

4.1 — Idle tuning and adjustment

Idle adjustments on a multi-cylinder engine with several carburettors should be carried out with a mercury manometer having a column for each carburettor.

Make sure, both for independent (figure 31) and grouped carburettors (figure 32), that each throttle cable has about 1mm free play at idle.

Now you can adjust the idle as follows:

- Connect each barrel to the mercury manometer, taking off the blanking plugs provided on the vacuum intakes and fitting instead the proper vacuum connectors. If a compensator is fitted, dismantle it and connect the compensator connections to the mercury manometer.
- unscrew each idle mixture screw (3) about two turns from the fully-closed position.

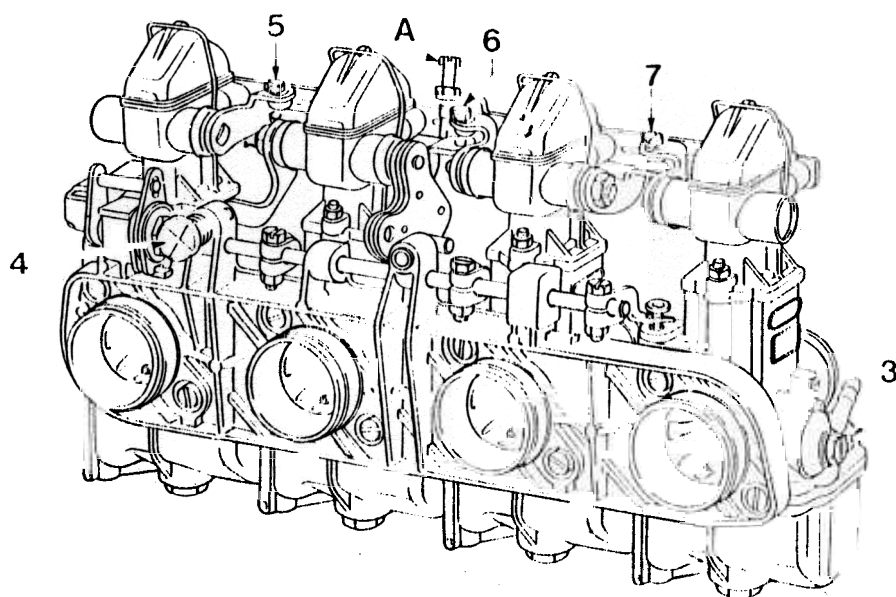


fig. 32

- start the engine and when it has reached normal running temperature, adjust the idle speed to about 1000 rpm using the throttle adjusting screw (2) in figure 31 or screw (4) in figure 32.
- for independent carburettors (figure 31) align the mercury column levels using the throttle adjusting screws (2) on each carburettor.
- for carburettors mounted together in a group (figure 32) align the mercury column levels with the level of the carburettor connected directly to the throttle control, adjusting the balance-adjusting screws (5), (6), (7).
- then adjust the mixture screws (3) of each carburettor to obtain the fastest even running.
- recheck the alignment of the mercury columns and then reset the engine to the desired idle speed using the throttle adjusting screw (2) in figure 31 or screw (4) in figure 32.
- for independent carburettors (figure 31) check that the alignment of the mercury columns is unaffected by slightly opening the throttle. If it is, adjust the individual cable-adjuster screws (1) to correct this.
- finally, disconnect the manometer unions and refit the blanking plugs or the compensator piping.

Where the carburettor group has been dismantled for servicing, some approximate synchronisation will be helpful before reassembling; see that all the slides are opened 1mm and that the idle mixture screws are opened two turns from the fully-closed positions.

The throttle valve opening securing-screw (A) should be adjusted in such a way that it allows full opening of the throttle slides up to a maximum of 1mm beyond complete clearance of each carburettor barrel.