

**REGION** *Method & Procedure*  
**OPERATIONS** *Release*



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*Provisioning & Maintenance*  
*I&M Process & System Support*

DOC. No.: 2005-00206-MDP

ISSUE: **B**

ISSUE DATE: **09/15/05**

REVISED DATE: **05/09/08**

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## Technician Mini-Handbook New England

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<b>Purpose</b>	To provide the field Technicians with a reference guide as it pertains to their daily responsibilities
<b>Revision reason</b>	Issue B replaces issue A to provide updated information
<b>Personnel affected</b>	All Installation and Maintenance Technicians in the New England Market Area.
<b>Effective date</b>	This document is effective immediately upon receipt.
<b>Timeline for review and delivery of document</b>	This document must be reviewed no later than <b>05/09/08</b> . The suggested method of delivery is handout. The estimated time of delivery is 30mins.
<b>Contact</b>	For any questions, contact the New England Regional Staff Support.
<b>Author</b>	Roxanne Altomonte, Specialist – I&M National Staff Support 845.735.4186
<b>Approver</b>	Anne Manning, Manager – I&M National Staff Support 717.777.4545

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***Verizon Safety Creed***

*The demands of the service or urgency of the job are never so great that we cannot take time to perform our work safely.*

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## Customer Contact

### Five Points of Contact

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**Outstanding communication is a key component** to providing excellent service. By utilizing the **five points of contact** we can significantly improve our CCI surveys. The CCI surveys capture our customer's perception of 4/5 touch points associated with work that requires a technician dispatch. An analysis of these touch points manifests a direct relationship between the number of interactions customers have with Verizon employees and the overall satisfaction rating they give.

**Note:**

In New England, contact points 2-4 are handled by the field technicians while points 1 & 5 are handled elsewhere.

1. **Call ahead to the customer.** This will ensure that the customer is kept informed, unnecessary dispatches are kept at a minimum. The field technician will identify a CBR # specified on the service order or maintenance ticket requiring contact upon dispatch.
2. **Visit the customer upon arrival.** Identify yourself as a Verizon Technician, inform the customer of your visit, review the service order or maintenance ticket and explain any charges that may occur during your visit.
3. **Keep the customer informed throughout the service call.** Advise the customer if you are required to leave the area for any reason. Give the customer a status of their request every 90 minutes where applicable.
4. **At the completion of service request,** explain to the customer the actions taken to complete the service request, charges when they apply and provide a Work Completion Authorization/Completion Acknowledgement form. All service requests require the Technician to provide a Work Completion Brochure also known as the Leave Behind Card to the customer. This brochure must be filled out completely by the Technician. Thank the customer and ask, "Is there anything else I could do for you".
5. **Technician Call Back** will provide a courtesy call to the customer to ensure the customer was satisfied with the service request. This call will be made within a 24-hour period of service completion.

**Note:** If the customer is not at the premise at the time of dispatch, contact the customer at the CBR#.

### Code of Business Conduct

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Employees are responsible for dealing with our customers, suppliers, competitors and all other business partners with **integrity** and proper **consideration** for their interests as a requirement of the Verizon Code of Business Conduct.

# Safety

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## Introduction

Verizon and its employees are committed to providing a safe and healthful work environment in order to minimize the risk of work related injuries and illnesses. We conduct our business in a manner designed to protect the safety and health of not only our employees and our customers, but also the public and the environment. The promotion of safety and the occupational health is an integral part of Verizon's culture and is fundamental to the attainment of our Corporate Vision and Values.

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## Safety Responsibilities

All employees should regard safety as a **personal value** and be accountable for understanding and implementing the safety and occupational health requirements of his or her job. All employees have an individual responsibility to:

- **Perform** all work operations in accordance with applicable safety, occupational health, and environmental regulations, policies and procedures.
- **Maintain** a safe and healthy work environment.
- Immediately correct and/or report to your supervisor all unsafe conditions, work related injuries and illnesses, and motor vehicle incidents.
- **Know the hazards** of materials and equipment you work with and follow specified precautions and procedures.
- **Properly** use all safety equipment and inspect hand/power tools for defects. Tool Inspection Checklist form 20-1567 may be used as a guide.
- **Remind** co-workers who may overlook a safety procedure.
- **Request** assistance or safety equipment when necessary.
- Company Vehicles should be **inspected** in accordance with Verizon Corporate Policy/Practices, State and Federal Regulations for defects. Motor Vehicle Checklist form 20-1565 and DVIR 20-1653 may be used as a guide.
- **Notify** your Supervisor if there is any question regarding your physical ability to work safely.

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## Safety, Continued

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**Vehicle Use** We must follow all **laws, regulations and company policies and practices** regarding vehicle operation and traffic safety. We must drive company vehicles defensively and wear seat belts at all times. Verizon Corporate policy prohibits the use of hand held wireless phones while the employee is driving a vehicle in the conduct of company business. We may operate a vehicle only if we have a valid driver's license for the class of vehicle we are driving along with documented driver training for the type of vehicle we are using. We must report suspension or loss of the license promptly to our manager.

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**Verizon Safety, Health and Environment Vision Statement** All Verizon employees **understand** and accept **accountability** for their health, safe work processes and regulatory compliance.

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**Verizon Safety Creed** The demands of the service or urgency of the job are **never** so great that we cannot take time to perform our work safely.

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**Code of Business Conduct** The health and safety of all employees, business partners and other visitors are company priorities. Good health and safety practices help us do our jobs without putting others or ourselves at unnecessary risk. As Verizon employees, we are committed to following all appropriate health and safety practices, including related laws, regulations and company policies.

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## Safety, Continued

**Safety Hotline** Verizon maintains a 24-hour Safety, DOT & Environment Hotline **1-800-386-9639**. The following are voice prompts you will hear:

Prompt	Description						
1	To report fatalities and serious occupational injuries, illness and motor vehicle accidents.						
2	To report and/or request <ul style="list-style-type: none"> <li>• An emergency, incident or spill</li> <li>• Hazardous material exposure</li> <li>• Material safety data sheet</li> <li>• Hazardous waste pick-up</li> <li>• Cleanout of contaminated manholes</li> </ul>						
3	Department of Transportation Information <table border="1" style="margin-left: 20px;"> <tr> <td><b>1</b></td> <td><b>NY, New England, New Jersey</b></td> </tr> <tr> <td><b>2</b></td> <td><b>All other States</b></td> </tr> <tr> <td><b>3</b></td> <td><b>DOT policy, eWeb tools, Waivers</b></td> </tr> </table>	<b>1</b>	<b>NY, New England, New Jersey</b>	<b>2</b>	<b>All other States</b>	<b>3</b>	<b>DOT policy, eWeb tools, Waivers</b>
<b>1</b>	<b>NY, New England, New Jersey</b>						
<b>2</b>	<b>All other States</b>						
<b>3</b>	<b>DOT policy, eWeb tools, Waivers</b>						
4	Recycling Information						
5	To speak with a Safety or Environmental Manager						
6	To order videos on safety or environmental topics						

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## Quality Assurance

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### Quality

The quality of every job is important to ensure the customer has “**Best in Class**” service. It is the responsibility of all of us to ensure that every service call has a quality inspection. A quality inspection also known as T-Zone inspection will apply to all service requests. The Technician will perform the following:

- **Visually** inspect the Network from serving pole to each pole on either side. Detect open terminals, drop clearances and open cable.
- **Inspect** the Drop Service Wire and Network Interface at the customer premise.
- **Ensure** all grounding is properly installed and identified.

The Technician will upgrade the Drop Service Wire and Network Interface when applicable. All minor quality defects will be logged on an Upkeep memorandum (3722-19 form.) if it cannot be cared for at the time of dispatch. All major quality defects will be referred to the Field Supervisor. Supervisor shall be notified immediately when open plant has been identified and this defect will be cared for immediately.

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### Local Procedures

Adhere to local procedures prescribed by the Supervisor when determining if defects are to be addressed at the time of dispatch. If the Supervisors determine that minor defects will not be cared for at the time of dispatch, all defects will be noted on an Upkeep Memorandum (3722-19 form).

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### T-Zone Inspection

When performing your T-Zone inspection adhere to all Verizon safety practices. Inspect Verizon facilities within your immediate work area. The following shall be inspected during T-Zone review.

1. Inspect the serving pole from top to bottom and cable spans extending from through bolt to through bolt.
2. Look for defects that may later prove to affect service or may lead to a safety hazard.
3. Conduct a line of sight inspection of adjacent equipment and facilities for defects that may affect service or potential safety hazard.

Follow local procedures prescribed by your Supervisor when determining if defects are to be repaired

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## Quality Assurance, Continued

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### Quality checklist

The following checklist is provided to guide the field technician during quality performance.

#### Terminal Activity

- Brush out foreign matter.
- Replace missing terminal covers.
- Secure loose wirework.
- Check bond connections for proper torque.
- Place term-seals on all threaded lugs.
- Place base sealant, if required (pea gravel or foam).
- Seal all openings with the appropriate sealant.
- Ensure correct wire termination.
- Check for routing of jumper wire.
- Ensure proper type of protection.
- Replace defective terminal blocks.

#### Drop Activity

- Replace spliced/twist drops.
- Ensure proper use of hardware for attachments.
- Ensure drop is free of interference from trees, building, or other objects.
- Check for proper clearances.

#### Protector Activity

- Brush out foreign matter.
  - Ensure proper protection.
  - Place term-seals.
  - Seal all openings with appropriate sealant.
  - Ensure correct wire termination.
  - Ensure proper installation.
  - Ensure correct bond, ground, and caution tag.
  - Ensure correct gauge of ground wire.
  - Place NIJ/NID on all protector replacements.
  - Perform noise and transmission tests, on trouble reporting noise or transmission problems, Came Clear, Repeats, and service order activity installing new service on line additions.
  - Perform MLT Completion Test on installation and repair request.
  - Tag all Special Circuits as required.
  - Tag all Wholesale Loops as required.
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# FiOS 13 Point Checklist

The following checklist is provided to guide the field technician during a premise installation.

13-Point Tech Checklist Service Order Review				
	Customer TN:			
	Customer CKID:			
	Customer Street Address:			
	Customer City:			
	Customer State:			
	Order Type: <input type="checkbox"/> Voice <input type="checkbox"/> Data <input type="checkbox"/> Video			
	Master Order Number (MON):			
	Technician First Name:			
	Technician Last Name:			
	Technician's Supervisor Name:			
	Area Manager's Name			
	Reviewer Last Name:			
	Review Date (mm/dd/yy):			
<b>GENERAL</b>	<b>Must be observed on all Service Orders</b>	<b>OK</b>	<b>DEV</b>	<b>N/A</b>
	Verified optical light levels are within specified threshold at the ONT and/or verified LEDs are in normal, working state			
	Verified ONT is ground to a low resistance MGN			
<b>VOICE</b>	<b>Must be observed on all Service Orders containing a Voice element</b>	<b>OK</b>	<b>DEV</b>	<b>N/A</b>
	Checked dial tone at all jacks after install (confirmed working jacks with customer prior to start of job)			
	Verified alarm systems are working after install			
	Reviewed value added services and calling features			
<b>DATA</b>	<b>Must be observed on all Service Orders containing a Data element</b>	<b>OK</b>	<b>DEV</b>	<b>N/A</b>
	Ensured Customer understands how to connect wirelessly to the FiOS router.			
	Ensured Customer's PC is configured with Tech Wizard and speed tested using <i>speedtest.verizon.net</i>			
	Reviewed value added services and calling features			
<b>VIDEO</b>	<b>Must be observed on all Service Orders containing a Video element</b>	<b>OK</b>	<b>DEV</b>	<b>N/A</b>
	Confirmed Sunrise smart test has passed at all Set Top Boxes			
	Confirmed STB MoCA diagnostic screen			
	- Throughput measurements are 180 or above			
	- All STB devices are shown as part of the MoCA network			
	Advised the customer that the video service requires a router compatible with the FiOS service and that changing or removing the router may affect the video service.			
Allowed Customer to Test Drive FiOS TV. Including: Interactive Programming/Media Guide, PPV and VOD channels and self-help option, and Widgets.				
Demonstrated Home Media DVR, if applicable				
Ensured all FiOS remote controls are configured				
<b>REGIONAL</b>	<b>Optional - For those regions requiring additional quality checkpoints</b>	<b>OK</b>	<b>DEV</b>	<b>N/A</b>
	Was the correct ONT (external or JI-ONT) used?			
	Was the prior video provider's service wire properly terminated (capped) and grounded?			
	Did the technician verify the presence of electrical wiring/equipment prior to drilling?			

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## Glossary

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**Demarcation Point** The DP is the location, established by Verizon, to which Verizon is responsible for installing and maintaining Network Service, and may be evidenced by a NID. The location of the DP will be beyond the protector on the customer's side and will be dependant upon physical layout of the particular premises. It will be extended past the point of facilities entrance (protector) only as far as necessary to provide customer access. This point is where network access recurring charges and Verizon's responsibility stop, and beyond which customer responsibility begins. Facilities on Verizon's side of the DP are regulated; those on the customer's side of the DP are non-regulated.

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**Network Interface Device (NID)** Verizon provided and maintained interface terminating the telecommunications network. Located at a point determined by Verizon. The NID is a FCC Part 68-registered jack from which IW may be disconnected from the regulated Verizon network.

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**Network Interface** A registration jack that is located at the Demarcation Point appropriate for the type of premises and service/customer. Certain existing Network Interfaces may not be able to meet the requirements to be classified as a Network Interface since they may not be at the correct Demarcation Point.

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**Network Terminating Wire** That portion of wire that extends from a Protector or inside distribution terminal to the Demarcation Point. It is a segment of the Central Office loop and is not considered to be inside wire.

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**Protector** A device designed for the grounding of network facilities to protect against hazardous voltages and harm to the customer and/or network. The protector, which is part of Verizon's network, is installed and maintained by Verizon. It shall not be accessed, modified, or disturbed in any way by the building owner, property owner, or customer.

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## Glossary, Continued

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<b>Minimum Point of Entry</b>	A point within twelve inches of the protector, or where there is no protector, within twelve inches of where the wiring enters the building or closest practicable point from where the network facilities enter the building.
<b>Point of Entry</b>	The first practical point where the Network Terminating Wire or Service Wire enters or could enter a building or house.
<b>Inside Wire</b>	All wire, connecting blocks, and materials associated with Inside Wire located on the customer's side of the Demarcation Point. IW may be installed, rearranged and maintained by the customer, Verizon, or by others. Verizon offers installation and maintenance of IW only on a non-regulated basis. IW maintenance plans may be obtained from Verizon at a fixed monthly rate.
<b>Simple Inside Wire</b>	Simple inside wire, or standard inside wire, is all wiring on the customer's side of the demarcation point that serve 1- and 2-line, non-key, non-PBX type service.
<b>Complex IW</b>	All wiring other than simple or standard inside wire.
<b>Intra System Wire</b>	All wire and jacks on the customer's side of any common equipment, which connects station components to each other.
<b>Fire Retardant Wire</b>	Fire Retardant Cable (Teflon) is low-smoke, flame resistant, sheathed cable for use as network terminating or inside wire in air return plenums and other air handling areas. The cable is available for use in those instances where conduit is unavailable, or where the customer would like to avoid conduit but must conform to national and local electric code standards.

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## Glossary, Continued

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**Wire Standards** Wire shall be of a gauge no smaller than 24AWG; it shall be flexible annealed copper or its equivalent; it shall contain a minimum of 2 conductors, each insulated by semi-rigid polyvinyl chloride or its equivalent and should be constructed in a twisted pair configuration.

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**Customer Premise** All space in the same building in which a customer has the right of occupancy to the exclusion of others or shares the right of occupancy with others. All space in different buildings on continuous property provided solely one subscriber occupies such buildings. Foyers, hallways and other space provided for the common use of all occupants of a building are considered the premises of the operator of the building.

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**Single Unit Premise** Describes a premise, such as a single-family house or business, designed for occupancy by a single customer. Also referred to by the terms Single-Tenant or Single Dwelling premise.

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**Multi Unit Premise** A single structure containing multiple, customer occupied units, i.e., apartment buildings, nursing homes and such premises as shopping centers, and office buildings.

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**Campus** Describes a premise consisting of multiple buildings or structures physically separated from one another, within the same parcel of land or property. There are two (2) types of campuses:  
**Single-Tenant Campus:** A campus where all buildings and units are occupied by the same tenant throughout the campus  
**Multi-Tenant Campus:** A campus occupied by multiple and distinct tenants who subscribe for Verizon service independently.

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**Standard Jacks** Jacks that are placed on the customer's side of the Demarcation Point on a Time & Materials basis. The jack designation usually begins with the prefix "JJ."

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## Glossary, Continued

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<b>Registration Jacks</b>	Jacks that are placed at the Demarcation Point and are used to terminate a Verizon access line. The jack designation usually begins with the prefix "RJ."
<b>Service Wire</b>	That portion of wire extending from an outside terminal to a Protector or DP.
<b>Customer Premise Equipment (CPE)</b>	Applies to the telephone sets, automatic dialers, speakerphones or other devices that comprise the communications equipment located in the customer's premises.
<b>Customer Rights - I/W</b>	Customers may install wiring on the customer's side of the demarcation point and may remove, reconfigure, or rearrange existing company installed and customer-owned deregulated inside wiring on the customer's side of the demarcation point.
<b>Entrance Bridge</b>	A wire junction device into which a customer's simple inside wire is terminated that contains up to four connection points. The EB also contains a cord with a modular plug on the end, which is used as an entrance plug to connect the customer's wire to the NI or modular jack. Once installed, or if requested separately for existing service, an EB is considered part of the inside wiring.
<b>House &amp; Riser Cable</b>	Also known as Intra-building Network Cable (INC). Used to distribute regulated network access facilities to various locations within property owned by one individual, corporation or partnership. In an existing typical multi-tenant, high-rise building, INC includes the House Cable to the Riser Closet from the building entrance.
<b>Smart Jack</b>	A Smart Jack is a specialized piece of equipment that allows remote loop-back testing to isolate troubles. The Smart Jack is located at the DP. The Smart Jack can be integrated into the housing that holds the HTU-R (copper), integrated into the NIU at the multiplexer (fiber), or separate RJ48. Additionally, any plant beyond the Smart Jack at the DP is considered non-regulated plant.

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## Wholesale Services

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<b>CLEC</b>	Competitive Local Exchange Carrier is a company that provides dial tone service to business and residential customers.
<b>Resale</b>	Verizon provides all facilities (loops) & switching features to the CLEC. The end-user's entire service is simply resold to the CLEC at a discounted rate. The CLEC is the end-user's interface for service, billing and maintenance. Verizon performs all service/maintenance for the CLEC.
<b>UNE - P</b>	The CLEC signs a commercial agreement with Verizon, leases individual elements of the Verizon network. Verizon re-bundles these elements at a negotiated rate. Verizon provides dial-tone, loop, switch features and maintenance to the CLEC. The CLEC is the end-user's interface for service, billing and maintenance.
<b>New Unbundled Loops</b>	CLEC leases a new unbundled loop from Verizon. Verizon connects the loop to the CLEC equipment at the Verizon central office collocation. CLEC provides dial-tone, TN, and all features including DSL. Verizon provides the loop and loop maintenance to the CLEC. The CLEC is the end-user's interface for service, billing and maintenance.
<b>Local Number Portability</b>	CLEC ports existing telephone number and owns the number once ported. The number is no longer in the Verizon network. Calls to the end-user's existing TN are routed to CLEC switch. The TN rides unbundled loop or CLEC provided facilities. CLEC is the SPOC (single point of contact) for all issues related to a ported number. Neustar (vendor) maintains TN records via NPAC database (Number Portability Administration Center).
<b>Wireless Local Number Portability (WLNP)</b>	<b>Wireless Local Number Portability (WLNP)</b> allows <i>individual</i> wireless TNs in cities included in the top 100 Metropolitan Service Areas (MSAs) to Port In or Port Out from Verizon switches.

## Wholesale Services, Continued

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**Loop Sharing** DLEC leases the HI-Frequency bandwidth of a Verizon Retail Voice loop. Verizon provides end-user with voice service and features. DLEC provides end-user with xDSL service and features. Voice and DLEC xDSL ride the same Verizon loop facility to the end-user via a splitter in Verizon's CO. Voice CLEC or Verizon is end-user contact for all voice issues. DLEC is end-user contact for all xDSL issues.

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**Wholesale Advantage Inside Wire Plan- WA IW** An optional service Verizon provides to Competitive Local Exchange Carriers (CLEC) who have contracted with Verizon to provide work beyond the Network Interface Device/Demarcation Point (NID/DP).

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## FTTP Components

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### Optical Network Terminal (ONT)

A Single interface for voice, data and video services delivered via the FTTP network. A **single family unit (SFU) ONT** comes equipped with:

**VOICE**-two to eight standard voice ports.

**DATA** - a single or double 10/100 Ethernet interface (RJ45) for high-speed internet access.

**MoCA** – a diplexer/triplexer (splitter) that allows the combining of signals at different frequency ranges on to a single coaxial medium.

**Note:** For Data, the technician must chose either Ethernet or MoCA, both interfaces can not used simultaneously.

**VIDEO** - a single standard coaxial F-connector for video service.

A **multiple dwelling unit (MDU) ONT** serves multiple living units and is equipped with:

**VOICE** – twenty-four standard voice ports.

**DATA** – eight to sixteen high-speed, bidirectional data lines service through Ethernet (10/100 Base-T) or VDSL modules

**VIDEO** - one standard coaxial video interface that can serve 12 living units.

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### Fiber Distribution Terminal (FDT)

Network equipment required to terminate distribution fibers /drops to each dwelling unit.

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### Fiber Jumper/ Fiber Drop

Fiber cable placed from the FDT (fiber distribution terminal) to the ONT (optical network terminal) for network connection.

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### Fiber Entrance Cable

Fiber cable placed into the MDU (multiple dwelling unit) building.

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### Fiber Distribution Hub (FDH)

Network equipment required to house passive components and to terminate distribution cables.

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## FTTP Components, Continued

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<b>MoCA NID</b>	<p>The MoCA Network Interface Device (NID) is a diplexer (splitter) that allows the combining of signals at different frequency ranges on to a single coaxial medium (Ex. MoCA and broadcast video). The MoCA NID serves two purposes:</p> <ul style="list-style-type: none"><li>• Allows Verizon MoCA to share an in-home coaxial network with a non-satellite video service provider</li><li>• Allows MoCA signal to bypass in-line amplifier</li></ul>
<b>Video Signaling Bridge</b>	<p>Network equipment required for select video services, it is placed only with service activation.</p>
<b>Optical Power Supply Unit</b>	<p>Power supply that converts AC power to DC power required for the FTTP equipment.</p>
<b>Integrated Power Supply Unit (IPSU)</b>	<p>A primary component in the JI-ONT. The IPSU consist of the Battery Back-up Unit (BBU) and the ONT Power Supply Unit (OPSU) in a single prewired Housing.</p>
<b>Broadband Home Router (BHR)</b>	<p>Provided by Verizon to interconnect a PC or home LAN to the high-speed data service. The BHR will support data rates requirements of 100 Mbps downstream and 30 Mbps upstream.</p>
<b>Battery Backup Unit (BBU)</b>	<p>Provides backup power for the FTTP equipment in the event of a commercial power failure or other loss of AC power.</p>
<b>Centralized Structure Wiring Cabinet (CSWC)</b>	<p>A single interconnection point where all home wiring for voice, data and video services originate within the dwelling unit and which is interconnected to the ONT.</p>
<b>Radio Interference Suppressor (RFI)</b>	<p>The TSI A-150 RFI Filter provides 57dB of attenuation for RF ranging from AM to Ham radios.</p>

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# FiOS Enablers

## Just-Inside Optical Network Terminal (JI-ONT)

The Just-Inside Optical Network Terminal (JI-ONT) was introduced to reduce installation time in the field associated with ONT activation. It is not a new ONT, but rather a new power supply and slack storage unit that facilitates indoor ONT applications. The JI-ONT provides technicians a more efficient ONT mounting solution.

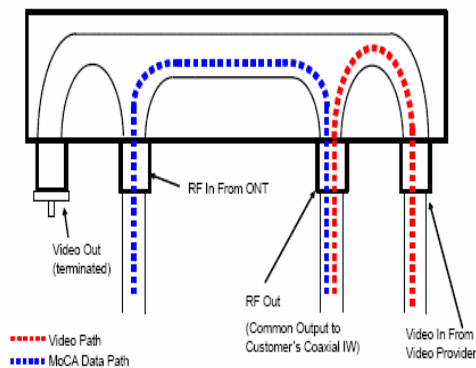
## Tech Wizard

Tech Wizard was created to automate the task associated with configuring and optimizing the customer's computer during a FiOS installation or maintenance job

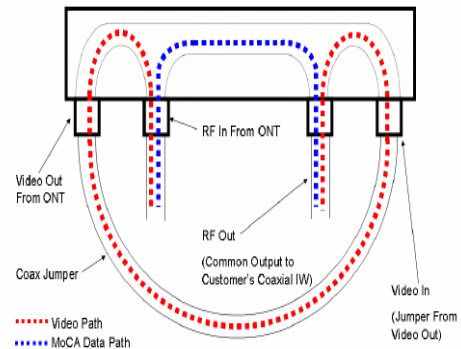
## Multimedia Over Coax Alliance (MoCA)

Multimedia over Coax Alliance is a newly developed protocol which allows high speed data to share coaxial cable with broadcast video signals. It is not, however, a new technology for Verizon. MoCA has been used for the LAN communications on the Set-top Boxes (STB) (Ex. Interactive Programming Guides (IPG), Video on Demand (VoD))

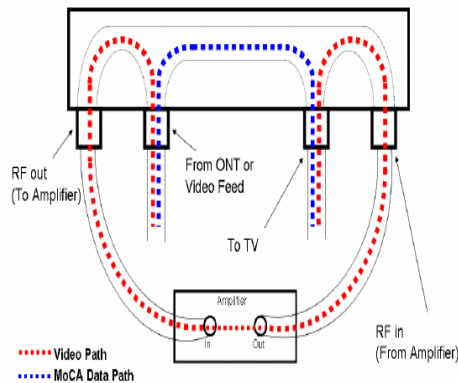
### Sharing In-Home Coaxial Cable



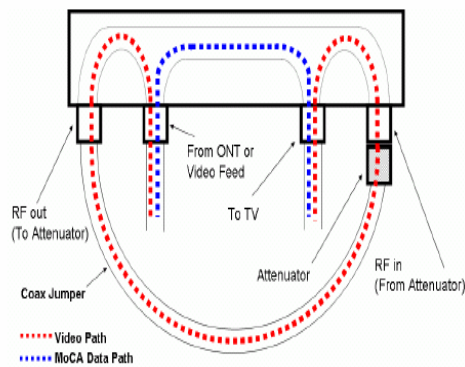
### Rewire MoCA NID for FiOS Video



### Bypassing an In-line Amplifier



### Bypassing an In-line Attenuator



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## FiOS Enablers, Continued

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**CM750 Sunrise Meter** To provide quality video service, the technician must use the CM-750 video meter to test the RF signals.

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**RF Levels** The following RF video level specifications are provided by VTO for the ONT and STB locations. The levels are also the specifications used to set up the pass/fail tests for the Sunrise CM-750.

Below are the acceptable RF Level:

**ONT**

Modulation Type	Minimum	Maximum
<b>Analog</b>	+14 dBmV	+35 dBmV
<b>Digital</b>	+7 dBmV	+35 dBmV
<b>QPSK (OOB) All Digital Areas</b>	+5 dBmV	+35 dBmV
<b>QPSK (OOB) Analog / Digital Areas</b>	+4 dBmV	+29 dBmV
<b>Notes:</b> <ul style="list-style-type: none"> <li>• Technician must verify the analog, digital, and QPSK signal levels relative to each other (e.g., -6 dBc for 256-QAM).</li> <li>• Maximum level was increased to incorporate MDU levels.</li> <li>• QPSK (OOB) in all digital areas will be equal to +/- 2 dB to the nearest QAM Ch e.g. Ch 5 QPSK (OOB) in analog / digital areas will still be 8 dB +/- 2 dB compared to the nearest analog channel</li> </ul>		

**Video Outlet**

Modulation Type	Minimum	Maximum
<b>Analog</b>	0 dBmV	+13 dBmV
<b>Digital</b>	-6 dBmV	+13 dBmV
<b>QPSK (OOB) All Digital Areas</b>	-10 dBmV	+13 dBmV
<b>QPSK (OOB) Analog / Digital Areas</b>	- 10 dBmV	+ 7 dBmV

*Continued on next page*

## FiOS Enablers, Continued

### RF Levels (continued)

CNR/MER/  
BER Levels

Modulation Type	CNR	MER	BER – PRE	BER – POST
Analog* ONT/STB	46 / 46 dB	N/A	N/A	N/A
Digital ** ONT/STB	N/A	32 dB	0.0 E-0 / 0.0 E-0	0.0 E-0 / 0.0 E-0
<ul style="list-style-type: none"> <li>• Sunrise CM750 Information: <ul style="list-style-type: none"> <li>* Analog signal level must be &gt; 10 dBmV to measure CNR</li> <li>** Digital signal level requirement to measure MER and BER <ul style="list-style-type: none"> <li>Hardware version V B3: &gt; -6 dBmV (Meters manufactured before 3/2007)</li> <li>Hardware version V B4: &gt; -12 dBmV (Meters manufactured after 3/2007)</li> </ul> </li> </ul> </li> <li>• MER is distance sensitive, which means that the MER will decrease as the distance of the PON increases. Therefore, the technician should correlate MER readings with distance.</li> </ul>				

*Continued on next page*

## FiOS Video, Continued

### RF Levels (continued)

#### Router Settings/MoCA Speeds

STB – Valid IP Address Range		
Router Type	Start IP Address	End IP Address
D-Link	192.168.0.50	192.168.0.89
Actiontec	192.168.1.100	192.168.1.150

1. Technician should verify STB has valid IP address on the on “Upstream Modem” choice of the diagnostic screen (OSD)
2. If STB does not get an IP address from router, then technician should check the following:
  - a. Verify home media architecture (HMA) on the OSD. This screen shows all the STB that are part of MoCA network.
    - i. Check MoCA connections of existing MoCA network.
    - ii. Make sure MoCA network does not exceed maximum allowable number of STB.
  - b. Verify whether MAC filtering is enabled/disabled. If enabled, then add STB to MAC filtering table.
3. On all video jobs, the STB must be connected to either an Actiontec or D-Link with the latest Verizon-approved firmware version
4. Technician must verify that all MoCA speeds exceed 180 Mbps
  - a. Typically, speeds should easily exceed 200 Mbps for short cable runs

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## FiOS Enhanced Functionalities

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### **FSC Voice Portal**

The FSC Voice Portal (**1-888-411-1110**) is available to  
After completing the authentication process, the technician can access the features via the Main menu. He/she will select the type of work function they need assistance with:

- 1) ONT Commands (Press 1)
  - 2) Video Commands (Press 2)
  - 3) Facility Information and Commands (Press 3)
  - 4) Desktop Commands (Press 4)
  - 5) More Options (Press 5)
  - 6) Enhanced Features (Press 6)
- 

### **Tech UpSell**

An enhanced functionality in vMobile & iVAPP to allow the FiOS Field Technician to make direct changes against pending FiOS Video orders, to efficiently satisfy customer-initiated changes, real-time, when dispatched on the order Due Date. In addition, field technicians will be able to offer the same enhancements to the customer, when dispatched on a FiOS Video maintenance ticket

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### **iVAPP Buddy**

The iVAPP Buddy application is a self-service tool for field technicians. It is based on the iVAPP Workflow framework and can be accessed through either vMobile (East and West) or the Voice Portal. iVAPP Buddy will assist in resolve facility, Voice, Data, and Video issues more efficiently.

The following services are available in iVAPP Buddy:

1. Feeder Fiber and Distribution Hub Details
  2. Drop Terminal and Drop Fiber Details
  3. Drop Terminal Port Changes
  4. splitter Port Changes
-

## FiOS Billing

- Video Outlets** Verizon FiOS TV customers may be provided a maximum of three free pre-wired Video outlets at the time of installation. There is no charge to the customer for correcting or replacing any pre-wired outlet or wiring. The back office billing system will automatically bill the customer depending on the work order closeout screen data entered by the technician and the number of set top boxes installed.
- Additional new outlets wired by the technician will be automatically billed at a rate of \$54.99 each.
  - Adding a set top box to pre-wired outlets after the third outlet will be automatically billed to the customer at a rate of \$19.99 each.
  - There is no charge for connecting an analog TV to a pre-wired Video outlet.
  - There is no charge to the customer for correcting or replacing any pre-wired outlet or wiring

## Subsequent Billing

**Subsequent Dispatch Billing - BHR** The following DATA USOCs are to be used for subsequent dispatches for BHRs:

USOC	Description	Non-Recurring Charge (NRC)
Y4332	Consumer Subsequent Dispatch If Verizon dispatches a technician to an existing FiOS Internet customer premises at customer's request -- on a <u>non-repair issue</u> , this includes the movement of the BHR	\$79.99
Y4333	Consumer Flat Rate PC/Laptop Configuration	\$89.99

**Subsequent Dispatch Billing - STB** The following USOC are to be used for subsequent dispatches for Set Top Boxes:

USOC	Description	Non-Recurring Charge (NRC)
Y6518	Set Top Box (STB) Install/Retrieval – by Technician. This includes moving a STB	\$79.99

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## Demarcation Point Locations

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### Single Unit Premise

If protector is in place, DP is within 12" of protector.

If no protector is in place, DP is within 12" of terminal, which may be located inside or outside the premise. If no terminal is in place, DP is within 12" from where the wire enters the building, or as close as practical to there.

#### Residential Single Unit Premise:

A **combination unit**, which contains both a network interface device (NID) and protector, is installed on the outside of the customer's premises and is commonly recognized as the demarcation point (DP). The preferred location for placing, moving, or upgrading a combination unit on a single family house is on the outside, near the electrical service, and at an easily accessible location.

If only a protector exists at the customer's Premises, upgrade the protector with an outside **combination unit**. Any protectors or network interfaces found inside should be replaced with an outdoor combination unit.

This applies when a premise is physically designed to be occupied by a single tenant (Single Unit Premise structure), however it is occupied by more than one subscriber with multiple phone lines.

---

### Multi Unit Premise

#### Single Story Building:

If protector is in place, DP is within 12" of protector.

If no protector is in place, DP is within 12" of terminal, which may be located inside or outside the premise. If no terminal is in place, DP is within 12" from where the wire enters the building, or as close as practical to there.

#### Multi Story Building:

On new or substantially renovated multi-tenant buildings, Verizon engineers will submit written notification to the property owner to provide the option of a single point of interconnection for the entire building, at the minimum point of entry.

#### **Absent this option letter:**

In multi-story multi-unit buildings ***without Verizon riser cable***, If protector is in place, DP is within 12" of protector. If no protector is in place, DP is within 12" of terminal, which may be located inside or outside the building. If no terminal is in place, DP is within 12" from where the wire enters the building, or as close as practical to there.

In multi-story multi-unit buildings ***with Verizon riser cable***, the DP is within 12" from the riser terminal closest to the customer. If there is no riser terminal on the same floor where the customer is located, use the closest riser terminal at a different floor.

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## Demarcation Point Locations, Continued

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### **Townhouses, Duplex, Row houses and Horizontal Condos**

Although by definition these could be considered Multi Unit premises, they are treated differently for Demarcation purposes. The reason is that these are attached horizontal units sharing common walls, however each unit sits on a separate individually owned parcel of land.

We treat each unit as a Single Unit premise. Each unit gets a NID. Refer to "Single Unit Premise".

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### **Strip Malls**

On new or substantially renovated strip malls, Verizon engineers will submit written notification to the property owner to provide the option of a single point of interconnection for the entire building, at the minimum point of entry.

Absent this option letter, DP is within 12" from where the wire enters each unit, or as close as practical to there.

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### **Single-Tenant Campus**

There will be one (1) DP for the entire single-tenant campus. Generally located at the main building of the campus, or the building closest to the public road. If protector is in place, DP is within 12" of the protector. If no protector is in place, DP is within 12" of terminal, which may be located inside or outside the building. If no terminal is in place, DP is within 12" from where the wire enters the building, or as close as practical to that point.

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### **Multi-Tenant Campus**

On new or substantially renovated multi-tenant campuses, Verizon engineers will submit written notification to the property owner to provide the option of a single point of interconnection for the entire campus, at the minimum point of entry of the campus.

Absent this option letter, there will be one (1) DP for each building of the multi-tenant campus. The following apply to the DP at each building:

If protector is in place, DP is within 12" of the protector. If no protector is in place, DP is within 12" of terminal, which may be located inside or outside the building. If no terminal is in place, DP is within 12" from where the wire enters the building, or as close as practical to there.

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## Demarcation Point Locations, Continued

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**Military Base** Treat as Single-Tenant Campus.

---

**Marinas** There will be one (1) DP for the entire marina. The DP will be at the end of the regulated cable, at the minimum point of entry of the property as determined by Verizon (e.g. terminal attached to Marina management building). Although some marinas have slips whose occupants subscribe to permanent service, these nevertheless will be treated as transient with a single DP for the marina, not a DP for each customer's unit.

Deregulated T&M charges apply when asked to extend wire to individual Dock or slip.

**Note 1:** The USOC for a deregulated weatherproof jack is JJK5C.

**Note 2:** Verizon - NE Wire Maintenance Plans are **not available** to Marina customers. Maintenance work is performed at T&M rates.

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**Trailers** Permanent Trailers:

Each trailer lot will have its own DP. Place the NID at the customer provided pad on the side of each trailer.

Transient/Seasonal Trailers & Campgrounds:

There will be one (1) DP for the entire park. The DP will be at the end of the regulated cable, at the minimum point of entry of the property as determined by Verizon (e.g. terminal attached to management building).

Deregulated T&M charges apply when asked to extend wire to individual units.

**Note 1:** A trailer is defined as any type of moveable or portable living unit, such recreational vehicle or construction trailer as opposed to one that is established permanent residence.

**Note 2:** Verizon - NE Wire Maintenance Plans are **not available** to customers with trailer service. Maintenance work is performed at T&M rates.

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## Demarcation Points for New England

**Demarcation Point Location** The following tables reflect the appropriate placement of demarcation points in MA for service other than FiOS.

Building			Campus		Enclosed Mall	Strip Mall	Military Base
Single Tenant	Multi-Tenant Single Story	Multi-Tenant With Riser	Single Tenant	Multi Tenant	Closest Riser Terminal	MPOE of Each Unit	MPOE of Base
MPOE of Building	MPOE of Building - Apt, Dorm, Nursing Home.  (Does not apply to strip malls)	Closest Riser Terminal	MPOE of Property	MPOE of each Building			

Cellular		Condominiums **	Marina	Campground / Trailer Parks	Competitive Access Provider
Single Customer	Multiple Customers	<u>High Rise Building: Same as Multi-Tenant with Riser Ground Level Bldg (Horizontal): Place DP to each Living Unit.</u>	<i>MPOE of Marina</i>	MPOE of Campground or Transient Park  DP at each Trailer Lot or Pad (Mobile Homes)	MPOE of CAP
MPOE of Customer	MPOE of Property or Cell Site				

**Note:** As previously described in this book **MPOE** is a point within twelve inches of the protector, or where there is no protector, within twelve inches of where the wiring enters the building or closest practical point from where the network facilities enter the building.

## FiOS Demarcation Points

**FiOS/FTTP** The following applies for FiOS / FTTP services.

### **FiOS Voice & Internet DP**

In most cases, the Voice/Data DP will be the ONT, whether it is an SFU ONT or an MDU ONT. The following chart summarizes the location of the FTTP Voice/Data DP for every scenario:

### **FTTP Voice/Data DP Location Chart**

Single Family	MDU		
	SFU ONT Design	MDU ONT Design	
		NY and FL	All other States
DP is SFU ONT *Includes Townhouses	DP is SFU ONT	<ul style="list-style-type: none"> <li>Voice DP is first Voice jack in LU</li> <li>Data DP is first Data jack in LU</li> </ul>	DP is MDU ONT

### **Single Family and Townhouses**

Each single-family structure will have an SFU ONT at the MPOE of the structure, either outside or inside. For example, a single-family Estate house in a suburban subdivision will typically have an SFU ONT mounted in the exterior wall. The SFU ONT is the Voice/Data DP. ***Townhouses are included in this category. Each townhouse will have an SFU ONT, and the SFU ONT is the Voice/Data DP.***

## FiOS Demarcation Points, Continued

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### Multi Dwelling MDU (Multiple Dwelling Units / Multi-Tenant Buildings):

#### SFU ONT Architecture

*The SFU ONT design for MDUs consist of Verizon placing fiber all the way into the LU, and terminating the fiber at an SFU ONT inside the LU. For all SFU ONT designed MDUs, the Voice/Data DP is the SFU ONT at each LU.*

#### MDU ONT Architecture

The second FTTP design choice for MDUs is the MDU ONT design, which consists of placing an ONT typically larger in size than the SFU ONT, located at a common space shared between several LUs, such as a riser closet at the floor, as opposed to inside any particular LU. For MDU ONT deployments apply the following DP guidelines:

#### States of NY, CT, and FL

The tariffs of these States require the DP for voice to be at the customer's premise. Therefore, when an MDU ONT design is used in these States, the DP for Voice/Data is the 1<sup>st</sup> jack inside the LU (1<sup>st</sup> voice jack for voice, and 1<sup>st</sup> data jack for data).

#### All other States in Verizon footprint

The Voice/Data DP is the MDU ONT.

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## FiOS Video Demarcation

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**Video Demarcation** Due to Federal Regulations, Video will be treated separately from Voice/Data for DP purposes. The following chart summarizes the location of the FTTP Video DP for every scenario:

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Single Family	MDU	
	SFU ONT Design	MDU ONT Design
DP is SFU ONT	DP is SFU ONT	DP is 1 <sup>st</sup> Coax Wall Jack in LU*  *If end of the coax at the LU is not accessible, then the Video DP is the next accessible point away from the LU

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**SFU ONT Architecture** For locations where an SFU ONT is placed at each living unit (single-family or MDU properties), the Video DP is the SFU ONT.

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**MDU ONT Architecture** For MDU locations where an MDU ONT is used, the Video DP is the end of the coaxial cable at the LU. The coaxial cable coming from the MDU ONT will typically be terminated at a coax wall jack located in close proximity to where the coax cable enters the premise. The standard coax wall jack consists of 2 female F connectors, 1 on each side of the wall plate. This first coax wall jack at the LU is the Video DP, and must be located as close as practically possible to where the coaxial cable enters the LU (minimum point of entry to the LU). The customer or property owner is responsible to provide to Verizon access to our facilities in concealed spaces such as behind a wall, ceiling, molding, etc. If the end of the coaxial cable at the minimum point of entry to the LU is not accessible, the Video DP will be the next accessible point in the coax away from the LU, that is, towards the MDU ONT.

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## Station Protection Grounding & Bonding

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**Ground (Earth)** A conducting path, whether intentional or accidental, between an electric circuit or equipment and earth or some conducting body that serves in place of the earth.

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**Bonding** The permanent connecting of metallic parts to provide an electrically conductive path.

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**Grounding & Bonding** The best and most preferred ground source-for station protection is the power ground. For new service, always make every effort to run the new drop parallel to power for close access to the ground source. This will minimize for long grounding or bonding conductors.

Use of a ground source other than power will still require that you bond that ground source to the power ground.

**Do Not** splice station ground wire, bond to the Cable TV ground wire or to the gas or fuel tank pipes

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**Ground Wire Requirements** # 10 ground wire will be used for 6 or less lines.  
# 6 ground wire will be used for 7 or more lines.

**Note:** All circuits (lines) require station protection.

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## Station Protection Grounding & Bonding, Continued

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### Selection of Grounds

The station protector must always be connected to an approved ground via the shortest and straightest practical route.

- The first choice for a station protection ground is the nearest accessible location at the power service entrance on the power grounding system.
- Building Steel.
- Metallic Cold Water Pipe that is bonded to power ground.

If the metallic cold water pipe is to be used as part of a bonding run, verify that the pipe is continuously metallic between the two points of bonding. Insulated sections of pipe should be bypassed with a No. 6 copper ground wire.

**Note:** A ground tag **must** be placed on all ground wire terminations to warn against disturbance of clamps or wire.

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### Notification Procedure

Where a Power ground is not present or inaccessible, the customer should be informed immediately and requested to notify Verizon when a ground has been provided.

Contact your Supervisor and follow local procedures for completing the exchange of information with the customer.

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## Disposition Codes

### Disposition coding

Disposition codes are used to reflect the type trouble found on the Network circuit. The codes must be selected accurately. Field Reporting Codes (FRC) is the result of a selected Disposition Code. The FRC codes have been attached to ensure proper time-card administration.

Disp. Code	Description	Billable T&M	FRC
	<b>NID NTW NI</b>		
0340	RINGER ISOLATOR	N	68R
0341	SEPARATE NI ONLY	N	68R
0342	NTWK TERM WIRE	N	68R
0344	SHIELEDDED	N	68R
0345	TEFLON	N	68R
0346	½ RINGER	N	68R
0347	MTU	N	68R
	<b>PROTECTION</b>		
0371	PROTECTOR	N	2R
0372	GROUND WIRE	N	2R
0373	RADIO SUPP AT PRO/COMBO UNIT	N	2R
0373	RADIO SUPP AT NI	N	68R
0376	NCTE DIGITAL	N	858R
0376	NCTE ANALOG	N	958R
	<b>DROP SERVICE WIRE</b>		
0381	AERIAL PAIRED	N	2R
0382	AERIAL MULTIPLE	N	2R
0383	BURIED PAIRED	N	45R
0384	BURIED MULTIPLE	N	45R
0385	BLOCK/BRIDLE	N	2R
	<b>TRBL NOT REPAIRED</b>		
0401	PR TRANS F1 AER	N	2R
0401	PR TRANS F1 BUR	N	45R
0401	PR TRANS F1 UG	N	5R
0402	BRG TAP REM AER	N	2R
0402	BRG TAP REM BUR	N	45R
0402	BRG TAP REM UG	N	5R
0403	PAIR TRANSPOSED AER	N	2R
0403	PAIR TRANSPOSED BUR	N	45R
0403	PAIR TRANSPOSED UG	N	5R
0404	INTRA/BLDG CABLE	N	62R
0406	PR TRANS F2 F3 FZ AER	N	2R
0406	PR TRANS F2 F3 FZ BUR	N	45R
0406	PR TRANS F2 F3 FZ UG	N	5R
0407	WIRE CABLE OPEN	N	2R
0408	RURAL WIRE	N	3R

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## Disposition Codes, Continued

Disp. Code	Description	Billable T&M	FRC
	<b>CABLE</b>		
0409	URBAN WIRE	N	3R
0411	SHEATH AER	N	2R
0411	SHEATH BUR	N	45R
0411	SHEATH UG	N	5R
0412	COIL/CASE/STUB AER	N	2R
0412	COIL/CASE/STUB BUR	N	45R
0412	COIL/CASE/STUB/UG	N	5R
0413	END CAP AER	N	2R
0413	END CAP BUR	N	45R
0413	END CAP UG	N	5R
0414	STUB AER	N	2R
0414	STUB BUR	N	45R
0414	STUB UG	N	5R
0415	VENT AER	N	2R
0415	VENT BUR	N	45R
0415	VENT UG	N	5R
0416	CONDUCTOR AER	N	2R
0416	CONDUCTOR BUR	N	45R
0416	CONDUCTOR UG	N	5R
0417	CAPACITOR/CASE AER	N	2R
0417	CAPACITOR/CASE BUR	N	45R
0417	CAPACITOR/CASE UG	N	5R
0418	PRECONNECT CBL AER	N	2R
0418	PRECONNECT CBL BUR	N	45R
0418	PRECONNECT CBL UG	N	5R
0419	CONDUCTOR REV AER	N	2R
0419	CONDUCTOR REV BUR	N	45R
0419	CONDUCTOR REV UG	N	5R
	<b>CLOSURE SPL CASE</b>		
0420	CLSR NO CAP FIBR AER	N	82R
0420	CLSR NO CAP FIBR BUR	N	845R
0420	CLSR NO CAP FIBR UG	N	85R
0421	TEMP CLOSE AER	N	2R
0421	TEMP CLOSE BUR	N	45R
0421	TEMP CLOSE UG	N	5R
0422	LEAD SLEEVE AER	N	2R
0422	LEAD SLEEVE BUR	N	45R
0422	LEAD SLEEVE UG	N	5R

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## Disposition Codes, Continued

Disp. Code	Description	Billable T&M	FRC
0423	ENCAPSULATED AER	N	2R
0423	ENCAPSULATED BUR	N	45R
0423	ENCAPSULATED UG	N	5R
0424	SAC/RAI/AER	N	2R
0424	SAC/RAI BUR	N	45R
0424	SAC/RAI UG	N	5R
0425	CABLE VAULT	N	5R
0426	NON-MET SPL CLO AER	N	2R
0426	NON-MET SPL CLO BUR	N	45R
0426	NON-MET SPL CLO UG	N	5R
0427	NON-MET SHEATH AER	N	2R
0427	NON-MET SHEATH BUR	N	45R
0427	NON-MET SHEATH UG	N	5R
0428	TEMP CLOSE FIBER AER	N	82R
0428	TEMP CLOSE FIBER BUR	N	845R
0428	TEMP CLOSE FIBER UG	N	85R
0429	CLO ENCAP FIBER AER	N	82R
0429	CLO ENCAP FIBER BUR	N	845R
0429	CLO ENCAP FIBER UG	N	85R
	<b>TERMINAL</b>		
0431	READY ACC AER	N	2R
0432	READY ACC BUR	N	45R
0433	SEALED DIST AER	N	2R
0434	WIRE TERMINAL	N	2R
0435	OUT OF SIGHT AER	N	2R
0435	OUT OF SIGHT BUR	N	45R
0435	OUT OF SIGHT UG	N	5R
0436	XBOX/SAC BOX	N	2R
0437	ACC CONT POINT AER	N	2R
0437	ACC CONT POINT BUR	N	45R
0437	ACC CONT POINT UG	N	5R
0438	INSUL DISPLACEM AER	N	2R
0438	INSUL DISPLACEM BUR	N	45R
0438	INSULT DISPLACEM UG	N	5R
0439	NON-STRIP XBOX AER	N	2R
0439	NON-STRIP XBOX BUR	N	45R
0439	NON-STRIP XBOX UG	N	5R
0439	NON-STRIP INTRA BLDG	N	62R

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## Disposition Codes, Continued

Disp. Code	Description	Billable T&M	FRC
	<b>FIBER OPTIC CABLE</b>		
0441	SHEATH FIBER AER	N	82R
0441	SHEATH FIBER BUR	N	845R
0441	SHEATH FIBER UG	N	85R
0442	FIBER RIBBON AER	N	82R
0442	FIBER RIBBON BUR	N	845R
0442	FIBER RIBBON UG	N	85R
0443	STRANDED FIBER AER	N	82R
0443	STRANDED FIBER BUR	N	845R
0443	STRANDED FIBER UG	N	85R
0444	AER FIBER CURB	N	82R
0445	BUR FIBER CURB	N	845R
0446	LOOSE TUBE AER	N	82R
0446	LOOSE TUBE BUR	N	845R
0446	LOOSE TUBE UG	N	85R
0447	SHEATH METALLIC AER	N	82R
0447	SHEATH METALLIC BUR	N	845R
0447	SHEATH METALLIC UG	N	85R
	<b>FIBER TERMINATION</b>		
0451	PIGTAIL AER	N	82R
0451	PIGTAIL BUR	N	845R
0451	PIGTAIL UG	N	85R
0452	PATCH CORD AER	N	82R
0452	PATCH CORD BUR	N	845R
0452	PATCH CORD UG	N	85R
0453	CONNECTOR AER	N	82R
0453	CONNECTOR BUR	N	845R
0453	CONNECTOR UG	N	85R
0454	COUPLER AER	N	82R
0454	COUPLER BUR	N	845R
0454	COUPLER UG	N	85R
0455	ATTENUATOR AER	N	82R
0455	ATTENUATOR BUR	N	845R
0455	ATTENUATOR UG	N	85R
0456	CABINET AER	N	82R
0456	CABINET BUR	N	845R
0456	CABINET UG	N	85R
0457	POWER	N	758R
0458	MULTIPLEXER	N	758R
0459	REPEATER	N	758R

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## Disposition Codes, Continued

Disp. Code	Description	Billable T&M	FRC
	<b>FIBER SPLICE</b>		
0461	CONNECTORIZED AER	N	82R
0461	CONNECTORIZED BUR	N	845R
0461	CONNECTORIZED UG	N	85R
0462	FUSION AER	N	82R
0462	FUSION BUR	N	845R
0462	FUSION UG	N	85R
0463	MECHANICAL AER	N	82R
0463	MECHANICLA BUR	N	845R
0463	MECHANICAL UG	N	85R
0464	SPLICE TRAY AER	N	82R
0464	SPLICE TRAY BUR	N	845R
0464	SPLICE TRAY UG	N	85R
	<b>AML/CM8/</b>		
0471	AML REPAIRED	N	457R
0472	AML REPLACED	N	457R
0473	AML CO EQUIP	N	457R
0474	CM8 CHANNEL CARD	N	457R
0475	CM8 POWER CARD	N	457R
0476	CM8 RINGER CARD	N	457R
0477	CM8 CO EQUIP	N	457R
	<b>SLC/ELECTRONIC</b>		
0480	DIGITAL AML FIELD	N	257R
0481	RPTER FAILURE	N	257R
0482	TUBE FAILURE	N	257R
0483	COMMON CKT PACK	N	257R
0484	CHANNEL UNIT EXCH	N	257R
0485	CHAN UNIT SPECIAL	N	257R
0486	ELECTRONIC	N	257R
0487	ALT POWER SOURCE	N	257R
0488	WIRING	N	257R
0489	DIGITAL AML CO	N	257R
	<b>MISCELLANEOUS</b>		
0491	POLE/ GUY/ ANCHOR	N	1R
0492	TRENCH	N	45R
0497	SQUIRREL GUARD	N	2R

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## Disposition Codes, Continued

Disp. Code	Description	Billable T&M	FRC
	<b>DISP OUT AND FOUND OK (CRAS)</b>		
0911	OPEN OUT	N	548R
0912	GROUND	N	548R
0913	SHORT	N	548R
0914	FOREIGN VOLTAGE	N	548R
0915	MULTI TROUBLE	N	548R
0916	NOISY/UNBAL	N	548R
0917	TEST OK	N	548R
	<b>DISP OUT AND FOUND OK (NON-CRAS)</b>		
0931	OPEN OUT	N	548R
0932	GROUND	N	548R
0933	SHORT	N	548R
0934	FOREIGN VOLTAGE	N	548R
0935	MULTI TRBL IND	N	548R
0936	NOISY/UNBAL	N	548R
0937	TEST OK	N	548R
0941	FOUND OK NO ACCESS	N	548R
	<b>DE-REGULATED PREM WIRE/CPE EQUIPMENT</b>		
1201	NAS-OK TO NID- MTC- TRBL TO SUB	N	126R
1207	UNE CLEC ACC NEEDED-SRV TERM	Y	148H
1208	CLEC ACC NEEDED-SRV TERM	N	126R
1209	RESALE NO ACCESS TO NID	Y	126R
1212	DSLPS – ACCESS DEVICE	N	112R
1213	DSLPS – PC SOFTWARE	N	113R
1215	T&M TO CPE/NI YES	Y	148H
1216	DSLPS CONTRACT CPE REPAIRED	Y	111R
1217	DSLPS CONTRACT NO ACCESS	Y	111R
1218	DSLPS CONTRACT NO TRBLE FOUND	Y	111R
1225	NAS-OK TO NID-MTC-TRBL TO SUB	Y	126R
1226	WHOLESALE ADVANTAGE T&M I/W JACK REPAIR	Y	148H
1227	WHOLESALE ADVANTAGE NO CHARGE 30 DAY WARRANTY	N	148H
1230	EXPEDITE OK TO NID	Y	148H
1231	RESALE OK TO NID	Y	148H
1233	WHOLESALE NO ACCES TO NID	Y	148H
1236	WHOLESALE MISDIRECT TRBL IN CO EXCEPT UNE PLATFORM	Y	148H
1239	WHOLESALE OK TO NID	Y	148H
1260	EXPEDITE MISDIRECT –TRBL IN CO	Y	148H
1265	MTC/NO CHARGE	N	148H

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## Disposition Codes, Continued

Disp. Code	Description	Billable T&M	FRC
	<b>DE-REGULATED PREM WIRE/CPE EQUIPMENT (cont'd)</b>		
1271	MO MTC/TIME CHARGED/ NO REPAIR	Y	148H
1272	NO MTC/T&M	Y	148H
1281	ECM/SET YES	N	148H
1282	ECM/SET NO	N	148H
1291	NO/NI MTC NO CHARGE	N	148H
1292	NO NI-NO MTC-NO CHARGE	N	148H
1298	NO ACCESSTO NID	N	126R

## Special Service Disposition Codes

### Special Service disposition and FRC codes

The following Disposition and FRC codes are associated with Special Service request. **Only 09, 12 and 13 codes differ from the previous tables.**

Disp. Code	Description	Billable T&M	FRC
	<b>DISP OUT AND FOUND OK (CRAS)</b>		
0911	OPEN OUT	N	548R
0912	GROUND	N	548R
0913	SHORT	N	548R
0914	FOREIGN VOLTAGE	N	548R
0915	MULTI TROUBLE	N	548R
0916	NOISY/UNBAL	N	548R
0917	TEST OK	N	548R
	<b>DISP OUT AND FOUND OK (NON-CRAS)</b>		
0931	OPEN OUT	N	548R
0932	GROUND	N	548R
0933	SHORT	N	548R
0934	FOREIGN VOLTAGE	N	548R
0935	MULTI TRBL IND	N	548R
0936	NOISY/UNBAL	N	548R
0937	TEST OK	N	548R
0941	FOUND OK NO ACCESS	N	548R

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## Special Service Disposition Codes, Continued

Disp. Code	Description	Billable T&M	FRC
	<b>DE-REGULATED PREM WIRE/CPE EQUIPMENT</b>		
1201	NAS-OK TO NID- MTC- TRBL TO SUB	N	126R
1207	UNE CLEC ACC NEEDED-SRV TERM	Y	138H
1212	DSLPS – ACCESS DEVICE	N	112R
1213	DSLPS – PC SOFTWARE	N	113R
1215	T&M TO CPE/NI YES	Y	138H
1216	DSLPS CONTRACT CPE REPAIRED	N	111R
1217	DSLPS CONTRACT NO ACCESS	N	111R
1218	DSLPS CONTRACT NO TRBLE FOUND	N	111R
1220	CUSTOMER DEMANDS DISP NTF	Y	138H
1221	DISP FOR TEST ASSIST NO CHARGE	N	138H
1225	NAS-OK TO NID-MTC-TRBL TO SUB	Y	126R
1233	WHOLESALE NO ACCES TO NID	Y	128H
1236	WHOLESALE MISDIRECT TRBL IN CO EXCEPT UNE PLATFORMS	Y	138H
1239	WHOLESALE OK TO NID	Y	138H
1240	DEMAND DISPATCH ORVENDOR MEET	N	138H
1265	MTC/NO CHARGE	N	138H
1271	MO MTC/TIME CHARGED/ NO REPAIR	Y	138H
1272	NO MTC/T&M	Y	138H
1281	ECM/SET YES	N	138H
1282	ECM/SET NO	N	138H
1291	NO/NI MTC NO CHARGE	N	138H
1292	NO/NI/NO/MTC NO CHARGE	N	138H
1293	I/W JACK WARRANTY	N	138H
	<b>PREMISE WIRE</b>		
1335	MSC FCC-1 IEC	Y	138H
1336	DDS NCTE/CSU/DSU	Y	548R
1337	MUX/UDVMS	Y	548R
1338	TST/DIG/SVC/NO EQ	N	548M
1397	COLOC	N	138H

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## AIR PRESSURE/PPM Disposition Codes

Disp. Code	Description	Billable T&M	FRC
	<b>PPM/AIR</b>		
2010	TRANSDUCER AER	N	2R
2010	TRANSDUCER BUR	N	45R
2010	TRANSDUCER UG	N	5R
2011	CONTRACTOR AER	N	2R
2011	CONTRACTOR BUR	N	45R
2011	CONTRACTOR UG	N	5R
2012	PRESSURE PLUG AER	N	2R
2012	PRESSURE PLUG BUR	N	45R
2112	PRESSURE PLUG UG	N	5R
2013	AIR FLOW SENSOR AER	N	2R
2013	AIR FLOW SENSOR BUR	N	45R
2013	AIR FLOW SENSOR UG	N	5R
2014	PIPE AER	N	2R
2014	PIPE BUR	N	45R
2014	PIPE UG	N	5R
2015	MANIFOLD/TUBING AER	N	2R
2015	MANIFOLD/TUBING BUR	N	45R
2015	MANIFOLD/TUBING UG	N	5R
2016	DRYERS AER	N	2R
2016	DRYERS BUR	N	45R
2016	DRYERS UG	N	5R
2017	AIR BOTTLES AER	N	2R
2017	AIR BOTTLES BUR	N	45R
2017	AIR BOTTLES UG	N	5R
2018	FITTINGS AER	N	2R
2018	FITTINGS BUR	N	45R
2018	FITTINGS UG	N	5R

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## FiOS Disposition Codes

The following codes will be used when dispatched on a Fiber Optic Service Order or Maintenance Ticket. The FRC codes have been attached to ensure proper time-card administration.

<b>Disp. Code</b>	<b>Description</b>	<b>Billable T&amp;M</b>	<b>FRC</b>
	<b>BATTERY BACKUP UNIT/POWER SUPPLY</b>		
0361	BBU/PS - BUR	N	5845R
0361	BBU/PS - AER - REPAIR	N	4257R
0361	BBU/PS - AER - REMOVE	N	4257X
0361	BBU/PS - AER - REPLACE	N	4257M
0361	BBU/PS - BLDG	N	5862R
	<b>FiOS PROTECTION</b>		
0372	FIBER GRND/BOND-BUR	N	5845R
0372	FIBER GRND/BOND-AER	N	182R
0372	FIBER GRND/BOND - BLDG	N	5865R
	<b>FiOS FIBER DROP SERVICE WIRE</b>		
0380	FIBER DROP - BUR	N	5845R
0388	FIBER DROP - AER	N	182R
0389	FIBER DROP - BLDG	N	5862R
	<b>FiOS NETWORK INTERFACE</b>		
0392	FiOS NETWORK TERM WIRE-MDU ONLY	N	5862R
0398	FiOS NID ONT - BUR	N	5845R
0398	FiOS NID ONT - AER	N	4257R
	<b>FACILITY CHANGE- FIBER STRAND SWAP</b>		
0401	FAC CHG- FIBER STRAND SWAP - AER	N	182R
0401	FAC CHG- FIBER STRAND SWAP -BUR	N	5845R
0401	FAC CHG- FIBER STRAND SWAP BLDG	N	5862R
0430	FDT - AER	N	182R
0430	FDT- BUR	N	5845R
0430	FDT - BLDG	N	5862R
	<b>FiOS HUB</b>		
0436	FIBER JUMPER NOT RUN-FDH-BUR	N	5845R
0436	FIBER JUMPER NOT RUN-FDH-AER	N	182R
0436	FIBER JUMPER NOT RUN-FDH-INTRA BDLG	N	5862R
	<b>FIBER CABLE</b>		
0444	FIBER CABLE - AER	N	182R
0445	FIBER CABLE - BUR	N	5845R
0448	FIBER CABLE - BLDG	N	5862R

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## FiOS Disposition Codes, Continued

Disp. Code	Description	Billable T&M	FRC
<b>FiOS FIBER TERMINATION</b>			
0452	FiOS PATCH CORD-AER	N	182R
0452	FiOS PATCH CORD-BUR	N	5845R
0452	FiOS PATCH CORD-UG	N	185R
0456	FiOS FIBER CAB-AER	N	182R
0456	FiOS FIBER CAB-BUR	N	5845R
0456	FiOS FIBER CAB-UG	N	185R
<b>FiOS MISCELLANEOUS</b>			
0491	POLE/GUY/ANCHOR	N	2R
0492	TRENCH	N	45R
0497	SQUIRREL GUARD	N	2R
<b>FiOS LINE TRANSLATION</b>			
0513	LINE EQUIPMENT	N	377R
0517	PON CARD	N	377R
0525	CO-TRANSLATION ERROR	N	377R
0526	CO-TRANSLATION DOC ERROR	N	377R
0533	FIBER JUMPER	N	377R
0559	SOFTSWITCH	N	377R
0569	WAVE DIVISION MULTIPLEXER (WDM/COMBINER CARD)	N	377R
<b>CUSTOMER ERROR OR MISUSE</b>			
0666	NO ACCESS/UNABLE TO RENEGOTIAITE	N	126R
0715	CANCEL PER CUS REQUEST	N	548R
<b>FiOS FOUND OK</b>			
0937	FiOS TEST OK	N	548R
<b>FiOS CPE/IW</b>			
1201	NO ACCESS/OK TO ONT MAINTENANCE PLAN	N	126R
1203	FiOS CPE DATA SERVICES (ROUTER/NETWORKING DEVICE)	Y	211H
1204	FiOS CPE DATA SERVICES- REPAIR WARRANTY (ROUTER/NETWORKING DEVICE REPLACED WITHIN 12 MONTHS OF INSTALL)	N	211H
1205	CPE – ONT BATTERY REPLACEMENT- WARRANTY	N	4257M
1206	CPE – ONT BATTERY REPLACEMENT(AFTER WARRANTY)	Y	4257M
1208	CLEC ACCESS NEEDED TO SERV TERM	N	126R
1209	RESALE - NO ACCESS TO ONT	N	126R
1210	FiOS CPE SET TBL	Y	9H
1216	FiOS DSLPS CONTACT CPE REPAIRED	Y	9H
1217	FiOS DSLPS CONTRACT NO ACCESS	Y	148H

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## FiOS Disposition Codes, Continued

Disp Code	Description	T&M Billable	FRC
<b>FiOS CPE/IW (cont'd)</b>			
1218	FiOS DSLPS CONTRACT NO TRBL FOUND	Y	9H
1225	FiOS NAS – OK ONT – NO MTC	Y	148H
1230	FiOS EXPEDITE OK TO ONT (WHOLESALE)	Y	148H
1230	FiOS EXPEDITE OK TO ONT (SVGAL)	Y	148H
1231	FiOS RESALE OK TO TO ONT (RESALE)	Y	148H
1233	FiOS NO ACCESS TO ONT (SVGAL)	Y	148H
1235	FiOS TIME CHARGE OCC DISP	Y	148H
1236	FiOS MISDIRECT TRBL IN CO (WHOLESALE)	Y	148H
1239	FiOS WHOLESALE OK TO ONT	Y	148H
1239	FiOS WHOLESALE OK TO ONT (SVGAL)	Y	148H
1260	FiOS EXPEDITE MISDIRECT TROUBLE IN CO (WHOLESALE)	Y	148H
1260	FiOS EXPEDITE MISDIRECT TROUBLE IN CO (SVGAL)	Y	148H
1294	FiOS TIME CHARGE VMS	Y	148H
1330	FiOS T&M for REPAIRS	Y	9H
1340	FiOS NO CHARGE HAS MTC	N	9H
<b>COAX WIRING</b>			
4210	COAX CONNECTOR	Y	221H
4211	COAX CONNECTOR – WARRANTY	N	221H
4230	COAX WIRING	Y	221H
4231	COAX WIRING – WARRANTY	N	221H
4260	COAX SPLITTER	Y	221H
4261	COAX SPLITTER- WARRANTY	N	221H
<b>SET TOP BOX /REMOTES/CABLECARDS</b>			
4250	REMOTES HANDHELD	Y	538H
4251	REMOTES HANDHELD- WARRANTY	N	538H
4270	STB (ALL MODELS AND FEATURES)	Y	538H
4271	STANDARD DEFINITION STB (IE 2500) WARRANTY	N	538H
4272	HIGH DEF STB W DIGITAL VIDEO RECORDER – (IE MODEL 6400)- WARRANTY	N	538H
4273	HIGH DEF STB (IE MODEL 6200)- WARRANTY	N	538H
4274	STANDARD DEF W DIGITAL VIDEO RECORDER (IE Model 2700) – WARRANTY	N	538H
4275	ST STANDARD DEF W DIGITAL VIDEO RECORDER (IE Model 2700) – WARRANTY	N	538H
4276	DCT 700 MINI	N	538H
4284	CABLE CARD- WARRANTY	N	538H
4285	CABLE CARD – BILLING	Y	538H

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## FiOS Disposition Codes, Continued

Disp Code	Description	T&M Billable	FRC
	<b>VIDEO EQUIP/ELECTRONICS</b>		
4281	NETWORK INTERFACE MODULE (NIM)	N	221H
4283	CUSOMER ELECTRONICS (IE HIFI SYSTEM)	Y	221H
4291	ATTENUATOR	N	221H
4292	AMPLIFIER – BILLING	Y	221H
4293	AMPLIFIER – WARRANTY	N	221H
4294	ETHERNET SITCH – BILLING	Y	221H
4295	ETHERNET SWITCH – WARRANTY	N	221H

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## Cause Codes

### Cause Codes

The following table reflects cause codes and their respective definitions. BAU and FiOS will share the same cause codes and descriptions.

<b>Cause Code</b>	<b>Description</b>
	<b>TELEPHONE EMPLOYEE</b>
111	INSTALLATION TECHNICIAN
112	REPAIR TECHNICIAN-MAINTENANCE.
113	OSP TECHNICIAN – CXM
114	ASSIGNMENT
115	CENTRAL OFFICE TECHNICIAN
116	RCMAC
117	FULL BANK
118	PSCY
119	LOCKED BANK
	<b>LOCAL NUMBER PORTABILITY</b>
161	LNP- SERVICE ORDER ACTIVITY
162	LNP- DATABASE SIGNAL CONTROL POINT
163	LNP- SWITCH TRANSLATIONS
	<b>EQUIP VENDOR/CONTRACTOR</b>
216	COMPETITIVE LOCAL EXCHNAGE CARRIER (CLEC) INTER-EXCHANGE CARRIER ( IL)
221	CONTRATOR VERIZON
222	CONTRACTOR NON-VERIZON
223	VANDALISM
	<b>CUSTOMER ACTION</b>
231	OTHER COMMON CARRIER (OCC)
232	ERROR MISUSE
233	MALICIOUS DAMAGE
234	THEFT
235	EXPLOSIVES NOT REPAIRED
236	PEEL-BACK
237	GUNFIRE
238	MOTOR VEHICLE
239	LOCAL USE
	<b>OTHER UTILITIES</b>
241	GAS
242	ELECTRIC
243	CABLE TV
244	SEWER
245	WATER
246	INDEPENDENT TELCO
	<b>THIEVERY</b>
251	THIEF MORE THAN \$25
252	THIEF LESS THAN \$25
253	FRAUD
254	EQUIP STOLEN

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## Cause Codes, Continued

<b>Cause Code</b>	<b>Definition</b>
	<b>DEFECTIVE</b>
311	WORN
312	CORROSIVE
313	DIRT
314	LOCAL USE
315	LOCAL USE
316	LOCAL USE
317	DEFECTIVE
318	LOCAL USE
	<b>ADJUSTMENT</b>
321	LOOSE
322	OUT OF ADJUSTMENT
323	RE-INITIALIZED
324	LOCAL USE
Thru	
328	LOCAL USE
329	OFF NORMAL
	<b>WEATHER</b>
441	LIGHTNING
442	MOISTURE/RAIN
443	FLOOD
444	WIND
445	HURRICAN/TORNADO
446	SLEET/SNOW/ICE
	<b>OTHER</b>
551	FIRE
552	ANIMALS
553	POWER
554	TREES/BRUSH
555	CHEMICALS
	<b>NO TROUBLE FOUND – NTF</b>
600	NO TROUBLE FOUND
610	CAME CLEAR

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## Commonly Used USOC Codes

**USOC coding** The following table reflects the most commonly used Business As Usual (BAU) Universal Service Order Code's (USOC).

USOC	Description
1FR	UNLIMITED RESIDENCE
2FR	LIFELINE, UNLIMITED 2 PARTY LOCAL SERVICE
AFH	UNLIMITED – 2 <sup>nd</sup> LINE
AYK	ANONYMOUS CALL REJECTION WITHOUT CALLER ID
AYW	ANONYMOUS CALL REJECTION WITH CALLER ID
CFZ	CALL FORWARD DOES NOT ANSWER
DRS	DISTINCTIVE RING – 1 <sup>st</sup> NUMBER- RES
DRS2X	DISTINCTIVE RING - 2 <sup>nd</sup> NUMBER – RES.
ESM	CALL FORWARD VARIABLE
ESX	CALL WAITING
ESC	THREE WAY CALLING
EXH	OFF PREMISE EXTENSION
E5E	CALL FORWARD BUSY LINE/DON'T ANSWER (FIXED CALL FORWARDING)
GCZ	CALL FORWARD BUSY LINE
HAT	CALL TRACE
HBA	ENHANCED *69
HBQ	REPEAT DIAL BLOCK
HBS	*69 BLOCK
LFV	LIFELINE UNLIMITED
MBB	HOME VOICE MAIL
MCFI	DISTINCTIVE RING – TO CALL FORWARD MAIN NUMBER ONLY
N7PXA	CALL WAITING ID WITH NAME
N7PXB	CALLER ID WITH NAME & * 69
N7PXC	CALLER ID W/NAME AND REPEAT DIAL
N7PXD	CALLER ID W/NAME AND *69 AND REPEAT DIAL
N7PXE	CALLER ID W/*69
N7PXF	CALL WAITING ID W/ *69 AND REPEAT DIAL
NAL	CENTREX CALL BLOCKING
NMC	NO MAINTENANCE CONTRACT
NNK	CALLER ID W/NAME
NNW	CALLER ID MANAGER W/NAME
NN2	CENTREX CALLER ID W/NAME
NPU	NON PUBLISHED NUMBER
NSD	CALLER ID
NSQ	REPEAT DIAL
NSS	*69
NSY	CALL BLOCK
NWT	CALL WAITING ID W/NAME

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## Commonly used USOC Codes, Continued

<b>USOC</b>	<b>Description</b>
NW1	STANDARD NETWORK INTERFACE
NW2	NETWORK INTERFACE
N6W	CENTREX, CALL WAITING ID W/NAME
PGOxx	VERIZON FREEDOM PACKAGE
PGOR1	CALL MANAGER-CALL WAITING, CALL ID W/NAME, CALL FORWARD BUSY
PREM	PREMIS VISIT CHARGE
PROX	BLOCKS 1010XXX AND 10XXXX - TOLL RESTRICTION
RBVTX	BLOCKS VERIZON LONG DISTANCE
RCFVL	REMOTE CALL FORWARD
RCRJx	VERIZON FREEDOM DISCOUNT
RTVXK	900 BLOCK
SEQ1X	TELESURE MAINTENANCE PLAN
SEQ2X	TELESURE MAINTENANCE PLAN – NE
SKQ2X	TELESURE PLUS MAINTENANCE PLAN
SVC	SERVICE CHARGE
TBE C	NO COLLECT CALLS
UFI	ULTRA FORWARD – NE
VMH2A	VOICE MAIL W/CALL FORWARD/DON'T ANSWER
WHO	CALL INTERCEPT
WNBK	WINBACK ORDER
WA IW	WHOLESALE ADVANTAGE INSIDE WIRE

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## FiOS USOC Codes

### USOC codes

The following table describes the Universal Service Order Codes (USOC) associated with FiOS service request.

USOC	Description
1CRFG	SET TOP BOX INSTALLATION D-LINK
1CRFH	VIDEO ROUTER INSTALLATION (VIDEO INSTALLATION ONLY)D-LINK
1CRFR	FTAS INSTALLATION AND ACTIVATION – CONSUMER PREMISE
1CRFS	FTAS INSTALLTION AND ACTIVATION – BUSINESS PREMISE
AS3FP	ANALOG VIDEO
AS3FQ	DIGITAL VIDEO
BURY1	FICTITIOUS CSU (UTILIZED FOR FIOS BURIED DROP WORK)
FBAS	NON- AFFILIATED ISP
FEKM1	SET TOP BOX STANDARD RECEIVER - DA FOR MINI HEAD END – NO RETURN PATH – QUANTICO/FT BELVOIR
FEKM2	SET TOP BOX - HD RECEIVER - DB FOR MINI HEAD END. NO RETURN PATH - QUANTICO/FT BELVOIR
FEKM3	SET TOP BOX - HD / DVR RECEIVER (160 gig HD) - DC FOR MINI HEAD END. NO RETURN PATH - QUANTICO/FT BELVOIR
FEKM4	SET TOP BOX – STANDARD RECEIVER – DA
FEKM5	SET TOP BOX - STANDARD/DVR RECEIVER ( 80 gig HD)
FEKM6	SET TOP BOX - HD RECEIVER – DB
FEKM7	SET TOP BOX - HD / DVR RECEIVER (160 gig HD)- DC
FEKM8	SET TOP BOX - HD / DVR / MULITROOM (360 gig HD)
FEKMA	SELF INSTALL ORDER: QIP 2500 STANDARD DEF STB (SHE)
FEKMB	SELF INSTALL ORDER: QIP 6200 HIGH DEF STB (SHE)
FEKMC	SELF INSTALL ORDER: QIP 6416 HIGH DEF DVR (SHE)
FEKMD	SELF INSTALL ORDER: DCT 2500 STANDARD DEF (MHE)
FEKME	SELF INSTALL ORDER: DCT 6200 HIGH DEF STB (MHE)
FEKMF	SELF INSTALL ORDER: DCT 6416 HIGH DEF DVR (MHE)
FEKMG	SELF INSTALL ORDER: QIP 2708 STANDARD DEF DVR (SHE)
FEKMH	SELF INSTALL ORDER: DCT 700 STB (SHE)
FEKQ1	FTAS VDSL MODEM
FEKQ2	FTAS VDSL FILTER
FEKQ3	VIDEO CARD FOR TV
FEKQB	FTAS D-LINK HOME ROUTER (WIRED) BUSINESS
FEKQC	FBAS BHR PCMCIA WIRELESS CLASS G ADAPTER (ALSO SEE FEKXG)
FEKQD	FBAS BHR USB WIRELESS CLASS G ADAPTER (ALSO SEE FEKXJ)
FEKQE	FTAS D-LINK HOME ROUTER (WIRELESS) BUSINESS
FEKQG	PCMCIA WIRELESS CLASS G ADAPTER
FEKQJ	FTAS USB WIRELESS CLASS G ADAPTER
FEKQK	FTAS BROADBAND ROUTER 4-PORT WIRELESS – BUSINESS
FEKQL	FTAS BROADBAND ROUTER 8-PORTED WIRED- BUSINESS

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## FiOS USOC Codes, Continued

USOC	Description
FEKQM	FBAS BHR 4 PORT WIRELESS – BUSINESS
FEKQN	FBAS BHR 8 PORT WIRED – BUSINESS
FEKQO	FTAS BR PCMCIA WIRELESS CLASS G ADAPTER
FEKQP	FTAS BR USB WIRELESS CLASS G ADAPTER
FEKQV	FBAS BROADBAND HOME ROUTER - INTEGRATED VDSL MODEM
FEKQW	FTAS ADTRAN 2054 (4 PORT – WIRED)
FEKQX	FTAS ADTRAN 122r (24 PORT – WIRED)
FEKQY	FBAS VDSL MODEM ( MDU )
FEKQZ	FBAS VDSL FILER ( MDU )
FEKXA	INSIDE WIRE INSTALLATION PACKAGE
FEKXB	FBAS D-LINK WIRED 4 PORT ROUTER
FEKXD	FTAS INSIDE WIRE INSTALLATION PACKAGE
FEKXE	WIRELESS ROUTER
FEKXG	PCMCIA WIRELESS ADAPTER
FEKXJ	USB WIRELESS ADAPTER D-LINK
FEKXM	FBAS BHR – FIRST ROUTER – CONSUMER BHR
FEKXW	ADTRAN 2054 (4 PORT WIRED)
FEKXX	FBAS ADTRAN 122r (24 PORT – WIRED)
FEKXY	COAX OUTLET
FEKXZ	SET TOP BOX
FEKY2	CABLE CARD FOR SELF-INSTALL ORDER
FTAS	NON-AFFILIATED ISP
FTOAC	10/2 MBPS
FTOAD	10/2 MBPS – VDSL
FTOAU	5/2 CHANGING TO 10/2 MPS RES/BUS
FTOAV	10/2 MBPS – VDSL
FTOBC	5/2M
FTOBD	5/2M – VDSL
FTOBU	5/2 SERVICE ACTIVATION
FTOBV	5/2 MBPS – VDSL
FTOCC	15/2 M
FTOCD	15/2 VDSL
FTOCU	15/2 SERVICE ACTIVATION
FTOCV	15/2 – VDSL
FTODC	FTAS 30-5M
FTODD	FTAS 30-5M – VDSL
FTODU	30/5 SERVICE ACTIVATION
FTODV	FBAS 30 MBPS /5 MBPS - VDSL
FTOEC	5/5 SERVICE ACTIVATION
FTOED	5/5M – VDSL
FTOEU	5/5 SERVICE ACTIVATION

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## FiOS USOC Codes, Continued

USOC	Description
FTOEV	5/5 – VDSL
FTOOC	20/5 MBPS
FTOOD	20/5 MBPS – VDSL
FTOOU	15/2 CHNAGING TO 20/5 MPS RES/BUS
FTOOV	FBAS 20 MBPS /5 MBPS - VDSL
FTOPC	FTAS 35-10 MBPS
FTOPU	15/5 CHANGING TO 35/10 MPS BUS
FTOQC	FTAS 50-10 MBPS
FTOQU	30/5 CHANGING TO 50/10 MPS BUS
FTORC	FTAS 50-5 MBPS
FTORU	30/5 CHANGING TO 50/5 MPS RES
HRRVX	VIDEO CPE LABOR 30 MINUTE INCREMENTS D-LINK
LQMPB	ADDITIONAL PC CONFIGURATION INCLUDES JACKS- BUSINESS
LQMPR	ADDITIONAL PC CONFIGURATION INCLUDES JACKS - CONSUMER
NRFFA	SERVICE PROVIDER CHANGE
NRFFB	SPEED CHANGE CHARGE
NRFFC	SPEED CHANGE CHARGE
NRFFD	SOFTWARE CHANGE CHARGE
NRFFE	CONNECTIVITY CHANGE CHARGE
OTNX2	IDENTIFIED DSL ON A POTS LINE
RAJFS	SHORTFALL LIABILITY Liability
RAJFT	SHORTFALL PENALTY
RCR3x	FiOS FREEDOM BUNDLE
T4KBX	BUSINESS INSTALLATION
T4KRX	CONSUMER INSTALLATION
TM1FA	INSTALLATION T&M - INITIAL 60 MINUTE PERIOD
TM1FB	INSTALLATION T&M FOR ADDITIONAL 30 MINUTE INCREMENT
TM1FC	REPAIR T&M – INITIAL 60 MINUTE PERIOD
TM1FD	REPAIR T&M FOR ADDITIONAL 30 MINUTE INCREMENT
TM1FE	FBAS ADDITIONAL RJ45 MATERIAL CHARGE
TM1FM	FTAS INSTALLATION TIME - 30 MINUTE INCREMENT
TM1FQ	FTAS REPAIR TIME MATERIAL - 30 MINUTE INCREMENT
TUAFS	FTAS TERMINATION LIABILITY
TUAFT	FTAS TERMINATION LIABILITY
VT6FB	SUBSEQUENT HIGH TOUCH DISPATCH – BUSINESS
VT6FC	BUSINESS DATA CSU
VT6FN	STAND ALONE TRUCK-ROLL (AFTER INITIAL ONT ACTIVATION)
VT6FO	FTAS STAND ALONE TRUCK-ROLL
VT6FR	SUBSEQUENT HIGH TOUCH DISPATCH – CONSUMER
VT6FV	STAND ALONE TRUCK-ROLL – VIDEO FTTP D-LINK ROUTER
XREFA	FiOS TV BUNDLE TRACKING
XREFB	FiOS TV SET TOP BOX CHANGE
XREFC	WHOLESALE MIGRATION– INSTALL COPPER NID (FiOS to CLEC)

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## FiOS Field Identifiers (FIDs)

<b>FID</b>	<b>DESCRIPTION</b>
AON	ACTIVATE ONT (USED ON MDUs 1ST INSTALL )
COB	CONNECTED OPTICAL BURIED (NO WORK NECESSARY)
COD	CONNECTED OPTICAL DROP (NO WORK NECESSARY)
DOB	DISCONNECT OPTICAL BURIED
DOD	DISCONNECT OPTICAL DROP
E4V	EXISTING 4-PORT VATs TERMINAL
E6V	EXISTING 6-PORT VATs TERMINAL
E8V	EXISTING 8-PORT VATs TERMINAL
EDJ	EXISTING DATA JUMPER AT MDU TO THE PUNCH BLOCK
ELV	EXISTING DATA JUMPER AT MDU TO THE PUNCH BLOCK
EON	EXISTING OPTICAL NETWORK
EOX	EXISTING OPTICAL CROSS-CONNECT (X-CONNECT)
ETJ	EXISTING TELEPHONE JUMPER AT MDU TO THE PUNCH BLOCK
MNT	PLACE MULTI-UNIT ONT
P4V	PLACE 4-PORT VATs TERMINAL
P6V	PLACE 6- PORT VATs TERMINAL
P8V	PLACE 8- PORT VATs TERMINAL
PDJ	PLACE Data Jumper (MDU )
PIW	PLACE Inside Wire
PLV	PLACE 12- PORT VATs TERMINAL
POB	PLACE OPTICAL BURIED DROP
POD	PLACE OPTICAL AERIAL DROP
PON	PLACE OPTICAL NETWORK
POT	PLACE OPTICAL TEMPORARY
POX	PLACE OPTICAL CROSS-CONNECT (X-CONNECT)
PTJ	PLACE TELEPHONY JUMPER ( MDU )
PVJ	PLACE VIDEO JUMPER ( MDU )
ROX	REMOVE OPTICAL CROSS-CONNECT (X-CONNECT)
RVJ	REMOVE VIDEO JUMPER AT MDU TO THE PUNCH BLOCK
SNT	PLACE SINGLE FAMILY ONT
TIW	TERMINATE INSIDE WIRE
TOB	TERMINATE OPTICAL BURIED
TOD	TERMINATE OPTICAL DROP

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## Field Reporting Codes (FRCs)

### Installation FRC's

The following table list the commonly used field reporting codes associated with both BAU and FiOS installation orders.

Description	FRC
<b>WIRE WORK BEFORE DEMARCATION POINT</b>	
NTW SEPERATE NI	68M
PLACED PROTECTOR/GND/WR/COMBO	2C
BLOCK/BRIDLE	2C
RADIO SUPPRESSOR AT NI	68R
RADIO SUPPRESSOR AT PROTECTOR	2R
PLACED AERIAL DROP SERVICE WIRE	2C
PLACED BURIED DROP SERVICE WIRE	45C
PLACED COMBO UNIT AERIAL	2C
PLACED COMBO UNIT BURIED	45C
AERIAL CABLE WORK	2M
UNDERGROUND CABLE WORK	5M
BURIED CABLE WORK	45M
PAIR GAIN DIGITAL/ ELECTRONICS	257C
DSLPS INSTALL	111E
DSLPS REARRANGE	111M
NO ACCESS INSTALL	121E
FiOS PLACED SERVICE WIRE-FIBER DROP/ONT-AERIAL	182C
FiOS PLACED SEFVICE WIRE FIBER DROP/ONT BURIED	5845C
FiOS REATTACH/ SERICE WIRE FIBER DROP/ONT AERIAL	182M
FiOS REATTACH SERICE WIRE FIBER DROP/ONT BURIED	5845M
FiOS REMOVE/ SERICE WIRE FIBER DROP/ONT AERIAL	182M
FiOS REMOVE SERICE WIRE FIBER DROP/ONT BURIED	5845M
<b>WIRE WORK AFTER DEMARCATION POINT</b>	
BUSINESS INSTALL	38H
BUSINESS MOVE/REARRANGE	138H
BUSINESS REMOVAL	138H
RESIDENCE INSTALL	48N
RESIDENCE MOVE/REARRANGE	148H
RESIDENCE REMOVAL	68M
FiOS- WIRE-INSTALL-BUSINESS	9N
FiOS- WIRE MOVE/REARRENGE-BUSINESS	9H
FiOS- WIRE REMOVE – BUSINESS	9H
FiOS- INSIDE WIRE INSTALL RESIDENCE	9N
FiOS- INSIDE WIRE MOVE/REARRANGE-RESIDENCE	9H
FiOS- INSIDE WIRE REMOVE- RESIDENCE	68M
FiOS- DATA CPE, ROUTERS, LAN ADAPTORS	211N
FiOS- VIDEO COA WIRING, SPLITTERS, AMPS, VIDEO JACKS	221N

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## Time & Material Billable Inside Wire Charges

**T&M Charges** The following table will be used as a guide when billing charges are applicable (commonly used material is posted below).

<b>LABOR</b>	<b>FEE</b>
T&M Installation period 1 hour minimum (Res/Bus)	\$ 110.00 Res/\$120.00 Bus
T&M Installation additional 30 min. increments (Res/Bus)	\$46.00 Res/\$46.00 Bus
Fixed Fee Installation –first jack- Res only	\$110.00 (\$46.00 for add'l jack)
T&M Repair initial period 30 min. minimum (Res/Bus)	\$91.00 Res/\$91.00 Bus
T&M Repair additional 30 min. increments (Res/Bus)	\$46.00 Res/\$46.00 Bus
Tariff Billable Work-Outside Wire Moves – 30 min. increments	\$46.00 Res/\$46.00 Bus
<b>MATERIAL</b>	<b>FEE</b>
JJK1C, JJK4C	\$ 3.99
JJK1W, JJK4W (DBL PORT)	\$ 9.14
RJ31X (ALARM JACK)	\$ 16.00
UA7HF (2 PAIR)	\$ 3.99 per 25 ft. increment
UA7FH (25 PAIR)	\$ 14.28 per 25 ft increment
JJM1X (25 pair block de-tariff)	\$ 48.30
RJ21X (25 pair block tariff)	\$ 42.00

**Fixed Fee** Fixed Fee has become the standard offering to residential customers when quotes are asked during initial service request. This quote is a fixed price for the labor of installing standard, deregulated inside wire and jacks. Standard wiring for fixed fee purposes is defined as installing exposed wire in the most direct route available. The Fixed Fee narrative will be placed on the Service Order. Materials are **not** included and should be billed in addition to the Fixed Fee charge. The material charges must be added during the job closeout when IFAS scripts prompt to do so.

**Time/Description** The following table describes time to be charged when T&M is required.

<b>Time</b>	<b>Description</b>
Basic	Scheduled workday, scheduled hours.
Overtime	Scheduled workday, outside of scheduled hours.
Premium	Outside of scheduled workday, i.e., Saturday, Sunday, Holiday.

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## Inside Wire Material List

**I/W USOC and Pricing** The following table reflects De-Regulated Wire and associated pricing. Pricing is based on 25' increments.

<b>Wire</b>	<b>Description</b>	<b>Pricing</b>
UA7HF	2 Pair Station Wire	\$3.99
UA7FD	4 Pair D Station Wire	7.14
UA7F9	1 Pair Shielded Station Wire	7.59
UA7HG	3 Pair Station Wire	3.99
UA7H6	12 Pair Shielded Cable	27.60
UA7FE	6 Pair Station Cable	7.14
UA7FH	25 Pair Station Cable	14.28
UA7FJ	50 Pair Station Cable	25.92
UA7FK	75 Pair Station Cable	41.40
UA7FL	100 Pair Station Cable	45.54
UA7DM	25 Pair Connector Cable	15.87
UA7S6	50 Pair Connector Cable	30.36
UA7D8	75 Pair Connector Cable	45.54
UA7SX	100 Pair Connector Cable	60.72
TXW02	2 Pair Plenum Station Wire	11.42
TXW04	4 Pair Plenum Station Wire	12.90
TXW25	25 Pair Plenum Station Wire	68.52
TXW50	50 Pair Plenum Station Wire	67.20
TXW75	75 Pair Plenum Station Wire	113.16
TXWAX	100 Pair Plenum Station Wire	142.75

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## De-Regulated Jacks

### Jacks and Pricing

The following table reflects De-Regulated Jacks and associated pricing.

Jack	Description	Pricing
JJK1C	Miniature 6-position Jack – Flush	3.99
JJK4C	Two-line non-key Jack - surface or flush	3.99
JJM1X	Connection to off-premises stations (25 cap.) Jack	48.30
JJ33X	Multi-line Universal Data Jack – Wall	85.66
JJ34X	Multi-line Universal Data Jack – Rack	56.58
JJK1W	Miniature 6-position Jack – Wall	9.14
JJK4W	Two-line non-key Jack – Wall	9.14
JJK5C	Weatherproof Jack	57.10
JJK6X	9DB Single Line with mode indicator Jack	11.42
JJK7C	Single Line Special Jack	9.14
JJK8C	Single Line non-key Telephone & Ancillary Jack	11.42
JJKDC	Single Line Bridged 4-wire Jack	3.99
JJM5C	Three line non-key & Ancillary Devices Jack	11.42
JJM6X	Multiple Line Universal Data with FLL Jack	386.40
JJM6S	Multi line Data Jack Housing	57.10
JJMDX	Twelve line Bridged 4-wire Jack	48.30
JJMEX	Twelve Line 2-wire w/ E&M Jack	48.30
JJMFx	Eight Line 2-wire w/E&M Type II Signaling Jack	48.30
JJMGX	Eight Line 2-wire w/E&M Type I Signaling Jack	48.30
JJMHX	Six Line 4-wire w/E&M Type II Signaling Jack	48.30
JJP1X	Alarm Reporting Devices Jack	14.49
JJP8X	Miniature 8-position for Alarm Reporting Jack	14.49
JJS1S	Universal Data Jack w/FLL & Programming Devices Jack	45.68
JJS5S	Programmed Data Jack	28.56
JJS8T	Miniature 50-position Ribbon Jack	48.30
JJS8X	Miniature 8-position w/Shorting Bar Jack	14.49
JJS8S	Miniature 8-position keyed jack for data	14.49
JJS8C	Miniature 8-position for 1.544 Mbps Digital	14.49
JJS8X	Miniature 8-position Jack w/shorting Bars for 1.544 Mbps Digital	14.49
JJV1C	Series Devices Jack	137.04

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## Material List

### Material List and Pricing

The following table reflects Material and associated pricing.

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<i>Description</i>	<b>Pricing</b>
<b>Adapters</b>		<b>Each</b>
102-945-524	153AM2 Single 4 pin modular jack to pins 48,49,23,&24 on cable connectorized	4.00
103-065-785	153AM3 Single 4 pin modular jack to pins 25,24,50,&49 on cable connectorized	4.00
101-726-370	153D	47.00
101-334-407	183A2 Used w/66 type block to provide 2 add'l terminals	1.00
998-529-873	159MC6 6 Pin In-line	1.00
998-527-873	1A-3P 6 Pin In-line	1.00
402-956-775	1A-4P 8 Pin In-line	4.00
102-605-136	258A	30.00
102-631-413	259A Single 8 pin modular jack to pins 27,2,28,1,26,3,29,&4 on cable conn.	17.00
103-715-082	267A2 "Y" bridges both L1 & L2 into two jacks	2.00
103-715-652	267CA "T" splits L1 & L2 into separate jacks	3.00
700-100-175	Super Mod XXV 299-2400-125	129.00
<b>Backboards</b>		<b>Each</b>
099-402-539	18"x32"	11.00
099-402-547	18"x18"	11.00
100-006-006	79A Wood 3/4"x5"x12-1/2"	6.00
100-006-014	81 Wood 3/4"x12-1/2"x25-1/2"	7.00
100-006-022	82AA225001	6.00
100-006-071	82FA581390 14"x45"	11.00
100-006-220	164A Wood 3/4"x3"x4-1/2"	9.00
101-412-963	183A1 Metal 8-1/2"x20" Blue	13.00
101-412-971	183A2 Metal 8-1/2"x20" Green	13.00
101-412-989	183B1 Metal 17"x20" Blue	22.00
101-564-631	183B2 Metal 17"x20" Green	22.00
101-937-928	183B4 Metal 17"x20" Purple	22.00
103-222-790	183C1 Metal 8.5"x10" Blue	10.00
101-412-997	184B1	92.00
102-901-139	187A1 Metal 6.6"x8.5" White	9.00
101-937-944	187B1 Metal 6.63"x17" White	12.00
102-689-569	188B1	15.00

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<b>Pricing</b>
<b>Backboards (cont'd)</b>		
102-953-817	198A Metal White E/W 4 distribution spools	7.00
995-940-616	ISS7 CK05796 L7 Particle Board 3/4"x7-1/4"x7-1/4"	3.00
<b>Bezel</b> <span style="float: right;"><i>(see Faceplate also)</i></span>		
001-577-782	Ivory Suttle SpeedStar	1.00
<b>Boxes</b> <span style="float: right;"><i>(see Connecting Blocks also)</i></span>		
101-605-129	115C1 Apparatus 2-11/16"x5-7/16"x17-9/16" (update w/11023475)	22.00
101-605-137	115D1 Apparatus 2-11/16"x9"x17-9/16" (update 11023476)	25.00
700-250-025	147-2 Single gang finished wall, elect ivory	2.00
700-233-131	Dual gang surface mount Ortronics	6.00
700-223-141	High profile 800A use w/800 type duct	5.00
700-223-142	Low profile 800A use w/ 800 type duct	5.00
401-246-350	Outlet B CA08732 (typical marina installation)	19.00
700-233-132	Single gang surface mount Ortronics	4.00
700-250-026	StarMBD Oversized 2-1/4" deep, elect ivory	3.00
103-552-865	Station wire 800A	4.00
103-853-370	Station wire 800C rough in nail on w/4 screw BP	3.00
<b>Brackets</b>		
999-887-169	89B Used w/connector blocks (Krone)	2.00
401-307-244	CK20502-L2 2 1/4" circular w/screw tab for existing walls	6.00
400-017-836	46L232 Corner L	2.00
400-017-844	46L232 Corner S	2.00
400-314-571	CA04591 House	1.00
700-247-107	5" Support Bar (pkg 2 wall mounts) Krone 200x 300x blocks SSI#700-247-001 & 007	14.00
<b>Cable Connectorized Dbl/End</b>		
001-556-471	A25B5DE E/W female/female amp. conn.	11.00
001-556-497	A25B15DE E/W female/female amp. conn.	18.00
001-556-505	A25B20DE E/W female/female amp. conn.	21.00
001-555-994	A25B30DE E/W female/female amp. conn.	28.00
001-556-000	A25B80DE E/W female/female amp. conn.	62.00
001-556-018	A25B100DE E/W female/female amp. conn.	75.00

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<b>Pricing</b>
<b>Cable Connectorized Dbl/End (cont'd)</b>		<b>Each</b>
001-308-808	A25B100DE E/W female/female amp. conn., fire retardant	95.00
001-556-026	A25B200DE E/W female/female amp. conn.	143.00
001-308-840	A25B200DE E/W female/female amp. conn., fire retardant	181.00
001-556-539	A25D10DE E/W male/male amp. conn.	14.00
001-556-547	A25D13DE E/W male/male amp. conn.	14.00
001-560-358	A50B100DE E/W 2 female/2 female amp. conn.	199.00
001-560-382	A50B200DE E/W 2 female/2 female amp. conn.	379.00
001-556-349	A75A100DE E/W 3 female/3 female amp. conn.	348.00
001-560-291	A75A200DE E/W 3 female/3 female amp. conn.	667.00
001-560-390	A100C200DE E/W 4 female/4 female amp. conn.	685.00
001-556-356	A100D100DE E/W 4 female/4 female amp. conn.	369.00
001-556-414	B25A5DE E/W male/female amp. conn.	11.00
001-556-422	B25A15DE E/W male/female amp. conn.	18.00
001-556-430	B25A30DE E/W male/female amp. conn.	28.00
001-556-448	B25A60DE E/W male/female amp. conn.	48.00
001-556-455	B25A100DE E/W male/female amp. conn.	75.00
001-560-408	B50A50DE E/W 2 male/2 female amp. conn.	109.00
001-560-416	B50A100DE E/W 2 male/2 female amp. conn.	119.00
001-560-424	B50A200DE E/W 2 male/2 female amp. conn.	379.00
<b>Cable Connectorized Sgl/End</b>		<b>Each</b>
001-556-489	A25B15SE E/W female amp. conn.	14.00
001-556-463	A25B25SE E/W female amp. conn.	21.00
001-555-978	A25B50SE E/W female amp. conn.	38.00
001-555-986	A25B100SE E/W female amp. conn.	72.00
001-556-513	A25B150SE E/W female amp. conn.	105.00
001-556-521	A25B200SE E/W female amp. conn.	139.00

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<i>Pricing</i>
<b>Cable Connectorized Sgl/End (cont'd)</b>		<b>Each</b>
001-560-226	A50B50SE E/W 2 female amp. conn.	100.00
001-556-331	A50B100SE E/W 2 female amp. conn.	190.00
001-560-366	A50B150SE E/W 2 female amp. conn.	280.00
001-560-374	A50B200SE E/W 2 female amp. conn.	370.00
001-560-242	A75A100SE E/W 3 female amp. conn.	334.00
001-560-309	A100C100SE E/W 4 female amp. conn.	342.00
000-512-491	A100C150SE E/W 4 female amp. conn.	505.00
001-560-317	A100C200SE E/W 4 female amp. conn.	667.00
100-961-994	A100C250SE E/W 4 female amp. conn.	829.00
001-560-333	A100D100SE E/W 4 female amp. conn.	347.00
<b>Cable Non-Connectorized</b>	<i>(see Wire also)</i>	<b>Per Foot</b>
400-025-425	24ga. 25pr. (update w/700-244-398)	0.80
400-025-433	24ga. 50pr. (update w/700-244-402)	1.50
400-025-458	24ga. 100pr. (update w/700-244-403)	3.50
<b>Clamps</b>		<b>Each</b>
400-121-547	CA07590 "E" for F drop & C rural wire	2.00
400-120-879	Beam "B" CA07433	5.00
400-120-887	Beam "C" CA07464	4.00
700-244-167	"E" 6 Pair drop wire	1.00
400-121-513	"B" 2 Pair drop wire CA07380	1.00
<b>Closures</b>		<b>Each</b>
700-219-651	Buried Cable TBTB4	163.00
700-219-652	Buried Cable TBTB5	256.00
700-254-461	Closure Wire, Buried Wire, 6 Pair	3.00

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<b>Pricing</b>
<b>Connecting Blocks</b>	<i>(see Jacks Data, Block or Modular also)</i>	<b>Each</b>
100-009-893	66B3-50	15.00
100-009-901	66B4-25	15.00
100-009-968	66E3-25 (update w/000-613-505, 25x Krone)	10.00
101-931-269	66M1-25 (update w/000-613-505, 25x Krone)	10.00
101-238-178	66M1-50 (update w/999-375-409, 50x Krone)	18.00
700-212-985	742A-246-90/CT Ivory junction box E/W 12" modular cord & 4 screw terminals	4.00
700-233-112	10 Pr. Krone 6089-1-121-002 disc. Module box of 10 (used w/700-247-001&007)	66.00
000-613-505	25 Pr. Krone 6639-1-003-1 disc. E/W label & holder	10.00
700-247-026	25 Pr. Krone 6639-1-003-04 disc. E/W 89B, label & holder, 1-RJ-71C & short plug	38.00
000-085-589	25 Pr. Krone 6639-1-003-02 disc. E/W 89B, label & holder, 1-RJ-21X female	24.00
000-092-130	25 Pr. Krone 6639-1-003-03 disc. E/W 89B, label & holder & 8 RJ-48X	67.00
700-247-027	25 Pr. Krone 6639-1-003-05 disc. E/W 89B, label & holder & 12 RJ-48S	78.00
700-247-028	25 Pr. Krone 6639-1-003-06 disc. E/W 89B, label & holder, 12 RJ-14C&1 RJ-21X female	82.00
700-247-029	25 Pr. Krone 6639-1-003-07 disc. E/W 89B, label & holder, 12 RJ-48S&1 RJ-21X female	97.00
000-031-724	50 Pr. Krone 6639-1-051-02/01 disc. E/W 89B, label & holder & 2-RJ-21X female	43.00
999-892-425	50 Pr. Krone 6652-1-880-12 disc. E/W 89B, label & holder & 2-RJ-21X male R/L sides	44.00
001-573-161	50 Pr. Krone 6652-1-880-12/02 disc. E/W 89B, label & holder & 2-RJ-21X male L side	44.00
700-247-001	200 Pr. Krone 6637-1-180-49 coloc. E/W 8 RJ-21X female	232.00
700-247-007	300 Pr. Krone 6637-1-210-14 coloc. E/W 12 RJ-21X female	327.00
<b>Connector Coax BNC</b>		<b>Each</b>
700-254-603	734 BNC Connector	2.00
700-254-604	735 BNC Connector	

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<i>Description</i>	<b>Pricing</b>
<b>Cords</b>		<b>Each</b>
401-246-509	CA08734 B 50 ft. weatherproof w/male & female twist plugs (typical marina inst.)	53.00
102-416-658	D4BT87 Long	2.00
102-416-666	D4BT87 Standard	2.00
102-479-888	D4BU29 Extra long 25 ft. clear	2.00
102-903-317	D4BU29 Modular male 2 ft.	1.00
102-479-904	D4BU29 Modular male 7 ft.	1.00
102-479-896	D4BU29 Modular male 14 ft.	1.00
102-937-604	D6AP87 Modular male long	3.00
102-872-496	D8AA87 Modular male long	5.00
102-872-496	D8BU29 Modular male long	5.00
700-225-521	D8W87 Modular male 14 ft.	3.00
103-848-800	D8W87 Modular male 25 ft.	7.00
103-848-818	D8W87 Modular male 50 ft.	11.00
403-204-639	IPWC-02P24-J-10-DE	7.00
102-812-773	M4AR29 Modular male to spade tip 5-3/4"	1.00
102-858-917	M4AS87 Standard	8.00
<b>Covers</b>		<b>Each</b>
400-604-658	CK20458-L13	15.00
400-604-633	CK20458-L14	11.00
400-461-273	CK20458-L3	8.00
401-281-688	Clear (used w/66M)	2.00
999-733-058	Clear 50 Pr. Krone disconnect dust cover	1.00
401-281-688	Clear or Gray used w/66M	2.00
401-281-670	Clear used w/66B	2.00
700-227-756	Clear used w/66B1-6	4.00
700-246-931	Hinged 10 Pr. Krone label holder and cover 200x 300x blocks SSI#700-247-001 & 007	2.00
401-368-402	KC-6-03 Black for transfer key	2.00
900-317-595	KC-6-50 Ivory for transfer key	2.00
401-368-428	KC-6-58 White for transfer key	1.00
401-368-436	KC-6-60 Beige for transfer key	1.00
700-207-387	KC-6-90 Brown for transfer key	1.00
000-360-305	Orange Hinged Krone dust cover 50 Pr. block SSI#000-031-724	6.00

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<b>Pricing</b>
<b>Data Mount</b>		<b>Each</b>
700-251-426	Enclosure outdoor 2 slot	192.00
700-264-192	Mounting wall/desk 2 position	44.00
700-264-191	Mounting wall/desk 4 position	78.00
001-570-134	Mounting lockable analog	53.00
<b>Data PICS (Deregulated use only)</b>		<b>Each</b>
11018737	PIC H2TU-C T200 T-Scan	117.00
73114415	PIC H2TU-C T200 T-Scan	174.00
11018735	PIC HDSL2 RMT T200 Span Power (Remote)	120.00
11018730	PIC HDSL4 RMT T200 Span Power (Remote)	186.00
<b>Ducts</b>		<b>Each</b>
700-221-800	801A 3/4"x1/2"x48 Ash w/adhesive	5.00
700-223-135	801A-IC 3/4"x1/2" Ash inside corner	1.00
700-223-130	801A-OC 3/4"x1/2" Ash outside corner	1.00
700-223-133	801A-J 1 3/4x1/2" Ash joint	1.00
700-223-140	801A-L 1 3/4x1/2" Ash elbow	1.00
700-223-147	801A-EC 1 3/4x1/2" Ash end cap	1.00
700-223-149	801A-T 1 3/4x1/2" Ash tee	1.00
700-221-801	802A 1 1/4"x3/4"x48" Ash w/adhesive	5.00
700-223-136	802A-IC 1 1/4x1" Ash inside corner	1.00
700-223-129	802A-OC 1 1/4x1" Ash outside corner	1.00
700-223-132	802A-J 1 1/4x1" Ash joint	1.00
700-223-139	802A-L 1 1/4x1" Ash elbow	1.00
700-223-148	802A-EC 1 1/4x1" Ash end cap	1.00
700-223-150	802A-T 1 1/4x1" Ash tee	1.00
700-223-134	803A 1 3/4"x1"x48" Ash w/adhesive	8.00
700-223-128	803A-OC 1 3/4x1" Ash outside corner	1.00
700-223-137	803A-IC 1 3/4x1" Ash inside corner	1.00
700-223-131	803A-J 1 3/4x1" Ash joint	1.00
700-223-138	803A-L 1 3/4x1" Ash elbow	1.00
700-223-146	803A-EC 1 3/4x1" Ash end cap	1.00
700-223-151	803A-T 1 3/4x1" Ash tee	1.00
700-223-143	Reducer 803A to 801A Ash	1.00
700-223-144	Reducer 802A to 801A Ash	1.00
401-140-769	Floor flexible 2 5ft.	1.50

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<b>Pricing</b>
<b>Faceplate</b>		<b>Each</b>
700-205-183	Elect. Ivory circular 16D-50 w/bkt 3 1/4"	1.00
700-224-876	Elect. Ivory w/knockout/bracket 2-3/4"x4-1/2"	2.00
001-577-741	Elect. Ivory single gang Suttle SpeedStar duplex (requires bezels)	1.00
001-577-758	Elect. Ivory single gang Suttle SpeedStar quad (requires bezels)	1.00
001-577-766	Elect. Ivory single gang Suttle SpeedStar 6-port (requires bezels)	1.00
<b>Filter</b>	<i>(see NID Modules also)</i>	<b>Each</b>
001-554-419	Radio Interference Filter TII wire in type	18.00
700-219-123	Radio Interference Filter inline modular Westek Z100B1	11.00
102-970-894	Radio Interference Filter block connector 6 position w/4 pin modular (1542AM)	11.00
<b>Grounding</b>	<i>(see Wire Ground also)</i>	<b>Each</b>
900-485-178	Clamp 1/2" hex head used w/ 1/2" rod	2.00
400-407-391	Clamp 1/2" to 2" used on water pipe	2.00
001-542-109	Rod 1/2" x 60" E CA08985	3.00
700-218-244	Strap 12" x 5/8"	2.00
700-218-243	Strap 7" x 5/8"	2.00
402-689-244	Clamp "H" CA08980 Fargo	9.00
700-220-903	Clamp "I" Beam EM4019	4.00
<b>Half Ringer</b>		<b>Each</b>
001-554-120	1/2 ringer TII w/wire spade leads	2.00
<b>Housing</b>		<b>Each</b>
001-577-774	Surface mount elect ivory Shuttle SpeedStar mounting for 1 or 2 jacks (req bezels)	3.00
<b>Jacks Modular CAT 3</b>		<b>Each</b>
700-241-730	625AS4, 4 Pin elect ivory surface assembly w/scwlngs/cov 2 1/4" x 2 5/8" (update w/700-254-089)	3.00
700-241-731	625AS6, 6 Pin elect ivory surface assembly w/cov/gel	4.00
000-653-774	625BE4, 4 Pin elect ivory flush w/19E/43C/625F (update w/700-241-732)	4.00
700-210-007	625D6, 6 Pin elect ivory duplex wall assembly w/gel/bkt 2 3/4" x 4 1/2"	9.00
700-241-734	625FE4, 4 Pin elect ivory circular block connector w/door	3.00
700-241-735	625FS4, 4 Pin elect ivory wall assembly w/swg-cov/gel/bkt 2 3/4" x 4 1/2"	4.00

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<b>Pricing</b>
<b>Jacks Modular CAT 3 (cont'd)</b>		<b>Each</b>
700-241-737	625SA4, 4 Pin elect ivory surface assembly w/swg-cov/gel	4.00
700-241-736	625SA6, 6 Pin elect ivory surface assembly w/swg-cov/gel	5.00
700-220-198	625WP4, 4 Pin black outdoor weatherproof in cover w/box	12.00
000-654-053	630AD4, 4 Pin SS wall assembly w/scr term/studs/bkt/gel 2 3/4" x 4 1/2"	5.00
700-241-739	630B4, 4 Pin SS wall assembly w/push clips/studs/bkt/gel 2 3/4" x 4 1/2"	5.00
102-906-062	635B, Surface 8 con nonkey w/RJ31X 1&4,5&8 short bars & 6 cond mod jack	11.00
700-250-027	Star600V6, 6 Pin elect ivory w/IDC term/gel (use with 001-577-741,758,766 or 782)	3.00
<b>Jacks Non -Modular CAT 3</b>		<b>Each</b>
401-246-707	1 Pr. outdoor weatherproof B CA08732 twist female in cover (marina inst.)	<b>15.00</b>
401-246-715	1 Pr. outdoor weatherproof B CA08733 twist male in cover (marina inst.)	<b>15.00</b>
<b>Jacks Modular CAT 5</b>		<b>Each</b>
700-210-008	102A8, 8 Pin elect ivory circular block connector wiring 568B	3.00
700-210-005	103A8, 8 Pin elect ivory surf assembly wiring 568B w/pundwn/adh/cov 2-5/8"x3"	4.00
700-210-010	104A8, 8 Pin elect ivory dupl. surf asbly wiring 568A/B w/pundwn/adh/cov 2-5/8"x3-1/2"	6.00
700-210-723	625A2, 8 Pin elect ivory surf assembly w/scwlngs/adh/cov 2-3/8"x2-3/8"	3.00
<b>Jacks Modular CAT 6</b>		<b>Each</b>
001-577-725	600A, 8 Pin Suttle SpeedStar ivory snap-in wiring 568A RJ-45 w/bezel	4.00
001-577-733	600B, 8 Pin Suttle SpeedStar ivory snap-in wiring 568B RJ-45 w/bezel	4.00
<b>Jacks Data, Block or Modular</b>	<i>(see Connector Blocks also)</i>	<b>Each</b>
998-909-238	625A28K 8 Pin mod. keyed w/RJ48X 1&4,2&5 short bars 2 5/8" sq. scr. adh.	4.00
001-248-491	625A28NK 8 Pin mod. non-key w/RJ48X 1&4,2&5 short bars 2 5/8" sq. scr. adh.	4.00
700-245-322	635A28NK52BAR 8 pin mod no-key w/RJ-48S 2-5/8" sq. scr. adh.	3.00
700-221-210	97A/B 8 Pin modular field programmable loop loss dB	26.00
000-092-130	Krone 8 Position 8 pin modular (use multi RJ48X)	67.00
700-238-819	Troncom Digital Maint. Termination Unit DMTU-100	21.00

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<b>Pricing</b>
<b>Label/Holder</b>		<b>Each</b>
700-246-981	10 Pr. Krone 6630-2-004-05 label holder (use at top of 200x&300x Krone	1.00
700-246-931	10 Pr. Krone 6089-2-015-01 label hinged holder (use on ea. Modules 200x&300x Krone)	2.00
000-334-607	10 Pr. Krone 6631-3-100-03 label sheet (50 on a sheet)	3.00
999-470-529	50 Pr. Krone adhesive label	1.00
999-375-512	50 Pr. Krone label holder	1.00
<b>Mounting Plate</b>		<b>Each</b>
700-250-022	Star501-52 Single, elect ivory (use with 000-157-774)	1.00
700-250-023	Star502-52 Duplex, elect ivory (use with 000-157-774)	1.00
<b>NID</b>		<b>Each</b>
000-771-295	2 Line Outdoor TII (Cust. Owned Coin Oper. Tel.) gray E/W 1 cust. bridge & prot.	27.00
000-771-303	2 Line Outdoor TII (Cust. Owned Coin Oper. Tel.) gray E/W 2 cust. bridges & prot.	36.00
700-250-235	3 Line Outdoor TII gray E/W 1 customer bridge & protector (update w/700-258-261)	15.00
700-250-234	3 Line Outdoor TII gray E/W 2 customer bridges & protectors (update w/700-258-265)	23.00
700-250-236	6 Line Outdoor TII gray E/W 3 customer bridges & protectors (update w/700-258-269)	32.00
001-316-348	12 Line Outdoor TII gray E/W 6 customer bridges & protectors (update w/700-258-288)	123.00
999-751-563	6 Line Indoor TII gray E/W 6 customer bridge with no stub	29.00
001-316-314	12 Line Indoor TII gray E/W 6 customer bridges & protectors	177.00
001-316-322	12 Line Indoor TII gray E/W 12 customer bridges & protectors	227.00
700-222-215	25 Line Indoor Keptel E/W 66 type ent bridges 8925-2-1-2 3 1/2"x10"x4"	132.00
999-616-501	25 Line Indoor Keptel E/W Scr 2125-1-1-1 w/cover 1/2 ringers	209.00
001-075-308	1 Line Indoor Suttle modular jack E/W swing door, 1/2 ringer & gel 625TD1	7.00
<b>NID Modules</b>		<b>Each</b>
001-555-705	Customer bridge TII E/W 1/2 ringer	4.00
000-191-213	Customer bridge TII E/W 1/2 ringer & RFI filter	26.00
001-555-739	Customer bridge TII no electronics	4.00
001-553-767	Protector TII solid state 1 pair	5.00
700-250-239	POTS splitter TII (DSL)	27.00
700-258-281	TII NID Modules with 1/2 Ringer and Protector	11.00
700-258-283	TII NID Module with NO Electronics and Protector	11.00
001-190-040	COAX service w/ protector	293.00
998-465-157	Selective Ringing TII 825W5 for 2 or 4 party	33.00

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## Material List, Continued

<b>Technician's Material Price List</b>		
<b>Category/SSI</b>	<b>Description</b>	<b>Pricing</b>
<b>Plugs</b>		
		<b>Each</b>
103-941-464	700A4 2pr. Modular	4.00
103-941-472	700A8 4pr. Modular	6.00
700-204-712	TCNP4 2pr. Modular (update w/700-242-258)	1.00
700-204-713	TCNP6 3pr. Modular (update w/700-242-154)	1.00
700-204-714	TCNP8 4pr. Modular (update w/700-242-153)	1.00
<b>Power Strip</b>		
		<b>Each</b>
700-219-131	Strip Power 120v 15amp 6 Outlet with Surge	77.00
87043748	Strip Power 15amp 6 Outlets	24.00
<b>Power Supply</b>		
		<b>Each</b>
700-251-822	Power Supply 48v DC @ 1.25amp	45.00
<b>Splitter DSL</b>		
	<i>(see NID Modules also)</i>	<b>Each</b>
700-248-024	Indoor standalone Westell A90-32RTPSGNA1	62.00
700-250-240	Outdoor TII standalone w/housing	32.00
<b>Transfer Key</b>		
		<b>Each</b>
401-789-987	TKM-6-03 DPDT w/black cover	16.00
<b>Wire Service</b>		
		<b>Per Foot</b>
700-216-024	Aerial drop 2pr. 22ga. (non-metallic supported 750 ft. disp.)	0.15
700-223-072	Aerial drop 6pr. 22ga. (fiberglass supported 400 ft. coil)	0.30
000-040-881	Buried drop filled 6pr. 22ga. (700 ft. roll)	0.40
<b>Wire Ground</b>		
		<b>Per Foot</b>
401-172-341	Insulated #6	0.55
400-292-207	Insulated #10	0.25

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## Material List, Continued

		<b>Technician's Material Price List</b>		
CAT 3 & CAT 5		The following table list CAT 3 & CAT 5 wiring		
Category		Description (CAT 3)		Pricing
SSI #/PID #	Item ID #	(CMP=Plenum, CMR=Riser, CMX=Outdoor Use)	OD	Per Foot
700-250-092	11004945	2pr. 22ga. Indoor/outdoor (CMR/CMX) gray (125ft. coil pack)	0.185"	0.15
700-250-093	11004946	2pr. 22ga. Indoor/outdoor (CMR/CMX) ivory (125ft. coil pack)	0.185"	0.15
700-255-695	11004947	2pr. 22ga. Indoor/outdoor (CMR/CMX) ivory (1000ft. reelex)	0.185"	0.15
700-259-704	11012831	2pr. 22ga. Indoor/outdoor (CMR/CMX) beige (1000ft. reelex)	0.185"	0.15
700-260-924	11014076	3pr. 24ga.. Indoor/outdoor (CMR/CMX) beige (1000ft. reelex)	0.16"	0.15
700-260-925	11014075	3pr. 24ga.. Indoor/outdoor (CMR/CMX) ivory (1000ft. reelex)	0.16"	0.15
700-258-103	11009271	3pr. 24ga. Indoor (CMR) ivory (1000ft. reelex)	0.16"	0.15
700-258-104	11009272	4pr. 24ga. Indoor (CMR) ivory (1000ft. reelex)	0.17"	0.15
700-258-129	11009273	6pr. 24ga. Indoor (CMR) ivory (1000ft. reelex)	0.19"	0.20
700-258-130	11009274	12pr. 24ga. Indoor (CMR) ivory (1000ft. reel)	0.29"	0.35
700-258-131	11009275	25pr. 24ga. Indoor (CMR) ivory (1000ft. reel)	0.38"	0.60
700-258-132	11009276	50pr. 24ga. Indoor (CMR) ivory (1000ft. reel)	0.56"	1.20
700-258-133	11009277	100pr. 24ga. Indoor (CMR) ivory (1000ft. reel)	0.77"	2.30
700-258-134	11009279	4pr. 24ga. Indoor (CMP) white (100ft. coil pack)	0.17"	0.15
700-244-397	440696	4pr. 24ga. Indoor (CMP) white (1000ft. reelex)	0.17"	0.15
700-258-135	11009278	4pr. 24ga. Indoor (CMP) gray (1000ft. reelex)	0.17"	0.15
700-258-136	11009280	6pr. 24ga. Indoor (CMP) white (1000ft. reelex)	0.20"	0.15
700-122-096	11009281	6pr. 24ga. Indoor (CMP) gray (1000ft. reelex)	0.20"	0.15
001-385-053	11009282	12pr. 24ga. Indoor (CMP) white (1000ft. reel)	0.30"	0.30
700-244-398	11009283	25pr. 24ga. Indoor (CMP) gray (1000ft. reel)	0.40"	1.00
700-244-402	89006855	50pr. 24ga. Indoor (CMP) natural (1000ft. reel)	0.58"	2.00
700-244-403	11009284	100pr. 24ga. Indoor (CMP) natural (1000ft. reel)	0.79"	3.75
700-244-395	564518	2pr. 24ga. Shielded Indoor (CMP) natural (1000ft. reel)	0.18"	0.30

*Continued on next page*

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## Material List Cat 3 and CAT 5, Continued

Category		Description (CAT 5)		Pricing
SSI #/PID #	Item ID #	(CMP=Plenum, CMR=Riser, CMX=Outdoor Use)	OD	Per Foot
700-260-927	11014073	4pr. 24ga. Indoor/outdoor (CMR/CMX) ivory (1000ft. reelex)	0.21"	0.15
700-260-928	11014072	4pr. 24ga. Indoor (CMR) ivory (1000ft. reelex)	0.20"	0.15
700-234-001	87279323	4pr. 24ga. Indoor (CMR) gray (1000ft. reelex)	0.20"	0.15
700-258-612	87291385	4pr. 24ga. Indoor (CMR) white (1000ft. reelex)	0.20"	0.15
700-258-650	11012100	4pr. 24ga. Indoor (CMR) blue (1000ft. reelex)	0.20"	0.15
700-239-829	11014200	4pr. DUAL 24ga. Indoor (CMR) gray (1000ft. reel)	0.19"x0.39"	0.30
700-233-688	11012099	4pr. 24ga. Indoor (CMP) gray (1000ft. reelex)	0.18"	0.15
700-258-613	11012098	4pr. 24ga. Indoor (CMP) white (1000ft. reelex)	0.18"	0.15
700-258-651	87288147	4pr. 24ga.. Indoor (CMP) blue (1000ft. reelex)	0.18"	0.15
700-239-828	11014199	4pr. DUAL 24ga. Indoor (CMP) gray (1000ft. reel)	0.16"x0.34"	0.30

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# Work Authorization/Completion Acknowledgement Form

**WACA form** The Work Authorization/Completion Acknowledgement Form will be filled out and signed by the customer for every completed installation or maintenance request when billing is required.

		Work Authorization / Completion Acknowledgement			(Form No.) (Rev. Date)	
Billing Telephone Number ( ) -		Date / /		Service Order / Trouble Ticket Number		
Customer Name		RES <input type="checkbox"/> BUS <input type="checkbox"/>		Telephone / Circuit ID #		
Address				City/Town		State
ACNA	MCN	Reason for visit <input type="checkbox"/> Installation <input type="checkbox"/> Maintenance <input type="checkbox"/> Trouble Isolation				
Billable Charges <input type="checkbox"/> Tariffed <input type="checkbox"/> Detariffed			Regular <input type="checkbox"/> Overtime <input type="checkbox"/> Premium <input type="checkbox"/>			
<b>Time &amp; Material Labor</b>		Minimum Charge		Additional Increments		Total
				No.	Amount	
Detariffed	Hr. _____ Min. _____			@		
Tariffed	Hr. _____ Min. _____			@		
<b>Fixed Fee Labor</b> <i>(Residence ONLY)</i>		First Jack Amount		Additional Jacks		Total
				No.	Amount	
New				@		
Rewired				@		
<b>Misc. Visit Charges</b> (where applicable e.g. NPV,MVC,MVV,MSC)						
<b>Non-Premise trouble or Maintenance Plan trouble repaired – No Charge (N/C)</b>						
<b>Billable Material</b>		Quantity		Unit Price		Amount
<b>Customer Accepted Installment Billing</b> <i>(Where available)</i>		<b>Material Total</b>			\$	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<b>Labor Total</b> <i>(from</i>			\$	
Number of Months (2 – 12) _____		<b>(City or County) Wiring Permit Fee</b>			\$	
		<b>Total Charges</b>				
<b>Work Performed</b>						
<b>Customer Authorization / Acceptance</b> In Person <input type="checkbox"/> By Phone <input type="checkbox"/>						
<b>THESE CHARGES WILL APPEAR ON YOUR MONTHLY STATEMENT</b>						
Signature of Customer / Customer's Agent					Telephone Number ( ) -	
Name (Please Print)					Date / /	
<b>Technician Information</b>						
Tech. No.	Type of Closeout <input type="checkbox"/> IFAS <input type="checkbox"/> Manual		LOB <input type="checkbox"/> CONS <input type="checkbox"/> EBG Tier 1 <input type="checkbox"/> EBG Tier 2 <input type="checkbox"/> WHOL <input type="checkbox"/> RESALE <input type="checkbox"/>			
Supervisory Review (Name)		Tel. No. ( ) -		Type of Circuit Access <input type="checkbox"/> Non Access <input type="checkbox"/>		

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# National Leave Behind Card

Leave behind card

The National Leave Behind Brochure will be given to every customer when a Technician is dispatched to the customer premise for a service request.

**Unsurpassed service. Exciting products. A better experience. It's what we're all about...**

Visit us at [www.verizon.com](http://www.verizon.com) and explore the possibilities.

**About your service request**

**Providing you with outstanding service is our goal.**

**Here's how we're working for you**

**What we did today:**

- Installed your new/additional communication service, including trouble-shoot work.
- Installed your new/additional communication service, no trouble-shoot work required.
- Installed a Verizon Broadband service
  - High-speed DSL
  - State-of-the-art FIOS (fiber optic service)
  - FIOS TV
- Reported Verizon network trouble area and to you.
- Located reported trouble in your equipment/home.
- Identified trouble in your equipment/home. If you wish to have us repair the problem, call us at \_\_\_\_\_.
- We were unable to complete your work request within time. Please refer to the technician's comments below.

**Sorry we missed you**

- We were here today, but we need access to your premises to complete the service request. Please call us at the following number to schedule a new appointment or address service.
- Customer Repair
- Residence Repair
- DSL
- FIOS
- New service change to existing service
- Temporary service site placed, see technician's comments below.

**Verizon Plans and Bill Line**  
Outside wiring up to and including the Network Interface Device

**Customer Repairable Items**  
Modem, router, jacks, telephones, computers, fax, and other Customer Provided Equipment (CPE)

**Customer**

Customer Name \_\_\_\_\_  
Address \_\_\_\_\_  
Date & Time \_\_\_\_\_  
Technician Name \_\_\_\_\_  
Comments \_\_\_\_\_

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## Time Card Administration

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### Time Sheet Administration

Proper completion and accuracy of the daily time report and supporting job documentation will be the responsibility of each employee. Most timecards will be cared for in electronic form. In addition all time-cards should:

- Reflect accurate time, work operations, location, lunch break hour and duration and accurate account of lost productive time when applicable.
- Must be kept current throughout the day (via vMobile, IFAS, WFA/DO).
- Submitted at the end of each tour.
- Approved and signed off by the respective Supervisor.

All Technicians will close out their jobs utilizing the window closeout screens in IFAS/vMobile. With limited exceptions a Technician shall use their Laptop, Scout or Handheld terminal for pick-up and closeout of all dispatched jobs.

NPW (non productive time) may only be used with a Supervisor's approval. A descriptive narrative must be entered in the timesheet when NPW time is taken.

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### Commonly Used CTLR codes

The following table identifies commonly used CTLR codes.

<b>DU</b>	<b>Day unassigned, This code schedules Saturday and un-assigns the day it is reported on.</b>
<b>OT1</b>	<b>Reported overtime worked.</b>
<b>NPW</b>	<b>Non Productive time, taken when meeting with a Supervisor, blood drive, transfer of vehicles, rubber glove testing, 188a test set testing.</b>
<b>APX</b>	<b>Excused work day.</b>
<b>H</b>	<b>Holiday</b>
<b>V</b>	<b>Vacation</b>
<b>123E</b>	<b>Technical training.</b>
<b>APU</b>	<b>Joint Management &amp; Union meeting.</b>

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# DATU

## DATU TEST

The following steps have been provided to properly utilize the DATU test equipment.

Step	Action																								
1	Dial DATU access number 1.800.406.5919																								
2	Listen to the prompts and when requested, enter your VZID number. Type an 8 for the 'V', so if the VZID is V123456 type 8123456)																								
3	Listen to the prompts and type in the 4-digit pin plus the 6-digit number on the front of the Secure ID Card.																								
4	Wait approximately 30 seconds and when prompted, enter the telephone number to test.																								
5	<p>If non-SLC, DATU responds "OK", go to step 6. If SLC line, see table below:</p> <table border="1"> <thead> <tr> <th>DATU Responds</th> <th>This Indicates</th> </tr> </thead> <tbody> <tr> <td>"OK" followed by 25 sec warble tone</td> <td>SLC subscriber line</td> </tr> <tr> <td>60 IPM busy</td> <td>PGTC alarm</td> </tr> <tr> <td>120 IPM busy</td> <td>Busy test pair</td> </tr> <tr> <td>1 one sec. Tone</td> <td>One party line/good</td> </tr> <tr> <td>2 one sec. Tones</td> <td>Multi-party line/good</td> </tr> <tr> <td>3 one sec. Tones</td> <td>Coin phone/good</td> </tr> <tr> <td>No Tone</td> <td>Bad channel</td> </tr> </tbody> </table>	DATU Responds	This Indicates	"OK" followed by 25 sec warble tone	SLC subscriber line	60 IPM busy	PGTC alarm	120 IPM busy	Busy test pair	1 one sec. Tone	One party line/good	2 one sec. Tones	Multi-party line/good	3 one sec. Tones	Coin phone/good	No Tone	Bad channel								
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6	<p>Enter code for test function.</p> <table border="1"> <thead> <tr> <th>Test Function</th> <th>Dial Code</th> </tr> </thead> <tbody> <tr> <td>Audio monitor</td> <td>2</td> </tr> <tr> <td>Short to ground</td> <td>3</td> </tr> <tr> <td>High Level Tone</td> <td>4</td> </tr> <tr> <td>Low Level Tone</td> <td>5</td> </tr> <tr> <td>Open Line</td> <td>6</td> </tr> <tr> <td>Short (Tip to Ring)</td> <td>7</td> </tr> <tr> <td>Permanent signal release</td> <td>9</td> </tr> <tr> <td>New subscriber line</td> <td>#</td> </tr> <tr> <td>Force disconnect</td> <td>##</td> </tr> <tr> <td>Continue line preparation after disconnect. After * enter 1-9 minutes.</td> <td>*</td> </tr> <tr> <td>Menu announcement</td> <td>0</td> </tr> </tbody> </table>	Test Function	Dial Code	Audio monitor	2	Short to ground	3	High Level Tone	4	Low Level Tone	5	Open Line	6	Short (Tip to Ring)	7	Permanent signal release	9	New subscriber line	#	Force disconnect	##	Continue line preparation after disconnect. After * enter 1-9 minutes.	*	Menu announcement	0
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## Mechanized Loop Testing (MLT)

**MLT TEST** Mechanized Loop Testing (MLT) tests a selected circuit from end-to-end.

Category	Ver Code	MLT summary	
TEST OK	0	TEST OK	
	05	TEST OK – CHANNEL NOT TESTED	
	0A	TEST OK – SPLITTER DETECTED	
	0C	CPE or HRO	
	0H	ROH DETECTED DURING TEST-USE CO REQ FOR CIRCUIT & DIALTONE	
	0L	OPEN OUT BALANCED-NO FAULTS TO BENCHMARK LENGTH	
	0M	TEST OK WITH MTU CONDITION	
	MC	TEST OK WITH CPE and MTU CONDITION	
	FOREIGN VOLTAGE	11	CROSS TO WORKING PAIR
		12	AC FEMF FAULT
13		HAZARDOUS POTENTIAL	
14		CROSS TO A WORKING PAIR, MARGINAL	
15		DC FEMF MARGINAL	
16		AC FEMF MARGINAL	
17		RESISTIVE FAULT	
18		OPEN OUT AND CROSSED	
DC FAULT		21	GROUND FAULT
	22	SHORT CIRCUIT	
	23	SWINGING RESISTANCE- FAULT	
	24	SWINGING RESISTIVE - MARGINAL	
	25	SHORT AND GROUND	
	26	MDF TEST RECOMMENDED –LOW RESIST	
	27	DC RESISTANCE – MARGINAL	
	28	SHORT OR GROUND	
	CO FAULT	05	CHANNEL STATUS NOT IDENTIFIED
3		OPEN IN	
30		SWITCH COMMON EQUIPMENT BAD	
31		INVALID CIRCUIT ARRANGEMENT	
32		CAN'T DRAW DIAL TONE	
33		CAN'T BREAK DIAL TONE	
34		POSSIBLE INVALID ACCESS	
35		OPEN IN AND CROSS	
36		LINE CIRCUIT AND DIAL TONE PROBLEMS	
37		DIAL TONE BURST DETECTED	
38		POSSIBLE CO WIRING ERROR	
39	CO EQUIPMENT BAD, BAD LINE CARD		

*Continued on next page*

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## Mechanized Loop Testing (MLT), Continued

Category	Ver Code	MLT summary
OPEN OUT	40	CO EQUIPMENT SUSPECT
	41	OPEN OUT AND BALANCED
	42	OPEN OUT IN CABLE
	43	HIGH RESISTANCE OPEN
	44	OPEN OUT 2 PLY OR BRIDGE LIFTERS
	45	OPEN OUT NEAR DROP
	46	OPEN ON PREMISE
	47	OPEN IN REMOTE TERMINAL
	48	T1 FACILITY BAD
	49	CHANNEL UNIT (x) UNDER TEST - LINE IS UNDER TEST (ISDN)
	50	COT CU SUSPECT - STATUS SHOWS CHANNEL UNIT PROBLEM (ISDN)
	51	C.O. BATTERY ON PAIRGAIN SYSTEM
	52	INVALID PAIR GAIN C.O. SIGNATURE
	53	PAIR GAIN SYSTEM BUSY - COULD NOT MAKE METTAIC ACCESS
	54	PAIR GAIN SYSTEM FAILURE - COULD NOT MAKE METALLIC ACCESS
	55	PAIR GAIN CHANNEL FAILURE
	56	COT CU BAD (ISDN)
	57	BAD RT CHANNEL UNIT
	58	BAD COT AND RT UNITS
59	RT CHANNEL UNIT SUSPECT	
SPEECH	6	BUSY SPEECH
	60	BUSY PACKET (ISDN)
	61	LINE IN USE
	63	CRAFT ACTION
Busy	71	RECEIVER OFF HOOK (ROH)
	72	MDF TEST RECOMMENDED – PERMANENT SIGNAL
	73	LINE IN SERVICE OR PERMANENT SIGNAL
	74	PERMANENT SIGNAL
	75	SHORT – PROBABLY ROH
ROTARY DIAL	80	DIAL OK
	81	DIAL NOT OK

*Continued on next page*

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## Mechanized Loop Testing (MLT), Continued

Category	Ver Code	MLT summary
GENERAL	91	INVALID PBX SIGNATURE
	92	INVALID AC SIGNATURE
	93	POOR BALANCE
	95	RESISTIVE FAULT AND OPEN
	96	MARGINAL BALANCE
	97	DERIVED PAIR NOT TESTED- NOT SERVED BY MLT
	98	ANALYSIS OF FULL RESULTS NEEDED
	99	MULIPLE FAULTS DETECTED
	EQUIPMENT BUSY	B0
B1		TEST NOT MADE
B2		TEST EQUIP BUSY-SANITY OR DIAG IN PROGRESS
B3		TEST EQUIP BUSY-SIMULTANEOUS TEST MADE
B4		TEST EQUIPMENT OUT OF SERVICE
B5		TEST EQUIP BUSY – PAIR GAIN ACCESS BUSY
B6		DOWN LOAD IN PROGRESS
B7		TEST EQUIPMENT BUSY
BA		NO DCTU PORT AVAILABLE
BB		DCTU NOT AVAILABLE
BC		NO GDXC AVAILABLE
BD		NO MTB AVAILABLE
BE		NO MTIB AVAILABLE
BF		NO MA PACK AVAILABLE
BG		NO MAB AVAILBALE
BH		NO PRTC AVAILABLE
BI		NO MTB TO PGTC AVAILABLE
BJ		NO MTB TO PGTC PORT EQUIPPED
BK		PGTC PATH SETUP BLOCKAGE
BL		NO PORT AVAILABLE
BM		NO TRUNK AVAILABLE
BN		NO TEST PACKAGE AVAILABLE
BP		NO PMU AVAILABLE
BQ		NO DIALER AVAILABLE
BR		NO BUSY DETECTOR AVAILABLE
BS		SWITCH BLOCKAGE
BT	RMU IN USE	
BU	CAN'T CONNECT TO RMU	
BV	NO MODEM PORT AVAILABLE	

*Continued on next page*

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## Mechanized Loop Testing (MLT), Continued

Category	Ver Code	MLT summary
	BW	CAN'T CONNECT TO CMU
	BY	NO HDT OR ONU EQUIP AVAILABLE
	BZ	HDT INIALIZING
	C1	TOTALIZER OPERATION PROBLEM- TOTALIZER HOMED
	C2	TOTALIZER DEFECT – RUNAWAY TOTALIZER
	C3	POLARITY GUARD PROBLEM
	C4	COIN RELAY PROBLEMS – TOTALIZER HOMED – RELAY NOT OPERATED
	C5	COIN SUPERVISORY CIRCUIT PROBLEMS
	C6	INITIAL RATE OR FRAUD CONTACT PROBLEM
	C7	OSCILLATOR PROBLEMS – TOTALIZER HOMES- NO TONES DETECTED
DENIED SERVICE	D1	DENIED SERVICE TERMINATING
	D2	DENIED SERVICE ORIGINATING
	D3	DENIED SERVICE
	D4	DENIED CPE
	D5	DENIED OR RESTRICTED SERVICE (ISDN)
	DG	REMOTE APPLICATIONS FAILURE – GATEWAY FAILURE (ISDN)
	DI	DENIED OR INTERCEPT MIXED SERVICE (ISDN)
	DL	DATA LINK FAILURE
	DP	DEFECTIVE DC TEST PAIR
SYSTEM ERROR	E0	TEST SYSTEM ERROR
	E1	TEST SYSTEM ERROR
	E2	TEST SYSTEM ERROR
	E3	TEST EQUIPMENT ERROR
	E5	TEST SYSTEM ERROR
	E6	TEST SYSTEM ERROR
	E7	TEST SYSTEM ERROR
	E8	CAN'T SEND REQUEST TO APPROPRIATE FE
EQUIPMENT FAILURE	F0	TEST EQUIPMENT FAILURE
	F1	TEST EQUIPMENT FAILURE
	F2	TEST EQUIPMENT FAILURE
	F3	TEST EQUIPMENT FAILURE
	F4	TEST EQUIPMENT BUSY

*Continued on next page*

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## Mechanized Loop Testing (MLT), Continued

Category	Ver Code	MLT summary
	FA	BUSY DETECTOR FAILURE
	FB	DIALER FAILURE
	FC	PMU FAILURE
	FD	SLEEVE CONTROL FAILURE
	FE	CONTROL FAILURE – ISLC/DCTU
	FF	CONTROL FAILURE – USLC/DCTU
	FG	TBCU PROTOCOL TEST FAILURE
	FH	EQUIPMENT ACCESS FAILURE
	FJ	SWITCH TEST ACCESS FAILURE
	FK	GDXC FAILURE
	FL	MODEM CONNECTION FAILURE
	FM	RMU/CMU CONNECT FAILURE
	FN	LOGIN FAILURE
	FP	OPERATION FAILED IN HDT
	FQ	STUCK RELAY - MA CP
	FR	LINK TO SDV EM DOWN
	FS	MSU OUT OF SERVICE
	FT	CONNECT FAIL - PROTOCOL FAILURE
	FV	DEFECTIVE DIST OR SCAN CP
	FW	RT COMMUNICATION FAILURE
	G0	RINGER COUNT AND TERMINATION OK
	G1	INVALID RINGER TERMINATION
	G2	INVALID 2 PARTY RINGER TERMINATION
	G4	TESTED WITHOUT LINE RECORDS - RINGER TERM LIKE SINGLE PARTY
	G5	VALID 2 PARTY TERMINATION
	G6	RINGER TEST- NON- CATALOGED EQUIPMENT
	G7	INVALID RINGER
	G8	NO RINGERS FOUND
ISDN	I0	TEST OK NOW
	IA	WIRING ERROR – NT1 REVERSED
	IB	UNEXPECTED ISDN TERMINATION
	IC	POSSIBLE AMI BRITE DETECTED
	ID	ISDN TERMINATION MISMATCH
	IE	ISDN TERMINATION ERROR
	IF	INVALID TERM FOR ISDN LINE
	IG	FURTHER TEST REQUIRED
	IH	OE MISMATCH
	IJ	DENIED SERVICE – ADD ANALYSIS
	IK	NOT AN ISDN LINE

*Continued on next page*

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## Mechanized Loop Testing (MLT), Continued

Category	Ver Code	MLT summary
	IL	TERMINATION MSMATCH SUSPECTED
	IM	DIGITAL TEST MARGINAL
	IN	CPE (NT1) POWER SUSPECTED
	IP	TEST OK PARTIAL TEST DONE
	IR	CPE (NT1) ON SECONDARY POWER
	IS	SECTIONALIZE WITH LONGER LPBK
	IT	TERMINATION MISMATCH
	IU	LINE RECORDS SHOW TERMINAL MISMATCH
	IV	CHANNEL MISMATCH (ISDN)
	IW	CHANNEL MISMATCH
	IZ	DIGITAL ANALYSIS REQUIRED
LOOP FAULT	LB	DSL CUSTOMER LOOP BAD
	LF	TEST TRANSFERRED – EXPECT DELAY
	LM	REMOTE TEST
	LS	DSL CUSTOMER LOOP SUSPECT
	LU	LINE IN USE
MDF	MC	TEST OK WITH CPE & MTU
	MD	MDF TEST RECOMMENDED
	MT	MDF TESTABLE ONLY
NOT TESTED	ND	TEST NOT DONE
	NE	CHANNEL UNIT NOT EQUIPPED (SDV) (SDV NOT CURRENTLY OFFERED IN fBA)
	NG	INVALID TDSL REQUEST
	NK	LINE RECORD ERROR (SDV) (SDV NOT CURRENTLY OFFERED IN fBA)
	NL	NO LINE RECORD IN SERVICE
NOT TESTED cont'd	NM	NETWORK MANAGER FAILURE
	NP	NOT VALID IDENTIFIER
	NS	LINE NOT SERVED BY MLT
	NT	NOT MLT TESTABLE
	NV	LINE NOT VERIFIED
PREMISES FAULT	P1	DC RESISTIVE FAULT
	P2	DC RESISTIVE MARGINAL
	P3	POSSIBLE TELEPHONE STATION SETt
	P4	CPE – BAD
	P5	CPE – SUSPECT
	P6	CPE – IN TEST MODE
	P7	CPE (STATION SET)- BAD OR INVALID
	P8	CPE (T – INTERFACE) BAD
	P9	NT1 PRIMARY POWER FAILURE

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## Mechanized Loop Testing (MLT), Continued

Category	Ver Code	MLT summary
PROTOCOL PROBLEMS	PA	LAYER 2 PROBLEM
	PB	POSSIBLE PROTOCOL PROBLEM
	PC	LAYER 3 PROBLEM
	PF	POWER FAILURE
SPECIAL SERVICE	SO	LINE IN SERVICE – ADD ANALYSIS
	SP	PROTECTED SERVICE
	SS	SPECIAL SERVICE REQUIRED
	ST	INTERCEPT – ADD ANALYSIS
	SU	INTERCEPT
	SX	PBX ROUTE ADVANCE TELEPHONE NUMBERS
SYSTEM TIMEOUTS	T1	SYSTEM TIMEOUTS
	T8	UNEXPECTED THERMITORS
	TB	BUSY DIGITAL TEST
	TS	USE SSA ACCESS
RECORD ERROR	U1	UNEXPECTED THERMISTORS
	U2	UNEXPECTED PBX SIGNATURE
	U3	UNEXPECTED RINGER TERMINATION
	U4	UNEXPECTED INWARD SERVICE
	U5	UNEXPECTED CHANNEL TEST RESULTES
	U6	UNEXPECTED INTEGRATED/UNIVERSAL PGS
	Hardware Problems	DP
	DL	DATA LINK FAILURE
	PF	POWER FAILURE
	X7	TEST SYSTEM ERROR
	XA	COMBO NOT IN DATABASE
	XF	HDT DID NOT RECOGNIZE CKT ID (SDV) (SDV NOT CURRENTLY OFFERED IN fBAfBA)
	XI	INVALID TELEPHONE NUMBER
	XO	TESTABLE VIA STV OPTION
	XS	TESTABLE VIA THE STV MASK ONLY
	XT	TRAINING SCRIPT UNAVAILABLE
	XU	TEST EQUIPMENT NOT AVAILABLE

*Continued on next page*

## Mechanized Loop Testing (MLT), Continued

Category	Ver Code	MLT summary
Digital AML	1D	DIGITAL AML TEST OK
	2D	DIGITAL AML POSSIBLE CPE PROBLEM
	3D	DIGITAL AML BAD C.O. LINE CARD
	4D	DIGITAL AML HAD REMOTE TERMINAL LINE CARD
	5D	DIGITAL AML MISSING REMOTE TERMINAL CARD
	6D	DIGITAL AML DLC OPEN TIP SIDE
	7D	DIGITAL AML DLC OPEN RING SIDE
	8D	DIGITAL AML DLC GROUND TIP SIDE
	9D	DIGITAL AML DSL GROUND TIP SIDE
	1E	DIGITAL AML DSL TIP/RING SHORT
	2S	SHORT –POSSIBLE AML
FIBER IN THE LOOP	1X	FITL TEST OK
	2X	FITL TEST NOT AVAILABLE
	3C	FITL CHANNEL FAILURE FEMF
	3X	FITL CHANNEL OK FEMF Disp ONU
	4C	FITL CHANNEL FAILURE
	5C	FITL CHANNEL FAILURE
	5X	FITL CHANNEL OK NO TERM- OPEN CPE
	6C	FITL CHANNEL FAILURE RESISTIVE FAULT
	6X	FITL CHANNEL OK RESISTIVE FAULT DISP. ONU
	7C	FITL CHANNEL FAILURE ROH
	7X	FITL CHANNEL OK ROH RETEST
	8C	FITL CHANNEL FAILURE HAZARDOUS VOLTAGE
	8X	FITL CHANNEL OK HAZARD VOLTAGE. DISP ONU
	9X	FITL TEST NOT AVAILABLE

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## Sidekick Test Set Job Aid

**Job Aid** The following table has been created to assist the field technicians with Sidekick test results. Refer to Sidekick Operational Manual for complete test procedures.

Test	To Test	Good Marginal Test	Bad Test Results	Comments
AC voltage			> 25 Volts	Ring voltage is > 25 volts
DC voltage		45V TO 52 V		
Stress		< 30 dB	>40dB	Results between 30dB – 40dB test other pairs for cable characteristics
Leakage	NB	> 2 Meg for Dial Tone	< 2 Meg	>20 meg for DATA, test minimum 15 seconds each
Resistance				Resistance to feet chart. Refer to sidekick operating manual
Distance to open				
Loop current		>23mA	< 20mA	RG value should be > than 150% TG value
Load coils	NB			Digital circuits – require provision pairs with no load coils
Power influence	QL	60dB to 90dB	>90dB	
Noise	QL	0dB to 30dB	>30dB	
Balance	QL	Good 60dB to 80dB	<40dB or >91dB	
CKT loss	QL	0db to -10db	< -10dB	Observe readings during 1000 cycle tone

**Good Ground** Stress test and remove Tip or Ring – Readings over 70dB indicates good ground. Refer to Sidekick Operational Manual for complete testing details.

**Quiet Line** A pair with dial-in resistance termination at the C.O.

**Working Idle** An on-hook pair with battery.

**Idle Pair** A pair with no connection to C.O. equipment.

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## Sell One More

### SOM

Sell One More is an awards program in which a referral, if it becomes a sale, converts to points for redeeming merchandise, travel or certificates. SOM is available to all NSG Employees and helps to play a role in directly delivering Verizon's Newest Broadband products and services to our customers. The SOM program is *only* available to *Verizon Customers*. Win-back and CLEC are *not* eligible. The referral Process is shown below:

Step	Action	
1	Identify and submit a referral via: HHT/Laptop, SOM website internet/intranet or 1-800-SELLONE, or option four (warm transfer)	
	<b>Consumer</b>	<b>1-877-215-0055</b>
	<b>Small Business</b>	<b>1-800-365-1909</b>
	<b>Sell One More website – work location</b>	<a href="http://sellonemore.verizon.com">http://sellonemore.verizon.com</a>
	<b>Sell One More – from home</b>	<a href="http://www.sellonemore.com">www.sellonemore.com</a>
2	Verizon Sales office Rep. will process the referral, contact the customer and update the referral status.	

### Points earned

Points earned for **sold referrals** accumulate and can be redeemed as:

<b>Merchandise</b>	<b>A wide range of easy-to-browse categories of high quality items, including sporting goods, hardware, jewelry, furniture, Verizon apparel and ...</b>
<b>Travel by design</b>	<b>Help in booking airline tickets, secure hotel accommodations and arrange ground transportation.</b>
<b>Gift Certificates</b>	<b>A range of certificates that feature many favorite restaurants and retailers.</b>

*Note:* Although recipients receive Sell One More Award Points, the points cannot be redeemed for money.

