

“PULSE* 120” – SG-1A

ELECTRONIC PRIVATE AUTOMATIC BRANCH EXCHANGE

SHIPPING AND RECEIVING

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1. GENERAL	1	1.01 This section describes the procedures for shipping and receiving PULSE 120 Electronic Private Branch Exchange (EPABX) items in preparation for installation.
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3. DELIVERY CHECK

- 3.01 All items received at the installation site must be checked against the order form and packing slip.
- 3.02 All errors or omissions, or both must be reported to the stores.

4. UNPACKING AND HANDLING OF APPARATUS

CABINET

4.01 The cabinet is unpacked as follows:

- (1) Cut the steel strapping securing the fiberboard container.

Note: Wear leather gloves to protect hands against cuts from the steel strapping.

- (2) Remove the fiberboard container.
- (3) Remove the plastic envelope covering the cabinet. Take off the two side panels. The side panels are removed by loosening the two screws at the upper edge of the panels, and then by lifting the panels upwards until the adjustable studs are clear of the cabinet.
- (4) Remove the four 5/8-inch nuts and bolts which hold the cabinet to the pallet and remove the cabinet from the pallet without bumping or dropping the cabinet.
- (5) Place side panels on the cabinet and cover the cabinet with the plastic envelope.
- (6) Remove the cabinet from the pallet without bumping or dropping the cabinet.

Note: The use of an upright 2-wheel truck dolly is recommended. The cabinet is loaded onto the truck dolly on the pallet, and is then wheeled off the pallet, gently.

- (7) The cabinet is ready for shipping to the installation site.

SHELF

4.02 Shelves are normally packaged in foam material as shown in Fig. 1. However, where foam-packing facilities are not available at the factory, the shelves are packed with cardboard inserts as shown in Fig. 2 and 3.

4.03 A shelf delivered as a single item and packed in foam material (Fig. 1) is unpacked as follows:

- (1) With a pair of pliers remove the metal staples from the top flap of the shipping container.
- (2) Turn all four flaps towards the outside of the container.
- (3) Grasp the edges of the top layer of foam and lift the foam out of the container to expose the shelf.
- (4) Remove the polyethylene sheets and lift the shelf out of the container.

4.04 A shelf delivered as a single item and packed with cardboard (Fig. 2 and 3) is unpacked as follows:

- (1) With a pair of pliers remove the metal staples from the top flap of the shipping container.
- (2) Turn all four flaps toward the outside of the container.
- (3) Turn the shelf, still in the container, upside down carefully.
- (4) Lift the container leaving the shelf behind.
- (5) Remove the shelf from the packing material and polyethylene bag.

Caution: Ensure that cables and connectors do not damage back-plane wiring during unpacking and handling.

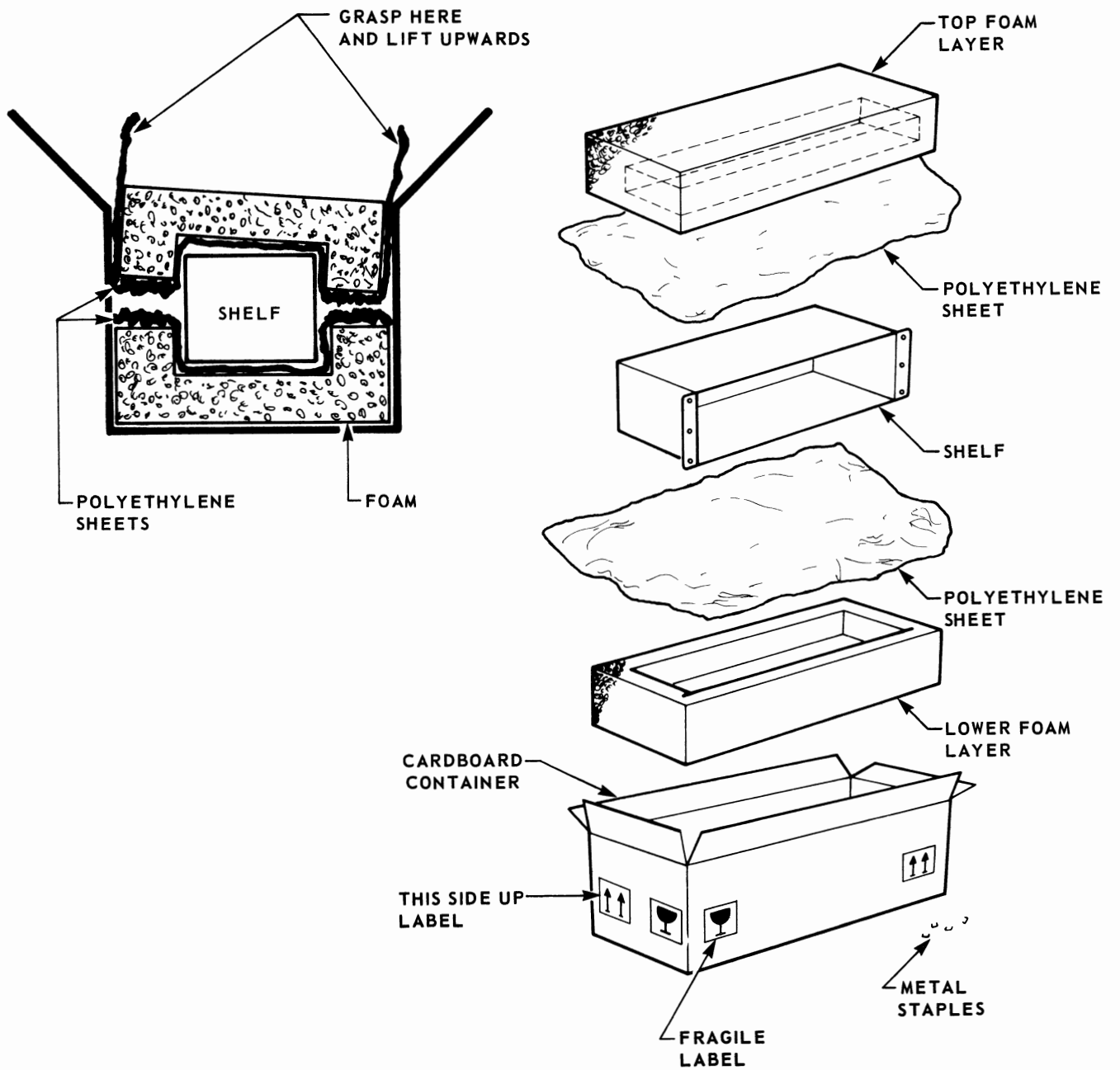


Fig. 1 – Placing and Removing a Shelf, Packed with Foam, from a Shipping Container

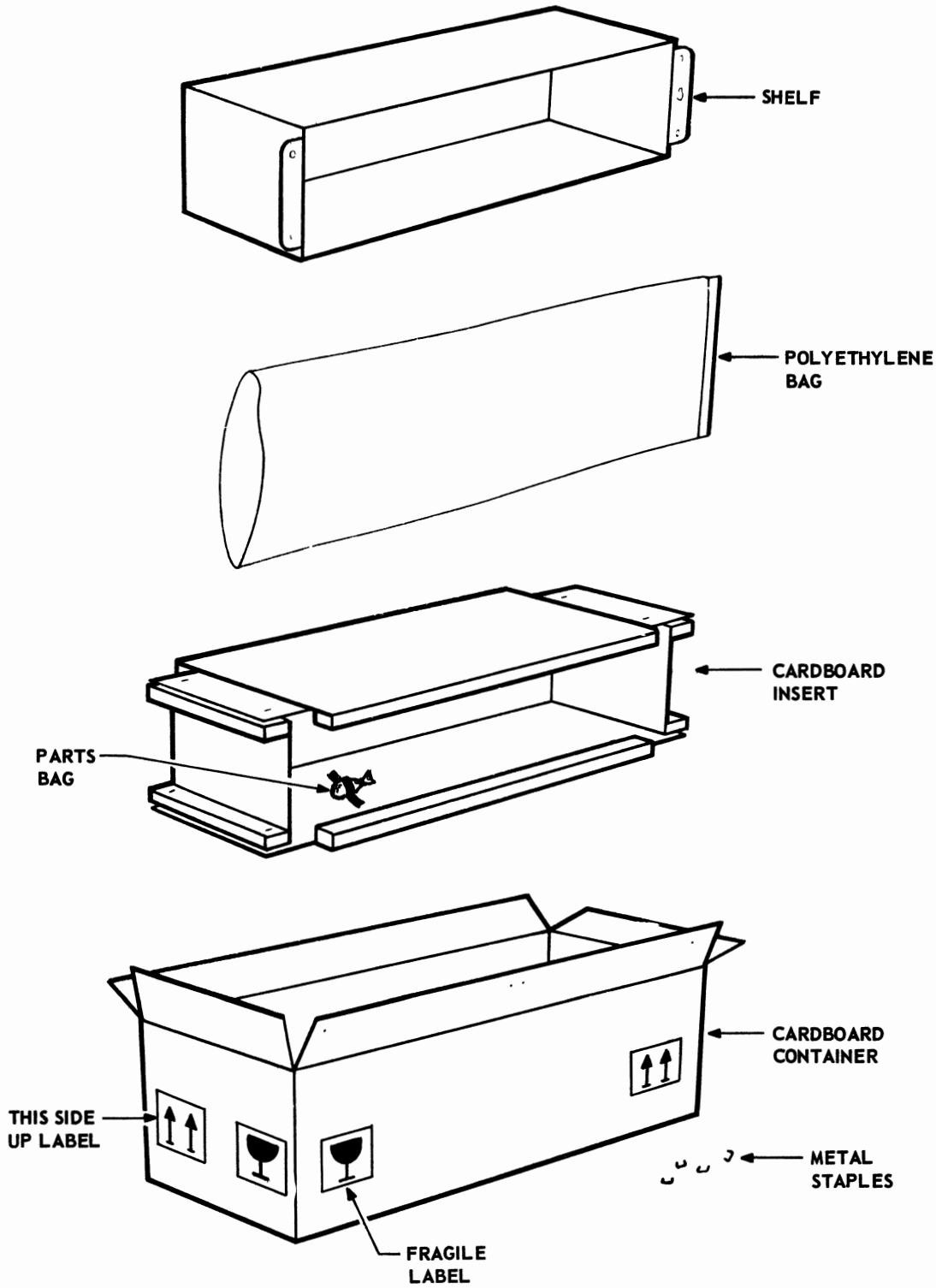


Fig. 2 – Placing and Removing a Line, Trunk, or Option Shelf, Packed with Cardboard, from a Shipping Container

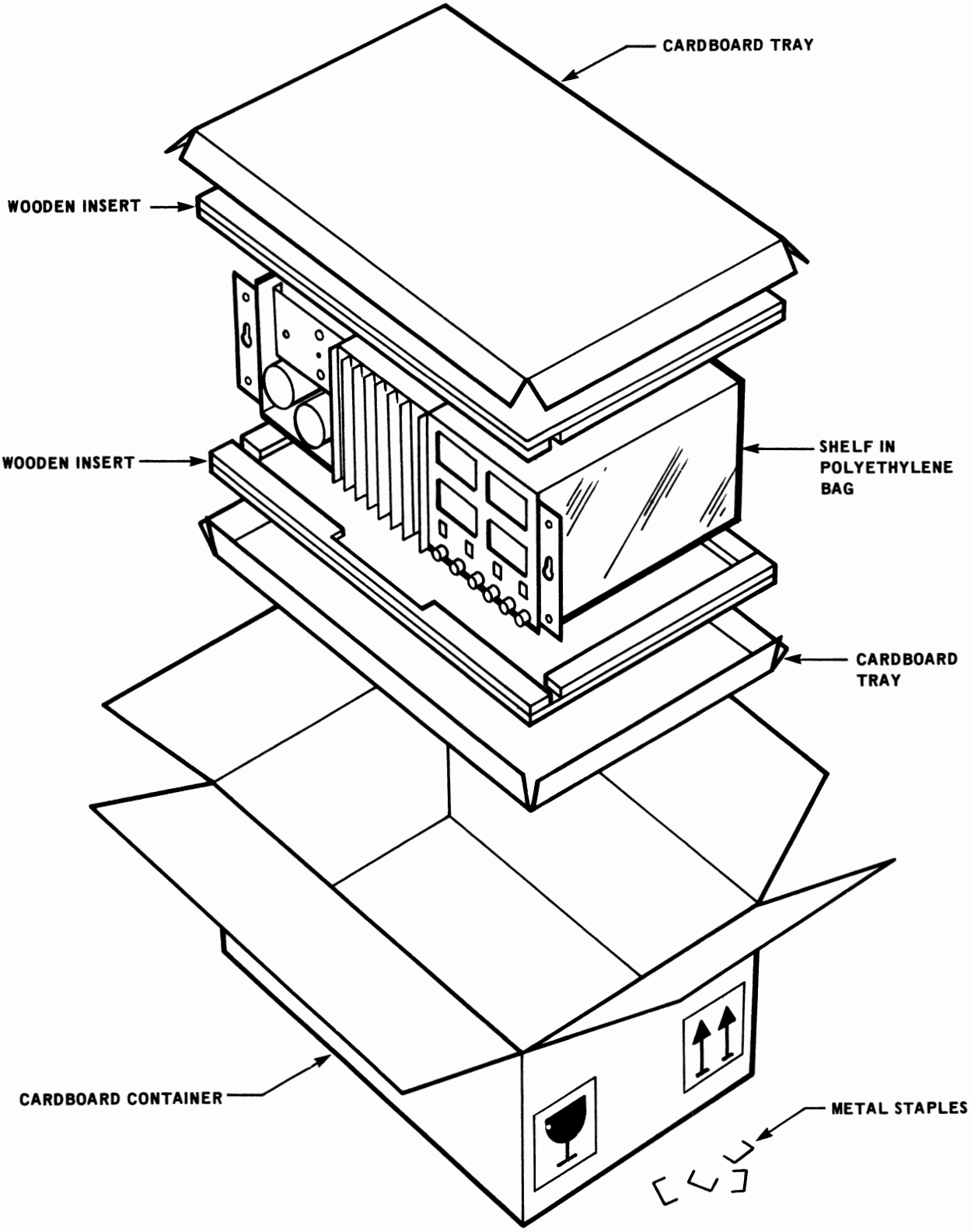


Fig. 3 – Placing and Removing a Power Shelf, Packed with Cardboard, from a Shipping Container

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4.05 If a shelf must be stored without the protection of the shipping container, the following precautions must be observed:

- Leave or place the shelf in the plastic envelope.
- Always place or store the shelf in its upright position.
- Store a shelf in a dry and dust-free area.
- The shelf must be stored in a location where mechanical damage, such as broken wires, bent or broken wire wrapping pins, or damage by dropping the apparatus, cannot occur.

CIRCUIT PACK

4.06 Each circuit pack is shipped in a foam insert. The insert is sealed by transparent tape shown in Fig. 4. Windows through the front edge of the insert expose the circuit-pack code for identification.

4.07 The following precautions must be observed when handling the circuit packs:

- Avoid dropping the circuit pack.
- Hold circuit pack by handle; avoid handling components.
- Avoid any field repairs of circuit pack.
- Store circuit pack in a dust-free area. Dust particles will scratch the contacts on the circuit pack when it is inserted in the connector.
- Store circuit pack in a dry area at room temperature. Excessive heat will cause the circuit pack to warp.
- Avoid unnecessary insertion and removal of circuit pack in the connector. Contact life is reduced by repeated insertions.

- Avoid touching circuit pack contacts. Handling leaves dirt and grease, causing apparatus failure and reducing contact life.
- Place circuit pack in a shipping container after removing it from the shelf.
- Clean circuit-pack contacts by spraying contacts with freon grease solvent. (Freon T.F. Degreaser, type MS-180, manufactured by Miller-Stephenson Chemical Co. Inc., Toronto, and Chicago, is recommended.) Remove residues with a nylon brush.

CABINET DELIVERY ON SITE

4.08 When a forklift truck is used to transport the cabinet to the customer's premises, the shipping package should not be removed from the cabinet until it is delivered to the installation site.

4.09 When the shipping package has been removed, an upright 2-wheel dolly is used to transport the cabinet. The cabinet is loaded on the dolly and transported as follows:

- (1) Tilt the cabinet on its front edge.
- (2) From the rear of the cabinet, insert the upright 2-wheel truck dolly.
- (3) Lower the cabinet onto the truck dolly.
- (4) Secure the upper half of the cabinet to the top of the truck dolly with a rope or strap.
- (5) Tilt the truck dolly backwards onto its wheels, and transport the cabinet to the desired location, avoiding bumps.
- (6) At the desired location, wedge the rear of the wheels of the truck dolly.
- (7) Tilt the truck dolly forward until the cabinet stands solidly on the floor. Assistance may be required to prevent the cabinet from dropping.

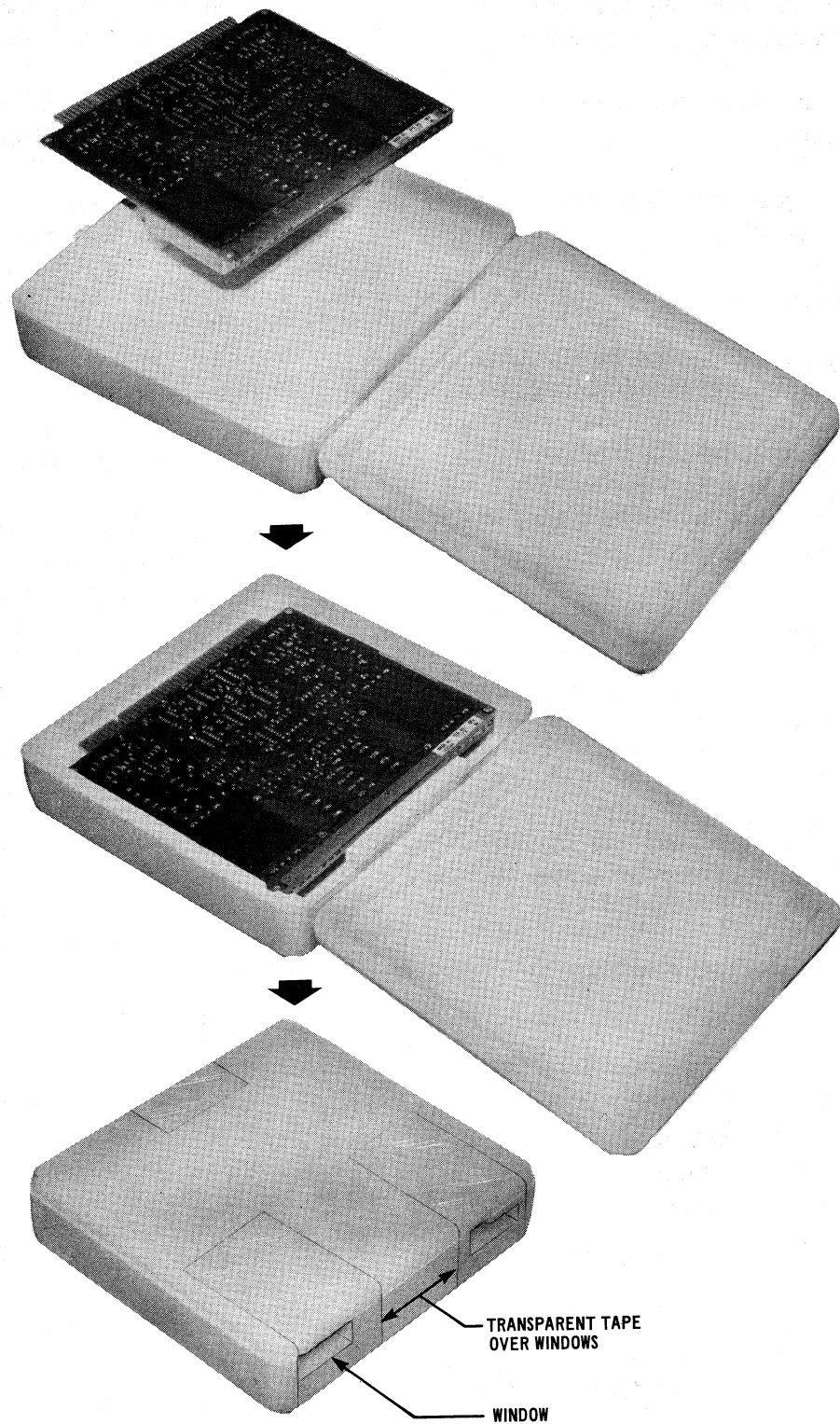


Fig. 4 – Placing and Removing a Circuit Pack from a Shipping Container (Foam Insert)

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- (8) Remove the rope or strap holding the cabinet to the truck dolly.
- (9) Tilt the cabinet forward on the front edge and remove the truck-dolly.
- (10) Slide the cabinet carefully into place, without damaging the floor covering.

5. INSPECTION OF CABINET AND APPARATUS

5.01 The visual inspection described in the following paragraphs is performed to ensure that the physical condition of the delivered items is satisfactory before starting the installation.

5.02 Damaged items should be tagged *Received in Defective Condition* and returned to the stores.

CABINET

5.03 Remove the plastic cover and inspect the cabinet to ensure that the following conditions are met.

- (1) The cabinet top, and the front and side panels, are free from disfiguring marks and scratches.
- (2) The front and side panels are held securely in place.

5.04 Remove the front and side panels and stand the panels carefully against a wall.

5.05 To prevent the shelf-slides from opening during transit, L-shaped steel brackets are bolted to the top and bottom front ends of each slide. To remove the brackets proceed as follows:

- (1) Remove the front panel.
- (2) With a 1/2-inch open-ended wrench remove the hexagonal nut, and lockwashers [Fig. 5(a)].
- (3) Remove the L-shaped brackets.

(4) Replace brackets for future use as shown in Fig. 5(b).

(5) *The hexagonal nut and lockwashers are replaced. The nut is tightened with the wrench to prevent the bracket from obstructing the opening of the slide, and to prevent the slide mechanism from slipping and causing jamming.*

5.06 Cut the twine holding the locking bar in turn from the face of the shelves. Remove the wooden inserts from between the shelves.

5.07 Inspect the slides to ensure that the spring latch engages the stud at the top of the front vertical support, so that the slides are held in the closed position.

5.08 Release one spring latch, extend the slide, and check that:

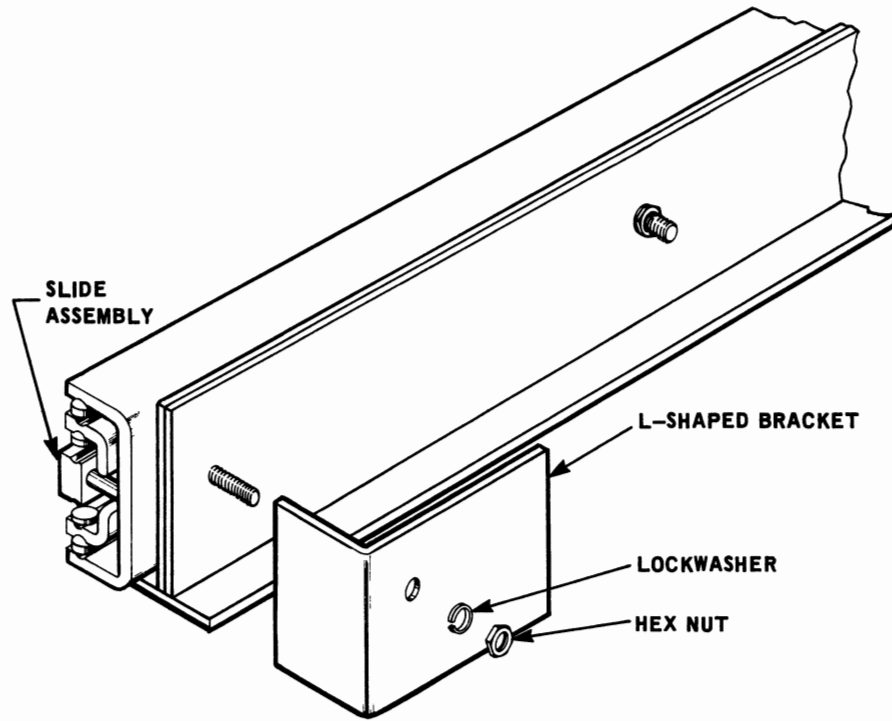
- (1) the slide operates smoothly on the track;
- (2) the interlock prevents the closed slide from being extended;
- (3) the spring latch engages the stud at the top of the rear vertical support, so that the slide is held in the fully extended position.

Release the spring latch, and return the slide to the closed position.

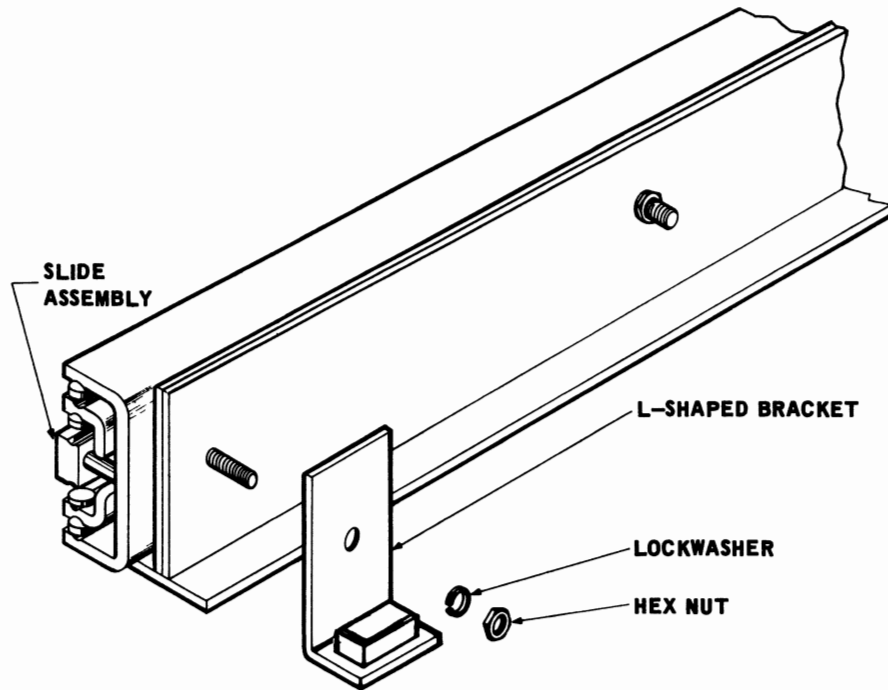
5.09 Repeat the slide inspection on the other slide.

5.10 Relocate the rubber-bumper to the outside rear of the cabinet as follows:

- (1) Extend one of the telescopic shelf-slides to the fully open position.
- (2) From inside the cabinet, remove the hexagonal nut and washer which secure the rubber-bumper to the cabinet back support.
- (3) Pull the rubber-bumper away from the bolt.
- (4) From the rear of the cabinet remove the bolt from the cabinet.



(a) Shipping Position



(b) Storing Position

Fig. 5 – Detail of a Bracket Mounting Attached to the Top and Bottom of Each Slide

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- (5) Ensure that the washer molded in the reset end of the rubber-bumper is present.
- (6) Insert the bolt in the rubber-bumper as shown in Fig. 6.
- (7) Insert the protruding end of the bolt in the hole from which the bolt was removed in Step 4 above.
- (8) From the inside of the cabinet place lockwasher, and fasten the nut to the bolt.
- (9) Tighten the nut securely.
- (10) Return the slide to its original position.
- (11) Repeat the above operations for the rubber-bumper at the rear of the other slide.

SHELVES

5.11 Inspect the shelves, including those contained in the cabinet and those shipped separately, if any, to ensure that the following conditions are met:

- Connector contacts are undamaged and no foreign matter adheres to them.
- No circuit-pack plastic guides are broken.
- No wires are broken.
- No connector pins are bent or broken.
- The wires from the shelf to its plug are laced together with twine.

CIRCUIT PACKS

5.12 Inspect any circuit packs shipped separately to ensure that the following conditions are met:

- The contacts at the rear of the circuit pack are not scratched or damaged.
- The circuit pack is not warped.

- The circuit pack is not cracked.
- There are no broken leads on the circuit pack components.
- There are no damaged components on the circuit pack.

POWER FAILURE TRANSFER PANEL

5.13 Inspect the power-failure transfer panel to ensure that the following conditions are met.

- The wire-spring relay contacts are not overlapped.
- The actuating cards are not defective.
- The relay covers are properly positioned to prevent operating failures.
- The rear contacts of the relays do not touch one another or the panel.
- The screws holding the panel in place are secure.
- The resistor lamps on the Power Failure Transfer Panel (and in Trunk Shelf No. 2, if installed) are not broken or damaged.

6. REPACKING APPARATUS FOR TRANS-SHIPMENT

6.01 When a PULSE 120 EPABX is moved from one location to another, all apparatus must be properly packed to prevent serious damage.

CABINET

Internal Packing

6.02 Install the L-shaped steel brackets in the shipping position (Fig. 5a) at the top and bottom front ends of each slide to prevent the slides from moving during transit.

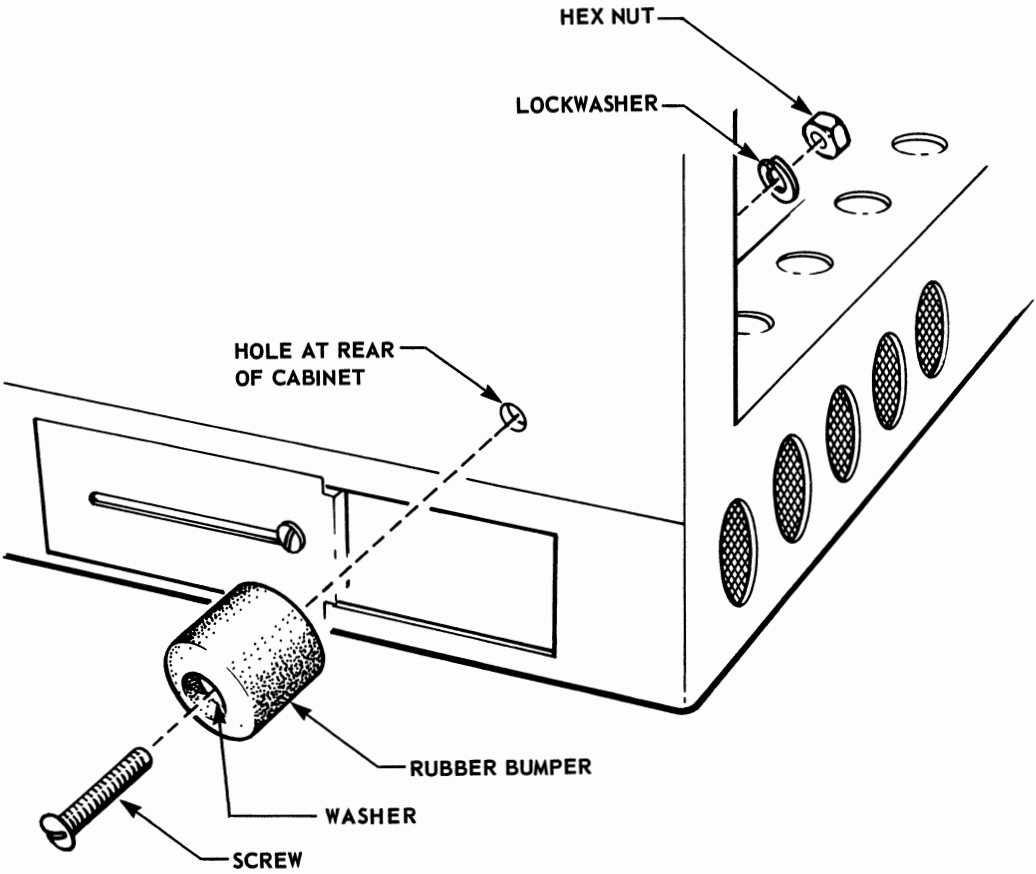


Fig. 6 – Detail of Rubber Rear Stop Assembly

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6.03 Install plywood inserts (2 by 4-1/4 by 5/16 inches) between shelves to prevent shelf-bending during vertical shock loads. If a slide is fully loaded, place an insert between the bottom shelf and the slide. If there is a shelf missing on a slide, brace the shelf above the gap from either the bottom of the cabinet or the shelf below the gap, with a wooden support (2 by 2 inches).

6.04 Secure the wooden inserts and supports with twine to prevent them from falling out during transit. Wrap the twine around the upper frame member on the lower shelf and the lower frame member on the upper shelf to hold the inserts in place.

6.05 Secure all circuit pack locking bars, in the locked position, to the shelf frame with twine. Both ends of each bar should be tied to prevent the possibility of circuit packs becoming loose during transit.

Cabinet External Packing

6.06 The cabinet must be mounted on a wooden pallet to permit forklift truck handling and to absorb shock loads. A pallet with foam separators is recommended since it gives better shock protection than the common all-wood pallet. The pallet on which the system was originally shipped should be retained for trans-shipping.

6.07 Place the cabinet on the pallet without bumping or dropping the cabinet. Secure the cabinet to the pallet with four nuts and bolts,

5/8-inch diameter and 5-1/2 inches long; through the holes provided in the base of the cabinet.

6.08 Using 1/2-inch cardboard, form a sleeve and cover for the cabinet to protect the exterior finish and cushion the minor horizontal shock loads. After installing the front and side panels, place the sleeve and cover over the cabinet and secure with steel strapping.

SHELF

6.09 When a shelf is trans-shipped as a single item, the shelf should be packed with the original shipping material as shown in Fig. 1 through 3. If the original material is not available, the shelf should be wrapped several times with air-cap cushion material. Lengthwise wraps should be made first for maximum protection. The wrapped shelf should then be placed in a cardboard shipping container and surrounded by paper until the shelf is secure.

CIRCUIT PACK

6.10 The foam insert, in which circuit packs are originally shipped, should be used when trans-shipping circuit packs. If inserts are not available, circuit packs should be wrapped several times with air-cap cushion material and placed in a cardboard container and surrounded by paper until the pack is secure.