

Part 573 Safety Recall Report

19V-924

Manufacturer Name : Motor Coach Industries**Submission Date :** DEC 27, 2019**NHTSA Recall No. :** 19V-924**Manufacturer Recall No. :** NR**Manufacturer Information :**

Manufacturer Name : Motor Coach Industries

Address : 200 East Oakton Street

Des Plaines IL 60018

Company phone : 1-800-241-2947

Population :

Number of potentially involved : 276

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2018-2020 MCI D4505

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : The recalled vehicles consist of 2018 - 2020 model year MCI D4500 and D4505 with steerable tag axles that were manufactured with tag lock clamps that had painted surfaces and lacked machining, resulting in clamp slippage. The non-recalled vehicles have clamps without painted surfaces, and have machined surfaces.

Production Dates : AUG 16, 2018 - NOV 13, 2019

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 2 : 2018-2020 MCI D4500

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : The recalled vehicles consist of 2018 - 2020 model year MCI D4500 and D4505 with steerable tag axles that were manufactured with tag lock clamps that had painted surfaces and lacked machining, resulting in clamp slippage. The non-recalled vehicles have clamps without painted surfaces, and have machined surfaces.

Production Dates : SEP 19, 2018 - DEC 11, 2019

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Description of Defect :

Description of the Defect : The D 4500 and D4505 model coaches are 45-foot buses with an available steerable tag axle. The steerable tag axle caster steers when the coach is operating at or below 15 MPH, and is designed to be locked when the coach's speed is above 15 MPH. The tag axle in the locked position is set in vehicle alignment to be orientated to the steer axle in the straight-ahead position. The locking of the tag axle is accomplished by a locking plate mounted to the tie rod between the tag axle wheel end assemblies and a locking pin assembly mounted to the tag axle. An air cylinder mounted on the tag axle actuates a locking pin above 15 MPH, which locks the tag axle in the straight-ahead orientation. The locking plate is attached to the tie rod by two block clamps that are adjusted in vehicle alignment to obtain the forward steer orientation when the tag axle is locked. MCI became aware that on certain D405 and D4500 vehicles, the tag axle forward alignment had changed after the vehicles went into operation. The block clamps that retain the tie rod had allowed slippage, resulting in the tag axle being out of alignment. The misalignment could cause the tag axle to not track with the steer axle and result in the vehicle's rear being offset relative to the front of the vehicle. As a result, the vehicle operator might lose steering control of the rear of the coach.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The rear of the coach could strike vehicles or pedestrians adjacent to the coach.

Description of the Cause : The causes of the insufficient clamping was determined to be (1) clamp blocks having paint on the clamping surfaces, (2) the fastener surfaces on the clamp blocks not being machined, and (3) the fastener head surface not being perpendicular to the tie rod clamping surface. The combination of paint on the clamping surface and the fastener head side loading allowed the clamp fasteners to lose torque. This allowed the tie rod to slide in operation when under load. Movement of the tie rod within the lock clamps allowed the tag axle to be offset from the front steering axle.

Identification of Any Warning that can Occur : The tag axle tires may show visible signs of scrubbing that would be observable during vehicle inspection. In vehicle operation, the operator may see the rear of the vehicle off-set through the rear view mirrors.

Supplier Identification :**Component Manufacturer**

Name : Shekonic Group Ltd.

Address : 1122 New Jinqiao Road

Room 2301, Founder Tower Shanghai FOREIGN STATES 201206

Country : China

Chronology :

On November 20, 2019, a customer reported that the steering lock plate mounted to the steering tie rod linkage had come loose during operation of its 2020 D4505 (unit 15477), resulting in the tag axle tracking in a left angle position and causing a collision with an automobile. The customer further reported that inspection of the coach following the collision indicated that the fasteners on the tag locking plates were loose. On November 21, 2019, MCI inspected two other coaches and found that the tag axle steering lock plate fasteners were not at the specified torque requirement. MCI then inspected the tag axle lock plates and clamps in its inventory and found the issues described above with the lock plate clamp, 12-04-1153. On December 20, 2019, the MCI safety committee decided to recall all affected units with the clamps from Shekonic.

Description of Remedy :

Description of Remedy Program : MCI will provide a replacement clamp (part 12-04-1153) that has the machined fastener interface surface and the paint removed from the bolt head surface and clamping surface, at no charge to owners. With the clamp replacement, new mounting fasteners will be used and torqued to specification. MCI will reimburse owners for the labor to replace the clamps.

How Remedy Component Differs from Recalled Component : The new clamp parts will have the contact surfaces unpainted and machined fastener contact surfaces. When clamps and fasteners are replaced, a paint line will be added to the clamp to indicate it was changed and re-torqued.

Identify How/When Recall Condition was Corrected in Production : Beginning on or about December 12, 2019, MCI began installing clamps that had the fastener contact surface machined to design specification and the paint removed on the fastener head contact surface and the surface that contacts the tie rod.

Recall Schedule :

Description of Recall Schedule : MCI will mail customer notification letters and service bulletins within seven (7) days after NHTSA approval.

Planned Dealer Notification Date : FEB 03, 2020 - FEB 03, 2020

Planned Owner Notification Date : FEB 03, 2020 - FEB 03, 2020

* NR - Not Reported