

Zenith Stromberg CD175 Carburetor Overhaul Specifications for Jaguar Mark X/ 420 manifold conversion project

All three carburetor positions: Many English Cars including XKE and XJ6s were produced with the ZS CD175 carburetors, as the basic SU HD8s could not meet stricter emissions standards of the late 60s. **Some XKEs have fixed metering needles**, so without the ability to adjust for wear, required more frequent major repairs; or just run poorly at idle. Once the Butterfly Shaft Seals begin to leak you have little hope of a good consistent tune.

1. All carburetors should be converted to **adjustable needles (if not already) and, or adjustable jets**. I recommend you allocated an extra +\$100 per carburetor and **install both**. You will see the benefit when beginning setup and tuning. With +30% more air filter area and short intake runners you will need more fuel, which means raising the needle or lowering the jet. Initial setting for my configuration was a **fixed Jet -.125"** below boss. (max setting is -.25"). At after initial tune, jet was reset to -.133, this left the adjustable needle at max rich. A very acceptable tune was achieved when car was warm. **Final Setting: To get the needle off max rich adjustment, the Jet was lowered to -.140"**. Adjusting the fixed jet without removing the carburetor from the car is a labor-intensive process involving partial disassembly of each carburetor.
 - **If both Adjustable needle & Jet are installed, set metering needles to mid-point and the adjustable jets to -.130 as a starting point. Adjust the Jet in small equal increments to get proper tune, leave needle adjustment for later Inservice tuning.** These procedures are in all the ZS carburetor tune-up manuals.
2. All fuel intake tubes should point forward if possible. If not, the ones facing each other will have to be trimmed shorter to get fuel hose on. Use fuel injection hose clamps.
3. If you send all the linkage and bits and pieces with the 3 carburetors to the Overhaul Shop, they can be re-plated them for you. (you want this to look good)
4. Basic configuration was for Metering Needle P/N B1E/A, from a 1968 XKE. (Recommended by Joe Curto) If you have access to modern exhaust sensor tune-up equipment, you could try a richer needle to dial-in higher RPM mixtures.
5. 3 ea. Temp Compensators P/N: B19999
6. 2 ea. Bypass Valve P/N: B23231

Post Overhaul Configuration:

Forward Carburetor: Should have operable Manual Choke, By-Pass valve, Temperature compensator, 5 1/4" shaft, with **8MM extension nut** on aft side of shaft. (the extension nut fits into the Zig-Zag fitting.)

Center Carburetor: Should have operable Manual Choke and Temperature compensator, with the **By-Pass valve removed & blanked off**; 6 1/4" shaft, long end facing forward, with 8MM extension nut on aft side of shaft. If not already fitted, a drilled hole with a threaded fitting should be installed as a Distributor Ported Vacuum Source. (Just install 1/8" vacuum cap, if you do not need vacuum source initially)

Aft Carburetor: Should have operable Manual Choke, By-Pass valve, Temperature compensator; 6 1/4" shaft long end facing forward.

Do not be surprised if all the float bowls are corroded beyond repair due to water in fuel over the years.

1. I sent my Carburetors to Joe Curto, Inc. in New York: A wealth of information and all the detailed Carburetor spare parts needed. **His recommendations were key** in getting this setup right from beginning.
2. Paltech Technologies LLC is also a good source and has experience with 3 ZS CD175 on a standard XKE triple manifold.

