# **Authorized Field Change**

AFC G-06907R1

Date: October, 2006

Subject File: ENGINE

**Subject:** New Design Engine Block Heater to Eliminate Coolant Leakage in International® DT 570 Engines in certain 4000, 7000, 8000 HPV Models Built Between April 7, 2004 and July 19, 2006

Model: 4400

Start Date: 04/07/2004 End Date: 07/19/2006

Model: 7300

Model: 7400

Start Date: 04/07/2004 End Date: 07/19/2006

Model: 7500

Model: 8500

Engine Family: DT 570

## **DESCRIPTION**

#### **REVISION DESCRIPTION**

Suspect population build date range changed from 4/2/2004 thru 5/8/2006 to 4/7/2004 thru 7/19/2006. All vehicles were properly marked in ISIS, only the dates in this service procedure were incorrect.

The new design engine block heater has improved mounting torque retention and seals to better withstand engine operating temperature.

## PARTS INFORMATION

## Table 1

Part Number	Description	
2004824C1	Old Design Block Heater	
1875814C2	New Design Block Heater	

## **SERVICE PROCEDURE**

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

## **SERVICE PROCEDURE (CONT.)**

WARNING – To avoid personal injury or death from hot coolant or steam use only the following procedure to remove the pressure cap from the radiator or expansion tank. Allow the engine to cool first. Wrap a thick heavy cloth around the cap. Push down, loosen the cap slowly to the first notch position; then pause a moment to allow pressure to release through the over flow tube. After the pressure has been released, the pressure cap may be removed.

Drain the engine coolant into a suitable, clean container.

NOTE – A small number of engines were put into service with the block heater harness but without the block heater. The block heater bore is sealed with a freeze plug.

2. Remove the block heater or freeze plug and Loctite sealant, if so equipped, located forward of the engine control unit (ECU)/injector drive module (IDM) on the driver's side of the engine (Figure 1).

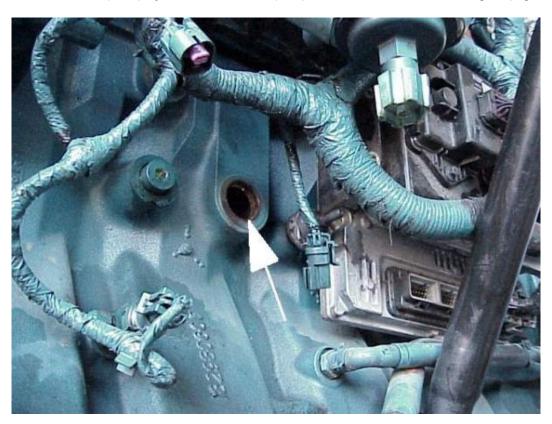


Figure 1 Freeze Plug or Block Heater Removed Shown at Arrow

- 3. Clean the freeze plug bore and surrounding area with fine emery cloth moving in a circular motion around the opening. Do not move laterally across the bore. Ensure the bore is clean and smooth.
- 4. Lubricate the block heater seal ring with O-ring lubricant and install the block heater (Figure 2). Make sure the heating element is not in contact with any metal inside the engine block. When the block heater

## **SERVICE PROCEDURE (CONT.)**

is inserted properly into the bore, tighten the Allen head screw to 40 to 45 Lbf-in (4.5 to 5 Nm) to lock it in position.

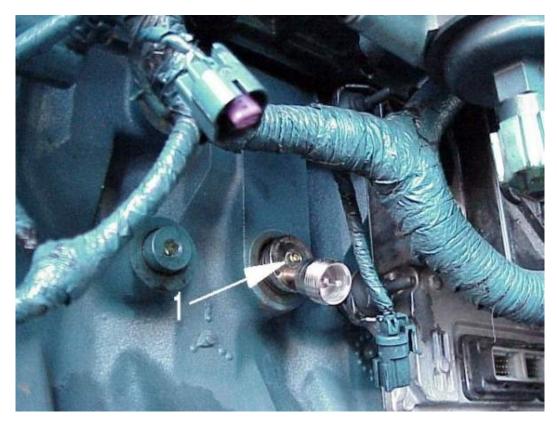


Figure 2 Install Block Heater

- 1. Allen Head Locking Screw
- 5. Connect the power lead to the block heater and secure it with the round nut (Figure 3).

# **SERVICE PROCEDURE (CONT.)**

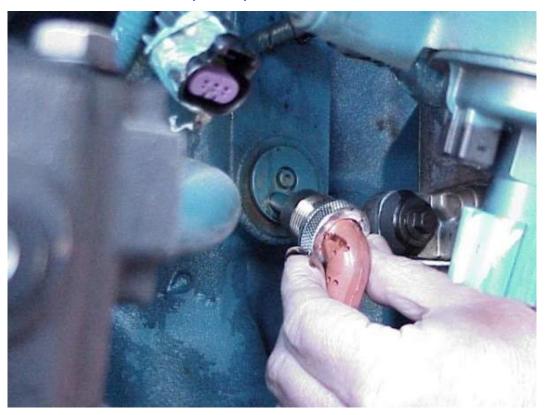


Figure 3 Connect Power Lead

- 6. Refill the cooling system with the coolant that was drained in Step 1.
- 7. Start the engine, run to operating temperature and check for leaks.

Operation number must appear on all claims.

**Table 2 Labor Information** 

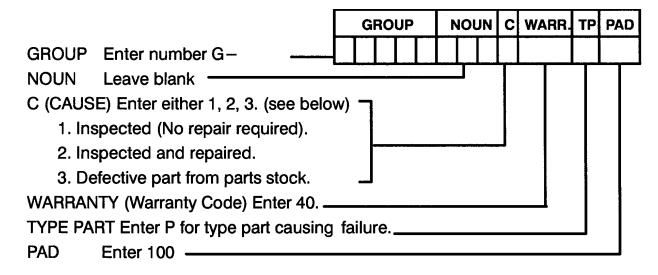
Operation No.	Description	Time
A40-06907-1	Remove and Replace Block Heater	0.9 Hr.
A40-06907-2	Remove Freeze Plug and Install Block Heater	1.0 Hr.

#### 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-06907.

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-06907 activity must be submitted by August 31, 2007 or within the normal warranty period for the vehicle, if after August 31, 2007.



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