



# TAMING THE CARB....

# HERO HONDA CBZ

## *ABOUT MYSELF...*

NAME : NITHIN NATH  
BIKE : 2000 MODEL SILVER HEROHONDA CBZ  
CALL SIGN : QUIXILVER

MODS DONE :  
MICHELIN M45 4X18 REAR TYRE, BULL A350 HANDLE BAR, RACING AIR FILTER AND FEW VISUAL MODS.  
PREFER PRACTICALLITY OVER STYLE... SO I STILL HAVE THE TWO MIRRORS AND CRASH GUARD... ☺

MEMBER OF :  
[HEROHONDACBZ GROUP AT YAHOOGROUPS.COM](#)  
[BIKE NOMADS](#)  
[XBHP](#)

## *OK SPEND SOME TIME ON THIS FOR A MOMENT*

1. IN CASE YOU DO NOT KNOW WHAT IS A CARBURETTOR OR AN UN-INTENDED RECEPIENT OF THIS DOCUMENT... PLEASE CLICK THE 'X' MARK ON TOP RIGHT CORNER OF THIS PDF. THANK YOU VERY MUCH.
2. FOR OTHERS, IN CASE YOU DO NOT KNOW AIR FILTER.. NEVER MIND... IN CASE YOU KNOW WHAT IS MEANT BY IDLING SPEED.. OR THINK YOU KNOW... JUST TAKE A SHOT. BUT DON'T TRY THIS AT HOME.
3. ALL ACTIONS PERFORMED ARE BY TOTALLY UNTRAINED PROFESSIONAL... SO DO NOT TRUST IT COMPLETELY :p.... JUST KIDDING!

4. THIS IS JUST AN INTRO INTO HOW TO DISMANTLE YOUR BIKE'S CARB. I REMOVED IT WITHOUT KNOWING THE RIGHT PROCESS ALTHOUGH KNOW A THING OR TWO ABOUT CARBS AND HAVE BEEN TUNING MANY A TYPE OF CARBS SINCE LONG.
5. THIS IS NOT SUGGESTED ON A BIKE UNDER WARRANTY.
6. I HAVE PUT DOWN A FEW BASICS. I SUGGEST YOU NOT TRY IF NOT CONFIDENT.
7. I AM NOT RESPONSIBLE FOR WHAT HAPPENS... OR IF YOU ARE NOT ABLE TO FIT IT BACK... OF IF YOU FIND 2 -3 EXTRA SCREWS ONCE YOU HAVE FITTED IT BACK... OR IF UR BIKE AINT STARTING ANYMORE....
8. DAREDEVILS... DON'T LISTEN... SO GO AHEAD..



TOOLS NEEDED ( of course... you need them..)

1. DOUBLE END SPANNER OF SIZE 10
2. SCREW DRIVERS '+' AND '-' TYPE. '+' TYPE WITH SMALLER SIZE ALSO NEEDED.
3. A POWER SCREW DRIVER IS RECOMMENDED
4. A CUP TO DRAIN FUEL INTO
5. A CUP TO KEEP ALL SCREWS IN
6. COTTON WASTE
7. PLIERS, A 2mm WASHER (TO TURN AIR SCREW)

## PRECAUTIONS TO BE TAKEN (better not be sorry..)

- TURN FUEL COCK POSITION TO OFF BEFORE ATTEMPTING ANY DISMANTLING.
- DISCONNECT FUEL LINE FROM COCK TO CARBURETTOR AND LET EXCESS FUEL IN THE TUBE TO DRAIN.
- REMEMBER TO KEEP THE SCREWS BELONGING TO EACH PART SEPARATE. ESPECIALLY DON'T CONFUSE BETWEEN THE PRESSURE CHAMBER SCREWS AT TOP AND BOTTOM. IF NEEDED WRITE DOWN ON PAPER AND KEEP ON IT ☺
- IN CASE UR ENGINE IS IDLING AT ABOVE 1500RPM, CHANCES ARE THAT UR IDLING SCREW WILL BE BUTTING A LIL TOO TIGHTLY WITH THE THROTTLE SLIDER. IT IS SUGGESTED TO LOOSEN IT BY ROTATING 2-3 TURNS ANTI-CLOCKWISE. HEY... IN CASE YOU WANTED TO CLEAN THIS SCREW ALSO... REMOVE IT ;)
- TAKE A PRINT OUT OF THIS STUFF ☺..... IN CASE....





**AIR FILTER**

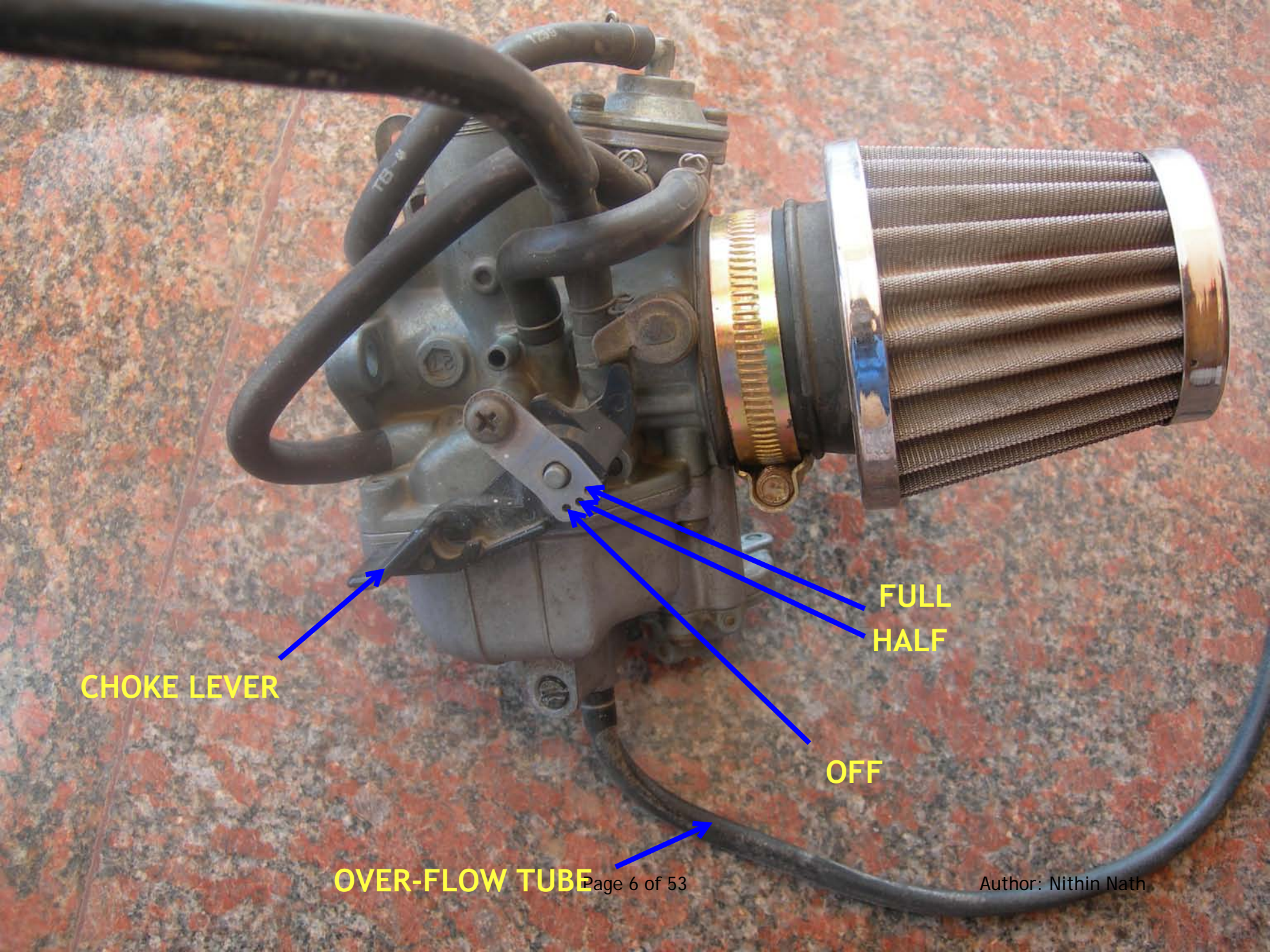
**MOUNTING CLAMP**

**IDLING  
ADJUST  
SCREW**

**THROTTLE  
ACTUATOR**

**CARBURETTOR**





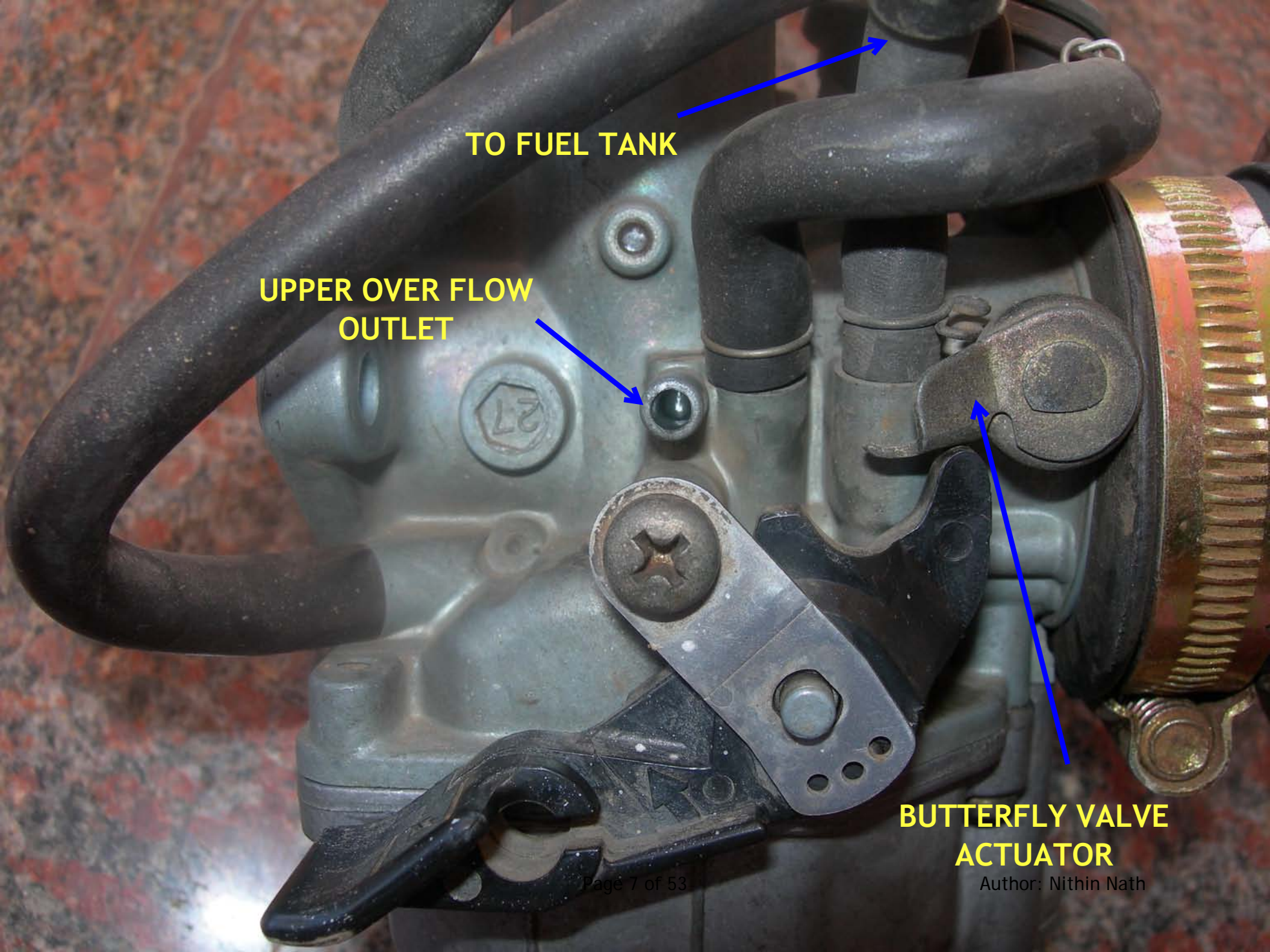
CHOKE LEVER

OVER-FLOW TUBE

FULL  
HALF

OFF





**TO FUEL TANK**

**UPPER OVER FLOW  
OUTLET**

**BUTTERFLY VALVE  
ACTUATOR**



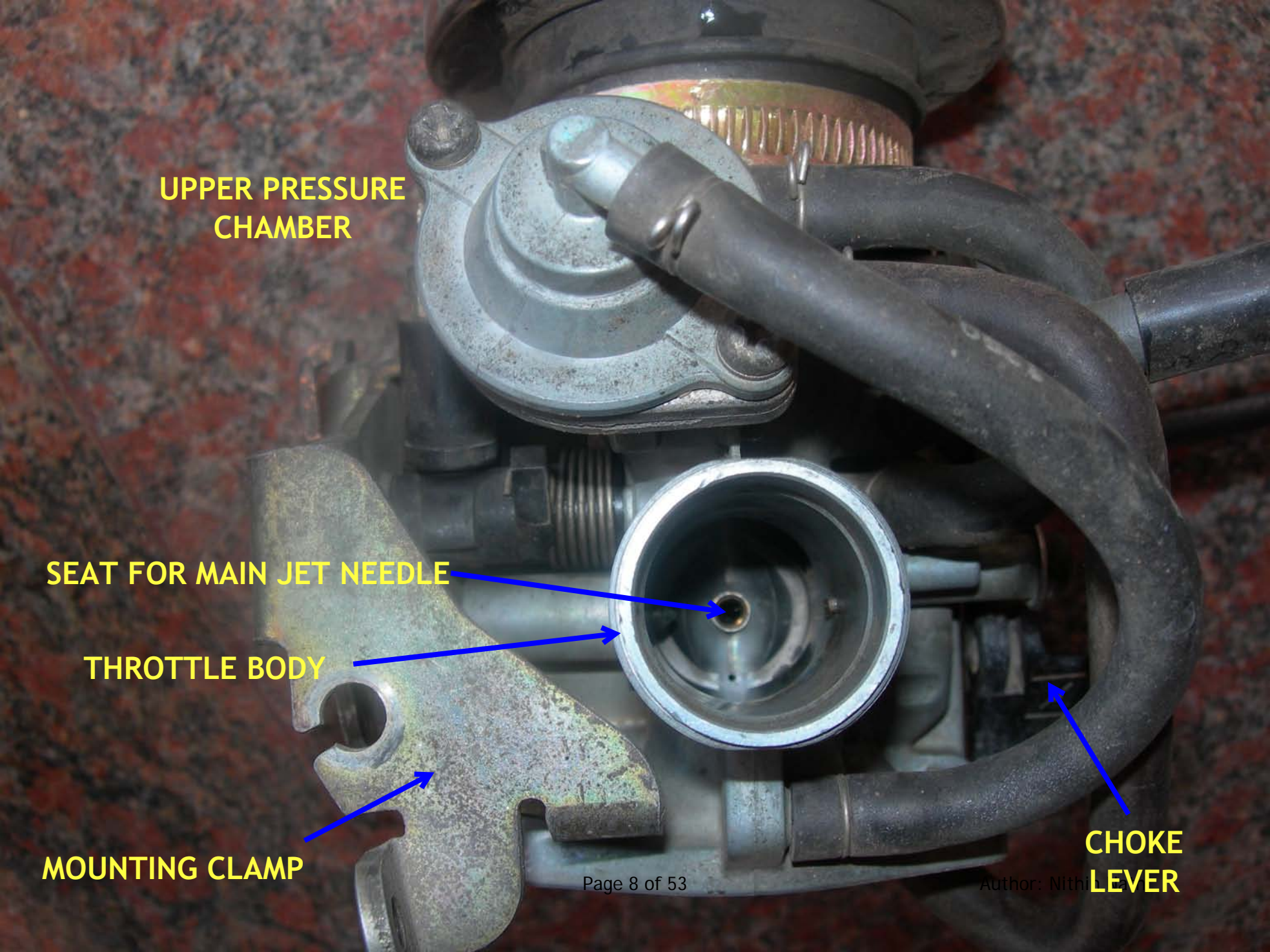
UPPER PRESSURE  
CHAMBER

SEAT FOR MAIN JET NEEDLE

THROTTLE BODY

MOUNTING CLAMP

CHOKE  
LEVER





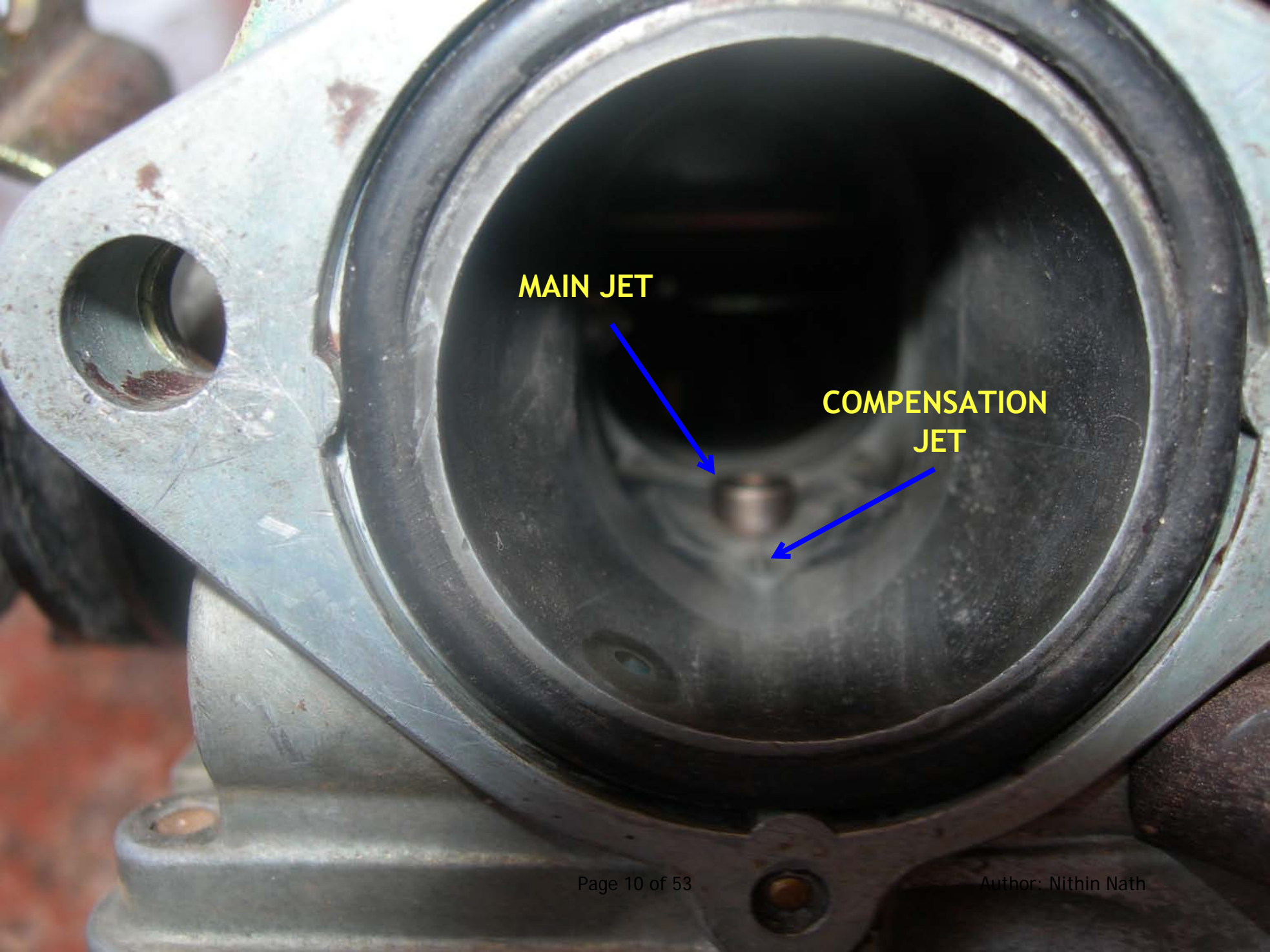
**THROTTLE  
ACTUATOR**

**MOUNTED TO  
ENGINE MANIFOLD**

**AIR SCREW**

**CHOKE  
LEVER**

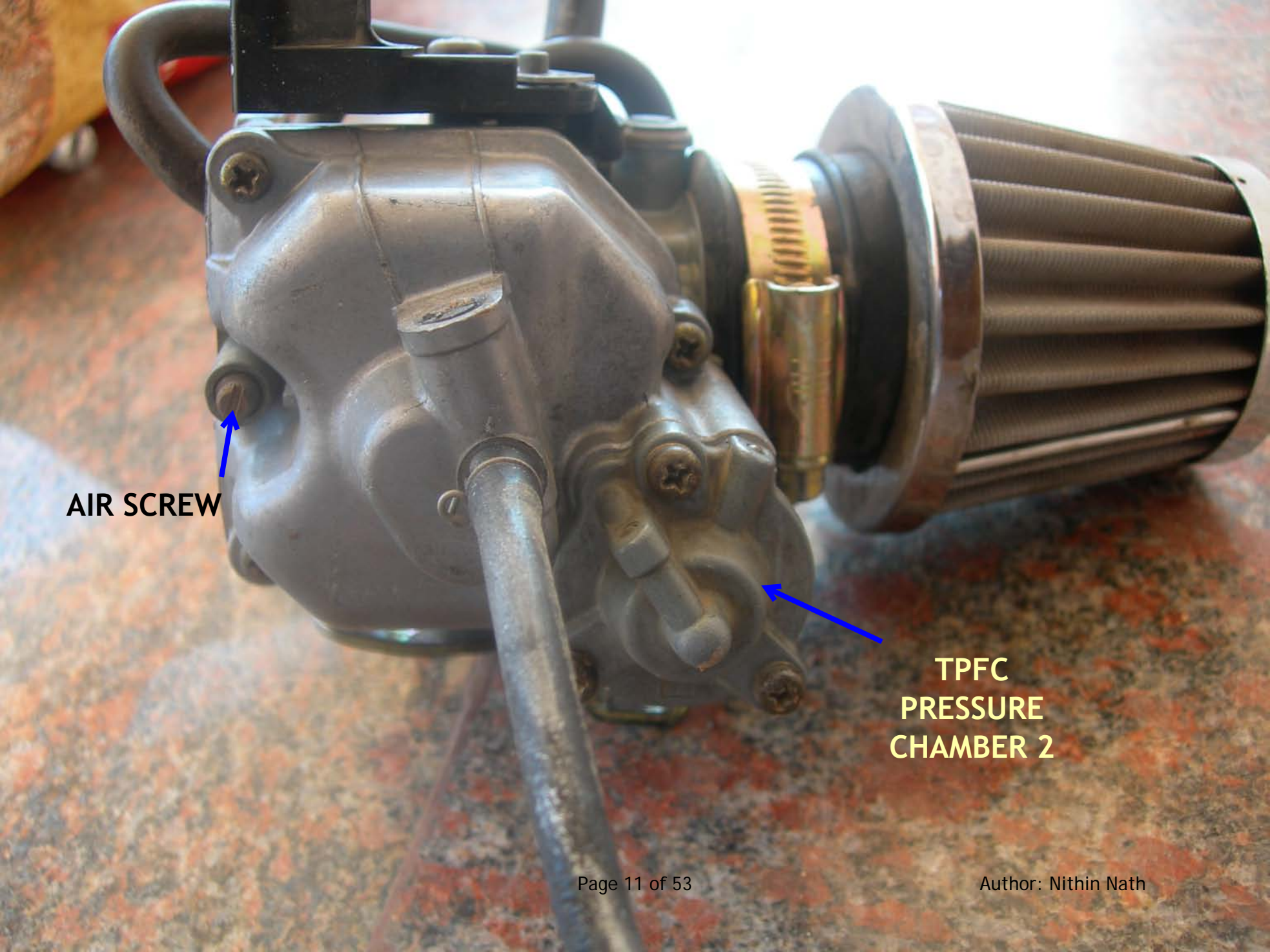




**MAIN JET**

**COMPENSATION  
JET**





AIR SCREW

TPFC  
PRESSURE  
CHAMBER 2



**TOP SIDE  
PRESSURE CHAMBER**





**DIAPHRAGM**



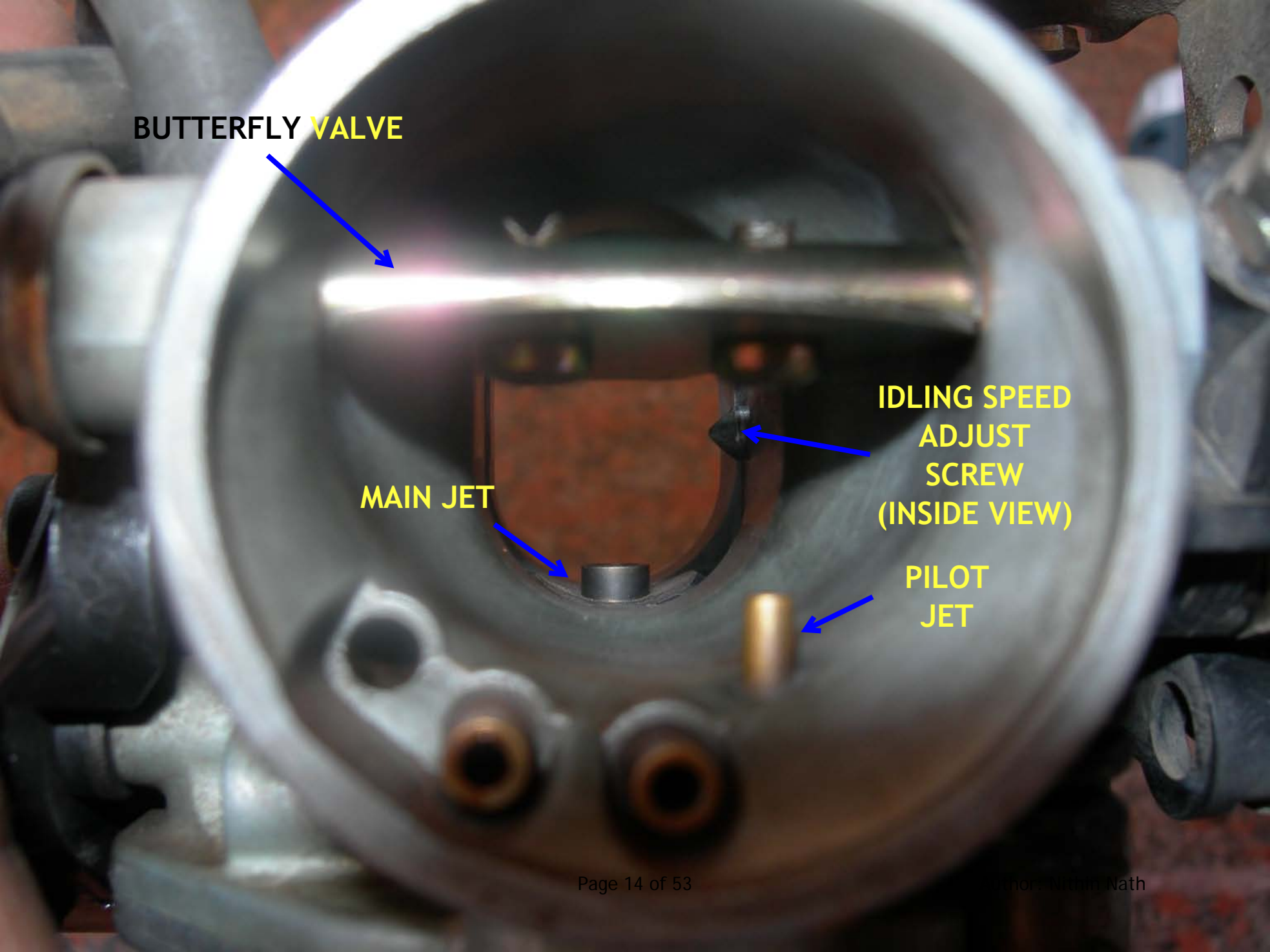
**SPRING**



**TOP SIDE  
PRESSURE CHAMBER CAP**







**BUTTERFLY VALVE**



**MAIN JET**



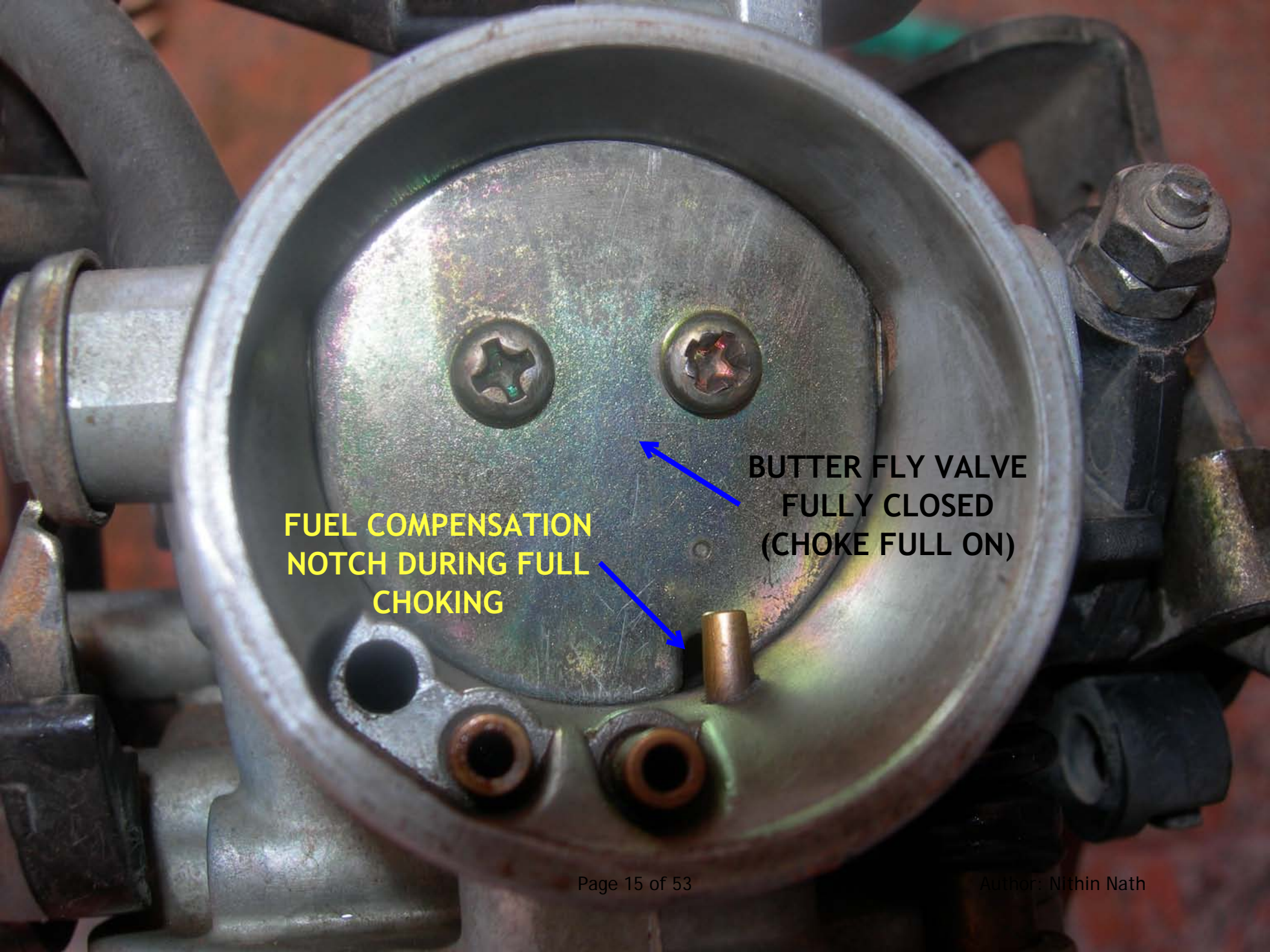
**IDLING SPEED  
ADJUST  
SCREW  
(INSIDE VIEW)**



**PILOT  
JET**



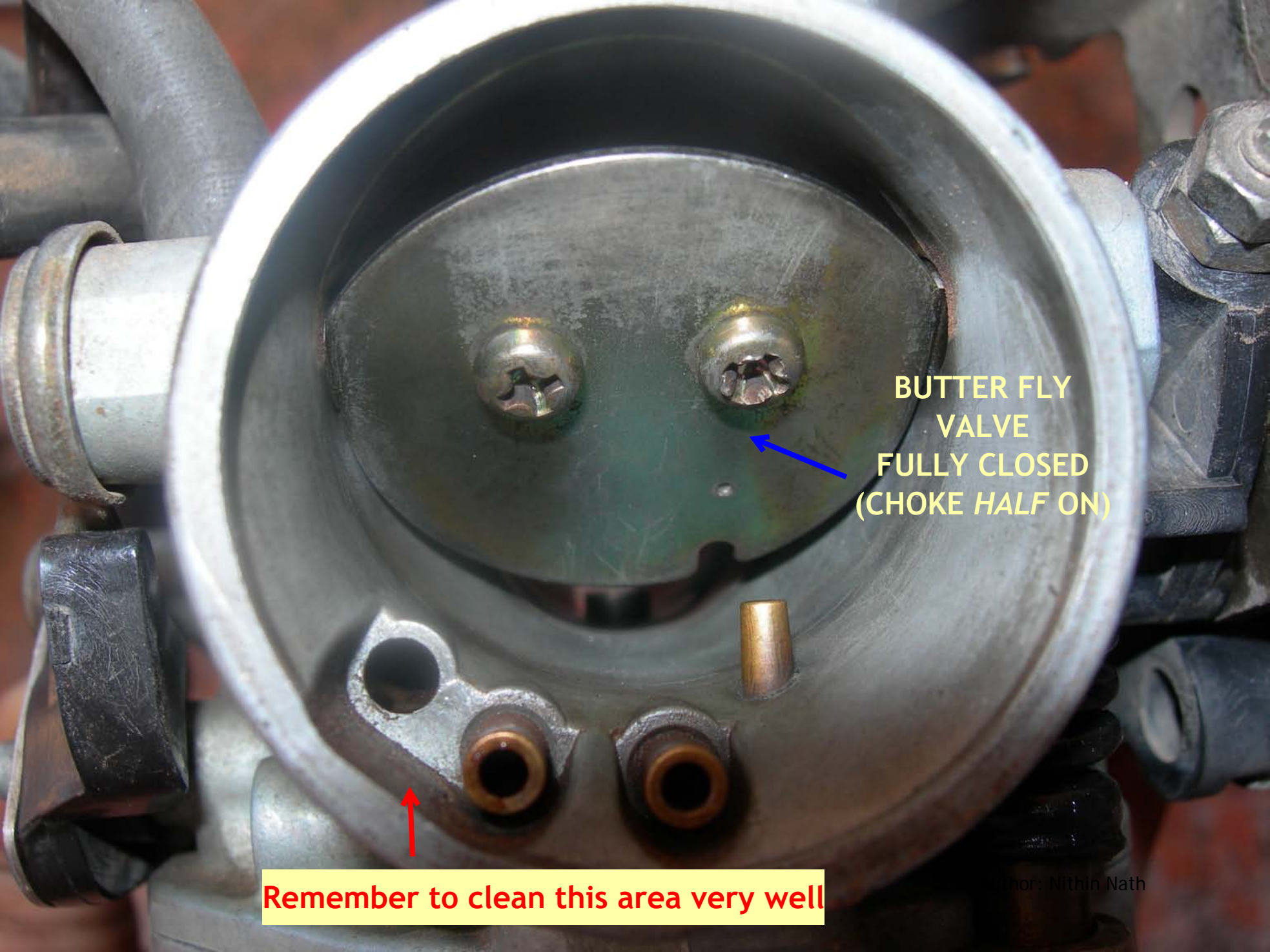




BUTTER FLY VALVE  
FULLY CLOSED  
(CHOKE FULL ON)

FUEL COMPENSATION  
NOTCH DURING FULL  
CHOKING

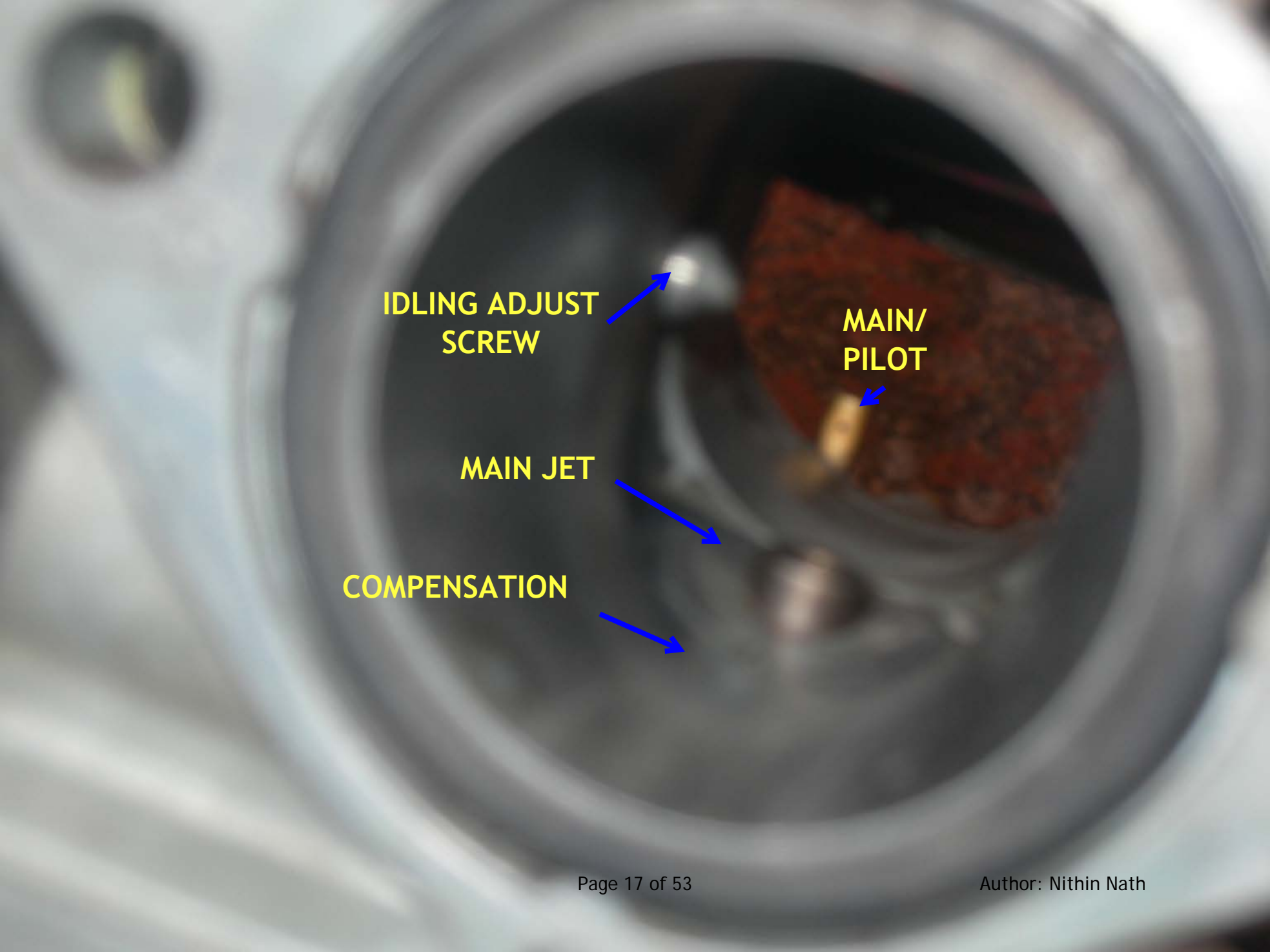




BUTTER FLY  
VALVE  
FULLY CLOSED  
(CHOKE *HALF* ON)

Remember to clean this area very well





**IDLING ADJUST  
SCREW**

**MAIN/  
PILOT**

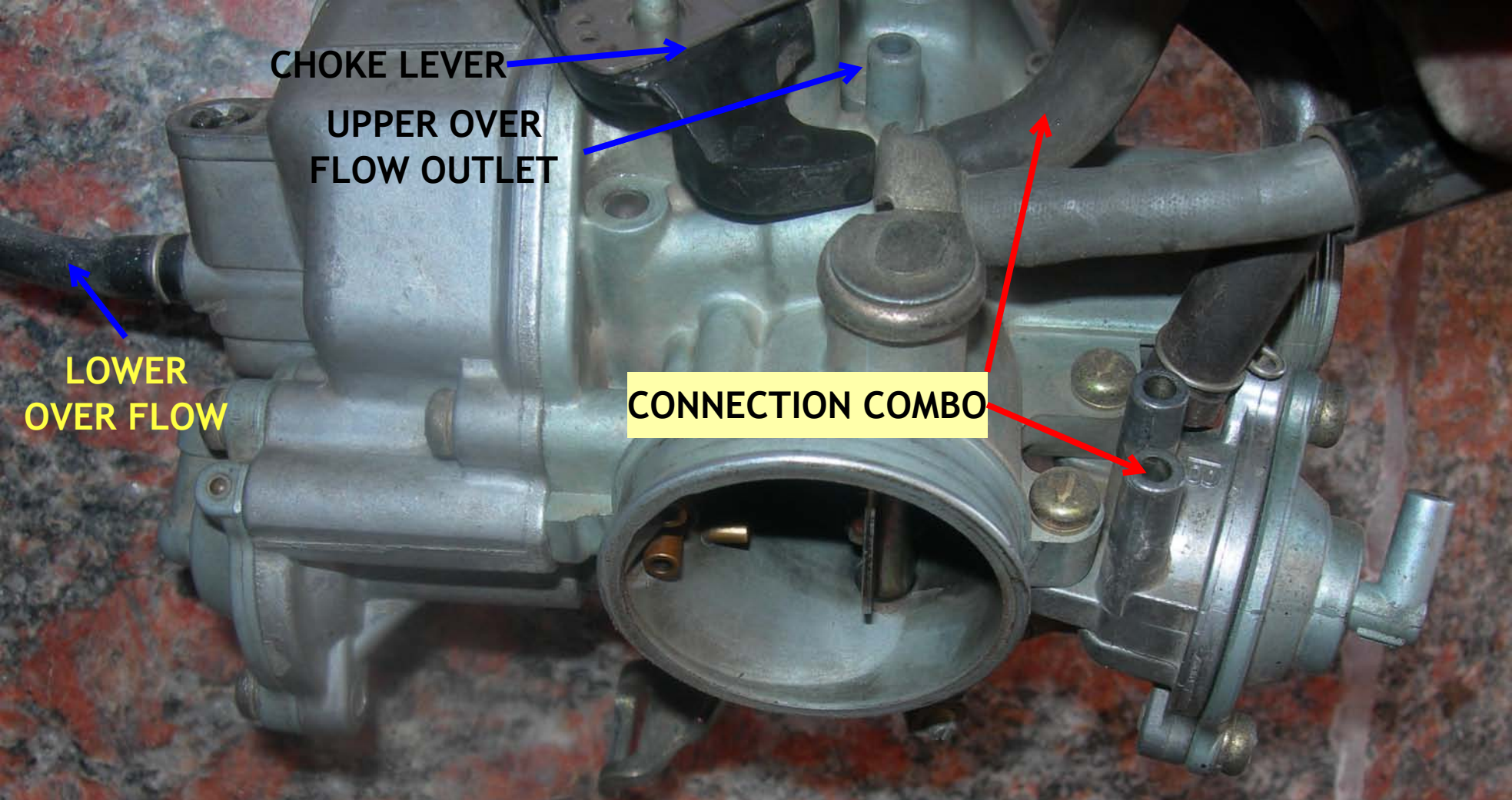
**MAIN JET**

**COMPENSATION**



**CHOKE LEVER  
IN OFF POSITION**





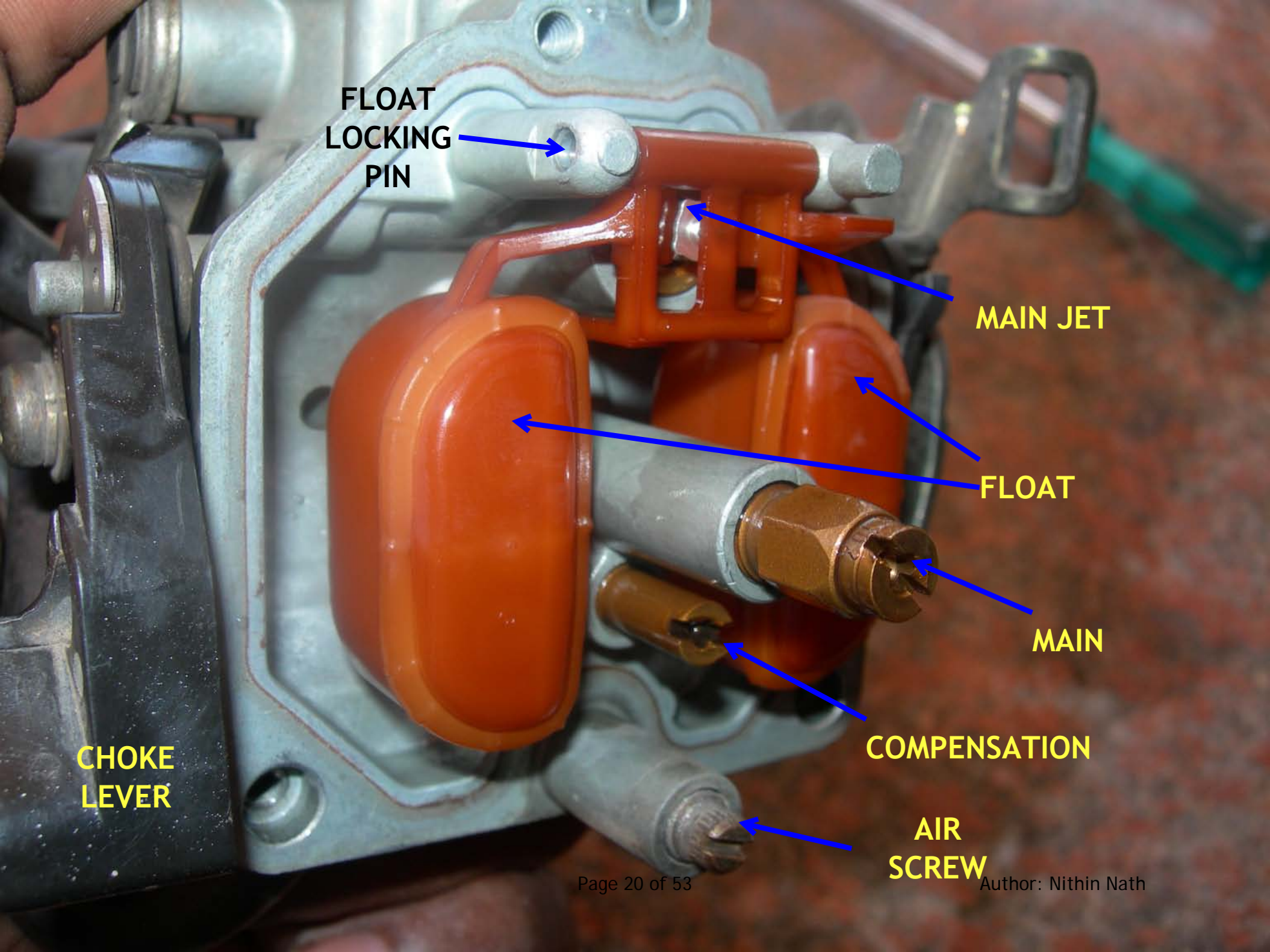
CHOKE LEVER

UPPER OVER  
FLOW OUTLET

LOWER  
OVER FLOW

CONNECTION COMBO





FLOAT  
LOCKING  
PIN

MAIN JET

FLOAT

MAIN

COMPENSATION

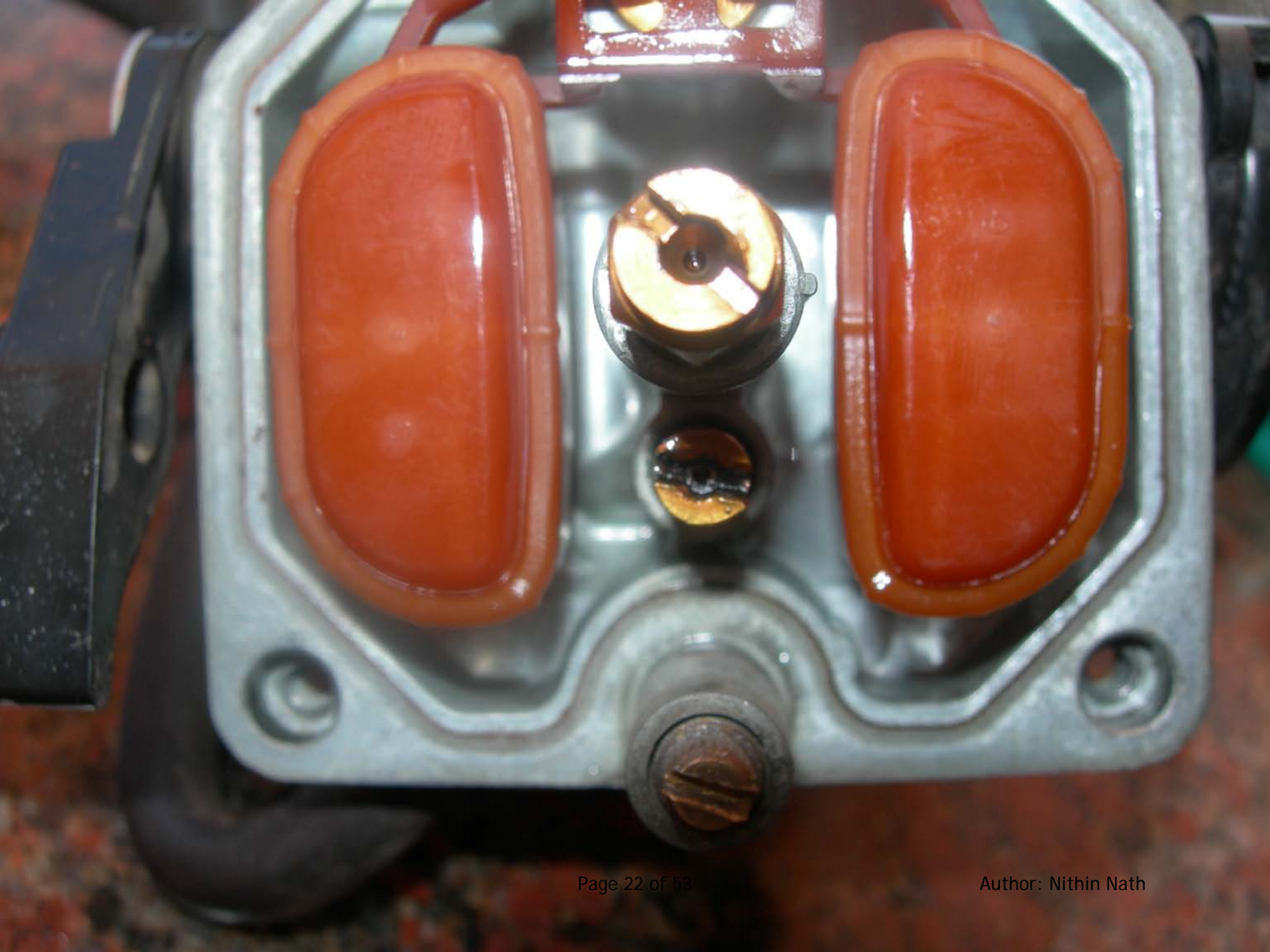
AIR  
SCREW

CHOKE  
LEVER



FLOAT  
LOCKING  
PIN

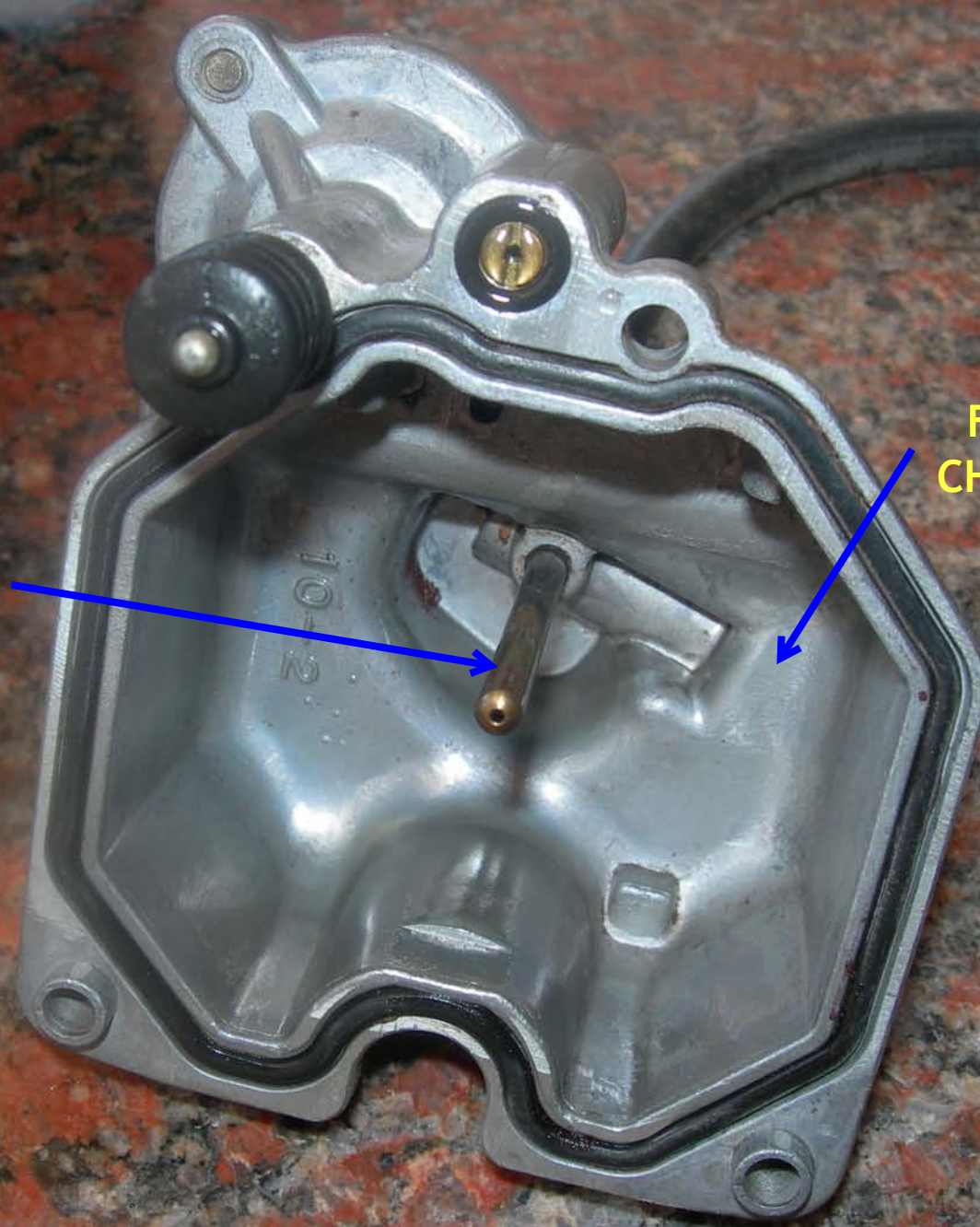






**OVER FLOW  
PIPE OF  
FLOAT CHAMBER**

**FLOAT  
CHAMBER**

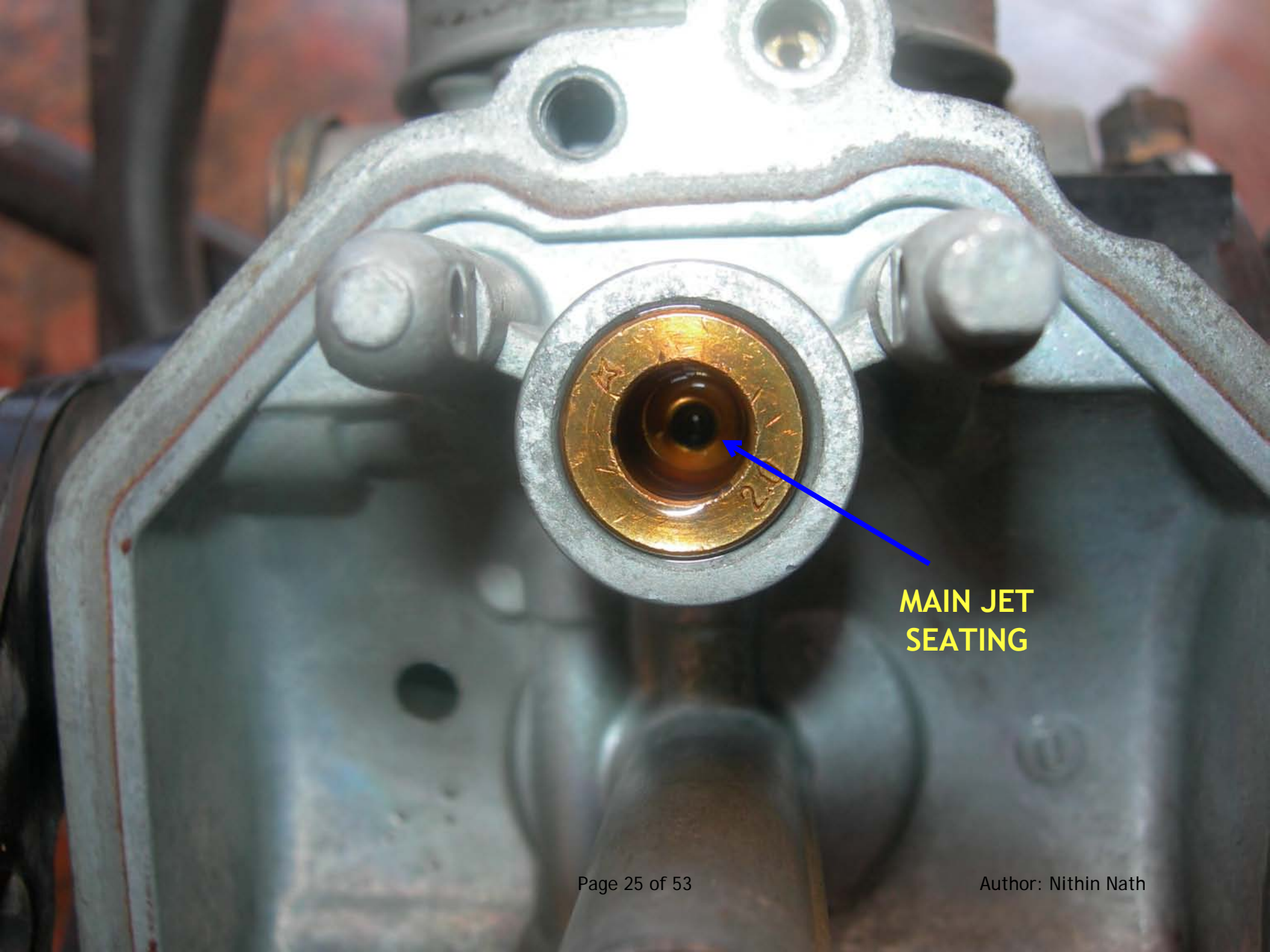




TPFC  
DIAPHRAGM  
ACTUATOR

TPFC  
COMPENSATION  
ORIFICE





**MAIN JET  
SEATING**





FLOAT

MAIN JET



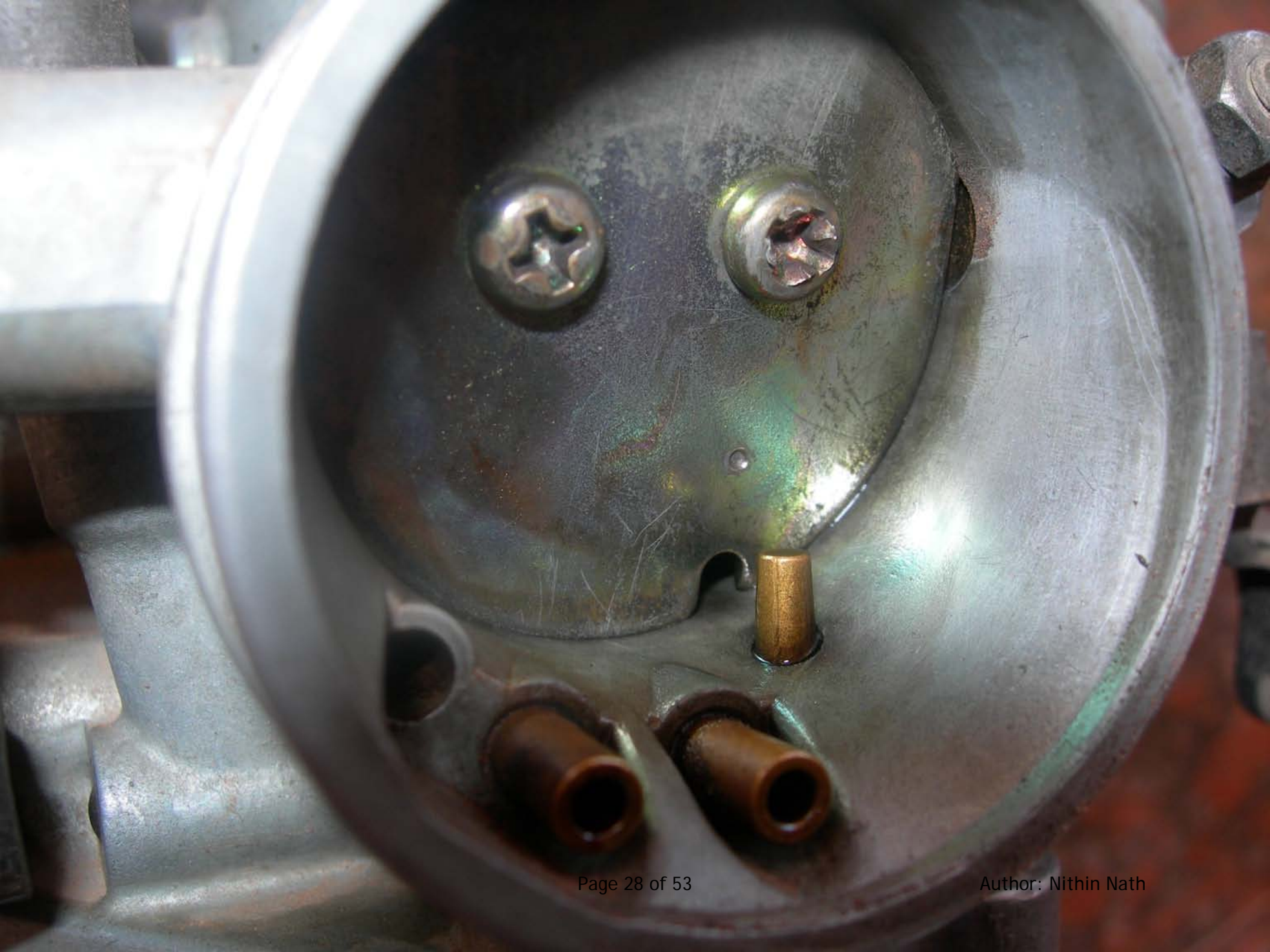
FLOAT LOCK PIN



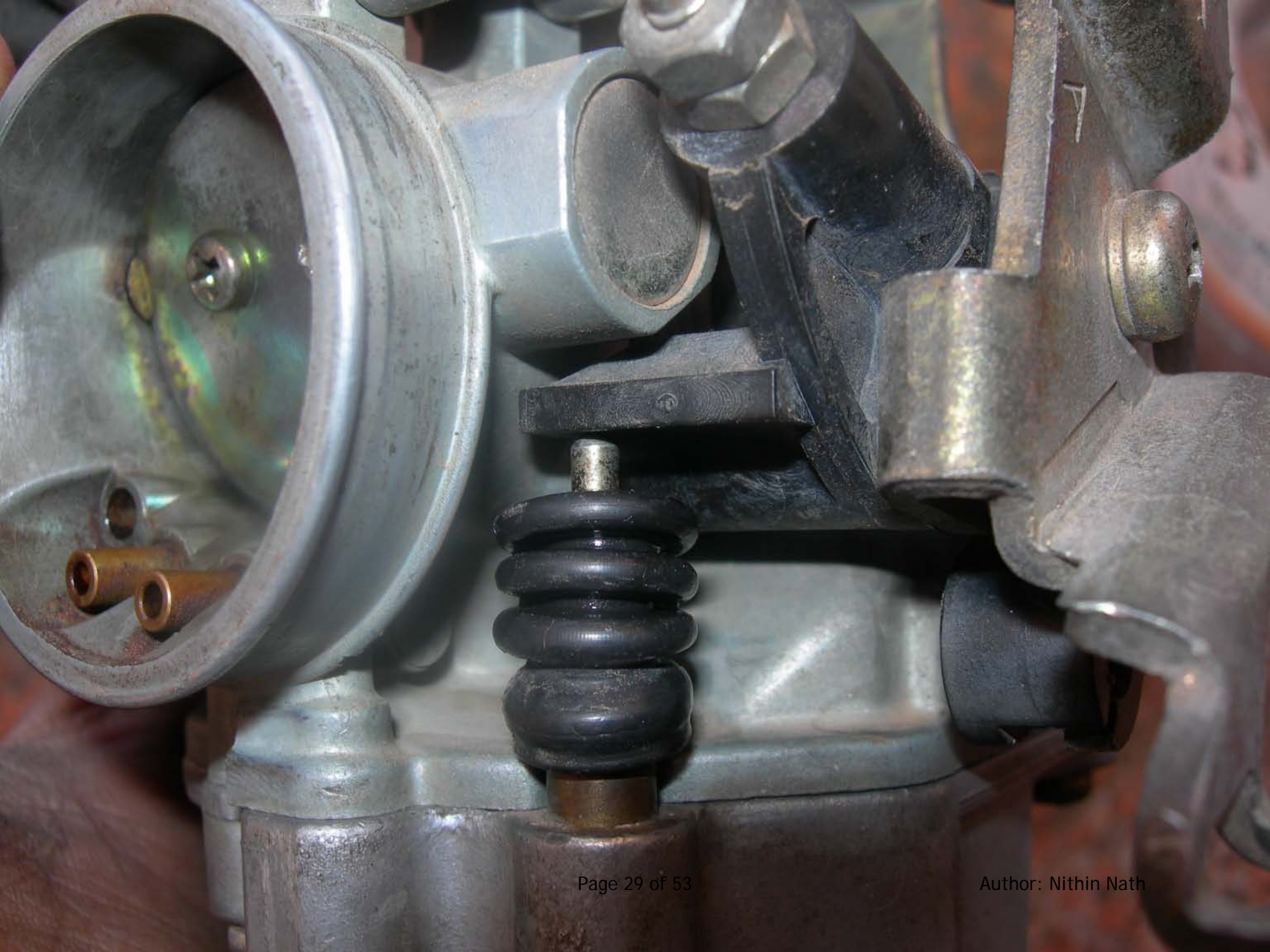




**MAIN JET  
(MOUNTED)**









TPFC JET  
ACTUATOR  
DIAPHRAGM









TPFC PRESSURE  
CHAMBER 2 TOP  
COVER

SPRING






TPFC PRESSURE  
CHAMBER 2 TOP COVER








TPFC PRESSURE  
CHAMBER 2 DIAPHRAGM  
ACTUATED

A close-up photograph of a metallic mechanical assembly. The main body is a cylindrical metal component with a weathered, greyish-brown surface. A blue arrow originates from the text label and points to a small, circular feature on the side of the cylinder. In the background, a hexagonal bolt is visible. The bottom right of the image shows a flange with several circular ports and a central circular opening.



A close-up photograph of a mechanical assembly, likely a diaphragm actuator. The main body is made of polished metal, possibly aluminum, and features a central threaded hole. A dark, circular diaphragm is visible in the foreground, partially obscuring the view of the internal components. The background is a blurred, reddish-brown surface.

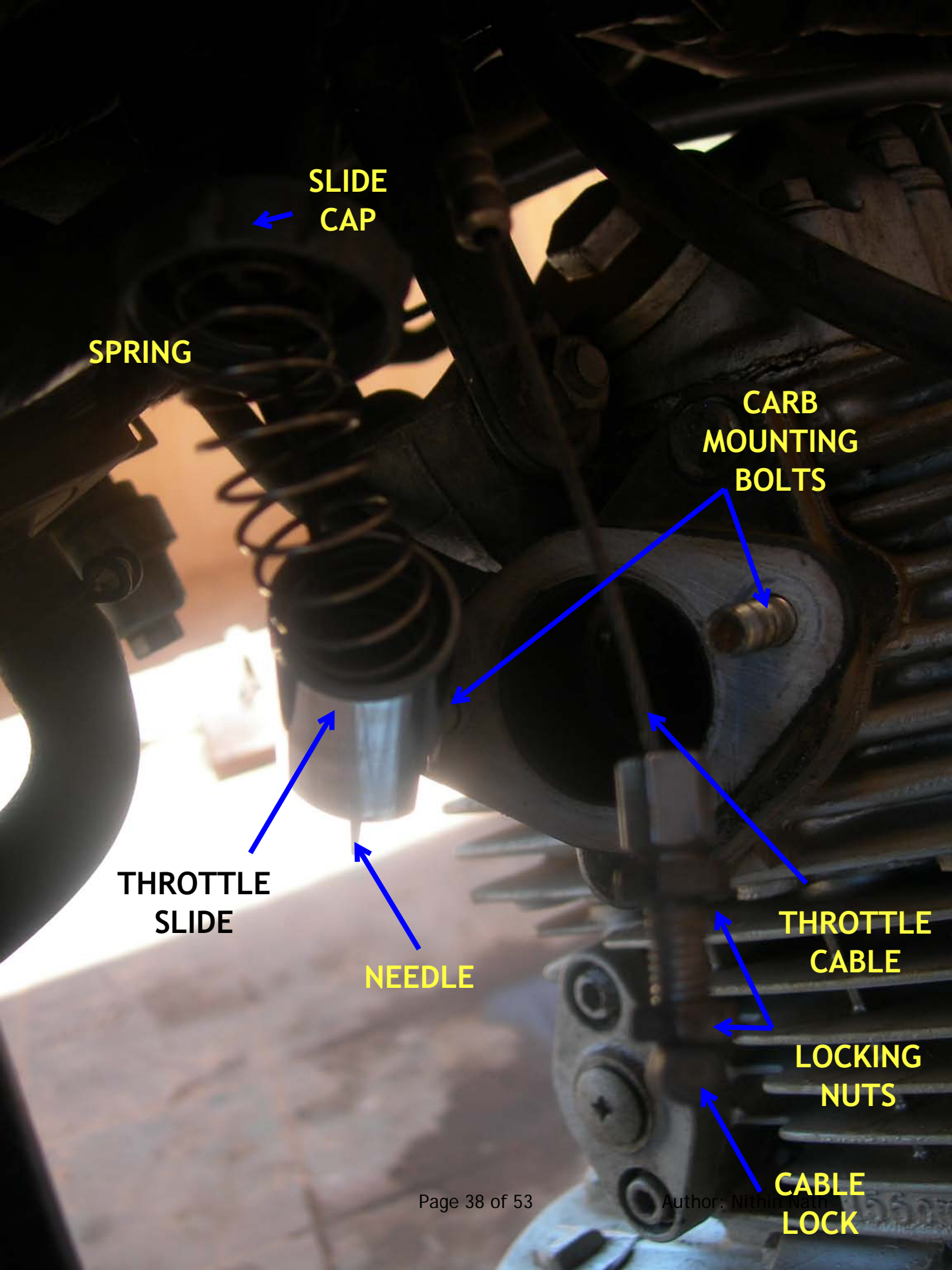
**TPFC PRESSURE  
CHAMBER 2 DIAPHRAGM  
ACTUATED**

A close-up photograph of a mechanical component, identified as a throttle slide body. The component is made of a light-colored metal, possibly aluminum, and shows signs of wear and corrosion. A large, curved metal tube, likely made of steel, is attached to the side of the slide body. The tube has a rough, dark interior and a small metal ring at its end. The background is a dark, textured surface, possibly a workbench or engine block.

**THROTTLE  
SLIDE BODY**







SLIDE  
CAP

SPRING

CARB  
MOUNTING  
BOLTS

THROTTLE  
SLIDE

NEEDLE

THROTTLE  
CABLE

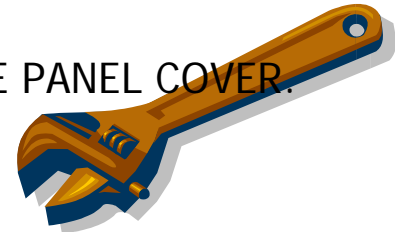
LOCKING  
NUTS

CABLE  
LOCK



## INSTRUCTIONS

- ON THE RIGHT HAND SIDE OF UR BIKE, FIRSTLY REMOVE THE SIDE PANEL COVER.
- AIR FILTER REMOVAL



### A. STOCK FILTER

1. IF YOU HAVE A STOCK AIR FILTER, YOU WILL NEED TO REMOVE THE DUCT. IT IS THE BLACK RUBBER DUCT WHICH IS CONNECTING THE AIR FILTER BOX AND CARBURETTOR INLET.
2. LOOSEN THE SCREW WHICH HOLDS THE CLAMP OF THIS DUCT NEAR THE CARBURETTOR INLET.
3. DISCONNECT THE DUCT FROM CARB SIDE. THEN YOU COULD ROTATE IT IN A POSITION WHICH WILL NOT BLOCK YOUR ACCESS TO THE CARB.
4. IF YOU CHOOSE TO REMOVE THIS DUCT, YOU WILL NEED TO CAREFULLY DO IT SINCE THERE IS A SMALL PLASTIC CHAMBER ATTACHED ON THIS DUCT (MIDWAY).
5. THE CARB CAN BE REMOVED EVEN WITH THE DUCT CONNECTED TO AIR BOX.

### B. PERFORMANCE FILTERS

1. IF YOU CAN MANAGE TO REMOVE CARB WITHOUT DISTURBING FILTER, WELL AND GOOD.

2. ELSE SUGGEST YOU REMOVE THE FILTER COZ ANYWAYS YOU'L NEED TO WASH IT AND CLEAN THE INLET SIDE OF CARB.

- REMOVE THE BLACK COVER (IF U STILL HAVE IT!!!! ;)) SHIELDING THE CARB BY REMOVING THE 2 '+' SCREWS.
- THE CARB HAS A 2-POINT MOUNTING ON THE ENGINE. USING A 'SIZE 10' SPANNER, LOOSEN THE NUTS.
- BE CAREFUL NOT TO REMOVE THE INTERMEDIATE PIECE CONNECTING CARB TO ENGINE. IT NEEDS A SMALLER SPANNER ANYWAYS ☺
- ONLY LOOSEN NUTS OF THE CARB MOUNT.
- ON TOP OF THE CARB, LOOSEN THE CAP WITH A CABLE RUNNING THROUGHT ITS MIDDLE. THIS IS THE CAP FOR THE SLIDER'S BODY. IT WILL USUALLY LOOSEN BY HAND ITSLEF. ELSE USE PLIERS
- DO NOT RELEASE IT YET. WAIT... HAVE PATIENCE...
- NOW YOU WILL NEED TO DISCONNECT THE ACCELERATOR CABLE.
- THERE ARE 2 NUTS HOLDING THIS CABLE TO THE CLAMP FIXED ONTO THE CARB'S SIDE. LOOSEN THEM. FOR ALL SUCH ACTIVITIES, I HAVE USED MY *BOSCH IXO* POWER



SCREW DRIVER... LIFE MADE EASY ☺

- IF U NOTICE, THERE IS THIS BLACK LEVER, ACTUATED BY THE CABLE. IF THIS IS PULLED UP, IT ACTUATES THE OPENING OF JET ORIFICE. OK OK... LEAVE IT NOW. LET'S COME BACK TO THE TOPIC. THE IDEA IS TO PUSH THE BLACK LEVER UP USING UR FINGER AND TRY TO RELEASE THE CABLE FROM ITS LOCKING POSITION.
- ONCE YOU ARE DONE... THE CARB IS READY TO BE REMOVED... BY THE WAY... HAVE YOUR REMOVED THE DAMN TUBE FROM THE TANK TO CARB????
- NOW YOU CAN SLOWLY PULL OUT THE TOP CAP FROM THE CARB. THE THING COMES OUT ALONG WITH A SPRING AND THE SLIDER + NEEDLE.. CAREFUL NOT TO SCRATCH THIS SLIDER OR BEND THE NEEDLE.
- SUGGEST YOU COVER THIS WITH PLASTIC COVER ONCE YOU REMOVE THE CARB.
- THERE IS ONE MORE TUBE TO BE DISCONNECTED. BUT NOW SLIDE OUT THE CARB FROM THE STUDS ON ENGINE MANIFOLD. ITS EASY... NOW BEFORE ATTEMPTING ANY HEROICS, THERE IS ONE MORE TUBE ATTACHED... ITS OVER FLOW LINE... DISCONNECT IT FROM THE CARB'S SIDE.
- PULL OUT THE BOTTOM DRAIN TUBE.... A VERY LOOOOOOOOOOOOOOOOOOONG AND LEAN ONE. ...WAIT WAIT... DON'T PULL OUT FROM CARB... JUST LET IT BE THERE...

ONLY MAKE SURE IT COMES ALONG WITH THE CARB FREELY.

- DISCONNECT AIR FILTER FROM CARB IF U HAVE THE PERF ONES
- NOW IT DEPENDS HOW YOU WISH TO CLEAN IT. I HAVE WASHED THE ENTIRE CARB WITH DETERGENT AND AN OLD TOOTH BRUSH!!! :p SO ITS NOT AN ISSUE
- BE CAREFUL NOT TO TILT THE CARB. THE FUEL WILL START COMING OUT OF BOTH OVER FLOW OUTLETS AND ALSO FROM VENTURI AREA. SO TRY UR BEST TO DRAIN IT TO A CUP... I HAVE FAILED ALL 3 TIMES I HAVE TRIED ☺ DAMN IT KEEPS COMIING FROM THE PLACE I AM NOT POINTING TOWARDS THE COLLECTING CUP!
- HAVE A LOOK AT HOW MUCH DIRT IS THERE AT THE INLET. CHECK IF YOUR BUTTERFLY VALVE WORKS FINE BY CHANGING CHOKE LEVER POSITON.
- AT THE UNDERSIDE OF YOUR CARB, YOU WILL NOTICE 3 '+' SCREWS CONNECTING THE 2HALVES OF THE CARB. LOOSEN TEM.
- BEFORE ATTEMPTING TO SPLIT THE HALVES, MAKE SURE U OPEN SLOWLY SO THAT U CAN DRAIN OUT ALL FUEL FROM THE FLOAT CHAMBER (BOTTOM HALF).
- WHILE SEPERATING THE HALVES, U WILL NOTICE THAT THERE IS THIS ACTUATOR FOR BOTTOM SIDE DIAPHRAGM.. THE TPFC THING! THE ACTUATOR HAS A RUBBER SHEATH SIMILAR TO THE COVER YOU FIND ON FRONT TELESCOPIC FORKS OF FEW BAJAJ BIKES.



BE CAREFUL NOT TO DAMAGE IT WHILE REMOVING.

- ONCE YOU ARE DONE WITH SPLITTING THEM, CHECK FOR DIRT EVERYWHERE.
- NEXT STEP IS TO DISMANTLE THE TPFC DIAPHRAGM UNIT. THERE ARE 3 SCREWS FOR THIS ONE. LOOSEN THEM ONE BY ONE COZ THERE IS A SPRING INSIDE... BE CAREFUL NOT TO HAVE UR FACE CLOSE TO IT...
- ONCE YOU HAVE REMOVED IT... AND SETTLED OUT CLEANING THE BLOODY FLOW OF FUEL THAT WUD HAVE SPILLED OUT ONTO UR TROUSERS FROM THAT UNIT... DOMN NO WONDER THE BIKE'S FUEL CONSUMPTION IS SO BAD WITH TPFC ON!
- ONCE YOU REMOVE THE COVER OF THIS UNIT, LOOK OUT FOR WHITE POWDERY OR STICKY MATTER. LOOKS LIKE WET CHALK POWDER... DONNO... IN MY CARB I FOUND THIS ☹
- SIMILARLY YOU CAN REMOVE THE TOP SIDE DIAPHRAGM... THIS IS A BIG BULLY... SO BE CAREFUL... IT'S GOT A VERY POWERFUL SPRING. I WONDER IF IT WILL EVER GET ACTUATED AGAINST THAT SPRING FORCE!
- NOW PROCEED TO REMOVE THE FLOAT (THE BROWN PLASTIC THING). JUST PUSH THE PIN FORM ONE END USING A NEEDLE (... HELLOO... DON'T USE THE NEEDLE WHICH IS HANGING FROM THE SLIDE FOR GOD'S SAKE!!!)

- ONCE U PULL OUT THE PIN, CAREFULLY REMOVE THE FLOAT AS THE JET IS PLACED ON IT. NOW CAREFULLY STORE THE JET NEEDLE... ELSE BE PREPARED TO SPEND A GOOD 800BUX... AND GOD SAVE YOU IF STOCKS ARE OUT!!
- NOW THE CARB BELONGS TO YOU... REMOVE THE TUBES AND START CLEANING THE CARB. YOU CAN USE PETROL TO CLEAN FIRST AND THEN IF YOU DO WISH... USE DETERGENT AND WATER. DON'T FORGET TO CLEAN THE SLIDER HANGING NEAR YOUR ENGINE.
- IN EITHER CASE... ONCE YOU ARE DONE... ALLOW TO DRY...
- NOW BLOW EVERY TUBE AND ORIFICE AND MAKE SURE YOU HAVE DRIVEN OFF ALL WATER/FUEL.
- DOUBLE CHECK NO DUST OR DIRT ANYWHERE... ELSE YOU HAVE WASTED YOUR TIME.
- ASSEMBLE THE STUFFS BACK (AAH... I FEEL SO RELIEVED... FINISHED IT OFF IN A SENTENCE 😊)
- MAKE SURE NO SCREWS REMAIN. :p
- ENSURE YOU CONNECT ALL THE TUBES TO THE RIGHT PLACES BEFORE YOU MOUNT THE CARB.



- WHILE FIXING THE CAP FOR THE TOP PRESSURE CHAMBER, MAKE SURE IT IS POINTED TO WARDS THE CARB... ELSE THE TUBE WON'T REACH IF U FIT FACING OTHER SIDE.
- ONCE YOU HAVE MOUNTED THE CARB ON THE ENGINE STUDS, PLACE THE SLIDER SLOWLY INTO THE THROTTLE BODY. JUST KEEP ROTATING IT SO THAT IT SLIDES PROPERLY INTO THE SLOT.

### STARTING

1. ONCE YOU HAVE FIXED EVERYTHING BACK TO AS IT WAS BEFORE, CONNECT THE TOP OVERFLOW DRAIN PIPE TO THE CARB, AND THE LINE THAT GOES TO TANK.
2. DO NOT FIT BACK YOUR SIDE PANEL OR THE CARB'S COVER. KEEP A '-' SCREW DRIVER READY.
3. IN CASE YOU HAVE REMOVED THE IDLING SCREW FOR CLEANING. REPLACE IT AND ROTATE IT CLOCKWISE FULLY.
4. PUT CHOKE TO ON POSITION. AND TURN UR FUEL KNOB ON.
5. WITH ACCELERATOR DEPRESSED FULL, KICK TWICE (FORGET UR DAMNED STARTER MOTOR IF U OWN A CBZ\*!)
6. THEN JUST ROTATE THROTTLE LEVER COUPLE OF TIMES WITHOUT KICKING.

7. NOW TRY STARTING THE BIKE WITH IGNITION KEY ON. DO NOT GIVE THROTTLE INPUT!
8. IF IT DOESN'T START, TRY WITH CHOKE AT HALF OR OFF. MUST START.
9. ELSE TRY ROTATING THE IDLING SCREW COUNTERCLOCKWISE 1-2 TURNS.
10. NOW THE ENGINE **MUST** START!
11. IF IT DID... THEN IF YOU KNOW HOW TO TUNE YOUR BIKE... GO AHEAD...

FOR OTHERS WHO HAVE REMOVED THE IDLING SCREW AND DO NOT KNOW HOW TO TUNE YOUR BIKE..... GOOD LUCK...

THANKS FOR BEING A DAREDEVIL! ... 😊



### TUNING TIP...

OK... JUST SMALL TUNING TIP... THIS IS WHAT I DO

1. TURN YOU IDLING SCREW TO MAX AND ROTATE ANTICLOCKWISE 2 TURNS AND YOU FIND YOUR ENGINE SPEED CLIMBING.
2. TRY ROTATING THE AIR SCREW AT THE BOTTOM OF THE CARB. ITS GOING TO MAKE U CRAZY IF I TELL YOU CLOCKWISE FROM A PARTICULAR DIRECTION. SO ROTATE IT TO MAKE UR ENGINE GO TOWARDS THE 8000REV MARK. BTW, ITS NOT POSSIBLE TO ROTATE THE AIR SCREW EASILY. I SUGGEST U USE A 2-3mm WASHER FOR THIS PURPOSE.
3. ROTATE IDLING SCREW COUNTERCLOCKWISE TO REDUUCE SPEED TO AROUND 3000RPM.
4. NOW REDUCE SPEED BY TURNING THE AIR SCREW. FINE ADJUST UR IDLING SPEED TO AROUND 1000RPM. ONCE YOUR ENGINE WARMS UP, THIS WILL CLIMB TO 1300+ RPM.

BTW .... I HOPE YOU HAD SWITCHED OFF THE CHOKE BEFORE ATTEMPTING THIS!

## Carburetor and Fuel System Troubleshooting Guide

This guide covers problems and solutions routinely encountered on stock and mildly modified motorcycle engines. As the horsepower goes up, so does the number of potential situations that impact performance or create problems. When the carburetor is acting up on a performance engine, these basic problems must be eliminated as a source of the problem before going on to performance tuning the carburetor.

Click if you have:

Fuel Overflow

Poor Idling

Poor Fuel Economy

Poor Acceleration

Hard Starting

Poor Road Performance

Poor High Speed Performance

Condition	Check For This Problem	Fix the problem by:
OVERFLOW	<ol style="list-style-type: none"> <li>1. Restricted fuel tank vent system.</li> <li>2. Loose float bowl screws.</li> <li>3. Damaged float bowl O-ring.</li> <li>4. Damaged or leaking float assembly.</li> <li>5. Particle contamination in fuel inlet fitting cavity.</li> <li>6. Worn or dirty inlet valve or seat.</li> <li>7. Improper fuel level in float bowl.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correct restricted hose. Replace vapor vent valve.</li> <li>2. Tighten screws.</li> <li>3. Replace O-ring.</li> <li>4. Replace float assembly.</li> <li>5. Clean and clear cavity and fuel supply tract.</li> <li>6. Clean or replace valve and clean seat.</li> <li>7. Adjust float tab for correct fuel level.</li> </ol>
POOR IDLING	<ol style="list-style-type: none"> <li>1. Idle speed improperly adjusted.</li> <li>2. Inlet system air leak (faster idling).</li> <li>3. Loose low speed jet.</li> <li>4. Contaminated or plugged low speed system.</li> <li>5. Enrichener valve not seated or leaking.</li> <li>6. Leaking accelerator pump.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust operating idle speed.</li> <li>2. Correct as required.</li> <li>3. Tighten jet.</li> <li>4. Clean, clear and correct as required.</li> <li>5. Adjust, clean or replace.</li> <li>6. Repair.</li> </ol>
POOR FUEL ECONOMY	<ol style="list-style-type: none"> <li>1. Excessive use of enrichener system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Limit system use.</li> </ol>



	<ul style="list-style-type: none"> <li>2. Enrichener valve not seated or leaking.</li> <li>3. Dirty air cleaner filter element.</li> <li>4. Restricted fuel tank vent system.</li> <li>5. High speed riding style.</li> <li>6. Idle speed improperly adjusted.</li> <li>7. Loose jets.</li> <li>8. Fuel level too high.</li> <li>9. Plugged or restricted bowl vent.</li> <li>10. Worn or damaged needle or needle jet.</li> <li>11. Vacuum piston assembly malfunction.</li> <li>12. Plugged air jets or passages.</li> <li>13. Excessive accelerator pump output.</li> <li>14. Idle mixture screw adjusted to far out</li> </ul>	<ul style="list-style-type: none"> <li>2. Adjust, clean or replace.</li> <li>3. Clean or replace as required.</li> <li>4. Correct restricted hose. Replace vapor vent valve.</li> <li>5. Modify riding habits.</li> <li>6. Adjust operating idle speed.</li> <li>7. Tighten jets.</li> <li>8. Adjust float tab for correct fuel level.</li> <li>9. Clean and clear passages.</li> <li>10. Replace needle or needle jet.</li> <li>11. Check Vacuum Piston Assembly. See troubleshooting chart.</li> <li>12. Clean, clear and correct as required.</li> <li>13. Check and clean accelerator pump bypass orifice.</li> <li>14. Set idle mixture screw to 2 to 3 turns out.</li> </ul>
POOR ACCELERATION	<ul style="list-style-type: none"> <li>1. Throttle cables misaligned.</li> <li>2. Inlet system air leak.</li> <li>3. Restricted fuel tank vent system.</li> <li>4. Restricted fuel supply passages.</li> <li>5. Plugged bowl vent or overflow.</li> <li>6. Enrichener valve not seated or leaking.</li> <li>7. Worn or damaged needle or needle jet.</li> <li>8. Vacuum piston malfunction.</li> </ul>	<ul style="list-style-type: none"> <li>1. Adjust throttle cables.</li> <li>2. Correct as required.</li> <li>3. Correct restricted hose. Replace vapor vent valve.</li> <li>4. Correct and clear restriction.</li> <li>5. Clean and clear passages.</li> <li>6. Adjust, clean or replace.</li> <li>7. Replace assembly.</li> <li>8. Check Vacuum Piston Assembly. See troubleshooting chart.</li> </ul>

	<p>9. Plugged jets or passages.</p> <p>10. Fuel level too low.</p> <p>11. Accelerator pump leaking or no output.</p>	<p>9. Clean and clear as required.</p> <p>10. Adjust float tab for correct fuel level.</p> <p>11. Repair as necessary</p>
HARD STARTING	<p>1. Choke (Enrichener system) plugged, not properly functioning or improperly operated.</p> <p>2. Inlet system air leak.</p> <p>3. Restricted fuel supply. No fuel in float bowl.</p> <p>4. Fuel overflow.</p> <p>5. Plugged slow jet or passages</p> <p>6. On high compression (over 10:1) engines, excessive voltage drop to the ignition coil can cause hard starting. A clear indication that this is the problem is that the engine wants to start after releasing the starter button.</p>	<p>1. Clean, adjust or replace; or read Owner's Manual.</p> <p>2. VOES vacuum hose not connected. Correct as required.</p> <p>3. Correct fuel supply or passages.</p> <p>4. Float level wrong. Fuel needle and seat need replacement. Fuel petcock left on while bike not running.</p> <p>5. Clean, clear and correct as required.</p> <p>6. Wire the coil directly to the battery using an air conditioning relay.</p>
More HARD STARTING - COLD	1. Throttle plate not closed	1. Adjust throttle cables.
More HARD STARTING - HOT	1. Idle mixture screw adjusted to far out.	1. Set idle mixture screw between 2 and 3 turns out.
POOR PERFORMANCE ON ROAD	<p>1. Idle speed improperly adjusted.</p> <p>2. Inlet system air leak.</p> <p>3. Restricted fuel tank vent system.</p> <p>4. Dirty or damaged air cleaner element.</p> <p>5. Enrichener valve not seated or leaking.</p> <p>6. Restricted fuel supply tract.</p> <p>7. Plugged bowl vent or overflow.</p> <p>8. Loose or plugged fuel and air jets or passages.</p> <p>9. Worn or damaged needle or needle jet.</p>	<p>1. Adjust operating idle speed.</p> <p>2. Correct as required.</p> <p>3. Correct restricted hose. Replace vapor vent valve.</p> <p>4. Clean or replace.</p> <p>5. Adjust, clean or replace.</p> <p>6. Correct and clear restriction.</p> <p>7. Clean and clear passages.</p> <p>8. Clean, clear and correct as required.</p> <p>9. Replace assembly.</p> <p>10. Check Vacuum Piston Assembly. See troubleshooting chart.</p>



	10. Vacuum piston assembly malfunction. 11. Accelerator pump inoperative.	11. Repair as required.
POOR HIGH-SPEED PERFORMANCE	1. Inlet system air leak. 2. Enrichener valve not seated or leaking. 3. Restricted fuel tank vent system. 4. Restricted fuel supply tract. 5. Dirty or damaged air cleaner element. 6. Plugged bowl, vent or overflow. 7. Worn or damaged needle or needle jet. 8. Vacuum piston assembly malfunction. 9. Loose or plugged main jets or passages. 10. Improper fuel level. 11. Accelerator pump inoperative. 12. Restrictive exhaust flow.	1. Eliminate air leak. 2. Adjust, clean or replace. 3. Correct restricted hose. Replace vapor vent valve. 4. Correct and clean restriction. 5. Clean or replace. 6. Clean and clear passages. 7. Replace assembly. 8. Check Vacuum Piston Assembly. See troubleshooting chart. 9. Clean, clear and correct as required. 10. Adjust float level. 11. Repair as required. 12. Loud pipes do not mean better flowing pipes. Exhaust gasket interfering with exhaust flow.

Vacuum Piston Assembly Troubleshooting for Keihin CV carburetors		
Condition	Check For This Problem	Fix the problem by:
PISTON DOES NOT RISE PROPERLY	1. Piston atmosphere vent blocked. 2. Diaphragm cap loose, damaged or leaking. 3. Spring binding. 4. Diaphragm pinched at lip groove. 5. Torn diaphragm.	1. Clear vent. 2. Tighten or replace cap. 3. Correct or replace spring. 4. Reposition diaphragm lip. 5. Replace piston diaphragm assembly. 6. Clean piston slides and body or

	6. Piston binding.	replace piston.
	7. Piston vacuum passage plugged.	7. Clean and clear passage.
PISTON DOES NOT CLOSE PROPERLY	1. Spring damaged.  2. Piston binding.  3. Piston diaphragm ring dirty or damaged.	1. Replace spring.  2. Clean piston slides and body or replace piston.  3. Clean or replace piston.



HOPE THIS DOCUMENT WAS USEFUL.... AND MAY GOD BLESS YOU ON YOUR MISSION.

WISH YOU AN EVENTFUL TUNING MISSION...

HAPPY BIKING.... RIDE SAFE... AND **ALWAYS WEAR A HELMET.**



Regards,  
Nithin Nath