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Revision B: This document supersedes previous revisions.

In MATERIAL THAT MAY BE NEEDED table, addition of hard fuel line kit #**SR15-04**. The hard fuel line replacement kit is available under Volvo p/n **85123349** and p/n **SR15-04**.

VERSION FRANÇAISE À LA FIN DE CE DOCUMENT

AFTERTREATMENT HYDROCARBON INJECTOR (AHI) – HARD FUEL LINE INSPECTION / REPLACEMENT

Prevost vehicles

DESCRIPTION

On the vehicles affected by this bulletin, it is necessary to inspect the AHI (Aftertreatment Hydrocarbon Injector) hard fuel line to ensure that a double loop nylon tie is installed on it. **If the double loop nylon tie is not installed**, a nearby coolant line may rub against the braided section of the hard fuel line.

The hard fuel line must be checked for signs of damage and replaced if damaged.

THIS SPECIAL BULLETIN CONSTITUTES THE SERVICE CENTER INSPECTION & REPAIR PROCEDURES APPLICABLE TO SAFETY RECALL SR15-04.

PERFORM SP15-11 PRIOR TO SR15-04 IF SR15-04 IS NOT ALREADY DONE. CONSEQUENTLY SR15-04 BECOMES UNNECESSARY AND VOID. IN THIS CASE, CLOSE SR15-04 NOTIFICATION.

APPLICATION

NOTICE TO SERVICE CENTERS <i>Verify vehicle eligibility by checking warranty bulletin status with SAP or via ONLINE WARRANTY SYSTEM available on Service / Warranty tab of Prevost website.</i>	
Model	VIN 
EPA2007 or EPA2010 Volvo D13 H3-41, H3-45 coaches Model Year : 2008 – 2012	Equipped with Allison transmission within the following range : From 2PCH334968C71 <u>0948</u> up to 2PCH33491CC71 <u>1885</u> incl.
EPA2007 or EPA2010 Volvo D13 H3-45 VIP motorhomes Model Year : 2011	Equipped with Allison transmission within the following range : From 2PCVS3494BC71 <u>1772</u> up to 2PCVS3498BC71 <u>1886</u> incl.
EPA2007 or EPA2010 Volvo D13 X3-45 coaches Model Year : 2008 - 2011	Equipped with Allison transmission <u>without retarder</u> within the following ranges : From 2PCG334978C72 <u>9259</u> up to 2PCG33499AC72 <u>9995</u> incl. And From 2PCG33491BC73 <u>5002</u> up to 2PCG33494BC73 <u>5074</u> incl.
EPA2007 or EPA2010 Volvo D13 XLII-45 Entertainer Model Year : 2009 - 2011	Equipped with Allison transmission <u>without retarder</u> From 2PCY334979C72 <u>9591</u> up to 2PCYS3495BC72 <u>9999</u> incl. And From 2PCYS3499BC73 <u>5000</u> up to 2PCYS3491BC73 <u>5024</u> incl.
This bulletin does not necessarily apply to all the above-mentioned vehicles, some vehicles may have been modified before delivery. The owners of the vehicles affected by this bulletin will be advised by a letter indicating the Vehicle Identification Number (VIN) of each vehicle concerned.	

MATERIAL THAT MAY BE NEEDED

For the replacement of the AHI hard fuel line

Part No.	Description	Qty
85123349 or SR15-04	KIT, HARD FUEL LINE	1
507664	NYLON TIE, DOUBLE LOOP TYPE 3/16" x 11"	1
052971	HOSE 2420mm LONG	1

NOTE

Material can be obtained through regular channels.

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PART 1 - INSPECTION



DANGER

Park vehicle safely, apply parking brake, stop engine. In the battery box, set the battery cut-off switch to the OFF position prior to working on the vehicle.

- 1) Locate the braided section of the AHI hard fuel line (item 2, FIGURE 1).
- 2) Check if a double loop nylon tie is installed on the braided section of the injector's hard fuel line (see FIGURE 4 to identify the appropriate type of nylon tie). This can easily be done from behind the coach by visual inspection using a flashlight. This double loop nylon tie should be installed there to maintain the nearby coolant line and the injector's hard fuel line (AHI) together while preventing them from rubbing against each other (see FIGURE 2).
- 3) If the double loop nylon tie is present as shown in FIGURE 2, then the installation is correct. This completes this bulletin, no part replacement is required.
- 4) If, as in FIGURE 3 , **the nylon tie is missing or an inappropriate nylon tie is installed** (standard nylon tie as shown on FIGURE 5), there is a risk that the injector's hard fuel line be damaged by rubbing against the coolant line. The AHI's hard fuel line must be checked and if damaged, it must be replaced.
- 5) If the hard fuel line braided section shows evidence of rubbing and is damaged, then perform replacement as instructed in PART 2 of this document.

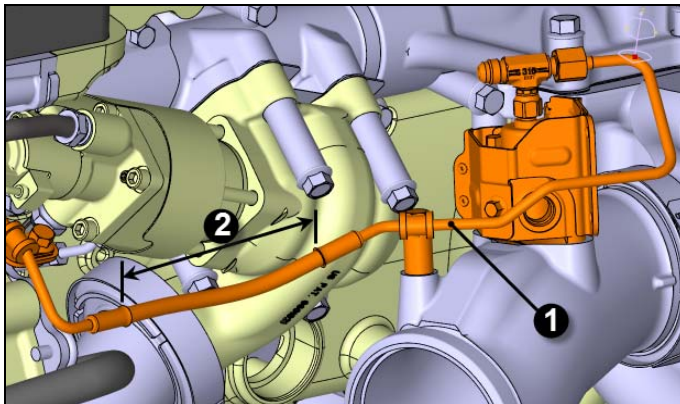


FIGURE 1
1- Aftertreatment hydrocarbon injector (AHI) hard fuel line
2- Braided section of the hard fuel line

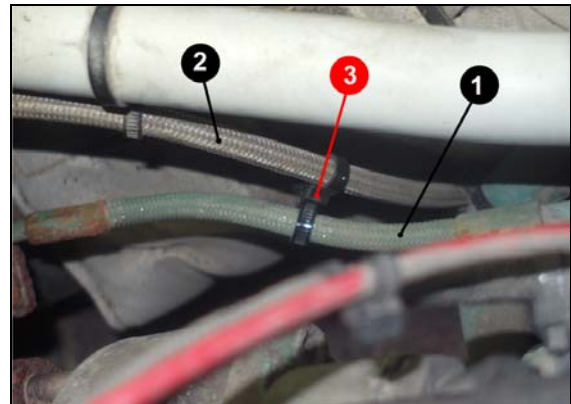


FIGURE 2: PROPER INSTALLATION (seen from above)
1- AHI's hard fuel line
2- Coolant line
3- Double loop nylon tie

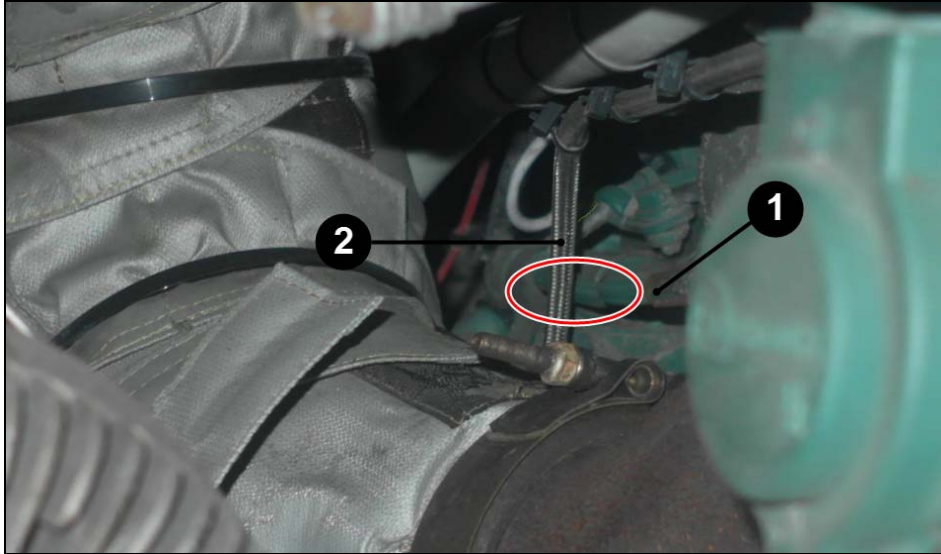


FIGURE 3: MISSING DOUBLE LOOP NYLON TIE
1- AHJ's hard fuel line
2- Coolant line



FIGURE 4: DOUBLE LOOP NYLON TIE



FIGURE 5: INAPPROPRIATE NYLON TIE

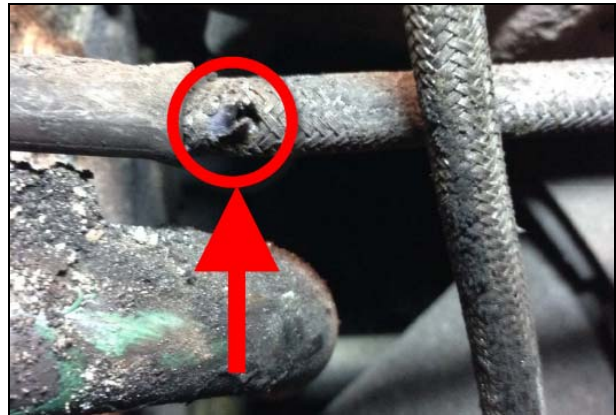


FIGURE 6: DAMAGED HARD FUEL LINE BRAIDED SECTION

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PART 2 - HARD FUEL LINE REPLACEMENT (IF DAMAGED)

- 1) Service technicians, for the complete procedure, refer to Volvo document **FSB 258-020** available on Impact. **DO NOT FORGET TO INSTALL A DOUBLE LOOP NYLON TIE** as shown on FIGURE 2. Take note that a partial draining of the cooling system is enough while performing the replacement.

Should the coolant line need to be replaced, refer to the vehicle Parts Manual for the appropriate coolant line part number or check the availability of hose #052971 which length should be appropriate for all vehicle type.

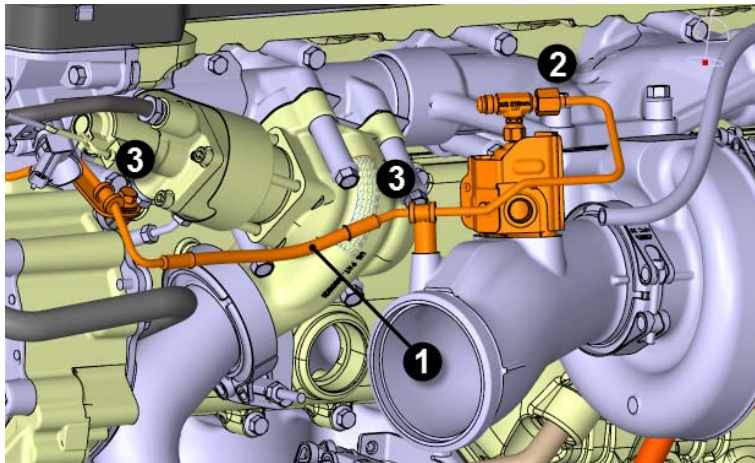


FIGURE 7 : HOT SIDE

- 1- Hard fuel line
- 2- Fuel line fitting
- 3- P-clamp

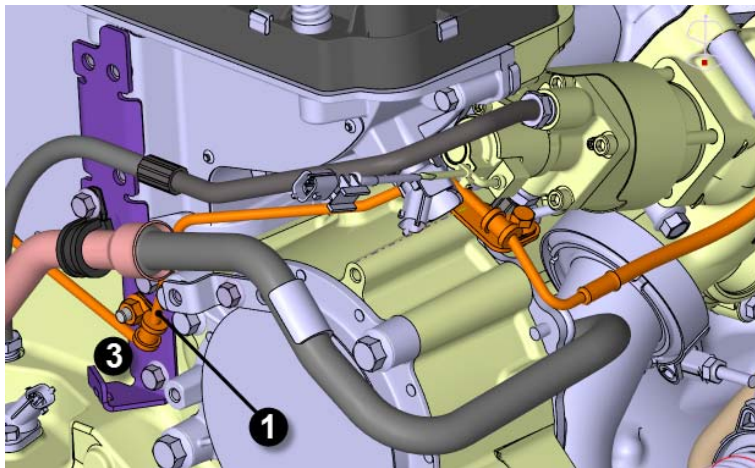


FIGURE 8

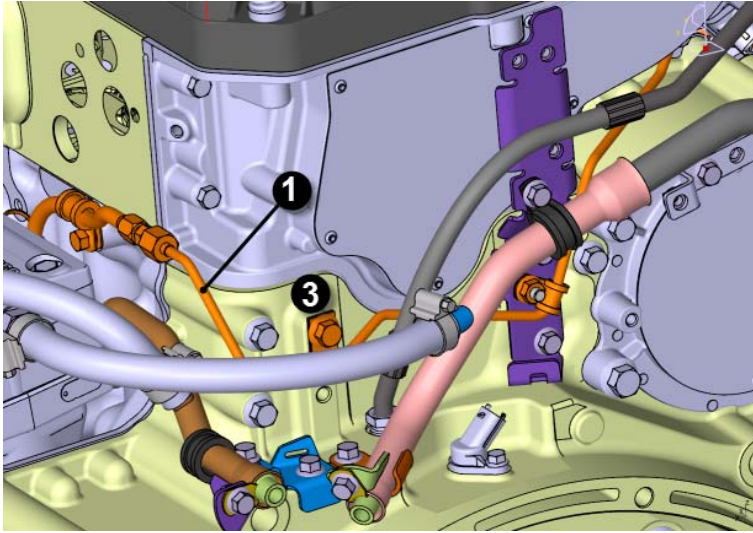


FIGURE 9

PARTS / WASTE DISPOSAL

The hard fuel line must be replaced parts must be returned to Prevost according to the Return Shipping Instructions available on <https://www.prevostcar.com/content/warranty-documents> for full reimbursement. A copy of the warranty claim form must be enclosed with the shipment.

ESTIMATED TIME

- Time allowed to inspect the hard fuel line if the nylon tie was missing: **0.5 hrs** (inspection is not required and cannot be claimed if a double loop nylon tie is already installed)
- Time allowed to replace the hard fuel line: **7.7 hrs**

OTHER

PERFORM SP15-11 PRIOR TO SR15-04 IF SR15-04 IS NOT ALREADY DONE. CONSEQUENTLY SR15-04 BECOMES UNNECESSARY AND VOID. IN THIS CASE, CLOSE SR15-04 NOTIFICATION ONLY.

VBC Bulletin	n/a
Fail Code	01.00-2
Defect Code	09
System Condition	B
Causal Part	21452506

Prevost engages in a continuous program of testing and evaluating to provide the best possible product. Prevost, however, is not committed to, or liable for updating existing products.

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Révision B: Ce document annule la version précédente.
Ajout de l'ensemble de remplacement de la conduite carburant #**SR15-04** dans le tableau de matériel pouvant être nécessaire. L'ensemble de remplacement est disponible sous le numéro Volvo #**85123349** ainsi que sous le numéro #**SR15-04**.

INJECTEUR DU SYSTÈME DE POST-TRAITEMENT DES GAZ D'ÉCHAPPEMENT – INSPECTION / REMPLACEMENT DE LA CONDUITE DE CARBURANT

Prevost vehicles

DESCRIPTION

Sur les véhicules visés par ce bulletin, il est nécessaire d'inspecter la conduite de carburant de l'injecteur du système de post-traitement des gaz d'échappement (AHI) afin de s'assurer qu'une attache de nylon à double boucle y est présente. **Si cette attache de nylon est absente**, il est possible qu'un boyau de liquide de refroidissement situé à proximité frotte sur la section à gaine tressée de la conduite de carburant de l'injecteur du système de post-traitement des gaz d'échappement. La conduite de carburant doit être inspectée afin de s'assurer qu'elle n'est pas endommagée. Elle doit être remplacée si des dommages sont visibles.

CE BULLETIN SPECIAL DESTINÉS AUX CENTRES DE SERVICE CONSTITUE LA PROCÉDURE D'INSPECTION ET RÉPARATION APPLICABLE À LA CAMPAGNE CR15-04.

EFFECTUER SP15-11 AVANT CR15-04 SI CR15-04 N'A PAS DÉJÀ ÉTÉ FAIT. AINSI CR15-04 DEVIENT NON NÉCESSAIRE ET EST ANNULÉ. SIMPLEMENT FERMER LA NOTIFICATION POUR CR15-04.

APPLICATION

AVIS AUX CENTRES DE SERVICE	
Vérifier que le bulletin s'applique au véhicule à l'aide de SAP ou de Garantie en ligne disponible sur le site web de Prevost, sous la rubrique Service / Garantie.	
Modèle	VIN 
Moteur Volvo D13 EPA2007 ou EPA2010 Autocars H3-41, H3-45 Année modèle: 2008 - 2012	Avec transmission Allison dans l'intervalle: Du 2PCH334968C71 <u>0948</u> jusqu'au 2PCH33491CC71 <u>1885</u> incl.
Moteur Volvo D13 EPA2007 ou EPA2010 Maisons motorisées H3-45 VIP Année modèle: 2011	Avec transmission Allison dans l'intervalle: Du 2PCVS3494BC71 <u>1772</u> jusqu'au 2PCVS3498BC71 <u>1886</u> incl.
Moteur Volvo D13 EPA2007 ou EPA2010 Autocars X3-45 Année modèle: 2008 - 2011	Avec transmission Allison sans ralentisseur dans l'intervalle: Du 2PCG334978C72 <u>9259</u> jusqu'au 2PCG33499AC72 <u>9995</u> incl. et Du 2PCG33491BC73 <u>5002</u> jusqu'au 2PCG33494BC73 <u>5074</u> incl.
Moteur Volvo D13 EPA2007 ou EPA2010 Maisons motorisées XLII-45 Entertainer Année modèle: 2009 - 2011	Avec transmission Allison sans ralentisseur dans l'intervalle: Du 2PCY334979C72 <u>9591</u> jusqu'au 2PCYS3495BC72 <u>9999</u> incl. et Du 2PCYS3499BC73 <u>5000</u> jusqu'au 2PCYS3491BC73 <u>5024</u> incl.
Ce bulletin n'est pas nécessairement applicable à tous les véhicules ci-haut mentionnés, certains peuvent avoir été modifiés avant la livraison. Les propriétaires de véhicules visés par ce bulletin seront avisés par une lettre indiquant le numéro d'identification de chaque véhicule concerné.	

MATÉRIEL POUVANT ÊTRE NÉCESSAIRE

Pièce No	Description	Qté
85123349 ou SR15-04	CONDUITE DE CARBURANT AHI , ENSEMBLE "KIT, HARD FUEL LINE"	1
507664	ATTACHE DE NYLON, DOUBLE BOUCLE 3/16" x 11"	1
052971	BOYAU 2420mm LONG	1

REMARQUE

Le matériel peut être commandé selon la pratique habituelle.

PARTIE 1 – INSPECTION



DANGER

Stationner le véhicule de façon sécuritaire, appliquer le frein de stationnement, arrêter le moteur, placer l'interrupteur principal à la position ARRÊT (OFF) avant de travailler sur le véhicule.

- 1) Localiser la section à gaine tressée de la conduite de l'injecteur du système de post-traitement des gaz d'échappement (item 2, FIGURE 10).
- 2) Valider qu'une attache de nylon à double boucle se trouve sur la section flexible de la conduite de l'injecteur (voir la FIGURE 13 pour identifier le type d'attache approprié). Ceci se fait par inspection visuelle, à l'aide d'une lampe de poche. Cette attache de nylon devrait y être installée afin de maintenir ensemble le boyau de liquide de refroidissement situé à proximité et la conduite de carburant de l'injecteur (AHI) tout en les empêchant de frotter ensemble (voir FIGURE 11).
- 3) Si l'attache de nylon est présente comme on peut le voir sur la FIGURE 11, alors l'installation est conforme. Ceci complète le bulletin, aucun remplacement de pièce n'est nécessaire.
- 4) Si comme sur la FIGURE 12, l'attache de nylon n'est pas en place ou si une attache inadéquate comme celle de la FIGURE 14 est installée, il est possible que la conduite de carburant de l'injecteur (AHI) soit endommagée par frottement sur le boyau de liquide de refroidissement. Il est nécessaire que la conduite de l'injecteur (AHI) soit inspectée et si elle est endommagée, elle devra être remplacée.
- 5) Si la section à gaine tressée de la conduite de l'injecteur présente des traces de frottement et est endommagée, effectuer le remplacement selon la partie 2 de ce bulletin.

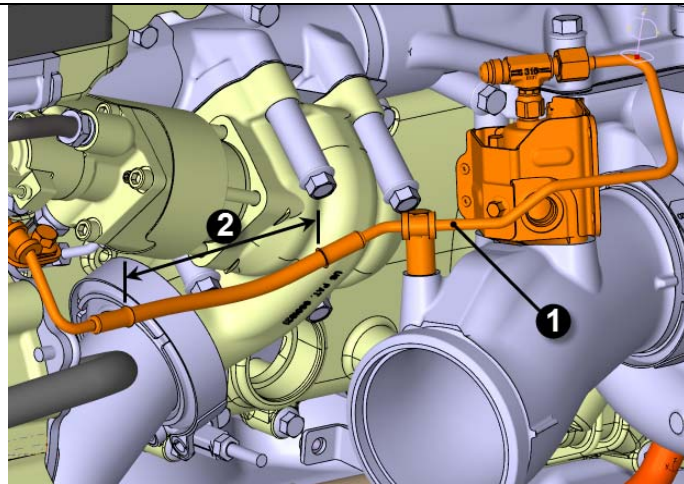


FIGURE 10
1- conduite de carburant de l'injecteur du système de post-traitement des gaz d'échappement (AHI)
2- Section à gaine tressée de la conduite

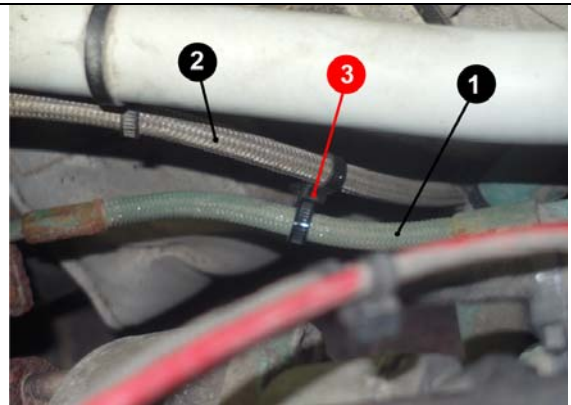


FIGURE 11: INSTALLATION CONFORME (Photo prise par le dessus)

- 1- Conduite de carburant de l'injecteur du système de post-traitement des gaz d'échappement (AHI)
2- Boyau de liquide de refroidissement
3- Attache de nylon à double boucle

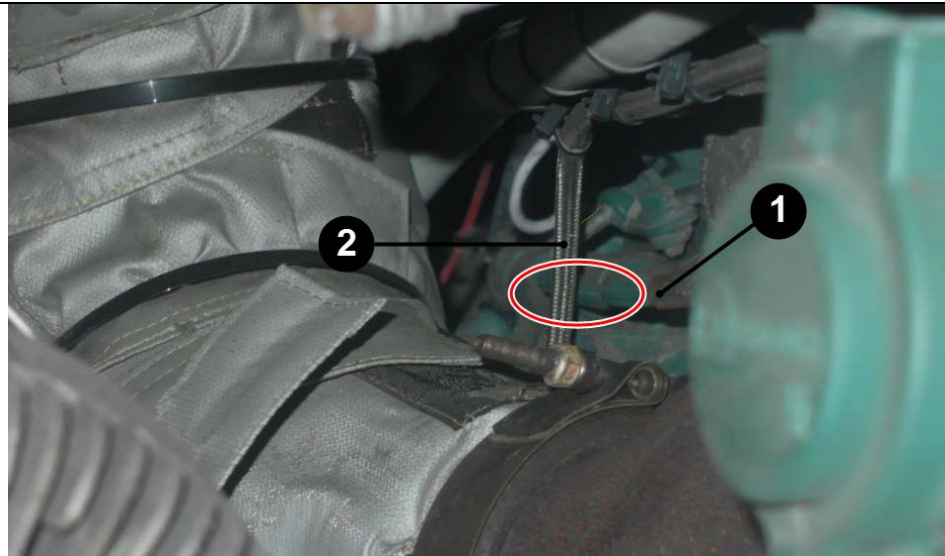


FIGURE 12: ATTACHE DE NYLON MANQUANTE

1- Conduite de carburant de l'injecteur du système de post-traitement des gaz d'échappement (AHI)
2- Boyau de liquide de refroidissement



FIGURE 13: ATTACHE DE NYLON À DOUBLE BOUCLE



FIGURE 14: ATTACHE DE NYLON NON APPROPRIÉE



FIGURE 15: PERFORATION SUR LA CONDUITE DE CARBURANT

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PARTIE 2 – REMPLACEMENT DE LA CONDUITE DE CARBURANT (SI ENDOMMAGÉE)

- 1) Techniciens, veuillez-vous référer à la procédure décrite sur le document Volvo FSB258-020 disponible sur Impact. **NE PAS OUBLIER D'AJOUTER UNE ATTACHE DE NYLON À DOUBLE BOUCLE** selon la FIGURE 11. Prendre note qu'une vidange partielle du liquide de refroidissement est suffisante.

S'il s'avérait nécessaire de remplacer le boyau de liquide de refroidissement, consulter le manuel de pièces pour le numéro de pièce approprié **ou vérifier la disponibilité du boyau #052971** dont la longueur devrait être appropriée pour tous les types de véhicules.

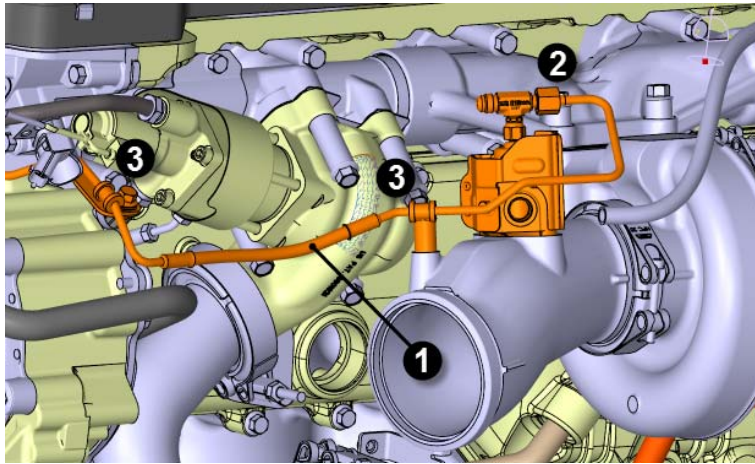


FIGURE 16

- 1- Conduite de carburant de l'injecteur
- 2- Raccord de la conduite
- 3- Bride en P

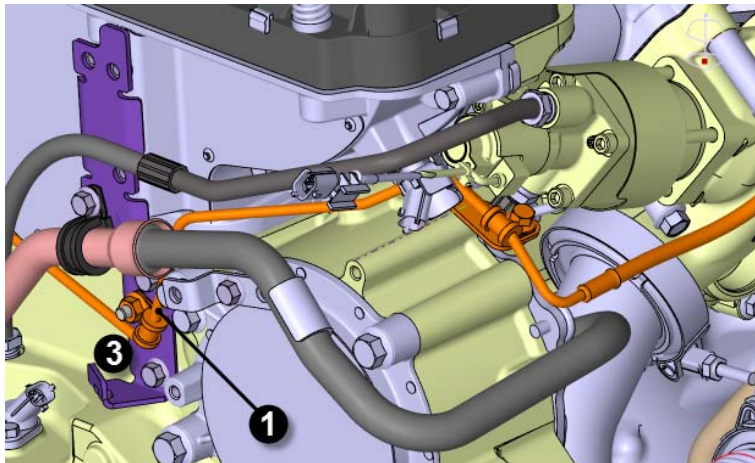


FIGURE 17

This Field Service Bulletin replaces bulletins FSB 258-020 dated 1.2011.

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Aftertreatment Hydrocarbon Doser Fuel Line
Change
D13F
B13R, PrevH, PrevX

FSB 258-020, Aftertreatment Hydrocarbon Doser Fuel Line Change

(March 2015)

On the vehicles affected by this bulletin, it is necessary to replace the aftertreatment hydrocarbon doser hard fuel line. The new fuel line is redesigned for improved clearance from hot components. Engines manufactured after serial number 933307 are equipped with the new fuel line.

Required Parts

Vehicle	Description	Part Number
B13R	Fuel Line Kit	85125458
PrevH, PrevX		85123349

Service personnel: Please circulate, read and initial

Service Manager	Warranty Administrator	Workshop Foreman	Service Technicians						

Procedure

You must read and understand the precautions and guidelines in Service Information Function Group 20, Engine Safety Practices, before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

Hard Fuel Line, Aftertreatment Hydrocarbon Doser, Replacement

- 1 Apply the parking brake and shift the transmission to neutral. Shut off all electrical loads. Turn the ignition key to the OFF position.
- 2 Open all engine access compartment doors.
- 3 Set rear starter switch to the OFF position.
- 4 Drain coolant from the cooling system.



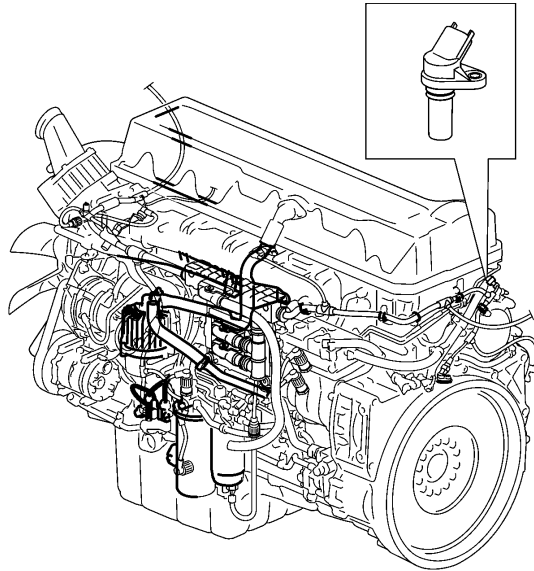
DANGER

Coolant is toxic; risk of poisoning. Do not drink coolant. Use proper hand protection when handling. Keep coolant out of reach of children and animals. Failure to follow these precautions can cause serious illness or death.

- 5 Disconnect the coolant hard pipe at the rear of the engine at the coupler.
- 6 Disconnect exhaust gas recirculation (EGR) valve oil return line at flywheel housing.

- 7 Remove the camshaft position (CMP) sensor from the upper timing gear cover.

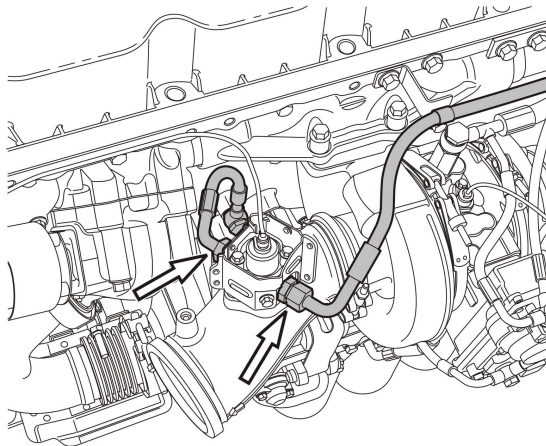
Note: Retain the shims.



W2033052

- 8 Remove inlet coolant line from aftertreatment hydrocarbon doser.

Note: Inlet coolant line is on engine side of aftertreatment hydrocarbon doser.



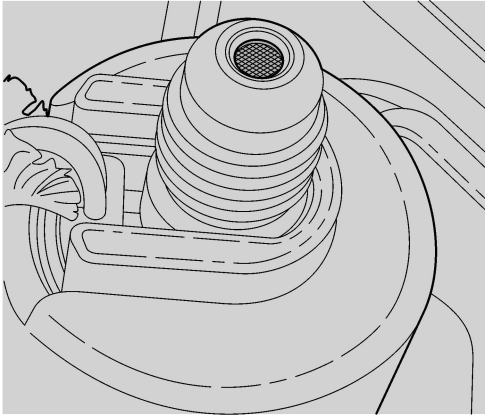
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- 9 Disconnect the aftertreatment hydrocarbon doser fuel supply line from the two-way check valve and remove fuel line clamp at turbocharger diffuser. Discard the clamp and screw. Collect any residual fuel that may be in the fuel line in a suitable container.
- 10 Remove and discard clamps securing old hard fuel line.

- 11 Remove clamp at left rear corner of engine securing air purge line.
- 12 Disconnect old hard fuel line from the flexible fuel line at the connector near the left rear of the engine.
- 13 Remove the old hard fuel line from the engine.
- 14 Remove the air line from the two-way check valve. Remove the two-way check valve from the aftertreatment hydrocarbon doser. Inspect the inlet screen to the aftertreatment hydrocarbon doser. If it is filled with carbon, spray carburetor cleaner on the doser screen and use a fine nylon or brass brush to scrub the screen repeatedly. Repeat as necessary to clean all carbon off of the screen.

**CAUTION**

Always use a fine nylon or brass brush to scrub the aftertreatment hydrocarbon doser inlet screen. Do not use a steel bristle brush to clean the doser inlet screen. A steel bristle brush will damage the doser and could lead to leakage.



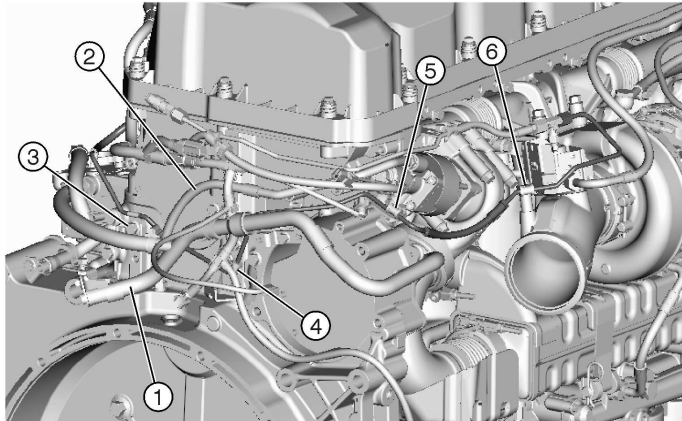
W2057938

Inlet Screen

- 15 Position the new hard fuel line (part number 21436788 – B13R, part number 21452506 – Prevost) on the engine.

**CAUTION**

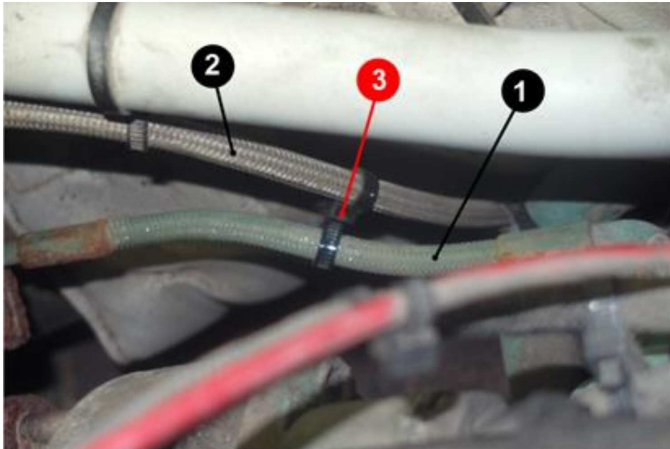
Do not bend the fuel line during installation.



W2057937

1. Coolant Hard Pipe
 2. EGR Valve Oil Line
 3. M10 Screw (part number 946329), Air Line Bracket and M10 Clamp (part number 946219)
 4. Silicone Clamp (part number 20960413) at Bend of Line
 5. Silicone Clamp (part number 20960413)
 6. Silicone Clamp (part number 20960413), Spacer (part number 847240) and M8 Screw (part number 948217)
- 16 Connect new hard fuel line to two-way check valve. Hand-tighten the fitting.
- 17 Connect the new hard fuel line to the flexible fuel line at the connector near the left rear of the engine.
- 18 Remove old M10 screw and install new screw through the air line bracket and M10 clamp. (Refer to item 3 in figure above)
- Note:** Install all clamps loosely. When all clamps are installed, tighten the fasteners.
- 19 Install silicone clamp on back of engine at the bend of the fuel line. (Refer to item 4 in figure above)
- 20 Install silicone clamp at right side of engine. Confirm that the bend in the fuel line is just outside the edge of the clamp and that the fuel line is not rubbing on the bracket. (Refer to item 5 in figure above)
- 21 Install silicone clamp with spacer and screw to turbocharger diffuser. (Refer to item 6 in figure above)

- 22 If vehicle is equipped with Allison transmission, a double loop cable tie must be installed as shown to prevent rubbing between hard fuel line and nearby coolant line.



W2100336

- 1. Hard Fuel Line
- 2. Coolant Line
- 3. Double Loop Cable Tie

**CAUTION**

Confirm that the line is not chafing anywhere before final tightening of the end fittings and fasteners. If the line is chafing anywhere, damage to the fuel line may result.

- 23 Connect the inlet coolant line to the doser and tighten to secure.

**CAUTION**

Do not kink the coolant lines. Kinking the lines may result in leakage.

- 24 Use clean motor oil to lubricate the new CMP sensor O-ring (part number 943177) before installation. Install the CMP sensor and shims, if equipped.

**CAUTION**

Use clean motor oil to lubricate the new CMP sensor O-ring before installation. If the O-ring is not lubricated before installation, the O-ring may be damaged and an oil leak will result.

- 25 Connect EGR valve return oil line at flywheel housing.

- 26 Replace the sealing ring on the coolant hard pipe. Connect the hard pipe at the rear of the engine.

- 27 Set the rear starter switch to the ON position.
- 28 Connect premium tech tool (PTT) to the vehicle. Disconnect fuel line at two-way check valve and install a piece of hose over the end of the fuel line and run it into a suitable container.
- 29 Perform PTT operation 2545-08-03-02, Exhaust Aftertreatment Diagnostics, to open the fuel shut-off valve. With key ON and engine OFF, use the hand primer on the fuel filter housing to flush about 1.0 L (1.06 Qt) of fuel through the line. Use PTT to close the fuel shut-off valve.
- 30 Use carburetor cleaner and shop air to clean the aftertreatment hydrocarbon doser and two-way check valve threads. Loosely install the check valve to the aftertreatment hydrocarbon doser.

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**CAUTION**

When tightening the air and fuel lines, do not allow any tightening force to be transmitted to the check valve inlet nipple. Damage to the nipple can result.

- 32 Loosely thread the fuel and air lines to the two-way check valve. While securing the check valve with a wrench, tighten the aftertreatment hydrocarbon doser fuel line fitting to 15 Nm (135 in-lb). Tighten the aftertreatment hydrocarbon doser air line fitting to 27 Nm (235 in-lb).
- 33 Tighten the other end of the fuel line (at the flexible fuel line connector near the left rear of the engine) to 15 Nm (135 in-lb).

Note: Both fuel line fittings must be marked using a paint stick after final torque. Mark the fitting and joining connector with a paint stripe for torque verification purposes.

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**CAUTION**

Only apply Loctite to the top threads of the aftertreatment hydrocarbon doser. Loctite on the flare or doser tip will damage the aftertreatment hydrocarbon doser.

Remove the two-way check valve from the aftertreatment hydrocarbon doser. Apply two drops of Loctite 271 180° degrees apart on the top threads of the doser. While securing the check valve with a wrench, tighten the check valve swivel nut to 24 Nm (212 in-lb).

- 35 Use PTT to reset adaptive factor for aftertreatment hydrocarbon doser and check for diagnostic trouble codes (DTC's).
- 36 Fill the cooling system with the recommended coolant.
- 37 Close all engine access compartment doors.

Reimbursement

This repair may be eligible for reimbursement if a product failure was experienced within time and mileage limits of the applicable Warranty coverage. Reimbursement is obtained via the normal claim handling process.	
Claim Type (used only when uploading from the Dealer Bus. Sys.)	W
Labor Code	
Primary Labor Code	Not Applicable 7.7 hrs.
Causal Part	21267344

Volvo Bus Corporation engages in a continuous program of testing and evaluating to provide the best possible product. Volvo Bus Corporation, however, is not committed to, or liable for updating existing chassis.