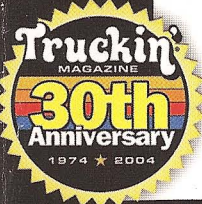


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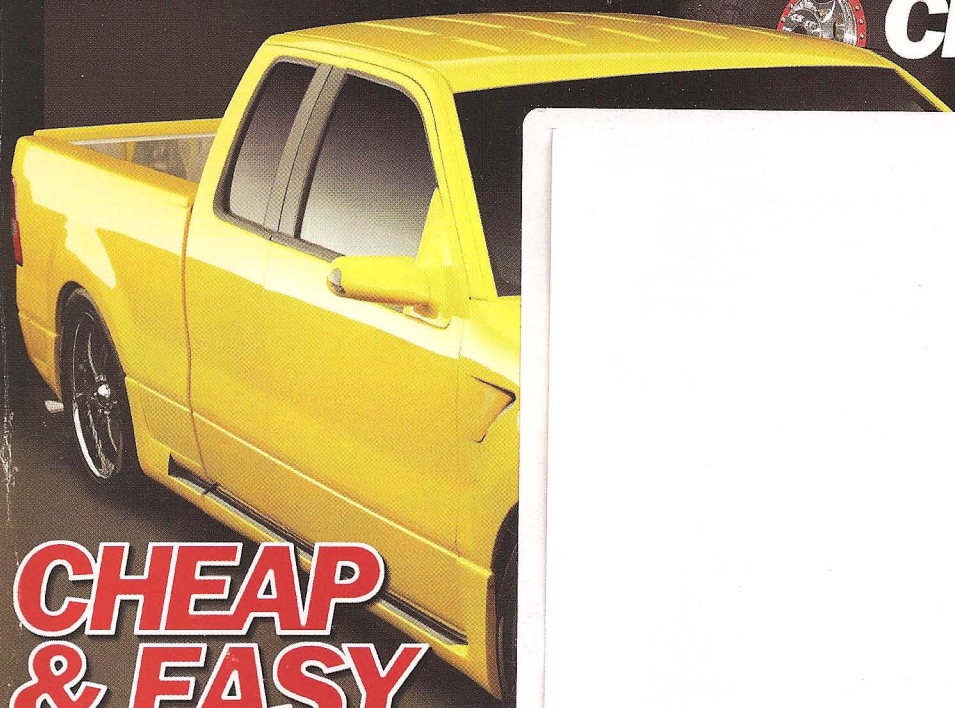
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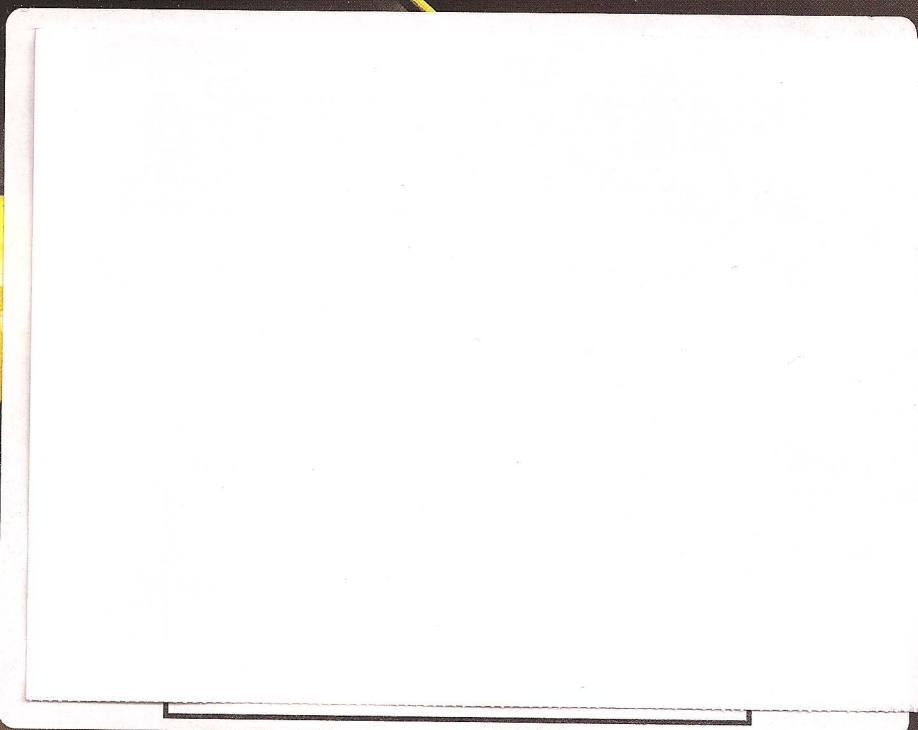
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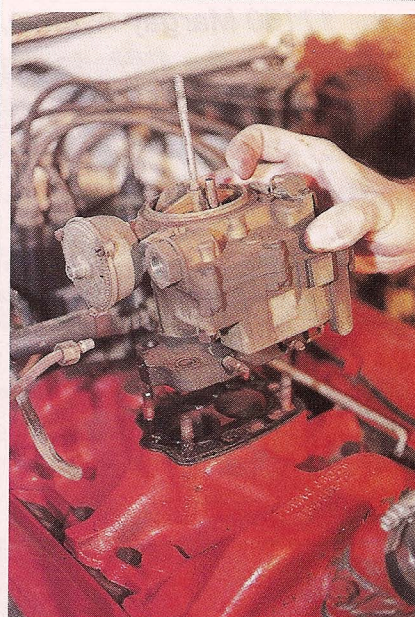
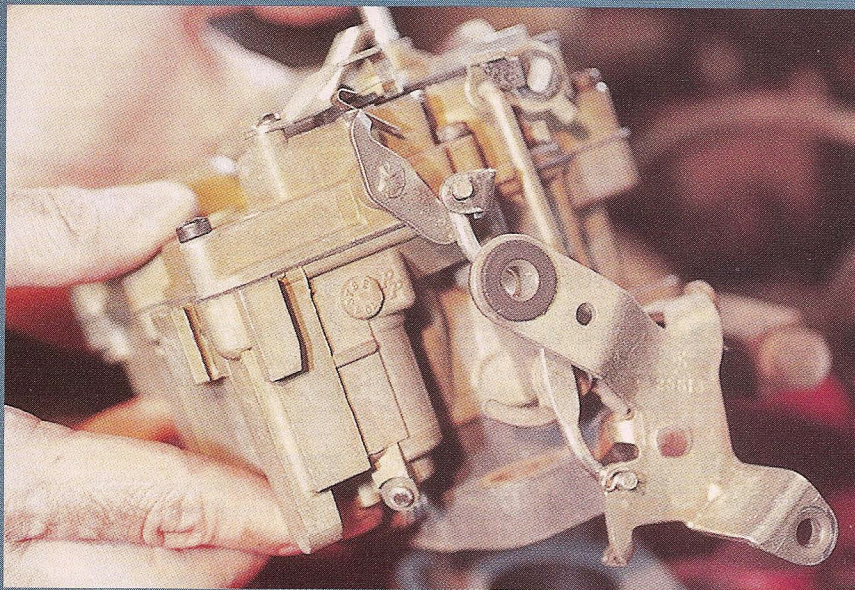
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Old-School Inhaler



1. After removing the fuel line and carburetor base-mounting nuts, the Rochester 2GC was easily removed from the intake manifold. Remember, the carburetor float bowl may have some fuel in it, so carefully drain it.

Rochester 2GC Rebuild

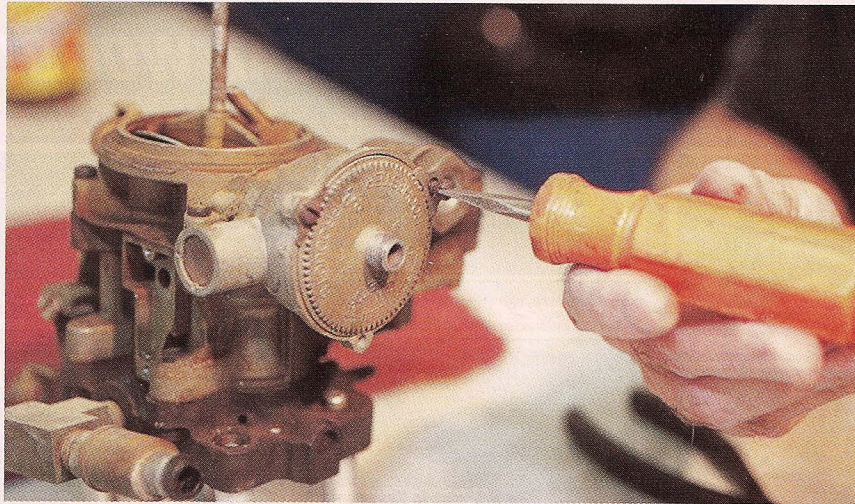
► The earliest Rochester carburetors date back to 1950. These simplified fuel delivery metering systems were found standard on most General Motors vehicles through the '60s. The Rochester 2G carburetor was used on a wide variety of GM V-8 engines from 1955 until 1978, when the government emissions and fuel economy standards forced it into retirement. These G-model carburetors are simple to rebuild and service; most of the calibrated metering parts are in the venturi cluster assembly. Rochester G models have two throttle bores, two venturis, and two identical metering systems, one per bore. The particular Rochester carb we will be rebuilding is a 2GC, meaning it is equipped with an automatic choke (C). Let's follow along as Sean Murphy from Sean Murphy Induction (SMI) performs his magic.

TR



Disassembly:

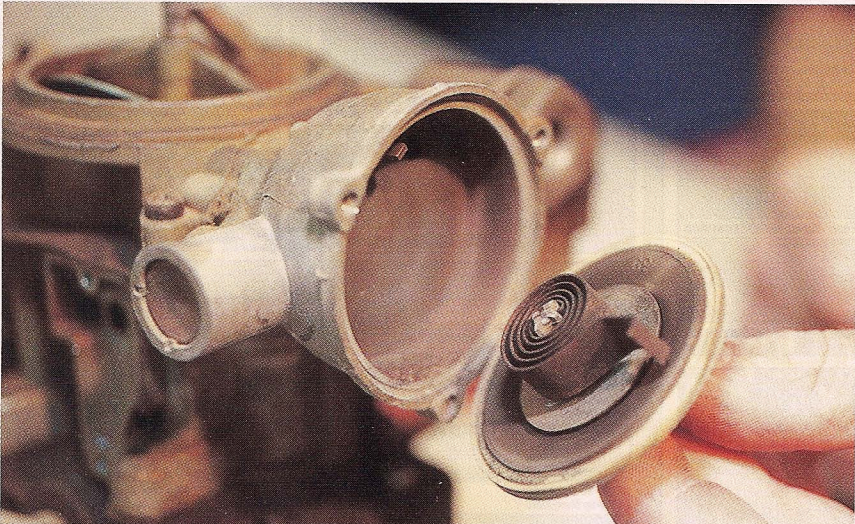
2. Sean Murphy from Sean Murphy Induction (SMI) in Huntington Beach, California, is known for his racing carburetion expertise, whether straight line, oval, or road course. Notice the carb support stand — they are convenient when disassembling and assembling carbs.



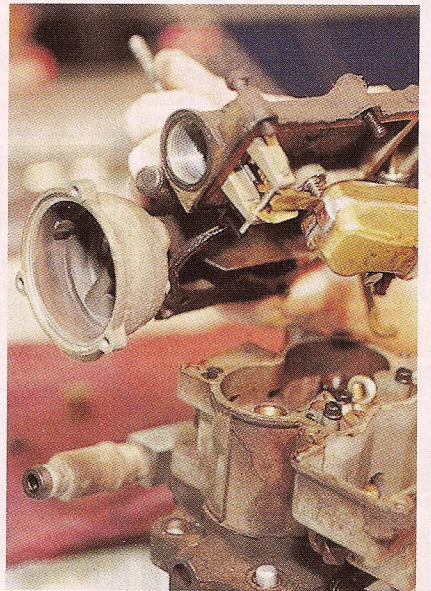
3. The idle compensator valve cover was removed, followed by the removal of the compensator valve itself. The automatic choke is activated by the heat of the exhaust gases from the exhaust manifolds. The heat travels up the exhaust manifold heat tube, which is threaded into the exhaust manifold and carburetor choke housing.



7. To gain access to the fuel filter and spring, the fuel inlet fitting was loosened and removed.



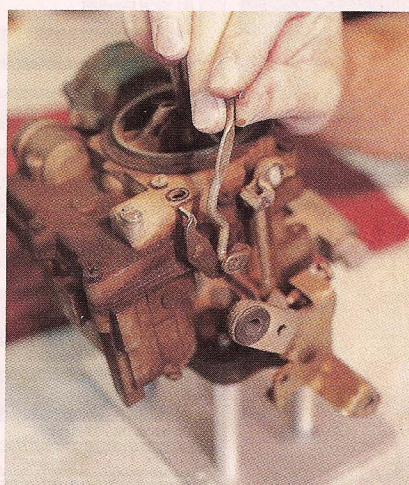
4. Following the removal of the stat cover plane retainer, the stat cover and spring assembly were removed.



8. With the carburetor air horn half screws and linkages removed, the air horn and main body bowl assembly were separated.



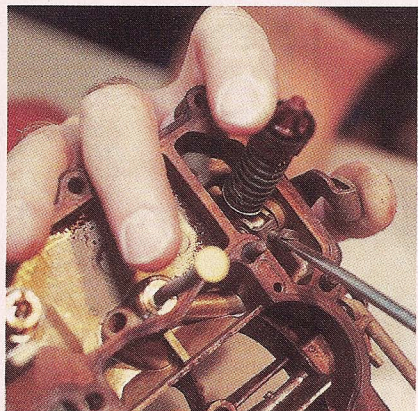
5. With the stat cover and spring assembly removed, the choke baffle plate was removed.



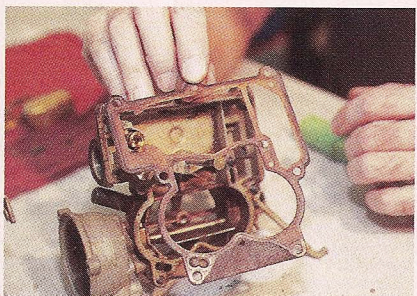
6. The pump rod was carefully disconnected and removed.



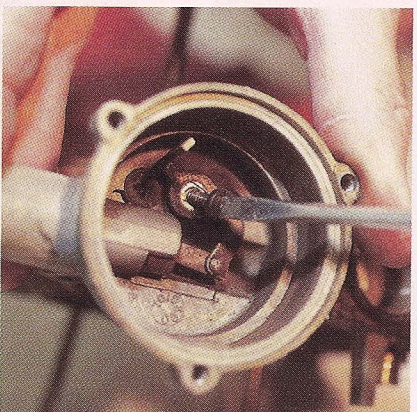
9. Rotating the top half of the carburetor allowed access to the float hinge pin, which was then removed.



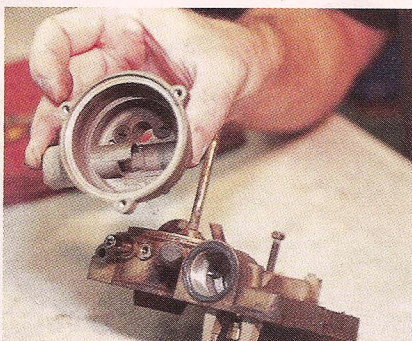
10. A flathead screwdriver was used to loosen then remove the accelerator pump plunger shaft and assembly.



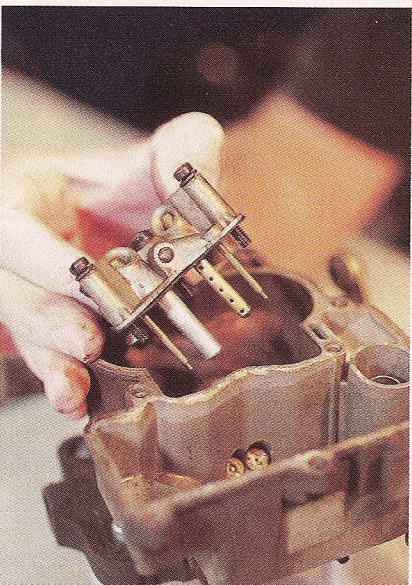
11. At this time, the 2GC carburetor body gasket was removed.



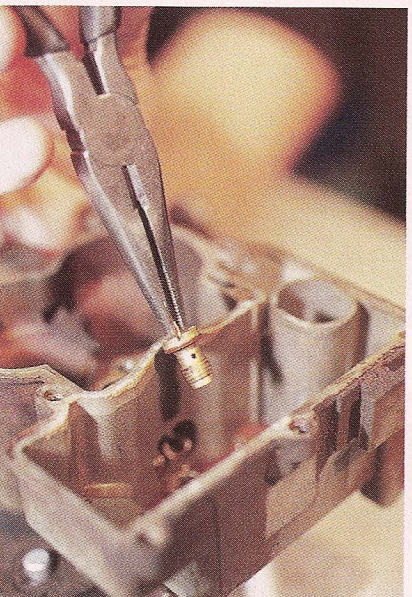
12. The screw that retained the heat choke plunger was loosened and removed. This allowed the heat rod to be removed.



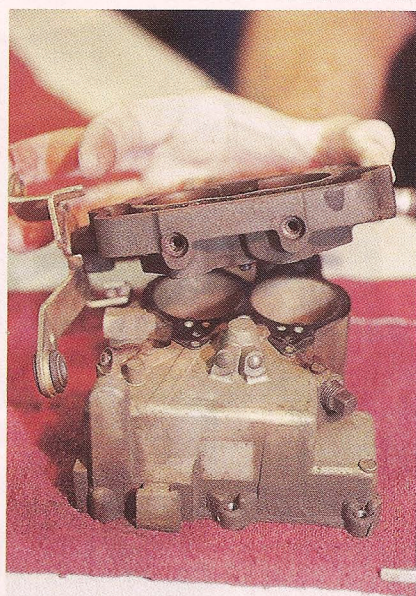
13. The choke housing basket was removed from the carburetor air horn assembly.



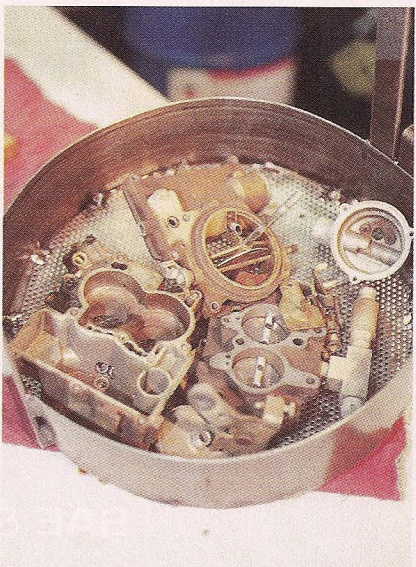
14. After unscrewing the venturi cluster screws, the cluster was removed.



15. The power valve was unscrewed and removed, along with the two main metering jets.



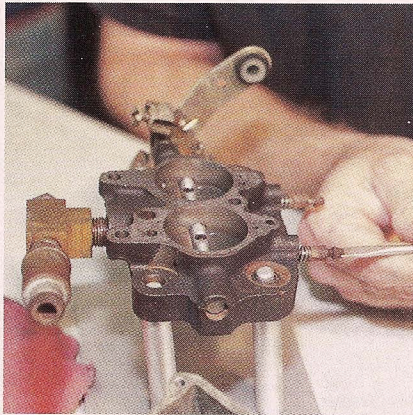
16. A small flathead screwdriver was used to separate the throttle body and shaft assembly from the carburetor bowl assembly.



17. All of the reusable parts and components were carefully loaded into the parts basket. The basket was lowered into the sonic carburetor cleaning machine and set to run a full cleaning cycle.



18. After the Rochester 2GC carburetor components and parts were thoroughly cleaned, they were laid out for inventory and inspection.

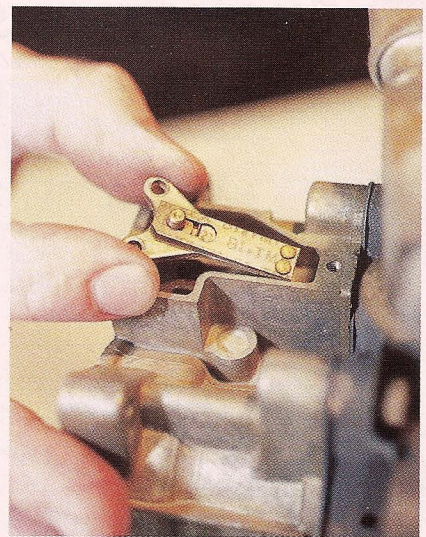


Re-assembly:

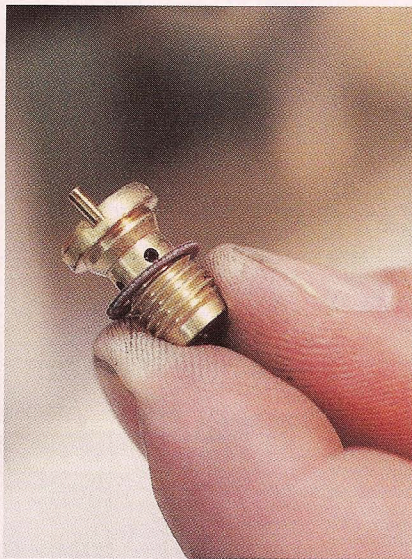
19. Before assembling the cleaned carburetor, it is mandatory to purchase a carburetor overhaul kit. The kit will include assembly instructions, specifications, and a new needle-and-seat assembly, with all the gaskets and seals needed. The two idle screws were installed into the throttle body.



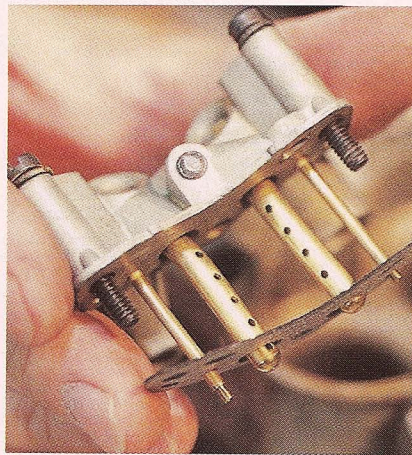
22. The two main well insert tubes were slid into the main body.



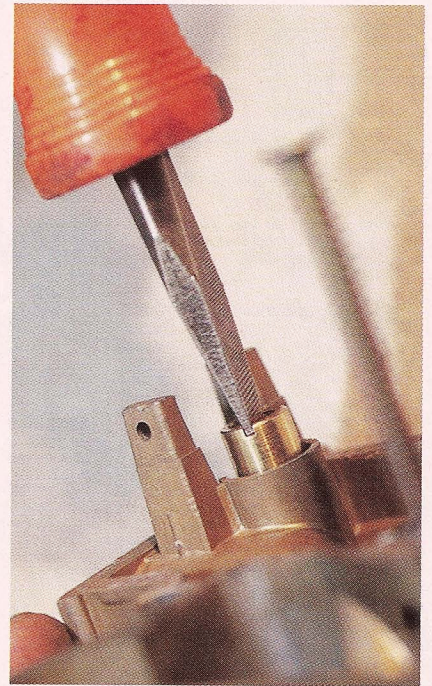
25. The idle compensator valve was re-assembled and secured by its cover.



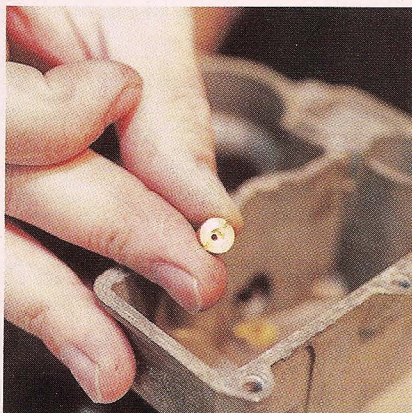
20. A new power valve and rubber O-ring was installed. Sometimes they can be a menace.



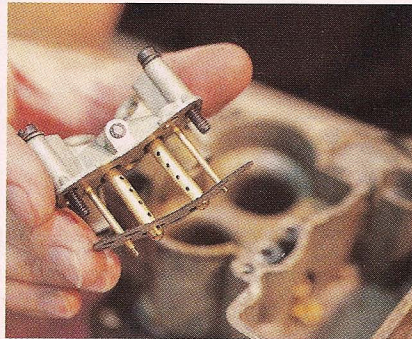
23. The newly assembled venturi cluster, complete with main metering rods and gasket.



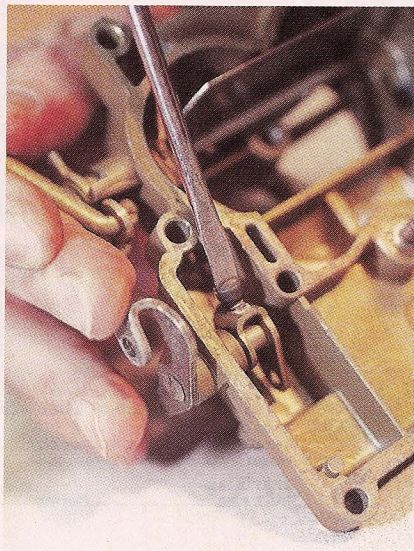
26. The new power valve assembly was inspected and threaded into the power valve assembly housing.



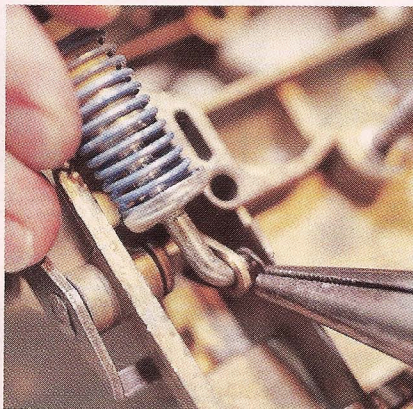
21. Two new main metering jets were then installed.



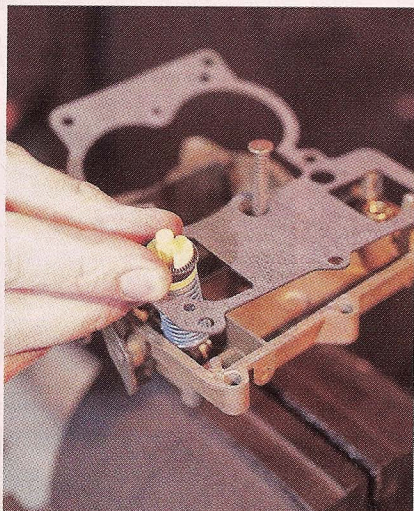
24. The venturi cluster, which consist of discharge nozzles and main metering rods, was carefully aligned and secured with screws.



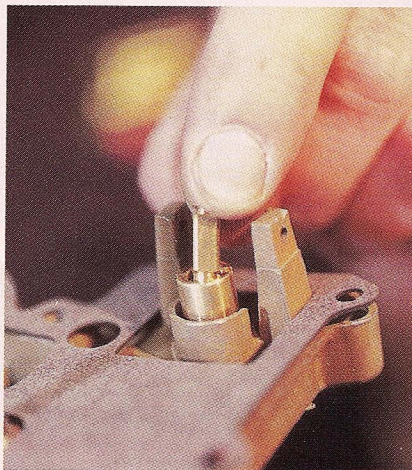
27. The accelerator pump plunger shaft linkage and rod were secured.



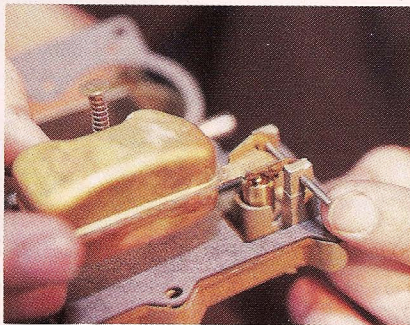
28. The accelerator pump plunger shaft spring assembly was connected to the linkage rod and secured with a C-clip.



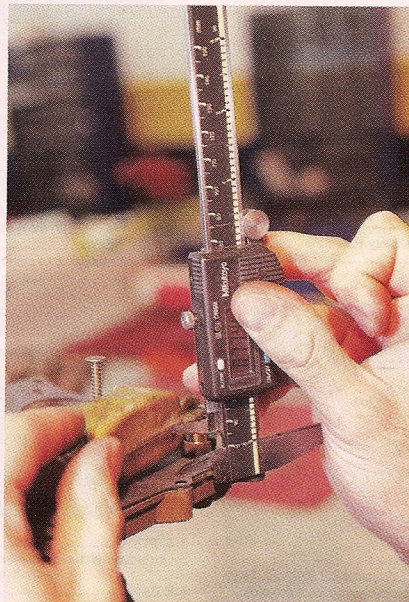
29. The accelerator pump plunger shaft spring assembly cup was then installed.



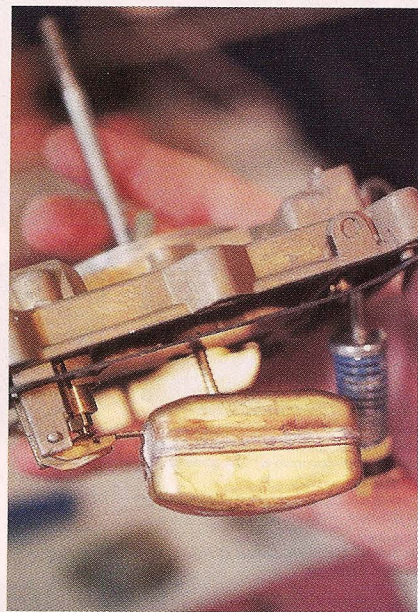
30. Next, the fuel inlet set and rotary inlet valve were inserted into the main body.



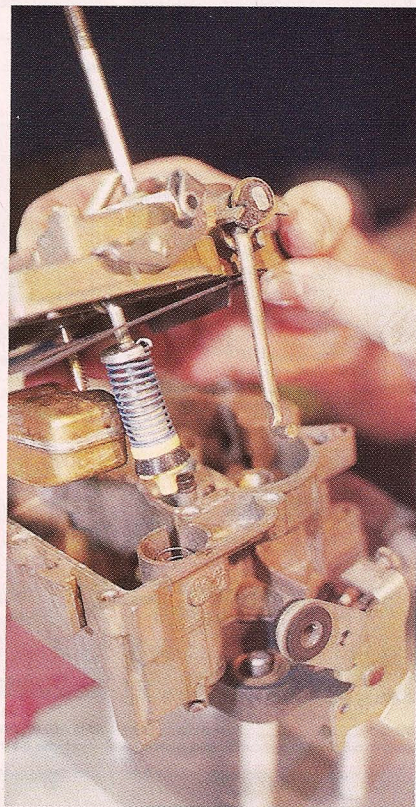
31. The float was carefully aligned with the float supports cast into the main body of the carburetor, then the float hinge pin was inserted.



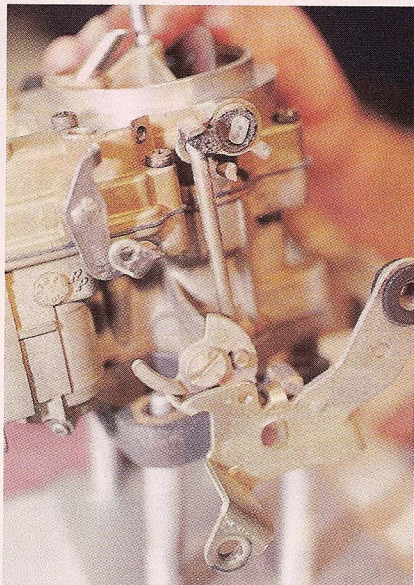
32. The air horn assembly was then turned over with the gasket in place. We measured the distance between the gasket and the middle seam of the float and compared the measurement to the overhaul kit specifications. Then, it was adjusted to the correct specs.



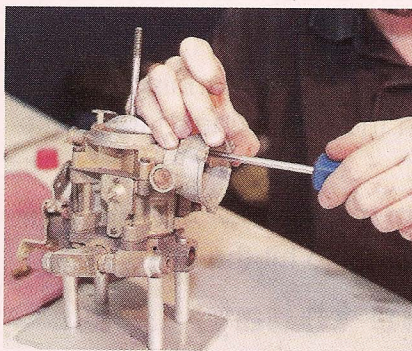
33. To correctly set the float drop, invert the air horn assembly and gasket. A metal float like this one measures the distance from the air horn gasket to the bottom of the float. We then compared the float drop to the overhaul kit specifications and adjusted it by bending the adjustment tang, until it was spot-on.



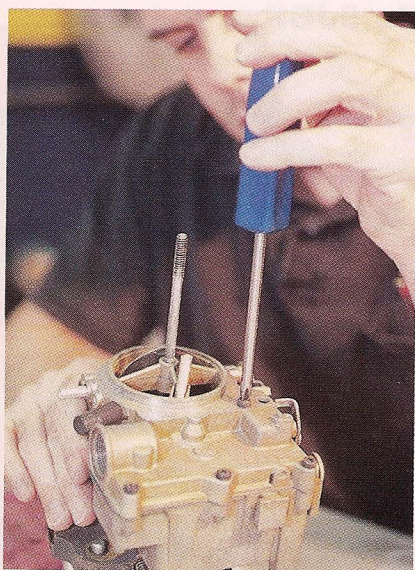
34. The air horn assembly was carefully aligned. Give special attention to the accelerator pump plunger assembly, float, and gasket while lowering and aligning.



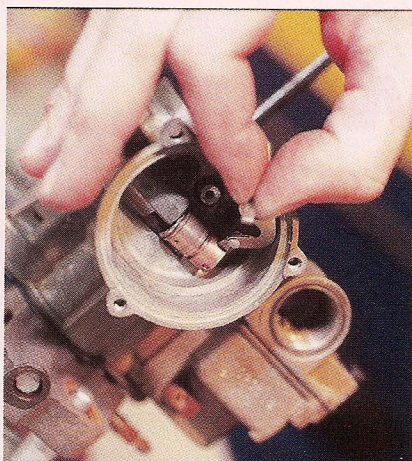
36. The choke rod was hooked up to the linkage assembly.



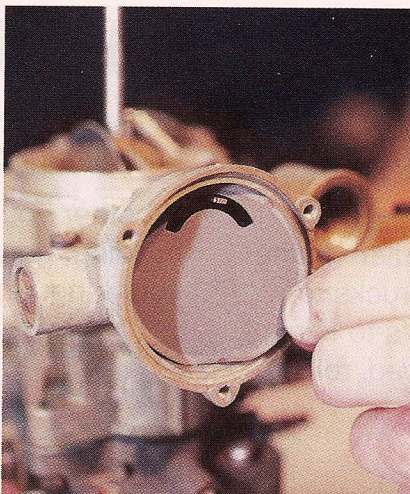
37. The choke housing basket was secured onto the air horn assembly.



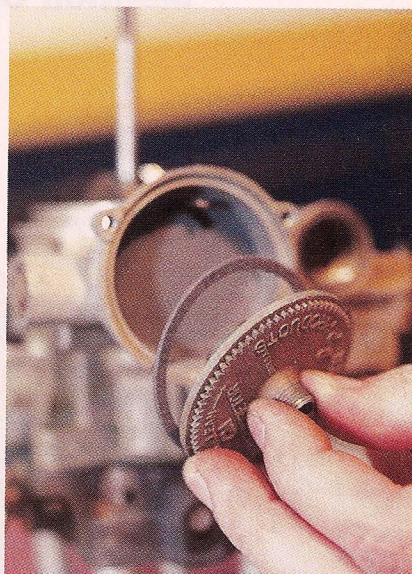
35. Screws were inserted into the air horn assembly and main body of the Rochester 2GC carburetor and tightened.



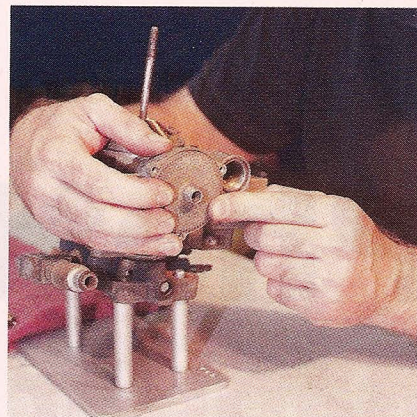
38. The choke rod lever was inserted into the choke housing basket and secured.



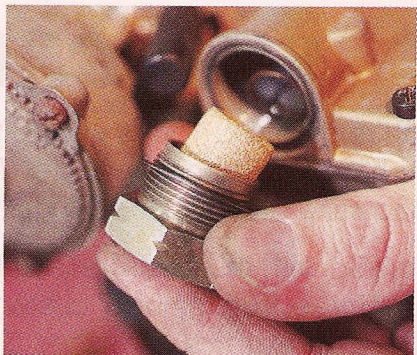
39. The choke baffle plate was aligned with the choke rod lever.



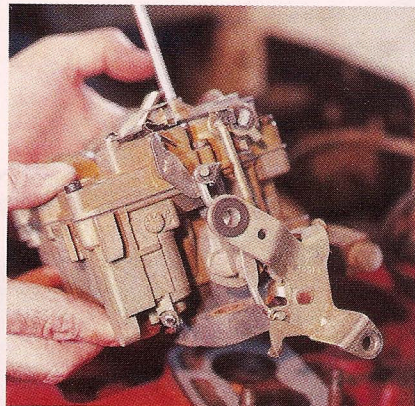
40. The stat cover, gasket, and spring assembly were attached to the choke rod lever.



41. To set the automatic choke, the stat cover can be rotated either counter-clockwise to enrich or clockwise to lean-out the air/fuel mixture.



42. After dropping the fuel filter spring into the fuel filter inlet housing, a new fuel filter was installed then secured with the fuel line inlet fitting.



43. A new intake/carburetor gasket was slid onto the manifold, then the freshly rebuilt Rochester 2GC carburetor was installed.

▶ Source

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