# Specifications

# Engine

## Valve clearance

Engine			Cold engine (mm)	hot engine (mm)
B 200-230	adjustment* inspection*		0.40 0.30-0.40	0.45 0.35-0.45
B 280	adjustment and inspection	inlet exhaust	0.10-0.15 0.25-0.30	0.15-0.20 0.30-0.35
D 24, D 24 T/TIC	adjustment and inspection	inlet exhaust	0.20 0.40	0.25 0.45
B 16, B 18, B 20, D 19 T	adjustment	inlet exhaust	0.20-0.25 0.40-0.45 B 18 FT: 0.50-0.55	
	inspection	inlet exhaust	0.15-0.25 0.35-0.45 B 18 FT: 0.45-0.55	
B 204/234, D 24 TIC EGR, B 5202/5252, B 5204/5234/5254 B 6254/6304	Hydraulic tappets, cannot be adjusted			

Same clearance for inlet and exhaust valves

#### Belt tension - camshaft belts

Engine type	Inspection	Adjustment	Tools		
B 16/18/20, D 19 T		7.5	999 <b>5506</b> and 999 <b>5434</b>		
D 24, D 24 T/TIC/TIC EGR		12.5	999 <b>5197</b>		
B 200/230	Manual adjustment of belts (no adjustment value)				
B 280	Camshaft chain (no adjustment value)				
B 204/234	3.5 - 4.5	Automatic belt tensioning	998 <b>8500</b>		
B 5252/5254 (21 mm belt)	3.5 - 4.6				
B 5252 (23 mm belt)	2.7 - 4.2				
B 5204/5234/5254 (23 mm belt)	2.5 - 4.0				
B 6304 (21 mm belt)	3.5 - 4.6				
B 6304 (23 mm belt)	3.0 - 4.0				
B 6254/6304 (28 mm belt)	2.5 - 3.5				

## Belt tension, balancer shaft belt

Engine type	Adjustment cold engine	Adjustment hot engine	Tools
B 204/234	3.8 ± 0.2	4.9 ± 0.2	999 <b>8500</b>

## Belt tension, pump belt

Engine type	Adjustment	ΤοοΙ
D 24	12.5	999 <b>5197</b>

## Belt tension - auxiliary unit belts - 400

Engine type	Inspection*	Adjustment	Adjustment
	min. value	"run-in" belt	new belt
B 16, B 18, B 20, D 19 T (	B-track belt) Tool 115 9660		
	20 kg	30-35 kg	45-50 kg
	<u>_</u>		
B 16, B 18, B 20, D 19 T (6	6-track belt) Tool 5434/5436		
<b>B 16, B 18, B 20, D 19 T (6</b> Basic variant	<u>_</u>	4 mm	3-4 mm
	6-track belt) Tool 5434/5436	1¥	

\* If belt tension drops below nominal value, tension should be set at the adjustment value for "run-in" belt. Other engines require no readjustment of belt tension.

# Fuel system

## CO-idle 240 (petrol)

Engine variant	CO-cont	CO-content in %		
	Adjustment value	inspection value	r/s (rpm)	
B 200 E	1.0	0.5-2.0	15.0 (900)	
B 200 F <sup>1)</sup>	cannot be adjusted	0.4-0.8	12.9 (775)	
B 230 E	1.0	0.5-2.0	15.0 (900)	
B 230 F <sup>1)</sup>	cannot be adjusted	0.4-0.8	12.9 (775)	
B 230 FX <sup>1)</sup>	cannot be adjusted	0.4-0.8	12.9 (775)	
B 230 FD <sup>1)</sup>	cannot be adjusted	0.4-0.8	12.9 (775)	

1) Lambda-sond connected. Measured upstream of catalytic converter.

## Injection timing and idle speed 240 (diesel)

Engine variant	Injection timing (BTDC)		Idle speed r/s (rpm)	
	Adjustment value Inspection value		Low	High
D 24	0.80	0.77-0.85	12.5 (750)	90 (5400)

#### CO-idle 400

Engine variant	CO-cont	Idle speed <sup>3)</sup>	
	Adjustment value	Inspection value	r/s (rpm)
B 18 U, B 20 F	cannot be adjusted	0.4-1.2	Cannot be adjusted
B 16 F, B 18 FP <sup>1)</sup>	cannot be adjusted	0.4-1.2	15.0 (900)
B 18 FT/FTM <sup>1)</sup>	0.7	0.4-1.0	13.3 (800)
В 18 К <sup>2)</sup> /КР	1.5	0.5-2.5	14.2 (850) <sup>4)</sup>
B 18 EP	1.2	1.0-1.4	14.2 (850)
B 18 EP, EVAP	1.2	0.8-3.0	14.2 (850)
B 18 U(M)	1.5	1.0-1.5	Cannot be adjusted
B 20 F(M)	1.5	0.5-1.5	Cannot be adjusted

1) F/FP/FT-engines: Measurement of CO-content upstream of catalytic converter. Use tool 5230.

AC if fitted is switched off.

2) B 18 K: Inspection must be carried out within 3 minutes after coolant thermostat has opened.

3) Engine cooling fan may not be connected.

4) B 18 K with air conditioning (A/C): 15.8 (950).

## Injection timing and idle speed 400 (diesel)

Engine variant	Injection timing (BTDC)		Idling speed r/s (rpm)	
	Adjustment value Inspection value		Low	High
D 19 T	Injection pump data		13.7±0.5 (825±25)	70.8±1.7 (4250±100)

Engine variant	CO-cont	ent in %	Idle speed
	Adjustment value	Inspection value	r/s (rpm)
B 200 E	1.0	0.5–2.0	15.0 (900)
B 200 F <sup>1)</sup>	cannot be adjusted	0.4–0.8	12.9 (775)
B 200 G	1.0	0.5–2.0	12.9 (775)
B 204 E	0.8	0.6–1.0	15.0 (900)
B 204 FT <sup>1)</sup>	cannot be adjusted	0.4–0.8	13.3 (800)
B 230 E	1.0	0.5–2.0	15.0 (900)
B 230 F <sup>1)</sup>	cannot be adjusted	0.4–0.8	12.9 (775)
B 230 FB <sup>1)</sup>	cannot be adjusted	0.4–0.8	12.9 (775)
B 230 FD <sup>1)</sup>	cannot be adjusted	0.4–0.8	12.9 (775)
B 230 G	1.0	0.5–2.0	15.0 (900)
B 230 GT	1.0	0.5–2.0	12.5 (750)
B 230 FT <sup>1)</sup>	cannot be adjusted	0.4–0.8	12.5 (750)
B 234 F <sup>1)</sup>	cannot be adjusted	0.4–0.8	14.2 (850)
B 234 G	0.8	0.5–1.1	14.2 (850)
B 280 E	1.0	0.5–2.0	12.5 (750)
B 280 F <sup>1)</sup>	0.6	0.2–1.0	12.5 (750)
B 6254 F	Cannot be adjusted	0.4-0.8	12.5 (750)
B 6254 G	1.0	0.5-2.0	12.5 (750)
B 6304 F <sup>1)</sup>	cannot be adjusted	0.4–0.8	12.5 (750)
B 6304 G	1.0	0.5–2.0	12.5 (750)

#### CO-idle 700/940/960

1) Lambda-sond connected. Measurement of CO content upstream of catalytic converter

## Injection timing and idle speed 700/940/960 (diesel)

Engine variant	Injection t	Injection timing mm		d r/s (rpm)
	Adjustment value	Inspection value	Low	High
D 24	0.70	0.65-0.73	12.5 (750)	90 (5400)
D 24 T Austria	0.75	0.72-0.80	13.8 (830)	90 (5400)
D 24 TIC	0.90	0.87-0.95	13.8 (830)	90 (5400)
D 24 TIC (EGR)	0.95	0.92-1.00	13.8 (830)	90 (5400)

## CO idle 850

Engine variant	CO cont	CO content in %		speed rpm)
	Adjustment value	Inspection value	-1993	1994–
B 5202/5252 F	cannot be adjusted	0.2–1.0	13.3 (800)*	14.2 (850)*
B 5204/5254 F	cannot be adjusted	0.2–1.0	13.3 (800)*	14.2 (850)*
B 5204/5234 T	cannot be adjusted	0.2–1.0	14.2 (850)*	14.2 (850)*
B 5234 S	cannot be adjusted	0.2–1.0	13.3 (800)*	14.2 (850)*

\* Idle speed cannot be adjusted. Idle speed with activated radiator fan: 1992: 13.7 r/s (825 rpm)

1993: 13.3 r/s (800 rpm))

1994–: 14.2 r/s (850 rpm)

## Lubricating system

## Oil, quality designations

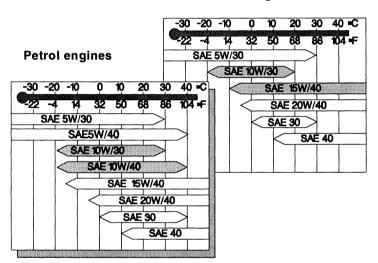
Engine type	API-Service	ССМС	Volvo P/N
Petrol turbo engines		Min. class G5	13 81 060-1 (3.85 l)
Other petrol engines	Min. class SG <sup>1)</sup>	Min. class G4	13 81 145-0 (3.85 l)
Diesel engines	Min. class CD <sup>2)</sup>	Min. class D2	13 43 306-5 (1 I)

1) Oils with designation SG/CD meet this requirement.

2) Oils with designations SF/CD and SG/CD meet this requirement.

## Viscosity

Temperature range refers to steady air temperature.



#### **Diesel engines**

Note! SAE 15W/40 or SAE 20W/40 engine oils are recommended for use in extreme driving conditions which involve high engine oil consumption eg driving in mountainous regions with frequent engine braking or fast motorway driving. Note however the lower temperature limits.

Oil capacity, incl. oil filter

2	00/700/900/800	400									
Engine	litres (I)	Model year	Engine	Litres (I)							
B 200/230	3.85	-1992	All	5.3							
B 204/234	4.00	1993	All*	5.0							
B 5202/5252	5.30	1994–	B 16, B 18	4.6							
B 5204/5234/5254	5.30		B 20	5.7							
B 280	6.00		D 19 T	5.0							
B 6254/6304	5.75	* Chassis no.	401000– (440/460) ar	nd 585000– (480): 4.6 l.							
D 24	6.00	1									

# Electrical system

## Spark plugs

Engine variant	Kit number
B 18 E(S), B 18 FT (M) B 20 F	33 44 899-4
B 16 F, B 18 (others)	33 44 473-8
B 200/230 E/G	270 747-9
B 204 E	270 747-9
B 204 FT	270 747-9
B 234 F/G	270 747-9
B 200 F	270 746-1
B 230 FT/GT	270 746-1
B 230 F/FB/FD	270 746-1
B 280 E/F	273 599-1
B 5204	271 603-3
B 5202/5252, B 5254*	271 727-0
В 5204/5234 Т	271 766-8
B 6254/6304 F/G	271 636-3

\* For forced driving: Kit number 271 603-3

## Tightening torques, spark plugs, Nm (kpm)

B 16/18/20	.,
B 200/230	5)
B 204/23425 (2.5	5)
B 280	2)
B 5204/5254, B 5202/525225 (2.5	5)
B 5204/5234 T25 (2.5	5)
B 6254/630425 (2.5	5)

## Electrode gap

400	0.8-0.9 mm.
Others	0.7-0.8 mm

## Battery

Standing voltage	12.0 volt
Start voltage	9.5 volt
Electrolyte spec. gravity:	
Fully charged battery	1.28
Recharge at	1.21

Drivetrain

## Drivetrain

#### Clutch

### **Clutch fork stroke**

## Play at clutch fork

240 ......1 - 3 mm Note! On cars with rotating bearings (without return spring) the clutch fork is pushed backwards to check play. 740/940/960/850 have a hydraulic clutch.

#### Automatic transmission

240, 700, 900	AW 70/71/72ZF 4 HP 22
Oil change volume	approx. 6.0 litresapprox. 7.5 litres
Oil quality	Dexron II D/EDexron II D/E
400	ZF 4 HP 14 Q
Oil change volume	approx. 3.3 litres
Oil quality	Volvo oil, P/N 33 44 208-8
	СVТ
Oil change volume	approx. 3.8 litres

Oil quality.....Volvo oil, P/N 33 44 959-6

Note! No other oil types may be used!

## 850 (AW 50-42) (no oil change normally required\*)

Oil change volume incl. flush ...... approx. 6.5 I Oil quality ......Dexron II E and Ford Mercon or Dexron III and Ford Mercon (Must meet both specifications at the same time)

## 960 (AW 30-43) (no oil change normally required\*)

approx. 6.5 l
Dexron II E and Ford Mercon
or Dexron III and Ford Mercon
(Must meet both specifications at the same time)

\* Oil change every 75,000 km only for cars in continuous taxi traffic and cars used frequently for towing trailers.

#### Manual gearbox (no oil change required)

# 240, 700, 900 (M 45, M 46, M47) Oil quality\* ......ATF, type F or G. \* For cars driven in areas where outside temp. seldom drops below -10 °C or cars which are driven a lot (eg taxis) we recommend Volvo Thermo Oil, P/N 1 161 323-9. Note! Do not mix the different oil types! 940/960 (M90) Oil quality......Volvo P/N 11 61 423-7 400 (gearbox/final drive) Oil quality.....Volvo P/N 33 43 922-5. Note! No other oil types may be used! 850 (gearbox/final drive) Oil quality......Volvo P/N 11 61 423-7

#### Final drive (no oil change required)

Oil quality......API-GL-5 (MIL-L-2105 B or C) Rec. Volvo P/N 11 61 329-6 (0.5 litres).

#### **Power steering**

Oil quality.....ATF, type F or G.

# Wheels and tyres

Model	Inflation pre	essure (kPa)
	Front	Rear
240 4-d. Petrol	180	190
240 5-d. Petrol	190	210
240 4/5-d. Diesel without power steering	210	210
240 4-d. Diesel with power steering	190	190
240 5-d. Diesel with power steering	190	210
400	210	190
740/940/960 4-d.	190	190
740/940/960 5-d.	190	210
850	220	200
850 Turbo	230	210

Note! The table gives nominal values. Tyre inflation pressure depends on tyre type, car load and speed. Check the specifications.

Ball joint (axle shaft - link arm)

Permitted play with normally loaded front suspension:

axial.....max. 1 mm radial.....max. 0.5 mm

Maintenance service - 240

240	km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
240	Months	12	24	36	48	60	72	84	<b>9</b> 6	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Automatic gearbox lever - check shift lock	Check when driving into workshop	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A1
Parking brake - check/adjust	Check when driving into workshop	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	×	x	x	x	x	A2
External lighting - check	Check when driving into workshop	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A3
Wash/wipe on windscreen and headlamps - check/adjust		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Α4
Kickdown wire - check/adjust			x		x		x		x		x		x		x		x		x		×	A6
Crankcase ventilation - clean	Replace flame trap. Clean nipples and hoses.						x		x		x		x		x		x		x		x	A7
Engine - check for leakage	Check from above	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	<b>A</b> 8
Raise the car																		i				
Engine/transmission - check for leakage	Check from underneath. Check gearbox level only if there is a leak	x	x	×	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	×	B1
Drain engine oil and replace oil filter	<b>Diesel:</b> Oil change every 7,500 km (5,000 miles). Oil <b>and filter change</b> every 15,000 km (10,000 miles)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B2
Automatic gearbox - drain the oil					x				x				x				x				x	В3
<b>Clutch</b> - check/adjust			x		x		x		x		x		x		x		x		x		×	B4

240	km x 1000		30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
240	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Tyres	Check for damage and																					
- check	wear	х	х	x	х	x	х	x	x	x	x	x	x	х	x	x	x	x	x	x	x	B7
Brake linings*	Min. lining thickness:																					
- check	Front 3 mm, rear 2 mm	х	х	x	х	x	х	x	x	x	x	x	х	х	x	x	x	x	x	x	x	<b>B8</b>
Brake hoses																						
- check for leakage/damage					х	х	х	x	x	x	x	x	x	х	x	x	x	x	x	x	x	B9
Brake & fuel lines																						
- check for leakage/damage					х	х	х	x	x	x	x	x	x	х	х	x	x	x	x	x	x	B10
Fuel filter - petrol																						
- replace								x							x							B11
Fuel filter - diesel																						
- drain condensate	Note! Every 7,500 km																					B12
- replace	(5,000 miles)			х			х			x			x			x			x			B13
Final drive	Check level only in case of																					
- check for leakage	leakage	x	х	x	х	х	х	x	x	x	х	x	x	x	х	x	x	x	x	x	х	B14
Exhaust system	-																					
- check condition/																						
for leakage/anchorage		x	х	х	х	х	х	x	х	x	x	x	x	x	х	x	x	x	x	х	х	B15
Lift the front wheels	4 · · · · · · · · · · · · · · · ·																					-
Steering system/front wheel																						Τ
suspension				-																		
- check/tighten		x																				C1
- check for wear	Incl. check/adjustment of				х	х	х	x	x	x	х	x	x	x	х	x	x	х	x	х	х	C2
	wheel bearings and check																					
	of shock absorbers																					
Propeller shaft, support bearing																						
trunnion block																						
- check for wear					х	x	х	x	х	x	х	x	x	x	х	x	x	х	x	х	х	C3
Rear wheel suspension																						
- check/tighten		x																				C4
- check for wear	Incl. shock absorbers				х	х	х	x	х	x	х	x	x	x	х	x	x	x	x	х	х	C5
* Check disc brake thickness whe	en replacing brake linings! See	book	< 2.					-														

240	km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
240	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Corrosion protection/paintwork* - check			x		x		x		x		x		x		x		x		x		x	C6
Lower the car				1	·			1	1	1	r		I	1	r	1	1	I		1	1	
Air filter (Petrol engines) - replace	Diesel: every 30,000 km (20,000 miles)				x				x				x				×				x	D1
Spark plugs - replace	See spec. pg. 7. F-engines E/G-engines	x	x	x x	x	x	x x	x	x	x x	x	x	x x	x	x	x x	x	x	x x	x	x	D2 D2
Valves - check/adjust clearance				x				x				x				x				x		D3
Top up engine oil	See spec. pg. 6	х	x	x	x	x	x	x	x	x	x	x	x	x	x	×	x	x	×	x	x	D4
Automatic gearbox - top up oil					x				x				x				x				x	D5
Fluid levels - engine compartment - check/adjust	Engine cooling system, brake and power steering reservoirs and washer reservoir	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D6
Coolant	Anti-freeze rating/																					
- check/top up	Corrosion prot.	x	x	×	x	x	x	x	x	x	×	x	x	×	x	x	x	×	×	x	×	D6
Battery - check level/attachment		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D7
Distributor - lubricate	Only B 200-230 E		x		x		x		x		x		x		x		x		x		x	D8
Auxiliary drive belt - check/adjust			x		x		x		x		x		×		×		x		x		x	D9
* Markets with anti-corrosion w	varranty: Insp. of rust-proofing after	er 3 a	l nd 6 y	⊥ ∕ears,	see s	ervice	e bulle	l tin no	. <u>1 - 1</u>	8 - 6	.l	1	I	1	1			L			_i	

240	km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	T
240	Months	12	24	36	48	60	72	84	96	108	120	132	144	156			192	204				
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180		200	
<b>Camshaft belt</b> - replace - check/tighten	Petrol (15,000 km (10,000 miles) after belt replacement)	x				x	x				x	x				x	x				x	D11 D13
Camshaft belt, pump belt, idler roller replace	Diesel								x								x					D14
EGR system - clean	Only B 230 FD						x						x						x			D17
CO idle - check/adjust	Petrol Not F-engines	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D18
Doors, bonnet - lubricate hinges, bonnet lock	Lubricate also door stop, lock lugs and locks	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D19
Power antenna - clean Brake fluid	Rec. at every service Rec. to customer																					D21
- replace	every alternate year *																					

\* If the car is driven in mountainous areas or a moist climate, the brake fluid should be replaced every year.

Maintenance service - 400

400	Km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270		300	
400	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	<u> </u>
Automatic gearbox lever - check		x		x		x		x		x		x		x		x		x		x		A1
Parking brake - check/adjust		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	, x	x	x	x	x	A2
External lighting - check		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A3
Wash/wipe on windscreen and headlamp - check/adjust		×	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	×	x	A4
<b>Clutch</b> - check/adjust		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	<b>A</b> 5
Kickdown wire - check/adjust		×		x		x		x		x		x		x		x		x		x		A6
Crankcase ventilation - clean	D 19: Remove upper cover						x			x			x			x			x			A7
Engine/gearbox - check for leakage		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	<b>A</b> 8
Raise the car			·		<b>.</b>	T=				<del></del>	- <u>1</u>		1		· · · · · ·	1				т <u> </u>	T	
Engine/gearbox - check for leakage	Oil level transmission only if there is leakage	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Drain engine oil and replace oil filter	Diesel *	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B2
	* Extra oil change (not filter)	every	7,500	km (	5,000	miles	). Not	e! Fac	tory-	fitted	oil filt	er rep	laced	at 7,	500 ki	n (5,0	00 mi	les).			-1	
Automatic gearbox - drain the oil				x			x			x			x			x			x	<u> </u>		B3
Driveshafts - check clearance - check rubber gaiters		x	x	x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	B5 B6
<b>Tyres</b> - check		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B7

400	Km x 1000	15	30	45	60	75	90	105	120	135		165		195		+	240	255		285		
400	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Brake linings (discs)*	Min. thickness 2 mm																					
- check		х	x	x	x	х	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B8
Brake hoses - check for leakage/damage					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	<b>B</b> 9
Brake/fuel lines - check for leakage/damage	Incl. fuel filter				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B10
Fuel filter - petrol - replace								x							x							B11
Fuel filter - diesel - drain condensate	Note! Every 7,500 km (5,000 miles)																					B11
- replace		х	x	x	x	х	х	x	х	x	x	x	x	х	x	x	x	x	x	х	x	
Exhaust system	Check																					
- check	for leakage/anchorage				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B15
Lift the front wheels				I			L	I		I	l	1				I	I	l			L	I
Steering system/front wheel																						
suspension - check/tighten		х																				C1
- check for wear		~			x	x	x	x	x	x	x	x	x	х	x	x	x	x	x	x	x	C2
Lower the front wheels	L											1					1		1		L	
Rear wheel suspension																						
- check/tighten		х																				C4
- check for wear					x	х	х	x	х	x	x	x	x	х	х	x	x	x	x	х	x	C5
Corrosion	,																					
protection/paintwork**			х		x		х		x		x		x		x		x		x		x	C6
- check											1											
Lower the car halfway																[			1			T
Brake linings (drums) - check	Min. thickness 1 mm																					C7
					X		х	L	X		x		X		X	l	x		x		x	
Lower the car																	- 1					
<ul> <li>Check disc brake thickness v</li> <li>** Markets with anti-corrosion w</li> </ul>	when replacing brake linings! S				-					40	404											

400	Km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
400	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Air filter																						
- replace	Petrol engines			x			x			x			x			x			x			D1
	Diesel engines		x		x		x		x		x		x		x		x		x		x	D1
Spark plugs	See spec. pg. 7	а а																				
- replace	1 10			x			x			×			x			x			x			D2
Valves	LPG-fuel:																					
- check/adjust clearance	30,000 km (20,000 miles) interval					×					×					×					x	D3
Top up engine oil	See spec. pg. 6.	х	x	×	x	×	x	×	x	×	x	x	x	×	x	×	×	×	x	x	×	D4
Automatic gearbox																						
- top up oil				x			x			×			x			×			x			D5
Fluid levels - engine	Engine cooling system,																					
compartment	brake and power steering reservoirs and washer	x	x	x	×	x	x	x	x	x	×	×	x	X	×	×	x	x	x	X	X	D6
- check/top up	reservoirs and washer reservoir																					
Coolant	Anti-freeze rating/																					
- check/top up	Corrosion prot.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D6
Battery																						
- check level		x	x	×	×	x	x	x	×	x	×	×	x	×	x	x	×	×	x	×	×	D7
Auxiliary drive belt																						-
- check/adjust belt tension	Multi-track belt	x		x		x		x		x		X		x		X		X		x		D9
Camshaft/auxiliary unit belt																						
- replace	Standard and multi-track						x						x						x			D12
	belt																					

400	Km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
400	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Self-diagnostic system	Engines with FENIX																					
- read off fault codes	fuel system	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D15
CO - idle*	Carburettor engines	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
- check/adjust	Injected engines (not F-engines)	X	x	^	x	^	x	~	x		x	A	x		x	^	x		x	~	x	D18
Doors, bonnet - lubricate hinges, bonnet lock	Incl. door stopper, lock lugs and locks	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D19
<b>Power antenna</b> -clean	Rec. to customer at every service																					
Brake fluid**	Should be replaced																					
- replace	every alternate year																					

\* B 18 K with AC: Check/adjust idle speed compensator.

\*\* If the car is driven in mountainous areas or a moist climate, the brake fluid should be replaced every year.

# Maintenance service - 700/940/960

700/940/960	Km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270		300	
700/940/900	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
a anti-contractor Carlo Maria	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Automatic gearbox lever - check shift lock	Check when driving into workshop	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A1
Parking brake - check/adjust	Check when driving into workshop	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	,x	x	x	x	x	A2
External lighting - check function	Check when driving into workshop	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A3
Wash/wipe on windscreen and headlamps - check/adjust		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	<b>A</b> 4
<b>Kickdown wire</b> - check/adjust	Not AW 30-43		x		x		x		x		x		x		x		x		x		x	A
Crankcase ventilation - clean	Clean nipples and hoses. Replace flame trap. Turbo has no flame trap.						x		x		x		x		x		x		x		x	A7
Engine - check for leakage	Check from above	x	x	x	×	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A8
Raise the car																						
Engine/gearbox - check for leakage	Check from underneath. Check gearbox oil level only in case of leakage	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B1
Drain engine oil and replace oil filter	<b>Diesel:</b> Oil change every 7,500 km. Oil and filter replacement every 15,000 km <b>Petrol turbo engine:</b> A first oil change (not filter) at 5,000 km (3,000 miles).	x	×	×	×	x	x	×	x	x	x	x	x	×	x	x	x	x	x	×	x	B2
Automatic gearbox - drain the oil	Not AW 30-43 *				x				x				x				x				x	B3

700/940/960	Km x 1000	15	30	45	60	75	90	105	120		150	165	180	195	210	225	240	255	270	285	300	
100/040/000	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	<u> </u>
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Tyres	Check damage																					
- check	and for wear	х	x	x	x	х	x	x	х	x	x	x	x	x	x	x	x	x	x	x	x	B7
Brake linings	Min. lining thickness *:																					
- check	Front 3 mm, rear 2 mm	x	x	x	x	х	x	x	х	x	x	x	x	x	x	x	x	x	x	x	x	B8
<b>Brake hoses</b> - check for leakage/damage					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B9
<b>Brake/fuel line</b> - check for leakage/damage					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B1(
Fuel filter - petrol - replace					~			x	~			~			x							B1 <sup>-</sup>
<b>Fuel filter - diesel</b> - drain condensate - replace	Note! Every 7,500 km (5,000 miles)			x			x			x			x			x			x			B12 B12
<b>Final drive</b> - check for leakage	Check level only in the event of leakage	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	×	x	B14
<b>Exhaust system</b> - check condition/ check for leakage, anchorage					x	x	x	x	x	x	x	X	x	x	x	x	x	x	x	x	x	B1
Lift the front wheels	1									•												
Steering system/front wheel suspension - check/tighten - check for wear	Does not apply to 960 Including shock absorbers	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	C1 C2
Propeller shaft, support bearing, trunnion block - check for wear					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	C3
<b>Rear wheel suspension</b> - check/tighten - check for wear	Does not apply to the 960 Including shock absorbers	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	C4 C5
Corrosion protection/paintwork ** - check			x		x		x		x		x		x		x		x		x		x	Се

700/940/960	Km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
/00/940/900	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Lower the car																						
Air filter	Diesel 45,000 km																					
- replace	(30,000 miles)				x				x				x				x				x	D1
Spark plugs	See spec. pg. 7.																					
- replace	F-engines			x			x			x			x			x			x			D2
	E/G-engines	х	x	x	x	x	x	x	x	x	X	X	x	x	x	x	X	x	x	x	x	D2
Valves	Not 4-valve engines																					
<ul> <li>check/adjust clearance</li> </ul>				X				X				X				X				X		D3
Top up engine oil	See spec. pg. 6.	х	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	×	x	D4
Automatic gearbox																						
- top up oil					x				x				x				×				x	D5
Fluid levels - engine	Engine cooling system,																					
compartment	brake and power steering	x	x	X	x	x	x	x	x	x	x	×	x	x	x	x	x	x	×	x	X	D6
- check/adjust	reservoirs and washer reservoir																					
	reservoir					ĺ																
• • •																						
Coolant - check/top up	Anti-freeze rating/ Corrosion prot.																x			x	x	D6
	Corrosion prot.	x	X	×	X	x	x	x	×	x	x	×	×	X	x	x	^	X	x	^	^	
Battery - check level		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D7
Auxiliary drive belts			X	×	×	<b>^</b>	<b>^</b>	<b>^</b>	<b>^</b>	<b>^</b>	<b>^</b>	<b>^</b>	<b> ^</b>	<b>^</b>	<u> </u> ^							
- check/just.	Not B 6254/6304		x		x		x		x		x		x		x		x		x		x	D9
- replace belt	Only B 6254/6304		<b>^</b>		^		x		<b>^</b>				x		<b>^</b>				x			D12
- grease the tension pulley*	<b>Only</b> B 6304 –1994			x			x			x			x			x			x			D12
* Applies only to early model to	ensioners which can be disman	tled.	1	<b></b>		.L			<b>.</b>			- <b>I</b>	- <b>h</b>	L	4							
Camshaft belt B 200-230			[		[	Ι								T		1						Ι
- replace	check the tensioner and					x					x					x					x	D11
•	lubricate the guide lug																					
- check/tighten	(15,000 km (10,000 miles)	x					x					x					x					D13
	after belt replacement)																					
Camshaft belt/balancer																						
shaft belt B 204-234																						
- replace						X					X					Х					X	D11

700/940/960	Km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
100/340/300	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Camshaft belt B 6304 (-93) - replace - grease tensioner	Apply the sticker			x x			x x			x x			x x			x x			x x			D12 D12
Camshaft belt B 6304 (94) - replace Camshaft belt						x					x					x					x	D12
B 6254/6304 (95) - replace									x								x					D12
Camshaft belt, pump belt, idler roller - replace	Diesel								x								x					D14
EGR system - check function - clean	D 24 T - Austria		x	×	x		x		x	x	x		x		x	x	x		x		x	D16 D17
EGR system - check function	D24 TIC (EGR)			x			x			x		-	x			x			x			
<b>EGR system</b> - clean	Only B 230 FD/FT (EGR) and B 6254 S (EGR)						x						x						x			D14
<b>CO idle</b> - check/adjust	Petrol engines Not F-engines	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D18
Doors, bonnet - lubricate hinges, bonnet lock	Lubricate also door stop, lock lugs and locks	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D19
Power antenna - clean	Rec. to customer at every service																					D21
Brake fluid - replace	Rec. to customer every alternate year *																					

\* If the car is driven in mountainous areas or a moist climate, the brake fluid should be replaced every year.

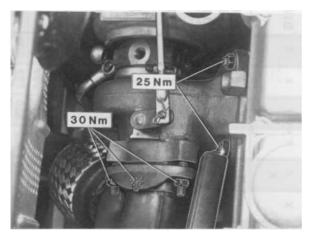
Maintenance service - 850

850	Km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
850	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Automatic gearbox lever	Check when driving into																					
- check shift lock	workshop	х	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A1
Parking brake	Check when driving into																					
- check/adjust	workshop Adjust on lift	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x،	x	x	x	x	A2
External lighting	Check when driving into																					
- check function	workshop	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A3
Wash/wipe on																						
windscreen and headlamps																						
<ul> <li>check function/wear</li> </ul>		х	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A4
Crankcase ventilation	Clean nipples and hoses.																					
- clean	Replace flame trap. Turbo						x			x			x			x			x			A7
	has no flame trap.																					
Engine/gearbox	Check from above																					
- check for leakage		х	x	x	X	X	x	x	X	x	X	x	X	x	x	X	X	X	X	x	X	<b>A</b> 8
Raise the car																						
Engine/gearbox	Check from underneath.																					
<ul> <li>check for leakage</li> </ul>	Check transmission level	х	x	х	х	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B1
	only during leakage																					
Drain engine oil	850 Turbo: A first oil																					
and replace oil filter	replacement (not filter) at	x	х	х	х	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B2
	5,000 km (3,000 miles).																					
	Note! Do not reset the																					
	service reminder.																					<u> </u>
Check/tightening of	Performed at 5,000 km																					
turbo/exhaust pipe.	(3,000 miles).																					
	See illustration on page 28									ļ											ļ	<b> </b>
Driveshaft joints																						
- check for wear							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	B5
- check gaiters		X	Х	х	Х	Х	X	X	X	x	x	x	X	X	x	X	X	X	X	X	X	<b>B</b> 6
Note! For cars with automatic	gearboxes which are used in o	contin	uous	taxi tr	affic o	r freq	uently	tow tr	ailers	chan	ge gea	arbox	oil eve	ery 75	,000	km.						

850	Km x 1000		30	45	60	75	90	105	120	135	150		180	195	210	225	240	255	270	285	300	1
000	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	)
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	,
Tyres	Check for damage																					T
- check	and wear	х	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	E
Brake linings*	Check brake discs when																					
- check	changing brake linings!	х	x	x	x	x	x	x	x	х	x	x	x	х	x	x	x	x	x	x	x	E
Brake hoses																						
- check damage/leakage							x	x	x	х	x	x	x	х	x	x	x	x	x	x	x	
Brake & fuel lines																						
- check damage/leakage							x	x	x	х	x	x	x	х	x	x	x	x	x	x	x	E
Fuel filter																						
- replace								x							x							E
Exhaust system																						
check condition, for leakage																						
anchorage							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	E
Lift the front wheels																						
Steering system/front wheel																						
suspension																						
check for wear	Incl. shock absorbers						х	x	x	x	x	x	x	х	x	х	x	x	x	x	x	0
Rear wheel suspension																						
check for wear	Incl. shock absorbers						х	x	x	х	x	х	x	x	x	x	x	x	х	x	x	(
Corrosion																						
protection/paintwork**			x		x		х		x		x		x		x		x		x		x	0
check																						
ower the car	,			,																		
Air filter	Incl. filter for control																					Τ
replace	unit box. Does not apply to				x				x				x				x				x	
	94–.																					
Spark plugs																						
replace	See spec. pg. 7.			x			х			x			x			х			x			
op up engine oil	See spec. pg. 6.	x	х	х	x	х	х	x	x	х	x	x	x	х	х	х	х	х	х	х	x	1

950	Km x 1000	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	
850	Months	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
	miles x 1000	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Fluid levels - engine compartment - check	Engine cooling system, brake and power steering fluid reservoirs and washer fluid reservoir	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D6
<b>Coolant</b> - check/top up	Anti-freeze rating/ Corrosion prot.	x	×	x	x	x	x	×	×	x	x	x	x	x	x	×	x	x	x	x	×	D6
Battery - check level/anchorage		x	x	x	x	x	x	x	x	x	×	x	x	x	x	x	x	x	x	x	x	D7
Auxiliary drive belt - replace belt - grease belt tensioner*				x			x x			x			x x			x			x x			D10 D10
	ner is of the early model which	can b	e disr	nantle	ed.		•				•											
Camshaft belt (-93), 21 mm - grease the tensioner - replace belt	Apply the sticker					x x					x x					x x					x x	D11 D11
<b>Camshaft belt (94-)</b> , 23 mm - replace belt	Apply the sticker								x								x					
EGR system - clean - inspect	B5252F (EGR)						x x						x x						x x			D16 D16
Doors, bonnet - lubricate hinges		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D19
Service reminder - reset	Does not apply to Yazaki instrument	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D20
Power antenna - clean Brake fluid - replace	Rec. to customer at every service Rec. to customer every alternate year**																					D21

\*\* If the car is driven in a mountainous area or moist climate, the brake fluid should be replaced every year.



Re-torque of turbo/exhaust manifold

- Tighten front exhaust pipe to turbo unit, 30 Nm.
- Tighten turbo unit to exhaust manifold, 25 Nm.