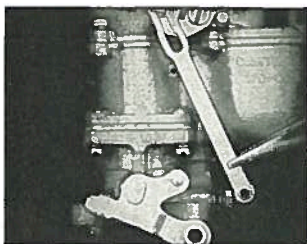
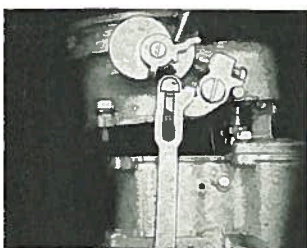


## SERVICE PROCEDURE 1938 and Prior—WDO Dual Climatic Control Carbureter

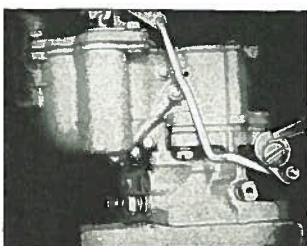
A fast, simple, Circuit method of servicing Carter WDO Dual Downdraft Carbureters. Use Carter tool kit.  
**BE ACCURATE.**



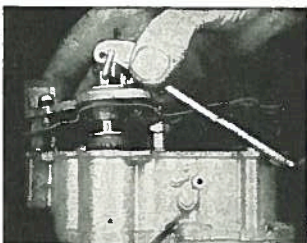
1.  
Remove fast idle connector link at lower end.  
Do not damage or lose spring or retainer.



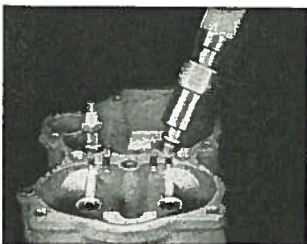
2.  
Remove air horn assembly.  
Retainer screw or plug in air horn beneath choke valve must be removed.



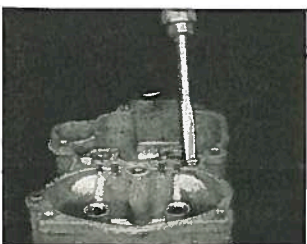
3.  
Disconnect throttle connector rod at throttle shaft.



4.  
Remove bowl cover with all parts attached.  
Remove bowl cover gasket.



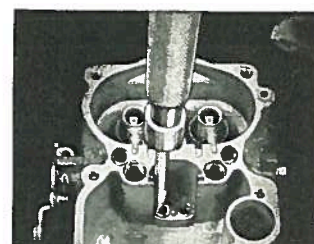
5.  
Remove both anti-percolator valves.



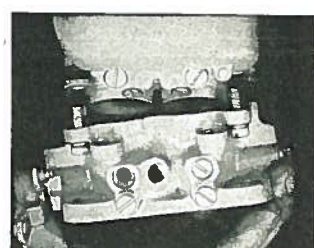
6.  
Remove both pump jet plugs and pump jets.  
All metering jets in dual carbureters are in duplicate. Illustrations show removal of only one.

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by Carter Carburetor Corporation  
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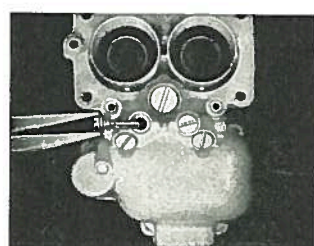
7.  
Remove both metering rod jet and gasket assemblies.



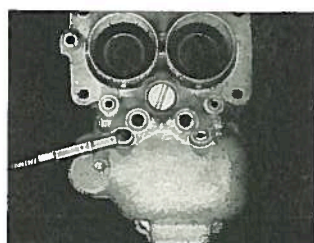
8.  
Remove body flange assembly and gasket.  
Be sure to remove two small rubber idle passage gaskets.



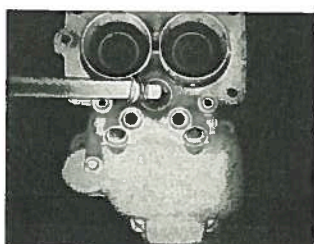
9.  
Remove both low speed jets.  
Remove two small gaskets from casting.



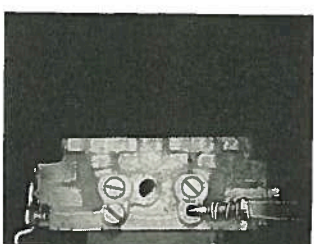
10.  
Remove both nozzle plugs, nozzle retainer plugs and nozzles.  
See that nozzle gaskets are removed from casting.

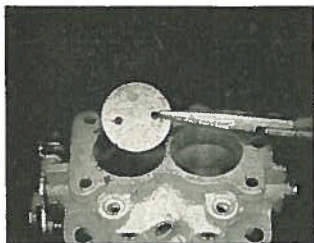


11.  
Remove pump check plug, screen and both pump checks.  
Remove washer from casting.

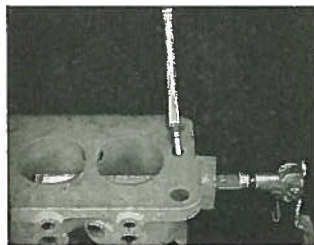


12.  
Remove idle adjustment screws and springs and idle port plugs.

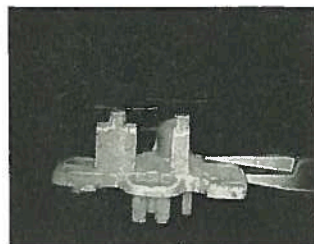




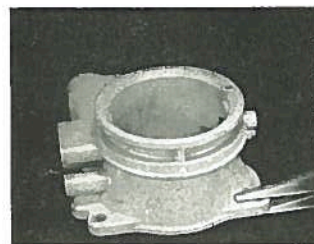
13.  
Remove both throttle valves.



14.  
Remove throttle centering screw, then throttle shaft and lever assembly.  
  
Check shaft for wear, loose lever and throttle rod hole in lever for wear.

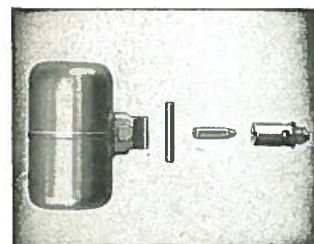


15.  
Remove all parts from bowl cover.

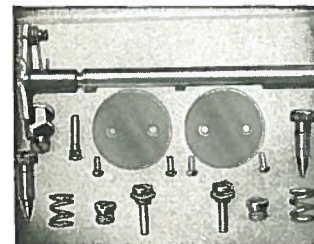


16.  
Remove all parts from air horn.  
  
(See note at bottom of page)

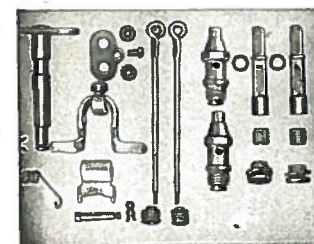
**TO REASSEMBLE**



17.  
Group all parts controlling gasoline level.

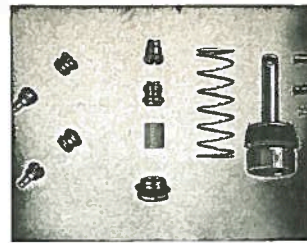


18.  
Group parts controlling idle circuit.

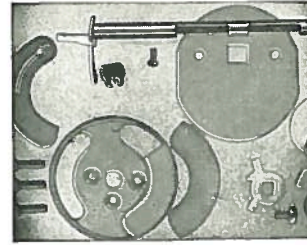


19.  
Group all parts controlling high speed circuit.

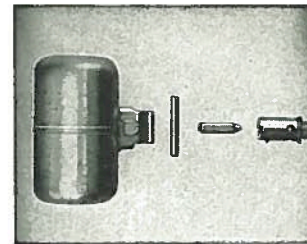
20.  
Group parts for pump circuit.



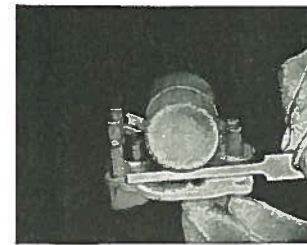
21.  
Group parts for choke circuit.  
  
Examine each part in the five groups and replace any part that shows wear, or does not meet specifications.



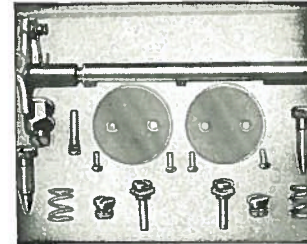
22.  
Assemble parts that control gasoline level as shown.  
Check float for dents and wear on lip and float pin for wear. Check bowl cover for warpage and wear in countershaft hole. If needle shows groove on seating surface replace both needle and seat.



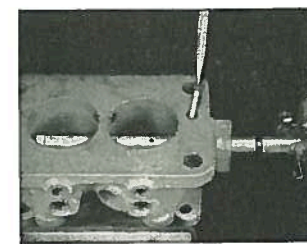
23.  
Install needle and seat assembly, float and lever assembly and float pin.  
  
Set float level to specifications by gauging distance between bowl cover and each end of float. Do not gauge from soldered seam.



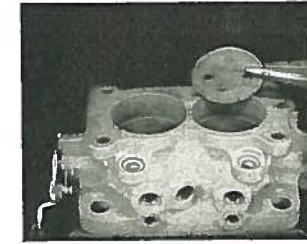
24.  
Assemble idle circuit parts.  
  
Never reinstall a used low speed jet. Use new jet and new washer. Be sure to scrape all carbon from bore of casting.



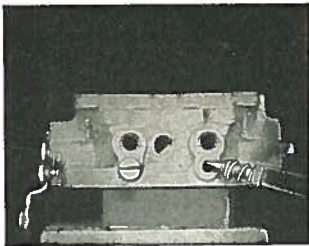
25.  
Install throttle shaft and lever assembly and throttle centering screw.  
  
Back out throttle lever adjusting screw.



26.  
Install throttle valves.  
  
Small "c" in circle or part number should be toward idle port when viewing casting from manifold side. Center throttle valves by tapping lightly and hold in place with fingers before tightening screws. Always use new screws.



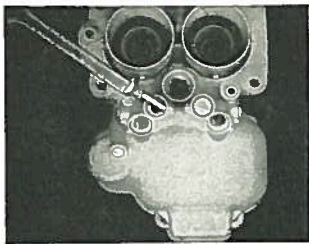
**NOTE:** Clean casting and all parts thoroughly, except cork pieces and coil housing assembly, with clean gasoline. Paint outside of body casting with Carter Special Body Finish. Be sure Finish does not restrict passages. On 1937 and 1938 models pump relief passage to outside must be clear of all obstruction.



27.

**Install idle adjustment screws and springs and idle port plugs.**

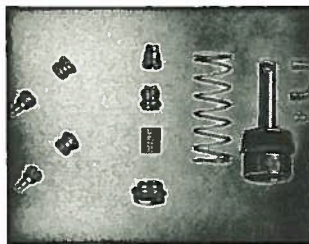
Back out idle adjusting screws to specifications.



28.

**Install two new low speed jets.**

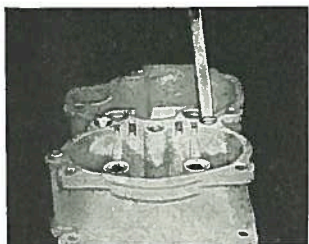
Be sure to install small copper washers (where used) before installing jets.



29.

**Assemble parts for pump circuit.**

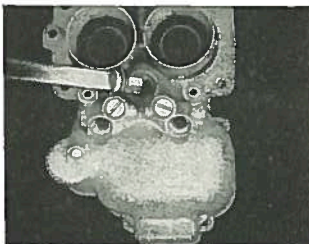
Replace both spring and leather if leather shows wear or mutilation. Test checks by blowing for free operation.



30.

**Install pump discharge jets and plugs.**

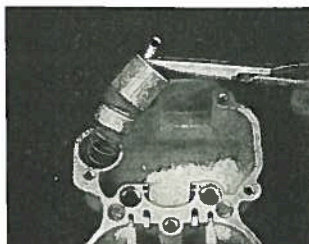
Make certain jets are clear of all restriction and seat properly. No washers are used beneath plugs.



31.

**Install both pump checks, strainer and plug.**

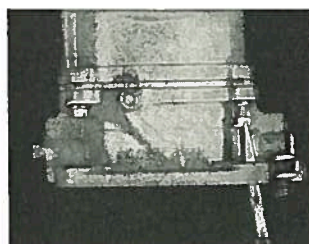
Place new copper washer in casting before installing plug and strainer (where used).



32.

**Install pump spring and plunger assembly.**

Use loading tool to avoid damage to leather.



33.

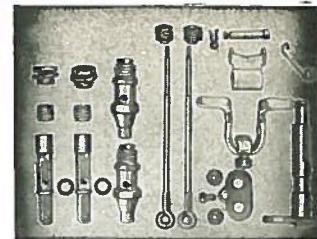
**Install flange assembly and gasket on body.**

See that two new small black rubber idle passage gaskets are installed on body before installing flange.

34.

**Assemble parts controlling high speed circuit.**

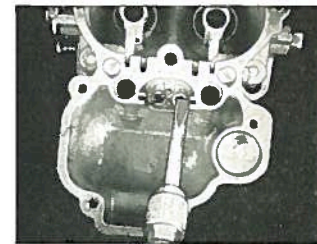
Check pump arm and countershaft for wear on shaft and for loose lever. If metering rods show wear, replace both rods and jets. New nozzles should be used whenever carbureters are serviced. Old nozzle gaskets must be removed from body. Check anti-percolator valves closely for dirt and wear.



35.

**Install metering rod jet and gasket assemblies.**

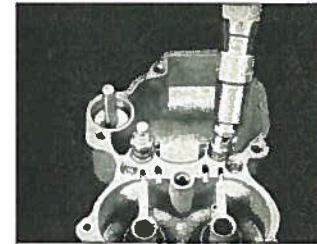
Metering rod jets must be installed snugly, but not so tightly as to cause distortion.



36.

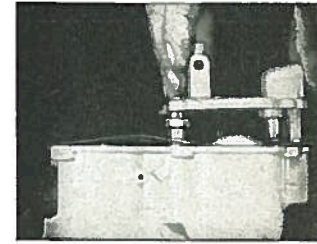
**Install both anti-percolator valves.**

No gaskets are used.



37.

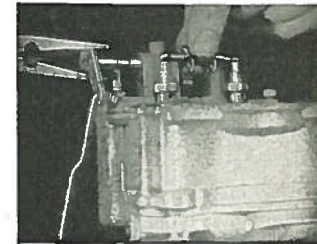
**Install bowl cover gasket and bowl cover as assembled.**



38.

**Install pump arm and countershaft assembly, anti-percolator arm and metering rod arm.**

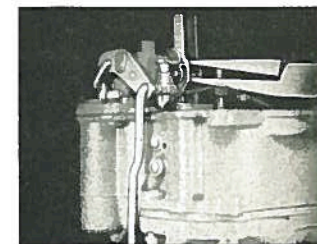
Install pump connector link. Check for wear on both ends of throttle connector rod. Install throttle shaft arm. (See No. 3.)



39.

**Adjust metering rods.**

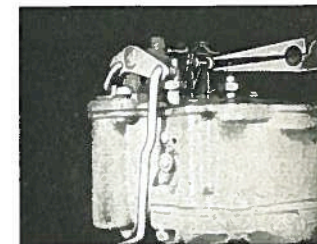
(See note at bottom of page)



40.

**Install metering rod disks, retainer and screw and metering rods, spring and pin.**

Metering rod disks must be under retainer.



**NOTE:** On 1935 and 1936 carbureters metering rod setting is made by bending throttle connector rod at lower end. On 1937 and later models, pump setting must be made before adjusting metering rods. Set pump by bending lower end of connector rod. Set metering rods by means of lock screw on anti-percolator arm. Both metering rods should be synchronized before making this adjustment. (See catalog page for complete instructions.)

41.

**Adjust anti-percolator valves.**

See catalog page for proper specification.

42.

**★Install nozzles, nozzle gaskets, retainer plugs and nozzle passage plugs.**

Use new copper washers (where used).

43.

**Assemble choke parts.**

Check for loose lever on shaft, broken piston, burrs in cylinder and warped piston plate.

44.

**Install air horn.**

Do not fail to install retainer screw or plug tightly in air horn beneath choke valve.

45.

**Install piston plate housing and new cork insulator.**

Be sure white paper air horn gasket is installed between air horn and piston housing assembly.

46.

**Install port plate, piston plate and strainer screen.**

If screen is dirty or clogged, do not clean but replace.

47.

**Install choke shaft and lever assembly and piston.**

48.

**Install choke valve.**

Use new screws when installing valve. Seat choke valve by tapping lightly. Hold in place with finger before tightening screws. Valve or shaft must not bind in any position.

49.

**Install thermostat coil and housing assembly as shown.**

Install thermostatic coil housing assembly with indicator mark to bottom. Then revolve housing ½ turn counter-clockwise and set indicator as stated in specification sheet.

50.

**Install fast idle cam, washer and choke trip lever.**

51.

**Install fast idle arm and spring.**

52.

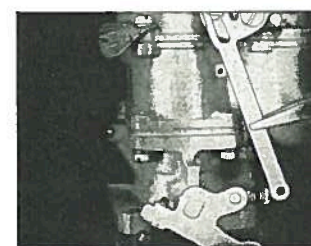
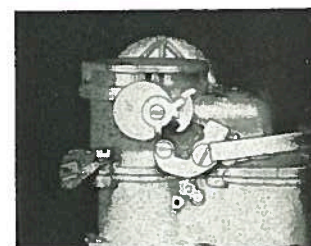
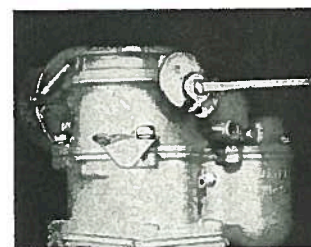
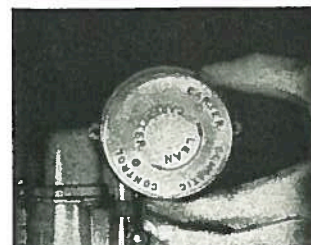
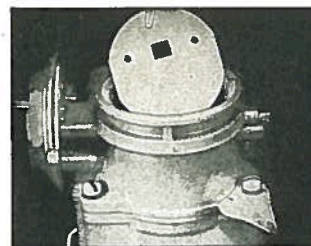
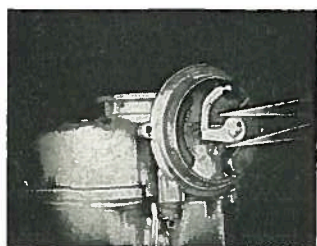
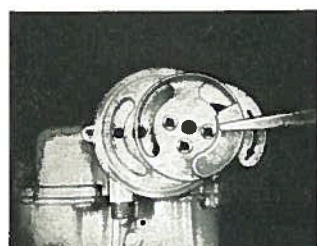
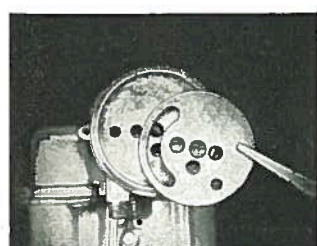
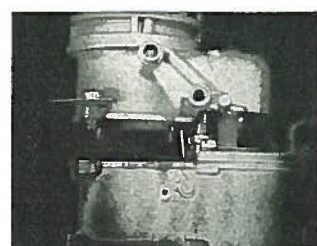
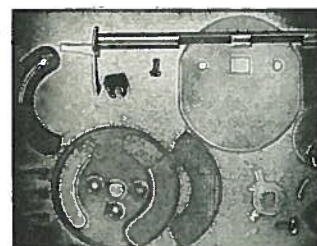
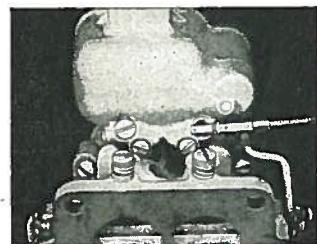
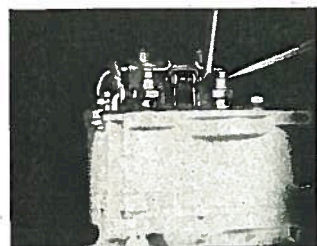
**Install fast idle connector link, spring and retainer at lower end.**

Protect your work with a Carter Airdome Fuel Filter.

Always use complete new gasket assortment when servicing a Carter Carburetor.

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

**CARBURETOR**  
TRADE MARK REG. U. S. PAT. OFF.  
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★On a few WDO carburetors, lack of space demands installation of the nozzles, retainer plugs and passage plugs before attaching body flange assembly. (Operation 33.)