



SERVICE BULLETIN No.1170

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COACH BUS MODEL	: T2145 and C2045
BULLETIN TYPE	: Service Information
MANUAL SECTION	: Exhaust system
DATE	: January 25, 2006
SUBJECT	: Detroit Diesel 60 Series engine with EGR – valve control lines and exhaust down pipe
TERMS & CONDITIONS	: No claims will be accepted with reference to this Bulletin.

APPLICATION:

The Service Information subject of this Bulletin applies to coaches with Detroit Diesel 60 Series engine and *hydraulically* operated EGR valve (see Chart below). Engines with pneumatically operated EGR valves are not affected.

Coach	Engine	Model	EGR operation	VIN	Affected
C2045	Detroit	6067MK2E	pneumatically	45935 → 45953, 46503, 45888	no
T2145	Diesel	6067MV2E	hydraulically	44620 →	yes
C2045	60 Series	6067MV2E	hydraulically	46531 →	yes

DESCRIPTION:

1. Detroit Diesel have replaced the pneumatically operated exhaust gas recirculation valve (EGR) by a hydraulically operated one. The change included a routing of the control lines, which is different to that for the pneumatically operated valve. As a result, the new line installation showed interference with the exhaust down pipe (see Figure 1, overleaf).
2. To address the issue, different solutions have been applied to T2145 and C2045 units, and to current production and field coaches respectively.
The purpose of this Bulletin is to summarize these solutions and provide service technicians guidance on part selection in order to assist them while carrying out exhaust system repair. Installation recommendations have also been included.

Description continued on next page.

Service personnel: please read, initial and circulate.

Service Manager	Parts Manager	Warranty Administrator	Workshop Foreman	Service Technician

Continued from page 1.

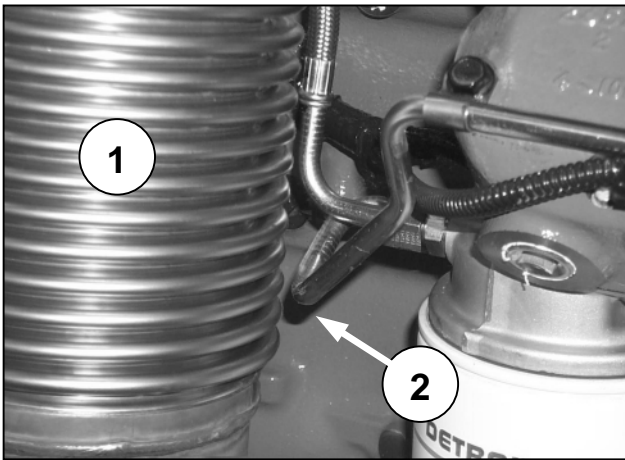
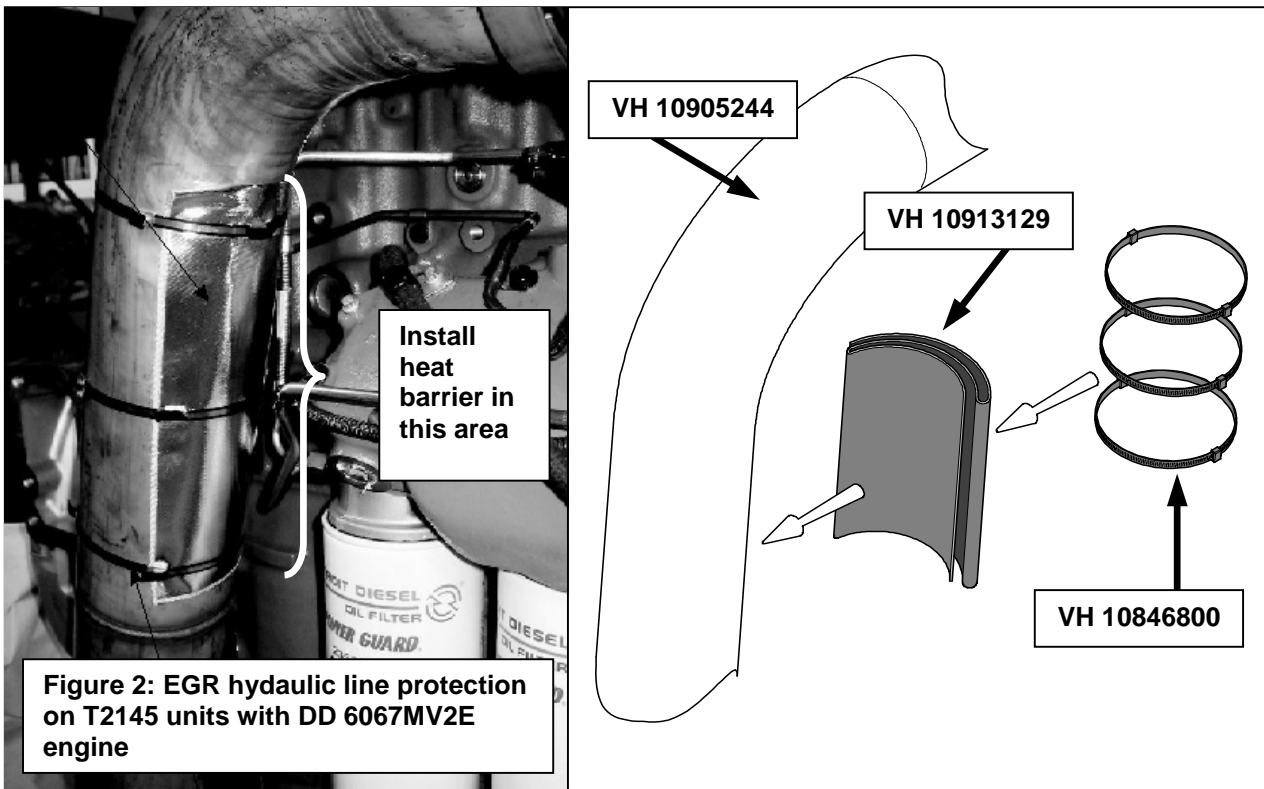


Figure 1: Interference between exhaust down pipe (1) and EGR hydraulic lines (2) (C2045 with Detroit Diesel shown)

T2145 MODELS:

1. EGR valve hydraulic line protection:

- To protect the EGR hydraulic lines against exhaust heat, an additional 3-layer heat barrier has been installed between the down pipe and the lines (see Figure 2). The barrier is secured to the down pipe with stainless steel tie wraps. No further changes have been made to the installation.
- Whenever the down pipe is reinstalled or replaced during repair, the heat barrier should also be reinstalled/replaced. Relevant part numbers are provided below.



2. Parts – exhaust heat shield (see Figure 2):

Part No.	Description	Qty.
VH 10905244	Downpipe	1
VH 10913129	Exhaust wrap (35 1/2 x 9 inches) (900 x 230 mm)	#
VH 10846800	Tie wrap	6

- Parts may be purchased from your nearest ABC Customer Care & Parts Source service center.
- Parts and products disposition: discard according to applicable environmental regulations.

3. Installation recommendations:

To install the heat barrier, proceed as follows:

1. Fold the heat resistant fabric (35 1/2 x 9 inches) to obtain a 9 x 12 inch heat shield.
2. Install the heat shield below the down pipe upper bend of in the area indicated in Figure 2.
3. Secure the shield to the down pipe with stainless steel tie wraps (3 x 2 tie wraps).
4. Cut and fold back the tie wrap end to secure the cable tie lock.

CAUTION: Exhaust installation should be free of strain, twist or tension. Assemble parts for a loose fit and adjust them to ensure stress-free installation before tightening fasteners.

C2045 MODELS :

1. EGR valve hydraulic line protection:

Units 46531 through 46589.

- To protect the EGR hydraulic lines and the compensator, the upper part of the down pipe has been lengthened, either by fitting a 25/32 inch spacer ring between the pipe and the turbo exhaust (see Figure 4.1) or by cutting-off and welding on a longer collar (see Figure 4.2). This moves back the pipe by the same amount and provides sufficient clearance for the EGR lines.
The muffler has been moved back also, to ensure stress-free installation of the down pipe.
- Whenever a down pipe fitted with a spacer ring is replaced by the new and longer factory item, the ring and accompanying clamp should be discarded.
Repositioning of the muffler may be necessary.

Current factory installation (units 46590 on):

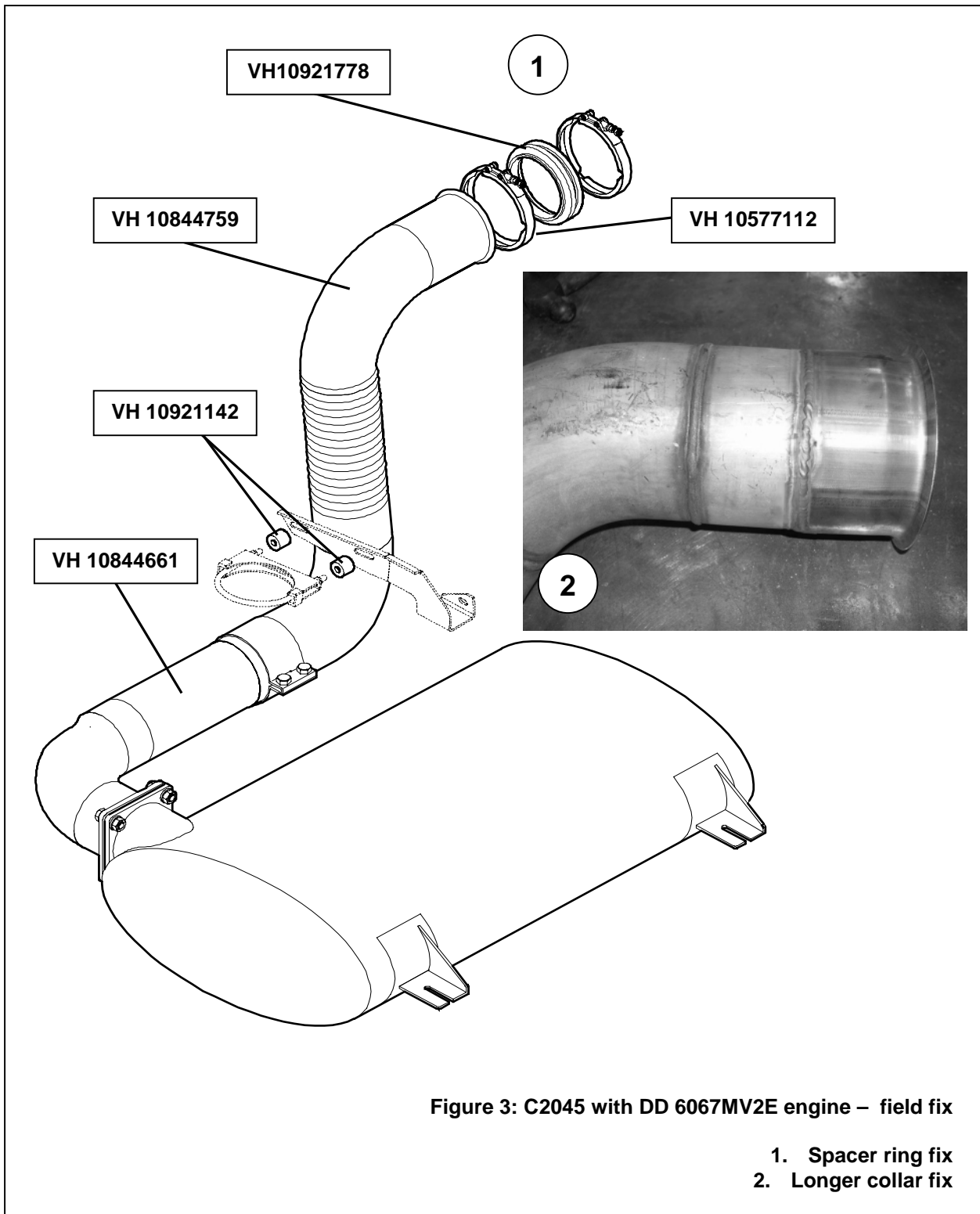
In production, following changes have been made (see Figure 3):

- The upper part of the down pipe VH10844759 has been lengthened by 25/32 inch.
- The down pipe to muffler elbow VH 10844661 has been shortened by 25/32 inch.
- Spacers VH 10921142 have been added between clamp VH 10749062 and down pipe mounting bracket VH 10844572.
- The muffler has been relocated to the original position.

NOTE: Do not consider this part of the Bulletin if the modifications have already been done on your vehicle(s).

2. **Parts – exhaust system (see Figure 3):**

Part No.	Description	Qty.
VH 10844661	Elbow, muffler to down pipe	1
VH 10844759	Down pipe w/ compensator	1
VH 10921142	Spacer, 25 mm	2



3. Installation recommendations:

CAUTION: Do not remove the installation sleeve around the compensator shown in Figure 4 until all parts have been installed.

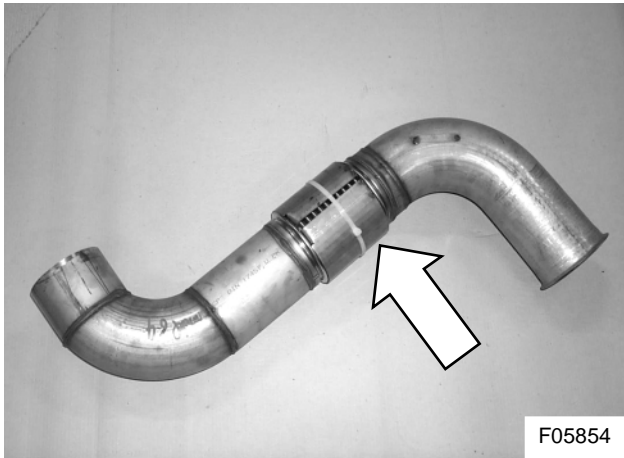


Figure 4: Installation sleeve

CAUTION: Always fit the installation sleeve around the compensator when welding is done to the downpipe.

CAUTION: Exhaust installation should be free of strain, twist or tension. Assemble parts for a loose fit and adjust them to ensure stress-free installation before tightening fasteners.

SERVICE INFORMATION:

Service Bulletins are issued to supplement or supersede information in the Van Hool manuals. Note Service Bulletin number, date and subject on the register at the end of the relevant chapter(s). File Service Bulletin separately for future reference.

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