

**VOLVO ARTICULATED HAULER**

# **A25D, A30D**



**VOLVO**

# HIGH PRODUCTIVITY AT LOW COST

The possibility of maintaining high average speed, high load capacity and powerful dump hydraulics – all contribute to making Volvo one of the most productive articulated haulers on the market. The low fuel consumption, the hydraulic retardation system and the fact that Volvo's haulers need no daily or weekly service keep operating costs low. In short – high productivity at low cost.

## Outstanding maneuvering characteristics

When it comes to effective hauling in rough terrain, Volvo A25D and A30D are hard to beat. The ingenious frame steering and frame joint are unsurpassed solutions for all types of transports where accessibility is the decisive factor. Together with Volvo's unique Hydro-Mechanical Self-Compensating Steering system, Volvo's articulated haulers offer outstanding operating and maneuvering characteristics, both on and off the road.

## More effective work at lower cost

Volvo always strives for increased productivity. That's why our articulated haulers have high load capacity and high average speed. Both A25D and A30D have a well-adapted body volume for effective transport of big loads.

Our in-house developed engines, our patented Load & Dump brake, as well as the fast dump hydraulics, make it possible to pick up the pace on the worksite. This gives high-efficiency work cycles, and you can haul even more, even faster – for the lowest cost possible.

## Key Features:

### Adapted load capacity

The high body volume enables faster hauling of bigger loads.

### High-efficiency dumping

The powerful and accurate dump system and the Load & Dump brake facilitate the dump cycle and reduces costs.

## Higher rimpull

Higher rimpull means faster uphill runs; shifting is automatic, leaving the operator free to select the ideal drive mode for the terrain.

## Simple and fast service

All service points are easily accessible, which simplifies service and reduces downtime.

## Cost control

Volvo's various service, maintenance and repair agreements assist you with cost control.

## Volvo – the safe choice

Safety is one of Volvo's core values. Already at the design and engineering stage, safety issues always have highest priority. It's all about safety for operators, machines and the environment.

## Volvo – the reliable choice

When you choose an articulated hauler from Volvo, you choose a company and product you can trust.

Our global dealer network of well-trained service professionals minimizes downtime. Genuine spare parts and factory remanufactured genuine parts for repairs also contribute to shorten downtime. Volvo strives for the most cost-effective solutions during the machine's entire operating life.

## Volvo – the environment-friendly choice

Care for the environment is another Volvo core value. That's why Volvo's haulers are designed for minimal environmental impact.

A safe and comfortable operator environment.



High average speed and optimal performance



Fast and controlled dumping



Service-friendly and long service intervals





# A PERFECT WORKPLACE

The most important thing in Volvo's articulated haulers is the operator. Despite all the technological development, only a pleased and effective operator can do justice to our productive haulers. And one condition for a satisfied operator is a good workplace. For many years, Volvo has been the market leader in operator environment and, with the award-winning cab in the A25D and A30D, we have solidified that position. It is a safe and comfortable workplace, which means that the operator can concentrate on effective operation from the beginning to the end of a long shift.

## **Spacious and ergonomical**

The cab in A25D and A30D has more room than before. There's lots of interior space for lunch boxes, extra boots or other items the operator wants in the cab.

Adjustable tilt/telescopic steering wheel, and the ergonomically-designed, air-suspended seat is easily adjusted for optimal comfort. All controls are user-friendly and located within easy reach.

## **Always comfortable**

Internal and external sound levels have been reduced to be the lowest in the industry. Volvo's proven and durable suspension eliminates impact on the operator. Together with our effective climate control system we offer the best operator comfort, regardless of the outside temperature.

## **Excellent overall visibility**

The operator's seat is positioned in the center of the machine, and the operator sits up high for maximal visibility over the surroundings. Well-dimensioned rear view mirrors, large windows and well-placed cab pillars all combine to give excellent overall visibility, which is a prerequisite for both high safety and high productivity.



## **Informative instrument panel**

The panel gives the operator a good overview of all important information. In this way, the operator can plan the work for optimal productivity and fuel consumption.

## **Clear information**

The operator communication system gives the operator clear and easy-to-understand information throughout the work cycle.

## **Practical interior**

The operator's seat can be lowered and used as a table, cab lights and a 24 V power outlet close by, as well as lots of storage space.

## **Easy entry and exit**

Wide and threshold-free door opening for easy entry and exit.



# OPTIMAL RIMPULL IN ALL APPLICATIONS

The drivetrain in Volvo's articulated haulers is incomparable. Every part of the drivetrain is developed in-house, which not only gives optimal rimpull but also results in higher operating reliability and considerably lower fuel consumption when compared to the competition. Our drivetrain also contributes to giving our machines longer service lives. With the A25D and A30D you can operate at the highest possible speeds in most applications and in the most extreme operating conditions. Volvo's proven transmission gives the hauler maximum performance during the entire haul cycle.

## **Optimal performance**

Volvo's automatic Powertronic transmission brings maximum performance to your hauler. The transmission always shifts at exactly the right time and without rimpull loss.

## **The right power at the right time**

Volvo's articulated haulers are the most flexible haulers on the market and give the operator full control to optimize the machine driveability for any operating condition.

For example, on good haul roads the operator can choose to operate with 6x4 drive to save fuel and reduce tire wear. None of our competitors offer this feature.

When operating in rough conditions, the operator selects 6x6 drive and 100% differential locks on one or all axles.

Differential locks are selectable on the move, which is a great advantage when operating in varying ground conditions.

## **Electronic engine control**

The turbocharged high-performance, low-emission diesel engine features electronically-controlled direct injection and intercooling. Cooling is controlled by demand, thus consuming only minimal power.

## **6x4 drive during fast hauling**

Only Volvo gives the operator the choice of 6x4 drive, resulting in less tire wear and lower fuel consumption.

## **Powertronic gives optimal performance**

Volvo's automatic Powertronic transmission gives optimal performance and comfort.

## **High torque at low engine speeds**

Volvo's engines give high torque at low engine speeds, which means long engine life and low fuel consumption.

## **Low emissions**

The electronically-controlled engine provides high power and effective combustion with low emissions.





# ONE OF THE MOST PRODUCTIVE ARTICULATED HAULERS ON THE MARKET

Today, Volvo manufactures one of the most productive articulated haulers available on the market. There are many reasons for this, but three very important reasons include the unique brake system, the effective retardation system and the fast dump system. These features enable effective work even in the toughest conditions and help the operator keep up the pace without tiring.

## Efficient brakes

The A25D and A30D feature dry disc brakes, and the system has two separate circuits for maximum safety. Should the pressure drop in both circuits for some reason, the parking brake is activated automatically, acting as an emergency brake. The parking brake can hold a fully loaded machine on grades up to 18%.

## Retardation system minimizes operating costs

Volvo A25D and A30D are equipped with a hydraulic retardation system built into the transmission. The retarder's fast response and high performance make it possible for the operator to operate at higher average speed throughout the work cycle. At the same time, wheel brake wear is minimized, which in turn reduces operating costs.

The foot-operated retardation system is user-friendly, effective and safe since the operator never lets go of the steering wheel.

## Fast and controlled dumping

With optimized pressure and oil flow, Volvo's double-acting hoist cylinders cut time at the dump site. A fully loaded body is hoisted in 12 seconds and lowered in 9 seconds – with complete control. The effective hydraulic system makes it possible to place the load exactly at the right place, even on downhill grades.

The machine's high ground clearance, the high placement of the dump joint and the body's shape give the machine the ability to dump the load over the dump edge, minimizing the need for dozers.

Volvo's unique and user-friendly Load & Dump brake gives both higher productivity and lower operating costs. The load unit's service brakes apply while the transmission is shifted to neutral simply by pressing a button during loading and dumping.



## Optimized for effective loading

The load body is wide and open, and it's optimized for loading with excavators. The body's shape enables even load distribution.

## Unique Load & Dump brake

Simply by pressing a button, the transmission is shifted to neutral, and all service brakes on the load unit are activated.

## Dumping on downhill grades

Volvo's high-performance hydraulic system together with the double-acting single-stage hoist cylinders have all the power it takes to raise and lower the body on downhill grades.

## Dump lever increases safety

Dumping and lowering of the body is controlled with the pilot-operated dump lever. The lever automatically moves to the hold position when, e.g., the operator leaves the seat.

## Optional equipment

The body can be adapted to a wide range of loads with optional equipment, including tailgates, upper side extensions, body heating and front spillguard.





# OPTIMAL STABILITY AND OUTSTANDING MANEUVERING CAPABILITY

Volvo's articulated haulers are built for tough real-life conditions. They can operate at high speed even on the most challenging haul routes, and they work effectively on the roughest, hard-to-reach load and dump sites. Volvo's unique steering system and innovative bogie suspension gives the hauler the best possible traction, so the operator stays in complete control.

## **By far, the best steering system on the market**

Volvo's unique Hydro-Mechanical Self-Compensating Steering system gives a unique feel for the road, only comparable to that steady automotive-type feel. Volvo's unique steering system has a feedback rod that senses and acts to neutralize external forces for stable operating control, and the steering angle is always the same for a given steering wheel position. These features make Volvo's steering system superior to other systems on the market and give the operator complete control of the machine. Steering is very stable even at high speeds, and it's also very powerful in off-road operation. Simply put, the system makes operating Volvo's articulated haulers both safer and easier.

## **Unbeatable off-road performance**

Volvo's innovative and unique bogie suspension gives our haulers unbeatable off-road performance with good ground contact on all the wheels. It is maintenance-free and built using only components with very long life. The straddle-mounted bogie beam minimizes stresses on the frame.

## **Maintenance-free wheel suspension**

Volvo's proven three-point suspension is just as uncomplicated as it is effective. It gives good ground contact, even at high speeds, in rough operating conditions. The system is completely maintenance-free, which further reduces operating costs.





### Key Features

- Volvo's unique Hydro-Mechanical Self-Compensating Steering system
- Volvo's innovative bogie suspension with straddle-mounted bogie beam.
- Volvo's proven, maintenance-free three-point suspension



# NO DAILY SERVICE REQUIRED

Our aim is to increase time for productive work, and that's why we have minimized service needs for our articulated haulers. Service stops should be few and short. That's why there's no daily or weekly servicing needed for the A25D and A30D! With lifetime-lubed bearings on steering cylinders and steering joints, as well as monitored checks of oil and fluid levels, we have reduced service needs to an absolute minimum.

## **Service-friendly**

Volvo's articulated haulers reduce the need for daily and weekly service and maintenance. Scheduled greasing is only needed every 250 hours!

There are only a few service points, and servicing is easy – that means reduced downtime. All filters are easy to reach, the engine hood can be opened a full 90°, and the swing-out front grill makes it easy to access service points on the engine. Longer service intervals give simpler maintenance and more time for productive work.

## **Safe service**

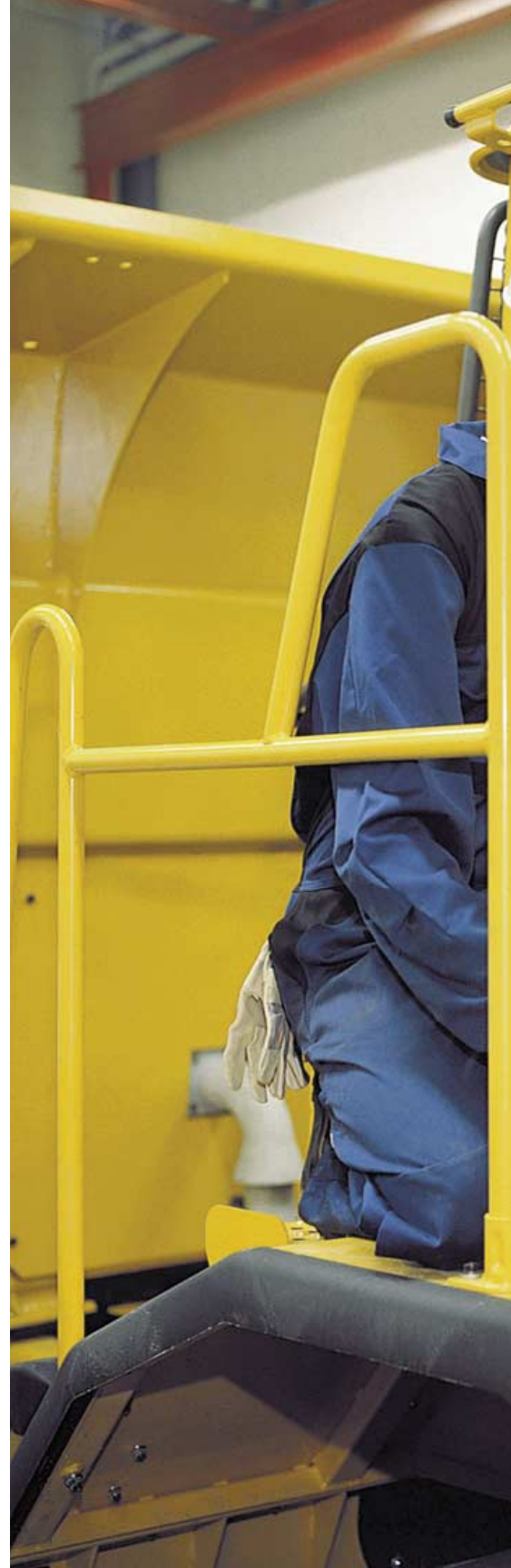
In order to increase safety, all service on the A25D and A30D is performed comfortably and safely at ground level or, when necessary, from easily accessed and sturdy platforms. There are anti-slip surfaces all around the cab, and along the roof there are handrails, making it easy to clean the windows.

## **Get control of your profitability and efficiency**

When you choose a Volvo articulated hauler, you also share in all of Volvo's knowledge and experience with construction equipment. With Volvo you always have the ability to easily gather a vast amount of information, which gives you fast diagnosis and immediate analysis of machine operation.

Our follow-up system, Matris, gives you fast and easy control of the machine and costs. Matris provides you with detailed reports and analyses of the machine's operating history, giving you the opportunity to continuously check and correct your operating methods. This means lower costs for maintenance and repairs, as well as longer machine life.

Our user-friendly system PROSIS gives you fast access to necessary information about spare parts on CD. PROSIS contains parts catalogs and service information for the vast majority of products from Volvo Construction Equipment.





**Commonality of components**

A lot of spare parts are the same for different Volvo machines, which contributes to good service and maintenance economy.

**Available spare parts**

Volvo's global organization enables fast distribution of spare parts, wherever you are.

**Highly-trained service technicians**

Throughout the world there are dealers with competent technicians trained by Volvo.

**Advantageous service agreements**

Volvo offers optional service tools and a wide range of advantageous service and support agreements.



# THE VOLVO A25D AND A30D IN DETAIL

Volvo's articulated haulers are equipped with a well-matched drivetrain for optimal use of engine power, torque and rimpull. Correctly matched and Volvo-designed drivetrain components, specifically developed for hauler applications, provide outstanding performance, high productivity, low fuel consumption and ensure long machine life.

## Serviceability

### 1 No daily or weekly service

The Contronic information system monitors all fluid levels, minimizing daily and weekly service times. Time to next service and the status of vital vehicle systems is shown to the operator on a display in the instrument panel.

### 2 Excellent serviceability

Swing down front service platform with access ladder to remote filter bank, located in front of engine. Grouped engine filters and remote mounted drains reduce service time. Large, 90° opening hood for total engine access.

## Productivity and Performance

### 3 High-performance, low-emission engine

The Volvo inline 6-cylinder, direct injected, electronically-controlled, turbocharged and intercooled 4-stroke diesel engine generates high torque at low rpm for quick response and low exhaust emissions that meet existing requirements.

### 4 High-capacity cooling system

Power and fuel saving, hydraulically driven, side mounted variable speed fan consumes power only when needed.

### 5 Brakes and Retarder

Dual-circuit, dry disc service brakes on all wheels for maximum safety. An easy-to-use, variable hydraulic transmission retarder reduces service brake wear and operating cost.

### 6 Volvo drivetrain

Correctly matched, Volvo-designed components, specifically developed for hauler applications. Low power losses and long service life.

### 7 Purpose-built dropbox

Optimized rimpull and speed in all operating conditions. Good ground clearance.

### 8 Volvo's unique self-compensating hydro-mechanical steering

Easy high-speed driving and steering accuracy promoting productivity. Fast acting, powerful steering with 3.4 turns lock-to-lock for slow speed maneuverability in rough conditions.

### 9 State-of-the-art hydraulic system

Variable displacement piston pumps consume power only as required. One ground-dependent piston pump for secondary steering mounted on the dropbox.

### 10 Rotating hitch

Rotating hitch and articulated steering provides good traction, off-road mobility and less stress on the frames in tough applications. High-positioned hitch provides superior clearance and stability.

### 11 Heavy-duty axles

Purpose built Volvo design with fully floating axle shafts, planetary type hub reductions and 100% dog clutch type diff. lock.

### 12 6x4 or 6x6 with five operating modes

Five easy-to-use drive combinations for every type of operating condition increases off-road mobility, reduces fuel consumption, driveline and tire wear. Operator-selectable on the move.

### 13 High-strength steel 400 HB body

Flat plate design with high chute and tipping joint with 70° or greater dump angle promotes load retention and ejection.

### 14 Maintenance free suspensions

Front axle has independent wheel movement via a 3-point mounting system, consisting of rubber springs and shock absorbers.

Rear bogie beam is straddle mounted with two A-frames, gives large wheel movement, low frame stress and keeps the body level, retaining the load. Low pivot point enhances stability.

### 15 Volvo Load and Dump brake

The Volvo patented "Load and Dump brake" function maximizes ergonomics and enhances productivity. When positioning the articulated hauler for loading or dumping, the operator only needs to press a single button to automatically apply the trailer brakes and shift the transmission to neutral.

### Low operating cost

All main components for our haulers are developed in-house by Volvo, including the drivetrain, frame, cab, electronics and software. This generates results: higher productivity, higher reliability and service friendliness. All working together to reduce operating cost.



### Operator Comfort and Safety

#### 16 Excellent operator environment

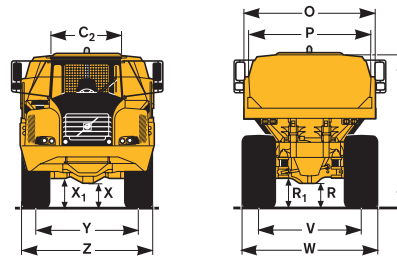
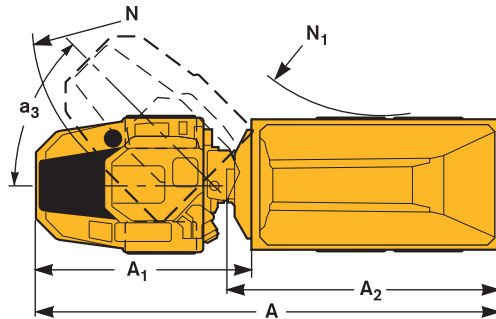
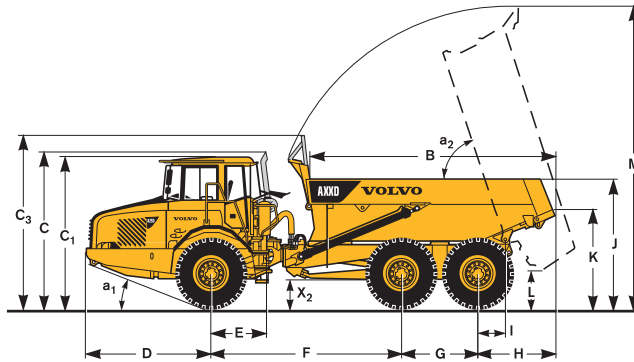
The Volvo cab is a safe, comfortable, efficient and ROPS/FOPS certified operator environment, ergonomically designed for high operator comfort and excellent unobstructed wide angle forward view. Wide threshold-free door opening and ergonomic cab entrance. Operator positioned above the front axle and in the center of the machine, together with the spacious and comfortable cab contributes to high productivity from the beginning to end of the shift.

Ergonomically-positioned controls, air-conditioning, adjustable operators seat with retractable seat belt and tilt/telescopic steering wheel for reduced operator fatigue and high safety. Filtered fresh air, four-speed fan and pressurized cab to maintain a clean operating environment.

#### 17 Operator communication system

The user-friendly operator's communication system provides simple and easy-to-understand information. All vital machine functions are constantly monitored, and specific system information is displayed if a problem occurs. Service technicians can increase their diagnostic efficiency by using the Contronic service display or Matris software to download operating information stored in the Contronic system.

# SPECIFICATIONS



Load Capacity		
	A25D	A30D
Standard Body		
Load capacity	24 000 kg <b>26.5 sh tn</b>	28 000 kg <b>31.0 sh tn</b>
Body, struck	11,7 m <sup>3</sup> <b>15.3 yd<sup>3</sup></b>	13,6 m <sup>3</sup> <b>17.8 yd<sup>3</sup></b>
Body, heaped	15,0 m <sup>3</sup> <b>19.6 yd<sup>3</sup></b>	17,5 m <sup>3</sup> <b>22.9 yd<sup>3</sup></b>
With underhung tailgate		
Body, struck	12,0 m <sup>3</sup> <b>15.7 yd<sup>3</sup></b>	13,8 m <sup>3</sup> <b>18 yd<sup>3</sup></b>
Body, heaped	15,3 m <sup>3</sup> <b>20 yd<sup>3</sup></b>	18,0 m <sup>3</sup> <b>23.5 yd<sup>3</sup></b>
With overhung tailgate		
Body, struck	12,1 m <sup>3</sup> <b>15.8 yd<sup>3</sup></b>	14,0 m <sup>3</sup> <b>18.3 yd<sup>3</sup></b>
Body, heaped	15,6 m <sup>3</sup> <b>20.4 yd<sup>3</sup></b>	18,1 m <sup>3</sup> <b>23.7 yd<sup>3</sup></b>
With over and under hung tailgate		
Body, struck	12,1 m <sup>3</sup> <b>15.8 yd<sup>3</sup></b>	--
Body, heaped	15,6 m <sup>3</sup> <b>20.4 yd<sup>3</sup></b>	--

Body volume according to SAE 2:1

Weights		
	A25D	A30D
<b>Tires</b>	<b>23,5R25</b>	<b>750/65R25</b>
Operating weight unloaded		
Front	12 160 kg <b>26 808 lb</b>	12 500 kg <b>27 557 lb</b>
Rear	9 400 kg <b>20 723 lb</b>	10 560 kg <b>23 280 lb</b>
Total	21 560 kg <b>47 531 lb</b>	23 060 kg <b>50 838 lb</b>
Payload	24 000 kg <b>52 910 lb</b>	28 000 kg <b>61 729 lb</b>
Total weight		
Front	14 140 kg <b>31 173 lb</b>	14 990 kg <b>33 047 lb</b>
Rear	31 420 kg <b>69 269 lb</b>	36 070 kg <b>79 520 lb</b>
Total	45 560 kg <b>100 442 lb</b>	51 060 kg <b>112 568 lb</b>

Operating weight includes all fluids and operator

Pos	Metric (mm)		Imperial (Feet)	
	A25D	A30D	A25D	A30D
A	10 220	10 297	33'6"	33'9"
A <sub>1</sub>	4 954	4 954	16'3"	16'3"
A <sub>2</sub>	5 764	6 002	18'11"	19'8"
B	5 152	5 339	16'11"	17'6"
C	3 428	3 428	11'3"	11'3"
C <sub>1</sub>	3 318	3 318	10'11"	10'11"
C <sub>2</sub>	1 768	1 768	5'10"	5'10"
C <sub>3</sub>	3 760	3 834	12'4"	12'7"
D	2 764	2 764	9'1"	9'1"
E	1 210	1 210	4'0"	4'0"
F	4 175	4 175	13'8"	13'8"
G	1 670	1 670	5'6"	5'6"
H	1 610	1 688	5'3"	5'6"
I	608	608	2'0"	2'0"
J	2 778	2 856	9'1"	9'4"
K	2 102	2 181	6'11"	7'2"
L	677	686	2'3"	2'3"
M	6 559	6 592	21'6"	21'8"
N	8 105	8 105	26'7"	26'7"
N <sub>1</sub>	4 079	4 037	13'5"	13'3"
O	2 700	2 900	8'10"	9'6"
P	2 490	2 706	8'2"	8'11"
R	512	513	1'8"	1'8"
R <sub>1</sub>	634	635	2'1"	2'1"
U	3 257	3 310	10'8"	10'10"
V	2 258	2 216	7'5"	7'3"
V*	-----	2 258	-----	7'5"
W	2 859	2 941	9'5"	9'8"
W*	-----	2 859	-----	9'5"
X	456	456	1'6"	1'6"
X <sub>1</sub>	581	582	1'11"	1'11"
X <sub>2</sub>	659	659	2'2"	2'2"
Y	2 258	2 216	7'5"	7'3"
Y*	-----	2 258	-----	7'5"
Z	2 859	2 941	9'5"	9'8"
Z*	-----	2 859	-----	9'5"
a <sub>1</sub>	23,5°	23,5°	-----	-----
a <sub>2</sub>	74°	70°	-----	-----
a <sub>3</sub>	45°	45°	-----	-----

A25D: Unloaded machine with 23,5R25

A30D: Unloaded machine with 750/65R25

\*) A30D with optional 23,5R25 tires

Body material		
Front	8 mm	<b>(0.31")</b>
Sides	12 mm	<b>(0.47")</b>
Bottom	14 mm	<b>(0.55")</b>
Chute	14 mm	<b>(0.55")</b>
Yield strength	1000 N/mm <sup>2</sup>	<b>(145000 psi)</b>
Tensile strength	1250 N/mm <sup>2</sup>	<b>(181000 psi)</b>
Hardness	400 HB	



Ground Pressure				
	A25D		A30D	
Tires	23,5R25		750/65R25	
Unloaded				
Front	123 kPa	<b>17.8 psi</b>	101 kPa	<b>14.6 psi</b>
Rear	48 kPa	<b>7 psi</b>	43 kPa	<b>6.2 psi</b>
Loaded				
Front	144 kPa	<b>20.8 psi</b>	121 kPa	<b>17.5 psi</b>
Rear	159 kPa	<b>23 psi</b>	146 kPa	<b>21.2 psi</b>

At 15% sinkage of unloaded radius and specified weights.

Fill capacities	
Crankcase	40 l (10.6 US gal)
Fuel tank	400 l (106.0 US gal)
Cooling system	115 l (30.4 US gal)
Transmission total	41 l (11.0 US gal)
Dropbox	8,5 l (2.2 US gal)
Axles, front/ rear	33 l (8.7 US gal)
First bogie axle	34 l (9.0 US gal)
Hydraulic tank	175 l (46.0 US gal)

Speed			
Forward	1	8 km/h	<b>(5.0 mph)</b>
	2	12 km/h	<b>(7.5 mph)</b>
	3	22 km/h	<b>(13.6 mph)</b>
	4	31 km/h	<b>(19.3 mph)</b>
	5	40 km/h	<b>(24.8 mph)</b>
	6	53 km/h	<b>(32.9 mph)</b>
Reverse	1	8 km/h	<b>(5.0 mph)</b>
	2	13 km/h	<b>(8.1 mph)</b>

## Engine

### A25D

<b>Make, model</b>	Volvo D9AAEE2**	
<b>Max. power at</b>	35 r/s	<b>(2 100 r/min)</b>
SAE J1995 Gross	220 kW <b>(295 hp)</b>	
<b>Flywheel power at</b>	35 r/s	<b>(2 100 r/min)</b>
SAE J1349 Net, DIN 6271***	219 kW <b>(293 hp)</b>	
<b>Max. torque at</b>	20 r/s	<b>(1 200 r/min)</b>
SAE J1995 Gross	1 700 Nm <b>(1 254 lb ft)</b>	
SAE J1349 Net, DIN 6271***	1 689 Nm <b>(1 246 lb ft)</b>	
<b>Displacement total</b>	9,4 l <b>(574 in<sup>3</sup>)</b>	

With fan operating at full speed, the flywheel power is 210 kW **(281 hp)** and maximum torque is 1 589 Nm **(1 172 lb ft)** which corresponds to DIN 70020.

### A30D

<b>Make, model</b>	VolvoD9AADE2**	
<b>Max. power at</b>	31,7 r/s	<b>(1 900 r/min)</b>
SAE J1995 Gross	252 kW <b>(338 hp)</b>	
<b>Flywheel power at</b>	31,7 r/s	<b>(1 900 r/min)</b>
SAE J1349 Net, DIN 6271***	251 kW <b>(336hp)</b>	
<b>Max. torque at</b>	20 r/s	<b>(1 200 r/min)</b>
SAE J1995 Gross	1 700 Nm <b>(1 254 lb ft)</b>	
SAE J1349 Net, DIN 6271***	1 689 Nm <b>(1 246 lb ft)</b>	
<b>Displacement total</b>	9,4 l <b>(574 in<sup>3</sup>)</b>	

With fan operating at full speed, the flywheel power is 238 kW **(319 hp)** and maximum torque is 1 589 Nm **(1 172 lb ft)** which corresponds to DIN 70020.

\*\* Meets US (EPA) tier 2, California (CARB) tier 2 and Europe (EU) step 2.

\*\*\* with fan at normal speed.

**Engine brake:** Exhaust retarder.

## 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.

<b>Voltage</b>	24 V	
<b>Battery capacity</b>	2x170 Ah	
<b>Alternator</b>	2,24 kW (80 A)	
<b>Starter motor</b>	7 kW <b>(9,4 hp)</b>	

## Drivetrain

	A25D	A30D
<b>Torque converter</b>	2,37:1	2,37:1
<b>Transmission, Volvo</b>	PT 1562	PT 1562
<b>Dropbox</b>	IL 1	IL 1
<b>Axles, Volvo</b>	AH 56	AH 64

## Brake system

Dual circuit system with air-hydraulic dry disc brakes on all wheels. Meets ISO 3450 and SAE J1473 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.

**Compressor:** Gear-driven by engine transmission.

**Retarder:** Hydraulic, infinitely variable, integrated in transmission.

## Steering system

**Cylinders:** Two double-acting steering cylinders.

**Supplementary steering:** Complies with ISO 5010 at total machine weight.

**Steering angle:** 3,4 steering wheel turns lock-to-lock,  $\pm 45^\circ$

## Cab

**ROPS/FOPS approved:** according to (ISO 3471, SAE J1040) / (ISO 3449, SAE J231) standards.

**Sound level in cab:** ISO 6396 74 dB (A)

## Hydraulic system

**Pumps:** Four engine-driven variable displacement load sensing piston pumps driven by the flywheel PTO. One ground-dependent piston pump for secondary steering mounted on the dropbox.

**Filter:** One fibreglass filter with magnetic core.

**Pump capacity per pump:**

<b>Engine-dependent</b>	140 l/min <b>(37 US gpm)</b>	
<b>Ground-dependent</b>	142 l/min <b>(37.5 US gpm)</b>	
at shaft speed	52,5 r/s	<b>(3 150 r/min)</b>
<b>Working pressure</b>	25 MPa <b>(3626 psi)</b>	

## Body/Dumping

**Load and dump brake:** With the engine running, the service brakes on the rear axle are applied and transmission is shifted to neutral.

**Dumping Cylinders:** Two single stage double-acting cylinders.

	A25D	A30D
<b>Tipping angle</b>	74°	70°
<b>Tipping time with load</b>	12 s	12 s
<b>Lowering time</b>	9 s	9 s

# EQUIPMENT

## The Volvo A25D - A30D Standard Equipment

### Safety

ROPS/ FOPS protected cab  
Service platform for ease of service  
Anti-slip material on hood and fenders  
Hazard lights  
Horn  
Protective grille for rear window  
Rearview mirrors  
Retractable 3-inch safety belt  
Secondary steering  
Steering joint locking assembly  
Dump body lock  
Windshield wipers with interval function  
Windshield washers  
Handrails on fenders  
Reverse alarm

### Comfort

Tilt/telescopic steering wheel  
Cab heater with filtered fresh air and defroster  
Overhead console for radio  
Sun visor  
Tinted glass  
Can holder /storage tray  
Cigarette lighter  
Ashtray  
Space for lunch cooler  
Storage box  
Instructor seat with seat belt  
Air-conditioning  
Radio

### Engine

Direct injected, electronically-controlled  
Turbocharged, intercooled  
Remote oil drain plug and hose  
Remote oil filters, for ease of access  
Preheater for easier cold starts  
Exhaust retarder

### Electrical system

80 A alternator  
Battery disconnect switch  
Extra 24 V socket for lunch cooler  
Lights:

- Headlights
- Parking lights
- Direction indicators
- Rear lights
- Back-up lights
- Brake lights
- Cab lighting
- Instrument lighting

Operator information interface

Gauges:

- Speedometer
- Tachometer
- Brake pressure
- Fuel
- Transmission oil temperature

Pilot lights for all switches

Warning lights grouped and easy to read

Central warning (3 levels) for all vital functions

Central positioned information display:

- Automatic pre-start checks
- Operation information, easy-to-find menu
- Troubleshooting diagnostics
- Hour meter
- Clock
- Machine settings

### Drivetrain

Automatic transmission  
Torque converter with automatic lock-up  
Dropbox, single-stage  
Hydraulic variable retarder  
6x4 or 6x6 operator selectable drive modes  
100% longitudinal differential lock  
100% differential locks in all axles

### Brakes

Air-hydraulic disc brakes  
Two circuit brake system  
Parking brake on prop shaft

### Body

Body prepared for exhaust heating  
Load and Dump brake

### Tires

A25D: 23,5R25  
A30D: 750/65R25

### Other

Air drier

## The Volvo A25D - A30D Optional Equipment

(Standard in certain markets)

### Safety

Fire-extinguisher and first aid kit

### Service and maintenance

Tool kit with tire inflation unit  
Electrical hood opening

### Engine

Extra air cleaner, heavy-duty  
Electric engine heater (120V or 240V)  
External emergency engine stop  
Delayed engine stop

### Electrical

Work lights, roof mounted  
Work lights, rear-facing, fender-mounted  
Rotating beacon, collapsible mount  
Back-up alarm  
Rear vision system  
Anti-theft system (prevents engine start)  
Headlights for left-hand traffic

### Cab

Heated, mechanically or air suspended, fully adjustable operator's seat  
Electrically heated rearview mirrors  
Air-conditioning  
Radio installation kit  
Radio  
Cable kit for cab heater (120V or 240V)  
Window tint film

### Body

Body exhaust heating kit

### A25D

Underhung tailgate, link operated  
Overhung tailgate, link operated (only in combination with underhung gate)  
Overhung tailgate, wire operated

### A30D

Underhung tailgate, link operated  
Overhung tailgate, wire operated

### Wear plates

Extra front spillguard  
Upper side extension, 200 mm

### Tires

A30D: 23,5R25

### External

Rear mudflaps

### Other

Synthetic hydraulic oil (biologically degradable)  
Artic oil kit  
Toolbox  
Towing Hitch





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# **VOLVO**

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