

CENTRAL OFFICE EQUIPMENT
INSTALLATION ACTIVITY PROCEDURES

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GENERAL

Purpose This practice presents the procedures to follow during installation and rearrangement assignments and responsibilities of the involved:

- Telephone company departments.
 - Central office equipment installation forces.
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Overview Installation activity **in central offices, both local and toll**, can be a source of customer **difficulty**. Following the **procedures** in this practice minimizes these difficulties. The major concerns are:

- Preventing service interruptions.
- Abnormal maintenance activities.
- Responsibilities of all parties **concerned**.
- **Preparing equipment for acceptance while restricting the installer as little as possible.**

A close liaison between the central office supervisor and the installation force is required at all times. Where possible, major responsibilities, precautions, practices, and general requirements have been established. Use this practice as a general guide since it is impossible to include every situation here.

Telephone Company Departments The telephone company departments, which consist of various departments involved in installation of central office equipment such as Engineering, Service, and Plant Supply, are referred to in this practice as the telephone company.

Installation Force The installation force is all central office equipment installation personnel, whether they are employed by:

- The equipment manufacturer.
- The telephone company.
- An outside contractor.

All such personnel are referred to as the installation force **in** this practice.

E.F.&I.-Basis installation Work Installation work performed by a manufacturer on an Engineer, Furnish, and Install (E.F.&I.) basis includes only the items agreed to in the initial contract or in subsequent agreements. In some cases, these work activities differ from those performed by personnel on the direct payroll of the telephone company.

It is the Installation and/or Engineering Coordinator's responsibility to see that work assignments are completed by the proper work group according to contractual arrangements and company policies.

RESPONSIBILITIES

Introduction

The following responsibilities sections:

- Detail actions to be taken by each associated party.
- Remove confusion regarding those responsibilities.

Each involved party must adhere to and respect the established rules to successfully complete assignments.

Make the responsibilities sections available to all installation forces doing work for the telephone company.

Telephone Company Responsibility

Equipment Engineer

The basic responsibility of the Equipment Engineer is to:

- Specify the equipment that goes into the central office.
 - Specify where the equipment is to be placed.
 - Ensure that the equipment is physically and electrically compatible.
 - Make certain the equipment, when placed **into** service, meets:
 - All requirements specified by the manufacturer.
 - All requirements specified by the **installation** force.
 - The demands of good service.
 - Integrate into the job-site drawing, the installation specifications from the:
 - Land and Building Engineer.
 - Transmission/Special Services Engineer.
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Supply and Transportation

The Supply and Transportation Departments must physically deliver the equipment on schedule and as specified by the engineer.

Central Office Supervisor

The local central office supervisor, who maintains the equipment after cutover, must have close contact with the installation in order to be able to accept the equipment when the installation force completes its task.

The central office supervisor is directly responsible for the type of service rendered to the customer. The central office supervisor is responsible **for**:

- Accepting equipment in a new office.
- Accepting additional equipment in an existing office.
- Providing qualified personnel to perform jointly with the installation force on the:
 - Acceptance test procedure.
 - Physical inspection.
 - Functional tests.

NOTE: Testing specifications are outlined in the Teiops Practice 200-002 series, Acceptance Test Plan series, and/or the manufacturer's practices. If agreed to.

The central office supervisor must ensure that all equipment meets specified requirements.

TELEPHONE COMPANY RESPONSIBILITY, continued

Pre-Installation

The telephone company will do the following:

- Assign a coordinator to assist the installation supervisor in joint problems. which may arise.
- Assure equipment and materials to be installed are:
 - Received properly and on time.
 - Delivered to where the installation force needs them.

NOTE: see Telops Practice 742-100-100 Fire Prevention and Protection Guide, for information on storing equipment In central offices.

- Provide materials required in local procedures that are not generally available to the installation crew.
- Provide the necessary ceiling inserts, embedded ceiling channel or applicable fastening hardware in the area where equipment requires ceiling fastening, unless otherwise agreed to.
- Provide adequate openings for taking equipment into the building. Ensure all necessary structural alterations are proper, including cable holes in the floor and walls, and provide mineral wool bags for the cable holes as described in GTE Practice 237-050-200. Method of Closing Cable Holes.
- Provide and ensure installation of all electric lighting equipment, including conduit, wiring, isolated AC outlets convenience outlets, and soldering iron outlets.

NOTE: Provide temporary lighting and outlets if permanent lighting and outlets will be installed on equipment frames.

- Provide heating, ventilation. and toilet and washing facilities for installation forces
- Provide and install all conduit required in connection with the power plant. including conduit and wiring between the commercial AC source of supply and the terminating points of the power plant and other units requiring AC, such as battery chargers and other miscellaneous equipment.
- Provide a trickle charge to ail cells of batteries in the event of early delivery.
- If floor covering is not in place, seal or treat the concrete surface to ensure that the room will be relatively free of dust during installation.
- Provide adequate fire protection apparatus as specified in Telops Practice 742-100-100 during installation and regular disposal of packing crates, combustibles. and other surplus materials from the exchange site.
- Provide and ensure installation of remote alarms and fire suppression systems before equipment is powered-up,
- Provide the COE battery maintenance safety board and materials at power-up time.
- Ensure that local buildings and ground conditions remain as clean as possible during the installation period.

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TELEPHONE COMPANY Responsibility, continued

Pre-Installation,
continued

- Provide a permanent, low-resistance exchange ground with necessary **cables and equipment** (in accordance with Telops Practice 795-805-071, **Central Office Grounding Systems Engineering Applications**) for the installer to connect to the ground bus bar.
- On telephone company-installed jobs, provide. at all work locations. office:
 - Furniture (filing cabinet(s), desk, chair, **workbench**, etc.).
 - Supplies.
 - Telephone services.
 - Floor space.
 - Signs (No Smoking, High **Voltage**).

NOTE: On manufacturer- or vendor-installed jobs it is the manufacturer or vendor's responsibility to provide furniture, supplies, and telephone services.

- Provide security measures to protect the installation materials and tools and permit installers free access to the premises during the installation period.
- Provide for mounting and installation of protectors and ground straps when protectors with tip cables are furnished. Coordinate scheduling for mounting and installing protectors and ground straps with the installation and outside plant construction forces so delays do not occur.
- Provide all intra-office grading assignments and cross-connect lists for the distributing frames. if the installer must complete the work within a specified time frame. to ensure satisfactory completion before cutover.

NOTE: This includes lists of all special services marked to notify the installer that special precautions must be taken as directed by the telephone company.

- After the installer has made the initial cross-connections, the telephone company is responsible for changes.

On additions, the telephone company may make line and trunk cross-connections and strap intercept of unassigned numbers, or equivalent, depending upon the nature of the office. In cases of question, the coordinator and installation supervisor will jointly determine who is assigned this function.

- Coordinate installing and connecting outside plant cables to the MDF/CDF to avoid interfering with equipment installation.
 - Supply and install house cable.
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During
Installation
and Before
In-Service

The telephone company will also do the following:

- Provide the installation with the latest data base, translation changes, and routing information
 - Provide a list of all special telephone numbers for rest purposes and an emergency call list in case problems arise during installation
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INSTALLATION FORCE Responsibility, continued

Pre-Installation.
continued

Installation must check the annual inspection **verification tag** to ensure that the proper test equipment calibration exists.

Do not use equipment **unless the tag** shows that the calibration is current and has been verified (see GTE Practice 100-000-100. Test Equipment Calibration Guideline).

Test equipment secured by installation must be system-standard and must not damage the equipment being installed.

- Provide all **necessary office supplies, forms, testing and adjusting instructions**, test equipment, and **tools unless otherwise provided for, specified in a contract, or** mutually agreed upon.
 - Establish job schedules (**approximate completion dates of major installation operations**) in conjunction with the telephone company coordinator and maintain an efficient and productive schedule.
-

During
Installation
and Before
In-Service

The installation force will also do the following:

- Keep to a minimum the packing and unpacking of material in equipment areas. Remove **all** surplus material and combustibles from the central office before the end of each work day.
 - Install and test all equipment according to relevant specifications, drawings, and practices (see Teiops Practice 200-002 series and/or agreed-to manufacturer's procedures for acceptance **testing requirements**. CH 110, Central Office **Equipment Installation, is the** primary reference document for installation).
 - Do not deviate from or make any modifications to drawings, specifications, or equipment layouts unless authorized by the telephone company Engineering Department.
 - Ensure that any required temporary lighting provided by the installer conforms to the Electrical Code and the rules of the local authorities.
 - Perform installation work according to specifications and installation methods established in the 040, 075, 7954305 series, and 200 through 289 GTE divisions practices.
 - Protect exchange equipment from damage or dust, and keep the work area accessible and clean at all times during installation.
 - Make the original grading assignments and cross-connections at the distributing frames from current lists supplied by the telephone company and/or the manufacturer on E.F.&I. jobs.
 - When required, make all crossconnections at the Main Distributing Frame (MDF) or Combined Distributing Frame (CDF) between the protectors or outside cable terminals and the central office equipment.
 - Ensure the proper wire-wrap gun-bit maintenance and test procedure **is used** per Telops Practice 075-630-801. Wire Wrapping Bits Maintenance, and that wire-wrap quality complies with GTE Practice 256-050-Z 11, Cabling Methods Connecting Wires Solderless Wrap Methods).
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INSTALLATION FORCE RESPONSIBILITY continued

During
Installation
and Before
In-Service.
continued

- Provide correct accounting of time charges to proper accounts.
 - Submit a report on job progress to the telephone company coordinator **or as specified** in local practices.
 - Coordinate installation of the MDF without interfering **with any** outside plant construction.
 - Prevent service interruption and abnormal maintenance effort.
 - Perform **all** acceptance test procedures physical inspection, and functional testing according to Telops Practice 200-001 series and/or the manufacturer's **agreed-to practices**.
 - **Report to Engineering all:**
 - Equipment defects according to Telops Practice 007-009-001, Unsatisfactory Condition Report (UCR).
 - Building problems or deficiencies, changes **requiring additional** work or rework.
 - **Material** and/or the cost of quality impacts by the UCR process, the Job information Memorandum (JIM) process, and/or the complaint process, as applicable.
 - Periodically provide quality assurance inspections before acceptance testing, using Telops Practice 004-200-001, Quality Assurance Operational Review COE Installation and/or the agreed-to manufacturer's practices. The COE inspector (manufacturer or Telco) will furnish the inspection results in writing to the responsible Telco installation representative.
 - Close cable holes in accordance with GTE Practice 237-050-200, Method of Closing Cable Holes, when work is not in progress.
 - Maintain a:
 - Printed circuit board repair and return log.
 - Software patch implementation log.
 - Complete trouble log and/or copies of trouble tickets of trouble encountered during installation showing the type, location, and who cleared it.
 - Where applicable, clean and lubricate all equipment furnished on this order according to the GTE Practice 231-401 series.
 - Verify all intended documentation changes with Engineering before making the changes. **Then, red line specification and/or** drawing changes so documentation is always kept current.
 - When changes or deviations are made, send drawings or specifications marked up to show deviations or changes by the turnover date to the:
 - Manufacturer's Installation Division.
 - Telephone company's engineering department (for example, Equipment Engineering, Land and Buildings, or Transmission/Special Services).
 - The installation group specifically assigned this work project completes initial line-up tests on carrier, **radio, voice-frequency repeaters, and similar** devices.
 - Replace ceiling tiles upon **completion** of the work **task that necessitated their removal**.
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PREPARING FOR INSTALLATION

Pre-Installation Meeting

Before the start of each job, a meeting must be arranged among the central office supervisor, coordinator, equipment engineer, and installation supervisor to review procedures, practices, and job specifications and drawings to:

- Identify and verify that equipment to be installed, rearranged, and/or removed is accurately included in the site documentation.
 - Determine the compatibility of the proposed installation or rearrangement with the existing equipment.
 - **Identify when working equipment may be taken out of service, if necessary, and the maximum number of circuits to be busied out at one time.**
 - **Determine the proximity of power plants and distribution system.**
 - **Determine who is authorized to remove fuses.**
 - Schedule when the work will begin and be completed.
 - Identify work activities requiring the presence of a telephone company employee.
 - Identify which alarms are to be disconnected.
 - Review office records or drawings.
 - **Review measures for protection of equipment.**
 - Establish procedures for **entrance** to buildings and access to work areas.
 - **Arrange** for use of company-owned test equipment.
 - Ensure workers maintain professional conduct in the building (no horseplay or foul language).
 - Ensure building facilities, such as the rest rooms, lunch rooms, elevators, equipment hoists, and parking lot meet the needs they were designed to fulfill.
 - Maintain protection of floors, walls, and ceilings.
 - Designate storage area for tools and materials. For example, GTE California provides a "gold room" or construction shack.
 - Review safety precautions and regulations.
 - **DISCUSS** and prepare for testing and physical inspection of equipment in accordance with Telops Practice 200-002 series and/or the manufacturer's practices, if agreed to.
 - Discuss the development of maintenance files and records.
 - Inquire about the presence of asbestos and potential health risks outlined in Telops Practice 009-000-003, Asbestos Work Procedures - Safety Precautions.
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PREPARXNG FOR INSTALLATION, continued

Building Access	<p>The installation force normally is allowed free access to the premises and facilities at all hours necessary for performing the installation work.</p> <p>Existing local procedures must be adhered to when installation forces require access to restricted areas.</p> <p>Access into a new building or existing building will be coordinated with the telephone company coordinator to obtain keys or other methods of access.</p>
New Buildings with No Working Equipment	<p>In installations in new buildings where no working equipment is in service, the installer is allowed full use of available space.</p>
Buildings with Working Equipment	<p>In installations in buildings where working equipment is installed, the installer schedules delivery of material to allow economical job progression. Do not allow storage of material to interfere with maintenance.</p>
Work and Storage Space Assignment	<p>Work and storage space are assigned by the telephone company representative for equipment such as desks, lockers, files and work benches. If possible, locate these spaces away from working equipment. In central offices where space is limited, the amount of material that the installer is allowed to bring into the office is restricted to items that will be installed within five working days, and conforming to Telops Practice 742-100- 100.</p>

SAFEGUARDING SERVICES

Central Office and Installation Supervisor Responsibilities	<p>During installation, central office and installation supervisors are jointly responsible for:</p> <ul style="list-style-type: none">• Maintaining uninterrupted service.• Keeping additional maintenance expenses to a minimum. <p>Attaining this objective requires full and continued cooperation before and during installation.</p>
Equipment Removals	<p>Before removing/relocating equipment in on-line offices, Installation must schedule the work with the central office supervisor to occur during low traffic periods and in accordance with Telops Practice 220-000-200, COE Installation Equipment Removal Guidelines.</p>
Clearing Trouble	<p>In case of trouble or problems that affect customer service:</p> <ul style="list-style-type: none">• During installation activity, maintenance and installation forces must cooperate closely in clearing equipment troubles that may be caused by the installation force.• The installation force must promptly advise the central office supervisor or a representative of any conditions believed to be a potential source of trouble.

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SAFEGUARDING SERVICES, continued

Clearing Trouble, continued

- The installation force must clear trouble that occurs on equipment they are working on, or that they worked on before acceptance, when trouble occurs because of their activity.

NOTE: If doubt exists as to which force is responsible, the maintenance force assumes responsibility for clearing the trouble.

- In case of a service interruption **or serious** circuit trouble, it is the joint responsibility of the installation and maintenance forces to locate and clear the **trouble** promptly.
 - The manufacturer's Technical Assistance Center (TAC) must be alerted to be on call when serious outages or degradations occur.
 - All service interruptions cleared **by installation forces must be** reported on trouble tickets to the central office supervisor.
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Avoiding Service Interruptions

Before starting any operation on **working equipment**, the **installation** supervisor must meet with the central office supervisor to:

- Explain procedures to follow to avoid trouble.
 - Warn of trouble to expect.
 - Mutually agree upon:
 - Hazards involved and **degree** of risk imposed by each.
 - Installing methods, tools, and test sets to be used.
 - **Experience** of personnel to be used.
 - Protection required on the equipment and tools.
 - The need to inform other departments that work is in progress.
 - When applicable, the time of day or night during which various steps of the work will be **performed**.
-

Special Precautions

Refer to Telops Practices **200-001-000** and **200-001-004** and the following special precautions:

- Do not touch special services without written concurrence from the central office supervisor
- Ensure that correct spare fuses are readily available when any work is undertaken, **especially** that involving power circuits, which may result in blown fuses. If a ladder or keys are necessary to get to the fuse box, these also must be easily available.

The telephone company representative must ensure that the installation personnel fully understand any special provision or requirement such as:

- Fuse-bypassing switches.
 - Alarm fuses associated with cartridge fuses.
 - The correct way to install grasshopper fuses.
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SAFEGUARDING SERVICES, continued

Special Precautions. continued

- Perform drilling, filing, tapping, and other such operations outside the switchroom. When this is not possible, as when working on mounted equipment, carefully protect the equipment.
- Make all installation personnel aware of the need for using wire bags and drop cloths.
- Do not open windows in equipment rooms at any time unless absolutely essential for the entrance of equipment. Keep doors closed at all times when not actually in use.
- When drilling holes in floors, walls, or ceilings, or otherwise cutting through building structures, the installer must exercise care to prevent dirt and dust from getting into working equipment.
- Do not wear metallic objects such as **identification** bracelets, rings, eyeglass frames, and wrist watches during installation activities.
- Use care when removing or replacing covers on relays, switches, and other equipment to prevent grounding of the unit or damage to adjacent units.
- Carry out cabling activities within the shortest interval possible, because of the dust dislocation caused by this operation.
- When wiring on working equipment, ensure that all associated alarms are in working order.

All equipment under and near wiring operations must be protected from loose wire ends and solder splashes by using wire bags and drop cloths.

Wires carrying potential or ground must be taped or sleeved as soon as they are disconnected.

- Installers must not work on live bus bars and live main power panels unless properly supervised (see GTE Practice 205-705-201, Power Plant Bus Bar Installation). When work is performed on bus bars and other exposed power conductors and connections, use additional protection such as rubber blankets.
- Use extreme caution when installing and handling equipment containing static-sensitive devices (see GTE Practices 007-005-Q15, Storing, Handling, and Transporting Static-Sensitive Components and **020-110-220**, Electronic Components installation and Handling).

SAFETY, HOUSEKEEPING, AND FIRE PREVENTION

Central Office Supervisor Authority

The central office maintenance supervisor has authority to insist that the installer observe the same rules of conduct, accident prevention, good housekeeping, and fire prevention that govern central office employees. If a breach of these rules cannot be resolved on a local level, refer the matter to the telephone company coordinator for action. Safety and housekeeping standards are covered in Teiops Practices:

- **200-001-000**, Central and PABX Offices Safety Precautions
- **200-001-002**, Reconditioning of Water-, Heat-, and Smoke-Damaged Electromechanical and Electronic Switching Systems and PABX Equipment.

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SAFETY, HOUSEKEEPING, AND FIRE PREVENTION, continued

Central Office
Supervisor
Authority .
continued

- **200-001-003.** Central Office Emergency Procedures Commercial Power Failure.
- 200-001-004. Equipment Rooms Housekeeping and Safeguards.
- **200-001-010.** Guidelines for the Use of Tools and Test Equipment in Electronic Equipment Areas.

Additional fire protection practices are covered in the Telops Practice 742 series.

Installation
Supervisor

The installation supervisor must see that working space is kept clean and free of hazards. Remove all **dust and dirt from outdoor equipment**, for example, crates, boxes, and cable reels, before they enter the equipment areas. This **applies to new buildings as well as those housing working equipment.**

Unpacking
Materials

Whenever possible, unpack installation material **away from working** equipment areas.

Trash Collection

If normal trash collection cannot handle the volume of construction trash, the construction supervisor must contact the local supply and transportation supervisor who arranges for additional collection during heavy construction.

Do not allow combustible trash to accumulate outside the central office to the point that it is unsightly or hazardous.

Storing with
Combustible
Shipping
Containers

Storing equipment and **material in combustible shipping containers in any** central office (existing or new) is **limited to the amount needed to sustain the construction** work force for five working days. The equipment stored within a central office building must be:

- Covered with an anti-static, **flame-retardant** covering (provided by the Telco).
 - Located as far away from existing equipment or construction activity as space conditions permit.
-

Disposing of
Combustible
Shipping
Containers⁵

As equipment is removed from shipping containers, immediately remove the combustible materials from the switchroom.

Never allow combustible material that is not contained in metal-covered trash barrels to remain in the switchroom overnight, or beyond the completion of any working shift. Use metal-covered trash containers for incidental, temporary, combustible storage; dispose of the contents as soon as possible.

Storage
Arrangements

Storage arrangements for direct-shipment deliveries are the responsibility of the local supply organization. If preplanned storage facilities are not available (due to a delay in building construction, for example), local supply arranges for temporary storage. Temporary holding areas must provide equipment protection consistent with factory recommendations for storage.

SAFETY, HOUSEKEEPING, AND FIRE PREVENTION, continued

Storing Salvageable Scrap	<p>Wire ends: cable, and other scraps with a salvage value must be stored in approved metal containers and kept separate from other scrap materials.</p> <hr/>
Protecting Work Space and Equipment	<p>Floors, walls, ceilings, and working equipment must be properly protected from damage. The greatest risk is damage to floors by boxes and cable reels. Never roll or store cable reels on tile or linoleum floors without adequate protection. Use non-combustible fiberboard or a similar material for this purpose.</p> <hr/>
Ladders	<p>Rolling ladders and ladder seats are only to be used by the installer when this does not interfere with work of the maintenance forces. All other ladders and scaffolds are provided by the installer.</p> <p>Installers must ensure that all ladders and scaffolds are:</p> <ul style="list-style-type: none">• Secure and properly guarded, so that tools and other equipment cannot fall on people or equipment below.• Placed to cause minimum interference. <hr/>
General	<p>GTE safety and fire prevention standards must be maintained at all times. Company rules and regulations apply equally to installers and company personnel.</p> <p>Safety equipment such as fire extinguishers must not be obstructed and must not be moved without permission of the central office supervisor, unless they are to be used for the intended purpose.</p> <p>Cable holes must be kept closed when associated cabling operations are not in progress. All cable holes must be closed with the approved materials at the end of each working day as specified in GTE Practice 237-050-200.</p>

ACCEPTANCE

Scheduling Acceptance Testing	<p>All new installations, additions, and conversions must be tested for acceptance in accordance with Telops Practice 200-002 and 200-003 series, as applicable, and/or the agreed-to manufacturer's procedures.</p> <p>The installation supervisor must notify the central office supervisor and/or coordinator, in advance, of the completion date for:</p> <ul style="list-style-type: none">• The job. <p>OR</p> <ul style="list-style-type: none">• Any part of the job that is to be accepted on a partial basis. <hr/>
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TOOLS AND TEST EQUIPMENT

Use of Test Equipment On new installations, installers must **turn over** work-order-provided test equipment **in new condition** to the central office supervisor when job ends.

NOTE: All **new test sets** must be calibrated and marked before use.

On additions, test equipment already **in the office** can be loaned to the installers if loaning the equipment does not interfere with maintaining the office. The telephone company ensures the:

- Calibration is checked **annually**.
 - **Inspection** date is properly tagged.
-

Precautions to Prevent interference Refer to Telops Practice **200-001-010** for precautions that **must be observed** to avoid interference in electronic/digital offices **when using electric tools and test equipment**.

All tools used on working equipment must be insulated with a minimum of three electrical tape wraps with a half-lap overwrap.

Wire-Wrapping Use only the standard wire-wrapping tool and maintenance procedures (see Telops Practices **075-630-101**, Wire Wrapping Tools Description and Use and **075-631-100**, Wire-Unwrapping Tool and Bit) for wire-wrapping terminations. Notify the central office supervisor before wrapping live equipment.

WARNING: Do not use **non-insulated, motor-driven, wire-wrapping tools on** working equipment.

INSTALLATION SITE CONFIGURATION CONTROL

Purpose Configuration control **(by issue)** verifies that the hardware and documents **received on-site**:

- Remain on-site after installation and test acceptance.
 - Are compatible with a given generic product line release level.
-

Instructions Check the stock list issue numbers stamped on the equipment and the **drawing** issue numbers against the CM-XXXXX-SVR (or equivalent) document to verify that they are in agreement.

Check the part number stock list issues stamped on the equipment using the System Version Release (SVR)/Conversion documents':

- Printed wiring card number and issues.
- Frame number and issues.
- File and backplane number and issues.

If equipment issue numbers are lower than the base issue numbers indicated on the applicable SVR/conversion document, contact local Engineering

Reference The configuration management process is covered in Telops Practice **007-035-030**, Configuration Management Electronic Switching and Support Systems Telco Procedures

DOCUMENTATION ADMINISTRATION

Introduction

Site documentation must be organized in a standard method. Standardized organization of site documentation:

- Promotes quick information retrieval for personnel.
 - Expedites documentation maintenance.
 - Reduces training time.
 - Eliminates lost or **misfiled** documentation.
-

installation Supervisor Responsibilities

The installation **supervisor** is responsible for updating **and** maintaining all work-order-related documentation, including:

- Drawings.
 - **GTE Practices.**
 - Software.
 - Administrative and site log books.
 - Safety meeting rosters on local safety meetings.
 - Quality Assurance documentation.
 - Time reporting log for the proper accounting of time charged against each work order or activity code on the project.
-

Standardizing Hard Copy Organization

File documentation in binders, when possible. to reduce the different types of office furniture required, and make information retrieval faster.

Use bookcases to house documentation contained in binders. The size of the **office** determines the quantity of **bookcases** needed.

Organize the bookcase from top left to bottom right and top to bottom. Place GTE Practices **starting** at the top of the **bookcase**. followed by the system user guide. and all other support documents.

File all unbound documentation (not in binders) in file cabinets. File the documents. using the document's identity as follows:

- File the documents having alphanumeric identities **AAA000** through **ZZZ999** top to bottom. followed by documents with numeric identities **000XXX** through **999XXX**.
- Label each drawer with the **beginning** and end of the range of documents that are within each drawer.
- Tab all **individual** slots within each drawer.

Locate large, bulky, oversized binders such as data base listings and D-size drawings in:

- Special cabinets or racks.
OR
- A designated area specified by the installation supervisor.

Organize the binders to eliminate the need for the user to search for specific information.

DOCUMENTATION ADMINISTRATION, continued

Alternative Media Documention media may be 35 mm or microfiche. See GTE Practice **224-017-000**, GTD-5 EAX Field Documentation. for definitions of the media and available documentation.

Practices **Organize practices** in the following manner:

- **File GTE Practices in numerical order.**
- **Arrange and file administrative documentation and log books chronologically.**
- **File the drawings using the alphanumeric identities. followed by drawings having only numeric identities.**
- **File software documentation using the alphanumeric identities.**

Site Logs **Maintain site logs (defect log, software patch implementation log, printed circuit board [PCB] repair log, maintenance and operation log) in the control center and update on** a daily basis.

Shift leaders log activities on the system on a shift basis. Site logs require the initials or name of the person making the entry, must be written legibly, and dated. The site logs may be removed from the control center **only** with the installation supervisor or telephone company representative's authorization.

Maintain a recent change fog for entering all authorized changes requested by staff or engineering departments. The authorization (name and department) must be entered into this log and dated, then signed by the person making each change.

Prints and Drawings The installer must:

- Report all authorized deviations from original prints and **specifications** through normal channels.
- Supply the telephone representative with marked-up prints showing the deviations to update the representative in the interim until new issues of corrected prints are supplied.
- Provide the telephone company representative with the information required to update local office records.

All prints and drawings removed from the maintenance **files** must **be** returned and filed at the close of each working day.

UNATTENDED OFFICES

Offices with Remote Alarm Systems When installations take place in unattended offices that have alarms extended to a remote location the installation force must report all alarms they set off to a location the telephone company designates.

UNATTENDED OFFICES, continued

Arrival and
Departure
Procedures

Personnel must report their arrival to and departure from an unattended office to the central office responsible for its maintenance.

Preventing
Service
Interruptions

To prevent a possible service interruption, the installer, when departing from an unattended office, must make certain:

- The alarm system is in the proper transfer position.
 - Local telephone company instructions for leaving an office in normal unattended operation were followed.
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Housekeeping

Maintain proper housekeeping in the unattended office.
