209 H-427 SP-20

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: OGT 5 1984

Forwarded to:

Mr. Curtis Atkisson President The Wayne Corporation P. O. Box 1447 Richmond, Indiana 47374

SAFETY RECOMMENDATION(S)

H = 84 - 76

At 11:45 a.m., on January 10, 1984, a G & D Auto Sales, Inc., tow truck was turning right from the company's driveway onto westbound State Route 44 in Rehoboth, Massachusetts, when the rear-facing passenger car in tow, a 1981 Oldsmobile, was struck by an eastbound tractor-semitrailer operated by Branch Motor Express Company. The 76,950-pound tractor-semitrailer continued eastbound; crossed the centerline of the damp, two-lane, two-way roadway; and struck the left front of a westbound Town of Rehoboth schoolbus carrying 15 students, ages 5 and 6. The 1979 schoolbus overturned and came to rest on its roof off the roadway. The driver of the tractor-semitrailer, the driver of the schoolbus, and one student were killed; 12 students were injured. The driver of the tow truck was not injured. 1/

One undesirable crashworthiness factor noted in this accident was that a number of seat cushions came loose from the seats during the bus rollover. FMVSS Standard 222 requires that "...the seat cushion shall not separate from the seat at any attachment point when subjected to an upward force of five times the seat cushion weight..." In this accident, the seat cushions came free because the clips at the rear of the cushion were free to rotate and, therefore, did not secure the cushion to the rear of the seat frame. It is possible that some of the movable seat cushion clips were not secured onto the seat frames before the accident, or that the clips rotated to the unsecured position during the rollover.

Loose seat cushions are a hazard during a crash. As the bus rolled over, the loose 13-pound cushions became missiles and may have contacted and injured some of the passengers. In addition, the loose cushions could have concealed small unconscious passengers and prevented them from being readily observed by rescuers. The Safety Board believes that an improved method of fastening the seat cushion to the frame is required to prevent seat cushion separation during impacts or rollovers.

Highway Accident Report—"Collision of G & D Auto Sales, Inc., Tow Truck Towing Automobile, Branch Motor Express Company Tractor-Semitrailer, and Town of Rehoboth Schoolbus, State Route 44, Rehoboth, Massachusetts, January 10, 1984" (NTSB/HAR-84/05).

Therefore, as a result of its investigation, the National Transportation Safety Board recommends that The Wayne Corporation:

On newly manufactured vehicles, improve the method of fastening seat cushions to seat frames by installing fail safe latching devices to prevent them from coming loose during impacts and rollovers. (Class II, Priority Action) (H-84-76)

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "... to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (P.L. 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and GROSE, Member, concurred in this recommendation. BURSLEY, Member, did not participate.

By: Jim Burnett
Chairman