

# COMPLETE VEHICLE MAINTENANCE SCHEDULE

(Opt. Motor Generator Covered Separately)

Color Code:  Lubrication and General Maintenance  Safety  Emission Control

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
Every 3 months or 3,000 miles	1	Chassis Lubrication																	
	2	*▲Fluid Levels																	
	3	*Engine Oil																	
	4	Air Conditioning System																	
	5	Living Area Water Pump Belt																	
	6	▲Wheel and Tires																	
Every 6,000 miles (Check wheel nut torque after 1st 500 miles)	7	*Engine Oil Filter																	
	8	Air Compressor Air Filter																	
	9	Automatic Transmission and Final Drive																	
	10	*Cooling System																	
	11	Rear Wheel Bearings																	
	12	Final Drive Boots & Output Shaft Seals																	
Every 4 months or 6,000 miles	13	Brakes and Power Steering																	
	14	Exhaust System																	
	15	*Drive Belts																	
	16	Suspension and Steering																	
	17	Owner Safety Checks																	
	18	Disc Brakes																	
Every 6,000 miles	19	Drum Brakes and Parking Brake																	
	20	Throttle Linkage																	
	21	Headlights																	
	22	Underbody																	
	23	Bumpers																	
	24	Thermostatically Controlled Air Cleaner																	
At 1st 4 months or 6,000 miles—then at 12 month/12,000 mile intervals	25	Carburetor Choke																	
	26	Timing, Dwell, Carb. Idle Speed, Distributor																	
	27	Carburetor Mounting																	
	28	Spark Plugs (When using leaded fuels)																	
	29	Thermal Vacuum Switch and Hoses																	
	30	Carburetor Fuel Filter																	
Every 6,000 miles	31	PCV System																	
	32	Engine Compression																	
	33	ECS System																	
	34	Fuel Cap, Tanks and Lines																	
	35	Air Cleaner Element																	
	36	Spark Plug Wires																	
Every 12 months or 12,000 miles	37	Thermostatically Controlled Air Cleaner																	
	38	Carburetor Choke																	
	39	Timing, Dwell, Carb. Idle Speed, Distributor																	
	40	Carburetor Mounting																	
	41	Spark Plugs (When using leaded fuels)																	
	42	Thermal Vacuum Switch and Hoses																	
Every 24 months or 24,000 miles	43	Carburetor Fuel Filter																	
	44	PCV System																	
	45	Engine Compression																	
	46	ECS System																	
	47	Fuel Cap, Tanks and Lines																	
	48	Air Cleaner Element																	
Every 24,000 miles	49	Spark Plug Wires																	
	50	Thermostatically Controlled Air Cleaner																	
	51	Carburetor Choke																	
	52	Timing, Dwell, Carb. Idle Speed, Distributor																	
	53	Carburetor Mounting																	
	54	Spark Plugs (When using leaded fuels)																	
At 1st 24/24—then every 12/12	55	Thermal Vacuum Switch and Hoses																	
	56	Carburetor Fuel Filter																	
	57	PCV System																	
	58	Engine Compression																	
	59	ECS System																	
	60	Fuel Cap, Tanks and Lines																	

\*Also an Emission Control Service

▲Also a Safety Service

† Figures represent miles in thousands

# GMC MOTOR HOME MAINTENANCE SCHEDULE

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

This section contains a complete schedule of the maintenance required by your vehicle. These services should be performed by any authorized GMC Motor Home service outlet or any other qualified service outlet which regularly provides such services.

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

**IMPORTANT: The maintenance schedule and service log in this manual 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.**

## EXPLANATION OF COMPLETE VEHICLE MAINTENANCE SCHEDULE

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

Vehicle operation under conditions such as heavy dust, continuous short trips, use of other than unleaded or low lead fuels or pulling trailers, is not considered normal use and therefore more frequent maintenance will be required. Such additional maintenance requirements are included where applicable. Refer to particular areas of this manual for service parts information and additional details on specific services. A listing of recommended lubricants and fluids is included later in this section.

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 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."

NOTE: The following colored blocks indicate when services should be performed based on mileage intervals as shown in the "When To Perform Services" column. Where more than one colored block is shown for a given ITEM NO., this item is also a safety or emission control related service depending on the color.

## LUBE & GENERAL MAINTENANCE

### ITEM NO. SERVICES

**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. See illustration on page 76.

**2 FLUID LEVELS**—Check level of fluid in brake master cylinder<sup>▲</sup>, power steering pump<sup>▲</sup>, all batteries, engine<sup>\*</sup>, final drive, transmission<sup>\*</sup>, and windshield washer<sup>▲</sup>. The engine coolant should be checked for proper level and freeze protection to at least -20° F., or to the lowest temperature expected during the period of vehicle operation<sup>\*</sup>. 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.

**3 ENGINE OIL<sup>\*</sup>**—Change each 3 months or 3,000 miles, whichever occurs first.

**4 AIR CONDITIONING**—Check condition of air conditioning system hoses and refrigerant charge at sight glass. Replace hoses and/or refrigerant if need is indicated.

**5 LIVING AREA WATER PUMP BELT**—Check for belt wear and adjust tension if necessary. See "Water Pump" section for adjusting information.

**6 WHEELS AND TIRES**—Have wheel-nut torque checked after 1st 500 miles and 500 miles after every wheel replacement thereafter. To equalize wear, rotate tires as illustrated in the "Wheels and Tires" section. Check tires for excessive wear, nails, glass, cuts or other damage. Make certain wheels are not bent or cracked. Uneven or abnormal tire wear may indicate the need for alignment service. Tire inflation should be checked monthly or more often if visual inspection indicates a need and after each tire rotation. Adjust pressure if required, as shown on tire placard on glove box door.

<sup>▲</sup>Also a Safety Service.

<sup>\*</sup>Also an Emission Control Service.

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

**8 AIR COMPRESSOR**—Filter<sup>▲</sup> attached by a spring clip should be washed with soap and water solution. Filter<sup>▲</sup> attached by a screw and washer should be cleaned with a suitable cleaning solvent. Add several drops of oil to the filter.

**9 AUTOMATIC TRANSMISSION FLUID AND FINAL DRIVE LUBRICANT**—Change the transmission fluid\* and filter; change final drive lubricant.

**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 every 24 months or 24,000 miles or earlier 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.

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

**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

**13 BRAKES AND POWER STEERING**—Check lines and hoses for proper attachment, 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.

**14 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 defects should

be corrected immediately. To help ensure continued integrity, exhaust system pipes rearward of the muffler must be replaced whenever a new muffler is installed. Use genuine GM parts specified for your vehicle.

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

It is recommended that belts be replaced every 24 months or 24,000 miles, whichever occurs first.

**16 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.

**17 SAFETY CHECKS TO BE PERFORMED BY OWNER**—Listed below are the safety checks that should be made by the owner (items a thru t). These checks should be made at least every 4 months or 6,000 miles, whichever occurs first, or more often when the need is indicated. Any deficiencies should be brought to the attention of your service outlet, as soon as possible, so the advice of a qualified mechanic is available regarding the need for repairs or replacements.

**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 LAP BELTS**—Check belts, buckles, retractors and anchors for cuts, fraying or weakened portions, loose connections, damage, and for proper operation. Check to make certain that anchor mounting bolts are tight.

**c STEERING**—Be alert to any changes in steering action. The need for inspection or servicing may be indicated by "hard" steering, excessive free-play or unusual sounds when turning or parking.

**d 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.

**e DEFROSTERS**—Check performance by moving controls to “DEF” and noting amount of air directed against the windshield.

**f WHEEL ALIGNMENT AND BALANCE**—In addition to 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 increased brake pedal travel. Any of these could indicate the need for brake system inspection and/or service.

**h 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 (See page 19).

**i GLASS**—Check for broken, scratched, dirty or damaged glass on vehicle that could obscure vision or become an injury hazard.

**j LIGHTS AND BUZZERS**—Check all instrument panel illuminating reminder, 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 someone observe operation of each exterior light while you activate controls.

**k TRANSMISSION SHIFT INDICATOR**—Check to be sure transmission shift indicator accurately indicates the shift position selected.

**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.

**l STARTER SAFETY SWITCH**—Check starter safety switch by placing the transmission in each of the driving gears while attempting to start the engine. The starter should operate only in the “PARK” or “N” (Neutral) positions.

**m HORN**—Blow the horn occasionally to be sure that it works.

**n SEAT SWIVEL LEVERS**—Check to see that seat swivel levers are holding by attempting to swivel the seat with the lever set in the locked cautions referenced at the end of items.

**o REAR VIEW MIRRORS AND SUN VISORS** — Check that friction joints are properly adjusted so mirrors and sun visors stay in the selected position.

**p ENTRANCE DOOR LATCH**—Check for positive closing, latching and locking.

**q 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 closing.

**r FLUID LEAKS**—Check for fuel, water, oil or other fluid leaks by observing the ground 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.

**s ENGINE AND MOTOR GENERATOR EXHAUST SYSTEM**—Be alert to any change in the sound of the exhaust system, motor-generator, or a smell of fumes which may indicate a leak. (See “Engine Exhaust Gas Caution” at the beginning of the section on Starting and Operating, and the Carbon Monoxide Caution at the head of the section on Living Area Facilities in this manual and item 14 in this section.)

**t LP GAS SYSTEM**—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. See cautions referenced at the end of item s.

**18 DISC BRAKES**—Check brake pads and condition of rotors while wheels are removed during tire rotation. (Note below regarding more frequent checks also applies to disc brakes.)

**19 DRUM BRAKES AND PARKING BRAKE**—Check drum brake linings and other internal brake components at rear wheels (drums, wheel cylinders, etc.). Parking 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. Your GMC Motor Home service outlet can advise you how often these checks should be performed. When brakes require relining, it is recommended that you use those genuine GM parts specified for your vehicle, and Delco fluid as required.

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

**21 HEADLIGHTS**—Check for proper aim. Correct as necessary. More frequent checks should be made if oncoming motorists signal when you are already using your low beams, or if illumination of the area ahead seems inadequate.

**22 UNDERBODY**—In geographic areas using a heavy concentration of road salt or other corrosive materials for snow removal or road dust control, flush and inspect the complete underside of the vehicle at least once each year, preferably after a winter's exposure. The effects of salt and other corrosion materials used for ice and snow removal can result in accelerated rusting and deterioration of underbody components such as brake and fuel lines, frame, underbody floor, exhaust system, brackets, parking brake cables. Particular attention should be given to cleaning out underbody members where dirt and other foreign materials may have collected.

**23 BUMPERS**—Check the front and rear bumper systems at 12-month/12,000-mile intervals to be sure the impact protection and clearance originally designed into the system remains in a state of full readiness. It also should be checked whenever there is obvious bumper misalignment, or whenever the vehicle has been involved in a significant collision in which the bumper was struck, even when no damage to the bumper system can be seen.

NOTE: Be sure to read the "FOREWORD" in the EMISSION CONTROL SYSTEMS INFORMATION AND WARRANTY section.

**24 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.

**25 CARBURETOR CHOKE**—Check choke mechanism for free operation. A binding condition may have developed from petroleum gum formation on the choke shaft or from damage.

**26 TIMING, DWELL, CARBURETOR IDLE SPEED, DISTRIBUTOR**—Adjust ignition timing, dwell and carburetor idle speed accurately (following the specifications shown on the label on the right engine cover at the first 4 months or 6,000 miles of operation, then at 12-month or 12,000-mile intervals. Adjustments must be made with test equipment known to be accurate.

Replace distributor points every 12 months or 12,000 miles and replace cam lubricator every 24 months or 24,000 miles. Also, carefully inspect and clean the interior and exterior of the distributor cap at 24-month/24,000-mile intervals to prevent misfiring and deterioration.

Proper functioning of the carburetor is particularly essential to control of emissions. Correct mixtures for emission compliance and idle quality have been pre-set by the manufacturer. Plastic idle mixture limiters have been installed on the idle mixture screws to preclude unauthorized adjustment. These idle limiters are not to be removed unless some major carburetor repair or replacement which affects the idle screw adjustment, has been necessary.

**27 CARBURETOR MOUNTING**—Torque carburetor attaching bolts to 15 foot-pounds to compensate for compression of gasket at first 4 months or 6,000 miles of vehicle operation only.

**28 SPARK PLUGS**—Replace at 6,000-mile intervals when operating with leaded fuels, or at 12,000-mile intervals when using unleaded fuels. Use of leaded fuels results in lead deposits on spark plugs and can cause misfiring at mileages less than 12,000 miles. Where misfiring occurs prior to 6,000 miles, spark plugs in good condition can often be cleaned, tested, and reinstalled in an engine with acceptable results.

**29 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.

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

**31 POSITIVE CRANKCASE VENTILATION SYSTEM (PCV)**—Check the PCV system for satisfactory operation at 12-month or 12,000-mile intervals, using a tester, and clean filter. Replace the PCV valve at 24-month or 24,000-mile intervals and blow out PCV valve hose with compressed air and replace the filter. 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 or trailer pulling.

The PCV filter should be replaced at 12-month/12,000-mile intervals under dusty driving conditions.

**32 ENGINE COMPRESSION**—Test engine cranking compression. If a problem exists, have correction made. Minimum compression recorded in any one cylinder should not be less than 70% of the highest cylinder. For example, if the highest pressure in any one cylinder is 150 lbs., the lowest allowable pressure for any other cylinder would be 105 lbs. ( $150 \times 70\% = 105$ ).

**33 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.

**34 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.

**35 AIR CLEANER ELEMENT**—Replace the engine air cleaner element under normal operating conditions every 24,000 miles. Operation of vehicle in dusty areas will necessitate more frequent element replacement. Your GMC Motor Home service outlet 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, backfiring can cause fire in the engine compartment.**

**36 SPARK PLUG WIRES**—Inspect spark plug wires for evidence of checking or cracking of exterior insulation and tight fit in the distributor cap and at the spark plugs. Exterior of wires should be cleaned, any evidence of corrosion on ends removed and wire replaced if deteriorated.

## 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. 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 Motor Home service outlet.

Additional information about the items on this schedule may be found later in this section.

## ONAN 4,000/6,000 WATT MOTOR GENERATOR MAINTENANCE SCHEDULE

SERVICE THESE ITEMS	AFTER EACH CYCLE OF INDICATED HOURS						
	8	100	200	400	500	1000	1500
General Inspection	4,000/6,000 watt						
Check Oil Level	4,000/6,000 watt						
Change Crankcase Oil		4,000/6,000 watt (1)					
Clean Air Cleaner		4,000/6,000 watt (1)					
Check Spark Plugs		4,000/6,000 watt					
Fuel Filter—Clean		4,000 watt			6,000 watt (2)		
Check Breaker Points		4,000 watt 6,000 watt(2)					
Clean Cooling Fins			4,000/6,000 watt (1)				
Change Oil Filter		6,000 watt (1)	4,000 watt (1)				
Replace Breaker Points			4,000 watt				
Clean Crankcase Breather			4,000 watt				
Replace Air Cleaner			4,000 watt (1)		6,000 watt (1)		
Remove Carbon From Heads			4,000 watt		6,000 watt		
Adjust Tappets				4,000 watt	6,000 watt		
Check Generator Brushes						4,000 watt	6,000 watt
Complete Reconditioning (If Required)						4,000 watt	6,000 watt

(1) Perform more often in extremely dusty conditions.

(2) Replace if necessary.

## KOHLER 4,000 WATT MOTOR GENERATOR MAINTENANCE SCHEDULE

SERVICE THESE ITEMS	AFTER EACH CYCLE OF INDICATED HOURS			
	8	50	100	200
General Inspection	X			
Check Oil Level	X			
Change Crankcase Oil (1)		X		
Clean Air Cleaner Element		X		
Replace Air Cleaner Element			X	
Check Spark Plugs			X	
Clean Cooling Fins				X
Check Breaker Points				X
Replace Fuel Filter			X	
General Tune-Up				X

(1) Initial oil change after 5 operational hours.