



*Nitrous Oxide Injection*  
*Motorcycle Caliper Rebuilds*  
*Motorcycle Service, Repair & Tuning*



## ***FUEL FLOW TESTING FOR GRAVITY FEED SYSTEMS***

For gravity feed applications, most factory fuel taps will flow adequate fuel for a 25bhp boost or more, however, fuel flows do vary. For boost levels above 25bhp on standard gravity feed systems, a fuel flow test is ***essential***.

For most petrol engine applications, we need to be able to flow 100ml of petrol in 10 seconds per 100hp – this is a general rule of thumb, giving a slightly rich (therefore safe) setting. For 25hp, this equates to 1 pint in 4 minutes.

It is highly advisable to perform 3 checks:

- Total fuel delivery from the fuel tap. This ensures there is adequate fuel supply for the carb under power as well as the nitrous system – if not, a high flow fuel tap will be required.
- Fuel supply to the nitrous solenoid, to ensure adequate fuel flow to the fuel solenoid in order to match the nitrous boost. Sometimes it may be necessary to use big bore rubber hose instead of plastic WoN fuel line in order to gain healthy flow on gravity feed applications.
- Fuel feed through the fully installed nitrous system to the actual injector(s), through the solenoid and chosen jet to confirm that fuel delivery matches desired power level. You may have to adjust jetting to get the result you need.

When carrying out these tests: using the same pipe bore/length and fittings as the actual application, arrange to catch the fuel in a suitable measuring container. If you can't get access to collect the fuel from the solenoid or injector in situ, make sure you do so with the test pipe exit is at the same level as the fitted component. The test should be conducted with the fuel tank half full.

**Do not go ahead with running the nitrous kit if you do not see sufficient fuel flow to feed your desired boost level** – inadequate fuel flow will cause the engine to run lean which may cause severe damage. In such cases it may be necessary to fit an aftermarket high flow fuel tap, or even to install a carb fuel pump.

**POWERHOUSE, Unit 7, Carr Wood Ind Estate Phase 1, Carrwood Road, Chesterfield, S41 9QB**

**Tel: 01246 260665 – Option 3    Email: [enquiries@powerhouse.uk](mailto:enquiries@powerhouse.uk)**

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