GROUNDING 253AS, 255AS, 266AS AND 270AS TYPE SHIELDED CABLES

1. GENERAL

1.1 Scope

1.11 This section covers the methods to be followed when grounding 253AS, 255AS, 266AS and 270AS Type Shielded pair cables using R-4498, (Raychem IR-550 Heating Tool).

1.12 The 250 Type cables involved are 253A, 255A, 266A and 270A with a shielded braid around the inner cable jacket covered with another cable jacket. These cables are presently in use on the "SLC" systems.

2. INSTALLING EQUIPMENT

2.1 Tools

AMT	CODE	Description
1	R-4498	Heating Tool IR-550
*1	RG-6	Nose Cone
*1	Item 1	Ladder Bracket
*1	Item 2	Foot Switch

*These items contained in shipping case with Heating Tool

2.2 Material

2.21 Solder Sleeves KS-21372 are ordered by list number for the different 250 Type Shielded Cables by the responsible equipment engineer.

CABLE CODE NO.	SOLDER SLEEVE	
253AS	KS-21372	List 23
255AS	KS-21372	List 25
266AS	KS-21372	List 26
270AS	KS-21372	List 28

NOTE: The "S" after 250A Type cable code stands for shielded.

3. CONNECTING SHIELD GROUND

3.1 Procedure

3.11 Place Solder Sleeve, large end first, onto cable and slide beyond the point where the termination is to be made.

3.12 Strip back and remove a necessary length of the outer cable sheathing, leaving approximately 1 inch of cable shield exposed past the outer cable sheathing.

3.13 Slide the thermal barrier over the inner cable sheathing and under the cable shield, leaving approximately 1/8" exposed past the cable shield.

3.14 Slide the solder sleeve forward until the solder preform in the sleeve is centered over the cable shield.

3.15 Insert the ground lead, prestripped 5/8-7/8 inch, between the cable shield and the solder preform, with the insulation of the ground lead overlapping the cable shield by approximately 1/16 inch.

3.16 Position the Sleeve Assembly in the RG-6 Nose Cone of the IR-550 Heating Tool, positioning the ground lead towards the heat source. Do not use RG-5 Type nose cone with Teflon insert for this type of heating operation.

3.17 Operate the trigger of the IR-550 Heating Tool and heat the solder sleeve assembly until the solder preform melts and flows.

3.18 The above cable codes, especially the larger cables, because of their size may present a problem in rotating the cable as specified in Para. 3.181. The following recommendations should apply as needed:

a) Run cable to designated position.

b) Prepare cable for solder sleeve at location required.

c) Remove cable from the confinement of the bay to a position that will allow enough slack in the cable that will permit the turning or rotation of that cable in the R-4498 Heating Tool per para. 3.181.

3.181 Slowly turn the cable and sleeve assembly so that the solder flows evenly all the way around until reaching the starting point.

3.19 Release the trigger of the IR-550 Heating Tool and remove the cable assembly from the RG-6 Nose Cone.

4. VERIFICATION ITEMS

4.1 The shield sleeve termination shall meet the following requirements.

(1) There shall be good solder wetting of the ground lead wire and shield braid and a minimum 1/4-inch long fillet of solder along each side of the wire.

(2) The soldered connection shall be capable of withstanding a 6 lb pull test.

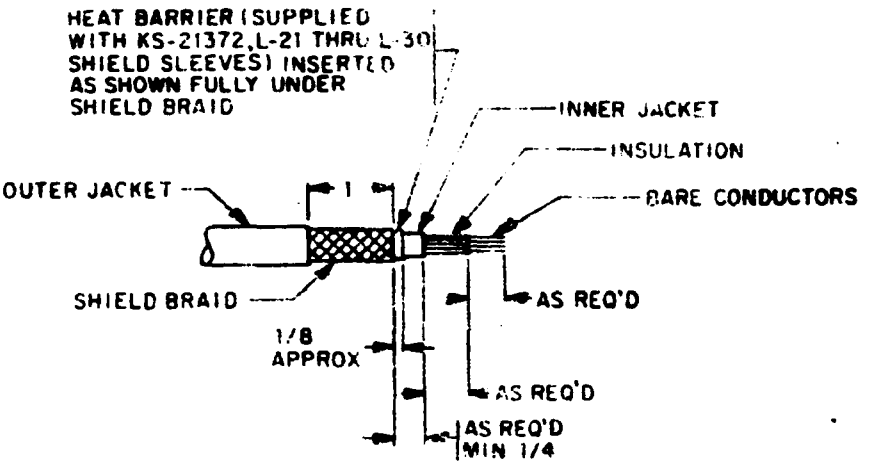
(3) There shall be no visible discoloration or distortion of the insulation on the center conductor or of the outer jacket of the shielded wire or cable.

(4) Except for the blue coded shield sleeves used with Teflon-insulated wire or cable such as KS-19195 and KS-19224, Etc., the portion of the shield solder sleeve butted against the cut end of the shield braid shall not be recovered (shrunk).

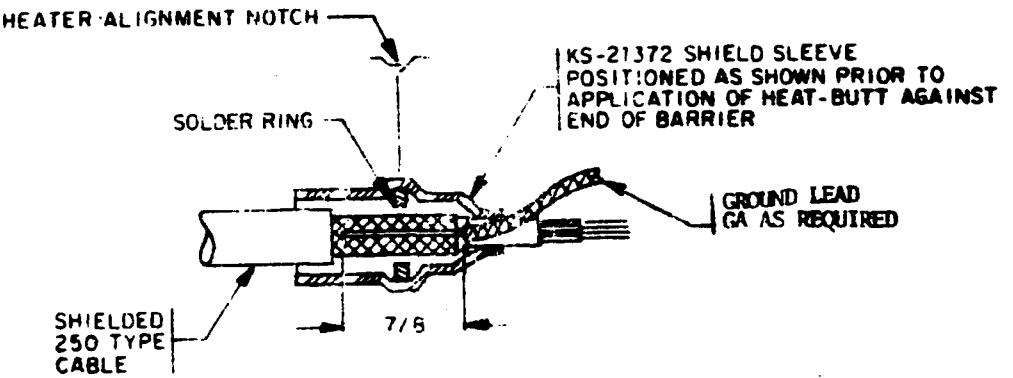
(5) The shield sleeve shall completely cover the exposed shield braid.

(6) The shield sleeve shall not be scorched, and shall not be discolored to such an extent that the solered connection cannot be inspected.

(7) Bare ground shall not overlap cable jacket and insulated portion of ground wire shall not overlap end of shield braid.



PREPARATION OF 253AS,255AS,266AS & 270AS CABLES



KS-21372,L-21 TO L-30 SHIELD SLEEVE TYPE GROUND LEAD TERMINATION TO SHIELDS OF 253AS,255AS,266AS AND 270AS TYPE CABLES

(MVI-2147)

FIG 1

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