



SERVICE BULLETIN

SB1243

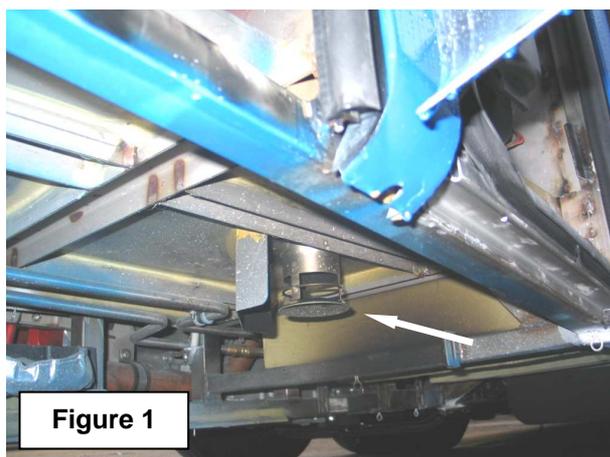
ADDRESSEES	: ABC Customer Care and Parts Source Owners and operators of coaches listed under 'Application'
VEHICLE MODEL	: TD925US
SYSTEM/SUBSYSTEM	: Climate control – Auxiliary heater
BULLETIN TYPE	: Product Improvement
DATE	: May 9, 2011
SUBJECT	: Auxiliary heater – Extended exhaust pipe
TERMS & CONDITIONS	: Note that no reimbursement will be awarded for carrying out this Product Improvement.

APPLICATION:

Model	VIN
TD925US	42301 → 42318, 42319 → 42401

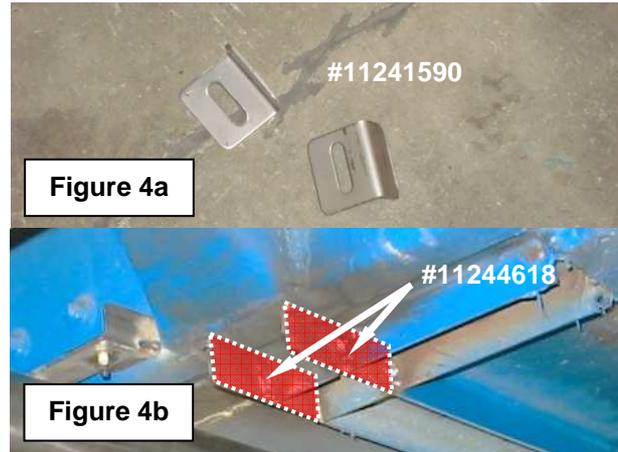
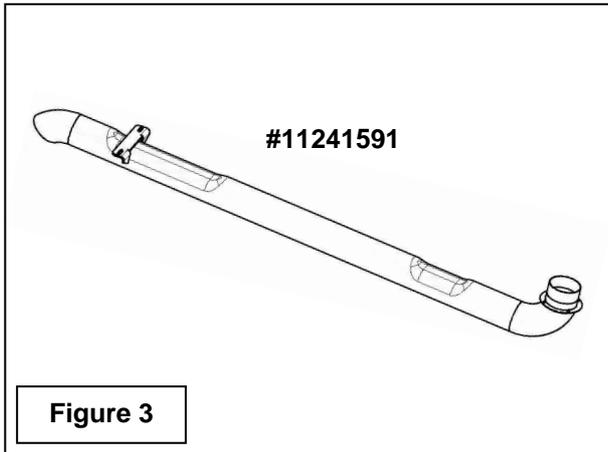
DESCRIPTION:

1. As from double-deck coach #42402, the auxiliary heater diffuser exhaust (Figure 1) has been replaced by an elbow and pipe that direct the heater exhaust gases to the rear of the vehicle (Figure 2).



2. The new installation prevents heater exhaust fumes from entering the luggage compartment when the vehicle is stationary and thus eliminates a source of discomfort for drivers and baggage handlers.
3. Owners and operators who wish to retrofit this product improvement to their coaches may purchase the parts and install them as described in this Bulletin.

MATERIAL:



VH reference	Description	Qty.	Refer to
11241591	Exhaust assembly, auxiliary heater	1	Figure 3
11241590	Bracket, exhaust support, weld-on	2	Figure 4a
11244618	Bracket, U-channel reinforcing, 110 x 25 x 3 mm, weld-on	4	Figure 4b
660229754	Bolt, M6 x 1.00 x 20 mm, DIN933, stainless	2	N/S
660623507	Washer, flat, 6.4 x 12 x 1.6 mm, DIN125A, stainless	4	N/S
660209935	Nut, self-locking, M6 x 1.00, DIN980, stainless	2	N/S
10511407	Blind rivet, 4.8 mm diameter, grip length 14.5 mm	3	N/S

- Material may be purchased through regular channels.
- Parts/Waste disposal: discard old material according to applicable environmental regulations.

PROCEDURE:

If you do not have the expertise to carry out present procedure, do not hesitate to go to your nearest ABC Customer Care & Parts Source service center.

1. General:

- This job has to be carried out by an experienced welder.
- For more information refer to the service literature that comes with the vehicle.

2. Special tools, equipment or services:

- MIG welding equipment suitable for welding stainless steel.
- Angle grinder.
- Drill bits (stainless steel).
- Rivet gun.

3. Preparations:

- Park the coach on a level-surfaced service pit with the front wheels straight. When using portable post lifts instead of a service pit, lower the suspension first. Apply the parking brake and shut down the engine.

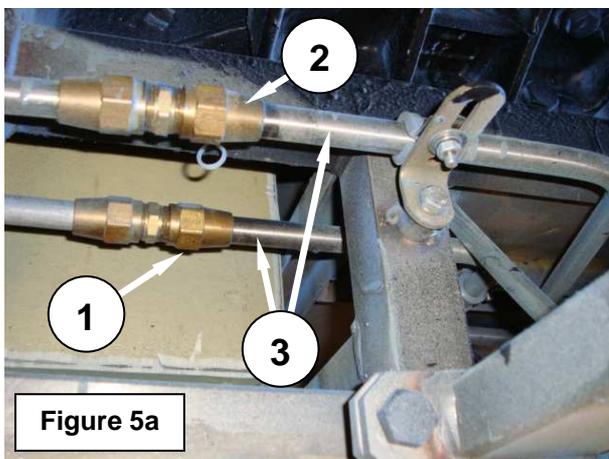
CAUTION: Make sure the auxiliary heater and climate control system are off.

- Switch off all systems and turn off the battery master switch.
- Also turn off the battery disconnect switch.
- Install a “DO NOT OPERATE” warning message on the instrument panel.
- Read the entire procedure before beginning to work.

CAUTION: Observe safe shop practices at all times.

4. To remove the diffuser exhaust:

- 1) Undo the fitting nuts (1 and 2, Figure 5a) connecting the extension tubing (3, Figure 5a) to the compressed air dryer coil.
Undo and remove the fasteners, and detach the bracket and P-clamps securing the extension tubing to the chassis (Figure 5b).
Remove the extension tubing from the vehicle and store it out of the way.



- 2) Using an angle grinder remove the diffuser exhaust heat shield that has been welded to the sheet metal floor of the battery/auxiliary heater compartment (Figures 6a and 6b).
Dress sharp edges and burrs.
Make sure not to damage the floor.



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- 3) With a suitably sized drill bit, remove the head of the rivets securing the diffuser exhaust (Figure 7a).
Withdraw the diffuser exhaust (Figure 7b) and remove the rivet stems.



5. **To remove a section of the battery/auxiliary heater compartment support frame and to install exhaust support brackets #11241590 and reinforcing brackets #11244618:**

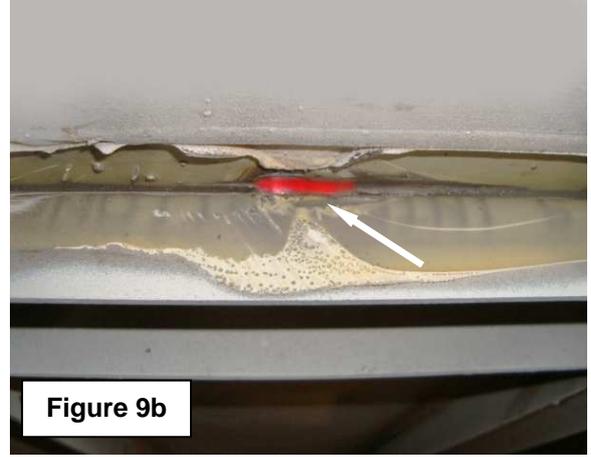
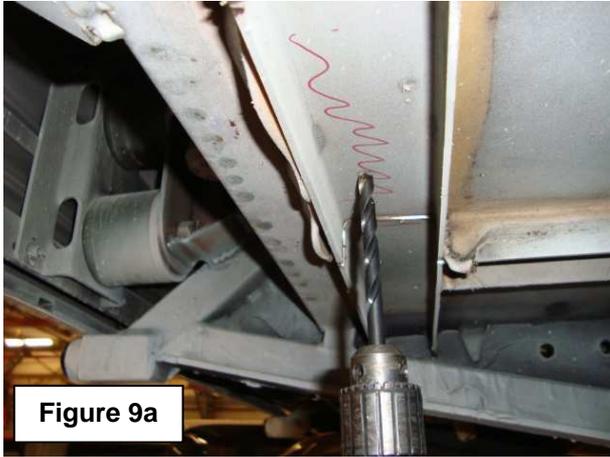
NOTE: The battery/auxiliary heater compartment is supported by a U-channel frame. A section of this frame needs to be removed to provide clearance for the new exhaust pipe. Note that the U-channels have been bead- and spot-welded to the floor of the compartment. To ensure structural stiffness of the frame, reinforcing brackets need to be added after removal of the U-channel section.

- 1) Figure 8a shows the section of the U-channel to be removed.
Mark the cutting lines (Figure 8b).
With an angle grinder cut through the U-channel making sure not to damage the floor of the battery/auxiliary heater compartment.



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- 2) Remove adhesives as required.
Using a suitable drill bit, remove the spot welds (Figure 9a).
With an angle grinder, remove the bead welds on both sides of the U-channel section (Figure 9b).
Using a chisel separate the U-channel section from the battery/auxiliary heater compartment floor (Figure 9c).
Dress sharp edges and burrs. Make sure not to damage the floor.



- 3) With the aid of an assistant trial fit and support exhaust pipe #11241591 (Figure 10).



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CAUTION: The following precautions must be taken to protect the vehicle's electronic equipment:

- **FIRST** disconnect the wires from the GND (ground) terminal of the battery equalizer.
- Disconnect the batteries (disconnect ground cable first, reconnect ground cable last).
- Disconnect the engine, transmission and brake system ECU's.
- Disconnect the HVAC and combustion heater ECU's.
- Disconnect the MUX nodes.
- On shell units, also disconnect the suspension ECU if the vehicle is equipped with an electronic control unit.
- For any other electronic equipment (radio, video, ICE...) refer to the OEM prescriptions.
- Keep the ground clamp as close as possible to the work and make sure the clamp makes perfect contact with the drive axle housing.
- Make certain the welder is properly grounded.

4) Attach the MIG welder ground cable as close as possible to the work (Figure 11).



Figure 11

Attach support brackets #11241590 for a loose fit to the support bracket that has been welded to the exhaust pipe (1, Figure 12a).

Tack weld then fully weld support brackets #11241590 to the battery/auxiliary heater compartment wall as shown in 2, Figure 12a and Figure 12b.
Remove the exhaust pipe.

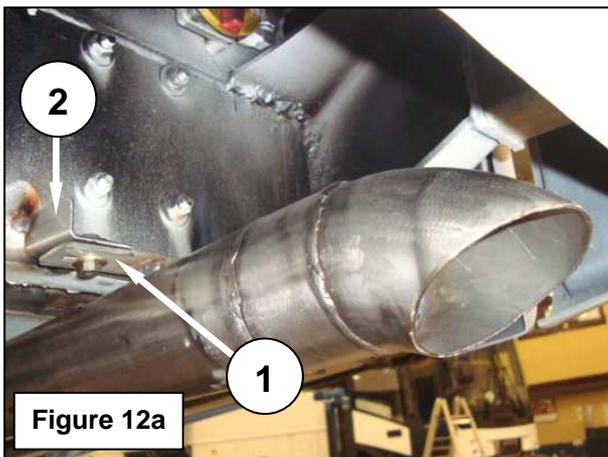


Figure 12a

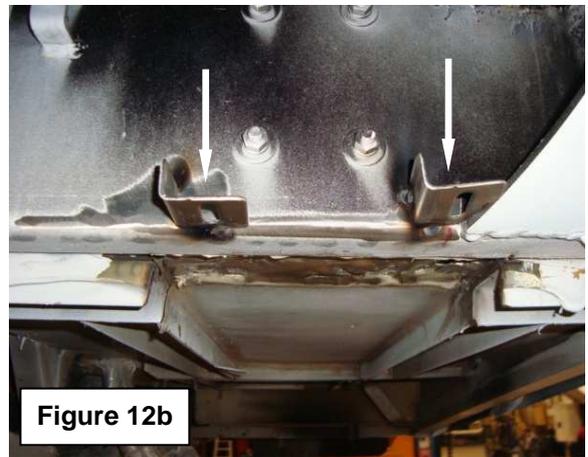


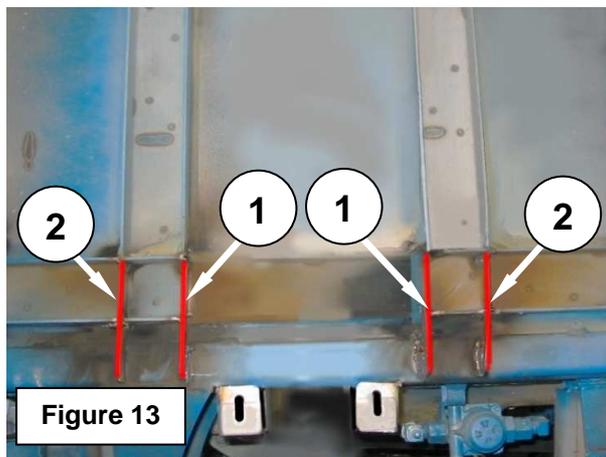
Figure 12b

- 5) Referring to 2, Figure 13 cut slots in the U-channel frame to accept reinforcing brackets #11244618.
Tack weld then fully weld the reinforcing brackets in place.
Close the U-channel open ends by welding on the remaining reinforcing brackets #11244618 (1, Figure 13).
This to provide a box section.
Weld all reinforcing brackets #11244618 to the compartment floor.

Detach the MIG welder ground cable.

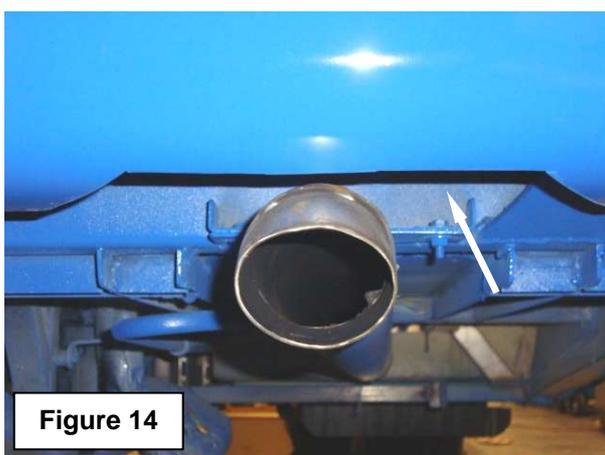
Thoroughly clean and degrease modified parts.
Coat bare metal with chassis black or similar.

Undo the precautionary measures taken before welding to prevent damage to the vehicle's electronic equipment.



6. To install auxiliary heater exhaust pipe #11241591:

***NOTE:** Before installing new exhaust pipe #11241591 on units equipped with a flat rear bumper, it is necessary to first provide a recess in the bumper for clearance (Figure 14).*

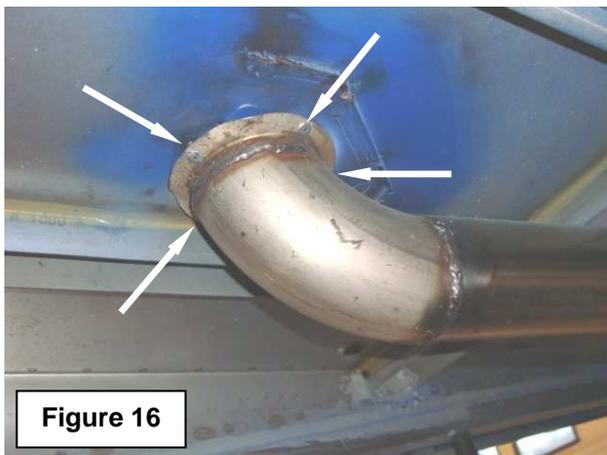


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- 1) Attach exhaust pipe #11241591 for a loose fit to support brackets #11241590 using the fasteners from the material's list (Figure 15).



- 2) Insert the exhaust pipe elbow into the battery/auxiliary heater compartment floor. When fully seated, secure the pipe with blind rivets #10511407 (Figure 16) to the floor. Tighten the support bracket fasteners to a torque of 80 in.lbf.



- 3) Reconnect the extension tubing to the compressed air dryer coil in reverse order to removal.

Procedure complete.

DISCLAIMER:

The procedures contained herein are not exclusive. Van Hool cannot possibly know, evaluate, or advise the transportation industry of all conceivable ways in which a procedure may be undertaken or of the possible consequences of each such procedure. Other procedures may be as good, or better, depending upon the particular circumstances involved. Each carrier who uses the procedures herein must first satisfy itself thoroughly that neither the safety of its employees or agents, nor the safety or usefulness of any products, will be jeopardized by any procedure selected.

INFORMATION HANDLING:

Important supplements to and modifications of the technical information not yet included in the Van Hool manuals are communicated by means of Service Bulletins.

File the Service Bulletins at the back of your manual, in numerical order.

To make sure that you will be reminded of the Bulletins that have appeared in the meantime while paging the manual, mark the pages concerned by hand with the Service Bulletin number.

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