

1977 VEHICLE MAINTENANCE SCHEDULE

(Opt. Motor Generator Covered Separately)

When To Perform Services (Months or Miles, Whichever Occurs First)	Item No.	Services (For Details, See Numbered Paragraphs)	OWNER'S SERVICE LOG																
			3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	50
SECTION A—LUBE AND GENERAL MAINTENANCE																			
Every 3 months or 3,000 miles	A-1	▲Chassis Lubrication																	
	A-2	▲▲Engine Oil—Change																	
	A-3	Air Compressor Wet Tank—Drain																	
Every 6 months or 6,000 miles	A-4	▲▲Fluid Levels—Check																	
	A-5	Air Conditioning—Check																	
	A-6	Air Compressor Air Filter—Clean																	
	A-7	Tire Rotation																	
Every 6,000 miles (Check wheel nut torque after 1st 500 miles)	A-8	*Engine Oil Filter—Replace																	
At 1st oil change—then every 2nd	A-9	▲Automatic Transmission Fluid and Final Drive Lubricant—Change																	
Every 12 months or 12,000 miles	A-10	Cooling System—See Explanation of Maintenance Schedule																	
	A-11	▲Rear Wheel Bearings—Clean and Repack																	
Every 24,000 miles	A-12	Final Drive Boots & Output Shaft Seals—Check																	
SECTION B—SAFETY MAINTENANCE																			
Every 6 months or 6,000 miles	B-1	Owner Safety Checks																	
	B-2	Tires, Wheels & Disc Brakes—Inspection																	
	B-3	Exhaust System—Check																	
	B-4	Suspension and Steering—Check																	
	B-5	Brakes and Power Steering—Check																	
Every 12 months or 12,000 miles	B-6	▲▲Engine Drive Belts—Check																	
	B-7	Drum Brakes and Parking Brake—Check																	
	B-8	Throttle Linkage—Check																	
	B-9	Underbody Flush & Check																	
SECTION C—EMISSION CONTROL MAINTENANCE																			
At 1st 3,000 miles	C-1	Carburetor Mounting Torque																	
At 3,000 miles, 12,000 miles, then at 12,000 mile intervals	C-2	▲Idle Speed Adjustment																	
Every 12 months or 12,000 miles	C-3	Thermostatically Controlled Air Cleaner—Check																	
	C-4	Carburetor Choke—Check																	
	C-5	Carburetor Fuel Filter—Replace																	
	C-6	▲PCV System—Check																	
	C-7	Spark Plug Wires—Check																	
	C-8	Air Cleaner Element—Replace																	
	C-9	Thermal Vacuum Switch & Hoses—Check																	
	C-10	Throttle Return Control—Check																	
	C-11	Engine Timing Adjustment & Distributor Check																	
Every 12,000 miles	C-12	Spark Plugs—Replace																	
Every 24 months or 24,000 miles	C-13	ECS System Check & Filter Replace																	
	C-14	Fuel Cap, Tank & Lines—Check																	

Insert month and day (e.g. 11/10) in mileage square closest to the mileage when service is performed.

▲Also a Safety Service ▲Also an Emission Control Service ▲See explanation copy for variations in service descriptions and/or intervals †Figures represent miles in thousands

EXPLANATION OF 1977 VEHICLE MAINTENANCE SCHEDULE

Presented below is a brief explanation of each of the services listed in the preceding "1977 Vehicle Maintenance Schedule."

NORMAL VEHICLE USE—The maintenance instructions contained in this maintenance schedule are based on the assumption that the vehicle will be used as designed:

- To carry passengers and cargo within the limitations indicated on the Vehicle Identification Number plate, located behind the right front access door,
- On reasonable road surfaces within legal operating speeds,
- On unleaded or regular grade leaded gasoline.

Unusual operating conditions will require more frequent vehicle maintenance as specified in the respective sections included below.

After each of the following maintenance services is performed, it is recommended that you insert the date in the maintenance schedule under the appropriate "Owner's Service Log" column. For example, if the first chassis lubrication is performed at 3,000 miles, the date should be entered under the column headed "3."

LUBE & GENERAL MAINTENANCE

ITEM NO. SERVICES

A-1 CHASSIS—Lubricate all grease fittings in front and rear suspension and steering linkage. Also lubricate transmission shift linkage, brake pedal spring, parking brake cable guides and linkage.

A-2 ENGINE OIL*—Change each 3 months or 3,000 miles, whichever occurs first. See your Operating Manual for additional details on engine oil.

A-3 AIR COMPRESSOR WET TANK—Drain the wet tank at 3 month or 3,000 mile intervals.

NOTE: More frequent drain intervals should be made if driving conditions and habits result in excessive air compressor operation.

A-4 FLUID LEVELS—Check level of fluid in brake master cylinder, power steering pump, all batteries, engine, final drive, transmission, and windshield washer. The engine coolant should be checked for proper level and freeze protection to at least

—20°F (—29°C.) or to the lowest temperature expected during the period of vehicle operation. Proper engine coolant also provides corrosion protection.

Any significant fluid loss in any of these systems or units could mean that a malfunction is developing and corrective action should be taken immediately. A low fluid level in the brake master cylinder front reservoir could also be an indicator that the disc brake pads need replacing.

A-5 AIR CONDITIONING—Check condition of automotive air conditioning system hoses and refrigerant charge at sight glass. Replace hoses and/or refrigerant if need is indicated. If equipped with roof mount air conditioner(s), clean filter(s).

A-6 AIR COMPRESSOR—Filter should be washed with soap and water solution or replaced.

A-7 TIRES—to equalize wear, rotate tires as indicated in Operating Manual and adjust tire pressures as shown on tire placard on glove box door. Have wheel-nut torque checked after 1st 500 miles and 500 miles after every wheel replacement thereafter.

A-8 ENGINE OIL FILTER*—Replace at the first oil change and every 2nd oil change thereafter.

A-9 AUTOMATIC TRANSMISSION FLUID AND FINAL DRIVE LUBRICANT—Change the transmission fluid and filter; change final drive lubricant. Under unusual conditions such as heavy traffic (stop and go driving) during hot weather or where the engine idles for long periods, the transmission fluid should be changed at 6,000 mile intervals. See your Operating Manual for additional details.

A-10 COOLING SYSTEM—At 12-month or 12,000-mile intervals, wash radiator cap and filler neck with clean water, pressure test system and radiator cap for proper pressure holding capacity. (Tighten hose clamps and inspect condition of all cooling and heater hoses.) Replace hoses if checked, swollen or otherwise deteriorated.

Also each 12 months or 12,000 miles, clean exterior of radiator core and air conditioning condenser. Every 24 months or 24,000 miles, drain, flush, and refill the cooling system with a new coolant solution as described in your Operating Manual.

• Also a Safety Service.
* Also an Emission Control Service.

A-11 REAR WHEEL BEARINGS—Clean and repack wheel bearings with a lubricant as specified in the "Recommended Fluids and Lubricants" chart.

A-12 FINAL DRIVE AXLE BOOTS AND OUTPUT SHAFT SEALS—Check for damaged, torn or leaking boots on drive axles and for leaking output shaft seal. Replace defective parts as necessary.

SAFETY MAINTENANCE

B-1 SAFETY CHECKS TO BE PERFORMED BY OWNER—**NOTE:** Items B-1 (a) thru (u) can be checked by the owner, while items B-2 thru B-9 should only be checked by a qualified mechanic. It is particularly important that any safety systems which may have been adversely affected in an accident be checked and repaired as necessary before the vehicle is returned to use.

The following checks should be made regularly during operation at no greater interval than 6 months or 6,000 miles, whichever occurs first, and more often when the need is indicated. Any deficiencies should be brought to the attention of your dealer or another service outlet, as soon as possible, so the advice of a qualified mechanic is available regarding the need for repairs or replacement.

a STEERING COLUMN LOCK—Check for proper operation by attempting to turn key to LOCK position in the various transmission gears with vehicle stationary. Key should turn to LOCK position only when transmission control is in "PARK." Key should be removable only in LOCK position.

b PARKING BRAKE—Check parking brake holding ability by parking on a fairly steep hill and restraining the vehicle with the parking brake only.

IMPORTANT: Do NOT attempt to test the holding ability of the "PARK" position on the transmission—the vehicle could become locked in this position.

CAUTION: Before making the following check, be sure to have a clear distance ahead and behind the vehicle, set the parking brake and firmly apply the foot brake. Do not depress accelerator pedal. Be prepared to turn off ignition switch immediately if engine should start.

- c STARTER SAFETY SWITCH**—Check starter safety switch by attempting to start the engine with the transmission in each of the driving gears. The starter should operate only in the "PARK" or "N" (Neutral) positions.
- d TRANSMISSION SHIFT INDICATOR**—Check to be sure transmission shift indicator accurately indicates the shift position selected.
- e STEERING**—Be alert to any changes in steering action. The need for inspection or servicing may be indicated by increased effort to turn the steering wheel, excessive free-play or unusual sounds when turning or parking.
- f WHEEL ALIGNMENT AND BALANCE**—In addition to uneven or abnormal tire wear, the need for wheel alignment service may be indicated by a pull to the right or left when driving on a straight and level road. The need for wheel balancing is usually indicated by a vibration of the steering wheel or seat while driving at normal highway speeds.
- g BRAKES**—Be alert to illumination of the brake warning light or changes in braking action, such as repeated pulling to one side, unusual sounds when braking or between brake applications, or increased brake pedal travel. Any of these could indicate the need for brake system inspection and/or service.
- h ENGINE AND MOTOR GENERATOR EXHAUST SYSTEM**—Be alert for any change in the sound of the exhaust system, motor generator (if so equipped), or a smell of fumes which may indicate a leak requiring inspection and/or service (See "Engine Exhaust Gas Caution in Operating Manual and item B-3 in this folder). In addition for GMC Motorhomes, see "Living Area Facilities Caution (Carbon Monoxide)" in the Operating Manual.
- i LP GAS SYSTEM** (If so equipped)—Check that all vents and LP gas-operated components are clean and operating properly. If LP gas fumes are noticed at any time the cause should be corrected without delay because of the possibility of fire. Also, see cautions referenced at the end of item "h".
- j WINDSHIELD WIPERS AND WASHERS**—Check operation of wipers, as well as condition and alignment of wiper blades. Check amount and direction of fluid sprayed by washers during use.
- k DEFROSTERS**—Check performance by moving controls to "DEF" and noting amount of air directed against the windshield.
- l REAR VIEW MIRRORS AND SUN VISORS**—Check that friction joints are properly adjusted so mirrors and sun visors stay in the selected position.
- m HORN**—Blow the horn occasionally to be sure that it works. Check all button locations.
- n LAP BELTS**—Check belts, buckles, latch plates, retractors and anchors for proper operation and for damage. Check to make certain that anchor mounting bolts are tight.
- o SEAT LOCKING AND SWIVEL LEVERS**—Check to see that seat locking and swivel levers securely engage by attempting to push forward and backward, and to twist seat with the levers set in the locked position.
- p LIGHTS AND BUZZERS**—Check all instrument panel illuminating and warning lights, ignition key buzzer, interior lights, license plate light, side marker lights, headlights, parking lights, taillights, brake lights, turn signals, back-up lights, hazard warning flashers, and roof mounted identification and clearance lights. Have headlight aim checked every 12 months or 12,000 miles, or more often if light beams seem to be aimed improperly.
- q GLASS**—Check for broken, scratched, dirty or damaged glass on vehicle that could obscure vision or become an injury hazard.
- r ENTRANCE DOOR AND WINDOW LATCHES**—Check for positive closing, latching and locking.
- s EXTERIOR COMPARTMENT DOOR AND FILLER OPENINGS**—Check to make sure all doors and openings can be closed securely by trying to open them after each closing. Check also for broken, damaged, or missing parts which might prevent secure latching.
- t FLUID LEAKS**—Check for fuel, water, oil or other fluid leaks by observing the surface beneath the vehicle after it has been parked for awhile. (Water dripping from automotive air conditioning system after use is normal.) If gasoline fumes or fluid are noticed **at any time**, the cause

should be determined and corrected without delay because of the possibility of fire.

- U SPARE AND JACK**—Check that spare tire assembly (if so equipped) and jack equipment are securely stowed at all times.

B-2 TIRES, WHEELS AND DISC BRAKES—Check disc brake pads for wear and surface condition of rotors while wheels are removed during tire rotation (see Item A-7). Check tires for excessive wear or damage. Make certain wheels are not bent or cracked and that wheel nuts have been tightened to the torque value specified in the Operating Manual. Check tire inflation pressure (including the spare tire) when the tires are "cold" at least monthly, or more often if daily visual inspection indicates the need.

B-3 EXHAUST SYSTEM—Check complete exhaust system and nearby body areas of vehicle engine and motor-generator system for broken, damaged, missing or mispositioned parts, open seams, holes, loose connections or other deterioration which could permit exhaust fumes to seep into the passenger compartment. Dust or water in the passenger compartment may be an indication of a problem in one of these areas. Any necessary corrections should be made immediately. To help ensure continued integrity, exhaust system pipes rearward of the muffler must be replaced whenever a new muffler is installed. Also see Item B-1 (h).

B-4 SUSPENSION AND STEERING—Check for damaged, loose or missing parts, or parts showing visible signs of excessive wear or lack of lubrication in front and rear suspension and steering system. Questionable parts noted should be replaced by a qualified mechanic without delay.

B-5 BRAKES AND POWER STEERING—Check lines and hoses for proper attachment, binding, leaks, cracks, chafing, deterioration, etc. Any questionable parts noted should be replaced or repaired immediately. When abrasion or wear is evident on lines or hoses, the cause must be corrected.

B-6 ENGINE DRIVE BELTS*—Check belts driving fan, generator, power steering pump and air conditioning compressor for cracks, fraying, wear and tension. Adjust or replace as necessary.

B-7 DRUM BRAKES AND PARKING BRAKE—(See item B-2 for disc brake check.) Check drum brake linings for wear or cracks and other internal brake components at each wheel (drums, wheel cylinders, etc.). Park-

ing brake adjustment also should be checked whenever drum brake linings are checked.

NOTE: More frequent checks should be made if driving conditions and habits result in frequent brake application.

B-8 THROTTLE LINKAGE—Check for damaged or missing parts, interference or binding. Any deficiencies should be corrected without delay by a qualified mechanic.

B-9 UNDERBODY—Corrosion materials used for ice and snow removal and dust control accumulate on the underbody. If allowed to remain, these materials can result in accelerated rusting and deterioration of underbody components such as fuel lines, frame, floor, exhaust system, etc. At least once each year, preferably after a winter's exposure, these corrosion materials should be removed by flushing the underbody with plain water. Particular attention should be given to cleaning out those areas where mud and other foreign materials collect.

EMISSION CONTROL MAINTENANCE

NOTE: Additional recommended maintenance instructions relating to vehicle use, evidence of maintenance, and service replacement parts are included in the New Vehicle Warranty Information folder.

C-1 CARBURETOR MOUNTING—Check carburetor attaching bolt torque at the first 3,000 miles, only. If torque on any bolt is less than 48 inch-pounds, tighten all bolts to 120 inch-pounds using the following tightening sequence:

- a—Left Rear Bolt
- b—Right Rear Bolt
- c—Right Front Bolt
- d—Left Front Bolt

C-2 ENGINE IDLE SPEED—Adjust engine idle speed accurately (following the specifications shown on the label attached to engine rocker cover) at 3,000 miles of operation, 12,000 miles, then at 12,000 mile intervals thereafter. Adjustments must be made with test equipment known to be accurate.

C-3 THERMOSTATICALLY CONTROLLED AIR CLEANER—Inspect installation to make certain that all hoses and ducts are connected and correctly installed. Also check valve for proper operation.

C-4 CARBURETOR CHOKE AND HOSES—Check choke mechanism for free operation. Any binding condition which may have developed due to petroleum gum formation on the choke shaft or from damage should be corrected. Check carburetor choke hoses for proper connection, cracking, abrasion or deterioration and correct or replace as necessary.

C-5 CARBURETOR FUEL FILTER—Replace filter at 12-month/12,000-mile intervals or more frequently if clogged.

C-6 POSITIVE CRANKCASE VENTILATION SYSTEM (PCV)—Check the PCV system for satisfactory operation at 12 month or 12,000-mile intervals, and clean filter (located in rocker cover). Replace the PCV valve and filter at 24 month or 24,000-mile intervals and blow out PCV valve hose with compressed air. Replace deteriorated hoses. The PCV valve should be replaced at 12 month or 12,000 mile intervals when the vehicle is used in operations involving heavy dust, extensive idling, and short trip use at freezing temperatures where engine does not become thoroughly warmed up.

C-7 SPARK PLUG WIRES—Clean exterior of wires with a clean cloth or soft bristle brush and a solution of mild detergent and warm water. Remove any evidence of corrosion on end terminals. Inspect spark plug wires for evidence of checking, burning, or cracking of exterior insulation and tight fit at distributor cap and spark plugs or other deterioration. If corrosion cannot be removed or other conditions above are noted, replace wire.

C-8 AIR CLEANER ELEMENT—Replace the engine air cleaner element under normal operating conditions every 12,000 miles. Operation of vehicle in dusty areas will necessitate more frequent element replacement. Your GMC Motorhome dealer can be of assistance in determining the proper replacement frequency for the conditions under which you operate your vehicle.

CAUTION: Do not operate the engine without the air cleaner unless temporary removal is necessary during repair or maintenance of the vehicle. When the air cleaner is removed back-firing can cause fire in the engine compartment.

C-9 THERMAL VACUUM SWITCH AND HOSES—Check for proper operation. A malfunctioning switch must be replaced. Check hoses for proper connection, cracking, abrasion or deterioration and replace as necessary. California engines are equipped with an additional low temperature thermal vacuum switch.

C-10

THROTTLE RETURN CONTROL (TRC)—Check hoses for cracking, abrasion or deterioration and replace as necessary. Check system for proper operation and adjust as necessary.

C-11

TIMING AND DISTRIBUTOR CAP—Adjust ignition timing following the specification on label attached to the engine rocker cover. Also, carefully inspect the interior and exterior of the distributor cap and rotor for cracks, carbon tracking and terminal corrosion. Clean or replace as necessary.

C-12

SPARK PLUGS—Replace at 12,000 mile intervals. Where misfiring occurs prior to 12,000 miles, spark plugs in good condition can often be cleaned, tested and reinstalled in the engine with acceptable results.

C-13

EVAPORATION CONTROL SYSTEM (ECS)—Check all fuel and vapor lines and hoses for proper connections and correct routing as well as condition. Remove canister(s) and check for cracks or damage. Replace damaged or deteriorated parts as necessary. Replace filter in lower section of canister.

If vehicle is equipped with two canisters, filter is located in the lower canister only.

C-14

FUEL CAP, FUEL LINES AND FUEL TANKS—Inspect the fuel tank cap and lines for damage which could cause leakage. Inspect fuel cap for correct sealing ability and indications of physical damage. Replace any damaged or malfunctioning parts.

**MOTOR GENERATOR
MAINTENANCE INTERVALS**

Regularly scheduled maintenance is the key to lower operating costs and longer service life for the unit. The following schedule can be used as a guide for units installed in a GMC Motorhome. However, actual operating conditions under which a unit is run should be the determining factor in establishing a maintenance schedule. When operating in very dusty or dirty conditions, some of the service periods may have to be reduced. Check the crankcase oil, the filters, etc., frequently until the proper service time periods can be established.

For any abnormalities in operation, unusual noises from engine or accessories, loss of power, overheating, etc., contact your nearest GMC Motorhome Dealer.

RECOMMENDED FLUIDS & LUBRICANTS

USAGE	FLUID/LUBRICANT
Engine oil	High quality SE oil
Motor generator**	High quality oil meeting both SE and CC requirements
Power steering system and pump reservoir. Includes windshield wiper motor	GM power steering fluid Part No. 1050017 or equivalent
Final drive	SAE 80W or SAE 80W-90 GL-5 gear lubricant (SAE 80W GL-5 in Canada)
Brake system and master cylinder	Delco Supreme 11 or DOT-3 fluid or equivalent
Transmission shift linkage	Engine oil
Chassis lubrication	Lithium soap multi-purpose chassis grease meeting requirements of GM 6031-M
Transmission	DEXRON® II automatic transmission fluid
Parking brake cables	Chassis grease
Rear wheel bearings	Lithium soap multi-purpose chassis grease meeting requirements of GM 6031-M
Body door hinge pins, hinges and latches at the front access doors, external utilities generator/storage and LP gas doors. Gas fill door hinge	Engine oil
Windshield washer solvent	GM Optikleen washer solvent Part No. 1051515 or equivalent
Batteries	Colorless, odorless, drinking water
Engine coolant	Mixture of water and a high quality Ethylene Glycol base type anti-freeze conforming to GM Spec. 1899-M

NOTE: Fluids and lubricants identified with GM part numbers or GM specification numbers may be obtained from your GMC Motorhome Dealer.

**GMC Motorhome only.

ONAN MOTOR GENERATOR MAINTENANCE SCHEDULE **

X-7722B

SERVICE THESE ITEMS	AFTER EACH CYCLE OF INDICATED HOURS					
	8	100	200	400	500	1000
General Inspection						
Check Oil Level						
Change Crankcase Oil (1)						
Clean Air Cleaner (1)						
Check Spark Plugs (2)						
Fuel Filter—Check (1)						
Check Breaker Points (2)						
Check Governor Linkage						
Clean Cooling Fins (1)						
Change Oil Filter (1)						
Replace Breaker Points						
Replace Air Cleaner (1)						
Remove Carbon From Heads						
Adjust Tappets						
Check Generator Brushes						
Complete Reconditioning (if Required)						

(1) Perform more often in extremely dusty conditions.

(2) Replace if necessary.

**GMC Motorhome only.

1977 GMC MOTORHOME AND TRANSMODE MAINTENANCE SCHEDULE (With 403 Cubic Inch Engine)

To retain the safety, dependability and emission control performance originally built into your GMC Motorhome or TransMode Vehicle it is essential that it receive periodic inspections, maintenance and service parts replacements.

This folder contains a schedule of the maintenance required by the Motorhome, and the engine, chassis and body components of the TransMode Vehicle. These services should be performed by any GMC Motorhome Dealer or any other qualified service outlet which regularly provides such services.

In addition to the in-shop type services detailed in the schedule, the folder also includes safety checks which you, the vehicle owner or driver, should perform periodically.



IMPORTANT

THIS MAINTENANCE SCHEDULE AND SERVICE LOG SHOULD BE KEPT WITH THE VEHICLE AT ALL TIMES AND LEFT WITH THE VEHICLE WHEN SOLD. THE SERVICE LOG, PLUS ANY PERTINENT MAINTENANCE AND REPAIR RECEIPTS, MAY BE REQUIRED IN THE EVENT WARRANTY REPAIRS BECOME NECESSARY.

Part No. 2024798

Litho in USA