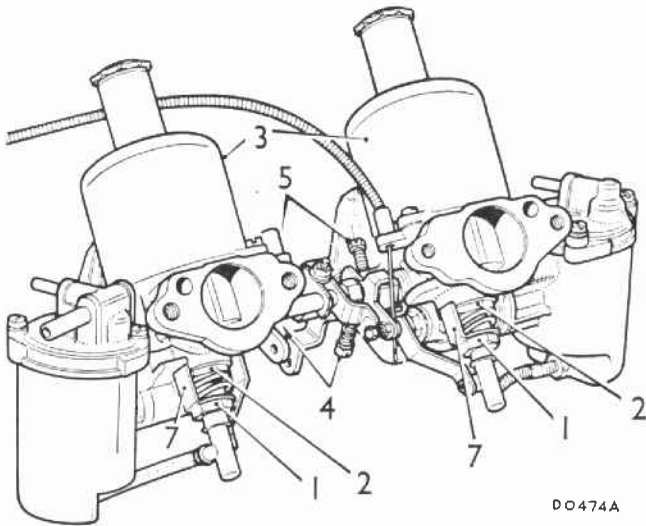


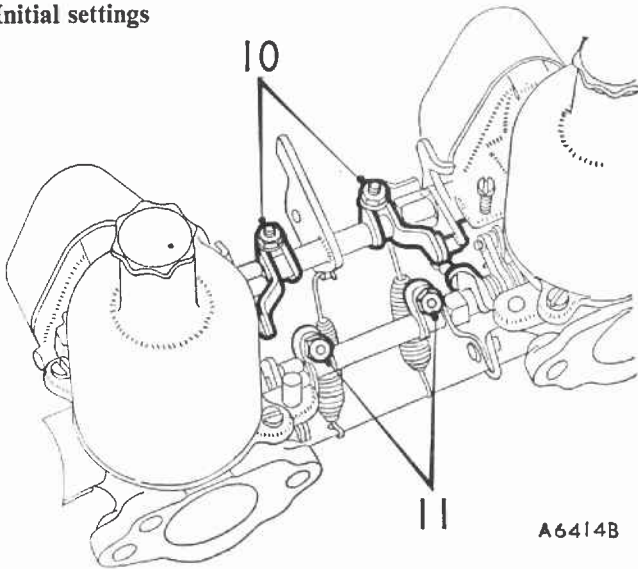
TWIN CARBURETTERS



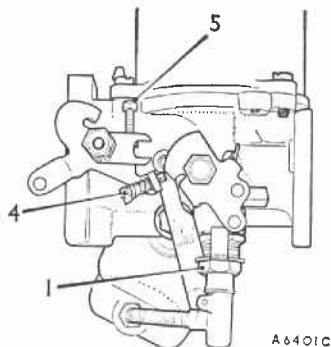
A twin-carburettor installation

- | | |
|-----------------------------|--------------------------------|
| 1. Jet adjusting nuts. | 4. Fast-idle adjusting screws. |
| 2. Jet locking nuts. | 5. Throttle adjusting screws. |
| 3. Piston/suction chambers. | 7. Jet adjustment restrictors. |

Initial settings



- (1) Slacken both clamping bolts (10) on the throttle spindle interconnections.
- (2) Disconnect the jet control interconnection by slackening the clamping bolts (11).
- (3) Disconnect the mixture control wire if fitted.



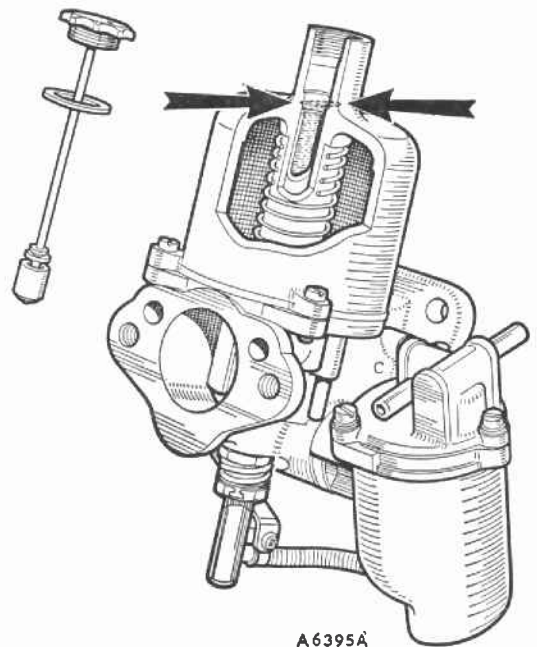
- (4) Unscrew the fast-idle screw (4) on both carburetters until they are well clear of the cams.
- (5) Unscrew the throttle adjusting screw (5) on both carburetters until they are just clear of their stops and the throttles are closed.
- (6) Set the throttle adjustment screws on both carburetters half a turn open.
- (7) The jet adjusting nuts must not be altered at this stage as they will be initially set to a datum setting either at the factory or during the carburettor servicing procedure.

Tuning conditions

To ensure that the engine temperature and mixture requirements are stabilized, tuning must be carried out in accordance with the following setting cycle.

- (1) Connect a tachometer and an approved exhaust gas analyser in accordance with the instrument-maker's instructions.
- (2) Warm the engine at a fast idle to normal operating temperature preferably with the car standing in an ambient temperature of between 16 and 27° C. (60 to 80° F.). Run the engine for at least five minutes after the thermostat has opened; the thermostat opening point can be detected by the sudden rise in temperature of the radiator header tank.
- (3) Set the engine speed at 2,500 r.p.m., at no load, and run for one minute.
- (4) Tuning operations may now be commenced and must be carried out in the shortest possible time. If the time for settings exceeds a three-minute period, open the throttle and run the engine at 2,500 r.p.m. for one minute then resume tuning. Repeat this clearing operation if further periods of three minutes are exceeded.

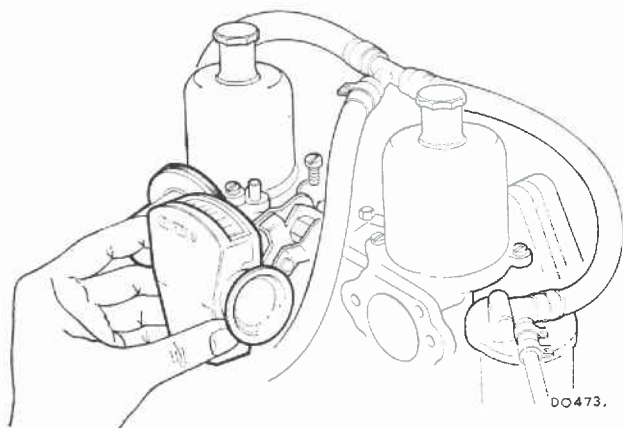
Tuning procedure



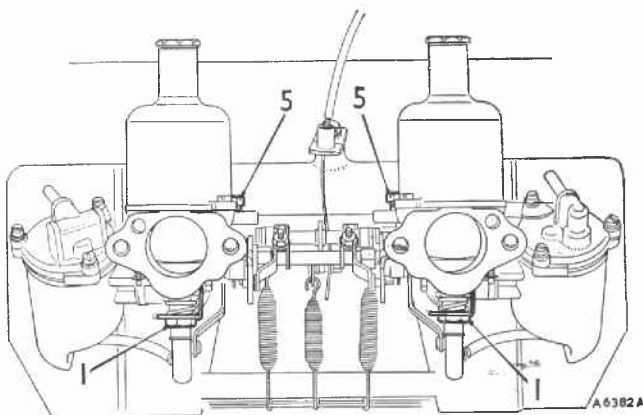
CARBURETTERS

- (1) Top up the piston damper with the recommended engine oil until the level is $\frac{1}{2}$ in. above the top of the hollow piston rod.

NOTE.—On dust-proofed carburetters, identified by a transverse hole drilled in the neck of the suction chambers and no vent hole in the damper cap, the oil level must be $\frac{1}{2}$ in. below the top of the hollow piston rod.



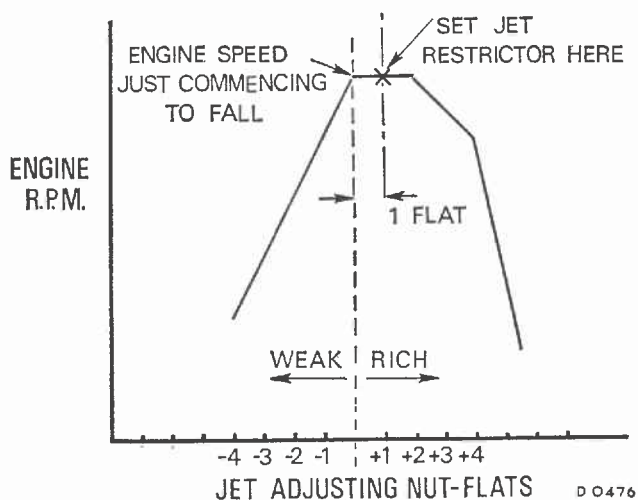
- (2) Warm up the engine as described in 'TUNING CONDITIONS.'
- (3) Turn the throttle adjusting screw on both carburetters until the idling speed given in 'TUNING DATA' is obtained.
- (4) Using an approved balancing meter in accordance with the maker's instructions, balance the carburetters by altering the throttle adjusting screws; the idling speed obtained during this operation must be as given in 'TUNING DATA'.



- (5) During the following procedure, just before the readings of the tachometer and exhaust gas analyser are taken, gently tap the neck of each suction chamber with a light non-metallic instrument (e.g. a screwdriver handle).

Turn the jet adjusting nut (1) on both carburetters up to weaken, down to richen, the same amount until the fastest speed is recorded on the tachometer.

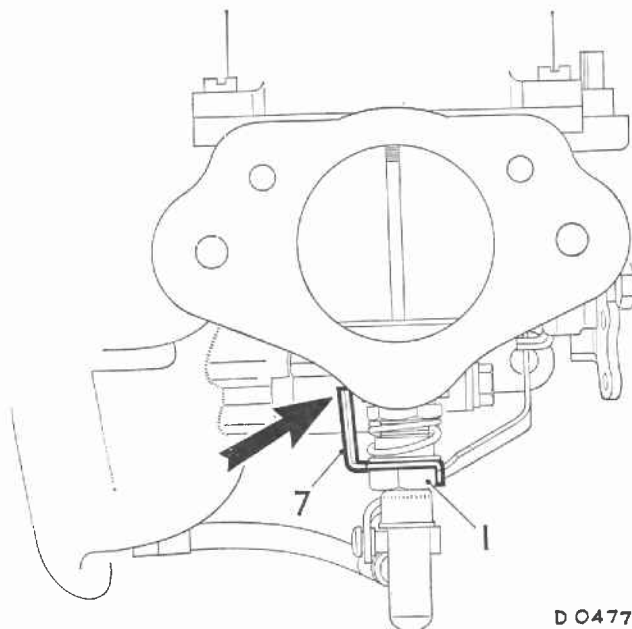
Turn both adjusting nuts very slowly up (weaken) until the engine speed just commences to fall, then turn both adjusting nuts one flat down (rich).



Check the idling speed against the figure given in 'TUNING DATA', and adjust if necessary by altering both throttle adjusting screws, each by the same amount. Using the balancing meter, check that the carburetters are balanced.

- (6) Using the exhaust gas analyser, check that the percentage CO reading is within the limits given in 'TUNING DATA'.

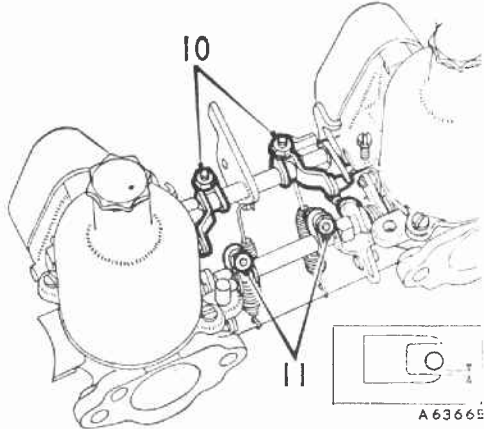
If the reading falls outside the limits given, reset both jet adjusting nuts by the minimum amount necessary to bring the reading just within the limits. If an adjustment exceeding two flats is required to achieve this the test equipment should be checked for correct calibration.



- (7) Hold the jet adjusting nut (1) on each carburettor, to prevent it turning, and rotate the adjustment restrictor (7) round the nut until the vertical tag contacts the carburettor body on the left-hand side when viewed from the air cleaner flange (see illustration). In this position, bend the small tag on the adjustment restrictor down so that the restrictor locks to the nut and will follow its movements.

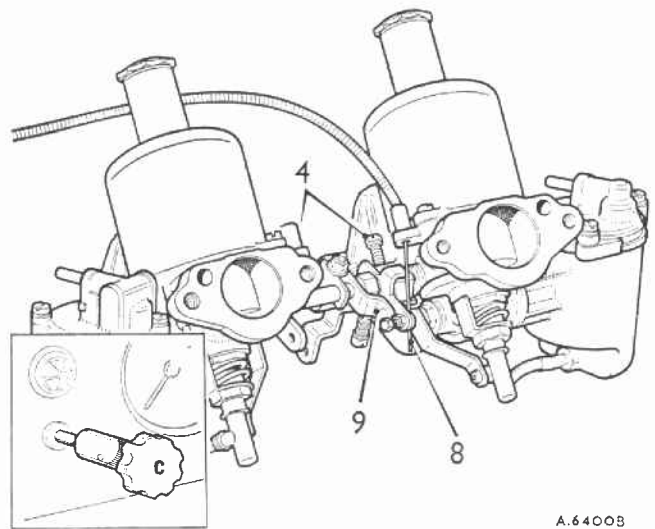
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- (8) Paint the small tag of the jet adjusting nut restrictor and the adjacent flat of the jet nut to identify the locking position.
- (9) Set the throttle interconnection clamping levers (10) in accordance with the instructions given in the relevant vehicle Workshop Manual, so that a clearance exists between the link pin and the lower edge of the fork (see inset). Tighten the clamp bolts ensuring that there is approximately $\frac{1}{32}$ in. end float on the interconnection rod.



- (10) With both jet levers at their lowest position, set the jet interconnection lever clamp bolts (11) so that both jets commence to move simultaneously.

Run the engine at 1,500 r.p.m. and, using the balance meter, check that the carburetters are balanced.



- (11) Reconnect the mixture control wire (8) with approximately $\frac{1}{16}$ in. free movement before it starts to pull on the jet levers (9).
- (12) Pull the mixture control knob until the linkage is about to move the carburetter jets.
- (13) Using the carburetter balancing meter to ensure equal adjustment, turn the fast-idle adjusting screws (4) to give the correct fast idling speed (see 'TUNING DATA').
- (14) Refit the air cleaners.