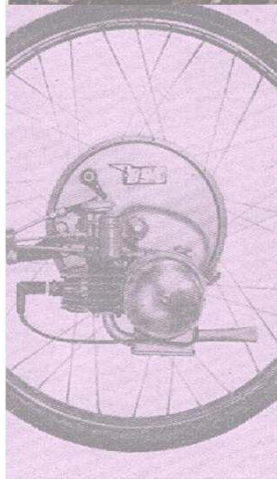


# IceniCAM Information Service

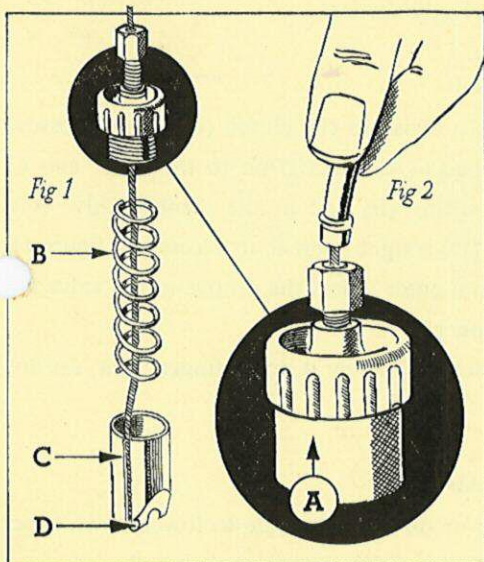


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# Carburettor (B.E.C.)



## data sheet



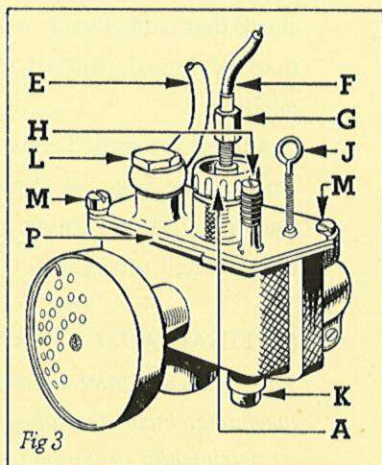
- A Mixing Chamber Top
- B Throttle Valve Spring
- C Throttle Valve
- D Cable Nipple
- E Carburettor Feed
- F Cable Outer
- G Cable Adjuster Nut
- H Mixture Adjusting Screw
- J Flooding Control
- K Jet
- L Banjo Nut
- M Float Chamber Securing Screws
- P Float Chamber Cover

### (1) FITTING THE TWISTGRIP

Clean offside handlebar, remove rust and dirt with emery, apply thin film of grease.

Loosen twin clamping screws on twist-grip. Slide it on to handlebar with cables on the underside. Adjust position until the grip rotates freely without binding. Tighten twin clamping screws. Loosen setting screw on front face. Tighten gradually until the grip rotates easily but remains set in any throttle position when you take away your hand.

Connect decompressor or clutch cable as instruction book. Connect throttle cable as given hereunder.



## **(2) FITTING THE CARBURETTOR**

Remove mixing chamber top (A) take out spring (B) and valve (C). Fit carburettor to inlet port. With bicycle upright make sure that the carburettor is perfectly vertical.

## **(3) FITTING THE CABLE**

First, turn the twistgrip clockwise to the clutch (or decompressor) position. Secondly, slide parts (A) and (B) on to the other end of the cable. Compress the spring (B) and fit the throttle valve (C). Make sure that the nipple (D) is tight home in its recess (see figure 1). Replace the valve; it will not enter unless the groove in the valve fits over the ridge in the chamber.

Replace mixing chamber top (A) screw it down finger tight, do not use force.

## **(4) SECURING THE CABLES**

Clip the cable to crossbar or on a lady's cycle to lower down tube. Avoid sharp bends and allow a gentle sweep at each end.

## **(5) ADJUSTING THE THROTTLE CABLE**

**TWISTGRIP END:** For the Synchronomatic Drive turn the built-in tickover adjuster clockwise until it is fully closed. For both models check that cable ferrule is right home in twistgrip recess. Also check that twistgrip is still set in the (clockwise) clutch or decompressor position.

**CARBURETTOR END:** Screw in cable adjuster nut (G). Take the cable between the fingers and pull it gently as shown in figure 2. Take up slack (if any) by turning nut (G). Give the nut one more turn after it has seated the cable ferrule.

## **(6) FINAL ADJUSTMENT (if necessary)**

*The following final adjustment must only be made by a qualified mechanic; incorrect adjustment will result in loss of power and may be detrimental to the motor.*

Turn on petrol. Lift flooding control (J) for five seconds (Note: never flood the carburettor when the motor is warm). Ride the machine until it is thoroughly warm (i.e. when the cylinder barrel is too hot to touch). You can then make the following adjustment. **TICKOVER ADJUSTER** (for Synchronomatic Drive only). Keep the cycle in an upright position with the handlebars straight. Rotate the fingertip adjuster until the tickover is even and steady. It should be remembered that the tickover adjustment is a result of setting nut (G) on the carburettor and of setting the fingertip adjuster in the grip. In short, the cable is adjustable from both ends.

### **7) NOTES ON TICKOVER**

The position of the bicycle can affect tickover. If the machine is leant towards the offside carburation becomes weak and tickover may become slow and erratic.

If the machine is inclined towards the nearside, carburation becomes too rich and the motor may 'four-stroke'. Movement of the handlebar may also affect tickover. The tip to learn is, when the machine is standing still and the motor is ticking over keep the cycle upright, keep the handlebar still.

### **(8) ADJUSTING THE MIXTURE**

The mixture is altered by turning the spring loaded Mixture Adjusting Screw (H) clockwise to richen and anti-clockwise to weaken. The approximate setting is one full turn from fully closed. (Note: Pressure must NOT be exerted in the closed position. Turn gently and stop as soon as the screw touches.) A weak mixture will give erratic running and a lack of power. A rich mixture will give four-stroking and lack of power. Before obtaining the perfect position it may be necessary to alter the tickover position, as the adjustment of the mixture and the tickover are combined. A really fine adjustment will only be obtained when the motor is fully run-in

### **(9) GENERAL SERVICE TO THE CARBURETTOR**

In spite of the fact that the petrol tap and the carburettor are fitted with gauze filter, dirt may pass through and cause the motor to run erratically or stop.

### Removing dirt

Turn off petrol. Undo banjo nut (L), clear the small hole in the well underneath it by using the jet gauge of the gauge set (see photograph No. 1). Do this gently—do not scratch the hole. Before replacing the banjo nut take out the gauze filter in the end of the threaded portion and wash out the inside of the nut and the inside of the well with petrol.

### Cleaning the jet

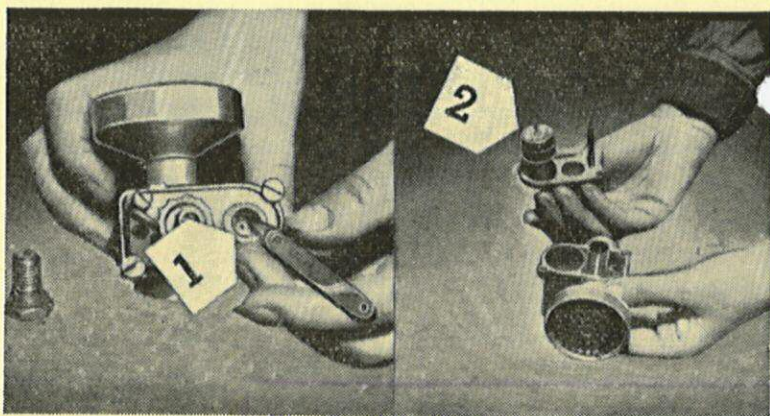
Remove the jet (K). Clear it with the jet gauge—gently does it, do not enlarge the holes. Wash with petrol; replace.

## (10) REMOVING THE FLOAT CHAMBER COVER

Do this when you need to clean the float chamber or to reset the float needle.

Unscrew mixing chamber top (A), remove throttle valve assembly. Undo securing screws (M) (M).

When replacing the cover hold it upside down and place the gasket on to it. Insert the float needle into its seating hole. Fit the carburettor body to it, upside down (see photograph No. 2). This method ensures that the point of the delicate float needle does not become damaged and that it is correctly seated.



R. G. SINCLAIR,

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