Spark plugs are protected by an insulating nipple made of special heat-resistant material which covers the spark plug terminal and extends downward over a portion of the plug insulator. These nipples prevent flash-over with resultant missing of engine, even though a film is allowed to accumulate on the exposed portion of plug porcelains.

Do not mistake corona discharge for flash-over or a shorted insulator. Corona is a steady blue light appearing around an insulator, just above the shell crimp. It is the visible evidence of high-tension field and has no effect on ignition performance. Usually it can be detected only in darkness.

This discharge may repel dust particles, leaving a clean ring on the insulator just above the shell. This ring is sometimes mistakenly regarded as evidence that combustion gases have blown out between the shell and insulator.