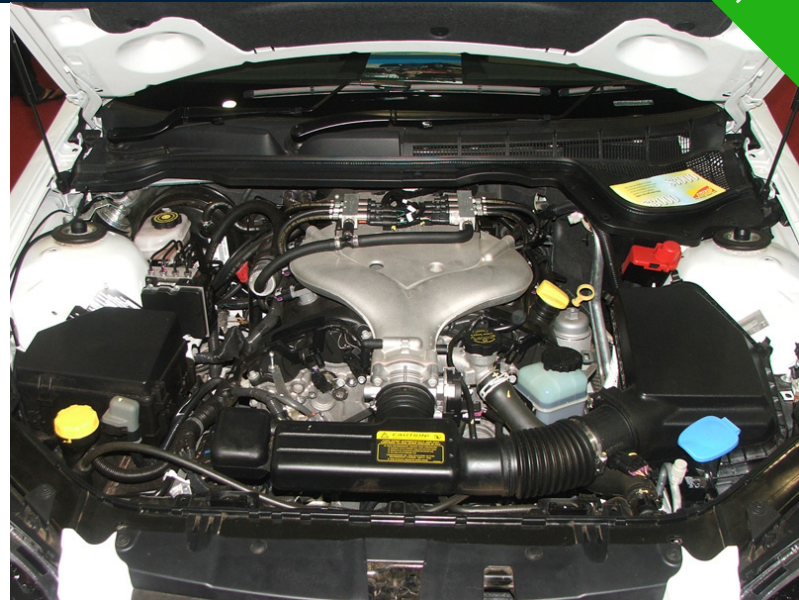
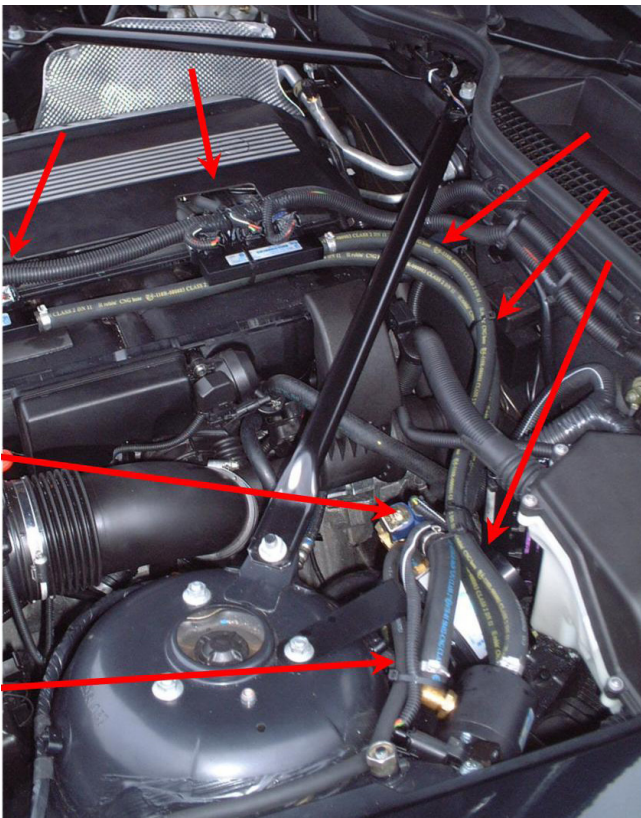


## Small part with great consequences

Every manufacturer of LPG installations is involved with two parties who demand high safety and quality requirements: the automobile industry and the end user, the motorist. The automobile manufacturer wants to be certain that the warranty given to the purchaser of the automobile is not in danger. The end user expects a worthwhile investment without maintenance costs falling outside the warranty.

### The Challenge

When installing gas installations the manufacturer uses high quality pipelines and cables which must be attached and bound together with cable ties. The whole system must remain as separate as possible from the other components and cables, not unimportantly to keep the maintenance orderly. However the problem is that the cable ties are exposed to the high temperatures of the engine as well as to moisture. That moisture comes from splashing rain water and condensation. The latter comes from the transport of the relatively cold gas. Both factors demand the use of stainless steel cable ties.



### The Solution

Use of stainless steel is therefore a requirement. However there are a number of problems with standard cable ties, including the sharp edges of the material. They damage not only the hoses and the cables but also cause injury to the installer's hands.

The solution can be found in a special cable tie from the Panduit factory.

The production method for stainless steel ties is modified by the use of an improved stamping technique which prevents the formation of sharp edges. A version with PVC coating has also been made for use in places where insulation is required. A version has been designed for hoses with a so-called Cushion Sleeve. This provides the hoses with optimal protection.

### The Implementation

The installation time is less and safety has increased significantly. During the assessment of an installation with the new cable ties, the manufacturer realised his need for more visual identity. M-H has provided the cable ties with the company name, in electrolytic imprint as well as in the Preag technique. The order under the bonnet is also increased by this move.



See next page

## The result

Both the quality and the safety of the complete entirety have been notably increased by giving attention to an apparently insignificant component in the gas installation. Moreover the installers are very pleased with the 'hand-friendly' cable ties. The attention for detail has been appreciated by the automobile manufacturers, resulting in more confidence.

## Our Websites



- mulder-hardenberg.com
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