

PRIORITY	
Mandatory	As Required
Next Visit	At Installation
Information	

FIELD SERVICE BULLETIN

DATE ISSUED: February 1, 2013 NUMBER: 689

Switching to CoolFlow IGE Corrosion Inhibitor

PRODUCT All 80 MHz Chameleon Series Lasers (Ultra, Vision and Vision-S)

PURPOSE To inform Field Service Engineers, Representatives, and Coherent

Subsidiaries of a change of corrosion inhibitor applicable to **new** Chameleon laser systems and **new Chameleon head/psu's only**.

DESCRIPTION From 23/01/2013, all **NEW** 80 MHz Chameleon Series Lasers

(Ultra, Vision and Vision-S) shipped from DPSS Glasgow will be configured with a proprietary liquid, 'Coolflow IGE', in the cooling

channels.

CoolFlow IGE is based on ethylene glycol blended with proven corrosion, scale and biological inhibitors. A container of pre-mixed CoolFlow IGE is supplied with each NEW laser system.

CoolFlow IGE is supplied with each **NEW** laser system.

Since CoolFlow IGE and Optishield Plus should **NOT** be mixed with each other, it is imperative that we are able to identify which type of coolant each laser system or laser head is using. To do this each laser head and chiller needs to be clearly labeled - please read the body of this document carefully.

As new and refurb systems ship from the factory with CoolFlow IGE, the installed base of Chameleon lasers will change. There will soon be a mix of Optishield and CoolFlow systems in the field. This is why the labelling procedure below must be followed carefully to ensure that the Chameleon laser head and chiller have a matching coolant type and identifying labels.

1.0 <u>Label fitting instruction</u>

This instruction outlines the application of labels to ensure that the Chameleon laser head and chiller both have a matching coolant type identifier.

Note 1: It should be assumed that non-labeled existing lasers and chillers in the field are using Optishield Plus.

Note 2: Field Service Engineers should now include the coolant type used in each laser system within the Field Service Report.

Two adhesive labels will be supplied and can be found within the laser shipping crate. A "CoolFlow" label as in Figure 1, and an "Optishield" label as in Figure 2.

One of the labels needs to be applied to the Thermotek chiller by Field Service, unless otherwise directed by this FSB.



Figure 1 - CoolFlow IGE label

10% "OPTISHIELD PLUS" + 90% DISTILLED WATER

Figure 2 - Optishield label

1.1 For complete new build laser systems:

A **NEW** laser system will have a CoolFlow label fitted to the back of the head as indicated in Figure 3.

When un-packing the chiller for the installation, the CoolFlow label provided (Figure 1) should be applied to the Thermotek T255P chiller as indicated in Figure 4.

The "Distilled water only" sticker, if fitted, should be removed from the chiller. Discard the Optishield label (Figure 2).



Figure 3 - Positioning of CoolFlow Label on back of laser head



Figure 4 - Positioning of CoolFlow label on Chiller

1.2 New Head/PSU only shipments:

New head/PSU-only systems will have been manufactured using CoolFlow IGE. Optishield Plus coolant should **NOT** be used with them.

Field Service must identify if the customer has previously used CoolFlow IGE or Optishield Plus in the coolant loop of their existing chiller by checking the labelling on the existing chiller.

There are now two possible courses of action:

1. If the customers' existing chiller has used CoolFlow IGE:

- No further action should be required. Ensure labels are applied as in section 1.1.
- Discard the Optishield label supplied (Figure 2).

2. If the customers' existing chiller has used Optishield Plus:

- Flush out the chiller and hose assemblies using distilled water. Run in a closed loop (see Hose Adaptor under 'Parts' later in this document) for at least 10 minutes, then discard the water.
- Remove any 'coolant type' labels from the chiller.
- Fill the chiller with CoolFlow IGE and apply the label to the chiller as per Figure 4.
- Discard the Optishield label supplied (Figure 2).

1.3 Repair systems:

Repair systems may have been manufactured using CoolFlow IGE **or** Optishield Plus coolant. Care must be taken not to use the incorrect fluid in the laser head.

Field Service must identify from the label on the back of the replacement laser head whether it has been manufactured using CoolFlow IGE or Optishield Plus. If there is no label, the system can be assumed to be running Optishield Plus.

Field Service must identify if the customers' existing chiller has previously used CoolFlow IGE or Optishield Plus by checking the label applied to the chiller. If there is no label, the chiller can be assumed to be running Optishield Plus.

There are now four possible courses of action:

- 1. If both the existing chiller and replacement head have been running CoolFlow IGE:
- No further action should be required. Ensure labels are applied as in section 1.1.
- Discard the Optishield label supplied (Figure 2).
- 2. If both the existing chiller and replacement head have been running Optishield Plus:
- No further action should be required. Ensure labels are applied as in Figures 5 and 6 below.
- Discard the CoolFlow label supplied (Figure 1).
- 3. If the existing chiller was running Optishield Plus and the replacement head running CoolFlow IGE:
- Flush out the chiller and hose assemblies using distilled water. Run in a closed loop (see Hose Adaptor under 'Parts' later in this document) for at least 10 minutes, then discard the water.
- Remove any 'coolant type' labels from the chiller and apply a CoolFlow IGE label as in Figure 4.
- Fill the chiller with CoolFlow IGE and run.
- Discard the Optishield label supplied (Figure 2).
- 4. If the existing chiller was running CoolFlow IGE and the replacement head running Optishield Plus:
- Flush out the chiller and hose assemblies using distilled water. Run in a closed loop (see Hose Adaptor under 'Parts' later in this document) for at least 10 minutes, then discard the water.
- Remove any 'coolant type' labels from the chiller and apply an Optishield Plus label as in figure 6.
- Fill the chiller with Optishield Plus + Distilled water mix and run.
- Discard the CoolFlow label supplied (Figure 1).



Figure 5 - Position of Optishield label on laser head



Figure 6 – Position of Optishield label location on Chiller

2.0 PARTS

It is recommended that all Field Service Engineers include CoolFlow IGE, Optishield Plus and a Hose Adaptor (For flushing chiller and hoses in closed loop – see below) in their standard tool kit.

- CoolFlow IGE FRU #1234080
- Optishield Plus FRU #1050571
- Hose Adaptor FRU #TBD



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