

This is a carburetor cleaning guide for the Mikuni BS34SS which is used on the Suzuki GS450 E, L, and S models. Confirm that you have the same carburetors by looking at the pictures provided on the next page.

I specifically did this for my 1980 Suzuki GS450L which uses the Mikuni BS34SS.

Please familiarize yourself and read through this guide a few times BEFORE attempting.

I am NOT responsible for any damage done. Proceed at your own risk.

With that said, let's get on with it.

Start out with a clean work area. Put a towel under the work area to avoid damaging and/or losing parts. Use an egg carton or similar item to keep your small parts organized.

You will need:

- Ratchet with 10mm and 17mm sockets
- Philips screwdriver (JIS if possible)
- Flat blade screwdriver
- Pliers
- Carburetor dip
- Carburetor cleaning spray
- Compressed air
- O-ring kit from cycleorings.com which can be ordered [here](#).
- Recommended: allen cap bolts. See the last page for sizes.

Replace your o-rings AFTER it has been dipped. And make sure your gas tank is clean and free of rust. If it isn't, then all that rust and junk is going to end up in your carburetors. Then you would have to dip them again. Doesn't sound too fun does it?

Mikuni BS34SS

To head



To airbox



Top

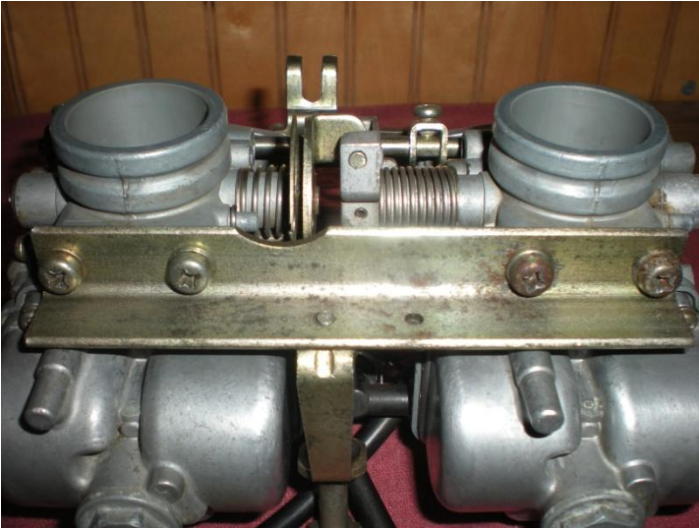


Bottom

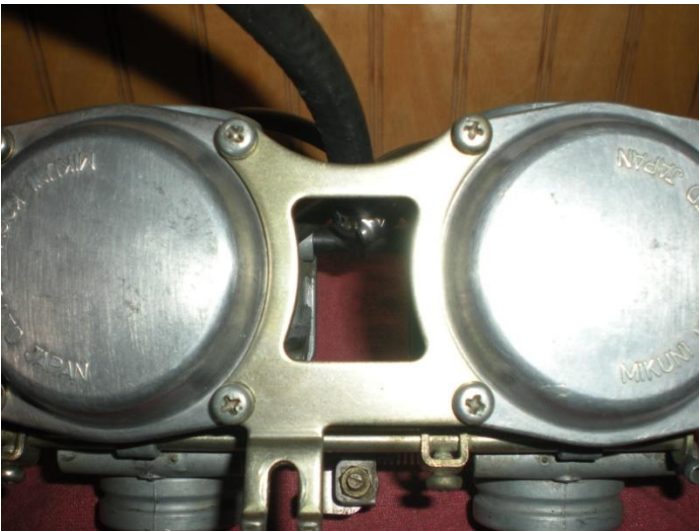


Separating The Carbs

Remove the 4 bolts holding the gang plate.



Remove the 4 bolts on the joining bracket on the CV cap.



Separating The Carbs Page 2

Remove the 2 screws holding the choke lever in place. Be careful not to lose the small parts.



Loosen the 2 screws on the choke rod. Notice the dimples on the choke rod. That's where the bolts screw into.

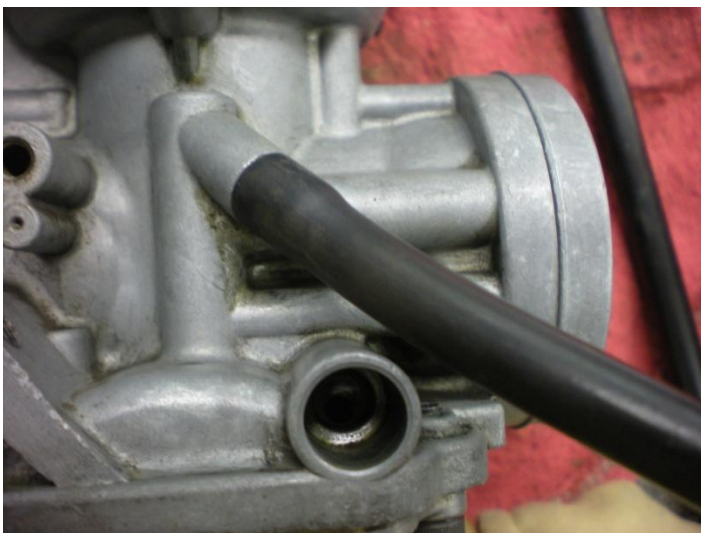


Separating The Carbs Page 3

Pull the carbs apart gently... Success! Pull out the fuel line with the T too.



Pull the fuel overflow tubes off. Mines were glued on so it may be on tight.



Disassembling Carburetor #1

Put carb #2 to the side and work on carb #1.

Remove the 2 remaining screws on the CV cap. Pull the CV cap off. Underneath the CV cap are the diaphragm and spring.

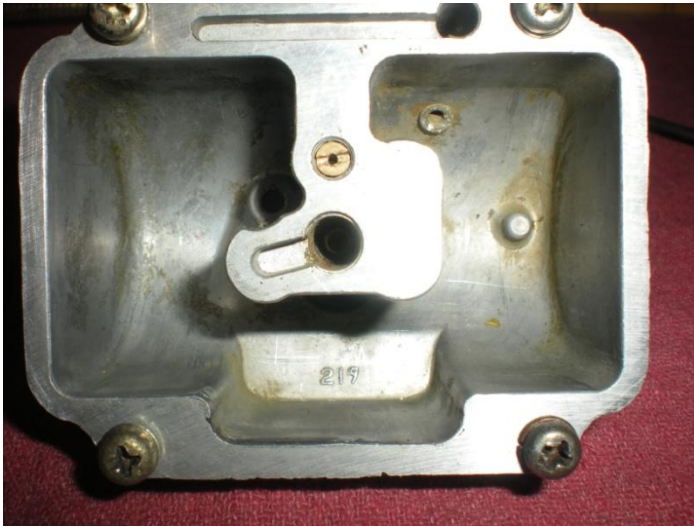


Flip the carburetor over. Remove the 4 bolts that hold the float bowl in place. Pull the float bowl off gently.

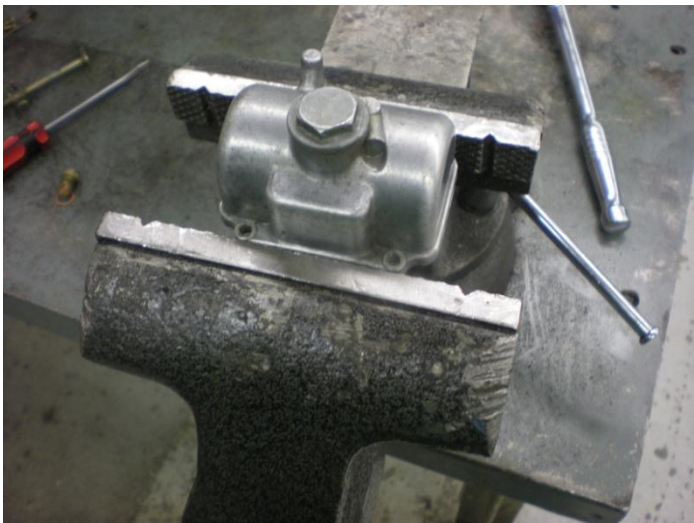


Float Bowl

Use a good fitting flat blade screwdriver to remove the pilot jet.



Use a 17mm socket to remove the float bowl drain screw.



Float Bowl Page 2

O-ring #1. The float bowl drain screw.



Under the float bowl drain screw is the main jet.
Use a good fitting flat blade screwdriver to remove the main jet.



Disassembling the Carbs Page 2

Look back at the carb body. Use a punch or similar tool to push the float bowl pin out.



Pull the valve needle out.



Disassembling The Carbs Page 3

Use a 10mm socket to remove the valve needle seat.



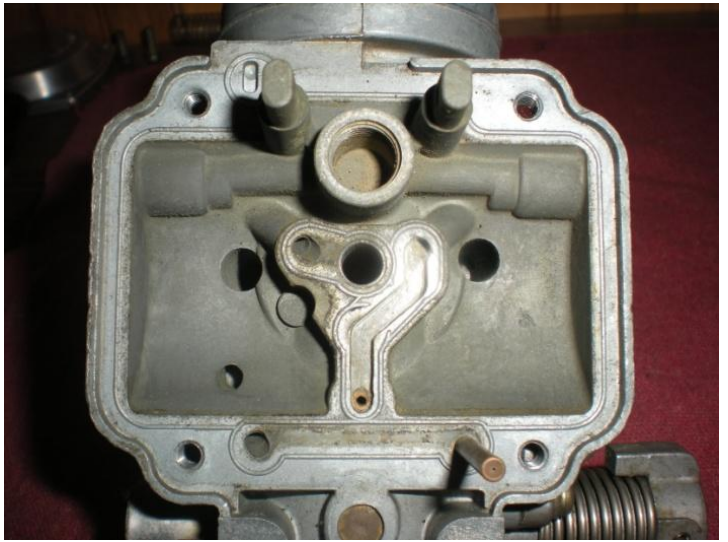
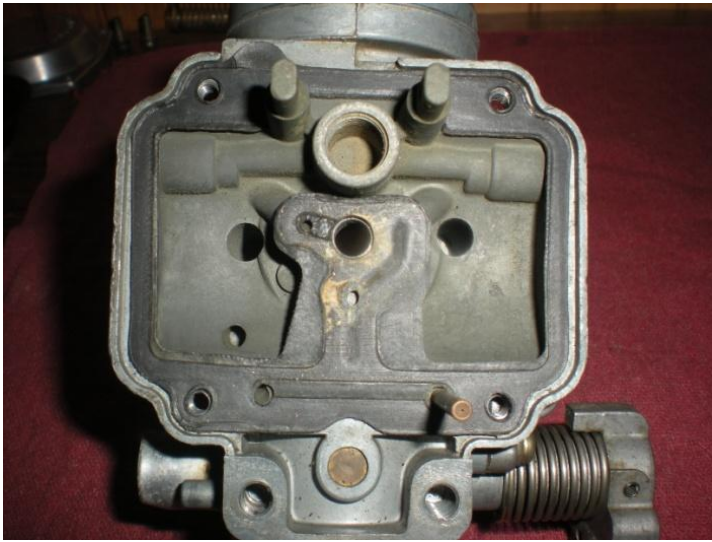
Use pliers to gently pull out the needle jet. Pull it straight out. It is not threaded.

O-ring #2 is on the needle jet.



Disassembling The Carbs Page 4

Gently remove the float bowl gasket. Renew if necessary.

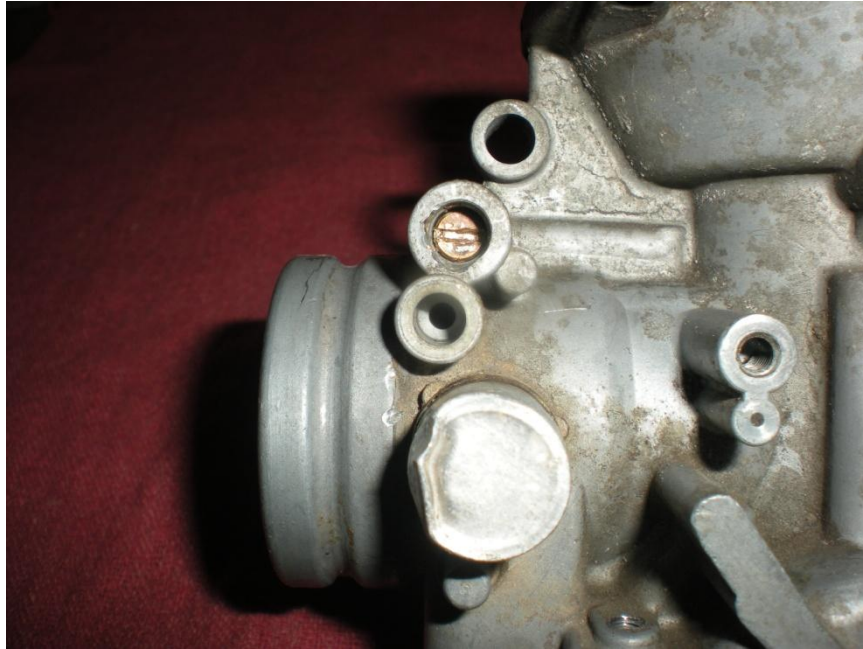


Use pliers to pull out the vacuum hose plug.



Disassembling The Carbs Page 5

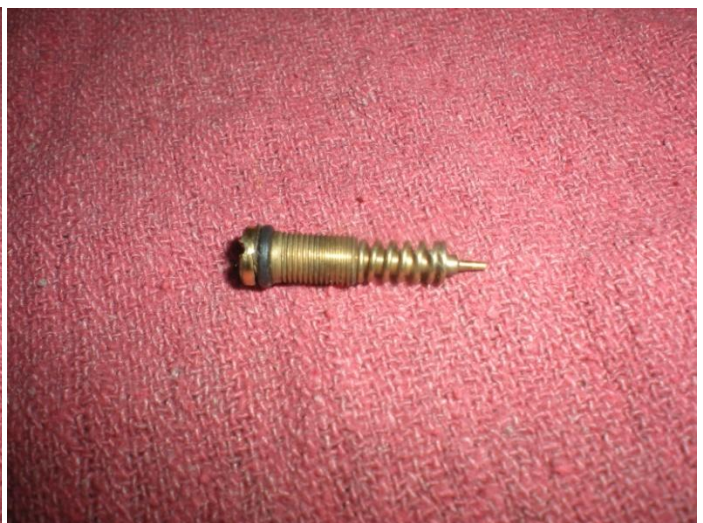
If necessary, drill out the adjustment screw plug. Drill slowly. You do not want to drill the actual adjustment screw.



IMPORTANT: Before removing the adjustment screw, turn it to the right and record how many times it turns until it is lightly seated. Write that number down. During reassembly, turn the adjustment screw until it is lightly seated then turn it back to the left to the number you wrote down. My bike has the stock exhaust and airbox so it came out to be 2 turns.

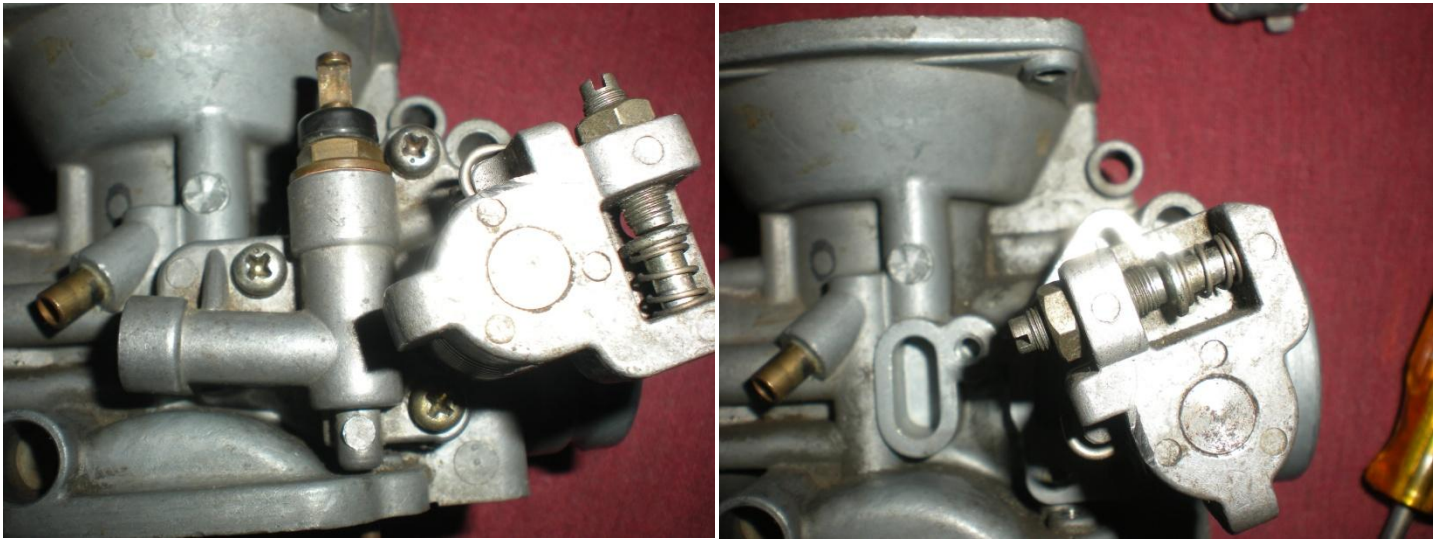
Don't lose the little spring!

O-ring #3. The adjustment screw.



Disassembling The Carbs Page 6

Remove the 3 bolts holding the choke plunger holder.



Use a 10mm socket to remove the choke plunger assembly.



Assembled choke plunger assembly.



Before Dipping

Clean out every hole that you can find on the carbs and small parts. This includes the pilot jet, needle jet, choke circuit fuel pick up tube, small holes on the carb body, and the small holes on the float bowl.

Parts To Be Dipped

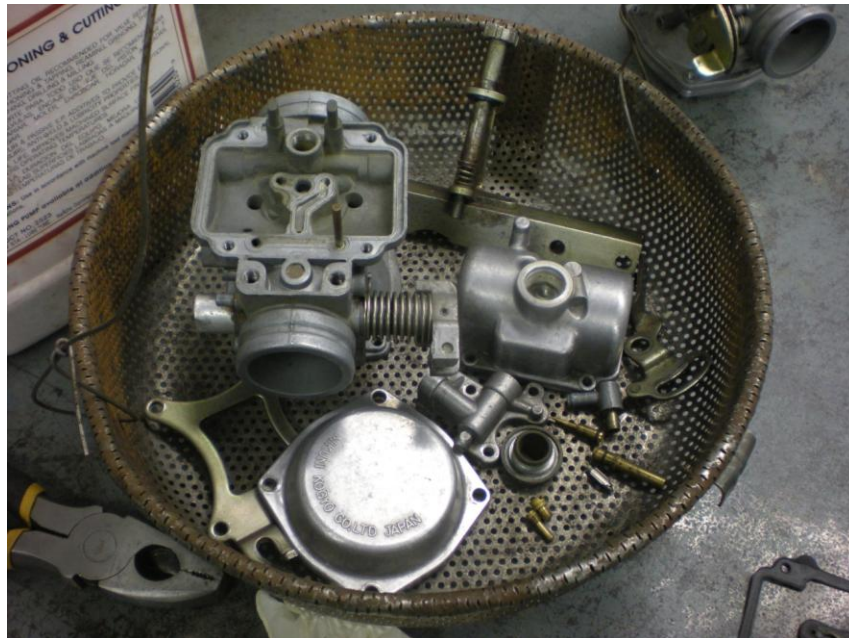
I dipped these parts for a full 24 hours in carburetor dip. I used Berryman's.

- Carburetor body
- Float Bowl and float bowl drain screw
- Choke Plunger Holder
- Needle Jet
- Pilot Jet
- Main Jet
- Valve needle
- Adjustment Screw

Do not dip anything that is rubber or plastic with the exception of the OLD o-rings.

You can dip the CV bracket, CV cap, choke lever, and choke rod if you want to but it is not needed.

Use carb spray to clean all of the other parts that were not dipped.



After Dip

Use carb spray to clean out all the small holes. Then use compressed air to spray in the small holes to blast all of the gunk out.

Replace The Rubbers

Replace all the o-rings. Make sure to lube them with rubber protecting spray.

Replace the fuel T if needed.
My old one (top) is ripped up.



Replace the fuel line too. My old one (top) is hard and rotting.



There you go. Much better.



Replace the float bowl and/or choke plunger holder gaskets if needed.

Replacing Your Bolts

CV Cap
M5 – .80 x 16
Total: 8 (4 each)



Float Bowl
M4 – .70 x 12
Total: 8 (4 each)



Choke Plunger Holder
M4 – .70 x 12
Total: 6 (3 each)



Gang Plate
M6 – 1.00 x 12
Total: 4



I do recommend using stainless steel hardware but I couldn't find any locally. I had to settle with these black bolts... for now.

Don't forget to apply anti-seize on your new bolts!

Reassembly

Reassembly is just the reverse of disassembly so follow this guide backwards for reassembly.

Carburetor #2 is exactly the same as carburetor #1 with the exception of the choke lever. Just follow the above steps to clean carb #2.

OK. So you got both carbs cleaned up and reassembled. Go ahead and replace the intake boot o-rings and bolts if you haven't done so already. Remember to apply anti-seize on the bolts!

I first put the airbox side of the carbs in. Then I reattached the throttle cable. After that I put the intake boot side in. Push the carbs into place. Tighten both airbox clamps and both intake boot clamps. Now set the petcock on PRIME, wait a few minutes, and then fire it up! Make adjustments if necessary. You like that? I know I did!

Why not take it for a ride? You should notice the stable idle, quick throttle response, and smooth riding.

Enjoy your bike!

Written and photography by Flaming Chainsaws.

Cheers,
Allen