1. **General**

1.1 This document describes the installation and maintenance of the CCH Plug & Play™ System modules introduced in October 2008 (Figure 1).

**IMPORTANT:** CCH modules are factory sealed. Breaking the seal will void the manufacturer’s warranty.

1.2 CCH Modules are designed to streamline the process of deploying fiber links by effectively breaking-out high density MTP® connector trunking solutions into system equipment style connectors such as LC and SC Duplex.

Consult the instruction provided with the housing you are using for complete instructions on connecting the module with an MTP trunk.

1.3 This issue reflects the current module design.

2. **Precautions**

2.1 **General Precautions**

**Safety Glasses**

**WARNING:** The wearing of safety glasses is strongly recommended when cleaning fiber optic connectors with isopropyl alcohol.

2.2 **Chemical Precautions**

**CAUTION:** Isopropyl alcohol is flammable. Flashpoint is 50 °F. Can cause irritation to eyes on contact. In case of eye contact, flush eyes with water for at least 15 minutes. Inhaling fumes may induce mild narcosis. In case of ingestion, consult a physician.

2.3 **Laser Precautions**

**WARNING:** Laser light can damage your eyes. Laser light is invisible. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Never look into the end of a fiber or at a connector in a microscope which may have a laser coupled to it. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

2.4 **Fiber Optic Cable Precautions**

**CAUTION:** Fiber optic cable is sensitive to excessive pulling, bending and crushing forces. Consult the cable specification sheet for the cable you are installing. Do not bend cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics of the cable - the cable may have to be replaced.

3. **Module Installation**

3.1 Remove a blank panel by pulling out both of the plungers of the panel’s push/pull fasteners (Figure 2).

3.2 Position the module’s fasteners over the proper holes in the mounting bracket and push in all the plungers to lock the module in place.
4. Connecting the Module with an MTP Trunk

4.1 Standard MTP connectors mated into the adapters on the back of a CCH module have precision guide pins. To secure a non-pinned MTP connector from a trunk into an adapter:

a) Remove the dust caps from the MTP connector on the end of the trunk and the MTP adapter on the back of the CCH connector module.

b) To install the connector, grasp the connector by its boot which is marked “push.” Align the key in the connector with the slot in the adapter and push the connector until it clicks in place (Figure 3).

4.2 To unplug the connector, grasp the slider which is marked “pull” and pull the connector out of the adapter.

DO NOT PULL ON THE BOOT TO UNPLUG THE CONNECTOR.

5. Maintenance

5.1 The most likely cause of a problem with a module is connector end face contamination. Always keep clean dust caps on the module’s connector adapters and the trunk’s connectors when they are unmated, and clean the connectors before each mating.

5.2 To clean the MTP connector and adapters, use the MTP cleaning tool (p/n 2104466-01) provided in the Plug & Play Cleaning Kit (p/n TKT-PNP) (Figure 4).

5.3 To clean the various connectors and adapters available on the front of a CCH module, use the appropriate items provided in the Plug & Play Cleaning Kit as described in SRP-006-093.

5.4 Periodically check the fiber optic cable to make sure bends do not exceed the minimum bend radius. Check the trunk for unnecessary strain. Check the trunk cable for crimping or crushing.