

SB-10056066-3319



Reliability Driven™

Service Bulletin No. 407

MODEL	D Series	TYPE	Field Change Program	SECTION/GROUP	12-Suspension	DATE	May 7, 2014
SUBJECT	GABRIEL SHOCK ABSORBER POLYURETHANE BUSHING						
CONDITIONS							

Customer Complaint:

Gabriel Ride Control has notified Motor Coach Industries (MCI) that in early 2013 they replaced the red 185 durometer polyurethane bushings with a red 288 polyurethane bushing in the shock absorbers at their production plant. Gabriel advises that these shock absorbers operating in cold temperatures may result in failure of the shock absorber stud breaking at the bushing. If the shock absorber fails, the coach cannot be operated due to the risk of suspension component damage.

Cause:

Gabriel reports that the material in the polyurethane bushing will harden and stiffen, increasing resistance in extreme cold temperatures. The stiffer bushing under compression yields greater resistance that could transfer additional force onto the bolt that mounts the shock. In addition, an over-compressed bushing in a sustained cold temperature environment may cause shock absorber stud fracture.

Corrective Action:

MCI strongly encourages owners of the D4000, D4005, D4500, D4505 and D4000 ISTV series coaches listed in the table below to replace the front, drive and tag axle shock absorber stud bushings with the Q13 / 2013 date code by implementing the steps in this procedure as soon as possible.

12901 to 12906	12912	12919	12921 to 12960	12963 to 12981
12994 to 13021	13028 to 13032	13038 to 13118	13120 to 13133	13135
13161	13162	13180	13182 to 13213	13215
13221	13242 to 13276			

Parts

Qty.	New P/N	Description
1	12-05-1321	Kit, Bushing, Gabriel Shock Absorber <i>Kit contents are:</i>
1	19-3-153	Lock nut, 5/8-18 UNF
2	12J-3-104	Washer
2	12-05-1320	Bushing, Shock Absorber

Service Procedure:

 **WARNING**

*Read this entire procedure before beginning work.
Use Safe Shop Practices At All Times.*

 **REFER TO MANUAL**

Refer to Section 3 / Body, in the MCI D Series Maintenance Manual, in conjunction with this procedure for jackstand support placement information.

NOTICE

This procedure is to be performed at an ambient temperature of 60 degrees F / 16 degrees C or higher.

1. Turn the main battery disconnect switch to the OFF position.
2. Using wheel lifts, lift the coach to the desired work height.
3. Position jack stand supports under the coach frame support points.
4. Carefully lower the axle a little to clear the lower shock absorber stud.
5. Visually inspect and record the date code on the front, drive and tag axle shock absorbers (refer to Figure 1).



Figure 1.



NOTICE

If the date code on the shock absorber is stamped Q13 and the bushing is red, proceed to the procedure steps below to replace the bushing.

If the date code on the shock absorber is stamped Q13 and the bushing is not red, no further action is required. Proceed to the next shock absorber.

If the date code on the shock absorber is not stamped Q13, no further action is required regardless of the bushing color. Proceed to the next shock absorber.

Upon inspection, if the shock absorber stud is damaged take a digital photo of the fractured stud as well as the shock absorber part number and the date code (refer to Figure 1). Contact the MCI Fleet Support Technical Center at 1-800-241-2947 for further information regarding replacement.

DRIVE AXLE SHOCK ABSORBER PROCEDURE

6. Remove and retain the nut from the lower location (stud end) of the drive axle shock absorber.
7. Compress the shock absorber upwards.
8. Remove and discard the existing lock nut, washers and red polyurethane bushing from the lower location (stud end) of the drive axle shock absorber (refer to Figure 2).

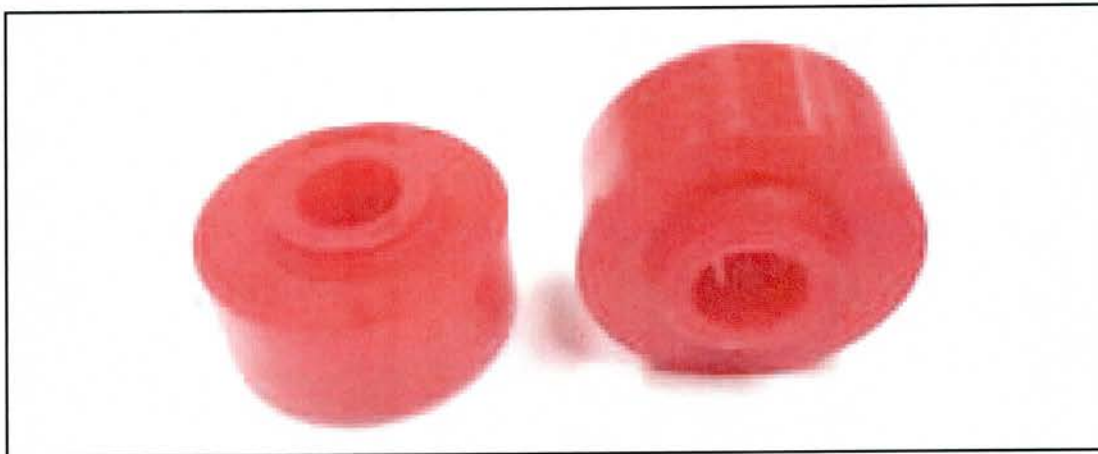


Figure 2.

9. Orient and install the new bushings, p/n 12-05-1320.
10. Install the new washers, p/n 12J-3-104, and lock nut, p/n 19-3-153.
11. Tighten the lock nut until compressed bushing height falls between the range 0.649-0.669 inch / 16.50-17.00mm. (refer to Figure 3).



FRONT AXLE / TAG AXLE SHOCK ABSORBER PROCEDURE

12. Unfasten and remove the hex nut, retaining washers and the existing red polyurethane bushing from both ends (upper and lower stud end locations) of the shock absorber. Discard the existing lock nut, washers and red polyurethane bushing (refer to Figure 2).
13. Orient and install the new bushings, p/n 12-05-1320.
14. Re-install the shock absorber with new washers, p/n 12J-3-104 and new lock nut, p/n 19-3-153.
15. Tighten the lock nut until compressed bushing height falls between the range 0.649-0.669 inch / 16.50-17.00mm. (refer to Figure 3).

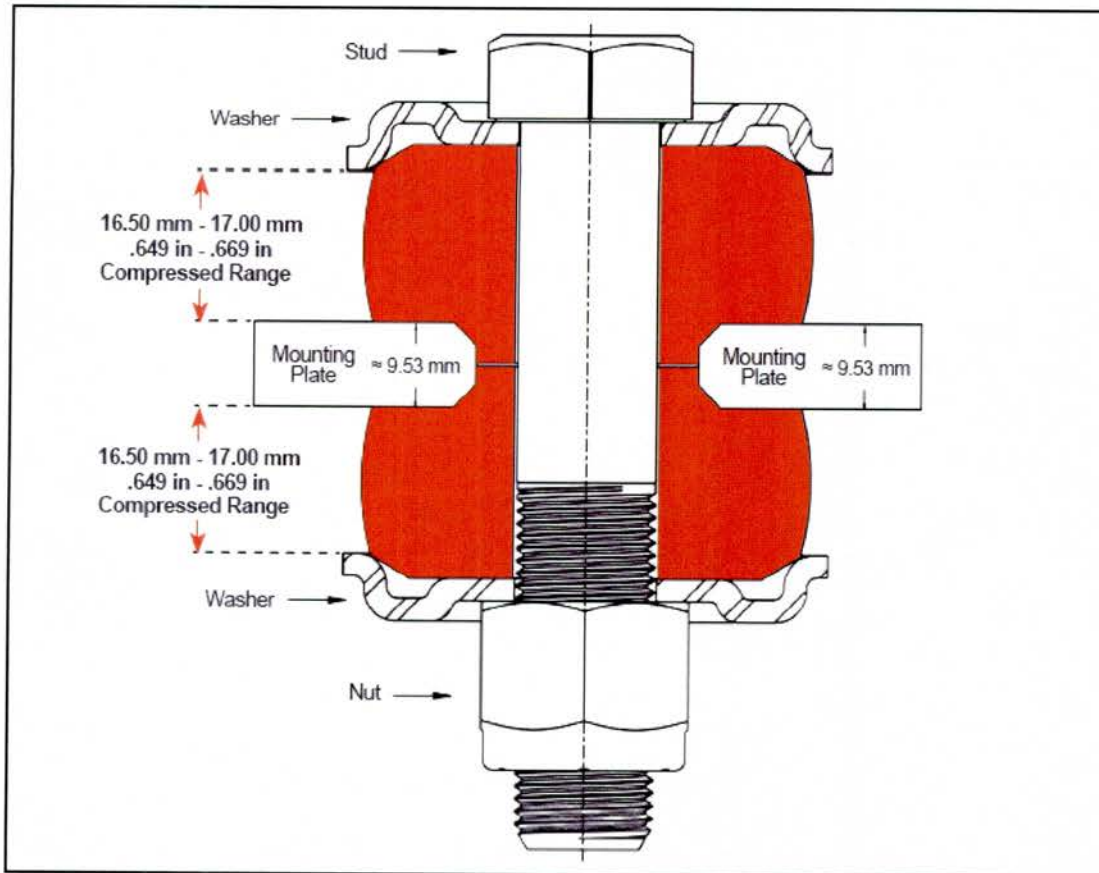


Figure 3.

Procedure Complete.



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Mail or fax the completed limited warranty claim form and verification form to MCI's warranty department, or photocopy and mail to:

MCI Fleet Support
Attn: Warranty Department
7001 Universal Coach Drive
Louisville, KY 40258
Fax Number 1-800-360-8886

to receive credit for the hours used to complete this task. Contact the MCI Fleet Support Technical Center at 1-800-241-2947 for any further information.

Field Change Program Conditions:

The parts required for this change will be supplied without charge.

A labor allowance of 0.5 hour per one (1) shock absorber will be granted for the procedure of installing the specified part(s) in this bulletin on D Series coaches.

This labor allowance will be credited to your MCI Fleet Support Parts Account on receipt of the attached "MCI Field Change Program Verification Form" and a "Warranty Claim Form" as detailed in your Owner Warranty manual to MCI's Warranty department. A "MCI Field Change Program Verification Form" needs to be submitted for each VIN affected. Photocopy the attached "MCI Field Change Program Verification Form" as required for the number of affected coaches in your fleet.

This program will end on November 21, 2014.

Motor Coach apologizes for any inconvenience resulting from this campaign, but urges you to implement this change as soon as possible.

Sincerely,

Motor Coach Industries



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MCI FIELD CHANGE PROGRAM (FCP) VERIFICATION

CONTACT INFORMATION	
CUSTOMER NAME: _____	
(PLEASE PRINT)	
FCP INFORMATION – ONE FORM PER UNIT	
FCP#: _____	Coach Model _____ Model Year _____
COACH SERIAL #: (At least the last 5 digits)	DATE COMPLETED __ / __ / __
MILEAGE:	
<u>IMPORTANT:</u> TO RECEIVE CREDIT FOR ANY ALLOWABLE LABOR CHARGES, THIS VERIFICATION FORM MUST BE RETURNED TO MCI UPON COMPLETION OF THE FCP.	
SUBMITTED BY: (Please Print) _____	
	DATE __ / __ / __
TITLE: (Please Print) _____	
SIGNATURE: _____	
COMMENTS:	

FAX TO: 800-360-8886

MAILING ADDRESS:

**MOTOR COACH INDUSTRIES
ATTN: WARRANTY DEPT.
7001 UNIVERSAL COACH DRIVE
LOUISVILLE, KY 40258**

MCI part # 03-15-7738C