

# PARTS & SERVICE NEWS

REF NO.	AT03057B
DATE	Jun. 3, 2004

(C)

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This PARTS & SERVICE NEWS supersedes the previous issue No. AT03057A dated Jun. 3, 2003 which should be discarded.

**SUBJECT:**  $\triangle$ B IMPROVED TYPE FUEL FILTER AND ADDITIONAL CAP (AS SPARE PARTS ONLY) FOR CRI ENGINES

**PURPOSE:** To introduce addition of a cap to the fuel filter (filters available as spare parts only) and modification of the fuel filter  
(To prevent entry of dust)

**APPLICATION:** SA(A)6D125E-3 Engines, Engine Serial Nos. 310001 and up  
SA(A)6D140E-3 Engines, Engine Serial Nos. 110001 and up  
SA(A)6D170E-3 Engines, Engine Serial Nos. 310001 and up

**FAILURE CODE:** A7W0Z9

## DESCRIPTION:

### 1-1. Introduction

This Service News will introduce addition of a cap to the fuel filter and precautions when using this fuel filter.

In the Operation and Maintenance Manual, a method to shorten the air bleeding time by filling the fuel filter with the fuel when replacing the fuel filter is being described but, if the fuel directly enters into the clean side of the filter by an error while the fuel filter replacement work is being carried out, there will be a possibility of occurrence of malfunctioning.

As KOMATSU added the cap to prevent occurrence of the aforementioned trouble, follow the handling procedure being described in this Service News when handling this cap.



$\triangle$ B KOMATSU has modified the fuel filter for the  $\phi$  125 and  $\phi$  140 Common Rail Spec. Engines into a high efficiency filter, and is introducing the new fuel filter in this Service News.


A table of related Service News's is attached and refer to those Service News's also when using this high efficiency fuel filter.

### 1-2. Revised places:

2 places $\triangle$ A	Jun. 3, 2003	The error in writing corrected
8 places $\triangle$ B	Jun. 3, 2004	The fuel filter has been changed

## 2. List of parts

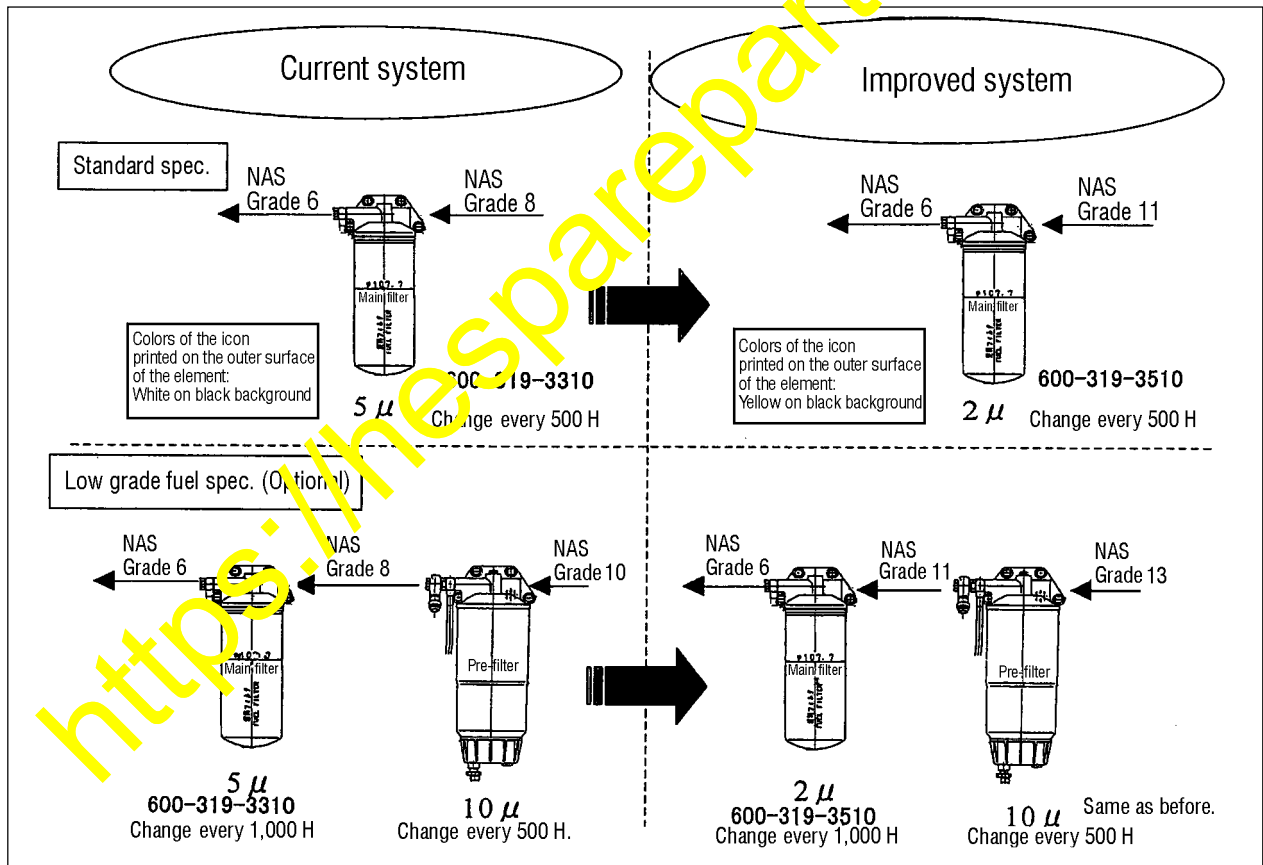
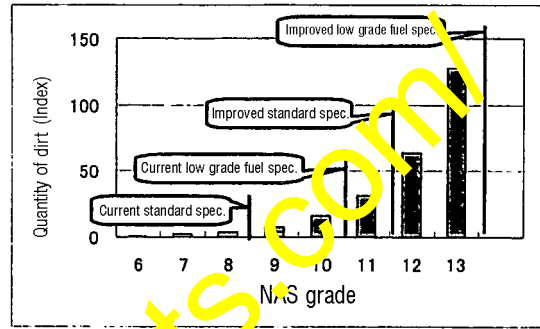
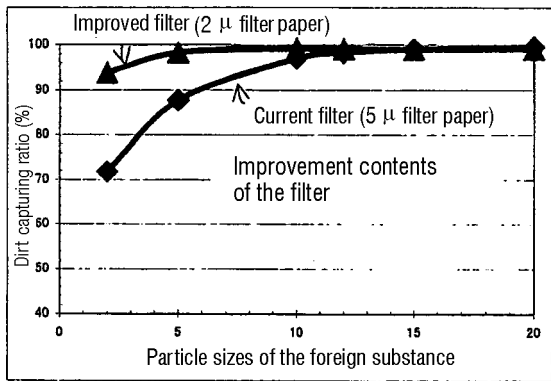
No.	Part No.	Part Name	Q'ty	Remarks
 1	3510 600-319- <del>3310</del> (600-319-3310)	Cartridge (Cartridge)	1 (1)	Cartridge for the standard fuel filter for the $\phi$ 125 and $\phi$ 140 CRI engines
2	600-319-3111	Cartridge	1	Cartridge for the standard fuel filter for the $\phi$ 170 CRI engines
3	600-319-3400	Cartridge	1	Cartridge for the additional fuel filter for the $\phi$ 125 and $\phi$ 140 CRI engines used in low grade fuel using areas (Equipped with the clear bowl)
4	600-319-3440	Cartridge	1	Cartridge for the additional fuel filter for the $\phi$ 125 and $\phi$ 140 CRI engines used in low grade fuel using areas (Spare parts -- Without clear bowl)
5	600-319-3200	Cartridge	1	Cartridge for the additional fuel filter for the $\phi$ 170 HPI engines used in low grade fuel using areas (Equipped with the clear bowl)
6	600-319-3240	Cartridge	1	Cartridge for the additional fuel filter for the $\phi$ 170 HPI engines used in low grade fuel using areas (Spare parts -- Without clear bowl)
 7	600-319-3310 (600-311-7132)	Cartridge (Cartridge)	1 (1)	Cartridge for the additional fuel filter for the $\phi$ 140 CRI engines used in low grade fuel using areas (For the twin type filter of the beginning stage setting)

 Page added

3. Regarding the  $\phi$  125 and  $\phi$  140 Common Rail Spec. Engines

Although the current fuel filter system could accept only the fuels with upto the NAS10 grade of dirt, KOMATSU has made it usable the fuels with upto the NAS13 grade of dirt.

The filter changing interval is the same.



Note 1) Light oil being sold at the gas stations in Japanese is of NAS Grade 7 or NAS Grade 8.

Note 2) In case your customers possess a fuel storage tank and if the inside surface of the fuel storage tank is being corroded to cause the fuel grade exceed the NAS Grade 13, wash it properly.

$\triangle$  Page added4. Table of related Service News's to the modification (5  $\mu$   $\rightarrow$  2  $\mu$ ) of the fuel filter for the Common Rail Spec. Engines

No.	Service News No.	Theme
1	AT03057	Regarding the addition of the fuel filter cap and modification of the fuel filter (Refer to this Service News regarding the part numbers of the filter and the replacement procedure.)
2	AT03093	Introduction of the inspection method when pressure feeding failure error occurs on the Common Rail Spec. Engines
3	AT03094	Regarding the fuels used for the Common Rail Spec. Engines and corrective measures to take

## 5. Table of related Service News's to the additional fuel filter for the Common Rail Spec. Engines

○ Engine mount type  
 ◎ Machine mount type

Engine	Machine model	Original setting		Current setting	
		Water separator	Twin type Additional fuel filter	W/S built-in type Additional fuel filter	Service News No. (Issuance month)
140	PC600	○	◎	◎	BT03019 ('03/10)
	PC750/800	○	◎	◎	BT03018 ('03/10)
	PC1800	○	-	○	BT03027 ('03/10)
	D155AX	○	-	○	AT03090 ('03/6)
	D275AX	○	-	○	AT03089 ('03/6)
	WA500	○	-	○	BT03015 ('03/5)
	HM350	○	-	◎	} Will be issued in April '04
	HM400	○	-	◎	
	HD325	○	◎	◎	
125	PC400	-	-	○	} This modification has been made from the first shipment machine.
	D65	-	-	○	
	D85	-	-	○	
	WA470/480	-	-	◎	Will be issued in April '04
	HM300	-	-	◎	Will be issued in April '04
	HD255	-	-	◎	Now under development

## 6. The location to add the fuel filter cap

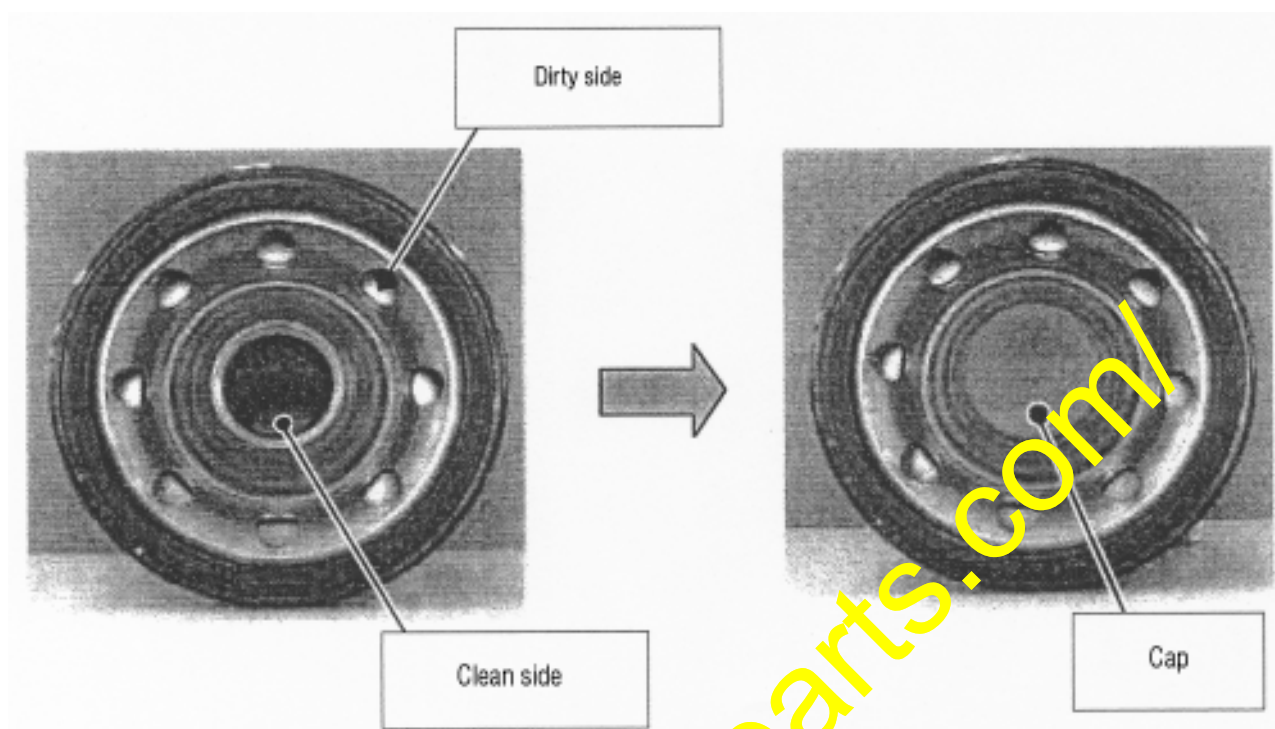


Fig. 1

## 7. The reason for addition of the cap

To prevent entry of dirt into the clean side

When filling the fuel filter with fuel at the time of changing the fuel filter, the Operation and Maintenance Manual instructs to feed the fuel into the dirty side only.

However, the current structure of the fuel filter allows the operator to feed the fuel into the clean side, also by error. (If dirt contained in the fuel goes into the clean side, malfunctioning of the fuel injection system may be caused.)

To prevent the above trouble, KOMATSU has added a cap to cover the clean side port. Replacement procedure for the filter equipped with this cap (the filters available as spare parts are equipped with this cap) will be described on the next page.

8. Replacement procedure for the fuel filter cartridge (and how to feed the fuel)

When replacing the fuel filter cartridge, feed the fuel into the filter following the procedures described below.

- ① Before feeding the fuel, make sure that the cartridge is equipped with the cap (A).

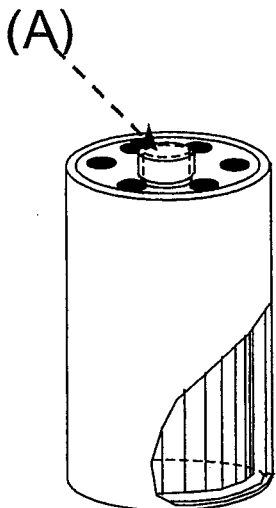


Fig. 2

- ② Feed the fuel into the filter with the cap (A) installed.

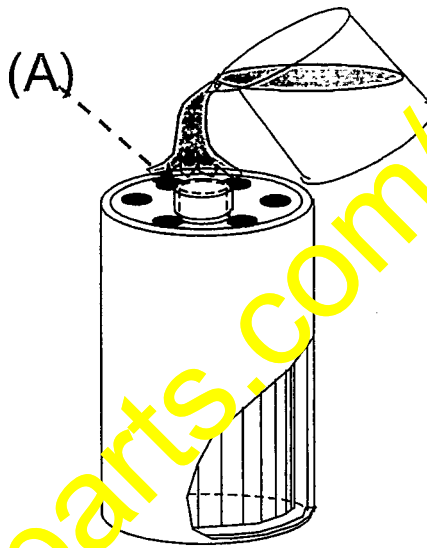


Fig. 3

- ③ After filling the filter with the fuel, remove the cap (A) and discard it.

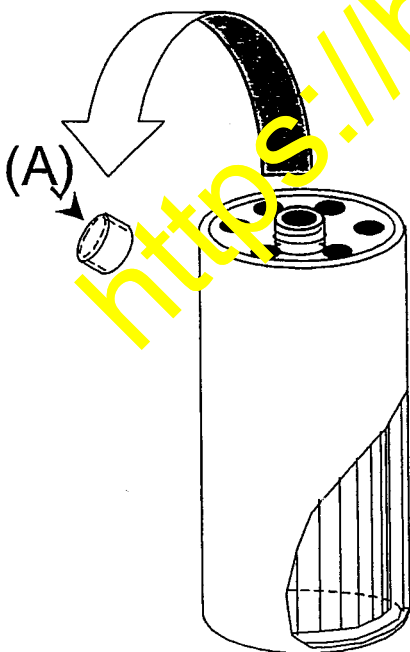


Fig. 4

- ④ Lightly apply engine oil on the surface of the packing for the fuel filter and install the packing onto the filter head. Then, after the surface of the packing comes in contact with the sealed surface on the filter head, tighten it by turning by 1/2 to 3/4 turn.

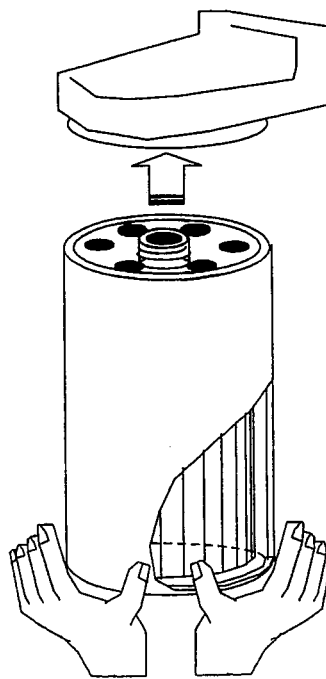


Fig. 5

9. Addition of the caution mark when replacing the filter

A caution mark describing the filter replacement procedure as follows, a simplified indication of the replacement procedure per the above Section 8, will be printed on the fuel filter body and this Service News is also introducing it.

(Some of the fuel filters do not have this print on their bodies. Refer to this Service News in case a fuel filter which does not have this print is delivered.)

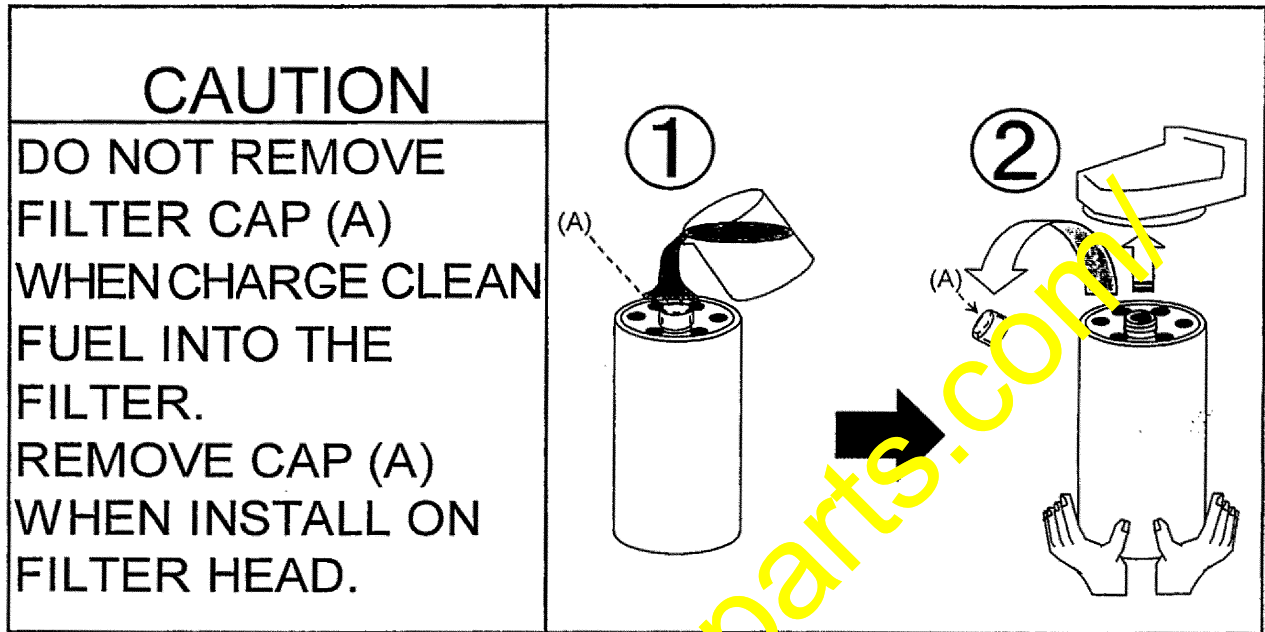


Fig. 6

10. Part number configuration (Be careful about the part number.)

- 10-1. Standard fuel filter  $\phi$  125, 140CPI: 600-319-~~3310~~ 3510  $\triangle B$   
 $\phi$  170HP: 600-319-3111

Be careful since the Part No. printed on the cartridge body surface and the Spare Parts No. do not match.  
 (The Part No. printed on the cartridge body surface is the part number of the cartridge body only.)

$\triangle B$ 600-319- <del>3310</del>	(Part No. as the spare parts)	=	600-311- <del>3310</del>	(Part No. of the cartridge body)	+	(01)	(Part No. of the cap as the component part)
600-319-3111	(Part No. as the spare parts)	=	600-311-3111	(Part No. of the cartridge body)	+	(01)	(Part No. of the cap as the component part)

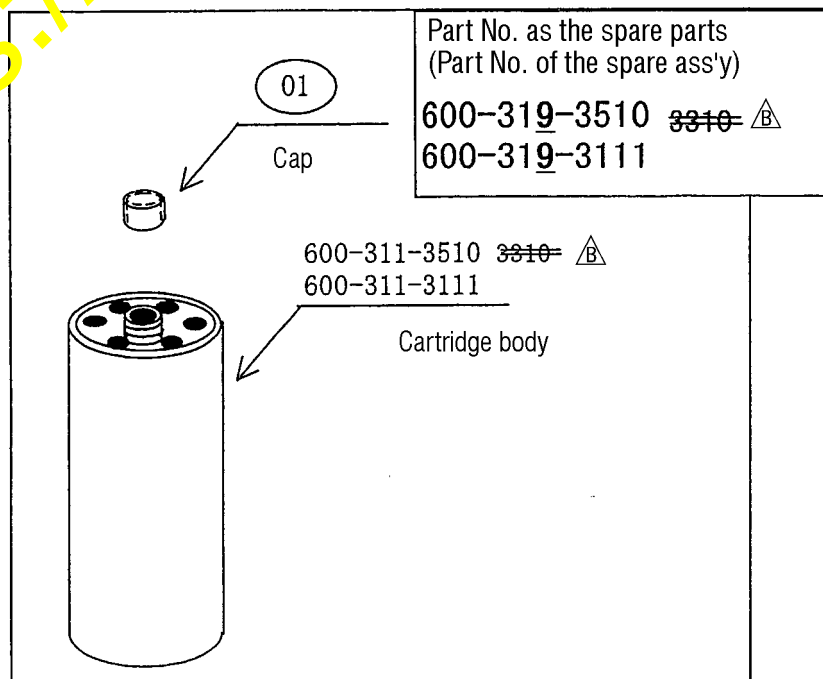


Fig. 7

10-2. Additional fuel filter for the areas using low grade fuels

- $\phi$  125, 140CRI: 600-319-~~3240~~<sup>3440  $\triangle$</sup>  (Spare parts -- Without clear bowl)
- $\phi$  170HPI: 600-319-~~3440~~<sup>3240  $\triangle$</sup>  (Spare parts -- Without clear bowl)

IMPORTANT: Be careful since the Part No. printed on the cartridge body surface and the Spare Parts No. do not match. (The Part No. being printed on the cartridge body surface is the part number of the cartridge body only.)

- For the  $\phi$  125 and  $\phi$  140 CRI engines: 600-319-3440 (Part No. as the spare parts) = 600-311-3410 (Part No. of the cartridge body) + 600-311-3230 (Seal) + (01) (Part No. of the cap as the component part)
- For the  $\phi$  170 HPI engines: 600-319-3240 (Part No. as the spare parts) = 600-311-3210 (Part No. of the cartridge body) + 600-311-3230 (Seal) + (01) (Part No. of the cap as the component part)

Notice: KOMATSU has also registered the Part No. of the assembly equipped with the clear bowl and is informing you as follows:  
 (Also, the Part No. printed on the cartridge body surface is the part number of the cartridge body only. Be careful since the Part No. printed on the cartridge body surface and the Part No. of the assembly equipped with the clear bowl do not match.)

- For the  $\phi$  125 and  $\phi$  140 CRI engines: 600-319-3400 (Part No. of the assembly equipped with the clear bowl) = 600-311-3410 (Part No. of the cartridge body) + 600-311-3230 (Seal) + (01) (Part No. of the cap as the component part) + 600-311-3220 (Part No. of the clear bowl)
- For the  $\phi$  170 HPI engines: 600-319-3200 (Part No. of the assembly equipped with the clear bowl) = 600-311-3210 (Part No. of the cartridge body) + 600-311-3230 (Seal) + (01) (Part No. of the cap as the component part) + 600-311-3220 (Part No. of the clear bowl)

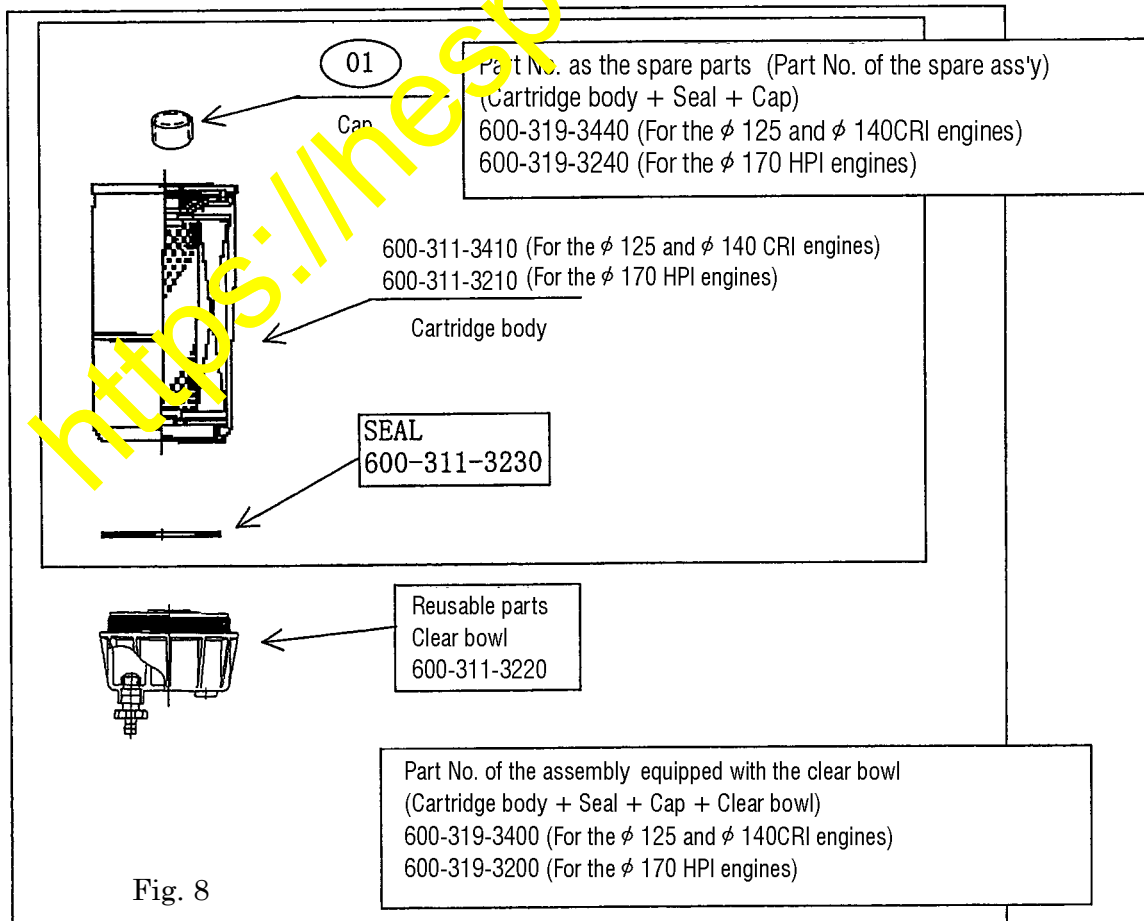


Fig. 8