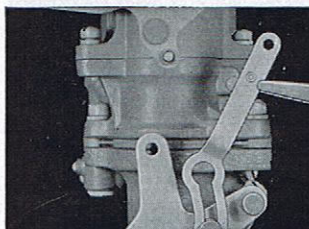
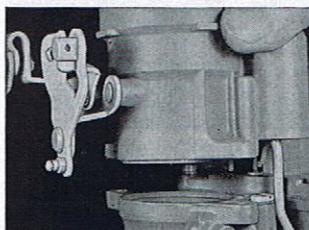


W-O CARBURETER SERVICE PROCEDURE

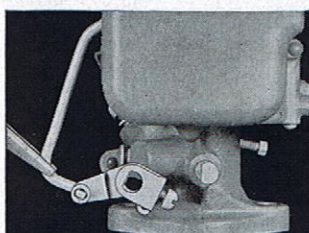
A fast, simple, Circuit method of servicing Carter W-O Carbureters. Use Carter Tool Kit. BE ACCURATE.



1.
Remove choke link pin spring, choke connector link and spring.



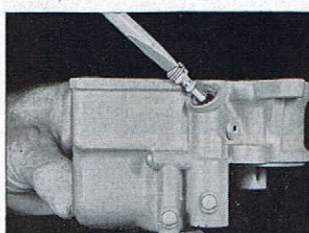
2.
Remove air horn and dust cover assembly with all parts attached.



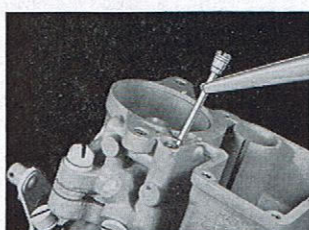
3.
Remove throttle shaft arm and screw assembly and throttle connector rod.



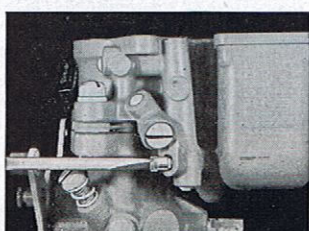
4.
Remove bowl cover with all parts attached.



5.
Remove pump jet passage plug and gasket assembly, and pump jet.



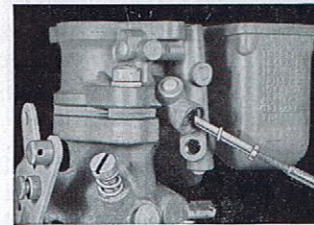
6.
Remove low speed jet plug and gasket assembly, and low speed jet.



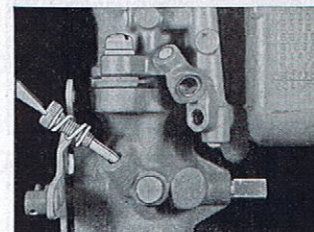
7.
Remove idle well plug and gasket assembly, and idle well jet.

8.
Remove nozzle passage plug and gasket assembly, nozzle retainer plug and nozzle.

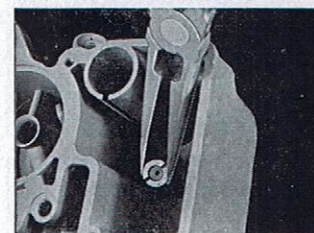
Be sure to remove small nozzle gasket.



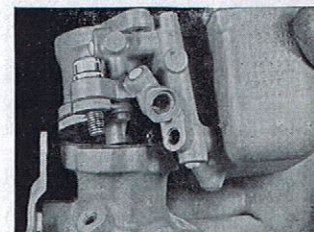
9.
Remove idle adjusting screw and spring.



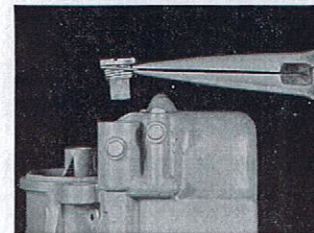
10.
Remove metering rod jet and gasket assembly.



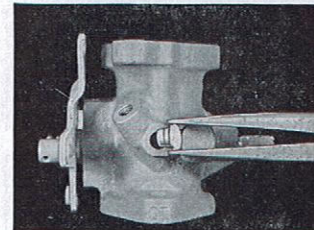
11.
Disassemble flange from body and remove insulator and gaskets.



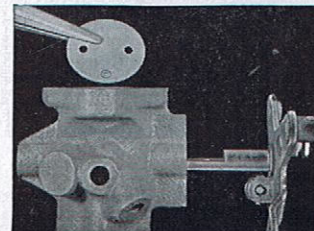
12.
Remove strainer passage plug, strainer, intake and discharge check assemblies.

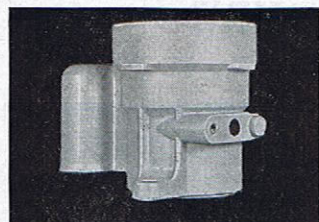


13.
Remove idle port rivet plug.



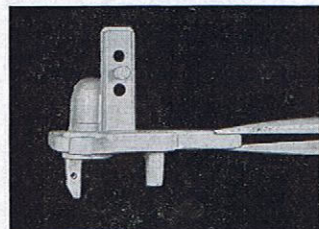
14.
Remove throttle valve screws, valve and throttle shaft and lever assembly.





15.

Remove all parts from air horn and dust cover assembly.



16.

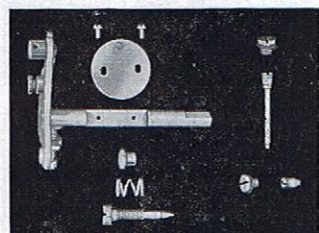
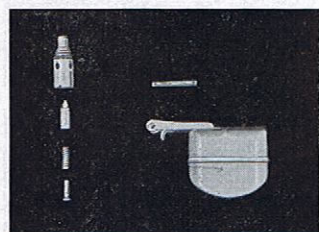
Disassemble all parts from bowl cover.

Clean all castings thoroughly, inside and out, with a small brush and clean gasoline. Then blow out all passages with compressed air.

TO REASSEMBLE

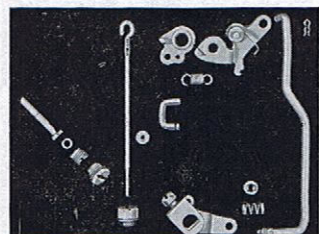
17.

Group all parts controlling gasoline level.



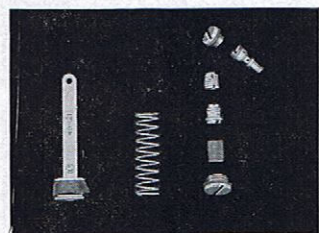
18.

Group all idle circuit parts.



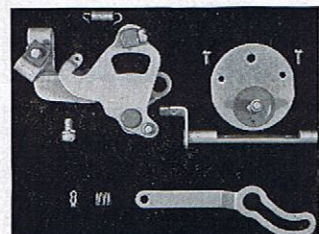
19.

Group all high speed circuit parts.



20.

Group all pump circuit parts.



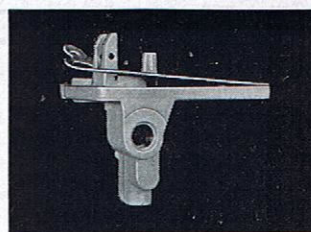
21.

Group all choke circuit parts.
(See note at bottom of page.)

22.

Install bowl cover gasket.

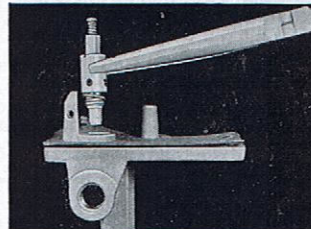
Check bowl cover for warpage and wear on countershaft pin.



23.

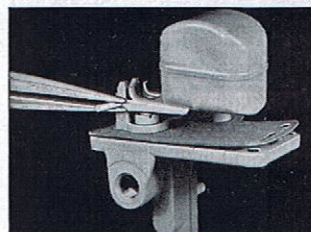
Install needle seat and gasket assembly in bowl cover.

Then install needle, pin and spring.



24.

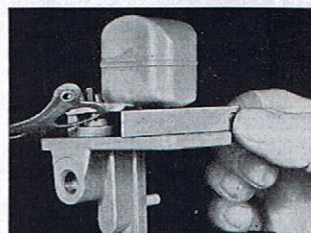
Install float and lever assembly and float pin.



25.

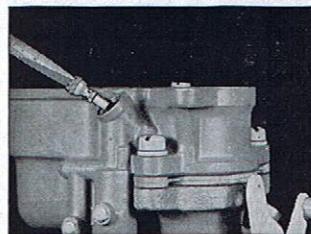
Set float level.

Turn gasket around so gauge can be placed on machined surface of casting. Adjustment is obtained by bending float lip (which contacts needle). Do not bend float.



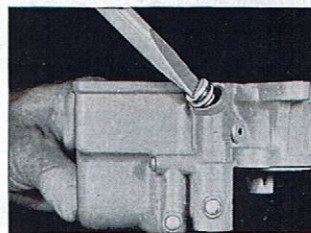
26.

Install pump jet.



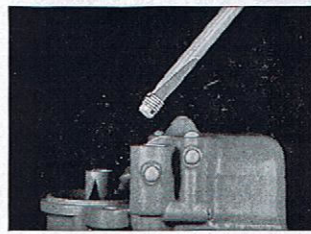
27.

Install pump jet passage plug and gasket assembly.

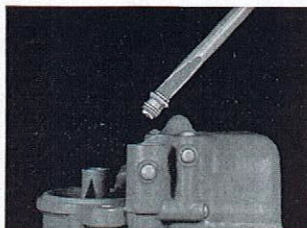


28.

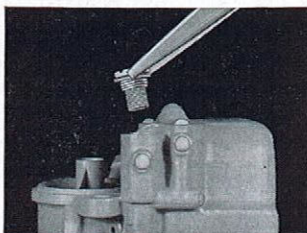
Install discharge check assembly.



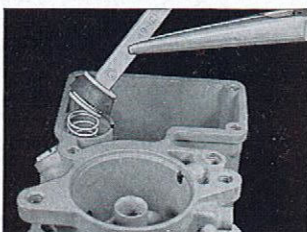
NOTE: Examine each part in each group and replace those parts that show wear or damage. If any carbon is in the bore of the flange, remove it by scraping, or with sandpaper (do not use emery cloth). Install all parts tight. Use all new gaskets.



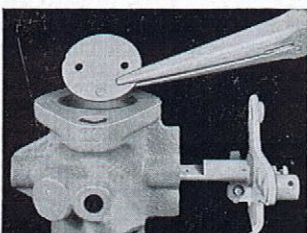
29.
Install intake check assembly.



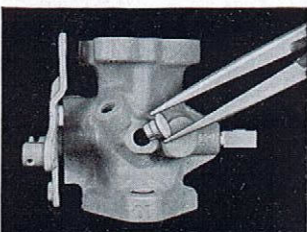
30.
Insert strainer in recessed portion of strainer plug. Then install strainer plug as assembled.



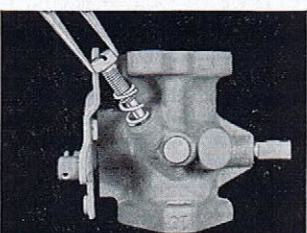
31.
Install pump spring and pump plunger and rod assembly.



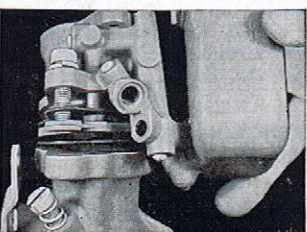
32.
Install throttle shaft and lever assembly and throttle valve. Install valve with small "c" toward idle port opening and facing manifold side of flange. Back out throttle lever adjusting screw. With screws loose, tap throttle valve lightly to centralize it in bore of carburetor, hold in place with fingers and securely tighten screws. Always use new screws.



33.
Install new idle port plug.

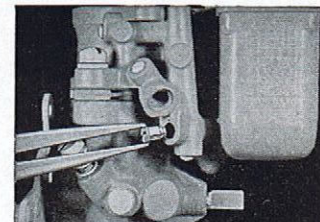


34.
Install idle adjustment screw and spring.
Set to specification.

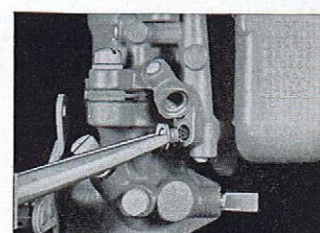


35.
Assemble flange to body.
Use new gaskets. Line up holes in body casting with holes in insulator, gaskets and flange before tightening screws. Don't forget lock washers.

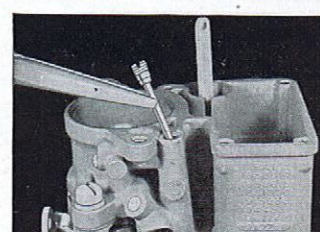
36.
Install idle well jet.



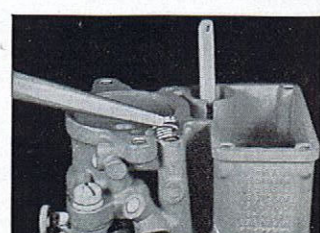
37.
Install idle well jet passage plug and gasket assembly.



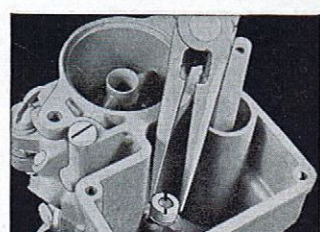
38.
Install low speed jet.
Work jet well into seat to insure a good seal.



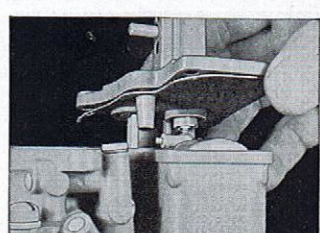
39.
Install low speed jet passage plug and gasket assembly.



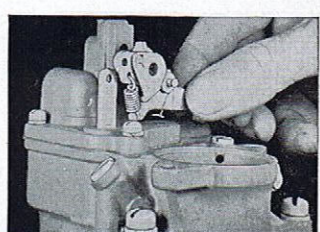
40.
Install metering rod jet and gasket assembly.



41.
Install bowl cover as assembled.
Tighten screws evenly and securely.

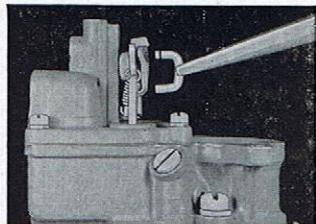


42.
Install pump arm and collar and pump operating lever assembly on pin in bowl cover.



CARBURETER

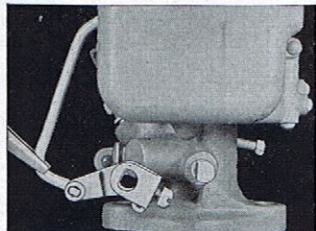
TRADE MARK REG. U. S. PAT. OFF.
MARCA REGISTRADA



43.

Install pump connector link.

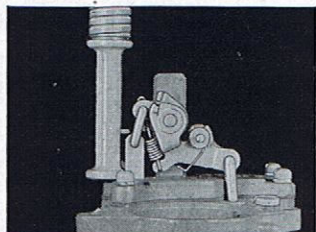
Ends of link should be away from bore with pin spring at top.



44.

Install throttle shaft arm and screw assembly on throttle shaft.

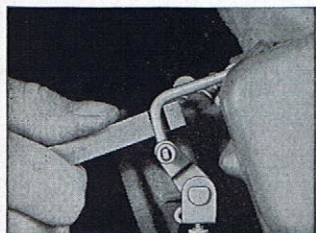
Then install throttle connector rod using new spring and retainer at lower end and pin spring at top end. Examine throttle connector rod and throttle shaft arm for wear.



45.

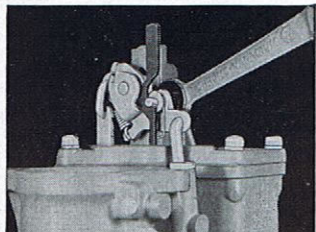
Adjust pump stroke.

(See note at bottom of right hand column.)



46.

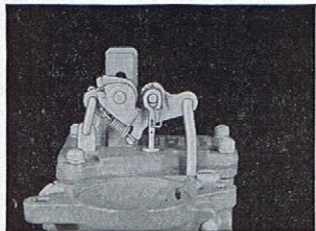
Proper method of bending throttle connector rod for pump adjustment.



47.

Adjust metering rod.

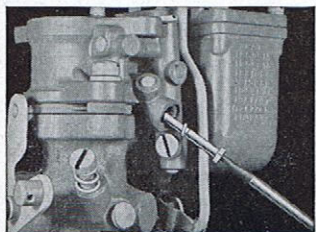
(See note at bottom of right hand column.)



48.

Remove metering rod gauge and install metering rod and disk.

End of metering rod spring should be inserted through hole in metering rod in 539S carburetor.



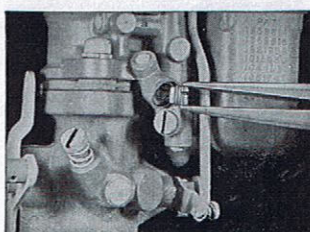
49.

Install nozzle and gasket.

Install nozzle with flat side facing up. Be sure to install new nozzle gasket.

50.

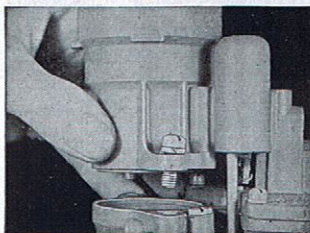
Install nozzle retainer plug and nozzle passage plug and gasket assembly.



51.

Install air horn and dust cover assembly on body.

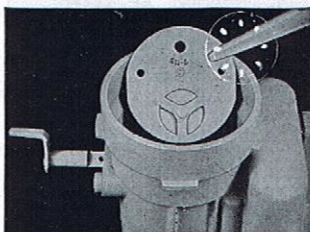
Tighten screws evenly and securely.



52.

Install choke shaft and lever assembly and choke valve.

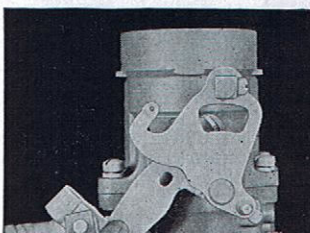
Centralize valve in air horn, then securely tighten screws. Always use new screws.



53.

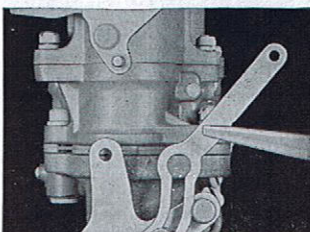
Install choke tube bracket assembly.

Connect choke pull back spring.



54.

Install choke connector link, spring and pin spring.



PUMP ADJUSTMENT: Back out throttle lever set screw. Pump plunger should travel specified distance from closed to wide open position. Pump travel can be measured by placing base of gauge T109-117S on raised portion of bowl cover so that projecting ear of gauge rests on top surface of pump shaft. Hold gauge vertical. The difference between the numbers shown by index mark on gauge at closed and wide open throttle positions will be plunger travel in 64th's. Adjust by bending throttle connector rod at lower angle (Fig. 46).

METERING ROD ADJUSTMENT: Insert gauge in place of metering rod, seating tapered end in metering rod jet. **With throttle valve seated** (back out throttle lever set screw) and metering rod pin resting on shoulder of gauge, tighten adjusting nut (Fig. 47). Remove gauge and install metering rod and disc. Connect metering rod spring.

ALWAYS USE ALL NEW GASKETS WHEN SERVICING A CARTER CARBURETER.

NO CARBURETER CAN DELIVER GOOD MILEAGE OR PERFORMANCE UNLESS COMPRESSION IS NORMAL AND THE MOTOR IS PROPERLY TUNED.