

V O L V O



Volvo Articulated Haulers 25 t / 55,116 lb 315 hp

A25G

Volvo Construction Equipment

A25G



Hauling heavy profits



Service and maintenance

- 250-hour greasing interval
- Half the fluid volume compared to the competition
- 1,000hr engine service intervals
- Service reminders and fluid level monitoring
- Industry-leading service access and ground-accessible service points



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



Only from Volvo

- Industry-leading Volvo engine and driveline: high performance, high fuel efficiency
- Terrain Memory function: optimized engagement of the traction control for excellent off-road mobility
- Volvo dynamic drive
- Automatic drive combinations including 100% differential locks, all-terrain bogie and hydromechanical steering
- OptiShift: fast and smooth directional changes



The operator's choice

- Ease of operation: ergonomic and easy-to-understand controls
- Centrally positioned operator for best-in-class visibility
- Cruise control, hill assist, dump support system, load and dump brake
- The downhill speed control function automatically maintains a constant speed when operating on downward gradients
- Built-in brake test: schedule and perform a stationary brake test, guided by the machine display



Solutions for you

- Easy machine monitoring: CareTrack, ActiveCare Direct
- Lifetime Frame and Structure Warranty
- 24hr parts delivery guarantee
- 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

Volvo A25G in detail

Engine

V-ACT, 11 liter, 6-cylinder straight VGT (Variable Geometry Turbocharged) diesel engine with 4 valves per cylinder, overhead camshaft. The Fuel system have a common rail with electronically controlled of 3 Pce of pumping injectors and 3 Pce of non-pumping 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 AH1 (After treatment Hydro carbon Injection) device as back up.

Engine model	Volvo	D11M
Max power - SAE J1995 Gross	kW (hp)	235 (315)
at engine speed	r/min (r/s)	2,100 (35)
Flywheel power - ISO 9249, SAE J1349 Net	kW (hp)	234 (314)
at engine speed	r/min (r/s)	2,100 (35)
Max torque - SAE J1995 Gross	Nm (ft lbf)	2,040 (1,505)
Max torque - ISO 9249, SAE J1349 Net	Nm (ft lbf)	2,030 (1,497)
at engine speed	r/min (r/s)	1,100 (18.3)
Displacement	l (in ³)	10.8 (659)

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	2x170
Alternator	kW/A	3.396/120
Starter motor	kW	9

Drivetrain

Torque converter with built-in lock-up function.

Transmission: Fully automatic Volvo PowerTronic planetary transmission with six forward gears and two 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).

Torque converter		2.37:1
Transmission	Volvo	PT 2116
Dropbox	Volvo	IL1 ATC
Axles	Volvo	AHW56

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, ±45°.

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 110

Internal sound level with sound kit: 70 dB(A)

External sound level with sound kit: 108 dB(A)

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.

System max working pressure	MPa (psi)	25 (3,626)
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Dumping System

Patented Load and Dump Brake.

Dumping Cylinders: two single stage double acting cylinders.

Tipping angle	°	74
Tipping time with load	s	12
Lowering time	s	10

Body

Plate thickness

Front	mm (in)	6 (0.24)
Sides	mm (in)	10 (0.39)
Bottom	mm (in)	14 (0.55)
Chute	mm (in)	14 (0.55)

Material

Yield strength	N/mm ² (psi)	1,150 (166,793)
Tensile strength	N/mm ² (psi)	1,350 (195,801)

Load Capacity

Standard Body

Load capacity	kg (sh tn)	25,000 (27.56)
Body, struck	m ³ (yd ³)	12.1 (15.8)
Body, heaped 2:1	m ³ (yd ³)	15.3 (20)

With overhung tailgate

Body, struck	m ³ (yd ³)	12.4 (16.2)
Body, heaped 2:1	m ³ (yd ³)	15.9 (20.8)

Suspension

Front suspension: Gas-hydraulic struts. Soft and progressive. Independent wheel movement via a 3-point mounting system.

Specifications

REFILL CAPACITIES				
			A25G	
Crankcase	l	gal	35	9.2
Fuel tank	l	gal	380	100.4
Cooling system	l	gal	48	12.7
Brake cooling system	l	gal	35	9.2
Transmission	l	gal	41	10.8
Dropbox	l	gal	9	2.4
Axles, front/bogie	l	gal	30/61	7.9/16.1
Hydraulic tank	l	gal	137	36.2
DEF	l	gal	39	10.3

SPEED				
			A25G	
Forward				
1	km/h	mph	8.3	5.2
2	km/h	mph	11.9	7.4
3	km/h	mph	21.1	13.1
4	km/h	mph	30.3	18.8
5	km/h	mph	38.4	23.9
6	km/h	mph	52.7	32.7
Reverse				
1	km/h	mph	7.7	4.8
2	km/h	mph	13.7	8.5

OPERATING WEIGHT UNLOADED				
			A25G	
Tires			23.5R25*	
Front	kg	lb	12,800	28,219
Rear	kg	lb	9,900	21,219
Total	kg	lb	22,700	50,045
Payload	kg	lb	25,000	55,116

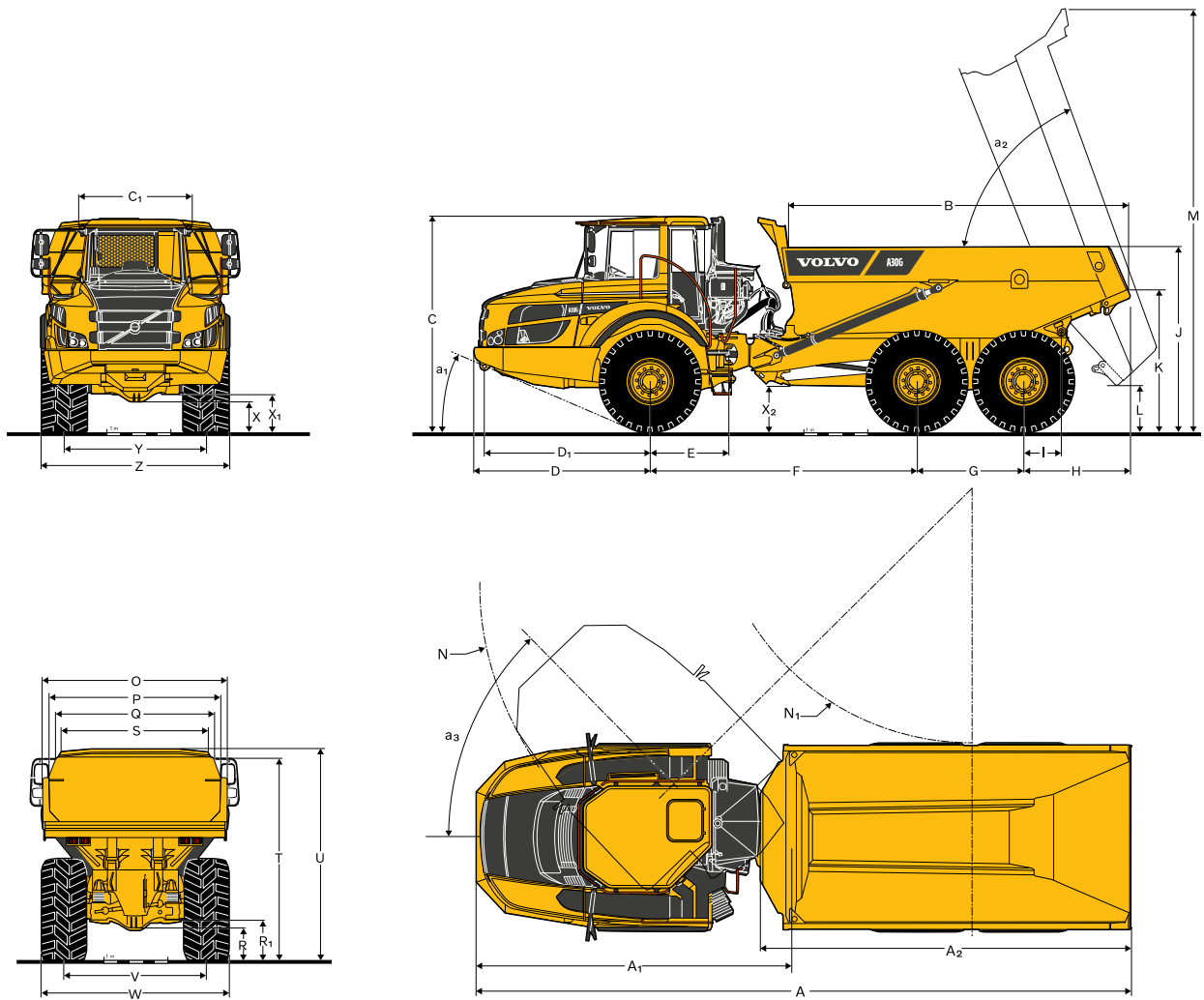
Operating weight includes all fluids and operator

*) A25G with tires 750/65R25, add 200 kg (440 lb)/axle

TOTAL WEIGHT				
			A25G	
Tires			23.5R25*	
Front	kg	lb	14,950	32,959
Rear	kg	lb	32,750	72,201
Total	kg	lb	47,700	105,160

*) A25G with tires 750/65R25, add 200 kg (440 lb)/axle

GROUND PRESSURE						
			A25G			
Tires			23.5R25		750/65R25	
Unloaded						
Front	kPa	psi	130	18.9	108	15.7
Rear	kPa	psi	49	7.1	42	6.1
Loaded						
Front	kPa	psi	157	22.8	125	18.1
Rear	kPa	psi	166	24.1	137	19.9



DIMENSIONS

Pos	Unit	A25G	
A	mm ft in	10,218	33'6"
A ₁	mm ft in	4,954	16'3"
A ₂	mm ft in	5,736	18'10"
B	mm ft in	5,162	16'11"
C	mm ft in	3,356	11'0"
C ₁	mm ft in	1,772	5'10"
D	mm ft in	2,762	9'1"
D ₁	mm ft in	2,607	8'7"
E	mm ft in	1,209	4'
F	mm ft in	4,175	13'8"
G	mm ft in	1,670	5'6"
H	mm ft in	1,610	5'3"
I	mm ft in	609	2'
J	mm ft in	2,791	9'2"
K	mm ft in	2,103	6'11"
L	mm ft in	678	2'3"
M	mm ft in	6,529	21'5"
N	mm ft in	8,109	26'7"
N ₁	mm ft in	4,092	13'5"
O	mm ft in	2,776	9'1"

DIMENSIONS

Pos	Unit	A25G	
P	mm ft in	2,490	8'2"
Q	mm ft in	2,298	7'6"
R	mm ft in	519	1'8"
R ₁	mm ft in	633	2'1"
S	mm ft in	2,110	6'11"
T	mm ft in	3,094	10'2"
U	mm ft in	3,265	10'9"
V	mm ft in	2,258	7'5"
W	mm ft in	2,915	9'7"
X	mm ft in	455	1'6"
X ₁	mm ft in	581	1'11"
X ₂	mm ft in	660	2'2"
Y	mm ft in	2,258	7'5"
Z	mm ft in	2,915	9'7"
a ₁	°	23.5	
a ₂	°	74	
a ₃	°	45	

A25G: Unloaded machine with 23.5 R25

Equipment

STANDARD EQUIPMENT

Engine

Direct injected, electronically controlled, turbocharged, intercooled

Grouped oil filters

Preheater for easier cold starts

VEB (exhaust retarder EPG + compression brake)

Wheels and tires

23.5R25

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 and security

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

Machine Tracking Information System MATRIS

Service platform integrated in the front grill

Tool box

OPTIONAL EQUIPMENT
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
Wheels and tires
750/65R25
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
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

OPTIONAL EQUIPMENT
Safety and security
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
Arctic oil kit
CareTrack
Fast fuelling system
Jump start connector, NATO -type
Frame extension
Bogie extension
Haul Assist - On-Board Weighing
Haul Assist - Tire Pressure Monitoring System





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