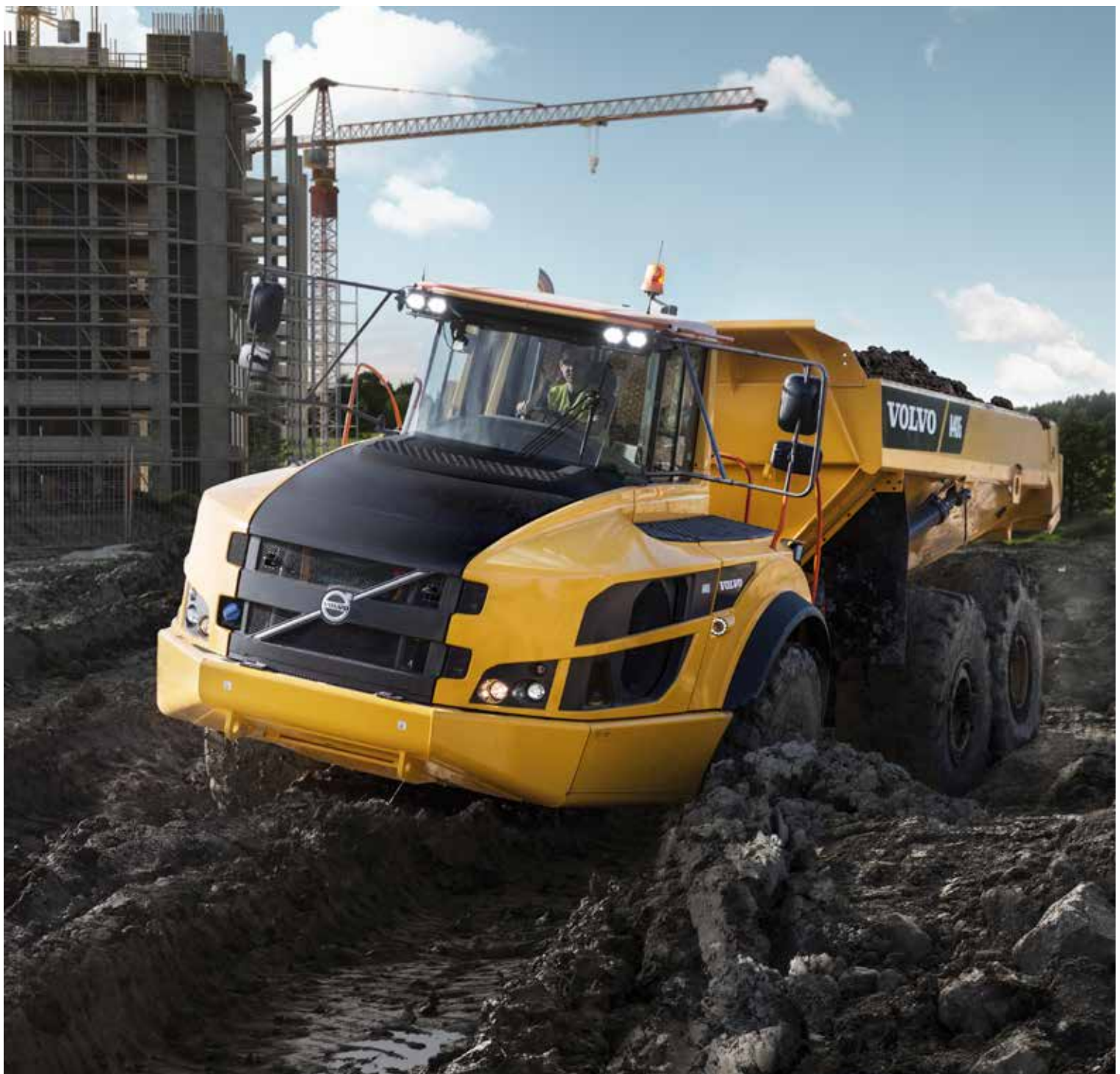


Volvo Construction Equipment
Building Tomorrow



A35G, A40G

Volvo Articulated Haulers 34.5-39 t 457-476 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

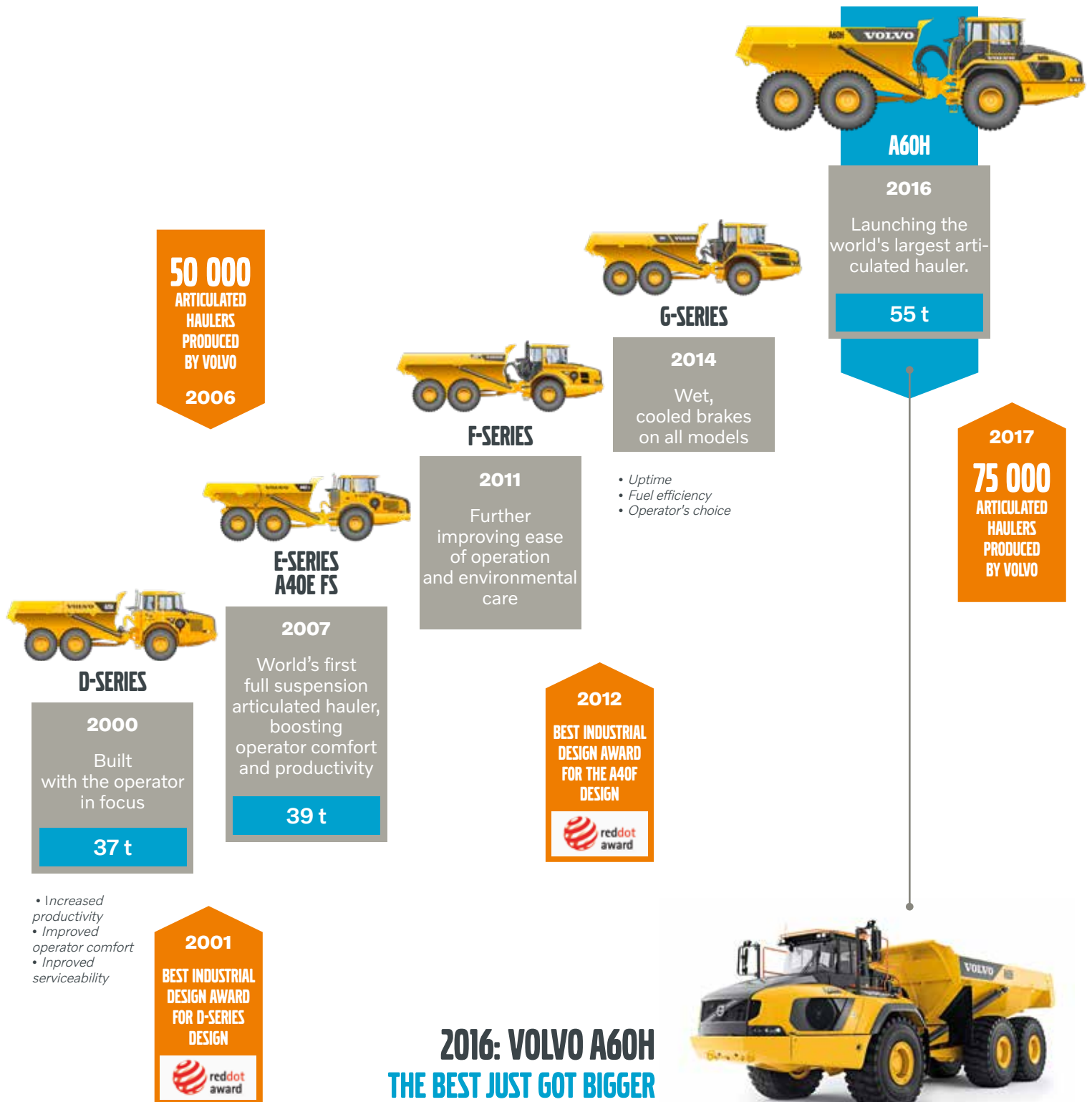


DR 631
GRAVEL CHARLIE

1966

World's first series-manufactured articulated hauler

10 t
25 km/h



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 ready to work with the new Volvo articulated hauler. 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.

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 A35G/A40G. 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.



FUEL EFFICIENCY GUARANTEED

The A35G/A40G, 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.

Incredible efficiency

Improve your efficiency and move more for less. Excellent fuel efficiency, innovative technology and useful operational data tools help to control your maintenance costs and maximize your investment.

Move more for less

The machine is optimized for efficiency featuring higher payload capabilities. Its smart design allows for more capacity while reducing fuel consumption so you can move more for less.



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.



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.



Volvo dynamic drive

Dynamic and predictive gear selection adapts to operating conditions, for improved comfort and fuel efficiency.



Hit the targets

Hit your targets with the A35G, A40G. This machine features 100% off-road performance, proven Volvo technology and increased payload – contributing to sustainable operations, year after year.

Articulated hauler concept

Go where others can't. The articulated hauler concept provides total versatility so you can access the entire jobsite and climb steeper gradients. Work in all seasons, terrains and applications. With body building solutions and different chassis options you can tailor the machine to your jobsite.



Simply the best

The A35G/A40G machine delivers unbeatable off-road performance in its class with features including matched Volvo drivetrain, Automatic Traction Control including 100% differential locks, all-terrain bogie, hydro-mechanical steering.



The right speed for the job

Ensure the right speed for your job using the retarders and dynamic Volvo Engine Brake to adapt your speed for maximum productivity and safety.



Load optimization

The optional 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

With superior productivity you can carry more in one go. The A35G, A40G articulated hauler is built to improve your cycle times and productivity.

Get ready for heavy hauling

Guaranteed durability

Volvo proven durability and support mean you never need to worry about getting the job done.

Over fifty years strong

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

Dump support system

The new dump support system increases stability and control in tough environments.

Service access

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

OptiShift

Directional changes are made smoother, easier and faster.

OPERATOR'S CHOICE

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



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.

FUEL EFFICIENCY GUARANTEED

Powered by the world-renowned Volvo engine delivers excellent fuel efficiency without compromising on power or performance.

Cruise Control

Set and adjust the cruise control to maintain a constant travel speed for smoother and more efficient hauling.

Volvo dynamic drive

Gear shifting adapts dynamically to operating conditions, for improved comfort and fuel efficiency.



Brake test

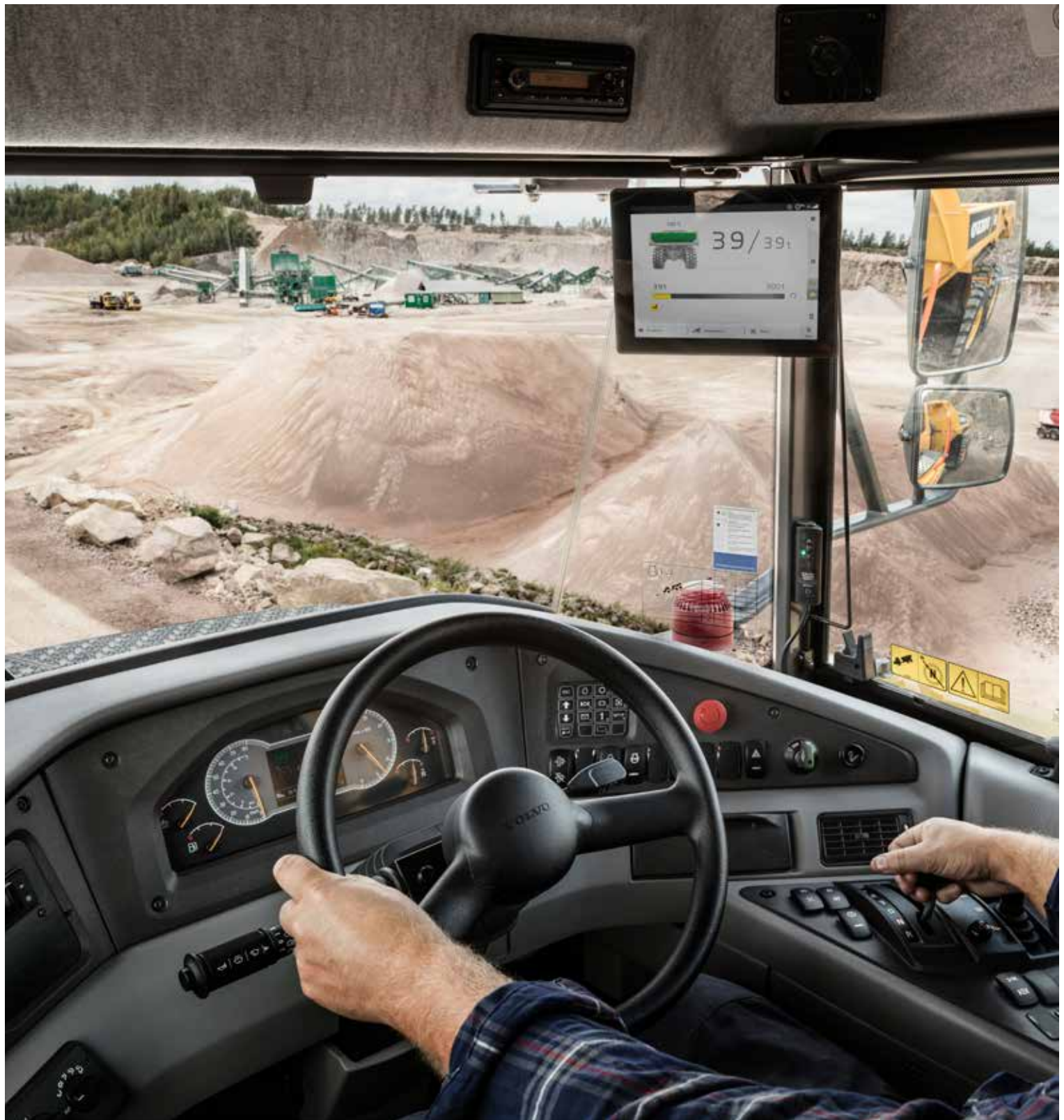
Schedule and perform a safe and easy stationary test, guided by the operator's display.

Downhill Speed Control

Easily maintain control and speed when operating downhill, for safer and more comfortable operation.

PRODUCTIVITY

Move more tonnes per hour and give a 100% in all conditions.



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.

Control in comfort

The industry-leading spacious cab and comfortable work environment make the A35G/A40G the number one choice for operators. Its superior comfort, control, ease of operation and safety appeals to operators, helping to maintain outstanding productivity all day, every day.

Total operator control

The A35G/A40G is packed with features to help operators get the most from the machine. Intelligent functions such as cruise control, downhill speed control and hill assist help the operator control the machine with ease and efficiency, for enhanced safety and productivity in all conditions.



Ease of operation

The ergonomic and comfortable controls make Volvo articulated haulers easy to understand and suit all operators. Automatic functions such as OptiShift – which enables fast and smooth directional changes – offer even greater ease of operation for an unrivalled operator experience.



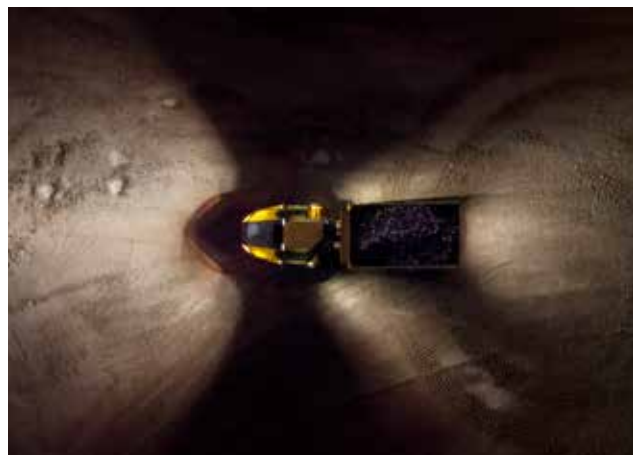
Operator comfort

Feel comfortable and spend more time in the A35G/A40G. 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 A35G/A40G 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 A35G, A40G in detail

Engine

V-ACT, 13 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.

		A35G	A40G
Engine model	Volvo	D13J (Stage V)	D13J (Stage V)
Max power - SAE J1995 Gross	kW	336	350
	hp	457	476
at engine speed	r/min	1 900	1 900
Flywheel power - ISO 9249, SAE J1349 Net	kW	333	347
	hp	453	472
at engine speed	r/min	1 900	1 900
Max torque - SAE J1995 Gross	Nm	2 407	2 525
Max torque - ISO 9249, SAE J1349 Net	Nm	2 386	2 500
at engine speed	r/min	1 200	1 050
Displacement	l	12.8	12.8

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.

		A35G	A40G
Voltage	V	24	24
Battery	V	2x12	2x12
Battery capacity	Ah	2x170	2x170
Alternator	kW/A	3.396/120	3.396/120
Starter motor	kW	9	9

Drivetrain

Torque converter with built-in lock-up function.

Transmission: Fully automatic Volvo PowerTronic planetary transmission with nine forward gears and three reverse gears. The transmission has the ability to skip gears for fast and accurate gear selection.

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).

		A35G	A40G
Torque converter		2.1:1	2.1:1
Transmission	Volvo	PT 2529	PT 2529
Dropbox	Volvo	IL2 ATC	IL2 ATC
Axles	Volvo	ARB H35	ARB H40

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 acting on the trailer unit propeller shaft. When the parking brake is applied, the longitudinal differential 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 fulfil 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.

		A35G	A40G
Sound level in cab (ISO 6396) - LpA	dB(A)	72	72
External sound level (ISO 6395) - LwA	dB(A)	112	112
Internal sound level with sound kit: 70 dB(A)			
External sound level with sound kit: 110 dB(A)			

Suspension

Front suspension: Three point suspension consisting of a-stay fitted to the frame structure by a spherical rubber bushing, shock absorbers with accumulators and cross stays.
Rear suspension: 3-point bogie beam suspension consisting of a straddle-mounted bogie beam with maintenance free rubber bearings, flexible rubber pads, cross stays and a-stay.

Hydraulic system

Pumps: Four variable displacement piston pumps driven by the flywheel PTO.
Two load-sensing used for steering and tipping and two electrical controlled used for fan, brake cooling and brake power supply.
One ground-dependent piston pump for secondary steering mounted on the dropbox.
Two return oil filters with magnetic cores provide effective oil filtration.

		A35G	A40G
System max working pressure	MPa	26	26

Dumping System

Patented Load and Dump Brake.
Dumping Cylinders: two single stage double acting cylinders.

		A35G	A40G
Tipping angle	°	72	70
Tipping time with load	s	12	12
Lowering time	s	10	10

Body

		A35G	A40G
Plate thickness			
Front	mm	8	8
Sides	mm	11	11
Bottom	mm	14	14
Chute	mm	16	16
Material		HB450 steel	HB450 steel
Yield strength	N/mm ²	1 150	1 150
Tensile strength	N/mm ²	1 350	1 350

Load Capacity

		A35G	A40G
Standard Body			
Load capacity	kg	34 500	39 000
Body, struck	m ³	16.6	18.4
Body, heaped 2:1	m ³	21.2	24
With overhung tailgate			
Body, struck	m ³	17	18.8
Body, heaped 2:1	m ³	22.1	24.7

Specifications

REFILL CAPACITIES

		A35G	A40G
Crankcase	l	51	51
Fuel tank	l	480	480
Cooling system	l	44	44
Brake cooling system	l	188	188
Transmission	l	43	43
Dropbox	l	9	9
Axles, front/bogie	l	25/51	26/53
Hydraulic tank	l	174	174
DEF/AdBlue®	l	39	39

®registered trademark of the Verband der Automobilindustrie e.V. (VDA)

OPERATING WEIGHT UNLOADED

		A35G	A40G
Tires		26.5R25*	29.5R25**
Front	kg	15 700	16 100
Rear	kg	13 600	14 600
Total	kg	29 300	30 700
Payload	kg	34 500	39 000

Operating weight includes all fluids and operator

*) A35G with tires 775/65R25, add 200 kg /axle

**) A40G with tires 875/65R25, add 300 kg /axle

SPEED

		A35G	A40G
Forward			
1	km/h	5.9	5.8
2	km/h	8.6	8.5
3	km/h	10.3	10.4
4	km/h	15.2	15
5	km/h	21.9	21.6
6	km/h	27.7	27.3
7	km/h	36.6	36.1
8	km/h	48.5	47.8
9	km/h	57	57
Reverse			
1	km/h	6.6	6.5
2	km/h	9.5	9.4
3	km/h	18	18

TOTAL WEIGHT

		A35G	A40G
Tires		26.5R25*	29.5R25**
Front	kg	19 200	20 450
Rear	kg	44 600	49 250
Total	kg	63 800	69 700

*) A35G with tires 775/65R25, add 200 kg /axle

**) A40G with tires 875/65R25, add 300 kg /axle

GROUND PRESSURE

		A35G	A40G	A35G	A40G
Tires		26.5R25	29.5R25	775/65R25	875/65R25
Unloaded					
Front	kPa	132	111	115	98
Rear	kPa	54	47	48	42
Loaded					
Front	kPa	158	139	138	121
Rear	kPa	183	167	160	146

Excavator PASS MATCHING

	EC380	EC480	EC750
Number of passes			
A35G	9	7	5
A40G	10	8	5

Well matched, 4-6 buckets.

Excavator under capacity, 7 buckets or more.

Excavator undersized for optimum match.

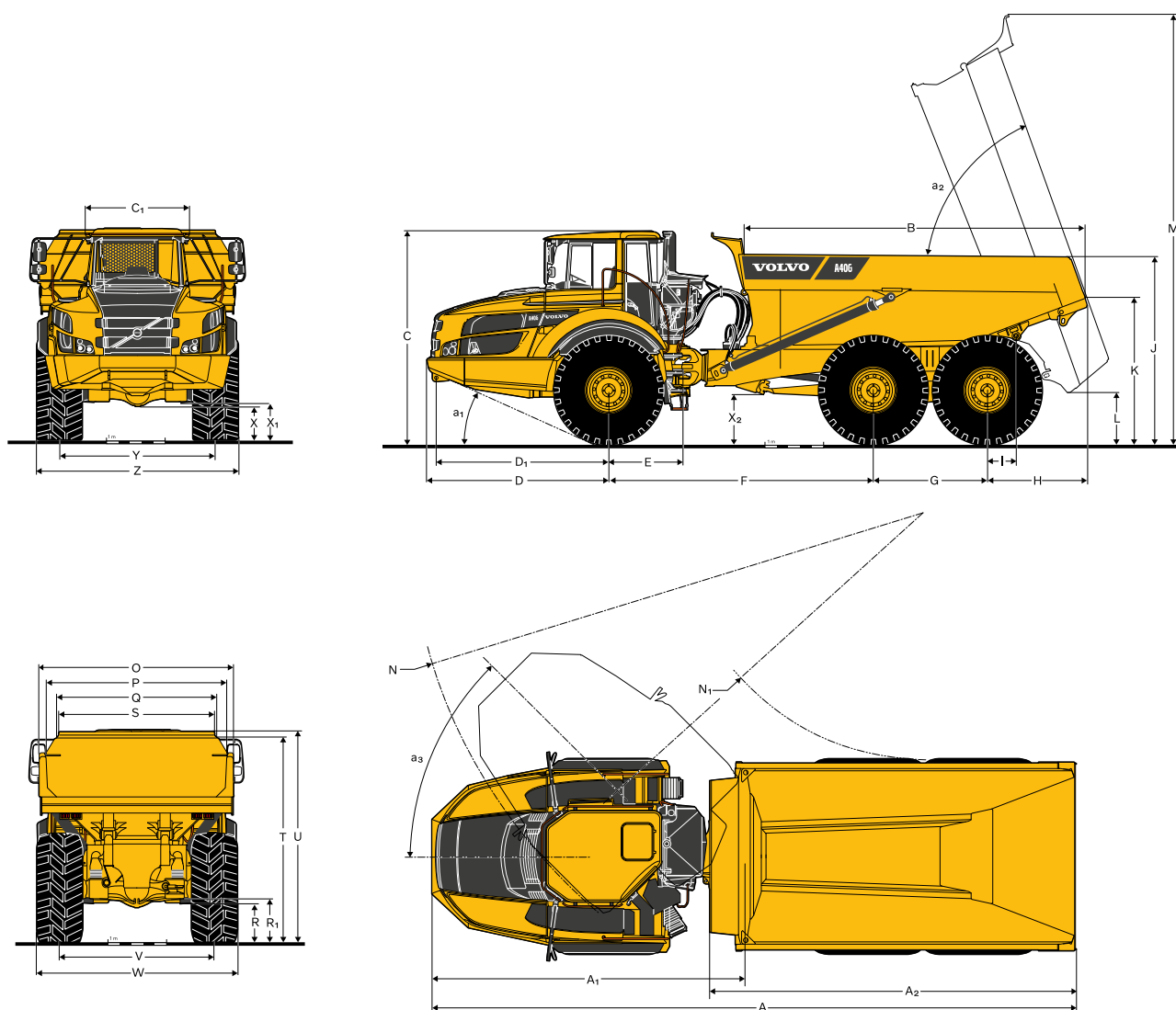
Wheel loader PASS MATCHING

	L150	L180	L220	L250	L350
Number of passes					
A35G	5	4	4	3	3
A40G	5	5	4	4	3

Well matched, 2-3 buckets.

Loader under capacity, 4 buckets or more.

Loader undersized for optimum match, reach might be an issue.



DIMENSIONS

Pos	Unit	A35G	A40G
A	mm	11180	11263
A ₁	mm	5476	5476
A ₂	mm	6241	6404
B	mm	5568	5844
C	mm	3547	3599
C ₁	mm	1772	1772
D	mm	3100	3100
D ₁	mm	2942	2942
E	mm	1277	1277
F	mm	4578	4518
G	mm	1820	1940
H	mm	1683	1706
I	mm	650	495
J	mm	3014	3132
K	mm	2304	2435
L	mm	890	822
M	mm	7236	7265
N	mm	8866	8957
N ₁	mm	4416	4327
O	mm	3216	3430

DIMENSIONS

Pos	Unit	A35G	A40G
P	mm	2902	3118
Q	mm	2553	2820
R	mm	564	613
R ₁	mm	652	701
S	mm	2423	2651
T	mm	3382	3427
U	mm	3498	3546
V	mm	2534	2636
W	mm	3221	3403
X	mm	500	553
X ₁	mm	592	645
X ₂	mm	738	788
Y	mm	2534	2636
Z	mm	3221	3403
a ₁	°	23.6	24.3
a ₂	°	72	70
a ₃	°	45	45

A35G: Unloaded machine with 26.5R25

A40G: Unloaded machine with 29.5R25

Equipment

STANDARD EQUIPMENT		
	A35G	A40G
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		
26.5R25	•	—
29.5R25	—	•
Drivetrain		
6x4 and 6x6 automatically engaged drive modes	•	•
Dog clutch type 100% diff-locks in all axles	•	•
Full automatic transmission	•	•
Dropbox with longitudinal diff-lock	•	•
Torque converter with automatic lock-up	•	•
Electrical system		
120 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	•	•
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		
	A35G	A40G
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	•	•
Machine Tracking Information System MATRIS	•	•
Service platform integrated in the front grill	•	•
Tool box	•	•

OPTIONAL EQUIPMENT		
	A35G	A40G
Engine		
Air filter, heavy duty, EON	•	•
Engine heater, 120 V, USA	•	•
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	•	•
Tires		
775/65R25	•	—
875/65R25	—	•

OPTIONAL EQUIPMENT		
	A35G	A40G
Electrical system		
Headlights, LED	•	•
Warning beacon, LED	•	•
Working lights, halogen	•	•
Working lights, LED	•	•
Entrance light	•	•
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 240 V	•	•
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	•	•
Low profile cab	•	•

OPTIONAL EQUIPMENT		
	A35G	A40G
Body		
Body exhaust heating	•	•
Front spillguard, extra	•	•
Side extension, 200 mm / 7.9 in	•	•
Side extension, light material	•	•
Tailgate, overhung, linkage-operated	•	•
Tailgate, overhung, wire-operated	•	•
Tailgate, underhung	•	•
Wear plates, 450 HB	•	•
Underground body	•	•
Safety		
Fire suppression system	•	•
Warning triangle	•	•
First aid kit and fire extinguisher	•	•
Fire extinguisher	•	•
Wheel chocks	•	•
Service and maintenance		
Lube system, standard machine	•	•
Lube system, tailgate	•	•
Lubrication hose, ground level greasing	•	•
Tool kit	•	•
Other		
Siberian kit -40°C	•	•
On board weighing (OBW)	•	•
Arctic oil kit	•	•
CareTrack	•	•
Fast fuelling system	•	•
Jump start connector, NATO -type	•	•
Frame extension	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Entrance light



Fast fuelling



LED lighting



On board weighing



Heavy duty air filter



Volvo fire suppression system



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