

INSURANCE  
INSTITUTE  
FOR  
HIGHWAY  
SAFETY

June 12, 1990

The Honorable Jerry R. Curry  
Administrator  
National Highway Traffic  
Safety Administration  
400 Seventh Street, SW  
Washington, D.C. 20590

Dear General Curry:

The National Highway Traffic Safety Administration (NHTSA) has recently written several domestic vehicle manufacturers seeking information about "foreign produced components that could pose a safety hazard to the American motoring public." According to the letter, NHTSA was prompted to take this action after receiving "expressions of concern from both individual and Congressional sources about aftermarket or replacement automotive component parts manufactured offshore."

Since the Institute is concerned with reducing both economic and human losses resulting from vehicle crashes, we have examined claims by some vehicle manufacturers that the use of cosmetic body parts that are not produced by original equipment manufacturers (OEMs) might pose a safety problem. Because our main concern is human injury, the Institute would oppose any practice designed to save money, including the use of certain replacement parts, if the result of that practice were to increase the risk of human injury.

The cosmetic body parts in question, such as fenders, quarterpanels, door panels, grills, hoods, and trunk lids, serve no structural or safety function but instead serve as the cosmetic skin of the vehicle. These parts do not include the basic structural parts of the vehicle, such as frame rails or vehicle subframes, which have an important energy-absorbing function in a crash. There is only one federal standard, Standard 219 on windshield intrusion, where compliance could possibly be affected by competitive non-OEM cosmetic parts. Our examination of competitive hoods indicates that the crumple points have been copied as well as the rest of the hood, furthermore, the hinges and attachment systems which still come from the OEMs are more likely to be the critical areas of

performance. Based on our review of the safety issues, the Institute published the enclosed advisory in January 1987, which concluded that the source of cosmetic body parts does not have an effect on the possibility of injury in cars after they have been repaired.


As pointed out in that advisory, in instances where replacement parts do have a safety function, NHTSA has established a Federal Motor Vehicle Safety Standard to set safety-related performance requirements for that equipment. For example, Standard 108 specifies performance requirements for lights, reflective devices, and associated equipment, whether they are used on new cars or as replacement parts. Although there is a federal standard for lights and associated equipment, there are no standards that apply to cosmetic body parts, either as original equipment or replacement parts. As noted in the 1987 advisory, vehicle manufacturers concerned about the safety of replacement parts could petition NHTSA to set standards for those new and replacement parts, or the manufacturers could publish their existing internal safety standards so competitive parts could be tested to those standards. Vehicle manufacturers have chosen not to pursue either of these alternatives.

Even though there are not any federal standards for replacement crash parts, the Institute sponsored a crash test in 1987 to show that it is not the cosmetic sheet metal that makes a car safe in a crash -- it is the underlying construction of the vehicle that absorbs energy in a crash. In August 1987, the Transportation Research Center (TRC) in East Liberty, Ohio conducted a fully instrumented front-into-barrier crash test for the Institute to measure the compliance of a 1987 Ford Escort with Federal Motor Vehicle Safety Standards. To show that cosmetic body parts are irrelevant to meeting federal safety requirements, the grill, left and right front fenders, and the sheet metal from the front doors were removed. Since some automakers have especially raised safety concerns about the use of competitive hoods, the vehicle was equipped with a competitive hood to measure the car's compliance with the hood intrusion resistance requirements of Standard 219. As documented in the enclosed crash test report from TRC, the vehicle complied with Standards 208, 212, 219, and 301 -- by a wide margin, in fact. For example, the head injury criterion for the driver was 296 and 339 for the passenger, far below the maximum reading of 1,000 permitted by Standard 208. I have also enclosed a November 1987 Institute advisory summarizing the test results.

The Honorable Jerry R. Curry  
June 12, 1990  
Page 3

I hope that this data will be of help to NHTSA in its current inquiry about the safety of competitive parts. As the data clearly show, whether cosmetic body parts are made by an OEM or competitive factory does not affect the safety performance of a vehicle. If your staff has any questions about the material submitted by the Institute, we would be glad to answer them.

Sincerely,



Brian O'Neill  
President

cc: Mr. George Reagle  
Associate Administrator for  
Enforcement (NEF-01)  
National Highway Traffic  
Safety Administration  
400 Seventh Street, SW Room 5321  
Washington, D.C. 20590

Mr. Robert Hellmuth, Director  
Office of Vehicle Safety Compliance (NEF-30)  
National Highway Traffic  
Safety Administration  
400 Seventh Street, SW Room 6111  
Washington, D.C. 20590

Enclosures