SERVICE BULLETIN	
Note No.	SVC-FSB-0003A
Release Date	2/5/2020
Contact	ngceoservice@ngc.com

# NORTHROP GRUMMAN

## **Desiccant Maintenance**

#### Purpose

This bulletin provides instruction on maintenance of the desiccant cartridge.

#### Scope

This bulletin applies to High Power Patara lasers.

#### Definitions

N/A

#### Disclaimer

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### **Tools and Equipment**

- Desiccant cartridge part no. 1DT57000, or refill DTMS-B-4-4-20G (can be purchased from CEO or directly from Drytech, Cookstown NJ, telephone 609-758-1794).
- No installation tool is needed. The cartridge must be hand-tightened.

### **Replacing the Desiccant**

- 1. The desiccant cartridge must be periodically replaced to keep the laser dry, so it should be checked weekly for exhaustion.
- 2. Exhaustion is indicated when the 30% level sector has turned a lighter shade of blue and the 15% level has turned light pink as shown in **Figure 1** below. When color changes occur, the desiccant has absorbed maximum recommended moisture and the cartridge must be exchanged. Waiting until all sectors have turned white will result in optical damage. See **Figure 1** for examples.

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Figure 1: New Desiccant (Left) and Slotted Cap Removed (Right)

3. To exchange the desiccant simply unscrew and remove the desiccant cartridge, remove the slotted cap and exchange the desiccant. Replace the desiccant cartridge immediately to prevent dust getting in the laser. Tighten by hand. DO NOT OVERTIGHTEN.

#### **Maintenance Frequency**

The desiccant should be checked weekly and exchanged as need when exhausted. The frequency will vary based on site/regional humidity, and frequency of opening the laser top cover. A second desiccator assembly is recommended to reduce the time the desiccator assembly is removed from the Patara Laser cover. Any spare desiccators should be stored in a cool dry area. A nitrogen purged dry box is recommended for storage.