

The Elan Factory - Information Sheet



Dellorto carburettor synchronisation and idle adjustment

Where carburettors have had considerable use, it is recommended the following initial checks be carried out. Remove the carburettor top cover and make any necessary adjustments to the individual float levels (see details below). Remove each idle-mixture adjustment screw **(2)** clean and polish it before reinstallation. This will make each one more sensitive when responding to slight adjustments. Take care not to misplace the small O -rings and washers under the screw retaining springs.

Disconnect the throttle cable **(1)** located between the carburettors.

Unscrew the idle speed adjusting screw **(2)** out of contact with the central lever extension **(3)**.

Unscrew the screw **(4)** of the central balance lever **(5)** until the throttle butterflies of both front and rear carburettors are fully closed. Check this with light upward pressure on the main lever **(3)**.

While maintaining this pressure, screw in the balance screw **(4)** until it contacts the tongue of lever **(1)** so as to fully close the throttles of both the front and the rear carburettors.

Screw in the idle speed screw **(2)** one full turn and unscrew the mixture adjusting screws **(6)** two full turns from their fully-closed position.

Reconnect the throttle cable **(1)** located between the carburetors.

Start the engine and let it run until normal operating temperature has been reached.

Adjust the idle speed screw again to, set the correct idle speed and, if the engine runs irregularly, adjust the mixture adjusting screws **(6)** on each cylinder in turn in order to obtain the smoothest running. A Gunson Colortune Spark Plug is highly recommended for adjusting the idle mixtures. This device has a clear glass insulator that provides a "real time window" into each cylinder as it is operating. The Colortune Spark Plug is available from The Elan Factory – ask for separate product data sheet.

NOTE: Screwing in the mixture adjusting screws results in a leaner idle mixture and vice versa.

Now readjust the idle speed to the desired level with screw **(2)**.

For better synchronisation using a four-column mercury manometer, proceed as follows:

The engine should be at its normal operating temperature.

Remove the vacuum blanking plugs **(8)** on each barrel and fit in their place the four connectors of the mercury manometer.

Ensure that the mercury columns are free of bubbles, as these will cause inaccurate readings and poor results.

Align the mercury column levels between the front and rear carburettor using the balance screw **(4)**.

Check the running of each cylinder by turning the mixture screws **(6)** in turn, remembering again that screwing them in weakens the idle mixture and vice versa.

If necessary, recheck the mercury levels and then reset the idling speed as desired with the idle speed screw **(2)**.

Remove the four vacuum connectors and refit the blanking plugs.

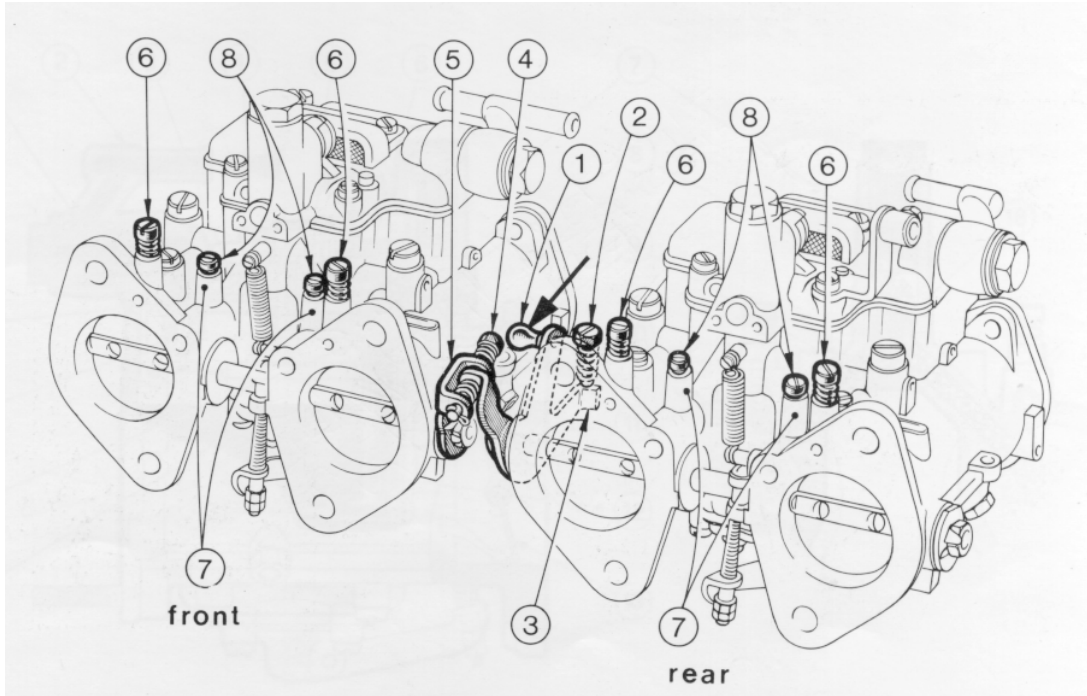
These are the only adjustments that are required when setting up the twin carburettor installation. Adjusting the ignition timing can often make some further improvement to the running of the engine. If the ignition timing is subsequently altered, this may require the mixture screws to be adjusted again.

Note carefully when installing new carburettors or new jets, several hours of operation must take place before the petrol properly wets the newly machined surfaces. Until then, surface tension makes the calibrated jet sizes appear to be smaller. For optimum performance, the whole procedure should be

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repeated after approximately five hours of operation. Do not make premature or incorrect assumptions about re-jetting when the wetting process has not been allowed to take place. What may appear to be a long adjustment procedure should be amply rewarded by an excellent running engine plus longer than normal service intervals.

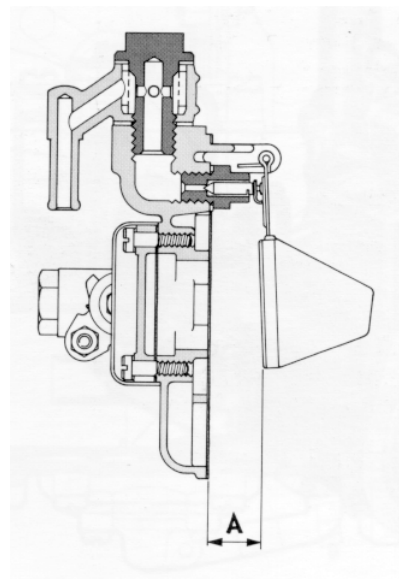


Checking and adjusting float levels

Check that the float weighs same amount that is marked on it, is undamaged and also free to rotate on its pivot pin.

Hold the carburettor cover vertically so that the float arm is in light contact with the needle and with the spring in the needle is not compressed.

In this position, check that both half-floats are at the correct distance from the float chamber cover measured to the top cover gasket fitted to it.



Float part number	Dimension "A"
7298 - 1	14.5 to 15.0mm
7298 - 2	16.5 to 17.0mm

For further information regarding carburettor kits and pump jet delivery calibration services, please phone The Elan Factory on (613) 9761-1903 or fax on (613) 9739-8944. Alternatively you can write to The Elan Factory at 5 Marong Court, Boronia Heights 3155, Melbourne, Australia or e-mail at elanfactory@optusnet.com.au