



ELECTRICAL SYSTEMS (Continued)

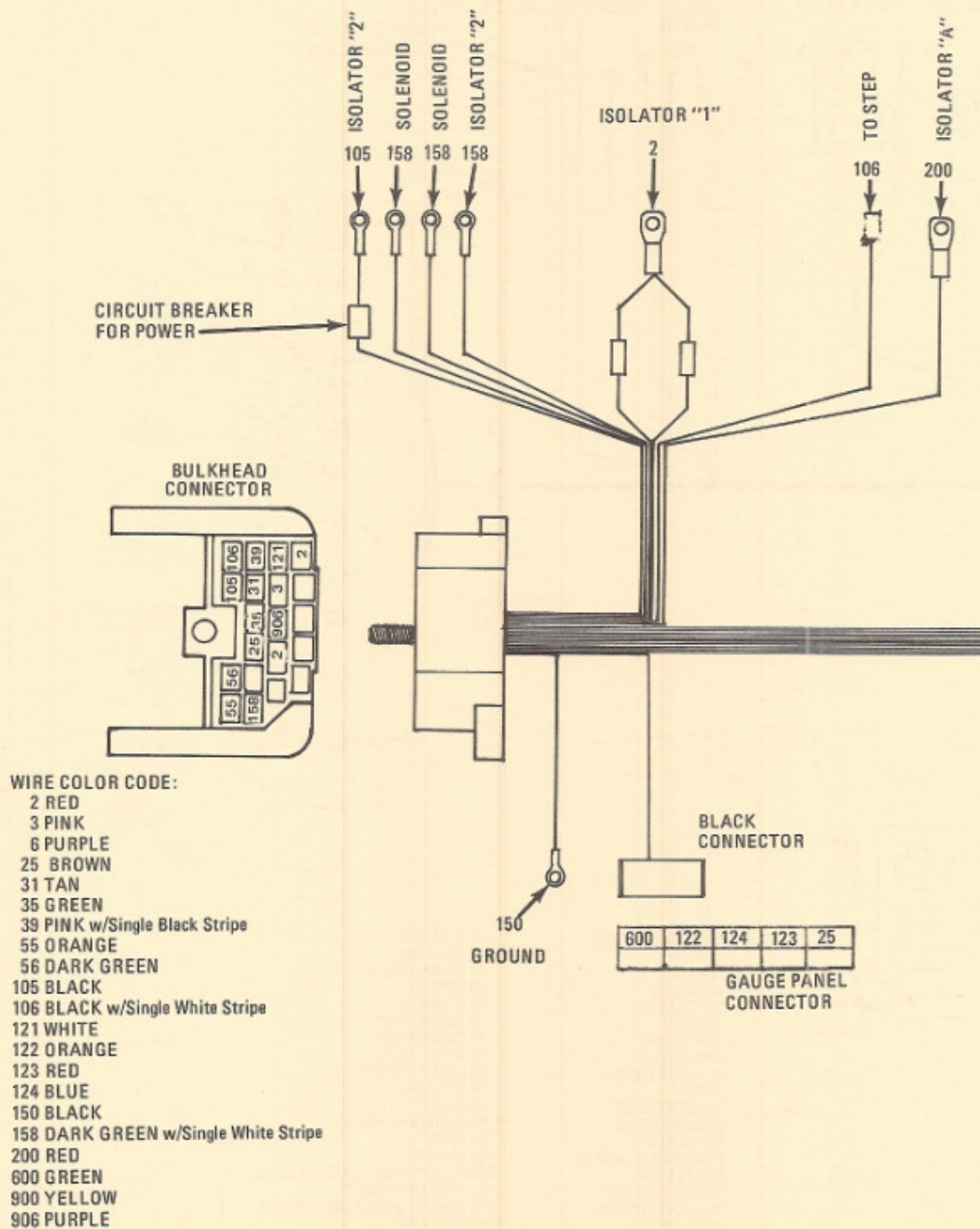
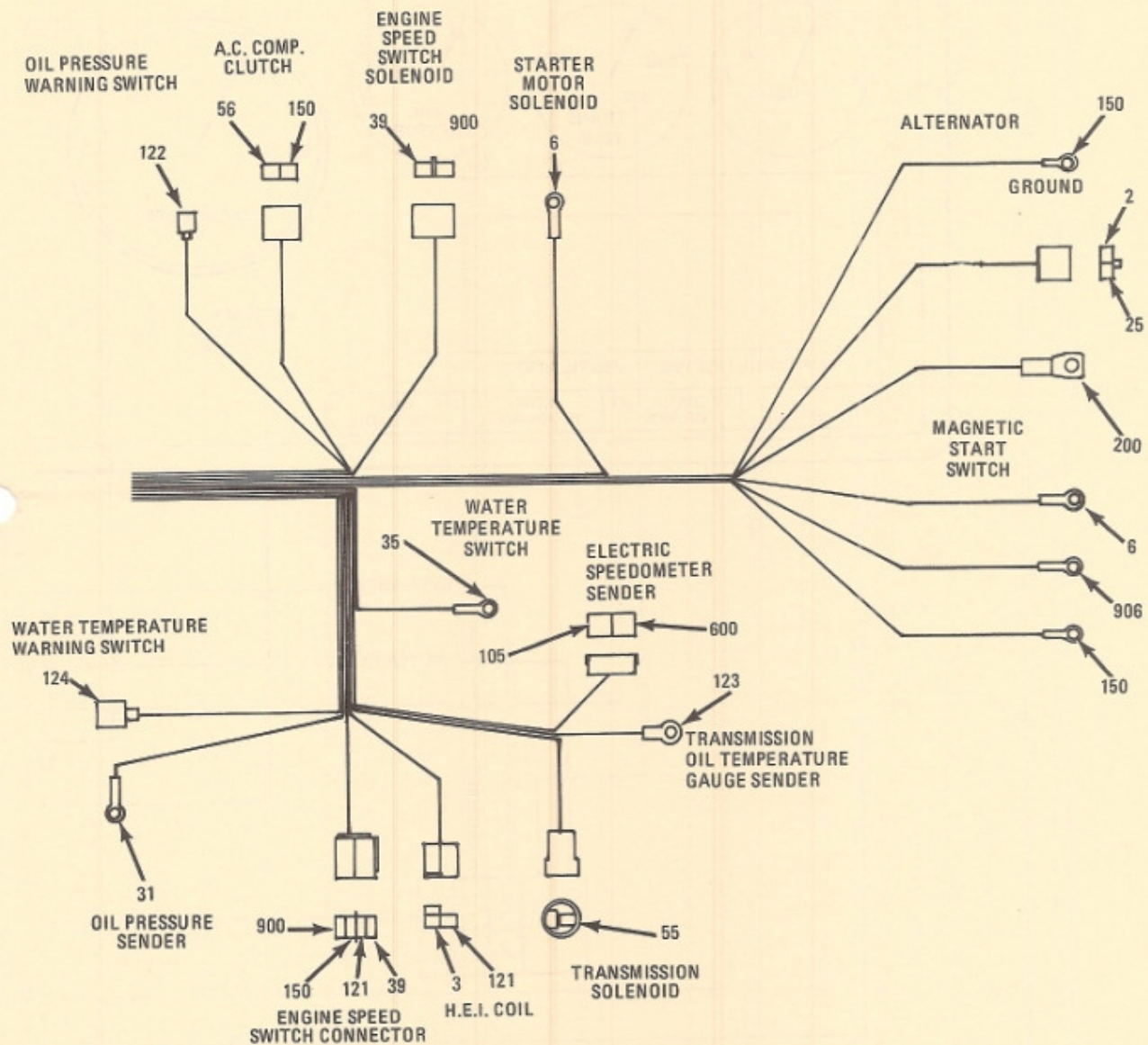


Figure 199 — Engine Electrical Wiring Schematic



ELECTRICAL SYSTEMS (Continued)



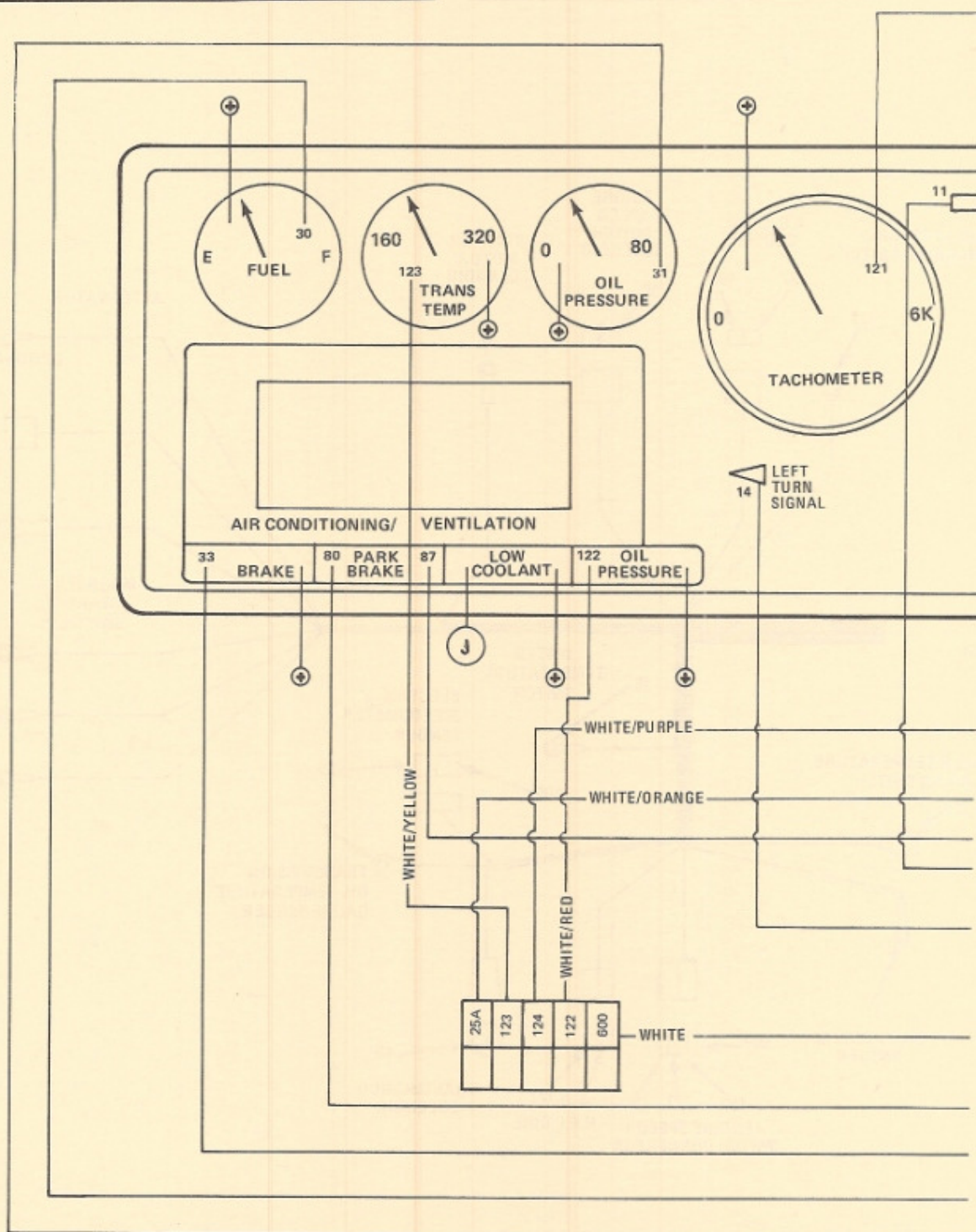


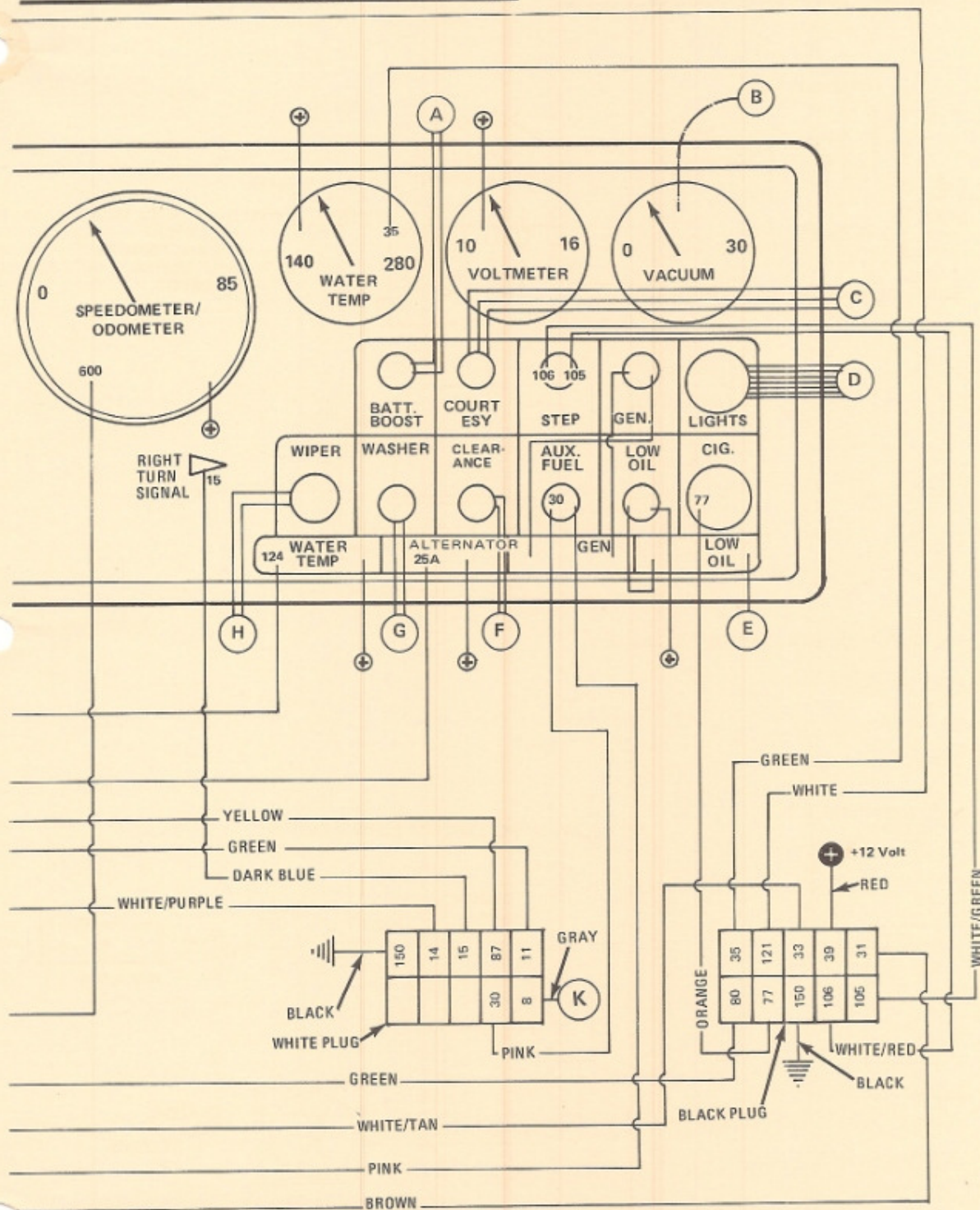
Figure 200 – Gauge Panel Wiring Schematic

NOTES:

- A. Battery Boost to Instrument Panel Schematic.
- B. Vacuum Tubing to Engine Manifold.
- C. Courtesy Light Switch direct to Instrument Panel Schematic and Coach Wiring.



ELECTRICAL SYSTEMS (Continued)



- D. Headlight Switch direct to Instrument Panel Schematic.
 E. Low Oil Light to Sensor.
 F. Clearance Light Switch to Instrument Panel Schematic.

- G. Windshield Washer Switch to Instrument Panel Schematic.
 H. Wiper Control to Wiper Schematic.
 J. Low Coolant Light (See Low Coolant Schematic).
 K. Panel Lights and Park Indicator.



ELECTRICAL SYSTEMS (Continued)

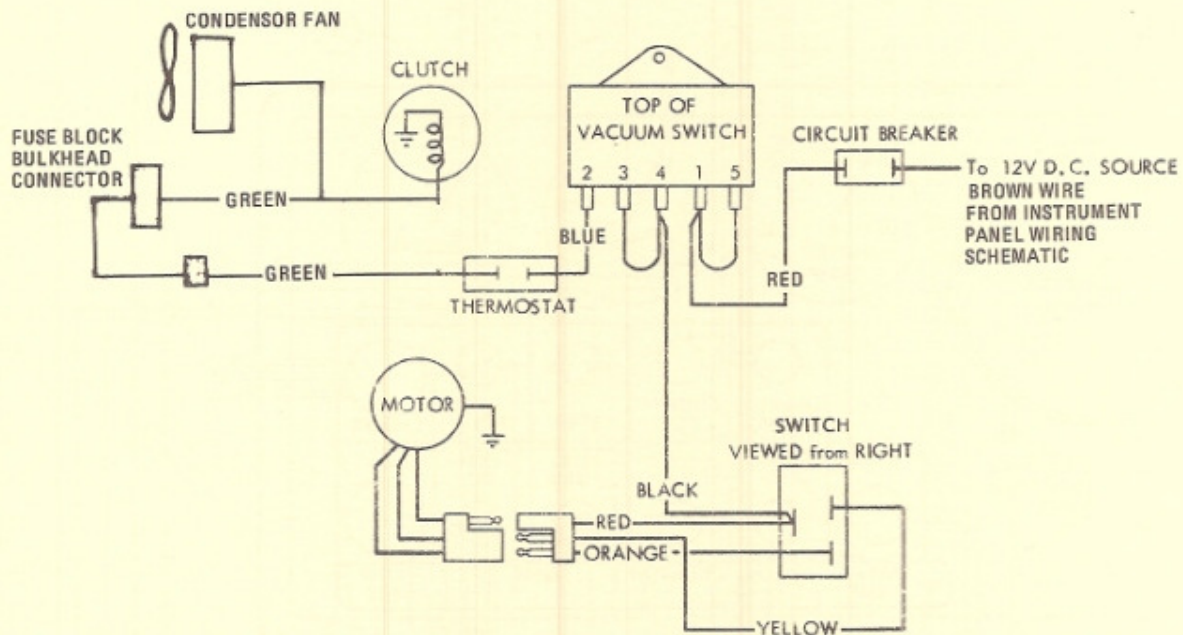


Figure 201 - Dash Air Conditioning Electrical Schematic

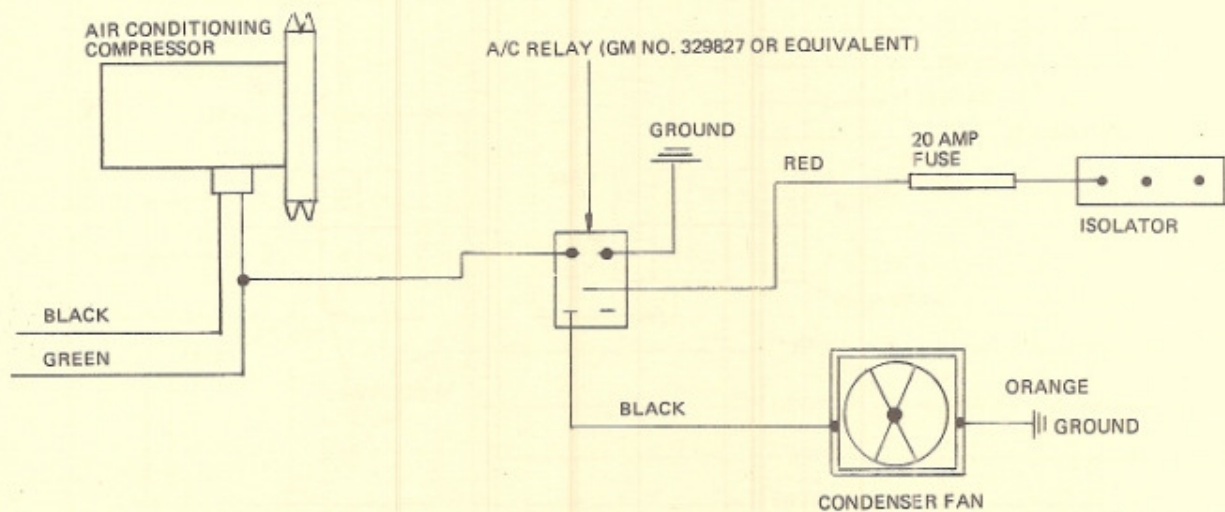


Figure 201A - Electrical Relay for Condenser Fan - Second Design

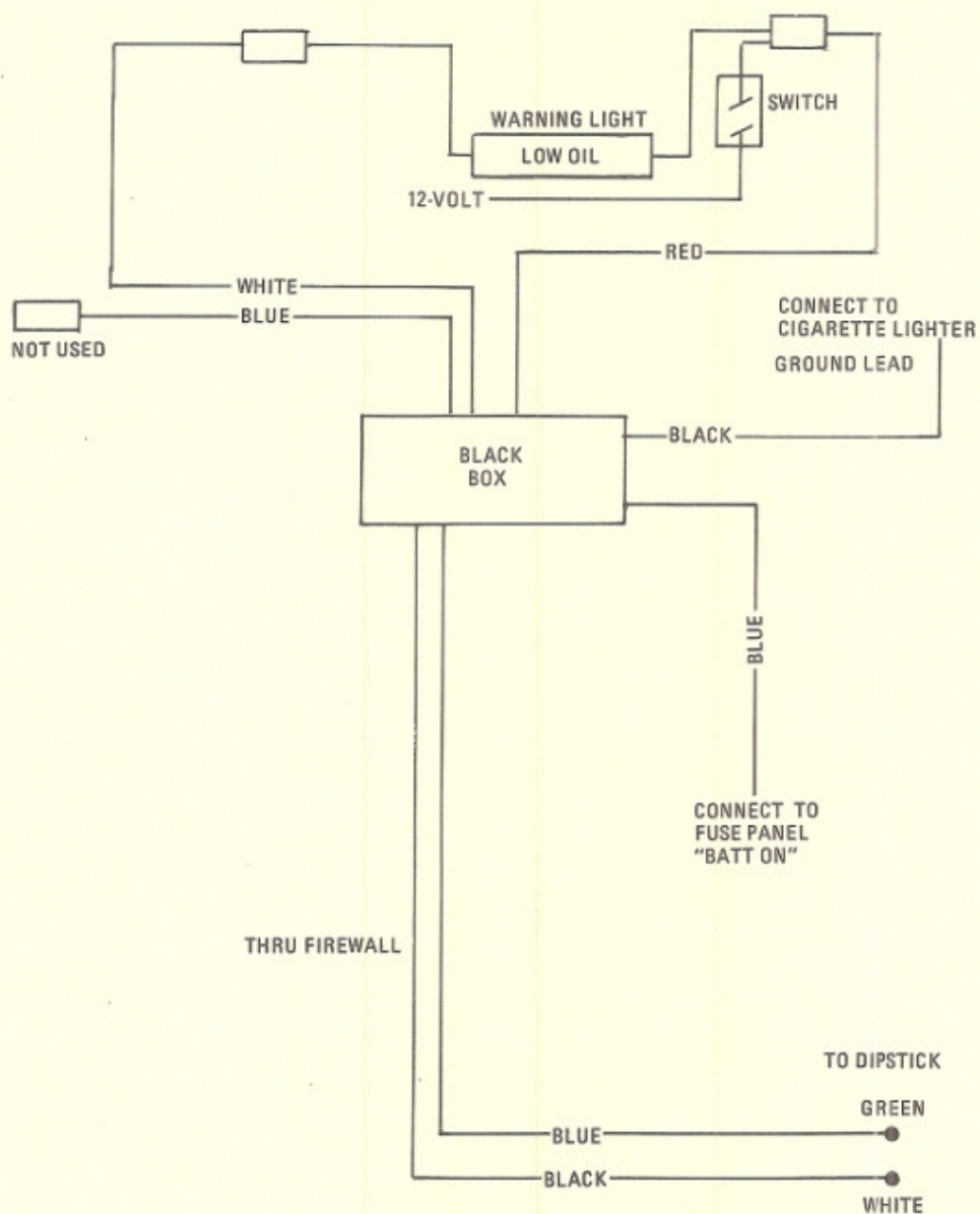


Figure 202 – Low Oil Electrical Wiring Schematic



MOTOR GENERATOR SET

AUXILIARY GENERATOR — Your REVCON is equipped with an Onan 6.5 NH gas-powered generator, installed in a compartment on the left rear side of the vehicle. This internal combustion engine drives an electrical generator providing 115-volts AC power to your coach. It can be used in exactly the same manner as electrical power taken from a commercial utility service outlet in a campground. The unit may be operated when the coach is parked where an external source of electricity is not available. The generator may also be used while the motorhome is traveling, in order to operate the roof-mounted air conditioner(s) or other electrical appliances which take 115-volt power only.

AUXILIARY GENERATOR OPERATION — The generator may be started by pressing the switch on the control center panel to the "START" position. This switch should NOT be held in "START" for more 30 seconds as internal damage to the motor generator set may occur. The generator also may be started by a switch located at the unit itself.

NOTE: All 115-volt coach appliances, particularly the roof-mounted air conditioner, should be turned off while starting the generator.

The light above the switch will be illuminated while the generator is operating. To stop the generator, press the switch to the right, to the "STOP" position and then hold for approximately 20 seconds or until the unit has stopped running.

Your REVCON is equipped with an elapsed time gauge, located on the control panel, for this generator. This gauge accumulates the hours and tenths of hours that your generator has operated, providing you with information as to when the unit should be serviced.

Fuel is supplied to the generator from the main fuel tank. As a safety feature to allow you sufficient fuel to reach a service station, the generator will stop operating when the fuel level in the main tank is down to 10 gallons.

Crankcase Oil — The set oil capacity is 3 U.S. quarts plus 1/2 quart for oil filter change. Fill the crankcase until the oil reaches the "FULL" mark on the oil level indicator (see figure 204). **DO NOT OVERFILL.** (Overfilling may cause

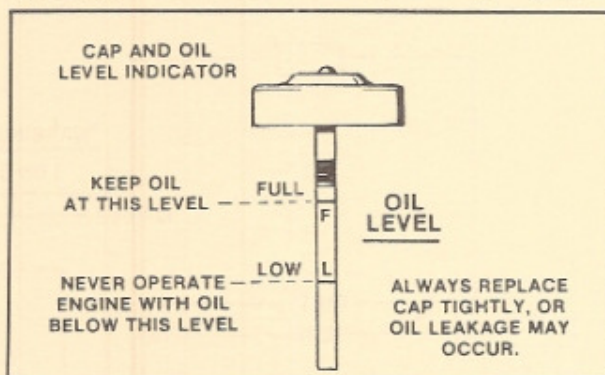


Figure 204 — Checking Oil Level

foaming and engine shutdown.) Always change the oil filter when changing oil. Be sure to fill the crankcase with oil to the "FULL" mark on the oil level indicator. Use oil with the API (American Petroleum Institute) designation SE or SE/CC. Refer to oil chart for recommended viscosity and temperature, (see figure 205).

Oil consumption may be higher with a multigrade oil than with a single grade oil if both oils have comparable viscosities at 210° F (99° C). Therefore, single grade oils are generally more desirable, unless anticipating a wide range of temperatures.

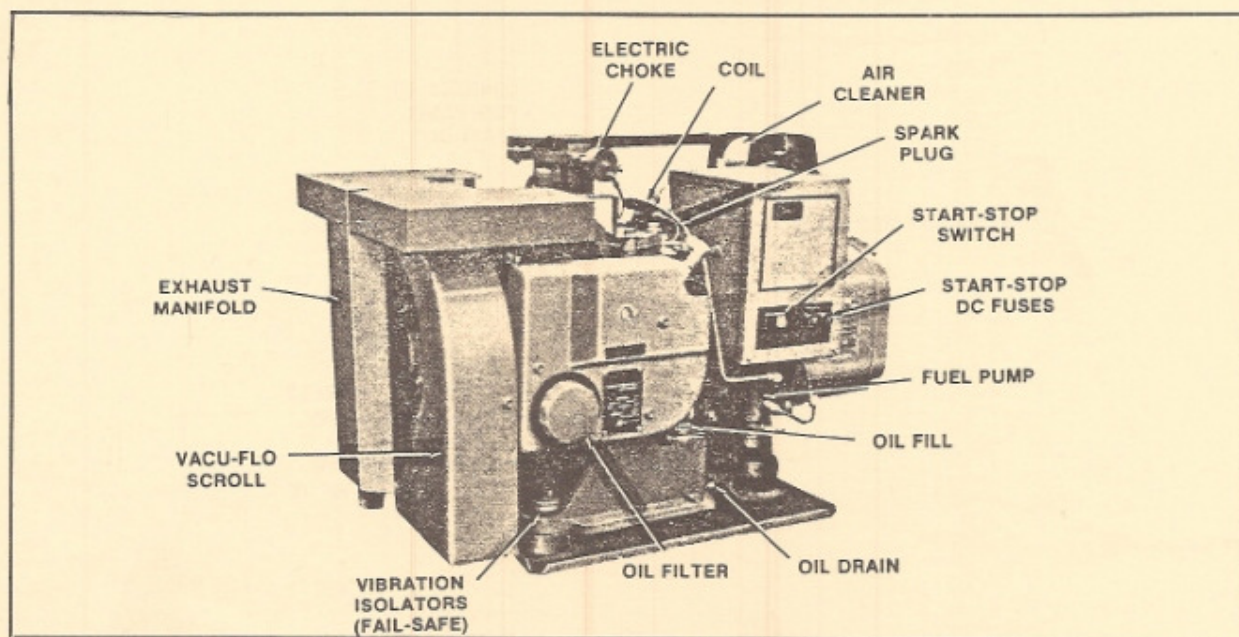


Figure 203 — Motor Generator Set



MOTOR GENERATOR SET (Continued)

Use of the same grade and quality of oil as that used in your recreational vehicle engine is acceptable as long as unit is serviced regularly and oil meets requirements shown in chart.

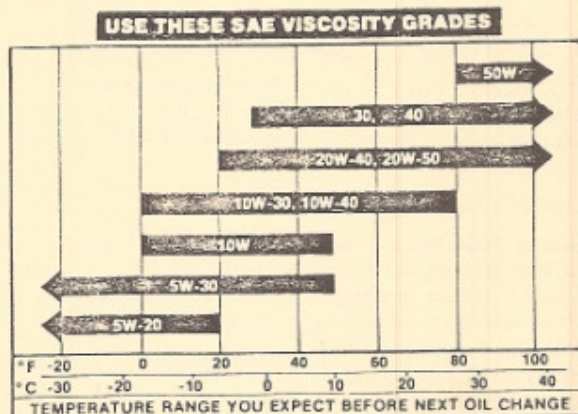


Figure 205 — Oil Viscosity Grades Chart

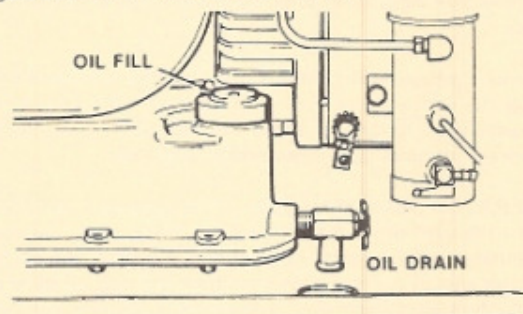


Figure 206 — Oil Drain and Fill

WARNING — Do NOT check oil while the generator is operating. Hot oil could cause burns by blowing out of oil fill tube due to crankcase pressure.

Check oil level daily and change oil every 100 normal operating hours. See figure 206 for location of oil drain. If operating in extremely dusty or dirty conditions, the oil might have to be changed sooner. When adding oil between changes, use the same brand as in the crankcase. Various brands of oil might not be compatible when mixed.

Break-in Procedure — Controlled break-in with the proper oil and a conscientiously applied maintenance program will help to assure satisfactory service from your Onan electric generating set. Break-in as follows:

1. One half hour at 1/2 load (with one air conditioner) and approximately 500 watts additional load.
2. One half hour at 3/4 load (with one air conditioner) and approximately 1500-2000 watts additional load.
3. Change crankcase oil after the first 50 hours of operation.

Applying Load — If practical, allow set to warm up before connecting a heavy load. Continuous generator overloading may

cause high operating temperatures that can damage windings. Keep the load within nameplate rating.

Exercise — Infrequent use results in hard starting. Operate the generator set one 30-minute period each week. Run longer if battery needs charging. Exercising for one long period each week is better than several short periods.

Battery Charging — The battery charge rate is controlled by a fixed value resistor that allows a trickle charge rate of 1 - 1 1/2 amps under all conditions.

High Operating Temperatures —

1. See that nothing obstructs air flow to and from the set.
2. Keep cooling fins clean. Air housing should be properly installed and undamaged.
3. Keep ignition timing properly adjusted.

Low Operating Temperatures —

1. Use correct SAE oil for temperature conditions; use oil viscosity chart. Change oil only when engine is warm. If an unexpected temperature drop causes an emergency, move vehicle to a warm location.
2. Protect against moisture condensation. Below 0° F (-18° C), adjust carburetor main jet for a slightly richer fuel mixture.
3. Keep ignition system clean, properly adjusted, and the batteries in a well charged condition.
4. Partially restrict cool airflow, but use care to avoid overheating.

Extremely Dusty or Dirty —

1. Keep unit clean. Keep cooling surfaces clean.
2. Service air cleaner as frequently as necessary.
3. Change crankcase oil every 50 operating hours.
4. Keep oil and gasoline in dust-tight containers.
5. Keep governor linkage clean.
6. Clean generator brushes, slip rings, and commutator. Do not remove normal dark brown film. Do not polish.

High Altitude Operation — For operation at altitudes of 2500 feet above sea level, close carburetor main jet adjustment slightly to maintain proper air-to-fuel ratio. Maximum power will be reduced approximately four percent for each 1000 feet above sea level after the first 1000 feet.

GENERATOR SET MAINTENANCE

Electric Fuel Pump — Service of the generator fuel pump is limited to cleaning the filter. Every 100 hours, drain the fuel pump and check the filter element. Turn the hex nut on the base of the pump to gain access to the filter element. If the element appears dirty, replace it. Be sure to replace gaskets when reassembling (see figure 207).

Cooling System — The generator is cooled by a flywheel blower fan which pulls air over the cylinders and cooling fins. The air path is directed by sheet metal shrouds and plates. These shrouds and plates must always be installed properly so unit does not overheat. Check and clean (if necessary) the cooling fins at least every 200 hours of operation. Remove any dust, dirt or oil which may have accumulated. Check compartment air inlet and the generator set air outlet for any buildup of dirt, chaff, etc.



MOTOR GENERATOR SET (Continued)

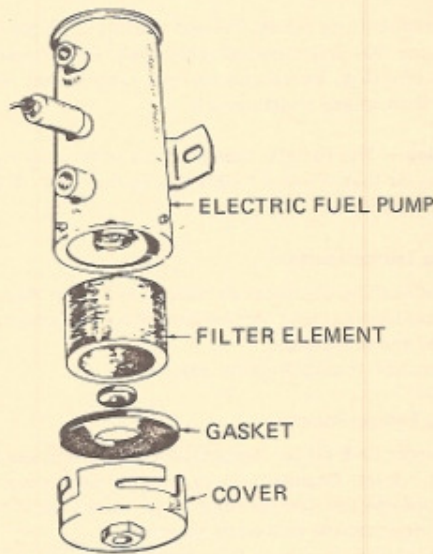


Figure 207 — Onan Fuel Pump

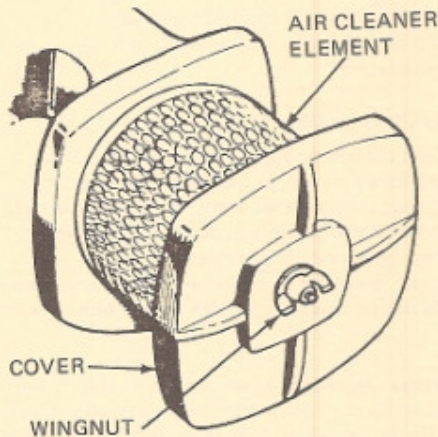


Figure 208 — Air Cleaner Element

Air Cleaner Element — Check and clean element at least every 100 hours. Loosen wing nut to remove. Clean by tapping base lightly on a flat surface. Replace element at least every 200 operating hours; clean or replace more often in dusty conditions (see figure XX).

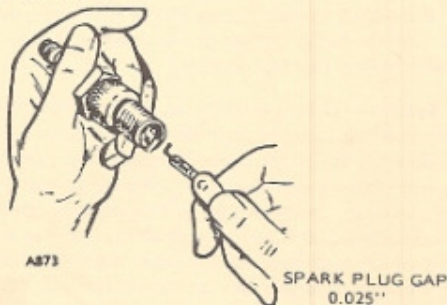


Figure 209 — Checking Spark Plug Gap

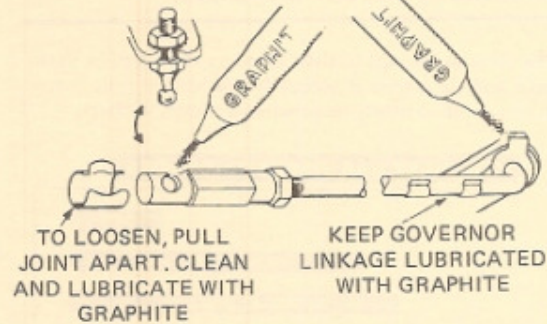


Figure 210 — Governor Linkage

Generator Spark Plugs — Replace spark plugs every 100 hours or at least once a year. A badly leaded plug will cause misfiring, poor operation, or stopping when a load is applied.

Black deposits indicate a rich mixture.

Wet plug indicates misfiring.

Badly or frequently fouled plug indicates the need for a major tuneup.

Each time the spark plugs are removed, inspect, clean, and re-gap (see figure 209). If the plug looks discolored or has fouled, replace it.

Governor Linkage — The linkage must be able to move freely through its entire travel. Every 50 hours of operation, clean the joints and lubricate as shown in figure 210. Also inspect the linkage for binding, excessive slack, and wear.

GENERATOR MAINTENANCE — The generator normally needs little care other than a periodic check of the brushes, commutator, and collector rings. If a major repair job on the generator should become necessary, have the unit checked by a competent electrician who is thoroughly familiar with the operation of electric generator equipment.

Brush Replacement — Install new brushes when the old ones are worn to the dimensions shown in figure 211. Remove the end bell band to expose the brush holders. Remove the three screws holding each brush holder in place (see figure 211). Remove the old brushes and clean the holders so the new brushes can move easily in their holders. Install the new brushes in the same manner as the old ones. Always use the correct brush as specified for this unit. Never substitute a brush which may appear to be the same for it may have different characteristics. New brushes are shaped to fit and seldom need sanding to seat properly. If some brush sparking occurs after replacing the brushes, run the generator set under a light load until the brushes wear to a good seat.

Collector rings acquire a glossy brown finish in normal operation. Do not attempt to maintain a bright newly machined surface. Ordinary cleaning with a dry, lint-free cloth usually is sufficient. Very fine sandpaper (No. 200) may be used to remove slight roughness.

Exhaust Spark Arrester — Exhaust spark arresters are necessary for safe operation. All require periodic clean-out every 50 to 100 hours of operation to maintain maximum efficiency. Some state and federal parks require them. To clean spark arrester, remove pipe plug in bottom of muffler. Run the generator set under load for five (5) minutes. Replace plug.



MOTOR GENERATOR SET (Continued)

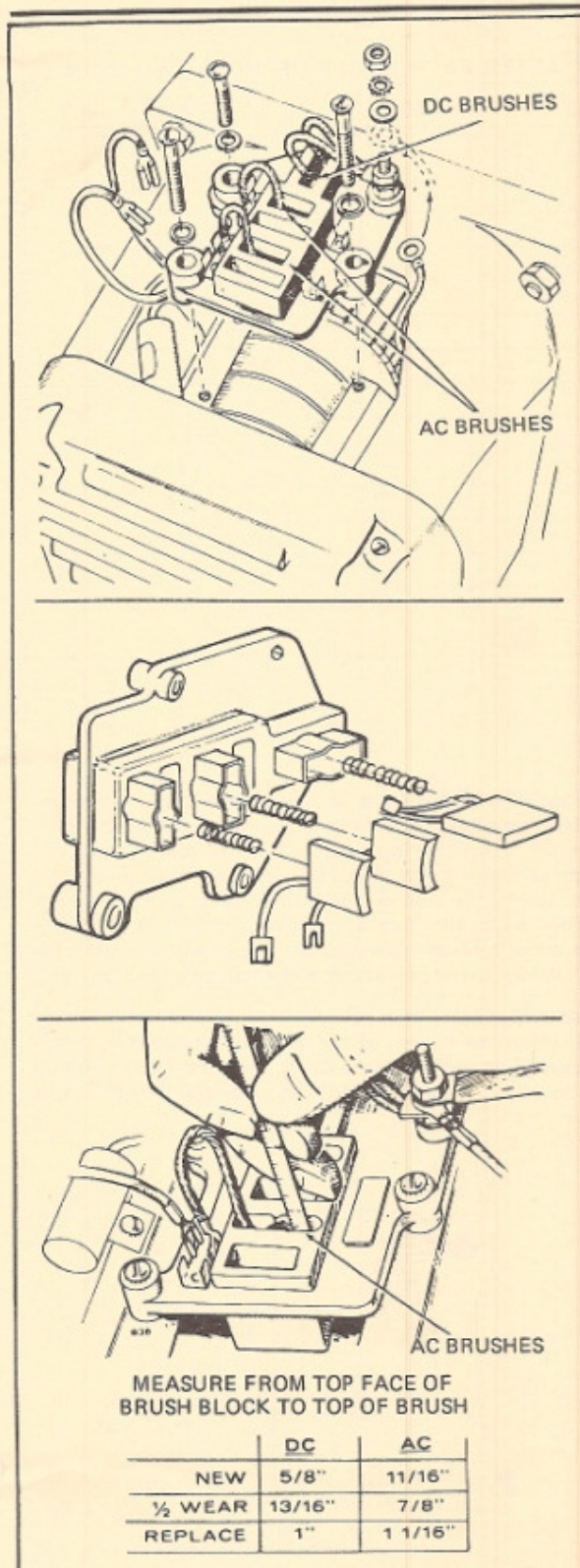


Figure 211 — Brush Length

GENERATOR SET MAINTENANCE SCHEDULE — 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 condition of 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 authorized REVCON or Onan dealer.

WARNING: Always allow generator set to cool off before performing any maintenance or installation work. Working on a hot unit could cause severe burns.

WARNING: All exhaust system connections must be checked regularly for any leaks and tightened as necessary. DO NOT terminate exhaust pipe under vehicle or near any window or door openings. Inspect the vapor tight seals around all openings made in the unit's compartment for wiring, conduit, etc., to prevent entrance of any noxious fumes to the motor home interior.

GENERATOR SET ADJUSTMENTS — Satisfactory generator set performance depends on correct adjustments. If trouble develops, follow an orderly procedure to determine the cause before making changes in adjustments.

Generator Carburetor — The generator set carburetor has two mixture adjustments: an idle mixture which affects operation mainly at no load, and a main (power) adjustment which affects operation at maximum load (see figure 212). If your generator set has a "hunting" (sudden surges and drops in speed) condition at no load or full load and cannot be corrected by carburetor adjustments, check governor, linkage, and adjustment. A hunting condition at no load can usually be corrected by an idle mixture adjustment.

CAUTION: When determining fuel mixture settings, never force the fuel mixture adjustment needles against their seats (this damages the seats and needles).

1. Adjust the carburetor idle needle with no load connected.
2. Adjust the carburetor main jet for the best fuel mixture while operating the set with a full rated load connected.

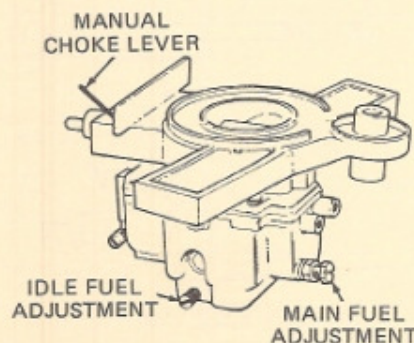


Figure 212 — Carburetor Fuel Mixture Adjustments



SERVICE THESE ITEMS	AFTER EACH CYCLE OF INDICATED HOURS				
	8	50	100	200	400
General Inspection	X1				
Check Oil Level	X				
Check Battery Electrolyte Level		X			
Change Crankcase Oil			X2		
Check Air Cleaner			X2		
Check Spark Plugs			X4		
Check Breaker Points			X3		
Change Oil Filter			X2		
Clean Cooling Fins				X2	
Replace Breaker Points				X4	
Clean Crankcase Breather				X2	
Replace Air Cleaner				X2	
Remove Carbon Deposits from Heads				X	
Adjust Tappets					X
Replace Fuel Filter					X4
Clean Carburetor					X
Check Generator Brushes (Replace if Necessary)	As Required				

X1 - With set running visually and audibly check exhaust system for leaks.

X2 - Perform more often in extremely dusty conditions.

X3 - Replace if necessary.

X4 - Replace annually or prior to storage.

- Adjust the length of the governor linkage and check linkage and throttle shaft for binding or excessive looseness.
- Adjust the governor spring tension for rated speed at no load operation.
- Adjust the governor sensitivity.
- Recheck the speed adjustment.
- Set the carburetor throttle stop screw.

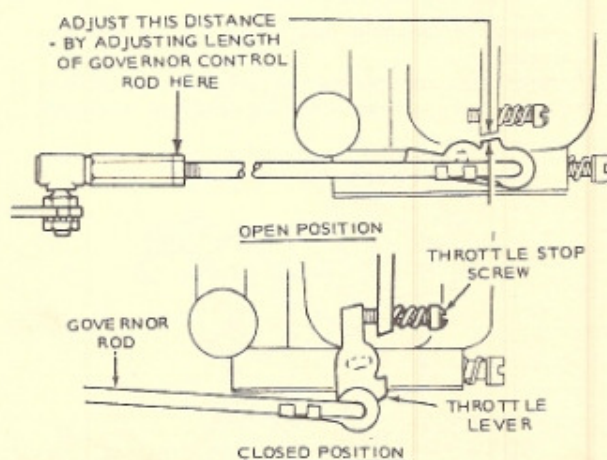


Figure 213 - Throttle Stop Screw Setting

Linkage: The engine starts at wide open throttle. The length of the linkage connecting the governor arm to the throttle shaft assembly is adjusted by rotating the ball joint. Adjust this length so that with the engine stopped and tension on the governor spring, the stop on the throttle shaft assembly almost touches the throttle stop screw housing on side of carburetor (one more turn of governor ball joint would allow throttle shaft linkage to rest against stop screw housing). (See figure 213.)

Speed Adjustment: With the warmed-up unit operating at no load, adjust the tension of the governor spring. Refer to the Voltage Chart and the Speed Chart. Turn the speed adjusting nut to obtain a voltage and speed reading within the limits shown.

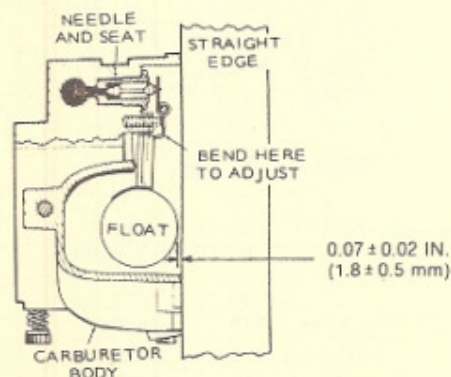


Figure 214 - Carburetor Float Setting



MOTOR GENERATOR SET (Continued)

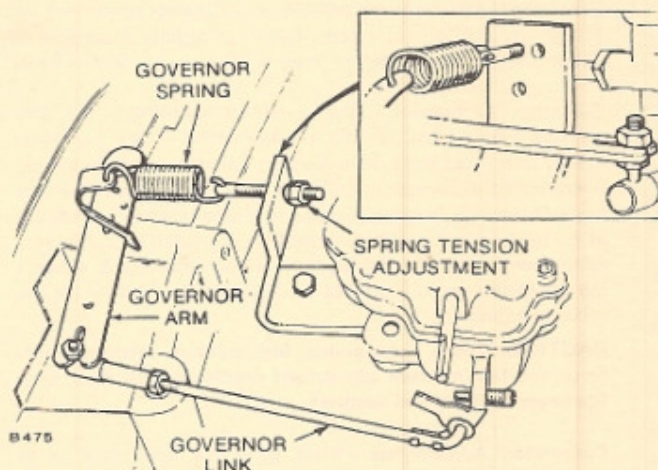


Figure 215 - Governor Adjustments

Sensitivity Adjustment: Refer to the Governor Adjustment illustration, and to the Voltage and Speed Charts. Check the voltage and speed, first with no load connected and again with a full load. Adjust the sensitivity to give the closest regulation (least speed and voltage difference between no load and full load) without causing a hunting condition.

To increase sensitivity (closer regulation), shift the spring toward the governor shaft.

Electric Choke — If extremes in starting temperatures require a readjustment of the choke, loosen slightly the two cover retaining screws (see figure 216). For less choking action, turn the cover assembly a few degrees in a clockwise direction. For more choking action, turn counterclockwise. Retighten the cover screws. Choke may be closed manually if desired to adjust choke settings or for troubleshooting purposes.

NOTE: If the engine starts and runs roughly after a minute or two of operation, the choke is set too rich. If the engine starts, and assuming that fuel, ignition and compression are adequate, but the engine sputters or stops before it warms up, the choke is set too lean.



AVERAGE CHOKE SETTING	
AMBIENT TEMP (F°)	CHOKE OPENING
58 (14° C)	closed
66 (19° C)	1/4 open
72 (22° C)	1/2 open
76 (24° C)	3/4 open
82 (28° C)	open

Figure 216 - Choke Adjustment

VOLTAGE CHART FOR CHECKING GOVERNOR REGULATION	120 VOLT 1 PHASE 2 WIRE
MAXIMUM NO-LOAD VOLTAGE	132
MINIMUM FULL-LOAD VOLTAGE	108

SPEED CHART FOR CHECKING GOVERNOR REGULATION	
MAXIMUM NO-LOAD SPEED (RPM)	1890
HERTZ (CURRENT FREQUENCY)	63
MINIMUM FULL-LOAD SPEED (RPM)	1770
HERTZ	59

Breaker Points and Ignition Timing — The correct point gap setting is .016 cold (0.41mm) and should be adjusted as follows:

1. Remove cover by loosening screw, and lift off.
2. To set the point gap, turn the engine crankshaft with rotation until the maximum breaker point gap is obtained.
3. Using an allen head wrench, adjust set screw (B) for .016 (0.41 mm). Measure point gap with a flat thickness gauge.

NOTE: Make sure feeler gauge is clean and free of any grease, oil or dirt, (see figure 217).

The timing is adjusted during initial engine assembly and is fixed by the point gap adjustment. No other adjustment or alignment is necessary. A .016 point gap is equivalent to approximately 20° BTC.

4. Replace point box cover.

NOTE: The ignition adjustments should be made with the engine in a static condition and cold.

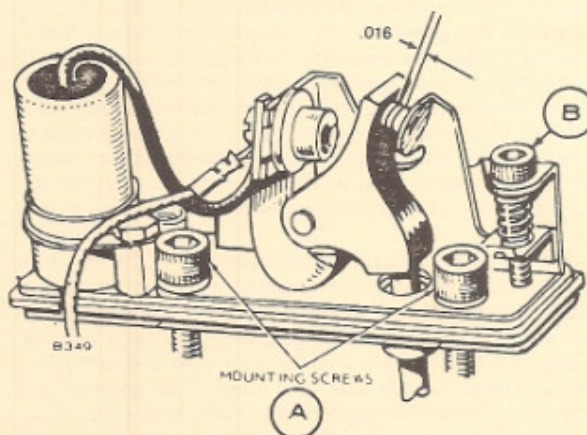


Figure 217 - Top Adjustment Points



MOTOR GENERATOR SET (Continued)

Carburetor Float Adjustment —

1. Normal operation seldom requires any adjustment of the float level. Disconnect throttle control, choke leads, air cleaner inlet hose and fuel line from carburetor.
2. Remove the four bolts that hold the intake manifold assembly in place and remove the complete carburetor and intake manifold assembly as one unit. Then remove carburetor from intake manifold for easier handling when checking float level.
3. Remove the four phillips head screws on the top of the carburetor and lift it off.
4. Invert the carburetor and check the float setting (see figure 214). The float should have a 0.07 ± 0.5 mm clearance from the machined mating surface (without gasket). Bend the float tab as required.
5. If it is necessary to reset the float level, loosen the screw near float valve axle (pin) and bend the float arm near float valve axle (pin) to position float flush with top edge of carburetor float bowl (see figure 214).

CAUTION: If float adjustment is necessary, be careful not to lose the buoyancy spring or the tension spring on the viton tip float needle and seat assembly.

6. Reassemble carburetor and reinstall carburetor on intake manifold assembly and then replace complete assembly on the engine.
7. Check carburetor for proper operation.

Governor Adjustments —

NOTE: If carburetor and the following governor adjustments have already been made and the governor action is still erratic, replace the governor spring (figure 215) with a new one and re-adjust the governor. Springs lose their calibrated tension through fatigue after long usage.

Before making governor adjustments, run the unit about 15 minutes under light load to reach normal operating temperature. (If governor is completely out of adjustment, make a preliminary adjustment at no load to first attain a safe voltage operating range).

Engine speed determines the output voltage and current frequency of the generator. By increasing the engine speed, generator voltage and frequency are increased, and by decreasing the engine speed, generator voltage and frequency are decreased. An accurate voltmeter or frequency meter (preferably both) should be connected to the generator output in order to correctly adjust the governor. A small speed drop (not noticeable without instruments) will result in an objectionable voltage drop. The engine speed can be checked with a tachometer.

A binding in the bearings of the governor shaft, in the ball joint, or in the carburetor throttle assembly will cause erratic governor action or alternate increase and decrease in speed (hunting). A lean carburetor adjustment may also cause hunting. Springs of all kinds have a tendency to lose their calibrated tension through fatigue after long usage. If all governor and carburetor adjustments are properly made, and the governor action is still erratic, replacing the spring with a new one and resetting the adjustments will usually correct the trouble.

GENERATOR ADJUSTMENTS

Satisfactory generator set performance depends on correct adjustments. If trouble develops, follow an orderly procedure to determine the cause before making changes in adjustments.

Generator Carburetor — The generator carburetor has two mixture adjustments: an idle mixture which affects operation mainly at no load and a main (power) adjustment which affects operation at maximum load (figure 217). If your generator set has a "hunting" (sudden surges and drops in speed) condition at no load or full load and cannot be corrected by carburetor adjustments, check governor, linkage and adjustment. A hunting condition at no load can usually be corrected by an idle mixture adjustment.

CAUTION: When determining fuel mixture settings, never force the fuel mixture adjustment needles against their seats (damages the seats and needles).

Carburetor Adjustments — Start generator and allow it to warm up for at least 10 minutes before making any adjustments. Remove all AC loads and connect a plug-in-type AC voltmeter into one of the receptacles in the coach. When procedure below calls for full load, turn on appliances or use an Onan load test panel. The first two adjustments are made with the generator not running. Turn unit off — proceed as follows:

1. Turn idle mixture screw out (counterclockwise) 1/2 to 3/4 turn from seated position.
2. Turn the main mixture screw 1 1/4 to 1 1/2 turns out (counterclockwise) from seated position.
3. Start set and adjust governor spring setting so engine speed is 1860 rpm at no load (62 hertz or 130 volts).
4. Hold back governor arm so that throttle lever rests on throttle stop screw. Adjust idle stop screw to 1500 rpm (50 hertz or 100 volts). Release governor arm.
5. Adjust idle mixture screw to highest rpm or voltage. Readjust governor spring setting so engine speed is 1860 rpm at no load (62 hertz or 130 volts).
6. Apply full load to generator and adjust main mixture screw to highest rpm or voltage. Readjust governor spring setting so engine speed is 1770 rpm at full load (59 hertz or 110 volts).
7. Remove and add load several times to check for a governor hunting condition. Readjust governor spring setting if required.

Throttle Stop Screw — The throttle stop screw is located on the base of the carburetor (opposite side from main power adjustment needle) near the crankcase breather valve. It must be adjusted to obtain 56 hertz at no load with the throttle closed as far as possible (throttle shaft lever touching adjustment screw (see figure 213)).

OUT-OF-SERVICE PROTECTION — You should protect a generator set that will be out of service for more than 30 days from damage caused by rust or corrosion. Use the following procedure to properly protect this equipment:

1. Run the generator set with at least a 50% load until thoroughly warm. Usually about one (1) hour.
2. Turn off fuel supply and allow engine to run out of fuel. Also operate the choke manually as the engine stops to help drain the carburetor completely.
3. Drain the oil from oil base while the engine is still



MOTOR GENERATOR SET (Continued)

CONDITION	PROBABLE CAUSE	CORRECTION
Fails to crank	<ol style="list-style-type: none"> 1. Bad battery connection 2. Low battery 3. Faulty start solenoid 4. Faulty start switch 	<ol style="list-style-type: none"> 1. Clean and tighten all battery and cable connections. 2. Check specific gravity. Recharge or replace battery if necessary. Reverse current, diode may be shorted or open causing a drain on battery. 3. Check for battery voltage at terminal. Push start switch. Check start solenoid terminal voltage to ground. When battery voltage at start solenoid terminal is present, battery voltage should also appear at terminal: if not, replace start solenoid. 4. Jumper switch to ground. If solenoid energizes, replace switch.
Cranks slowly	<ol style="list-style-type: none"> 1. Bad battery connection 2. Low battery 	<ol style="list-style-type: none"> 1. See 1 above "Fails to crank." 2. See 2 above "Fails to crank."
Cranks but won't start	<ol style="list-style-type: none"> 1. Blown fuse 2. Faulty fuel solenoid or Fuel pump <p>On later models, fuel solenoid is an integral part of fuel pump.</p> <ol style="list-style-type: none"> 3. Faulty ignition 4. Inoperative choke 5. Faulty crank ignition relay 	<ol style="list-style-type: none"> 1. Replace fuse on control. 2. Fuel solenoid must open during cranking and running. Check by removing steel line from carburetor and crank engine. If fuel solenoid is open, fuel will pulsate out of this line. If it does not, the fuel solenoid and fuel pump must be checked separately to determine defective part. WARNING: Use extreme care for this test. Direct fuel flow into a suitable container and make sure area is well ventilated to prevent accumulation of gasoline fumes. 3. Check to see if points open and close during cranking. If they do not open and close, adjust and set points. Plug and plug wires must be in good condition. Voltage at ignition coil negative terminal (-) must alternate from +12 volts to zero volts as points open and close during engine cranking. 4. With engine not running, check choke vane movement by pushing choke lever arm. Choke must be in closed position with cold engine, and must be free to move against bimetal spring. As engine warms up, bi-metal spring relaxes and allows choke vane to open fully. The lever will pulsate as engine warms up. 5. Check voltage from relay terminal to ground while cranking unit. Battery voltage should appear at this terminal. If not, check for voltage at relay terminals. Check wiring between start solenoid and crank ignition relay.
Unit starts, but stops immediately after releasing start switch	<ol style="list-style-type: none"> 1. Resistor may be open 2. Run ignition relay 3. Low oil level 4. Low oil pressure switch may be defective 	<ol style="list-style-type: none"> 1. Check voltage. With set running voltage should be 24-32 volts DC. 2. Check voltage on both sides of relay. Should be 12-volts. 3. Check oil level. If low or empty, refill to proper level. 4. Switch should close with set running at 10 lbs. minimum oil pressure.
Unit runs then stops	<ol style="list-style-type: none"> 1. Low oil level 	<ol style="list-style-type: none"> 1. Check oil level. If low or empty, refill to proper level.



MOTOR GENERATOR SET (Continued)

Unit runs but surges	1. Stuck choke 2. Governor not adjusted properly	1. See 4 above "cranks but won't start." 2. Readjust governor.
Unit stops	1. Faulty ignition 2. Out of fuel 3. Low oil level	1. See 3 above "Crank but won't start." 2. Refill fuel tank. 3. Check oil level. If low or empty, refill to proper level.
Remote running time meter or generator lamp inoperative	1. Blown fuse	1. Replace fuse on control.

warm. Replace the oil filter if so equipped. Replace drain plug and refill. Attach a warning tag stating type and viscosity of oil used.

4. Remove spark plugs. Pour one (1) ounce of rust inhibitor oil (or SAE No. 10) into each cylinder. (Spray cans work well for this application.) Turn engine over by hand at least two (2) complete revolutions. Replace the spark plugs.
5. Replace the air cleaner at least on an annual basis.
6. Plug the exhaust outlet to prevent entrance of moisture, dirt, bugs, etc.
7. Clean and oil all exposed engine parts including carburetor and governor linkage.
8. Wipe generator brushes, slip rings, housing, etc. Do not apply any lubricant or preservative.
9. Provide a suitable cover if the unit is exposed to the elements.

RETURNING GENERATOR TO SERVICE

1. Remove the cover and all protective wrapping. Wipe the oil film off all exposed engine parts. Remove the plug from the exhaust outlet.
2. Visually inspect the unit for any damage. Check to be sure the carburetor and governor linkage are free. Remove the generator end bell band and check to be sure the brushes work freely in their holders.
3. Check the tag to ensure oil of proper brand and grade has been installed. Check the oil level.
4. Remove spark plugs, clean and gap. Turn the engine over by hand several times. Reinstall spark plugs.
5. Turn on fuel supply; disconnect electric fuel pump lead and electric fuel solenoid shut-off lead if unit is so equipped. Jumper the fuel pump and electric fuel solenoid shut-off leads to the battery to prime the unit. Reconnect the leads.
6. Remove all load and start the generator set at the unit. Initial start may be slow due to oil or rust inhibitor in the cylinders. Excessive smoke and rough operation will occur until the oil or rust inhibitor is burned off.
7. Apply a 50% load after the set runs smooth. Allow the generator set to warm up (one (1) hour) with the load connected. Check speed and voltage. Unit is now ready for service.