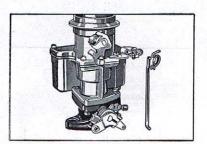
# CARTER CARBURETOR

DIVISION OF QCf INDUSTRIES INCORPORATED ST. LOUIS, MO., U. S. A.

# SERVICE PROCEDURE YF DOWNDRAFT CARBURETER

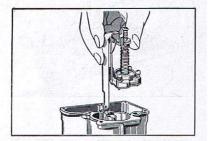


1.

Remove pin springs, fast idle connector rod spring and rod.

6

Loosen diaphragm housing attaching screws (4) and lift out entire pump and metering rod assembly.

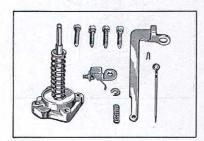


2

Remove air horn and bowl cover attaching screws (7), and choke tube clamp assembly.

7.

Remove diaphragm housing attaching screws, pin spring, metering rod, upper pump spring retainer, upper pump spring, metering rod arm assembly and pump lifter link.

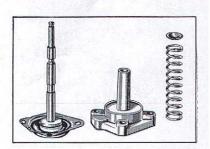


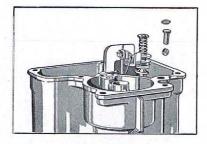
3.

Remove air horn assembly and gasket.

8

Remove diaphragm spring retainer, spring and pump diaphragm assembly.

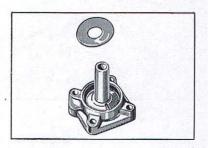


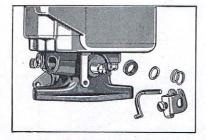


4

Remove pump disc retainer ring (using knife tip) retainer and pump check disc. 9.

Carefully remove pump intake strainer from housing, using tip of knife blade.

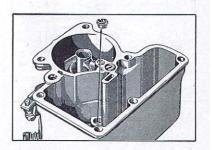


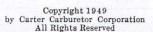


5

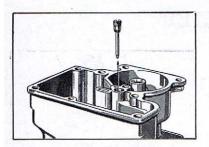
Remove throttle shaft arm assembly, pump connector link, shaft seal spring, dust seal washer and felt dust seal. 10.

Remove metering rod jet.



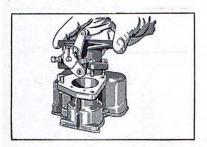






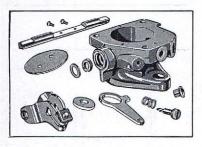
### 11.

Remove low speed jet assembly. Do not remove pressed in parts such as: nozzle, pump jet or antipercolator air bleed.



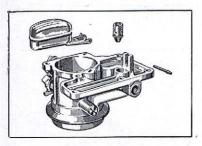
# 12.

Remove body flange attaching screws (3), body flange assembly and gasket.



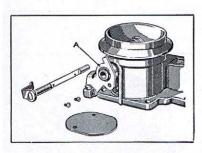
# 13.

Remove idle adjustment screw, spring, idle port rivet plug, throttle lever assembly, washer, fast idle arm, valve attaching screws (2) and throttle shaft. Then remove throttle shaft seal by prying out seal retainer. Do not remove vacuum passage orifice (pressed in).



# 14.

Remove float pin, float, and needle and seat assembly from air horn casting.



# 15.

Remove choke valve screws and choke valve. Unhook choke spring and slide shaft from housing. Do not remove balance vent tube. Note: In normal service, choke lever assembly will not require replacing. However, if it has been bent or otherwise damaged requiring replacement, proceed as follows: Pry off choke lever retainer ring (A) and remove lever assembly.

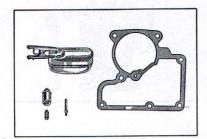
# 16.

Wash all parts in carbureter cleaning solution and blow out passages with compressed air. Do not immerse diaphragm assembly, pump check disc or seals in cleaning solution. Inspect all parts for wear or damage—replace if necessary. Always use new gaskets.

# TO REASSEMBLE

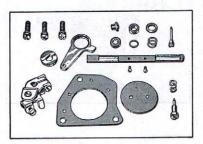
#### 17.

Group all parts controlling float circuit: float, float pin, needle and seat assembly, air horn gasket.



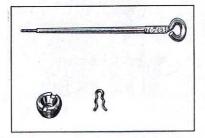
#### 18.

Group all parts controlling low speed circuit: Throttle shaft seals (2) and retainers (2), throttle shaft, throttle valve and screws, fast idle arm, throttle shaft washer, throttle lever assembly, idle port rivet plug, idle adjusting screw and spring, gasket, attaching screws (3), low speed jef, throttle shaft seal spring.



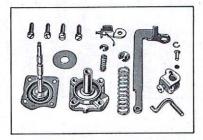
# 19.

Group all parts controlling high speed circuit: Metering rod, metering rod jet, pin spring.



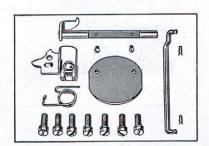
# 20

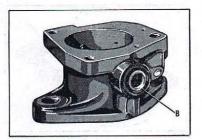
Group all parts controlling pump circuit: Pump lifter link, pump connector link, throttle shaft arm assembly, metering rod arm assembly, pump diaphragm housing, pump diaphragm assembly, pump diaphragm spring, diaphragm spring, diaphragm spring, upper pump spring retainer, pump disc check, pump disc retainer pump disc retainer pump disc retainer ring, diaphragm housing screw and washer assemblies (4).



# 21.

Group all parts controlling choke circuit: Choke valve and screws (2), choke shaft and lever assembly, fast idle connector rod and spring, choke tube clamp assembly, air horn attaching screw and washer assembly (7), pin spring (2).



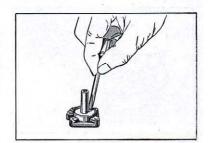


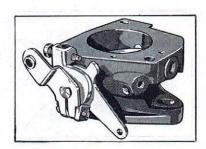
22.

Install throttle shaft seal and retainer (B) in flange casting.



Install pump intake strainer in pump diaphragm housing and carefully press into recess. Caution: If strainer is even slightly damaged, a new one must be used.



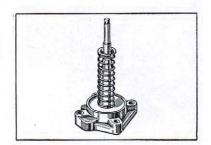


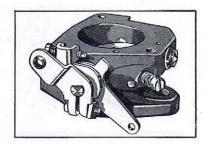
23

Install fast idle arm, washer and lever assembly on throttle shaft, slide shaft into place and install throttle valve. Carter trademark (c) should go toward the idle port when viewed from manifold side of flange. Tap valve and hold in place with finger before tightening screws.



Install pump diaphragm assembly in diaphragm housing, then install pump diaphragm spring (lower) and retainer.



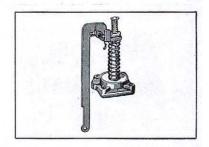


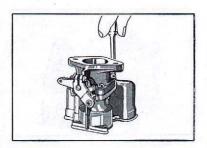
24.

Install idle port rivet plug and idle adjusting screw and spring.



Install pump lifter link, metering rod arm, upper pump spring and retainer.



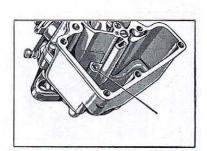


25.

Attach flange assembly to body casting. Use new gasket.



Install metering rod jet. (No gasket used with this jet.)



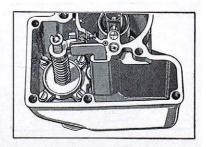


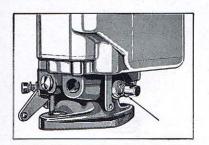
26.

Install low speed jet assembly.

# 31.

Install diaphragm housing attaching screws (4) in the diaphragm housing, making sure the edges of diaphragm are not wrinkled. Lower into place and tighten screws evenly and securely.

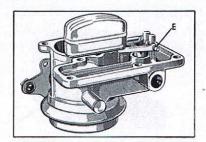




Install throttle shaft seal, dust seal washer, and shaft seal spring.

### 37.

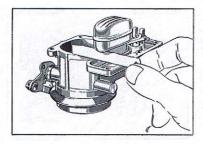
Install needle seat and gasket assembly, needle, float and float pin. Stop shoulder (E) on float pin must be on side away from bore of carbureter.

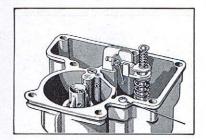


Install pump connector link in the throttle shaft arm assembly. Install throttle shaft arm assembly on throttle shaft, guiding connector link into pump litter link hole. Caution: Linkage must not bind in any throttle position. If binding occurs, loosen clamp screw in throttle arm, adjust slightly and retighten screw.

#### 38.

Set float level to catalog page specifications. Measure from machined surface of casting (gasket removed). Adjust by bending lip which contacts needle.

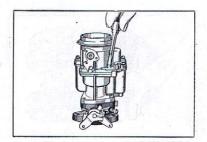


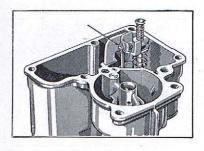


Install pump check disc, disc retainer, and lock ring.

# 39.

Install air horn gasket and air horn assembly. Install attaching screws and lock washers (7) and choke tube clamp assembly. (Tighten center screws first.)



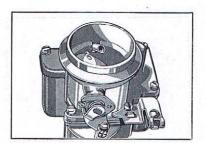


# 35.

Install metering rod and pin spring. Connect metering rod spring.

# 40.

Slide choke shaft and lever assembly into place and connect choke lever spring. Install choke valve. Center valves by tapping lightly and hold in place with fingers when tightening screws.



36.

Metering Rod Adjustment:
Be sure flat of metering
rod arm is parallel to flat
of pump lifter link before
proceeding with metering
rod adjustment. With
throttle valve seated, press
down on upper end of
diaphragm shaft, Metering rod should be seated
in casting and metering
rod arm flat against pump
lifter link (C). If metering rod does not seat in
body cesting (check by
pressing downward on
metering rod) or seats
before the metering rod
arm makes flat contact
with pump lifter link,
raise or lower by bending
lip (D) on metering rod
arm.

# 41.

Install fast idle connector rod with offset portion of the rod to top and pin spring to the outside (F). Install fast idle connecting rod spring.

