Debbie:

This e-mail is in regard to metal hardness of CAPA certified aftermarket parts. Specifically parts that the original Equipment manufacturer (OEM) parts are high strength steel (HSS) and radiator supports, which are considered structural parts. Because a previous contact regarding this subject was ignored by CAPA I am copying this e-mail to some other parties to ensure this issue is brought to light.

I’ve tested some CAPA Certified aftermarket replacement parts with a Rockwell Hardness tester and compared the hardness to the OEM part it was intended to replace. My sample size was small, but there was a 100% failure rate. The hardness of the CAPA Certified aftermarket parts were significantly different than the OEM parts they were supposed to replace. Because of the 100% failure rate I have to conclude there are a significant amount of CAPA certified aftermarket parts, presently on cars, that are made from different material than the OEM parts they are intended to replace.

This brings up two issues. First in regard to the radiator supports there is a potential safety issue. Radiator supports are considered structural and play a role in the deployment of airbags.

Secondly, if the CAPA aftermarket parts are not equivalent to the OEM parts they replace the vehicle owner isn’t made whole. The parts would not be of like kind and quality which is a requirement of most insurance policies.

I am basing my concerns upon statements previously made by CAPA. The structural CAPA certified aftermarket radiator supports are not of the same hardness as the original equipment parts they intend to replace and in CAPA’s own words this puts the driving public at serious risk.

The following are the statements that I refer to:

In 2007 there was an appraiser in this area telling consumers that CAPA certified parts were crash tested just like the OEM parts. I knew that was untrue, but e-mailed you for verification to resolve the issue.

I got your response in an e-mail dated 4/26/2007. This was your response: “No CAPA parts are crash tested because CAPA certified parts are only considered cosmetic parts. This includes bumper covers because they are only covers – they are not reinforced steel. If they were reinforced steel bumpers then we would be required to do crash testing.

All of the parts material strengths etc. are tested and must be the same as the OEM in that respect as well as fit and appearance.”

A couple years later during the Collision Industry Conference in November of 2009, repair organizations demonstrated testing an OEM and a NON-OEM bumper reinforcement for a 2009 Toyota Corolla that was not CAPA certified. These tests demonstrated that Toyota’s bumper reinforcement made of high strength steel (HSS) was exponentially stronger than the non-OEM bumper reinforcement that was made with ordinary carbon steel.

On February 1, 2010 CAPA issued a press release. I will not quote the entire release, but there are 2 paragraphs that will help make my point. “For the past 2 months, CAPA has been conducting its own independent evaluations of aftermarket bumpers” said Gillis. “The results of these tests point squarely to the need for a CAPA bumper standard. CAPA is proud to be able to respond to this urgent need by developing independent certification standards for bumper reinforcement parts.”

“In developing the standard, CAPA has tested numerous bumpers for comparability to their car-company-brand counterparts. In testing what appear on the surface to be reasonably well-manufactured aftermarket bumpers, our laboratories discovered serious deficiencies in mechanical properties such as strength and metal hardness, material thickness, and fit. These deficiencies potentially place the driving public, who trust body shops to repair their vehicles with safe quality parts, at serious risk.”

The bumper reinforcements that CAPA has referred to in their press release are structural, as are the radiator supports. Because these parts are structural they both play a role in the proper timing of the deployment of the airbags. So the radiator supports should concern CAPA as much as the NON-CAPA bumpers and the supports were CAPA certified.

In 2015 I had an insurer challenge me to first prove that a CAPA certified Subaru radiator support upper tie bar was not of like kind and quality (a policy requirement of insurers) and later on a Toyota CAPA certified radiator support to prove it was unsafe. In response to this I bought a $2,200 Rockwell Hardness Tester. In both radiator support tests I found that the CAPA certified part was significantly harder that the OEM counterpart it was meant to replace. There is a formula to convert Rockwell “B” scale values to tensile strength. I calculated difference in tensile strengths, between the OEM and CAPA certified aftermarket part to be around a 16,000 psi. The deployment of an airbag could be delayed by a part harder than the manufacturer of the vehicles intended it to be.

I then had an insurer recommend a CAPA certified Chrysler hood. The factory hood is made from HSS. I could not tell you the difference as the CAPA certified hood was so soft I could not get a reading on my Rockwell hardness tester.

Most recently, at a Congressional Hearing, Jack Gillis was quoted to say, “Well, first and foremost, the parts should be certified to be functionally equivalent to the car company brand part”. Obviously if the parts are not of the same hardness, different metals are being used and they are not functionally equivalent.

Based on this information I believe CAPA should immediately decertify all aftermarket radiator supports and aftermarket parts intended to replace HSS OEM parts and to recall and replace all the CAPA Certified aftermarket radiator supports installed on vehicles with OEM supports.

Mike Parker

President of the Vermont Auto Body Association