

Keysight Technologies  
Noise Sources:  
346B, 346C, N4001C, and N4002A  
(All Serial Numbers)

## Instructions for Attenuator Replacement

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## Agilent Technologies Noise Sources: 346B, 346C, N4001A, and N4002A

### A. Introduction

The Replacement Attenuator Kit, 00346-60027, is available for field repair of the 346B, 346C, N4001A and N4002A RF Module (Bulkhead).

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**CAUTION:** Repair or parts replacement of noise sources should NOT be attempted without full calibration capability and official field calibration software.

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### B. Replacement Attenuator Kit 00346-60027 Parts List

Table 1                      Parts List

Item	Quantity	Description	Part Number
1	1	Attenuator Cartridge.	00346-67005
2	1	Polyiron Rod	00346-20033
3	1	Bag - Shielding	9222-1417
4	1	Installation Note (this document).	00346-90024

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**NOTE:** You must ensure that the polyiron is cut squarely.

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## C. Procedure

If the ENR of the noise source does not meet specification, the polyiron rod is used to tune the response of the noise source. For step 1, follow the procedure depending on the model:

1. **346B/ N4001A:**

Screw the polyiron rod into the threaded hole of the cartridge approximately half way to the substrate.

**346C/ N4002A:**

Screw the polyiron rod into the threaded hole of the cartridge to between 75% and 90% of the way in to the substrate.

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**NOTE:** Be careful not to allow the polyiron to touch the substrate.

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2. Cut off the excess polyiron using a razor blade or sharp knife.

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**NOTE:** Be careful when using sharp objects and use the appropriate precautions.

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3. Install the replacement attenuator into the noise source and test the noise source for ENR and Reflection.

The polyiron will decrease Reflection and ENR at high frequencies (above 12 GHz).

If the ENR is too low at high frequencies, unscrew the polyiron 1 to 2 turns and trim flush. If the ENR is too high, screw the polyiron further into the cartridge. Take care not to allow the polyiron to touch the substrate.

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September 2014

Published in USA



00346-90024  
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