

SEWED FORMS
 PREPARATORY OPERATIONS

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1. GENERAL

1.1 Scope of Section

1.11 This section covers the basic preparatory information, tools and methods required to perform the operation of "making up" sewed forms.

1.12 Although the basic principles covered herein apply to all jobs, some variations from the specified procedures may be found practicable under certain conditions. For example, the R-3410 Wire Spool Dispenser will handle 25 wire spools and would be very useful when making up large forms or a large number of forms. However, when small forms or a small number of forms are being made up, this tool may not be worthwhile.

1.13 Each figure in this section illustrates only conditions to which reference is made in the text and should not be considered as covering other requirements or conditions that may be shown.

1.2 Precautions Against Personal Injury, Equipment Damage and Service Interruptions

1.21 The specific precautions to be taken against personal injury, equipment damage, and service interruptions are

covered in this section with the associated method. General precautions are covered in Handbook 0 and are to be observed at all times, as they apply to the operations being performed.

2. INSTALLING EQUIPMENT

2.1 Tools

- See HB 250 Clamp, C (Size as Required)
- R-3410 Dispenser, Wire Spool
- R-3788 Drill, 1/4" Electric
- See HB 250 Drills, Twist (Size as Required)
- R-9430 Hammer, Claw
- R-1652 Rule, Folding 6 Ft.
- R-2529 Saw, Crosscut 20"
- R-3145 Seat, Rolling Ladder
- R-5460 Stool, Three Position

2.2 Supplies

- RM-626122 Canvas, Flameproofed
- Obtain Hooks, Screw (Size as Required)
- Locally Obtain Nails (Size as Required)
- Locally Obtain Screws (Size as Required)
- Locally R-2916 Twine
- R-3455 Shellac, White
- SD-48-125, Sheets, Connecting
- 126, 126A,
- 127, 127A

NOTE: Tools included in the wireman 168 Kit not listed.

3. METHODS

3.1 Ladders

3.11 Arrange for sufficient ladders (where required) or three position stools at the location where the forming operation is to be performed. When the forming operation is to be performed on a working bay of equipment, refer to Handbook 0 for the necessary precautions to prevent service interruptions.

3.111 Check all ladders being used to insure that they are in proper working condition and that blocks are provided for ladders that are not equipped with brakes.

3.112 Check the near vicinity of the working area to insure there are no projecting ends of cable rack, threaded rods, etc. Where such conditions do exist, pad these conditions with layers of canvas or other suitable materials to prevent possible personal safety hazards.

3.2 Lighting

3.21 Arrange for suitable lighting facilities to insure that the working area is sufficiently illuminated. Refer to Handbook 0 for information pertaining to temporary lighting and auxiliary equipment.

3.3 Bulk Wire

3.31 When bulk wire has not been furnished or when additional wire is required, it should be requisitioned as shown below, showing the number of feet required, the gauge and type of wire required, the colors and indication of whether it is single, paired, triple, etc.:

Example:

100 ft.	22BG	Green Single Wire
75 ft.	20BN	Slate & Red-Slate Paired Wire
50 ft.	22BH	Yellow, Yellow-Green & Red-Green Triple Wire

NOTE: Refer to Section 103 of this handbook for various types of bulk wire.

3.311 In case a wire code has been superseded, the former or lower numerical code will be furnished until the stock of wire is depleted. After that point, the higher numbered code will automatically be furnished.

3.32 Check all bulk wire before it is used. Examine the insulation to see that it conforms to that specified on the wiring diagram or, in the case of substitution, see that the correct type has been furnished. Detailed information on the construction of wire is given in Section 103 of this handbook.

3.4 Wire Spool Dispenser

3.41 The R-3410 Wire Spool Dispenser will accommodate 25 spools of wire and should be used to perform large cable forming operations.

3.5 Running Sheets

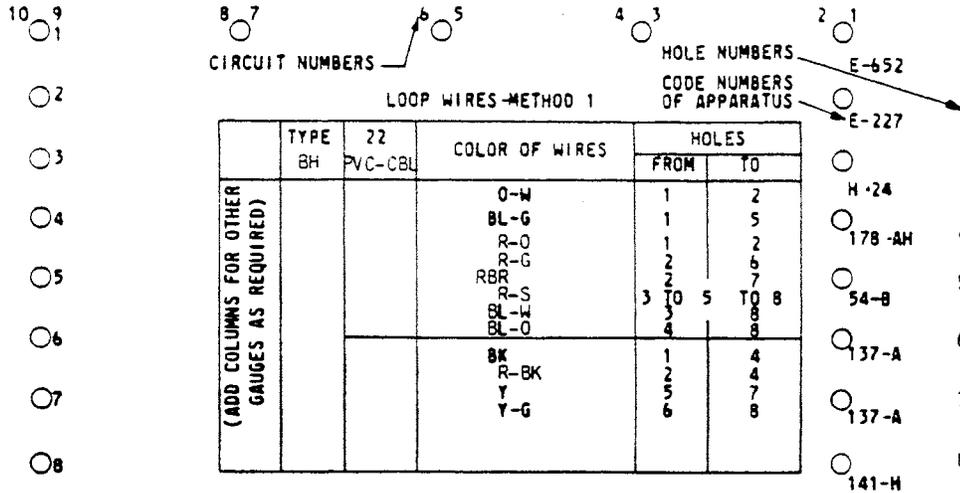
3.51 Make up layout sheets in the case of complex forms or where continuous reference to the drawings would be difficult. A typical layout sheet is shown in Figure 1 for apparatus on mounting plates. For reference purposes mark the hole number of each piece of apparatus on the circuit drawing.

3.511 The analysis effort necessary to determine the wiring and strapping required for circuit groups, and the associated numbering and stamping on terminal strips, relays, etc., should be combined whenever possible. Forms SD-48-125 thru -127 may be requisitioned (see Handbook 250) for use when laying out miscellaneous wire and cable conductor ends at these various terminating locations.

3.6 Form Boards

3.61 When forming operations necessitate the use of a forming board and standard forming tools are not adequate or available and the forming operation is to be performed in the office equipment room, the use of lint free fire retardant materials shall be used. (Refer to Handbook 0, Section 20.)

CIRCUIT _____ T- _____ ISSUE: _____
 CIRCUIT WIRED _____ EQUIPPED _____
 MISC. RELAY RACK - BAY _____



	TYPE BH	22 PVC-CBL	COLOR OF WIRES	HOLES	
				FROM	TO
(ADD COLUMNS FOR OTHER GAUGES AS REQUIRED)			O-W	1	2
			BL-G	1	5
			R-O	1	2
			R-G	2	6
		RBR	R-S	3 TO 5	7 TO 8
			BL-W	3	8
			BL-O	4	8
			BK	1	4
			R-BK	2	4
			Y	5	7
		Y-G	6	8	

LOOP WIRES - METHOD 2

HOLE NO.	FUNCTIONAL DESIG.	TYPE GAUGE										PAIR		PAIR	
		R-BL	R-G	R-BR	R-S	R-W	R-BL-W	R-O	R-G-W	R-O-W	S	S-W	O	O-W	
1	SL														
2	BY	I	I	I	I	I	I	I	I	I					
3	S	I			I	I	I		I						
4	ON		I								I	I	I	I	
5	SU-2		I								I	I	I	I	
6	A-RES				I	I					I	I	I	I	
7	B-RES				I	I					I	I	I	I	
8	C-RES		I		I	I					I	I	I	I	
9	PL-RES	I			I	I					I	I	I	I	
10	SU	I			I	I					I	I	I	I	
11	PL COND	I			I	I					I	I	I	I	
12	PL REL.										I	I	I	I	
13															
14															
15															
16															
17															
18															
19															
20															

WIRES FROM SWBD CABLE

CODE	CA. NO.	FROM	TO	COLOR OF WIRE	HOLE	CIRCUIT NO.
24M	NO.1	—	REL. RACK	1 - 10 PRS.	1	CKTS 1 - 10
				11 - 20 PRS.	7	CKTS 1 - 10
70M	NO.1	—	REL. RACK	1 - 10 PRS.	1	CKTS 1 - 10
				11 - 20 PRS.	6	CKTS 1 - 10
				181 - 190 PRS.	5	CKTS 1 - 10
				RED TRACER	7	CKTS 1 - 10
				191 - 200 PRS.	4	"F" STITCH CKTS 1 - 10
				RED TRACER	8	CKTS 1 - 10

(RP -12750A)

FIG. 1 RUNNING SHEET FOR APPARATUS ON MOUNTING PLATES (PAR. 4.51)

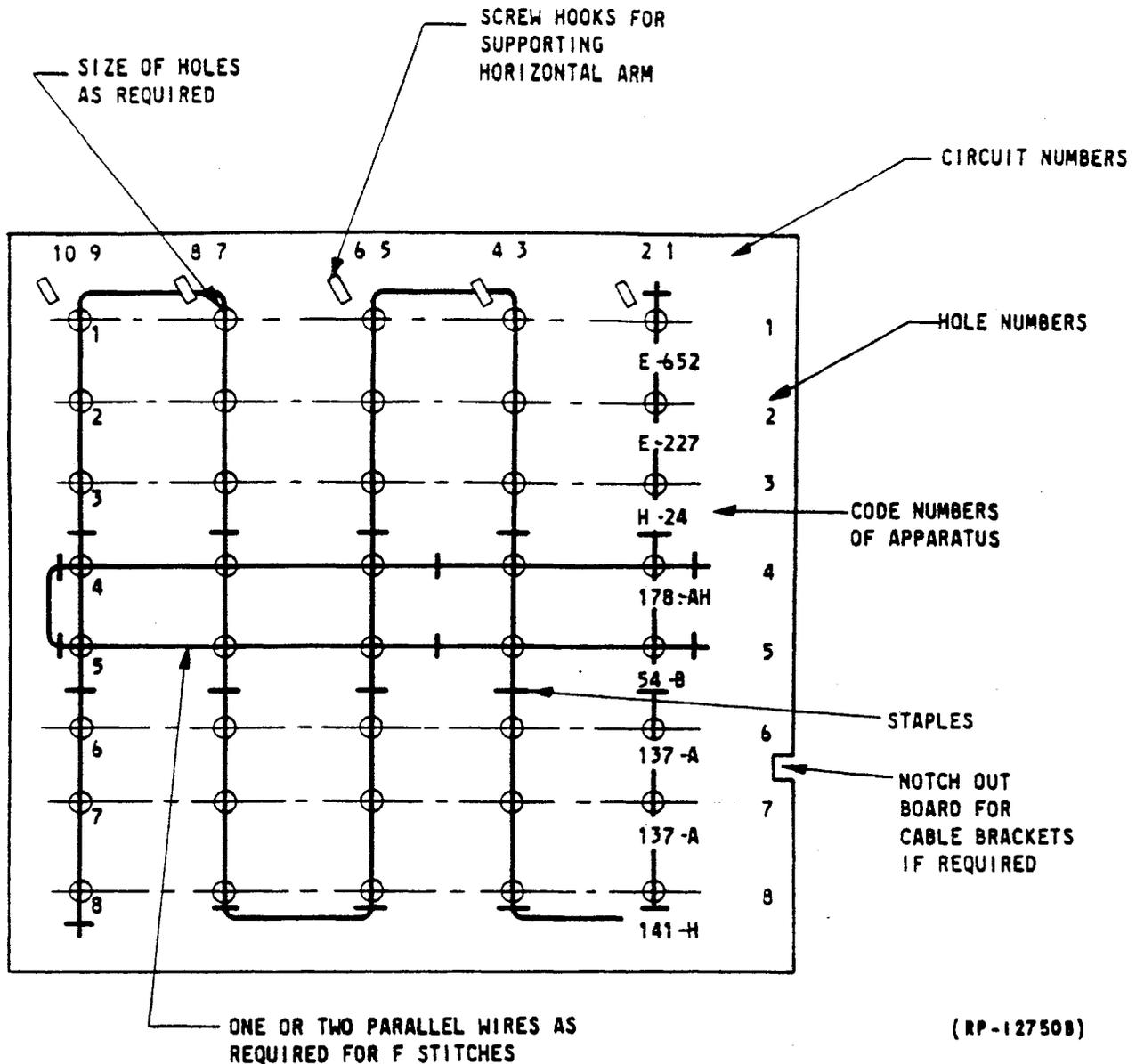


FIG. 2 TYPICAL FORM BOARD FOR RELAY RACK
(PARS. 3.65, 3.66)

3.62 Obtain a board of the proper size and lay out all holes, notches and slots that will be required. If a drawing or sketch of the required form is available, attach it to the face of the form board. In this case the drawing or sketch should locate holes, nails, etc. Arrange to reinforce large form boards when necessary with narrow strips, nailed to the back of the board, where nails or screw hooks are to be installed.

3.63 Consider how the form board will be supported. C clamps are usually suitable but in the case of very large form boards other means of support are generally necessary.

3.631 At or near live equipment take extra precautions when supporting form boards so that the support does not come in contact with the apparatus terminals. Where practicable, approved twine or nylon ties can be