CARBURETOR CLINIC

CARTER BARREL WEBER

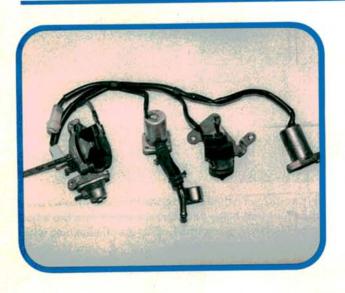
This one-barrel carb was used on certain 1982-84 Subarus. This carburetor may strike you as being an oddball unit. But I think you'll find it to be an exercise in simplicity compared to many other import carburetors!

In the accompanying photos, you'll see access holes for the accelerator pump and metering rod adjustments. Remember to carefully drive the plugs out of these access holes before you reinstall the air horn.

Then put a drop of locking sealer on them and gently drive them back into place when you've completed these adjustments.

If you're having driveability problems with one of these carburetors, don't ignore those adjustments! Check the throttle stop first, accelerator pump second, and the metering rod last.

—By Dan Marinucci



PLEASE, DON'T DUNK US

Don't dip the choke unit, the bowl vent solenoid, the idle stop solenoid, or the duty cycle solenoid in the carb cleaner soup. I found it to be easiest to leave the wiring harness intact and remove these items all at the same time.



2

ACTIVE DUTY (SOLENOID)

The duty cycle solenoid resistance should be within 10-100 ohms. To read duty cycle, set your dwell meter to the 90-degree scale and connect it to the yellow/red wire in the six-pin pink test connector next to the ignition coil.



3

DUTY SOLENOID LOCATING DOWEL

Carter-Weber designers graciously cast this dowel into the duty solenoid housing so it'll only go on one way. Solenoid screws take a T-25 Torx® bit. Preferred duty cycle dwell on this carb is 31-32 degrees.



BOWLED OVER

To test the bowl vent solenoid, ground the carburetor and apply battery voltage to this terminal inside the three-terminal connector. The solenoid should click when you apply power to this terminal.



5

TORX® 'ED OFF

The bowl vent screws take a T-20 Torx® bit. You may find that you can barely get a ¼-drive type Torx® bit into place here. Hopefully, you've got one of those Torx® kits in which you slide the bit into a driver tool that's got a super-slim shank.



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THE OL' HIDDEN BOLT TRICK

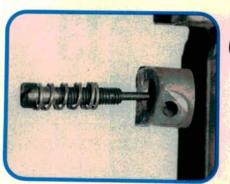
One Carter-Weber mounting bolt threads into this throttle base hole from under the intake manifold. Some jokers have cracked these because they overlooked this bolt and then tried to pry the carb off the engine! Base screws take a T-27 Torx® bit.



7

ROLL PIN REMOVAL

If you want to remove this anti-tampering roll pin without removing the carb from the engine, use a seal pick to lift up the roll pin. Then pry out and snap off this barb. Using needle-nose pliers, turn the pin and break off the other little barbs.



8

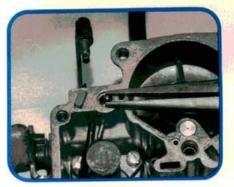
NO O-RING NEEDED

If you're like me, you're accustomed to finding an oring on the inner end of the idle mixture screw. Don't look any further here, because the Carter-Weber doesn't have one! Be sure the tip of that mixture screw isn't bent.



SLOT 'EM YOURSELF

You'll have to slot the heads of these tamper-resistant choke cover screws before you can remove them. Try this. Sharpen a chisel. Support the edge of the choke housing with a block of wood, and then cut a slot in the screw head with the chisel.



WEIGHTY MATTER

When you're dumping out all those carb parts, it's easy to lose this weight and check ball. The check ball goes into this accelerator pump channel first and the little rectangular weight goes in second.



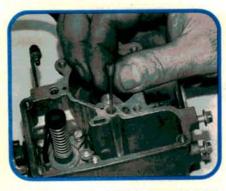
SPRING-LOADED INLET VALVE

Pay attention when you remove the fuel inlet valve assembly. The Carter-Weber's equipped with the relatively uncommon spring-loaded inlet valve setup. Don't lose that little inlet valve spring!



WATCH THE NOTCH

This may not be obvious at first glance, but the accelerator pump assembly's notched to clear the casting bulge around the main jet. Install the pump with the notch toward the main jet.



FLUSH THE IDLE CIRCUIT

Yes, it's your favorite part (and mine), the idle jet! Spray carb cleaner through this jet. Then hold it up to a light and look through it to be sure it's perfectly clean. Spray carb cleaner down that passage to back flush the idle circuit.



COMPRESS, THEN TIGHTEN

When you install the accelerator pump diaphragm, start all four screws. Then compress the pump with your thumb. Keep the pump compressed until you've tightened all four screws.



15

HEY HOSE HEAD!

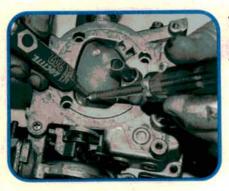
Handle this plastic accelerator pump discharge hose with care. If the hose doesn't want to go back on this fitting easily, try heating it in some warm water for a moment.



16

LITTLE SPRING HOOKS ON HERE

Watch out for this one. When you're reassembling the choke and the air horn, remember to hook the looped end of this spring onto this lever on the choke shaft. Did you remember to check continuity on the choke heater coil?



17

LOCK 'EM UP

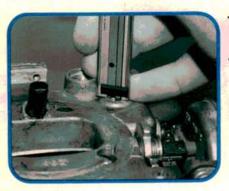
When you removed them, you probably noticed that these choke blade screws aren't really staked in place. Before you reinstall these screws, play it safe and coat them with your favorite thread locking sealer.



18

IDLE STOP ADJUSTMENT

Double check the idle stop adjustment before you adjust the metering rod and the accelerator pump. Hold the choke open and turn this screw in until it just touches the throttle lever. Then turn it in another full turn.



19

PUMPED UP

Use the end of your calipers or a similar measuring device to check total accelerator pump travel or pump stroke. To adjust pump stroke, carefully bend the accelerator pump linkage.



20

HAVE ROD, WILL TRAVEL

Always check and adjust metering rod travel last. Hold the choke open. Keep the throttle fully closed. Push the metering rod hanger down and use your caliper to measure its travel. To adjust it, turn the T-10 Torx® screw in the top of the rod hanger.