

# Authorized Field Change



**AFC G-04901**

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**Date:** March, 2004

**Subject File:** ENGINE

**Subject:** High Pressure Oil Pump Fitting and Plug Leakage in International Truck and Bus Models Built Between March 1, 2002 and October 15, 2002 with International DT 466E and 530E Engines

Truck Model: IC Bus

Start Date: 03/01/2002 End Date: 10/15/2002

Truck Model: 3000 FE

Start Date: 03/01/2002 End Date: 10/15/2002

Truck Model: 3000 RE

Start Date: 03/01/2002 End Date: 10/15/2002

Truck Model: 3200

Start Date: 03/01/2002 End Date: 10/15/2002

Truck Model: 3800

Start Date: 03/01/2002 End Date: 10/15/2002

Truck Model: 4300

Start Date: 03/01/2002 End Date: 10/15/2002

Truck Model: 4400

Start Date: 03/01/2002 End Date: 10/15/2002

Truck Model: 7300

Start Date: 03/01/2002 End Date: 10/15/2002

Truck Model: 7400

Start Date: 03/01/2002 End Date: 10/15/2002

## DESCRIPTION

Print ready (PDF file) copy of the AFC letter

Due to engine design changes, which increased the high pressure oil operating pressure, it is possible for oil leakage to become apparent at certain plugs and fittings on the high pressure oil pump. The truck and bus models affected were built between March 1, 2002 and October 15, 2002.

Any vehicles built in this time window that have had the high pressure oil pump replaced will not require this repair. We have searched our warranty records and all VIN's with high pressure oil pumps charged on

## DESCRIPTION (CONT.)

a warranty claim will have the Authorized Field Change marked as complete. These customers will not receive an Authorized Field Change notification letter.

## PARTS INFORMATION

Table 1

Part Number	Description	Quantity
1842906C91	High Pressure Oil Pump Kit Containing the Following:  1171798R3 Instructions (1)  Loctite® 680 Sealant  O-Ring Seal, Large (1)  O-Ring Seal, Small (2)  Outlet Fitting (1)  Oil Ferry Plug (1)  Construction Port Plug (1)	1

## SERVICE PROCEDURE



**WARNING** – To avoid property damage, personal injury or death, park the vehicle on a flat level surface, turn the engine off, set the parking brake and chock the wheels.

**CAUTION** – Do not attempt this repair with the pump on the vehicle. The ferry plug check ball will fall out when the ferry plug is removed and cannot be properly installed with the pump on the engine. If the ferry check ball falls out, the engine will not start.

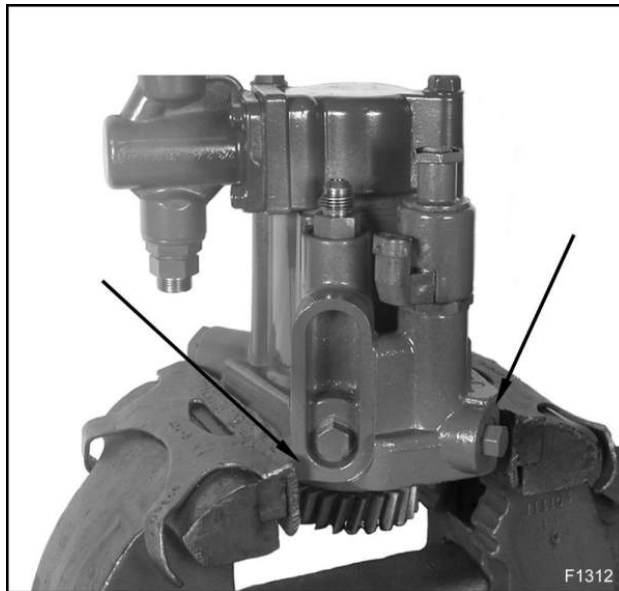
1. Remove the high-pressure oil pump from engine by following the procedures in the appropriate service manual.

**CAUTION** – If the hex on the outlet fitting of the high-pressure oil pump to be repaired has notches as shown in Figure 3, Item 3, do not attempt further repair of the pump. Replacement of the pump is advised.

## SERVICE PROCEDURE (CONT.)

**CAUTION – Do not clamp the pump in the vise on the seal housing. It may cause damage to the seals and to the pump mounting surface.**

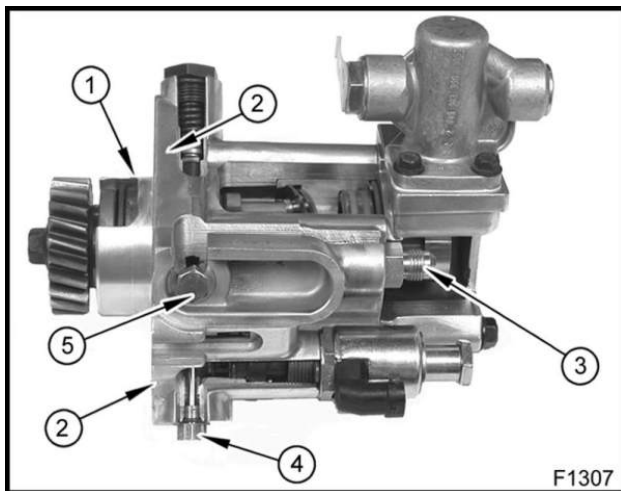
2. Place the high-pressure oil pump in a shop vise in a vertical position and with vise-jaw liners on the body as seen in Figure 1. Be careful not to over tighten the vise jaws as it could cause damage to the pump housing.



**Figure 1 Correct Way Of Mounting Pump Into Vise**

3. Remove and discard the ferry plug (Figure 2, Item 4).
4. Remove and discard the construction port plug (Figure 2, Item 5).
5. Remove and discard the outlet fitting (Figure 2, Item 3).

## SERVICE PROCEDURE (CONT.)

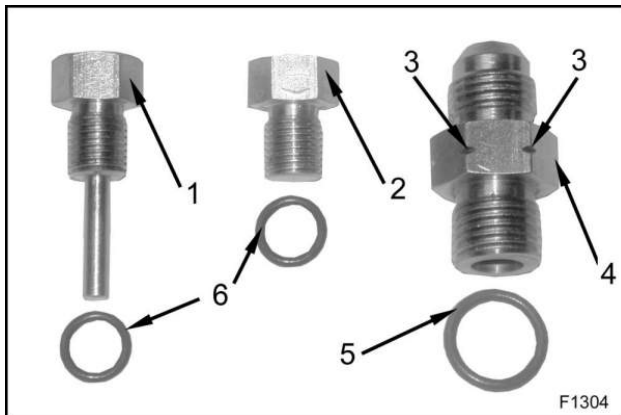


**Figure 2 Location Of Plugs, Fitting, And Pump Body**

1. Seal housing
2. Pump body
3. Outlet fitting
4. Oil ferry plug
5. Construction port plug

**NOTE – Do not clean the high-pressure pump with compressed air. The check ball may come out of the pump. The check ball is not a serviceable part.**

6. Install new O-rings on the new outlet fitting and the two new plugs (Figure 3). Use care when installing them and make sure the O-rings are properly seated.



**Figure 3 O-rings and Fittings Provided in Kit 1842906C91**

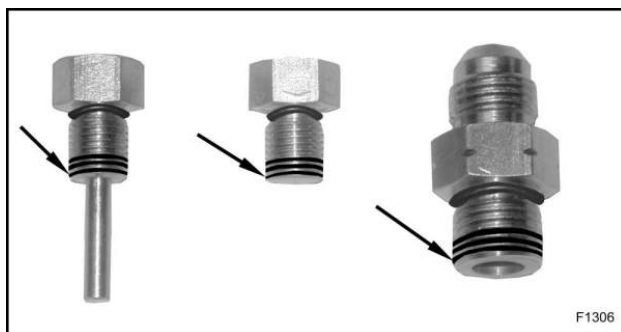
1. Oil ferry plug Large
2. Construction port plug
3. Notch locations
4. Outlet fitting
5. O-ring (1) large
6. O-rings (2) small

## SERVICE PROCEDURE (CONT.)

**CAUTION – Do not oil O-rings. Use only O-rings supplied with kit because of special Teflon coating. If O-ring is loose, cut, or damaged prior to installation a new kit must be ordered. Failure to follow this caution will cause the pump to leak.**

7. Clean the high-pressure pump and port openings with brake clean and dry with a clean, lint free, shop towel.
8. Before installing the outlet fitting and the two plugs into the high-pressure pump, verify that the check ball is in place by inserting a small pointer from the front (machined surface) of the pump.
9. Apply Loctite® 680 only to the first three threads of the fitting and plugs (Figure 4). For this repair, only Loctite® 680 can be used. Do not apply more than is needed to cover the first three threads.

**NOTE – Loctite® 680 Sealant is to be added onto only the first three threads of the fittings as shown in Figure 4.**



**Figure 4 Loctite® 680 on First Three Threads On Oil Ferry Plug, Construction Port Plug, And Oil Supply Fitting**

**NOTE – It is very important to come up to torque without stripping the threads. If torque cannot be achieved, then pump will have to be replaced.**

10. Install outlet fitting and tighten to 40 to 48 N·m (30 to 35 lbf·ft).
11. Install construction plug and tighten to 17 to 21 N·m (150 to 186 lbf·in).
12. Install oil ferry plug and tighten to 17 to 21 N·m (150 to 186 lbf·in).
13. Refer to the proper service manual for installing of the high-pressure pump on the engine.
14. Start the engine and check for oil leaks.
15. Stop the engine and check engine oil level. Add oil if needed.

Operation number must appear on all claims.

**Table 2 Labor Information**

Operation No.	Description	Time
A40-04901-1	Remove, Repair, Reinstall High Pressure Oil Pump	1.3 Hr.

## ADMINISTRATIVE PROCEDURE

Expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Authorized Field Change Number G-04901.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44.

To assure this important improvement is made in a timely manner, all claims for G-04901 activity must be submitted by March 31, 2005 or within the normal warranty period for the vehicle, if after March 31, 2005.

	GROUP	NOUN	C	WARR.	TP	PAD
GROUP Enter number G—						
NOUN Leave blank						
C (CAUSE) Enter either 1, 2, 3. (see below)						
1. Inspected (No repair required).						
2. Inspected and repaired.						
3. Defective part from parts stock.						
WARRANTY (Warranty Code) Enter 40.						
TYPE PART Enter P for type part causing failure.						
PAD Enter 100						

Distribution: All except J-81  
Reproduction: Not required.

**Figure 5**