# Unwanted R7-Oszillations of Passbandtuning
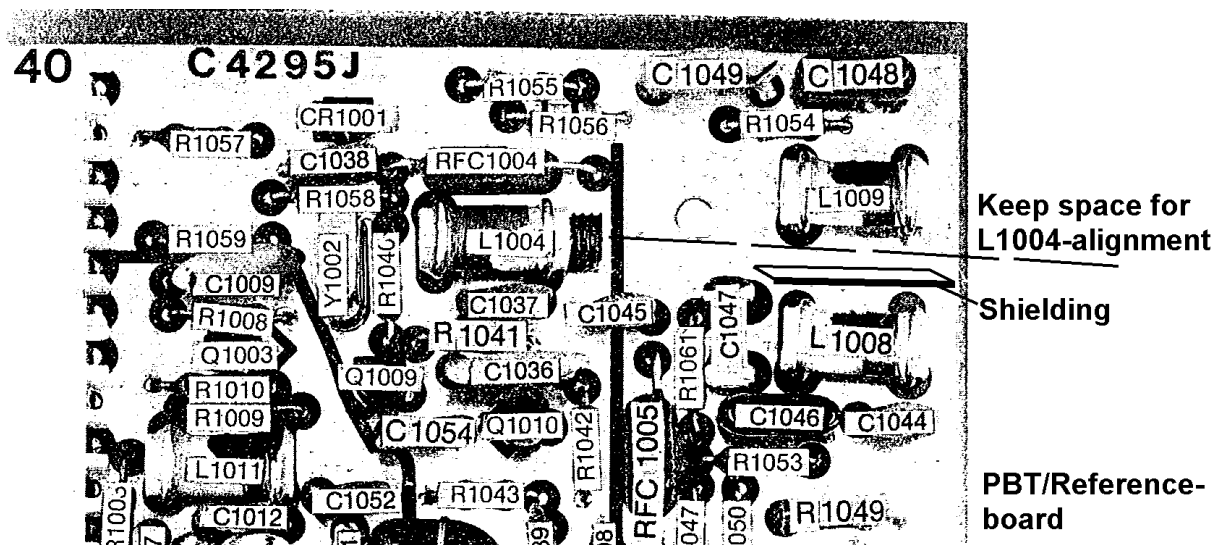
## Introduction

My R7 had sometimes a very strong noise, when using the PBT-control.
The S-meter jumped up to S9++ irrespective of the setting of BAND, MODE,
SELECTIVITY, RCVR GAIN and others. When shifting from LSB to USB, this noise
dissapeared sometimes – or not.
After unsuccessfully checking the PBT-oscillator (Q1009/1110) on the PBT/Reference board,
i found that the circuit L1008/L1009 and Q1011 was the problem: Depending upon the
alignment of these two coils the self-oscillation of Q1011 appeared or disappeared.
When aligning acc. to the manual, these oscillations were strong.

## Solution

A shielding between L1008 and L1009 on the PBT/Referenceboard solves this problem
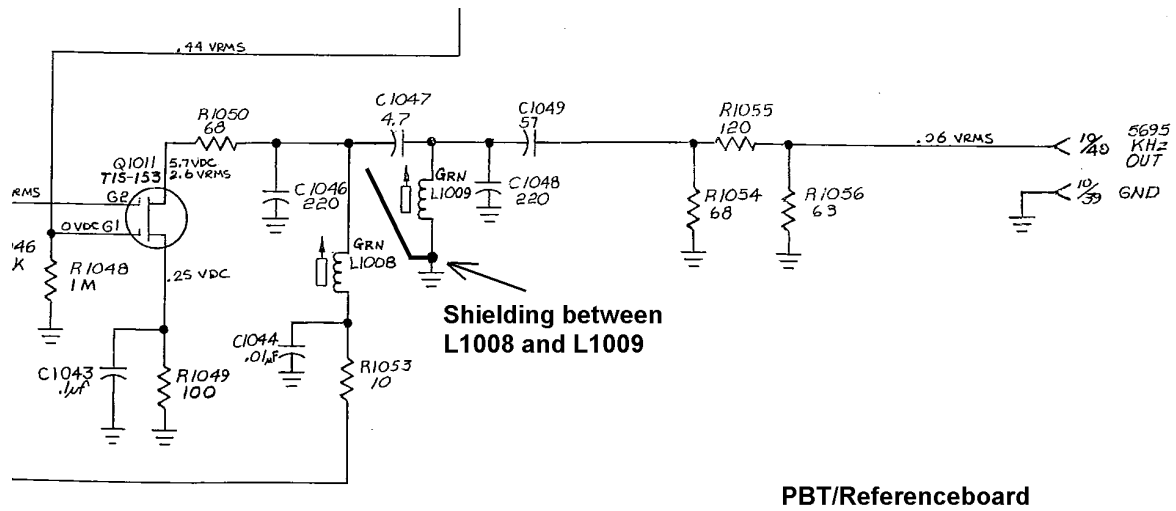(pictures 1 and 2).



Picture 1: Shielding

Remove the enamel with a sharp knife and solder a small piece of tinned metal to the pcb.

Note:
Solder the shielding close to L1008 to make sure that there remains enough space for a later
alignment of L1004.

**PBT/Referenceboard**

Picture 2: Circuit

## Realignment

Don´t forget to realign L1008 and L1009 for maximum output at Pin 10/40 acc. to the manual after installing the shielding.

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