

CTS-00135

Assy, Lamp, Deuterium

Equivalent to: Shimadzu 228-34016-02



Technical Data Sheet

1.0 Description

This Deuterium Lamp Assembly is designed to be compatible with SPD-10, SPD-10A, SPD-10AVvp, SPD-20A, SPD-20AV Detectors. It is equivalent to Shimadzu part number 228-34016-02.

2.0 Specifications

2.1 Operating Specifications

Aperture Diameter: 0.5mm

Lifetime: 2000 hours

2.2 Materials

Socket Contacts: Pre-tinned Bronze

Connector Plug: Nylon, White Color

Lamp Envelope: UV Glass

3.0 Replacement Frequency

It is recommended that the lamp be replaced if it will not ignite, the noise or drift exceeds specifications, or if the lamp energy is below 50% of original intensity, as recorded during the initial installation.

4.0 Installation Information

CTS's parts are designed to be compatible and interchangeable with the OEM parts.

1. Power down the PDA detector.
2. Remove the power cord.
3. Wait 15 minutes for the detector lamp to cool before handling the lamp.
4. Remove the optics cover to access the lamp.



5. Disconnect the lamp power connector.
6. Unscrew the two mounting screws.
7. Grip the metal base and pull the lamp out.
8. Remove the mounting screws from the old lamp.
9. Carefully unpack and hold the replacement lamp by its base only.
10. Orient the lamp so the two holes in the base align with the mounting pins and screws in the optics bench.
11. Insert the lamp and secure it with the two mounting screws.
12. Reconnect the lamp power connector.
13. Close detector housing.
14. Reconnect the power cord and power up PDA detector.
15. Record initial lamp intensity in the instrument log.

5.0 Operating Recommendations

5.1 Lamp Intensity

It is known within the industry that deuterium lamps exhibit reduced intensity as they age during their normal service life. It is recommended that a diagnostic test, showing PDA intensity levels, be run on the lamp at installation, then regularly during the lamp's service life. It is also recommended that the lamp be replaced at 50% of original intensity.

5.2 Installation and Transportation

The lamp is sensitive to physical shock such as being dropped. It is recommended that you avoid shock when installing or transporting the lamp. If it is suspected that a lamp has been subjected to excessive shock, it is recommended that a diagnostic PDA Intensity Test is run to verify that intensity is acceptable. An acceptable PDA Intensity Test will not, however, guarantee that no damage occurred.

5.3 Fingerprints

Fingerprints on the glass envelope affect the lamp's performance. It is highly recommended that the lamp's envelope not be touched unless wearing gloves. If there is any chance that there are fingerprints on the lamp's envelope, wipe the envelope with methanol using a lint-free tissue and allow to dry prior to installation.

5.4 Flow Cells

It is important to clean the flow cell regularly. If the flow cell is not clean, the amount of light passing through the flow cell may be insufficient and could

affect the light intensity. If after replacing a lamp the detector performs poorly; it is recommended that you check to make sure that the flow cell is clean and leak free.

6.0 Warranty

We view your business with us as a partnership based on mutual trust.

We extend a Lifetime Warranty against any manufacturing defects on all CTS parts. On the rare occasion that you experience a problem, we invite you to contact your Account Manager directly.

Returns can only be accepted if a Return Material Authorization Number (RMA) is obtained prior to shipment. Please call (1) 952-895-8292 or email: ctssales@ctshplc.com to get an RMA.