Continue

I am wondering if I have set my floats correctly...so when you pull the carb off the engine and remove the bowl should the floats be hanging down at an angle and the valve closed? When you turn it upside down the float should sit parallel with the rest of the carb. Re: A little confused on proper carb float setting. When the float is hanging down, the needle valve should be open. There is a wire clip that hooks to the float tang and loops the top of the needle valve. This helps to pull the needle valve off it's seat. Most carbs are set with the carb upside down, with the float parallel to the carb body. Re: A little confused on proper carb float setting. 'Ya need to tell us what you are working on. Some carbs are real easy, others need a guage or you'll never get it right. :facepalm: Re: A little confused on proper carb float setting. When the float is hanging down, the needle valve should be open. There is a wire clip that hooks to the float tang and loops the top of the needle valve. This helps to pull the needle valve off it's seat. Most carbs are set with the carb upside down, with the float parallel to the carb body. When I set mine, I had it upside down (the removed bowl would have been on top) and it is parallel with the rest of the carb. Its a Johnson 50ESL72C. Re: A little confused on proper carb float setting. When I set mine, I had it upside down (the removed bowl would have been on top) and it is parallel with the rest of the carb. Its a Johnson 50ESL72C. Actually you want the tip of the float - opposite the hinge side - to be just slightly above horizontal. That way it will correspond with the official factory float gauge tool setting. Re: A little confused on proper carb float setting. (Carburetor Float Setting) (J. Reeves) With the carburetor body held upside down, the float being viewed from the side, adjust the float so that the free end of the float (the end opposite the hinge pin) is ever so slightly higher (just ever so slightly off level) than the other end. And when viewed from the end, make sure it is not cocked. To adjust the float, to you bend the piece of metal the float is attached to or the little flap of metal that sits against the pin? Re: A little confused on proper carb float setting. With the carb upside down, the piece to bend is the metal between the float and the hinge pin. Re: A little confused on proper carb float setting. With the carb upside down, the piece to bend is the metal between the float and the hinge pin. On a 2 carb motor, what does the hose that connects the two carry? Fuel or air? Re: A little confused on proper carb float setting. Fuel Re: A little confused on proper carb float setting. hmmm...I am probably going to have to change that hose then. O'Reily sold me a winshield wiper and vacuum hose, that was the only size they had that I needed. I am using 100% gasoline though, no ethanol. hello. just got this motor this spring. ran it first time in the river today. 35:1 oil, new lines, clean tank, guy said it just had a tune-up including carb rebuild, i put in new j6c .030. took about 30 pulls to start, and i finally had to put it in gear and advance throttle to start. ran excellent at high rpm, but really bad at low. ran for about 30mins total (all at high). removed cover, turned out high-speed adjust 1.5 turns (the one on top), and it ran AWESOME low speed (ie trolling!), BUT, no acceleration, and kind of crappy at high speed. there is a knob on the motor for low-speed adjust, but i think it has been disconnected. i assume it was supposed to go into the bottom of the front of the carb, but there is just a slot screw there now (maybe it is supposed to be there?). any clues or advice would be awesome. also, when running in gear, lots of water comes out of the spout, but also 2 fast streams come out of the FRONT of the shaft on the opposite side of the exhaust spout and just below through the 2 holes. is this normal? thanks.
tim (logan&mallory are my kids) Re: 1972 johnson 25hp carb adjustment? Hi Logon
The carb on your motor only has one adjustable needle valve. The one at the top of the carb. This is your low speed circut. Proper setting starts at 11\2 turns out from litely seated. The screw in the bottom on the bowl is a drain and access to your fixed high speed orfice. The recomended fuel\oil ratio is 50:1. Sounds like you might need to remove the carb for a cleaning. Hope this helps. Re: 1972 johnson 25hp carb adjustment? If this is a tiller drive the black knob is for a slow speed trolling. and is adjustable only when motor is warm.Agree with previous post there is only one adjustment on carb be sure not to screw in to tight as you will damage idle needle. Re: 1972 johnson 25hp carb adjustment? hi. i pulled the carb and did a complete re-build. it was not dirty, but i figured why not. i also put in new plugs and changed mixture to 50:1. it ran a little better. the low speed adjust needle worked best at about .75 turns out. still bogs at acceleration and deceleration. also, after running only 20 mins both plugs were quite fouled. any advice? thanks.
tim Re: 1972 johnson 25hp carb adjustment? Hi Logon
It sounds like your motor is running too rich. Check float level and adjust. The float must be paralell to the carb body when inverted. Also check your main nozzle gasket. Beteen main nozzle and bowl. Once you get the high speed air\fuel mix correct, readjust the slow speed. 1.5 turns is just the starting point. You go from there until you get best perfromance. If you dont have correct fuel level in the bowl or a leaky-missing gasket, the slow speed wont be correct ether. Re: 1972 johnson 25hp carb adjustment? clean out your gas tank, check the screen in the tank, and put in new gas. Re: 1994 25HP Johnson carb issues - correct tuning adjustment? Dial it in until it just gently seats and then turn it back out 1.25 turns. In water, fire up the motor and let it warm up at a slow idle. Now turn it clockwise 1/8 of a turn and give the motor 10 seconds to respond. If the idle increases, slow it back down. Keep doing this, 1/8 of a turn at a time, until the motor sneezes and wants to die or does die. Turn the needle counter-clockwise 1/4 turn and never touch it again. Last edited: Mar 26, 2014 hey guys, really neat site. thanks. I have a 1984, 35 hp Johnson, model # J35TELCRR can someone tell me the correct way to adjust the carb? is the screw on the front of the carb, just above the throat the only one? my idle is kinda rough, but smooths out upon opening up the throttle. seems like it is loading up. Thanks, BG12 Re: carb adjustment question 35 Johnson that is the only one. (Carburetor Adjustment - Single S/S Adjustable Needle Valve) (J. Reeves) Initial setting is: Slow speed = seat gently, then open 1-1/2 turns. Start engine and set the rpms to where it just stays running. In segments of 1/8 turns, start to turn the S/S needle valve in. Wait a few seconds for the engine to respond. As you turn the valve in, the rpms will increase. Lower the rpms again to where the engine will just stay running. Eventually you'll hit the point where the engine wants to die out or it will spit back (sounds like a mild backfire). At that point, back out the valve 1/4 turn. Within that 1/4 turn, you'll find the smoothest slow speed setting. Note: As a final double check setting of the slow speed valve(s), if the engine has more than one carburetor, do not attempt to gradually adjust all of the valves/carburetors at the same time. Do one at a time until you hit the above response (die out or spit back), then go on to the next valve/carburetor. It may be necessary to back out "all" of the slow speed adjustable needle valves 1/8 turn before doing this final adjustment due to the fact that one of the valves might be initially set ever so slightly lean. When you have finished the above adjustment, you will have no reason to move them again unless the carburetor fouls/gums up from sitting, in which case you would be required to remove, clean, and rebuild the carburetor anyway. if this does not improve it. suggest carb cleaning and rebuild kit. Re: carb adjustment question 35 Johnson thanks. i had read that earlier but didnt really understand it. what i missed was, lowering the rpms back down with the idle adjustment, not the ss. how big of a deal is replacing the water pump on this motor? it has not been run for 6 years, but the pump seems to be working fine. would you suggest replacing it anyway? Re: carb adjustment question 35 Johnson the hardest part is getting to the shift rod connector back under the carb. the rest is straight forward. do not turn the shift rod. service manual here: Re: carb adjustment question 35 Johnson one more question for now. this motor is a long shaft. i would like to raise it up for running the timber duck hunting. what should be the distance from the bottom of the boat to the horizontal plate. it is on a 1648 alumaweld jon. i heard 5'' somewhere, but that was on an older motor. BG12 Re: carb adjustment question 35 Johnson the AV plate should be 1-2 inches above the bottom of the boat. Re: carb adjustment question 35 Johnson thanks TD!! WE SHIP..... Our friend and longtime OMC Tech, Joe Reeves, has posted thousands of answers to technical questions about Johnson and Evinrude motors on our Boat Repair Forum. He started contributing to the forum in 2001 and is still at it! He has helped countless visitors solve their engine problems. We have compiled some of his Carburetor adjustment posts here. (Carburetor Adjustment – Single S/S Adjustable Needle Valve) (J. Reeves) Initial setting is: Slow speed = seat gently, then open 1-1/2 turns. Start engine and set the rpms to where it just stays running. In segments of 1/8 turns, start to turn the S/S needle valve in. Wait a few seconds for the engine to respond. As you turn the valve in, the rpms will increase. Lower the rpms again to where the engine will just stay running. Eventually you'll hit the point where the engine wants to die out or it will spit back (sounds like a mild backfire). At that point, back out the valve 1/4 turn. Within that 1/4 turn, you'll find the smoothest slow speed setting. Note 1: As a final double check setting of the slow speed valve(s), if the engine has more than one carburetor, do not attempt to gradually adjust all of the valves/carburetors at the same time. Do one at a time until you hit the above response (die out or spit back), then go on to the next valve/carburetor. It may be necessary to back out "all" of the slow speed adjustable needle valves 1/8 turn before doing this final adjustment due to the fact that one of the valves might be initially set ever so slightly lean. Note 2: If the engine should be a three (3) cylinder engine with three (3) carburetors, start the adjustment sequence with the center carburetor. When you have finished the above adjustment, you will have no reason to move them again unless the carburetor fouls/gums up from sitting, in which case you would be required to remove, clean, and rebuild the carburetor anyway. (Carburetor Adjustments – Two Adjustable N/Vs) (J. Reeves) Initial settings are: Bottom high speed = seat gently, then open 1 turn out. Top slow speed = seat gently, then open 1-1/2 turns. Setting the high and low needle valves properly: NOTE: For engines that DO NOT have a shift selection, obviously there is no NEUTRAL position. Simply lower the rpms to the lowest setting to obtain the low speed needle valve adjustment. (High Speed) Start engine (it will run pretty rough), shift into forward gear, take up to full throttle. In segments of 1/8 turn, waiting for the engine to respond between turns, start turning in the bottom high speed needle valve. You'll reach a point whereas the engine will either start to die out or spit back (sounds like a mild backfire). At that point, back out the needle valve 1/4 turn. Within that 1/4 turn, you'll find the smoothest setting. (Low Speed) Slow the engine down to where it just stays running. Shift into neutral. Again in segments of 1/8 turns, start to turn the top needle valve in. Wait a few seconds for the engine to respond. As you turn the valve in, the rpms will increase. Lower the rpms again to where the engine will just stay running. Eventually you'll hit the point where the engine wants to die out or it will spit back. Again, at that point, back out the valve 1/4 turn. Within that 1/4 turn, you'll find the smoothest slow speed setting. When you have finished the above adjustments, you will have no reason `to move them again unless the carburetor fouls/gums up from sitting, in which case you would be required to remove, clean, and rebuild the carburetor anyway. (Dual Carb V/4 With 4 (2 each carb) Slow Speed Adjustable N/Valves) (J. Reeves) The adjustment procedure of the carburetor slow speed needle valves follows. NOTE... if the needle valves turn too freely, replace the nylon bearing retainer (the nylon item at the front of the carb that the needle valve goes through first) with the newer type RED retainer #315232. If your engine has that weird linkage that connects all four of those needle valves, the newer RED retainers will enable you to discard that linkage. The RED retainers make it impossible for the needle valves to vibrate out of adjustment. (Carburetor Adjustment – 2 Slow Speed Adjustable Needle Valves, each carburetor) Initial setting is: All (4) Slow speed valves = seat gently, then open 1-1/2 turns. Facing the carburetors, start with the top left needle valve, then the top right valve, then the bottom let valve, then the bottom right valve. It may be necessary to redo these steps to get the adjustments ideally set Start engine and set the rpms to where it just stays running. In segments of 1/8 turns, start to turn the S/S needle valve in. Wait a few seconds for the engine to respond. As you turn the valve in, the rpms will increase. Lower the rpms again to where the engine will just stay running. Eventually you'll hit the point where the engine wants to die out or it will spit back (sounds like a mild backfire). At that point, back out the valve 1/4 turn. Within that 1/4 turn, you'll find the smoothest slow speed setting. Do not attempt to gradually adjust all four of the valves at the same time. Do one at a time until you hit the above response (die out or spit back), then go on to the next valve. When you have finished the above adjustment, you will have no reason to move them again unless the carburetor fouls/gums up from sitting, in which case you would be required to remove, clean, and rebuild the carburetor anyway. (Carburetor Adjustments – Older V/4 Downdraft Carb) (J. Reeves) NOTE: The early model downdraft carburetors incorporated "Adjustable High Speed Jets". The later model downdraft carburetors used "Fixed High Speed Jets". The high speed jets would be located in back of the two bottom drain screws. Follow the below instructions accordingly. NOTE: If you do not have adjustable high speed jets, ignore those paragraphs pertaining to same..... BUT do make sure that you manually inspect and clean the two brass fixed high speed jets which would be located in back of the two 7/16˝ slotted hex head bolts in the bottom front portion of the float chamber. Lift the center High Speed Control lever and turn it so that the point faces forward, resting on the high ridge. This will disengage the lever control gear from the individual high speed jets (slots). Have the slow speed needle valve knobs installed upside down so that they can be turned without encountering any obstruction. Gently seat each of the High Speed needle valves, then back each one out one and one half (1-1/2) turns. NOTE... have the jam nut on the s/speed needles snug so that vibration won't have any effect on them, but loose enough so that you can turn them without a great amount of effort. (High Speed) With a reliable person at the wheel, and one kneeling in front of the engine, start the engine (yes, it will run lousy with the above initial needle valve settings), put it into forward gear, and apply full throttle. Start with the High Speed adjustment on the left using a screwdriver that properly fits the slot. (High Speed Adjustments) At full throttle, with the proper size screwdriver, slowly start turning one of the H/S needles in segments of 1/8 turn, waiting momentarily for the engine to respond, then repeat turning. You will reach a point where the engine will start to die out. At that point, back that needle valve out approximately 1/4 turn. Now, go to the other High Speed needle valve and repeat that procedure. At some point in that 1/4 turn out, you will find the smoothest high speed setting (you can now lower the throttle rpm). That will have both high speed needle valves set correctly, and at that point you can lift that center lever adjustment of that high ridge, keeping it lifted until the point is facing the engine, then lower it into its proper position. (When you turn that lever now, you're adjusting both High Speed needle valves at the same time.) (Slow Speed Adjustments) Now, lowering the rpms of course, take the engine out of gear and set the throttle just to where the engine will stay running. Again, in segments of 1/8 turn, slowly start turning in one of the slow speed needle valves, waiting a few seconds between each turning for the engine to respond. As you turn the s/speed needles in, the rpms will increase..... and as it does, lower the rpms to where the engine will just stay running (otherwise the rpms will climb quite high). You will reach a point whereas the engine will either start to die out or it will spit back (sounds like a mild backfire). At that point, back the needle valve out 1/4 turn. Repeat the process with the remaining slow speed needle. Again, at some point in that 1/4 turn out, you will find the smoothest setting. When finished, tighten the jam nut somewhat, then remove and reinstall the s/speed knobs correctly (right side up). Editor's note: Please also refer to your specific engine diagrams and a Service / Repair Manual for your model for additional information. Hello everyone, I have searched everywhere but unable to find a step-by-step guide to set the carb throttle to original factory specs for my motor (1974 Johnson 25hp [25RL74M]). After installing the Ignition Tune-Up Kit (0172523) and the Carburetor Kit (0396701), I thought this was a piece of cake, but this is not the case. What's interesting is that even the service manual I have does not cover this topic in any great details (it does have a few sentences for simple linkage adjustments, but not enough to set to factory specs). I have attached some pictures containing the idle adjustment, throttle linkage and the flywheel roller that I have been tinkering with but the the issue remains: I am unable to open the throttle fully from the tiller handle. I have been working on this for a couple of months now and can't wait to test it in the lake. This is the last step so PLEASE help if your manual has this information or that you know how to do this. Thanks in advance. This might be obvious, but do you have it in forward gear? It won't open all the way in neutral or reverse. The omc service manual is $15 on ebay. I agree, the manual assumes we know more than I do, but my 73 manual has a good description of the throttle cam follower adjustment. Is there more to it than that? anthill I have attached the same section from my manual. The problem I had was what position should the throttle control on the handle be in when the cam follower is between the two marks on the throttle cam? Slow, Start, Shift or Fast? I followed the instructions and the throttle wouldn't even open when I turned the handle. This is when I cam here for help. Thanks again everyone. The slow / fast thingy on the handle is only a crude guide.-----The stuff in the red lined info is for adjusting / synchronizing throttle and spark advance.----Maximum throttle is merely checking that all linkages are attached and fully rotating the magneto plate. Thanks. Are you saying that it doesn't matter if the throttle is opened or not when I turn the handle as long as the linkage is attached and the throttle cam/magneto plate rotates? Throttle plate MUST OPEN at the correct time.----For starting you just rotate the magneto plate to the neutral stop.-----Throttle will open to full when motor is in gear if all linkages are correct.----So easy to confirm in my opinion. Throttle plate MUST OPEN at the correct time.----For starting you just rotate the magneto plate to the neutral stop.-----Throttle will open to full when motor is in gear if all linkages are correct.----So easy to confirm in my opinion. Yes it's easy for a pro like yourself Do you mind showing with some pictures? Sorry----Fixing motors is easy.----Posting pictures is not something that I want or need to learn. The plastic screw you have circled is the idle stop screw (throttle, not carb). First step would be to back out the screw all the way, then see where you are. The current setting may be the lowest adjustment at which the motor will idle at the moment -- which may mean some cleaning or fine tuning (e.g., carb issues). oldboat1 Thanks. I appreciate instructions like this because if I know what I was supposed to do, then I wouldn't be asking. If I were giving instructions, I would assume that the other person is a beginner. Otherwise, I wouldn't bother responding at all. Admin, please close/delete this thread for me. Thanks you might have something binding up somewhere. pull the tiller twist grip and check for old solidified grease inside or possibly a broken friction block inside the handle. once that old grease firms up it can mimic a mechanical problem but in fact, just need a good cleaning and new lubricant. Just take the motor to a shop.----Ask them to show you how to operate a motor.-----Or buy a new one where all you have to do is " push a button " to start it.----Sorry if you can not figure out how your motor works.------Over and out. Just take the motor to a shop.----Ask them to show you how to operate a motor.-----Or buy a new one where all you have to do is " push a button " to start it.----Sorry if you can not figure out how your motor works.------Over and out. Please do me a favor and don't respond to any of my posts in the future. That would be really helpful. And thanks to everyone else for giving your advice. Page 2 You are using an out of date browser. It may not display this or other websites correctly.You should upgrade or use an alternative browser. Thread starter Bevo2000 Start date Jun 10, 2019 Jupiterimages/Photos.com/Getty Images Outboard carburetors are designed and function similar to automobile carburetors. Both meter fuel in precise amounts to the engine for optimum internal combustion. Outboard carburetors have a power circuit, metering jets, float bowl and low speed and idle circuit. Adjusting outboard carburetors requires a knowledge of the position of the mixture and idle speed screws on the carburetor. Submerge the lower end unit into a larger rubber container filled with water. Cover the water intake ports, but allow the exhaust port to sit above the water level. You can also perform this procedure in the water by tying up securely to a dock with fore and aft lines. Check your owner's manual to see if your carburetor adjustment can be made in the water with a neutral transmission setting. Many models require that the engine be in forward gear, with the prop producing resistance in the water. Unclasp the top engine cowl. Remove the spark arrestor, or air cleaner system, with a socket if it impedes access to the carburetor. Start the engine and let it warm up to normal operating temperature. Deactivate the manual choke, or wait for the electric solenoid choke to open fully, if you have this model. Turn the engine off. Locate the idler mixtures screws for your carburetor. Refer to your owner's manual under "Air-fuel mixture setting." Place a small engine tachometer clip lead around the number one cylinder spark plug. Connect the other tachometer lead to a ground source. If you have a dashboard tachometer gauge, have an assistant monitor it for rpm readings. Turn each idle-mixture screws in clockwise until they gently seat. Then turn them counterclockwise 1 1/4 to 1 1/2 revolutions. For a multi-cylinder engine with dual carburetors, adjust each idle mixture screw with this procedure. Start the engine and place the shift selector in forward gear.Turn the idle mixture screw in clockwise until the engine sputters. Turn it out counterclockwise until the engine begins to miss. Turn it back in until you achieve the highest rpm on your tachometer, which will be a midpoint between the two stumbling screw positions. Adjust each mixture screw in this fashion, achieving the highest rpm on the tachometer gauge. Locate the idle speed stop screw on the carburetor linkage. You will recognize it by pulling back on the throttle linkage and seeing where a small screw rest against a cam. The screw will have a throttle return spring very close to it. Look up the idle speed specifications for your outboard in your service manual. It will recommend a maximum idle speed for a warm engine. Use a screwdriver to turn the idle speed stop screw clockwise to increase the rpm, and counterclockwise to decrease it. Set the rpm to manufacture's specifications, reading that number on the tachometer. Turn the engine off. Remove the tachometer. Replace the spark arrestor, or air cleaner assembly and tighten it with the appropriate socket. Fasten the engine cowl.