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5-5031

# TM 5-5031

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

# GENERATOR SET

## ELECTRIC, PORTABLE
## GASOLINE-DRIVEN
## SKID-MOUNTED
## LIQUID-COOLED
## 5-KW, 120 VOLTS
## 2-WIRE, DIRECT CURRENT

HOLLINGSWORTH MODELS
CE–51–DC AND CE–51–DC/WK2

22


*DEPARTMENT OF THE ARMY • JUNE 1953*

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DEPARTMENT OF THE ARMY
WASHINGTON 25, D. C., *10 June 1953*

TM 5–5031 is published for the information and guidance of all concerned.
[AG 412.41 (29 Apr 53)]

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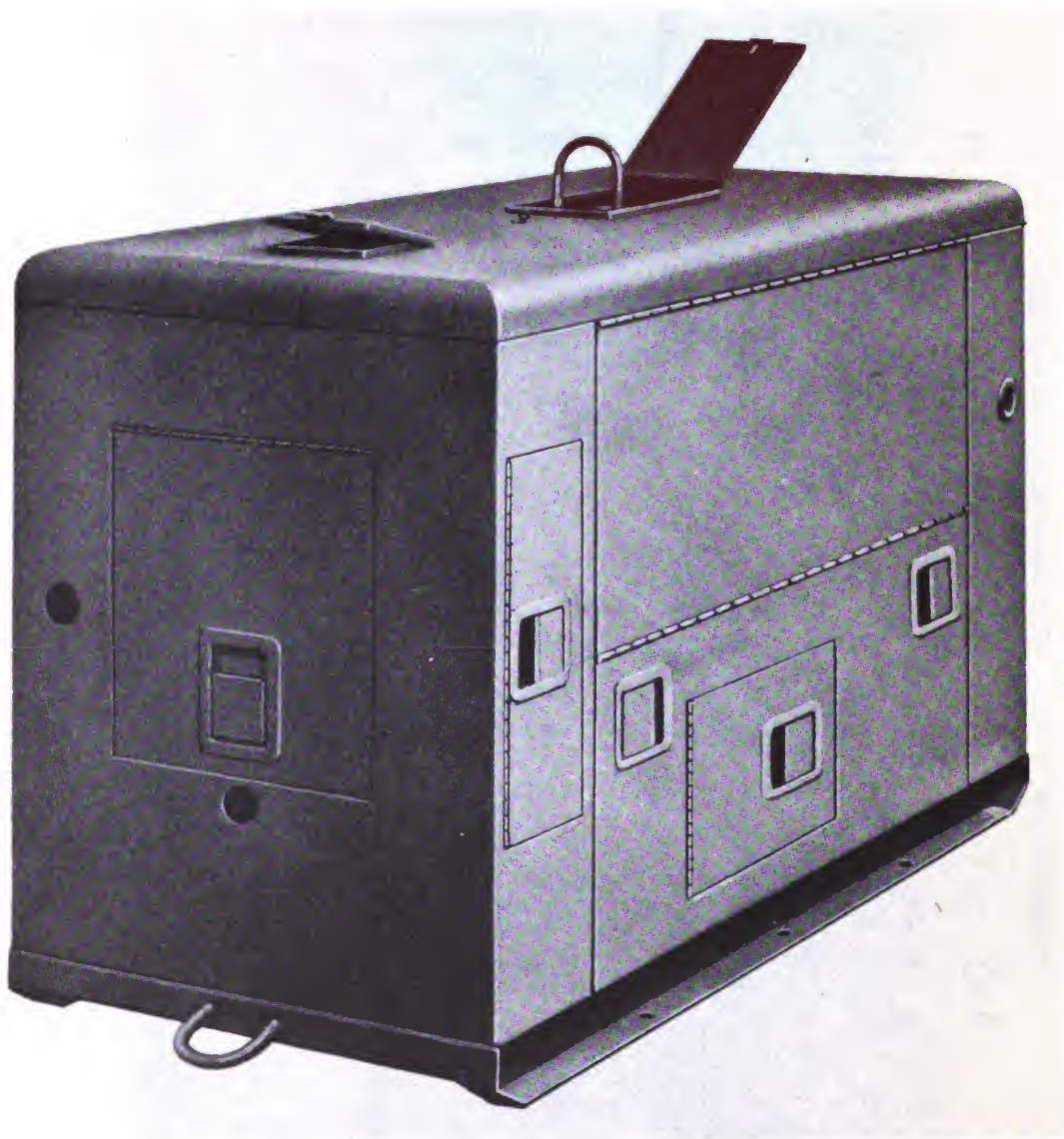

**Figure 1—CE-51-DC/WK2 Power Plant**



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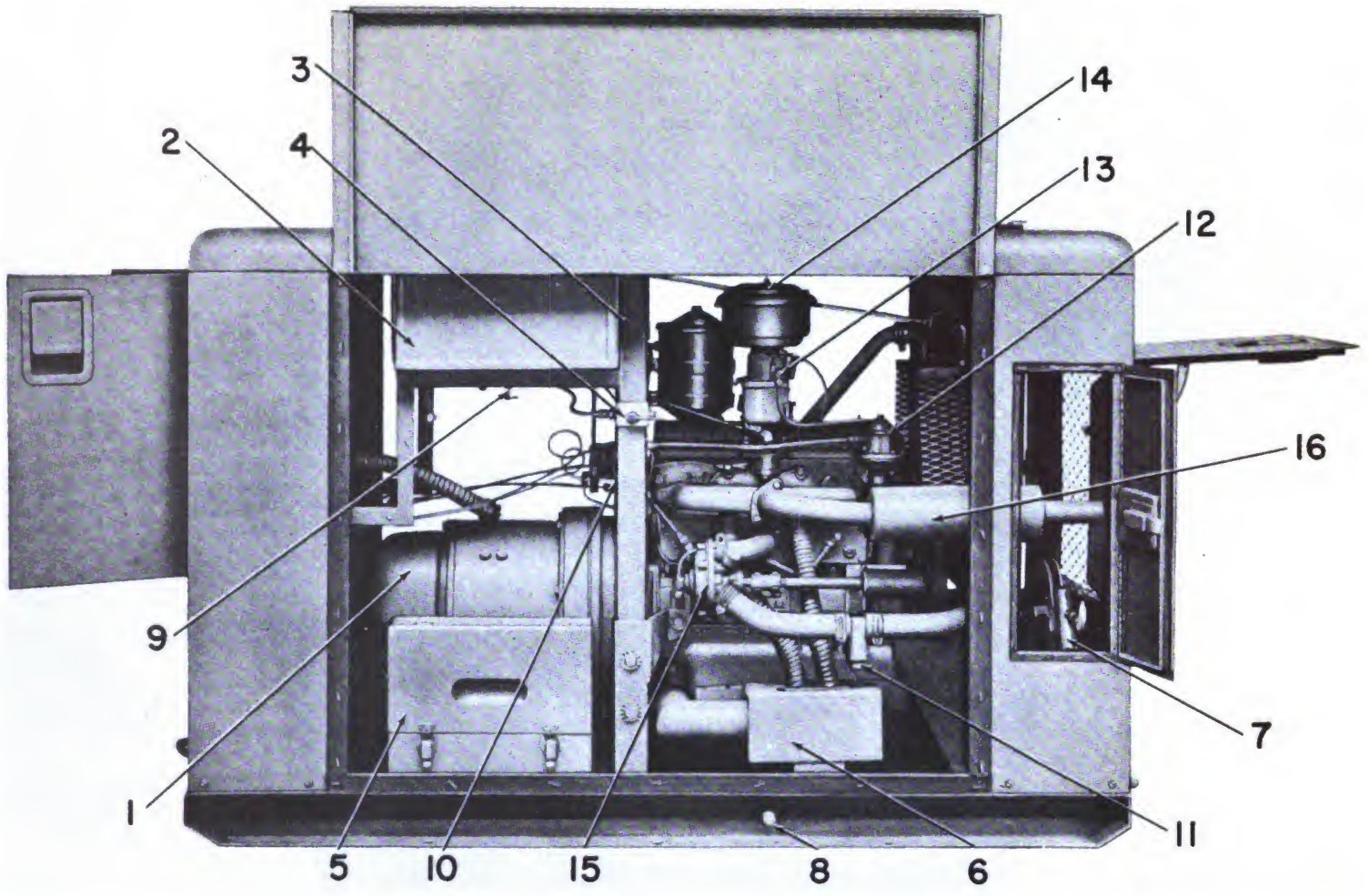


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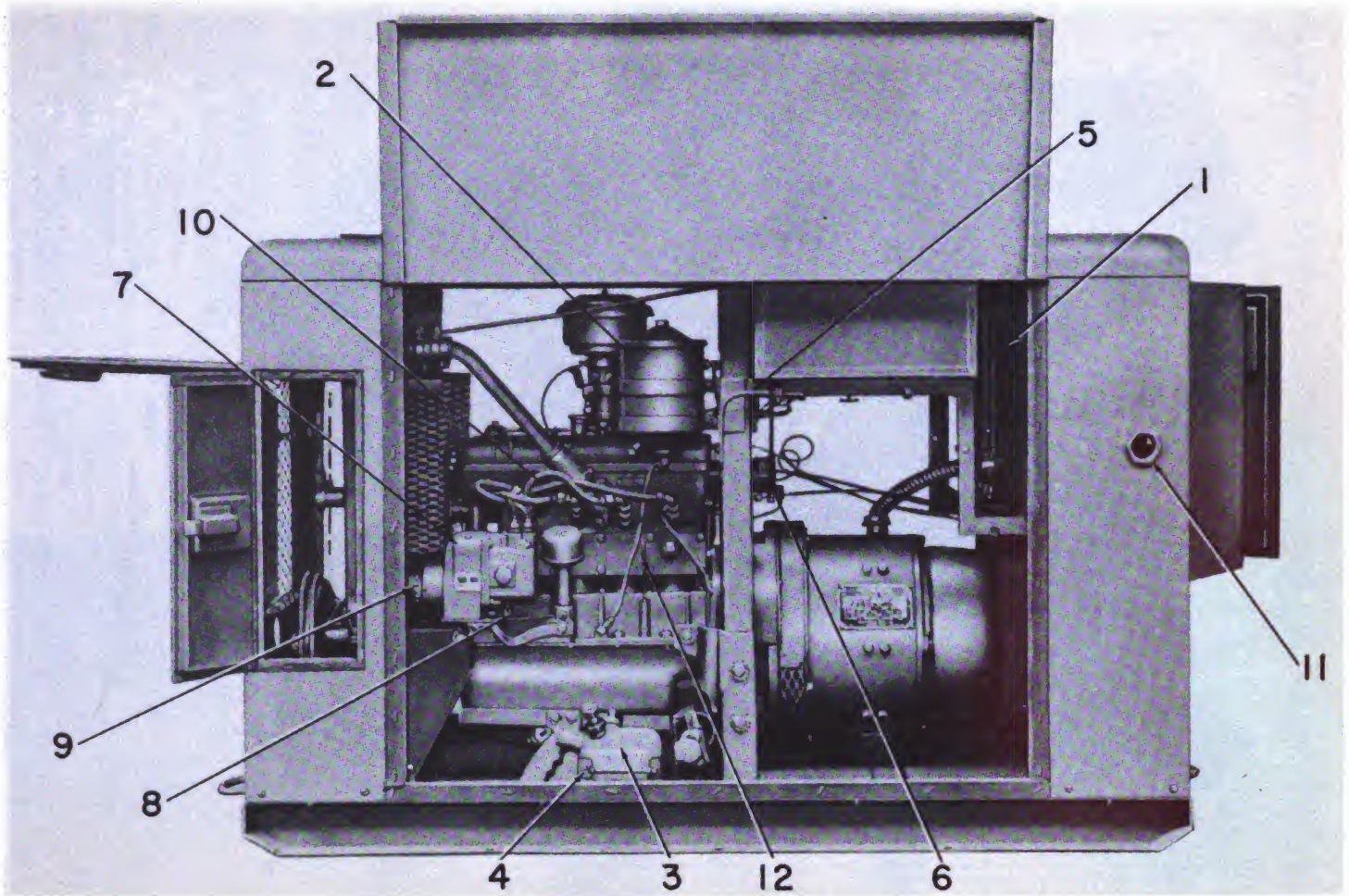


**Figure 3—*Right Side View—Open***

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11. POWER CORD GROMMET
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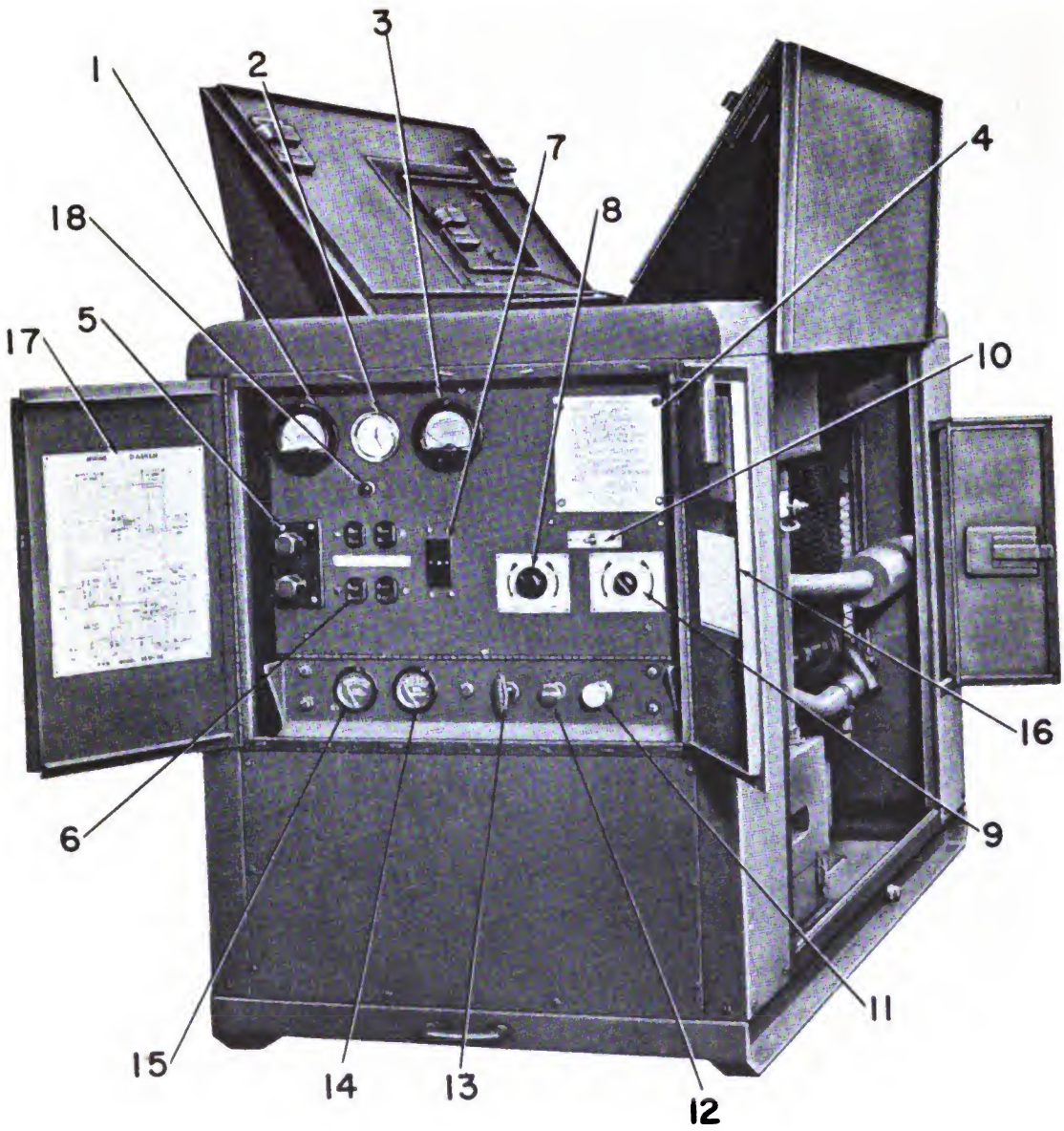


**Figure 4—*Control Panel***

1. AMMETER
2. ELAPSED TIME METER
3. VOLTMETER
4. OPERATING INSTRUCTION PLATE
5. OUTPUT TERMINAL BLOCK
6. DUPLEX RECEPTACLE
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16. FUEL DIAGRAM
17. WIRING DIAGRAM
18. PILOT LIGHT



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## I. UNIT SPECIFICATIONS

Gasoline engine driven generator unit.

Portable, skid mounted. Dry weight approximately 635 lbs. Length 57", Width 26", Height 36".

5 KW, 120 Volt, 2 Wire, DC, 3600 RPM.

Model Nos. CE-51-DC without winterization.
CE-51-DC/WK2 with winterization.

Separate Winterization included, only when specified.

Operating temperatures: —65°F. to 125°F. for winterized sets.

Altitude: 5000 ft. (maximum temperature 107° F.)

Provided with towing and lifting attachments.

## II. GENERAL DESCRIPTION

Engine: Crosley Motors, Inc., Industrial Model.
No. of Cylinders: 4 (in line)
Bore and Stroke: 2½ x 2¼.
Displacement: 44 cu. in.
Compression Ratio: 7:1.
Overhead Camshaft and Valves.

Generator: Winpower Mfg. Co., Model No. 5036
120 Volts, 41.7 amps., 5 KW., DC.

The unit consists of a gasoline engine, a generator and a control panel upon which are mounted the necessary instruments and devices for controlling the operation of the unit. The unit, being completely self-contained, has a rope starter, fuel tank, auxiliary heater and tool box including tools and instruction booklets. Provision is made for drawing fuel from an external source for convenience of extended operation.

## III. INSTALLATION

The engine generator set is designed for operation where it is exposed to the weather but, when available, it should be located under cover for the comfort of operating personnel. When located in a heated building, the overall housing may be removed if desired. An adequate supply of fresh air is required for engine operation and cooling.

Although it is not critical, the unit should be located reasonably level.

Minimum clearances around the unit, required for normal operation with housing in place, are:

Left side....20" Front (radiator end)...14"
Right side...40" Rear (panel end).....20"

Left and right sides are as viewed from the panel end.

When located in a closed building, the engine exhaust must be carried to the outdoors through a suitable tube. The exhaust pipe on the engine is 1⅜" O.D. and a 1⅜" I.D. or larger tube should be used from the engine to the outdoors. Clamp the added tube on to the engine exhaust pipe.

120 volt DC, 2 wire leads can be connected to this engine generator set. Use No. 4 A.W.G. insulated wire for the connections to the large binding posts on the control panel.

Fifteen (15) ampere convenience outlets are provided on the control panel for auxiliary lights, portable tools, etc.

## IV. OPERATION

### A. STARTING THE ENGINE

1. Make certain that operating personnel are alerted and foreign articles are removed from the set.
2. Pull out and push in the primer 3 to 4 times.
3. Pull choke control all the way out.

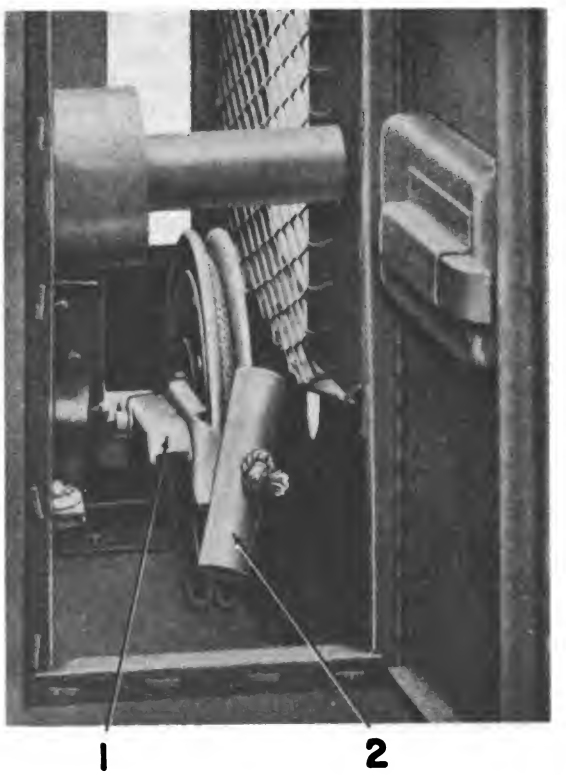


**Figure 5—Rope Starter**

1. RELEASE LEVER 2. ROPE STARTER HANDLE



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4. Press release lever on the rope starter (see Figure 7) and permit the starter arm to move toward the engine.

5. Pull the rope to start the engine. Repeat as necessary. The rope will automatically rewind on the starter pulley when it is permitted to return. The starter is automatically disengaged from the engine when the engine starts.

6. After engine starts, adjust the choke for best operation until the engine is warm, then push the choke in all the way.

When encountering extreme cold weather:

a. Install separate Winterization Kit if not already installed.

b. Start the torch by following instructions on side of torch.

c. Place the torch in its bracket (see Fig. 2) with the nozzle extending into the heater tube as far as possible.

d. Proceed with steps 1 through 6 above.

e. Shut off torch after engine starts and/or when water temperature is 110°F.

When operating normally, the governor holds the throttle wide open until the engine starts and then closes down to the required adjustment for the power drawn from the engine. The throttle on the control panel can only be used to override the governor control and run the engine at speeds lower than 3600 r.p.m. for which the governor is set. Pulling out the throttle slows down the engine.

## B. STOPPING THE ENGINE

Throw main circuit breaker to OFF and allow engine to run without load for about ½ minute. Pull throttle all the way out, then push up the STOP button located under the magneto (see Fig. 2).

## C. OPERATING PRECAUTIONS

Observe the following precautions:

### 1. Warm-up Period and Water Temperature

After starting a cold engine, operate it at normal speed with no load for a few minutes to allow it to warm up. Allow the engine to reach normal operating temperature (180°F.). If the water temperature exceeds 210°F. stop the engine and investigate the air and water circulation.

### 2. Oil Pressure

With the engine turning at 3600 r.p.m. and the water at normal operating temperature, the oil pressure is maintained at 35 to 50 pounds. As bearings wear and more than the normal amount of oil escapes, there will be a drop in pressure shown on the oil pressure gauge, particularly at idling speed. If oil pressure is abnormally low, stop the engine and check for oil leakage in the system and for the amount of oil in the crankcase. Determine the cause of the pressure drop and make corrections.

### 3. Excessive Water

Every effort must be taken to keep the engine dry, especially the electrical system. Should the engine become wet during heavy rainstorms, wipe it dry with a clean cloth moistened in dry-cleaning solvent.

### 4. Extreme Heat and Humidity

If operated during periods of excessive heat and humidity the engine requires more frequent lubrication than in operation under normal conditions.

### 5. Excessive Dust

Under extremely dusty conditions, inspect and clean the air cleaner, the crankcase breather cap, and the oil breather cap more frequently than specified on the lubrication order. Keep all fuel and oil containers covered and dust-tight. Clean containers and fuel strainers more frequently. Inspect all lubrication points frequently and lubricate as required.

### 6. Extreme Cold

The engine should be serviced for any anticipated changes in temperature. Antifreeze solutions should be added at the approach of cold weather. After the cold season is over, the antifreeze solution should be removed and the engine cooling system flushed.

Lubricant should be of the proper viscosity to insure adequate lubrication at lowest anticipated temperatures.

## D. GENERATOR CONTROLS

1. With engine running and up to speed, adjust the voltage (see fig. 4) to the desired value.

2. Push the circuit breaker handle to ON position.

3. Power is now being supplied to the external circuits. Immediately check the ammeter and voltmeter readings. Should the ammeter be above the rated current (red line), push circuit breaker handle to OFF and reduce the connected load. The operator should periodically check both instruments to ascertain that readings are normal.



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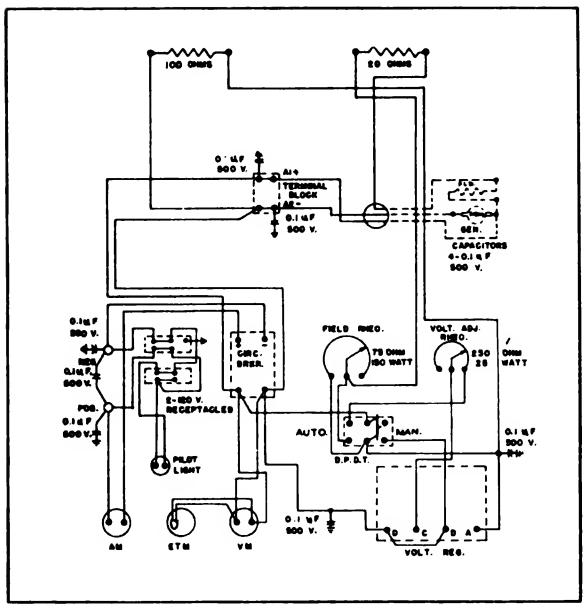


**Figure 6—*Wiring Diagram—Generator Circuit***

4. Voltage Regulation

***a. Automatic***

Push toggle switch marked MAN-AUTO to the AUTO position. Turn the AUTOMATIC ADJUSTMENT knob until the desired voltage is indicated on the voltmeter. The automatic voltage regulator will then hold the voltage substantially constant under varying load conditions.

***b. Manual***

This is generally used only when the "automatic" is inoperative. Push toggle switch marked MAN-AUTO to the MAN position. Turn the MANUAL ADJUSTMENT knob until the desired voltage is indicated on the voltmeter. With varying loads, the voltage will vary unless the MANUAL ADJUSTMENT knob is readjusted for each load condition.

5. To disconnect generator from the load, push circuit breaker handle to OFF position.

6. The circuit breaker has a magnetic overload trip set to open the load circuit between 125% and 135% of rated load current.

## V. COOLING SYSTEM

### A. ENGINE COOLANT

Capacity of system—4 quarts

**1. General**

Check the level of the cooling liquid in the radiator regularly and add water when necessary. Add good rust inhibitor to minimize the corrosive action of the coolant.

**2. Draining and Cleaning**

Open drain valve on lower radiator hose connection (see Fig. 2A) and the drain cock on the lower heater connection (see Fig. 2) and flush the cooling system with clean water once a year. This can be done when the antifreeze is added in the Fall. Do not use chemicals that loosen scale unless planning to reverse-flush radiator, because scale may plug radiator water passages.

**3. Adding Antifreeze**

a. Use any good non-corrosive antifreeze in the cooling system of a Crosley engine. Use only a Universal hydrometer to determine the freezing point of standard types of antifreeze solutions at various temperatures. Errors as great as 30°F. are possible unless the temperature of the cooling solution is taken into consideration.

b. Do not mix different types of antifreeze since it will be impossible to correctly read the freezing point of the mixture. Add the same type of antifreeze originally installed.

**4. Coolant Level**

a. Pure water, alcohol mixtures, and permanent types of antifreeze all have a tendency to expand as the temperature rises. Therefore, to prevent loss of coolant through the overflow pipe, keep the coolant level about one inch below the filler neck opening.

b. Never pour cold water into the radiator when coolant is extremely low and the engine hot. Allow the engine to cool off for about 10 or 15 minutes, and then add coolant slowly with engine idling.

c. Never run engine with coolant level below.

### B. SHUTTER

A door, hinged at the top and with a ratchet to hold it at various open positions, is provided at the front of the housing to regulate the flow of air out of the set. Two small doors, one on each side at the front, also can be used to regulate the flow of air.

### C. FAN BELT ADJUSTMENT

Keep the fan belt on the engine in proper adjustment at all times. A fan belt that is too loose may slip when the engine is being operated at high speed and still appear to be driving the pulley. A fan belt that is too tight will cause rapid wear of the fan pulley bearings.



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# VI. FUEL SYSTEM

## A. SHUT-OFF VALVE

A shut-off valve is provided at the outlet of the fuel tank. It must be open for operation of the primer and the engine from the tank supply. It should be shut off when the unit is not operating, or when the engine is running on fuel drawn from an external tank. (See Fig. 6.) The primer cannot be operated from the external tank.

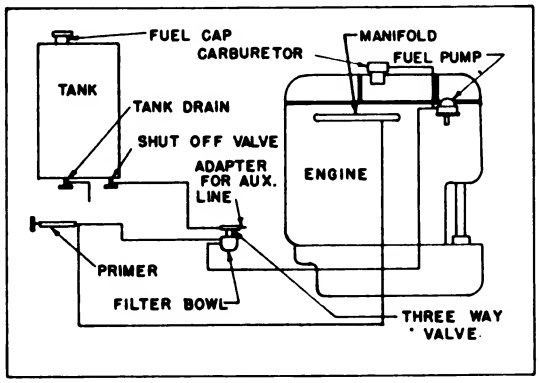


**Figure 7—*Fuel System***

## B. FILTERS

A filter is incorporated in the fuel line. It filters all fuel entering the pump and primer. It may be cleaned by removing the bowl and cleaning the screen.

**CAUTION**

Always inspect the gasket for air leaks after each removal of the bowl. If air leaks in by the gasket, the pump will fail to draw fuel from the source.

## C. THREE-WAY VALVE

A three-way valve is located in the fuel line which permits drawing fuel directly from an outside source. It is important to set the valve in such a position that fuel is drawn from the internal or external tank as desired. Always check its position before starting engine.

## D. AUXILIARY FUEL LINE

Coiled in the tool box is the auxiliary, 12-ft. fuel line. When the 7/16" 24-thread end is fastened to the fuel selector valve as indicated in Figure 6 and the change-over valve set to cut off the flow from fuel tank, fuel may be drawn from an external source by the action of the fuel pump. It may be necessary to prime the engine more than once in order to pump the air out of the hose and deliver fuel to the carburetor.

## E. FUEL PUMP

### 1. Purpose

The purpose of the fuel pump is to deliver fuel from the fuel tank to the carburetor.

### 2. Normal Operation

The rotation of the camshaft gear eccentric, actuating the rocker arm, pulls the diaphragm down so as to create a vacuum in the pump chamber. On the suction stroke of the pump, fuel enters the sediment chamber, passes through the inlet valve, and into the pump chamber. On the return stroke, the diaphragm spring pushes the diaphragm upward and forces the fuel through the outlet valve to the carburetor. When the carburetor bowl is full, the float in carburetor will close the needle valve and thus create a pressure in the pump chamber. This pressure will hold the diaphragm down against the diaphragm spring, where it will remain inoperative until carburetor requires more fuel and the needle valve opens.

### 3. Failures

#### a. *Causes*

Failure of the fuel pump to deliver fuel indicates that the diaphragm is broken or dirt is under the valves. Insufficient fuel supply may be due to worn pump link, weak diaphragm spring, leak at inlet or outlet valves, clogged filter, leak in cover gasket, leak or obstruction in fuel line, or a combination of these causes. Erratic action of the pump indicates a broken rocker arm return spring.

#### b. *Inspection*

If pump fails to supply the correct amount of fuel to the carburetor, make the following inspection before removing pump from engine. Disconnect the fuel line at the carburetor and cover the open end with the thumb. If rapid pulses of pressure are felt when the engine is turned over with the starter, the pump is operating. Check operation of carburetor float and needle valve. Check fuel lines for leaks, loose connections, kinks and obstructions. Blow line clean with compressed air. A leak in the fuel tank side of the fuel line might not show up as fuel leakage, but air leakage into the line at that point will prevent proper suction of fuel to the pump. Tighten cover shrews.

### 4. Servicing

#### a. *Normal Services*

Clean the fuel pump as follows every 50 hours or when necessary:

1. Remove bolt that holds cover to the pump.
2. Remove cover.



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3. Remove gasket and filter.

4. Remove screw plug below inlet, clean and wipe bowl dry.

5. Clean filter in gasoline. Do not use a cloth to dry filter.

#### b. *Special Services*

If pump leaks at diaphragm flange, tighten cover screws alternately and securely. Do NOT use shellac or other adhesives on diaphragm. If operation of pump is impaired by gum collection on the valves, clean and polish the valves, valve seats, and filter parts. Be sure that vent holes in the pump are kept open at all times. All Crosley pumps are equipped with a rubber boot to prevent oil leakage through vent holes.

#### 5. Disassembling

To disassemble the fuel pump:

a. Remove bolt holding cover in place.

b. Remove cover, strainer and core gasket.

c. Remove the six screws holding cover flange to pump body. Scratch a line across cover and body so that the two parts may be correctly matched on assembly.

d. Remove cover and rocker arm spring.

e. Press down on diaphragm assembly and away from rocker arm side of pump to unhook diaphragm rod from rocker arm link.

f. Remove the three screws holding inlet and outlet valve retainer.

g. Wash all parts in gasoline.

#### 6. Assembling

To assemble fuel pump:

a. Install spring that fits under diaphragm assembly.

b. Hold rocker arm down and press and put diaphragm in place.

c. Tilt diaphragm, pull rod and hook into rocker arm.

d. Install inlet valve with spring down and outlet valve with spring up. (These parts are interchangeable.)

e. Install valve retainer plate and the three screws.

f. Assemble lower and upper units so that scratch mark lines up.

g. Install the six screws and tighten them evenly.

h. Install rocker arm spring.

i. Assemble cover with new cover gasket and screen, and tighten bolt securely.

**NOTE**

In removing fuel pump from cylinder block, rotate flywheel until pump can be removed without forcing.

### E. AIR CLEANER

#### 1. Function

The function of the air cleaner is to remove dust and dirt from the air so that it will not enter the engine.

#### 2. Servicing

To service air cleaner, remove cleaner element and wash in gasoline or dry-cleaning solvent. Wipe any remaining oil from air cleaner bowl. Replace the freshly cleaned element and add engine oil up to the level indicated. Replace top and thumbscrew.

### G. CARBURETOR ADJUSTMENT

The carburetor provided on the Crosley engine should require no extensive service in the field. If service other than that described in this manual is needed, it is advisable either to replace the entire carburetor with a new one or have the reconditioning done in a properly equipped shop. Care must be taken at all times to exclude dust and dirt from the fuel lines.

#### 1. Idle Adjustment

Completely close idle adjustment screw by turning it clockwise until seated (without forcing). Then turn back in opposite direction ¾ to 1¾ turns.

#### 2. Float Level Adjustment

To correctly set float level, remove upper body assembly containing complete float mechanism. Turn assembly upside down with float lever resting on inlet needle. The distance from the free end of the float to the machined surface of the bowl cover should be one-half inch.

## VII. IGNITION SYSTEM

### A. SPARK PLUGS

#### 1. Cleaning

Clean spark plugs thoroughly, using abrasive type cleaner. If porcelains are badly glazed or blistered, replace spark plugs. All spark plugs must be of the same heat range.

#### 2. Installing

To install spark plugs first inspect the porcelain for cracks and dirt and check the spark gap with the gauge provided. Place the gasket over the thread, insert the plug in the block, and



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tighten to finger tightness. Using the spark plug wrench—

a. Tighten one-eighth to one-fourth turn past finger tightness when using old gaskets.

b. Tighten one-half to three-fourths turn past finger tightness when using new gaskets.

Replace radio shielding.

#### 3. Adjusting

Adjust points to .025 inch apart. Do not bend center electrode when adjusting gap. Always make adjustments with side electrode, using the gauge provided.

#### 4. Selecting Replacement Plug

Replace with spark plug recommended in Autolite AN-7E or equivalent, in the 14-millimeter size.

### B. MAGNETO

FAIRBANKS-MORSE Type XYE4A94A

#### 1. Testing the Ignition Spark

With properly adjusted spark plugs in good condition, the ignition spark should be strong enough to bridge a short gap in addition to the actual spark plug discharge. This may be determined by removing the upper half of the spark plug radio shield and holding the ignition cable not more than 1/16 in. away from the spark plug terminal. The engine should not misfire when this is done.

#### 2. Testing the Magneto Spark

Remove the cable outlet nuts to free the metal cable sheaths; then pull the cables out of the distributor block sockets. Remove ½ in. of the insulation from the end of a short piece of stiff, rubber-covered wire and insert in place of the high-tension cable. Be sure this wire reaches the bottom of the socket and contacts the brass insert. Bend the other end of the wire to within ⅛ in. of the engine or magneto frame and watch closely for a spark between the wire and the engine (or magneto) frame when the engine is cranked slowly. Test each of the sockets in turn; if a strong spark is observed with the wire in each socket, it is recommended that the magneto be eliminated as the source of difficulty and that the cables, terminals and spark plugs be thoroughly inspected. If no spark occurs, the stop button on the magneto should be examined to make certain it has not accidently become pushed up.

#### 3. Service of Breaker Points

If no spark is obtained from one or more of the magneto terminals, the end cap assembly should be removed from the magneto frame by removing the four end cap screws. Then examine the carbon brush in the center of the distributor block and replace it if noticeably worn or damaged. This brush should move freely in its holder and should be under slight spring pressure. Next, inspect the breaker points for evidence of pitting or pyramiding. A small tungsten file or fine stone may be used to resurface the points except in the case of badly worn or pitted points, which should be replaced. If it is necessary to resurface or replace the breaker points, it will also be necessary to adjust them to their proper clearance, which is 0.015 in. at full separation. This adjustment is made in the following manner: Loosen the contact support locking screws. Then move the contact support until the proper breaker point clearance is obtained. This is accomplished by means of a screwdriver inserted in the horizontal slot at the bottom of the contact support and pivoted between the two small bosses on the bearing support. Lock the assembly in place by tightening the locking screws, and make a final measurement of the breaker point gap after the locking screws are tightened.

Oil film can be removed from breaker points by using a small stiff brush and a small quantity of carbon tetrachloride or naphtha.

## VIII. LUBRICATION

### A. ENGINE

#### 1. Crankcase

Capacity, 4 quarts. Keep filled with recommended grade of engine oil. Drain and fill after every 50 hours of operation. Drain only when hot.

#### 2. Water Pump

A grease cup is located so as to lubricate both the shaft and seal of the water pump. This cup should be given one turn after every 50 hours of operation. ALWAYS fill with special water pump grease. Never allow the cup to become dry since this condition will cause excessive wear and loss of coolant.

### B. GENERATOR

Generator bearings are lubricated for the normal life of the unit and do not require relubrication.



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## IX. ELECTRICAL FAILURE

If generator fails to produce power, the cause may be within or without the unit. To ascertain where the fault lies, switch off the generator main switch, disconnect external lines, connect a test light across the output terminals; then switch on main switch. If test light lights, the fault is in the external lines, which should then be corrected. However, if test light does not light, then the fault is within the unit. Proceed to check circuit breaker, control panel and instrument wiring and lines to the generator.

**REMEMBER**

One disconnected or improperly connected wire is sufficient to cause lack of power. If wiring between instruments, control panel and generator is correct, then the fault is in the generator itself. First, check the brushes, see that they are properly seated and connections are secure. Examine commutator and insure that it is clean and free from pits and mica ridges. Check the capacitors.

The above faults may also cause decreased output and efficiency of the unit before a total breakdown occurs.

## X. SUPPLIES

### A. GASOLINE

Capacity of tank: 7.9 gallons.

Use combat grade, 80 octane gasoline.

### B. OIL

Capacity: 4 quarts. Spec. MIL-O-2104. Recommended viscosity:

65°F. and above: SAE-30 or OE-30.

10°F. to 65°F.: SAE-20 or OE-20.

For extreme cold temperatures use oil per spec. MIL-O-10295.

### C. WATER

Capacity: 4 quarts.

### D. ANTIFREEZE

To prevent freezing at temperatures above —20°F., add the recommended quantity of permanent antifreeze to water to fill the system. Below —20°F., fill the cooling system with Arctic antifreeze only. DO NOT ADD WATER.

### E. TOOLS

*Item No.*

1 1 Set Gauges (Feeler-leaf).
2 1 Set Gauges (Feeler-wire).
3 1 Screw Driver, 4".
4 1 Gas Pliers, 6".
5 1 Spark Plug Wrench, 13/16" Hex with Handle.
6 1 Set Open End Wrenches (6).
7 1 Adjustable Wrench, 8".
8 1 Oil Can ¾ Pt., 3" Base.

**NOTE**

Furnished with set are either of the following tool sets:

Item 1, 3, 5 and 6 or
Items 2, 3, 4, 5, 7 and 8.



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## RECOMMENDED SERVICE PARTS

| REQUIRED NUMBER | PART NAME | MANUFACTURER'S PART NUMBER |
|---|---|---|
| 1 | Impulse Coupling Nut Lockwire | W-304834 |
| 1 | Gasket, Cover Camshaft | W-209557 |
| 1 | Fram Cartridge | H-10139 |
| 4 | Spark Plug | XEJ-6J |
| 1 | Kit-Valve Adjusting Shim | W-301901 |
| 1 | Kit-Fuel Pump Diaphragm | W-304804 |
| 1 | Kit-Fuel Pump Repair | W-304805 |
| 2 | Nut, Manifold Stud | W-209567 |
| 1 | Repair Package (Carburetor) | H-12001 |
| 1 | Gasket Assortment | W-304845 |
| 1 | Coupling—Water Pump | W-207174 |
| 1 | Water Hose—Block to Pump | W-304761 |
| 2 | Hose Clamp—Water Hose | H-10429 |
| 2 | Stud—Manifold | C-300331 |
| 8 | Retainer—Valve Spring | W-202255 |
| 16 | Taper—Valve Spring | W-202256 |
| 1 | Thermostat | 138 |
| 2 | Timing Belt, Magneto | W-304514 |
| 2 | Spacer—Camshaft Cover Bolts | W-207511-1 |
| 2 | Elastic Stop Nut #10-32 | W-206980 |
| 2 | Cork Washer—Camshaft Cover | W-300077 |
| 2 | Fan Belt | W-304748 |
| 1 | Overhaul Kit, Water Pump Packing | W-304846 |
| 1 | Kit—Thrust Washer Camshaft Gear | W-207636-1 |
| 1 | Rope Starter | H-10127 |
| 1 | Handle—Starter Rope | W-304562 |
| 2 | Water Hose—Water Pump | H-10240 |
| 1 | Water Hose—Radiator Block | H-10242 |
| 1 | Water Hose—Top of Radiator and Block | H-10241 |
| 1 | Condenser Assembly (Magneto) | H-12002 |
| 1 | Breaker Arm Stationary Brkt. & Points | H-12003 |
| 1 | Contact Support Assembly | H-12004 |
| 1 | Brush & Spring Assembly | H-10707 |
| 8 | Bushing—Coupling | H-10674 |
| 6 | Pin—Coupling | H-10675 |
| 1 | Fuel Filter Gasket | OW-222 |
| 1 | Screen—Fuel Filter | OW-452 |
| 2 | Condenser | H-10280 |
| 4 | Brushes—Generator | H-10710 |
| 1 | Voltage Regulator | H-10003 |
| 1 | Spark Wire #1 | H-10460 |
| 1 | Spark Wire #2 | H-10461 |
| 1 | Spark Wire #3 | H-10462 |
| 1 | Spark Wire #4 | H-10463 |
| 1 | Pinion Gear—Governor | W-304870 |
| 1 | Drive Gear—Governor | W-304867 |

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