Installation Engineering Handbook 8
Western Electric
Rolling Meadows RM-4

Section   501
9-30-83
Replacing Issue of
6-27-80

MISCELLANEOUS CABLING OPERATIONS
CUTTING CABLES DEAD AT CABLE RACKS

CONTENTS

1. GENERAL

1.1 Scope of Section

1.1.1 This section covers the procedure to be
       followed when cutting dead cables from
cable runs containing live cables. Adherence
to this procedure will reduce the possibility
of service interruptions occurring.

1.1.2 Dead Cables are those cables made dead
       due to their disconnection at equipment
terminations at both ends of a cable as a
result of equipment removals, relocations,
modifications, etc.

1.2 General Information Pertaining to Arrangement of Tools, Precautions, Verifications, Specs and Drawings and Figures

1.2.1 Refer to Section 1 of this handbook for
       information pertaining to these items.

2. INSTRUCTIONS

2.1 Extent of Removal

2.1.1 Normally, job specifications specify
       the extent to which dead cables on
cable rack are to be removed.

2.2 Loosening Dead Cables

> CAUTION: USE CARE DURING THE LOOSENING
> OPERATION TO AVOID DAMAGE TO
> ADJACENT CABLES WHICH MAY BE
> LIVE. DO NOT USE UNAPPROVED
> TOOLS TO LOOSEN CABLES BECAUSE
> SUCH USE MAY RESULT IN PER-
> SONAL INJURY OR SERVICE
> INTERRUPTION.

2.2.1 In order to eliminate the possibility
       of service interruptions being caused
by the ends of dead cable coming in contact
with live circuits, tape the ends of dead

cables with R-3428 Gray Plastic Tape.

2.2.1.1 Place a single layer (or as many as
         required to cover the end) across the
end of the cable and longitudinally along the
sides of approximately 1-1/2". Then wrap a
single layer of tape over the 1-1/2" area of
the tape previously applied.

2.2.2 Loosen dead cables from cable runs by
       removing the cable clips or sewing
twine used to secure them. Use the R-2542
Clip Remover as prescribed in Section 312 of
this handbook to remove the clips and the R-
1682 5" Scissors to cut the twine. Loosen
cables as far along the cable racks as
required to permit removing them to the extent
specified in the job specification. Live
cables loosened in the process shall be tem-
porarily tied up and off the cable racks as
required to facilitate removal of dead cables.

2.2.3 When removing dead cable from bays, or
       in the vicinity of bays which have
working cables equipped with coaxial type
jacks and plugs, the installer shall secure
the working connections (jacks and plugs) by
tying with twine. This precaution shall be
observed even though protective devices
(spring clips) for locking plugs and jacks
together are in place. At the conclusion of
the operation, the twine protection ties shall
be removed.

2.3 Using Cable Markers

2.3.1 To prevent service interruptions due to
       cutting cables with live circuits,
cable markers are to be attached to all cables
in the vicinity of the work being performed.
Cables with live circuits, as well as those to
be cut, are to have cable markers attached.

2.3.2 The R-4888-1 Red Cable Marker (see
       Figure 1) is to be attached to all
cables with live circuits.

2.3.3 The R-4888-2 Green Cable Marker (see
       Figure 1) is to be attached to all dead
cables to be cut and removed.

2.3.4 On both the red and the green cable
markers, the order number of the job,
Initials or name of person installing the
marker (verified by) and date are to be filled
in. The cable markers are installed by remov-
ing the backing from the pressure sensitive
adhesive and folding the marker back upon
itself as it is passed around the cable.

2.4 Cutting and Removing Dead Cables

| CAUTION: | DO NOT, UNDER ANY CIR-
CUMSTANCES, CUT THE LOOPS OF
ANY DEAD CABLES ON OR OVER
CABLE RUNS CONTAINING LIVE
CABLES. |
|---|---|

2.4.1 Where job specifications do not specify
the extent to which dead cables are to
be removed from cable runs, remove them up to
a point on the cable rack as close as practi-
cal to the cross strap to which they were last
secured. To do so,

1. mark the dead cables at the above (cut-
ting) point with a China marking pencil

2. loosen them from the cable run a con-
venient distance beyond the cutting mark
and tie adjacent live cables loosened in
the process as required.

3. pull the dead cables back and off the
cable rack so that their ends and por-
tions having the cutting marks hang off
the rack in an area clear of live cables

4. place cable-end through the R-4225 (8"
cutter with guard) (see Figure 2) or the
plate hole (R-4073) (see Figure 3) which
is attached to the blades of the cable
cutters (R-1514)

5. push cable through the R-4225 Guard or
cable cutter plate to cutting point

6. cut cable with R-4225 (8" cutter with
guard) or R-1514 Cable Cutters

7. dispose cut off length of cable and
place the cut end of the dead cable back
on cable rack.

2.4.1.1 Where job specifications specify
removing dead cables up to given
points on the cable rack, remove as much of
the cables specified for removal as practical.
To do so, repeat operations 1 to 6 in Para-
graph 2.4.1 above.

2.4.1.2 Where cable rack conditions prevent
removing the specified length of dead
cables in one length, remove them in sections
(several lengths) repeating operations 1 to 6
in Paragraph 2.4.1 above for each section.

2.4.2 For complete cable removal Instructions
(cable mining), refer to Handbook 42.

2.5 Removal of Cable Markers

2.5.1 Upon completion of all cutting and
removal of dead cables, the cable mark-
ers are to be removed and discarded.

2.6 Treatment of Dead Cable Ends

2.6.1 The ends of all dead cables on cable
racks are to be taped with the R-3428
gray plastic tape for the safety of the
installer to prevent scratches or other per-
sonal injury.

2.7 Restoring Cable Runs

2.7.1 Resecure cables cut loose from cable
runs during the process of removing
dead cables. Use securing methods prescribed
in the 300 series of this handbook.

→ Indicates new or changed information

1 Indicates information subject to verifi-
cation.

Engineering Planning Manager
(Installation)

Attachments:
  Figure 1
  Figure 2
  Figure 3
  Table A

Reason for Reissue:
  Revised Paragraph 2.6.1

TABLE A. VERIFICATION

VERIFICATION ITEMS AND BRIEF STATEMENT OF REQUIREMENTS	REFERENCE	
	Par. No.	Fig. No.

Treatment of Dead Cable Ends

The ends of all dead cables on cable racks are to be taped with the R-3428 gray plastic tape for the safety of the installer.   2.6.1

Restoring Cable Runs

Resecure cables cut loose from cable runs during the process of removing dead cables.   2.7.1

Removal of Cable Markers

Upon completion of all cutting and removal of dead cables, the cable markers are to be removed and discarded.   2.5.1

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+----------------------------------------------------------+
|                                                          |
|  DO NOT CUT          DO NOT CUT                          |
|  THIS CABLE          THIS CABLE                          |
|                                                          |
|                      ORDER NUMBER _____ _____    |
|                                                          |
|                      VERIFIED BY_____DATE_____   |
|                                                          |
|  R-4888-1 (3-80)                                         |
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RED MARKER

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+----------------------------------------------------------+
|                                                          |
|    CUT THIS            CUT THIS                          |
|  CABLE ONLY          CABLE ONLY                          |
|                                                          |
|                      ORDER NUMBER _____      |
|                                                          |
|                      VERIFIED BY_____DATE_____   |
|                                                          |
|  R-4888-2 (3-80)                                         |
+----------------------------------------------------------+
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GREEN MARKER

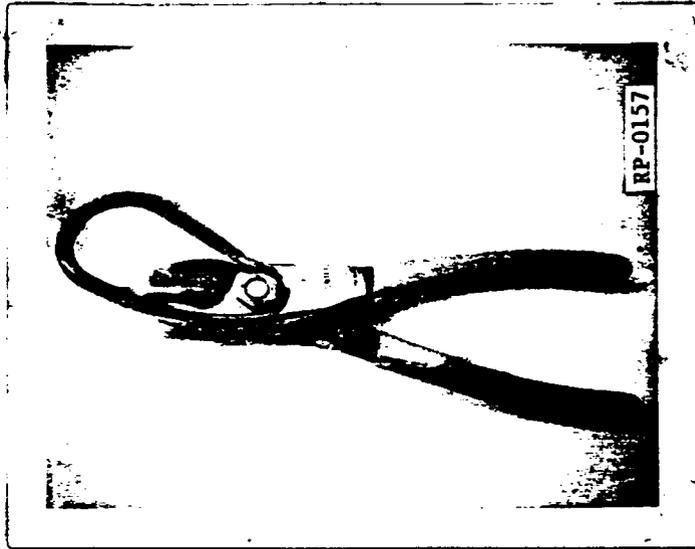FIG. 1 CABLE MARKERS R-4888-1 AND R-4888-2
(PAR. 2.3.2. and 2.3.3)

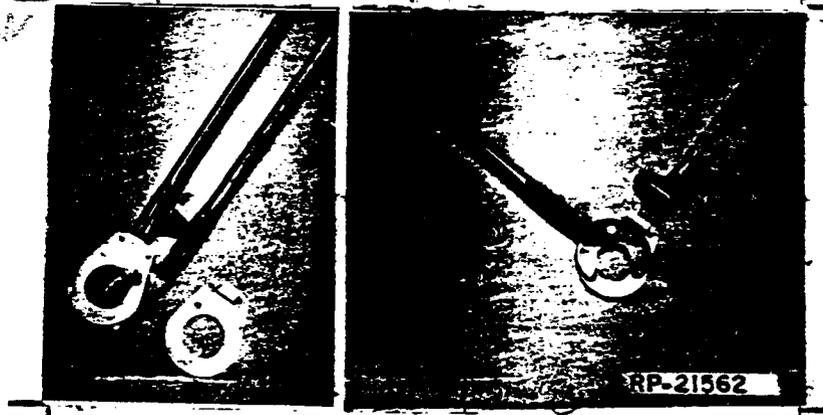FIG. 2   R-4225 8" CABLE CUTTER WITH GUARD
(PAR. 2.4.1)

FIG. 3   CABLE SHEARS (R-1514) WITH ATTACHED R-4073 CABLE-CUTTER-PLATE
(PAR. 2.4.1)