

Repairing sticking or misaligned Märklin Telex Couplers

(**E117993** <http://www.maerklinshop.de/ersatzteile/25736/telexkupplung-fuer-v90-2-stueck>)

Source: <http://www.marklin-users.net/forum/posts/m511056-Roco-125308-Telex-coupler#post511056>

SUCCESS! With the Stummiform information which Francois kindly directed me to, I managed to open up one of my faulty 117993 Telex couplers (ones that lets go of towed carriages) and line the inside of the solenoid cylinder with insulating tape so the solenoid fits snugly and after re-assembly, it works faultlessly! So this method of repair works for both 117993s where the decoupling pin sticks & does not drop and also where it lets go of towed carriages, as in my case. And as I have a total of 7 units of faulty 117993s, to learn of this fix is really good news. Thanks again Francois.

By the way, I took a photo of the coil and gasket assembly and this is attached. As pointed out by Patrick on the Stummiform thread, you really have to take care when you remove the coil to avoid breaking the wires. In my case, after carefully prising off the bottom cover with a cutter blade, I used a toothpick to push through the hole at the other side (i.e. the top of the the coupler) and this ease the coil assembly out together with the gasket and connecting wires. The photo is taken after the two are separated.

And to clarify ref the unwanted decoupling affecting my 117993s, I would first confirm that this happens even when coupled with Marklin close couplers. I know and accept that the older Relex couplers do not work with 117993s (it lets go the first time the train goes over a crossing or any unevenness in the track).

By the way, you are absolutely right that the reason why the pin moves up in my faulty units is due to the excess space & clearance in the cylinder such that the coil and pin can move around. What happens is that the variable backward & sideways pull on the 117993's coupling bar as carriages are towed causes the coil and pin to shift around inside the cylinder & it eventually works the pin upward until the coupling bar lets go. And as I do not connect the uncoupling wires to the decoder when I am testing the 117993, there is no possibility that the uncoupling is due to the coil being activated by an unwanted signal or other voltage.

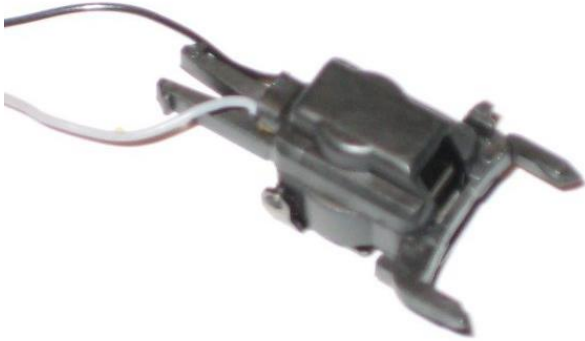
Note: conversion of non-NEM reflex to close couplers via: **7205 kit** or for NEM reflex to close couplers via: **7203** (or **72021** current conducting KKs)
As some reports suggest that reflex couplers have problems on telex couplers. Also, use 7001 Coupler Gauge for Märklin H0 to ensure metal coupler shapes.

(Translated Stummiform source thread instructions on next page)

Stummiforum.de: <http://www.stummiforum.de/viewtopic.php?f=2&t=73011>

Disassembly of the Telex coupler form below

Telex coupling from below, fully assembled:



Carefully prying off the bottom cover with a cutter/knife or similar sharp blade reveals the internals:

Telex coupling from below, lower cover removed, default pin position with its flaps:



Telex coupling now with pin removed:



Removal of Printed Circuit Board & Coil

WARNING: you must remove the coil and PCB together

Telex coupler without printed circuit board PCB), you can see the coil:

WARNING: This photo was only possible because the wires from coil to PCB broke - you will want to remove the coil and PCB together. Reattaching the broken coil wires requires professional soldering iron and soldering skill.



Telex coupling with coil removed (This is what you should see when the coil and PCB are *very carefully* removed together)- **into the vacant cylinder, apply a thin strip of electrical tape (~2 mm x 14 mm) around its wall to provide a more firm seat for the coil.**



Supplemental images for reference:

The pin in default rest position (left) and 'decouple position' (center), and the pin installed in the casing (right)

