

# HO SCALE ROYAL HUDSON

## CHUFF SOUND EFFECT SYNC CORRECTION



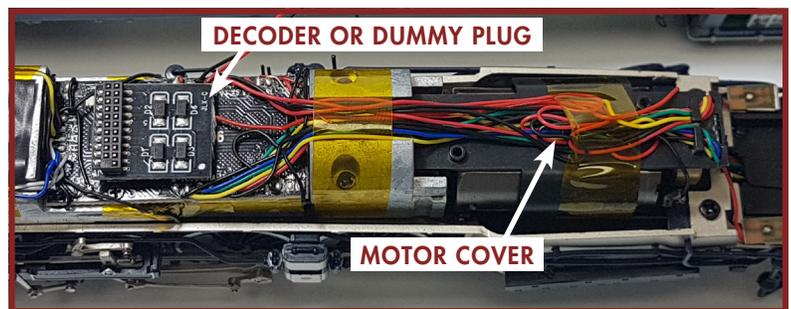
A few modellers have noticed that their DCC/Sound Hudson locomotives have issues with the chuffs not properly aligning with the rotation of the driver wheels.



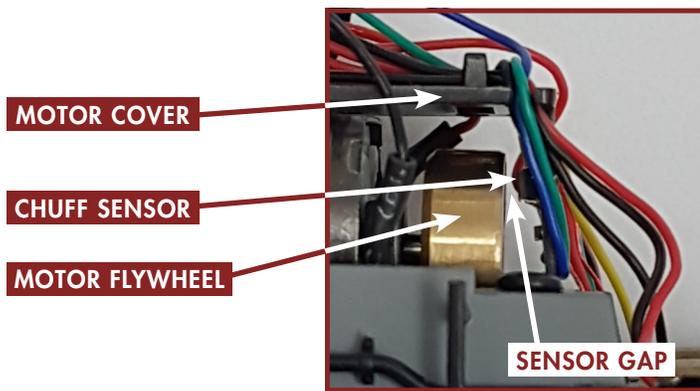
The intermittent chuff or total loss of chuff is due to the motor top cover shifting from its locked position, owing to excessive play in the locking tabs. The fix is fairly easy and can be carried out with tools and other items you may already have available. You can also request a **Rapido Chuff Repair Kit** from us and we will mail you one at no charge.

You will need a Philips screwdrivers (small size usually used for model trains), a business card, a pair of scissors, Rapido Chuff Repair Kit (or a toothpick), CA glue and some patience.

1. Open the shell for the boiler unit by removing in sequence the front coupler (1 screw), the front pilot (2 screws), the shell (front, 2 screws) and the shell (rear, 2 screws)
2. Very gently rock the shell open, holding the cylinders and walkway edge for the front and the ash pit and walkway edge for the rear.
3. Once the shell is free, gently place to a side while the boiler chassis rests on its wheels. There are two wires connected, so be careful not to stretch them.
4. Locate the decoder (no need to remove it) and look for a black plastic motor cover towards the rear of the locomotive. The cover has two holes on the top (one may be covered by insulation tape). Under the rear end of this cover, you will see a small flywheel and a vertical sensor board close to it.

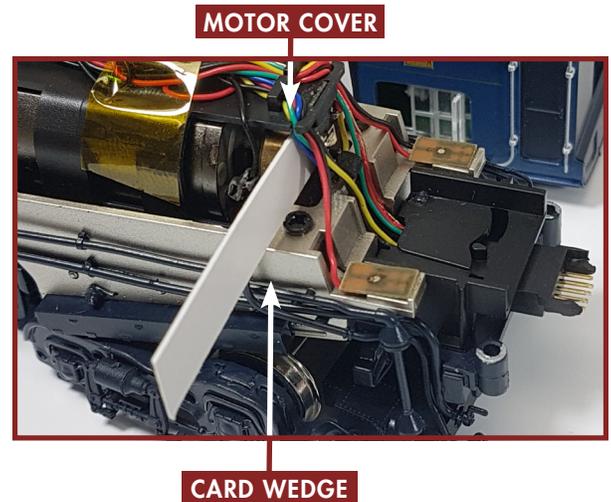


5. The intermittent chuff or total loss of chuff is because the motor top cover has shifted from its locked position due to a play in the locking tabs. This moves the sensor board too far away from the magnetic contact on the flywheel, resulting in partial or complete loss of chuff sound.



6. Cut a thin card (a business card is perfect) into a rectangle about 5mm x 40mm in size. Wedge this card between the flywheel and the sensor on the board (see "sensor gap" at left).

7. Using only your finger, move the motor cover so that the sensor board moves closer to the flywheel (but not touching it). Make sure the card wedge is not too tight. (see right)

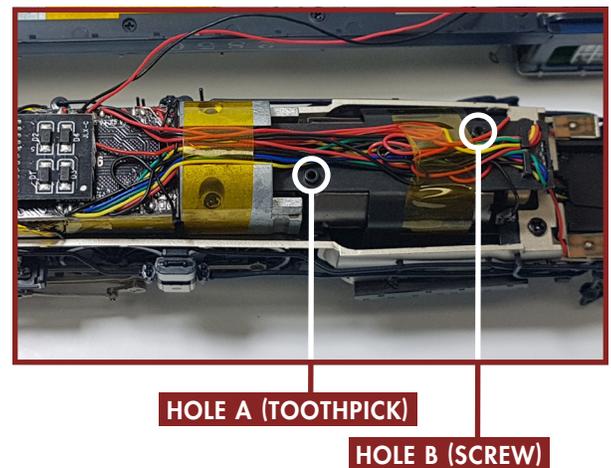


8. *If using the repair kit ...*

Once positioned, either insert the screw from the kit on hole B. Tighten gently while holding the motor cover down. Finger tightness is adequate to ensure the board does not move.

*If not using the repair kit ...*

Insert a toothpick through hole A (you may need to thin it out to slide easily into hole A.) and wedge it again against the motor face. Here again, please make sure the card wedge can slide out easily. Once this is in, use a drop of CA glue to seal the end of the toothpick and snip off any excess.



9. Once set, remove the card wedge, place the shell on the boiler (you may screw it back in once you have tested the result) and test the Hudson.

At this point, the chuff should work. If for some reason it does not, just re-examine the modification you have made. Once successful, gently push the shell back on and insert the screws in reverse order.

Please feel free to contact us for further assistance and support.