

INSURANCE INSTITUTE FOR HIGHWAY SAFETY

April 14, 2003

Jeffrey W. Runge, M.D.
Administrator
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

Request for Comments; Glare from Headlamps and Other Front-Mounted Lamps: Adaptive Frontal-lighting Systems FMVSS 108; Lamps, Reflective Devices, and Associated Equipment; Docket No. NHTSA-02-13957; Notice 01

Dear Dr. Runge:

The National Highway Traffic Safety Administration (NHTSA) has requested comments on the use of vehicle headlamps, called adaptive frontal-lighting systems, that bend or swivel as a vehicle turns. In the notice, the agency asks for comments on the potential costs associated with these systems. However, there is one important cost -- the cost to consumers of replacing the systems as a result of low-speed fender-benders -- that NHTSA does not discuss. The Institute's 5 mph crash testing shows that today's lighting systems are vulnerable to substantial damage because of the inadequacy of the existing federal bumper standard. In evaluating the cost implications of adaptive frontal-lighting systems, the agency needs to take these costs into consideration.

Background

The federal standard on bumpers prohibits damage to safety-related equipment, including lamps and reflective devices, in a 2.5 mph impact. Today's standard is much weaker than the one that was in effect during the late 1970s and early 1980s, which prohibited damage to lighting and other safety systems in 5 mph tests.

The Institute's continuing series of 5 mph bumper tests show that today's flimsy bumpers can result in substantial and expensive damage to vehicle lighting systems. For example, in March of this year the Institute released results of front-into-angle-barrier tests of several new models. In the tests, the housings for the headlights on both the Acura RL and Infiniti Q45 broke and had to be replaced. Largely because of the cost of the headlamp assembly, the damage to the Q45 in the angle-barrier

Jeffrey W. Runge, M.D.
April 14, 2003
Page 2

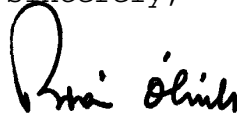
impact totaled \$2,661. In some vehicles (for example Honda Accord, Chevrolet Caprice, Mercedes E class, Lexus LS 430 and Infiniti Q 45), the only way to replace a headlamp is to replace the entire assembly at prices ranging from approximately \$200 to more than \$1,000.

An inadequacy of the existing federal bumper standard is that it covers only passenger cars and not trucks, utility vehicles, and minivans. In 1998 testing of pickup trucks, each vehicle sustained damage to one or more front lamps in the angle-barrier impact. Headlights on the Chevy S-10, Dodge Dakota, and Nissan Frontier had to be replaced ("Pickup bumpers perform poorly in Institute low-speed tests", *Status Report*, Vol. 33, No. 3, 1998).

Conclusion

In evaluating the costs of new lighting technology, NHTSA should consider the expensive damage to lights in low-speed fender-benders that occurs as a result of the inadequacies of the existing federal bumper standard. The most direct way to reduce these unnecessary costs is to improve the existing bumper standard.

Sincerely,



Brian O'Neill
President