

TUNING TWIN ENGINES WITH SINGLE CARBURETTERS

Proceed as for single cylinders according to the general instructions in this leaflet. If a flat spot appears when just opening up, the cause may be a throttle worn slack and it should be replaced.

TUNING TWIN ENGINES WITH TWIN CARBURETTERS

where each cylinder has its own Carburetter.

There are three essential matters to attend to apart from the general tuning instructions where the setting of the main jet, needle position and throttle valve cutaway should be the same for both Carburetters. They are:—

- 1.—Before general tuning of both Carburetters as instructed on page 7, of this list making the same adjustments to both, proceed first as paragraphs 2 and 3 below. However, if a flat spot should be apparent when just opening up, the cause may be due to either one or other or both throttles having worn slack and they should be replaced before attempting to tune.
- 2.—For slow running, each Carburetter to be tuned separately for its own cylinder by removing the plug lead from the other cylinder and running the engine on the Carburetter to be tested. Tune this Carburetter exactly as advised on page 7, paragraphs 2nd and 5th. Now do the same for the other Carburetter and then run on both cylinders when the tickover may have increased slightly; if it has, reset both the throttle stops very slightly the same amount till the tickover is good.
- 3.—When slow running is achieved and the throttles are resting on their throttle stops, the throttle cable adjusting screws on the Carburetters should be accurately set to take out any backlash in the cables when the Twist Grip is in the shut position: this is to ensure that both the throttles open the same amount, especially at low speeds as the twist grip opens them. To check this, stop the engine, remove the air funnels, shut the twist grip off; then insert the fingers of the left hand into the air intakes and press them on the throttles; with the right hand gently open the Twist Grip and feel that the throttles are lifted off their stops exactly at the same time.

SERVICE ARRANGEMENTS

There are many AMAL Service Stockists in Gt. Britain and in other countries where motor-cycling is popular: you are strongly recommended to purchase spares from them and to consult them about your requirements.

GENUINE AMAL SPARES are sold by our stockists. As soon as conditions permit, you will again get them either **packeted or sealed** under the name **AMAL**. Our spares are made in our factory under the same conditions of gauging and inspection as the parts used in the manufacture of each carburetter.

JETS. All spare jets will also eventually again be sealed with a soft wire through the orifice so that the orifice cannot be tampered with. All jets for the carburetters here described are type No. 4/042 with a list price of 8d. each. They are made in sizes 30, 35, 40 c.c., etc., with increments of 5 c.c. up to 100 c.c., and from 100, 110, 120 c.c. to 500 c.c. by increments of 10 c.c.

The meaning of c.c. is that the jets will pass the marked number of cubic centimetres of petrol under conditions of test on the Amal jet calibrating machine—which machines are adopted as a national standard. Each jet you get has been individually tested before marking.

Spares generally. All are listed at fixed prices. **SERVICE STOCKISTS HAVE OUR LISTS OF RECOMMENDED SETTINGS FOR ALL STANDARD MOTOR-CYCLE CARBURETTERS.**

Use of Special Alcohol Fuels

Before using either Methanol or JAP racing fuel, change the needle-jet for one of exactly the same type and length but stamped with the size No. 113 and replace the main jet by one about 2½ times larger than the size used for petrol.

*Example of change over from petrol:—*Change the needle-jet to a number 113, then, if the petrol jet were 170, first put in a number 420 jet (viz., 170 x 2½=425). As stated, this increase of jet size is approximate; the final size, perhaps 400 or 410, being determined by actual test, proceeding as instructed on page 7. Make sure there is an ample flow through the petrol tap.

Do not attempt to alter the petrol jets, keep them by you for any further use with petrol.

HINTS & TIPS

for VERTICAL
HORIZONTAL & INCLINED
NEEDLE-JET CARBURETTERS
WITH PILOT JETS

**SINGLE
LEVER**

**DOUBLE
LEVER**



pilot air adjuster and the one above is the adjustable throttle stop.

1—Illustration of carburetter with

AMAL LTD.

Holford Works, Perry Barr,
BIRMINGHAM, 20, England

Phone: BIRchfields 4571.
(5 lines.)

Telegrams: "AMALCARB," PHONE,
BIRMINGHAM."

NDEX.

- 1—This page.
- 2—Section of carburetter.
- 3—How it works.
- 4—Hints and tips.

- 5—How to trace faults.
- 6—Parts to tune up with.
- 7—How to tune up.
- 8—Twin Engines, Service and the use of alcohol fuels.