



IGNITION  
PARTS

## TECHNICAL INFORMATION SHEET

### FLASHOVER

Spark plugs can sometimes be blamed for causing an engine to misfire. What can be overlooked is the vehicles HT connection on to the plugs - which can cause a phenomenon called '**flashover**'.

Flashover is the result of the HT voltage taking an easier path to earth instead of jumping the spark plug gap. In this case, it is from the top terminal of the plug to the metal shell down the outside of the 'ceramic' insulator.

*A misfire occurs whenever flashover happens.*

This discharge can often leave black markings 'etched' into the insulator over a period of time.

The symptom is caused by a poor connection on to the spark plug top terminal and/or poor sealing of the boot on to the plug.

*The problem can occur with plugs made by all spark plug manufacturers and is not caused by the spark plug itself.*

Check the overall condition of the HT connection (caps/covers/boots/leads) and that they are secure on to the top of the plugs. Ensure the sealing arrangement fits tightly around the ceramic insulator of the spark plugs – sealing effectiveness can reduce through ageing. If flashover has been occurring over a long period (black lines will clearly be seen on the spark plug insulator) the cover may be damaged. Renew deteriorated items as necessary. Make sure components are clean and dry upon assembly.



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