

# PARTS & SERVICE NEWS

<b>REF NO.</b>	AA03044
<b>DATE</b>	March 11, 2003

**SUBJECT:** RADIAL SEAL AIR CLEANER RETRO-FIT

**PURPOSE:** To improve serviceability and performance of the air cleaner, particularly in dusty areas.

**APPLICATION:** 830B Motor Grader Serial Number 203163 and Up  
 830C Motor Grader Serial Number 203163 and Up  
 GD530A-2BY Motor Grader Serial Number 203163 and Up  
 GD530A-2CY Motor Grader Serial Number 203163 and Up  
 GD530AW-2BY Motor Grader Serial Number 203163 and Up  
 GD530AW-2CY Motor Grader Serial Number 203163 and Up

**FAILURE CODE:** AA00ZB

**DESCRIPTION:** In some severe, dusty environments it has been reported that the grader's air cleaner is hard to service properly and has led to dusting of the engine. The following information shows how to install a radial seal air cleaner for simplified service over the original air cleaner. It should be noted that when installing this radial seal air cleaner do not support heavy intake accessories on just the air cleaner. Separate support mounts must be provided.

**NOTE** The information in this Parts & Service News does not authorize or imply any obligation on the part of Komatsu America Company to provide reimbursement for any expenses. Machines requiring part repair or part replacement during the machine warranty are covered under normal warranty. Out of warranty machines are the responsibility of the distributor/customer.

## REPLACEMENT PARTS

The following replacement parts must be ordered:

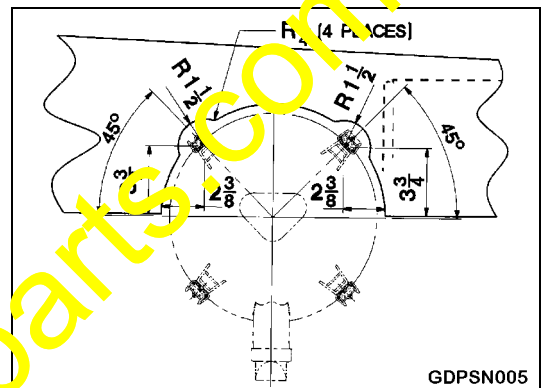
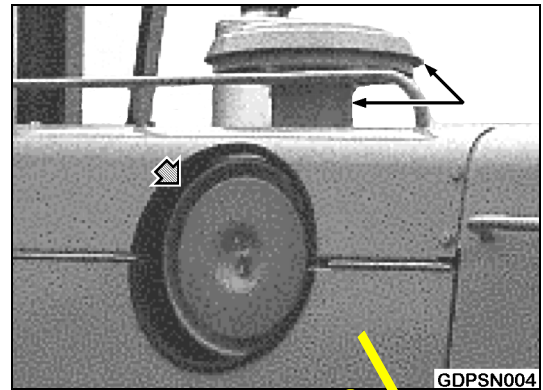
Item	Service Part	Description	Qty	Ref	Old Part
	1316 517 H01	AIR CLEANER.....	1		
	438 719 R91	CLAMP.....	2		
	1439 529 H1	INTAKE TUBE.....	IR	F1	
	1439 528 H91	RAIN CAP.....	IR	F1	
	454 889 R91	CLAMP.....	IR	F1	

IR - If Required.


F1 - For Serial Number 203705 and Below. Ref. AA98072.

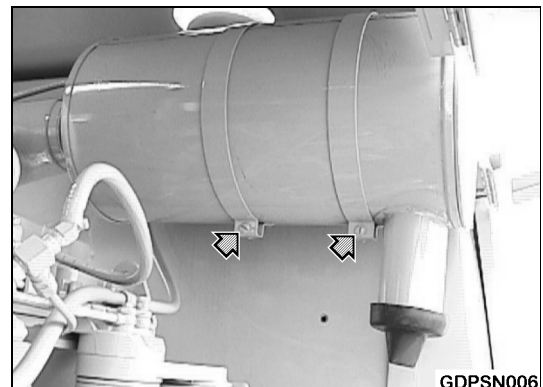
## REPLACEMENT

1. Remove the air intake cap and inlet tube.
  2. Disconnect the hose leading to the air restriction indicator.
  3. Remove the old air cleaner and the hose from the air cleaner to the turbocharger. Cover the turbocharger inlet to prevent dirt and dust from entering the turbocharger.
  4. Thoroughly clean inside the hose with a clean damp lint free cloth and examine the hose for signs of aging and cracks. Replace if necessary, P/N 1438 584 H91.
- ★ Check the hose visually to insure that it is clean before attaching it to the new air cleaner.
5. Trim the air cleaner opening per the dimensions illustrated for clearance of the new air cleaner's latches.




6. Mount the air cleaner in the bands and center the air cleaner inlet in the hood top opening. Tighten the bolts in the bands on the air cleaner.

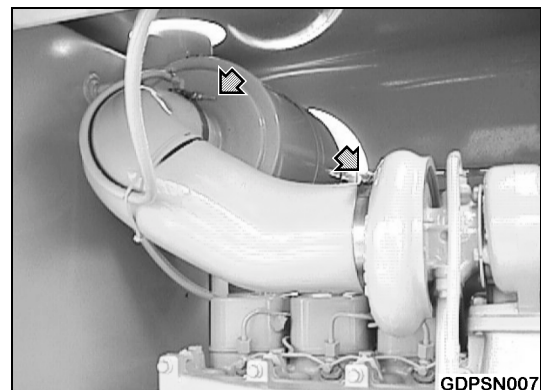
 N•m Band bolts ..... 5.4 N•m




7. Replace the inlet hose clamps with new ones. Position the clamps near the ends of the hose and install hose between air cleaner outlet and turbocharger.

 N•m Hose clamps ..... 8 to 9 N•m


- ★ The rubber hose has compression memory, retorque the hose connections 24 hours after the initial installation.




8. Attach the inlet tube to the top of the air cleaner and secure it in place with the clamp and tighten.

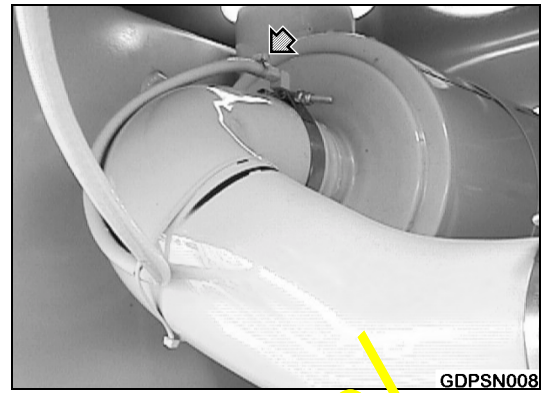
 **N•m** Hose clamps ..... 8 to 9 N•m

9. Install the new air intake cap, if applicable, and secure it in place with the clamp provided. Install the service dust indicator hose fitting and the hose with clamp and tighten.

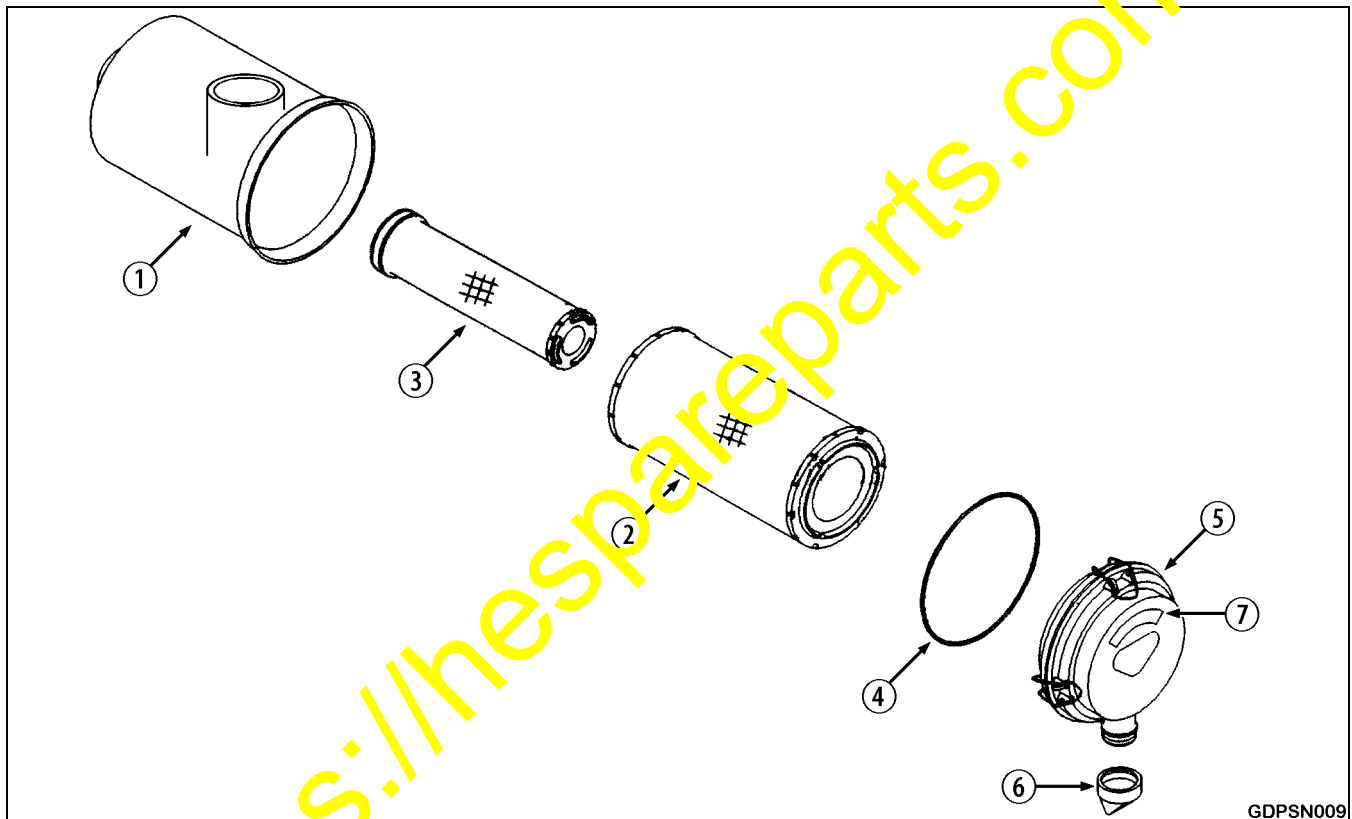
 **N•m** Cap clamps ..... 8 to 9 N•m

 **N•m** Hose clamps, hand tighten..... 3.4 to 4.5 N•m

Place a copy of this attached service information in your parts book.



GDPSN008



GDPSN009

Item	Service Part	Description	Qty	Ref	Serial Number
	1216-517 H91	AIR CLEANER .....	1		203163-
①	NSS	.BODY .....	1		203163-
	600-185-4100	.KIT, ELEMENT .....	1		203163-
②	600-185-4110	..ELEMENT, OUTER .....	1		203163-
③	600-185-4120	..ELEMENT, INNER .....	1		203163-
④	600-184-1370	..SEAL RING .....	1		203163-
	600-184-1420	.COVER, END .....	1		203163-
⑤	600184-2810	..PLATE .....	1		203163-
⑥	600-184-1350	.EVACUATOR VALVE .....	1		203163-
⑦	600-181-1930	.INSTRUCTION PLATE .....	1		203163-

- ★ For individual service part numbers, refer to the subsequent pages of this PARTS & SERVICE NEWS. Place a copy in your parts book and operators manuals. Use this publication along with the applicable parts book until this information is incorporated into the parts book.

### SERVICE INSTRUCTIONS

1. Release the Seal Carefully.

Unlatch and remove the service cover of the air cleaner. Make certain the latches are folded back against the cover so that they don't hinder filter removal or installation. The filter fits tightly over the outlet tube, creating the critical seal on the inside diameter of the filter end cap. The filter should be removed gently to reduce the amount of dust dislodged. There will be some initial resistance, similar to breaking the seal on a jar. Gently move the end of the filter back and forth to break the seal.

2. Avoid Dislodging Dust from the Filter.

Gently pull the filter off the outlet tube and out of the housing. Avoid knocking the filter against the housing.

3. Clean Sealing Surface of the Outlet Tube.

Use a clean cloth to wipe the sealing surface. Dust on the outside diameter of the outlet tube could hinder an effective seal and cause leakage. Make sure that all contamination is removed before the new filter is inserted.

4. Clean the Inside of the Outlet Tube

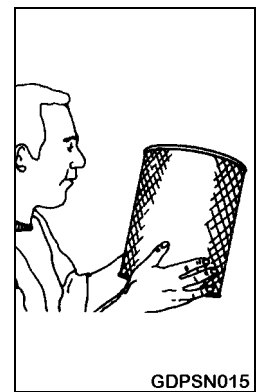
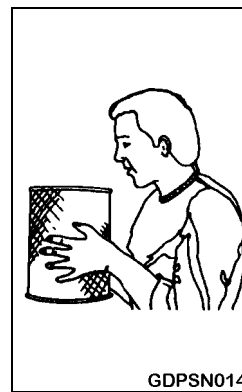
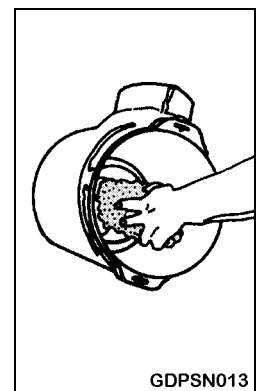
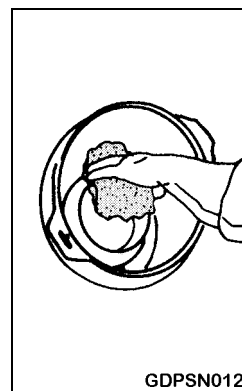
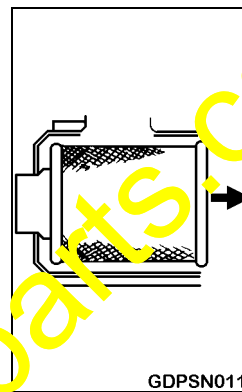
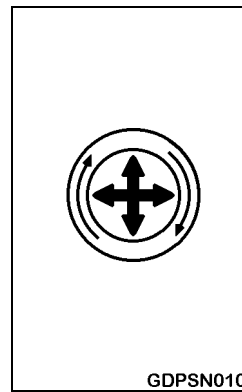
Carefully wipe the inside of the outlet tube with a clean cloth. Dirt accidentally transferred to the inside of the outlet tube will reach the engine and cause wear. It takes only a few grams of dirt to dust an engine! Be careful not to damage the sealing area on the tube.

5. Check the Old Filter for Leak Clues.

Visually inspect the old filter for any signs of leaks. A streak of dust on the clean side of the filter is a telltale sign. Remove any cause of leaks before installing a new filter.

6. Inspect the New Filter for Damage.

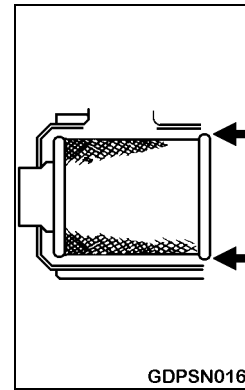
Inspect the new filter carefully, paying attention to the inside of the open end, which is the sealing area. Never install a damaged filter.



### 7. Insert the New Filter by Hand.

Never use the latches on the cover to force the filter into the air cleaner housing. It is tempting to assume the cover will do the job of seating the filter but it will not. Using the latches to push the filter in could cause damage to the housing and will void the warranty.

This filter is self aligning, self centering, and self sealing. A new filter has a dry lubricant to aid installation. The critical sealing area will stretch slightly, adjust itself and distribute the sealing pressure evenly. To complete a tight seal, apply pressure by hand at the outer rim of the filter, not the flexible center. Avoid pushing on the center of the urethane end cap. No cover pressure is required to hold the seal. Again, **Do Not** use the service cover to push the filter into place!




When the filter is in place, put the service cover back on, making sure the vacuator valve points down. Refasten the latches.

### 8. Check Connections for Tight Fit.

Make sure that all clamps, bolts, and connections in the entire air intake system are tight. Check for holes in the piping, and repair if needed.

### 9. Installation Tips.

**Do Not** support heavy intake accessories on just the air cleaner. Separate support must be provided. Hand tighten the filter service indicator.

 Filter service indicator ..... 3.4 to 4.5 N•m