

PARTS & SERVICE NEWS

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| REF NO. | AA02229 |
| DATE | October 7, 2002 |

(C)

SUBJECT: EXCESSIVE VIBRATION DUE TO INSUFFICIENT CLEARANCE BETWEEN OPERATOR CAB AND ROPS

PURPOSE: To inform the field of a countermeasure for a vibration problem in the operator cab and ROPS structures.

APPLICATION: Komatsu Wheel Loaders :
 WA700-3L: A50001 & A50027;
 WA800-3LC: A50001 & A50024;
 WA900-3LC: A50001 & A50024

FAILURE CODE: 5500PC

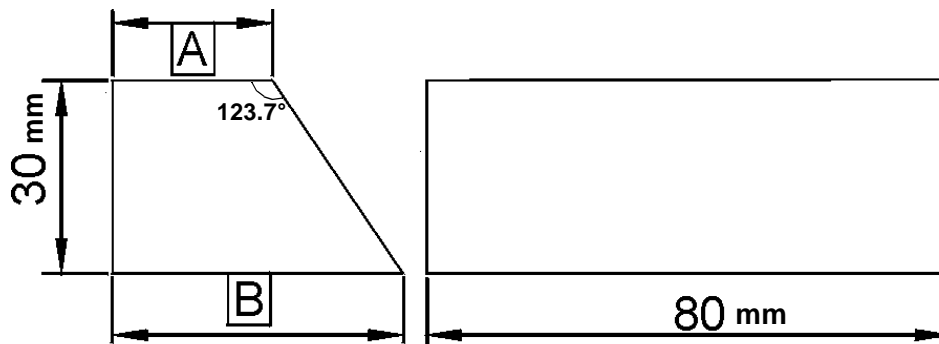
DESCRIPTION:

Some wheel loaders in operation may experience excessive displacement of the cab under certain conditions. This results in contact between the cab and the Roll Over Protection Structure (ROPS) because of insufficient clearance between the two structures. A fix for this problem has been developed which entails installing two rubber blocks in between the structures to act as bumpers or shock absorbers. Follow the procedure outlined in this bulletin in order to prevent further contact due to occasional cab displacement. Refer to Table 1 for a listing of parts needed to complete the procedure.

RUBBER BUMPER INSTALLATION PROCEDURE

| TABLE 1. PARTS LISTS FOR BUMPER INSTALLATION | | |
|--|--------------------------------|----------|
| Part Number | Description | Quantity |
| 22T-72-21160 | Adhesive (1 kg) | 1 |
| 22T-72-21170 | Primer (750 g) | 1 |
| 22T-72-21180 | Hardener (40 g) | 1 |
| --- | Paint Thinner (Source Locally) | 1 |
| 428-54-21910 | Rubber* | 2 |
| 428-54-21920 | Rubber* | 2 |
| 428-54-21930 | Rubber* | 2 |

*The size of the rubber bumpers to be used is determined by measurements between the cab and ROPS. Only two of the blocks will be used per vehicle. Dimensions and material information is outlined in Figure 1.



| Part Number | A | B | Material | Hardness |
|--------------|---------------------|---------------------|--------------------|-----------------|
| 428-54-21910 | 25 mm (0.98 in.) | 45 mm (1.77 in.) | Neoprene CR-120 | JIS - Hs 60 ± 5 |
| 428-54-21920 | 30 mm (1.18 in.) | 50 mm (1.97 in.) | | |
| 428-54-21930 | 35 mm (1.38 in.) | 55 mm (2.17 in.) | | |

FIGURE 1. RUBBER BUMPER SPECIFICATIONS

1. Test fit each size of rubber block between the cab and ROPS. Refer to Figure 2 for the mounting location of the blocks. Upon final installation of both rubber blocks, the top surfaces of the blocks and the cab must be level. Refer to Figure 3. The gap between the cab and the blocks must be 10 ± 3 mm (0.39 ± 0.12 in.). The blocks must also be positioned approximately 15 mm (0.59 in.) from the rear of the cab. Refer to Figure 4. Choose two blocks that meet these requirements for installation. Etch location markings for block installation on the ROPS.

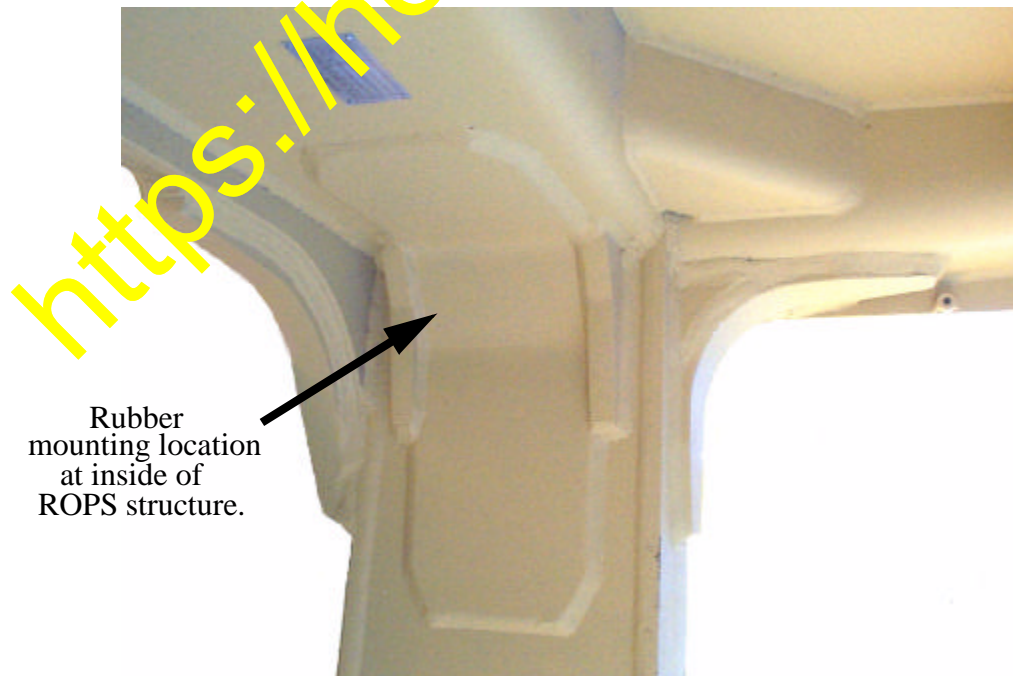


FIGURE 2. RUBBER BLOCK INSTALLATION LOCATION

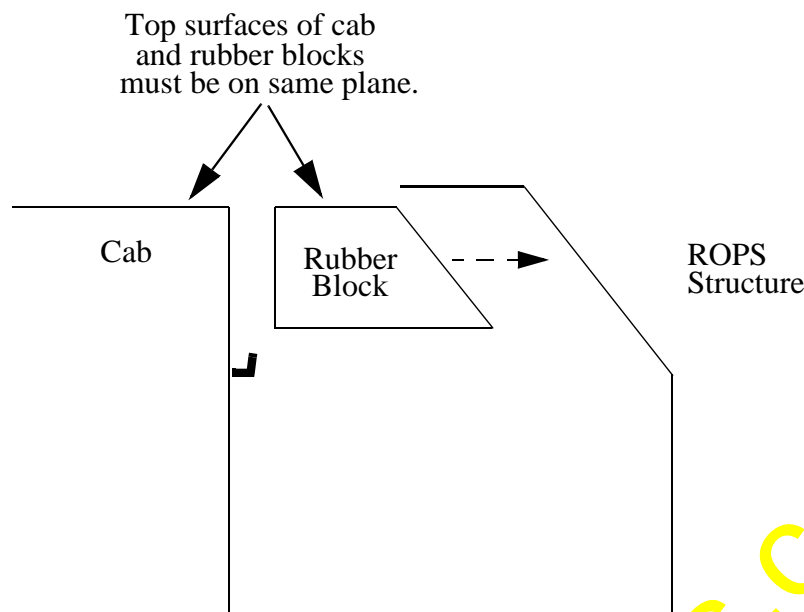


FIGURE 3. RUBBER BLOCK ORIENTATION

2. Remove the ROPS structure from the machine.
3. Use a grinder to carefully remove paint and foreign material, and to smooth the two mounting surfaces on the ROPS. Use care when grinding to prevent removing block location markings.
4. Use paint thinner to thoroughly clean the area after grinding.

WARNING

- *Observe all instructions and safety precautions on each container when working with the chemicals that are used in this procedure.*
 - *Perform work in a well ventilated area. Overexposure to the chemicals may cause headaches, dizziness, and nausea.*
 - *Follow the guidelines on the containers if irritation results from direct contact with the chemicals. If any irritation persists, contact a physician, immediately.*
5. Carefully, apply primer (22T-72-21170) to the mounting area on the ROPS with a hard-bristled brush. Allow the primer to set for approximately 30 minutes until dry.
 6. Lightly buff the mating surfaces of the rubber blocks with a grinder, and clean.
 7. Mix 100 cc (3.4 oz) of adhesive (22T-72-21160) and 4 cc (0.16 oz) of hardener (22T-72-21180) in a separate container. Stir well. This step should be performed directly before application is to take place. The mixture should not be used if more than two hours have elapsed since first mixing.
 8. Apply the adhesive mixture to the mating surfaces of the rubber blocks and ROPS. Use a brush with short, hard bristles for application of the adhesive. Do not over-apply the adhesive.

9. Allow the mixture to dry for 1 hour. The rubber *must not* be installed on the ROPS at this time.
10. After one hour has passed, again apply the adhesive mixture to the mating surfaces of the rubber blocks and ROPS. Allow the mixture to partially dry until it becomes thick and sticky. As the consistency of the adhesive reaches this point, apply the rubber blocks to the ROPS in the locations that were previously marked. Apply equal force throughout the blocks during installation. Ensure that no gaps are evident between the mating surfaces. Allow 12 hours for the adhesive to completely bond.
11. Install the ROPS onto the cab after 12 hours has elapsed. Torque the mounting capscrews to **2746 ± 294 Nm. (2025 ± 217 ft.lbs.)**.

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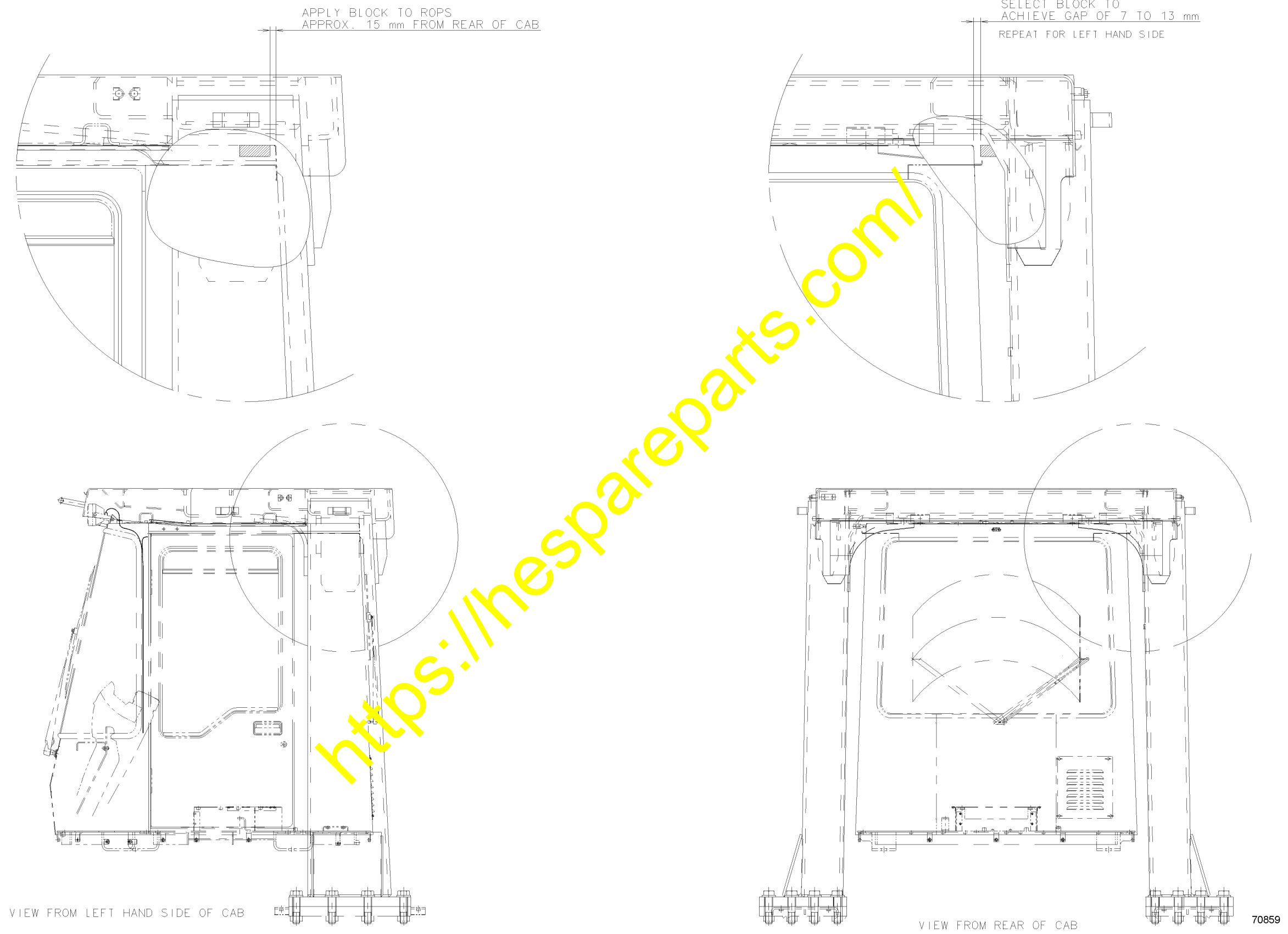


FIGURE 4. CAB/ROPS BUMPER INSTALLATION