COAXIAL TERMINATIONS
DSX-3 CROSS CONNECT BAY
ED2C666-10

CONTENTS

1. GENERAL

1.1 This handbook section describes the proper procedures to be used when cabling and terminating coaxial cables to a DSX-3 Cross Connect Bay ED2C666-10.

1.2 It is important that 728A coaxial cables terminating to the DSX-3 frame be placed in the proper compartments within the cable ducts. Cables must also be dressed properly at cable rack breakoff points at the top of the frame. A fully loaded frame will have 68 cables on each side of the frame.

1.3 Before starting the termination of the 728A coaxial cables the tools and materials of paragraph 3 of this section must be on hand.

1.4 Coaxial cables 728A will be terminated by installer to coaxial cable jack assemblies 627C and 619F. The other end of these cable assemblies have 514A jacks which are shop terminated.

2. DRAWINGS

2.1 The following drawings should be used for reference when installing a DSX-3 Cross Connect Frame:

DRAWING	SUBJECT
ED2C666-10	Cable Plan
ED2C666-30	Cable Conn Plan
T96221-34	Wiring Provided by Installer
ED2C667-10	DSX-3 Panels
T96621-33	Wiring Provided by Shop
SD96621-02	Schematic

3. TOOLS AND MATERIAL

3.1 The following tools will be required when making coaxial terminations to the DSX-3 frame:

CODE	DESCRIPTION
R-4081	Crimping Tool
R-3186	Coaxial Stripping Tool (Note 1)
R-4877	Coaxial Stripping Tool (Note 1)
R-4121	Soldering Station-35 Watt
	or
KS14440,L-16	Soldering Iron, 16ft. cord-45watt

NOTE 1: Either R-3186 or R-4877 Stripping Tool can be used on 728A Coaxial Cable.

3.2 The following material will be required when making coaxial terminations to the DSX-3 frame:

CODE	DESCRIPTION
RM725784	Solder, Thin Diameter 60% Tin, 40% Lead
KS-15712 List 22	Outer Sleeve-length 1/2"

4. BAY CABLE DRESS

4.1 Refer to Figure 2 of this section for proper running of 728A coaxial cables in the duct compartments of DSX-3 frame. The top four panels ED2C667-10 on both the left and right side of the frame are fed by the inner most duct compartment. The middle four panels on the frame are fed by the center compartment. The bottom three panels on the frame are fed by the outside compartment of the left and right duct.

4.2 Due to the large number of cables feeding both the left and right duct it is important that good cable dress be maintained at the top of the frame coming off the cable rack. Cables should be secured to cable rack brackets in rows of at least eight deep. If more than eight cables are placed in a row it might be necessary to make a cut out in the cable rack guard assembly. When this is done be sure to round off any sharp edges in the cutout to protect incoming cables.

4.31 Proper cable dress will be even more important when a second DSX-3 frame is place along side in the lineup and the number of cables at a breakoff point doubles.

5. CABLE PREPARATION

5.1 Refer to Figure 3 of this section for cable preparation strip lengths of 728A coaxial cable shield braid, dielectric and center conductor.

5.2 Stripping tool R-4877 can be used for this operation. Refer to Section 730A of this handbook for operation of the R-4877 tool. If tool R-4877 is not available tool R-3186 coaxial stripping can be used, refer to Section 730 of this handbook for its operation.

5.3 It is recommended that center conductor of coaxial cable 728A be longer than 1/4 inch. Center conductor should be pre-tinned using thin diameter solder 60% tin, 40% lead. Soldering station (35 watt) R-4121 is recommended for use on these coaxial connections. After pre-tinning center conductor trim to final 1/4 inch length. This will rid any buildup of solder on tip of center conductor during pre-tinning from causing insertion problems when cable is mated to jacks.

5.4 Slide factory provided outer sleeve KS-15712 List 22 (1/2 inch length) over 728A cable in preparation for crimping of cable to jack 627C or 619F. Insert cable onto jack assembly, verify that center conductor is visible inside jack and shielded braid is over inner sleeve of jack barrel.

6. CRIMPING AND SOLDERING

6.1 Slide outer sleeve KS-15712 List 22 over prepared end of cable termination. Do not slide outer sleeve over shoulder of jack body, outer sleeve should mate with shoulder and shielded braid should be visable under sleeve.

6.2 Crimp connection using Crimping Tool R-4081 Detail 3 position-16 one die.

6.21 Verify that there are no cracks in outer sleeve, no evidence of double crimp and no portion of outer cable jacket is under crimped outer sleeve.

6.22 The crimped outer sleeve shall be butted against outer cable jacket or within 1/32 inch of butting against it. If this is not met, it will be necessary to tape the exposed shielded braid.

6.23 The crimped outer sleeve List 22 shall exhibit six approximately flat furfaces with no fins or excessive rounding at the 60 degree corner bends. If this is not met redo the crimp, verify that the proper outer sleeve and crimping tool die are being used.

6.4 Verify that the center conductor was pre-tinned. Then solder using R-4121 Solder Station and thin diameter solder.

CAUTION: Do not over solder connection. After wetting with solder center conductor outline must be visable under soldered connection. Remove any excess solder with solder sucker.

6.41 Verify that there is a good wetting of solder to the jack barrel and center conductor, that there are no loose solder droplets or other material left inside of jack 627C or 619F.

6.5 Close jack 627C or 619F body and secure with screw.

7. VERIFICATION

7.1 Before mounting coaxial jack assemblies 627C and 619F to DSX-3 Panels ED2C667-10 verify that 728A cable is crimped securely to the body of the jacks. Grasp the body of the jack between the thumb and forefinger of one hand and the shield crimp connector with the other thumb and forefinger. Apply a slight twist (no more than 6 inch lbs.) there should be no movement of the crimped connections.

Reason for Reissue:
To change Jack identification from 618F to 619F throughout this section.

Attachment:
Figures 1, 2 and 3

Manager, Engineering Transmission Products

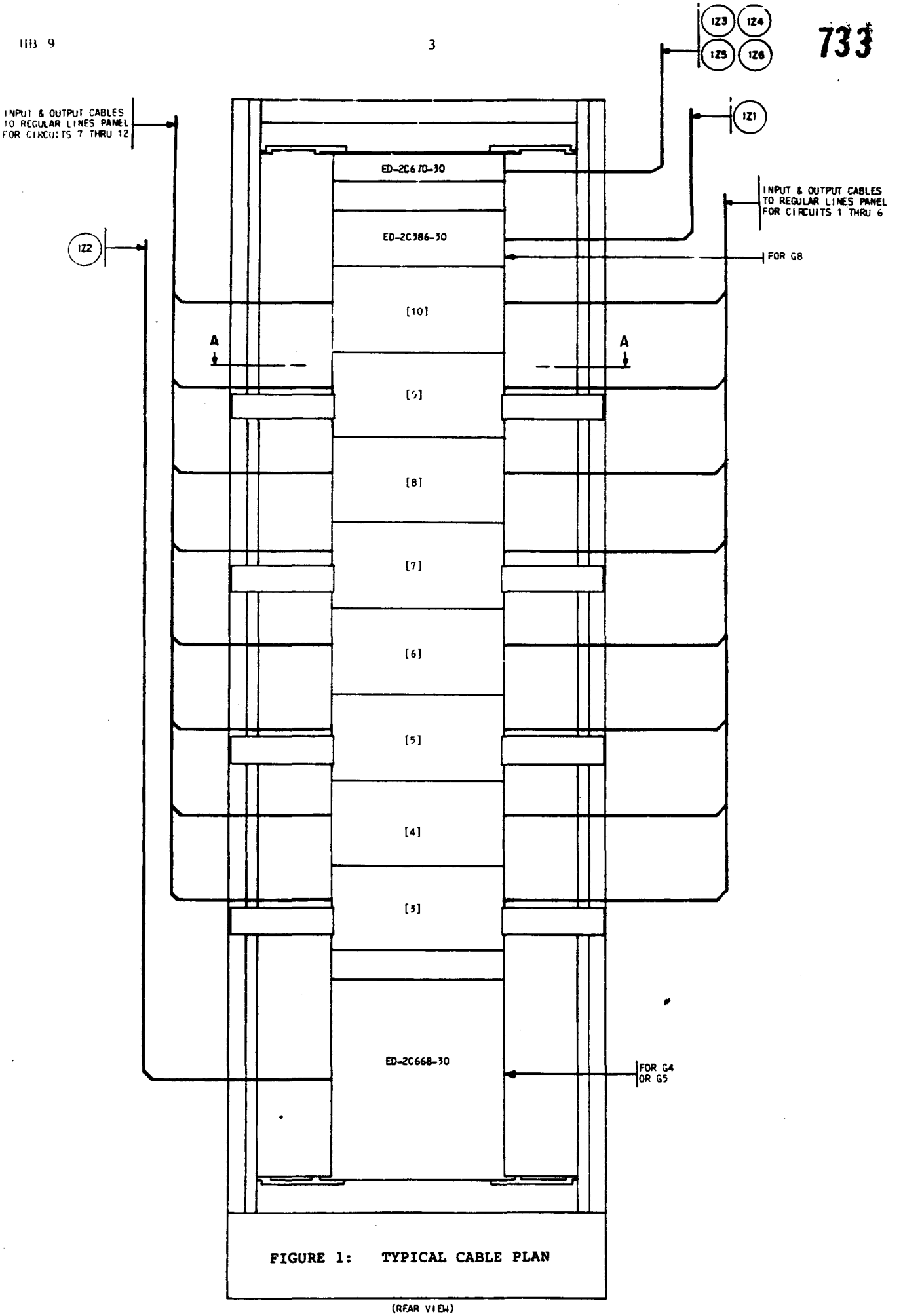


FIGURE 1: TYPICAL CABLE PLAN

(REAR VIEW)

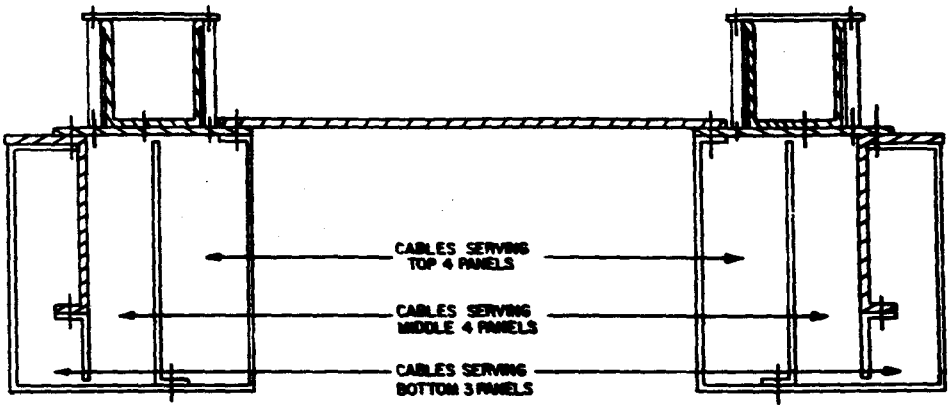
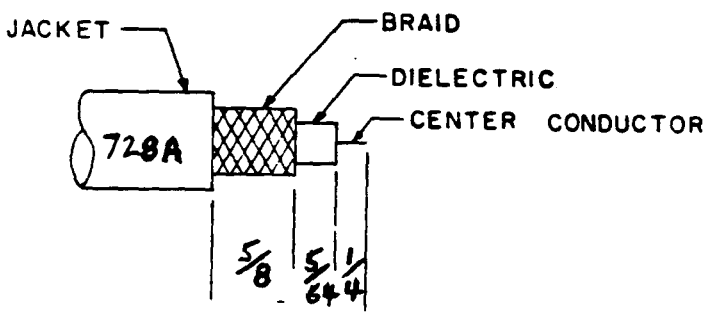


FIGURE 2: TYPICAL CABLE DRESS



TRIM CABLE TO DIMENSIONS SHOWN. DO NOT NICK, BRAID OR CENTER CONDUCTOR
TIN CENTER CONDUCTOR

FIGURE 3: COAXIAL CABLE 728A PREPARATION