

# PARTS & SERVICE NEWS

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(C)

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**SUBJECT:** REPAIR PROCEDURE FOR TIMING RAIL PRESSURE SENSOR FOR FUEL INJECTION CIRCUIT

**PURPOSE:** To inform Field Personnel

**APPLICATION:** A6D170E-G1-3 Engine S/N 00310001 and up  
 A6D170E-KC-3 Engine S/N 00310001 and up  
 SAA6D170E-2 Engine, All Serial Numbers  
 D375A-5 Bulldozers, S/N 18001 thru 18306  
 HD465-7 Bulldozers, S/N 7001 thru 7315  
 PC1250-7 Hydraulic Excavator, S/N 20001 thru 20189  
 PC1250LC-7 Hydraulic Excavator, S/N 20001 thru 20138  
 WA600-3 Wheel Loader, S/N 54001 thru 54024  
 WA600-3A Wheel Loader, S/N 52001 thru 52157  
 WA600-3D Wheel Loader, S/N 53001 thru 53055  
 WA700-3 Wheel Loader, S/N 51001 thru 51024  
 WD600-3 Wheel Dozer, S/N 50001 thru 50016

**FAILURE CODE:** C116MC

**DESCRIPTION:**

1. Introduction:

When failures such as engine speed changes, generation of white smoke exhaust gas, etc., occur by malfunctioning of the timing rail pressure sensor for the fuel injection circuit, modify as outlined in this **PARTS & SERVICE NEWS**. (Replace the sensor with the new part with improved pressure pulsation and increased mechanical strength).

2. List of Parts:

Part No.	Part Name	Purpose of Part	Qty.	Remarks
6560-51-6201 (6560-51-6200)	Pressure Sensor (Pressure Sensor)	Replacement	1 (1)	

## 1. Details of the modification

Replace the timing rail pressure sensor for the control valve.

## 2. Modification procedure

### 2-1. Preparations before starting the modification work

- (1) Park the vehicle on a flat place, turn on the parking brake, turn OFF the starting switch and apply chocks to each tire.
- (2) Before starting the modification work, clean the surroundings of the timing rail pressure sensor to remove dirt, dust, etc. to prevent entry of dust into the fuel line.
- (3) Close the cock of the fuel tank before starting the modification work. (If the modification work is carried out with the cock opened, the fuel remaining in the fuel piping will return to the tank and air-bleeding may become necessary when re-starting the engine.)  
Be careful when replacing the timing rail pressure sensor since fuel will leak. (Place a fuel receiving pan to prevent the fuel from flowing out externally.)

### 2-2. Replacement of the timing rail pressure sensor of the control valve (Refer to Fig. 1.)

- (1) Remove the engine controller. (By removing 6 pcs. of the mounting bolts)
- (2) Disconnecting the connector of the timing rail pressure sensor of the control valve, replace the timing rail pressure sensor.
- (3) Connect the connector.
- (4) Install the engine controller.

Timing rail pressure sensor						
Current sensor 6560-51-6200 (Identification No. 3408381)	⇒	New sensor 6560-51-6201 (Identification No. 3408595)	Since the opposite side is made of aluminum, strictly observe the instructions for the tightening torque. <table border="0" style="margin-left: 20px;"> <tr> <td rowspan="2" style="font-size: 3em; vertical-align: middle;">}</td> <td>Tightening torque for the engine controller mounting bolts: 8 ± 1 N.m 0.8 ± 0.1 kgm</td> </tr> <tr> <td>Tightening torque for the pressure sensor mounting bolts: 14 ± 2 N.m 1.4 ± 0.2 kgm</td> </tr> </table>	}	Tightening torque for the engine controller mounting bolts: 8 ± 1 N.m 0.8 ± 0.1 kgm	Tightening torque for the pressure sensor mounting bolts: 14 ± 2 N.m 1.4 ± 0.2 kgm
}	Tightening torque for the engine controller mounting bolts: 8 ± 1 N.m 0.8 ± 0.1 kgm					
	Tightening torque for the pressure sensor mounting bolts: 14 ± 2 N.m 1.4 ± 0.2 kgm					

### 2-3. Checks to make after finishing the modification work

After finishing the modification work, operate the machine and make sure fuel does not leak from the timing rail pressure sensor section and check the output of the timing rail pressure sensor on the monitor panel.

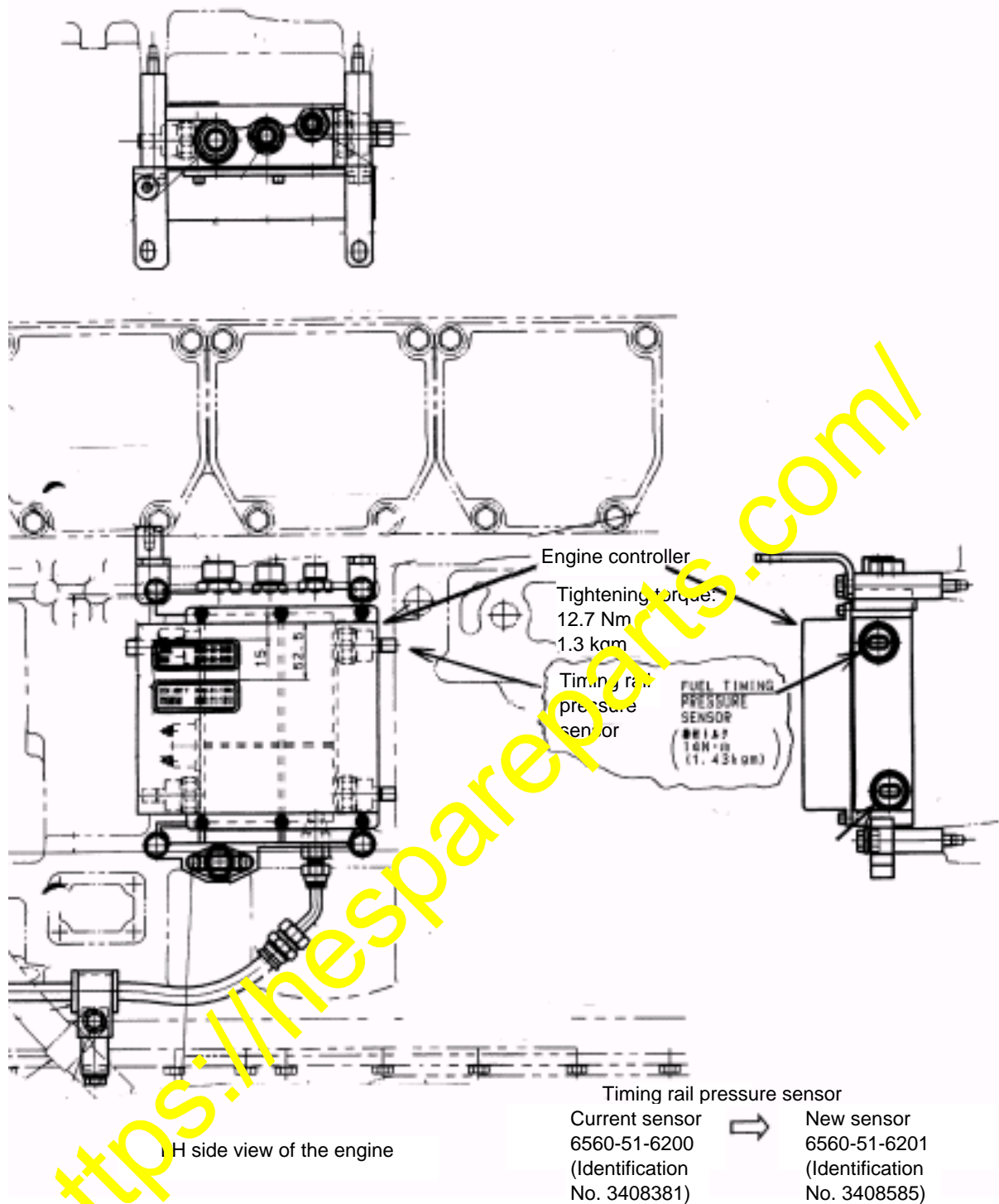


Fig. 1

Timing rail pressure sensor

Current sensor → New sensor  
6560-51-6200 → 6560-51-6201  
(Identification No. 3408381) (Identification No. 3408585)

Since the opposite side is made of aluminum, strictly observe the instructions for the tightening torque.

Tightening torque for the engine controller mounting bolts:  
8 ± 1 N.m  
0.8 ± 0.1 kgm

Tightening torque for the pressure sensor mounting bolts:  
14 ± 2 N.m  
1.4 ± 0.2 kgm