

<i>Possible Cause</i>	<i>Check</i>	<i>Remedy</i>
(b) Oil pressure low.	Check through observation hole.	Check condition of oil pump.
(c) Oil too light	Check grade of oil.	Drain and refill with oil of proper grade.
(4) Fan belt loose or slipping.	Test belt tension.	Replace fan belt.
(5) Air cleaner clogged.	Inspect air cleaner.	Clean out element.
(6) Excessive carbon.	See subparagraph e(2) above.	
(7) Improper timing.	See subparagraph a(10) above	
(8) Couling air passages obstructed.	Check radiator grille, and generator vents.	Remove dirt or obstruction.
(9) Lack of ventilation in shelter.	Check ventilation openings.	Open windows; provide more air vents.
(10) Overload on generator.	Check load.	Reduce load.
(11) Exhaust obstructed.	Check exhaust pipe and muffler.	Remove obstructions. Replace muffler if necessary.

b. Excessive Smoking at Exhaust

<i>Possible Cause</i>	<i>Check</i>	<i>Remedy</i>
(1) Improper fuel.	Check grade of fuel.	Replace with correct fuel.
(2) Mixture too rich.	Check choke.	Adjust choke.
(3) Pistons pumping oil.	Check compression.	Replace rings.
(a) Loose or worn rings.	Examine rings.	
(b) Scored cylinder walls.	Remove pistons and inspect cylinders.	Regrind cylinders.
(c) Oil too light.	Check grade of oil.	Replace with heavier oil.
(d) Oil level too high.	Check oil level (Should not be above "H" mark on gauge).	Drain excess oil.
(4) Worn rod bearings.	See subparagraph e(7) above.	

(5) Worn cylinders, pistons.

Check engine compression.

Replace worn parts.

1. Engine Operates with Varying Speed.

<i>Possible Cause</i>	<i>Check</i>	<i>Remedy</i>
(1) Clogged fuel line, dirt fuel.	See subparagraph a(2) above.	
(2) Governor stuck.	Check governor operation.	Correct alignment. Replace faulty parts.
(3) Faulty choke operation.	Check choke button.	Replace defective or bent rod.
(4) Motor cold.	Check engine temperature.	Remove load, allow engine to warm up.

16. GENERATOR TROUBLE CHART.

a. Failure to Generate.

<i>Possible Cause</i>	<i>Check</i>	<i>Remedy</i>
(1) Short or open in wiring system.	Check leads in generator.	Solder connections. Replace defective wires.
(2) Ground or open in armature or coils.	Test armature and coils.	Replace defective parts.
(3) Residual magnetism weak.	Pass current from battery through field coils.	Connect positive battery pole to positive lead of field.
(4) Brushes not contacting.	Check to see if stuck or unevenly worn.	Adjust or replace brushes.
(5) Shorted armature.	Check commutator bars for dirt and material in slots.	Clean bars and slots.
(6) Reversed field coils.	Check to see that coils are alternate north and south.	Change position of coils if necessary.
(7) Capacitor shorted.	Disconnect capacitor and see if current flows.	Replace capacitor.
(8) Defective voltage regulator relay.	Test relay.	Replace relay.