

## WORKSHOP

### Beginner's Guide

# DISTRIBUTORS EXPLAINED

Our new series answers the questions you might think too obvious to ask...

#### What does it do?

The distributor does two things: the main housing controls the low-tension electrical circuit to the coil; the cap distributes the high-tension current to each spark plug in turn at the correct moment.

#### How does it work?

When the points in the distributor are closed, the coil is building up a magnetic field. When they open, that field collapses and a high-voltage current is sent from the coil to the distributor cap. From there, it gets sent down to each spark plug via the rotor arm and a contact for each cylinder.

#### What can go wrong with it?

Put simply, if something goes wrong with a distributor, a spark isn't going to reach the plugs. If the condenser or the points fail, the LT circuit won't be able to collapse. If the rotor arm fails, the HT current won't be distributed to the spark plugs.

#### What do I have to do to look after it?

Correctly setting the points gap should be part of your routine servicing – as should checking their overall condition. Rotor arms can wear out, as can the contacts in the distributor cap. Periodically inspect both. Your engine's ignition timing is set by the distributor and adjusted by simply rotating the distributor until the spark is delivered at the correct moment.

#### Can I improve my distributor?

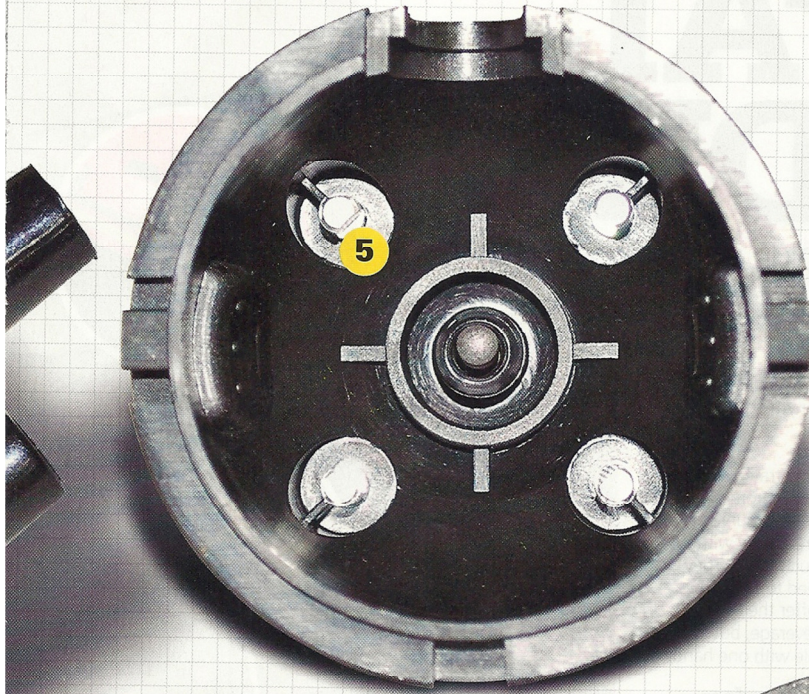
You can now get maintenance-free electronic ignition for many classics. This can be fitted within the distributor housing and replaces the points.



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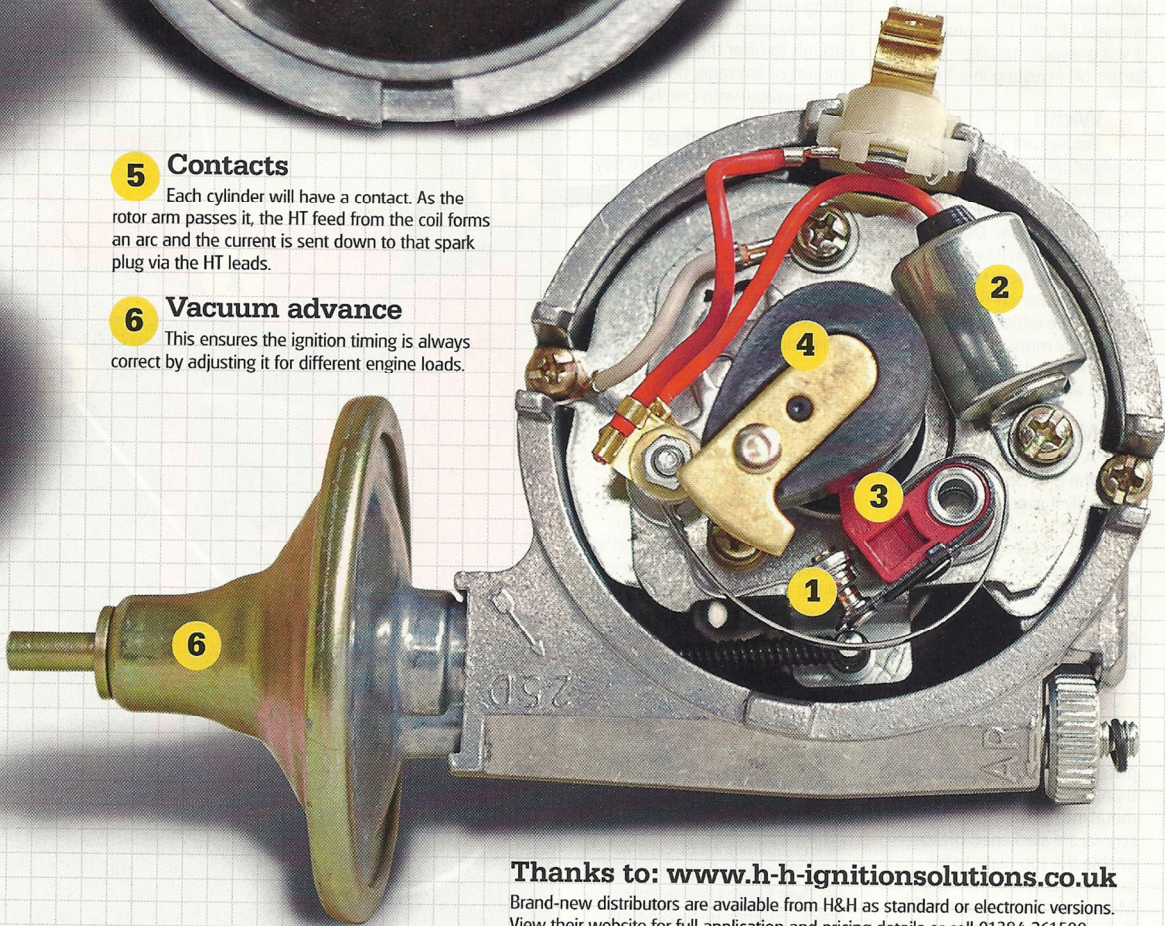


### Glossary

- 1 Points**  
When closed, the LT circuit passes through them. When open, the LT circuit collapses and the coil sends an HT feed to the distributor cap.
- 2 Condenser**  
Absorbs any spark at the points, enabling the LT circuit to collapse.
- 3 Cam follower**  
Opens the points.
- 4 Rotor arm**  
Distributes the HT feed to the spark plugs via contacts in the distributor cap and the HT leads.

**5 Contacts**  
Each cylinder will have a contact. As the rotor arm passes it, the HT feed from the coil forms an arc and the current is sent down to that spark plug via the HT leads.

**6 Vacuum advance**  
This ensures the ignition timing is always correct by adjusting it for different engine loads.



Thanks to: [www.h-h-ignitionsolutions.co.uk](http://www.h-h-ignitionsolutions.co.uk)

Brand-new distributors are available from H&H as standard or electronic versions. View their website for full application and pricing details or call 01384 261500.