Notes on the Carb Kit

1. The following is included in the Enhanced Carb Kit:

New parts - 167 total:

Included in the All Balls Carb Rebuild Kit -118 parts

- ACV nose O-rings __6
- Air Cut Valve jets O-rings __12
- Air Horn Gaskets__6
- Air Rail Tee O-rings __4
- Air Rail Tube O-rings ___ 4
- Bowl Drain Screw O-rings_6
- Bowl gaskets __6
- Bowl screws 18
- Fuel rail tee O-rings __ 4
- Fuel rail tube O-rings __4
- Main Needle Holder O-rings __6
- Main needles 6
- Pilot screws, springs, washers, orings_24
- Slow and main jets. 35/100 (stock) or jet for your exhaust if not stock. __12

K&L Bowl Float Needle Valves_6 The All Balls float needle valves are replaced with superior K&L

Additional New Parts not from Carb Rebuild Kit - 43 parts

- Air Cut Valve Screws 6
- Air Cut Valve Tubing_6
- Crossover arm bearings 2
- Crossover arm cotter pins 2
- CV Cap Screws__18
- Fuel line clamps__6
- Fuel Lines 3
- 2. The All Balls carb kit includes 18 green screws that are for the chrome carb CV diaphragm covers. Use the 18 chrome ones I included instead, unless you prefer green!
- 3. The bowl float needle valves included in the All Balls kit do not set the floats at the proper level. Throw them away and use the K&L float bowl needle valves instead.
- 4. The All Balls O-rings and gaskets all come in one bag and are unmarked. I sent a picture of where they go. The easy way to do it is to start with the biggest ones and work your way down to the smallest ones.
- 5. The All Balls bag with the screws also has springs and washers for the Pilot valves.
- 6. I supply new screws for the Air Cut Valves (ACVs); the originals are not supposed to be reused.
- 7. The 6 pieces of vacuum tubing are for the ACVs.

- 8. You can test the crossover arm bearings by putting a chopstick or a pencil in the center and spinning it to see if it is smooth.
- 9. For the crossover arm bearings, use a drift pin punch to drive them out on the outer race.
- 10. To reinsert the bearings if you do not have a bearing install kit, after placing the new bearing on the hole, use a washer to apply the pressure to the outside race and press it in. It will not take that much force, but if you drive it on the inner race, it will destroy the bearing.
- 11. I use Super Lube Multi-Purpose Synthetic Oil to lubricate the rubber O-rings.
- 12. I highly recommend using an ultrasonic cleaner to clean the carbs after **complete** disassembly.
- 13. Then check all the passages open with compressed air or a Mighty Vac, depending on the passage.
- 14. I include the Carb Inspection and disassembly report I use when rebuilding customer carbs. You may find it helpful.
- 15. DO NOT spray carb cleaner into the carbs with the CV diaphragms, and/or the ACVs installed you will likely ruin the rubber parts. The ACVs cost about \$80 each, and the slider diaphragms cost about \$100 each. It would cost over \$1000 to replace them all.

16. INSTALLING THE ACV O-Rings:

The All Balls ACV jet O-rings are a bit fatter than stock and are more difficult to install. Here is how I install them:

- a. Lubricate them with Super Lube Multi-Purpose Synthetic Oil.
- b. Install them on the 120 jet.
- c. Install the nose O-ring on the ACV.
- d. Connect the vacuum tube to the metal tube but leave it disconnected from the ACV.
- e. Insert the jet in the carb body with the captured O-ring end first.
- f. Now you need something pointed. I use a small pair of needle nose pliers. You could also use the JIS screwdriver you use for the screw.
- g. Place the pointed tip on the brass jet, and using a circular motion while pressing down, get the jet bottomed out in the hole.
- h. Set the ACV in place and move it a bit to get it seated.
- i. Hold the ACV up straight so the screw doesn't try to cross thread.
- j. Make sure the nose O-ring is not sticking out.
- k. Start the screw and then tighten it down while seating the ACV.
- Install the vacuum tube on the ACV.



