

PARTS & SERVICE NEWS

REF NO.	A930002
DATE	Feb. 18, 1993

SUBJECT: IMPROVEMENT FOR FACILITATING THE CLEANING OF AIR CONDITIONER EVAPORATORS

PURPOSE: To introduce modifications of the air conditioners to facilitate cleaning of the evaporator, thereby preventing the evaporator clogging and functional deterioration of the air conditioner system.

APPLICATION: WA500-1 Wheel Loaders, Serial Nos. 20001 thru 20510
 WA600-1 Wheel Loaders, Serial Nos. 10001 thru 11213
 WA700-1 Wheel Loaders, Serial Nos. 10001 thru 10095
 WA800-1 Wheel Loaders, Serial Nos. 10001 thru 10499
 WA800-2 Wheel Loaders, Serial Nos. 10501 thru 10638
 WA500-1L Wheel Loaders, Serial Nos. A20854 and up
 WA600-1L Wheel Loaders, Serial Nos. A10391 and up

DESCRIPTION:

1. Introduction

Air conditioning system evaporators may become clogged with dust and debris when loaders are at work in dusty environments. Evaporator clogging will reduce air conditioner operating efficiency significantly. Changes have been implemented to enhance access allowing improved evaporator cleaning. Furthermore, intake air filter and air conditioner box sealing have been improved.

These improvements may be applied to previously built machines that operate in dusty conditions. Please follow the instructions contained in this **BULLETIN**.

- NOTES:**
1. For the evaporator cleaning procedure, refer to Par. 5.
 2. These modification procedures are applied only to those machines which are equipped with air conditioners manufactured by Nippon Denso (Ltd.). Please confirm by checking the air conditioner name plate provided beside the controller.

2. Parts required for the modifications:

Part No.	Part Name	Q'ty	Remarks
01580-00605	Nut	4	For reworking the box
428-963-1410 *(Note)	Seat	1	
★425-54-13380	Plate	1	For reworking the rear box
★425-54-13390 *(Note)	Plate	1	
426-54-13130	Seat	1	
01571-01016	Seat	1	For reworking the A/C unit
01571-00609	Seat	4	
198-911-5420	Grommet	1	For installing to the box
01435-00610	Bolt	2	
423-T43-1430	Filter Inner	2	
01435-00610	Bolt	4	For installing to the A/C unit
★ 01	Cover	1	
★ 02	Sheet	1	

*(Note) On WA600-1 (Serial Nos. 10001 thru 11213) and WA800-1 (Serial Nos. 10001 thru 10499), the above parts need not be obtained or reworked.

3. Reworking procedures:

Rework the parts marked (A), (B) and (C) in Fig. 1, referring to the subsequent pages.

Note 1) Reworking of box (A) should be proceeded by removing the damper and blower.

Note 2) Reworking of Air conditioner unit (C) can be carried out without removing the air conditioner internal parts, provided that care is taken not to damage these parts.

- a) Reworking the box
(A) (see Paragraph 3a).
- b) Reworking the rear box (B)
(See Paragraph 3b).
- c) Reworking the Air conditioner unit
(C) (See Paragraph 3c)

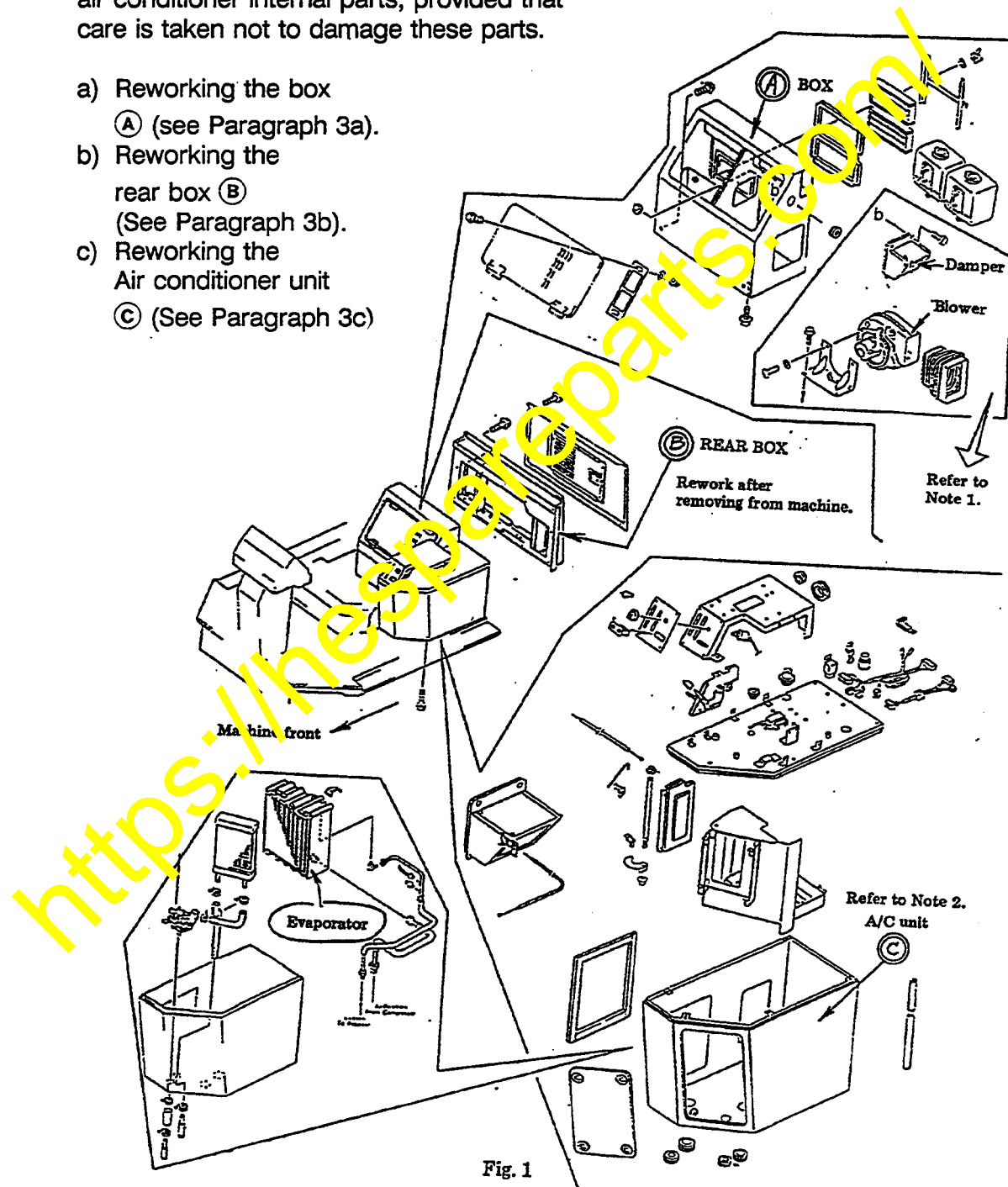


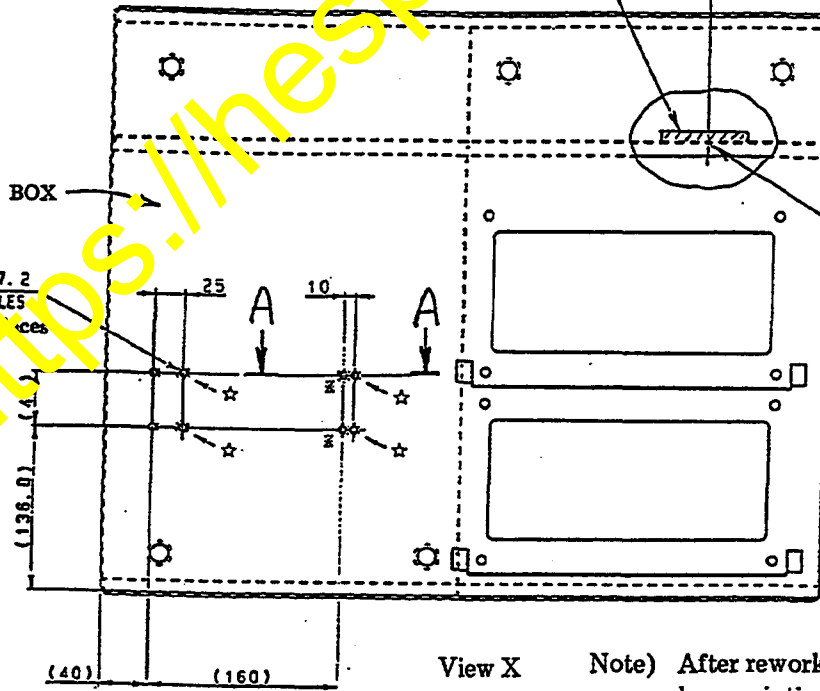
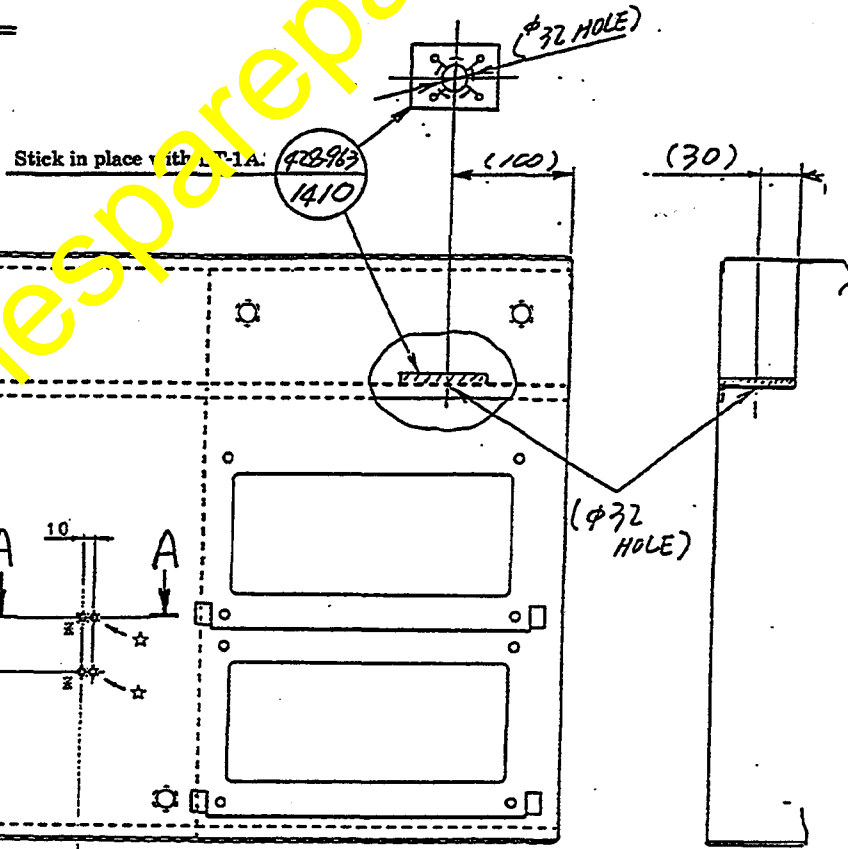
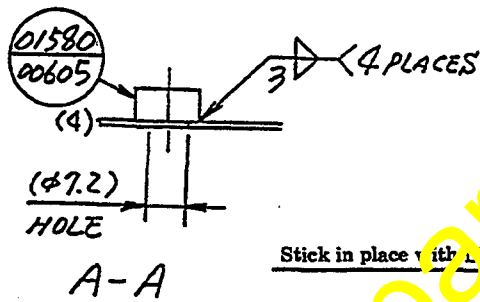
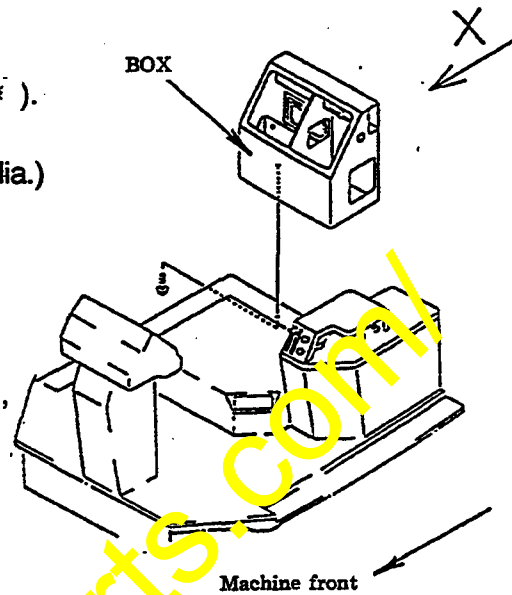
Fig. 1

a) Reworking the box

Rework the box in the following manner:

- ① Remove nuts (seats) (at 2 places marked *).
- ② Add nuts 01580-00605 and holes (7.2 mm dia.) (at 4 places marked ★).
- ③ Add the seat (428-963-1410).

NOTE: (On WA600-1 (Serial Nos. 10001 thru 10880) and WA800-1 (Serial Nos. 10001 thru 10499), Step ③ is not required)



View X

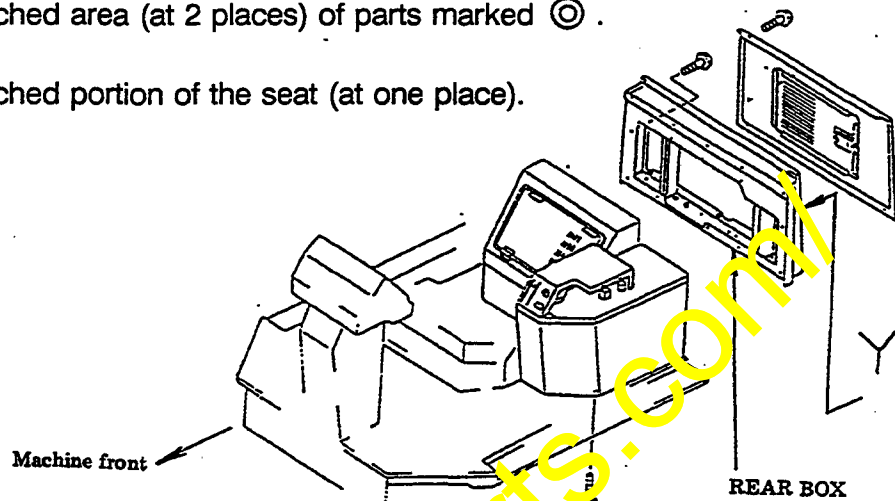
Note) After reworking, finish the surfaces by repainting.

Fig. 2

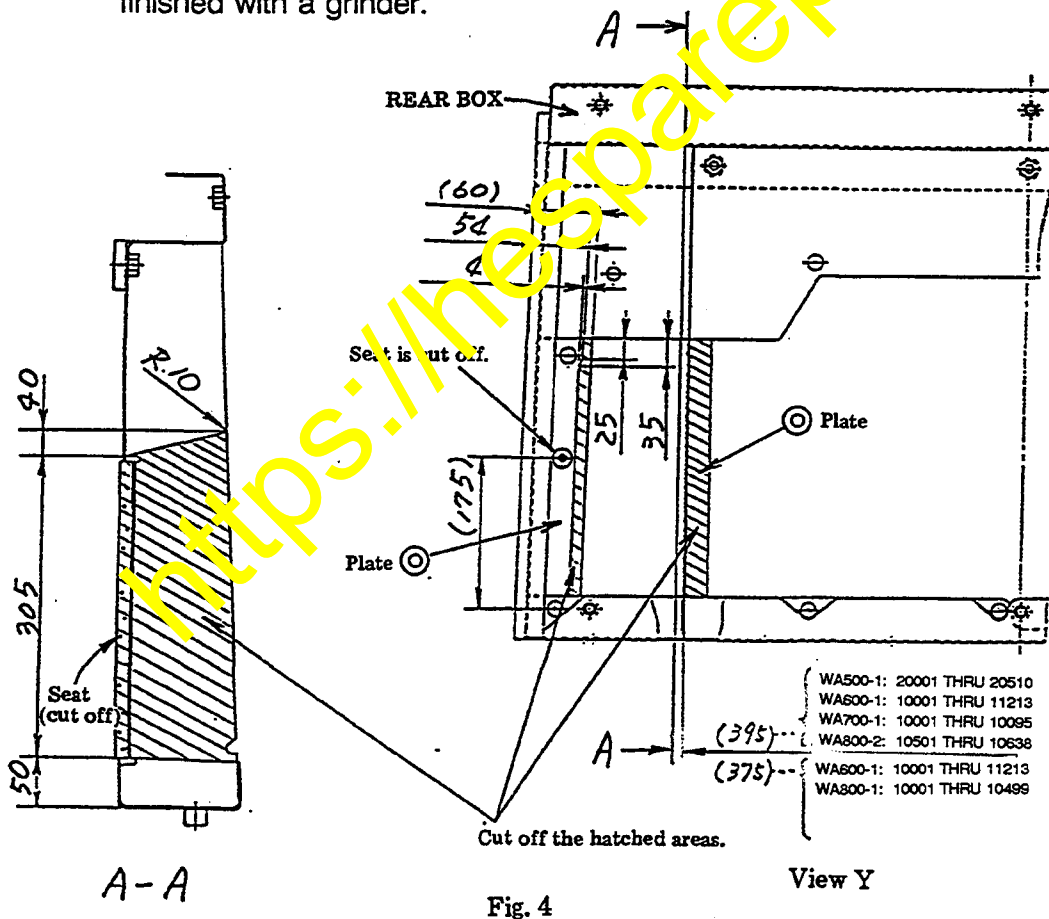
b) Reworking the rear box

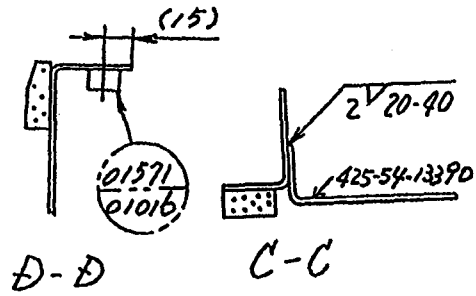
Rework the rear box in the following manner.

- ① Remove the hatched area (at 2 places) of parts marked ⊙.
- ② Remove the hatched portion of the seat (at one place).



NOTE:) The edge of the plates and seat from where the hatched areas were cut off should be finished with a grinder.





- ③ Addition of plate (425-54-13390)
(See Note)
- ④ Addition of plate (425-54-13380)
- ⑤ Addition of seat (426-54-13130)
- ⑥ Addition of seat (01571-01016)

NOTE:

Reference item ③ "the addition of plate (425-54-13390)" is not required on WA600-1 (#10001 thru #10880) and WA800 (#10001 thru #10499).

Note) After completing the rework, finish the surfaces by repainting.

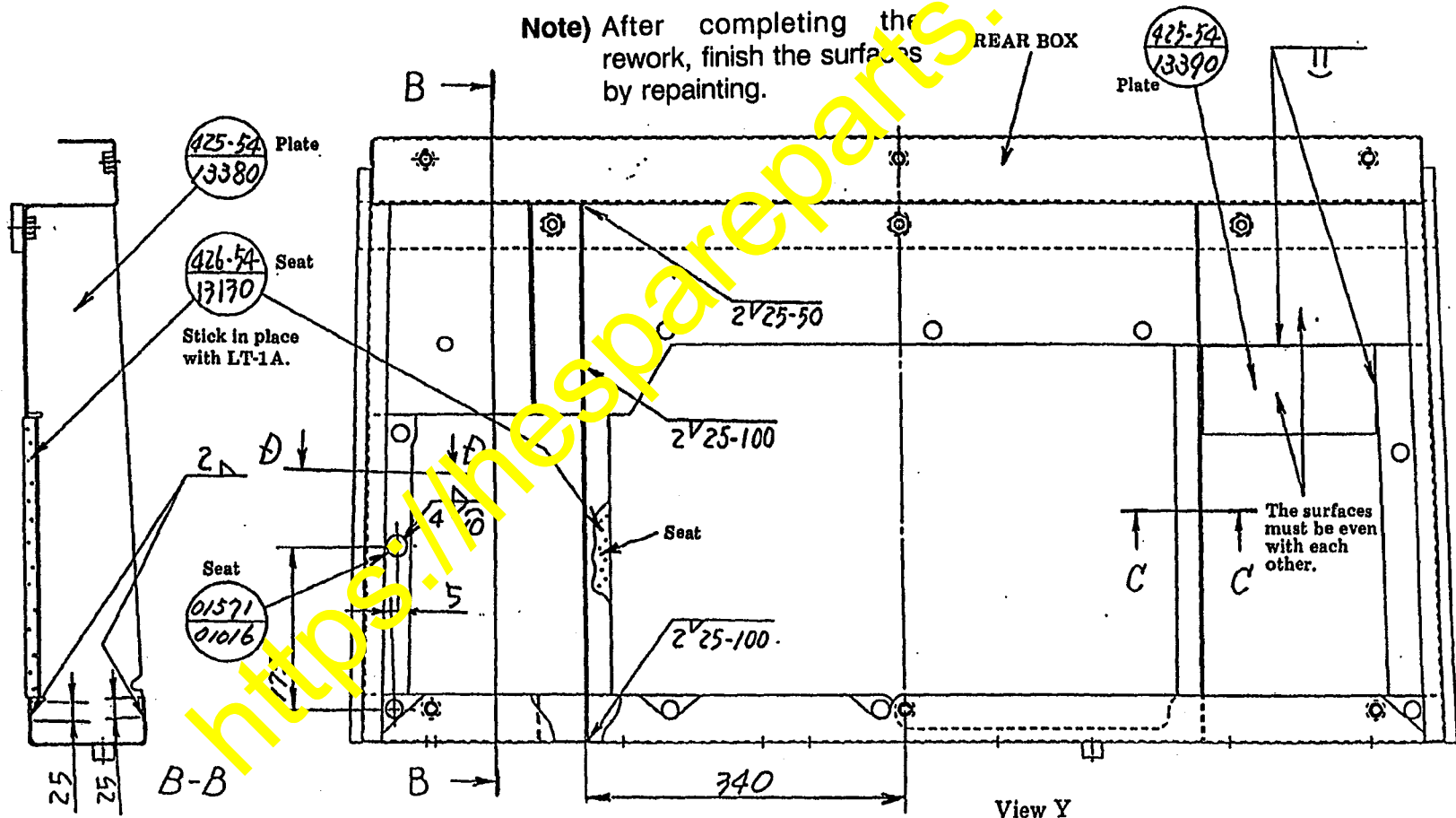


Fig. 5

c) Reworking the air conditioning unit (case)

Rework the air conditioning unit in the following manner.

- ① Addition of a hole (245 X 148)
- ② Addition of four seats (01571-00609)

Note) After the reworking, finish the surfaces by repainting.

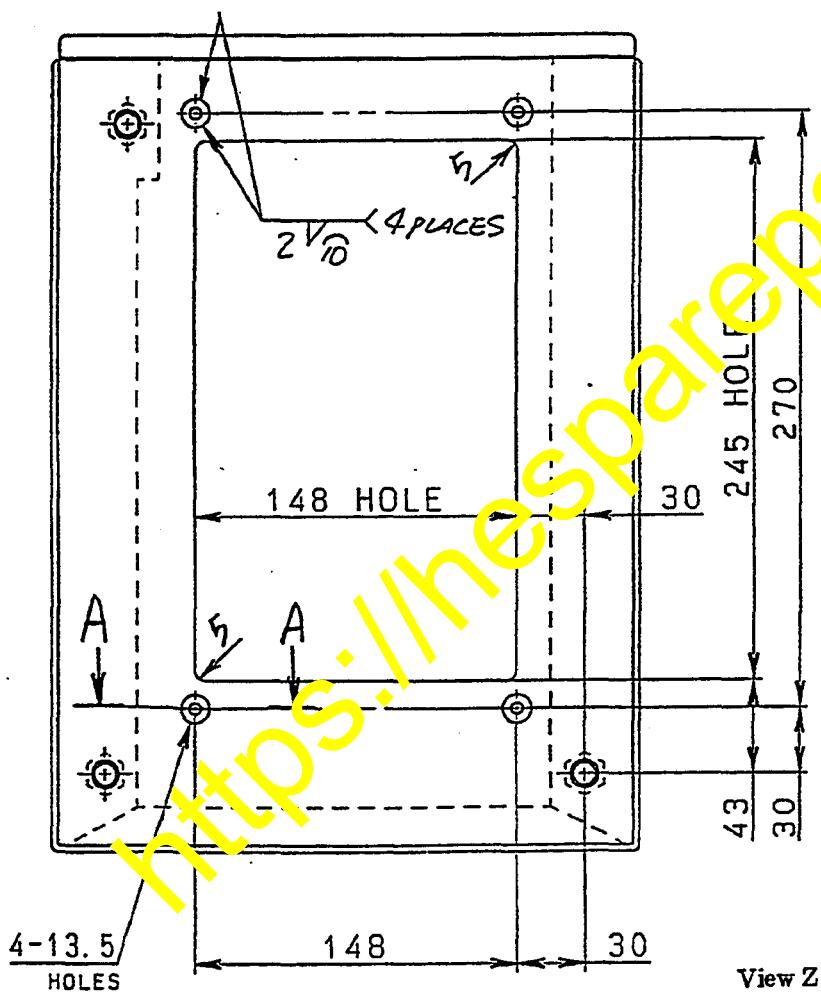
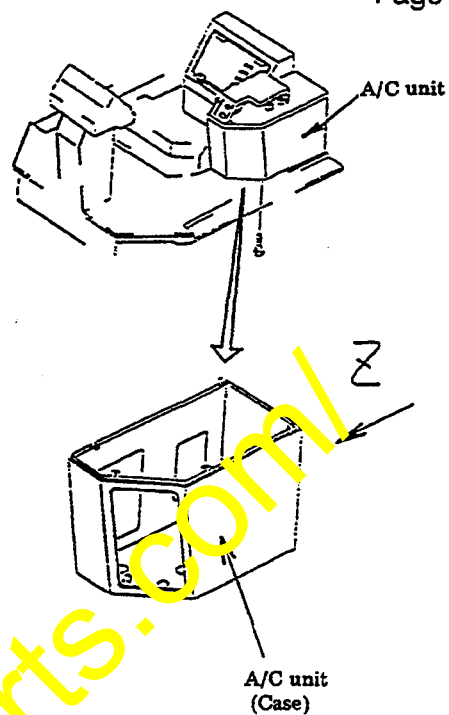
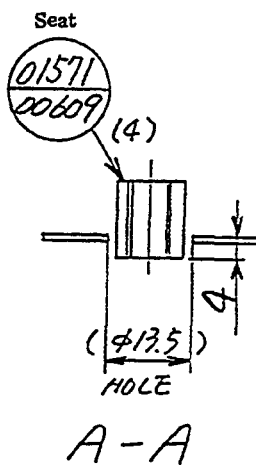


Fig. 6

View Z

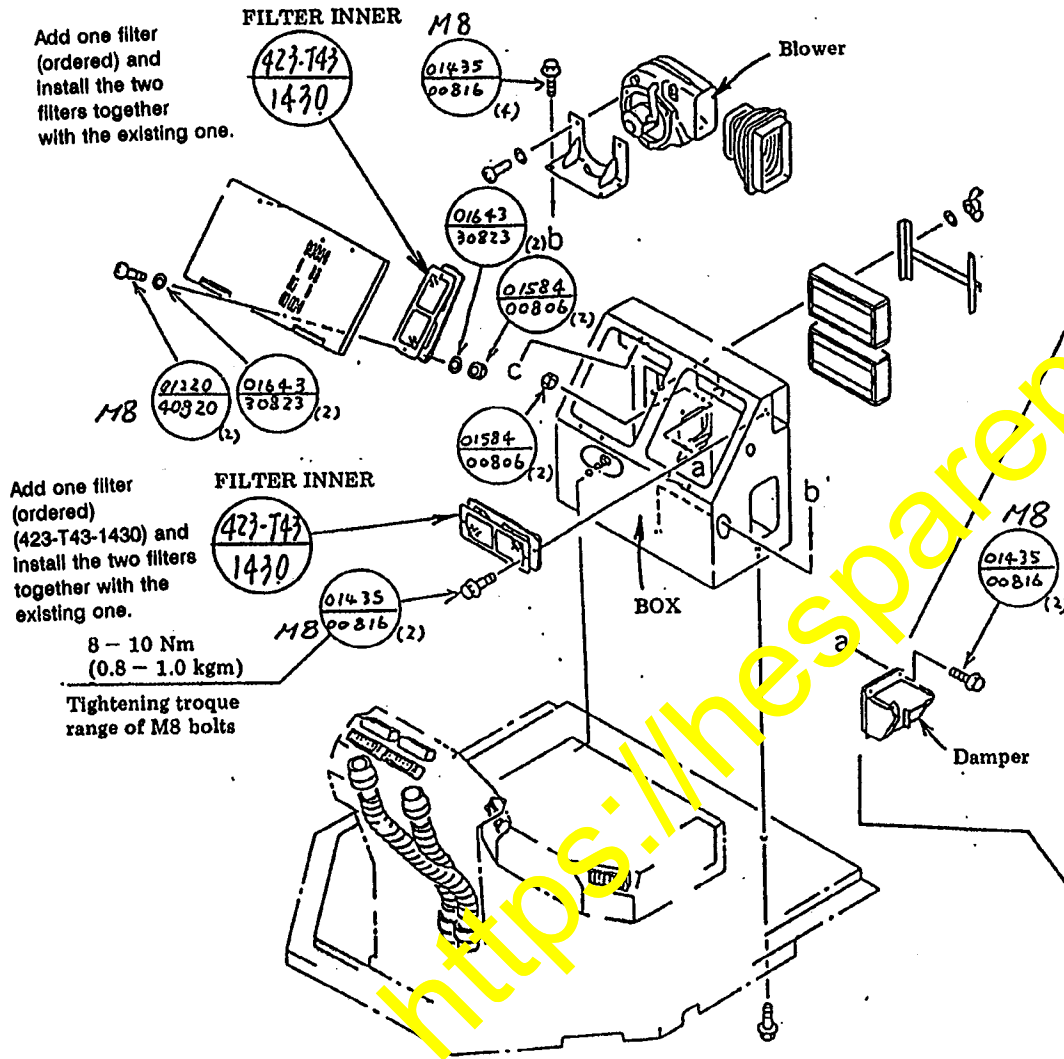


4. Assembly procedure

a-1) Installation of boxes

a-2) Installation of damper & blower
(Refer to the note in Fig. 7)

a-3 Addition of the inner filter



NOTE: The inner and outer air damper adjustment procedure

- a) Set the air conditioner unit air intake selector lever on the FRE (the outer air) side.
- b) Push down the damper in the direction of "FRE".
- c) Secure the wire with the damper screws.
- d) Secure the outer cable with clips. Further, actuate the air intake selector lever between "FRE" and "REC" to confirm the damper closure.

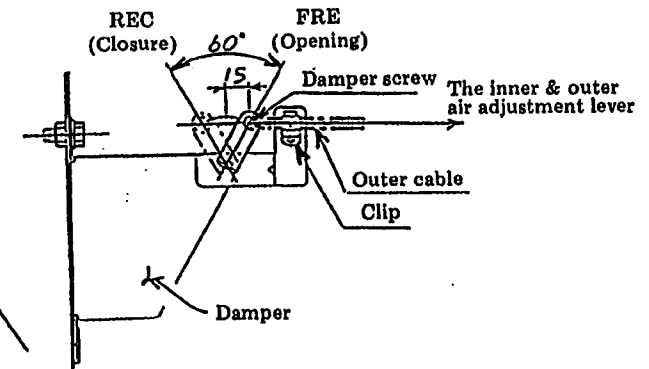


Fig. 7

a-4) Replace of grommet

Replace the current grommet with the new one (198-911-5420).

Note) Put the inner and outer air adjustment control cable through a new grommet, and make sure that the control lever can be operated smoothly.

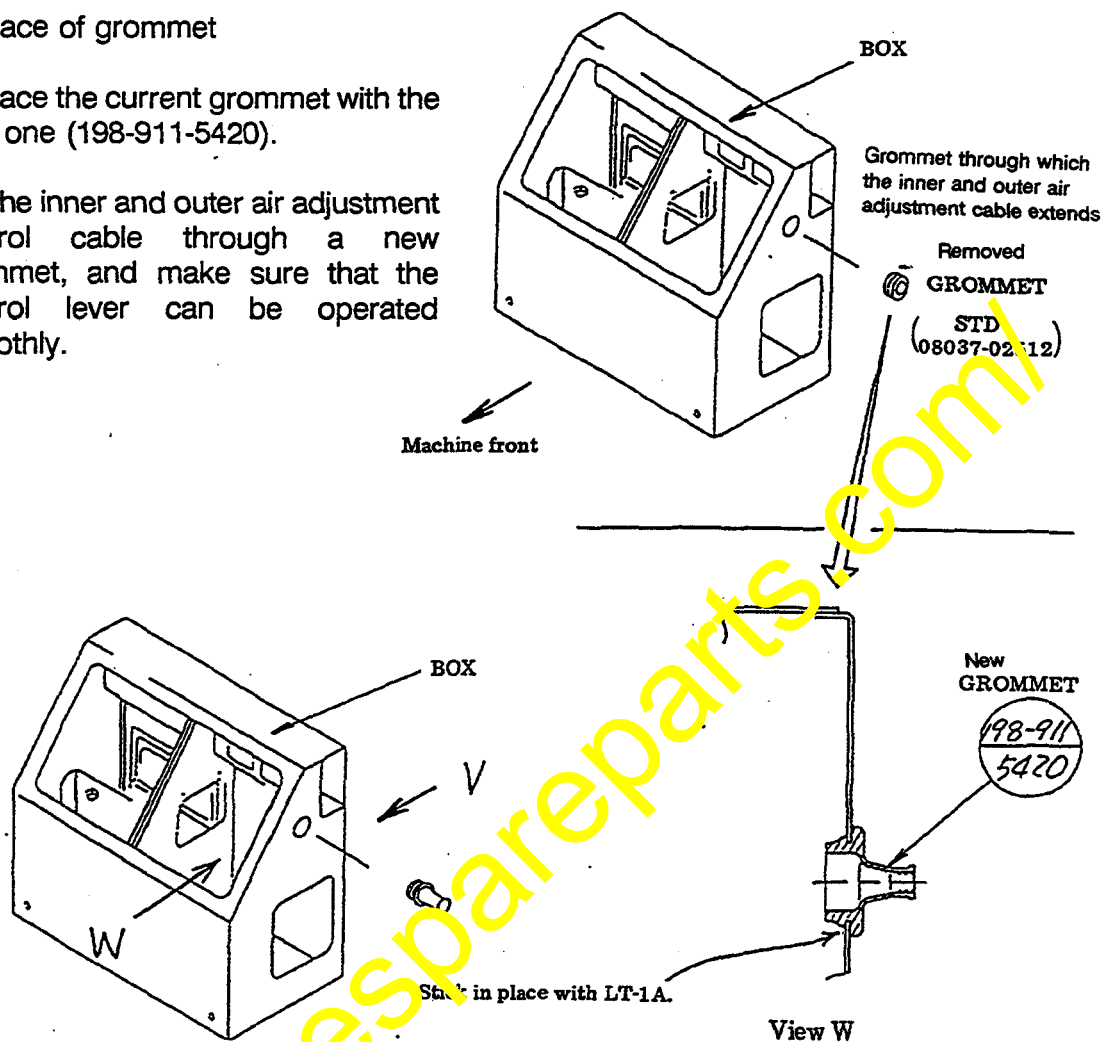


Fig. 8

a-5) Addition of blind bolts

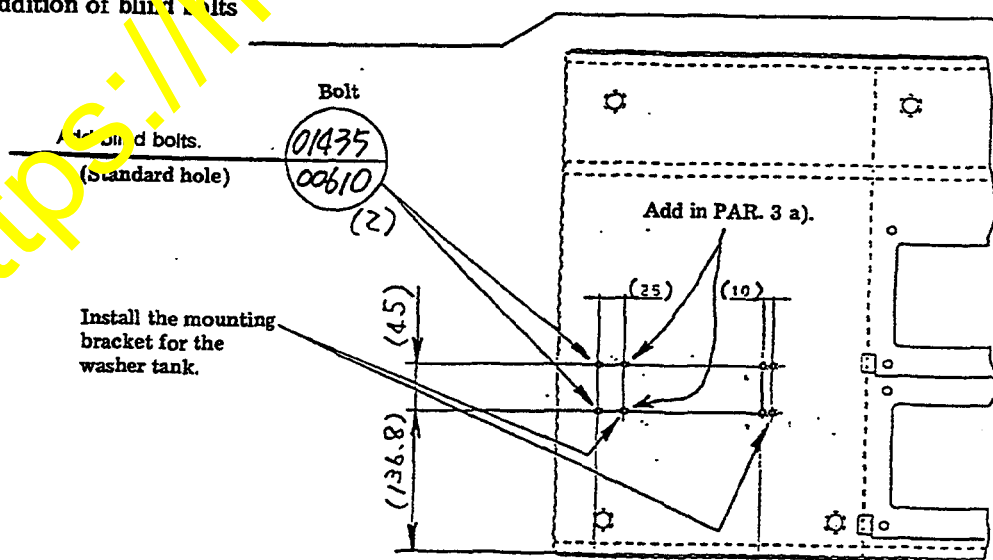


Fig. 9

View V

b) Installation of air conditioner unit cover

Install the cover ① and sheet ② to the air conditioner unit rear side.

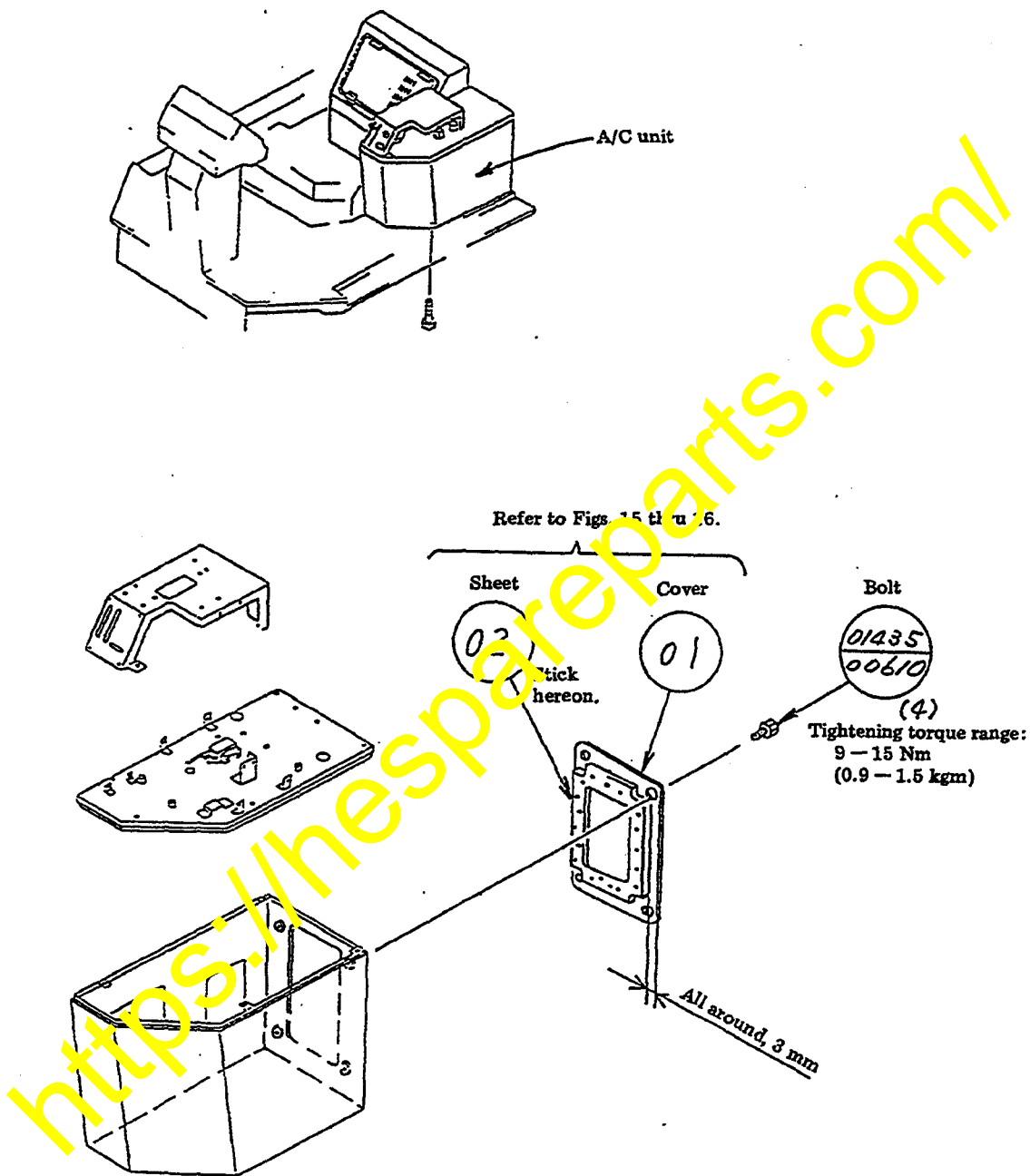


Fig. 10

c) Installation of the rear box and cover

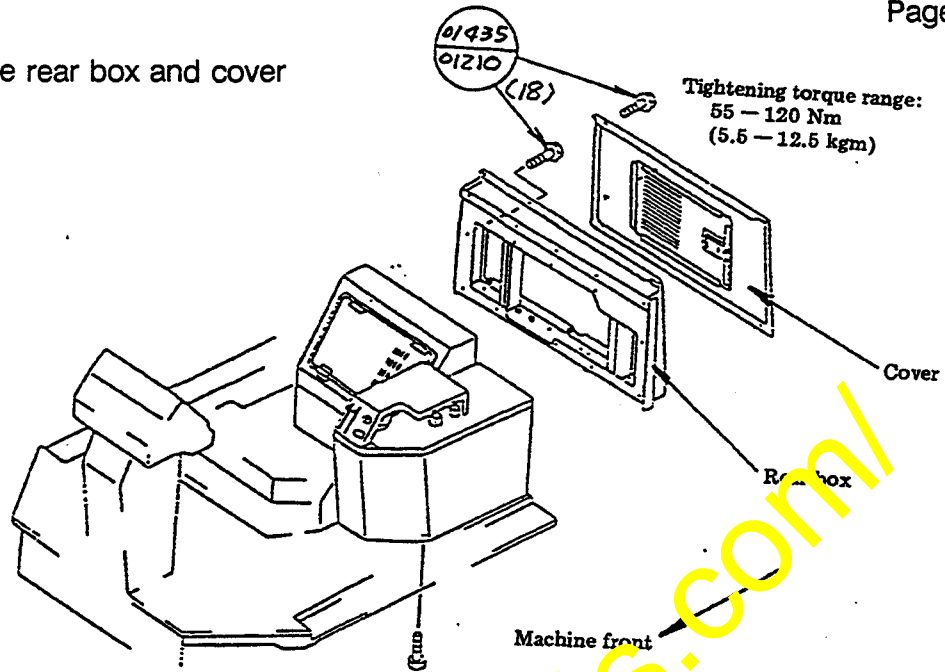
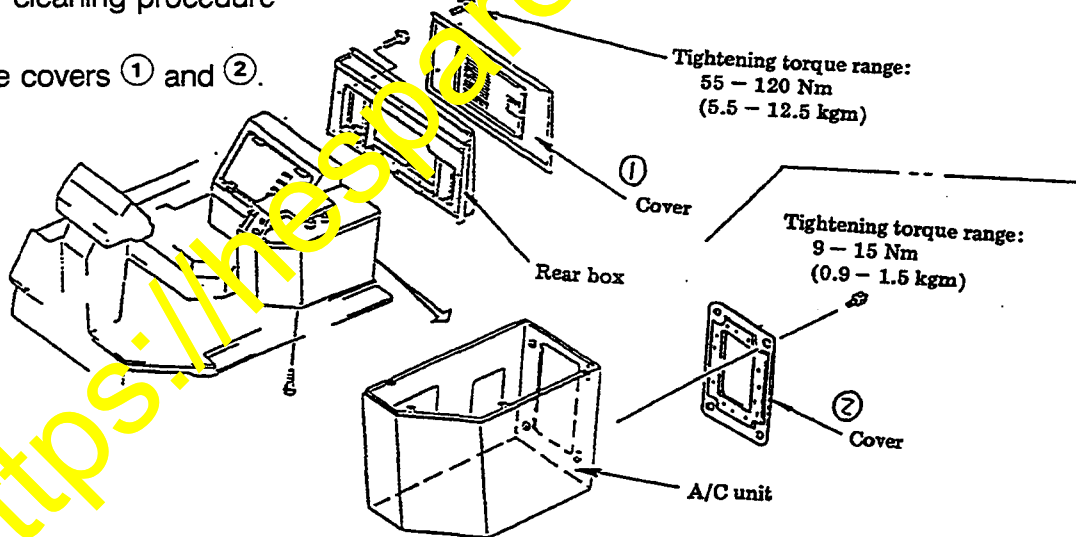


Fig. 11

5. Evaporator cleaning procedure

a) Remove covers ① and ②.



b) Remove dust from the evaporator fins with a cleaner, etc. Take extreme care not to bend or break the fins.

★ Evaporator clogging depends a great deal on the operating frequency of the air conditioner and the dust conditions of the job site.

Cleaning intervals should be determined depending on worksite conditions.

Part No. : 425-54-13390
 Part Name : Plate
 Material : SS400
 Q'ty : 1 sht/machine
 Painting : Rust-preventive painting

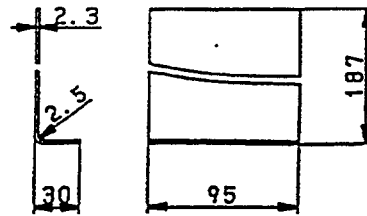


Fig. 13

Part No. : 425-54-13380
 Part Name : Plate
 Material : SS400
 Q'ty : 1 sht/machine
 Painting : Rust-preventive painting

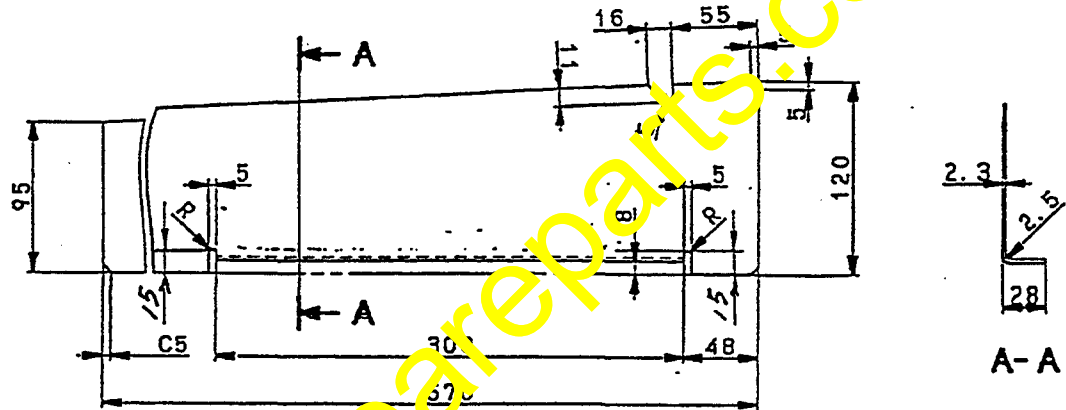


Fig. 14

Part No. (SYM) : 01
 Part Name : Cover
 Material : SS400
 Q'ty : 1 sht/machine

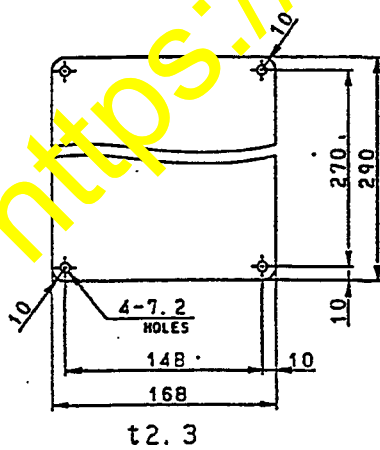


Fig. 15

Part No. (SYM) : 02
 Part Name : Sheet
 Material : Sponge rubber or equivalent
 Q'ty : 1 sht/machine

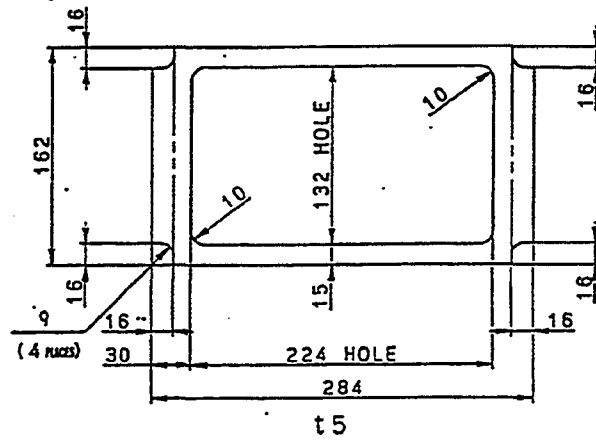


Fig. 16