



CARURATOR MAINTENANCE For the Tenere 3AJ by Gracula.

(Translated to English by Mezo)

Introduction.

This manual was developed specifically for procedure to maintain the Ténéré 3AJ carburetor, but it should also work on other XT 600's and other models in the Ténéré range. The only thing that changes is the disassembly of the tank and seat, which are not addressed in this tutorial and perhaps the removal of the filter and removal of the carburetor from the motorcycle.

The mechanical side of the carb are the same.

This tutorial does not discuss the dismantling of your bike simply because if you don't know how to do that you may as well leave it to an expert before disassembling your carburetor.

In fact, this tutorial is but a sequence of pictures showing disassembly. If I put the photos in sequence, without any additional text you would be able to disassemble and reassemble the carburetor without effort (but I'll add some comments as I go).

By the way do not expect much from the comments, the pictures are the important thing here.

Note by Mezo.

I have done my best to translate this tutorial, I have added some hyperlinks to spares on the web. I may or may not have got the right numbers, it is up to you to double check the part numbers.

Part 1 Accessing the carburettor



Fig 1. Remove the bolt (10 mm) that secures the air filter to the frame

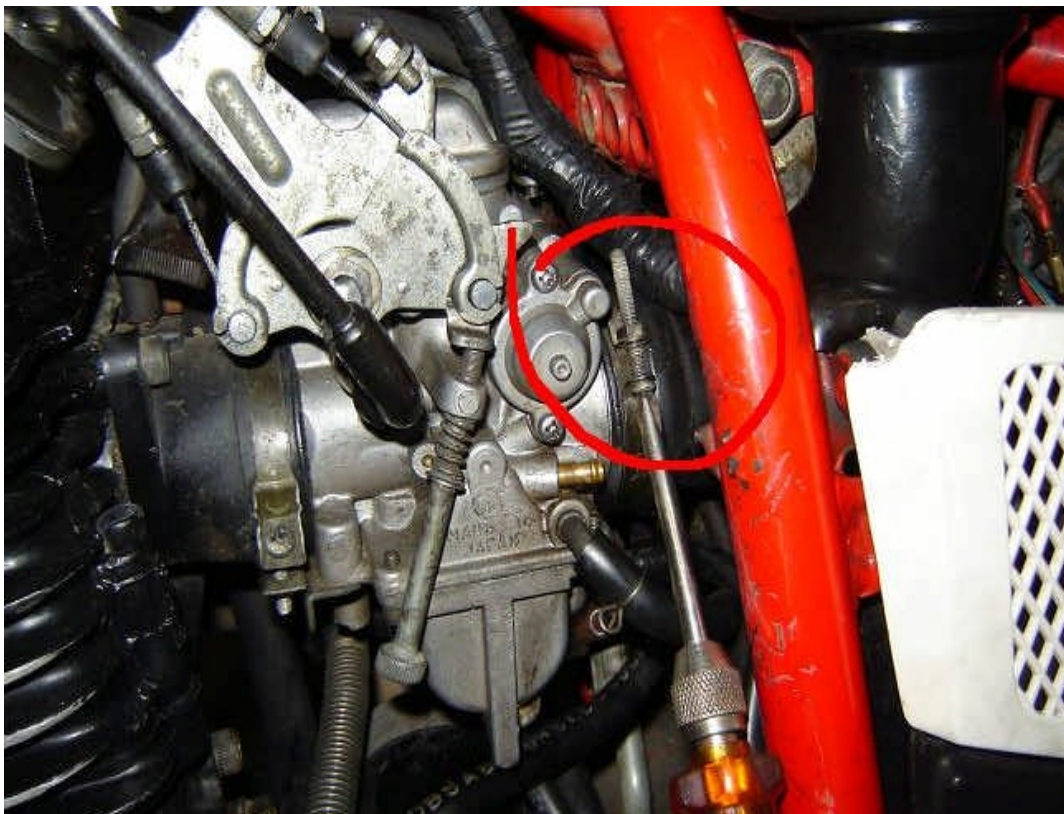


Fig 2. Loosen both clamps (one each side) on the intake boots.

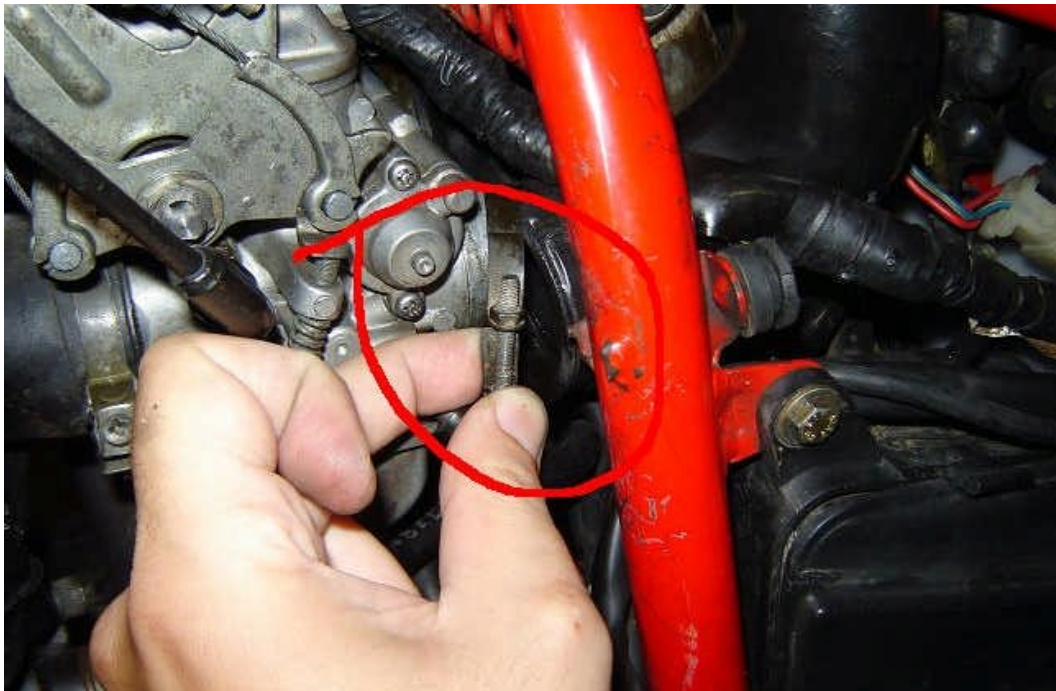


Fig 3. Loosen the air filter tubes that are connected to the carburetor and take off the clamps.



Fig 4. (Tip) Keep the parts in sequence of disassembly, this will help you remember the order when it comes to putting it back together.

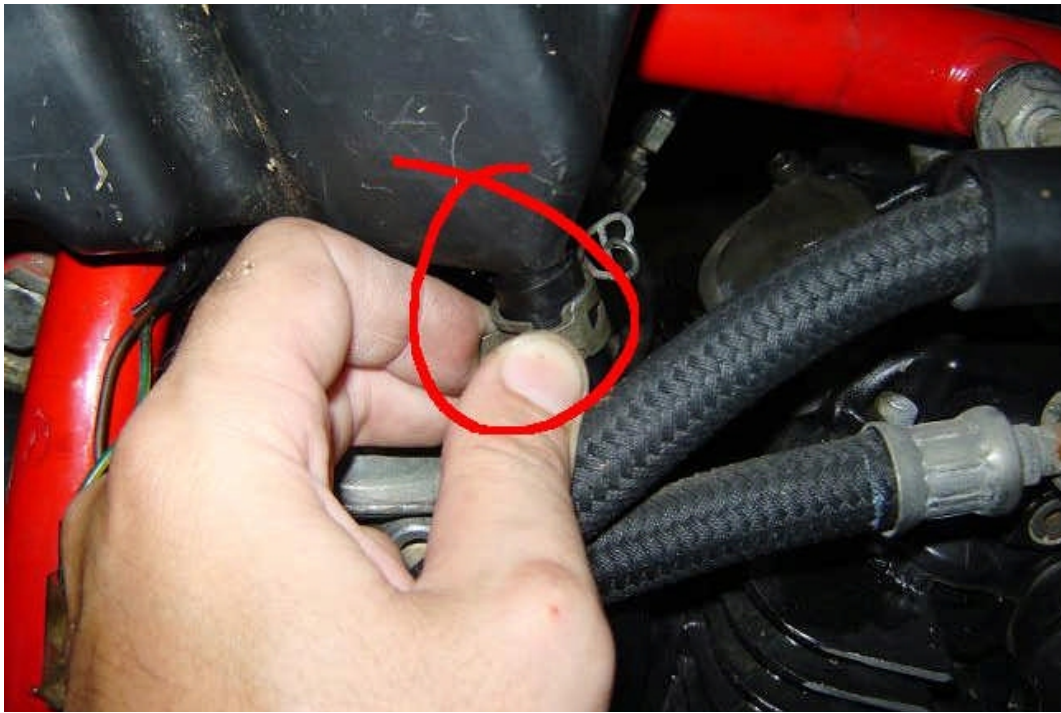


Fig 5. Release the clamp from the air breather return pipe that goes to the airbox, remove this clamp & put in a safe place rather than dropping it.



Fig 6. Disconnect the rear brake switch wires, dont worry about the polarity.

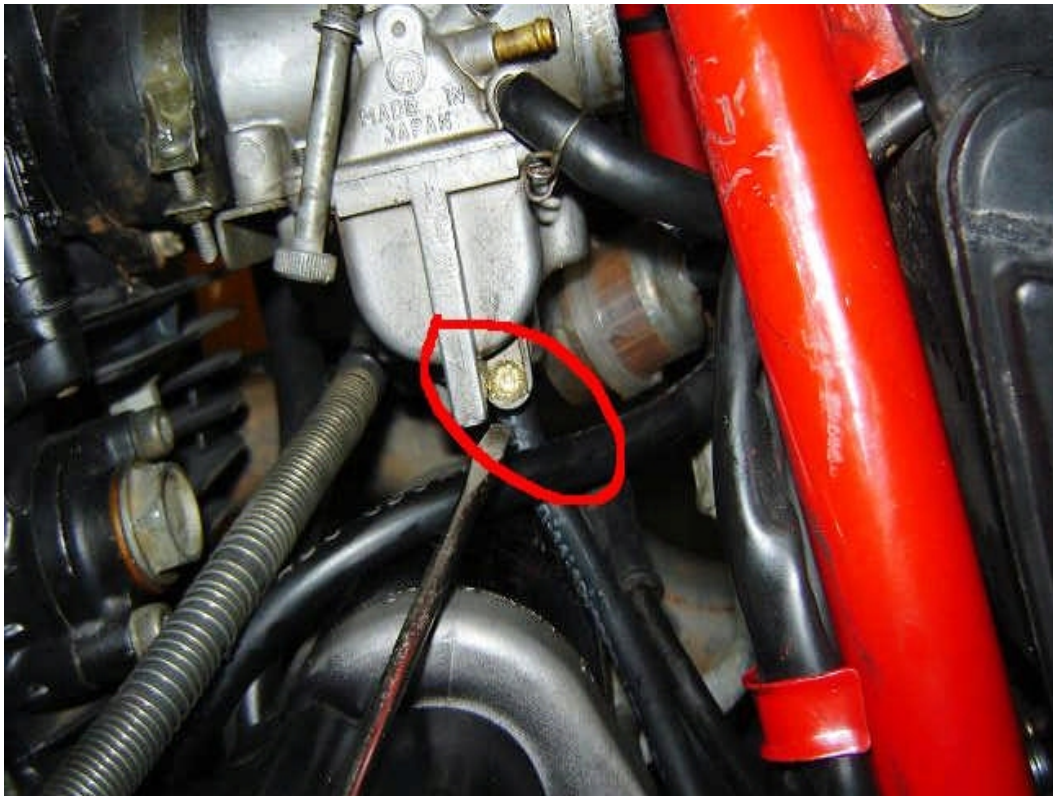


Fig 7. Drain the carburator of fuel.

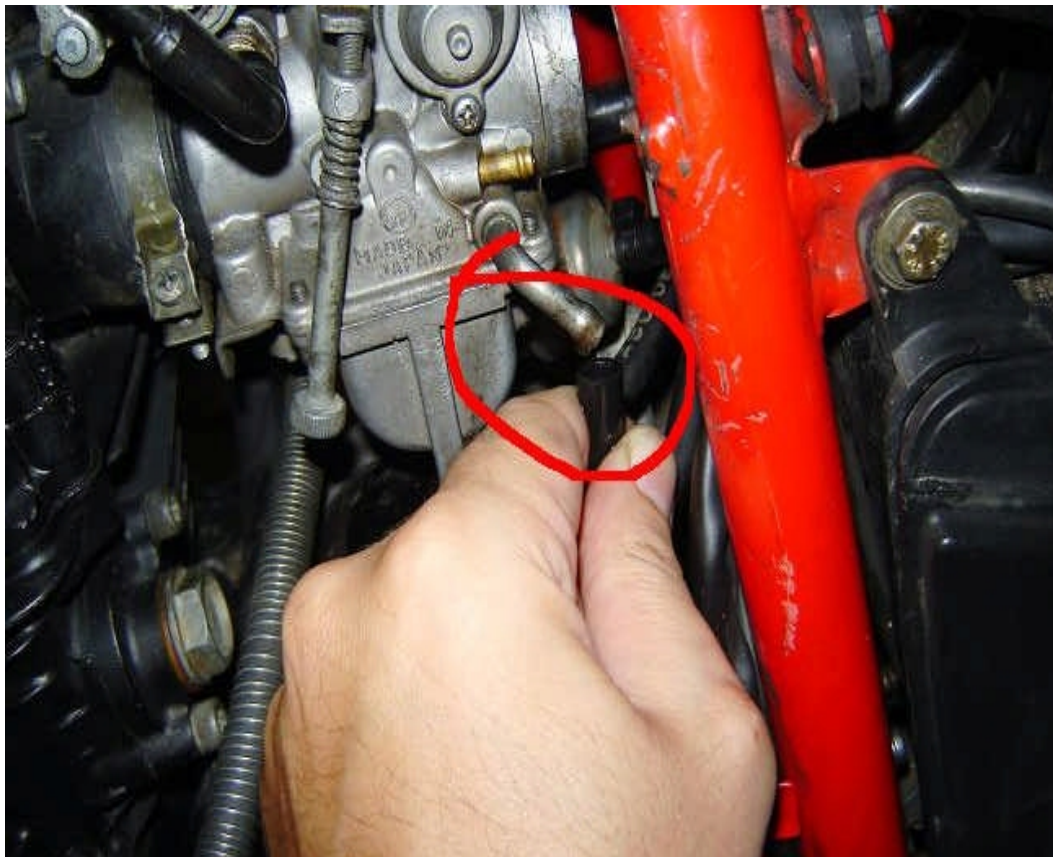


Fig 8. Remove the fuel inlet pipe coming from your fuel pump (if you still have a pump) in which case it will be coming direct from the tank.

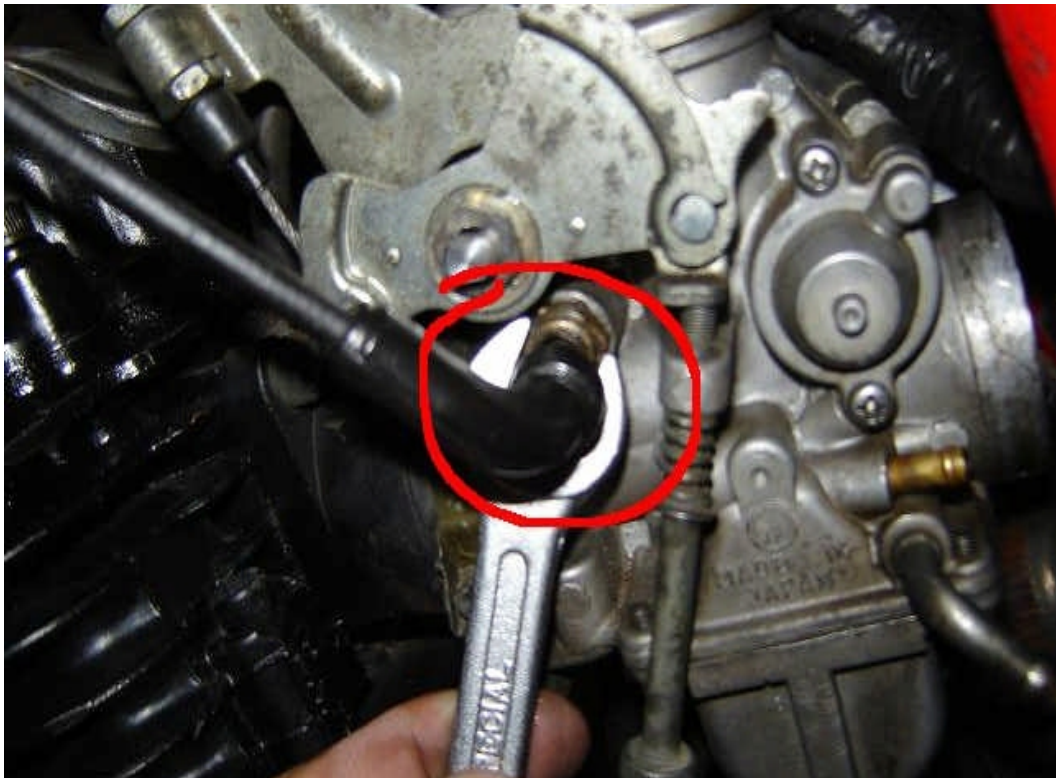


Fig 9. Undo the choke cable nut that goes in to your carbie.

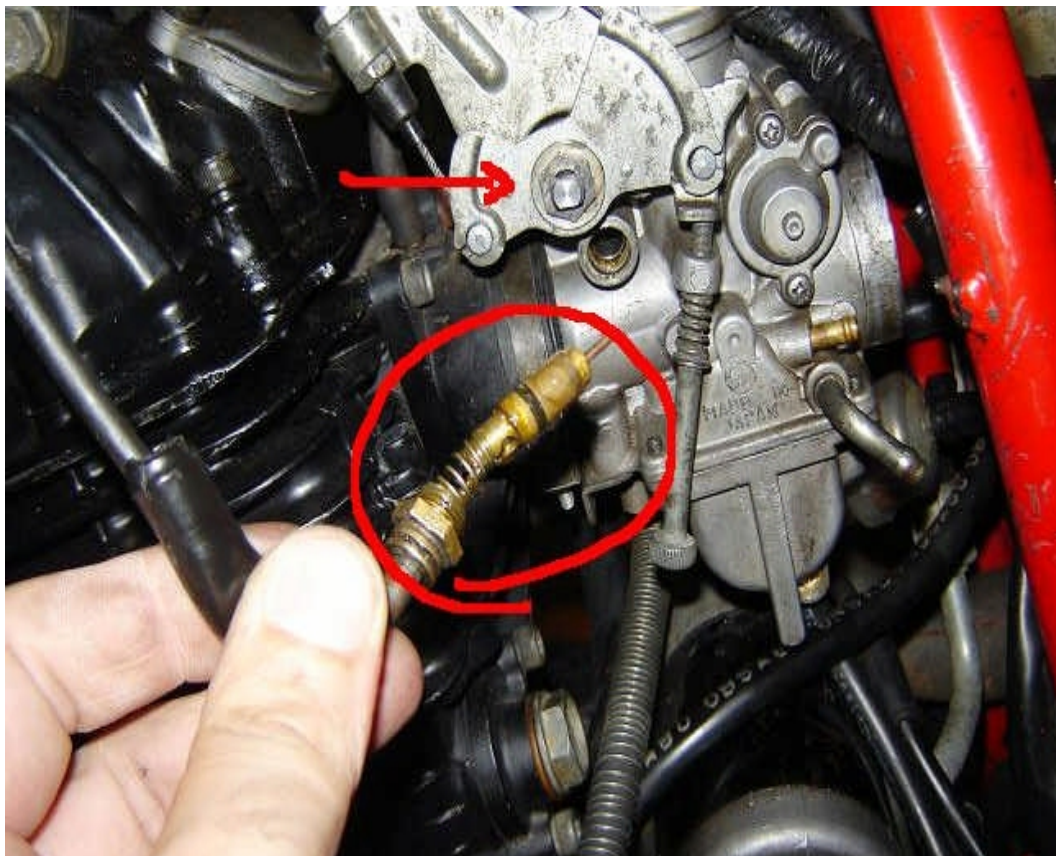


Fig 10. Slide the plunger out & put a plastic bag over it, then tie it up out of the way.
Also remove the nut (arrow pointing) holding throttle cables.

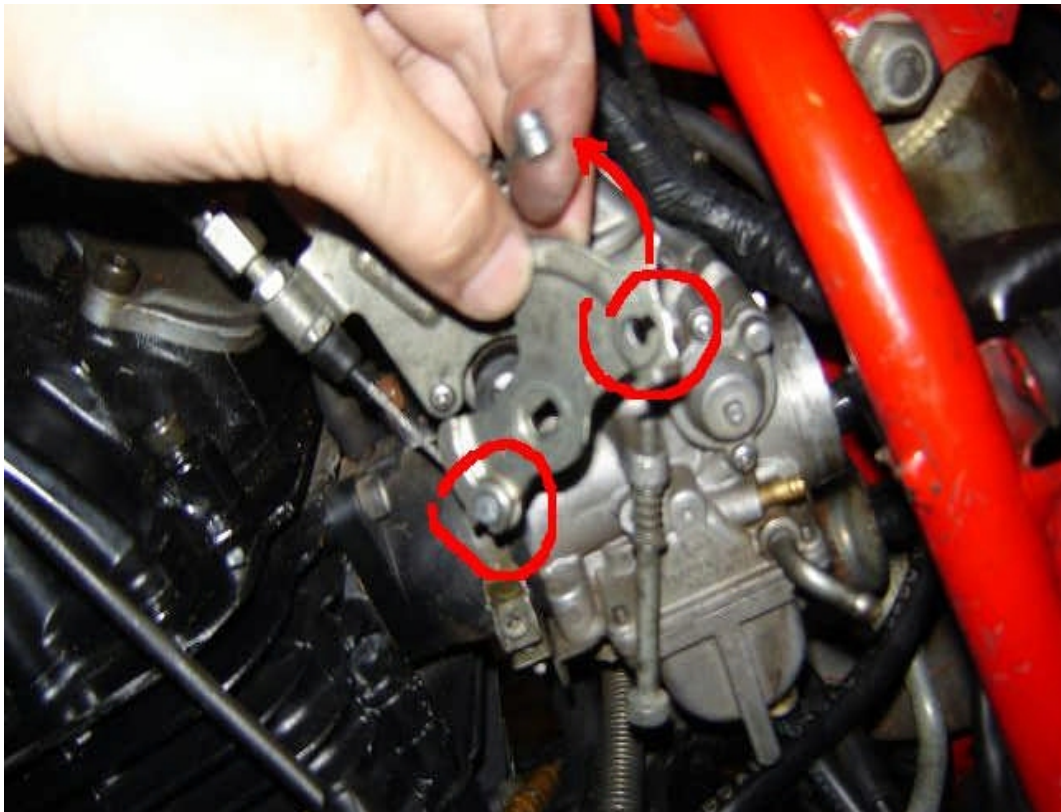


Fig 11. Loosen the throttle cables and save the butterfly.

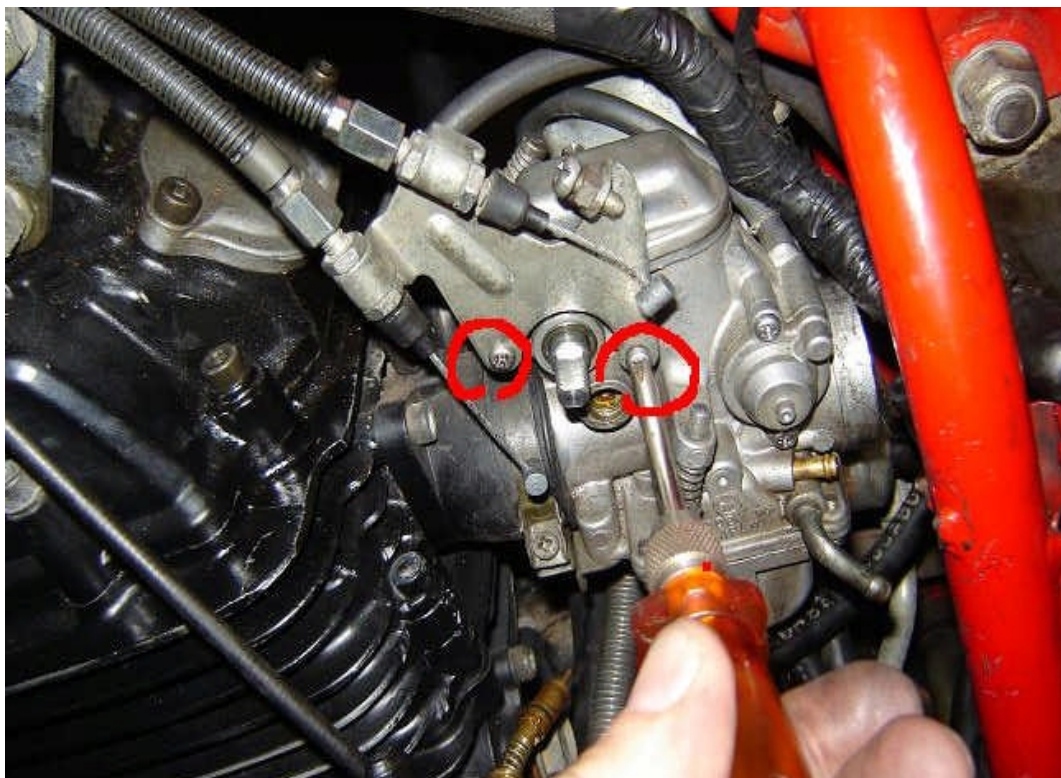


Fig 12. Release the screws that secure the throttle cable support, then tie the cables up & out of the way.

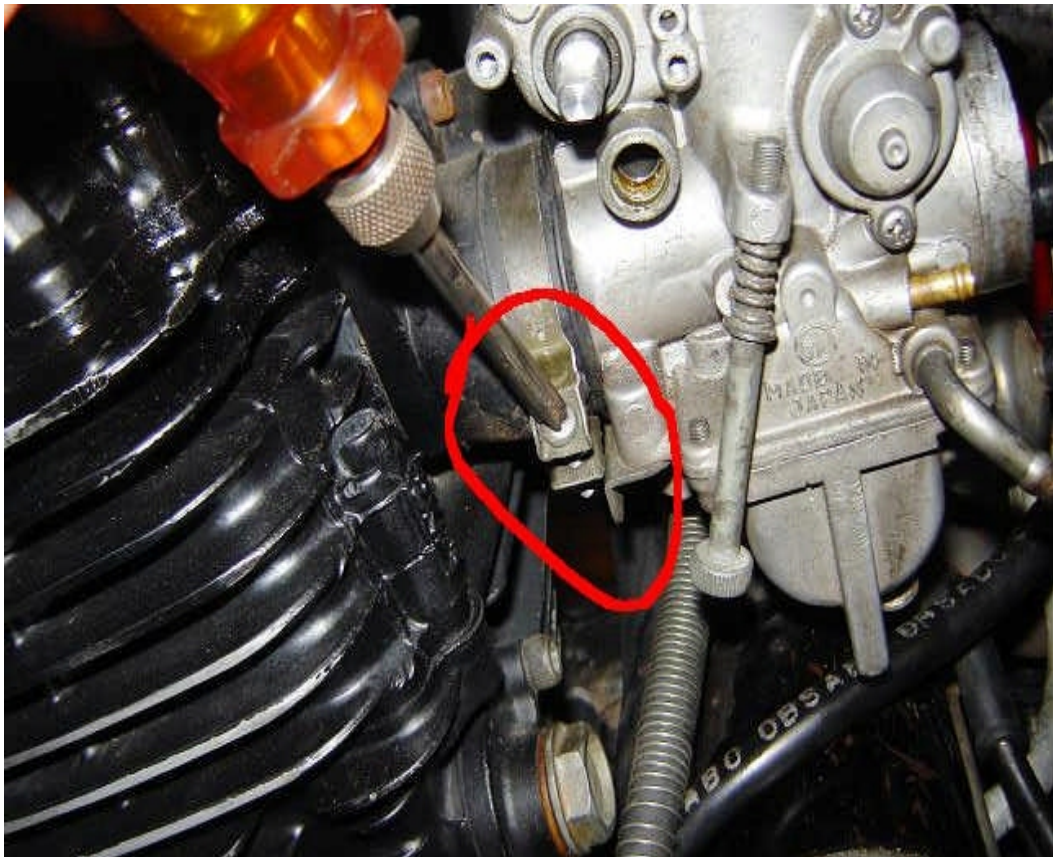


Fig 13. Loosen of both the clamps on the intake manifolds (left & right)



Fig 14. Gently pull back on the carbies wiggling up & down at the same time, dont go yanking on them as you will split the rubber intake manifolds.



Fig 15. With the carburetor loose, we must also remove one of the intake manifolds to facilitate the exit of the carburetor out of the bike, begin by loosening the top screw.

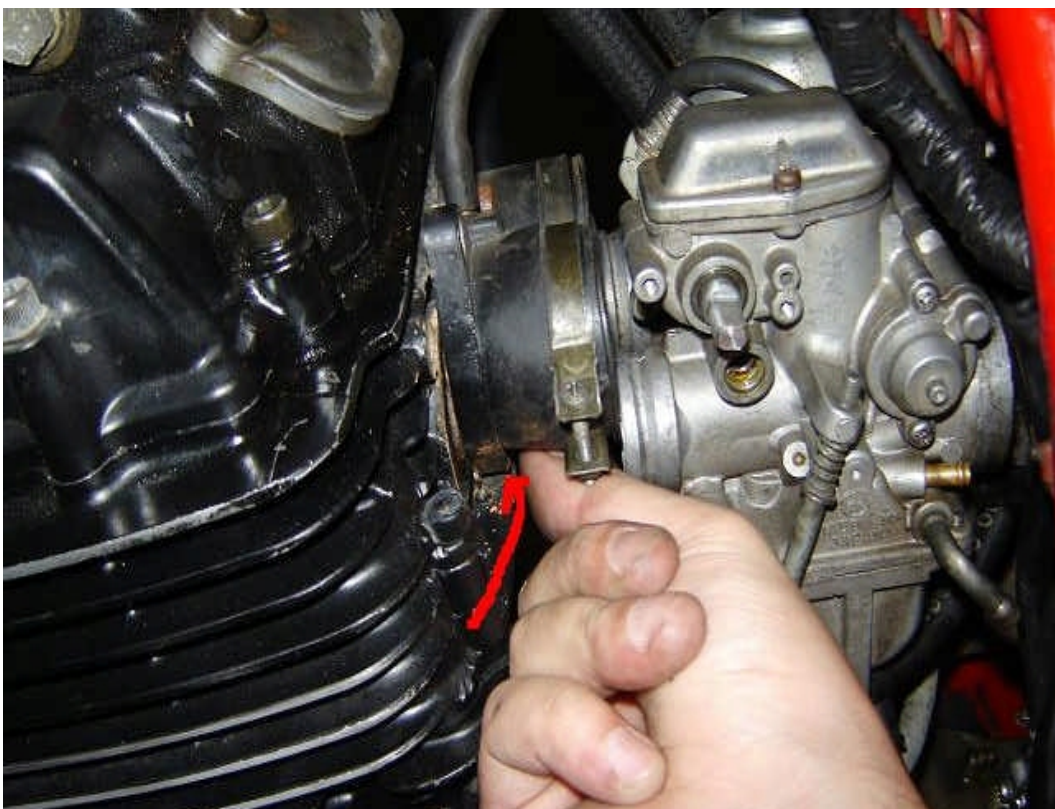


Fig 16. Then tilt the manifold up slightly to gain access to the bottom screw, once removed pull the left manifold clear & be carefull not to damage or loose the rubber O-Ring.



Fig 18. Then gently ease the carb out of the bike.

Part 2 Disassembling the Carbie.



Fig 19. Remove the screws that hold the two sides of the carbs together.



Fig 20. Then remove the four screws that hold the plate, this plate also holds both sides of the carbs together.



Fig 21. Release the vacuum hose & pull both sides in opposite directions.



Fig 22. Remove the small hose between float chamber and the second stage at the bottom & store safely.



Fig 23. With needle nose pliers release the spring on the first stage carb.



Fig 24. Slide the rubber O-Ring from the shaft.



Fig 25. Remove the two screws on the first stage cover.



Fig 26. Once the cover is removed, undo this screw which will allow the cam to slide out.

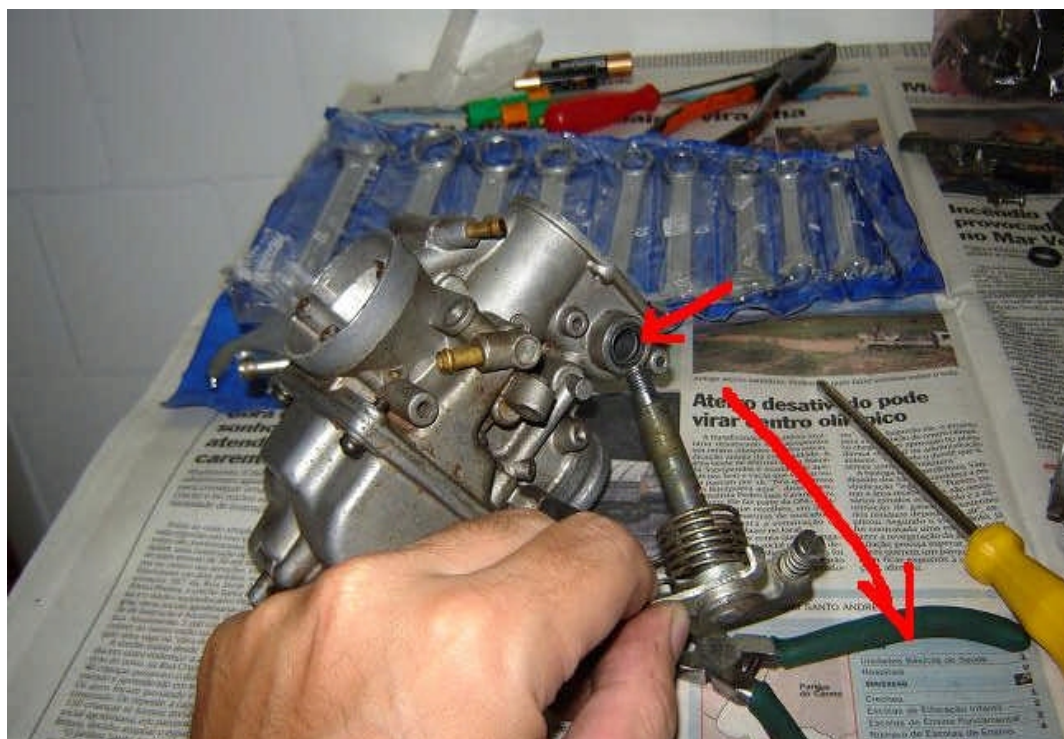


Fig 27. "Et Voila" (he didnt say that that's Mezo being silly)



Fig 28. Remove the O-Ring being carefull not to damage it.



Fig 29. Pull the slide out carefully ensuring you do not bend the fine needle.



Fig 30. Remove the four screws holding the float bowl on.

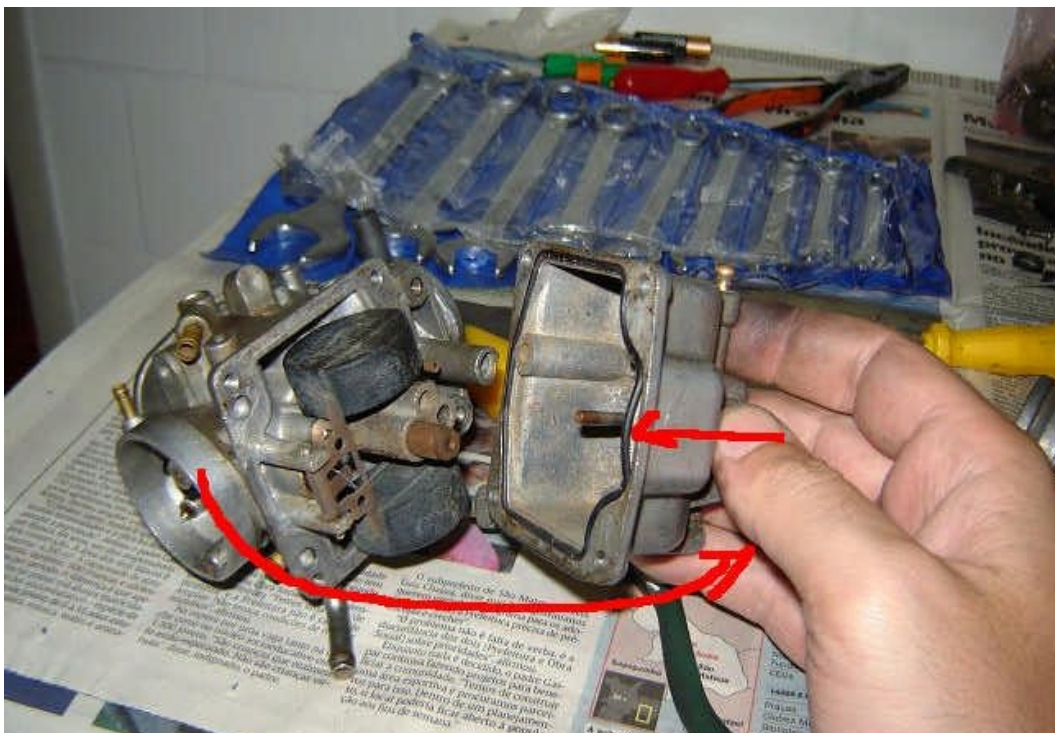


Fig 31. Remove the float bowl and try to avoid getting the rubber seal to wet with gas/petrol as it will swell the rubber & you will have difficulty refitting it.
Or have new seals allready purchased ready for the job.



Fig 32. Remove the idle crew adjustment & clean thourogley with a wire brush, then grease & re-assemble later it, will make turing it much more easy.

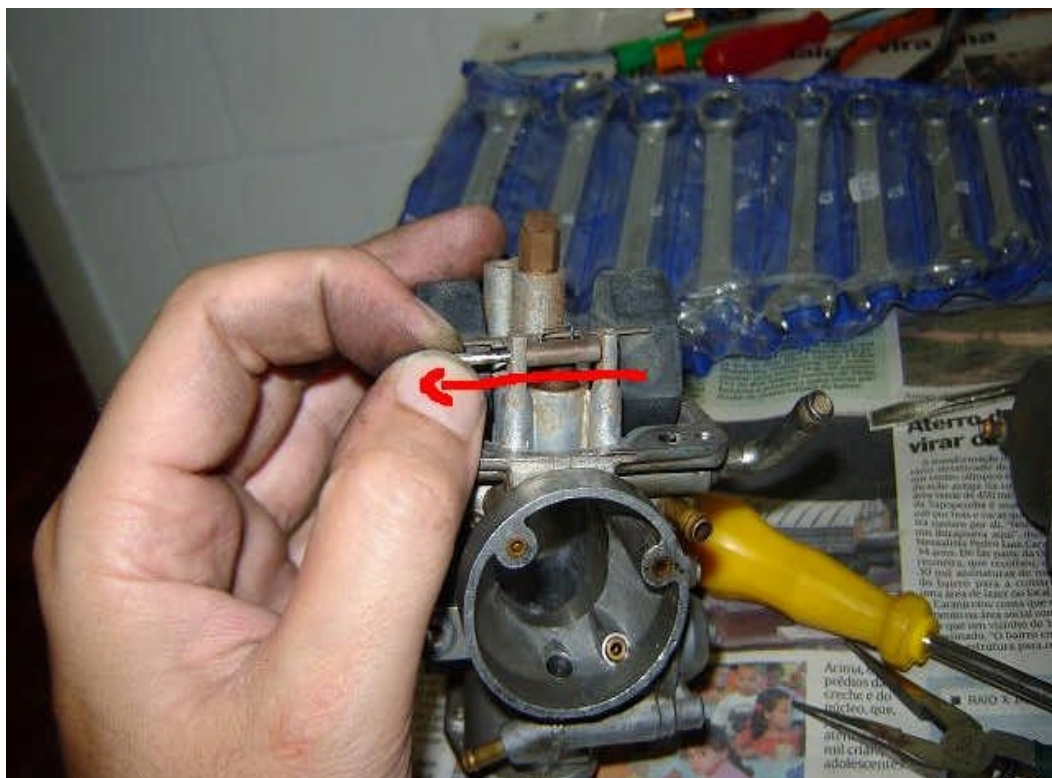


Fig 33. Remove the pin that hold the floats in place (dont loose it).



Fig 34. Remove the float along with the needle valve, this part is normally worn and should be replaced ([1JK-14107-01-00](#)) US\$33.00



Fig 35. Remove the screw that hold the float needle seat in place.



Fig 36. Pull the needle seat out gently, it can be quite tough to get out, important to remove this as there is a filter behind.



Fig 37. When you remove it you will see the filter, it is common to find it dirty.

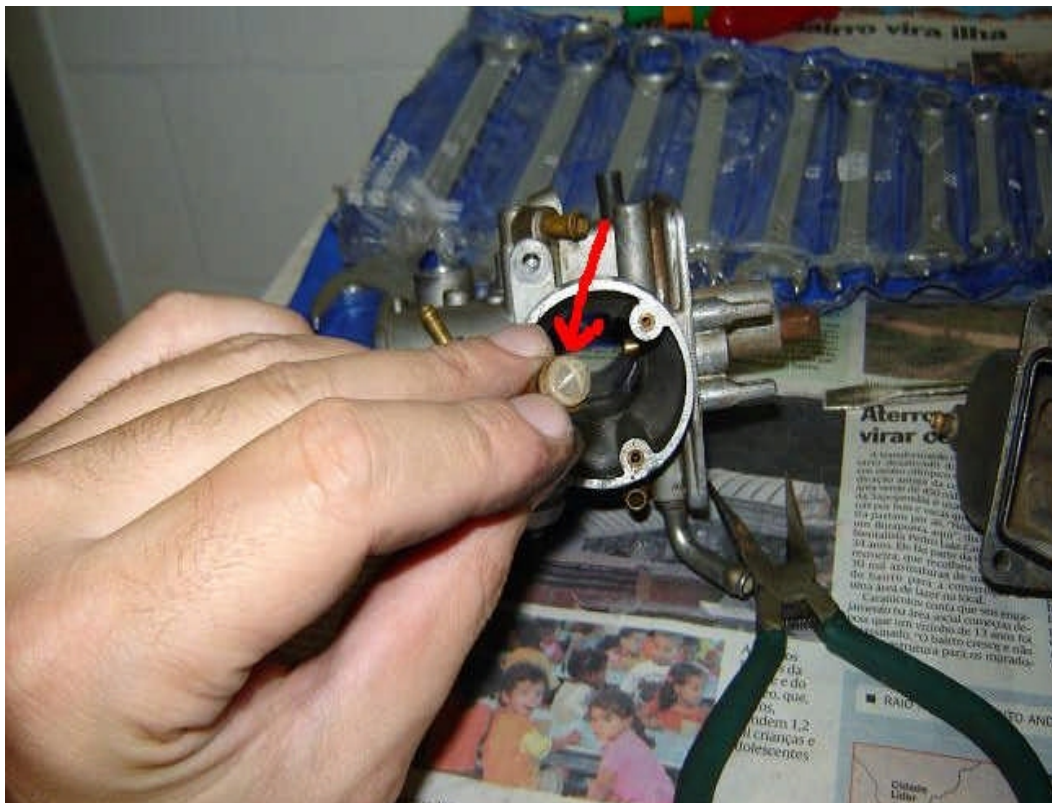


Fig 38. My filter is clean because this was the second time i had done this and i had cleaned it previously.



Fig 39. Unscrew the main jet, you will need two spanners (8mm & 6mm) if im not mistaken.



Fig 40. Unscrew & remove jet checking for any dirt that may causing a blockage, replacement parts ([43F-14341-00-00](#)) ([360-24512-00-00](#)) ([288-14343-65-00](#))



Fig 41. Remove this O-Ring carefully & keep safe or replace ([5Y1-14536-00-00](#))



Fig 42. Unscrew the pilot jet and clean it or replace ([43F-14342-23-00](#))

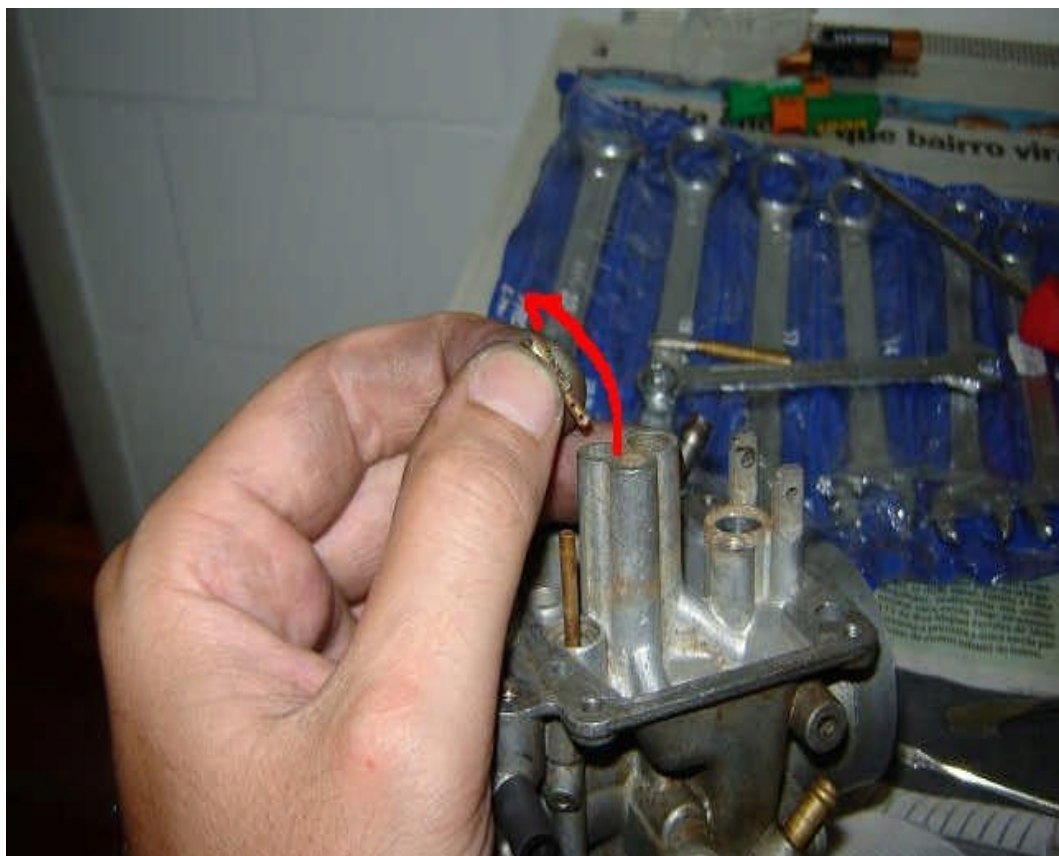


Fig 43. Remove the jet (gigleur as he calls it) and clean thouroughly or replace.



Fig 44. Remove the screws on the decompressor cover, this stops your bike popping on decelaration.

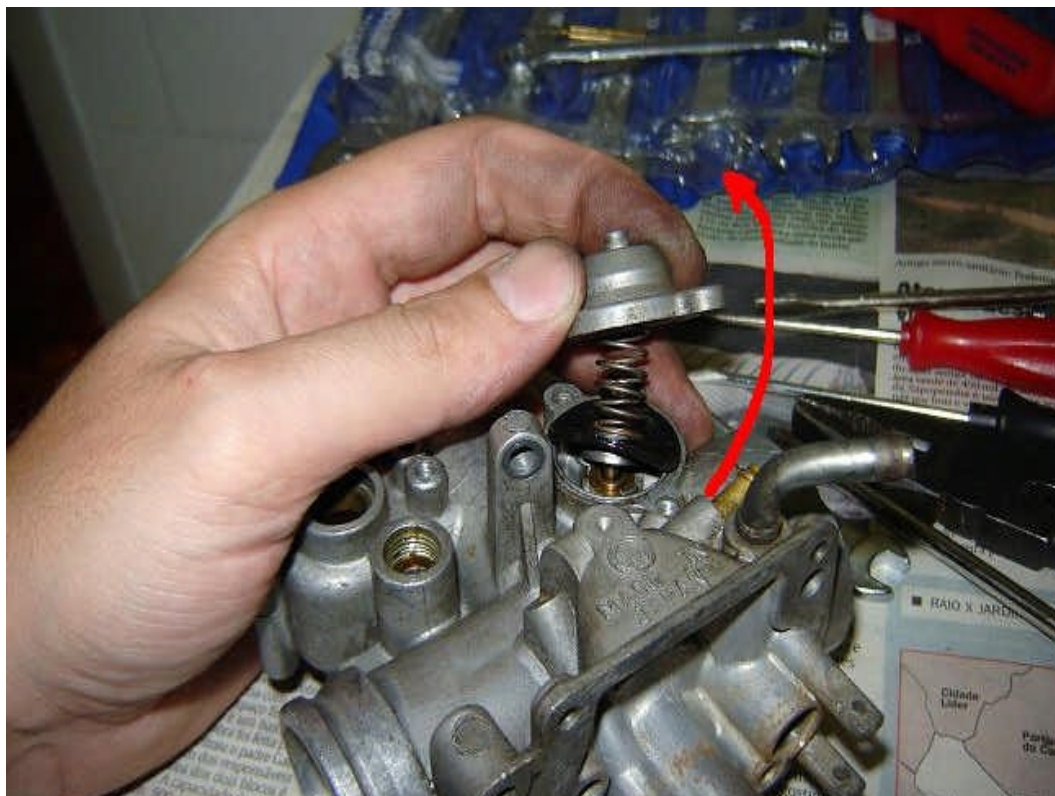


Fig 45. Remove the cover and you'll see a very strong spring, a small cap driven vacuum and a piston that injects gasoline into the venturi. It has a notch that fits in a little hole, this comes as a kit ([5Y1-1490A-00-00](#))



Fig 46. Remove the two screws in the throttle slide.



Fig 47. Throttle slide (1) Needle (2) Washer (3) Plastic connector (4) Spring (5) Cable connect set (6)



Fig 48. This hole must line up with the washer marked with arrows. when you reassemble it.



Fig 49. Remove the four screws on the diaphragm cover, there is a big spring underneath the cover so watch it doesnt go flying accross the room.



Fig 50. Remove the cover & be carefull not to puncture the rubber diaphram.



Fig 51. Pull the rubber diaphram out of the groove in the carb body, note the index mark on the rubber aligns with an indent on the carb body.



Fig 52. Make sure when you put things back together you line this up perfect.



Fig 53. Remove the two screws that hold the diaphragm to the metal plate.

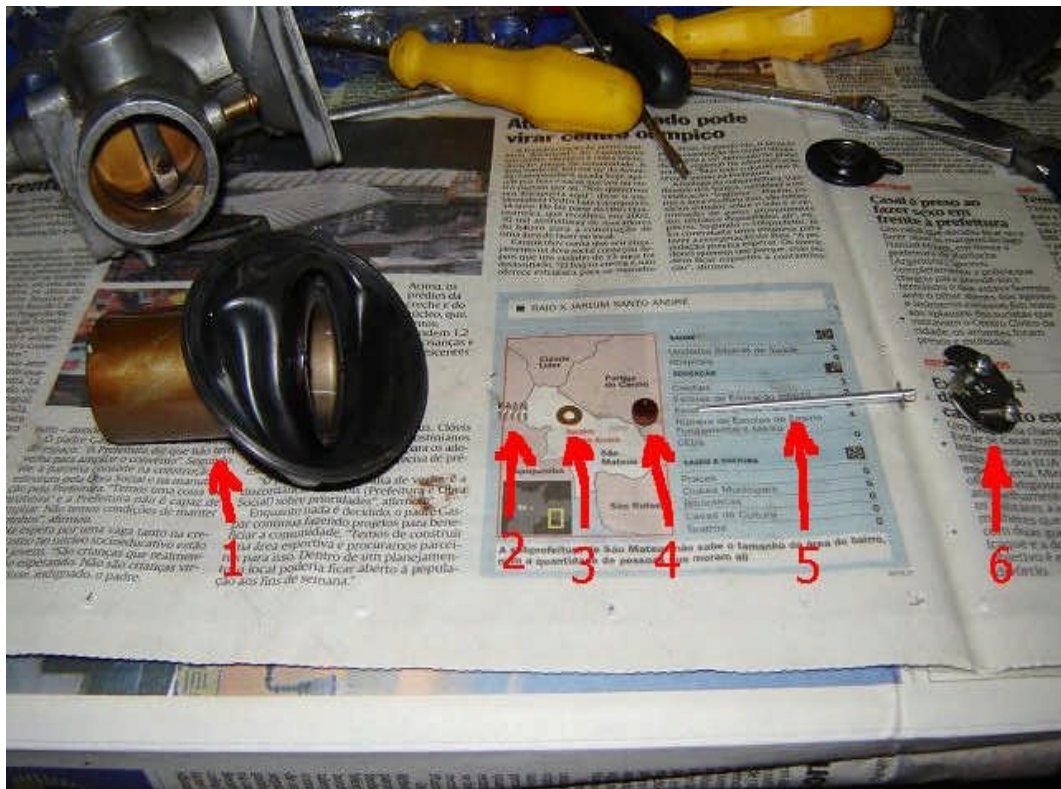


Fig 54. Slide & Diaphragm (1) Spring (2) Washer (3) Rubber Ring (4) Needle (5) Metal plate (6) Needle Set ([49N-1490J-00-00](#))



Fig 55. Unscrew the main jet ([5Y1-14343-63-00](#)) and main nozzle ([5Y1-14355-00-00](#))

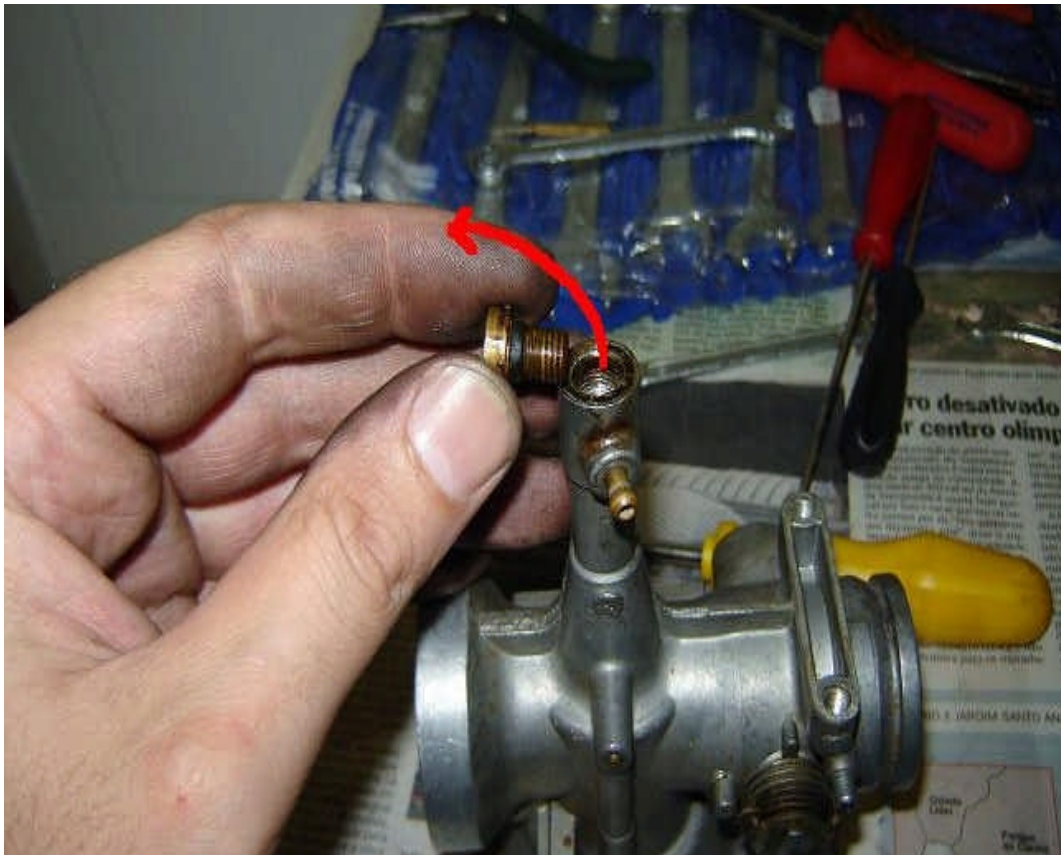


Fig 55. Remove the screw & you will be able to have access to the main jet.



Fig 57. Then with a screwdriver undo the main jet.



Fig 58. Taking another screw that you have access to the second needle jet
I do not have a photo of this jet withdrawal but it is very simple.
stick your finger in the venturi and press down to remove it.

Part 3 – Rebuilding the carburetor.

To reassemble the carburetor, it is very simple, just run dismantling procedure in reverse. Some tips for reassemble the carburetor has been given in their own sequence disassembly, but I have some more tips for you to look at the time assemble it all back:

1. Before anything else, clean all parts;
2. Verify that you have lost nothing. It is very annoying to discover in the middle of a montage that you missed something and the bike will have to stand still until you can replace the part;
3. Beware of the rubber parts such as diaphragms, rings seals (o-ring) and joints. They tend to swell when in contact with gasoline and then gets to ride hard back. The same happens if you take a ride in back, as they reduce the size;
4. If you disassembled the carburetor because the bike was not cool try to discover the defect before replacing. Check things like the diaphragm of the second stage punctured hose synchronization (vacuum) clogged jets dirty stuff etc.
5. Much attention in time to assemble sets of needles. Note well sequences of parts.
6. Many of the pieces and parts have grooves that prevent the assembly wrong, but watch out for the assembly of the iron of the pistonete second stage. The little hole has to appear;
7. Also be careful when mounting the float needle, this prevents your float bowl from overflowing and you probably only see the problem long after the carburetor is mounted on bike;
8. Also make sure not to bite in to the rubber diaphragm on the decompressor.
9. Same thing for the hood of pistonete the second stage. Take careful not to pinch diaphragm with the cover and check that the diaphragm is properly seated in its track;
10. After all assembled, before starting the bike, open the petcocks and the drain plug and let the fuel run through.