



Reliability Driven™

Service Bulletin No. 415B

MODEL	J4500 Series	TYPE	Field Change Program	SECTION/GROUP	7-Electrical	DATE	Sept. 17, 2014
SUBJECT	DD13 ENGINE REGENERATION AT LOW AMBIENT TEMPERATURE						
CONDITIONS							

THIS BULLETIN SUPERCEDES FIELD SERVICE BULLETIN 415 IN ITS ENTIRETY.

Customer Complaint:

Motor Coach Industries ("MCI") has become aware that the DD13 engine does not reach an operating temperature that is sufficient to perform a regeneration at low ambient temperatures.

Cause:

Engine does not reach high enough operating temperature at low ambient temperatures.

Corrective Action:

MCI will remedy the affected coaches at no cost to customers by installing the cooler bypass valve and revising the Actia program. However, proper repairs will require the use of specialized equipment and therefore MCI strongly urges customers to make an appointment as soon as possible by calling the MCI Customer Service Line at 1-800-241-2947, to have the repair performed by trained technicians who have the necessary equipment.

66279	66280 to 66283	66295 to 66300	66305 to 66307	66309 to 66310
66318 to 66319	66342 to 66348	66382	66409	66413 to 66416
66429 to 66439	66441 to 66442	66445 to 66446	66448 to 66453	66460
66503 to 66509	66511 to 66523	66526 to 66529	66531	66532
66533	66534	66540	66541	66579
66648	66698 to 66703	66705 to 66724	66728	66735 to 66738
66759 to 66762	66786 to 66788	66791	66792	66806
66807	66816 to 66822	66850	66851	66853
66855	66875 to 66887	66925 to 66929	66948 to 66952	



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Parts

Qty.	Old P/N	New P/N	Description
1		26-13-0006	Kit, Transmission Cooler Bypass Valve, DD13 <i>Kit contents are:</i>
1		07-12-4975	Harness, Coolant Bypass
1		16-16-1616	Valve, 2 Way
2		19-10-3058	Fitting, 3/4 x 5/8
4		19-11-258	Tyrap, 7.31 inch
2		19-11-259	Tyrap, 3/8 x 3.50 inch
1		19-2-69	Washer, 1/4 inch
1		19-4-22	Clamp, Line
2		19-4-230	Clamp, Stepless, Spring
a/r			Sealant, Pipe Fitting

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. Open the wheelchair compartment door and secure in the open position using the steel detent pin.

NOTICE

NOTICE
If the coach is equipped with a wheelchair lift, activate and raise the lift to the upper position. Insert the maintenance steel pin on both sides of the lift

2. Turn the main battery disconnect switch to the OFF position.
3. Close the quarter turn valves in the engine compartment to isolate the cooling system. Drain the coolant into a clean, suitable sized container.

4. Locate the closing panel on the rear wall of the wheelchair lift compartment. Release the eight (8) fasteners on the closing panel and place aside to be re-installed at a later step in this procedure. Refer to Figure 1.

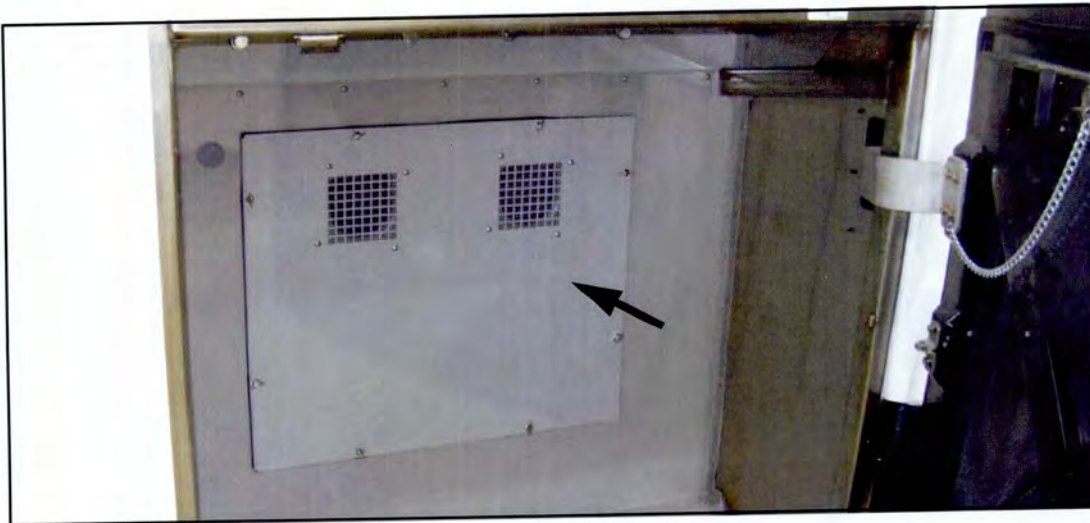


Figure 1.

5. Locate Plug 46 on bulk head. Locate spare wires SP43 and SP45 in Plug 46.
6. Using wire cutters, cut the harness, p/n 07-12-4975, four (4) feet back from the connector (plug) end.
7. Using wire strippers, strip the wires on the four (4) foot section of cut harness 0.250 inch. Using solder, heat shrink and high heat loom, splice on black wire from harness, p/n 07-12-4975, to SP43. Splice the white wire from harness, p/n 07-12-4975, to SP45.



Figure 2.

8. Locate the coolant hose (refer to Item 1 / Figure 3).
9. Locate the coolant hose line clamp (refer to Item 5 / Figure 3). Remove and retain the line clamp and mounting hardware.
10. Using a marker and tape measure, mark a line at the 9.50 and 14.00 inch point using Item 3 / Figure 3 as the starting point.

NOTICE

When cutting the coolant hose, use caution not to deform the integrity of the hose ends.

11. Using hose cutters and wire cutters, cut the hose jacket and wire framing at the lines made in Step 10. Discard the cut piece.

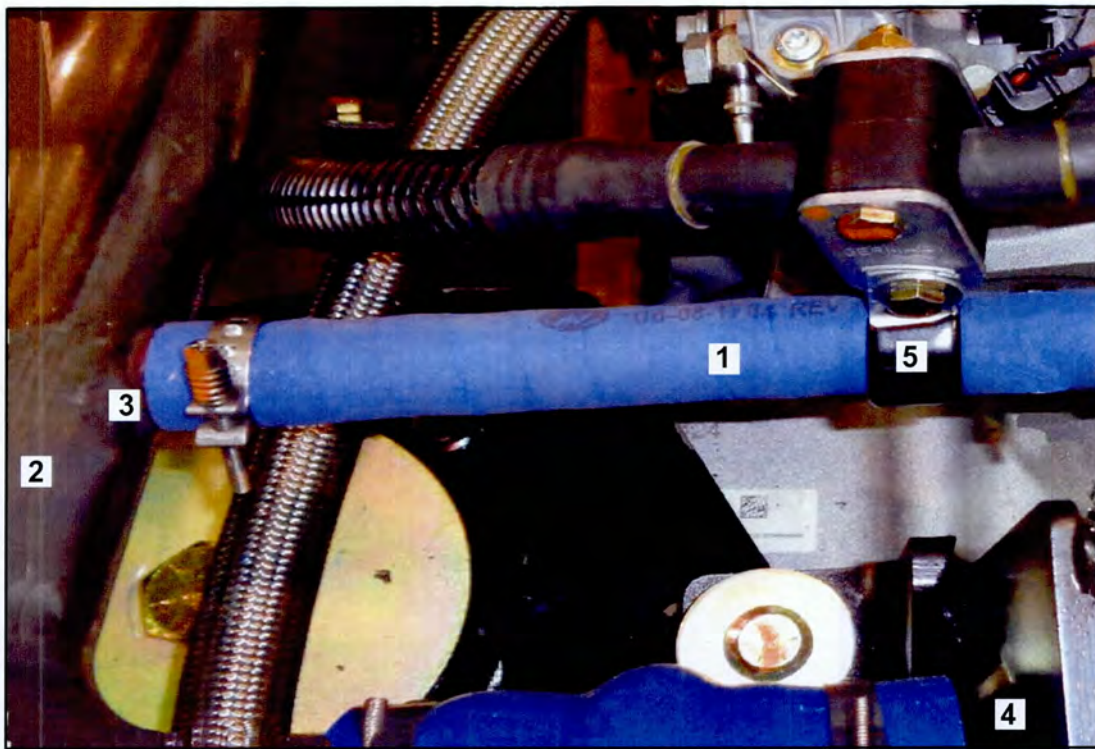


Figure 3.

Item	Description
1	Coolant hose
2	SST Pipe, Oil Cooler to Thermostat
3	Measurements, 9.50 and 14.0, inch, to be taken from this point
4	Transmission cooler, reference location
5	Remove and retain line clamp and mounting hardware

12. Orient the coolant bypass valve, p/n 16-16-1616, ensuring that the casting stamped "IN" port is facing towards the curbside of the coach. Slide one (1) stepless spring clamp, p/n 19-4-230, over both ends of the cut hose end. Install the valve utilizing the cut hose ends as shown in Figure 4. Orient and tighten the stepless spring clamp over the valve ports. Torque clamps to 12-14 in.-lbs.
13. Re-install the coolant hose line clamp (refer to Item 5 / Figure 3).



Figure 4.

14. Locate the 2 pin packard connector on the coolant bypass valve shown in Figure 4. Connect to the harness end installed in Step 7.
15. Open the baggage bay compartment #3 doors. Locate the rear electrical junction box mounted to the ceiling. Pull to release the rubber T-straps on the rear electrical junction box closing panel.

16. Locate the pink Plug 332 on the Wabco ABS module mounted on the hinged closing panel (refer to Figure 5). Locate spare wires SP43 and SP45 in the bundle six (6) inches back from the plug.

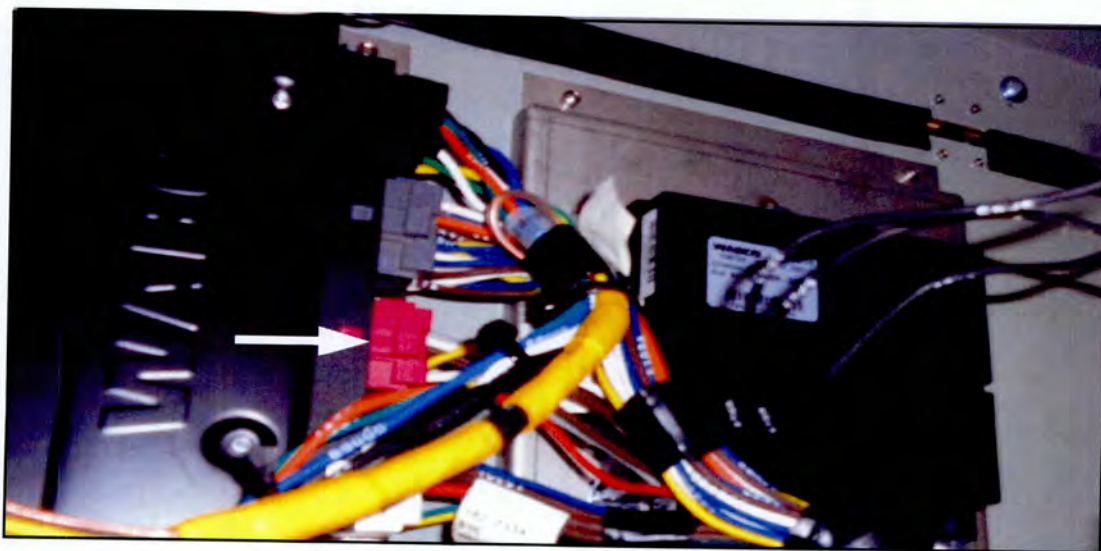


Figure 5.

NOTICE

In the event that Pin 38 is populated utilize Pin 39. If Pin 38 and 39 are populated utilize Pin 36 when performing Step 17.

17. Locate Plug 103 on the Actia module (refer to Figure 6). Locate Pin 38 on Plug 103. Remove the plug from the cavity and populate Pin 38 with the pin end of the remaining cut section of the harness, p/n 07-12-4975.
18. Using wire strippers, strip the black wire 0.250 inch. Using solder, heat shrink and high heat loom, splice on black wire from harness, p/n 07-12-4975, to SP43.

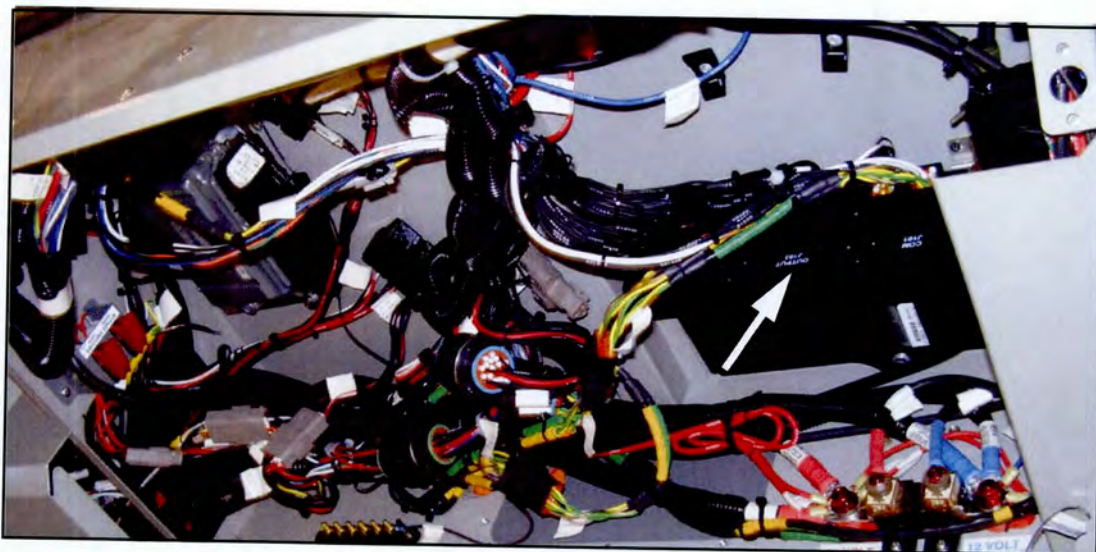


Figure 6.

19. Route the ring terminal end of the remaining cut section of the harness, p/n 07-12-4975, to the ground block shown in Figure 7.

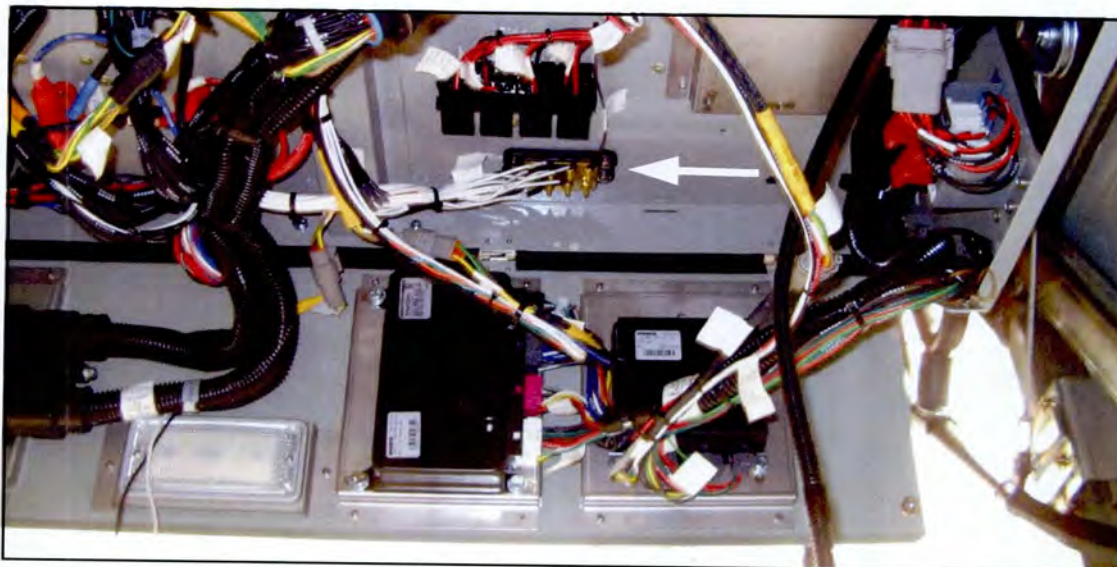


Figure 7.

20. Using wire strippers, strip the white wire 0.250 inch. Using solder, heat shrink and high heat loom, splice on white wire from harness, p/n 07-12-4975, to SP45.
21. Using tyrap, tyrap to secure the harness wires in the rear electrical junction box.
22. Close the rear electrical junction box. Pull to engage the rubber T-straps to secure in the closed position.
23. Orient the closing panel on the rear wall of the wheelchair lift compartment and engage the eight (8) fasteners to secure in the closed position.

CAUTION

Ensure there is no debris and/or contaminants in the collected coolant.

NOTICE

Ensure all drain valves are closed prior to introducing coolant back into the system.

24. Open the quarter turn valves in the engine compartment.
25. Follow the Special Coolant Fill Instructions on the decal located in the engine compartment, add coolant to the system as required.
26. Position the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the ON position. Start up the coach and allow to run for a few minutes.
27. Position the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the OFF position. Check for leaks and coolant level.
28. Connect a laptop to the coach. Download the new ACTIA program.

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:

Specialized programming equipment is required to perform this retrofit.

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

A labor allowance of 1.50 hours will be granted for the procedure described in this bulletin on applicable 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 April 5, 2015.

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