

## Amal 'power jet' carburetters

The 'power jet' is a variation of the famous Amal Mark 2 Concentric carburetters for two stroke engines, particularly those for competitions, racing, motocross etc.

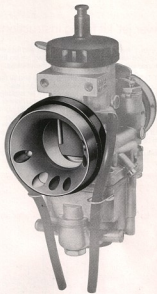
The large bore carburetters used for these purposes usually require an abnormally large main jet for optimum power at maximum rpm. This can produce a rich mixture in the mid-rev range, with loss of power and hesitant performance; fitting the 'power jet' reduces the main jet size and eliminates this problem.

Amal Mark 2 carburetters are obtainable with the 'power jet' already fitted, by quoting the part numbers below:

Carburettor size	Part number
28mm	R2928/306 L2928/307
30 mm	R2930/306 L2930/307
32 mm	R2932/306 L2932/307
34 mm	R2934/306 L2934/307
36 mm	R2036/306 L2036/307
38 mm	R2038/306 L2038/307
40 mm	R2040/306 L2040/307

The 'power jet' is located in the carburettor body and discharges through a tube in the upper side of the intake adaptor. This location ensures that air flow into the carburettor is not interrupted.

The 'power jet' size is usually 25% to 30% of the original main jet, and the ratio of 'power jet' to main jet may be adjusted more accurately within certain limits, by further experimental testing. The table, right, indicates which jets are fitted to the Amal Mark 2 Concentric carburetters complete with the 'power jet' system.



Carburettor size	'Power jet' number	Main jet number
28 mm	50	150
30 mm	60	180
32 mm	70	210
34 mm	80	240
36 mm	90	270
38 mm	100	300
40 mm	110	330

## Amal 'power jet' kits

Alternatively 'power jet' kits can be purchased for fitting to most existing Amal Mark 2 Concentric carburetters. The kit part numbers are detailed below and each kit contains the

appropriate power and main jets. Note that right R and left L handed carburetters require different kits.

Carburetter size mm	28	30	32	34	36	38	40
Part number	R2928/175 L2928/177	R2930/175 L2930/177	R2932/175 L2932/177	R2934/175 L2934/177	R2036/175 L2036/177	R2038/175 L2038/177	R2040/175 L2040/177

Each kit contains the following parts: air intake adaptor complete with spray tube, power jet, main jet, 'O' ring and annular ring.

### 'Power jet' kit fitting instructions

Ensure you buy a kit for the correct bore size, and for a left or right handed carburetter (adjusting screws are on left or right hand side of carburetter looking at the air intake).

**TO FIT THE KIT** — remove float chamber (A) and air intake adaptor from the original carburetter. Study slot and re-assemble carefully. Ensure original pilot jet is placed in position number one (C). Carefully drive plug (D) further into feed passage to depth shown to clear hole (E), using a suitable tool of approximately  $\frac{1}{8}$ " or 3 mm diameter. The 'power jet' is then located in hole (E) in place of either the original pilot jet or the blanking screw. Original main jet (F) should be exchanged for smaller main jet in kit.

The float chamber can then be re-assembled, making sure

float spindle and gasket are correctly positioned.

Fit 'power jet' adaptor (B) in place of the original adaptor; ensure that 'O' ring (G) is located in adaptor (B) in the machined recess to seal 'power jet' feed. Check original primary air jet (H) is still in place. Annular rubber ring (I) is then placed around adaptor (B) so it locates correctly in the guide grooves. This fit should be checked periodically to ensure there is no leakage.

The jets supplied in the conversion kit give a nominal assumed setting for each size of carburetter. It is important that careful testing takes place to ensure they are correct for your particular application. The ratio of 'power jet' to main jet may be altered, within certain limits, to suit exactly the characteristics of your engine, but the sum of the two jets should approximately equal the size of the original main jet fitted.

