



### MGBGT V8 distributor – adjustment of ignition timing

The data regarding distributor rotation in MGBGT V8 Workshop Manual Supplement (AKD8468) has been shown to be incorrect as the **rotor in fact rotates clockwise and not anti-clockwise** as stated. During correspondence on the matter between Victor Smith and the author, Victor suggested that some members might appreciate a refresher on the subject of ignition timing on the V8 engine. Here Jim Livingstone explains.

The diagram alongside shows a plan view of the distributor with the cap removed. In this case the distributor is equipped with electronic ignition but the principle is the same for conventional points.

A single rotating trigger (red) and the static sensor (white) are shown in the initial firing position 1 for a particular cylinder. If the sensor is rotated to position 2 (ghosted) by turning the distributor body clockwise it can be seen that the rotor needs to travel further to trigger ignition (the displacement is exaggerated for demonstration purposes). Thus, ignition is later in the engine cycle and therefore retarded relative to the initial position. The opposite is true for anti-clockwise rotation of the distributor body. Therefore, for the V8 engine:

**Rotating the distributor body clockwise retards ignition and rotating anti-clockwise advances ignition**, or if you prefer, the rather catchier **advance backwards**.

In practice, most will adjust their ignition dynamically with a strobe light, in which case the feedback from the flash will indicate the effect of rotating the distributor body without needing to know the rotation direction. A knowledge of the rotation direction will only be required for static timing when the backlash in the distributor shaft needs to be eliminated.