



HOT ROD CARBURETION • CLOTHING & COLLECTIBLES • SERVICE PARTS • LINKAGE & FUEL DELIVERY

## Choosing the right kit for your 4x2 linkage

### Ready-to-fit or Trim-to-Fit?

Hot rod 4x2 intakes come in many forms, but most put the carbs in line behind each other or staggered in a 2-plus-2 arrangement. Some are widely spaced to get the carburetors right over the intake ports, with a big single plenum chamber, like the famous Horne/Cragar intakes, but some have a very close, overlapped stagger like the Weiand WC4D manifold for small block Chevy, which is more of a dual-plane design.

#### 4x2 in line.

Pretty much all the early Flathead Ford intakes, plus a few early ohv intakes, put all four carbs in a line, like a typical 3x2 but with one more 97 squeezed on the end. The main brands you might see are Sharp and Weiand. Building a 4x2 direct linkage so all the carburetors work at the same time is simple. Just order up 4 of our 9091K kits (Superlink lever arm and swivel) and link them together with a straight length of 3/16th rod. You might want to order some of our 9054K Snapback torsion type carburetor return springs, too, but that's pretty much it.

Building a 4x2 progressive linkage is quite another thing. We have built some to special order, though, and here's how. We put our 9096K long levers on the two center carburetors and link them together with a short threaded rod between two rod ends. We then link the second carb to the front one with a sliding link, and the front carb back to the fourth, just like a 3x2 progressive system. Email us at [sales@stromberg-97.com](mailto:sales@stromberg-97.com) if you need one. Just one issue. As with most progressive systems, if you want to use banjo fuel fittings, you must add our Banjo Fitting Spacers (9086K) to move the fuel line away from the long center levers.

#### 4x2 staggered systems.

If your intake manifold spaces the carburetors far enough apart across the intake to get separate linkage rods to each bank of carburetors, all you need is a quality, sturdy linkage that won't flex when you stick your foot in it, and won't swamp your beautiful 97s with huge pillow-block brackets either. The Stromberg 4x2, designed and manufactured exclusively by us, fulfills all those criteria with a whole new level of quality, efficiency and looks.

4x2 staggered systems need a direct (non-progressive) linkage, otherwise some intake ports (and therefore cylinders) are going to starve at low revs. Stromberg offers one type of 4x2 direct linkage, but in two sizes.

The full kit comprises the following parts: 2 Stromberg stainless steel Back-bar brackets with 4 Oilite self-lubricating bushes; a 7mm diameter Back-bar shaft with two stainless steel rod stops to prevent sideways movement; two 9096K long levers pinned to the Back-bar shaft with 3/32 roll pins for security and positive action; 4 carburetor linkage levers with special swivels; threaded linkage rod with rod ends and lock nuts connecting the front and back carbs on each bank; 2 linkage pull rods, connecting the back bar to the front carb on each bank; 2 Stromberg Snapback torsion type carburetor return springs.

Kit 9271-D is ready made to fit the Offenhauser Pacesetter 5024 - Chevy 4x2 intake, which spaces the carburetors 8-5/8th inch in front of each other and 6-1/2 inch apart across the intake with 3/4 inch offset between the two banks of carbs (ie, the one bank is 3/4 inch in front of the other. This linkage is ready to go, comes almost completely assembled with the Back-bar levers pinned to the shaft and even though it bolts straight on, it still comes with full instructions, of course.

If you have any other intake of this type, choose our kit 9270-D 4x2 Trim-to-Fit Direct Linkage Kit. It will work with intakes that space the carburetors up to 9-1/2 inch in front of each other, the same dimension across the intake and with up to 1 inch of offset between the two banks of carbs. Believe us, that's going to cover pretty much every production engine around. How difficult is the trimming? You'll be drilling and maybe shortening one bracket and adjusting the lengths of the rods. And everything is explained in the Installation Guide included. Download a copy right here in our Tech Center if you'd like to see it first.

#### The Weiand WC4D manifold - and others.

We mentioned the Weiand WC4D manifold, above, which sets the Stromberg 97 carburetors in a sort of in-line, overlapped stagger. The Edelbrock CD-694 for early Cadillac engines is another example. As are most blower plates for mounting 97 carbs on top of GMC-style superchargers. All of these place the carburetors so close together that you cannot get a linkage rod between the two banks of carburetors. What you need for these intakes is our 9139K Throttle Shaft Extension Kits, comprising a stainless steel shaft extension plus a separate support bracket. You'll find these on our website under Linkage Parts. And there's a full 'How-To' article in our Tech Center, too - just go back to the Tech Center main page and click the tab for 'How to install our Stuff'.

#### Your link to the pedal.

Stromberg recommends a mechanical pedal link for all multi-carb systems. Ideally, your 4x2 Back-bar can be connected to the pedal via one of the long levers that work the two banks of carburetors (they have three adjustment/connecting holes at the top). However, if these do not line up with your pedal link, you can add a third long lever to the Back-bar shaft with Stromberg kit 9096K (Long linkage arm/swivel) positioned to align with your throttle pedal 'pull' point. Complete with swivel, clamping screw and 3/32" roll pin, the 9096K lever can also be drilled and pinned to the Back-bar to ensure positive location.

As with all our Tech articles, we welcome customer feedback and other input. Email us with your thoughts and if it adds to the debate, we can add it in.....[tech@stromberg97.com](mailto:tech@stromberg97.com)



