INSTRUCTIONS FOR O.S. TYPE 7D-7DV AUTOMATIC CARBURETTER

The O.S. Type 7D & 7DV carburettor has been designed to provide a correctly balanced mixture of fuel and air at all throttle settings. It ensures steady power and a smooth response — even to abrupt operation of the throttle. With the new O.S. mixture control system employed by this carburettor, adjustment can be made easily and accurately.

Under average operating conditions, the carburettor will normally function satisfactorily as factory set. Simply start the engine in the normal way and adjust the needle valve for maximum rpm. On closing the throttle, the engine should idle at between 2,000 and 2,500 r.p.m. and also run steadily at all intermediate speeds. However, different fuels and/or climatic conditions, may require minor readjustments for optimum results.

ADJUSTING THE CARBURETTER

Three adjustable controls are provided on this carburettor:

1. The Needle Valve (located on left hand side of carburettor).
2. The Mixture Control Screw (located on right hand side).
3. The Throttle Rotor Set Screw (angled at rear of body).

I. The Needle Valve is used in the same way as on all model engines i.e., for adjusting the high speed mixture strength. Start the engine and, with the throttle fully open, gradually close the Needle Valve until it is running at its maximum speed. Caution: Do not close Needle Valve to too "lean" a setting as this will cause the engine to overheat and slow up.

II. The Mixture Control Screw is for adjusting fuel mixture strength at part throttle and idling speeds. Having set the Needle Valve as detailed above, close the throttle. The engine should idle continuously and steadily without further adjustment.

III. The Throttle Rotor Set Screw is for establishing the minimum idling speed. If the engine runs too fast with the throttle closed, the Rotor Set Screw should be turned counter-clockwise to allow the throttle opening to be reduced.

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CARBURETTOR INSERT (for Type 7D only)

Two different sizes of carburettor insert are used with the Type 7D carburettor. A large I.D. insert is installed in the carburettor fitted to the MAX-90FSR. A smaller I.D. one is installed in the carburettor of the MAX-61 engine.

In the case of the MAX-90FSR, ordinary suction feed is sufficient to use this carburettor with the large insert. If, however, higher power output is required for aerobatic flying, it is permissible to remove the insert. In this case, a muffler pressurised fuel system should be used.

In the case of the MAX-61, a muffler pressurised fuel system should be used on this carburettor with the smaller I.D. insert. If higher output is required, it is permissible to replace this with the larger insert, or to remove the insert completely, but, in these instances, a pumped fuel supply, such as the Perry Pump system, or Robart Super-Pumper should be employed.

If higher output is required on the MAX-61 FSR or MAX-61VF engine equipped with the type 7DV carburettor, use the optional Type 7D carburettor.

HOW TO REMOVE THE CARBURETTOR INSERT

• Unscrew the rotator screw and withdraw the throttle rotator.
• Remove the idle valve set-screw and carefully withdraw idle valve.
• Extract the carburettor insert.
• Reassemble the carburettor.

SUBSEQUENT OPERATION AND CARE

Once the required settings have been established it should be unnecessary to alter them. Such slight needle valve alterations as may be necessary to cope with differences in atmospheric conditions or fuels, do not affect the other two adjustments. The engine should start readily with the throttle in the idle position.

It is important that the carburettor operates under clean conditions. Make sure that fuel is properly filtered before use. We advise fitting a filter to your fuel can and another filter in the delivery tube between tank and engine, to reduce the risk of the carburettor jet becoming partially clogged and upsetting running adjustments.

O.S. ENGINE

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