Installation Engineering Handbook 30
Western Electric Company, Incorporated
Service Division

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AUXILIARY FRAMING AND CABLE RACK TEMPORARY SUPPORT USING THE R-4099 ADJUSTABLE STANCHION

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1. GENERAL

1.1 Scope

1.11 This section covers instructions for the assembly and use of the R-4099 Adjustable Stanchion on Non-ESS type applications.

1.111 The intended use of the R-4099 Stanchion is to support auxiliary framing and/or cable rack when frames are being removed in the dismantling operation of central offices.

1.12 The R-4099 comes assembled with an insulating plywood base which must be removed if it is required to fasten stanchion to floor, per Paragraph 3.1. Also, the 5/16" x 3" long bolt and 5/16" x 3/4" long button head bolt must be exchanged before being used.

1.2 Description

1.21 The R-4099 Adjustable Stanchion (see Figure 1) consists of 2 steel hollow tubes with a maximum diameter of 2-3/4 inches. The steel tubes are arranged to telescope one inside the other forming an adjustable column. The telescoping column can be locked at different heights by using a locking pin which is inserted in drilled holes in column at 1 foot intervals. A screw jack fastened to upper column provides a fine adjustment of an additional 3 inches. The column is adjustable in height from a minimum of 7'-0" to a maximum of 12'-7-1/8".

1.22 The R-4099 Adjustable Stanchion will safely support weights up to 2,000 pounds. The capacity of existing ceiling supports (beam clamps) are 1,200 pounds. The added weight bearing capacity of the R-4099 allows a maximum spacing of 8 feet between stanchions.

2. LOCATING REQUIREMENTS

2.1 Before the removal of frames and locating of stanchion, a visible check should be made of existing ceiling supports and threaded rods. Any evidence of undue strain or pull out should be noted and a R-4099 used to support this location. Supports located in plaster, tile, blocks, wood, etc., should receive special attention. If any doubt exists as to weight bearing capacity of a superstructure arrangement, use the R-4099 Stanchion at this point. The Line Engineer will normally provide a marked floor plan drawing, showing location of R-4099. The spacing of stanchions are arranged to temporarily support cable, cable rack and auxiliary framing during frame and cable removal operations. The distances shown on drawings shall be adhered to. In the event the floor plan is not marked, then the stanchions shall be located on approximately 8 foot centers.

3. FASTENING INFORMATION

3.1 The R-4099 Stanchion is normally fastened to existing auxiliary framing using the 5/16" x 3" long bolt and washer provided and standard P-452376 Clips (see Figure 1). With plywood removed, the base of tool has holes provided for locking the stanchion

to floor using loxins and studs (not provided with tool). Normally the tool will not have to be fastened to floor except in areas of heavy traffic. When it is felt the tool should be locked to floor, consideration should be given to using holes already drilled in location of removed equipment.

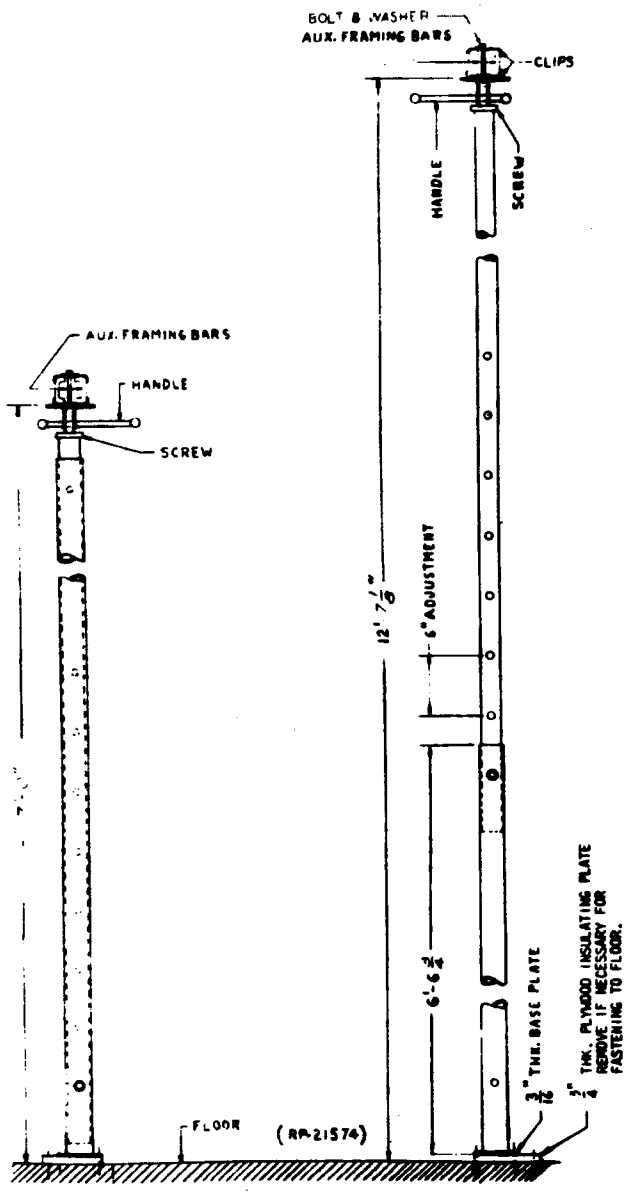

FIG. 1 R-4099 ADJUSTABLE STANCHION ASSEMBLY

3.2 The R-4099 is designed as a general purpose support tool. The details provided and fastening information given above will not always apply. When existing overhead auxiliary framing is not used to support cable rack, the installer shall fabricate short pieces of auxiliary framing bars, clips, J bolts, etc., to adapt to conditions encountered. Handbook 30 gives detailed information using various figures to fasten auxiliary framing bars to existing cable rack. Stanchions can then be fastened to added auxiliary framing to support cable rack. Occasionally conditions will be encountered where auxiliary framing bars cannot be used. Care should be exercised to make certain that stanchion is fastened overhead using any means to prevent stanchion falling over.

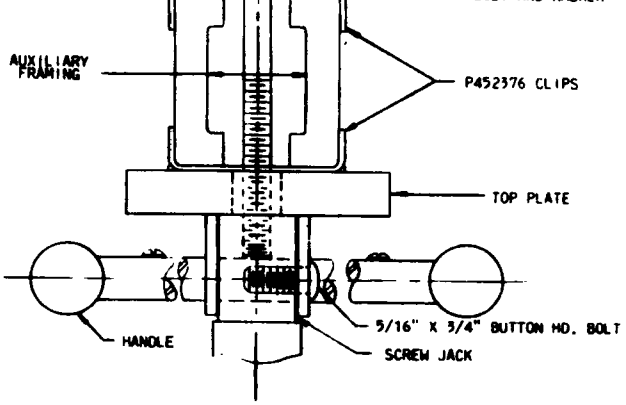

FIG. 2 SUPPORT OF AUXILIARY FRAMING

4. OPERATING INSTRUCTIONS (See Figure 1 and 2)

4.1 The stanchion is positioned in place by removing the 5/8" nut and bolt in the drilled holes in the columns. Raise inner column to approximate height of auxiliary framing. Replace 5/8" bolt through matching holes drilled in columns and bolt in place. The top plate of the stanchion and a standard P-452376 Clip shall be positioned on top of the jack and the jack shall be turned up until the bottom clip is wedged in place against the auxiliary framing bars. Another P-452376 Clip shall be placed on top of the auxiliary framing. The 5/16" x 3" bolt and washer provided shall be inserted through the top clip and screwed into the jack to secure the auxiliary framing to the stanchion.

5. REMOVAL INSTRUCTIONS

5.1 After as much cable and cable rack has been removed and the cable and auxiliary framing which is to be left in place has been supported in accordance with Handbook 30 requirements, the stanchion may be removed.

6. SHIPPING

6.1 No packing case is required. Stanchion is to be shipped completely assembled with all pieces tightly fastened. If plywood base has been removed, it must be reassembled before shipment. Care should be exercised in shipping to prevent damage to threads of jack. Threads should be screwed into column so they are not exposed and stanchion locked in place at its lowest height using locking bolt and nut. Fastening details for locking stanchion to auxiliary framing shall be screwed into top column jack to prevent loss of details.

→ Arrowed lines indicate new or changed information.

Assistant Manager
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Reason for Reissue:
To provide modification of Stanchion Base such that it can be substituted for the R-3849 Stanchion in ESS use.