

V O L V O



Volvo Articulated Haulers 55 t 639 hp

A60H

Volvo Construction Equipment



Being the first. Keeping the lead.

Since introducing Gravel Charlie, the world's first series manufactured articulated hauler, Volvo has consistently led the way when it comes to pioneering technology which delivers the ultimate in sustainable productivity and performance.

Today we offer the most comprehensive range of articulated haulers in the industry, with common technology throughout, ensuring optimum results whatever size class you are operating. Combine this with a range of complementary services and solutions and Volvo Articulated Haulers deliver the lowest possible cost per tonne.

1966

DR631 "Gravel Charlie"

The world's first series manufactured articulated hauler

1967

DR 860

3-axle machine with unique bogie concept

1979

5350

Featuring fully automatic transmission, unique suspension system and class leading cab with low noise level

1993

A25C

The first articulated hauler with low emission engine as standard

1995

A40

Product range from 20t to 40t

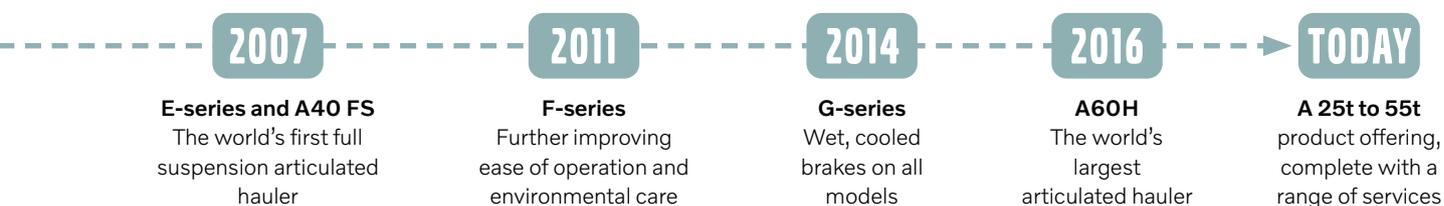
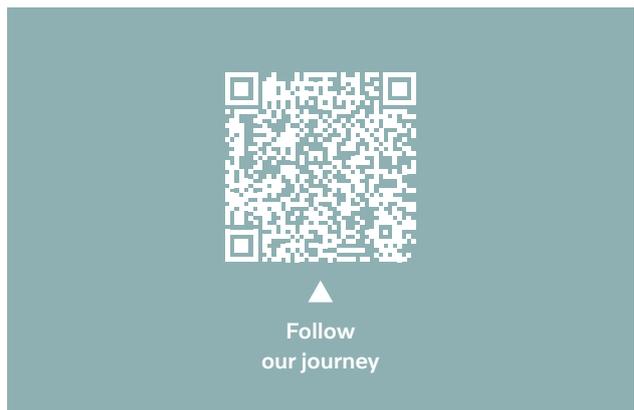
2000

D-series

Built with a focus on the operator



As part of our enduring focus on environmental care we are committed to Science Based Targets (SBTi) to achieve net-zero value chain emissions by 2040, with significant emission reductions as early as 2030. From product planning, manufacturing and supply, through to end-of-life, our focus continues to be on minimizing our global footprint and driving transformation in our industry.



Keep on moving

Effective maintenance can have a big influence on your total cost of ownership. Volvo Articulated Haulers are designed to be easy to service, helping you to maximize your uptime and keep maintenance costs to a minimum.

Reduce oil volume by half

When measured over the lifetime of the machine, Volvo Articulated Haulers require less than half the fluid volume compared to competition, benefitting both the environment and your operating costs.



Easy to service

Servicing your machine is quick and easy thanks to industry leading service access and essential maintenance points accessible from the ground. The front grill swings down, opening a service platform with anti-slip steps and the electric hood opens to 90 degrees, allowing full access to the engine compartment.



Service alerts

Fluid levels are constantly monitored with timely service alerts displayed on the dashboard, helping you stay on top of your maintenance requirements.





*Reduce your maintenance costs with Volvo
Articulated Haulers.*



NO DAILY OR WEEKLY GREASING

With Volvo Articulated Haulers greasing is only required every 250 hours – the best in the industry – delivering maximum uptime.

Haul Assist

Gain access to a set of tools designed to help you get the most out of your Volvo Articulated Hauler and boost your profitability.

Proactive tire management

Optimize tire life with the support of the Tire Pressure Monitoring System, which allows the operator to monitor tire pressure and temperature from the comfort of the cab.



A complete site overview

Monitor the whereabouts of all your machines, vehicles and visitors in real-time with Map, a connected tool which provides accurate positioning to help monitor on-site traffic and navigate the site more efficiently.



Go into detail

Reports can be generated automatically on a daily and weekly basis, or manually at any time, including the geo-tracking of moved material which is enabled by Map.



Support you can count on

As a fully integrated and factory-fitted Volvo system, all the components, hardware and software of Haul Assist are supported by your Volvo dealer to keep your operation running smoothly. What's more, you will benefit from over-the-air updates, easy upgrades and remote support.





The perfect Assist-ant to help get the most of your Volvo Articulated Haulers.



Watch our Haul Assist video ▶



TAKE CONTROL OF YOUR PRODUCTIVITY

On-Board Weighing provides real-time payload information which can help to eliminate carry-back and overloading; the result is peak productivity, reduced fuel consumption and less machine wear.

Bigger and bolder

With 100% off-road performance, proven Volvo technology and impressive payload, count on the Volvo A60H Articulated Hauler to boost your profits.

Comfort at speed

The A60H is fitted with active hydraulic front suspension – permitting high hauling speeds in tough conditions. This optimizes operator comfort and stability during travel.



Unbeatable off-road performance

The ground-breaking A60H is the best articulated hauler on the market. With matched drivetrain, automatic drive combinations including 100% differential locks, all-terrain bogie and hydro-mechanical steering, this machine is unbeatable.



Articulated hauler concept

Go where others can't. The A60H embodies the full articulated hauler concept and provides total versatility so you can access the entire jobsite and climb steeper gradients. Work in all seasons, terrains and applications using tailored machine configurations and tires, optimized for this 60 tonne machine.





*Volvo Articulated Haulers deliver
the highest profitability.*



MOVE MORE FOR LESS

Reach your production targets faster and reduce your cost per tonne with the Volvo A60H. The largest articulated hauler on the market offers up to 40% more productivity along with outstanding fuel efficiency.

Control in comfort

The industry-leading cab appeals to operators and helps maintain productivity all day, every day.

Total control

Stay in control at all times. The dump support system, dynamic Volvo engine brake, load and dump brake and hill assist, all help the operator to control the machine for extra productivity and safety.



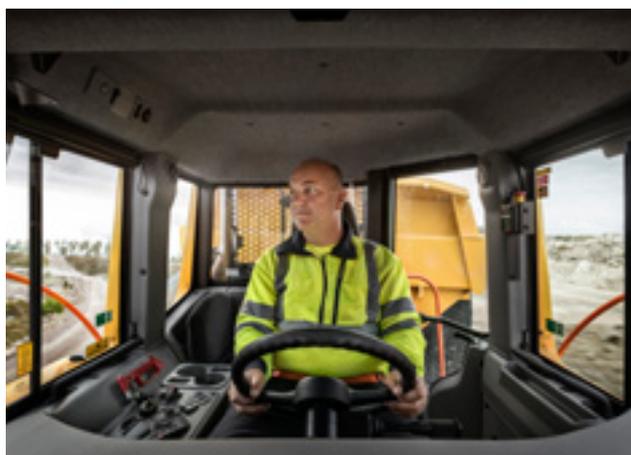
Ease of operation

The ergonomic, comfortable and easy-to-understand controls are designed to suit all operators, combined with automatic functions for increased ease of operation.



Operator comfort

Feel comfortable and spend more time in the Volvo Articulated Haulers. The centrally positioned operator, superior steering, excellent suspension, low noise levels, climate control, space and visibility reduce operator fatigue for more effective operations.



Safety first

Whether its operators, trainers, technicians or site workers – safety on site is of fundamental importance. In the Volvo Articulated Haulers superior visibility and efficient lighting combine with features such as the brake test and dump support, helping to keep everyone working around the machine safe.





Volvo Articulated Haulers are the operator's number one choice.



OPERATOR'S CHOICE

A happy operator is a more productive operator and when many other machines are onsite, most operators prefer the Volvo. Even in the most adverse conditions, its comfortable cab and ease of operation keep operators alert and performing their best.

Simply the best and the biggest

Only from Volvo

- Proven Volvo engine and matched driveline: high performance, high fuel efficiency
- Automatic drive combinations including 100% differential locks, all-terrain bogie and hydromechanical steering
- Active hydraulic front suspension for high hauling speeds in tough conditions
- The largest articulated hauler on the market, delivering 40% more productivity

The operator's choice

- Ease of operation: ergonomic and easy-to-understand controls
- Centrally positioned operator for best-in-class visibility
- Hill assist, dump support system, load and dump brake
- Built-in brake test: schedule and perform a stationary brake test, guided by the machine display

Solutions for you

- Easy machine monitoring: CareTrack, ActiveCare
- Genuine Volvo Parts
- Volvo Site Simulation: get recommendations on the best fleet configuration and site set-up
- Operator Training Program: unlock the full potential of your machine
- Uptime Services: control your maintenance costs



Haul Assist

- On-Board Weighing: real-time payload monitoring
- Tire Pressure Monitoring System
- Map: real-time positioning of on-site traffic
- Productivity Reports, including the geo-tracking of moved material
- Over-the-air updates, easy upgrades, remote support

Service and maintenance

- 250-hour greasing interval
- Half the fluid volume compared to the competition
- Service reminders and fluid level monitoring
- Industry-leading service access and ground-accessible service points



Configured for success

Ensuring your fleet is configured in the correct way can yield huge benefits to your operation including more productivity, enhanced performance and less costs.

Here are some tips to help tailor your new Volvo Articulated Hauler according to the application, site conditions and type of transported material, as well as matching to the appropriate loading unit. For more detailed information, talk to your Volvo dealer!

Body options

Question	Answer	Solution
Dealing with height restrictions? Operating in restricted height conditions e.g. silos or underground	No	Select standard body
	Yes	Select low profile body
Hauling abrasive material? Granite, silicate etc	No	<i>Go to next question</i>
	Yes	Select wear plates / rock liners for extended service life
What material density? Gravel is ~1.65 ton/m ³	> 1.5 ton/m ³ (gravel, blasted rock)	<i>Go to next question</i>
	1.1 - 1.5 ton/m ³ (dry earth, shale)	Select side extensions to increase body volume
	< 1.0 ton/m ³ (coal, fly ash etc)	Select light material kit to increase body volume
Front spill protection needed? Getting loaded by large excavator	No	<i>Go to next question</i>
	Yes	Select front spillguard
Extra load retention needed? Risk of dropping material e.g. when climbing steep inclines	No	<i>Go to next question</i>
	Yes, but not hauling boulders	Select tailgate – overhung type – to reduce spillage
	Yes, hauling boulders	Select tailgate – underhung type – to reduce spillage
Hauling sticky material? Risk of carry-back	No	<i>Go to next question</i>
	Yes	Select body exhaust heating

Exceeding gross machine weight is not permitted.
Payload should be reduced by the weight of the optional equipment.

Tires

Question	Answer	Solution
Operating on abrasive haulroad? Risk of tire cuts or extensive wear	No	E3 tires are optimized for soft ground, offering the best traction and high average speed
	Yes	Select E4 tires for the best cut resistance, comfort and tread life
Extra flotation needed? Risk of sinkage in soft ground	No	Select standard profile tires
	Yes	Select low profile tires, featuring lower ground pressure for improved flotation, stability and comfort



Optimal pass-matching

Volvo Excavator	EC480	EC530	EC550	EC750	EC950
	Number of passes				
A60H	11	9	8	7	5

- Excavator overcapacity, 3 buckets or below
- Well matched, 4-6 buckets (≈ 90 seconds loading time)
- Excavator undercapacity, 7 buckets or more
- Excavator undersized for optimum match

Volvo Wheel Loader	L220	L260	L350
	Number of passes		
A60H	6	5	4

- Loader overcapacity, 2 buckets or below
- Well matched, 2-3 buckets (≈ 90 seconds loading time)
- Loader undercapacity, 4 buckets or more
- Loader undersized for optimum match. Reach might also be an issue



Hauler chassis solutions

With Special Application Solutions and different chassis options you can tailor Volvo Articulated Haulers to your specific needs.



Volvo A60H in detail

Engine		
16 liter, 6-cylinder straight turbocharged diesel engine with 4 valves per cylinder, overhead camshaft and electronically controlled unit injectors. The engine has wet replaceable cylinder liners and replaceable valve guides and valve seats.		
Engine model	Volvo	D16F
Max power - SAE J1995 Gross	kW	495
	hp	673
at engine speed	r/min	1 800
Flywheel power - ISO 9249, SAE J1349 Net	kW	492
	hp	669
at engine speed	r/min	1 800
Max torque - SAE J1995 Gross	Nm	3 200
Max torque - ISO 9249, SAE J1349 Net	Nm	3 177
at engine speed	r/min	1 050
Displacement	l	16.1
Electrical System		
All cables, sockets and pins are identified. Cables are enclosed in plastic conduits and secured to main frame. Halogen lights. Prewired for options. Connectors meet IP67 standard for water-proofing as necessary.		
Voltage	V	24
Battery	V	2x12
Battery capacity	Ah	2x225
Alternator	kW/A	2.264/80
Starter motor	kW	9
Drivetrain		
Torque converter with built-in lock-up function.		
Transmission: Fully automatic Allison planetary transmission with 6 forward gears and 2 reverse gears. Internal torsional damper in the torque converter.		
Dropbox: Volvo-developed, in-line design with high ground clearance and 100% longitudinal "dog clutch" type differential lock.		
Axles: Heavy duty, purpose built Volvo design with fully floating axle shafts, planetary type hub reductions and 100% dog clutch type diff-lock. Automatic traction control system (ATC).		
Torque converter		1.85:1
Transmission	Volvo	6630 ORS
Dropbox	Volvo	IL3 ATC
Axles	Volvo	AHW80

Brake system		
Fully hydraulic, wet multiple disc brakes with enclosed, forced oil-cooled multiple discs on all wheels. Two circuit brake system. Complies with ISO 3450 at total machine weight.		
Circuit division: One circuit for front axle and one for bogie axles.		
Parking brake: Spring-applied disc brake on the propeller shaft, designed to hold a loaded machine on a grade of up to 18%. When the parking brake is applied, the longitudinal differential is locked.		
Retarder: Service brake retarder function and Volvo Engine Brake (VEB).		
Steering System		
Hydro-mechanical articulated steering, self compensating design. Two double-acting steering cylinders.		
Steering angle: 3,4 steering wheel turns lock-to-lock, $\pm 45^\circ$.		
Steering system, including secondary steering fulfills ISO 5010.		
Chassis		
Frames: box type, heavy duty. High strength steel, robot welded.		
Rotating hitch: 100% maintenance free, fully sealed, with permanently greased tapered roller bearings.		
Cab		
Mounted on rubber pads. Ergonomically designed. Easy entry and exit. Wide angle forward view.		
Operator centrally positioned above the front axle. Adjustable operators seat with retractable seat belt.		
Tilt/telescopic steering wheel. Ergonomically positioned controls. Filtered air. Climate control system.		
Operator communication system: Contronics.		
Large color display, user-friendly and easy-to-understand information, all vital machine functions are constantly monitored.		
Instructor seat with seat belt.		
Safety: ROPS/FOPS standards approved according to ISO3471, SAE J1040 / ISO3449, SAE J231.		
Sound level in cab (ISO 6396) - L _{PA}	dB	72
External sound level (ISO 6395) - L _{WA}	dB	113
External sound level with sound kit: 111 dB(A)		



Hydraulic system

Pumps: Five variable displacement piston pumps driven by the flywheel PTO.
One ground-dependent piston pump for secondary steering mounted on the dropbox.
Two return oil filters with magnetic cores provide effective oil filtration.

System max working pressure MPa 28

Dumping System

Patented Load and Dump Brake.

Dumping Cylinders: two single stage double acting cylinders.

Tipping angle ° 70

Tipping time with load s 13

Lowering time s 10

Body

Plate thickness

Front mm 8

Sides mm 14

Bottom mm 16

Chute mm 16

Material HB400 steel

Yield strength N/mm² 1 000

Tensile strength N/mm² 1 250

Load Capacity

Standard Body

Load capacity kg 55 000

Body, struck m³ 25.8

Body, heaped 2:1 m³ 33.6

With overhung tailgate

Body, struck m³ 26.5

Body, heaped 2:1 m³ 35.1

Suspension

Front suspension: Unique, full hydraulic, with automatic leveling and stabilizer.

Rear suspension: 100% maintenance free. Straddle mounted bogie beam. Independent wheel movement via a 3-point mounting system.

Hydraulic cylinders (struts), front/rear 2/0

Accumulators, oil-nitrogen, high pressure, front 2

Levelling sensors 2



Specifications

REFILL CAPACITIES

Crankcase	l	55
Fuel tank	l	750
Cooling system	l	75
Brake cooling system	l	131
Transmission	l	58
Dropbox	l	12
Axles, front/bogie	l	74/147
Hydraulic tank	l	198

SPEED

Forward		
1	km/h	7
2	km/h	10
3	km/h	13
4	km/h	19
5	km/h	26
6	km/h	55
Reverse		
1	km/h	5
2	km/h	8

OPERATING WEIGHT UNLOADED

Tires		33.25R29
Front	kg	22 350
Rear	kg	21 050
Total	kg	43 400
Payload	kg	55 000

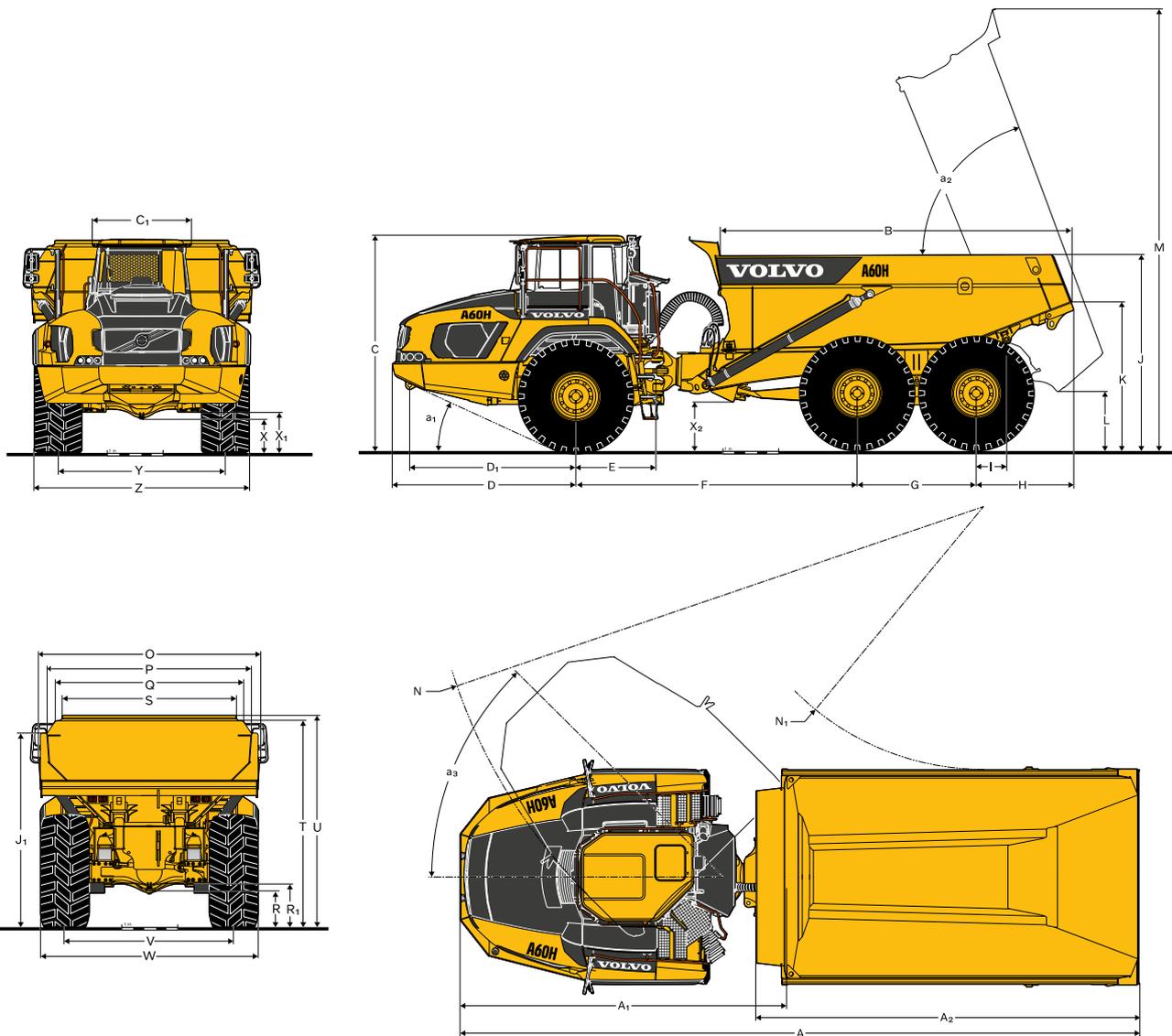
Operating weight includes all fluids and operator

TOTAL WEIGHT

Tires		33.25R29
Front	kg	28 700
Rear	kg	69 700
Total	kg	98 400

GROUND PRESSURE

Tires		33.25R29
Unloaded		
Front	kPa	125
Rear	kPa	58
Loaded		
Front	kPa	159
Rear	kPa	193



DIMENSIONS

Pos	Unit	A60H
A	mm	12 225
A ₁	mm	5 872
A ₂	mm	6 900
B	mm	6 310
C	mm	3 852
C ₁	mm	1 772
D	mm	3 293
D ₁	mm	2 986
E	mm	1 440
F	mm	5 050
G	mm	2 140
H	mm	1 743
I	mm	541
J	mm	3 510
K	mm	2 658
L	mm	1 030
M	mm	7 960
N	mm	10 014
N ₁	mm	4 761
O	mm	3 989

DIMENSIONS

Pos	Unit	A60H
P	mm	3 673
Q	mm	3 370
R	mm	677
R ₁	mm	778
S	mm	3 126
T	mm	3 734
U	mm	3 833
V	mm	3 010
W	mm	3 884
X	mm	601
X ₁	mm	727
X ₂	mm	845
Y	mm	3 010
Z	mm	3 884
a ₁	°	24.9
a ₂	°	70
a ₃	°	45

A60H: Unloaded machine with 33.25R29 tires.

Equipment

STANDARD EQUIPMENT

Engine

Direct injected, electronically controlled, turbocharged, intercooled
Grouped oil filters
Preheater for easier cold starts
VEB (exhaust retarder EPG + compression brake)

Tires

33.25R29
800/80R29

Drivetrain

6x4 and 6x6 automatically engaged drive modes
Dog clutch type 100% diff-locks in all axles
Full automatic transmission
Two-stage dropbox with longitudinal diff-lock
Torque converter with automatic lock-up

Electrical System

80 A alternator
Battery disconnect switch
Extra 24 V socket for lunch cooler
Lights:
Back-up light
Brake lights
Cab lighting
Direction indicators
Headlights
Instrument lighting
Parking lights
Rear lights

Brake system

Hill assist
Load & Dump Brake
Retarder pedal
Parking brake on propeller shaft
Two circuit, fully hydraulic, wet discs on all axles

Body

Body prepared for exhaust heating and optional equipment
On board weighing (OBW)

Safety

Anti-slip steps and platforms
Dump body lock
Handrails on steps and platforms
Hazard lights
Horn
Protective grill for cab rear window
Rear-view mirrors
Retractable 3-inch safety belt
ROPS/ FOPS - certified cab
Secondary steering
Steering joint lock
Windshield washers
Windshield wipers with interval function
Dump support system

STANDARD EQUIPMENT

Comfort

ACC control panel
Ashtray
Cab heater with filtered fresh air and defroster
Can holder /storage tray
Instructor seat with seat belt
Overhead console for radio
Sliding window
Space for lunch cooler
Storage box
Sun visor
Tilt/telescopic steering wheel
Tinted glass

Operator information interface

Gauges:
Brake pressure
Fuel
Speedometer
Tachometer
Wet disc brakes cooling oil temperature

Warning lights grouped and easy to read

Central warning (3 levels) for all vital functions

Central positioned information display

Automatic pre-start checks
Clock
Hour meter
Operational information, easy-to-navigate menu
Troubleshooting diagnostics

Exterior

Front mudguard wideners and rear mudflaps

Service and maintenance

Electrical engine hood and belly plate
Drainage hose
Machine Tracking Information System MATRIX
Service platform integrated in the front grill
Tool box

OPTIONAL EQUIPMENT

Engine

Air pre-cleaner, cyclone type
Air pre-cleaner, oil-bath type
Air filter, heavy duty, EON
Engine heater, 240 V
Engine heater, diesel (Eberspächer)
Engine auto shutdown
Engine shutdown timer
External emergency engine stop
Fuel filter, extra
High engine idle speed

OPTIONAL EQUIPMENT

Electrical System

- Headlights, LED
- Warning beacon, LED
- Working lights, LED
- Entrance light
- Seat belt indicator, external
- Anti-theft system (pin code)
- Rear view camera
- Reverse alarm
- CAN-BUS interface, extra

Cab

- Noise reduction kit (fulfils 2000/14/EC)
- Anchorage, operator's manual
- Cab heating/ventilation timer
- Cable kit, for cab heater
- HEPA cab air filter
- Bluetooth radio kit
- Rear view mirrors, adjustable, el.heated
- Seat belt XXL, non-retractable
- Sun blinds, side windows
- Universal key
- Air suspended, heated, fully adjustable seat
- Armrest for operator seat
- Headrest for operator seat
- Air blow gun

OPTIONAL EQUIPMENT

Body

- Body exhaust heating
- Front spillguard, extra
- Side extension, light material
- Tailgate, overhung, wire-operated
- Wear plates

Safety

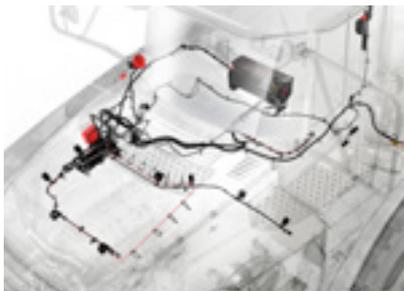
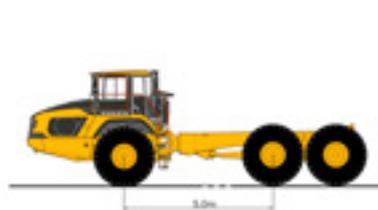
- Fire suppression system
- Warning triangle
- First aid kit and fire extinguisher
- Fire extinguisher
- Wheel chocks

Service and maintenance

- Lube system, standard machine
- Tool kit

Other

- Siberian kit -40°C
- Arctic oil kit
- CareTrack
- Fast fuelling system
- Jump start connector, NATO -type
- Haul Assist - Tire Pressure Monitoring System
- Hauler chassis (without body)

SELECTION OF VOLVO OPTIONAL EQUIPMENT**Fire suppression system****Fast fuelling****Auto lube****Wheel chocks****Hauler chassis****LED lighting**

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.

Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

Our portfolio of products and services is designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today. Below are just some examples. Talk to your dealer to find out and discuss the right fit for you!

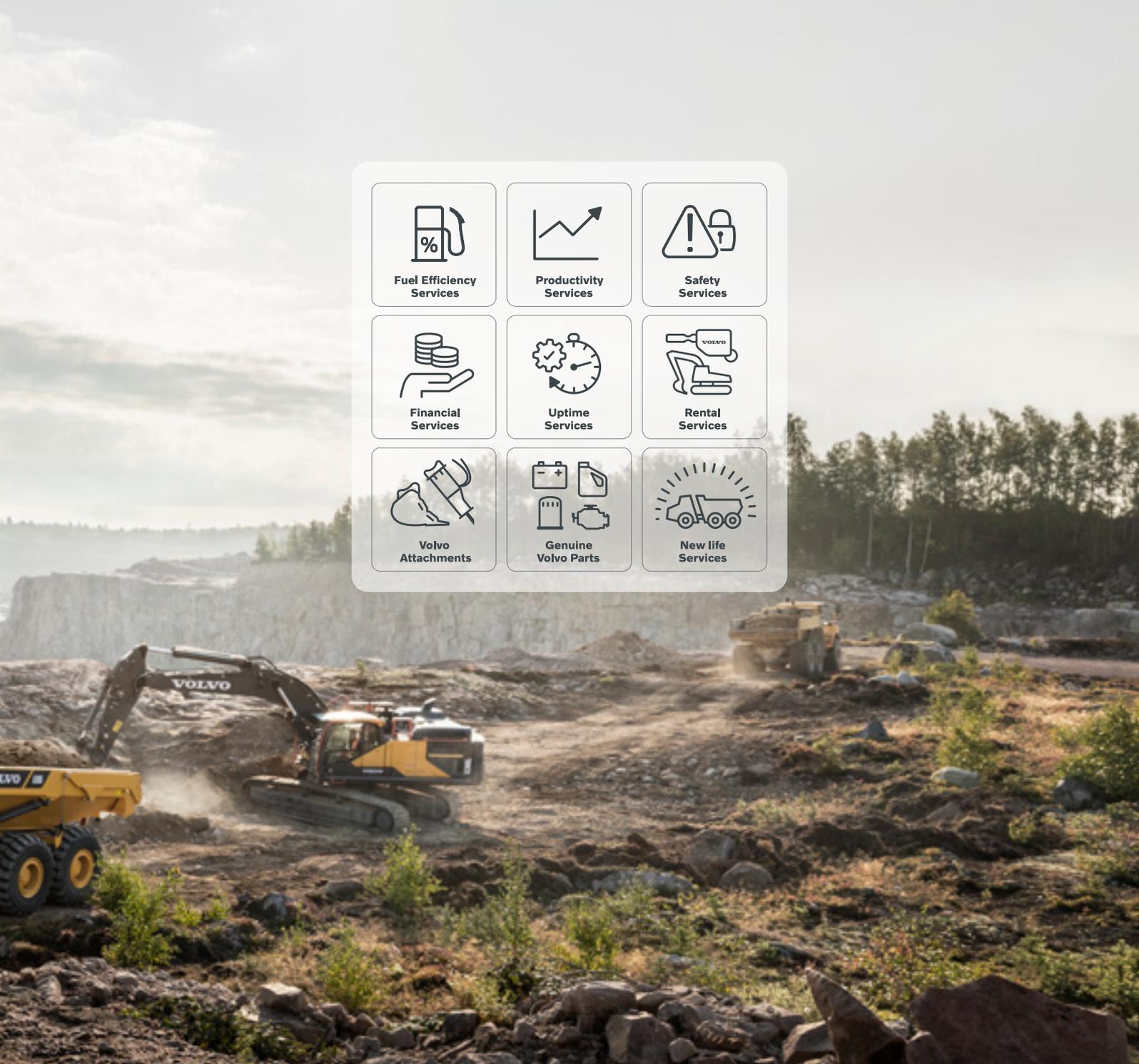


Get the most from your machine

While reliable and efficient machines of course play a vital role in reducing costs, enhancing safety and maximizing productivity, it is ultimately the performance of the operator that really makes the difference. We offer a range of training initiatives to help operators unlock the full capability of their Volvo Articulated Hauler.

Connected to Uptime

Maximize machine uptime and reduce repair costs with the CareTrack telematic system. Choose to keep track of your machine yourself or let us take care of it with ActiveCare. Our Volvo Uptime Center will provide 24/7 machine monitoring, supplying weekly reports and notifying you should preventive maintenance action be required.



Fuel Efficiency Services



Productivity Services



Safety Services



Financial Services



Uptime Services



Rental Services



Volvo Attachments



Genuine Volvo Parts



New life Services

Control your maintenance costs

Stay on track with planned servicing and keep your asset covered with our range of flexible maintenance and repair agreements.

Optimize site efficiency

Using Volvo Site Simulation, we can help you make on-site logistics more efficient and lower your cost per tonne. Get recommendations on the best fleet configuration and site set-up to maximize profitability.

Genuine Volvo Parts

Maintain productivity and machine uptime with our range of readily available, tested and approved parts – all backed by Volvo warranty. Only by using Genuine Volvo Parts, can you protect your investment, extend machine life and guarantee long-lasting performance.

V O L V O