

MINIATURE BOARD WITH BUFFER IN PLACE OF ORIGINAL C291.  
 BOARD FIXED IN POSITION WITH A STAND-OFF NEXT TO T14.  
 TO REDUCE STRAY CAPACITANCE  $C_{in}$  IS FLOATING BETWEEN  
 THE EXTRA BOARD AND ONE OF C291'S ORIGINAL PADS.

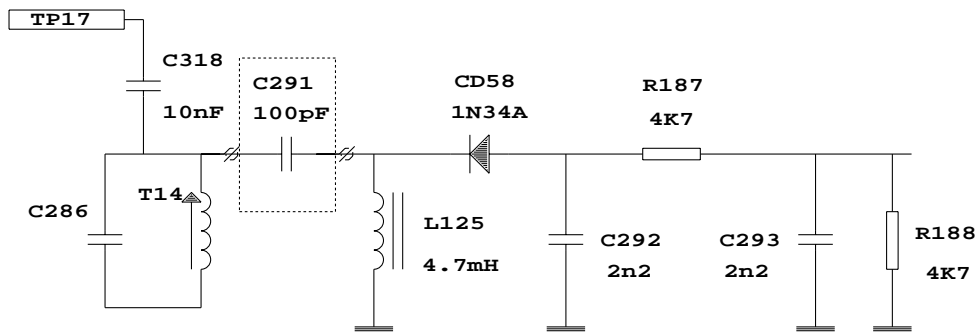
THE OUTPUT 100pF COULD BE ENLARGED NOW (TO 1nF), BUT  
 THE HIGHER AM OUTPUT COULD CAUSE CLIPPING, SO DON'T ENLARGE  
 CLIPPING TEST POINT = TP22, AFTER BUFFER AMP.

THE AM DETECTOR DIODE CIRCUIT FORMS A  
 TOO HEAVY LOAD ON THE T14 CIRCUIT

BECAUSE IT IS A HALVE WAVE RECTIFIER THE  
 RESONANCE CIRCUIT AROUND T14 IS  
 ASYMMETRIC DAMPED. THIS GIVES ANNOYING  
 DETERIORATION OF THE SIGNALS, ALSO AUDIBLE  
 IN SSB MODE. THE GIVEN CIRCUIT FORMS  
 AN IMPEDANCE BUFFER.

WITH A SMALL ALIGNMENT OF THE AGC CONTROL,  
 TO AVOID UNNESSESAIRY CLIPPING BY CD52 AND  
 BY CD53, THERE IS NO DISTORTION ANYMORE!!

MY SETTING IS MAX 5V peak-peak ON TP17  
 AM CARRIER+MODULATION LEVEL FROM GENERATOR



ORIGINAL SITUATION AROUND C291

REMOVES ANNOYING DISTORTION, ALSO IN SSB

Title

JRC NRD-515 AM detector buffer

Size Document Number

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REV

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