

Tuning 40DCNF Carburettors 206–246 engines

How to tune 40DCNF's reasonably accurately.

- 1.You must have an accurate vacuum gauge.
- 2.Check for air leaks at the inlet manifold "O" rings, the gaskets between the carburettors and manifold also at the exhaust manifold gaskets.
- 3.Check the butterflies and carburettor body to make sure there is no excessive wear.
- 4.Set the float levels correctly and check that they weight all about the same.
- 5.Remove idle jets screws and make sure the jets are clear and that the rubber "O" rings are still in good condition.
- 6.Remove the air bypass screws and use compressed air to clean out these and the idle jets.
- 7.Refit the air mixture screws and turn out 1 1/2 turns from the closed position, do not over tighten as they can be damaged very easily.
- 8.Refit the air bypass screws and nuts adjust so that they are turned out one turn, then lock them with the nut.
- 9.Check for excessive play in the linkage setup because if there is play here it will not return the carburettors properly to the idling position or open them up evenly.

Unless all this has been done there is not much point trying to tune the carburettors.

- 1.If everything checks OK then warm the car up to operating temperature and remove the throttle linkage from carburettors.
- 2.Set the front carburettor first and adjust the throttle stop screw so that it is open sufficiently to allow the engine to idle slowly with the other 2 carbs throttle stop screws completely backed off. In other words the front carburettor is just about all that is keeping the engine idling.
- 3.Adjust the front carburettor stop screw so that you get the slowest idle without stalling. Obviously the engine will be running quite roughly.
- 3.Then set the mixture screws at the base so that you get the smoothest idle you can achieve.
- 4.Then check the vacuum in both venturis of the front carburetor and if they differ adjust the air bypass screws, which are halfway up the body to achieve an identical vacuum. This should only require a small adjustment. If you have had to adjust these recheck the idle mixture screws again for the best setting.
- 5.Now do exactly as you have done to the front carburettor to carburettors 2 and 3. That is idle on ONE CARBURETTOR only at a time.
- 6.Having adjusted all three carburettors now slacken off the adjuster nuts on the rod which connects all three carburettors and using the VACUUM gauge tighten nuts on the rod so that there is no increase or decrease in vacuum on all three carburettors when tightened.
- 7.Replace all other linkages and you are now done.