

Service Bulletin.

FRAME

Repairing the frame

We have prepared more detailed instructions for the above work. In future, therefore, the following recommendations will apply for repair of cracks in the frame members.

Drill a hole at the source of the crack in order to prevent it from spreading.

Open up the crack along its entire length by, for example, sawing along with two hacksaw blades. Chamfer the edges to V-section so that the weld can penetrate through to the reinforcing plate.

The reinforcing plate should have the same thickness as that of the frame member, or slightly less. The reinforcing plate should be made and the weld carried out so that the frame is subjected to the least possible stress concentration. The carry-over from the unreinforced to the reinforced part of the frame should be made long and at an acute angle in order to avoid stresses which could subsequently cause fatigue breakage.

Welding at the corners of the frame members or along the side of the flanges particularly should be avoided.

Figure 1 shows a crack in the frame flange which has been prepared for welding and a reinforcing plate for same. Figure 2 shows how this plate should be welded on. If the crack has run down to the web of the frame, the reinforcing plate should be made and the weld carried out as shown in figures 3 and 4.

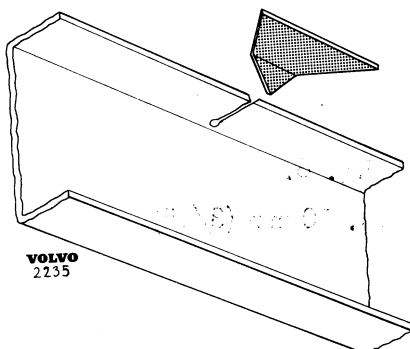


Fig. 1

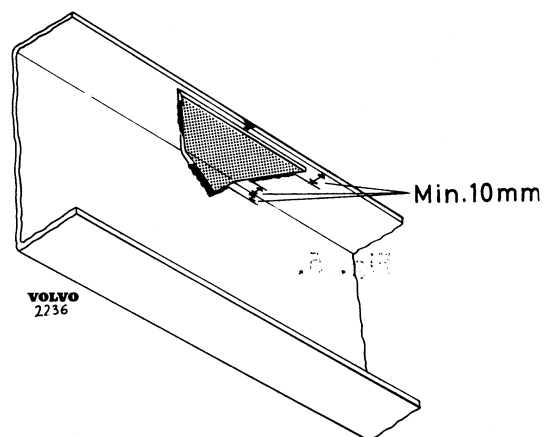


Fig. 2

Min. 10 mm (3/8")

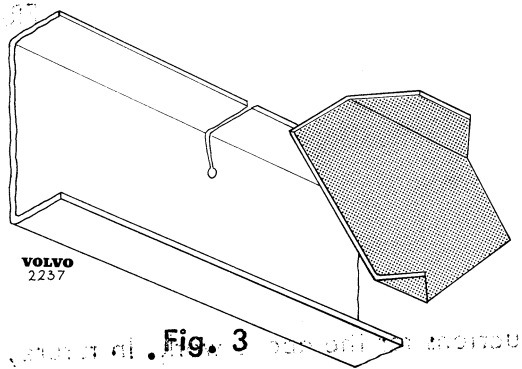


Fig. 3

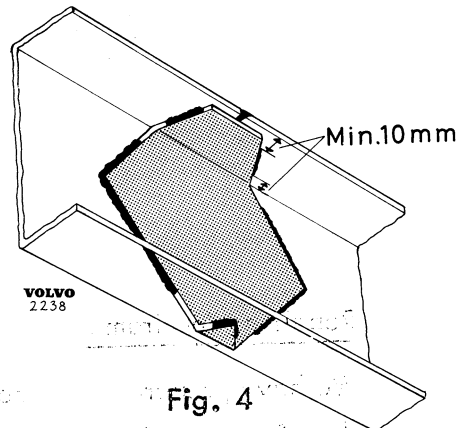


Fig. 4

Min. 10 mm (3/8")

In cases where external reinforcing plates are more suitable, these can be shaped and welded as shown in figures 5 and 6. The plate should be obliquely cut in order to give a more even sectional carry-over. In this case the thickness of the U-reinforcement should be slightly less than that of the frame member and the fit on the frame member should correspond to a light driving fit. The longer flange should be placed on the frame member flange which is subjected to tension, that is to say, generally on the lower flange where frame damage occurs between the front and rear axles.

Cracks and reinforcements should be electrically welded with electrode ESAB OK 48 P or equivalent. Electrode thickness should be 3.25 or 4 mm (1/8 or 5/32"). In all cases weld only at those places and to the extent shown in the respective figures.

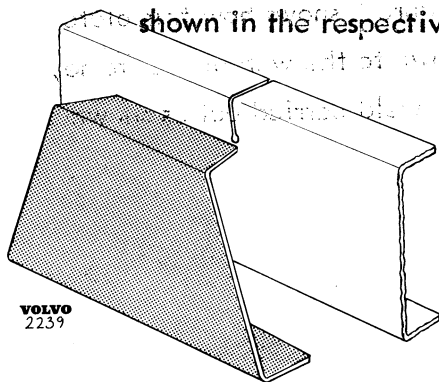


Fig. 5.

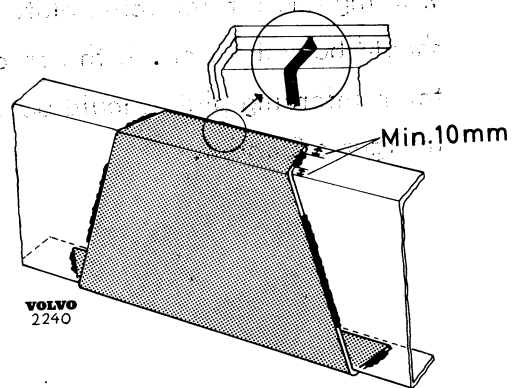


Fig. 6.

Min. 10 mm (3/8")