

Figure 1

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1. INTRODUCTION

This instruction sheet provides installation procedures for the RCS DSL Starter Panel Kit 1479708-1 which is used in either the RCS14 or RCS36 media convergence centers (MCC).

The Structured Cabling System is recommended to be installed in accordance with the ANSI TIA/EIA-570-B Residential Telecommunications Cabling Standard. Refer to that publication for technical specifications on wiring and cables.

NOTE

All numerical values are in metric units [with U.S. customary units in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

2. DESCRIPTION

Basic terms and features of kit components are provided in Figure 1 (for component part numbers, refer to Figure 7). The front-loadable modules are shipped assembled into the 18-port panel. All other components are supplied loose.

The following procedures include voice and data cable termination and component installation inside the MCC.

NOTE

Installation and service shall be performed by a qualified installer. The MCC is intended to house Underwriters Laboratories Inc. (UL) listed devices only. Wiring must comply to the requirements for separation of circuits per the National Electric Code/NFPA 70.

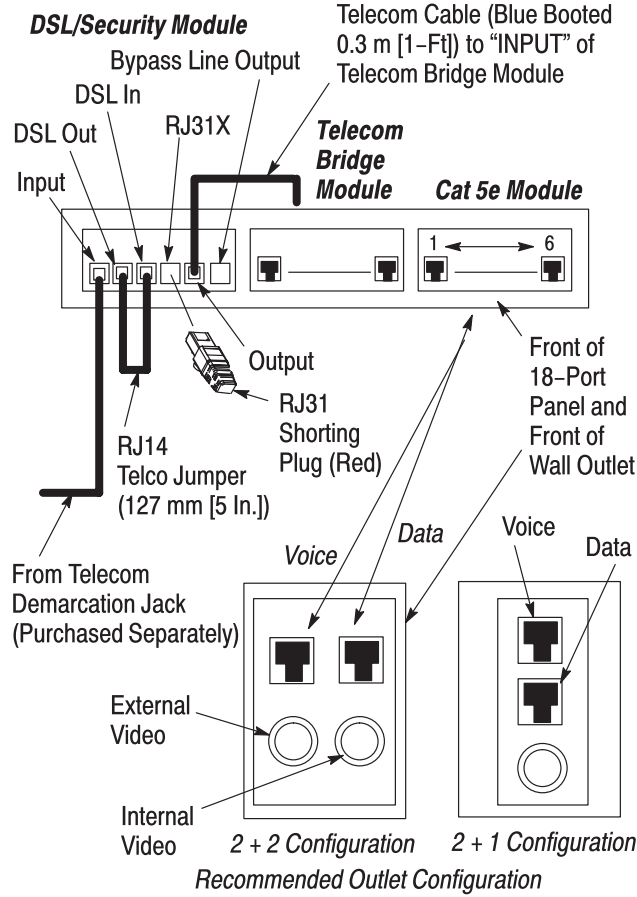
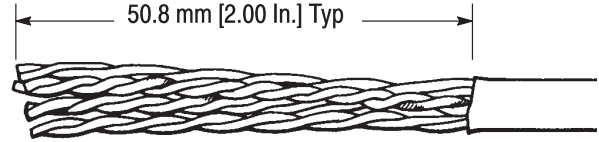
3. CAT 5 CABLE (Cat 5e Recommended)

This cable consists of four, unshielded, twisted pairs of wires that are used for telephone distribution (voice) and computer networking (data). The cables should be divided and inserted through the two hole plugs at the top of the MCC (see Figure 2).

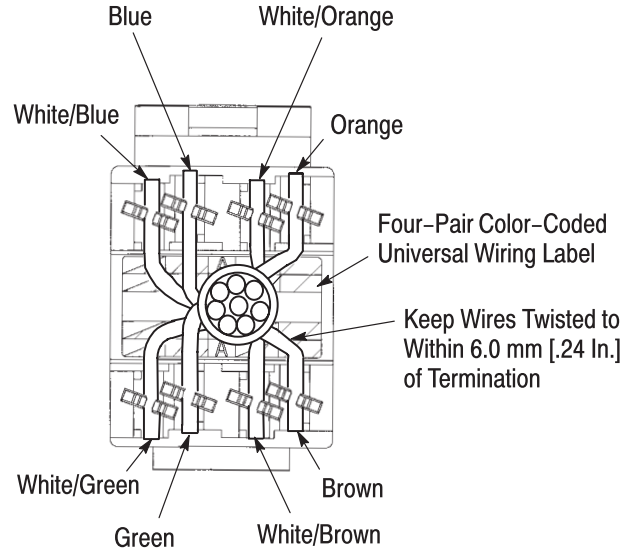
Each cable should be labeled to identify the room/wall outlet.

NOTE The cable bend radius should be maintained throughout cable installation (minimum bend radius is four times the diameter of the cable).

Allow cable to extend approximately 46 cm [18 in.] into MCC for termination and mounting of 18-port panel. Push excess cable back up into wall cavity.



Optional SL Modular Jack Termination (T568A Color Code Shown)



Cat 5 Cable

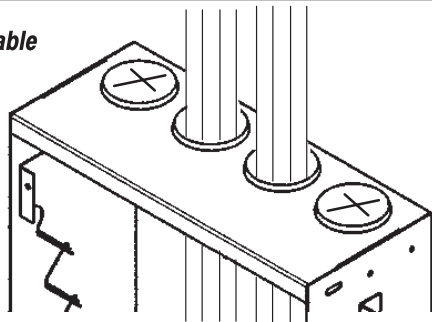


Figure 2

CAT 5 Cable Termination

The Cat 5e patch module is terminated to the Cat 5 cables going to the wall outlets. The blue SL modular jack (included with Demarcation Kit 1479285-1 if purchased) is terminated to the incoming telephone service cable entering the MCC.

Refer to Figure 3 for proper wire stripping and termination.

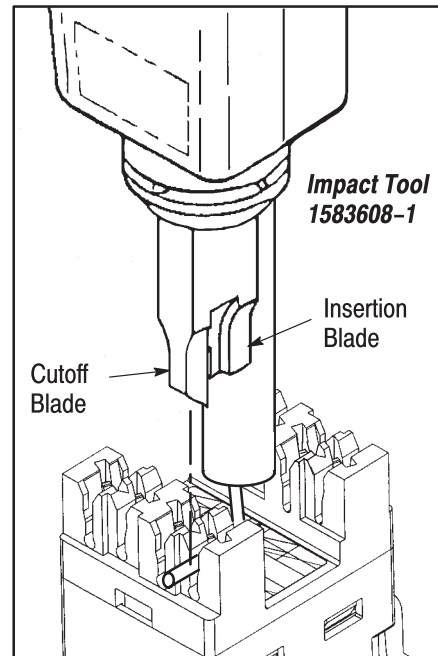


Figure 3 (cont'd)

Patch Module Termination

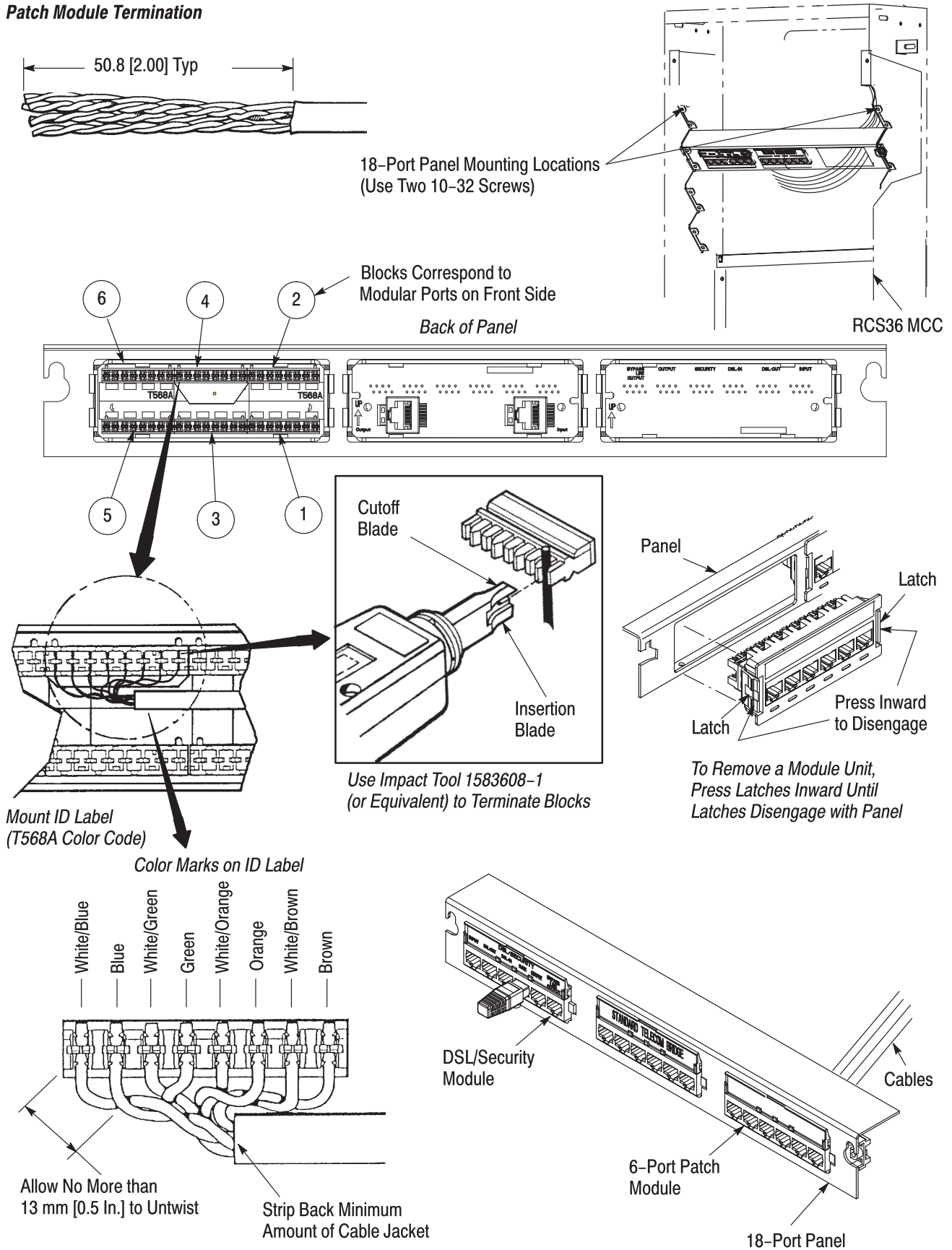


Figure 3 (end)

4. 18-PORT PANEL INSTALLATION

The RCS14 MCC accommodates two 18-port panels.

The RCS36 MCC accommodates four 18-port panels. If one or more expansion panels are to be installed, the expansion panel(s) should be installed first. Panel(s) should be mounted starting on the bottom bracket.

1. Before mounting the panel, some components must be inserted into the BACK of the Telecom bridge/security module. See Figure 4.

a. Insert one end of the 0.3 m [1-ft] Telecom cable (blue-booted) into the **INPUT** port of the Telecom bridge module. Connect the other end to the DSL/security module **OUTPUT** port.

b. Insert one end of the 0.3 m [1 Ft] Telecom expansion cable (blue, non-booted) (included with expansion panel – if used) into the **OUTPUT** port of the Telecom bridge module.

2. Mount panel onto lower brackets with 10/32 pan head screws, or above expansion panel(s) if used.

NOTE

Carefully position the cables so that they do not provide stress on the patch modules. Push excess cable up into the wall.

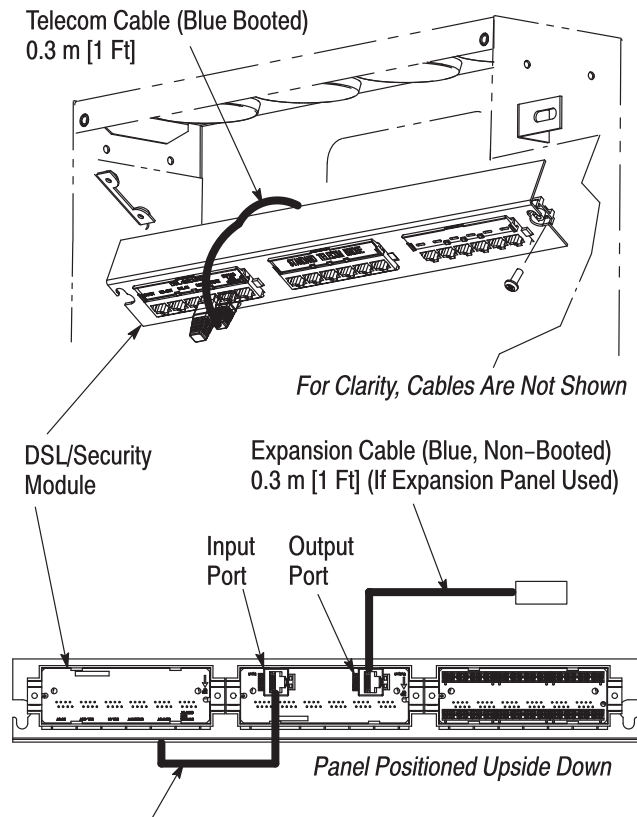
3. Remove Cat 5e 6-port module from 18-port panel. Feed Cat 5e cables through openings in 18-port panel and trim to proper length.

4. Terminate the SL Modular Jack (purchased separately) and 6-port patch modules according to Section 3, **CAT 5 Cable Termination**.

5. After patch module termination, snap module into front slot of 18-port panel and feed excess cable into wall.

6. Identify each cable and mark the label (not supplied) accordingly above each port position.

7. The blue SL modular jack (terminated to the incoming telephone service cable) should be inserted into the demarcation bracket and mounted onto the equipment mounting bracket (not shown).



Telecom Cable (Blue Booted) 0.3 m [1 Ft]

Rear View of 18-Port Panel (Cable Assembly Connections)

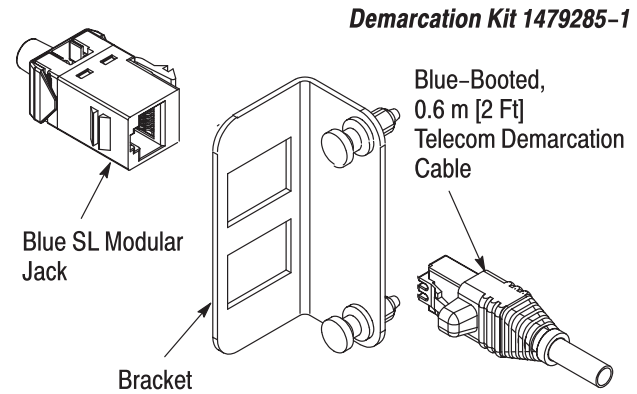


Figure 4

5. CONFIGURATION PROCEDURES

NOTE

Data connections are not covered in this document. Refer to the procedures provided with the selected networking equipment.

Refer to Figure 2 for the following connections:

- Insert the red RJ31 shorting plug into the **RJ31X** port on the DSL/Security module.

NOTE The shorting plug is inserted only if no security panel is connected to the security port (marked **RJ31X**). Either shorting plug or security panel must be installed to provide Line 1 service to output port.

- If connecting DSL modem, proceed to Paragraph 5.1, otherwise, connect Telco jumper (127 mm [5 in.], 2 pair) between **DSL-OUT** and **DSL-IN** ports on the DSL/Security module.

NOTE Either Telco jumper or DSL Modem must be connected between **DSL-OUT** and **DSL-IN** ports to provide Line 1 service to output port.

5.1. DSL Modem Connection (Figure 5)

Connect DSL/Security module **DSL-OUT** port to DSL modem line input.

NOTE DSL signal must be present on Line 1 (blue pair).

Connect filtered Line 1 from DSL modem phone output (if available) to **DSL-IN** port. If using modem without a filtered phone output, use DSL microfilter as shown in Figure 5.

5.2. Line Connections

Insert one end of the .6 m [2-Ft] Telecom demarcation cable (blue-booted), included with the demarcation kit, into the **INPUT** port of the DSL/Security module. Connect the other end to the

blue SL modular jack that is terminated to the incoming telephone service cable. See Figure 2.

NOTE The **BYPASS LINE OUTPUT** port is available in the event of a DSL modem or security panel failure. If the bypass line output is connected, the security panel will be unable to seize Line 1.

The six, blue-booted (Line 1), and two, orange-booted (Line 2), 0.3 m [1 Ft] Telecom cables are used to connect and configure telephone (voice) service to each wall outlet.

To configure Line 1, 2, 3, or 4 as the primary telco line at a selected wall jack, patch the appropriate patch panel port (corresponding to the desired wall outlet jack) to a Telecom bridge module using the appropriate line selection cord.

To identify the primary telco line available at any given outlet, the patch cord color will correspond to the following color-code: (Line 1 – blue; Line 2 – orange; Line 3 – green; Line 4 – gray).

NOTE Line 3 (green booted – part number 1479005-1) and Line 4 (gray booted – part number 1479006-1) are purchased separately.

If a specific outlet jack is to be designated for an application utilizing active switching (Ethernet network, PBX, etc) patch the appropriate patch panel port to the active switching device using a 568A patch cable (Cat 5e, 0.6 m [2 Ft], yellow, part number 219246-2 is recommended).

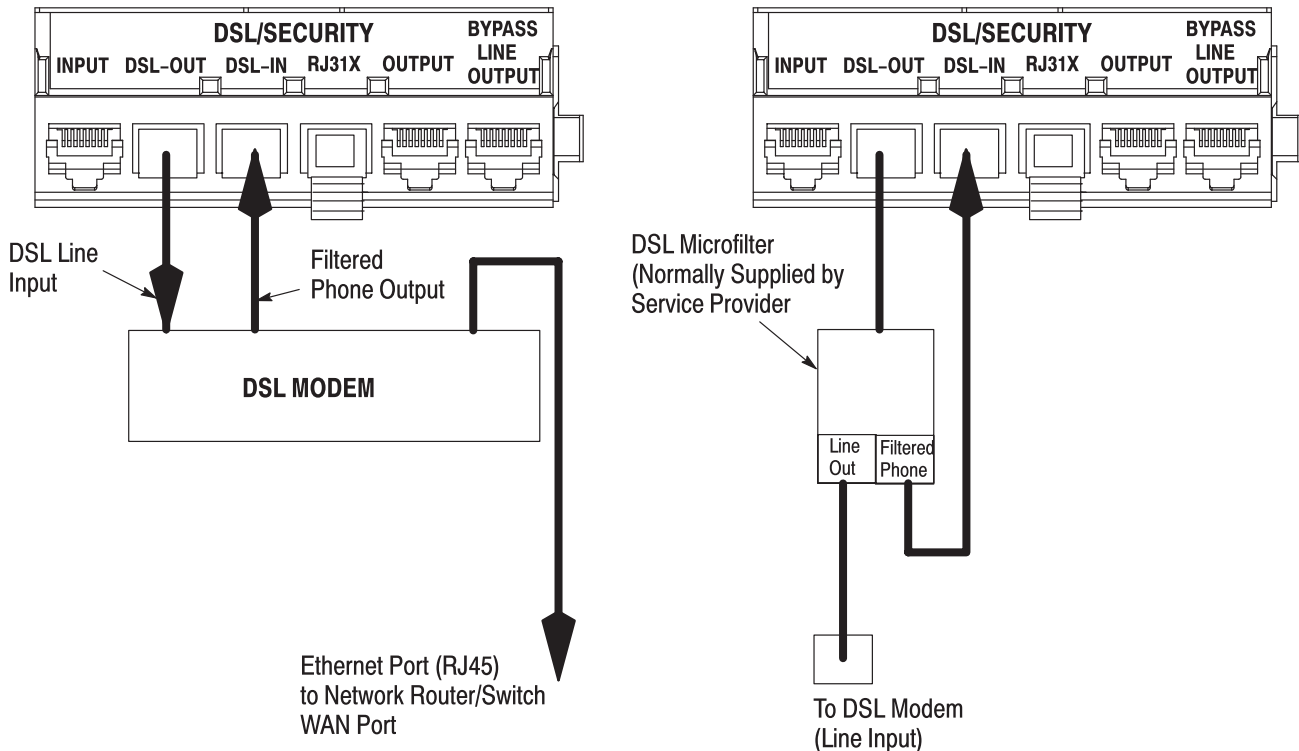


Figure 5

After configuring the telephone lines, use the hook and loop Velcro cable tie to bundle the cords together. See Figure 6.

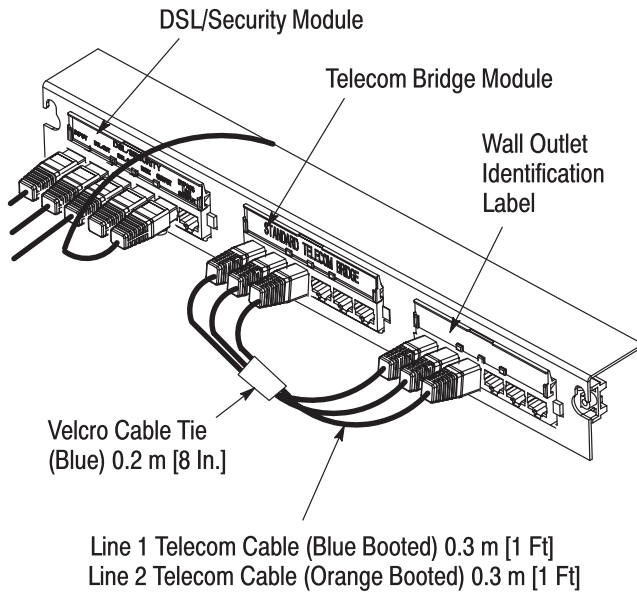


Figure 6

6. REVISION SUMMARY

Per EC 0990-0195-05

- Updated document to corporate requirements
- Removed “Blue” from callout in Figure 1

COMPONENT PARTS LIST

COMPONENT DESCRIPTION	PART NUMBER	QTY PER KIT
18-Port Panel, Front-Loadable	1479609-1	1
Telecom Bridge Module	1479781-1	1
6-Port, Cat 5e, Patch Module	406337-1	1
6-Port Interface Housing	1479187-1	3
10/32 Cross-Recessed, Pan Head Screw, Bag of Four Screws	406746-2	1
Line 1 Telecom Cable (Blue Booted) 0.3 m [1 Ft]	219198-1	7
Line 2 Telecom Cable (Orange Booted) 0.3 m [1 Ft]	1479004-1	2
Velcro Cable Tie (Blue) 0.2 m [8 In.]	1375274-6	1
RJ31 Shorting Plug	1375379-1	1
110Connect ID Label	406905-1	1
DSL/Security Module	1375319-1	1
RJ14 Telco Jumper	1375399-1	1

Figure 7