PARTS & SERVICE NEWS

REF NO.	AT00279
DATE	Nov. 20, 2000

SUBJECT: MODIFICATION TO PREVENT OCCURRENCE OF INTERFERENCE BETWEEN HEATER HARNESS AND FUEL PIPING ON SA6D140 ENG.

PURPOSE: To introduce modification procedures to prevent occurrence of interference between the heater harness and the fuel piping for the SA6D140 engines

APPLICATION: SA6D140 Engines, Serial Nos. Refer to page 6.
(The S6D140 engine and the SAA6D140 engine are outside application)

FAILURE CODE: ABD143

DESCRIPTION:

1. Introduction
   It has been found out that there is a fear of occurrence of interference between the heater harness and the fuel piping for the SA6D140 engines wearing a hole in the fuel piping and resulting in fuel leakage. To prevent occurrence of the aforesaid failure, make the modification introduced in this Service News following the procedures outlined herein.

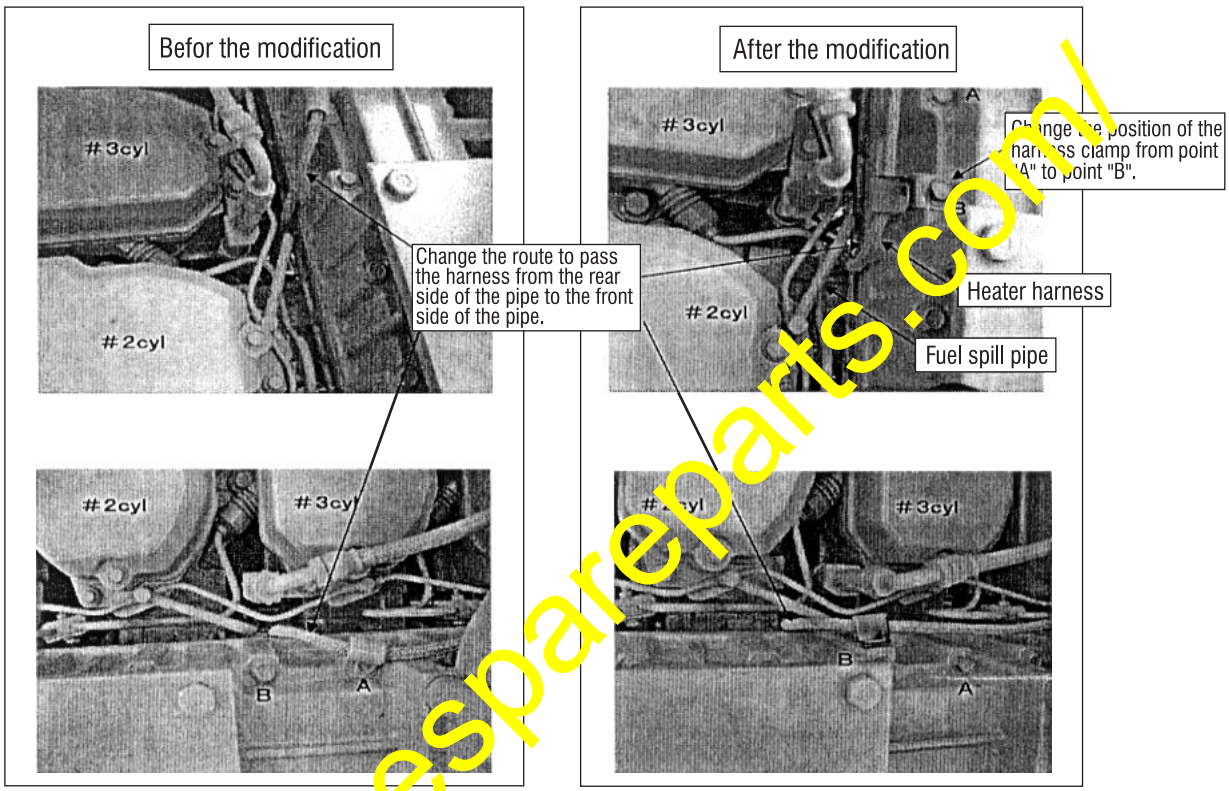
2. List of parts

Part No	Part Name	Purpse of part	Q'ty	Remarks
6211-72-5160 (6211-72-5160)	Tube #6 (Tube #6)	When deemed necessary Replacement	1 (1)	D155 PC1600SP J6D140E-W2-2
6934-71-5161 (6934-71-5161)	Tube #6 (Tube #6)		1 (1)	SA6D140A-W1-1
6211-71-5160 (6211-71-5160)	Tube #6 (Tube #6)		1 (1)	Other models than the above.
6211-72-5810 (6211-72-5810)	Tube, Spill (Tube, Spill)		1 (1)	D155
04434-50808 (08036-31210)	Clamp (Clamp)	Replacement	1 (1)	D155

3. Contents of the modification and modification procedures

3-1. Changing the route of the heater harness connecting between #2 Cylinder and #3 Cylinder

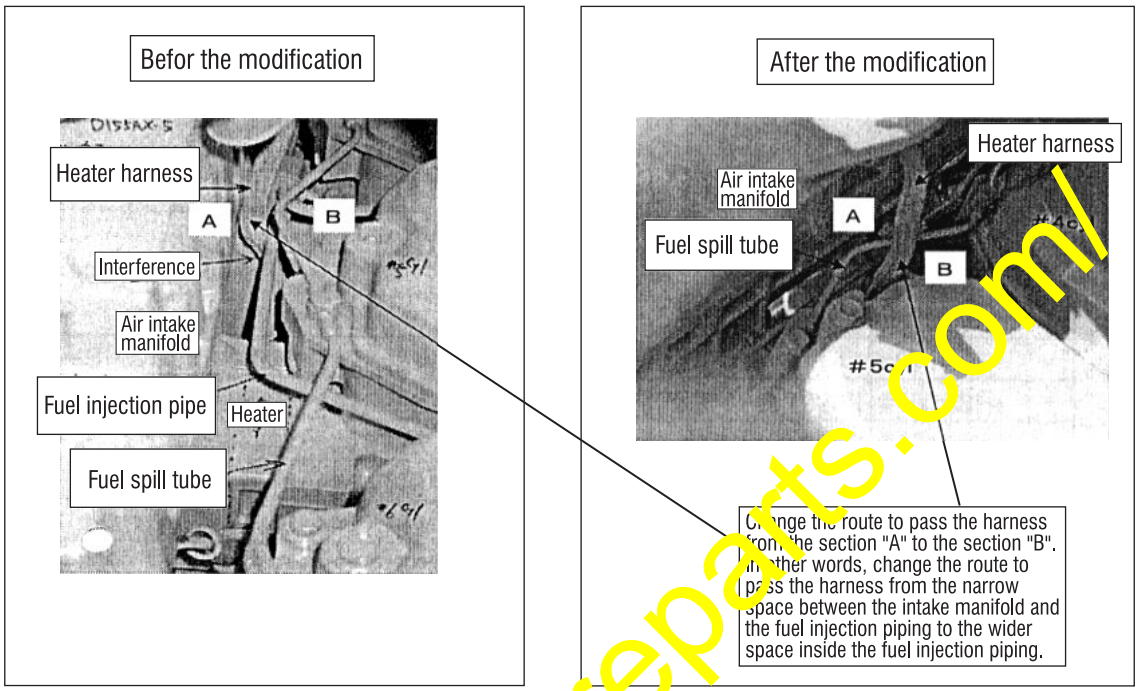
Applicable to the D155AX-3, D155A-3, D155AX-5 and D155-2A only. (Other machine models than the above are not applicable to this modification since the spill pipe does not pass through the subject area.)
On other models, the spill pipe passes by #1 or #6 cylinder.



1) Check if the heater harness and the fuel spill pipe are not interfering each other.
2) When they are interfering each other:
   - As for the pipe, regardless of the degree of wear, replace the current pipe with a new part when the pipe has been worn even very slightly.
   - As for the heater harness, when it is worn at the interfering section, repair the wear using insulator tape.
     (Since removal and reinstallation of the heater harness at the heater section are difficult, repair to reuse the current harness.)
3) Change the route to pass the harness as follows:
   - Disconnect the harness connecting to the heater relay.
   - Remove the J-shaped harness clamp located at the point "A" and discard it.
   - Change the route to pass the harness from the rear side of the fuel pipe to the front side of the pipe before connecting the harness to the heater relay.
   - Install the P-shaped clamp (04434-50808) to the point "B" to clamp the harness.
   - Since there should not be a margin in the length of the harness, bend the P-shaped clamp downward when deemed necessary.
   - If the length of the harness is still in short, rework the air cleaner bracket ac cording to the instructions given on page 5.
   - Reuse the bolts having been used at point "A" and point "B"
   - Reuse the flat washer having been used at point "A" at point "B".
4) After finishing the aforementioned work, check and make sure that there is a clearance of more than 10 mm between the harness and the fuel pipe.

3-2. Changing the route of the heater harness connecting between #4 Cylinder and #5 Cylinder

This is applicable to all models

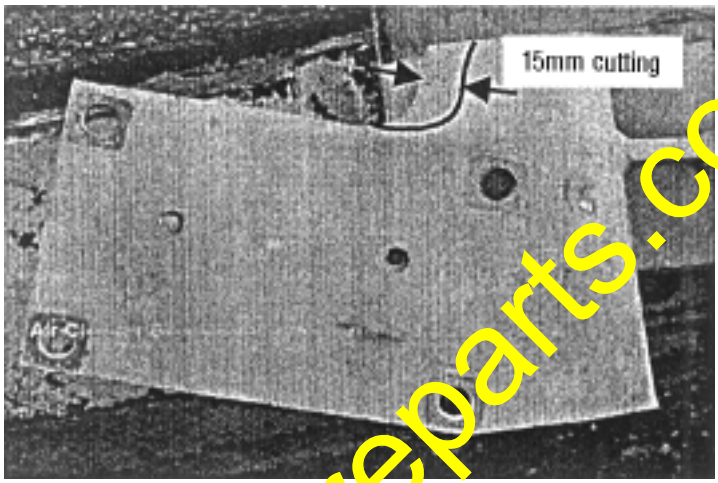


1) Check if the heater harness and the fuel spill pipe are not interfering each other.
2) When they are interfering each other:
   - As for the pipe, regardless of the degree of wear, replace the current pipe with a new part when the pipe has been worn even very slightly.
   - As for the heater harness, when it is worn at the interfering section, repair the wear using insulator tape.
     (Since removal and reinstallation of the heater harness at the heater section are difficult, repair to reuse the current harness.)
3) Change the route to pass the harness as follows:
   - Disconnect the harness connecting to the heater relay.
   - Change the route to pass the harness from the section "A" to the section "B".
   - Reconnect the harness to the heater relay.
4) After finishing the aforementioned work, check and make sure that there is a clearance of more than 20 mm between the harness and the fuel spill pipe.

Reworking with the air cleaner bracket (Refer to the Section 3-1-3, on page 3/6.)

1) Although this is a rare case, the length of the harness connecting #2 Cylinder and #3 Cylinder may be in short when passing through the suggested new route depending on the harness connecting angle to the heater terminals.

2) In such case, rework the air cleaner bracket reterring to the photo given below.
(By this rework of the bracket, the route of passing the harness can be shifted to the front side of the engine.)



Applicable machine models (engine models)

No.	Applicable machine/engine models	Serial numbers of the applicable engines		Serial numbers of the applicable machines	
		Already shipped engines	Factory shipment new engines	Already shipped machines	Factory shipment new machines
1	D155A-2	27560 – 28545	28656 and up	57001 – 57026	57027 and up
2	D155A(X)-3	22537 – 28431	28602 and up	60272 – 61142	61143 and up
3	D155AX-5	25887 – 28492	28560 and up	70001 – 70268	70268 and up
4	PC1600(SP)-1	11397 – 28578	28632 and up	10001 – 10122	10123 and up
5	PC650(SE, LC)-3	11978 – 25318	Next shipment and after	10665 – 11119	Next shipment and after
6	PC650(SE, LC)-5	17740 – 27989	Next shipment and after	20001 – 20334	Next shipment and after
7	PC710(SE)-5	17741 – 27989	Next shipment and after	10001 – 10226	Next shipment and after
8	HD325-5	10185 – 27982	Next shipment and after	2002 – 4293	4294 and up
9	HD325-6	17983 – 28387	Next shipment and after	5001 – 5499	5500 and up
10	GC380F-2	21744 – 28499	28648 and up	12003 – 12058	12059 and up
11	WS23S-2	10428 – 16256	Next shipment and after	3001 – 3118	Next shipment and after
12	SA6D140W1-1	19181 – 25688	Next shipment and after		
13	EG350B-L	14639 – 22082	Next shipment and after		
14	EG400(B)-2	12599 – 23633	Next shipment and after		
15	EG400BS-2	13433 – 26280	Next shipment and after		
16	J6D140E-GD-2	23474 – 28534	28755 and up		
17	J6D140E-G1-2	28185 – 70009	70010 and up		
18	J6D140E-KC-2	28211	28737 and up		
19	SA6D140-A2-1	10010 – 28548	28605 and up		
20	SA6D140-P-1	10010 – 28548	28605and up		
21	SA6D140A-GA-1	10010 – 28548	28605 and up		
22	SA6D140-GD-1	10010 – 28548	28605 and up		
23	SA6D140B-1	10010 – 28548	28605 and up		
24	SA6D140A-1	11717 – 28564	28579 and up		
25	SA6D140A-G2-1	11717 – 28564	28579 and up		
26	SA6D140A-A1-1	22954 – 28112	Next shipment and after		
27	SA6D140A-GT-1	22954 – 28112	Next shipment and after		
28	SA6D140A-G1-1	22954 – 28112	Next shipment and after		
29	SA6D140A-P-1	22954 – 28112	Next shipment and after		
30	SA6D140A-G3-1	16398 – 27603	28684 and up		
31	SA6D140B-G1-1	21705 – 28554	28614 and up		
32	SA6D140B-G3-1	10951 – 22039	Next shipment and after		
33	SA6D140B-GA-1	14659 – 17951	Next shipment and after		
34	SA6D140-C2-1	12919 – 28526	28565 and up		