



Service Bulletin No. 383B

MODEL E4500 / J4500 Series Coaches	TYPE Field Change Program	SECTION/GROUP 11 – Steering	DATE June 13, 2012
SUBJECT POWER STEERING VIBRATION			
CONDITIONS			

THIS BULLETIN SUPERSEDES SERVICE BULLETIN 383 IN ITS ENTIRETY.

Customer Complaint:

Motor Coach Industries, Inc. ("MCI") has become aware that certain MCI E4500 / J4500 model coaches equipped with a Cummins ISX engine may experience vibration that is transmitted to the steering wheel.

Cause:

If an affected coach is driven at a low speed, the air compressor cuts in, and simultaneously there is demand for power steering, an additional load is placed on the engine's internal gears, which could result in vibration that is transmitted to the steering wheel.

Corrective Action:

MCI strongly encourages owners of the E4500 / J4500 model coaches listed in the table below to implement the steps in this procedure as soon as possible.

65758	65782 to 65783	65791 to 65792	65801 to 65806	65877
65917	65918	65923	65956 to 65987	65989 to 66007
66009 to 66031	66033 to 66073	66075 to 66077	66079 to 66081	66083
66084	66086	66088 to 66104		

Parts

Qty.	New P/N	Description
1	26-11-0005	Kit, Noise Suppressor, ISX <i>Kit Contents Are:</i>
1	03-15-5255	Bracket, Amerex Bottle, WCL Pump
1	11-08-1450	Suppressor, Hydraulic
1	11-08-1455	Hose Assembly, P / S
1	11-08-1456	Hose Assembly, P / S
1	19-01-1516	Capscrew, Flanged
1	19-03-0495	Nut, Flanged
1	19-04-0428	U-Clamp
1	19-10-2481	Fitting, 90 degree Elbow
2	19-10-872	Fitting
3	19-4-47	Clamp, Line Support
a/r		Oil Transmission, TES-389
a/r		Torque Seal

Service Procedure:

⚠ WARNING

Read this entire procedure before beginning work.

Use Safe Shop Practices At All Times.

⚠ WARNING

To avoid personal injury, never enter or perform work in the engine compartment prior to positioning the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the OFF position. Allow enough time for components to cool down prior to working in the engine compartment.

1. Activate the disconnect feature of the main battery disconnect (MDS) system by pressing (for one second only) the momentary toggle switch on the MDS module to OFF. An audible click can be heard from the main solenoids in the MDS module. Position the rotary switch to the DOWN (OFF) position.
2. Chock both sides of the tires.

NOTICE

The power steering hoses referenced in this procedure can be identified by the part number stamped on the hose assembly.

3. Locate the power steering pressure hose (supply), p/n 11-08-1363 (refer to Figure 1). Disconnect the lower end of the power steering pressure hose to drain the oil into a suitable sized container. Discard the oil. Using a clean cloth, wipe clean the installation area.
4. Remove and discard the power steering pressure hose, p/n 11-08-1363, and the clamp (refer to Figure 1). Retain the capscrew and nut to be used at a later step in this procedure.

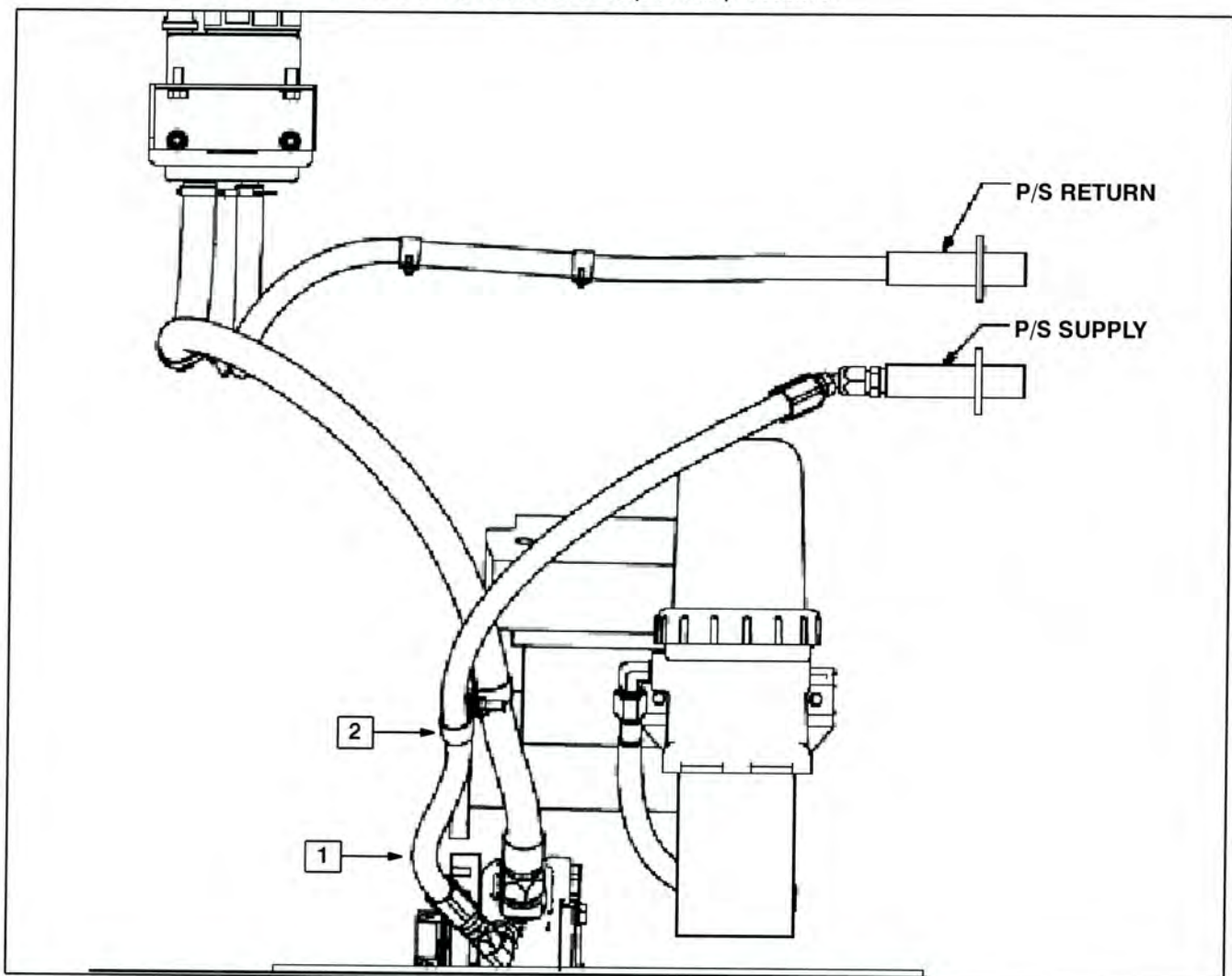


Figure 1. Existing configuration, pre-retrofit.

ITEM	DESCRIPTION
1	Disconnect the lower end of 11-08-1363 hose to drain the system.
2	Discard the 11-08-1363 hose and clamp. Retain capscrew and nut.

5. Locate the bracket on the Amerex nozzle. Remove and retain mounting hardware. Discard the bracket.

NOTICE

Utilize the system oil on the o-ring side of the suppressor fittings.

Coaches equipped with a wheelchair lift should install hose assembly, p/n 11-08-1455, on the workbench to avoid having to deploy the wheelchair lift for installation access (see Figure 3).

6. On a workbench, assemble the suppressor, p/n 11-08-1450, suppressor o-ring fittings, and fittings, p/n 19-10-872 and 19-10-2481 (refer to Figures 2 and 3 for proper orientation). Using two (2) wrenches (use one { 1 } as a backing wrench), torque suppressor o-ring fittings to 43–48 ft-lbs.

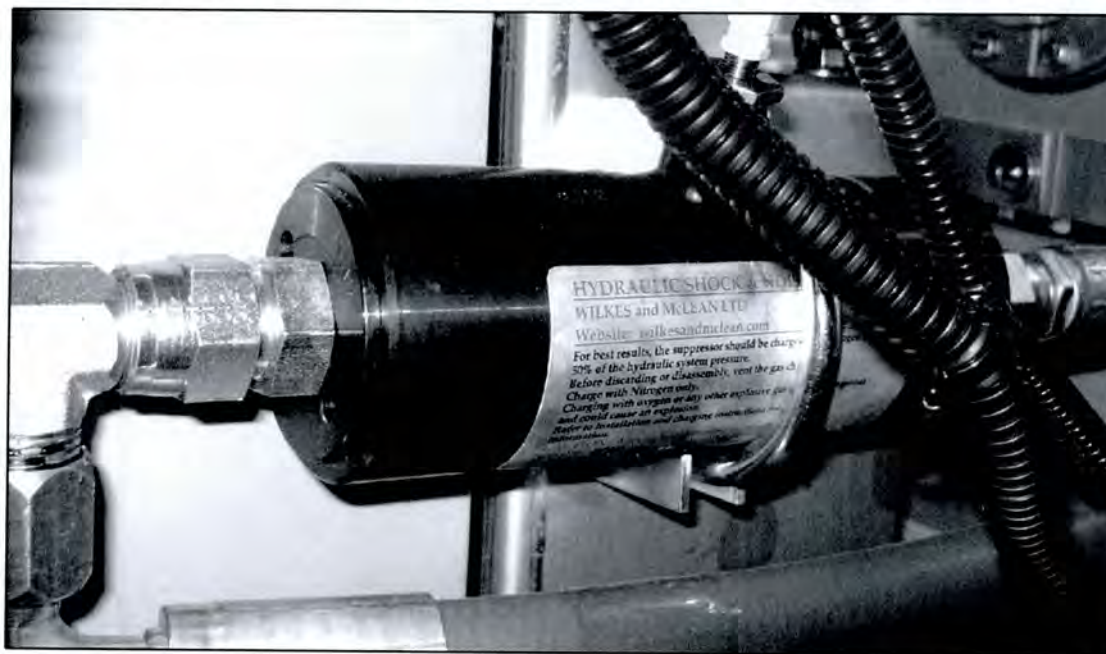


Figure 2. Reference photo of suppressor orientation.

7. Using the mounting hardware removed in Step 5, install the new bracket, p/n 03-15-5255 (Figure 3).
8. Using the u-clamp, p/n 19-04-0428, mount the suppressor to the Amerex bracket (refer to Fig 3 to 6).
9. Wipe off any residue and orient the power steering pressure hoses, p/n 11-08-1455 and 11-08-1456, as shown in Figures 3 and 4. Using two (2) wrenches (use one { 1 } as a backing wrench on the fitting), torque the four (4) hose ends to 53–63 ft-lbs.
10. Apply torque seal from the face of the hose end to the face of the fitting.
11. Orient the clamps, p/n 19-4-47, on the hoses as shown in Figures 3, 4 and 5. Using the capscrew, p/n 19-01-1516 and nut, p/n 19-03-0495, secure the clamps together.
12. Remove the cap from the power steering reservoir. Add oil, TES-389, to fill up to the MAX line.

! WARNING

To avoid personal injury, exercise extreme caution when working in the engine compartment with the engine running.

13. Position the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the ON position. Start up the coach from the engine compartment remote control box to visually monitor the power steering reservoir level.
14. Add oil (approx. 2 US quarts), TES-389, until the correct level is achieved utilizing the Min–Max levels marked on the housing. Return and secure the cap on the power steering reservoir.
15. Turn the steering wheel to the left and right, three times in each direction. Re-check oil level at reservoir.
16. Inspect all fittings and hoses for leaks.
17. Shut down the coach. Close the engine compartment door.

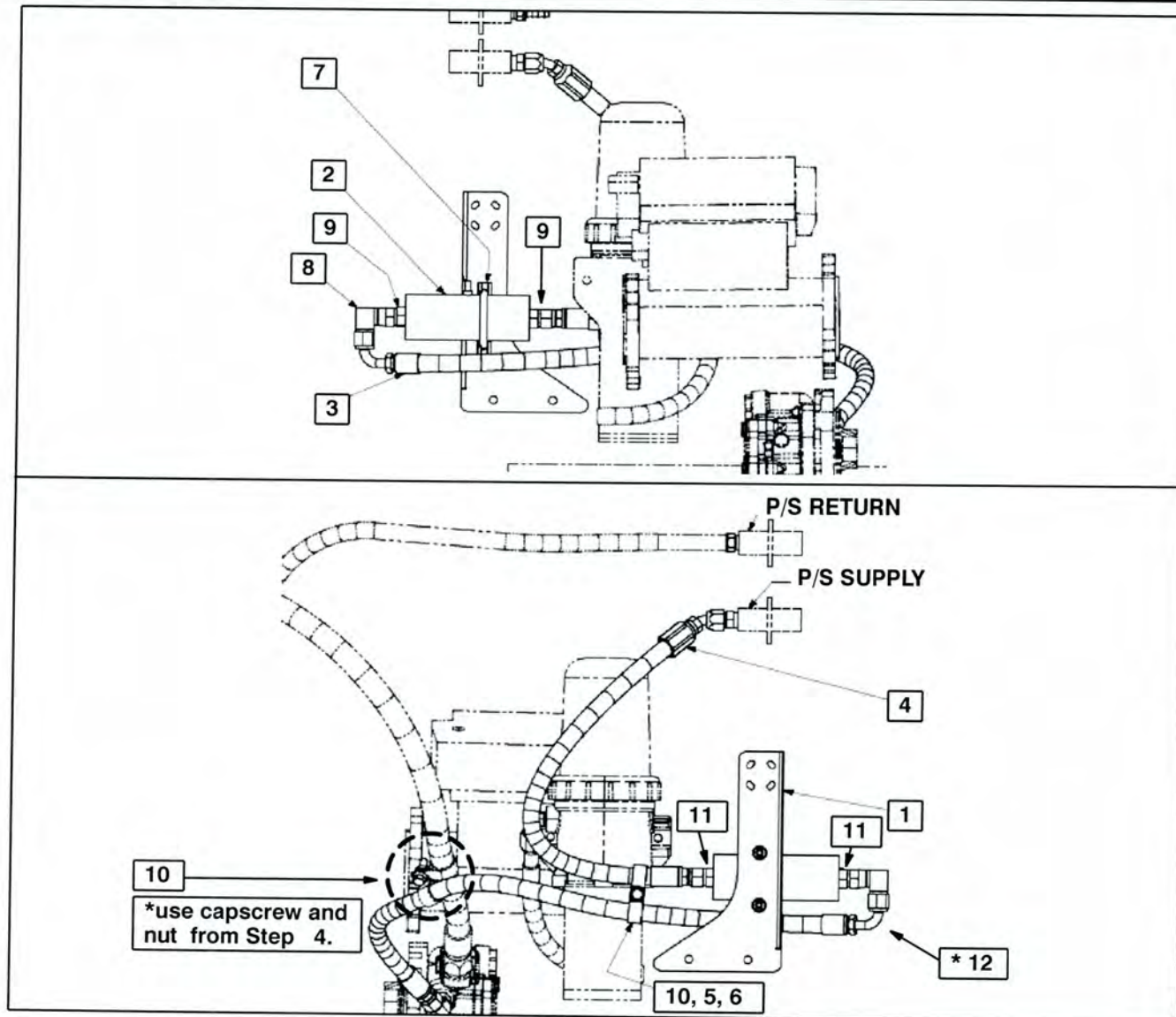


Figure 3.

ITEM	DESCRIPTION
1	Bracket, p/n 03-15-5255
2	Suppressor, p/n 11-08-1450
3	Hose Assembly, P / S Pressure, p/n 11-08-1455
4	Hose Assembly, P / S Pressure, p/n 11-08-1456
5	Capscrew, p/n 19-01-1516
6	Nut, p/n 19-03-0495
7	U-Clamp, p/n 19-04-0428
8	Fitting, p/n 19-10-2481
9	Fitting, p/n 19-10-872
10	Clamp, p/n 19-4-47
11	Suppressor o-ring fitting (2)
12	* On WCL equipped coaches, install 11-08-1455 on workbench.

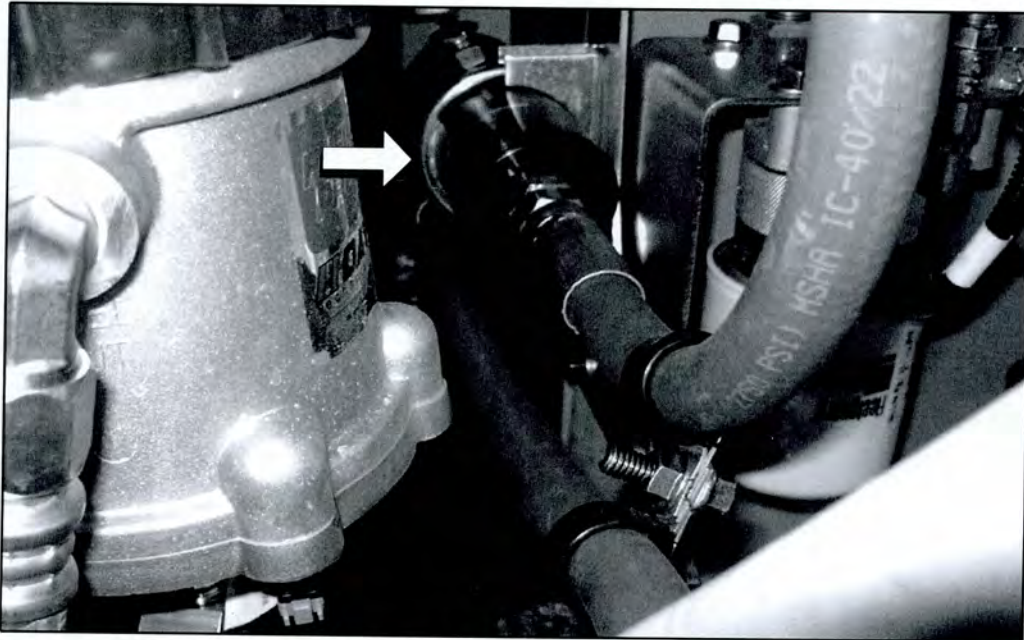


Figure 5. View of installation from the engine compartment.

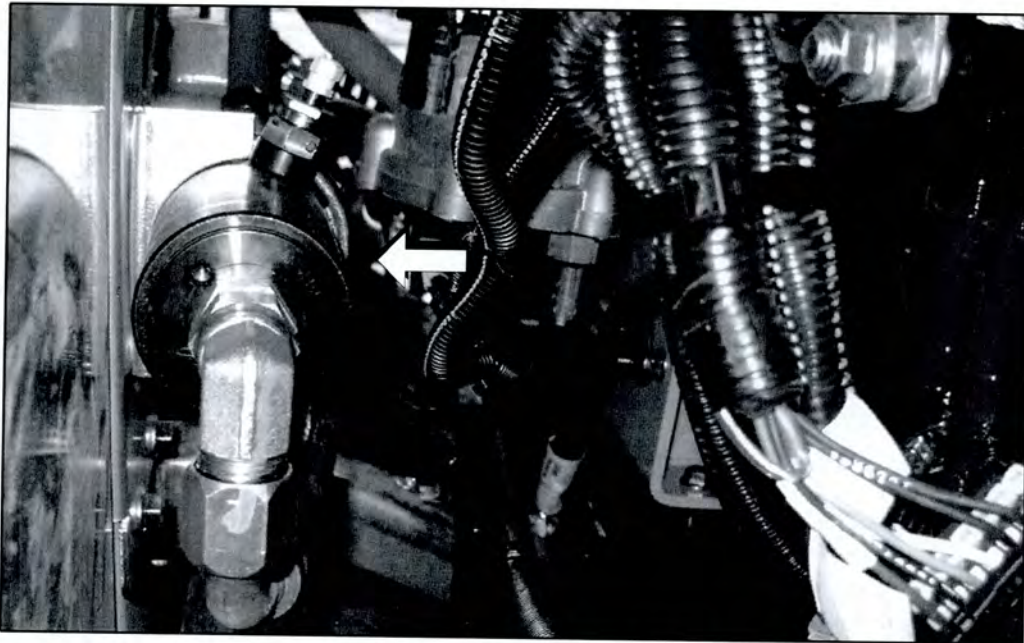


Figure 6. View of installation from the access panel in the wheelchair lift compartment.

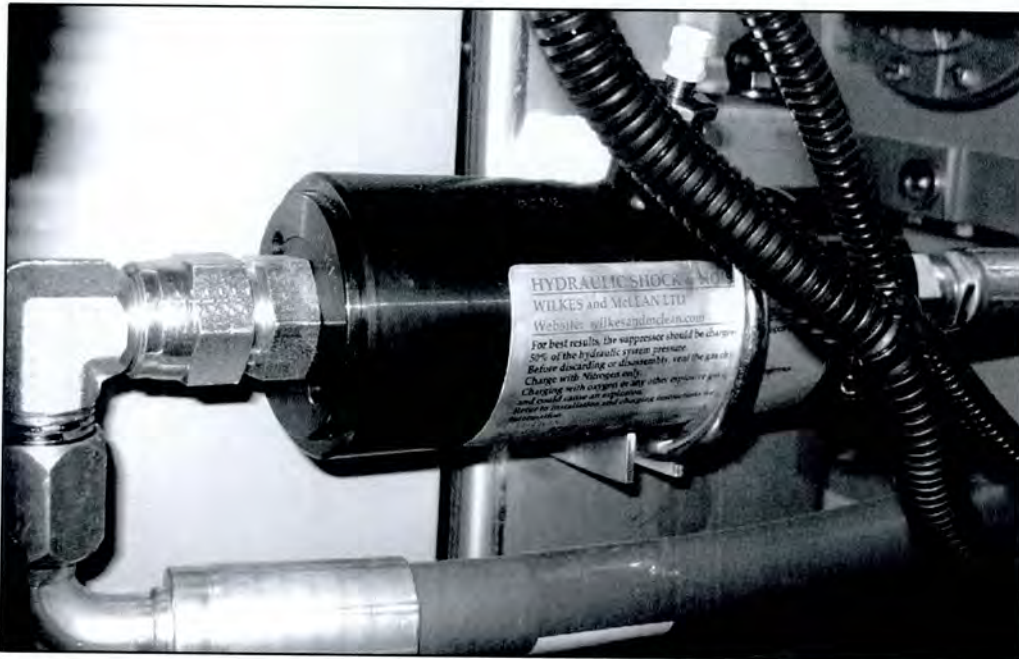


Figure 7. Side view of the installed suppressor.

Procedure complete.

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 1.5 hours will be granted for the procedure of installing the specified part(s) in this bulletin on affected E4500 / J4500 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 December 28, 2012.

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



Reliability Driven™

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:	
IMPORTANT: 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