

Volvo Construction Equipment
Building Tomorrow



A60H

Volvo Articulated Haulers 55 t / 121,254 lb 630 hp





1966: DR 631 GRAVEL CHARLIE

WORLD'S FIRST SERIES-MANUFACTURED ARTICULATED HAULER

By today's standards Gravel Charlie was not a big machine – but its impact on transport operations in the construction sector was massive.

- The world's first series manufactured articulated hauler
- Pioneering solutions including articulated steering, all-wheel drive and differential locks
- Unrivalled manoeuvrability in off-road conditions

GRAVEL CHARLIE MARKED THE BEGINNING OF SOMETHING NEW
AND SOMETHING WHICH WOULD CHANGE THE CONSTRUCTION SECTOR FOREVER.

25 000
ARTICULATED
HAULERS PRODUCED
BY VOLVO

1996

10 000
ARTICULATED
HAULERS
PRODUCED
BY VOLVO

1981



A40

1995

A class bigger

36 t

A complete product range
20 - 40 ton class



A25C

1993

First articulated hauler with low emission engine as standard



5350

1979

"Terrain Express" expanded Volvo articulated hauler's global success

20 t
50 km/h

- Constant 4-wheel drive
- Higher average speed in combination with higher load capacity = **improved profitability**
- Fully automatic transmission
- Unique suspension system allows high average speed
- Top class, roomy cab with low noise level



DR 860

1967

Master of rough terrain: 3-axle machine with unique bogie concept, still going strong

15 t
30 km/h



DR 631
GRAVEL CHARLIE

1966

World's first series-manufactured articulated hauler

10 t
25 km/h

50 000
ARTICULATED
HAULERS
PRODUCED
BY VOLVO
2006



D-SERIES

2000

Built
with the operator
in focus

37 t

- Increased productivity
- Improved operator comfort
- Improved serviceability

2001
BEST INDUSTRIAL
DESIGN AWARD
FOR D-SERIES
DESIGN



**E-SERIES
A40E FS**

2007

World's first
full suspension
articulated hauler,
boosting
operator comfort
and productivity

39 t



F-SERIES

2011

Further
improving ease
of operation
and environmental
care



G-SERIES

2014

Wet,
cooled brakes
on all models

- Uptime
- Fuel efficiency
- Operator's choice

2012

BEST INDUSTRIAL
DESIGN AWARD
FOR THE A40F
DESIGN



A60H

2016

Launching the
world's largest arti-
culated hauler.

55 t

2017

75 000
ARTICULATED
HAULERS
PRODUCED
BY VOLVO

2016: VOLVO A60H THE BEST JUST GOT BIGGER



Built on the proven Volvo technology of articulated steering, all-wheel drive and differential locks, the Volvo A60H has evolved to be bigger and bolder!

- The largest true articulated hauler on the market
 - 55 t payload capacity
- Meeting a growing demand for larger, higher payload haulers

BY EVOLVING OUR PRODUCT LINE-UP TO RESPOND TO CUSTOMER DEMANDS,
THE VOLVO A60H CONTINUES OUR PROUD HERITAGE OF INNOVATION AND MARKET LEADERSHIP IN HAULER SOLUTIONS.

Pure uptime

Get continuous production with this bigger, durable and superior machine – always available and ready to work. Count on superb reliability thanks to the machine's robust design, easy service access and outstanding Volvo dealer network. Guarantee pure uptime.

Guaranteed durability

Increase your uptime using heavy-duty front and rear frames, hitch and wet disk brakes. Volvo proven durability and the support of extensive warranty options means you never need to worry about getting the job done. Strength and durability are hallmarks of the Volvo articulated hauler.



Over fifty years strong

Fifty years and fifty tonnes later, Volvo is the world's leading manufacturer of articulated haulers. We invented the concept and have been developing and building these machines for over 50 years – it has come a long way from its original 10 tonne articulated hauler. With proven success over the years, the machines include innovative technology and the renowned Volvo engine.



Service access

With industry-leading access, servicing your machine is quick and easy. The front grill swings down, opening a service platform with anti-slip steps. The electric hood opens to 90 degrees, allowing full and safe access to the engine compartment.



Volvo dealer network

The exclusive Volvo dealer network is there to support you whenever you need it. Volvo offers a number of services, local knowledge and global experience, including telematics machine monitoring – CareTrack™ and MATRIS™ – as well as superb parts availability.





UPTIME

Get ready to work with the all new A60H. Designed for heavy hauling in severe off-road operation, the machine's long service life, quality, reliability and durability is everything you expect from a Volvo. Hauling is easier and more efficient.



PROFITABILITY

Reduce cost per tonne with a higher payload. The state-of-the-art design allows for more capacity while improving fuel efficiency so you can move more for less.

Move more, make more

Increase your business's profitability by moving more for less. Industry-leading fuel efficiency, innovative technology and vital operational data tools help to optimize production and control your maintenance costs, maximising your return on investment.

Fuel efficiency guarantee

The A60H, powered by the world-renowned Volvo engine, delivers excellent fuel efficiency without compromising on power or performance. With guaranteed fuel efficiency, this machine will increase your profitability and improve your return on investment.



Maximise your investment

Meet your targets faster with the A60H. Increase your earnings with a higher payload and greater productivity for lower cost per tonne.



Control your maintenance costs

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.



Operational data

Receive valuable data to improve onsite efficiency and save costs. With intelligent systems from Volvo such as MATRIS™, CareTrack™ and the On Board Weighing system, you will optimize your production and minimise your operational costs.



Bigger and bolder

Achieve astounding productivity with the A60H. This machine is the ultimate hauler, featuring 100% off-road performance, proven Volvo technology and impressive payload – contributing to sustainable operations, year after year.

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.



Simply the best

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



Comfort at speed

A60H is fitted with active hydraulic front suspension – permitting high hauling speeds in tough conditions. This optimizes operator comfort and stability during travel. Move more material in a shorter time for unmatched productivity.



Load optimization

The On Board Weighing System guarantees the optimal load every cycle. This maximizes production, boosts fuel efficiency and reduces machine wear in all site conditions and operations.





PRODUCTIVITY

The A60H can move more tonnes per hour and give a 100% in all conditions. The largest articulated hauler on the market has a bigger payload for your application, delivering up to 40% more productivity.

Simply the best and the biggest

PROFITABILITY

The state-of-the-art design allows for more capacity while improving fuel efficiency so you can move more for less.

Over fifty years strong

Over fifty years later, Volvo is still the world's leading manufacturer of articulated haulers.

Load optimization

The On Board Weighing System guarantees the optimal load every cycle.

Guaranteed durability

Increase your uptime using heavy-duty front and rear frames, hitch and wet disk brakes.

Simply the best

The ground-breaking A60H is the best articulated hauler on the market and the latest innovation from Volvo.

PRODUCTIVITY

The A60H can move more tonnes per hour and give a 100% in all conditions.



OPERATOR'S CHOICE

Its comfortable cab and ease of operation, even in adverse conditions, makes operators choose this machine.



Articulated hauler concept

Go where others can't. The machine embodies the full articulated hauler concept and provides total versatility.

Maximise your investment

Meet your targets faster with the A60H. Increase your earnings with a higher payload and greater productivity for lower cost per tonne.

Fuel efficiency guarantee

The A60H is powered by the world-renowned Volvo engine delivers excellent fuel efficiency without compromising on power or performance.

Service access

With industry-leading access, servicing your machine is quick and easy.

UPTIME

Designed for heavy hauling in severe off-road operation, its long service life, quality, reliability and durability is everything you expect from a Volvo.



OPERATOR'S CHOICE

When many other machines are onsite, most operators prefer the Volvo. Its comfortable cab and ease of operation, even in adverse conditions, makes operators choose this machine.

The ultimate operating environment

The A60H is the number one operator's choice because of its industry-leading spacious cab and comfortable work environment. Its superior comfort, control, ease of operation and safety appeals to operators, maintaining productivity all day, every day.

Total operator control

Stay in control at all times. The dump support system, downhill cruise control and load and dump brake, all help the operator to control the machine for extra productivity and safety.



Ease of operation

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



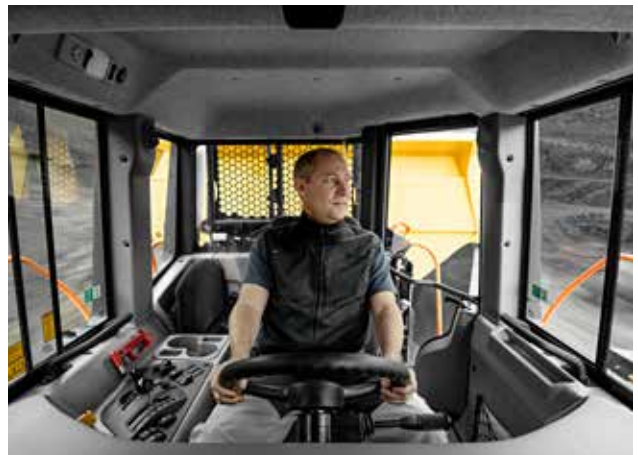
Operator comfort

Feel comfortable and spend more time in the A60H. The centrally positioned operator, superior steering, excellent suspension, low noise levels, climate control, space and visibility, reduce operator fatigue for more effective operations.



Safety

Whether its operators, trainers, technicians or site workers – safety on site is of fundamental importance. In the A60H superior visibility and efficient lighting combine with a number of safety features, such as the brake test and dump support, helping to keep the operator and people working around the machine safe, even in the most demanding working environments.



Volvo A60H in detail

Engine

V-ACT, 16 liter, 6-cylinder straight VGT (Variable Geometry Turbocharged) diesel engine with 4 valves per cylinder, overhead camshaft and electronically controlled unit injectors. It has wet replaceable cylinder liners and replaceable valve guides and valve seats. The engine has cooled EGR (Exhaust Gas Recirculation) and exhaust after treatment with EAT-Muffler (Exhaust After treatment) including DOC (Diesel Oxidation Catalyst), DPF (Diesel Particulate Filter) and SCR (Selective Catalytic Reduction) with an electronically controlled UDS (Urea Dosing System). After treatment system features passive DPF regeneration with an AHI (After treatment Hydro carbon Injection) device as back up.

Engine model	Volvo	D16J
Max power - SAE J1995 Gross	kW (hp)	470 (630)
at engine speed	r/min (r/s)	1,800 (30)
Flywheel power - ISO 9249, SAE J1349 Net	kW (hp)	467 (626)
at engine speed	r/min (r/s)	1,800 (30)
Max torque - SAE J1995 Gross	Nm (ft lbf)	2,960 (2,183)
Max torque - ISO 9249, SAE J1349 Net	Nm (ft lbf)	2,942 (2,170)
at engine speed	r/min (r/s)	1,050 (17.5)
Displacement	l (in ³)	16.1 (982)

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 fulfils 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. Optional 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) - LpA	dB(A)	72
External sound level (ISO 6395) - LwA	dB(A)	113
Internal sound level with sound kit: 70 dB(A)		
External sound level with sound kit: 111 dB(A).		

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

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 (psi)	28 (4,061)
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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 (in)	8 (0.31)
Sides	mm (in)	14 (0.55)
Bottom	mm (in)	16 (0.63)
Chute	mm (in)	16 (0.63)

Material

Yield strength	N/mm ² (psi)	1,000 (145,038)
Tensile strength	N/mm ² (psi)	1,250 (181,297)

Load Capacity

Standard Body

Load capacity	kg (sh tn)	55,000 (60.6)
Body, struck	m ³ (yd ³)	25.8 (33.7)
Body, heaped 2:1	m ³ (yd ³)	33.6 (43.9)

With overhung tailgate

Body, struck	m ³ (yd ³)	26.5 (34.7)
Body, heaped 2:1	m ³ (yd ³)	35.1 (45.9)

Specifications

REFILL CAPACITIES

Crankcase	l	gal	55	14.5
Fuel tank	l	gal	750	198.1
Cooling system	l	gal	75	19.8
Brake cooling system	l	gal	131	34.6
Transmission	l	gal	58	15.3
Dropbox	l	gal	12	3.2
Axles, front/bogie	l	gal	74/147	19.5/38.8
Hydraulic tank	l	gal	198	52.3
DEF	l	gal	60	15.9

OPERATING WEIGHT UNLOADED

Tires	33.25R29			
Front	kg	lb	22,750	50,155
Rear	kg	lb	21,000	46,297
Total	kg	lb	43,750	96,452
Payload	kg	lb	55,000	121,254

Operating weight includes all fluids and operator

SPEED

Forward				
1	km/h	mph	7	4
2	km/h	mph	10	6
3	km/h	mph	13	8
4	km/h	mph	19	12
5	km/h	mph	26	16
6	km/h	mph	55	34
Reverse				
1	km/h	mph	5	3
2	km/h	mph	8	5

TOTAL WEIGHT

Tires	33.25R29			
Front	kg	lb	28,900	63,714
Rear	kg	lb	69,850	153,993
Total	kg	lb	98,750	217,706

GROUND PRESSURE

Tires					33.25R29
Unloaded					
Front	kPa	psi	125	18.1	
Rear	kPa	psi	58	8.4	
Loaded					
Front	kPa	psi	159	23.1	
Rear	kPa	psi	193	28	

Excavator PASS MATCHING

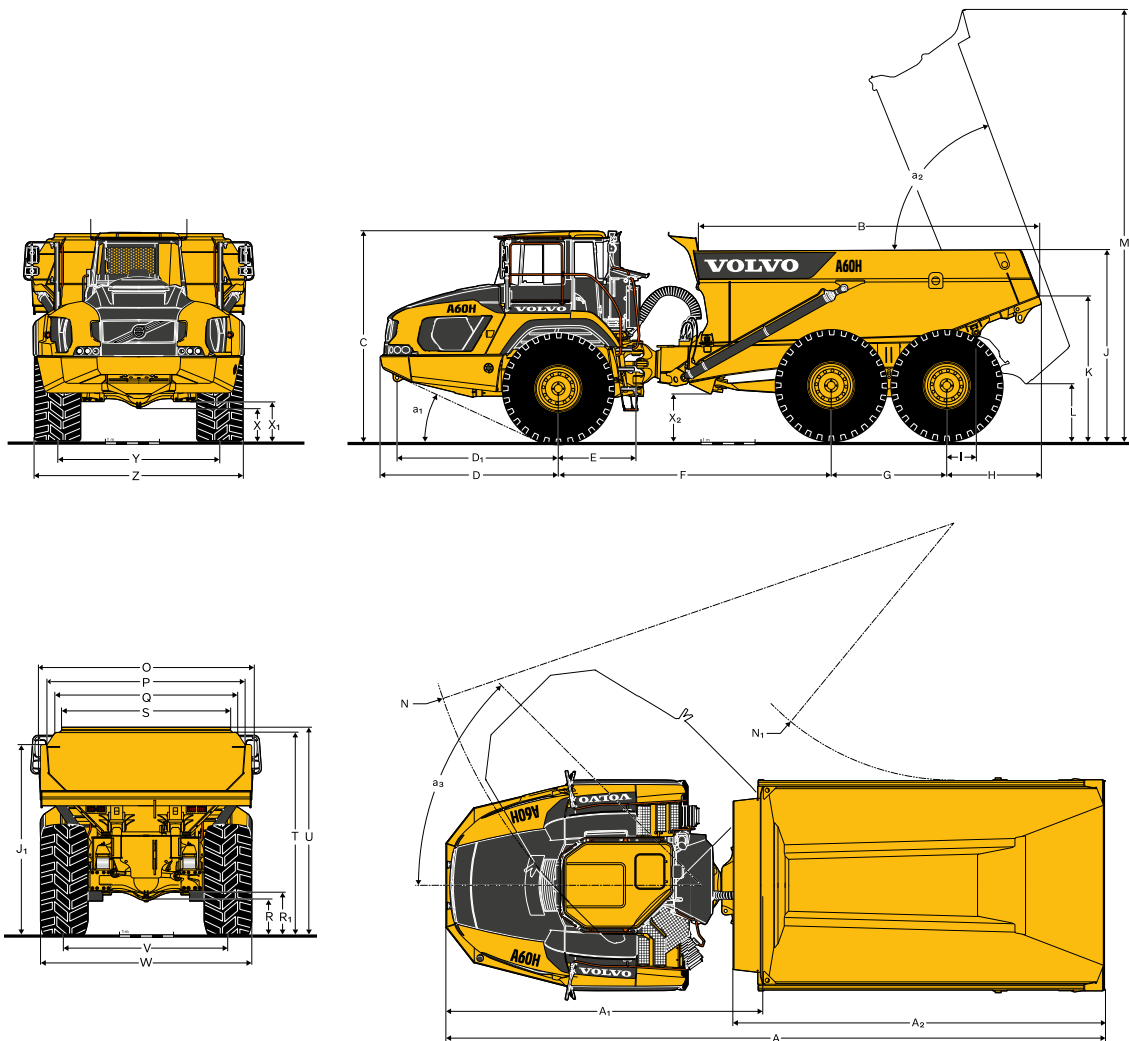
	EC480	EC750
	Number of passes	
A60H	11	7

Well matched, 4-6 buckets.
Excavator under capacity, 7 buckets or more.
Excavator undersized for optimum match.

Wheel loader PASS MATCHING

	L220	L250	L350
	Number of passes		
A60H	6	5	4

Well matched, 2-4 buckets.
Loader under capacity, 5 buckets or more.
Loader undersized for optimum match, reach might be an issue.



DIMENSIONS

Pos	Unit		A60H	
A	mm	ft in	12 225	40'1"
A1	mm	ft in	5 872	19'3"
A2	mm	ft in	6 900	22'8"
B	mm	ft in	6 310	20'8"
C	mm	ft in	3 852	12'8"
C1	mm	ft in	1 772	5'10"
D	mm	ft in	3 293	10'10"
D1	mm	ft in	2 986	9'10"
E	mm	ft in	1 440	4'9"
F	mm	ft in	5 050	16'7"
G	mm	ft in	2 140	7'0"
H	mm	ft in	1 743	5'9"
I	mm	ft in	541	1'9"
J	mm	ft in	3 510	11'6"
K	mm	ft in	2 658	8'9"
L	mm	ft in	1 030	3'5"
M	mm	ft in	7 960	26'1"
N	mm	ft in	10 014	32'10"
N1	mm	ft in	4 761	15'7"

DIMENSIONS

Pos	Unit		A60H	
O	mm	ft in	3 989	13'1"
P	mm	ft in	3 673	12'1"
Q	mm	ft in	3 370	11'1"
R	mm	ft in	677	2'3"
R1	mm	ft in	778	2'7"
S	mm	ft in	3 126	10'3"
T	mm	ft in	3 734	12'3"
U	mm	ft in	3 833	12'7"
V	mm	ft in	3 010	9'11"
W	mm	ft in	3 884	12'9"
X	mm	ft in	601	1'12"
X1	mm	ft in	727	2'5"
X2	mm	ft in	845	2'9"
Y	mm	ft in	3 010	9'11"
Z	mm	ft in	3 884	12'9"
a1	°		24.9	
a2	°		70	
a3	°		45	

A60H: Unloaded machine with 33.25R29 tires.

Equipment

STANDARD EQUIPMENT

Engine

Direct injected, electronically controlled, turbocharged, intercooled
Grouped oil filters, for ease of change
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 protected Care 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
Cigarette lighter
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 MATRIS
Service platform integrated in the front grill
Tool box

OPTIONAL EQUIPMENT

Engine

Air filter, heavy duty, EON
Engine heater, 240 V
Engine heater, diesel (Eberspächer)
Engine auto shutdown
Engine shutdown timer
External emergency engine stop
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

SELECTION OF VOLVO OPTIONAL EQUIPMENT

LED lighting



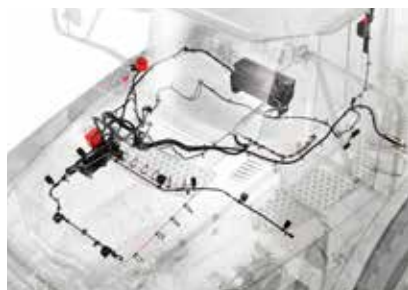
Tailgate



Fast fuelling



Volvo fire suppression system



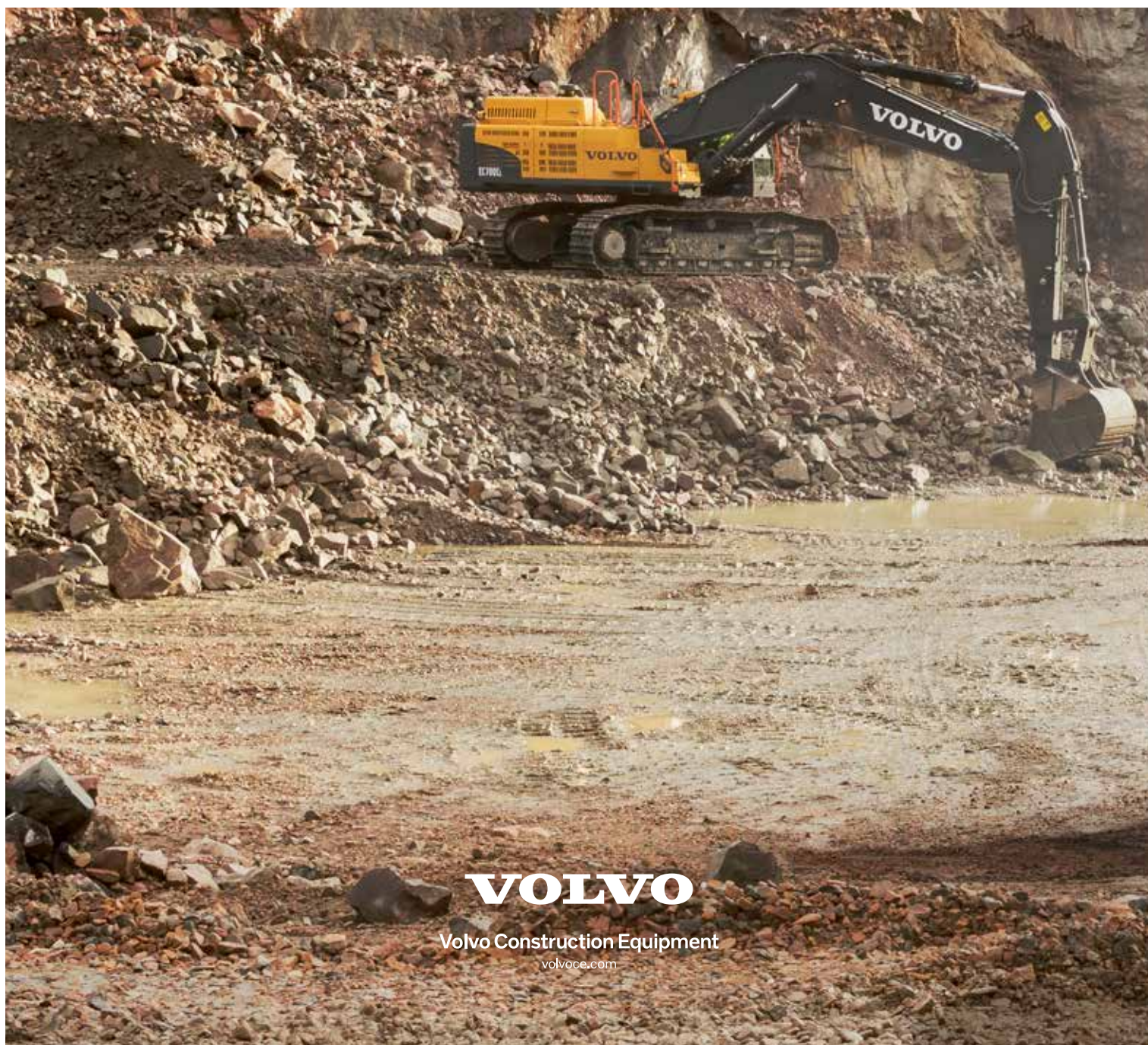
Light material kit



Seat belt indicator



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.



VOLVO

Volvo Construction Equipment
volvoce.com