-CONFIDENTIAL -

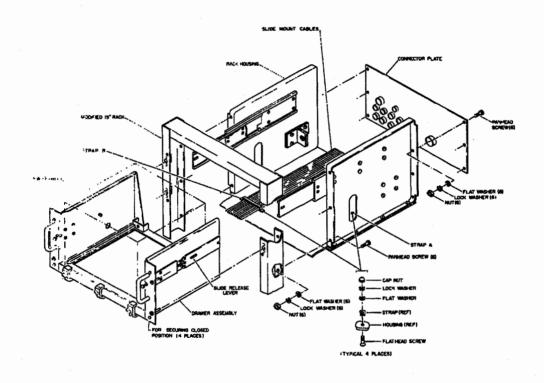
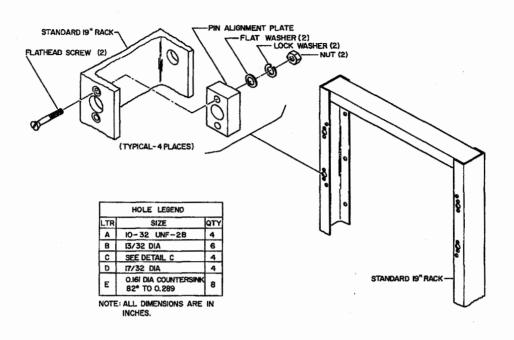


Figure 3-8.—Pivotal Slide Mount, Rack Type Mounting.



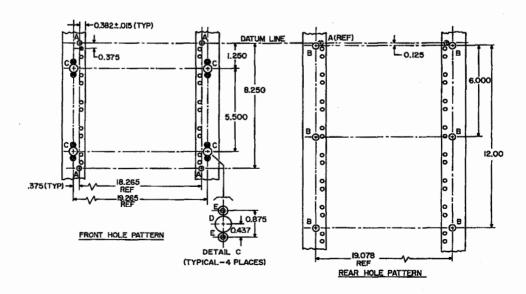


Figure 3-9.—Modification of Standard 19-Inch Rack.

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- (1) Remove the indicated 3 mating hole screws and 2 plug buttons from the bottom plate of the KW-7 and store them in a suitable receptacle to prevent loss.
- (2) Extend the sliding plate to its full length and lower the KW-7 onto the mounting plate taking care to align the screw holes in the mount with the KW-7 mounting plate holes.
- (3) Insert and tighten the 6 panhead screws provided with the slide mount and determine that the KW-7 equipment is securely fastened to the sliding plate.
- (4) Return the slide to its normal position.

Note: To remove the KW-7 from the slide mount, reverse the installation procedure.

- e. Fixed Mount (fig. 3-7).—The KW-7 is adaptable for fixed mounting on standard 19-inch racks in fixed installations or in large mobile installations. The following steps describe the procedure to perform fixed rack mounting.
 - (1) Remove the indicated 3 mating hole screws and 2 plug buttons from the bottom plate of the KW-7 and store them in a suitable receptacle to prevent loss.
 - (2) Fasten the fixed mount in a standard 19-inch rack and place the KW-7 on the fixed mount. Carefully align the screw holes in the bottom of the fixed mount with the KW-7 bottom plate mating holes.
 - (3) Insert and tighten the 6 panhead screws provided with the fixed mount and determine that the KW-7 is securely fastened to the fixed rack mount.

Note: To remove the KW-7 from the fixed mount, reverse the installation procedure.

- f. Pivotal Slide Mount, Rack Type Mounting (fig. 3-8).—Installation of the KW-7 on the rack type mounting of the pivotal slide mount is accomplished in three phases: modification of a standard 19-inch rack to accommodate the mount, assembly and installation of the mount and, finally, installation of the KW-7 on the mount.
 - (1) Rack modification (fig. 3-9).—The standard 19-inch rack is modified in the following
 - (a) Drill and tap four holes (hole legend A) in the front side of the rack's channels. Observe spacing shown in the "front hole pattern".
 - (b) Drill holes per detail C hole pattern (hole legend D and E) at four places in the front side of the rack's channels. Observe spacing shown in the "front hole pattern" and detail C.
 - (c) Drill six holes (hole legend B) in the rear side of the rack's channels. Observe spacing shown in the "rear hole pattern".
 - (d) Install the four pin alignment plates inside the channels at the C locations and secure each to the front side of the rack with two flathead screws, flat washers, lock washers and nuts.
 - (2) Mount assembly and installation.—The mount consists of three assemblies: the housing, the connector plate and the drawer. The assembly of the housing and installation of the three assemblies is as follows:
 - (a) Housing assembly (fig. 3-10).
 - Secure the bottom plate to the right-hand side and the left-hand side at eight places with a flathead screw, flat washer, lock washer, and nut.
 - Position one support bracket and shim on each housing side, and secure them at four places each with a panhead screw, flat washer, lock washer and nut.
 - (b) Housing installation (fig. 3-8).
 - Position the housing on the rear side of the rack.
 - Align the holes in the front of the housing's sides with the six B holes (see fig. 3-9) and secure the housing at six places with a hex-head screw, flat washer, lock washer and nut.

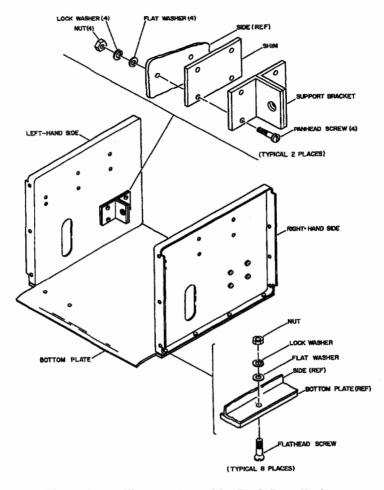


Figure 3-10.—Housing Assembly, Rack Installation.

- (c) Connector plate installation (fig. 3-8).—Position the connector plate on the rear of the housing and secure it with six panhead screws, flat washers, lock washers and nuts.
- (d) Drawer installation (fig. 3-8).
 - 1. Trip the release lever on both slides and remove the slide assemblies from the drawer.
 - 2. Fully extend the slides and align the mounting holes in each with the six corresponding holes in each housing side.
 - Secure each slide to the housing at six places with a flathead screw, flat washer, lock washer and nut.
 - 4. Insert the drawer in the slides; check that the release levers are in the locked position.

- (e) Cable installation (figs. 3-8 and 3-11).—Twelve special purpose cables are included for the purpose of allowing the KW-7, after the mounting, to be fully extended and pivoted without exerting stress on the system interconnecting cables.
 - 1. Install the slide mount cables as follows:

Cable	Cable Connector	To Connector Plate Connector
W17	W17P2/5J7	J7
W16	W16P2/5J8	J8
W15	W15P2/5J9	J9
W14	W14P2/5J10	J10
W13	W13P2/5J3	J3
W12	W12P2/5J4	J4
W11	W11P2/5J5	J5
W10	W10P2/5J6	J6
W9	W9P1/5J1	J1
W8	W8P1/5J2	J2
W18	W18P1/5J11	J11
W19	W19/5E1	E1

- Place cable W18 under retaining strap A, and secure the strap with a flathead screw, flat washer, lock washer and cap nut at two places.
- Place all remaining cables under retaining strap B, and secure the strap with a flathead screw, flat washer, lock washer and cap nut at two places.
- (3) KW-7 Installation on mount (fig. 3-8).
 - (a) Turn the three thumb-screws to the extreme counterclockwise position. Turn the clamps to the side.
 - (b) Slide the KW-7 between the rail guides until the guide pins located at the rear of the unit are fully seated in the receptacles provided at the rear of the unit.
 - (c) Position the three clamps upright and secure them in place by turning the three thumb-screws clockwise until tight.
 - (d) Pull the slide mount forward and install the mount cables as follows:

Cable	Cable Connector	To KW-7 Connector
W17 (Loop In 1)	W17P1/1A17J4	1A17J4
W16 (Loop In 2)	W16P1/1A17J3	1A17J3
W15 (DC Power)	W15P1/1A17J2	1A17J2
W14 (AC Power)	W14P1/1A17J1	1A17J1
W13 (Loop Out 2)	W13P1/1A17J8	1A17J8
W12 (Loop Out 1)	W12P1/1A17J7	1A17J7
W11 (PTS)	W11P1/1A17J6	1A17J6

CID:

Cable	Cable Connector	To KW-7 Connector
W10 (TD Step)	W10P1/1A17J5	1A17J5
W9 (Line Out)		1A17E4, 1A17E5, 1A17E6
W8 (Line In)		1A17E1, 1A17E2
W18 (Remote)	W18P1/1J1	1J1
W19 (Ground)	W19/1A17E3	1A17E3

- (e) Pull forward on the knurled knobs and pivot the drawer up and down. Return the drawer to the horizontal position and run the slide forward and back; there should be no binding.
- (f) Secure the slide in the closed position by means of the four retaining screws located on the front of the drawer.
- (g) Connect the system interconnecting cables to the slide mount to set up the desired form of operation. (In the event that only one loop-input and/or one loop-output circuit is connected, install the jumper plugs, supplied with the KW-7 equipment, in the unused slide mount loop circuit connectors.)
- g. Pivotal Slide Mount, Shelf Type Mounting (fig. 3-11).—Installation of the KW-7 on the shelf type mounting of the pivotal slide is accomplished by assembling the mount and then securing the unit to the mount.

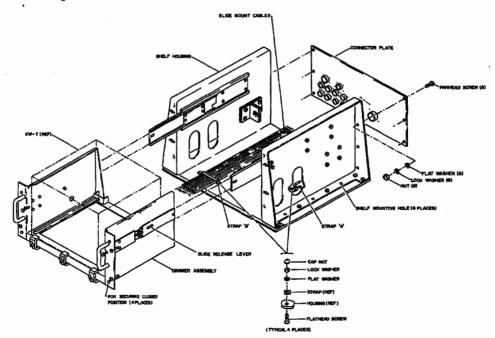


Figure 3-11.—Pivotal Slide Mount, Shelf Type Mounting.

CID:

- (1) Mount assembly.—The mount consists of three assemblies: the housing, the connector plate and the drawer. The assembly of the housing and the installation of the three assemblies to form the mount is as follows:
 - (a) Housing assembly (fig. 3-12).
 - Secure the bottom plate to the right-hand side and the left-hand side at 12
 places with a flathead screw, flat washer, lock washer and nut.
 - Position one support bracket and shim on each housing side, and secure them at four places each with a panhead screw, flat washer, lock washer and nut.
 - Secure each of the four pin alignment plates to the housing at the indicated points with two flathead screws, flat washers, lockwashers and nuts.
 - (b) Housing installation.—Secure the housing to the applicable mounting surface by means of attaching parts inserted through the six available holes in the bottom plate of the housing.
 - (c) Connector plate installation (fig. 3-11).—Position the connector plate on the rear of the housing and secure it with six panhead screws, flat washers, lock washers and nuts.
 - (d) Drawer installation (fig. 3-11).
 - Trip the release lever on both slides and remove the slide assemblies from the drawer.
 - Fully extend the slides and align the mounting holes in each with the six corresponding holes in each housing side.
 - Secure each slide to the housing at six places with a flathead screw, flat washer, lock washer and nut.
 - Insert the drawer's slides into the slide members secured to the housing; check
 that the release levers are in the locked position.
 - (e) Cable installation.—Installation procedures for the slide mount cables are the same as for rack type mounting (refer to paragraph 3104f(2)(e)).
- (2) KW-7 Installation on mount (fig. 3-11).—The procedures for installing the KW-7 on the shelf type mounting are the same as for the rack type mounting (refer to paragraph 3104f(3)).

3105. System Interconnecting Wiring Procedures.—The necessary information for connecting the KW-7 in several types of operation is provided in the following tables. Table 3-5 lists the cables in general terms and table 3-6 lists the cabling connections required for a particular installation. The cables are identified by band markers connected adjacent to the plugs. The first part of the identification is the cable designator; the second part after the slash is the connector to which it can be mated. For instance, cable W1 is for the 230 VAC power input. One end of the cable is designated W1P1/1A17J1. This connects to 1A17J1 in the KW-7 filter unit. The other end is labled W1P2/230VAC. This connects to the 230VAC power source. Sometimes a cable can be connected to more than one equipment, (i.e. on the KW-7 or the Remote Control Unit). In this case, the band marker will list both connectors to which this cable may be connected. The type of operation used will determine the equipment to which this cable is connected. Table 3-6 pertains to system connections for using the KW-7 in plain synchroonous and cipher modes only. For plain asynchronous mode operation, substitute a teletypewriter for a KW-7 as shown in figure 3-19. Note this configuration is applicable to two-wire neutral operation only. The other types of operation may be likewise converted to plain asynchronous mode use by replacing a KW-7 with a teletypewriter. In such instances, the KW-7 line-out circuit must terminate at the page-printer terminals, while the KW-7 line-in circuit must terminate at the keyboard terminals. Connections for the additional circuit utilized in four-wire systems are to be made in the standard manner for the teletypewriter equipment in use.