

# PARTS & SERVICE NEWS

REF NO. AA00199

DATE August 23, 2000

(C)

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**SUBJECT:** INCREASED AIR CLEANER CAPACITY

**PURPOSE:** To improve the performance of the air cleaner, particularly in dusty environments.

**APPLICATION:** 850B Motor Grader Serial Numbers 210567 and down.  
850C Motor Grader Serial Numbers 210567 and down.  
870B Motor Grader Serial Numbers 210567 and down.  
870C Motor Grader Serial Numbers 210567 and down.  
GD650A-2BY Motor Grader Serial Numbers 210567 and down.  
GD650A-2CY Motor Grader Serial Numbers 210567 and down.  
GD650AW-2BY Motor Grader Serial Numbers 210567 and down.  
GD650AW-2CY Motor Grader Serial Numbers 210567 and down.  
GD670A-2BY Motor Grader Serial Numbers 210567 and down.  
GD670A-2CY Motor Grader Serial Numbers 210567 and down.  
GD670AW-2BY Motor Grader Serial Numbers 210567 and down.  
GD670AW-2CY Motor Grader Serial Numbers 210567 and down.

**FAILURE CODE:** AA0065

**DESCRIPTION:** In some severe, dusty environments it has been reported that the grader's air cleaner must be serviced too frequently. The following kit will install a larger size air cleaner to reduce the servicing frequency of the original air intake system.

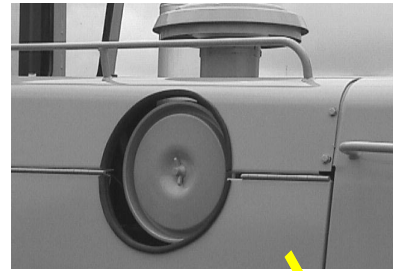
The following replacement parts must be ordered:

**Table 1: Replacement Parts**

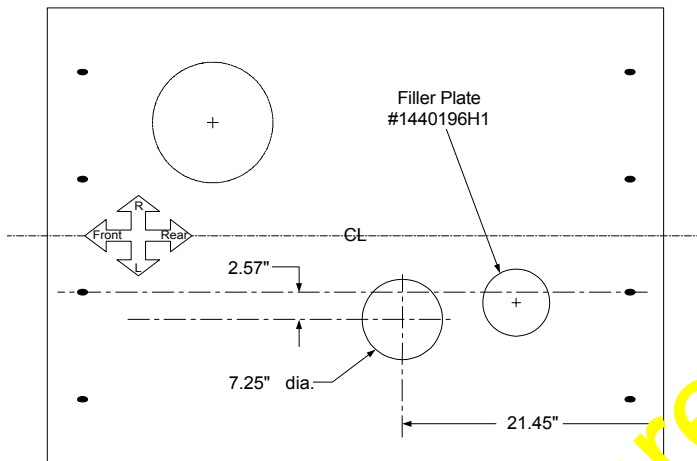
No.	Part Number	Quantity	Description
1	207-01-68250	1	Air Cleaner
2	1440 160 H91	1	Air Cleaner Bracket
3	27 588 R1	4	Bolt
4	33 384 H45	4	Washer
5	6151-1-4810	2	Band
6	6345-1-4011	2	Bolt
7	1440 169 H1	1	Tube (air cleaner intake)
8	437 923 R91	1	Clamp
9	1440 165 H1	1	Hose (air cleaner to turbo)
10	437 922 R91	1	Clamp
11	438 719 R91	1	Clamp
12	9409 931	1	Elbow
13	443 976	1	Nipple
14	1440 193 H1	1	Indicator
15	1439 528 H91	IF REQ.	Rain Cap - for serial no. 203705 and below
16	1440 196 H1	1	Plate, filler
17	1440 176 H1	1	Trim piece, 24 inch
18	1251 075 H1	1	Trim piece, 22.5 inch

## AIR CLEANER INSTALLATION INSTRUCTIONS

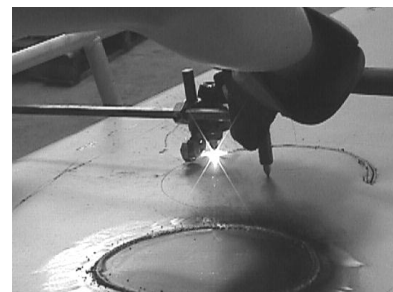
1. Remove the air intake cap, breather tube, hood-top and sides.



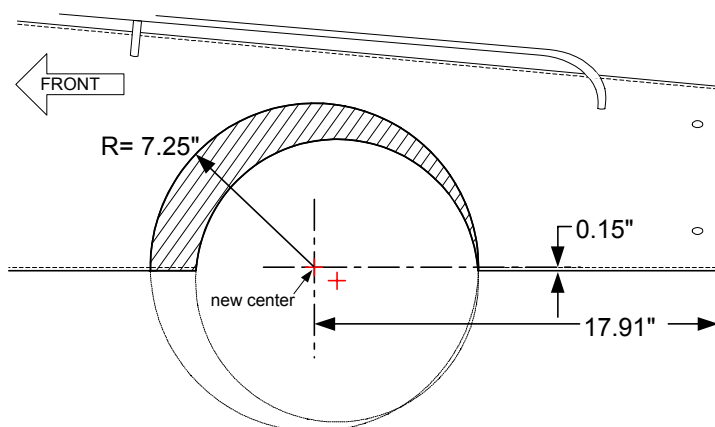
### Necessary Hood-Top Modifications



2. Weld the filler plate 1440 196 H1 to the hood-top filling the old tube hole. Grind the seam smooth.
3. With a straight edge or chalk line, mark a straight line between the centers of the hood mounting holes indicated in the drawing above.
4. Locate the center for the new hole 21.45 in (544.83 mm) from the rear of the hood and 2.57 in (65.278 mm) toward the left side.
5. Mark the new center and scribe the outline of the 3.13 inch (79.502 mm) radius (7.25 inch (184.15 mm)) circle.
6. Cut the new hole and grind the edges on both sides of the hood smooth.
7. Sand, prime, and paint the affected surface.

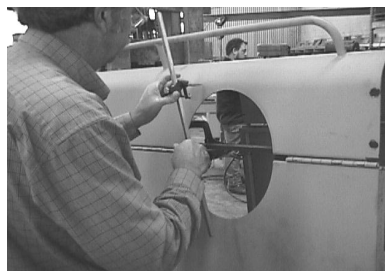


## Necessary Hood-Side Modifications

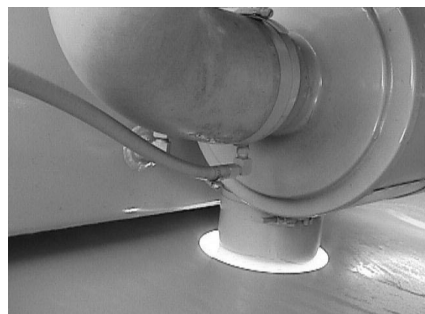
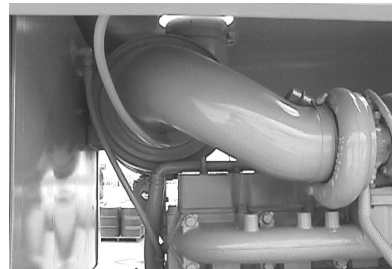
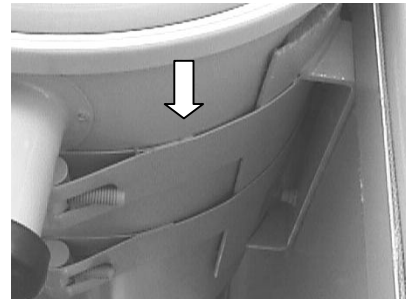


The center of the new hole should be 0.15 in (3.81 mm) above the bottom edge of the hood-side and 17.91 in (454.914 mm) from the rear edge.

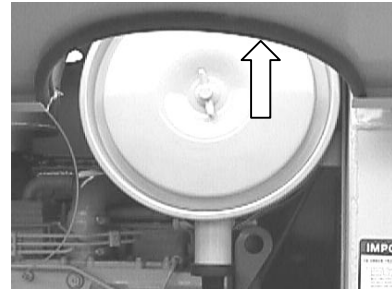
8. To locate the center for the new air cleaner hole, put spacers between the hood-top and side to keep the outer surface flat (if the machine has hood-sides). Next, clamp a flat bar in place across the hole to aid in locating the new center.
9. Mark and punch the new center.
10. Scribe the outline of the 7.25 inch (184.15 mm) radius circle.
11. Cut the new hole in the hood-top and side (if applicable) and grind the edges smooth.
12. Sand, prime, and paint affected surfaces.



13. Remove the old air cleaner, mounting bracket, and hose from the air cleaner to the turbo.
14. Before mounting the new bracket, thread both bands (6151-11-4840) through the bracket (1440160H91) with the split seam on the inside.
15. Coat the threads on each of the 4 bolts (27588R1) with anti-seize compound (NAPA P/N 765-1363, IOCK-TITE 767, or equivalent). Mount the bracket using the 4 bolts and washers (33384H45), tighten to 28 lbf ft (37.963 N•m).
16. Loosely mount the new air cleaner (207-01-68250) in the (2) bands.
17. Thoroughly clean inside the turbo and the hose with a lint free cloth.
18. Attach the new breather tube (1440169H1) to the top of the air cleaner and secure it in place with the clamp (438723R91). Tighten to 70~80 lbf in (7.9~9.0 N•m).
19. Set the reworked hood in place and align the air cleaner so the breather tube is centered in the hole.
20. Install the new air intake cap (1439528H91), if applicable, and secure in place with the clamp (437923R91). Tighten to 70~80 lbf in (7.9~9.0 N•m).
21. Tighten the bolts in the bands on the air cleaner to 14~15 lbf ft (1.9~2.1 N•m).
22. Put the clamps (437922R91 on the larger end and 438719R91 on the smaller end, around the new hose and put the hose in place with the small end toward the turbo. Position the clamps near the end of the hose and tighten each to 70~80 lbf in (7.9~9.0 N•m).
23. Install the new service dust indicator (1440193H1), elbow (9409551), and nipple (443976).
24. Reinstall the hood-top and hood-side.

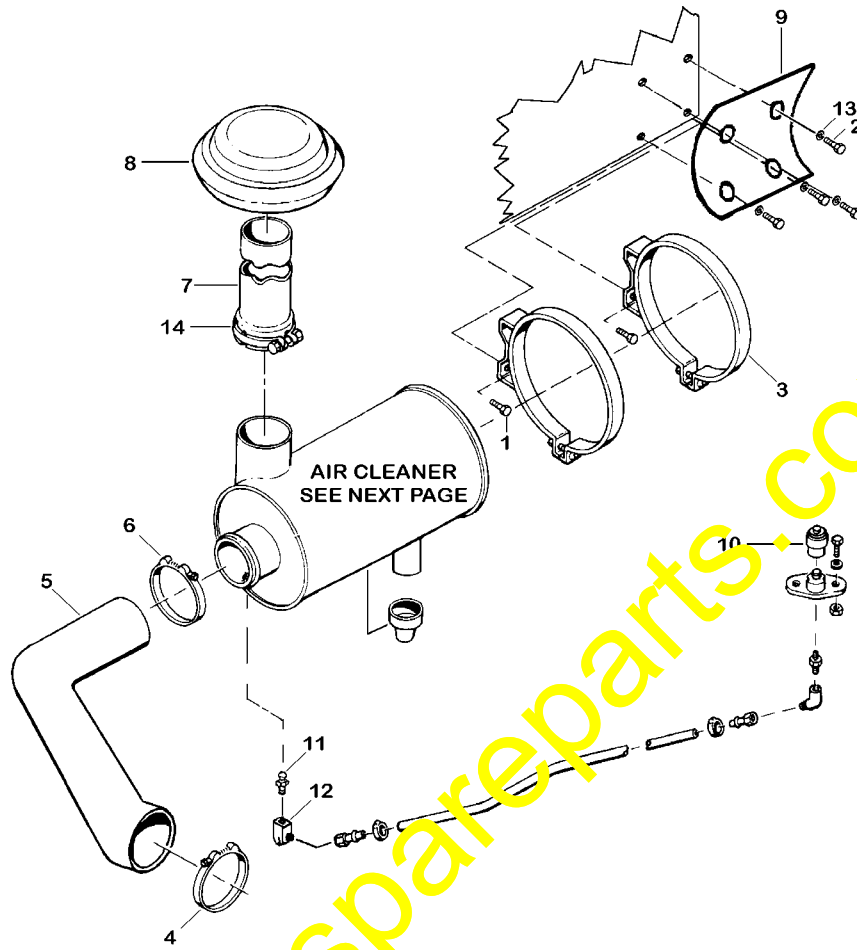


25. Fit the longer of the two rubber trim pieces (1440176H1) around the top edge of the hole with the flap toward the inside. If the machine has a hood-side, the shorter trim piece (1251075H1) fits around the bottom edge.



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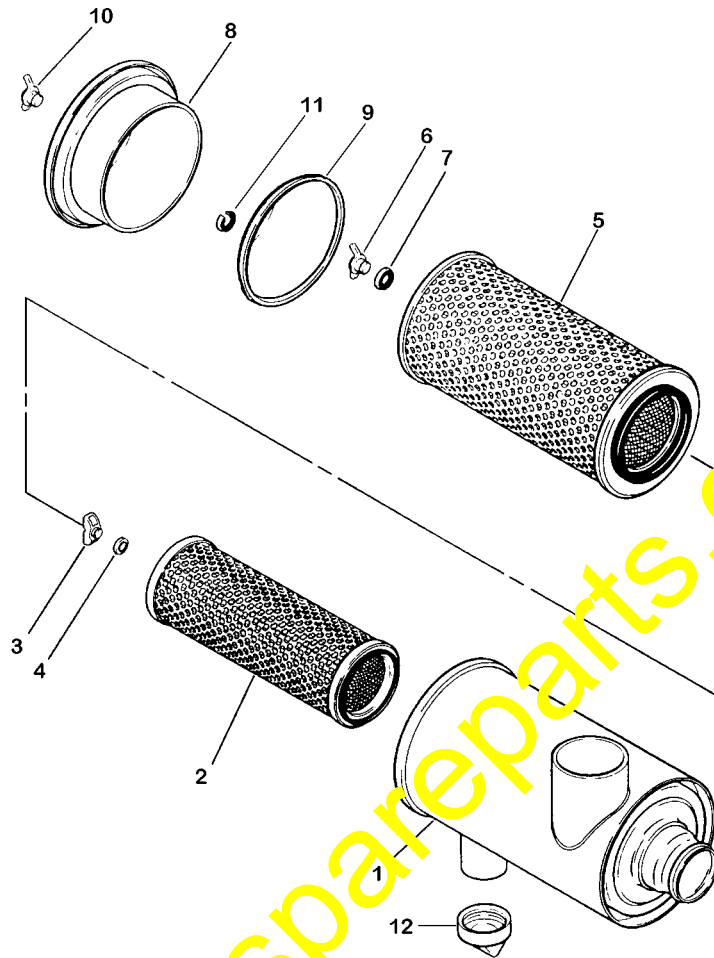
**AIR INTAKE SYSTEM REPLACEMENT PARTS**



VGPS0101

Item	Part Number	Description	Qty.
1	6643-11-4641	BOLT	2
2	27 588 R1	BOLT	4
3	6151-11-4810	BAND	2
4	437 923 R91	CLAMP	1
5	1440 165 H1	TUBE	1
6	437 922 R91	CLAMP	1
7	1440 169H1	TUBE	1
8	1439 528 H91	CAP	1
9	1440 160 H91	BRACKET	1
10	1440 193 H1	INDICATOR	1
11	443 976	NIPPLE	1
12	9409 931	ELBOW	1
13	33 384 H45	WASHER	4
14	437 923 R91	CLAMP	1

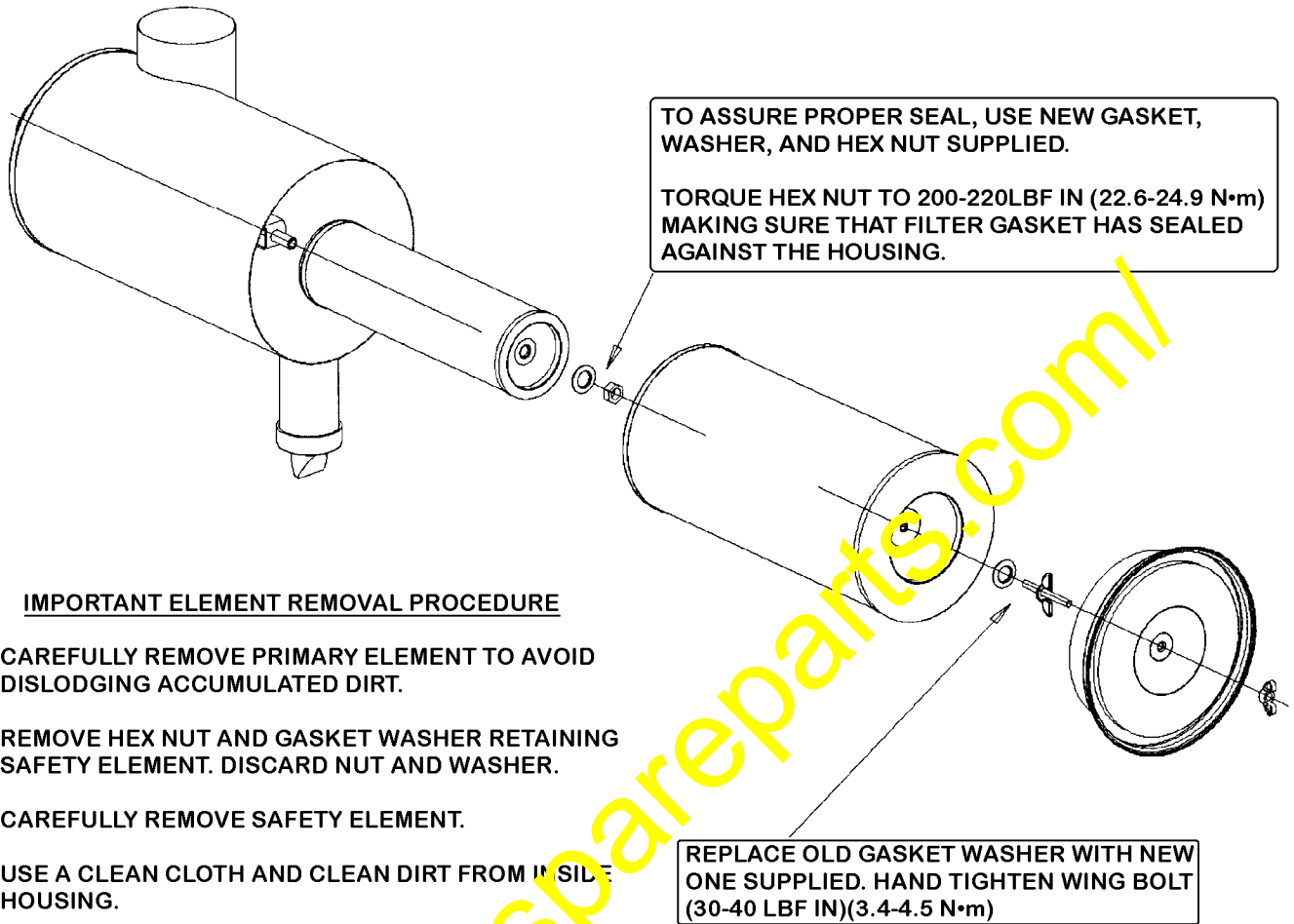
## AIR CLEANER ASSEMBLY



VGPS0102

Item	Part Number	Description	Qty.
	207-01-68250	AIR CLEANER ASSEMBLY	1
1	207-01-68440	.BODY, AIR CLEANER	1
	600-181-1600	KIT, ELEMENT ASSEMBLY	1
2	600-181-1680	.ELEMENT, INNER	1
3	600-181-1370	.NUT	1
4	600-181-7511	.WASHER, SEAL	1
	600-181-1660	.KIT, OUTER ELEMENT	1
5	600-181-1580	..ELEMENT, OUTER	1
6	600-181-1950	..NUT, WING	1
7	600-181-4440	..WASHER, SEAL	1
	600-181-1980	KIT, COVER ASSEMBLY	1
8	600-181-1690	.COVER	1
9	600-181-1770	.RING, SEAL	1
10	561-02-62370	.NUT, WING	1
11	561-02-12380	.RING, SNAP	1
12	600-181-1370	.VALVE, VACULATOR	1

## ELEMENT REPLACEMENT INSTRUCTIONS



### IMPORTANT ELEMENT REMOVAL PROCEDURE

CAREFULLY REMOVE PRIMARY ELEMENT TO AVOID DISLODGING ACCUMULATED DIRT.

REMOVE HEX NUT AND GASKET WASHER RETAINING SAFETY ELEMENT. DISCARD NUT AND WASHER.

CAREFULLY REMOVE SAFETY ELEMENT.

USE A CLEAN CLOTH AND CLEAN DIRT FROM INSIDE HOUSING.

VGPS0103