SERVICE PROCEDURE
WCD DUAL CLIMATIC CONTROL CARBURETER
WITH VACUUM OPERATED METERING ROD AND CARTER STARTER SWITCH

Use Carter tool kit.

1. Remove air horn and climatic control assembly with all parts attached.

2. Remove bowl cover with all parts attached.

3. Remove body flange assembly and body flange gasket.

4. Remove all parts from air horn and choke.

5. Remove all parts from bowl cover.

6. Remove all parts from carburetor body EXCEPT NOZZLES. Do not, under any circumstances, attempt to remove nozzles from body casting.

7. Remove all parts from body flange assembly. Check throttle shaft for wear, loose lever and throttle rod holes in lever for wear.

   (NOTE: Wash all parts in clean gasoline except coil and housing assembly, cork pieces and switch parts. Blow out all passages with compressed air and scrape carbon from bores of flange and replace all worn or damaged parts.)

TO REASSEMBLE

8. Group all parts controlling gasoline level.

   No. 1. Float Circuit.

9. Group all parts controlling idle operation.

   No. 2. Low speed circuit.

10. Group all parts controlling high speed operation.

    No. 3. High speed circuit.

11. Group all parts controlling pump operation.

    No. 4. Pump circuit.

12. Group all parts controlling choke operation.

    No. 5. Choke circuit.

Copyright 1946
by Carter Carburetor Corporation
All Rights Reserved
10. Group all parts controlling switch operation.


15. Install throttle valve. Small "o" in circle (or part numbered) 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.

16. Install idle port rivet plugs, then idle adjustment screws and springs. Set idle adjusting screws to specifications.

17. Install low speed jet assemblies. No gaskets are used.

18. Starter Switch. Install switch strainer and retainer.

19. Install switch ball.

20. Install switch plunger, guide block and "W" shaped switch contact spring.

21. Install switch return spring, terminal cap assembly, hold down clip and attaching screw.

22. Pump Circuit. Install air horn gasket, then pump jet and housing assembly. Use new gasket.

23. Install pump check needle, blunt end first.

24. Install discharge check plug first, then pump discharge passage plug.

25. Install pump strainer.

26. Install intake ball check.
27. Install ball check retainer.
Use sleeve from tool T109-122U to put cap firmly in position.

28. Install pump spring, plunger assembly and plunger guide.

29. Float Circuit. Install bowl strainer gauze and nut and gasket assembly.

30. Install needle and seat assembly.
Use new gasket.

31. Install float and lever assembly.
Use gauge T109-160 or T109-162. With bowl cover inverted, place gauge directly under float with notched portions filled over machined edge of casting. Float should just touch vertical sides of gauge and just clear horizontal portion. Carefully remove float, install bowl cover gasket, then replace float.

32. High speed circuit. Assemble body flange assembly to body casting.
Use new gasket.

33. Install metering rod jets.
Use new gaskets. Jets must be installed snugly, but not so tightly as to cause distortion.

Install vacuum piston link and metering rod spring.
Start pump countershaft assembly.

35. Install pump arm and collar assembly, metering rod arm and screw assembly and pump arm spring.

36. Install pump arm link on pump arm and collar assembly and plunger shaft.

37. Install vacuum piston and pin assembly, and vacuum piston spring on piston link.

38. Install bowl cover as assembled on body.
Use new gasket.

39. Install throttle shaft lever and throttle connector rod.
Do not forget throttle shaft washer.

40. Make pump adjustment. Use tool T109-117S.
Back out throttle adjustment screw, invert gauge on edge of dust cover boss as shown and measure plunger travel, by gauging from upper surface of lower end of connector link. Difference between wide open and closed throttle position readings will be plunger travel in 3/8". Bend throttle connector rod at lower angle to adjust.
41. Adjust metering rods.
   Install metering rod gauge in place of rod. Press down on piston link, adjust tip on metering rod arm to just make contact when throttle valves are completely closed. Remove gauge and install metering rods.

42. Install nozzles passage rivet plugs.

43. Choke circuit. Install air horn casting.

44. Install choke piston, lever, link and shaft assembly, and piston.

45. Install choker valve.
   Use new screws. Seat choke valve by tapping lightly, hold in place with finger before tightening screws. Valve or shaft must not bind in any position.

46. Install coil housing baffle plate and coil housing gasket.

47. Install thermostatic coil and housing assembly.
   Install housing with indicator marks at bottom. Revolve housing clockwise and set index mark as stated in specifications sheet, then tighten attaching screws.

48. Install choker lever and screw assembly and fast idle connector rod.

49. Install fast idle cam assembly.
   Make unloader and fast idle adjustments (see below) and starter switch adjustment using tool 10091558.

UNLOADER ADJUSTMENT: Two adjustments are necessary to get correct unloader setting: Loosen choker lever and screw assembly on shaft. Insert .010" flat feeler gauge between lip on fast idle cam and boss on flange casting. Hold choke valve closed and tighten choke shaft arm. Then adjust unloader lip on throttle shaft lever to give specified clearance between upper edge of choke valve and inside wall of air horn with throttle wide open.

FAST IDLE ADJUSTMENT: With choke valve tightly closed adjust fast idle set screw to give specified clearance between throttle valve and bore of carbureter (side opposite part).

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

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