

Safety Warning

NSA: The Netherlands

Date: 25 September 2014.

## **Wear of locking ring for cover of buffers.**

### **Incident**

Date: 12 august 2014 Time: 21h00

Place: Geldermalsen - NL

Due to wear of the locking rings in the cover of a buffer the bufferplate with the cover felt into the tracks. A following train hit the bufferplate with the cover and damaged the transponders for the signaling systems of the locomotive.



### **Involved components**

Buffer: Buffertype 59 ton with a round bufferplate  
Known in the Netherlands under type number KC 20330 / KC 20340

Maintenance rule: Corrective maintenance

### **First impression of inspection**

An inspection of the components of the buffer involved learned that the locking rings showed wear. The thickness as the corners of the (half) rings showed wear. Due to the wear the rings are pulled out of the savings for the rings. The difference of the diameter of the cover for the buffer plate and the cover for the buffer feet was big enough to let the locking rings pass by.



### **Critical length of the buffer**

Buffers with a stroke of 110 mm have a normal length of 620 mm.

Based on the findings during the inspection a further examination of the buffer is required for buffers with a length more the 625 mm.

The recognizable defects can be:

- On straight tracks; one of the buffers do not touch
- There is no free stroke with one of the buffers

### **Picture of the construction and critical parts.**



Saving of locking rings in buffer feet



Diameter difference of locking rings and saving for locking ring



Wear of the locking ring around the load bearing corners



Reduced thickness of the rings.