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POTENTIAL PROBLEMS WITH USING SALVAGED AIRBAGS AND ONES FROM SOURCES OTHER THAN OEMs

The relatively high costs of replacing airbag modules — from about \$200 to more than \$1,000 to purchase a frontal module for the driver side — has prompted interest in alternatives to modules supplied by original equipment manufacturers (OEMs). Both salvaged modules and non-OEM aftermarket modules have been touted as less expensive alternatives. However, there are potential problems with both of these alternative replacement modules.

Salvaged airbag modules

For a salvaged module to be viable for use in repairs, it first is necessary to precisely match the make, model, and model year of the salvaged vehicle with the vehicle being repaired. This requires meticulous recordkeeping. A second and bigger problem is the possibility that a salvaged module has sustained water damage, which would mean it could inflate incorrectly. Relatively large numbers of recent model passenger vehicles are salvaged due to flood damage, and the airbag modules from these vehicles shouldn't be used in repairs under any circumstances.

It's a challenge to ensure that salvaged modules don't come from flood-damaged vehicles. One company, Airbag Testing Technologies, sells salvaged airbags that it certifies haven't been water damaged. However, it isn't clear whether testing for water damage is reliable.

A third problem with the widespread use of salvaged airbag modules is the likelihood that it would encourage further airbag thefts.

A salvaged airbag module that has sustained water damage could inflate incorrectly, so airbag modules from passenger vehicles salvaged due to flood damage shouldn't be used in repairs.

The government insurer in Canada, Insurance Corporation of British Columbia (ICBC), encourages the use of salvaged airbags in repaired vehicles. As the sole provider of insurance in British Columbia, this company's monopoly allows it to control the chain of supply from wrecked cars to salvaged parts. This means ICBC should be able to eliminate questionable salvaged modules from the system and prevent them from being installed in repaired vehicles. However, it isn't possible in the United States for insurers to duplicate ICBC's methods of flagging and eliminating the use of suspect modules.

Aftermarket modules from sources other than OEMs

Itemco Industries has announced it will sell non-OEM driver airbag modules for Honda Accords. This company claims it has copied the original modules and says its product will perform the same as the OEM versions. However, requests for proof of these claims have prompted Itemco to provide only limited data from static airbag deployments, which are insufficient to support the company's claims of equivalent performance.

Cloning an OEM airbag module isn't a simple task. For a non-OEM module to have the same crash performance as an original, the two modules must have exactly the same chemicals that generate the gas, in exactly the same quantity and formulation. They must have the same triggering squib, and the chemicals must be hermetically sealed. The materials that make the bag must be the same, and they must be folded in exactly the same manner because airbag folding patterns are intricate and central to performance in a crash. Cloned airbags also must use the same methods, either holes or permeable material, to vent the inflating gas. It's unlikely that Itemco's airbags identically match the ones made by Honda in all of the aspects that can affect performance in crashes.

Conclusion

There are potential problems with salvaged airbag modules. Great caution should be exercised before using such modules in repairs. As for non-OEM aftermarket modules, the data to justify their use are nowhere near sufficient.

It's unlikely that Itemco's airbags identically match the ones made by Honda in all of the aspects that can affect performance in crashes.