

Section 5 Brakes

Group 51 Wheel brakes

Brake fluid

Quality DOT 4+

Master cylinder Type, tandem	-1990	1991- without ABS	1991 - with ABS
Primary cylinder, diameter mm	22.30	23.81	22.20
Slave cylinder, diameter mm	15.75	16.84	19.05

Servo cylinder	
Type	Ratio
DBA 2x8"	1 : 4
DBA 9"	1 : 3.5
DBA 10"	1 : 3.5
Girling 2x8"	1 : 3.5
Girling 10"	1 : 3.5

Front wheel brakes	Solid	Ventilated			
		ATE	Girling-78	Girling 79-	
Brake disc					
outer diameter	mm	263.0	263.0	263.0	263.0
thickness, new	mm	14.3	24.0	22.0	22.0
replace at min.	mm	12.7	22.8	20.8	20.4
max runout	mm	0.04	0.05	0.05	0.04
max thickness deviation	mm	0.015	0.02	0.02	0.01
Brake linings					
thickness, new	mm	10.0	10.0	10.0	11.0
min.	mm	1.5	1.5	1.5	3.0
effective area, Girling	cm ²	166	166	166	166
ATE	cm ²	145	145	145	145
designation		DB 861	DB 861	DB 861	DB 861
Wheel cylinders					
number per wheel	pcs.	4			
area, Girling 1975	cm ²	10.25			
1976	cm ²	11.34			
ATE	cm ²	10.17			

Rear wheel brakes

Brake disc	
outer diameter	mm 281.0
thickness, new	mm 9.6
replace at min.	mm 8.4
max. runout	mm 0.05
max. thickness deviation	mm 0.012
Brake linings	
thickness, new	mm 8.4
min.	mm 3.0
effective area	cm ² 100
designation	DB 862
Wheel cylinders	
number per wheel	pcs. 2
area, Girling	cm ² 11.43
ATE	cm ² 11.33

Reduction valve	
242,244 1975	3.0
245 1975	4.5
242/244 1976-	3.4
245 1976	4.5
264 1976, 262/264 1977-	2.5
265 1976, 242/244/265 1977-	3.4
245 1977-	5.0
245 Turbo 1982	3.4

Group 55 Parking brake

Parking brake

Brake drum, diameter	mm	160.45
radial run-out, max	mm	0.15
out-of-round	mm	0.2
Brake linings, effective area	mm	176.0
Full braking effect at	notches	3 - 7

Tightening torque

	Nm
Attachment bolts, front brake calipers	100
rear brake calipers	58
tie bolt	50
shield, front	24
shield, rear	40
brake caliper, slide pin	34
Wheel nuts	115
Attachment nuts, master cylinder	30
Bleeder nipples, front	5
rear	4.5
Brake pipe, nipples	14
nuts	20
Brake hoses to nipple	20
Reduction valve	20
Hose to reduction valve	20

Group 59 Anti-lock brakes (ABS)

Hydraulic unit Volvo P/N 35 30 316-3
Control module Volvo P/N 35 23 142-2

Transient protector 13 63 569-3

Sensors

front Volvo P/N 35 40 601-6
rear Volvo P/N 13 98 321-8
resistance, front Ω 1120 \pm 10%
 rear, Bosch Ω 885 \pm 10%
 rear, VDO Ω 1350 \pm 150
tightening torque Nm(ft. lbs) 8 - 12 (6 - 9)

Pulse wheel

front, - Oct. 1992 Volvo P/N 13 87 839-2
 Oct. 1992- Volvo P/N 35 30 983-0
rear, - Oct. 1992 Volvo P/N 35 02 561-8
 Oct. 1992- Volvo P/N 68 14 806-3