

Parts List For Model 527 Military Burner

No.	Name of Part
304	Eccentric Block.....
509	Pump Leather.....
620	Valve Stem Packing.....
538	Pump Check Body.....
520	Pump Plunger complete.....
532	Air Stem.....
131	Filler Plug.....
136	Filler Plug Gasket.....
159	Tank.....
299	Vaporizer.....
253	Tip Cleaner Stem complete.....
257	Instant Lite Body complete.....
375	Burner.....
425	Container Tube Cap.....
653	Valve Stem complete.....
657	Valve complete.....
550	Wrench.....
210	Vaporizer Nut.....

WARNING

Longest Service—For Best Service Use Only Genuine Coleman Parts
 on this Coleman Appliance.
 Each part is designed to exact precision and to work per-
 fectly with all other parts; therefore, only Genuine Coleman Parts and
 Accessories can be trusted to give satisfactory service.
 Use of other than Genuine Coleman Parts and Accessories invalid-
 ates the Coleman Guarantee.

A HANDBOOK

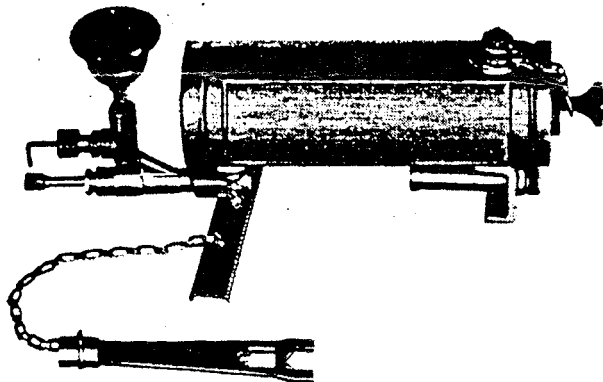
Covering the Operation and Maintenance

of

Coleman

MILITARY BURNER

Model No. 527



Made in the United States of America By

The Coleman Company, Inc

General Offices and Factory: WICHITA 1, KANSAS, U. S. A.

Canadian Office and Factory: Toronto, Canada

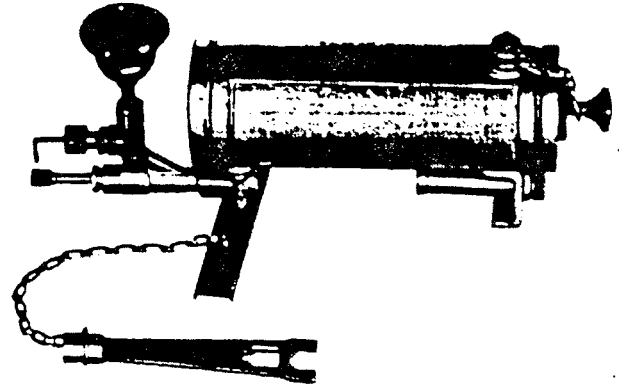
Sales Offices: Philadelphia 8; San Francisco 3; Los Angeles 1;

F1298

Honolulu, Hawaii

Printed in U.S.A.

GENERAL OPERATING INSTRUCTIONS FOR
COLEMAN MILITARY BURNER MODEL 527



A. TO SET-UP BURNER UNIT

Turn Stand Bracket to give a greater base area.

B. TO FILL

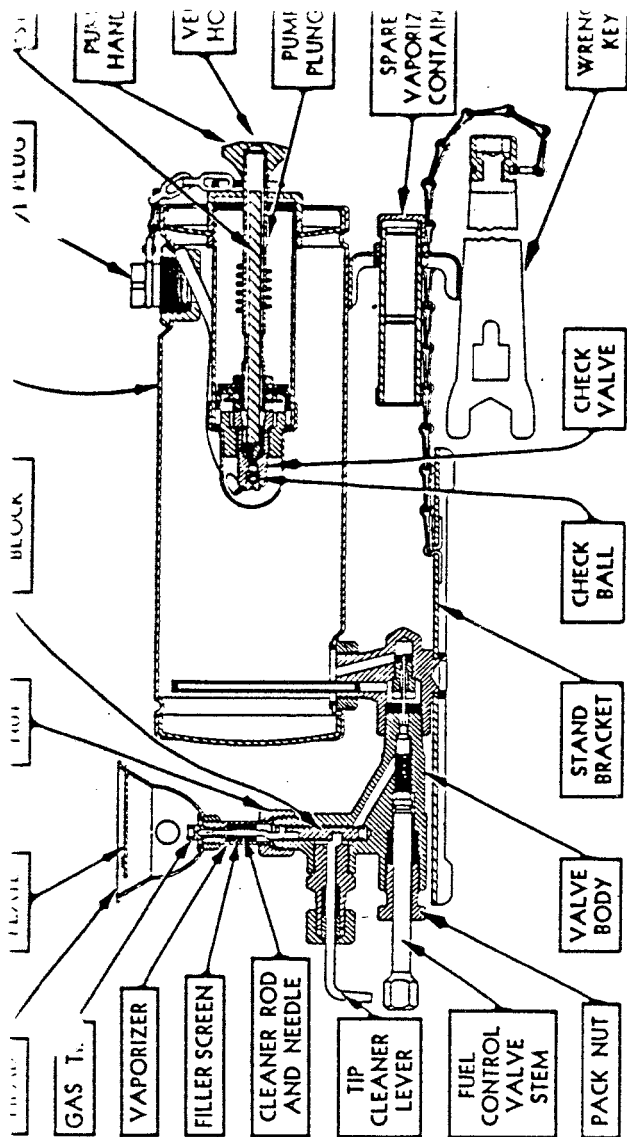
See that Burner Unit is level to prevent over-filling.

Be sure Fuel Valve is tightly closed. Turn the Fuel Control Valve to the right, using Wrench Key.

Remove Filler Plug and fill Tank with fresh, clean gasoline. Use non-leaded gasoline when available. Burns leaded gasoline satisfactorily, however, adequate ventilation must be provided to avoid effects from lead fumes.

Do not tip Burner Unit while filling. Always set it flat on its base. We suggest the use of the Filtering Funnel for straining the gasoline.

As soon as Tank is filled, replace Filler Plug and tighten firmly, using square hole in Wrench Key.



VAPORIZER ASSEMBLY

When hydro-carbon fuel (gasoline) is vaporized and burned, a residue in the form of carbon is produced from the gum content of the fuel.

If anti-knock compounds are added to gasoline to improve the operating efficiency of motorized equipment, the resulting fuel will, when used in gasoline pressure appliances, form a residue of both carbon and lead in the Vaporizer. It can be readily understood, therefore, that anti-knock compounds added to gasoline containing gum will form varying amounts of residue in direct proportion to the gum content and the amount of anti-knock compounds added.

When Burners are kept in continuous operation from fifteen to twenty hours daily, using fuel having a heavy gum content and high percentage of lead, naturally it will be necessary to clean or replace Vaporizers every two to five days.

Vaporizers on Burners used only a few hours daily will require cleaning or replacement *only at intervals of a month to six weeks.*

When anti-knock gasoline is used, the average time a Vaporizer can be used without cleaning or replacement is fifty to one-hundred hours—depending on gum and lead content of the fuel. The use of Regular (unleaded) gasoline having a normal gum content, will substantially increase Vaporizer life.

If an accumulation of residue is built up in the Vaporizer Tube, flame strength on the Burner will be noticeably decreased. When an efficient flame can no longer be maintained, it is usually an indication that the Vaporizer Tube is clogged and requires either cleaning or replacement.

Be sure the Burner Unit is level when pumping to avoid drawing gasoline into Pump.

See that Fuel Valve is closed, then turn Pump Handle to left two turns. Hold thumb over Vent Hole in end of Pump Handle and pump 15 to 20 full strokes of air into the Tank. Turn Pump Handle to right to close. Additional pressure should be added later while Burner is generating. Keep Pump Leather soft with a few drops of oil.

D. TO LIGHT

First—Clean Gas Tip in Vaporizer by revolving, several times, the Cleaner Needle Lever located above the Valve. Stop Lever in DOWN position.

Second—Be sure the Burner Unit is level to prevent flooding of Burner during lighting operation. Open Fuel Control Valve a quarter turn to left. Apply lighted match at top of Burner Head. In extremely low temperatures allow Burner Head to become moist with gasoline before applying lighted match. 5 to 10 minutes are required for complete generation. Under some conditions flame may blow itself out. Just re-light. Flame will soon settle down to steady blue.

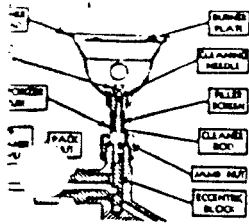
Apply several additional strokes with Pump to replace air used in generation.

Third—After flame burns steady blue for 2 or 3 minutes, open Fuel Control Valve AS FAR AS POSSIBLE.

E. TO SHUT OFF BURNER

Close Fuel Control Valve.

Note: Any open burner should never be used in a confined space without ventilation, especially when leaded gasoline is used as fuel.

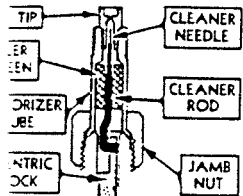


Remove the Burner Head by unscrewing to the left. Turn Tip Cleaner Lever up. Unscrew Jamb Nut at lower end of Vaporizer. Lift Vaporizer and Cleaner Rod

and Needle off by unhooking Cleaning Needle from Eccentric Block.

When loosening the Jamb Nut at the base of the vaporizer, hold the Valve Body so that it will not be sprung or twisted out of position.

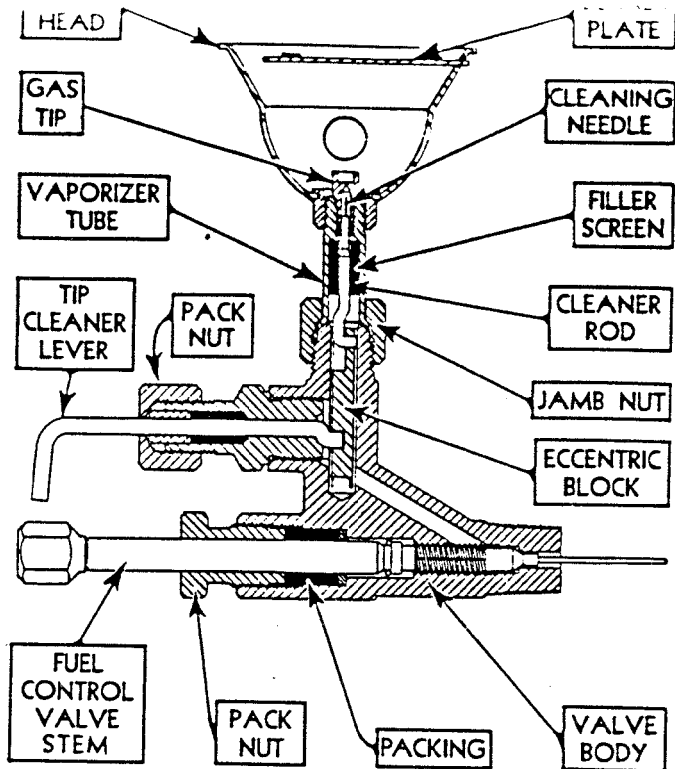
3) CLEAN VAPORIZER



Remove Filler Screen and scrape all carbon from inside of Vaporizer. Do not force anything through Gas Tip hole as this would increase size of opening. If

new Filler Screen is available, insert in Vaporizer Tube; however, old screen may be cleaned and used if care is used in unrolling and re-rolling. Screen must be rolled tightly around Cleaner Rod before being put back into Vaporizer to insure proper operation.

Extreme care must be taken not to damage the Needle when assembling Vaporizer over the Needle.

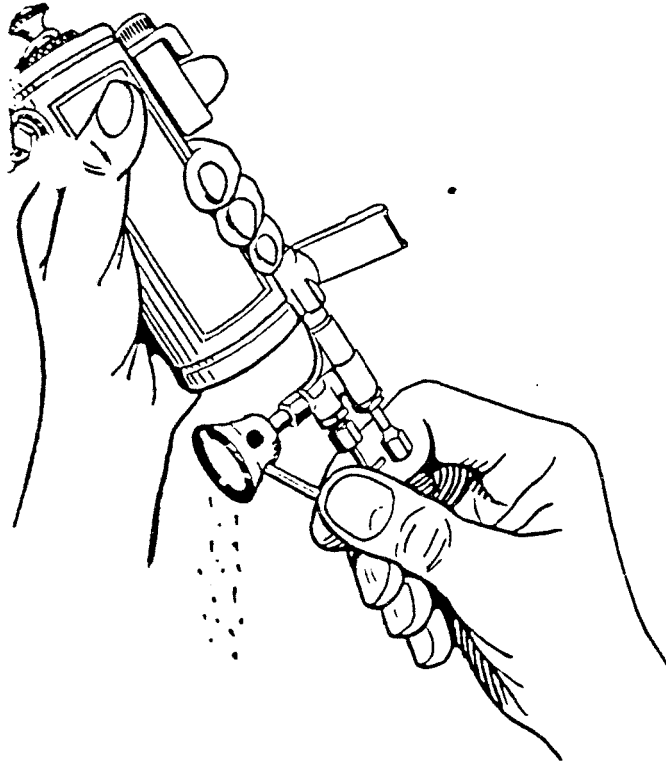


TO REPLACE VAPORIZER

To install new Vaporizer with Cleaner Rod and Needle—

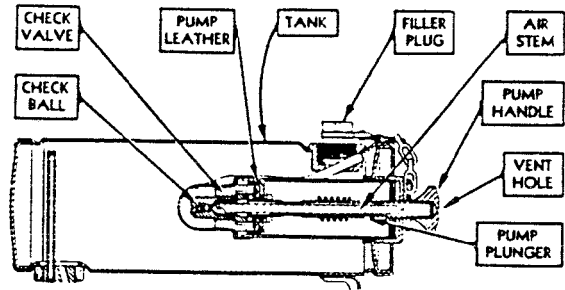
First, pull Cleaner Rod down out of Vaporizer about 1/8" and hook in hole of Eccentric Block. Now turn Tip Cleaner Lever down, seat Vaporizer properly. Screw Jamb Nut down, tightening with Wrench Key.

SERVICE QUESTIONS AND ANSWERS



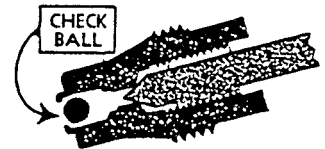
Q. Pump does not operate properly.

A. (1) Before attempting to apply pressure to the Tank open Pump Assembly by turning a few turns to the left. Hold thumb or palm of hand over Vent Hole in end of Pump Plunger. Gasoline will be drawn into Pump Barrel if Burner Unit is not in level position while applying pressure; or, Tank too full of gasoline.



(2) Pump Leather dried out. Remove Pump Plunger and work lubricating oil into leather, or replace if leather is worn out.

(3) Check Ball stuck. Remove Check Valve and clean. Replace if Check Ball does not work freely after cleaning.



KEEP BURNER PLATE CLEAN

IT IS IMPORTANT that the underside of the Burner Plate be cleaned frequently or every few days. Failure to do this regularly will reduce the efficiency of the Burner.

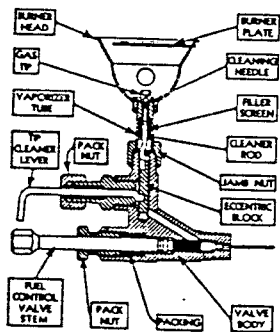
Insert a sharp stick or wire through the holes in the side of the Burner Head to clean or scrape carbon accumulations off the underside of the Burner Plate.

Q. Will not hold air when Pump Plunger is in OFF position.

A. (1) Threads on Air Stem and Check Valve worn out. Replace.

Q. Leak at Stem Pack Nut.

A. Tighten Pack Nut a few turns to hold packing in firm contact with Valve Stem. Note: If Pack Nut is drawn up too tightly, Valve will not turn. Back off slightly. Replace packing if leak is not stopped by tightening Pack Nut.



Q. Leak at Pack Nut on Tip Cleaner Assembly.

A. Tighten Pack Nut a few turns to hold packing in firm contact with stem. Note: If Pack Nut is drawn up too tightly, lever will not turn. Back off slightly. Replace if leak is not stopped by tightening Pack Nut.

Q. Tip Cleaner Lever will not turn.

A. Continuous use of fuel having a high gum and anti-knock compound content will cause an accumulation of carbon on Eccentric Block, causing it to "freeze" in the valve assembly. Remove and clean or replace.

Q. Tip Cleaning Needle does not work.

A. (1) Needle broken off. Replace.
(2) Tip Cleaning mechanism worn out. Re-

Q. Burner will not light.

A. (1) Out of fuel.
(2) Not enough pressure in Tank.
(3) Vaporizer Tip clogged. Revolve Tip Cleaner Lever several turns. Be sure Cleaning Lever is in DOWN position when lighting Burner.
(4) Vaporizer clogged. Clean or replace.
(5) If Burner does not light after checking above suggestions, the Valve complete should be removed and inspected. Replace Valve if gum content of gasoline has clogged Valve Body.

Q. Burner burns but produces "red, lazy" flame.

A. (1) Burner Unit not level during lighting operation.
(2) Tank pressure too low. Pump several additional strokes.
(3) Vaporizer Needle bent. Replace.
(4) Vaporizer almost clogged. Clean as above, or replace.
(5) Burner Plate corroded. Insert a sharp stick or wire through the holes in the side of the Burner Head to clean or scrape carbon accumulations off the underside of the Burner Plate. See illustration on page 8.
(6) Burner loose on Vaporizer. Tighten.

Q. Burner backfires and burns with red flashes.

A. (1) Burner loose on Vaporizer. Tighten.
(2) Burner Plate corroded. Clean as above.