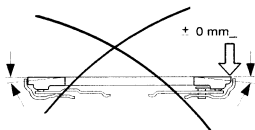
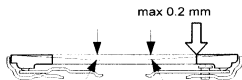


Section 4 Power transmission

Group 41 Clutch

Engine type	B 5204 T2	B 5204 T3 B 5234 T3 B 5254 T
Pressure plate		
diameter mm	230	241
maximum distortion (see illustration below) ... mm	0.2	
Clutch driven plate		
diameter mm	228 ± 1.0	240
thickness loaded, new mm	7.25 ± 0.3	8.4
Clutch pedal, travel mm	130	130
Throwout fork, travel mm	17 - 22	
CSC, travel mm	8.5	8.5



Tightening torques	Nm
Pressure plate - flywheel	25
Mounting screws, master cylinder	25

Group 43 Transmission

Manual

Type	M 56 L2	M 56 H
Gear ratios:		
1st gear	3.38 : 1	3.07 : 1
2nd gear	1.90 : 1	1.77 : 1
3rd gear	1.19 : 1	1.19 : 1
4th gear	0.87 : 1	0.87 : 1
5th gear	0.65 : 1	0.70 : 1
Back-up (reverse) gear	3.30 : 1	2.99 : 1
Final drive	4.25 : 1	4.00 : 1

Lubricating oil		
Type: synthetic		5W/30
..... Volvo P/N (1 lit)		11 61 423
Oil capacity:	Liters	2.1
Tightening torques		Nm
Screws for		
transmission housing-clutch cover		25
starter motor-transmission		40
clutch cover-cylinder block		50
guide sleeve, throwout bearing		10
bracket, gear selector		25
reverse gear detent holder		25
inductive sensor (ABS sensor)		10
input shaft		50
ring gear, stage 1		30
stage 2	angle	90°
gear selector assembly		25
switch		25

wire grommet, firewall	6
engine mountings	50
Plug for draining/checking level	35

Automatic transmission AW 50-42

Gear ratios:		
1st gear		3.61:1
2nd gear		2.06:1
3rd gear		1.37:1
4th gear		0.98:1
Back-up (reverse) gear		3.95:1
Final drive (alternative version)		2.56:1 2.76:1
Line pressure		
position D, idling speed	MPa	0.4
stalling speed	MPa	1.2
position R, idling speed	MPa	0.6
stalling speed	MPa	1.8
Lubricant		
oil capacity	liter	7.60
difference between MAX-MIN	liter	0.5
quality, see Section 1 Service and maintenance		

Motor	Year-model	Final drive	Transmission P/N	TCM P/N	Torque converter			Normal stalling speed r/s (r/min)
					K factor	Diameter mm	Final drive ratio.	
B 5204 T2	97	2.76:1	12 08 898	94 42 861	206	241	1.9:1	46 (2800)
B 5204 T3	97	2.56:1	12 08 901	94 42 308				48 (2900)
B 5234 T3	98-	2.56:1	12 08 865	94 42 307	206	241	1.9:1	48 (2900)
B 5254 T	98	2.56:1	12 08 897	94 42 107	206	241	1.9:1	48 (2900)

Gear shifting speeds

(Gear selector in position D.)

Mode selector position: E = Economy;
S = Sport; W = Winter

En-gine	ECM	*	Throttle angle	Gear shifting speed					
				1-2	2-3	3-4	4-3	3-2	2-1
B 5204 T2	94 42 861	E	100% / KD 22% / 60%	57/60 23/49	109/120 43/87	117/180 60/132	130/175 42/65	85/110 30/40	38/53 10/15
		S	100% / KD 22% / 60%	60/60 23/49	120/120 43/87	180/180 60/132	175/175 51/80	110/110 33/52	53/53 10/15
		W	100% / KD 22% / 60%	-/60 -/-	-/120 -/-	95/180 68/75	70/175 55/61	-/110 -/-	-/53 -/-
B 5204 T3	94 42 308	E	100% / KD 22% / 60%	61/61 19/49	118/118 37/92	180/180 57/160	120/170 42/58	76/111 26/36	36/49 15/15
		S	100% / KD 22% / 60%	61/61 19/49	118/118 37/92	180/180 56/135	170/170 42/68	111/111 26/47	49/49 15/31
		W	100% / KD 22% / 60%	-/61 -/-	-/118 -/-	92/180 80/82	65/170 55/60	-/111 -/-	-/49 -/-
B 5234 T3	94 42 307	E	100% / KD 20% / 60%	62/62 19/51	118/118 37/92	180/180 58/143	120/170 42/58	76/111 26/36	36/49 15/15
		S	100% / KD 20% / 60%	62/62 19/51	118/118 37/92	180/180 58/143	170/170 42/68	111/111 26/47	49/49 15/31
		W	100% / KD 20% / 60%	-/62 -/-	-/118 -/-	92/180 80/82	65/170 55/60	-/111 -/-	-/49 -/-
B 5254 T	94 42 107	E	100% / KD 20% / 65%	60/60 23/58	118/188 43/111	180/180 65/170	130/170 44/85	76/111 30/49	36/49 12/23
		S	100% / KD 20% / 65%	60/60 23/58	118/118 43/111	180/180 65/170	147/170 44/100	98/111 30/75	36/49 12/33
		W	100% / KD 20% / 65%	-/60 -/-	-/118 -/-	92/180 80/85	65/170 58/62	-/111 -/-	-/49 -/-

Mechanical locking (LOCK-UP), km/hGear selector lever in position **D**. Tolerance $\pm 10\%$ Mode selector position: **E** = Economy;
S = Sport; **W** = Winter

Engine	ECM	*	Throttle angle	Vehicle speed					
				2 IN	2 OUT	3 IN	3 OUT	4 IN	4 OUT
B 5204 T2	94 42 861	E	100% / KD 22% / 60%	-/- -/-	-/- -/-	125/135 -/-	112/116 -/114	177/180 70/132	130/175 63/79
		S	100% / KD 22% / 60%	-/- -/-	-/- -/-	136/136 -/136	125/125 -/125	180/180 78/132	175/175 63/98
		W	100% / KD 22% / 60%	-/60 -/-	-/53 -/-	65/120 -/55	60/110 50/50	95/180 68/75	85/175 64/69
B 5204 T3	92 42 308	E	100% / KD 22% / 60%	-/- -/-	-/- -/-	118/118 -/-	93/93 -/-	150/150 80/35	140/140 75/92
		S	100% / KD 22% / 60%	-/- -/-	-/- -/-	118/118 -/-	93/93 -/-	180/180 80/135	140/140 75/92
		W	100% / KD 22% / 60%	-/61 -/-	-/49 -/-	-/118 -/-	-/111 -/-	92/180 80/82	75/170 75/75
B 5234 T3	94 42 307	E	100% / KD 20% / 60%	-/- -/-	-/- -/-	118/118 -/-	93/93 -/-	150/150 80/135	140/140 75/80
		S	100% / KD 20% / 60%	-/- -/-	-/- -/-	118/118 -/-	111/111 -/-	180/180 80/135	170/170 75/92
		W	100% / KD 20% / 60%	-/62 -/-	-/49 -/-	-/118 -/-	-/111 -/-	92/180 80/82	75/170 75/75
B 5254 T	94 42 107	E	100% / KD 18% / 65%	-/- -/-	-/- -/-	-/- -/-	-/- -/-	200/233 110/193	175/175 75/175
		S	100% / KD 18% / 65%	-/- -/-	-/- -/-	-/- -/-	-/- -/-	200/223 110/193	175/175 75/175
		W	100% / KD 18% / 65%	-/- -/-	-/- -/-	-/- -/-	-/- -/-	200/233 110/193	175/175 75/175

Components

Control module	
Engine	Volvo number
B 5204 T2	94 42 861
B 5204 T3	94 42 308

Control module	
Engine	Volvo number
B 5234 T3	94 42 307
B 5254 T	94 42 107

Gear-shift position sensor	
Volvo number	35 15 264
Aisin Warner number	50 40 320 002 J
Mode selector	
Volvo number	68 49 844
Solenoids:	
Shift solenoid 1 (S1) and 2 (S2)	
Volvo number	68 43 783
Aisin Warner number	50 40 310 002 N-A
Resistance	Ω 10 - 15
Lock-Up solenoid (SL)	
Volvo number	68 43 784
Aisin Warner number	50 40 313 001 L-D
Resistance	Ω 10 - 15
Line pressure solenoid (STH)	
Volvo number	*
Aisin Warner number	50 40 315 001 Z
Resistance	Ω 2 - 6
Engine speed (RPM) sensor	
Volvo number	35 15 266
Aisin Warner number	50 40 330 003 B
Resistance	Ω 300 - 600
Oil temperature sensor	
Volvo number	35 15 267
Aisin Warner number	50 40 352 002 J
Resistance at	
+150°C	Ω 23 - 31
0°C	Ω 1700 - 2300

) Not available as separate replacement part. Calibrated together with control system.

Tightening torques	Dim.	Nm
Torque converter - engine	M 10	48
Drive plate - torque converter	M 8	28
Transmission - oil filler pipe, bracket	M 8	24
Transmission - transmission cable bracket	M 8	25
Manual shaft - lever for gear shift cables	M 8	16
Nipple for coolant pipe	M 14	30
Plug, oil drainage	M 18	40