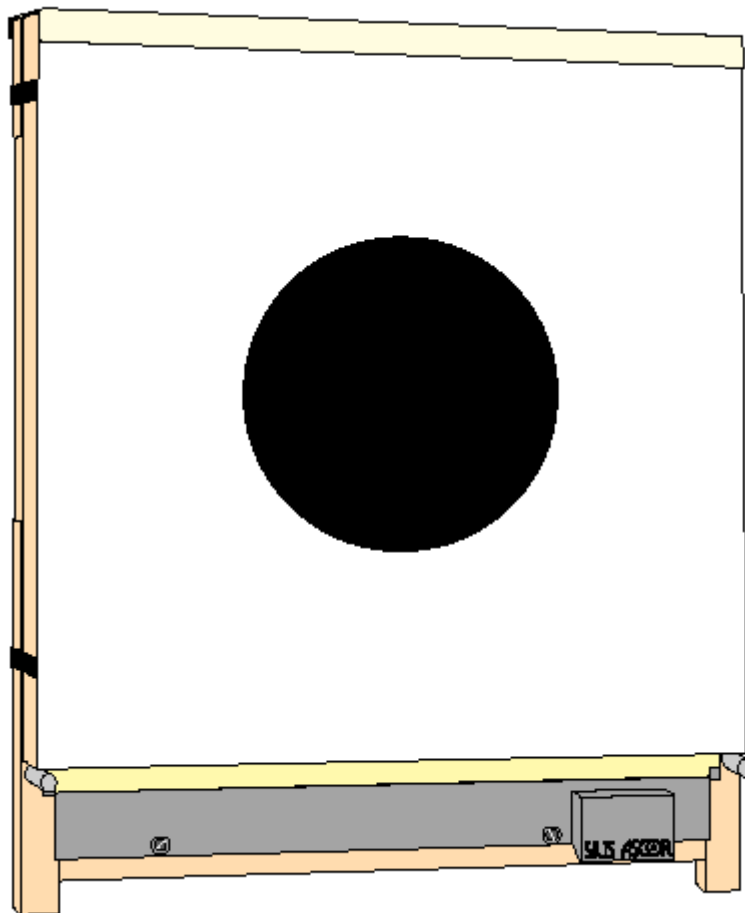


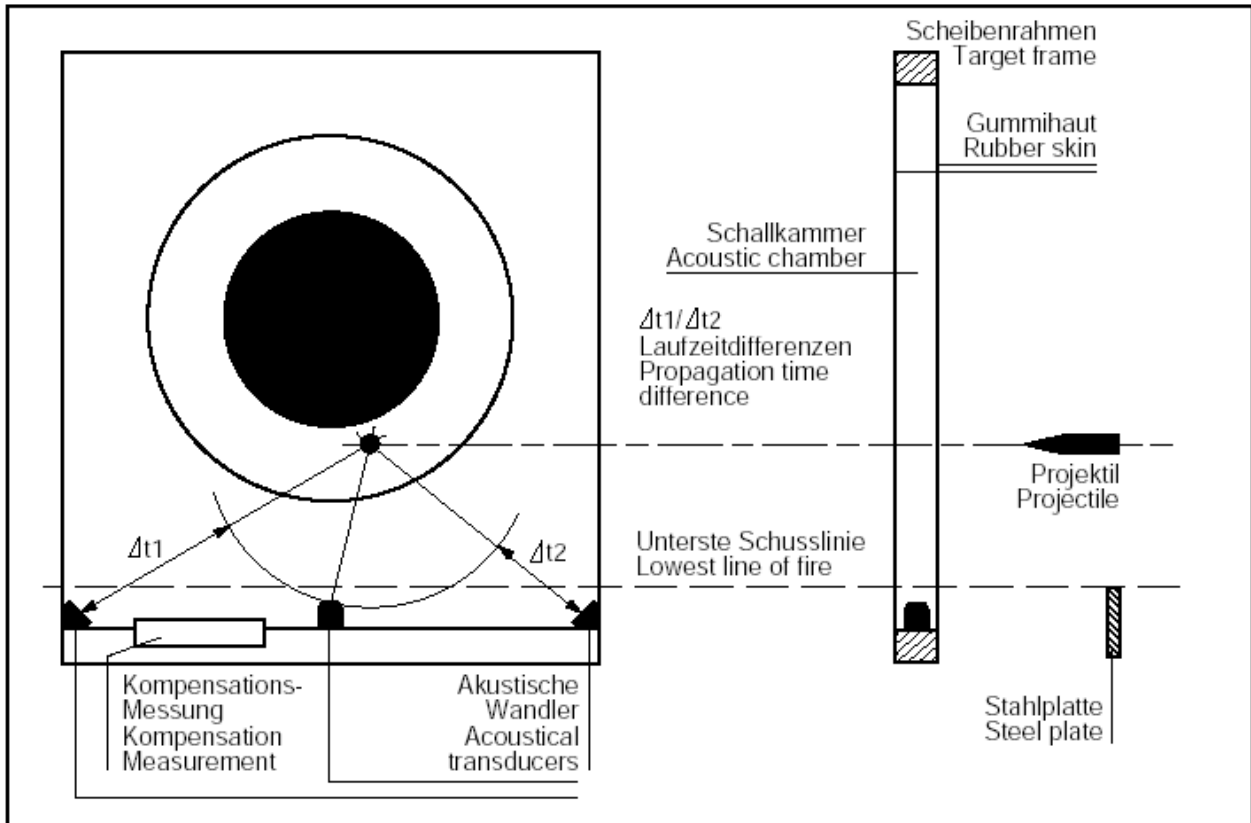
Attention:

The Target, acoustic chamber with measuring bar, is the main part of the SIUS electronic scoring system. Lack of sufficient and expert maintenance cannot be compensated not even by the most efficient scoring electronic.



This information is to be considered as an addition to our existing Installation, User- and Maintenance Manual. It is important to maintain the system according to the direction provided by this manual.

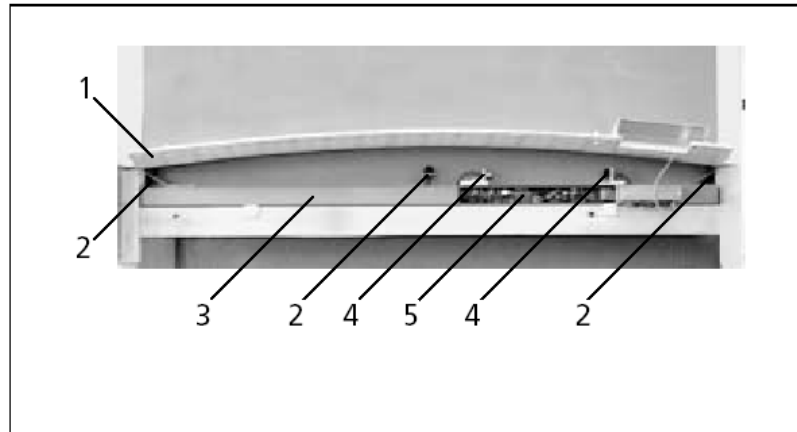
Operation of the measuring system



The sound of the bullet is registered in the target (acoustic chamber). Computing the differences in propagation time t_1/t_2 , the shot is located.

Any dirt on the acoustical transducers, which absorbs the sound of the bullet or holes in the rubber skin, which allow the sound of the bullet to enter into the acoustic chamber before the penetration of the bullet, can lead to false measurement.

Cleaning of measuring bar



1. Cover of measuring bar
2. Acoustical transducer
3. Measuring bar
4. Compensation measurement (or sensor, depending on model)
5. Electronics

Any dirt must be removed regularly from the measuring bar. For further procedure see the maintenance manual.

A measuring bar as shown in the following is **not** in the position to provide correct results due to the dirt on the acoustical transducers.



General Information

The number of shots possible between each maintenance depends on the ammunition used and the spread. The more holes in the rubber skin the less accurate the measurement. For high accuracy no light may pass through the target from behind the target.

1. Check before each shooting whether the measuring bars are clean!
2. Check before each shooting whether rubber skin and endless rubber band are in good condition!
3. Check before each shooting the rim of the cut out!

For highest accuracy, checks are necessary also during shooting breaks!

Target without cut out

With these shots fired accurate measurements are still guaranteed.



Ca. 200 shots Ø 80mm



Ca. 300 shots Ø 80mm

For highest accuracy, cut outs have to be made as shown in the following



Ca. 400 shots Ø 80mm

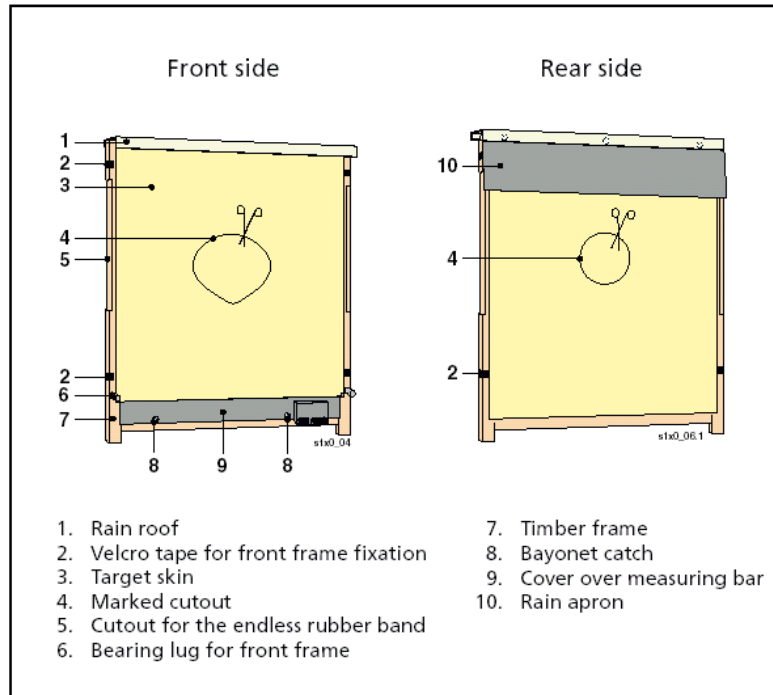
| |
|--|
| <p>200 shots in 80mm correspond to ca. 2000 shots at 300m 300 shots in 80mm correspond ca. 3500 shots at 300m 400 Schuss in 80mm correspond ca. 5000 shots at 300m</p> |
|--|

fired with army weapons

Cut out on Main Frame

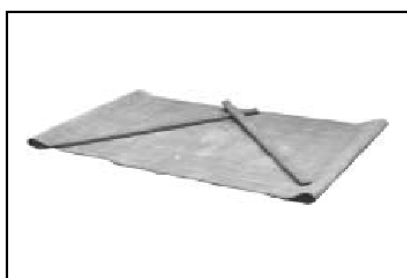
The cut out is to be made as shown in the following. On the front side in a shape of an egg, on the back side in a shape of a round hole.

Always use a scissors. Using a knife the rubber skin may tear!



To place the endless rubber band

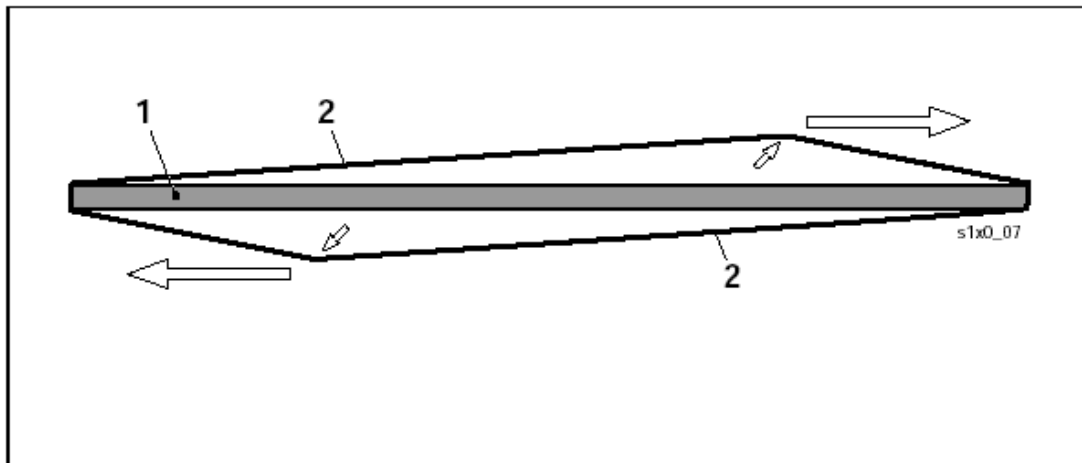
For detailed instructions see the manual.



To turn the endless rubber band

As regards to the maintenance intervals for the rubber band the same rules apply as for the rubber skin of the main frame. If the target is used under normal conditions (see picture „300 shots“ on „target without cut out“), the endless rubber band can be moved by approx. 15 cm each time.

To turn the endless rubber band



1. Main frame

2. Endless rubber band

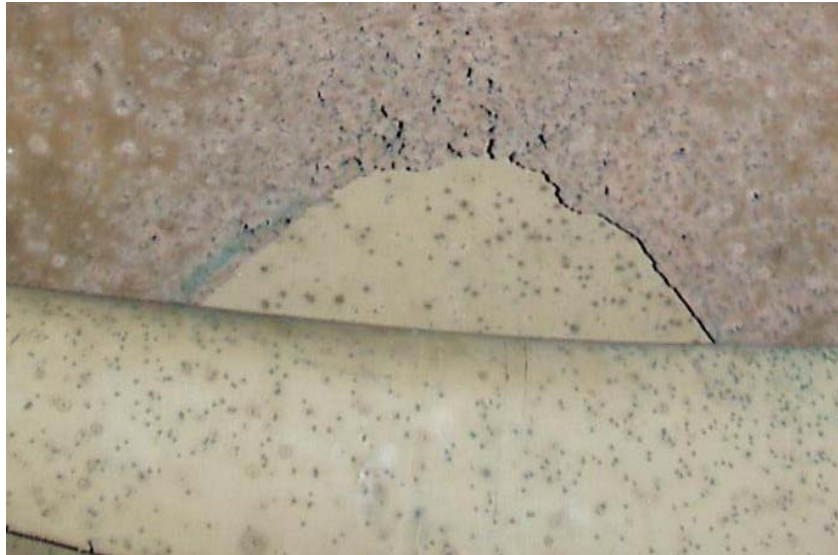
With shots fired as shown in the following, the rubber band must be moved forward by min. 20 cm. Consequently the band can be moved forward approx. 3 times only. This way an economical use of wear material is not possible (see last page too)!



Additional cut out

The additional cut out is made with a scissors to make sure that no scraps of the rubber skin rise up into the acoustic chamber.

With these shots fired the additional cut out needs to be foreseen.



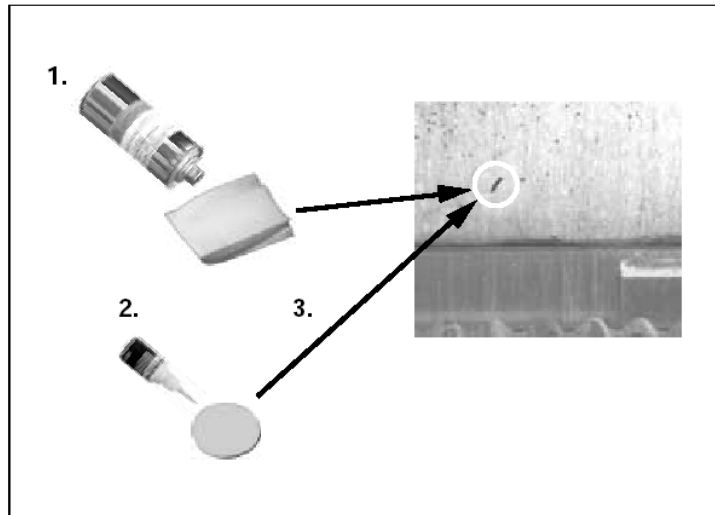
At this stage the additional cut out **must** be made.



Ricochet holes

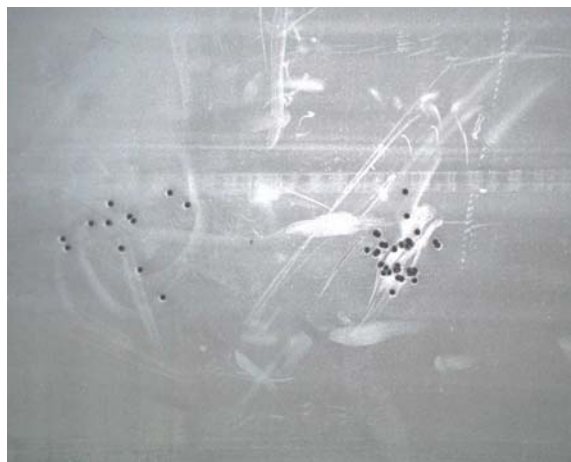
Any holes in the rubber skin above or below the endless rubber band must be covered immediately to prevent strange noise from entering into the acoustic chamber. Holes going through the endless rubber band and the main frame can be covered by moving forward the endless rubber band.

Holes in the rubber skin of the main frame influence the accuracy of the target extremely!

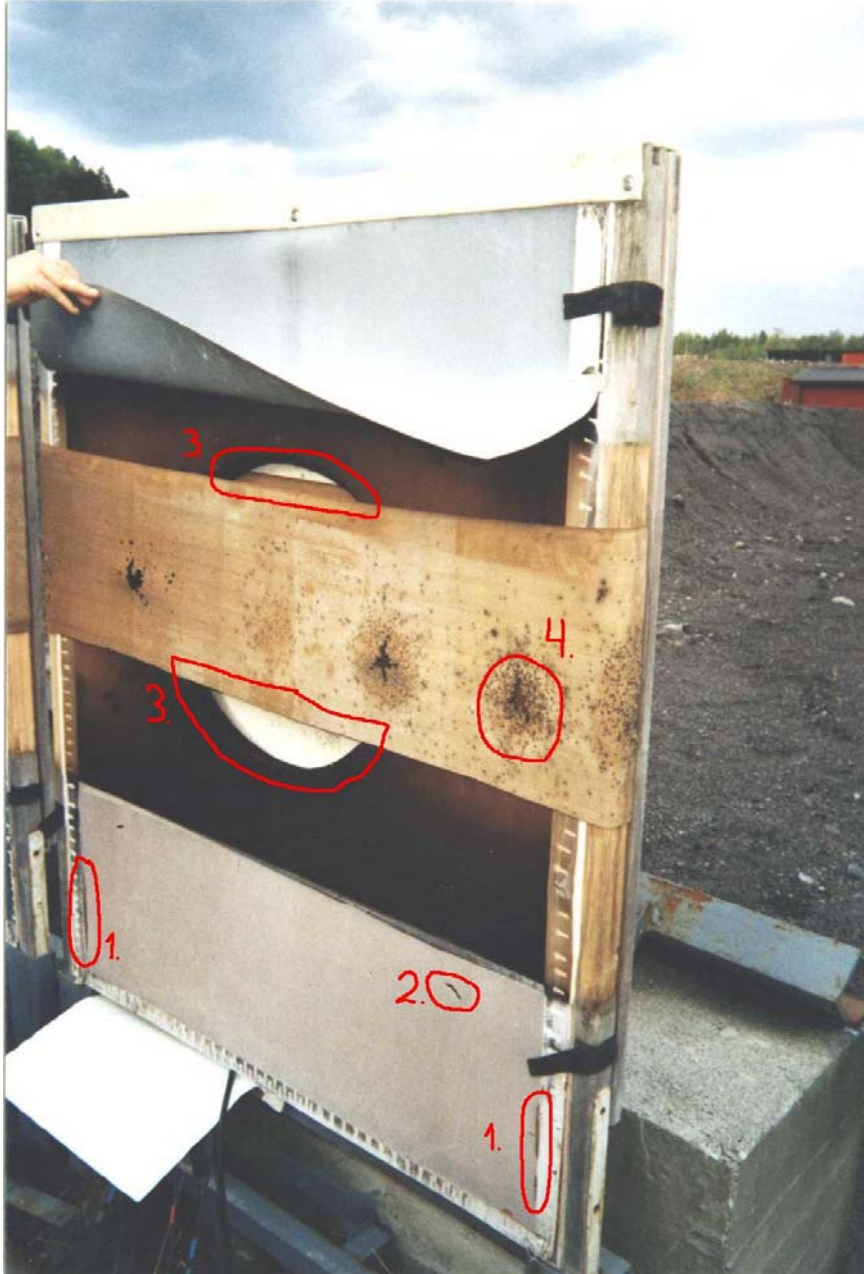


1. Clean the damaged spot with acetone
2. Apply special glue CA15 G on patch
3. Press patch immediately on the damaged spot

Holes with a size bigger than ca. 2mm Ø, caused by some ammunition, need also to be covered. Holes as shown below may influence the shot location heavily.



Never use targets in this condition!



1. The lower part of the rubber skin is already weathered heavily. The rubber skin is torn at the level of the acoustical transducers.
2. There are ricochet holes.
3. The endless rubber band does not fit the cut out of the main frame (too small).
4. The holes in the rubber band should have been avoided by moving forward the endless rubber band more often.

This picture has been taken in a shooting range where the user claimed that shots are not displayed accurately or not registered at all.