

HP 16195A Calibration Kit  
**Operating Note**



HP Part No. 16195-90010  
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# Contents

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- 1. General Information**
- Introduction . . . . . 1-1
- Kit Contents . . . . . 1-1
- Maintenance Of Connectors . . . . . 1-2

# Tables

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1-1. Calibration Kit Contents . . . . . 1-1

## General Information

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### Introduction

The HP 16195A is the APC7 Calibration Kit for the HP 4286A RF LCR Meter. The HP 16195A consists of the open, short, 50  $\Omega$ , and low-loss capacitor terminations. The calibration using the HP 16195A is performed on the APC7 connector plane made by connecting the APC3.5 to APC7 adapter to the HP 4286A's APC3.5 test port.

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### Kit Contents

The HP 16195A contents are listed in Table 1-1.

**Table 1-1. Calibration Kit Contents**

| Description             | Qty. | HP Part No. |
|-------------------------|------|-------------|
| 50 $\Omega$ Termination | 1    | 16195-65006 |
| Open Termination        | 1    | 04191-85302 |
| Short Termination       | 1    | 04191-85300 |
| Low-Loss Capacitor      | 1    | 04291-60042 |
| Carrying Case           | 1    | 16195-60001 |
| Operating Note          | 1    | 16195-90010 |

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#### Note



The HP 16195A can be used for calibrating the HP 4286A in the performance test, when the HP 4286A has no calibration kit furnished.

The low-loss capacitor termination is not used in the HP 4286A performance test.

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#### Note



When using the HP 16195A with the HP 4286A, the CALIBRATION KIT value of the HP 4286A must be its default value (reset setting). Do not modify these values when using the HP 16195A.

OPEN conductance : 0 S  
 OPEN capacitance : 82 fF  
 SHORT resistance : 0  $\Omega$   
 SHORT inductance : 0 H  
 LOAD resistance : 50  $\Omega$   
 LOAD inductance : 0 H

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## Maintenance Of Connectors

Each termination of the HP 16195A must be handled carefully to guard against damage to its contact surface. Also, the contact surface must be kept clean.

Visually inspect and, if necessary, clean all connectors each time a connection is made. Metal particles from the connector threads may find their way onto the mating plane surfaces when a connection is disconnected. Do not use the damaged connectors.

To maintain clean contact surfaces, it is recommended that the operator performs periodic cleaning. Use a lint-free cloth and, if a cleaning fluid is needed, use isopropyl alcohol.

There are two Hewlett-Packard publications available to help you learn these skills:

- **Microwave Connector Care** (HP PN 08510-90064) explains in detail how to care for microwave connectors.
- **HP Application Note 326 Coaxial Systems** (HP PN 5954-1516) summarizes microwave connector care. It is available free from the nearest Hewlett-Packard office.

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### Caution



- Do not touch the mating plane surfaces.
- Do not set connectors contact-end down.
- Use end caps over the mating plane surfaces.

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### Caution



Do not use aromatic or chlorinated hydrocarbons, esters, ethers, terpenes, higher alcohols, ketones, or such chemicals as benzene, toluene, turpentine, dioxane, gasoline, cellulose acetate, or carbon tetrachloride. Keep exposure of the connector parts to the cleaning fluid as brief as possible.

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