

## Installation of a sound decoder including loudspeakers:

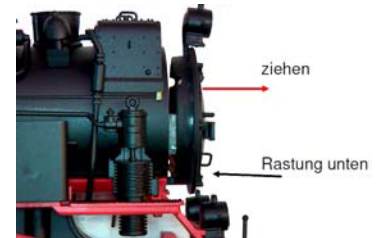
The steam locomotives of the series BR 99.2 are prepared for the subsequent installation of a sound decoder as well as a loudspeaker. To this end, for instance an ESU sound decoder can be used (Lok Pilot V4.0).

The interface Next18 according to NEM 662 is located under a cover in the driver's cab. It is possible to install a loudspeaker under the printed circuit board in the area of the driver's cab.

To install a decoder the driver's cab has to be spread out slightly in the area of the surrounding step below the side windows and the driver's cab must then be pulled off upwards. Following this, the coal imitation or the oil tank can be pulled off upwards with the cover under the driver's cab window. The latching lugs are located in the area of the tender attachment.

### Opening of the model:

To this end the smoke box door (it possesses a guidance below) is initially carefully pulled forwards out of the boiler. Here ensure that no detailing parts break off or are lost and that the cables for the headlights are not damaged.



### Take off driver's cab / boiler / water boxes:

To this end, the driver's cab is carefully spread out on both sides using a flat tool or craft knife / scalpel. As an aid you can fix a splayed side in place with a toothpick until the other side is also spread apart.



Then pull off the driver's cab upwards from the model. Following this also pull off the boiler upwards. Now carefully remove the coil insert or the oil tank upwards. The coal insert / oil tank is snapped into place. Now detach the water boxes from the vehicle frame and remove them. To this end three detent mechanisms must be carefully detached on each locomotive side.



Remove the boiler upwards



Pull off the coal / oil attachment upwards



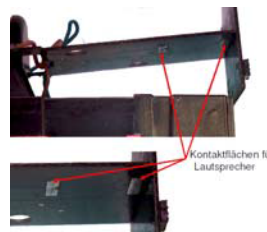
Remove the water box (three detent mechanisms must be removed on each side to this end)

### Detach the board:



die zwei Schrauben der LP- Befestigung lösen

Following this detach the two screws of the circuit board and then lift off the board upwards



Kontaktflächen für Lautsprecher

Now, the intended recess for the loudspeaker is visible and can be easily reached for the loudspeaker installation.

### Installation of loudspeaker:

The loudspeaker (without sound capsule, dimensions 15 x 11 x 6.8 mm, item no. 396491) is now positioned in the recess in such a way that the two contact springs are located below the existing contact surfaces on the printed circuit board.



Federkontakte unter die Kontaktflächen der LP legen



Now place the printed circuit board correctly in the model again and carefully screw in both fixing screws. Then insert the digital sound decoder with a suitable sound recording (see above) into the Next18 interface.

Prior to this remove the interference suppression board located there. It should be taken out, as the Tillig customer service only accepts locomotives without a decoder for repair, if a repair should ever be necessary.

Now put the water boxes back on and press them into the detent mechanism. Following this attach the coal insert / oil tank and snap it into place. Now the boiler is put back on the chassis and if this sits correctly the cab is sensitively pressed back into its detent mechanisms. Finally push the smoke box door into the boiler from the front and snap it into place.