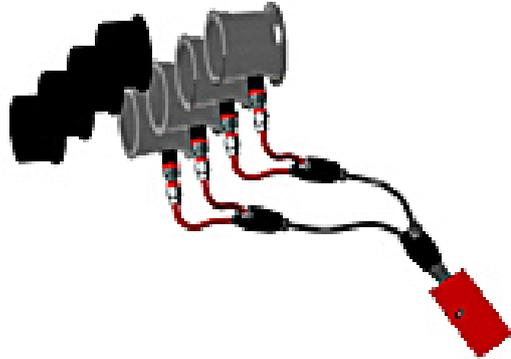


PRO SERIES FITTING INSTRUCTIONS

VERY IMPORTANT:

The most important mounting consideration applies to the fuel Pulsoid, Venom injectors and all the pipe work between these components.

Every effort should be made to mount them **below** the point of fuel injection.



ALTERNATIVE OPTION;

Mount the Pulsoid/s separate from Y-Block/s (we may have to supply alternative appropriate fittings to do so) and then **the Y-Block and all pipe between that and the injectors must be mounted below the fuel injection point**, while the Pulsoid/s can be mounted above the injection point.

Venom fuel injector (nozzle) mounting:

Venom fuel injectors should be mounted in one of the following locations;

- 1) The preferred option is in the lower section of the intake trumpets / bellmouths.
- 2) Option 2 is the upper section of the intake trumpets / bellmouths.
- 3) Option 3 is the lower section of the intake runners.
- 4) Failing those, option 4 is the upper section of the intake runner.
- 5) On some applications (like Suzuki Hyabusa's), they can be located in a rail positioned above the entry to the throttle bodies.

Wherever they are located, the fuel Venom's should protrude into the air flow as little as possible.

The discharge ports should point towards the engine, which is indicated externally by the indent mark on the injector head, which will be pointing towards the engine when correctly fitted.

Venom nitrous injector (nozzle) mounting:

Venom nitrous injectors should be mounted in one of the following locations;

- 1) The preferred option is in the upper section of the intake trumpets / bellmouths.
- 2) Option 2 is the lower section of the intake trumpets / bellmouths.
- 3) Option 3 is anywhere in the intake runners.
- 4) On some applications (like Suzuki Hyabusa's), they can be located in a rail positioned at the entry to the throttle bodies.

Wherever they are located, the nitrous Venom's should protrude as close to the centre of the runner bore as possible.

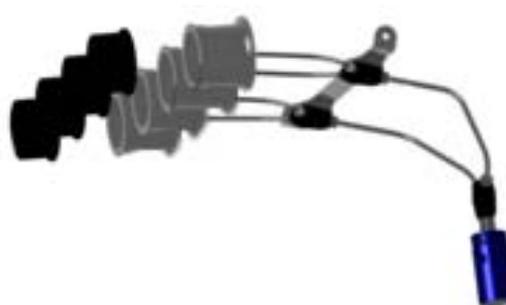
The discharge ports should point towards the engine, which is indicated externally by the indent mark on the injector head, which will be pointing towards the engine when correctly fitted.

When Venom's are used for both fuel and nitrous it is preferable to have them side by side (radially) around the runner.

Nitrous Discharge tubes:

Nitrous discharge tubes should be mounted with the following considerations in mind;

- 1) The tips of the discharge tubes should be central to the intake trumpets.
- 2) They should also be as close to the start/entrance of the trumpets as possible.
- 3) The tubes should be kept as short and as straight as possible.
- 4) Any essential bends should be a 'gentle' - **sharp bends are to be avoided.**



The following 2 points apply for use on carbs ONLY;

- 6) The nitrous discharge tubes **MUST** be mounted so that the outlet ends are positioned as close as possible to the carb slides but not be so close as to risk making contact with the slide due to vibration etc.
- 7) The nitrous discharge tubes 'should' be mounted so that the outlet ends are positioned centrally in the vertical plane and offset to the side of the needle in the horizontal plane.

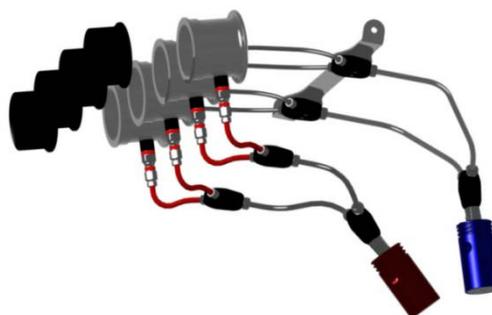
Fuel Discharge tubes:

The same basic information applies to the fuel discharge tubes as above for the nitrous tubes but the tips will be offset from the centre of the bore.

Nitrous & Fuel Y-Block location and mounting:

The most important aspects of locating and mounting the Y-Blocks are as follows;

- 1) They should be as close to the discharge point as possible, in order to keep the discharge tubes as short as possible.
- 2) It is essential that the feed pipe to the Y-Blocks is perfectly straight for as long as possible (at least 2"), as distribution will be adversely affected otherwise .
- 3) If it is not possible to have the feed tube perfectly straight for at least 2", please see the specific Y-Block fitting instruction sheet for more details.



- 4) Once located the Y-Blocks may be supported by the SS pipe work but it may be wise on some applications, to add a support bar strip that can be secured to the frame to which the Y-Blocks could be mounted utilising the 2 holes provided.

Nitrous & Fuel Outlet Pipes:

- 1) ALL pipes that are multiples for the same purpose per cylinder (connecting the outlets from the Y-Blocks to the Venom injectors for example), **must** be cut to the same length.
- 2) Any cut SS pipe **must** be square cut, chamfered and burr free inside and out.
- 3) Nylon pipe must be square cut using a suitable pipe cutter or a utility knife – it should **not** be cut using diagonal cutters, wire cutters or similar tool.

Nitrous & Fuel Supply Pipes:

- 1) The most important aspect of the supply pipes (in particular the fuel supply pipe for reasons of safety), is that they are able to flow the required amount.
- 2) To help achieve this the pipes should be as short as possible and with the minimum of bends and connections, between the supplies and the Pulsoids.
- 3) The pipes should be routed so as to avoid heat (this is of particular importance for the nitrous supply pipe) and when this is not possible a suitable insulating sheath should be added.

Nitrous & Fuel Pulsoid location and mounting:

- 1) The Pulsoid/s should be mounted as close to the injectors as possible.
- 2) Where possible they should be located in the coolest possible location
- 3) If a suitably cool location is not available, then they should either be protected from the heat by a reflective shield or cooled by having cool air ducted to them.

Bottle mounting:

- 1) The optimum bottle location is as close to the engine as possible and ideally above it with the valve downwards.

- 2) If this is achievable it will require the replacement of the normally long dip tube with a short one.



require the replacement of the normally long dip tube

- 3) Our Pro series MaxFlow bottle with radiused entry tip.

valves are fitted with such a dip tube, complete

- 4) If you are unable to achieve the optimum bottle location and mounting, the closer you can get to this utopia the better the results will be.



Nitrous supply pipe fitting:

- 1) The main reason for locating the bottle as close to the engine as described above, is to minimise the length of the supply pipe, because every inch of pipe length reduces the flow and velocity of the nitrous that reaches the engine.
- 2) If you are not using pipe supplied by WON, we strongly recommend that you check the bore of the end fittings, as we've found wide variations in the size and consistent nature of those supplied by other companies. If you find the bore to be tapered (as all those I've inspected have been), then you should bore out the fittings to a consistent size as big as possible to maximise flow.