



MG T Register

“How T Evening 23rd March 2011”

Tuning a T Type

Introduction

The T Type XPAG motor is a rugged, reliable little engine if properly looked after. This means regular servicing and preventative maintenance. At our last 'How To' evening we demonstrated how to bleed the brakes This evening we will be demonstrating a grease and oil change followed by a demonstration of how to set the timing and tune the twin SU carburettors.

Ignition Timing

There is little point in setting ignition timing if the distributor *contact breaker gap* and/or the *tappet clearances* are wrong. Accordingly for the purposes of this evenings exercise we are going to assume the the points and tappets clearances have been checked and are correct. If the demand exists we could make these the subject of another 'How To'.

1. Make sure that the timing marks on the fan pulley and block , which indicate TDC are clearly marked. Paint them with liquid paper ('white out') if needed.
2. Start the engine and allow it to warm up. Take it for a short drive if you are able.
3. Turn the engine off and loosen the clamp at the base of the distributor just enough so that the distributor is able to be rotated
4. Connect the timing light. Start the engine and allow it to settle into a steady idle – around 900 to 1,000 rpm.
5. Examine the fan pulley using the timing light. The timing marks should line up. If they do not rotate the distributor (either by hand or if a micrometer is fitted using the micrometer) until they do and then tighten the clamp, making sure not to rotate the distributor in the process. Note if your engine has been tweaked you may have to set the timing to between 5° and 10° before TDC the exact amount dependent upon the state of tune.
6. Now rev the engine to between 2,500 and 3,000 rpm the mark on the pulley should move ahead of the mark on the block i.e. firing is retarded. If it does not the distributor advance and retard system is not working and the distributor should be removed and serviced.

Tuning the SU Carburettors

We are once again making a number of assumptions. Namely that the carburettor is good condition, that linkages are in good condition, that correct needles and jets are fitted, and that the needle and seat valve in the float chamber is correctly set and operating correctly.

1. With the air cleaners removed, start the engine and allow it to warm up.
2. Slacken the linkages connecting the carburettors so that they are able to operate independently.
3. Adjust the throttle control screws until a satisfactory idle is achieved.
4. Kill the engine
5. Remove the dashpot and screw the jet adjusting nut up until the jet is level with the carburettor bridge.
6. Replace dashpot and screw the jet nut down two turns
7. Start the engine and using a length of hose compare the intake hiss on both carburettors.
8. Adjust the individual throttle control screws until the same intensity of hiss is received.
9. Check the front carburettor mixture setting by lifting the piston 1/32 in (0.8mm) using the lifting pin if one is fitted or alternatively using a screwdriver. If the:
 1. Engine speeds up the carburettor is running rich – screw the jet nut up



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2. Engine slows down carburettor is lean – screw nut down
3. Engine speeds up momentarily and then settles down to a steady idle – mixture is correct
10. Repeat the process for the back carburettor.
11. Recheck all the idle and mixture settings and if satisfactory, tighten linkage between carburettors and replace air cleaner/s.

Note: The engine will run a little richer after the air cleaners are replaced – the amount dependent upon the efficiency of the air cleaner.