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JULY 1970

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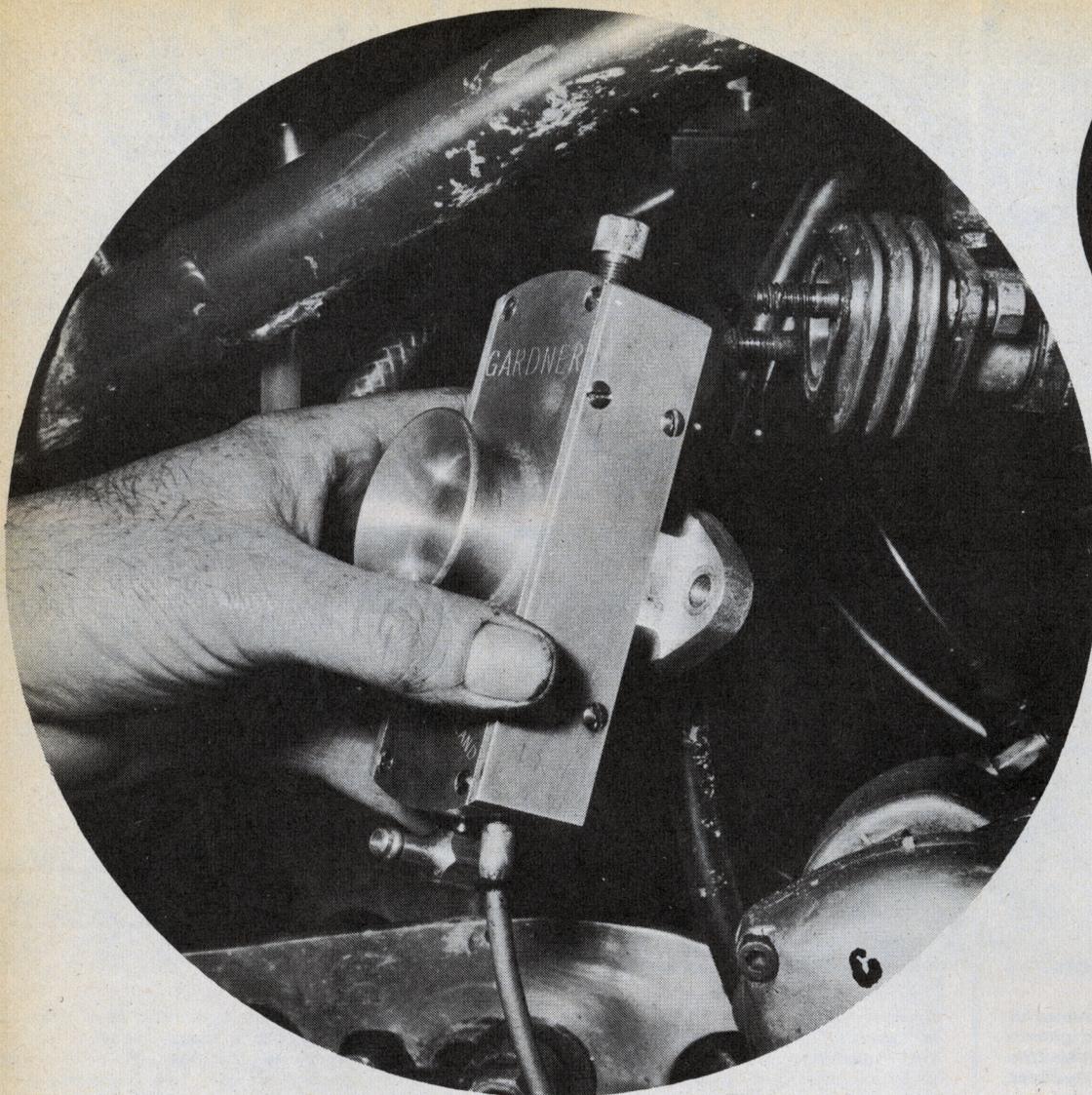
MOTORCYCLE *SCOOTER & THREE-WHEELER* **MECHANICS**

LARGEST SALE

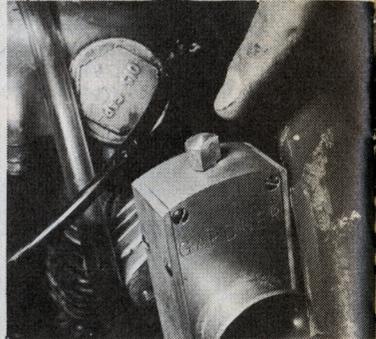
SAVE ON RUNNING COSTS!

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FITTING AND TUNING



The knurled adjuster shown here is at the wrong angle. Always make sure the flat on the carrier is held against the plunger—important!

GET THE --- GARDNER! ---

Weed out poor carburation . . . MM shows how to fit and tune this sporting carb . . .

► Is the performance of your engine being held back by the limitations of your carburettor? Do you get maximum fuel economy, correct mixture throughout the range, plus the additional benefits of easy starting, etc., or is it all a matter of luck?

If you are in any doubt, a new Gardner might be the tonic your engine needs.

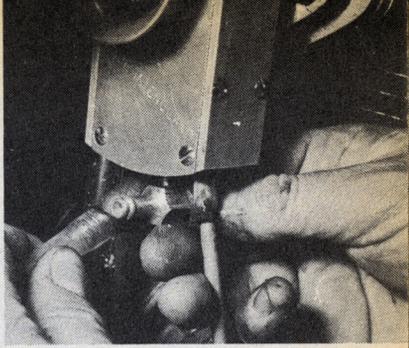
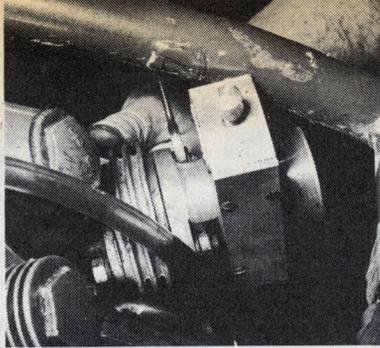
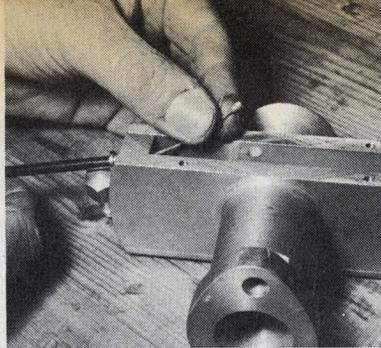
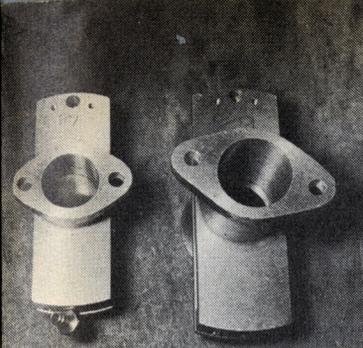
When you first see a Gardner, the first thing that you notice is its rectangular shape. The throttle cable enters the body at the base instead of the top, and the needle stays still while the jet moves up and down in a Tufnol block—different to say the least!

Gardners were originally designed for road-racing machines, on which they enjoyed success all over the world. Now these carbs are available for most types of machine from road burner to humble commuter.

The most important point when ordering a Gardner is to give full details of your engine and the purpose for which it will be used.

The carburettor you receive will be adjusted for the motor you specify—no other, so please be accurate.

For example, if a 650 cc BSA

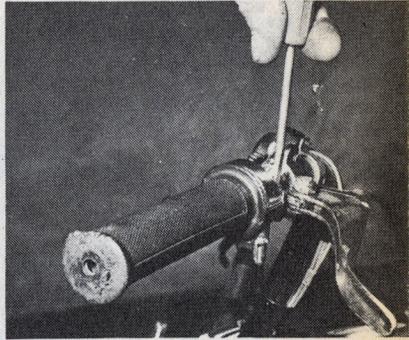
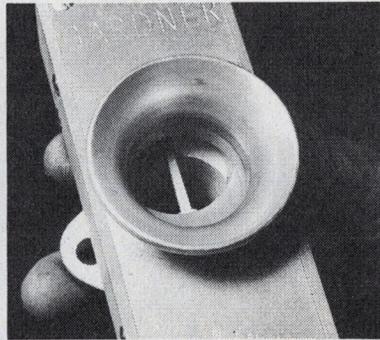
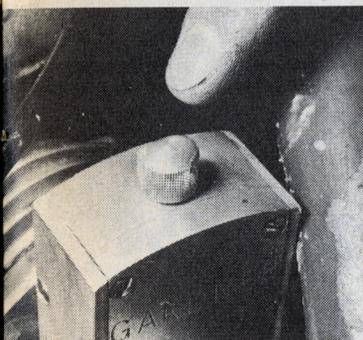


Gardners can be bought in most choke sizes and with straight or offset flange fittings. Mods for special adaptations are available at extra cost

Throttle cable goes up through the base of carburettor body and fits into the Tufnol slide plate. Replace slide plate. Check slide is free

Fitting carb to head is easy. Use spring washers behind the retaining nuts. Float chamber level must be the same as level mark on sideplate

Connect feed pipe from float chamber (or petrol pump). Carburettor to float chamber connection should be flexible



This is the correct position. The flat on the adjuster to the rear. For safety keep the threads greased, preferably with a molybdenum grease

About 7 or 8 turns should be enough to get the engine going. Usually the adjuster is turned back to around 5 turns when the engine is tuned in

The flat on the needle is critical for correct carburation on each type of engine. Tell Gardners the engine spec—they'll supply the needle

Fit the twistgrip with the cable coming out downwards. It will reach more easily and the flow will be smoother into carb

solo racer is fitted with two 130 carburettors, they will be supplied with 12A x 4 needle assemblies. If the machine is then fitted with silencers for road use, a high-speed misfire may occur which can be cured by fitting 12A x 1 assemblies.

For sidecar outfits, different needle assemblies are needed. No float chamber is used on outfits. Instead a separate fuel pump, an SU for instance, can be fitted, which does away with the "swill" problem normally associated with fast sidecar outfits.

Where a float chamber is used, make sure there is no air lock between it and carburettor. Do this by opening the throttle wide and turning the fuel tap on. Fuel will then flow through to the carburettor jet. When it reaches this jet, the throttle must be closed and float chamber allowed to assume its normal level.

When fitting the float chamber, make sure you get the float level the same height as the mark on the body sideplate.

Tuning is done by the knurled adjuster on top of the carburettor body. Screwing the adjuster in weakens the mixture, screwing out richens it.

A spring-loaded plunger holds

the profile of the needle in its correct position. The flat of the adjuster must always be set to the rear of the carburettor. The adjuster must be turned a full 360 degrees when attempting to alter the tune.

When despatched, the adjuster will be fully screwed down. To start the engine for carburettor setting, turn the adjuster out seven or eight turns. Then turn it back once the engine has started and keep turning it back until the motor runs cleanly. This will probably be at about five turns. In very cold weather, ten or 11 turns may be necessary to effect a start from cold.

Starting procedure is to flood the float chamber when the engine is cold and then start the engine by holding the throttle at approximately one-eighth opening. Under no circumstances must the throttle be held at a greater opening than this until the engine is running.

Gardners claim improved performance, easier starting and economy is possible by using their carburettors.

Full details are available from The Gardner Carburettor Co Ltd, 45 Newport Road, Burgess Hill, Sussex. Prices, according to choke size, from £9 10s. to £15.

THE COMPONENTS

Simplicity is the keyword of the Gardner carburettor. There are only 11 component parts. It can be assembled in a few minutes.

1. Carburettor complete.
2. Left-hand sideplate.
3. Body front.
4. Lock plate and plunger.
5. Needle and adjuster assembly.
6. Jet tube, return spring and jet tube extension (below).
7. Slider plate.
8. Main body.
9. Right-hand sideplate.