

Section 5 Brakes

Group 51 Wheel brakes

Brake fluid		
Quality	DOT 4+	
Front wheel brakes		
Brake disc (ventilated),type	I	II
outer diameter.....mm	287	280
thickness, new	22.0	26.0
replace at min.	20.0	23.0
max. runout.....mm	0.035	0.035
max. thickness variation.....mm	0.008	0.008
Brake linings		
thickness, new	11.0	12.0
min.	3.0	3.0
Rear wheel brakes		
Brake disc (solid)type	I *	II **
outer diameter.....mm	281	265
thickness, new	9.6	10.0
replace at min	8.4	8.0
max. runout.....mm	0.05	0.04
max. thickness variation.....mm	0.012	0.008
Brake linings		
thickness, new	10.0	8.0
min.	2.0	2.0
* Live rear axle		
** Multi link rear axle		
Master cylinder	91	92-
Type, tandem, with ABS		
Primary cylinder, diameter	22.20	23.81
Secondary cylinder, diameter	19.05	20.64
Type, tandem, without ABS		
Primary cylinder, diameter	23.81	23.81
Secondary cylinder, diameter	16.84	20.64

Reduction valve	type	2	3
Begins reducing at	MPa	3.5	2.5
Type 2 : 5 - door with 4 cyl. engines			
Type 3 : Others			
Servo cylinder			
Type , DBA,	inches	2	3
Ratio		1x10	2x8
		1:4.0	1:4.0
Type 2 : B 6304, 16 valve engines without turbo, LHD			
Type 3 : Others			

Group 55 Parking brake

Parking brake

Brake drum, radial runout, max.	mm	0.15
out-of-round, max.	mm	0.20
Full braking effect		
after adjusting at	notches	4 - 8
when checking, max.	notches	11

Tightening torques

	Nm	ft. lb
Fasteners, front brake calipers	100	74
rear brake calipers	60	44
tie bolt	50	37
shield, front	25	18
shield, rear	25	18
brake caliper, slide pin	30	22
Wheel nuts	85	63
Attachment nuts, master cylinder	30	22
Bleeder nipples, front	10	7
rear	4.5	3.3
Brake pipe, unions	14	10
Brake hoses to nipple	18	13
Nipple to caliper	18	13

Group 59 Anti-lock brakes (ABS)

Hydraulic unit, -91Volvo P/N 35 30 316-3

92-Volvo P/N 35 30 871-7

Control moduleVolvo P/N 35 23 142-2

Volvo P/N 91 30 197-8

Transient protectorVolvo P/N 13 63 569-3

Sensors

front.....Volvo P/N 35 15 092-9

rear.....Volvo P/N 35 15 093-7

resistance, front Ω 900 - 2200

rear Ω 600 - 1600

tightening torque.....Nm(ft lb) 8 - 12 (6 - 9)

Tooth wheel

front.....Volvo P/N 13 87 839-2

rear.....Volvo P/N 68 14 113-4