VOLVO ARTICULATED HAULERS

A25 D, A30 D, A35 D, A40 D

VOLVO

1 MORE PRODUCTIVE

2 BETTER COST EFFECTIVENESS

3 HIGH LEVEL OF SAFETY

4 LESS ENVIRONMENTAL IMPACT

VOLVO HAULERS – BUILT FOR MAXIMUM EFFICIENCY

Everyday, our haulers prove their power, flexibility and operational reliability on work sites all over the world.

Now, we've developed the new generation of articulated haulers. The D-series, with increased payload and body capacities, can haul bigger loads, and faster – at a lower cost. Regardless of terrain and ground conditions.

Volvo haulers are designed to ensure effectiveness through high availability – making your operation even more efficient.

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A30D

1

VOLVO HAULERS – FOR HIGHER PRODUCTIVITY

The objective of Volvo's machine development is to boost your productivity. That's why we have developed our haulers even further and equipped them with new features that improve the efficiency of your operation. The comfortable operator environment is based on a proven cab design concept and suspension. In combination with new engines and transmission, it allows you to operate at higher average speeds.

Our new patented Load & Dump brake and faster dumping hydraulics are just a couple of examples of how we've stepped up the pace and work capacity on loading and dumping sites.

Higher load capacity

Haul even bigger loads,
with an increased load capacity.

Safe downhill operation

Easy-to-maintain downhill speed.
The user-friendly retardation system facilitates control of the machine.

Increased rimpull

Faster uphill operation.
Shifting is automatic, and the operator simply selects the most suitable drive combination.

Faster dumping

Gain time at the dumping site.
The steering system makes it easy to position the hauler with great accuracy. The dumping system and the Load & Dump brake provide ease of operation, stability and effectiveness.

Optimized work environment

Keeps the operator going on long shifts.
Good operator comfort means high productivity.

Excellent off-road performance

Takes you virtually anywhere.
Volvo haulers feature superior off-road characteristics.

Higher availability

For maximized uptime.
Volvo haulers offer high availability.
Service needs have been minimized.

2

VOLVO HAULERS – FOR LOWER OPERATING COSTS

All main components for our haulers are developed in-house by Volvo. Some examples include, the drivetrain, frame, cab, electronics and software. This generates results such as higher productivity, higher reliability and service friendliness. That's how we've been able to reduce the already low operating costs even more.

Reliable

Maintain a high resale value. Long-life components assure fewer repairs and a high second-hand value.

Better serviceability

Less downtime for service. The Volvo hauler concept is designed for optimal serviceability and access.

Minimized maintenance

Extended service interval times. Fewer oil and filter changes give higher availability, lower operating costs and reduced environmental impact. Automatic level checks and fewer lube points for more uptime.

Durable

Minimizes drivetrain and tire wear. Various drive combinations give you flexibility–6x4 drive on good ground conditions results in less tire wear and lower fuel consumption. 100% differential locks on all axles when operating off-road. Operator selectable on the move.

Fuel efficient

Save all the way. Volvo haulers have low fuel consumption – in fact, the industry's lowest per hauled ton.

3

VOLVO HAULERS – FOR A HIGH LEVEL OF SAFETY

Volvo haulers have excellent maneuverability, powerful steering and reliable brakes. Productivity increases, just like safety – in all stages of your operation. The D-series features Volvo's front-runner technology, automatically giving you overall peace of mind.

Enhanced visibility

Minimize blind spots. Volvo haulers are designed for good visibility around the machine.

Improved access for service

Ease of servicing.
Required maintenance work is reduced. Level checks are handled by the information system. Slip-resistant surfaces and handrails provide easy and safe access to move around on the machine.

Automatic emergency brake

Ensure secondary braking readiness.
The automatic brake function helps provide increased hauler safety.

Intelligent communication system

Safety at work.
For example, the operator's communication system warns the operator if the dump body is up, and also indicates if the seat belt is unbuckled, or the door is open.

4

VOLVO HAULERS – FOR LESS ENVIRONMENTAL IMPACT

Meet environmental requirements

Invest for the future.
Volvo haulers fulfill current governing legislation with regards to emissions, external noise level and recycling.

Recycling

Prepared for recycling
– from the beginning.
The haulers are developed for the recycling of components and oil.

Cleaner air

Save fuel.
New engine with the industry's lowest fuel consumption per-hauled ton. Electronic engine controls help provide for lower emissions.

Reduced waste

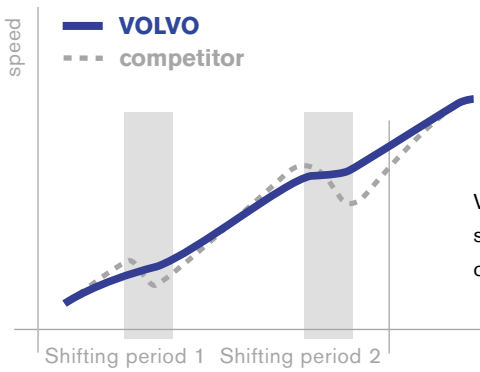
Reduce the amount of waste oil.
Extended service intervals and fewer oil changes save limited resources.

OPERATOR ENVIRONMENT AND COMFORT – FOR A MORE EFFECTIVE WORK ENVIRONMENT

Volvo haulers offer a world-class operator's environment.

The foundation is the ergonomically designed cab with low sound levels, as well as the proven and simple, yet comfortable, front suspension. Rough operating conditions do not affect the operator's concentration and have no effect on the operator's performance during long shifts. Steering and braking have good reactions to the operator, similar to the steering feel of a truck.

Comfort when shifting



Volvo haulers shift smoothly, reducing operator fatigue.

Passive safety

The new, well-designed cab is an award winner. It is built using high-strength steel and meets ROPS/FOPS standards. Operator awareness is enhanced with features such as indication of raised dump body, unbuckled seat belt and open door.

The instructor's seat is located within easy reach of important controls.

The operator's position is elevated for optimal visibility, yet protected by the front plate of the dump body.

Active safety

Volvo's self-compensating, hydro-mechanical steering system gives an accurate feel for the road.

The steering is stable at high speeds and powerful when operating in off-road conditions. The heavy-duty design of the system ensures consistent steering performance for the entire life of the machine.

These features make the Volvo steering system superior to all other systems on the market.

The rounded and sloped hood improves visibility for the operator.

Great cab to work in

It's easy to access the cab via correctly sized and positioned cab steps and a wide door opening without a threshold. The cab is sound-insulated, spacious and pleasant with a well-designed, modern and practical interior.

The cab features a centrally located operator's seat and large glass areas. In combination with well-placed cab pillars and large rear-view mirrors, it offers exceptional visibility all around the machine. Excellent visibility means less operator fatigue, higher productivity and a safe work area.

Well-placed and user-friendly controls, ergonomic operator's seat, tilt-telescopic steering wheel and an effective climate control system all contribute to maintaining high operator efficiency and long-term high productivity.

Clear information

The user-friendly operator's communication system provides simple and easy-to-understand information. The system registers and saves operating information during the work cycle. All information is displayed in order of importance. The reliable communication system helps to make maximum production possible, even in severe operating conditions.

Practical interior

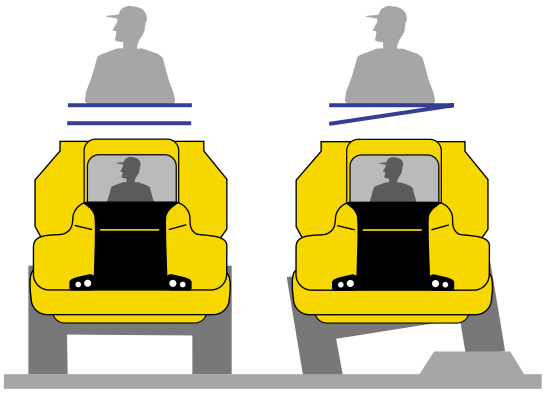
The cab's interior is characterized by excellent practical and ergonomic solutions, and it's easy to keep clean.

When lowered, the instructor's seat becomes a table, next to a convenient 24 volt outlet. There is plenty of storage space for a lunchbox or cooler. To keep the floor clear, the hauler is equipped with several storage compartments, inside and outside the cab.

Optional equipment

If you want to enhance the operator's environment further, there is a wide range of optional equipment, from sun visors and air conditioning to a rear vision system.

The three-point suspension allows the operator to sit straight and comfortably, even when operating over rough ground and uneven surfaces.

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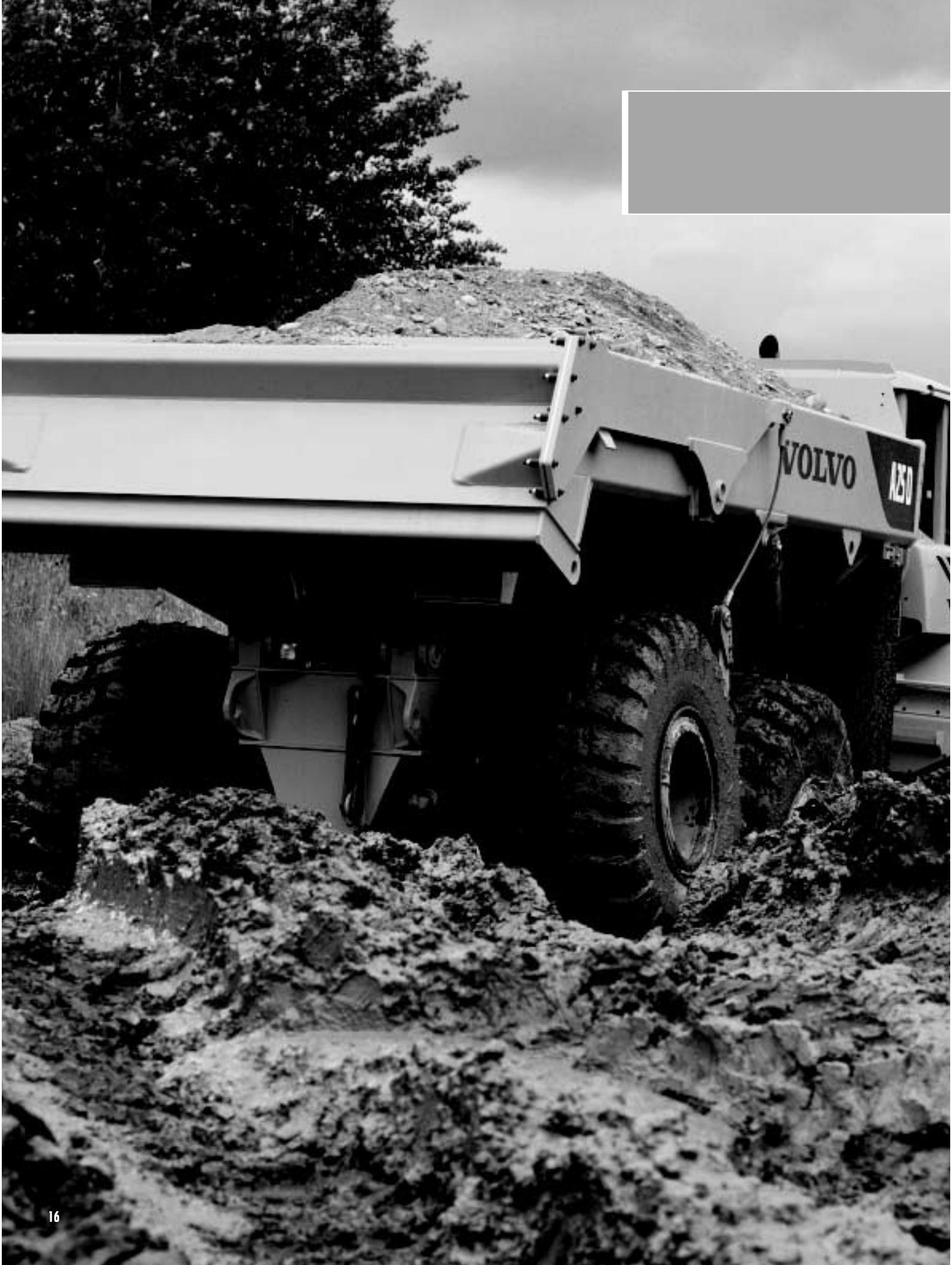

VOLVO
A25D

DRIVETRAIN
– WELL-MATCHED FOR MAXIMUM PERFORMANCE

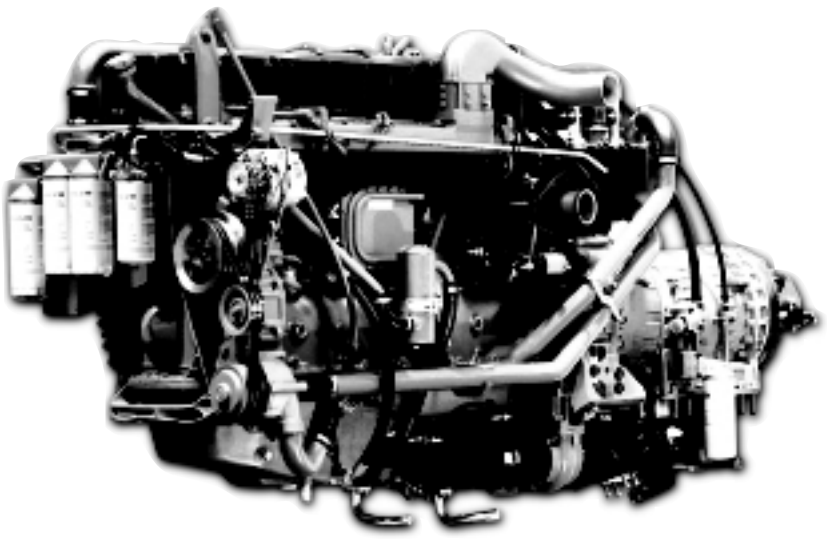
Volvo's articulated haulers are equipped with a well-matched drivetrain for optimal use of engine power, torque and rimpull. Correctly matched and Volvo-designed drivetrain components, specifically developed for hauler applications, provide outstanding performance, high productivity, low fuel consumption and ensure long machine life. With Volvo's haulers, you can set the benchmark for the highest average speeds on a wide range of work sites and applications.

Our proven hauler transmission is unique. It's developed and purpose-built to give maximum performance.

Electronic engine control

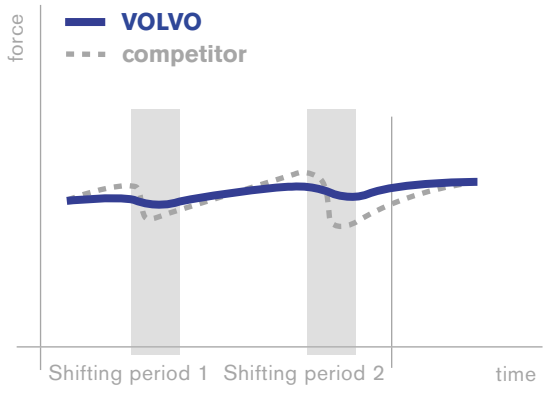
Volvo haulers are equipped with turbo-charged, high-performance, low-emission diesel engines, featuring electronically controlled injection and intercooler. Cooling is thermostat controlled, with a variable speed fan that only runs when there's a cooling demand, which means optimal use of power and lower fuel consumption.

The engine is electronically controlled by the machine's advanced electronic system. Downtime for service is minimized, and uptime is maximized for high productivity.



Engine D12C in the A35D and A40D.

Rimpull when shifting



The electronically controlled transmission allows the Volvo haulers to maintain high and constant speed during shifting.

Optimal shifting quality

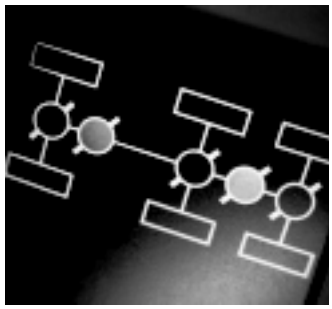
Volvo's automatic planetary transmission, Powertronic, gives high shifting quality. The transmission has been designed so that shifting takes place at the right time to optimize rimpull and fuel economy and to extend drivetrain life. The dropbox is also optimized for the hauler concept, giving high ground clearance under the hitch. Transmission cooling is controlled by demand.

Power – when and where it's needed

Volvo's haulers are flexible machines. The operator can optimize drive combinations based on the ground conditions.

On good haul roads, you can select 6x4 drive, which reduces tire wear and fuel consumption since fewer drive components are engaged. Only Volvo gives operators the option of selecting 6x4 drive.

When operating in rough conditions, you can select 6x6 drive - and 100% differential locks on one or all axles. Volvo's drive combinations and 100% differential locks have been field-proven for years and are extremely reliable. The operator can engage and disengage different drive combinations on the move. This is a distinct and important advantage, especially when ground conditions change, as they often do, between the haul road and the dumping site. We also equip our haulers with various tire options for different applications.



BRAKES AND RETARDER – INCREASE PRODUCTIVITY AND REDUCE COSTS

Volvo haulers have service brakes on all wheels and are not dependent on drivetrain components during braking.

A40D is equipped with fully sealed, oil-cooled wet disc brakes, while the other hauler models are equipped with dry disc brakes. Fully sealed wet brakes are available as optional equipment for the A35D.

The brake system has two separate circuits. If the pressure in both circuits should fail at the same time, the automatic emergency brake function is activated through application of the parking brake.

User-friendly retardation system

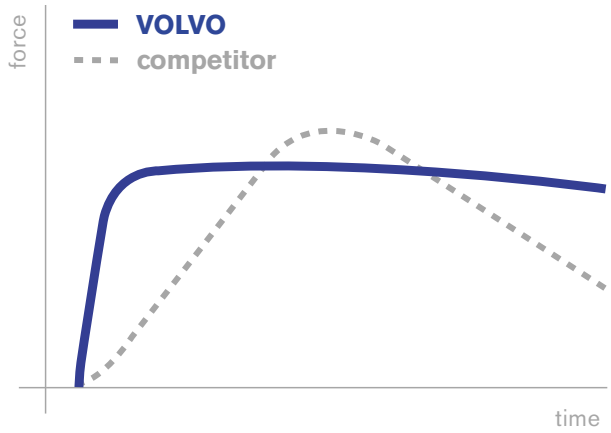
All Volvo haulers have a hydraulic retarder integrated in the transmission.

The retarder's quick response and good sustained braking action makes it easier for the operator to run the hauler with optimum average speed throughout the cycle and at the same time reducing wear on the service brakes.

The foot-operated system is a user-friendly and effective alternative, allowing the operator to keep both hands on the steering wheel.

In the A35D and A40D, the retarder works together with a Volvo-patented engine brake: VEB (Volvo Engine Brake). The A25D and A30D are equipped with an exhaust retarder.

Braking force with retardation system



Unique Load & Dump brake

The new generation of Volvo's articulated haulers feature the new and Volvo-patented Load and Dump brake. With the single press of a button, the transmission is shifted to neutral, and all load unit service brakes are activated.

The brakes are released automatically when the gearshift control lever is moved past the neutral position once again.

Load & Dump brake is activated with a single press of a button.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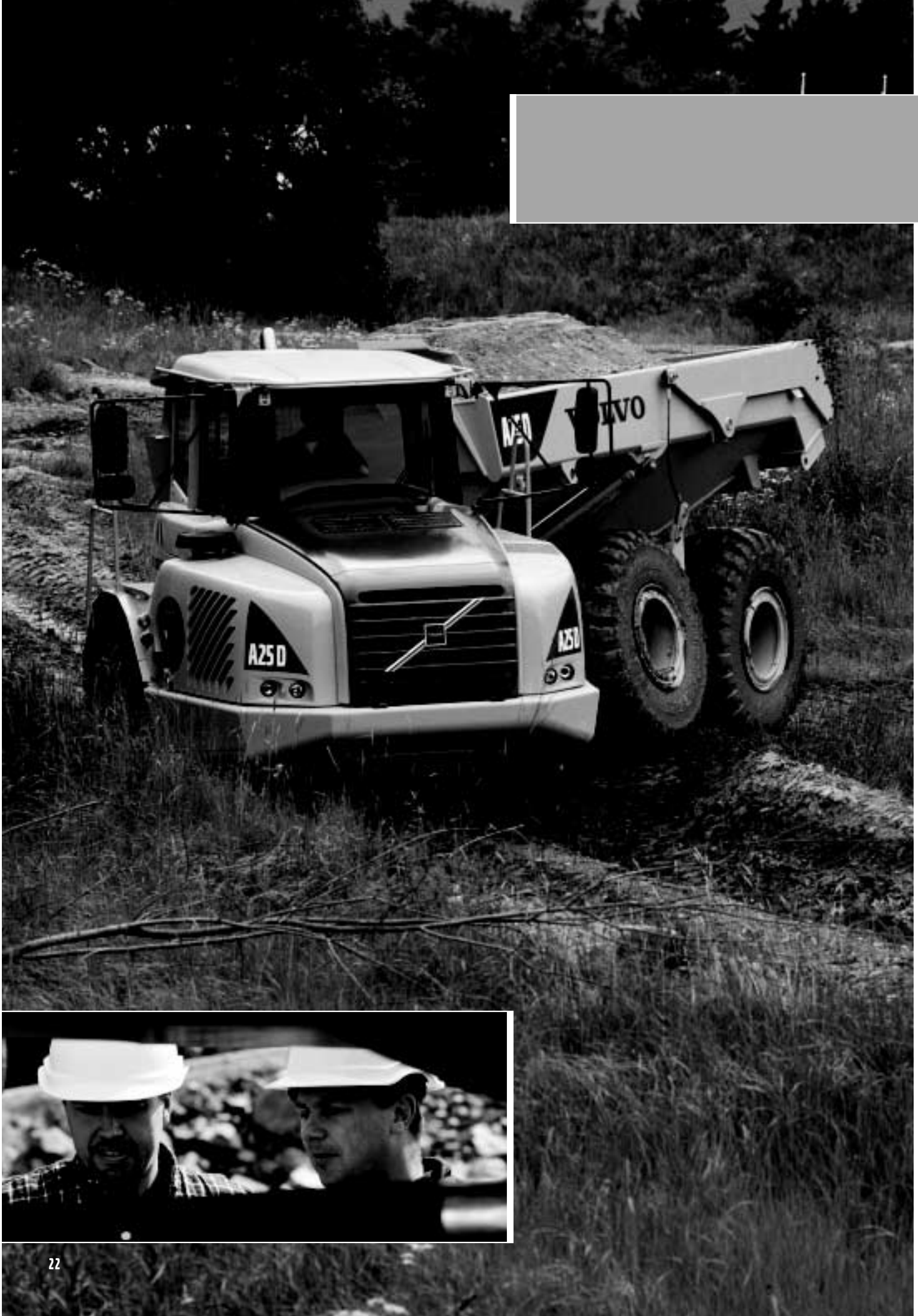
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FRAMES AND SUSPENSION – ENSURE STABILITY AND MANEUVERABILITY

The steering, drivetrain, frame components and the machine's centers of gravity are designed to work together. The combination allows our haulers to operate with high stability and control at high average speeds, even on long and difficult haul routes.

The high ground clearance, the robust steel construction of the underbody and skid plates, as well as excellent bogie movement mean that our haulers can handle the roughest and hardest-to-reach loading and dumping sites.

The frame design of the previous hauler generation has been improved with bearings of new design that minimize or eliminate lubrication needs.

Heavy-duty suspension

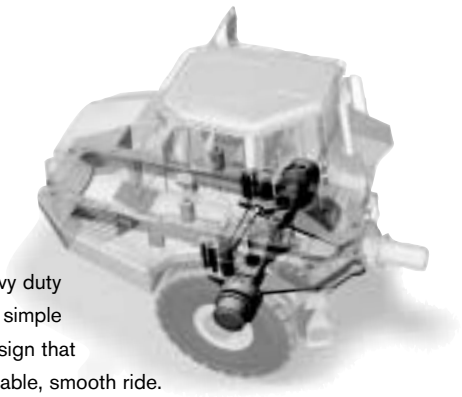
All axles have a maintenance-free, three-point suspension. Three-point suspension makes it possible for each axle to move independently in rough operating conditions, which reduces stress on the frame, while providing optimal ground contact and rimpull, allowing the body to remain level.

The well-functioning, reliable and proven design with rubber springs and shock absorbers provides very good operator comfort.

Volvo's proven all-terrain bogie system, well-known for its reliability and long suspension stroke, is at work under the load unit. The bogie system is centered around a heavy-duty bogie member rubber bushing.

Rugged frame

The underside of the machine has no fragile plastic parts or exposed joints. It's made of steel throughout. All components, even the vulnerable rear crosstay, are well-protected, either above or in the frame construction.



The reliable three-point suspension consists of heavy duty components. A simple and durable design that gives a comfortable, smooth ride.

BODY AND DUMP SYSTEM – FOR FASTER DUMPING

The Volvo hauler's exceptional capacities for steering, maneuvering and mobility make it easy to get the hauler into the right position for loading.

It's easy to load the body. Its shape promotes even distribution of the load, regardless of loading tool.

The load body is a rugged, flat plate design made of impact-resistant high-strength steel. The front has a spill guard that effectively protects the frame joint components from material spills. The load body chute has the right length and angle to prevent spills, for example, when hauling uphill.

The dumping system has all the needed power, even for dumping up a steep slope.

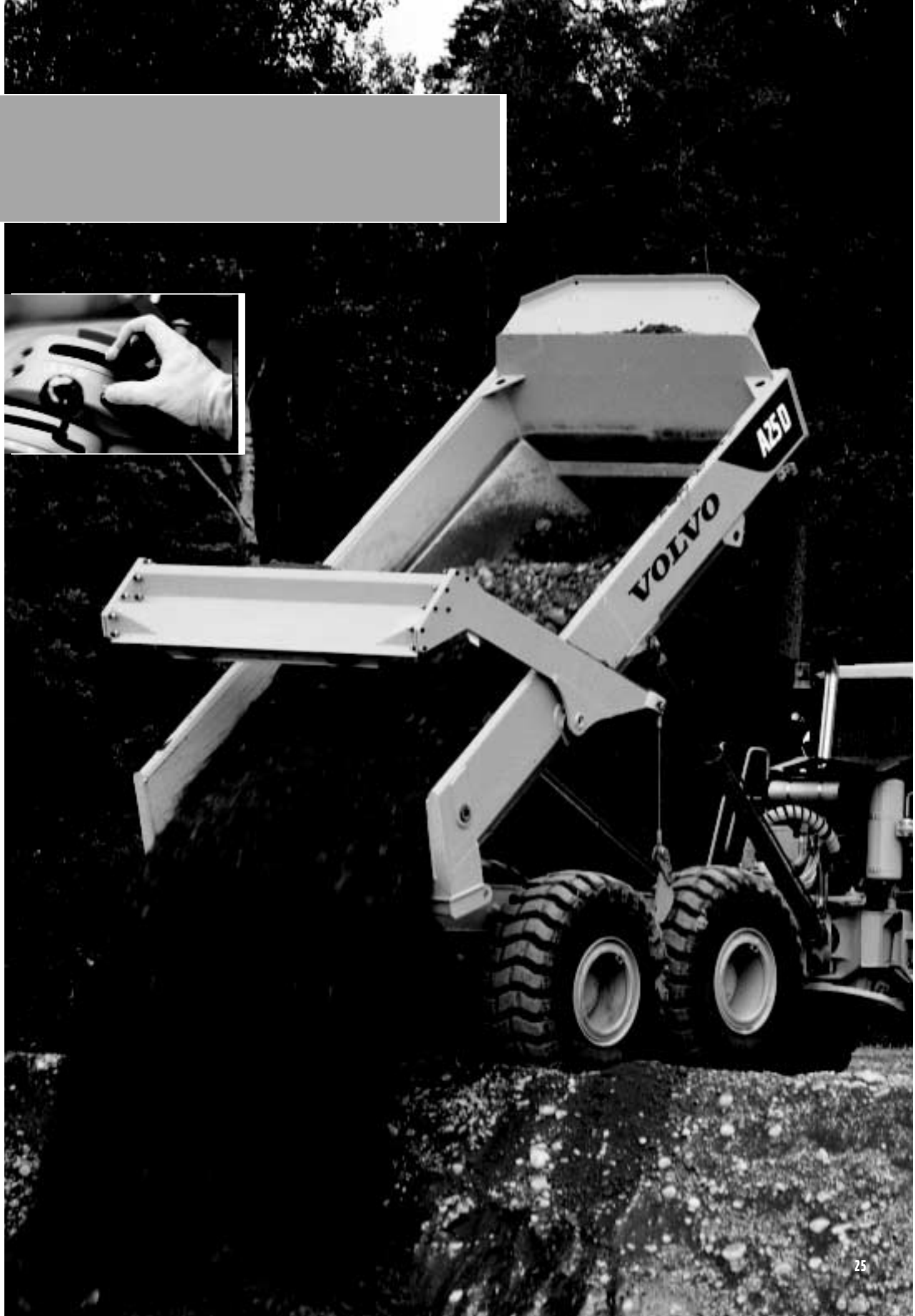
High-efficiency dumping

When dumping, the shape of the load body promotes release of the load and ensures that it ejects far beyond the rear wheels. The machine's high ground clearance, high placement of the dump hinge and the shape of the load body make it possible to run the machine forward with the body up, without displacing the dumped material or making contact with the dump edge when dumping over an edge. The need for dozers on the dumping site is minimized.

The new dumping hydraulics with higher pressure and greater oil flow have reduced dumping times. The two powerful double-acting hoist cylinders quickly lift and lower a full load with optimal control.

Optional equipment

The load body can be adapted to different materials with optional equipment such as tailgates, body side extensions, body heating and extra front spill guard.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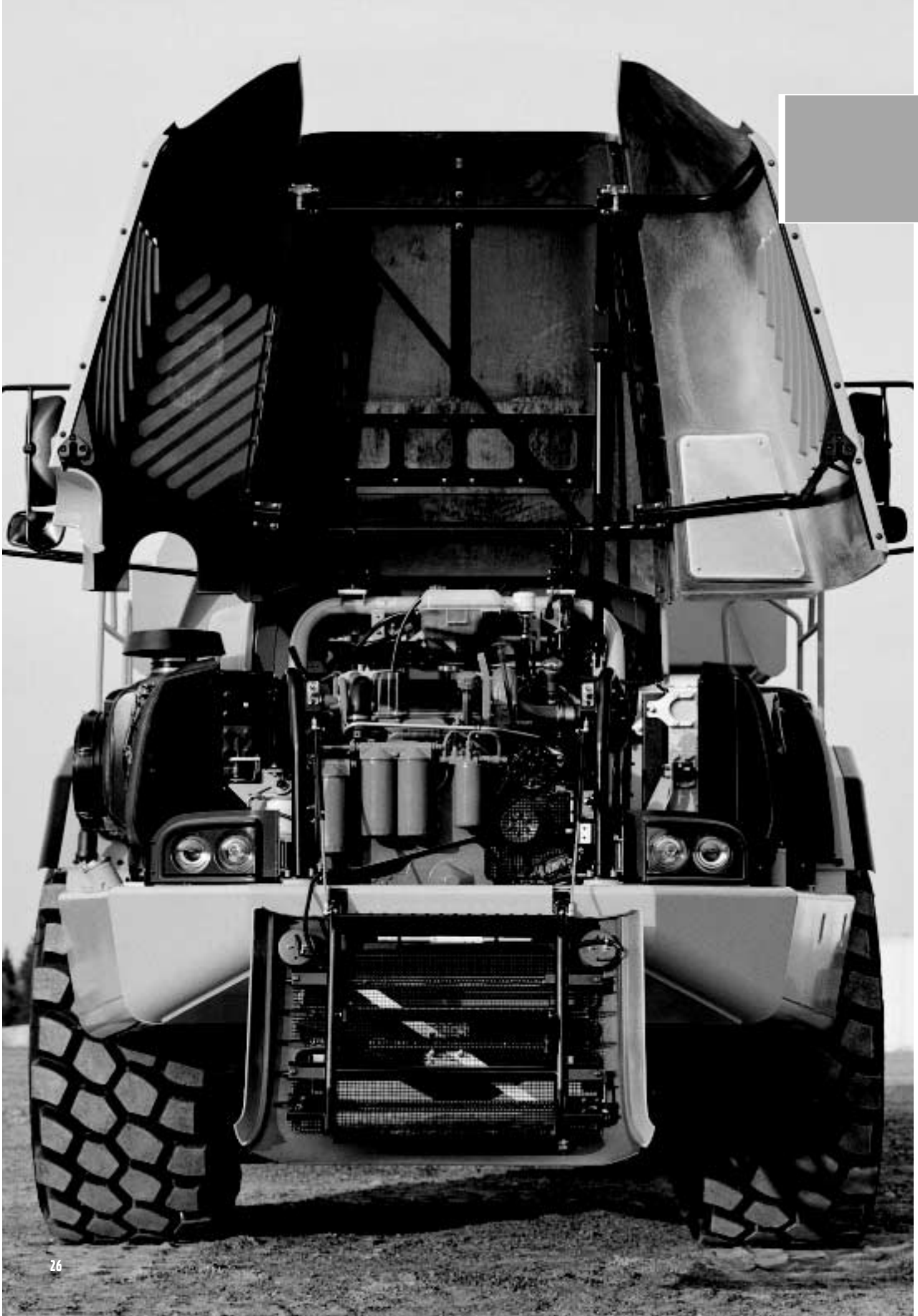

SERVICE AND MAINTENANCE – FOR HIGHER AVAILABILITY

The new haulers have stepped into the future, where the demand for minimized service and reduced service downtime is becoming more important.

When you operate Volvo haulers, the daily service requirements are reduced by using monitored oil and fluid level checks, as well as new types of bearings. We have succeeded in reducing the service needs to a low level.

Coordination advantages

At pace with ever-increasing environmental requirements, electronics are making their way into the machines – and we've used that to the greatest extent.

By coordinating electronic development for the machines, we have attained several advantages: Volvo has one system, whereas others are forced to handle and maintain several different systems. Volvo's system can read off various machine data, which allows direct analysis of machine operation and quick diagnostics. Performance of Volvo haulers is optimized due to communication between components.

Since other Volvo CE products and Volvo trucks also use these systems, component coordination and experience are great advantages.

Easy access for service – high serviceability

Volvo haulers feature new and practical solutions, such as the easily accessed filters and better accessibility around the engine. These are just a couple of all the improvements we've introduced to make the Volvo D-series the world's most service-friendly hauler!

Required service points have good access and servicing is easy from conveniently located service platforms or from the ground level. Slip-resistant material around the cab and handrails along the cab roof facilitate work, such as washing windshields and side windows.

Spare parts and service contracts

Volvo is the front-runner when it comes to worldwide service. One of the great challenges we face is supporting trained mechanics with an organization for quick distribution of spare parts.

At Volvo, we put considerable effort and work into coordinating components between the different machine types, all to minimize the amount of parts.

We also offer special tools, as well as service and support contracts.

SPECIFICATIONS

ENGINE

	A25D	A30D	A35D	A40D
General	Volvo inline 6-cylinder, direct injected electronic controlled, turbocharged, intercooled 4-cycle low emission diesel engine with wet replaceable cylinder linings.		Volvo inline 6-cylinder, electronically controlled direct injected, turbocharged, intercooled 4-cycle low emission diesel engine with overhead camshaft and unit injectors and wet replaceable cylinder liners.	
Fan	Hydrostatically driven, thermostatically controlled, variable speed radiator fan consuming power only when needed.			
Engine brake	Exhaust retarder.	Exhaust retarder.	VEB (Volvo Engine Brake) includes compression and exhaust brake.	
Make, model[1)] Make, model[2)]	Volvo D10BACE2 Volvo D10BADE2	Volvo D10BAAE2 Volvo D10BABE2	Volvo D12CABE2 Volvo D12CADE2	Volvo D12CAAE2 Volvo D12CACE2
Max power SAE J1995 Gross	228 kW (306 hp) at 33.3 r/s (2000 r/min)	242 kW (324 hp) at 33.3 r/s (2000 r/min)	289 kW (387 hp)[*)] at 30 r/s (1800 r/min)	313 kW (420 hp)[*)] at 30 r/s (1800 r/min)
Flywheel power SAE J1349 Net, DIN 6271[3)]	227 kW (304 hp) at 33.3 r/s (2000 r/min)	241 kW (323 hp) at 33.3 r/s (2000 r/min)	285 kW 382 hp at 30 r/s 1800 (r/min)	309 kW (414 hp) at 30 r/s (1800 r/min)
Max torque SAE J1995 Gross SAE J1349 Net, DIN 6271[3)]	1375 Nm (1014 lb ft) 1365 Nm (1007 lb ft) at 22.5 r/s (1350 r/min)	1420 Nm (1047 lb ft) 1410 Nm (1040 lb ft) at 22.5 r/s (1350 r/min)	1950 Nm (1438 lbf ft) 1915 Nm (1413 lbf ft) at 20 r/s (1200 r/min)	2100 Nm (1549 lbf ft) 2056 Nm (1517 lbf ft) at 20 r/s (1200 r/min)
Displacement total	9.6 l (586 in^3)	9.6 l (586 in^3)	12 l (732 in^3)	12 l (732 in^3)
	1) Meets US (EPA) step 2, California (CARB) step 2 and Europe (EU) step 2. 2) Meets Europe (EU) step 2. 3) with fan at normal speed. With fan operating at full speed, the flywheel power is 214 kW (287 hp) and maximum torque is 1276 Nm (941 lb ft) which corresponds to DIN 70020.	1) Meets US (EPA) step 2, California (CARB) step 2 and Europe (EU) step 2. 2) Meets Europe (EU) step 2. 3) with fan at normal speed. With fan operating at full speed, the flywheel power is 228 kW (306 hp) and maximum torque is 1321 Nm (974 lb ft) which corresponds to DIN 70020.	*) the D12C engine is emission certified as a Family Engine with the following output data: Rated power at 31,7 r/s 1900 rpm SAE J1349 Gross 280 kW 376 hp Max torque at 20 r/s 1200 rpm SAE J1349 Gross 2100 Nm 1549 lbf ft 1) Meets US (EPA) step 2, California (CARB) step 2 and Europe (EU) step 2 emission regulations. 2) Meets Europe (EU) step 2. 3) with fan at normal speed. With fan operating at full speed, the flywheel power is 277 kW 371 hp and maximum torque is 1860 Nm (1372 lb ft) which corresponds to DIN 70020.	*) the D12C engine is emission certified as a Family Engine with the following output data: Rated power at 31,7 r/s 1900 rpm SAE J1349 Gross 280 kW 376 hp Max torque at 20 r/s 1200 rpm SAE J1349 Gross 2100 Nm 1549 lbf ft 1) Meets US EPA) step 2, California (CARB) step 2 and Europe EU) step 2 emission regulations. 2) Meets Europe (EU) step 2. 3) with fan at normal speed. With fan operating at full speed, the flywheel power is 301 kW 404 hp and maximum torque is 2010 Nm (1482 lb ft) which corresponds to DIN 70020.

ELECTRICAL SYSTEM

	A25D	A30D	A35D	A40D
General	All cables, sockets and pins are identified. Cables are enclosed in plastic conduit and secured to main frame. Halogen lights. Prewired for options. Connectors meet IP67 standard for watertightness as necessary.			
Voltage	24 V	24 V	24 V	24 V
Battery capacity	2x170 Ah	2x170 Ah	2x170 Ah	2x170 Ah
Alternator	1.54 kW (55 A)	1.54 kW (55 A)	1.54 kW (55 A)	1.54 kW (55 A)
Starter motor	6.6 kW (8.8 hp)	6.6 kW (8.8 hp)	7.2 kW (9.6 hp)	7.2 kW (9.6 hp)

DRIVETRAIN

	A25D	A30D	A35D	A40D
General	Volvo components, specifically designed for hauler applications.			
Torque converter	Single stage with free wheeling stator and automatic lock-up on all gears.			
Transmission	Fully automatic planetary transmission with six forward gears and two reverse gears, with an integral variable hydraulic retarder.			
Dropbox	Volvo design, single stage. Power take-off and differential with 100% lock-up function.		Volvo design with high and low function, power take-off and differential with 100% lock-up function. Separate dropbox oil cooling.	Volvo design with high and low function, power take-off and differential with 100% lock-up function. Automatic upshift from low range to high range in 6th gear. Separate oil cooling.
Axles	Volvo design. All axles have transversal differential locks with 100% lock-up and fully floating axle shafts with planetary type hub reductions.			
Differential locks	One longitudinal and three transverse. All with 100% lock-up function, operator selectable on the move.			
Configuration	6x4 or 6x6 drive, operator selectable on the move.	6x4 or 6x6 drive, operator selectable on the move.	6x4 or 6x6 drive, operator selectable on the move.	6x4 or 6x6 drive, operator selectable on the move.
Torque converter	2,37:1	2,37:1	1,95:1	1,95:1
Transmission	Volvo PT 1560	Volvo PT 1560	Volvo PT 1860	Volvo PT 1860
Dropbox	Volvo IL 1	Volvo IL 1	Volvo FL 852	Volvo FL 862
Type of tires		750/65R25		
Axles	Volvo AH 56	AH 64	Volvo AH 64	Volvo AHW 71
Speed				
Low gear forward	–	–		
1			5 km/h (3 mph)	6 km/h (4 mph)
2			8 km/h (5 mph)	9 km/h (6 mph)
3			15 km/h (9 mph)	16 km/h (10 mph)
4			21 km/h (13 mph)	24 km/h (15 mph)
5			27 km/h (17 mph)	31 km/h (19 mph)
6			35 km/h (22 mph)	41 km/h (26 mph)
Automatic upshift to 6th gear, High range				55 km/h (34 mph)
High gear forward				
1	8 km/h (5 mph)	8 km/h (5 mph)	9 km/h (6 mph)	9 km/h (6 mph)
2	12 km/h (7.5 mph)	12 km/h (7.5 mph)	13 km/h (8 mph)	13 km/h (8 mph)
3	22 km/h (13.7 mph)	22 km/h (13 mph)	23 km/h (14 mph)	23 km/h (14 mph)
4	31 km/h (19.3 mph)	31 km/h (19.3 mph)	34 km/h (21 mph)	33 km/h (20 mph)
5	40 km/h (24.8 mph)	40 km/h (24.8 mph)	43 km/h (27 mph)	42 km/h (26 mph)
6	53 km/h (32.9 mph)	53 km/h (32.9 mph)	56 km/h (35 mph)	55 km/h (34 mph)
Low gear reverse	–	–		
1			5 km/h (3 mph)	6 km/h (4 mph)
2			9 km/h (6 mph)	10 km/h (6 mph)
High gear reverse				
1	8 km/h (5 mph)	8 km/h (5 mph)	8 km/h (5 mph)	8 km/h (5 mph)
2	13 km/h (8.1 mph)	13 km/h (8.1 mph)	14 km/h (9 mph)	14 km/h (9 mph)

SERVICE

	A25D	A30D	A35D	A40D
General	The computerized information system monitors 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.			
Service accessibility	Fold down front grill with access ladder to remote filter bank, located in front of engine. Large, 90° opening hood for total engine access. Remote drain hoses.			
Fill capacities				
Crankcase	38 l (10 US gal)	38 l (10 US gal)	50 l (13.2 US gal)	50 l (13.2 US gal)
Fuel tank	400 l (105.7 US gal)	400 l (105.7 US gal)	480 l (126.8 US gal)	480 l (126.8 US gal)
Cooling system	80 l (21.1 US gal)	80 l (21.1 US gal)	117 l (30.9 US gal)	117 l (30.9 US gal)
Transmission total	48 l (12.7 US gal)	48 l (12.7 US gal)	48.5 l (12.7 US gal)	48.5 l (12.7 US gal)
Dropbox	8.5 l (2.1 US gal)	8.5 l (2.2 US gal)	10.5 l (2.6 US gal)	10.5 l (2.6 US gal)
Hub	3 l (0.8 US gal)	5 l (1,3 US gal)	3.5 l (0.92 US gal)	7 l (1.84 US gal)
Front axle	32 l (8.5 US gal)	38 l (10 US gal)	48 l (12.7 US gal)	55 l (14.5 US gal)
First bogie axle	36 l (9.5 US gal)	40 l (10,6 US gal)	49 l (12.9 US gal)	56 l (14.8 US gal)
Second bogie axle	32 l (8.5 US gal)	38 l (10 US gal)	48 l (12.7 US gal)	55 l (14.5 US gal)
Brake hydraulics	2 l (0.53 US gal)	2 l (0.53 US gal)	–	–
Hydraulics system	260 l (68.7 US gal)	260 l (68.7 US gal)	400 l (106 US gal)	400 l (106 US gal)
Hydraulics tank	180 l (47.6 US gal)	180 l (47.6 US gal)	250 l (66.1 US gal)	250 l (66.1 US gal)

SUSPENSION

	A25D	A30D	A35D	A40D
General	Volvo´s unique maintenance free 3-point suspension system. The axles are suspended at three points, which results in independent movement needed in rough terrain.			
Front axle	One rubber spring and two hydraulic shock absorbers on each side.		One rubber spring with bottoming absorption and three shock absorbers on each side.	
Boggie	Volvo's unique terrain bogie, which permits individual oscillation between the axles. High axle displacement keeps the body level retaining the load.			

BRAKE SYSTEM

	A25D	A30D	A35D	A40D
General	Dual circuit system with air-hydraulic disc brakes. Complies with ISO 3450 and SAE J1473 at total machine weight.		Fully hydraulic disc brakes on all axles. Two circuits. Well protected components. Complies with ISO 3450 and SAE J1473 at total machine weight.	Fully hydraulic brakes with enclosed, forced oil-cooled multiple discs on all axles. Two circuits. Separate brake cooling for each axle. Complies with ISO 3450 and SAE J1473 at total machine weight.
Service brakes	Dry discs on all wheels.	Dry discs on all wheels.	Dry discs on all wheels.	Wet multiple disc brakes on all wheels.
Circuit division	One circuit for front axle and one for bogie axles.		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 up to 18%. When the parking brake is applied, the longitudinal differential is locked.			
Compressor	Gear driven by engine transmission.		Gear driven by engine transmission.	
Retarder	Hydraulic, infinitely variable, integrated in transmission.		Hydraulic, infinitely variable, integrated in transmission.	
Volvo Engine Brake	–	–	Standard. Operator selectable application together with service brakes or when accelerator pedal is released.	

HYDRAULIC SYSTEM

	A25D	A30D	A35D	A40D
General	Load-sensing variable displacement piston pumps that consume power only when needed.			
Pumps	Engine driven pumps mounted on flywheel power take-off. One ground-dependent piston pump for supplementary steering mounted on the dropbox.			
Filter	One fiber glass filter with magnetic core.		Two glass fiber filters with magnetic cores.	
Pump capacity/pump				
engine dependent	105 l/min (27.7 US gpm)	105 l/min (27.7 US gpm)	143 l/min (37.8 US gpm)	143 l/min (37.8 US gpm)
ground dependent	142 l/min (37.5 US gpm)	142 l/min (37.5 US gpm)	202 l/min (53.4 US gpm)	202 l/min (53.4 US gpm)
at shaft speed	52.5 r/s (3150 r/min)	52.5 r/s (3150 r/min)	47.5 r/s (2850 rpm)	47.5 r/s (2850 rpm)
working pressure	25 MPa (3628.4 psi)	25 MPa (3628.4 psi)	25 MPa (3628 psi)	25 MPa (3628 psi)

CAB

	A25D	A30D	A35D	A40D
General	Volvo cab, designed for high operator visibilty, ergonomics and comfort. Wide threshold-free door opening and ergonomic instep. Isolation rubber pads to reduce vibrations. Tilt/ telescopic steering wheel. Overhead console for radio and storage. Dash-mounted Operator's Communication System. Storage bins.			
Standard	ROPS/FOPS tested and approved. (ISO 3471, SAE J1040)/(ISO 3449, SAE J231) standards.			
Heater and defroster	Filtered fresh air, four speed fan and pressurized cab to maintain a clean operating environment. Multi-level air outlets and separate defroster vents for all windows.			
Operator's seat	Adjustable operator´s seat with flameproof upholstery. Retractable seat belt.		Standard, with retractable seat belt.	
Instructor seat	Optional equipment	Optional equipment	Optional equipment	Optional equipment
Internal sound level	74 dB (A) ISO 6396	74 dB (A) ISO 6396	72 dB (A) ISO 6394 76 dB (A) at max. speed	72 dB (A) ISO 6394 76 dB (A) at max. speed

STEERING SYSTEM

	A25D	A30D	A35D	A40D
General	Hydromechanical self-compensating articulated steering for safe and accurate high speed hauling. 3.4 turns lock-to-lock.			
Cylinders	Two double-acting steering cylinders.		Two double-acting steering cylinders.	
Supplementary steering	Complies with ISO 5010 at total machine weight.		Complies with ISO 5010 at total machine weight.	
Steering angle	± 45°	± 45°	± 45°	± 45°

BODY & DUMP SYSTEM

	A25D	A30D	A35D	A40D
Load and dump brake	With the engine running, the service brakes on bogie axles are applied and transmission shifted to neutral.			
Body	Hardened and tempered steel body, flat plate design fabricated from Hardox 400.			
Cylinders	Two single stage double-acting cylinders.		Two single stage double-acting cylinders.	
Tipping angle	74°	70°	70°	70°
Tipping time with load	12 s	12 s	12 s	12 s
Lowering time	9 s	9 s	10 s	10 s
Body, plate thickness				
Front	8 mm (0.31 in)	8 mm (0.31 in)	8 mm (5/16 in)	8 mm (5/16 in)
Sides	12 mm (0.47 in)	12 mm (0.47 in)	12 mm (1/2 in)	12 mm (1/2 in)
Bottom/Chute	14 mm (0.55 in)	14 mm (0.55 in)	16 mm (5/8 in)	16 mm (5/8 in)
Yield strength	900 N/mm² (130000 psi)	900 N/mm² (130000 psi)	900 N/mm² (130000 psi)	900 N/mm² (130000 psi)
Tensile strength	1250 N/mm² (181000 psi)	1250 N/mm² (181000 psi)	1250 N/mm² (181000 psi)	1250 N/mm² (181000 psi)
Hardness min.	360 HB	360 HB	360 HB	360 HB

WEIGHTS

	A25D	A30D	A35D	A40D
General	Operating weight includes all fluids and operator.		Operating weight includes all fluids and operator.	
Operating weight	**Type of tires: 23.5R25**	**Type of tires: 750/65R25**	**Type of tires: 26.5R25**	**Type of tires: 29.5R25**
Unloaded				
Front	12160 kg (26 808 lb)	12500 kg (27 557 lb)	15320 kg (33774 lb)	16300 kg (33935 lb)
Rear	9400 kg (20 723 lb)	10560 kg (23 280 lb)	12980 kg (28616 lb)	14970 kg (33003 lb)
Total	21560 kg (47 531 lb)	23060 kg (50 837 lb)	28300 kg (62390 lb)	31270 kg (68938 lb)
Payload	24000 kg (52 910 lb)	28000 kg (61 728 lb)	32500 kg (71649 lb)	37000 kg (81570 lb)
Total weight				
Front	14140 kg (31 173 lb)	14990 kg (33 047 lb)	17770 kg (39175 lb)	19170 kg (42262 lb)
Rear	31420 kg (69 268 lb)	36070 kg (79 519 lb)	43030 kg (94863 lb)	49100 kg (108245 lb)
Total	45560 kg (100 441 lb)	51060 kg (112 566 lb)	60800 kg (134038 lb)	68270 kg (150507 lb)
		A30D with tires 23.5 R25, add 200 kg (440 lb) per axlel.	A35D with tires 800/65R29, add 100 kg (220 lb) per axlel.	A40D with tires 875/65 R 29, add 300 kg (660 lb) per axle.

GROUND PRESSURE

	A25D		A30D		A35D		A40D	
General	At 15% sinkage of unloaded radius and specified weights.				At 15% sinkage of unloaded radius and specified weights.			
	With tires 23.5R25		**With tires 750/65R25**		**With tires 26.5R25**		**With tires 29.5R25**	
Unloaded								
Front	123 kPa	(17.8 psi)	101 kPa	(14.6 psi)	128 kPa	(18.6 psi)	115 kPa	(16.7 psi)
Rear	48 kPa	(7.0 psi)	43 kPa	(6.2 psi)	54 kPa	(7.8 psi)	53 kPa	(7.7 psi)
Loaded								
Front	144 kPa	(20.9 psi)	121 kPa	(17.5 psi)	149 kPa	(21.6 psi)	135 kPa	(19.6 psi)
Rear	159 kPa	(23.1 psi)	146 kPa	(21.2 psi)	180 kPa	(26.1 psi)	172 kPa	(24.9 psi)
			With tires 23.5R25 (optional)		**With tires 800/65R29 (optional)**		**With tires 875/65R29 (optional)**	
Unloaded								
Front			127 kPa	(18.4 psi)	109 kPa	(15.8 psi)	100 kPa	(14.5 psi)
Rear			54 kPa	(7.8 psi)	46 kPa	(10.7 psi)	47 kPa	(6.8 psi)
Loaded								
Front			152 kPa	(22.0 psi)	126 kPa	(18.2 psi)	118 kPa	(17.1 psi)
Rear			183 kPa	(26.5 psi)	153 kPa	(22.2 psi)	150 kPa	(21.7 psi)

LOAD CAPACITY (BODY VOLUME ACCORDING TO SAE 2:1)

	A25D		A30D		A35D		A40D	
Load capacity	24 000 kg	(26 sh tn)	28 000 kg	(31 sh tn)	32 500 kg	(36 sh tn)	37 000 kg	(41 sh tn)
Body, struck	11.7 m^3	(15.3 yd^3)	13.6 m^3	(17.8 yd^3)	15.2 m^3	(19.9 yd^3)	16.9 m^3	(22.1 yd^3)
heaped	15 m^3	(19.6 yd^3)	17.5 m^3	(22.9 yd^3)	20 m^3	(26.1 yd^3)	22.5 m^3	(29.4 yd^3)
With overhung tailgate								
Body, struck	12.1 m^3	(15.8 yd^3)	14 m^3	(18.3 yd^3)	15.5 m^3	(20.3 yd^3)	17.2 m^3	(22.5 yd^3)
heaped	15.6 m^3	(20.4 yd^3)	18.1 m^3	(23.7 yd^3)	20.7 m^3	(27.1 yd^3)	23.2 m^3	(30.3 yd^3)
With underhung tailgate								
Body, struck	12 m^3	(15.7 yd^3)	13.8 m^3	(18 yd^3)	–		–	
heaped	15.3 m^3	(20 yd^3)	18 m^3	(23.5 yd^3)	–		–	

DIMENSIONS

	A25D		A30D		A35D		A40D	
	6x6 (unloaded with 23.5R25 tires)		6x6 (unloaded with 750/65R25 tires)		6x6 (unloaded with 26.5R25 tires)		6x6 (unloaded with 29.5R25 tires)	
A	10220 mm	(33'6")	10394 mm	(34'1")	11167 mm	36'8"	11310 mm	(37'1")
A1	4954 mm	(16'3")	4954 mm	(16'3")				
A2	5764 mm	(18'11")	6032 mm	(19'9")	6224 mm	(20'5")	6428 mm	(21'1")
B	5152 mm	(16'11")	5339 mm	(17'6")	5527 mm	(18'2")	5730 mm	(18'10")
C	3428 mm	(11'3")	3428 mm	(11'3")	3681 mm	(12'1")	3746 mm	(12'3")
C1	3318 mm	(10'11")	3318 mm	(10'11")	3560 mm	(11'8")	3626 mm	(11'11")
C2	1768 mm	(5'10")	1768 mm	(5'10")	1768 mm	(5'10")	1768 mm	(5'10")
C3 with optional spill-guard upright	3760 mm	(12'4")	3834 mm	(12'7")	3987 mm	(13'1")	4093 mm	(13'5")
D	2764 mm	(9'1")	2764 mm	(9'1")	3101 mm	(10'2")	3100 mm	(10'2")
E	1210 mm	(4'0")	1210 mm	(4'0")	1276 mm	(4'2")	1279 mm	(4'2")
F	4175 mm	(13'8")	4175 mm	(13'8")	4501 mm	(14'9")	4451 mm	(14'7")
G	1670 mm	(5'6")	1670 mm	(5'6")	1820 mm	(6'0")	1940 mm	(6'4")
H	1610 mm	(5'3")	1688 mm	(5'6")	1757 mm	(5'9")	1823 mm	(6'0")
I	608 mm	(1'12")	608 mm	(2'0")	728 mm	(2'1")	646 mm	(2'1")
J	2778 mm	(9'1")	2856 mm	(9'4")	2912 mm	(9'7")	3075 mm	(10'1")
K	2102 mm	(6'11")	2181 mm	(7'2")	2302 mm	(7'7")	2492 mm	(8'2")
L	677 mm	(2'3")	686 mm	(2'3")	915 mm	(3'0")	906 mm	(3'0")
M	6559 mm	(21'6")	6592 mm	(21'8")	7242 mm	(23'9")	7384 mm	(24'3")
N	8105 mm	(26'7")	8105 mm	(26'7")	8720 mm	(28'7")	8863 mm	(29'1")
N1	4079 mm	(13'5")	4037 mm	(13'3")	4397 mm	(14'5")	4238 mm	(13'11")
O	2700 mm	(8'10")	2900 mm	(9'6")	3103 mm	(10'2")	3268 mm	(10'9")
P	2490 mm	(8'2")	2706 mm	(8'11")	2870 mm	(9'5")	3078 mm	(10'1")
R	512 mm	(1'8")	513 mm	(1'8")	584 mm	(1'11")	654 mm	(2'2")
R1	634 mm	(2'1")	635 mm	(2'1")	670 mm	(2'2")	751 mm	(2'6")
U	3257 mm	(10'8")	3310 mm	(10'10")	3528 mm	(11'7")	3590 mm	(11'9")
V	2258 mm	(7'5")	2216 mm	(7'3")	2515 mm	(8'3")	2636 mm	(8'8")
W	2859 mm	(9'5")	2941 mm	(9'8")	3208 mm	(10'6")	3432 mm	(11'3")
W[1)]							3570 mm	(11'8")
X	456 mm		456 mm	(1'6")	572 mm	(1'11")	617 mm	(2")
X1	581 mm		582 mm	(1'11")	606 mm	(2'0")	639 mm	(2'1")
X2	659 mm		659 mm	(2'2")	720 mm	(2'4")	765 mm	(2'6")
Y	2258 mm		2216 mm	(7'3")	2515 mm	(8'3")	2636 mm	(8'8")
Z	2859 mm		2941 mm	(9'8")	3208 mm	(10'6")	3432 mm	(11'3")
Z[1)]							3570 mm	(11'8")
a1	23.5°		23.5°		23°		25°	
a2	74°		70°		70°		70°	
a3	45°		45°		45°		45°	

1) with optional 875/65R29 tires