Document Title: **Test**	Function Group: **000**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Hydraulics

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

HYDRAULICS

The following information is displayed on the unit:

Engine dep. xxx bar	Shows hydraulic oil pressure from engine-dependent pumps in bar/psi.
Ground dep. xxx bar	Shows hydraulic oil pressure from ground-dependent pump in bar/psi.

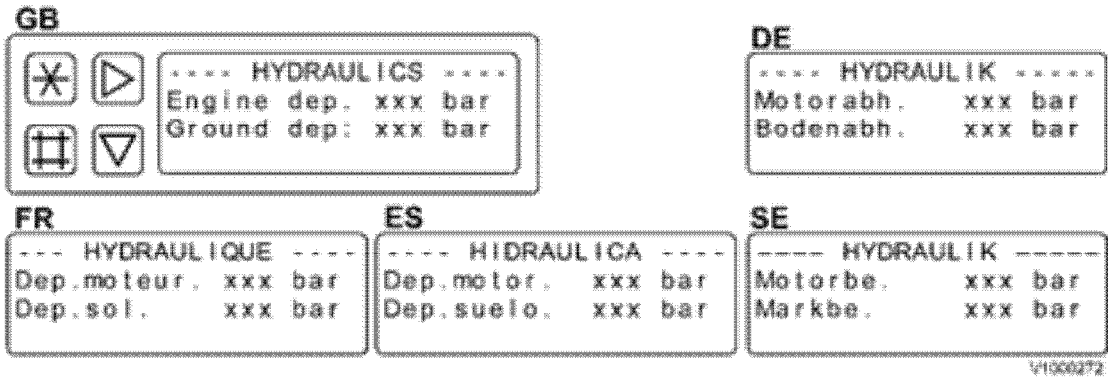


Figure 1
HYDRAULICS, all languages

VOLVO CONTRONIC

		- - - HYDRAULICS - - -	
		Engine dep.	xxx bar
		Ground dep.	xxx bar

HYDRAUL TANK VALVE

NOTE!

The valve is discontinued on machines of later version, see SE9101, Wiring diagram A24.

See also 35F9901 Parameters, MO21 module start–stop.

The following information is displayed on the unit:

Closed no start

Activated

Deactivated

The key is used to shift between activated and not activated.

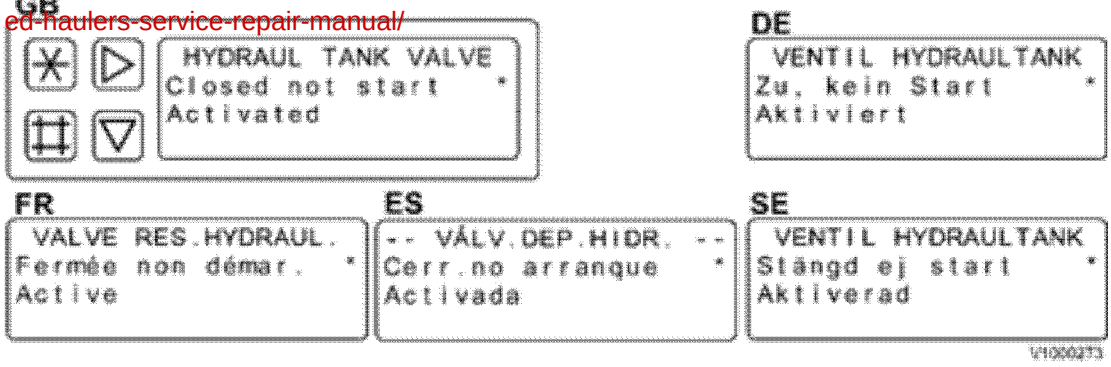


Figure 2
HYDRAUL TANK VALVE

VOLVO CONTRONIC

		HYDRAUL TANK VALVE
		Closed not start *
		Enabled

VOLVO

Service Information

Document Title: **Product identification plates**	Function Group: **000**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Product identification plates

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

The following text with numbers refers to the illustration, and shows which product identification plates should be on the machine. The **P**roduct **I**dentification **N**umber (PIN) and machine model must always be correctly quoted when ordering spare parts and in any telephone enquiries or correspondence regarding service matters.

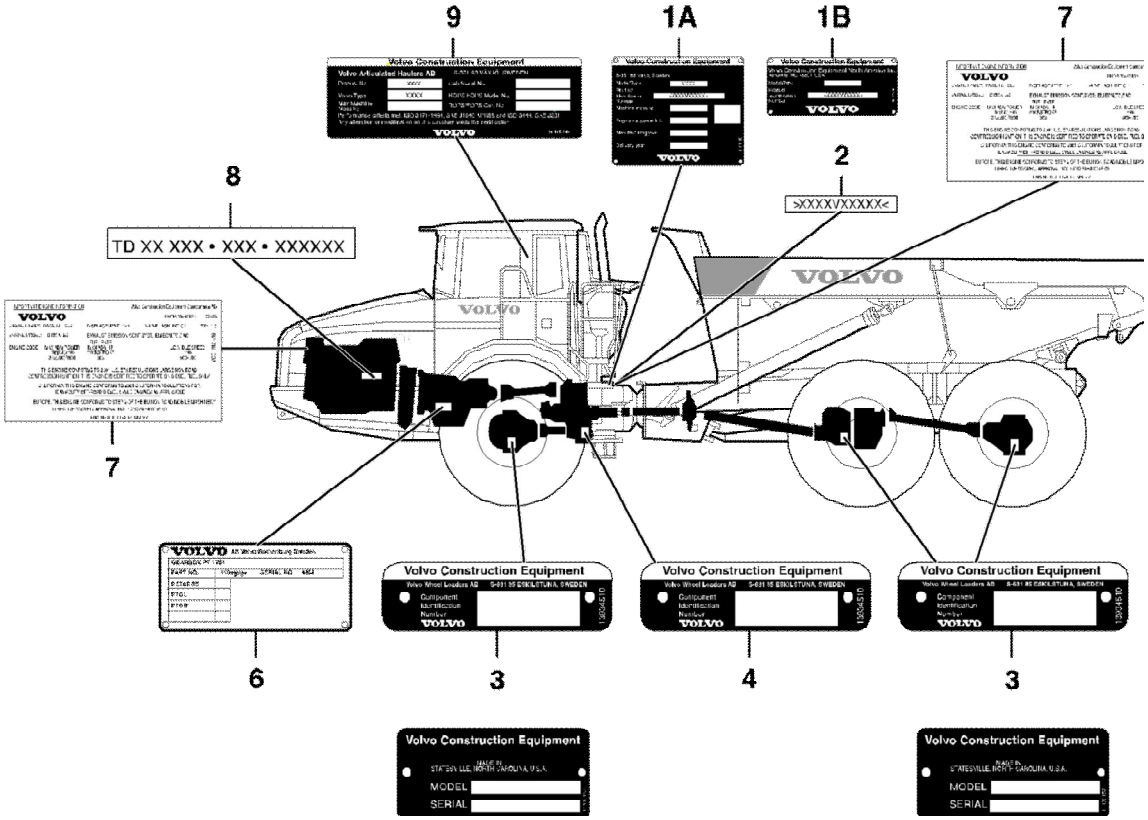


Figure 1
Position of product identification plates

1. Product identification plate with **P**roduct **I**dentification **N**umber, **PIN**, for a complete machine (includes model, product and serial number, weight, engine output and, if applicable, CE certification). The plate is affixed on the left-hand side of the tractor unit frame next to the steering joint.
   1A: Product identification plate variant for markets outside USA.
   1B: Product identification plate variant for USA market.
2. The machine's serial number is also stamped on the right side of the tractor unit's frame, by the steering joint.
3. Drive axle serial numbers are located on the axle housing.
4. The dropbox's serial number is located on the right rear of the dropbox.

5. The brakes' type designation and serial number are located on the brake housing's end plate.
6. The transmission's type designation and serial number are located on the left side of the transmission.
7. Supplementary sticker with important engine data is located on the valve cover for engine D12D. For engine D12C the supplementary sticker is located on the engine's right side
8. Information about the engine and which type of machine it is installed in is stamped on the cylinder block's right side, on a plate next to the stamping as well as on a sticker on the engine ECU (E-ECU). The E-ECU is located on the engine's left side.
9. Cab type, type approval and serial number is located on the right inside the cab.

Document Title: **Information and warning decals**	Function Group: **000**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Information and warning decals

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

The operator should be aware of and follow the information and warning decals that are located on the machine. All decals are not found on all machines, since they are market-dependent and machine-dependent.

The decals shall be kept clean and legible. If decals have been lost or no longer are readable, they shall be replaced immediately. Spare part number (order number) is stated on each decal as well as in the Parts catalogue.

NOTE!
The text “WARNING” is shown on the warning decals in North America.

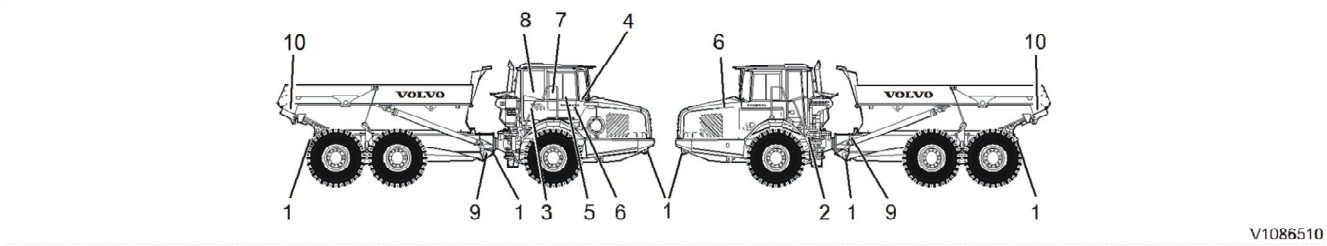
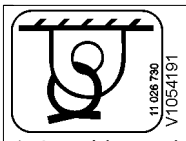
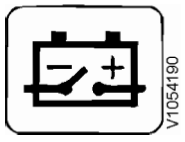


Figure 1

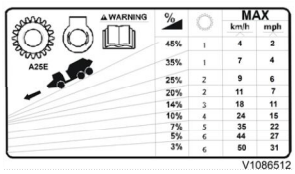


1. Attaching point for lashing



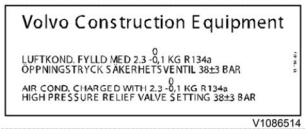
2. Battery disconnect switch

3. Avoid spraying water at air inlets.

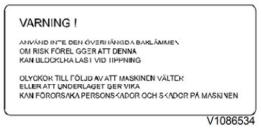


4. Retarder diagram

5. WARNING! Do not operate downhill with the gear selector in N-position. Only shift gears with the gas pedal let up.



6. Air conditioning filled with R134a. Opening pressure safety valve (optional equipment)



7. WARNING! Do not use the overhung tailgate (optional equipment) if there is any risk that it can block the load when dumping. Accidents as a result of the machine turning over or the ground giving way can cause personal injuries and machine damage.

8. Emergency exit

9. WARNING! Risk of crushing – frame steering

10. WARNING! Do not enter the work area of a reversing machine

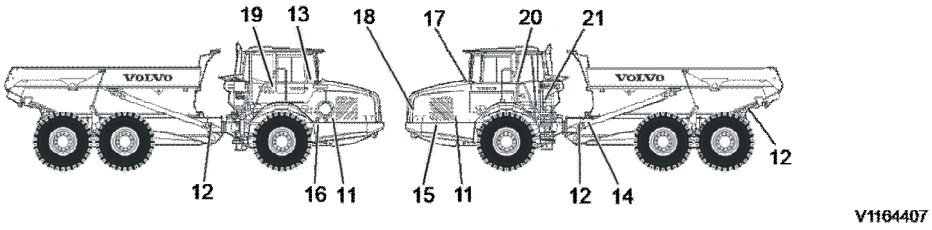
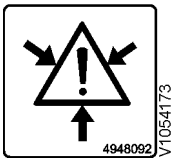


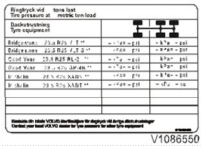
Figure 2

11. WARNING! Rotating fan

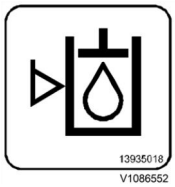
12. WARNING! Do not lean in under a raised load body without first securing it.



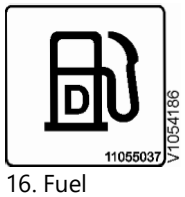
13. Pressurized brake system



14. Tire pressure

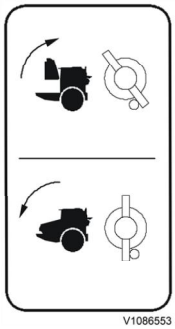


15. Hydraulic oil



16. Fuel

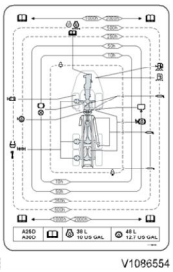
17. WARNING! Only use genuine Volvo coolant VCS – read the Operator's Manual



18. Engine hood

19. Sound pressure level (LpA) at operator's station

20. Sound power level (LwA) around the machine



21. Service decal

Document Title: **Hydraulic cylinder, description**	Function Group: **000**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Steering cylinder, description

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

There are two models of steering cylinders depending on serial number, see table below.

Model A

Machine	Place of manufacture, serial number	
	EU	Brazil
A25D	–11949	–XXXXX
A30D	–10583	–70028

Model B

Machine	Place of manufacture, serial number	
	EU	Brazil
A25D	11950–	XXXXX–
A30D	10584–	70029–

Model A

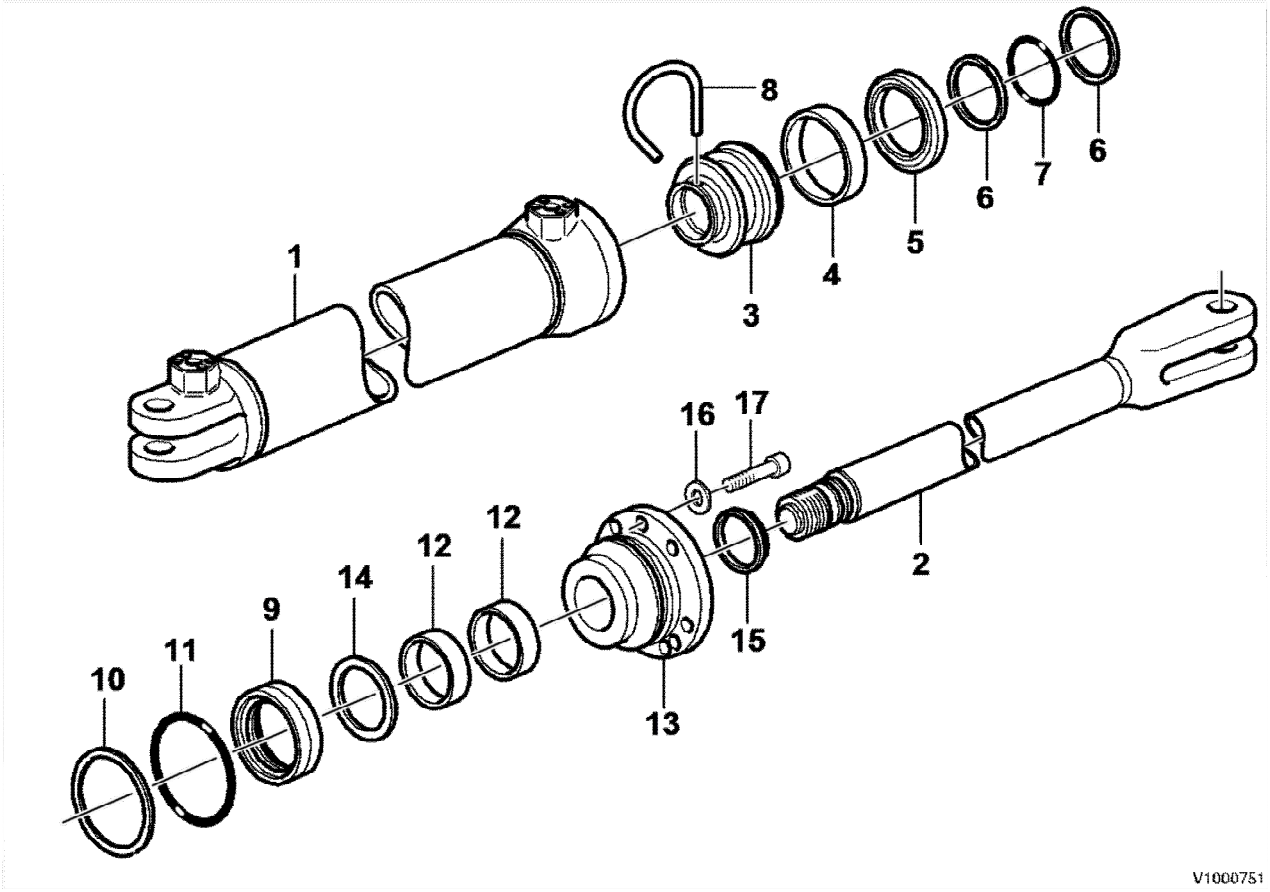


Figure 1
Steering cylinder model A

Pos.		Description	Pos.		Description
1		Cylinder barrel	10		Back-up ring
2		Piston rod	11		O–ring
3		Piston	12		Guide ring
4		Guide ring	13		Piston rod guide
5		Piston seal	14		Back-up ring
6		Back-up ring	15		Scraper
7		O–ring	16		Spring washer
8		Lock brace	17		Bolt
9		Piston rod seal			

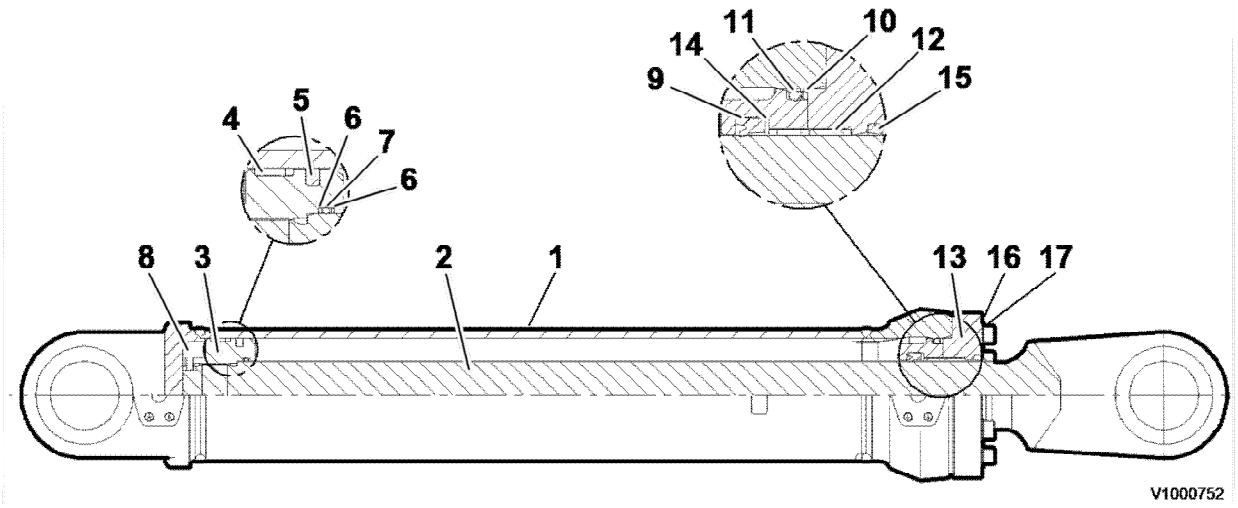


Figure 2
Steering cylinder, cut-away view, model A

Pos.		Description	Pos.		Description
1		Cylinder barrel	10		Back-up ring
2		Piston rod	11		O–ring
3		Piston	12		Guide ring
4		Guide ring	13		Piston rod guide
5		Piston seal	14		Back-up ring
6		Back-up ring	15		Scraper
7		O–ring	16		Spring washer
8		Lock brace	17		Bolt
9		Piston rod seal			

Model B

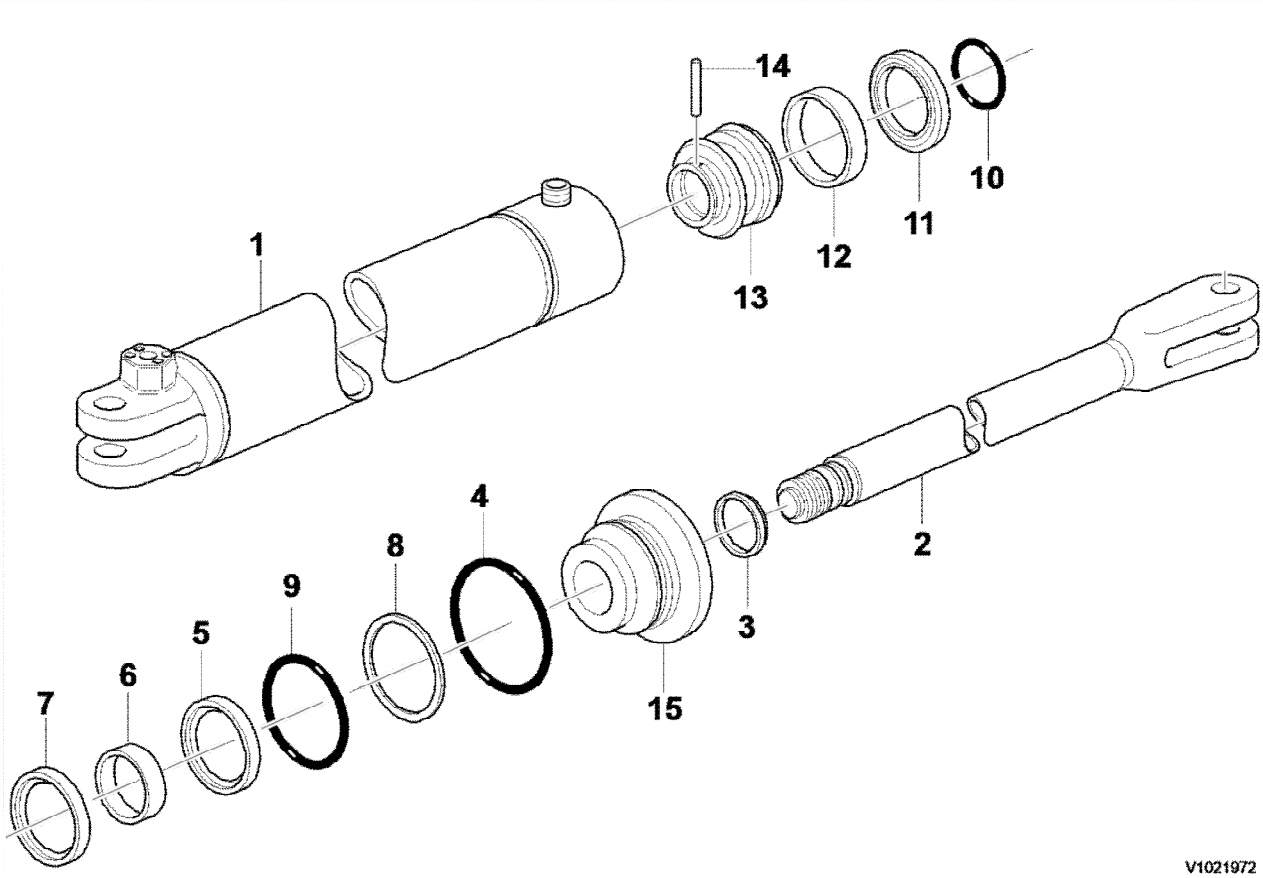


Figure 3
Model B

Pos.		Pos.	
1	Cylinder barrel	8	Back-up ring
2	Piston rod	9	O–ring
3	Scraper	10	O–ring
4	O–ring	11	Piston seal
5	Piston rod seal	12	Guide ring
6	Guide ring	13	Piston
7	Piston rod seal	14	Spiral spring pin

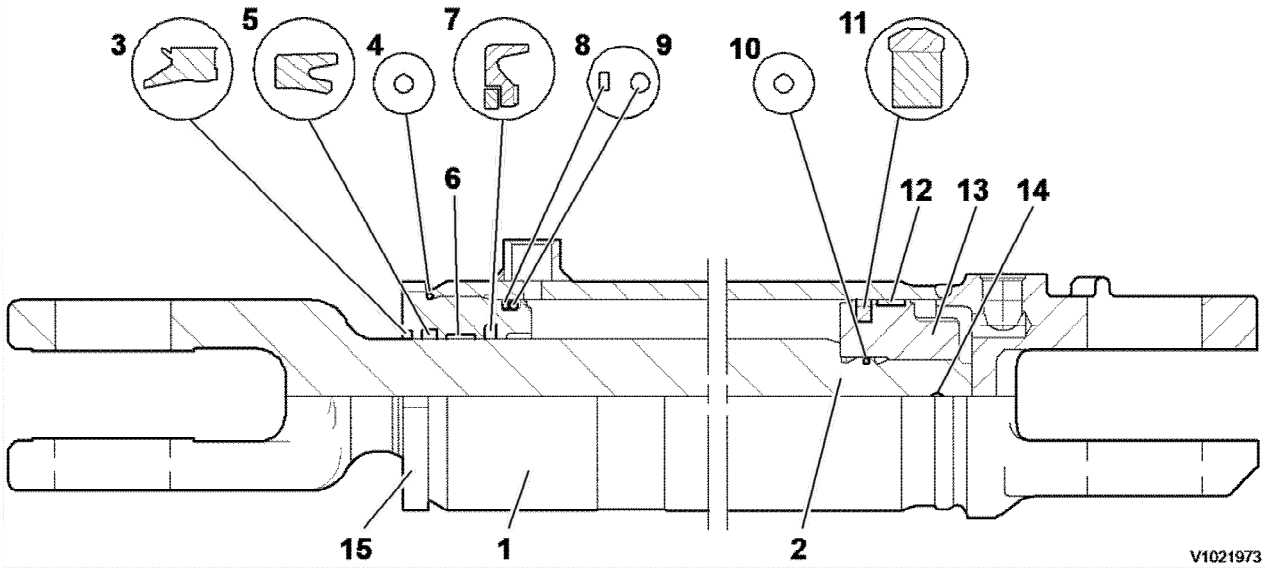


Figure 4
Steering cylinder, cut-away view, model B

Pos.		Pos.	
1	Cylinder barrel	8	Back-up ring
2	Piston rod	9	O–ring
3	Scraper	10	O–ring
4	O–ring	11	Piston seal
5	Piston rod seal	12	Guide ring
6	Guide ring	13	Piston
7	Piston rod seal	14	Spiral spring pin

Document Title: **Volvo standard tightening torques**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Volvo standard tightening torques

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

The tightening torques in the following tables apply to bolts and nuts with tensile strength. The tables should be used as a general instruction for tightening bolts and nuts without specified values. The charts contains values for course thread bolts and nuts.
Torque values should be increased with ≈10%, for flange bolts.
All standard torques for bolts are without surface treatment.
The standard torque for bolts lubricated with oil should be reduced with 20% of the given value.

Standard tightening torque charts

Bolt size Metric Coarse Threads	**Tensile strength 8.8**		**Tensile strength 10.9**	
	(Nm)	**(lbf ft)**	**(Nm)**	**(lbf ft)**
M5	6	4	8	6
M6	10	7	14	11
M8	25	18	35	26
M10	50	37	70	52
M12	87	64	122	90
M14	139	103	195	144
M16	213	157	299	220
M18	293	216	413	305
M20	416	307	585	432
M24	719	530	1010	745
M27	1060	782	1490	1100
M30	1140	840	2025	1493
M36	2500	1844	3600	2653

Bolt size Inch SAE Coarse Threads	**Tensile strength 5**		**Tensile strength 8**	
	(lbf ft)	**(Nm)**	**(lbf ft)**	**(Nm)**
1/4	10	13,6	14	19
5/16	21	28,5	29	39,3
3/8	37	50,2	52	70
7/16	59	80	84	114
1/2	90	122	128	174
9/16	130	176	184	250
5/8	180	244	254	345

3/4	320	434	451	612
7/8	515	700	728	988
1	775	1052	1091	1480
1 1/8	953	1290	1545	2100
1 1/4	1344	1823	2180	2960
1 3/8	1600	2170	2650	3600
1 1/2	2000	2714	3200	4340

Document Title: **Machine dimensions**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Machine dimensions

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

A25D

The letters in the figures refer to the table below.

Dimensions apply to unloaded machine	**dimension**	**mm**	**in**
Total length	A	10220 (402.4)	402
Total length, tractor unit	A1	4954 (195.0)	195
Total length, load unit	A2	5764 (226.9)	227
Load body length, standard body	B	5152 (202.8)	203
Total height at top of exhaust pipe	C	3453	136
Height to cab roof	C1	3318 (130.6)	131
Width across cab	C2	1768 (69.6)	70
Overhang, towing eyes	D1	2604	109
Distance, front axle – steering centre (articulation joint)	E	1210 (47.6)	103
Distance, drive axles	F	4175 (164.4)	164
Distance, bogie axles	G	1670 (65.7)	66
Overhang, rear	H	1610 (63.4)	63
Overhang, frame	I	608 (23.9)	24
Loading height	J	2778 (109.4)	109
Height to load body	K	2102 (82.8)	83
Free dumping height	L	677 (26.7)	27
Total height, elevated load body	M	6559 (258.2)	258
Outer turning radius	N	8105 (319.1)	319
Inner turning radius	N1	4079 (160.6)	161
Outside width, load body	O	2700 (106.3)	106
Inside width, load body	P	2490 (98.0)	98
Minimum ground clearance, load unit	R	512	20
Minimum ground clearance axle, load unit	R1	634 (25.0)	25
Maximum height, upper body plate	U	3257 (128.3)	128
Track width, load unit	V	2258	89
Total width, load unit	W	2859 (112.6)	113
Minimum ground clearance, tractor unit	X	456 (18.0)	18
Minimum ground clearance axle, tractor unit	X1	581 (22.9)	23
Minimum ground clearance, hitch	X2	659 (26.0)	26
Track width, tractor unit	Y	2258	89

Total width, tractor unit	Z	2859	113
Angle of approach	a1	23.5°	
Dumping angle	a2	74°	
Max. steering angle	a3	45°	

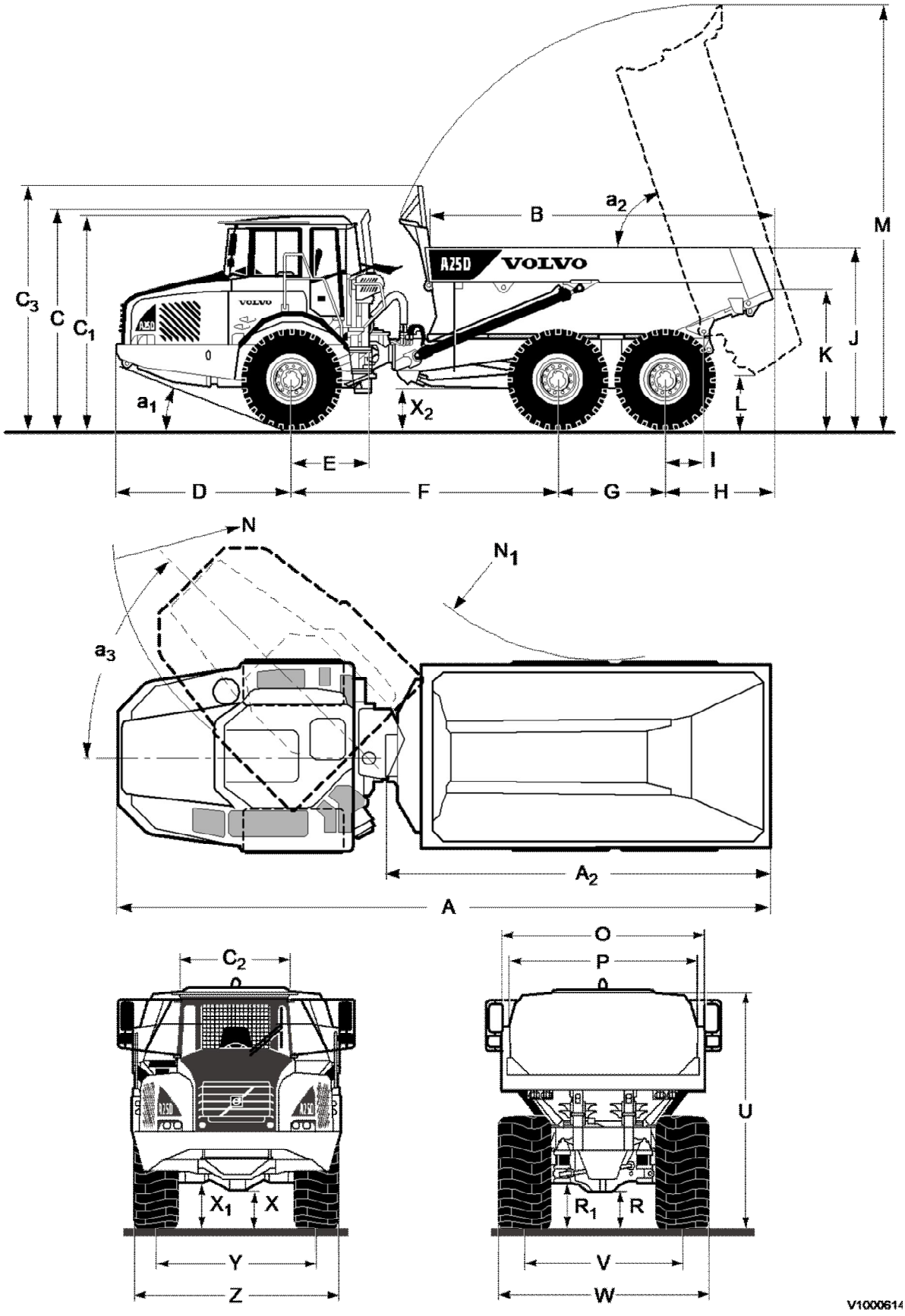


Figure 1
V1000614

Document Title: **Capacities**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Capacities

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

	total	**when changing**
Engine, incl. filters	49 l (12.9 US gal)	37 l (9.75 US gal)
Cooling system	80 l (21.1 US gal)	65 l (17.2 US gal)
Transmission, including filters and cooler	48 l (12.7 US gal)	41 l (10.8 US gal)
Dropbox	8,5 l (2.2 US gal)	8.5 l (2.2 US gal)
Front axle	38 l (10.0 US gal)	33 l (8.7 US gal)
Front bogie axle	40 l (10.6 US gal)	34 l (9.0 US gal)
Rear bogie axle	38 l (10.0 US gal)	33 l (8.7 US gal)
Hub reduction	5 l (1.3 US gal)	3 l (0.8 US gal)
Hydraulic system	260 l (68.7 US gal)	175 l (46.2 US gal)
Hydraulic oil tank	180 l (47.5 US gal)	
Fuel tank	400 l (105.7 US gal)	

Document Title: **Weights**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Weights

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

Tyre equipment	23.5 R25
Operating weight	
Front axle	12180 kg (26852 lbs)
Bogie axles	9400 kg (20723 lbs)
Total (incl. operator and full fuel tank)	21560 kg (47531 lbs)
Total weight	
Max. load allowed on front axle	14140 kg (31173 lbs)
Max. load allowed on bogie axles	31420 kg (69269 lbs)
Load capacity	24000 kg (52911 lbs)
Total weight, maximum	45560 kg (100443 lbs)

Document Title: **Rocker arm shaft, tightening torques**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Rocker arm shaft, tightening torques

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

Tighten the attaching bolts evenly spaced across the rocker arm shaft to avoid shear loads. Tighten the bolts according to steps 1 to 7; see tightening diagram.

Camshaft and bearing caps in place	
Tighten the bolts 1–7 in the order 4, 3, 5, 2, 6, 1, 7.	25 Nm (18 lbf ft)

NOTE!
The rocker arm shaft bolts may only be tightened three times. Mark the bolt head with a punch mark each time the bolt is tightened.

Rocker arm shaft in place	
Step 1: Tighten the bolts 8–14 gradually until the rocker arm shaft rests against the camshaft bearing caps	
Step 2: Tighten bolts 11, 9 and 13	90 ±5 Nm (66 ±4 lbf ft)
Step 3: Tighten the bolts 8, 10, 12, 14	60 ±5 Nm (44 ±4 lbf ft)
Step 4: Loosen bolts 11, 9 and 13	
Step 5: Tighten bolts 11, 9 and 13	60 ±5 Nm (44 ±4 lbf ft)
Step 6: Angle–tighten bolts 1–7 **NOTE!** Skip this step if the camshaft bearing caps has not been removed.	90° ±5°
Step 7: Angle–tighten bolts 8–14	120° ±5°

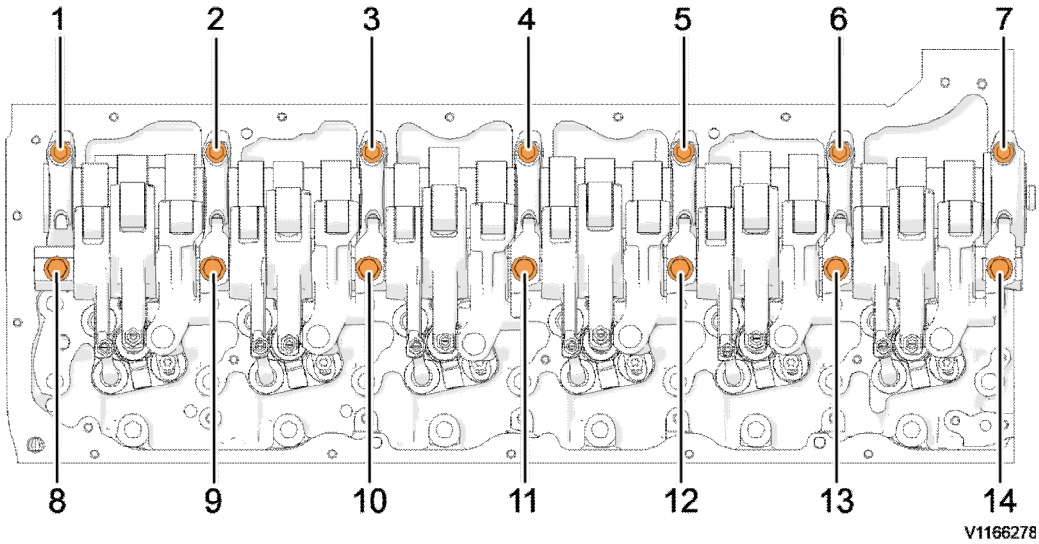


Figure 1

Bearing cap bolts, rocker arms

Document Title: **Coolant with freezing and corrosion protection**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Coolant with freezing and corrosion protection

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

Anti-freeze

Check the anti-freeze every 500 hours.
At delivery, the cooling system is filled with a mixture of 50% water and 50% Volvo Construction Equipment concentrated coolant with freezing protection down to -25°C.
If there's a risk that the ambient temperature drops below this temperature, the freezing protection should be adjusted, see below.

Corrosion protection

Volvo Construction Equipment concentrated coolant contains active corrosion protection additives to protect engine and radiator. These additives have a limited service life. Therefore, change the coolant every **3000 hours.**

NOTE!
Volvo Construction Equipment concentrated coolant may not be mixed with other brands of coolant or additives. Mixing could have negative effects.

Volume and change volume cooling system; see Engine, capacities.
The content of concentrated coolant with anti-freeze protection may not be below 40%.
40% provides protection against freezing down to -25° C.
50% provides protection against freezing down to -37° C.

Document Title: **Tyre equipment and recommended tyre pressures**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Go back to Index Page

Tyre equipment and recommended tyre pressures

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

A25D

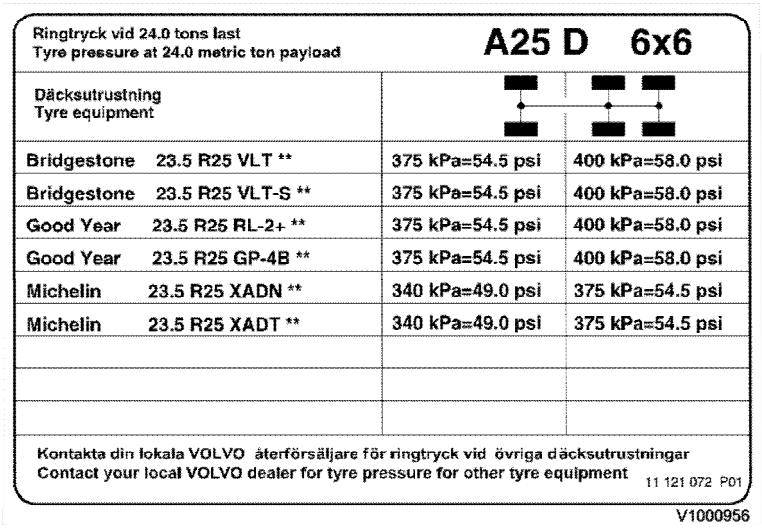


Figure 1
V1000956

A30D

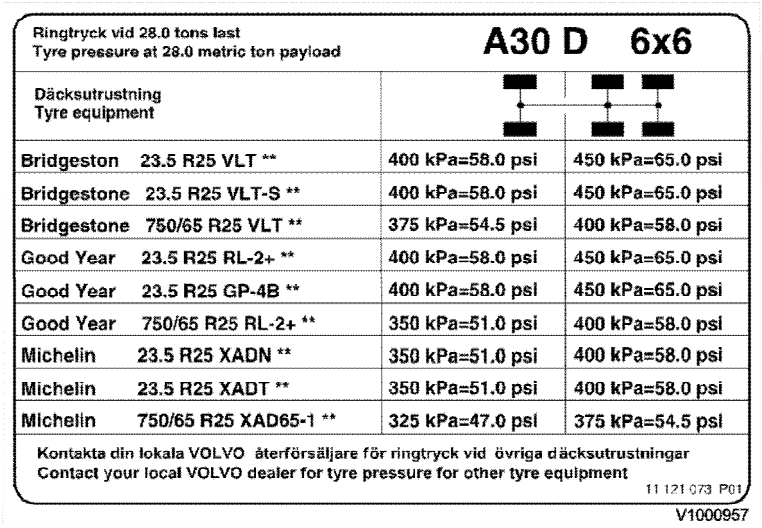


Figure 2
V1000957

Document Title: **Tyre equipment and recommended tyre pressures**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Go back to Index Page

Tyre equipment and recommended tyre pressures

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo	Braås	15003	19999
A25D Volvo	Pederneiras	72107	79999

A25D

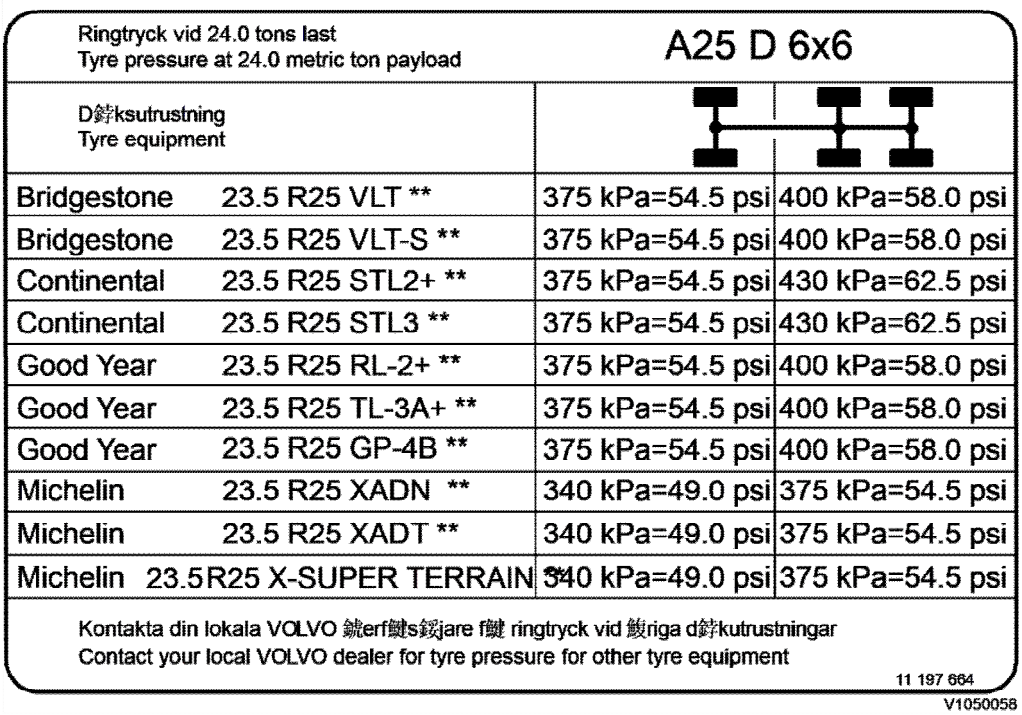
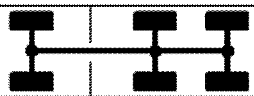


Figure 1

A30D

Ringtryck vid 28.0 tons last
Tyre pressure at 28.0 metric ton payload

A30 D 6x6

D錚ksutrustning Tyre equipment			
Bridgestone	23.5 R25 VLT **	400 kPa=58.0 psi	450 kPa=65.0 psi
Bridgestone	23.5 R25 VLT-S **	400 kPa=58.0 psi	450 kPa=65.0 psi
Bridgestone	750/65 R25 VLT **	375 kPa=54.5 psi	400 kPa=58.0 psi
Continental	23.5 R25 STL2+ **	400 kPa=58.0 psi	500 kPa=72.5 psi
Continental	23.5 R25 STL3 **	400 kPa=58.0 psi	500 kPa=72.5 psi
Good Year	23.5 R25 RL-2+ **	400 kPa=58.0 psi	450 kPa=65.0 psi
Good Year	23.5 R25 TL-3A+ **	375 kPa=54.5 psi	450 kPa=65.0 psi
Good Year	23.5 R25 GP-4B **	400 kPa=58.0 psi	450 kPa=65.0 psi
Good Year	750/65 R25 RL-2+ **	350 kPa=51.0 psi	400 kPa=58.0 psi
Michelin	23.5 R25 XADN **	350 kPa=51.0 psi	400 kPa=58.0 psi
Michelin	23.5 R25 XADT **	350 kPa=51.0 psi	400 kPa=58.0 psi
Michelin	750/65 R25 XAD65-1 **	325 kPa=47.0 psi	375 kPa=54.5 psi
Michelin	23.5R25 X-SUPER TERRAIN **	350 kPa=51.0 psi	400 kPa=58.0 psi

Kontakta din lokala VOLVO 鯱erf鱔s鍐jare f鱔 ringtryck vid 鍑riga d錚kutrustningar
Contact your local VOLVO dealer for tyre pressure for other tyre equipment

11 197 665

V1050057

Figure 2

Document Title: **Lubrication system, specifications**	Function Group: **030**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Lubrication system, specifications

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

Lubrication system, D10

Machine	Place of manufacture, serial number		
	EU	US	Brazil
A25D	11001–12999	61001–61118	71001–71999
A30D	10001–11999	60001–60093	70001–72999

Oil pressure, min. at low idle speed (warm engine)	200 kPa (2 bar) (29.0 psi)
Oil pressure, operating speed (warm engine)	350-600 kPa (3.5 –6.0 bar) (50.7–87.0 psi)

Lubrication system, D9

Machine	Place of manufacture, serial number		
	EU	US	Brazil
A25D	13001–	–	72000–
A30D	12001–	–	73000–

Oil pressure, min. at low idle speed (warm engine)	min. 270 kPa (2.7 bar) (39 psi)
Oil pressure, operating speed (warm engine)	300–550 kPa (3–5.5 bar) (44–80 psi)

Document Title: **Recovering and towing**	Function Group: **050**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Recovering and towing

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

WARNING

Before starting any recovery or towing work, make sure that the parking brake is applied and the wheels are blocked to prevent the machine from rolling. Extreme caution must be observed in connection with towing to prevent accidents and personal injuries.

WARNING

If the engine cannot be started, the brake and steering functions will be severely limited. In such cases, towing should only be performed in an emergency situation by experienced and trained personnel and only for the shortest possible distance (see towing). If possible, transport the machine on a trailer.

General

If possible, the engine should be running while recovering/towing the machine to ensure satisfactory braking and steering performance.

Recovering

Use a towbar, heavy-gauge cable or chain connected to the towing eyes at the front or rear of the machine to tow the machine to a suitable place or passable road.

Towing

- If the machine has to be towed to a workshop after recovery, use a towbar or heavy-gauge towing cable connected to the front towing eyes.
- A towbar must always be used if the machine that is to be towed has no brake function.
- The towing vehicle or machine must always be at least as heavy as the towed machine and have sufficient engine and braking power to tow and brake both machines on uphill and downhill grades.
- Always tow the shortest possible distance.
- Maximum towing speed under all conditions is 10 km/h.

  NOTE!
  The engine cannot be started by towing the vehicle.

Case 1 (with engine running)

The gearshift selector should be in neutral and the parking brake in the operating position. The machine can be towed for 10 km without taking special action.

Case 2 (without engine running)

Since the transmission is not lubricated when the engine is not running, the propeller shaft between the transmission and dropbox shall be removed. Then lubrication to the dropbox is maintained at the same time as the machine can be steered.

Removing the propeller shaft

1. Place the machine in service position.
2. Block the wheels so that the machine cannot start to roll and release all brakes.
3. Make sure that the front or rear wheels are slightly raised off the ground before removing the propeller shaft's bolts.

Filling compressed air system

If necessary, the compressed air system can be filled through the filler valve on the front part of the load unit frame by using compressed air from another machine.

Releasing the parking brake

When filling through the filler valve on the compressed air tank, the parking brake is released. The required minimum pressure is approx. 470 kPa (4.7 bar).

The parking brake control must be in the operating position, that is, not applied.

After recovering/towing

The following safety measures should be taken before removing the towbar, heavy-gauge cable or chain after recovering/ towing:

1. Park the machine on a level surface.
2. Apply the parking brake.
3. Block the wheels to prevent the machine from rolling.

Document Title: **Lifting machine**	Function Group: **050**	Information Type: **Service Information**	Date: **2/20/2025**
Profile: **A25D Volvo**			

Lifting machine

Showing Selected Profile

Valid for serial numbers			
Model	**Production site**	**Serial number start**	**Serial number stop**
A25D Volvo			

WARNING

Never stand under the machine when it is suspended in the air.

1. Lock the steering joint with the steering joint lock.

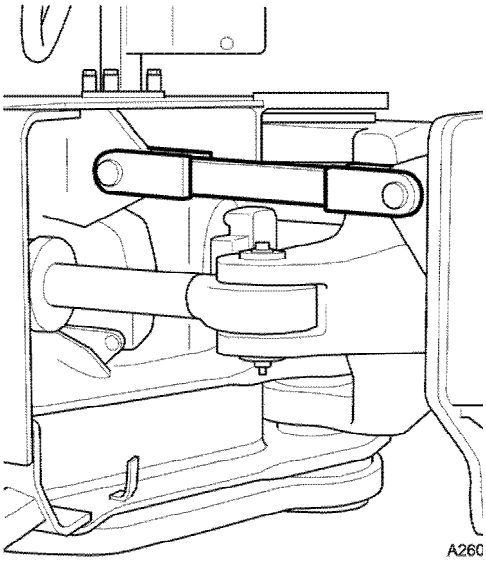


Figure 1
Steering joint lock

2. Block the rear wheels.
3. Release the parking brake and disengage the differential locks.
4. Lift the machine by the front lifting eyes in the frame.

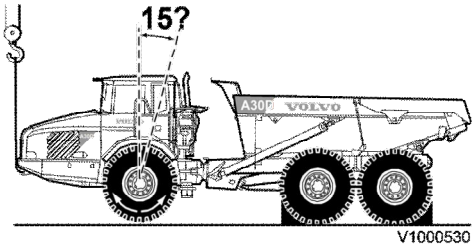


Figure 2