

Refitting the V12 distributor.

This is for those that removed it and forgot to mark where it was.

My extremely warped sense of humour may not sit well with some people, bad luck, I am what I am.

For the sake of the paper, I am going to assume you did NOT place the engine on 10deg BTDC prior to any of the removal.

Those that operate way outside the square as I do, may want to follow this suggestion.

Obtain a Bottle of your favourite Nectar (JD is mine), and a long length of plastic tube (about 2mm ID). Insert one end of the tube into said bottle and secure firmly. Place the other end between your teeth, and SUCK. I sometimes secure the tube to my cheek with some tape, as it leaves both hands free, and reduces spillage should the tube fall out.

- 1) Rotate the engine by **HAND**, until the timing mark on the timing plate and pulley (under the engine at the front) lines up with 10deg BTDC.

This must be on the compression stroke of cylinder 1A.

Dont know how to find TDC Comp Stroke?, suck on that tube, go the bottom and read that bit.

If you pass the timing mark when doing this, DO NOT cheat, and rotate this engine backwards, do it right and go around 2 more rotations and PAY ATTENTION this time, or you will do it ALL again until you get it right.

The distributor rotates in an anti-clockwise direction. This is handy for working out “advance” and “retard” movement you will be making.

- 2) Lower the distributor into its hole, noting the rotation direction of the rotor as it slides partly in. Based on that, some juggling of the “start” position may be needed so that when it is all the way home, the rotor is pointing at **Cylinder 1B approx**. This also coincides with the **1A** spark plug terminal AND the #1 cast into the cap at that post. This confuses MANY people, but it will make sense, trust me. Just suck on that tube.

The distributor WILL NOT drop all the way down, as the 3 Socket Cap screws will rise up and hit the upper section, so carefully “start” the threads of each screw, and wind them down a little at a time, and you will note the distributor slowly dropping all the way home. If the rotor is now pointing somewhere towards the 1B spark plug, you have done well. If its way out, then undo those 3 screws, and lift the distributor up so the centre shaft can be rotated a small amount (1 tooth) and then lower it again, screwing those screws in as you go, and see if you got it right this time.

- 3) Please ensure that the adjuster cam screw at the front of the distributor is loosened, and set in the almost “full retard” position. Ensure the “point” on the HE star wheel, or the Ferrite rod on the PreHE plastic wheel, is adjacent to the reluctor point. Rotate the distributor casing as needed to achieve the reluctor “point” setting, then lock the 3 socket cap screws down in the same sequence used to remove them.
- 4) The engine is now “basically” timed at 10deg BTDC, and will be sooooo close to what is needed, and you will have about 7+deg of advance available in that cam screw once it is warmed up.

Further fine tuning of the timing of the V12 is in my paper “ HE Tune up”, which is also freely available.

No snaps, so read this a few times, let it sink in, it is SIMPLE.

How to get the engine on TDC Compression Stroke 1A.

Remove 1A Spark Plug.

Find something to place over the hole, I use the handle of a screwdriver, the rounded end is just fine.

Place the “whatever” over the plug hole, and apply pressure hold it in place, partially sealing that hole.

Rotate the engine CLOCKWISE by HAND.

As the 1A piston come UP on compression stroke you will hear the air “hissing” past that “whatever

STOP.

Remove the “whatever”.

Go under the front of the engine.

Have your helper SLOWLY rotate that engine some more. BY HAND.

Watch the pulley as it comes around, and the Degree markings. When it gets NEAR 10Deg, yell at him to STOP.

Now have him MM that engine around so the 10Deg lines up with the marking, STOP.

SECRET:

If you are a bees appendage either side of that mark, call it DONE, the engine is NOT that fussy, and there is topside adjustment for later on.

Refit the Spark Plug.