

AISAN 2 • BARREL

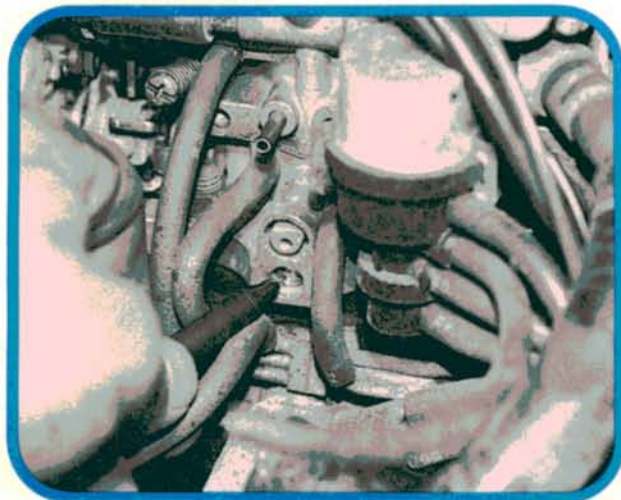
There are a variety of different Aisan carburetors that you will find on Toyota products. The particular Aisan unit shown here appears on the popular 22R engine. The 22R is found in vehicles such as the Celica and Toyota pickup.

Although this is a fairly straightforward carb overhaul, you should remember the follow things when you service this Aisan:

- Check the power to the electric choke, the bowl vent solenoid, and the idle fuel solenoid before you

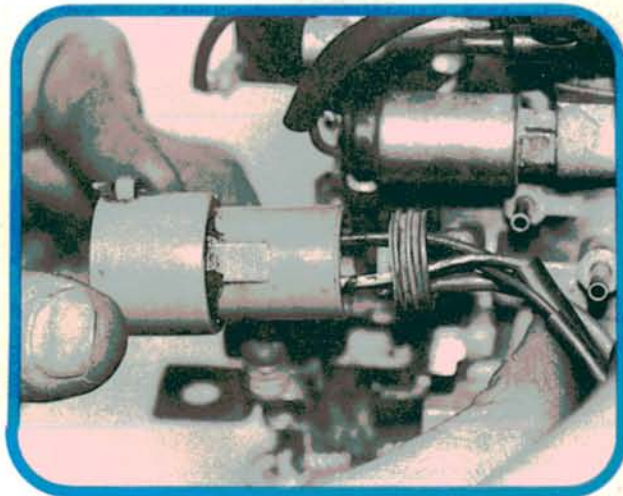
begin surgery on this carb. All of the wires leading to these parts pass through one green harness connector (see photo 2).

- Drill the idle mixture concealment plug slowly or you'll drill into the idle mixture screw. The plug is only about 1/8-inch thick, so a sharp drill bit will penetrate it very quickly.
- When you reinstall the primary main jet — which threads into the *wall* of the fuel bowl — remember that this jet does take a gasket.



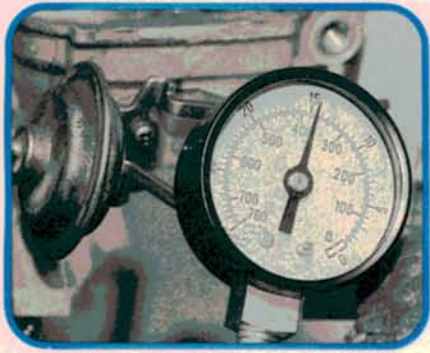
1 DRILL GENTLY, FRIENDS

Drill the idle mixture anti-tampering plug very gently or you'll drill right into the brass mixture screw shown here. When the bit begins throwing brass chips, you know you're too deep! Use a self-tapping screw and a slide hammer to pop out the plug.



2 LET'S TWIST AGAIN

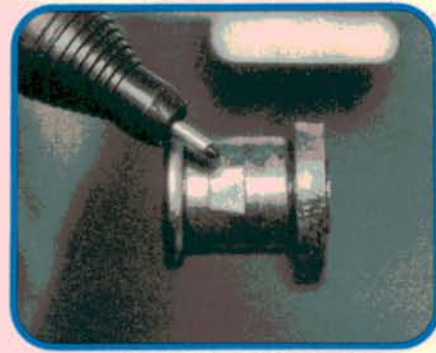
Clean this connector and carefully pry this grommet out of it. Then use a terminal removal tool or a tiny screwdriver to extract the idle fuel solenoid terminal. Now you won't twist up the solenoid wire as you're unthreading the solenoid from the carb.



3

TEST THESE DIAPHRAGMS

Leak-test all these vacuum diaphragms with your vacuum pump before you tear down the carb. Parts such as this choke opener aren't included in the carb kit.



4

ROLL ON, ROLLER

This groove that's worn into the accelerator pump arm roller confirms that the roller's rusted fast to the arm. Soak this roller in penetrating oil, free it up with pliers, and continue soaking it with lubricant until it spins freely again.



5

WORN PUMP CAM

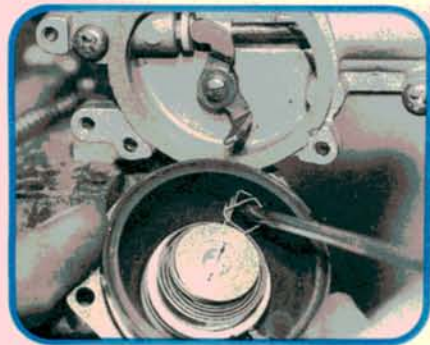
Whenever the pump arm roller is worn, you can bet you'll find a shiny wear spot on this throttle shaft cam that operates the pump arm. If this cam and the arm roller are badly worn, it's time for new parts or a new carburetor.



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CHOKE ANGLE GAUGE

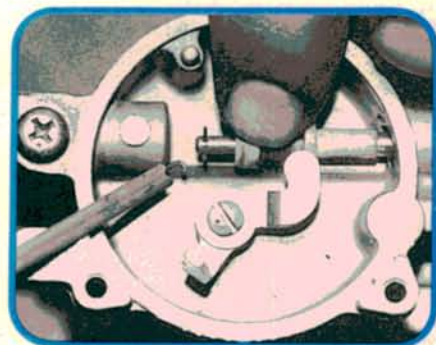
If you don't already own one, you'll have to get a choke angle gauge in order to set up all the Aisan choke adjustments properly. Outfits such as Borroughs, Kent-Moore, OTC and Thexton offer them.



7

HOOK UP THIS SPRING

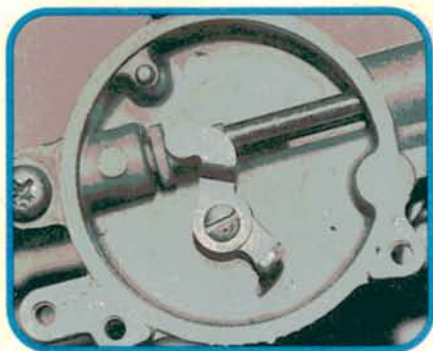
Inside the choke housing, you'll find a second spring with a loop on the end of it. Hook this loop onto the choke lever shown here. It helps keep the regular choke spring in contact with the lever.



8

E IS FOR E-CLIP

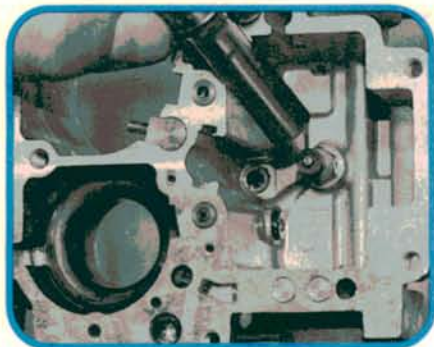
When you're removing the choke breaker diaphragm, slide back this spring and remove the tiny E-clip from the end of its stem. A carb clip tool such as this Lisle unit comes in real handy right about now!

**9****CHOKE LEVER POSITION**

When reassembly time rolls around, our elephantine memories sometimes fail us. In case you do forget, here's the correct position for your friend Mr. Choke Lever.

**10****MAIN JET ACCESS HOLE**

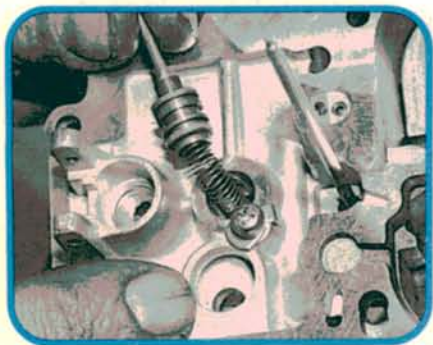
This is the primary main jet access hole. Be sure you use a screwdriver 1) that fits the jet snugly so you don't butcher the jet, and 2) that is slim enough to slip through the access hole.

**11****A JOB FOR YOUR 9 MM!**

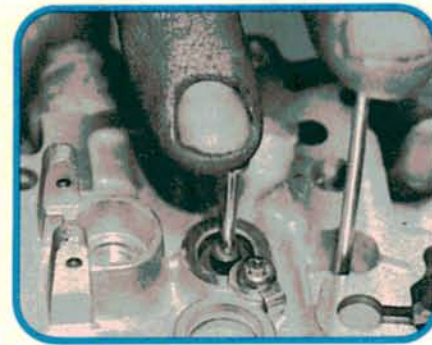
Grab your deep 9-mm socket and thoroughly wash all the crud out of it. It just so happens that a deep 9 mm makes a perfect R and R tool for the Aisan power valve.

**12****PUFFIN' ON A POWER VALVE**

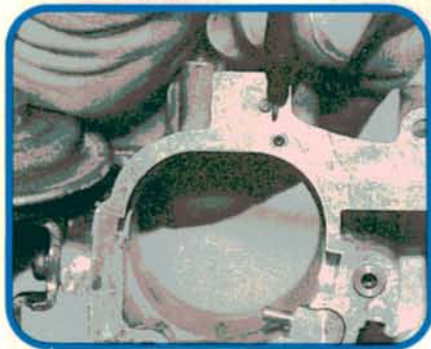
To do a quick check on an Aisan power valve, twist some vacuum hose onto it. Put the other end of the vacuum hose in your mouth. You should be able to blow air through the valve only when you press in the power valve stem as shown here.

**13****POLISH WHEN NECESSARY**

Be sure you flush any gum, varnish, or dirt out of the power piston bore in the air horn. Where necessary, clean up the piston with crocus cloth. The hole the finger points to is the bowl vent passage.

**14****SPRING BACK FOR MORE**

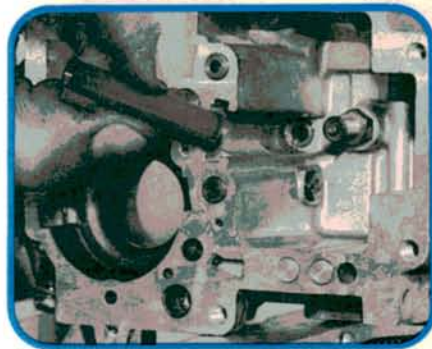
When you've done a thorough job on the power valve piston, the piston will snap right back after you push it down in its bore. If it doesn't snap right back, then you forgot to install the power piston spring or the piston's still sticking.



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OPEN ALL CHANNELS

As is the case with many carbs, the Aisan has its share of tiny, easy-to-miss channels that you must flush out thoroughly. This happens to be the vacuum passage leading to the power piston bore.



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METERING ROD GUIDE

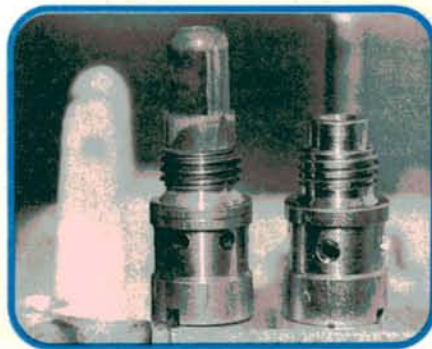
The ears on this plastic metering rod guide simply snap into slots in the bowl casting. To remove it, slip a thin screwdriver under one of its ears and gently pop it upward. Gently means don't crack it or the bowl casting!



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EXTRA ACCELERATOR PUMP

The Aisan has an auxiliary accelerator pump. Remember that this spring goes between the pump cover and the diaphragm.



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SCREEN PASS

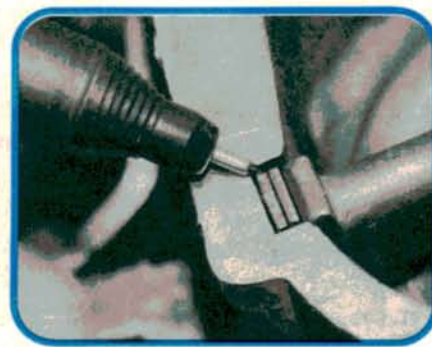
You have to unsnap this little filter screen from the old fuel inlet seat and put it on the new inlet seat. If the screen is tattered or clogged beyond hope, by all means replace it.



19

VENTURI O-RINGS

It's easy to overlook these little o-rings that seal the venturis to the bowl casting. Lubricate and install the new o-rings the kit provides. You'll discover that these venturis are made so that they only go back in one way — the right way.



20

POINTED END DOWN

These little retainer clips for the venturis go in pointed-side down. Gently tap these back into place with a straight-blade screwdriver and your palm or a small plastic mallet.

—By Dan Marinucci