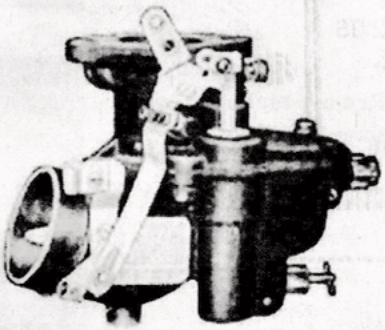
CARBURETER

THE BB CARBURETOR
UPDRAFT MODELS

Last month we began this two-part series on the Carter BB carburetor. The BB was a very popular model for Carter, with many marque applications over a long number of years.

Beginning in the mid/late 1920s, the updraft model was used on a variety of cars, either as orignal equipment or as a very viable replacement for the original carburetor (we believe that the application of the Jewett - see below - refers to a replacement rather than an OEM carburetor).



The project of determining application becomes considerably more difficult with the earlier updraft carburetors. The literature on the earlier vehicles is not nearly as available as for the later vehicles, and many early works do not offer the necessary specs. Perhaps the Owner's Manual might offer some help, or, if available a service manual could be of great help.

The 1936 edition of the Hollander Interchange does not even include carburetors; the 1939 edition and the 1949 edition do, and after a bit of research and cross-referencing, the Carter BB 1¼" updraft carb was used (as original or as interchangable) on the following vehicles. Not all models used this carburetor; please check a copy of Hollander's Interchange for specific applications:

Auburn 1925-'30 & '33;
Chevrolet truck 1939-'48(1);
Chrysler 1928-'31(2);
Diamond T 1930;
DeSoto 1931-'32;
DeVaux 1931-'32;
Dodge '29 & '31;
Dodge truck 1932;
Durant 1928-'32;
Erskine 1930;
Franklin 1927-'30(3);
Franklin 1932-'33(3);
Gardner 1928;
Graham 1931-'32 & Graham'34;
G. Paige 1929-'33;
Hupmobile 1029-'31;
International 1927-'29;
Jewett 1922-'24(4);
Oakland 1928-'29;
Plymouth 1932;
Pontiac 1929-'32;
Reo 1925-'26;
Rockne 1932-'33;
Studebaker1925-'27
Studebaker 1932;
Willys 1930-'31

(1) 1939-'48 seems rather late for an updraft carburetor application. We cannot determine if this Chevrolet listing is an anomoly or an error.

(2) The 1931 Chrysler 6-cylinder was originally fitted with a Stromberg carburetor. The Carter was a sutable aftermarket interchange.

(3) The Franklin was originally equipped with a Stromberg 1½" carburetor. Although the Carter BB is listed as a suitable interchange, the 1¼" size will most likely impede performance.

(4) Judging from the early dates, the Jewett is most probably an interchange application.

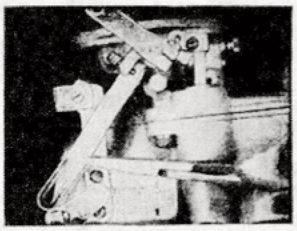
Another number of vehicles listed could use the same carburetor, but would require an adapter. These are listed in The Hollander.

A word of extreme caution: the accelerator pump assembly of the BB updraft carburetor is a multiple-piece metal unit, and, if stuck, during removal of the cover assembly it could easily be broken. Replacement accelerator pumps are NOT available. Be extremely careful when tearing down your carburetor so as not to damage this part. The accelerator pump well is the lowest point of the carburetor. Any water that gets into the carb will settle at this low point and rust. A strong rust penetrant might loosen the accelerator pump if this occurs.

Rebuilding kits for both the updraft and downdraft carbs, including gaskets, check balls, needle valves and seats, springs, etc. are available from Daytona Carburetor. See their ad on page 48

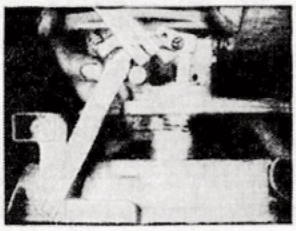
S.K.

SERVICE PROCEDURE
BB UPDRAFT CARBURETER



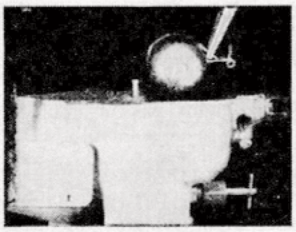
1.
Disconnect choke link.

Do not lose choke link washer.

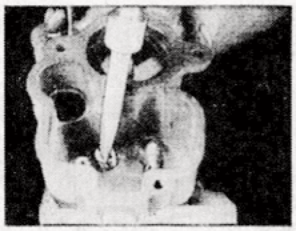


2.
Remove bowl cover with parts intact.

Remove pump sleeve, step-up push rod, and gasket. **[See caution note on previous page.]**

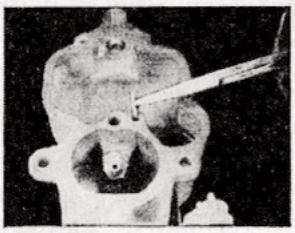


3.
Remove float lever pin and plug assembly, and float and lever assembly.

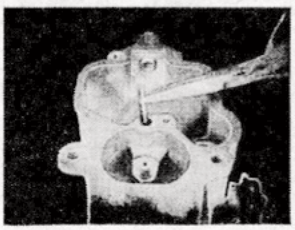


4.
Remove step-up valve assembly, pump valve assembly and check valve assembly.

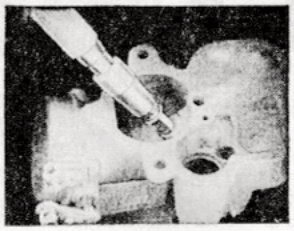
These three check valves are found at bottom of bowl.



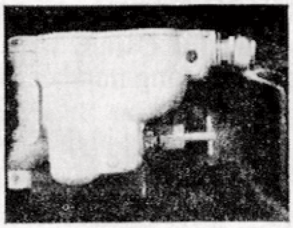
5.
Remove vent tube.



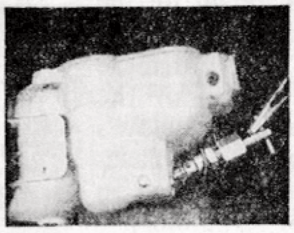
6.
Remove idle orifice tube (low speed jet.)



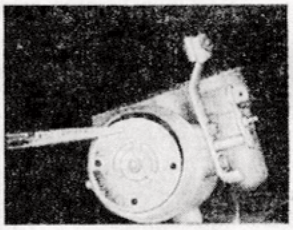
7.
Remove nozzle.



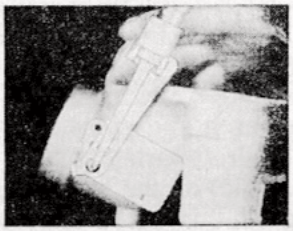
8.
Remove needle and seat assembly.



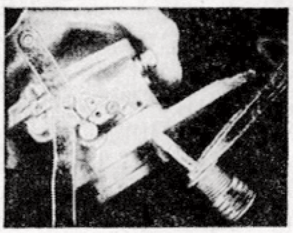
9.
Remove main metering screw.



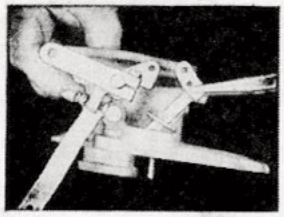
10.
Remove choke valve assembly and choke shafts.



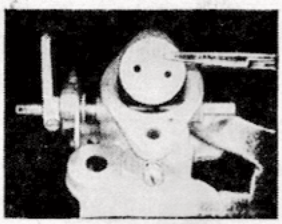
11.
Remove choke tube bracket assembly.



12.
Remove complete pump assembly.

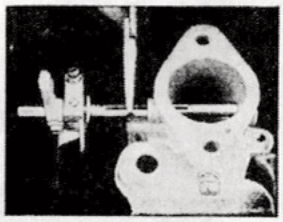


13.
Remove pump link and coverplate



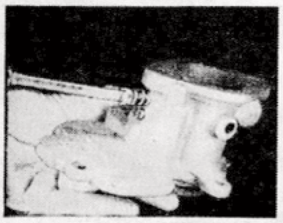
14.
Remove throttle valve.

Then remove loose throttle lever and dog assembly from shaft.

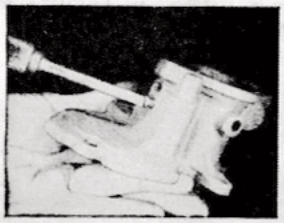


15.
Remove throttle shaft with parts attached.

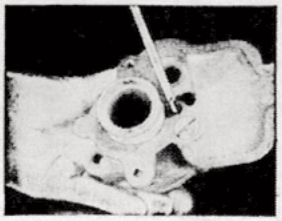
Remove choke link from shaft.



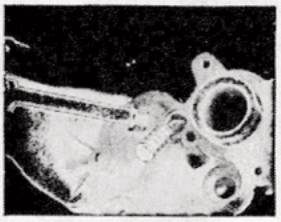
16.
Remove idle adjustment screw and spring.



17.
Remove idle port plug.



18.
Remove idle passage tube.

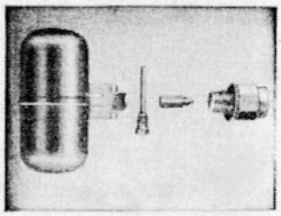


19.
Remove step-up piston plug to remove step-up piston and spring.

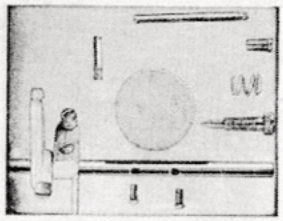
See note at bottom of page

TO REASSEMBLE

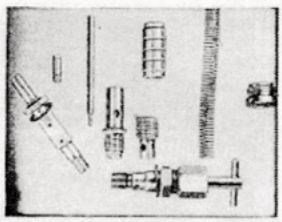
20.
Group parts controlling gasoline level.



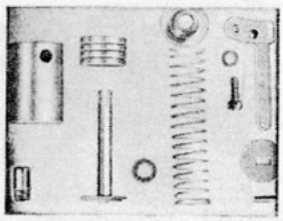
21.
Group parts controlling idle circuit.



22.
Group parts controlling high speed circuit.

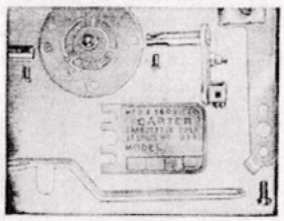


23.
Group parts for pump circuit.



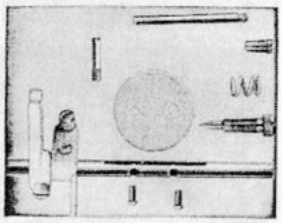
24.
Group parts for choke circuit.

Examine each part in the five groups and replace any part that shows wear or does not meet specifications.

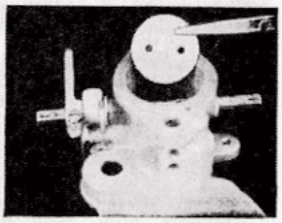


25.
Assemble parts controlling idle circuit.

Install choke link on throttle shaft.



26.
Install throttle shaft with assembled parts and throttle valve.
Small 'C' in circle or part number should be toward idle part when viewing casting from manifold side. Center throttle valve by tapping lightly and hold in place with finger before tightening screws. Always use new screws.



NOTE: Clean casting and all parts thoroughly with clean gasoline. Paint outside of body casting with Carter Special Body Finish. Be sure Finish does not restrict passages.

Page 3
BB
updraft

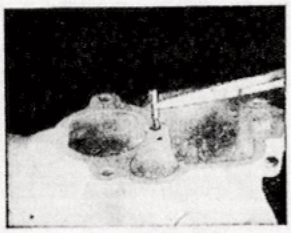
27.
Install idle passage tube.

If there is carbon accumulation on tube, replace with a new tube. Do not install tube too tightly. A snug fit will suffice.

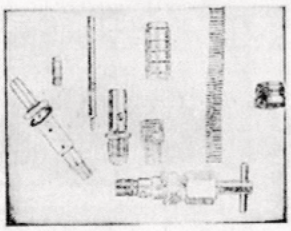
28.
Install idle adjustment screw and spring.

Set screw to specifications..

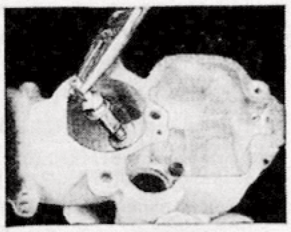
29.
Install idle port plug.



30.
Install idle orifice tube.
Do not install too tightly.

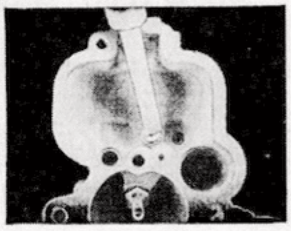


31.
Assemble parts controlling high speed circuit.



32.
Install nozzle

All carburetor use one nozzle gasket except 289S which should have two..



33.
Install pump valve assembly.

See that the ball in valve operates freely as all fuel to idle and high speed circuits is fed through this port. Lower face of valve must seat in casting.

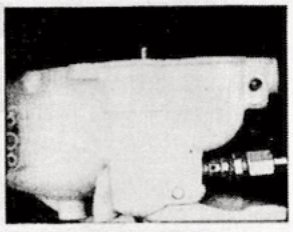
34.
Install new vent tube.

Use care when installing. Tube must be tight.

35.
Install step-up valve assembly

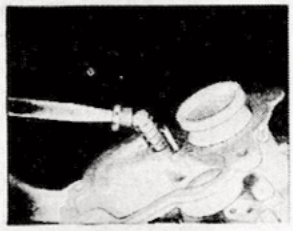
No gasket is used under this valve..

36.
Install main metering screw.

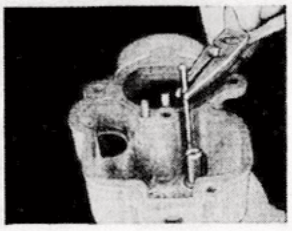


37.
Install step-up spring, piston and piston plug.

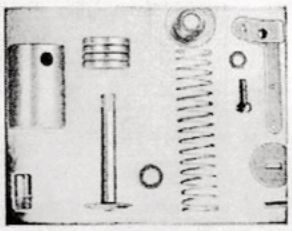
If piston shows slightest wear, replace. Always install a new step-up piston spring.



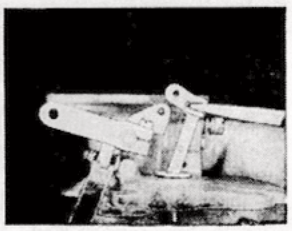
38.
Install step-up push rod.
Small portion of pin must be down..

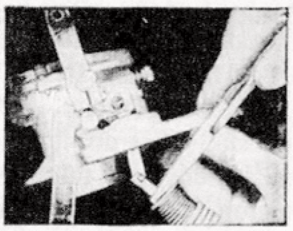


39.
Assemble parts for pump circuit.

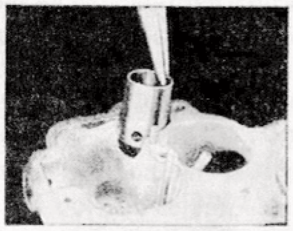


40.
Install pump link and cover plate.





41.
Install complete pump assembly.

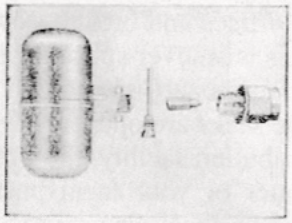


42.
Install pump sleeve.

Install with holes toward bottom.

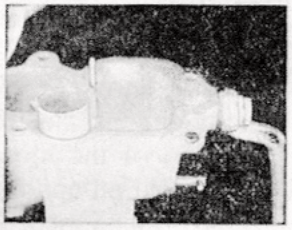
43.
Install check valve assembly.

Ball must be free.

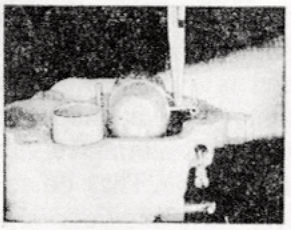


44.
Assemble parts that control gasoline level.

Check float for dents and wear on lip, and float pin for wear. If float is loaded with gas, replace. If needle shows groove on seating surface, replace both needle and seat.

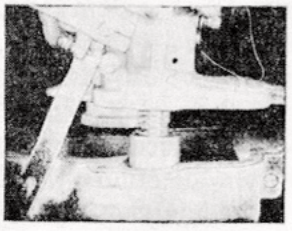


45.
Install needle and seat assembly.



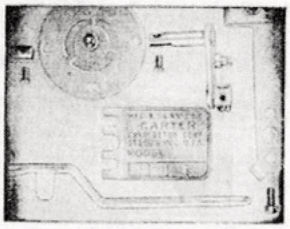
46.
Install float and needle assembly and float pin and plug assembly.

Set float level to specifications by bending lip, not float.



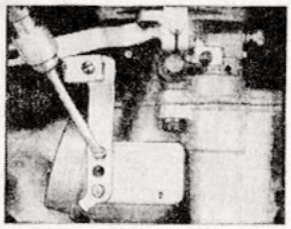
47.
Install upper casting as assembled.

Use new body gasket.

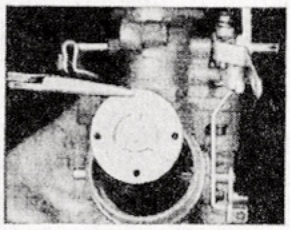


48.
Assemble parts for choke circuit.

Choke link has already been installed.

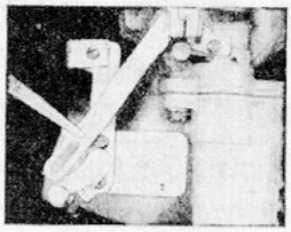


49.
Install choke tube bracket assembly and tag.



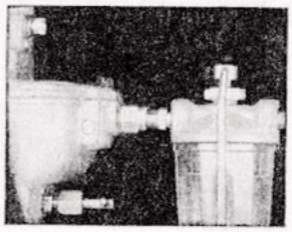
50.
Install choke shafts and valve assembly.

Assemble with valve in position as shown.



51.
Connect choke link.

Be sure to use choke link washer.



52.
Protect your work with a Carter Airdome Fuel Filter..

Note: New flange gasket should be used when installing carburetor on manifold. On cars without governor, gasket with 4 slots should be used; on cars with governor, install 26-12 plug in hole in bore and use gasket with 4 small holes. The original gasket with 4 slots to remain between manifold and governor.

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.

S.K.