange flashing beacon

Service and maintenance

Quick oil drain kit -40°C Arctic Kit

Central (Beka) autolube

Service light kit

Tires

Bridgestone standard supply

VRLS

VMTS

Michelin tires XDR2-B

XDT-A4

XKD1A XDRA

Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.





BIG ENOUGH TO TRUST **SMALL ENOUGH TO CARE**

Reference Number: 20055796_B

Founded in 1974...

CJD Equipment are in the industry for the long term and have the skills and knowledge to support you and your equipment. CJD Equipment takes great pride in being Volvo CE's first and only authorised partner in Australia for three decades. Together, we provide a full range of machinery ideally suited to Australia's unique landscapes and industry requirements. These products are fully supported through a nationwide network of branches, and carefully selected dealers and service agents, strategically positioned to ensure total support.

With fully equipped parts warehouses in every capital city, and dealers throughout major regional towns, we have the support network in place to ensure you're well supported, no matter where you or your machines are. Ongoing in-house training programs ensures our technicians' skills keep pace with the latest technology and product advances.

Visit www.cjd.com.au to read more about our history, range of products and to locate your local branch or dealer.

Visit www.cjd.com.au **Head Office** f Facebook.com/cjdequipment 54 Great Eastern Highway Call 1300 139 804 in Linkedin.com/company/cjd-equipment Instagram.com/cjd_equipment South Guildford, WA 6055 Email enquiries@cjd.com.au DARWIN MACKAY PORT HEDLAND ALICE SPRINGS BRISBANE GERALDTON • • KALGOORLIE NEWCASTLE PERTH . SYDNEY RUNRURY . ADELAIDE . ALBANY WODONGA MELBOURNE • • DANDENONG BURNIE . LAUNCESTON CJD Equipment Branches HOBART