



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: November 19, 2009

In reply refer to: H-09-28

Mr. Thomas C. Sorrells III
President and Chief Operating Officer
Motor Coach Industries, Inc.
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The National Transportation Safety Board (NTSB) is an independent Federal agency charged by Congress with investigating transportation accidents, determining their probable cause, and making recommendations to prevent similar accidents from occurring. We are providing the following information to urge your organization to take action on the safety recommendation in this letter. The NTSB is vitally interested in the recommendation because it is designed to prevent accidents and save lives.

The recommendation addresses the need for accurate information in vehicle maintenance manuals. The recommendation is derived from the NTSB's investigation of the August 8, 2008, motorcoach accident that occurred in Sherman, Texas, and is consistent with the evidence we found and the analysis we performed.¹ As a result of this investigation, the NTSB issued 12 safety recommendations, 1 of which is addressed to Motor Coach Industries, Inc. (MCI). Information supporting the recommendation is discussed below. The NTSB would appreciate a response from you within 90 days addressing the actions you have taken or intend to take to implement our recommendation.

About 12:45 a.m., central daylight time, on Friday, August 8, 2008, a 2002 56-passenger MCI motorcoach, operated by Iguala BusMex, Inc., was northbound on U.S. Highway 75 when it was involved in a single-vehicle, multiple-fatality accident in Sherman, Texas. The chartered motorcoach had departed the Vietnamese Martyrs Catholic Church in Houston, Texas, at approximately 8:30 p.m. on August 7, 2008, with a driver and 55 passengers onboard, en route to

¹ See *Motorcoach Run-Off-the-Bridge and Rollover, Sherman, Texas, August 8, 2008*, Highway Accident Report NTSB/HAR-09/02 (Washington, DC: National Transportation Safety Board, 2009), which is available on the NTSB website at <http://www.nts.gov/publictn/2009/HAR0902.pdf>.

the Marian Days Festival in Carthage, Missouri. When the accident occurred, the motorcoach had completed about 309 miles of the approximately 600-mile-long trip.

Before the crash, the motorcoach was traveling in the right lane of the four-lane divided highway. As the motorcoach approached the Post Oak Creek bridge at a speed of about 68 mph, its right steer axle tire failed. The motorcoach departed the roadway on an angle of about 4 degrees to the right, overrode a 7-inch-high, 18-inch-wide concrete curb, and struck the metal bridge railing. After riding against the bridge railing for about 120 feet and displacing approximately 136 feet of railing, the motorcoach went through the bridge railing and off the bridge. It fell about 8 feet and slid approximately 24 feet on its right side before coming to rest on the inclined earthen bridge abutment adjacent to Post Oak Creek. As a result of the accident, 17 motorcoach passengers died; 12 passengers were found to be dead at the crash site, and 5 others later died at area hospitals. In addition, the 52-year-old driver received serious injuries, and 38 passengers received minor-to-serious injuries.

The National Transportation Safety Board determined that the probable cause of this accident was the failure of the right steer axle tire, due to an extended period of low-pressure operation, which resulted in sidewall, belting, and body ply separation within the tire, leading to loss of vehicle control. Contributing to the severity of the accident was the failure of the bridge railing to redirect the motorcoach and prevent it from departing the bridge. The lack of an adequate occupant protection system contributed to the severity of the passenger injuries.

During the course of the investigation, the NTSB determined that the recommended tire pressure information in the MCI model J4500 motorcoach maintenance manual differed from information on the specification plate on the vehicle, and that the manual was incorrect. The tire inflation chart in the MCI J4500 manual lists the drive axle tire pressure as 85 psi and the tag axle tire pressure as 105 psi. The correct inflation pressures, as listed on the vehicle specification plate, are 90 psi for the drive axle tires and 120 psi for the tag axle tires. Additionally, a note in the manual about the wheels improperly identifies the model and gives the gross axle weight rating of the accident motorcoach's steer axle as 16,000 pounds, rather than the correct figure of 16,500 pounds. MCI's only guidance, whether written or electronic, for this motorcoach and others like it remains uncorrected. The most recent MCI manual with corrections does not apply to the earlier or legacy model 4500 motorcoaches, because the applicability of information is stipulated by vehicle identification number ranges. The NTSB concluded that until MCI informs operators of the inaccuracies in the J4500 motorcoach maintenance manual, operators may be confused as to the proper tire pressures for these motorcoaches.

As a result of the investigation, the NTSB makes the following recommendation to Motor Coach Industries, Inc.:

Correct any inaccurate tire pressure and gross axle weight rating information in the maintenance manuals of your J4500 motorcoaches and make electronic versions of the revised manuals readily available on your website; in addition, review the maintenance manuals of your other motorcoaches for similar errors and make appropriate corrections. (H-09-28)

The NTSB also issued safety recommendations to the Federal Highway Administration, the Federal Motor Carrier Safety Administration (FMCSA), the National Highway Traffic Safety Administration (NHTSA), the American Association of State Highway and Transportation Officials, and the American Association of Motor Vehicle Administrators. The NTSB also reiterated previous recommendations to the FMCSA and NHTSA.

In response to the recommendation in this letter, please refer to Safety Recommendation H-09-28. If you would like to submit your response electronically rather than in hard copy, you may send it to the following e-mail address: correspondence@ntsb.gov. If your response includes attachments that exceed 5 megabytes, please e-mail us asking for instructions on how to use our Tumbleweed secure mailbox procedures. To avoid confusion, please use only one method of submission (that is, do not submit both an electronic copy and a hard copy of the same response letter).

Chairman HERSMAN, Vice Chairman HART, and Member SUMWALT concurred in this recommendation.

[Original Signed]

By: Deborah A.P. Hersman
Chairman