

warranty inspection - servicing schedules - lubrication

Servicing is the best guarantee of reliability

The inspection and servicing intervals are given as a guide and are intended for vehicles operating under normal road conditions. The more severe the operating conditions, the shorter the service and inspection intervals. In some cases it will be necessary to consider servicing and inspection intervals in terms of hours rather than mileage. The Manufacturer cannot be held responsible for damage caused by driving errors, or failure to comply with the recommendations made in this handbook, particularly regarding the use of lubricants that do not conform to the specifications given.

Warranty inspection after 2500 km

This is an overall check on your vehicle. No charge is made but it is obligatory and affects the validity of the vehicle warranty. To have this inspection carried out, consult your dealer and show him the warranty card you received with the vehicle.

Lubrication

The manufacturer specifies the performance levels of the lubricants required for the correct operation of the vehicles he has built, and also sets the lubrication intervals.

These recommendations must be strictly followed.

Their observance will increase the service life of the components. Failure to comply can invalidate the warranty offered.

The lubrication table and chart set out these requirements.

● Important

Draining the oils: always drain the oils on level ground with the oils hot to aid the flow. When refitting the drain plugs, fit new sealing washers.

Checking the oil levels

(all units).

The oil levels must always be checked on level ground under the same conditions (vehicle empty or laden) and at least 5 minutes after the vehicle has stopped.

Road tests

After the warranty inspection, the selling dealer should make sure that the user clearly understands all the driving and servicing instructions in the handbook.

Cab protection

During assembly our cabs receive a special anti-corrosion treatment. An injection process is used which penetrates all the box sections of the cab. To extend the life of this initial protection, we strongly recommend that this treatment should be repeated annually. All you have to do is to contact your dealer who has the necessary equipment and material available to carry out this treatment.

RECOMMENDED SAFETY OPERATIONS

In the interest of safety it is strongly recommended that the following operations be carried out at the intervals specified, time or mileage basis whichever occurs the soonest.

30,000 km (18,000 miles) or 18 months

Change brake hydraulic fluid. All models.

60,000 km (36,000 miles) or 3 years

Serviceable hydraulic brake assemblies should be replaced or overhauled.
All flexible rubber hoses must be renewed.

120,000 km (72,000 miles) or 4 years

Renew load sensing valve assembly.

"USED" Engine Oils

WARNING - Prolonged and repeated contact may cause serious skin disorders, including dermatitis and cancer.

Avoid excessive contact, wash thoroughly after contact. Keep out of reach of children.

PROTECT THE ENVIRONMENT - It is illegal to pollute drains, water courses or soil. Use authorised facilities for disposal. If in doubt, contact your Local Authority for advice."

ALL 50 SERIES MINIBUSES — STEERING COLUMN UNIVERSAL JOINT.

160,000 km (100,000 miles).

Check flexible disc for damage.
Check universal joints for wear and corrosion.
Check all splines for condition and wear.

240,000 km (150,000 miles).

Renew universal coupling.

SEQUENCE OF SERVICE

OPERATOR CHECKS

Daily

Check/top-up engine oil level
Check/top-up coolant level - including anti-freeze
Check vacuum/air gauge reading
Check operation of service and parking brakes
Check operation of warning lights, road lights, horn and windscreen wash/wipe
Check/top-up brake antifreeze unit (winter only)

Weekly

Check/top-up clutch and brake fluid reservoir
Check/top-up washer bottle
Check/adjust tyre pressures
Check operation of air reservoir automatic drain valve
Inspect water and dirt trap
Inspect all units for leaks

FIRST SERVICE

2000km (1500 miles) (60 hours)

Service	kilometres (miles)		Hours
A	10,000	(6,000)	250
B	20,000	(12,000)	500
A	30,000	(18,000)	750
C	40,000	(24,000)	1,000
A	50,000	(30,000)	1,250
D	60,000	(36,000)	1,500
A	70,000	(42,000)	1,750
C	80,000	(48,000)	2,000
A	90,000	(54,000)	2,250
B	100,000	(60,000)	2,500
A	110,000	(66,000)	2,750
E	120,000	(72,000)	3,000

Note. In addition to the above servicing it is essential that engine oil and filter are changed at intermediate intervals of 5,000 km (3,000 miles) on engines which are engaged in arduous and dirty conditions, in extreme climates, low gear operation with low mileage, static operation, or frequent stop/start work.

SERVICE SCHEDULES

Operation	Services					
	First	A	B	C	D	E
Diesel Engines						
Check unit for oil and fuel leaks	X	X	X	X	X	X
Change engine oil and filter	X	—	X	X	X	X
Check/adjust valve clearances (every 48,000 miles)	—	—	—	—	—	—
Check/adjust drive belt tensions	X	—	X	X	X	X
Check/adjust slow running	X	—	X	X	X	X
Clean water trap (drain fuel tank sediment if necessary)	—	—	X	X	X	X
Clean fuel lift pump	—	—	X	X	—	X
Check fuel lines for corrosion or chafing etc.	X	—	X	X	X	X
Renew fuel filter element	—	—	X	X	X	X
Clean air cleaner element	—	—	X	X	—	—
Renew air cleaner element (every third cleaning)	—	—	—	—	X	X
Clean/reset injectors (every 60,000 miles)	—	—	—	—	—	—
Check/adjust governed speed	—	—	—	—	X	X
Check security and condition of air trunking	X	—	X	X	X	X
Check engine operation (road test)	X	—	X	X	X	X
Petrol Engine						
Check engine for oil and fuel leaks	X	X	X	X	X	X
Change engine oil	X	X	X	X	X	X
Change oil filter element (*arduous conditions)	—	*	X	X	X	X
Check/adjust drive belt tensions	X	—	X	X	X	X
Clean, regap or renew spark plugs	—	X	X	X	X	X
Check P.C.V. valve operation	—	—	X	—	X	—
Renew P.C.V. valve	—	—	—	X	—	X
Change in-line fuel filter	—	—	—	X	—	X
Clean rocker cover breather	—	—	—	X	—	X
Clean air cleaner element	—	—	X	X	—	—
Renew air cleaner element	—	—	—	—	X	X
Check fuel lines for corrosion or chafing etc.	X	—	X	—	X	—

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Operation	Services					
	First	A	B	C	D	E
Petrol Engine (continued)						
Check security and condition of air trunking	X	—	X	X	X	X
Clean and examine H.T. leads	—	—	X	X	X	X
Check/adjust carburettor settings	—	—	X	X	X	X
Check/adjust ignition timing	—	—	X	X	X	X
Adjust slow running	X	—	X	X	X	X
Check engine operation (road test)	X	—	X	X	X	X
Cooling System						
Check/top-up (including antifreeze)	X	—	X	X	X	X
Check system for leaks	X	—	X	X	X	X
Check condition of hoses	—	—	X	X	X	X
Clutch System						
Check/top-up fluid level	X	—	X	X	X	X
Check system for leaks	X	—	X	X	X	X
Check condition of pipes	X	—	X	X	X	X
Check operation (road test)	X	—	X	X	X	X
Gearbox						
Check unit for oil leaks	X	X	X	X	X	X
Check/top-up oil level	—	—	X	—	X	—
Change oil (or at least annually)	X	—	—	X	—	X
Clean breather	—	—	X	X	X	X
Check operation (road test)	X	—	X	X	X	X
Automatic Transmission						
Check/top-up fluid level (after road test)	X	—	—	—	—	—
Drain and refill	—	—	X	X	X	X
Renew filter	—	—	X	X	X	X
Adjust bands	—	—	X	X	X	X
Check shift speeds (road test)	X	—	X	X	X	X
Check unit for leaks	X	X	X	X	X	X

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Operation	Services					
	First	A	B	C	D	E
Rear Axle						
Check unit for oil leaks	X	X	X	X	X	X
Check/top-up oil level	—	—	X	X	X	—
Change oil	X	—	—	—	—	X
Clean axle breather	—	—	X	X	X	X
Check/adjust hub end float	—	—	X	X	X	—
Clean and repack hubs	—	—	—	—	—	X
Front Axle						
Check/adjust hub end float	—	—	X	X	X	—
Clean and repack hubs	—	—	—	—	—	X
Suspension						
Check 'U' bolt tightness	X	—	—	—	—	—
Check hydraulic dampers for leaks	—	—	X	X	X	X
Steering						
Check unit/system for leaks	X	—	X	X	X	X
Check/top-up oil level - manual unit	X	—	X	X	X	X
Check/top-up power steering reservoir	X	—	X	X	X	X
Change power steering reservoir filter	—	—	—	—	—	X
Lubricate swivel pins	X	X	X	X	X	X
Check operation (road test)	X	—	X	X	X	X
Propshaft						
Lubricate universal joints and sliding sleeves	—	—	X	X	X	X
Wheels and Tyres						
Check/adjust tyre pressure (including spare wheel)	X	—	X	X	X	X
Check condition of tyres	X	—	X	X	X	X
Check wheel nuts for tightness	X	—	X	X	X	X

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Operation	Services					
	First	A	B	C	D	E
Brakes						
Check/top-up brake fluid level	X	X	X	X	X	X
Check lining thickness (through backplate)	—	X	—	—	—	—
Check lining condition (drums removed)	—	—	X	X	X	X
Check load sensing valve security	X	—	—	—	—	—
Check/adjust load sensing valve setting (first A service only)	X	X	—	—	—	—
Check/adjust handbrake travel	X	—	X	X	X	X
Check condition of pipes and hoses	X	—	X	X	X	X
Examine front brake pads for wear		X	X	X	X	X
Check operation of auto drain valve	X	—	X	X	X	X
Clean auto drain valve	—	—	—	—	X	X
Check/decoke compressor*	—	—	X	X	X	X
Clean in-line filters	—	—	X	X	X	X
Check system for leaks	X	—	X	X	X	X
Lubricate handbrake compensator	—	—	X	X	X	X
Check operation of brakes (road test)	X	—	X	X	X	X
Examine brake caliper slide pin rubber boot & bush	—	—	X	X	—	—
Renew caliper slide pin, rubber boot & bush	—	—	—	—	X	X
Electrical						
Check operation of all instruments	X	—	X	X	X	X
Check operation of warning lights	—	—	X	X	X	X
Check operation of horn, wipers and washers	—	—	X	X	X	X
Check operation road lamps	—	—	X	X	X	X
Check/top-up battery	—	—	X	X	X	X
Clean and protect battery terminals	—	—	X	X	X	X
Check operation of brake fluid level switch	—	—	X	X	X	X
Visually check wiring	—	—	X	X	X	X
Check security of battery	X	—	—	—	—	—
Cab						
Check operation of door locks and hinges	X	—	—	—	—	—
Lubricate door locks and hinges	—	—	X	X	X	X
Check condition and security of sound insulation panels	X	—	X	X	X	X
Check condition and security of safety belts	X	—	X	X	X	X

RECOMMENDED LUBRICANTS

UNIT	AMBIENT TEMPERATURE	RECOMMENDED LUBRICANT	GRADE	SPECIFICATION
Phaser 90 Phaser 110T All Operations	All temps. down to -15°C	Elf Multi Perfo XC	15W/40	CCMC D2 MIL-L-2104C
	All temps. above 10°C	Elf Perfo XC	SAE 40	
	5°C to 35°C		SAE 30	
	All temps. down to -15°C	Elf Multi Performance 3D	15W/40	CCMC D2+ MIL-L-2104D
	All temps. above 10°C	Elf Performance 3D	SAE 40	
	5°C to 35°C		SAE 30	
	All temps. down to -15°C	Elf Multi Performance 4D	15W/40	CCMC D3 S.H.P.D.
Phaser 90 Only All Operations	All temps. down to -15°C	Elf Multi Performance 2B	15W/40	CCMC D1 MIL-L-46152
	All temps. above 10°C	Elf Performance 2B	SAE 40	
	5°C to 35°C		SAE 30	

Important. Diesel engines operating on high sulphur content fuels (0.6 to 1.0%) should use MIL-L-2104C lubricating oil only.

6.225 PETROL ENGINE 6 CYL.	MULTI-GRADE	40°C to -18°C	Elf Sporti Grade		API SE/CC
			or Elf Super Sporti Grade		API SF/CC
		Below -18°C	Elf Super Sporti Grade		API SF/CC
	MONO-GRADE	27°C to 0°C	SAE 30	Elf Performance 2B	API SE/CC
		0°C to -12°C	SAE 20W	OR	API SF/CC
		-12°C to -23°C	SAE 10W	Elf Performance 3D	

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RECOMMENDED LUBRICANTS

UNIT	AMBIENT TEMPERATURE	RECOMMENDED LUBRICANT	SPECIFICATION
GEARBOX S5-24/3	All temperatures to -15°C	ElfPerfo XC 30	MIL-L-2104C
	All temperatures to -25°C	ElfTranself EP 80W/90	MIL-L-2105A
GEARBOX T5-290	All temperatures to -25°C	ElfTranself, EP, 80W/90	MIL-L-2105A API GL4
STEERING BOX (Manual)			
REAR AXLE			
STEERING BOX (Power) and RESERVOIR	All	ElfElfmatic G2	DEXRON II
AUTOMATIC GEARBOX			
PROPSHAFTS	All	Elf Grease Multi EP2	LITHIUM SOAP BASE NLGI.2. INCORPORATING E.P. ADDITIVES
WHEEL HUBS			
HAND BRAKE LINKAGE			
SWIVEL PINS	All	Elf Grease Multi MOS 2	LITHIUM SOAP BASE NLGI.2. INCORPORATING MOLYBDENUM DISULPHIDE
AUTO BOX LINKAGE			
BRAKE & CLUTCH SYSTEMS	All	Lockheed Universal 329.S	Dot 3 FM VSS 116
CLUTCH ACTUATION- CLEVIS, LEVER, BRG. CARRIER & SPLINE	All	Elf Grease Multi MOS 2	LITHIUM SOAP BASE NLGI.2. INCORPORATING MOLYBDENUM DISULPHIDE
ENGINE COOLANT CONCENTRATE. (ANTI-FREEZE)	All	ICI 007 MOBIL PERMAZONE ELF ANTI-FREEZE RTIL	BS 6580 1985