I found this on the internet a long while back so if you recognise the article let me know the source and I will credit the originator.

DISTRIBUTOR- Initial ignition timing set-up

Any deviation away from the original standard engine specification, or where a dizzy from another source is used in the engine you have, the ignition timing will generally be different from that set by the manufacturer.

Dizzies that have had their advance curves altered to suit a particular specification by a specialist should come with an initial setting of some sort - either static or strobed. Even having a strobe figure stated has its pitfalls - least of all having no reliable or accurately set TDC mark/pointer on the crankshaft pulley! To get the engine started for running in or to a rolling road for initial set-up or where no rolling road exists where no such information is given, it's essential to get the ignition timing in the right operating envelope to avoid damage caused by incorrect ignition timing. Results of which can be disastrous. Terminal even.

There are no hard and fast rules or methods carved in stone with guarantees on how this should be done. But clearly a starting point is needed, so the following is the method I use where information is a little thin on the ground!

There are two stages to this method. The first to get the engine started and warmed up- a static setting, the second to get the best from an unknown quantity without costly damage - a running setting.

The first is very quick to sort out, as it is merely to ensure easy starting for warm-up. Whatever distributor you have, setting the ignition statically to have no more than 5 or 6 degrees advance (firing BTDC) is the way to go. You certainly don't want it set to fire ATDC - it causes all sorts of problems including exhaust pipes glowing red hot at idle! So just run through the standard method for setting ignition statically (see relevant separate article).

Once satisfied the static ignition is set, start the engine and run it until it reaches as close as you can get to normal running temperature or at least until the thermostat opens where one is fitted. Easily detected by the sudden increase in temperature of the top rad hose to the touch. Switch the ignition off, holding the throttle wide open to avoid any possibility of running on. Slacken the dizzy clamp bolt off slightly so the dizzy can be reasonably easily turned by hand. Connect a tacho up so it's easily read, or get an accomplice to advise you what the dash mounted one says. Also disconnect the vac pipe if applicable.

Restart the engine. Using the idle adjustment screw on the carb, increase the idle speed to near-enough 2,000rpm. Now slowly and carefully advance the ignition timing by turning the dizzy clockwise whilst keeping your eyes or your assistant's glued to the tacho. As the dizzy is turned, the revs should start to rise. Keep advancing the ignition until the revs stop rising, then retard the ignition by turning the dizzy anti-clockwise until the revs drop by around 250rpm. If the revs don't rise, retard the ignition until you get a marked decrease in the rpm shown, then progress as previously outlined. Once

satisfied, turn the ignition off, and nip the dizzy clamp bolt up. Try to do this in a reasonably swift manner to prevent any possible over-heating. Let the engine cool for a while, then re-start and re-set the idle speed. Don't forget - for cams with very sporty profiles that cause rough idling - DO NOT set the idle speed as standard(750-800rpm). This will cause premature valve train damage, let alone cause a mechanical cacophony! An idle speed of 1,000 to 1,100rpm should be your goal.

To double check you're not running into detonation problems, drive the car around using minimum loading (part throttle and use the gearbox) to get the engine up to running temperature. Then drive the car at about 25mph/40kph in third gear and slowly apply the handbrake to two-thirds operation, then accelerate swiftly(i.e. don't just floor it). If any rattling/pinking (detonation) can be heard, back the ignition timing off by a very small amount statically and try again until detonation is eradicated. Alternatively, if no detonation occurs, you can advance the static ignition timing until detonation registers then back it off. The idea is to test the engine at it's most critical rpm range for detonation -around 2,500-3,500rpm (dependent on cam type). If the engine just bogs down, try a slightly higher speed with the aforementioned rpm envelope in mind.

Once happy you've achieved the required goals, check what ignition advance you have at 2,000rpm using a strobe, engine hot, vac-pipe disconnected, using the standard timing marks/pointers if there are any. If not - contrive a pointer that's easy to use. Doesn't have to be exactly at TDC, it's just a reference should you need to disturb any of the ignition components in the future for whatever reason. Make a note of the reading some place safe.