

PREVOST

ENREGISTRÉ - REGISTERED
ISO 9001 & ISO 14001


WARRANTY BULLETIN

Wb04-04



DATE : APRIL 2004	SECTION : 01 - Engine
EXPIRATION: APRIL 2006	
SUBJECT : REPLACEMENT OF HOSES AND CLAMPS AND VERIFICATION OF MINIMUM CLEARANCE ON THE CHARGE AIR COOLER (CAC) SYSTEM	

APPLICATION

Model	VIN																										
<p>H3-41, H3-45 Coach VIP-45</p> <p>Model Year: 2004</p>	 <p>The following vehicles: 2PCV3349741014589 2PCV3349541014641 2PCH3349941014705</p> <p>and</p> <p>from 2PCV3349441014758 up to 2PCH3349541014832 incl.</p> <p>except</p> <table> <tr> <td>2PCH3349541014765</td> <td>2PCV3349941014819</td> </tr> <tr> <td>2PCH3349041014768</td> <td>2PCV3349441014825</td> </tr> <tr> <td>2PCH3349041014771</td> <td>2PCV3349841014827</td> </tr> <tr> <td>2PCV3349241014810</td> <td>2PCV3349141014829</td> </tr> </table>	2PCH3349541014765	2PCV3349941014819	2PCH3349041014768	2PCV3349441014825	2PCH3349041014771	2PCV3349841014827	2PCV3349241014810	2PCV3349141014829																		
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<p>XLII-45 Coach XLII-40 MTH & XLII-45 MTH - XLII Entertainer</p> <p>Model Year: 2004</p>	<p>The following vehicles:</p> <table> <tr> <td>2PCW3349841027937</td> <td>2PCW3349541028205</td> </tr> <tr> <td>2PCY3349541027953</td> <td>2PCX3349141028206</td> </tr> <tr> <td>2PCX3349741027965</td> <td>2PCW3349941028207</td> </tr> <tr> <td>2PCW3349541028009</td> <td>2PCW3349041028208</td> </tr> <tr> <td>2PCY3349741028019</td> <td>2PCY3349141028209</td> </tr> <tr> <td>2PCX3349341028028</td> <td>2PCW3349941028210</td> </tr> <tr> <td>2PCW3349841028084</td> <td>2PCY3349X41028211</td> </tr> <tr> <td>2PCX3349341028112</td> <td>2PCW3349641028214</td> </tr> <tr> <td>2PCX3349441028135</td> <td>2PCW3349X41028216</td> </tr> <tr> <td>2PCY3349741028165</td> <td>2PCW3340X41028217</td> </tr> <tr> <td>2PCW3349X41028166</td> <td>2PCW3349541028219</td> </tr> <tr> <td>2PCW3349141028167</td> <td>2PCW3349341028221</td> </tr> <tr> <td>2PCW3349341028168</td> <td>2PCY3349441028222...</td> </tr> </table>	2PCW3349841027937	2PCW3349541028205	2PCY3349541027953	2PCX3349141028206	2PCX3349741027965	2PCW3349941028207	2PCW3349541028009	2PCW3349041028208	2PCY3349741028019	2PCY3349141028209	2PCX3349341028028	2PCW3349941028210	2PCW3349841028084	2PCY3349X41028211	2PCX3349341028112	2PCW3349641028214	2PCX3349441028135	2PCW3349X41028216	2PCY3349741028165	2PCW3340X41028217	2PCW3349X41028166	2PCW3349541028219	2PCW3349141028167	2PCW3349341028221	2PCW3349341028168	2PCY3349441028222...
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2PCY3349941028202	2PCX3349641028282
2PCW3349141028203	2PCW3349341028283
2PCW3349341028204	2PCY3349441028284

DESCRIPTION

In order to meet the new standards concerning the greenhouse gas emission reduction, Detroit Diesel made some modifications to the engines which caused appreciable increase of air pressure in the Charge Air Cooler (**CAC**) circuit.

To make sure there will be no disconnection of the pipes during a pressure increase due to a rapid engine speed change, it is necessary to replace the hoses and clamps on your vehicle and to check if there is contact or friction between the CAC system pipes and other components of the engine compartment.

For the H3-41 and H3-45 coaches, VIP-45 and XLII-45 MTH, carry out part A of this bulletin only. For XLII coaches, XLII-40 MTH and XLII-45 Entertainer, carry out part B only.

PART A – H3-41 COACH, H3-45 COACH, VIP-45 AND XLII-45 MTH

MATERIAL

Order the following parts:

Part No.	Description	Qty
531467	Hose 4" dia. x 7" long	1
531469	Hose 4" dia. x 8" long	3
531396	Hose 4" dia. x 6" long (<i>order only if necessary, see step 3A</i>)	1
032543	Hose clamp (<i>check on your vehicle to determine the right quantity to order. Some hose clamps of that type may be installed on your vehicle's CAC system</i>)	between 8 & 19
032540	Spacer (<i>order only if necessary, see step 1A</i>)	4
071363	Support, transmission oil dipstick tube (<i>order only if necessary, see step 5A</i>)	1

PROCEDURE

Warning: Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

1A. On the pipe going from the charge air cooler (**CAC**) outlet to the engine air intake, remove the existing hose and clamps. Install 8" hose (#531469) (*figure 1*) and 4 hose clamps (#032543) on each connection. Tighten the clamps to a torque of 10 lb-ft.

Note: Unless it has already been done at the factory, insert 4 spacers (#032540) into the rubber support holes (*see figure 4*).

Note: Make sure that the pipes to be joined are as perfectly aligned as possible.

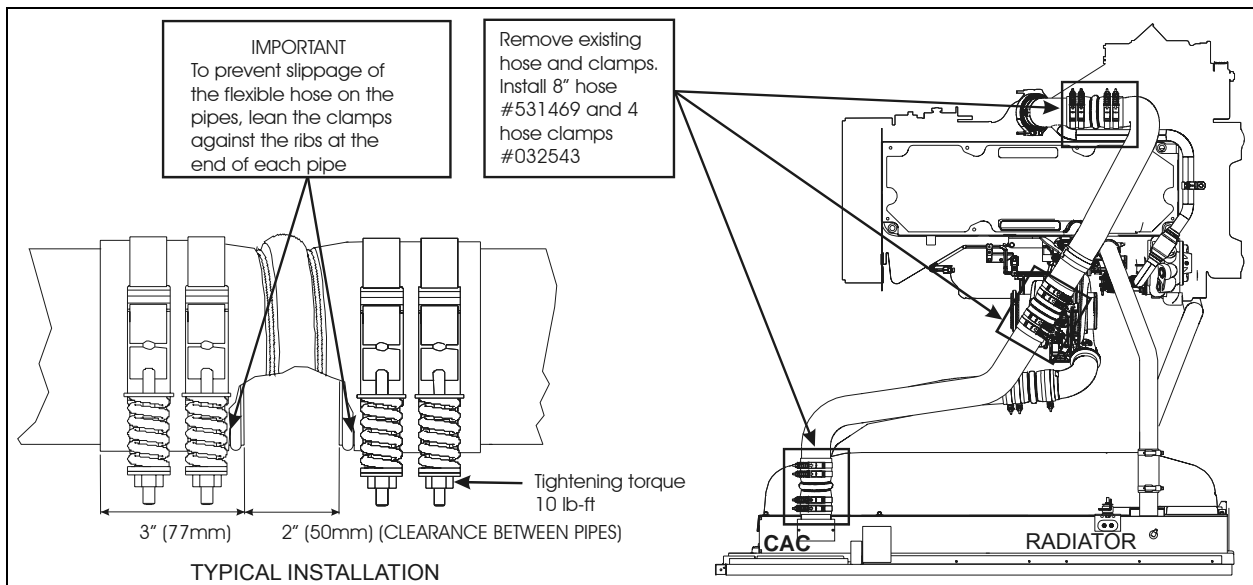


FIGURE 1: HOSE AND CLAMPS REPLACEMENT (ref. step 1A)

2A. At the turbocharger outlet, replace the existing hose and clamps. Install 7" hose (#531467) and 3 hose clamps (#032543). Tighten the clamps to a torque of 10 lb-ft (figure 2).

Note: Make sure that the pipes to be joined are as perfectly aligned as possible.

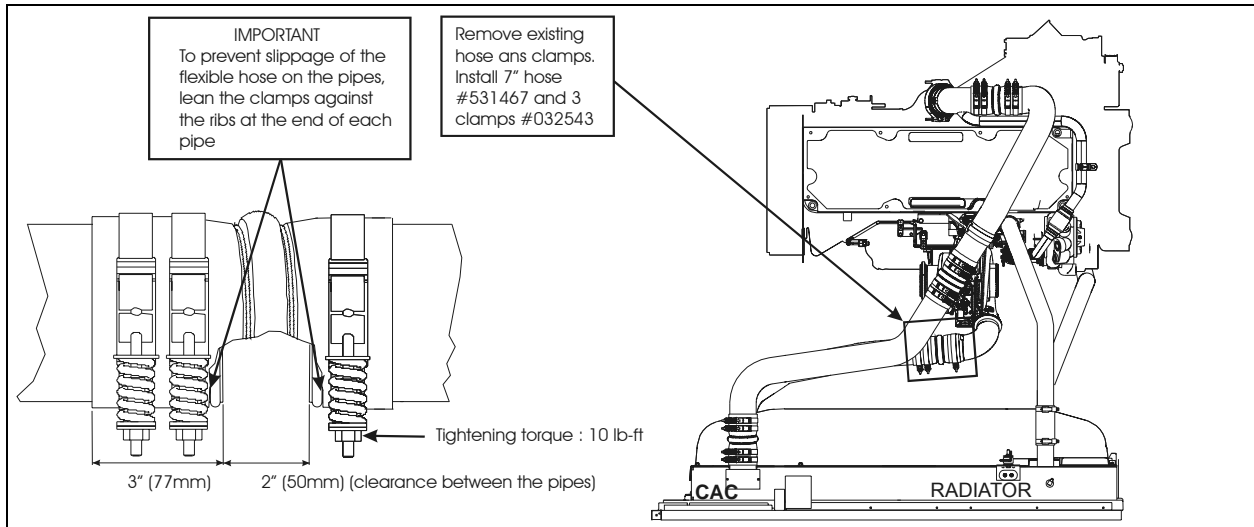


FIGURE 2: HOSE AND CLAMPS REPLACEMENT (ref. step 2A)

3A. At the CAC lower inlet, remove the existing hose and clamps. Install 6" hose (#531396) and 4 hose clamps (#032543) as per figure 3. Tighten the clamps to a torque of 10 lb-ft. **Important**, the 6" hose (#531396) may already have been installed at the factory. Check if the hose in place measures 6" long. If it does, just add clamps to have 4 of them.

Note: Make sure that the pipes to be joined are as perfectly aligned as possible.

Important: Leave a gap of 13/32" between the pipe and the inlet tip (figure 3). In order to have the CAC inlet tip perfectly align with the pipe coming from the turbocharger outlet, untighten the clamps and rotate the turbocharger outlet as needed (figure 5).

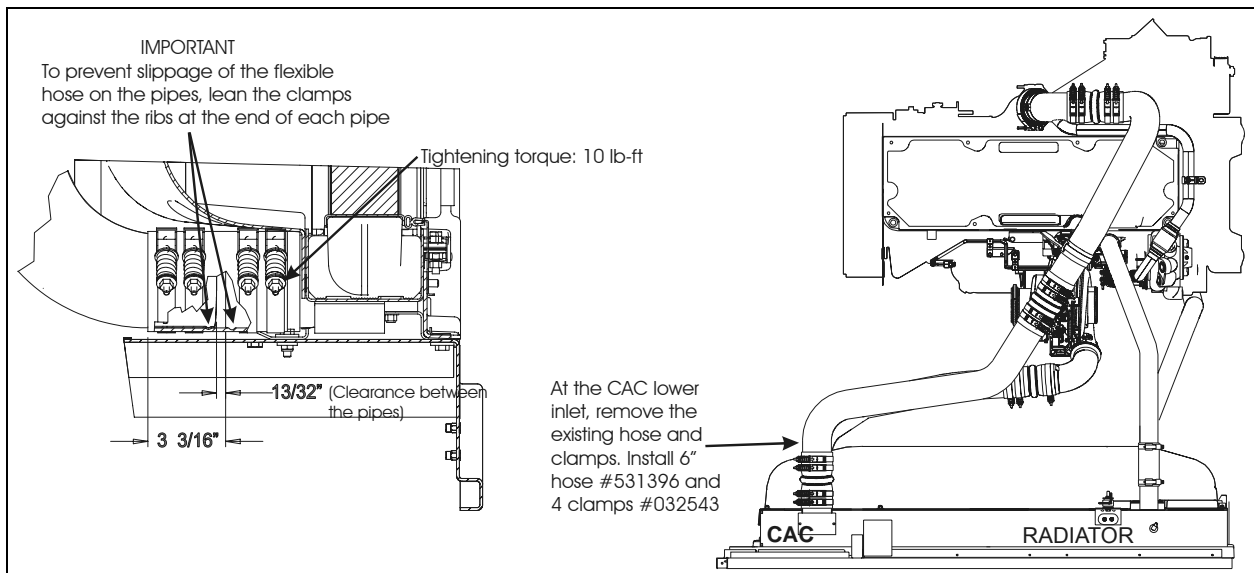


FIGURE 3: HOSE AND CLAMPS REPLACEMENT (ref. step 3A)

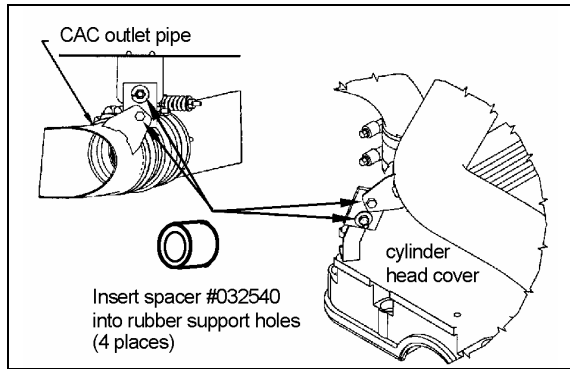


FIGURE 4: SPACER #032540 (ref. step 1A)

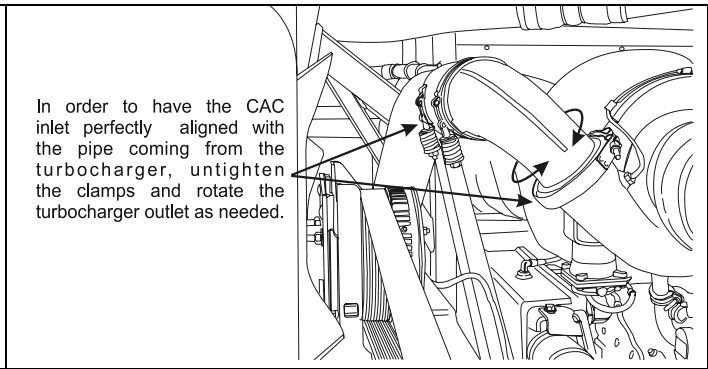


FIGURE 5: (ref. step 3A)

4A. Check if the clearance between the components of table A is in accordance with the specified minimum clearance.

TABLE A – Minimum clearance				
COMPONENT 1		COMPONENT 2	MINIMUM CLEARANCE	FIGURE
Pipe between engine air filter and turbocharger	&	Engine air inlet pipe	13/32" (10mm)	6
	&	Engine air inlet pipe support	13/32" (10mm)	7
	&	Coolant filter and valves	13/32" (10mm)	8
	&	Transmission oil dipstick tube (see step 5A)	13/32" (10mm)	8
CAC inlet pipe	&	diagonal reinforcement member	19/32" (15mm)	9
Engine air inlet pipe	&	Top of cylinder head cover	1/8" (3mm)	10

Note: If there are some places where the minimum clearance cannot be respected, correct by moving closer together the pipes at the connections. If needed, bend the pipe brackets (shown in figure 4) to meet the minimum clearance.

5A. If the minimum clearance around the transmission oil dipstick tube cannot be met, replace the support by the new support (#071363) (figure 11). **Important**, support #071363 may have already been installed on your vehicle at the factory. Compare your support with the one of figure 11.

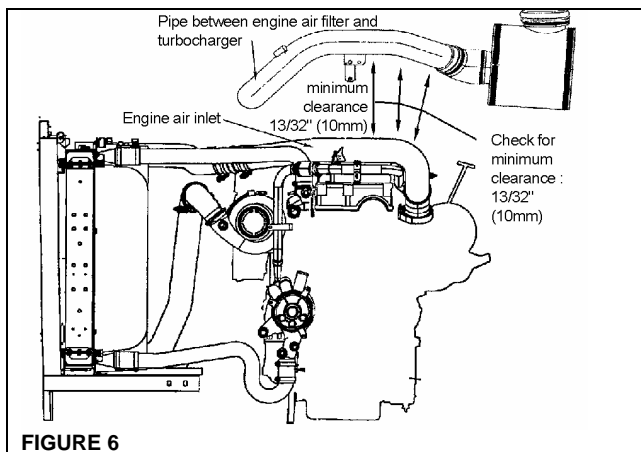


FIGURE 6

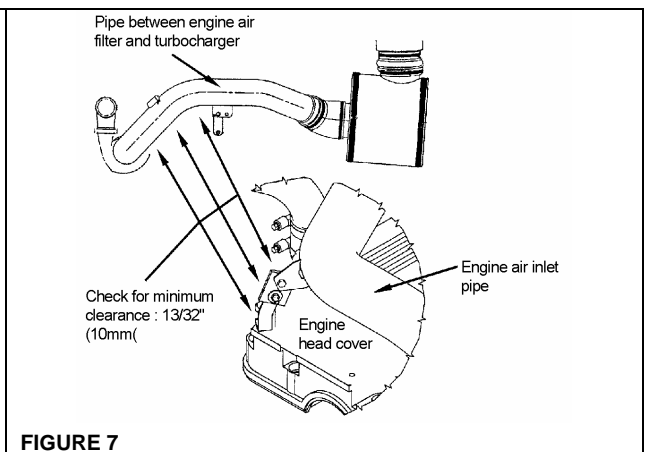


FIGURE 7

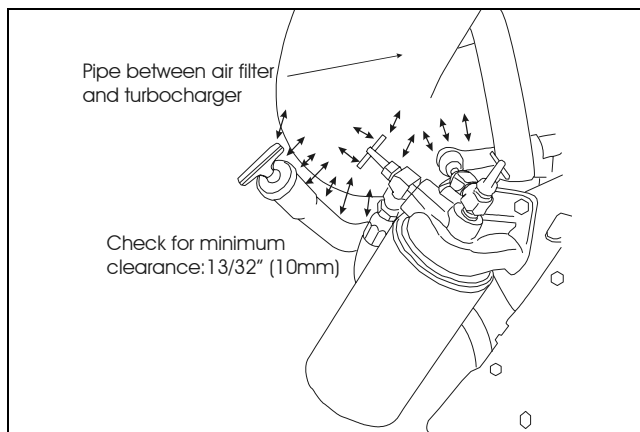


FIGURE 8

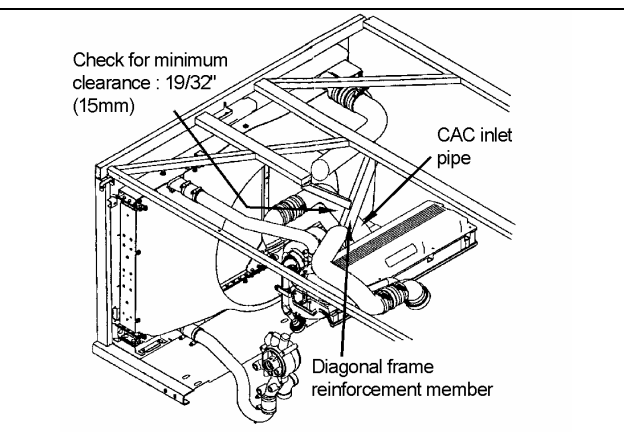


FIGURE 9

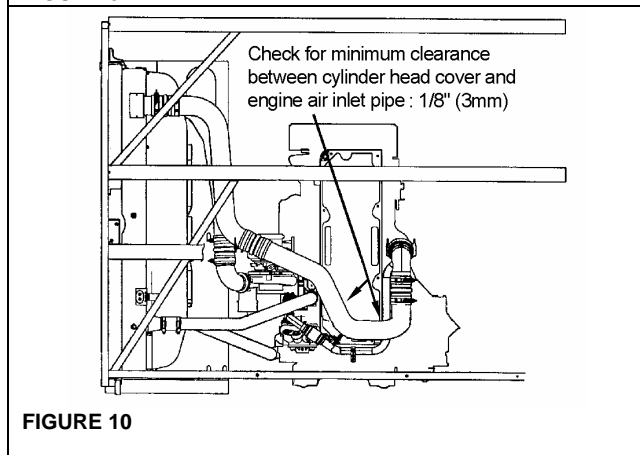


FIGURE 10

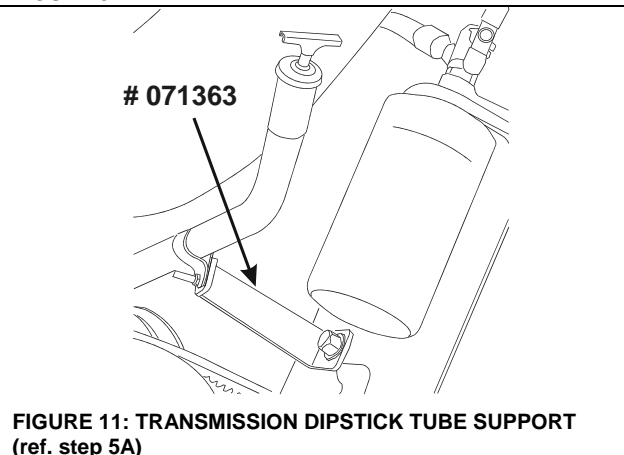


FIGURE 11: TRANSMISSION DIPSTICK TUBE SUPPORT (ref. step 5A)

PART B – XLII COACHES, XLII-40 MTH & XLII ENTERTAINER

MATERIAL

Order the following parts:

Part No.	Description	Qty
531467	Hose 4" dia. x 7" long	2
531469	Hose 4" dia. x 8" long	2
032543	Hose clamp (<i>check on your vehicle to determine the right quantity to order. Some hose clamps of that type may be installed on your vehicle's CAC system</i>)	Between 6 & 14
032472	Pipe between CAC and engine air filter, modified	1
071363	Support, transmission oil dipstick tube (<i>order only if necessary, see step 4B</i>)	1
012264	Bosch alternator support (<i>order only if necessary, see step 5B</i>)	1
032538	Pipe between engine air filter and turbocharger (<i>order only if necessary, see step 6B</i>)	1

PROCEDURE

Warning: Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

1B. Replace the pipe between the CAC outlet and the engine air inlet by the modified pipe (#032472). Reinstall using 8" hose (#531469) (figure 12) and 4 hose clamps (#032543) on each connection. Tighten the clamps to a torque of 10 lb-ft. If this pipe is not replaced, it will not be possible to install the required quantity of clamps.

Note: Make sure that the pipes to be joined are as perfectly aligned as possible.

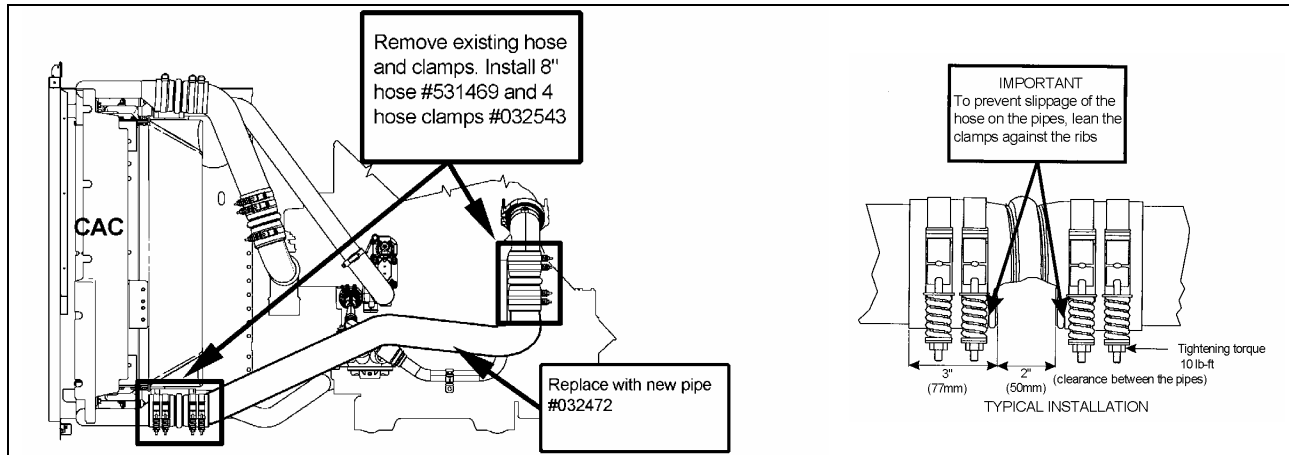


FIGURE 12: HOSE AND CLAMPS REPLACEMENT (ref. step 1B)

2B. On the pipe between the turbocharger outlet and the CAC inlet, remove the hose and clamps. Install 7" hose (#531467) and 3 clamps (#032543) as per figure 13. Tighten the clamps to a torque of 10 lb-ft.

Note : Make sure that the pipes to be joined are as perfectly aligned as possible.

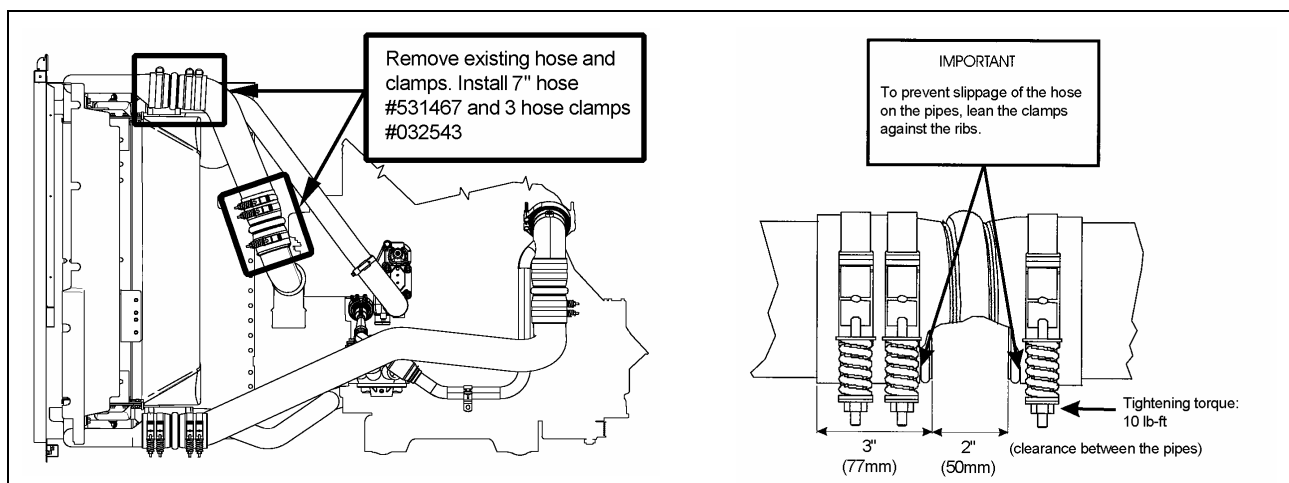
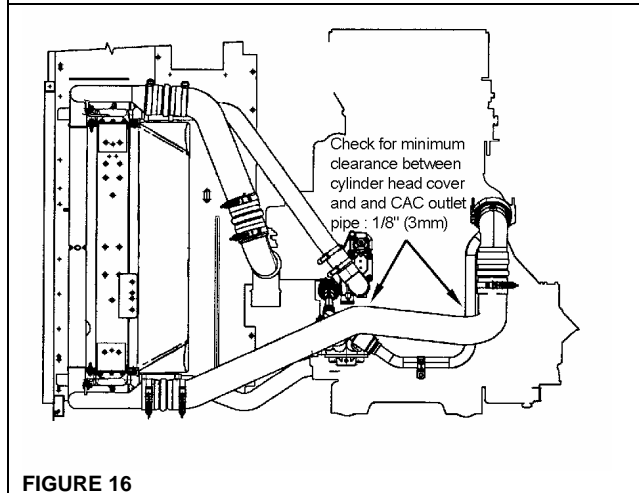
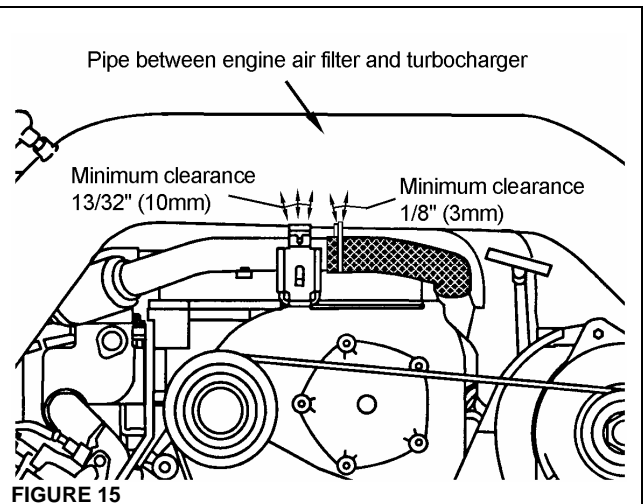
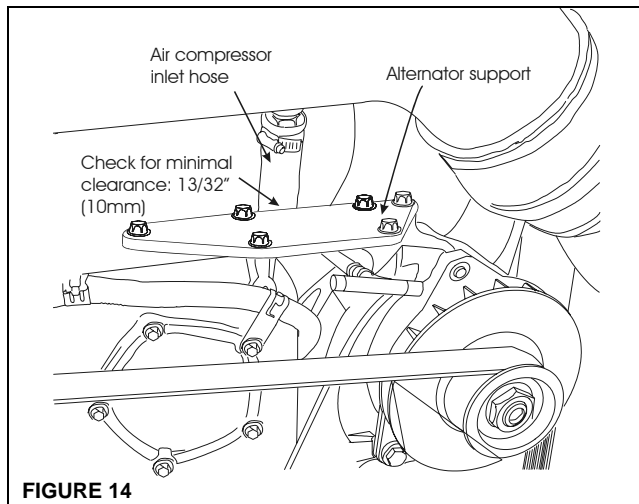


FIGURE 13: HOSE AND CLAMPS REPLACEMENT (ref. step 2B)

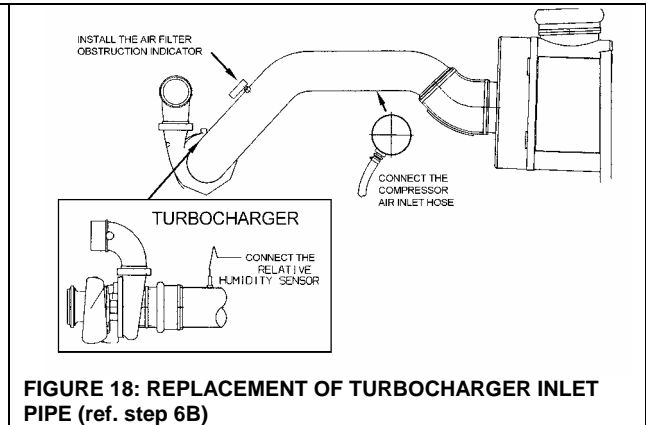
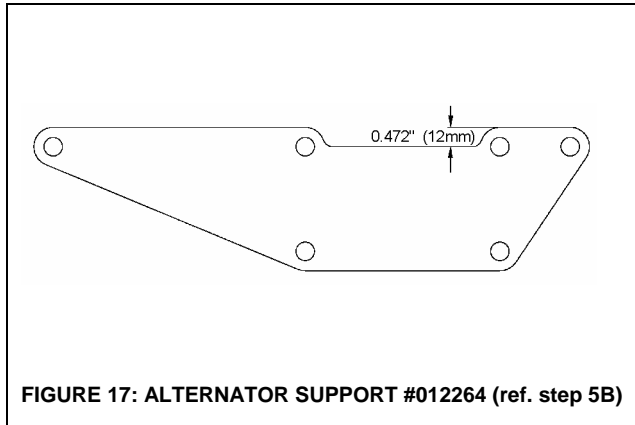
3B. Check if the clearance between the components of table B is in accordance with the specified minimum clearance.

TABLE B – Minimum clearance				
COMPONENT 1		COMPONENT 2	MINIMUM CLEARANCE	FIGURE
Air compressor inlet hose	&	Bosch alternator support	13/32" 10mm	14
Pipe between engine air filter and turbocharger	&	Engine air inlet pipe	13/32" 10mm	6
	&	EGR pipe spring clamp and support	13/32" & 1/8"	15
	&	Coolant filter and valves	13/32" 10mm	8
	&	Transmission oil dipstick tube (see step 4B)	13/32" 10mm	8
	&	Rear junction box lid when open	13/32" 10mm	---
CAC outlet pipe	&	Power steering fluid reservoir (coach only)	19/32" (15mm)	---
	&	Top of the cylinder head cover	1/8" (3mm)	16



Note: If there are different places where the minimum clearance cannot be respected, correct by moving closer together the pipes at a connection.

- 4B. If the minimum clearance around the transmission oil dipstick tube cannot be met, replace the support by the new support (#071363) (*figure 11*). **Important**, support (#071363) may have already been installed on your vehicle at the factory. Compare your support with the one of *figure 11* in part A.
- 5B. If your vehicle is equipped with 2 Bosch alternators and the minimum clearance cannot be met, replace the alternator support by the modified alternator support (#012264) which offers a greater clearance for the air compressor inlet hose. Tighten the screws at a torque of 43 lb-ft.
- 6B. If the minimum clearance around the turbocharger inlet pipe cannot be met, replace the pipe by the modified pipe (#032538). Transfer the relative humidity sensor, the air filter obstruction indicator and the air compressor inlet hose on the new pipe (*see figure 18*). Once completed, check for the minimum clearance and correct if needed.



WARRANTY

This modification is covered by PrevoSt Car's normal warranty. We will reimburse you the parts and five hours (5.0) of labor upon receipt of a completed A.F.A. form on which you must specify as per "Warranty Bulletin 04-04".

Parts / Waste disposal:

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)