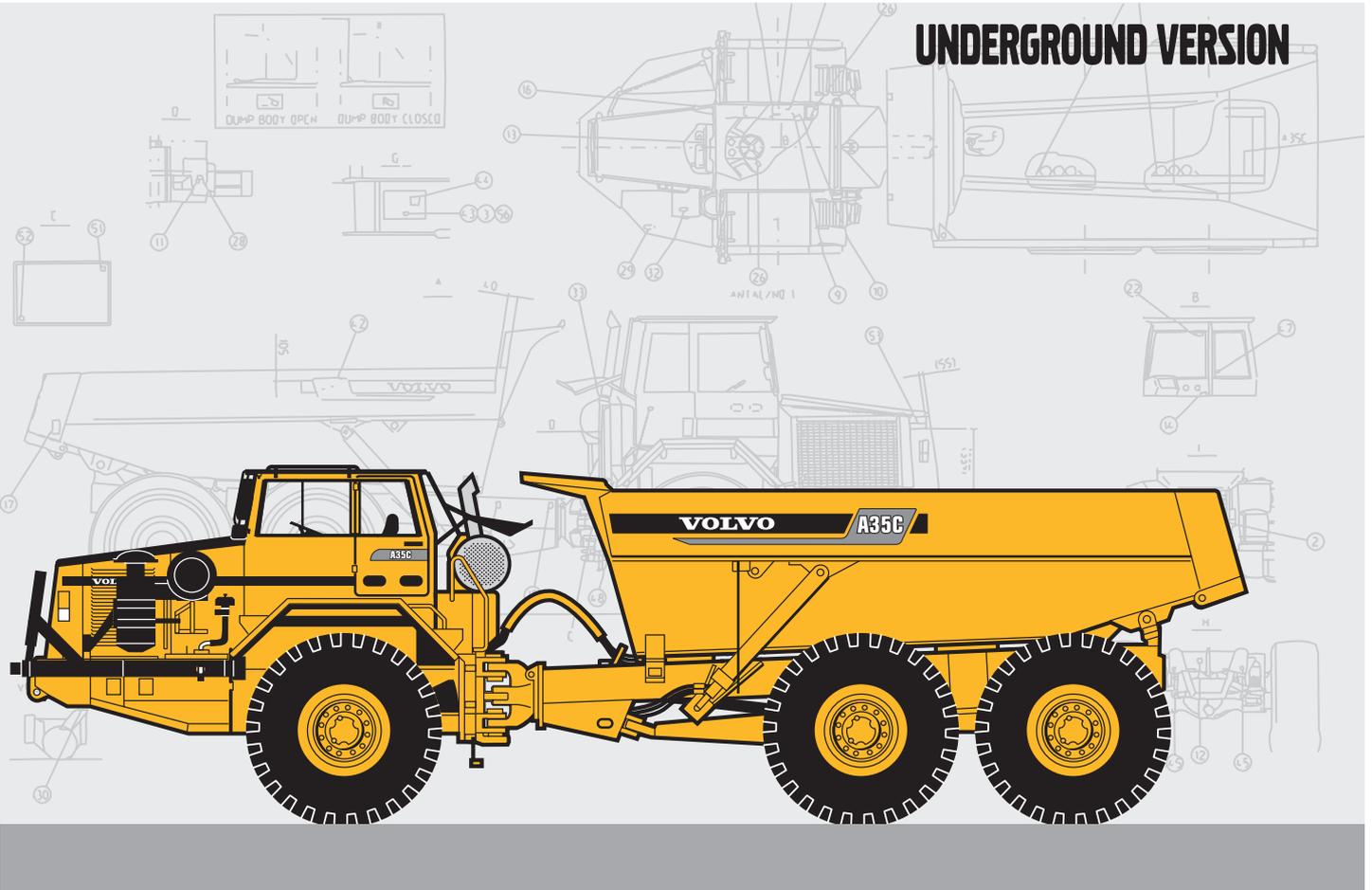


VOLVO ARTICULATED HAULER

A35C

UNDERGROUND VERSION



- **Engine output SAE J1349:**
Net 262 kW (351 hp)
Gross 267 kW (358 hp)
- **Body volume:**
19 m³ (25 yd³)
- **Load capacity:**
32 t (35 sh tn)
- **Volvo low emission** direct-injected, turbocharged, inter-cooled high performance diesel engine.
- **Fully automatic powershift transmission**, electronically controlled.
- **Hydraulic retarder** as standard.
- **Drop box with longitudinal differential lock** and high and low gear ranges.
- **100% lock-up** longitudinal and transverse differential locks.
- **Front axle with three-point suspension** and effective shock absorption.
- **Volvo terrain bogie**, individually oscillating axles and high ground clearance.
- **Load and dump brake**
- **Low interior noise level**
- **Adjustable steering wheel**

VOLVO

LOAD CAPACITY (According to SAE 2:1)

Load capacity	32 000 kg
Body, struck	14,8 m ³
heaped	19 m ³



WEIGHTS

Operating weight includes all fluids and operator.

Operating weight, kg:

Unloaded		Loaded
Front	13250	16450
Rear	12450	41250
Total	25700	57700



SERVICE CAPACITIES

	Change	Total
Crankcase	31 l	
Cooling system	63 l	90 l
Transmission		40 l
Axle, approx.	40 l	
Hydraulic system		194 l
Fuel tank.		360 l



ENGINE

Volvo 6-cylinder, inline, direct-injected, turbocharged, inter-cooled 4-cycle low emission diesel.

Fan: Hydrostatic driven, thermostatically controlled radiator fan consuming power only when needed.

Make/ Model	Volvo TD 122 KME
Max power at	35 r/s (2100 r/min)
SAE J1349 Gross	267 kW (358 hp)
Max torque at	18,3 r/s (1100 r/min)
SAE J1349 Gross	1595 Nm (1176 lbf ft)
Displacement total.	12 l (732 in ³)
Compression ratio	16:1



ELECTRICAL SYSTEM

Voltage	24 V
Battery capacity	2x170 Ah



BRAKE SYSTEM

Fully hydraulic disc brakes on all axles. Two circuits. Designed to comply with ISO 3450 and SAE J1473 at gross machine weight.

Parking brake: Spring-applied, air-released disc brake on the propeller shaft.

Load and dump brake: With the engine running, the service brake on the bogie axles is applied together with the parking brake.

Retarder: Hydraulic, integrated in transmission as standard. Variable effect when applied by retarder pedal or fully applied via the service brake pedal.



DRIVETRAIN

Transmission: Volvo PT 1761. Electronically controlled, fully automatic planetary transmission with six gears forward and two in reverse. Automatic lock-up in all gears.

Drop box: Volvo FL 762. 2-speed design, power take-off, 100% longitudinal differential lock and oil cooler.

Axles: Volvo AH 63. 100% transverse diff-locks with fully floating axle shafts with heavy-duty planetary hub reductions. 6-wheel drive engageable during driving.

Max speed :

Forward, Low/ High gear. . . .	33,6 / 54,4 km/h
Reverse, Low/ High gear . . .	8,5 /13,8 km/h



SUSPENSION

Volvo suspension system. Totally maintenance-free.

Front axle: Rubber springs with bottoming absorption. 2+2 shock absorbers. Stabilizer. The front axle is suspended at three points, allowing oscillation in rough terrain.

Bogie: Volvo's unique rough terrain bogie, which permits individual oscillation between the axles.



STEERING SYSTEM

Hydromechanical articulated steering with mechanical feedback. 3.4 turns lock-to-lock.

Cylinders: Two double-acting steering cylinders.

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

Steering angle: ± 45°



HYDRAULIC SYSTEM

4 variable piston pumps on flywheel power take-off. Oil filtration through two paper filters with magnetic core.

Working pressure: 21 MPa.



HAUL BODY

Material: Hardox 400, hardened and tempered steel with high impact strength.

Hoist cylinders: Two 3-stage cylinders, of which one stage is double-acting. Tipping time loaded 15 s. 73° tipping angle.



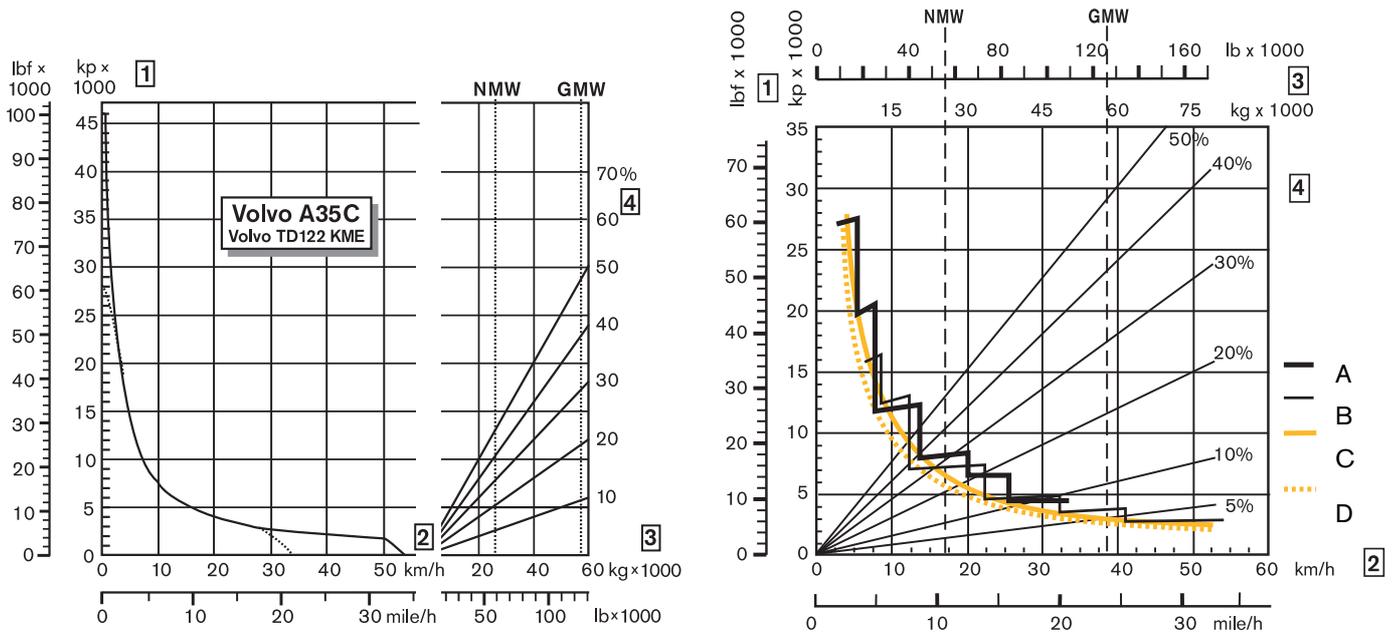
CAB

Volvo cab, tested and approved according to ROPS /FOPS. Mounted on rubber cushions. Adjustable steering wheel. 2 emergency exits.

Operator's seat: Ergonomically designed and adjustable operator's seat with flameproof upholstery. Retractable seat belt. **Trainer seat:** Standard, with seat belt and back rest.

Sound level: 76 dB (A) acc. ISO 6394 at max. speed.

RIMPULL AND RETARDATION GRAPHS



RIMPULL

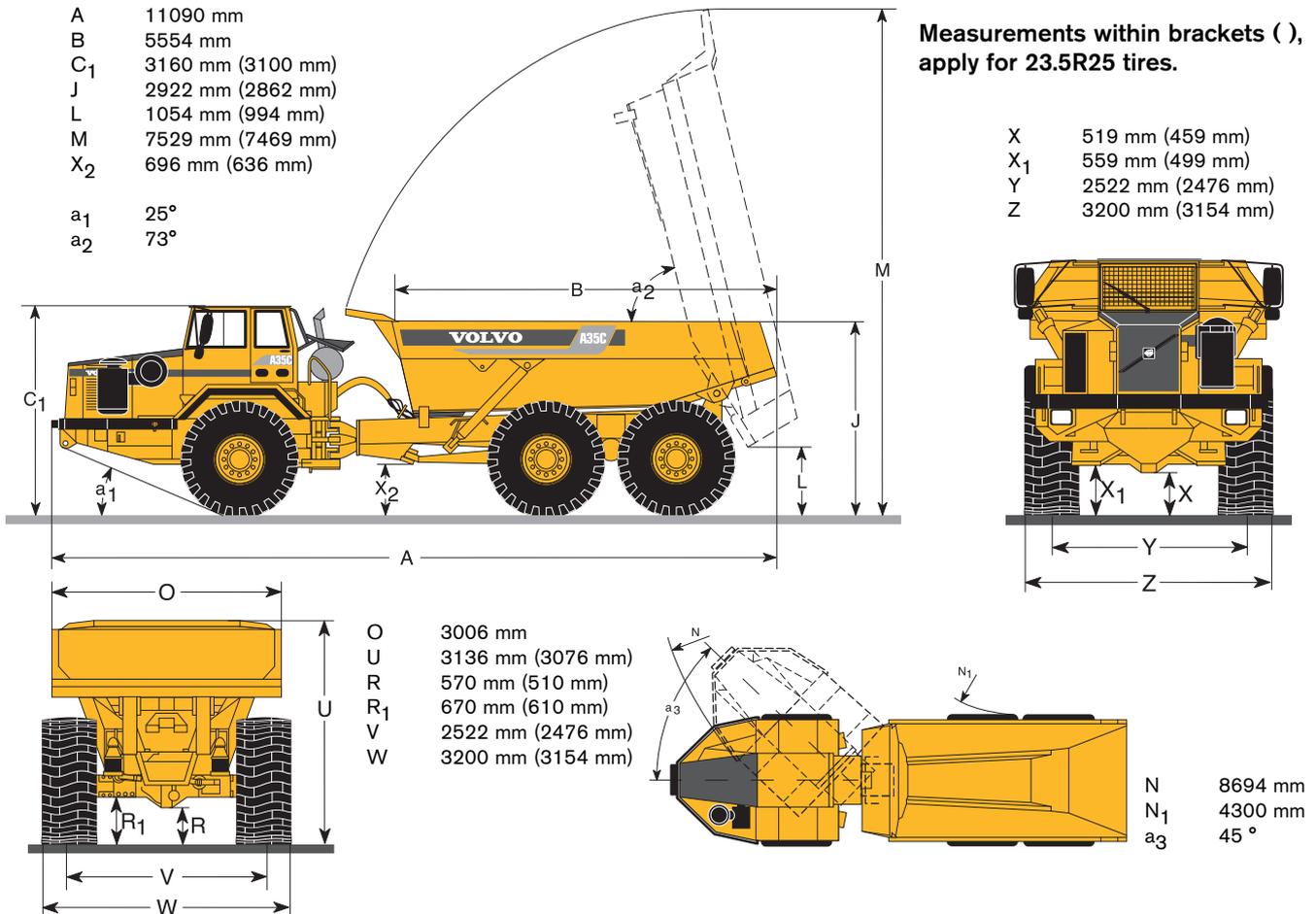
- 1 Rimpull in kp (lbf)
- 2 Speed in km/h (mile/h)
- 3 Machine weight in kg (lb)
- 4 Grade in % + rolling resistance in %.

RETARDATION PERFORMANCE

(Exhaust brake + retarder)

- 1 Braking effort in kp (lbf)
 - 2 Speed in km/h (mile/h)
 - 3 Machine weight in kg (lb)
 - 4 Grade in % – rolling resistance in %
- A: Low gear
B: High gear
C: Continuous incl. exhaust brake
D: Continuous

DIMENSIONS Volvo A35C 6x6 Underground Unloaded with 26.5R25 tires



STANDARD EQUIPMENT

Safety

ROPS/FOPS cab
Anti-slip material on fenders and hood
Hazard flashers
Horn
Protective grille for rear window
Rear-view mirrors
Secondary steering
Steering joint locking assembly

Cab

Adjustable steering wheel
Ashtray
Cab heater with filtered fresh air and defroster
Cigarette lighter
Cup holder
Ergonomically designed and adjustable operator's seat with retractable seat belt
Extra seat for trainer with back rest and seat belt
Speedometer
Sun visor
Tinted glass
Windshield wipers with interval
Windshield washers

Engine

Low-emission engine
Intercooler
Oil drainage hose
Oil-bath air cleaner
Preheating
Turbocharger

Electric system

Alternator
Battery disconnect switch
Electrical outlet on dash board

Lights:

- Headlights, main/dipped
- Parking lights
- Direction indicators
- Rear lights
- Back-up lights
- Brake lights
- Cab lighting
- Instrument lighting
- Control panel lighting

Gauges for:

- Air pressure
- Engine temperature
- Engine revs
- Fuel
- Hours
- Transmission oil temperature

Pilot lamps for:

- Direction indicators
- Bogie axles diff-lock
- Front axle diff-lock
- Longitudinal diff-lock
- Lights
- Main beam
- Preheating
- High-low gear

Warning lamps for:

- Air cleaner, engine
- Battery charging
- Body up
- Brake pressure
- Brake fluid level
- Coolant level
- Engine oil pressure
- Engine temperature
- Engine-dependent steering pump
- Ground-dependent steering pump
- Parking brake
- Transmission temperature

Central warning:

- Battery charging
- Brake pressure
- Brake oil level
- Body up
- Engine oil pressure
- Engine overspeed
- Steering function
- Transmission/ dropbox malfunction

Drivetrain

Torque converter with automatic lock-up
Automatic power transmission
Hydraulic, variable retarder
Dropbox with high/low gear
100% Longitudinal diff-lock
100% Differential lock front axle
100% Diff.-lock first bogie axle
100% Diff.-lock second bogie axle

Brakes

Fully hydraulic disc brakes
Two circuits
Brake shields
Parking brake on all wheels
Retarder activation in brake pedal
Load and dump brake

Body

Low profile standard body with exhaust ducts

Tires

26.5R25

OPTIONAL EQUIPMENT

Service and maintenance

Tool kit with tyre inflation unit
Tool box
Central lubrication

Engine

Coolant filter
External engine shut-down
Exhaust brake

Electrical

External 24V outlet
Headlights for left hand traffic
Head light protection
Rotating beacon
Work lights, roof-mounted
Work lights, fender-mounted

Cab

Airsuspended, electrically heated operator's seat
Air conditioning
Contronic display
Electrically heated rear-view mirrors
Kit for radio installation
Radio

Protection and safety

Collision guard, engine hood
Collision guard in front (rubber)
Collision guard, tractor sides
Fire-extinguisher and first aid cushion in cab
Preparation for fire suppression system
Rear-view monitor
Sight indicators
Warning light, raised body

External

Rear mudflaps

Body

Body heating, piping kit
Overhung tailgate, wire operated
Special underground body
Wear plates standard body
Wear plates for special underground body
Underhung tailgate

Tires

23.5R25

Other

Synthetic hydraulic oil (biologically degradable)

Under our policy of continual product 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 Group

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