

## Instructions for Replacing the 20MHz BPF in the 85309A with a 21.4MHz LPF

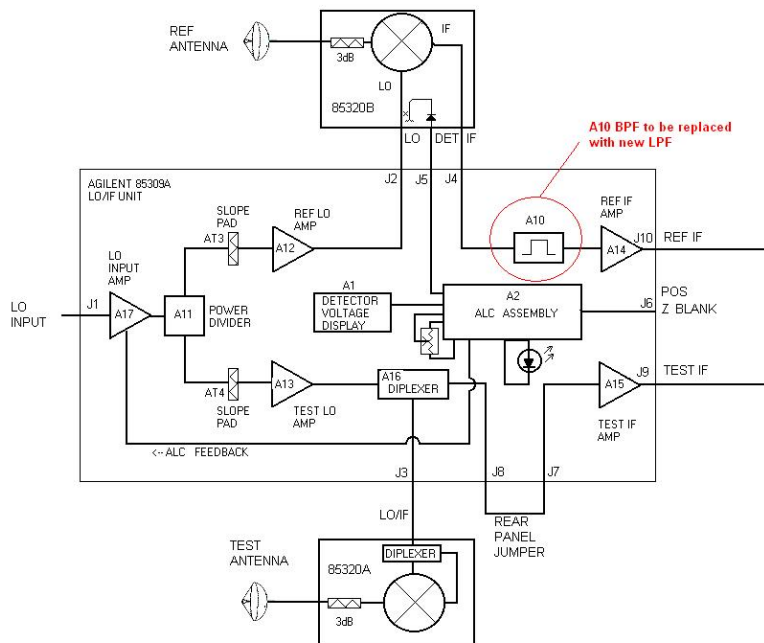
In order to use the 85309A with a PNA in an antenna test system, the A10 filter in the 85309A must be replaced. The 85309A was designed for use with the 8530A Microwave Receiver. The 8530A used a 20MHz IF signal and it passed through the A10 Band Pass Filter (BPF). The PNA series Network Analyzers use an 8.33MHz or 7.606MHz IF. For this reason we must change the A10 BPF filter assembly. We have chosen a new filter that is compatible with the 20MHz IF of the 8530A, the 8.33MHz IF of the E836xB PNA, and the 7.606MHz IF of the PNA-X.

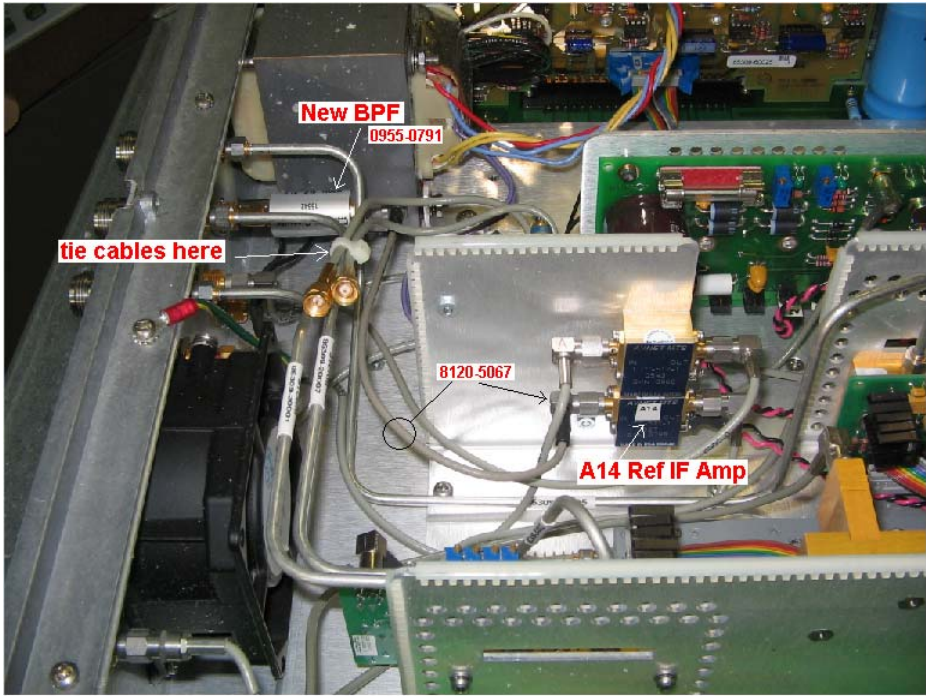
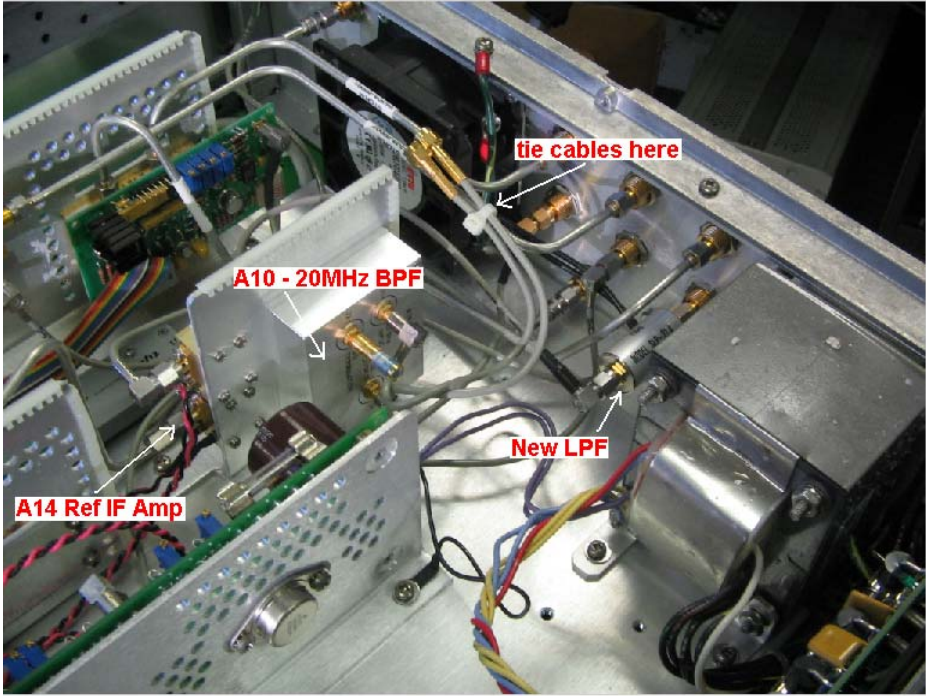
### Required parts:

0955-0791     Microwave FILTER-LOWPASS  
8120-5067     Cable assembly  
2 cable ties

### Instructions:

1. Remove the rear corner feet and top cover of the 85309A.
2. Locate the A10 filter assembly in the 85309A - see diagrams.





3. Locate the following two cables:
  - The cable that goes between the A14 IF Amplifier input and the A10 BPF output.
  - The cable that goes from the A10 BPF input to the J4 connector on the rear panel.
4. Use a cable tie and tie these cables as shown in the pictures. There is no need to remove the A10 BPF assembly from the 85309A.
5. Install the new LPF (0955-0791) by attaching it to the J4 connector on the rear panel (see photo).
6. Attach the new RF cable (8120-5067) from the input of the A14 amplifier to the newly attached LPF on J4. Be sure to verify that the cables that you tied up earlier do not interfere with the cooling fan assembly.
7. Reinstall the top cover and rear panel feet.
8. Install the 85309A back into your antenna system.