

Document Title: Description, complete machine	Function Group: 000	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

Complete machine, descriptions

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G Volvo	Pederneiras	732001	739999
A45G Volvo	Pederneiras	752001	759999

The machine consists of two main sections, the tractor unit and the load unit. The two units are joined by the frame joint, which allows movement about a vertical bearing for steering. The frame joint also allows twisting of the units in relation to each other along a horizontal axis.

Engine

The machine is equipped with a straight six cylinder, four-stroke, turbocharged diesel engine with direct injection and intercooler (charge-air cooler). The engine has an overhead camshaft and each cylinder has one unit injector. The cylinder head is common for all cylinders and has four valves per cylinder.

D13J and D16J

The engines comply with US Tier 4 final and California Tier 4 final emission requirements and EU Stage IV emission requirements.

Engines intended for EU and built after 1 January 2019 comply with the EU Stage V emission requirements.

These require low sulphur content in the fuel.

The engines feature external, cooled exhaust recirculation (EGR - Exhaust Gas Recirculation) and an exhaust aftertreatment system (EATS - Exhaust AfterTreatment System).

EATS consists of a diesel particulate filter (DPF), catalysts, and injection of AdBlue®/DEF. The system has a built-in cleaning function, regeneration, which uses increased temperature to clean the EATS.

EATS is monitored and controlled by the aftertreatment control module (ACM).

D13F and D16F

The engines meet emission requirements for Stage II. The engines can handle fuels with higher sulphur content than engines D13J and D16.

D16E

The engines only apply to the markets in Brazil, LAM, and China.

Electrical system

Machines with engine alternative D13J and D16J have eight control units (ECU).

Machines with engine alternative D13F and D16F have six control units (ECU).

Machines with engine alternative D16E have seven control units (ECU).

- **V-ECU**
Located on the left side in the cab in front of the circuit board. The V-ECU is the upper of the two ECUs. Handles brakes, gearshifting, steering, and cooling fan control on the machine.
- **V2-ECU**
Located on the left side in the cab in front of the circuit board. The V2-ECU is the lower of the two ECUs. Handles dumping system, brake cooling system, ATC, and differential locks. Handles Full Suspension, when applicable.
- **W-ECU**
Located on the left side in the cab over the circuit board. Handles CareTrack. (Telematic system for remote monitoring of information from the machine).
- **HMIM**
Located on the left side in the cab over the circuit board.

Product: Volvo A45G Articulated Haulers Service Manual

Full Download: <https://www.aresairmanual.com/downloads/volvo-a45g-articulated-haulers-service-manual/>

Handles information for the operator via instrumentation, information display unit, warning lights, and instruments.

○ **ECC**

Located in the cab on the right side under the gear selector.
Handles the climate control system.

Applies to machines with engine alternative D13J and D16J:

○ **ECM (E-ECU)**

Located on the left side of the engine.
Handles the engine.

○ **ACM**

Located under the engine hood on the leading edge of the right front fender.
Handles the exhaust aftertreatment system.

○ **Engine Gateway**

Located on the front cab wall under the left instrument panel.
Handles communication between the engine system and the machine system.

Applies to machines with engine alternative D13F and D16F:

○ **E-ECU**

Located on the left side of the engine.
Handles the engine.

Applies to machines with engine alternative D16E:

○ **E-ECU**

Located on the left side of the engine.
Handles the engine.

○ **Engine Gateway**

Located on the front cab wall under the left instrument panel.
Handles communication between the engine system and the machine system.

Power transmission

The **transmission** is fully automatic and of the planetary gear type. It has a torque converter with free-wheel stator and automatic direct clutch (Lock-up) in all gears. The transmission has nine forward gears and three reverse gears.

The **dropbox** has a differential type which distributes torque equally between the front axle and rear axles, reducing tire and road wear, as well as fuel consumption. The longitudinal differential features a lock function.

ATC, Automatic Traction Control, automatically controls engagement and disengagement of the longitudinal differential lock and 6-wheel drive as needed.

The **drive axles** are equipped with a differential and planetary gear hub reductions. All drive axles have differential lock.

Brake system

Engine brake

Depending on setting of switches, an engine brake is available to reduce wear of the brakes.

Service brake

The service brake is operated hydraulically. All wheel axles are equipped with sealed, wet multi-disc brakes and external oil cooler.

The brake system and hydraulic system have a common oil tank. The brake cooling system has a separate oil tank.

Parking brake

The hydraulic parking brake acts on the propeller shaft to the front bogie axle, and on the front axle as well through the dropbox.

The longitudinal differential lock in the dropbox is engaged at the same time as the parking brake is applied, which means that the propeller shaft locks the front axle and the front bogie axle.

Steering system

The steering system is self-compensating, hydromechanical with secondary steering function. A ground-dependent pump on the dropbox means that the steering works even if the engine stops as long as the machine is rolling forward.

Full Suspension (FS-system)

Machines with the designation FS feature **Full Suspension**, which is an all-hydraulic suspension system. Machines with Full Suspension do not have standard bogie beams, rubber springs, and shock absorbers. Instead the machine's frame and wheel

<https://www.aresairmanual.com/downloads/volvo-a45g-articulated-haulers-service-manual/>

axles are connected using six double-acting hydraulic cylinders. Each wheel has a position sensor, enabling adaptation of the suspension to ground conditions and load, which increases productivity and operator comfort.

Cab

The cab features an automatically controlled heating and ventilation system with defroster system for the windows. Air conditioning is standard. The cab has three emergency exits, the door and the front side windows on both right and left side. These are broken with the hammer in the cab if evacuation is necessary that way.

FOPS and ROPS

The cab is approved as a protective cab according to FOPS and ROPS standards, see page [CE-marking, EMC-directive](#). FOPS is an abbreviation of Falling Objects Protective Structure (roof protection) and ROPS is an abbreviation of Roll Over Protective Structure (roll over protection).

If any part of the cab's protective design features is affected by plastic deformation or cracks, the cab must be replaced immediately.

Never make any unauthorized changes to the cab, e.g., lowering the roof height, drilling, welding on of brackets for fire extinguishers, radio antenna, or other equipment without first discussing the modifications, via a dealer, with personnel at Volvo CE's design and engineering department. They will decide if the modification can lead to the approval becoming invalid.

Hydraulics

The hydraulic system consists of five hydraulic pumps of the piston pump type with continuously variable displacement. Two of these pumps are used for the steering and dump system, two for fan drive, and one is a ground-depend pump mounted on the dropbox. Of the two pumps for fan drive, one is for the intercooler's cooling fan, which also is used when dumping, and one is for the radiator's cooling fan. The radiator's fan pump is also used for charging of brake pressure. The ground-dependent hydraulic pump is mounted on the dropbox and delivers oil, via a non-return valve, to the steering system when the machine is rolling forward.

Machines with FS (Full Suspension) have an extra hydraulic pump for the FS-system.

Dumping system

The machine features an electric dump lever which sends an electric signal to two electro-hydraulic valves. These send a hydraulic signal to the dumping valve which controls the load body's movement. The machine has damping at the upper and lower load body positions.

Document Title: Product identification plates	Function Group: 000	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

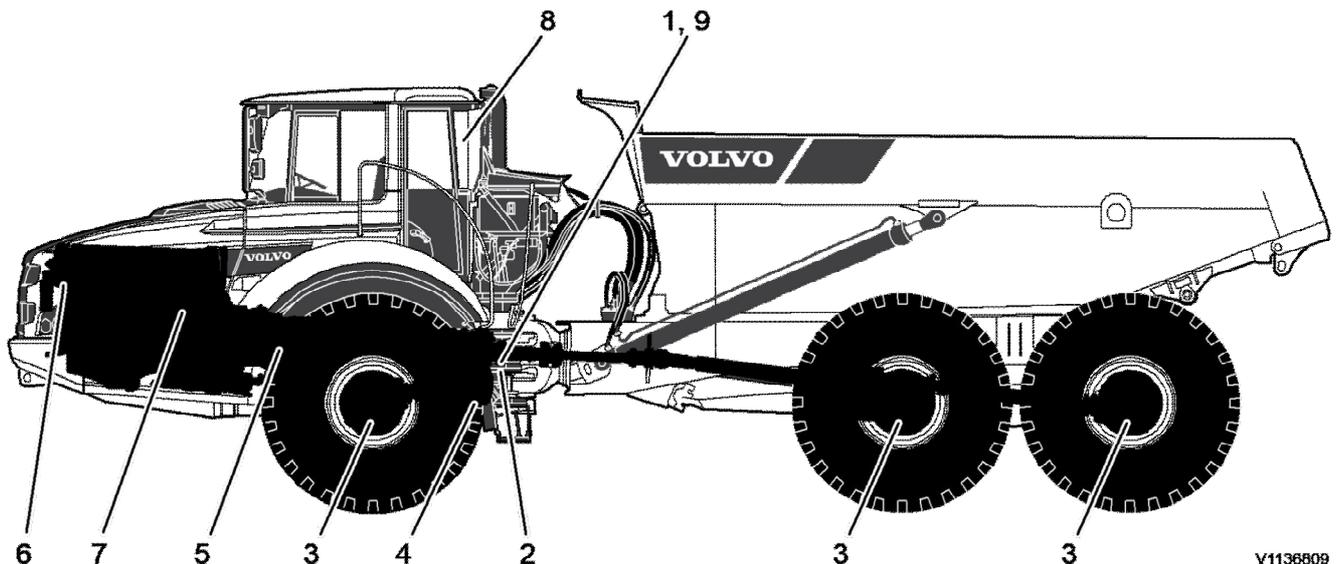
Product plates

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G Volvo			

The illustration and text below show the product plates that should be found on the machine.

When ordering spare parts and when making enquiries by telephone or correspondence, the model designation and Product Identification Number (PIN) should be stated.



V1136809

Figure 1

1. The data plate is located on the left side of the tractor unit's frame by the steering joint. The data plate varies depending on the market. The information is indicated as follows:

Volvo Construction Equipment		
Volvo Construction Equipment AB		
Carl Linné's väg, SE-363 41 Brista, Sweden		
Type/Model	<input type="text"/>	
Product Name	<input type="text"/>	
Product Identification Number	<input type="text"/>	
Machine mass kg	<input type="text"/>	
Engine net power kW	<input type="text"/>	
Manufacturing year	<input type="text"/>	
Made in	<input type="text"/>	Assembled in <input type="text"/>
VOLVO		

V1228478

Figure 2

Data plate for countries within the EU/EEC

- manufacturer's name and address
- type/model for complete machine
- product name
- **Product Identification Number (PIN)**
- machine weight (machine's most common configuration)
- motor power
- year of manufacture
- month of manufacture (only countries within Eurasian Customs Union)
- country of manufacture
- assembled in

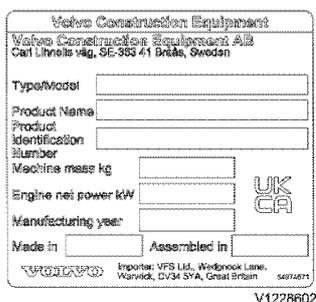


Figure 3
UKCA identification plate

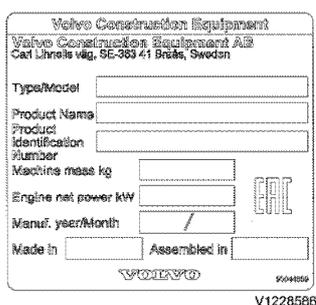


Figure 4
Data plate for countries within Eurasian Customs Union

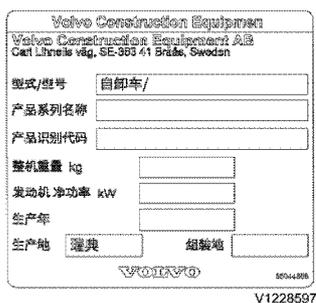


Figure 5
Data plate for China



Figure 6
Additional eco label for China

Volvo Construction Equipment	
Volvo Construction Equipment AB Carl Linnéus väg, SE-265 41 Bredå, Sweden	
Type/Model	<input type="text"/>
Product Name	<input type="text"/>
Product Identification Number	<input type="text"/>
Machine mass kg	<input type="text"/>
Engine net power kW	<input type="text"/>
Manufacturing year	<input type="text"/>
Made in <input type="text"/>	Assembled in <input type="text"/>
	
52044248	
V1228596	

Figure 7
Data plate for rest of the world

Volvo Equipamentos de Construção Latin America Ltda.	
Av. Lions Club 2470 - CEP 17.280-000	
Pedernheiras - São Paulo, Brasil	
CNPJ: 29.307.609/0001-90	
105409033	
V1210148	

Figure 8
Additional sign with Brazilian address

2. The machine's serial number is stamped into the frame on the left side of the tractor unit, by the steering joint.
3. The drive axles' serial numbers are located on the axle housing.
4. The dropbox's serial number is located at the front, on its right side.
5. The transmission's type designation and serial number are located on its left side.
6. The decal "Important Engine Information" is located on the front of the engine and on the left side of the tractor unit's frame by the steering joint.
7. The engine's type designation, part number, and serial number are stamped into the engine on both sides.
8. Cab type, type approval, and serial number are located on the left side in the cab, on the pillar to the left of the door (seen from inside the cab), closest to the rear window.
9. Engine and exhaust decal with the engine's type designation and component number.

Document Title: Information and warning decals	Function Group: 000	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

Information and safety decals

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G Volvo			

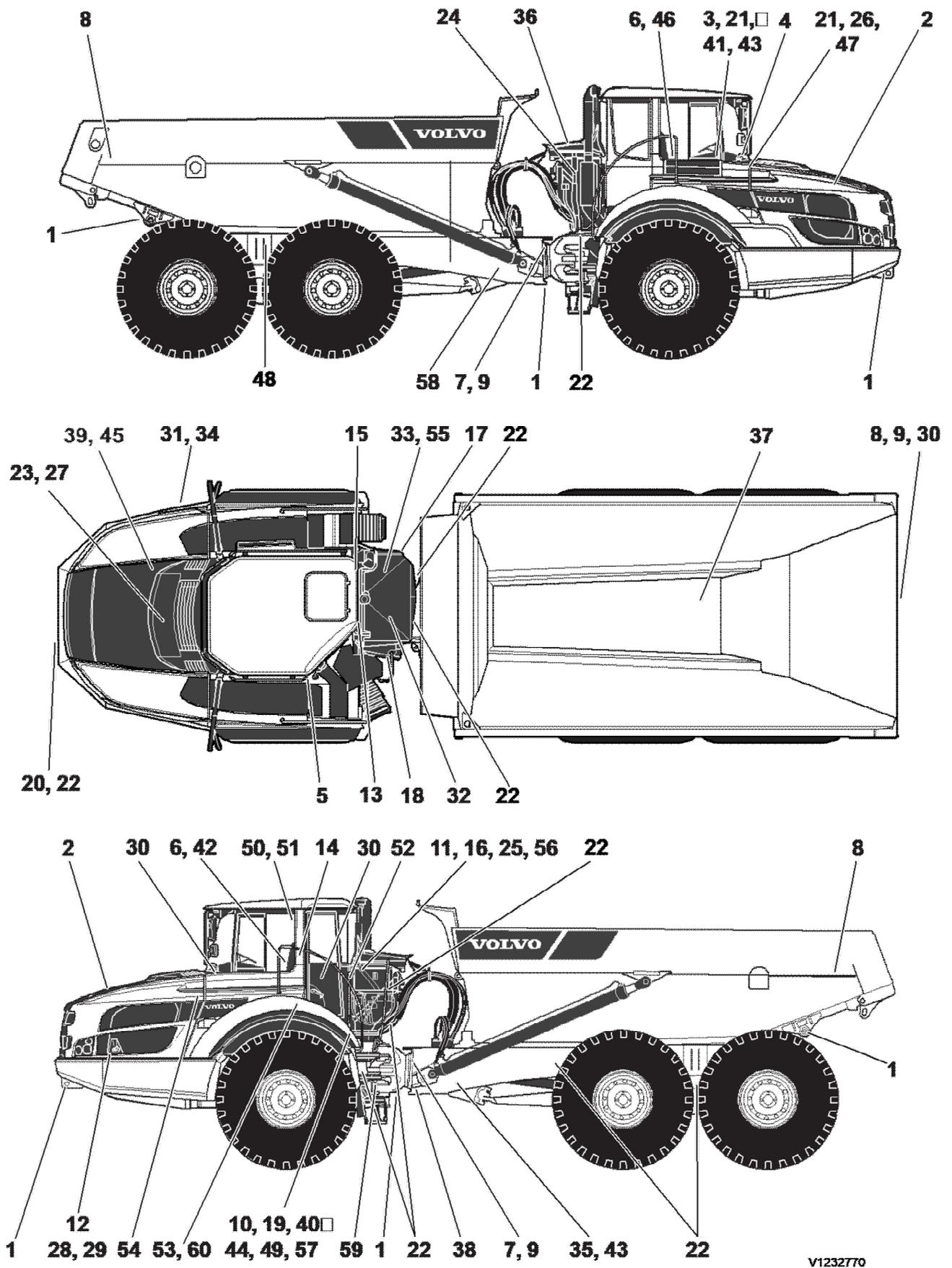
The machine operator should know and pay attention to the warnings and information on decals and plates. Decals may differ depending on the machine and the market.

The decals must be kept clean so that they can be read. Replace damaged, overpainted or missing decals and plates immediately.

The spare part number (order number) is shown on the decals/plates and in the part catalogue.

NOTE!

The text "WARNING" is shown on warning decals in North America.



V1232770

Figure 1

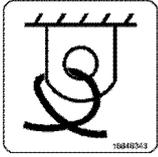


Figure 2

1. Attaching point for lashing
Spare part number: 16846343



Figure 3

2. Avoid aiming water jets at sound absorbents
Spare part number North America: 16929638
Spare part number China: 16315803
Spare part number, all other markets: 16929639

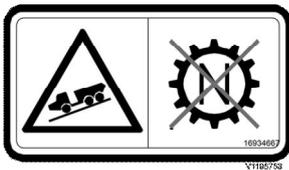


Figure 4

3. WARNING! Do not operate downhill with the gear selector in neutral. Only change gear with the accelerator released.
Spare part number North America: 16929626
Spare part number China: 16934522
Spare part number, all other markets: 16934667

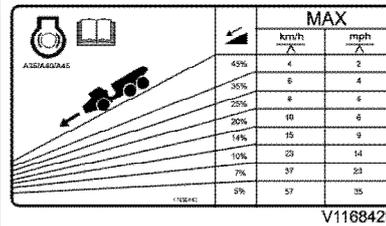


Figure 5

4. Retarder diagram
Spare part number: 17450443



Figure 6

5. Oil fill point transmission
Spare part number: 11197518



Figure 7

6. Emergency exit
Spare part number: 11118814



Figure 8

7. WARNING! Risk of crushing – articulated frame steering
Spare part number North America: 16929620
Spare part number, all other markets: 16901162

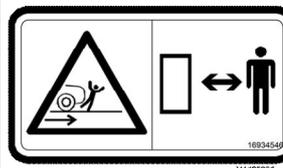


Figure 9

8. WARNING! Do not stand within the work area of a reversing machine
Spare part number North America: 16929627
Spare part number, all other markets: 16934546



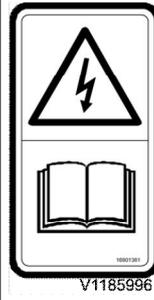
V1195752

Figure 10

9. WARNING! Do not lean in under raised load body unless it is blocked

Spare part number North America: 16929625

Spare part number, all other markets: 16934539



V1185996

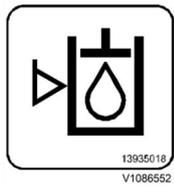
Figure 11

NOTE! Only the market.

10. WARNING! Before connecting start cables, read the Operator's Manual.

Spare part number North America: 16929621

Spare part number, all other markets: 16901361



13935018
V1086552

Figure 12

11. Hydraulic oil

Spare part number: 13935018



11055037
V1054186

Figure 13

12. Fuel

Spare part number: 11055037



V1054194

Figure 14

13. Sound pressure level (LpA) in cab

Spare part number 70 dB: 11180148

Spare part number 72 dB: 11180150



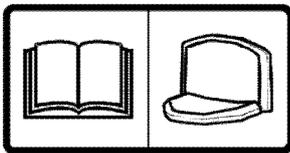
V1054192

Figure 15

14. Sound power level (LWA) outside machine

Spare part number 112 dB: 11180167

Spare part number 110 dB (optional equipment): 11180165

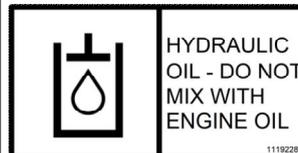


V1093411

Figure 16

15. Compartment for Operator's Manual

Spare part number: 15164402



11192288
V1093347

Figure 17

NOTE! Only North American market.

16. Hydraulic oil. Do not mix with engine oil

Spare part number: 11192288

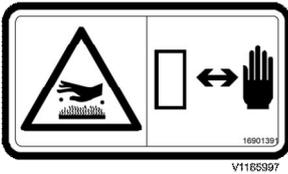


Figure 18

17. WARNING! Hot surfaces
 Spare part number North America: 16929623
 Spare part number, all other markets: 16901391



Figure 19

18. Oil fill point dropbox
 Spare part number: 15170937

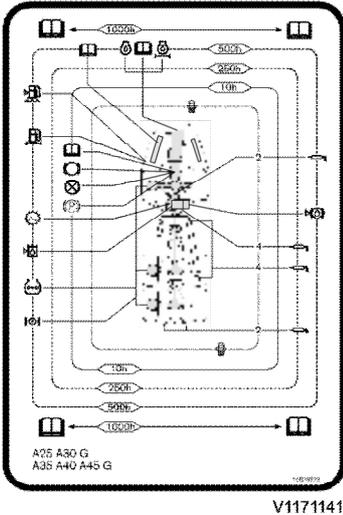


Figure 20

19. Service decal
 Spare part number: 16893723

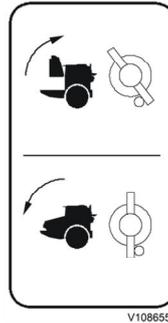


Figure 21

20. Engine hood
 Spare part number: 11116228

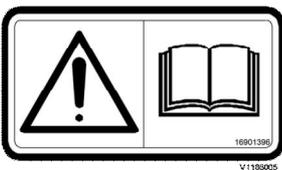


Figure 22

21. Read the Operator's Manual
 Spare part number North America: 16929624
 Spare part number, all other markets: 16901396

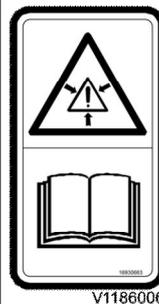
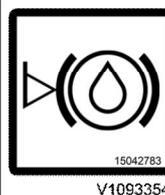


Figure 23

22. System/component with pressure
 Spare part number North America: 16929633
 Spare part number, all other markets: 16930663



V1228468



V1093354

Figure 25

Figure 24

23. WARNING! Hot coolant
Spare part number North America: 16948457
Spare part number, all other markets: 16943076

24. Brake cooling oil
Spare part number: 11116416

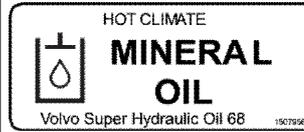


Figure 26

25. Synthetic ester
Spare part number: 11411924

Figure 27

25. Mineral oil for warm climate
Spare part number: 15079569

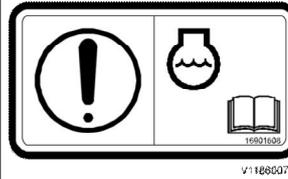


Figure 28

26. The air conditioning system is filled with R134a.
Spare part number: 1635465

Figure 29

27. WARNING! Only use Volvo coolant VCS – read the Operator's Manual
Spare part number North America: 16902967
Spare part number, all other markets: 16901608

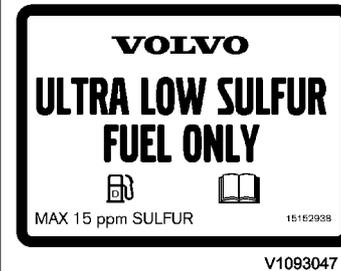
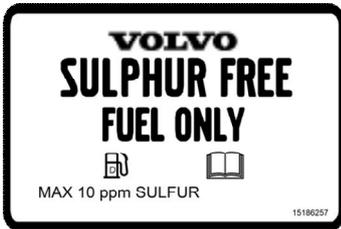


Figure 30

28. Fuel decal
Max. 10 ppm SULPHUR (only EU).
Spare part number: 15186257

Figure 31

29. Fuel decal
Max. 15 ppm SULPHUR (only North America).
Spare part number: 15152938



Figure 32

30. WARNING! The machine may not carry a heavier load

Figure 33

31. Do not step on this surface

than that which is stated on the decal (only on machines with body extensions for light materials).
Spare part number: 16929637, 16929636

Spare part number North America: 16929632
Spare part number China: 16925043
Spare part number, all other markets: 16901531



Figure 34

32. Hydraulic oil
Spare part number: 4948103

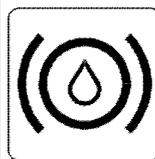


Figure 35

33. Brake cooling oil
Spare part number: 15042783

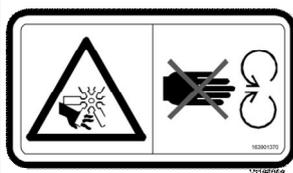


Figure 36

34. WARNING! Rotating parts
Spare part number North America: 16929622
Spare part number China: 16925041
Spare part number, all other markets: 16901370

A40G =39,000 kg (86,000 lb)			
Bridgestone 29.5 R25 VLT	350 kPa (51.0 psi)	450 kPa (65.0 psi)	
Bridgestone 29.5 R25 VLTS	350 kPa (51.0 psi)	450 kPa (65.0 psi)	
Goodyear 29.5 R25 TL-3A+	300 kPa (44.0 psi)	425 kPa (61.5 psi)	
Goodyear 29.5 R25 GP-4D	300 kPa (44.0 psi)	425 kPa (61.5 psi)	
Goodyear 875/65 R29 GP-4D	300 kPa (44.0 psi)	400 kPa (58.0 psi)	
Michelin 29.5 R25 XADN+	375 kPa (54.5 psi)	450 kPa (65.0 psi)	
Michelin 29.5 R25 XTRA DEF.	325 kPa (47.0 psi)	425 kPa (61.5 psi)	
Michelin 875/65 R29 XAD65-1	275 kPa (40.0 psi)	375 kPa (54.5 psi)	
Michelin 875/65 R29 XTRA DEF	250 kPa (36.5 psi)	325 kPa (47.0 psi)	
Yokohama 29.5 R25 RT41	350 kPa (51.0 psi)	425 kPa (61.5 psi)	
Trelleborg 29.5 R25 EMR 1030	325 kPa (47.0 psi)	450 kPa (65.0 psi)	

Figure 37

35. Tyre pressure
Spare part number A35G: 54656545
Spare part number A40G: 53036362
Spare part number A45G: 53036813



Figure 38

NOTE! Only North American market.
36. WARNING! High pressure in the brake system
Spare part number: 16929630



Figure 39

NOTE! Only North American market.
37. WARNING! Spring under high pressure
Spare part number: 4952177



Figure 40



Figure 41

NOTE! Only North American market.

Figure 40

NOTE! Only North American market.

38. Disconnect the steering joint lock before moving the machine

Spare part number: 16929628



Figure 42

NOTE! Only North American market.

40. Information compressed air system. Turn off the engine and depressurise the systems before checking and servicing.

Spare part number: 16929631

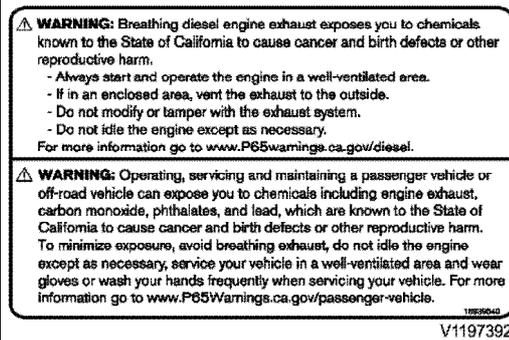


Figure 44

NOTE! Only North American market.

42. Information diesel exhausts

Spare part number: 16939540

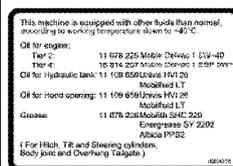


Figure 46

44. The machine is equipped with other fluids than normal for operating in temperatures down to -40 °C

Spare part number: 16814210

39. Do not use flammable gas in the air intake. Risk of fire.

Spare part number: 16929629



Figure 43

41. Apply the parking brake before leaving the operator's seat

Spare part number: 16929634

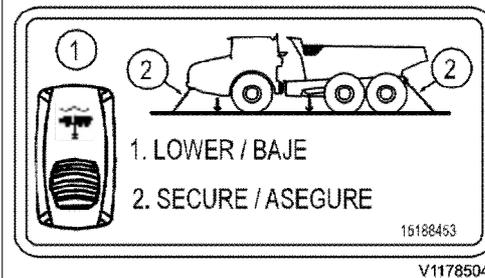


Figure 45

43. For all lashing in connection with transport of FS-machine, lower the machine to bottom position

Spare part number: 15188453

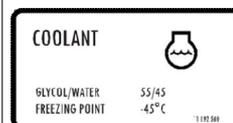


Figure 47

45. The machine has coolant with another mix ratio than normal for operating in temperatures down to -45 °C

Spare part number: 11192569

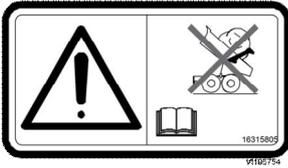
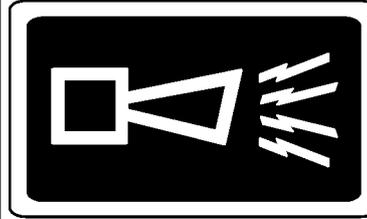


Figure 48

46. Overhung tailgate
 Spare part number North America: 16929635
 Spare part number China: 16315807
 Spare part number, all other markets: 16315805



V1082252

Figure 49

47. Strobe light and sound
 Fire Suppression System (optional equipment)
 Spare part number: 15126353

FIRE SUPPRESSION SYSTEM

The agent tank contains Forrex fire suppression liquid.
 Working temperature from -30°C to +99°C.
 The agent tank type SV-K is pressurised upon release only.
 Handle the tank with care. The tank should be inspected and recharged according to the maintenance instructions.
 The tank should be handled by authorised personnel only.

Typ / Type	Storlek (liter) / Size (litre)						Arbetsstryck / Working pressure
	5	10	12,5	15	20	25	
SV-K							20 bar

FILLING DATE CONTAINER YEARLY INSPECTION CONTAINER CE

REVISION DATE YEAR

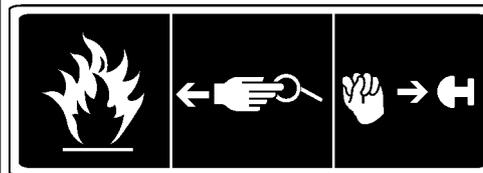
13	14	15	16	17	18
19	20	21	22	23	24

VOLVO 15149324

V1082254

Figure 50

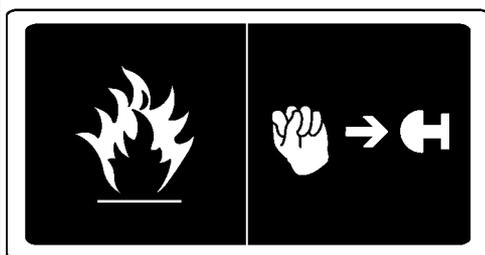
48. Extinguishing agent tank decal
 Fire Suppression System (optional equipment)
 Spare part number: 15149324



V1082251

Figure 51

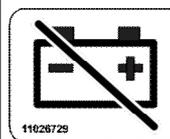
49. Manual activation
 Fire Suppression System (optional equipment)
 Spare part number: 15126559



V1082325

Figure 52

50. Inner activation button
 Fire Suppression System (optional equipment)
 Spare part number: 15126372



11026729

V1118495

Figure 53

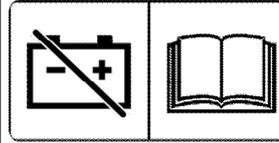
51. Battery disconnect
 Fire Suppression System (optional equipment)
 Spare part number: 11026729



V1082253

Figure 54

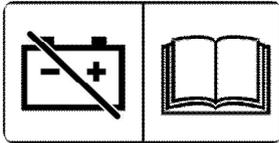
52. Handheld fire extinguisher
Fire Suppression System (optional equipment)
Spare part number: 15126327



V1151528

Figure 55

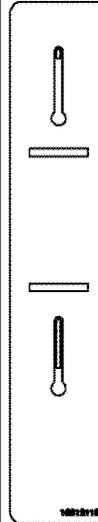
53. Emergency switch
Spare part number: 55281792



V1151528

Figure 56

54. Service switch
Spare part number: 16892452



V1171137

Figure 57

55. Brake cooling oil level
Spare part number: 16912118

Spare part number: 12833278

Document Title: Tightening torques	Function Group: 030	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

Tightening torques

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G 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 $\approx 10\%$, 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: Volvo standard tightening torques	Function Group: 030	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

Volvo standard tightening torques

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G 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 $\approx 10\%$, 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: Weights	Function Group: 030	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

Weights

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G Volvo			

	kg (approx.)	lb.
Operating weight [T1] ⓘ	30080	66315
Engine, complete	1650	3638
Engine and transmission, complete	2410	5313
Transmission	468	1032
Dropbox	363	800
Front axle	1558	3435
Front bogie axle	1639	3613
Rear bogie axle	1533	3380

[T1] If the machine is equipped with body extensions for light materials, operating weight increases by 2420 kg (5335 lb).

Document Title: Tyre equipment and recommended tyre pressures	Function Group: 030	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

Tyre equipment and recommended tyre pressures

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G Volvo			

If tyres other than those specified are used, contact the tyre manufacturer's dealer for information about correct rolling circumference and air pressure.

NOTE!

Avoid mixing tyres with different circumferences and type designations on the same axle. This may lead to unnecessary wear on the drive train and also other properties of the machine.

NOTE!

Remember that changing to another type of tyre requires changes in the machine's software via the authorised service tool.

NOTE!

Only applies to machines without Full Suspension (FS): For machines with load weighing (optional equipment), inspection of the equipment should take place in connection with changing wheels. Inspection of the cable and its attachment points as well as load cell must take place.

Air pressure in tyres at 41 000 kg (90 000 lb) payload [T1] ⓘ			
Tyre equipment	Front kPa (psi)	Rear kPa (psi)	Parameter value for speedometer (QM). mm (in)
Bridgestone 29.5 R25 VLT	350 (51.0)	450 (65.0)	5700 (224)
Bridgestone 29.5 R25 VLTS	350 (51.0)	450 (65.0)	5700 (224)
Goodyear 29.5 R25 TL-3A+	300 (44.0)	425 (61.5)	5700 (224)
Goodyear 29.5 R25 GP-4D	300 (44.0)	425 (61.5)	5700 (224)
Goodyear 875/65 R29 GP-4D	300 (44.0)	400 (58.0)	5700 (224)
Michelin 29.5 R25 XADN+	375 (54.5)	450 (65.0)	5700 (224)
Michelin 29.5 R25 XTRA DEF.	325 (47.0)	425 (61.5)	5700 (224)
Michelin 29.5 R25 X-SUPER TERRAIN+	375 (54.5)	450 (65.0)	5700 (224)
Michelin 875/65 R29 XTRA DEF.	250 (36.5)	325 (47.0)	5700 (224)
Michelin 875/65 R29 XAD65-1	275 (40.0)	375 (54.5)	5700 (224)
Yokohama 29.5 R25 RT41	350 (51.0)	425 (61.5)	5700 (224)
Trelleborg 29.5 R25 EMR 1030	325 (47.0)	450 (65.0)	5700 (224)

[T1] Specified payload is maximum load for a standard machine, also for individual occasions. Conversion of the machine or fitting optional equipment may require other tyre pressures. If this is the case then approval for use and recommended tyre pressure for the changed conditions are obtained from the tyre supplier.

Maximum permitted difference in rolling circumference

If a situation should nevertheless arise where different types of tyre must be used, there are rules for how much difference in

rolling circumference is permitted.

Different values apply, depending on where on the machine the tyre is fitted.

Different cases	Maximum permitted difference in rolling circumference
1	2% Tyres with greatest rolling circumference must be fitted on the front axle
2	1,5%
3	1,5%

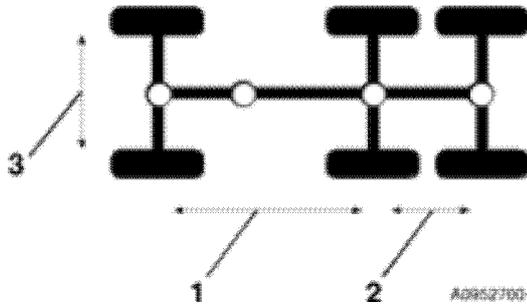


Figure 1

Example of calculation of difference in rolling circumference

Conditions

Case 3 – tyres on the same axle

Rolling circumference according to the tyre supplier:

Goodyear 875/65 R29 GP-4D — 5666 mm

Goodyear 29.5 R25 GP-4D — 5637 mm

Calculation: $5666/5637 \approx 1.005$

Answer: 0.5%

Conclusion: Maximum permitted difference is 1.5% and the calculation result is 0.5%, which means that mixing these tyres is approved.

Document Title: Operation numbers for additional work	Function Group: 070	Information Type: Service Information	Date: 4/11/2025
Profile: Articulated Haulers (ART)			

Operation numbers for additional work

Showing Selected Profile

These operations can be used to identify work that is not included in the time guide or described in the methods in the Service Manual. When these operations are used, a description of the work that has been performed must be provided.

Other work related to engine

Op. no. 070-210

This operation can be used when work has been done related to the engine and function group 2 when no applicable method description was available. When this operation is used, additional information is required:

- Description of work that has been done

Other work related to electrical system

Op. no. 070-310

This operation can be used when work has been done related to the electrical system and function group 3 when no applicable method description was available. When this operation is used, additional information is required:

- Description of work that has been done

Other work related to transmission, gearbox, travel motor, swing motor

Op. no. 070-410

This operation can be used when work has been done related to the transmission, gearbox, travel motor or swing motor and function group 4 when no applicable method description was available. When this operation is used, additional information is required:

- Description of work that has been done

Other work related to drive axle

Op. no. 070-470

This operation can be used when work has been done related to the drive axle and function group 46 when no applicable method description was available. When this operation is used, additional information is required:

- Description of required work that have been done

Other work related to brake system

Op. no. 070-510

This operation can be used when work has been done related to the brake system and function group 5 when no applicable

method description was available. When this operation is used, additional information is required:

- Description of work that has been done

Other work related to steering system

Op. no. 070-610

This operation can be used when work has been done related to the steering system and function group 6 when no applicable method description was available. When this operation is used, additional information is required:

- Description of work that has been done

Other work related to frame link, axle suspension

Op. no. 070-710

This operation can be used when work has been done related to the frame link, axle suspension and other parts related to function group 7 when no applicable method description was available. When this operation is used, additional information is required:

- Description of work that has been done

Other work related to cab, air conditioning

Op. no. 070-810

This operation can be used when work has been done related to the cab, air conditioning and other parts related to function group 8 when no applicable method description was available. When this operation is used, additional information is required:

- Description of work that has been done

Other work related to hydraulic system

Op. no. 070-910

This operation can be used when work has been done related to the hydraulic system and other parts related to function group 9 when no applicable method description was available. When this operation is used, additional information is required:

- Description of work that has been done

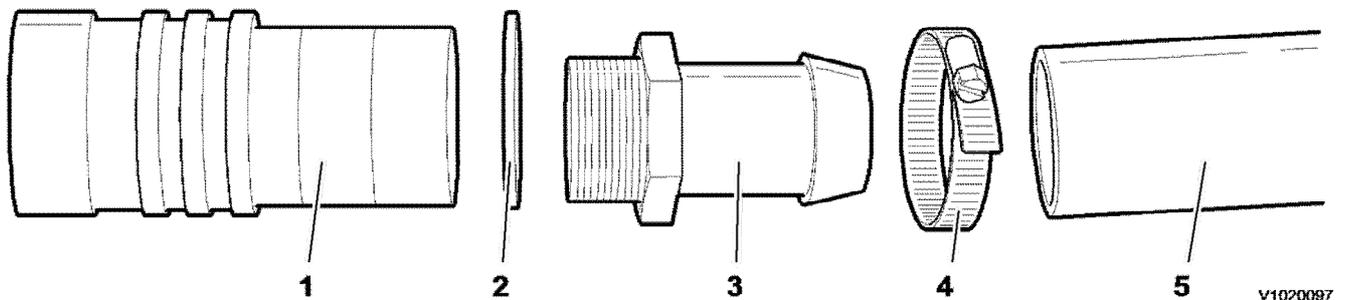
Document Title: E-1763	Function Group: 080	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

E-1763

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G Volvo			

E1763, Drain hose



V1020097

Figure 1

E1763

1. 4880194 Quick coupler
2. 948883 Seal ring
3. 4786606 Nipple
4. 13943472 Hose clip
5. 13946652 Hose

NOTE!

All included parts can be ordered as spare part from Volvo CE.

Document Title: E-2005	Function Group: 080	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

E-2005

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G Volvo			

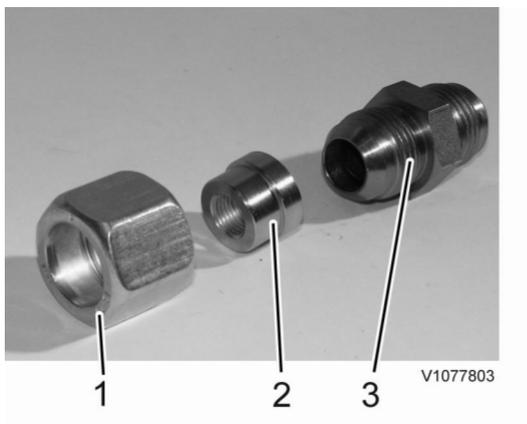


Figure 1

E-tool 2005

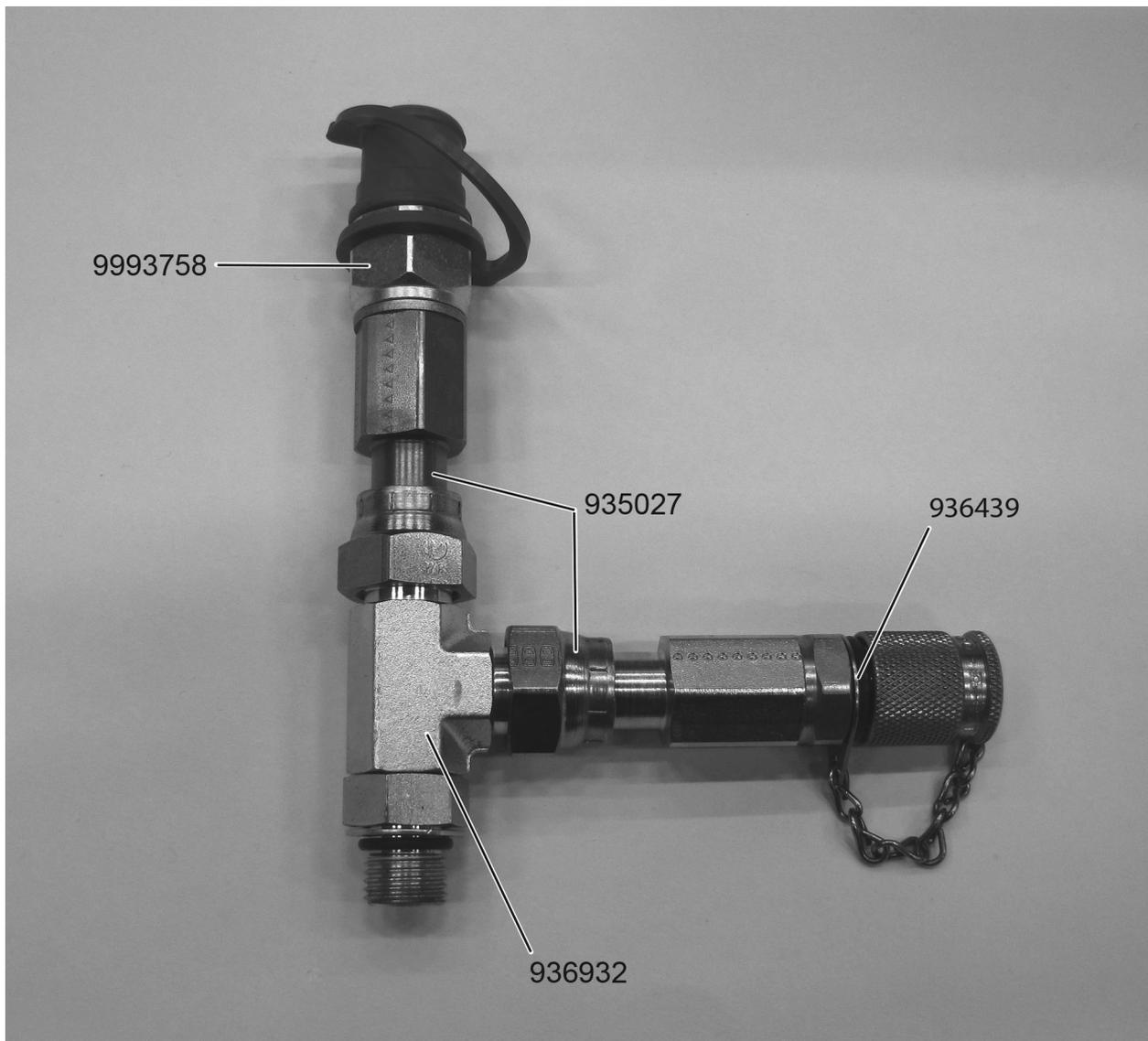
1. Coupling nut 931206
2. Test nipple 11054368 Thread R1/4"
3. Nipple 929315

Document Title: E-2014	Function Group: 080	Information Type: Service Information	Date: 4/11/2025
Profile: A45G Volvo			

E-2014

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
A45G Volvo			



V1138633

Figure 1

Sample of manual. Download All 4546 pages at:
<https://www.arespairmanual.com/downloads/volvo-a45g-articulated-haulers-service-manual/>