

SPECTRA 70

RADIO CORPORATION OF AMERICA · ELECTRONIC DATA PROCESSING



SPECTRA 70

ALL SYSTEMS

INSTALLATION PLANNING GUIDE



RADIO CORPORATION OF AMERICA

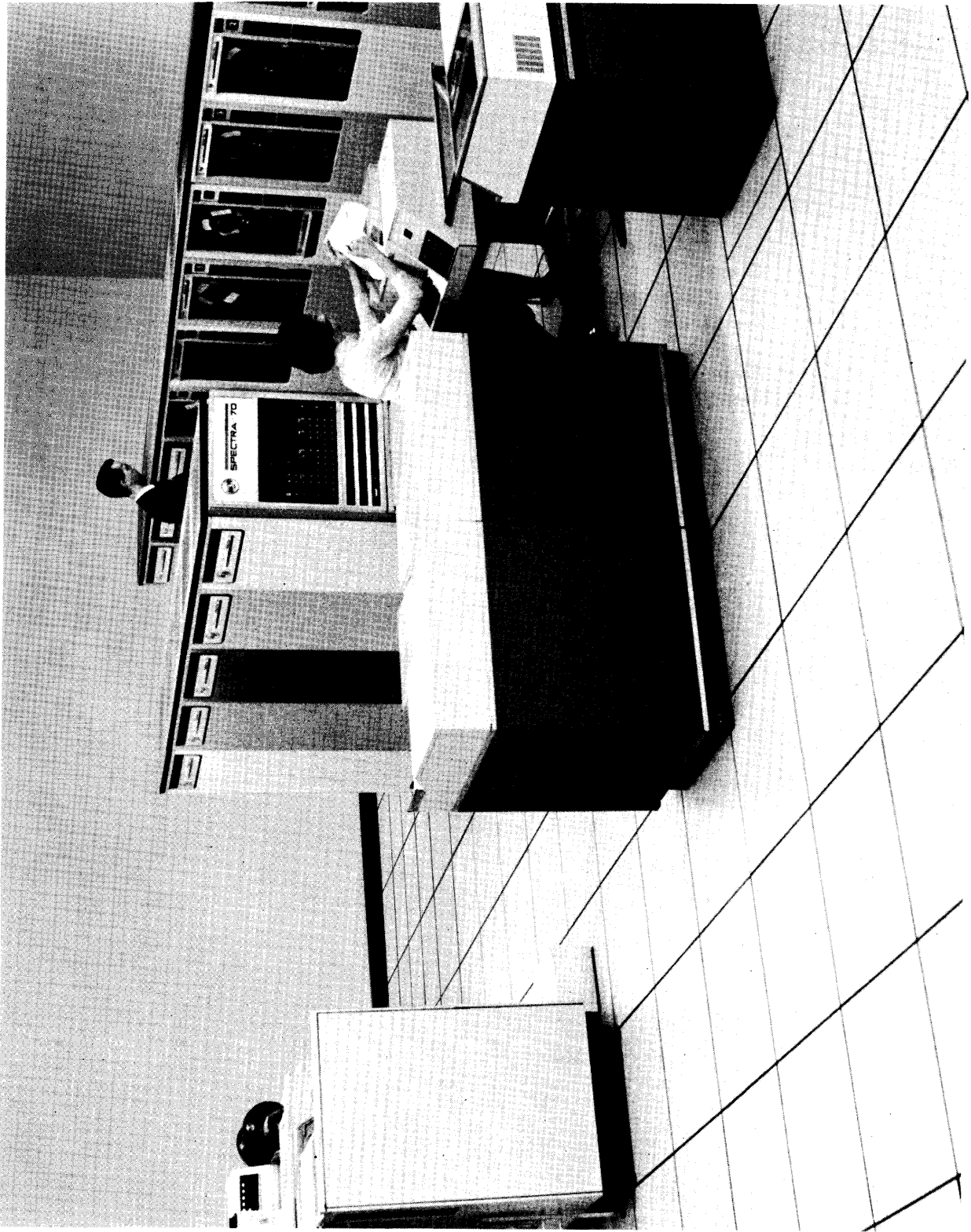
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CONTENTS

	Page
PLANNING PROCEDURES	
Site Selection	1
Floor Space Requirements	1
Air Conditioning	1
Electrical Power Requirements	2
Floor Loading	3
Raised Flooring	3
Fire Protection	3
Lighting	3
Acoustics	3
Storage Facilities for Operating Supplies	3
Site Cleanliness	3
Scheduling	4
Installation	4
Summary	5
Installation Activities Schedule	6
EQUIPMENT SPECIFICATIONS	9
SUPPLEMENTARY DATA	135
CABLING DIAGRAMS	139
TEMPLATES	141



Spectra 70 System

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PLANNING PROCEDURES

◆ This Installation Planning Guide provides the data required for the installation of the RCA Spectra 70 Data Processing Systems.

The successful installation of a data processing system involves many various services and/or contractors. The customer should appoint a coordinator to supervise these functions. This guide should be reviewed by all services prior to any facilitation of the site.

Site Selection

◆ Although the selection and facilitation of the site is a customer responsibility, RCA Installation Planning Specialists are available for consultation on problems incurred by the customer or his contractors. The most suitable location for the computer area should be determined only after thoroughly considering all aspects such as:

1. Sufficient air conditioning capacity.
2. Adequate power availability.
3. Floor loading.
4. Adequate protection from hazards such as fire, water, radiation, etc.
5. Space to house the data processing system and associated equipments.
6. Ceiling height, outside wall and glass area.
7. Flow of work to and from other areas.
8. Expansion of the system.

Floor Space Requirements

◆ Floor space requirements differ for each system and should include the necessary equipment maintenance service area, tape and paper storage area, and future expansion possibilities. The same environmental conditions should be maintained for all areas including the tape and paper storage area. If the storage area is not under the same environment as the system, time must be allowed to acclimate the media to the equipment environment. Whether an existing area is to be modified or a new facility is contemplated, it is always advisable to make several possible equipment layouts to arrive at the optimum. Care should be exercised in planning the equipment layout to avoid exceeding the maximum cable lengths. These restrictions are given later in this manual.

A service area for the RCA customer service representatives will be required for storage of spare parts, test equipment, etc. This area will vary with the size of the system. However, a minimum of 80 square feet should be allocated. At least two 120 volt, 15 ampere receptacles should be located in this service area.

Air Conditioning

◆ Spectra 70 systems are cooled by air which is circulated internally by blowers in most units. The air intake varies slightly from one unit to another, but in general, is through louvers along the bottom edge. The air is circulated over the components to absorb the heat and is then exhausted out of the top of the cabinets. It is advisable that a separate air-conditioning system be utilized for the installation area, and that heat loads due to future expansion be considered in the design.

Air entering or being recirculated through the air-conditioning system should be filtered by either of the two following methods:

Air Conditioning
(Cont'd)

1. *Electrostatic Plate Type Filter* — This type must be rated at a minimum of 85–90% efficient by the Bureau of Standard discoloration test using atmospheric dust.
2. *Mechanical Filter* — 20% minimum filtration efficiency based on the National Bureau of Standards blackness or discoloration test using atmospheric dust.

Special air filtration is necessary only where installations are exposed to corrosive gases, salt air, or unusual dirt or dust conditions.

A recording instrument should be provided to keep a continuous record of temperature and humidity conditions in the area. The recorder should be located in a position to record average conditions within the area. Alarms may be provided to indicate when the environmental limits are exceeded.

The Spectra 70 Systems should be maintained within the following environmental ranges:

1. <i>Power On</i>	Temperature (Dry Bulb)	60° – 90°F
	Relative Humidity	20% – 80%
	Maximum Wet Bulb	78°F
2. <i>Power Off</i>	Temperature	40° – 110°F
	Relative Humidity	10% – 90%
	Maximum Wet Bulb	80°F

The recommended design criteria for the most efficient machine and personal operation is 73° ±2°F dry bulb temperature and 50% ±5% relative humidity.

Electrical Power Requirements

◆ It is recommended that a separate building power source be provided for the computer system. When this is not possible, it is required that the source used be void of heavy variable loads such as elevator motors, air-conditioning motors, etc. The connection of tabulating equipment such as tabulators, adding machines, key punches, etc. to the same source as the computer is to be avoided.

The electrical requirements must be provided in accordance with applicable national and local codes and ordinances. As a guide, circuit breaker ratings are listed on the Specifications sheet for each equipment.

It is recommended that some convenience outlets be provided at various locations throughout the installation area for use by operating and maintenance personnel. As a safety precaution, a remote power off device should be provided in the machine room which will remove all power to the computer system.

RCA Spectra 70 Systems require power from a 3-phase 4-wire “Y” system that supplies 208 volts ±10% at 60 cycles ±1/2 cycle. From a distribution panel, four wires (including a neutral) are run to the equipments that will receive power. In addition, all equipments must receive a ground wire. These ground wires must be terminated at the transformer secondary or building ground. Specific electrical requirements are listed for each equipment in the Specifications section of this guide.

- | | |
|--|--|
| Floor Loading | ◆ Most office buildings and industrial plant floors will sustain the weight of the RCA equipment. To determine if the floor is adequate, allowable floor loading and structural configuration of the floor should be investigated by qualified personnel. Weights and dimensions of the equipment are listed in the Specifications section of this guide. |
| Raised Flooring | ◆ The RCA Spectra 70 Systems are designed to be installed on a raised-type floor with a nine-inch clearance between the subfloor and the bottom of the raised floor sections. The space under the raised floor accommodates the equipment cables and electrical power cables. Raised floor cross-members or stringers should not obstruct any cutouts for the equipment. The locations of these cutouts are shown in the Specifications of this guide. After the cables are in place, it is recommended that the floor openings be sealed.

The use of raised flooring provides maximum flexibility of equipment layout, ease of installation, neat appearance, and personnel safety. |
| Fire Protection | ◆ In most cases local codes establish the protection required for computer systems. This information is generally outlined in the applicable building and electrical codes. Additional information can be obtained from the National Fire Protection Association located in Boston, Massachusetts. This organization issues a standard for the protection of electronic computer systems, NFPA No. 75, which can be used as a guide.

Portable carbon-dioxide fire extinguishers should be located in readily accessible locations within the equipment area. These extinguishers must be inspected periodically in accordance with local codes. A fire detection and alarm system may be installed in the equipment area.

RCA shall be notified if it is necessary to alter the equipment in order to comply with local codes. |
| Lighting | ◆ The recommended light intensity, including natural light, to be maintained in the data processing area is 50 foot-candles measured at 30 inches above the floor. This intensity is sufficient for general work in the area and does not obscure equipment indicating lights. |
| Acoustics | ◆ Mechanical equipment such as card readers, card punches, printers and blower fans in the electronic racks, are sources of noise. For personnel comfort, some acoustical treatment of the data processing area is recommended. |
| Storage Facilities for Operating Supplies | ◆ Short-term storage facilities for magnetic tape, EAM Cards, etc., should be maintained within the same environmental range as for the system (power on conditions). Storage of these materials in atmospheric conditions outside the normal operating limits requires that the material be acclimated to the computer area environment before usage. |
| Site Cleanliness | ◆ Particular attention should be given to the type of materials used in the construction and furnishing of the machine room. Materials should be relatively easy to clean and should not be sources of dust, flaking, etc. |

Scheduling

◆ A successful installation is dependent upon the effective execution of a realistic schedule. A suggested schedule is provided in figure 1. This form lists the activities in the order in which they are generally undertaken and the average time normally allocated for each task. Space is provided to record actual progress with the suggested progress. As a guide, the progress may be broken down as follows:

1. Approximately seven months before the delivery of the EDP equipment, the system complement should have been determined — including a realistic allowance for future expansion. All interested personnel having a part in the project should have reviewed this guide for a reasonably complete understanding of the program to be followed. Tentative sites should have been selected from which the final site will be chosen.
2. Six months before the delivery date a layout mutually agreeable to RCA and the customer should have been worked out and preparation of preliminary plans and specifications started.
3. Four months before the delivery date the site design should be completed in sufficient detail to permit the orderly *letting* of the site facilitation contracts. The plans should include provisions for relocation of any equipment and personnel, and clearing the area of all unneeded obstructions and facilities.
4. At least three months before the delivery orders should have been placed for the power and air-conditioning equipment, and all other purchased items. The final EDP equipment layout must be completed. Any revisions to the layout after this will necessitate recoordination with RCA.
5. One month before delivery site preparation should be sufficiently complete to permit test operation of facilities. All work, except final adjustments, must have been completed one week before delivery of the equipment.

Installation

◆ Planning for the movement of the EDP equipment within the building should include: checking the route to be taken; the size and capacity of the elevators to be utilized; the size of doors, aisles, and window openings. Dimensions and weights of the equipment are indicated on the enclosed Equipment Specifications Sheets to aid in determining the clearances and loading requirements along the chosen route. The packing material increases the specified equipment clearance dimensions. These overall dimensions should be taken into consideration when the route is determined.

The height and width of the moving device (fork lift, Rol-a-lift, etc.) should also be taken into consideration. It is recommended that Rol-a-lifts be utilized to move the equipment. Johnson-type bars must not be used with data-processing equipment.

Unpacking and Placing of Equipment

◆ To protect the equipment from possible damage caused by moving devices, it is recommended that the pallet on which the equipment is mounted not be removed until the equipment is located at its approximate point of operation.

**Unpacking and Placing
of Equipment
(Cont'd)**

RCA will furnish the necessary technical assistance and supervision of the final placement of equipment in accordance with the provisions of the contract.

Final Checks

◆ Upon completion of the installation, RCA technical personnel will operationally test the equipment to assure error-free operation. During this period, the performance of the air-conditioning system may be checked and any necessary final adjustments made.

Summary

◆ Because the specific details of installation are complex and involve a wide range of technology, it is strongly recommended that only qualified experienced personnel be utilized for planning and designing the installation. This Installation Planning Guide is intended to provide sufficient technical details of the RCA equipment so that these personnel can effectively perform this task.

SITE PREPARATION AND FACILITY INSTALLATION SCHEDULE

LEGEND:
 ■ PLANNED
 ▨ ACTUAL

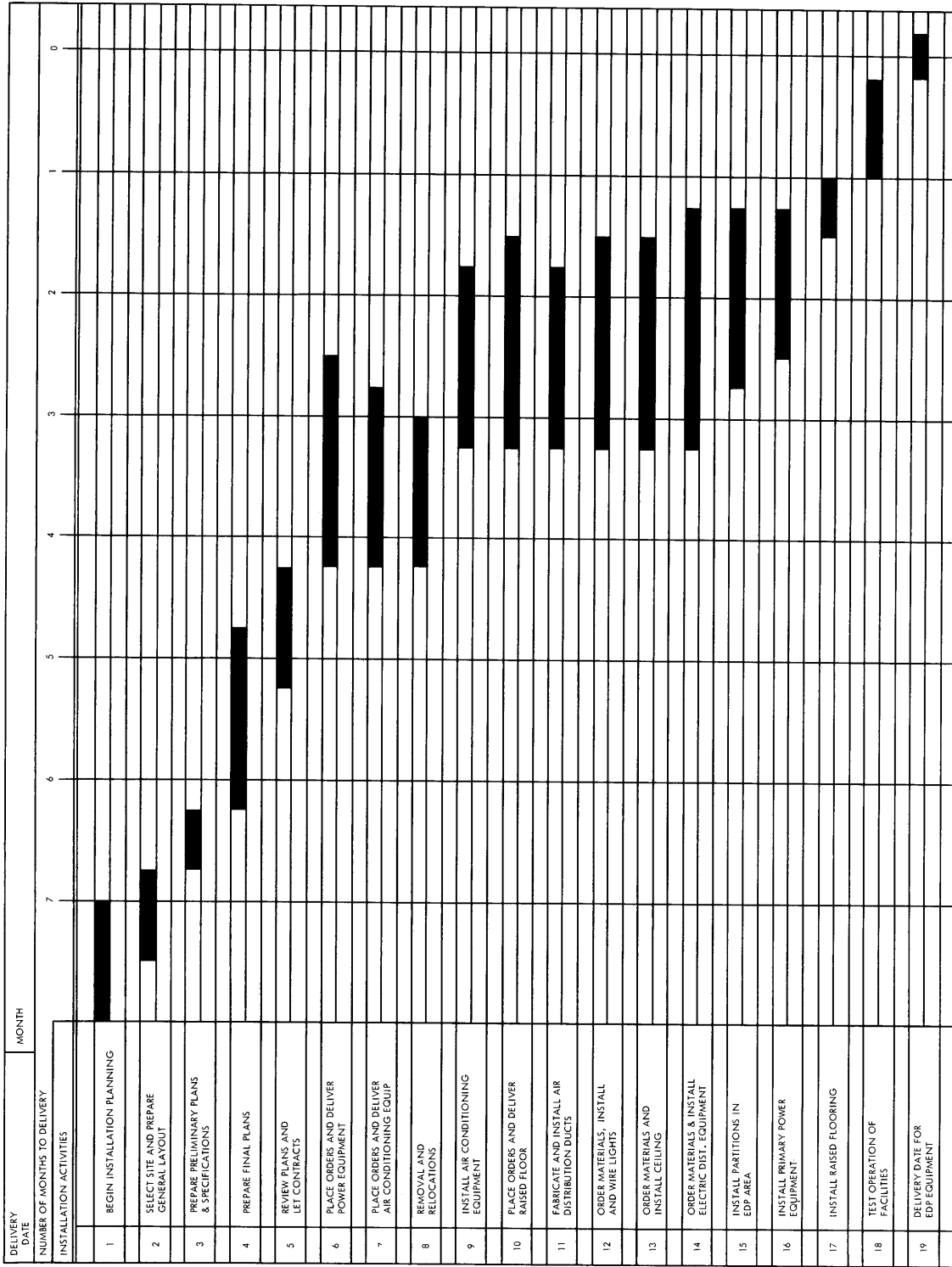
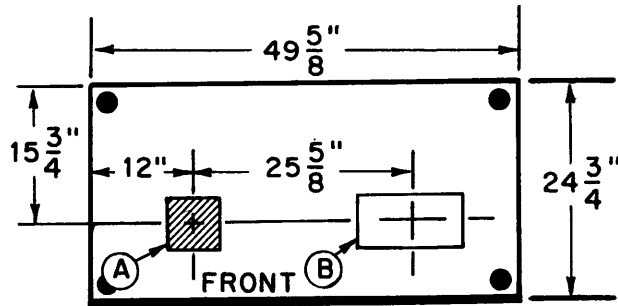
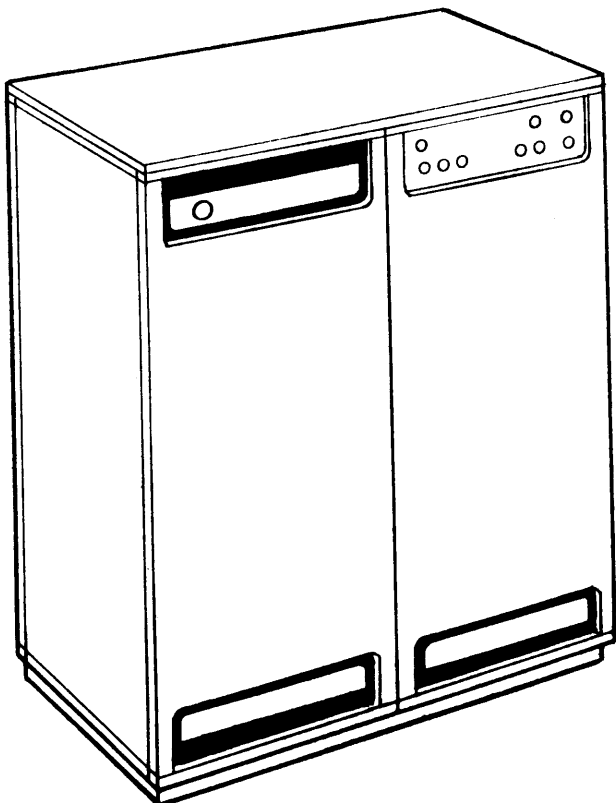


Figure 1. Installation Activities Schedule

EQUIPMENT SPECIFICATIONS

Processor 70/15-A, -B

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 600		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,100		
Electrical Requirements	◆ (KVA) 1.00		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycle, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ Refer to peripheral equipment specification sheets.		



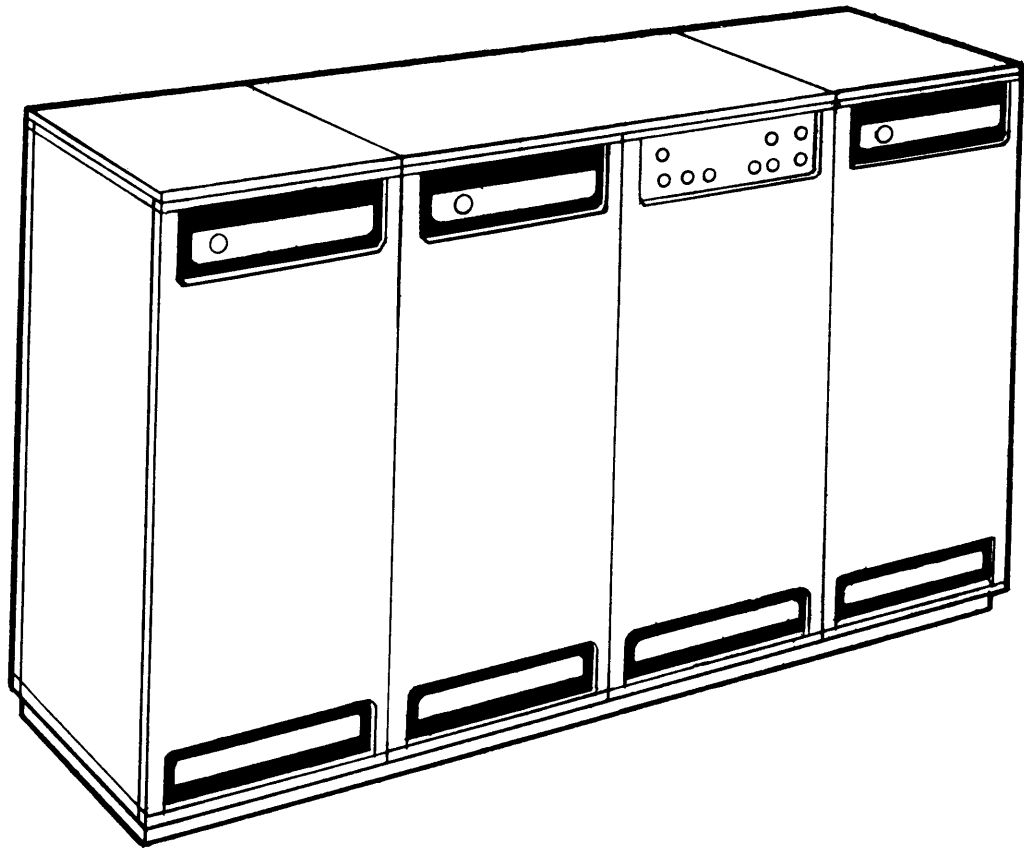
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Size of Cutouts:
 A 6" x 6"
 B 6" x 12"

Processor 70/25-C, -D, -E

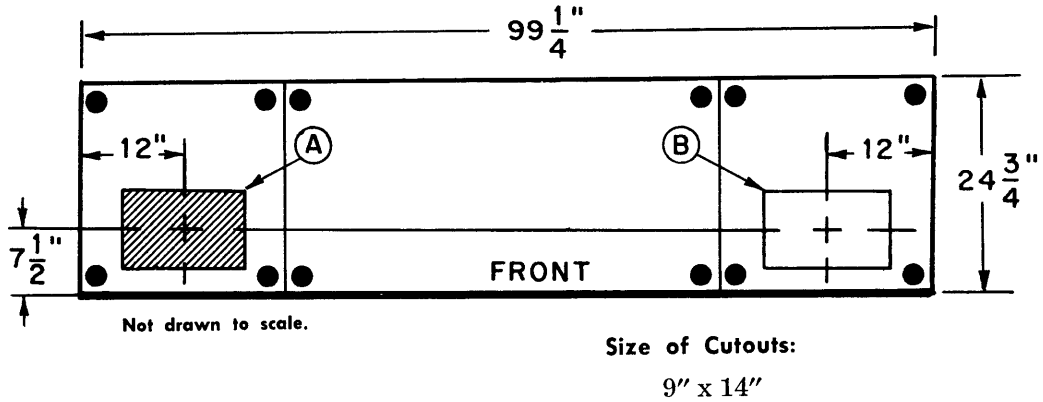
Optional Features

	KVA	BTU/HR
◆ Hi-Speed Selector #5010	.02	68
Selector Expansion #5011	.14	440
Multiplexor Channel #5012	—	—
Multiplexor Expansion #5014	.24	780



Processor 70/25-C, -D, -E

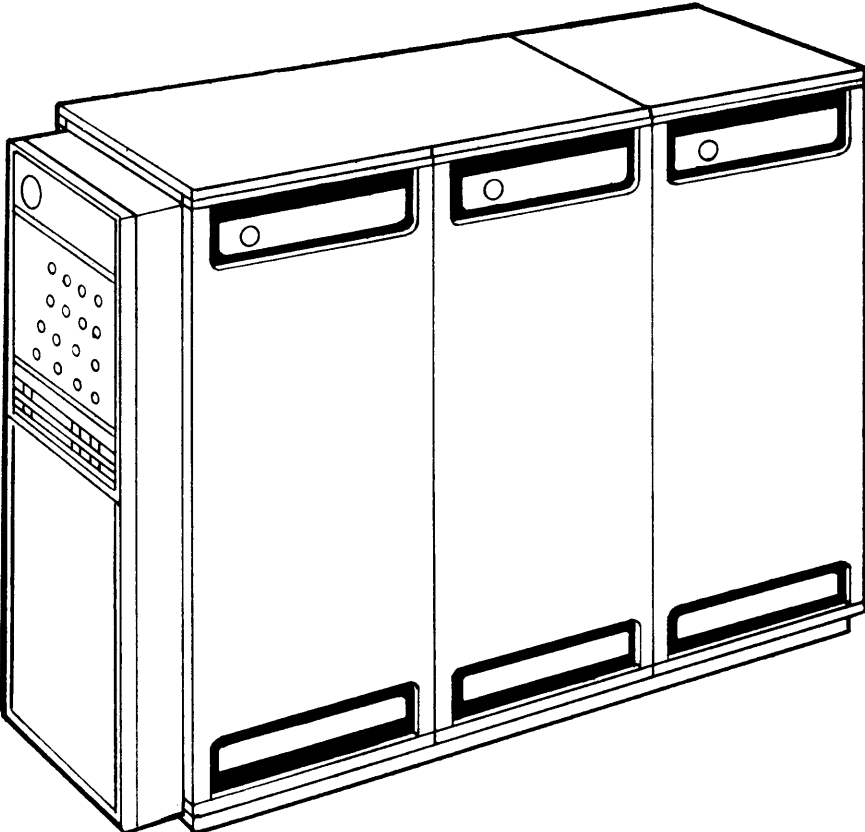
Dimensions (In.)	◆ Height — 62	Width — 99 $\frac{1}{4}$	Depth — 24 $\frac{3}{4}$
Weight (Lbs.)	◆ 1,200		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 5,900 (70/25-C), 7,500 (70/25-D), 9,100 (70/25-E)		
Electrical Requirements	◆ (KVA) 2.00 (70/25-C), 2.40 (70/25-D), 2.80 (70/25-E)		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus a No. 8 ground wire Total — 5 Wires		
Circuit Breaker	◆ 3 pole, 20 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ Refer to peripheral equipment specification sheets.		



Processor 70/35-C, -D, -E

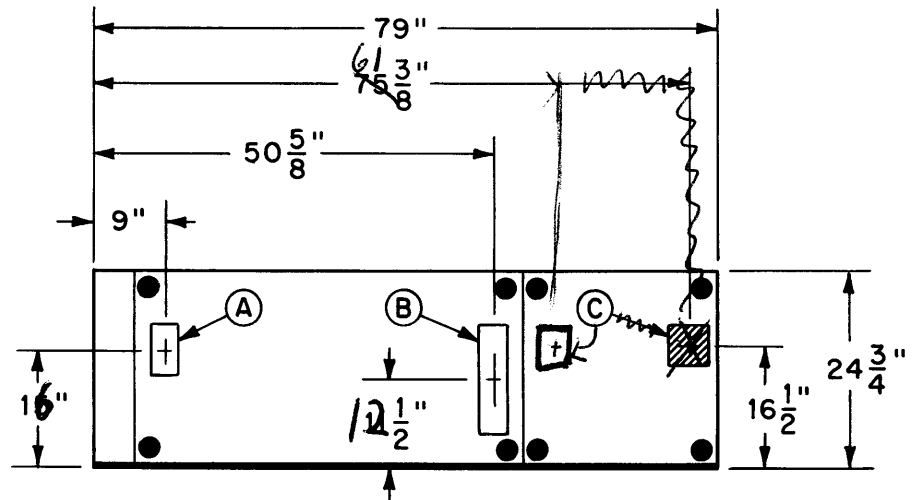
Optional Features

	KVA	BTU/HR
◆ Memory Protect #5001-35	.29	980
Elapsed Time Clock #5002-35	—	—
Direct Control #5003-35	.40	1,370
301 Emulator (D-E) #5005-35	.40	1,370
1401 Emulator (D-E) #5006-35	.40	1,370
Selector Channel (1) #5030	.34	1,160
Selector Channel (2) #5031	.49	1,670



Processor 70/35-C, -D, -E

Dimensions (In.)	◆ Height — 62	Width — 79	Depth — 24 $\frac{3}{4}$
Weight (Lbs.)	◆ 1,500		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3
Heat Dissipation (BTU/Hr.)	◆ 12,330 (70/35-C), 13,600 (70/35-D), 14,680 (70/35-E)		
Electrical Requirements	◆ (KVA) 4.0 (70/35-C), 4.40 (70/35-D), 4.75 (70/35-E)		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus a No. 8 ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 20 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ Refer to peripheral equipment specification sheets.		



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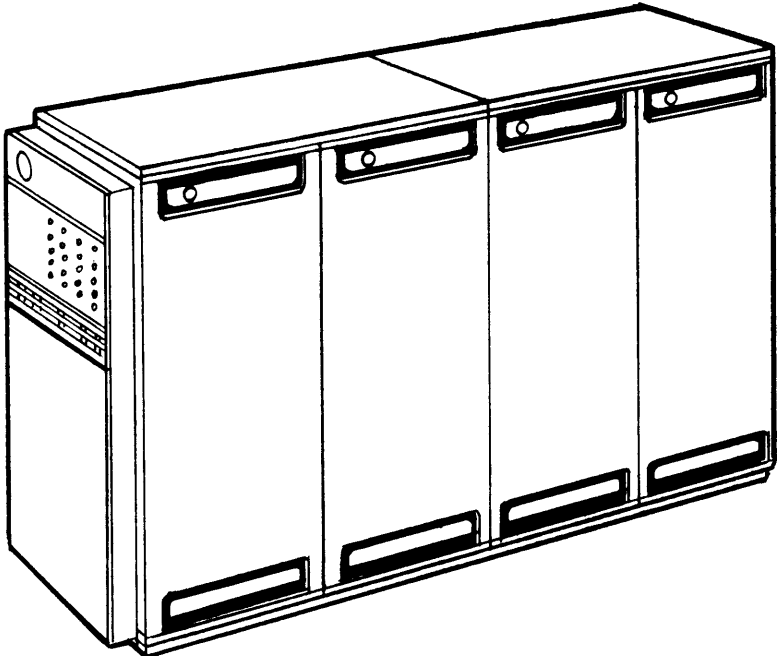
Size of Cutouts:

- A 3 $\frac{1}{2}$ " x 7"
- B 3 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ "
- C 5" x 5"

Processor 70/45-C, -D, -E

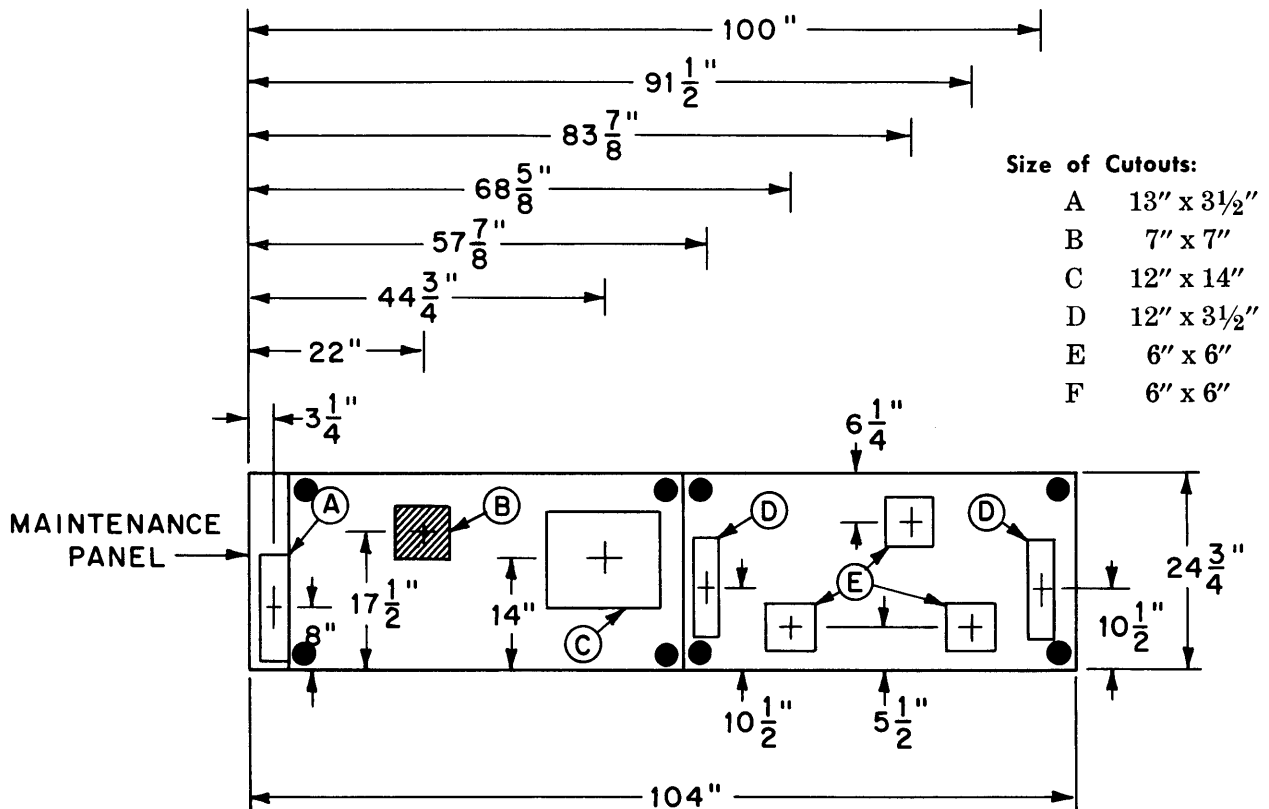
Optional Features

	KVA	BTU/HR
◆ Memory Protect #5001-45	.36	1,000
Elapsed Time Clock #5002-45	—	—
Direct Control #5003-45	.40	1,370
301 Emulator (D-E) #5005-45	.80	2,600
1401 Emulator (D-E) #5006-45	.80	2,600
501 Emulator (D-E) #5007-45	.80	2,600
Selector Channels (2) #5015	.16	500
Selector Channels (3) #5016	.80	2,460
1410 Emulator (E) #5026-45	.80	2,600
301/501 Emulator (D-E) #5036-45	1.6	5,200
1401/1410 Emulator (E) #5046-45	1.6	5,200



Processor 70/45-C, -D, -E

Dimensions (In.)	◆ Height — 62	Width — 104	Depth — 24 $\frac{3}{4}$
Weight (Lbs.)	◆ 1,900		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3
Heat Dissipation (BTU/Hr.)	◆ 17,300 (70/45-C), 17,300 (70/45-D), 18,100 (70/45-E)		
Electrical Requirements	◆ (KVA) 5.60 (70/45-C), 5.60 (70/45-D), 5.90 (70/45-E)		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus a No. 8 ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 30 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ Refer to peripheral equipment specification sheets.		

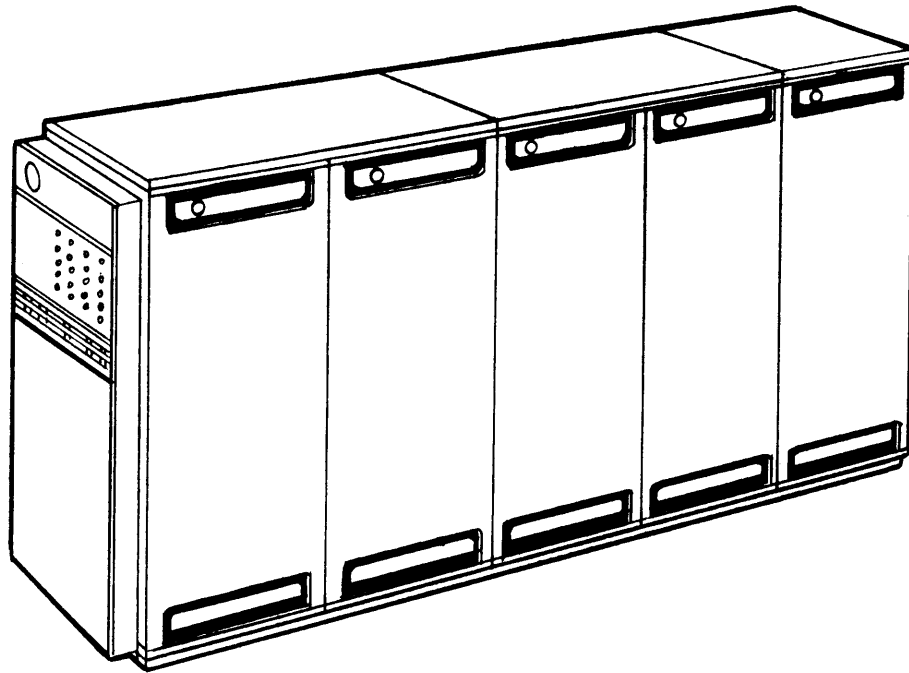


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Processor 70/45-F

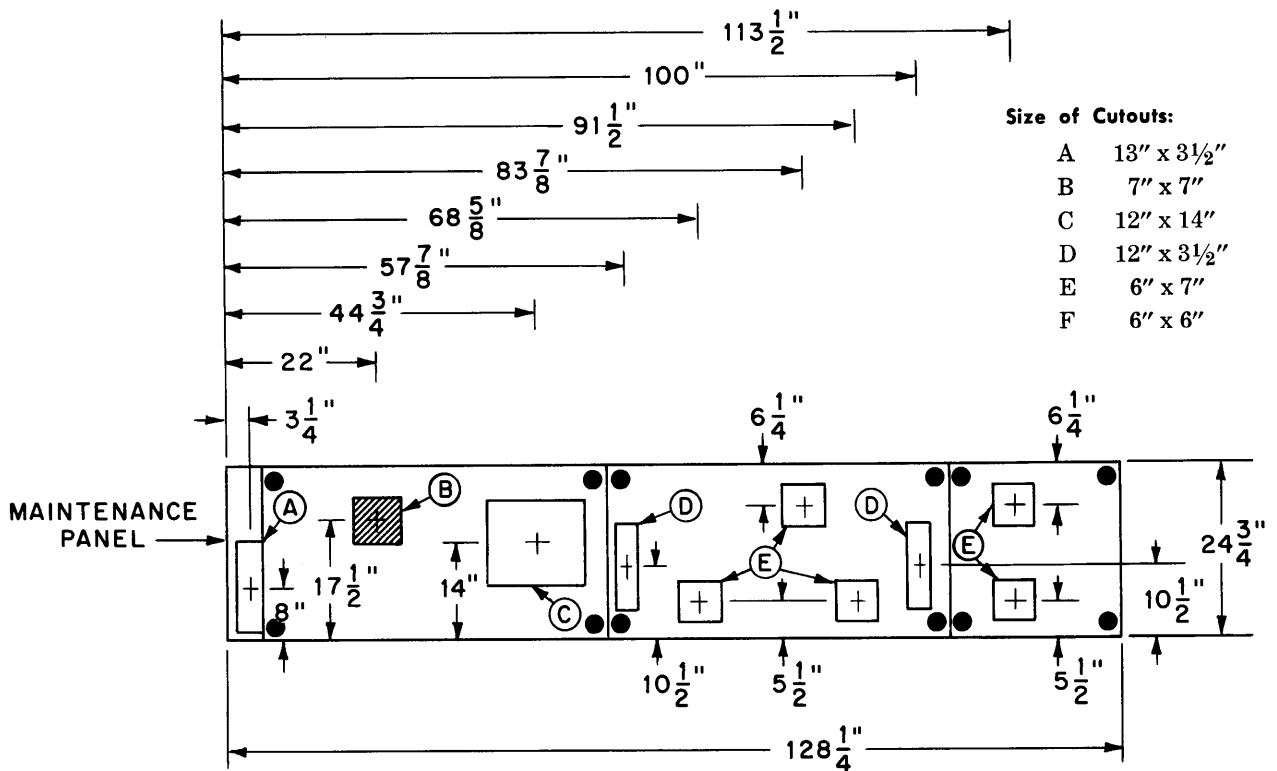
Optional Features

	KVA	BTU/HR
◆ Memory Protect #5001-45	.36	1,000
Elapsed Time Clock #5002-45	—	—
Direct Control #5003-45	.40	1,370
301 Emulator #5005-45	.80	2,600
1401 Emulator #5006-45	.80	2,600
501 Emulator #5007-45	.80	2,600
Selector Channels (2) #5015	.16	500
Selector Channels (3) #5016	.80	2,460
1410 Emulator #5026-45	.80	2,600
301/501 Emulator (D-E) #5036-45	1.6	5,200
1401/1410 Emulator (E) #5046-45	1.6	5,200



Processor 70/45-F

Dimensions (In.)	◆ Height — 62	Width — 128 $\frac{1}{4}$	Depth — 24 $\frac{3}{4}$
Weight (Lbs.)	◆ 2,300		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3
Heat Dissipation (BTU/Hr.)	◆ 22,700		
Electrical Requirements	◆ (KVA) 7.70		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus a No. 8 ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 30 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ Refer to peripheral equipment specification sheets.		

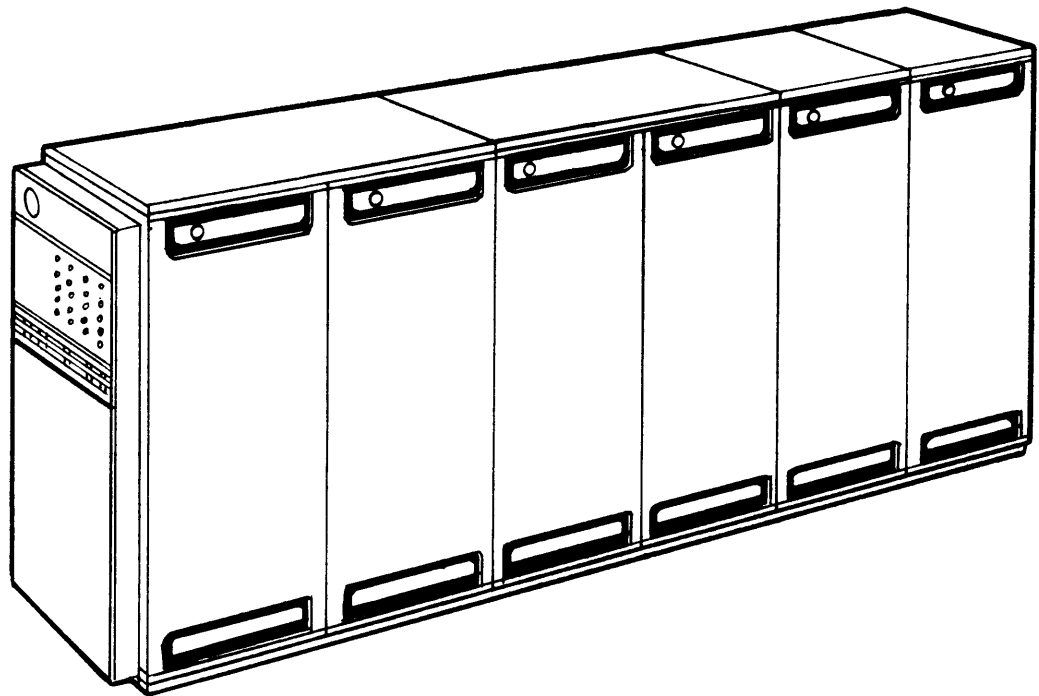


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Processor 70/45-G

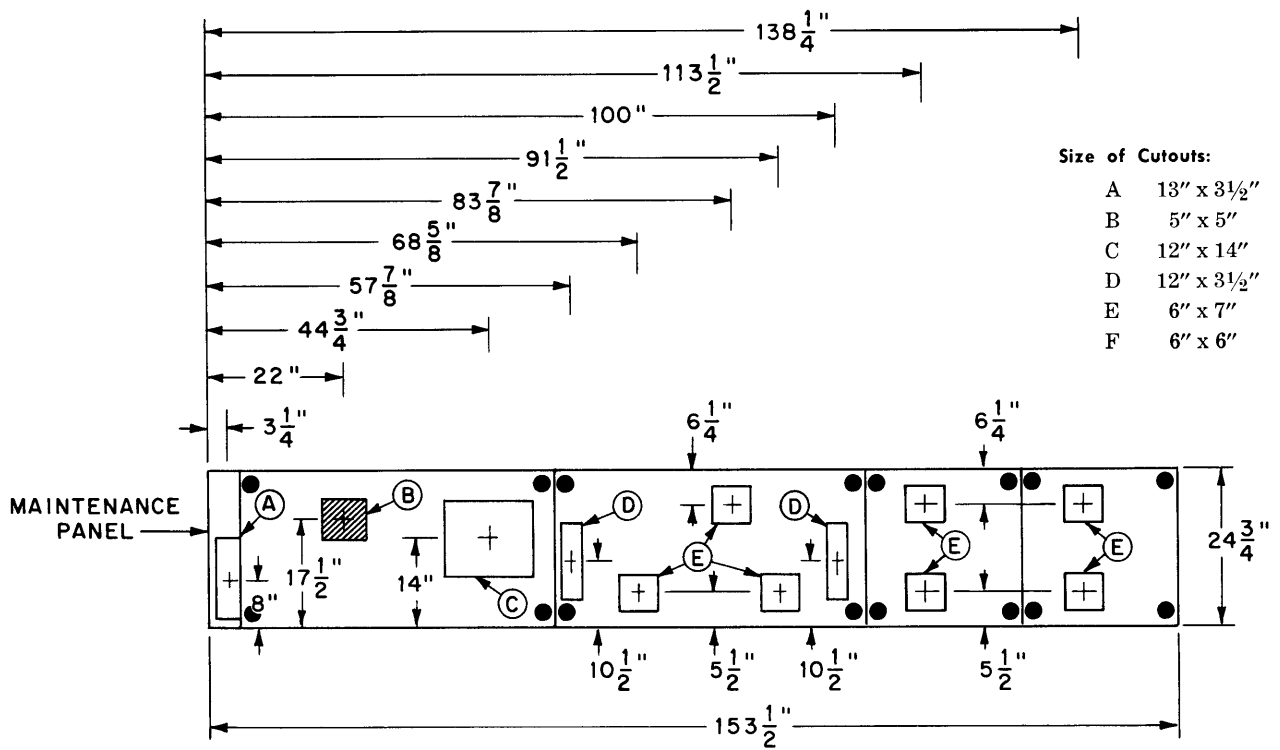
Optional Features

	KVA	BTU/HR
◆ Memory Protect #5001-45	.36	1,000
Elapsed Time Clock #5002-45	—	—
Direct Control #5003-45	.40	1,370
301 Emulator #5005-45	.80	2,600
1401 Emulator #5006-45	.80	2,600
501 Emulator #5007-45	.80	2,600
Selector Channels (2) #5015	.16	500
Selector Channels (3) #5016	.80	2,460
1410 Emulator #5026-45	.80	2,600
301/501 Emulator #5036-45	1.6	5,200
1401/1410 Emulator #5046-45	1.6	5,200



Processor 70/45-G

Dimensions (In.)	◆ Height — 62	Width — 153½	Depth — 24¾
Weight (Lbs.)	◆ 2,700		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3
Heat Dissipation (BTU/Hr.)	◆ 31,700		
Electrical Requirements	◆ (KVA) 10.6		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus a No. 8 ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 40 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ Refer to peripheral equipment specification sheets.		

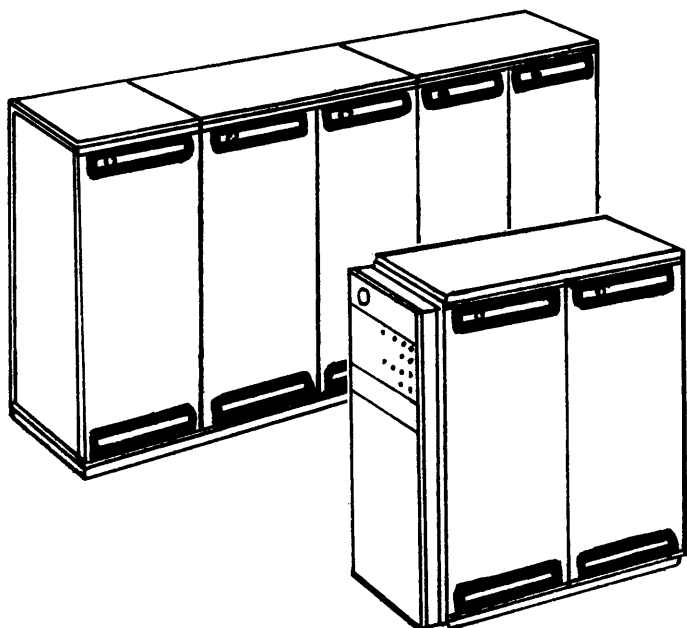


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Processor 70/55-E, -F, -G

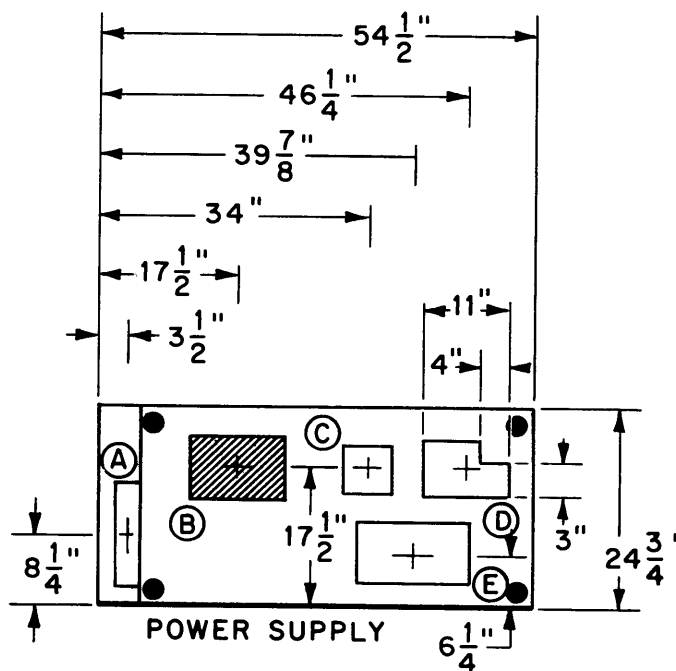
Optional Features

	KVA	BTU/HR
◆ Memory Protect #5001-55	.30	1,100
Elapsed Time Clock #5002-55	—	—
Direct Control #5003-55	.50	1,400
Selector Channel (2) #5020	1.01	2,800
Selector Channel (4) #5022	1.26	3,550
Selector Channel (6) #5024	1.71	4,800



Size of Cutouts:

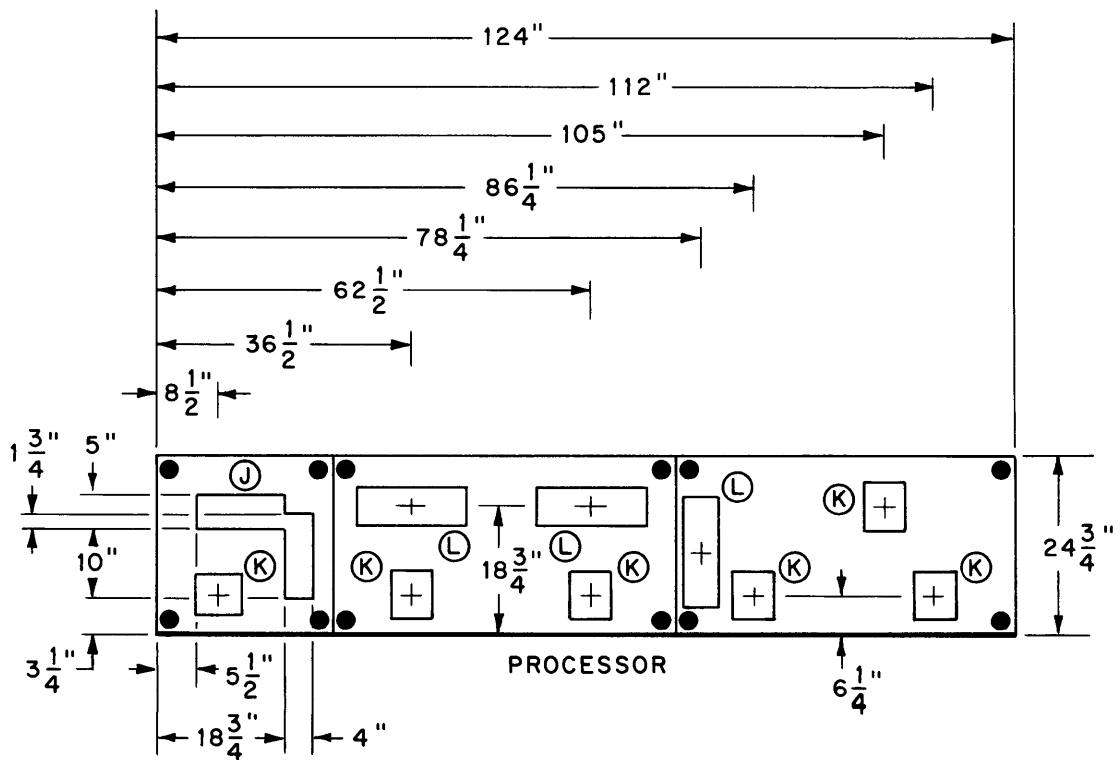
A	13" x 3 1/2"	E	9 1/4" x 13 1/4"
B	8" x 11 1/2"	J	As shown
C	6" x 6"	K	7" x 6"
D	As shown	L	5 1/2" x 16"



Not drawn to scale.

Processor 70/55-E, -F, -G

Dimensions (In.)	<ul style="list-style-type: none"> ◆ <i>Processor</i> <li style="padding-left: 20px;">Height — 62 <li style="padding-left: 20px;">Width — 124 <li style="padding-left: 20px;">Depth — 24³/₄ <i>Power Supply</i> <li style="padding-left: 20px;">Height — 62 <li style="padding-left: 20px;">Width — 54¹/₈ <li style="padding-left: 20px;">Depth — 24³/₄
Weight (Lbs.)	◆ 3,000
Maintenance Clearance (Ft.)	◆ Front — 3 Rear — 3 Left — 3
Heat Dissipation (BTU/Hr.)	◆ 36,300 (70/55-E), 39,700 (70/55-F), 47,300 (70/55-G)
Electrical Requirements	◆ (KVA) 12.22 (70/55-E), 13.32 (70/55-F), 15.82 (70/55-G)
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus a No. 3 ground wire Total — 5 wires
Circuit Breaker	◆ 3 pole, 70 amperes
Feeder Length Inside Equipment	◆ 24 inches
Maximum Distance Between Cutouts	◆ Refer to peripheral equipment specification sheets and supplementary data section.

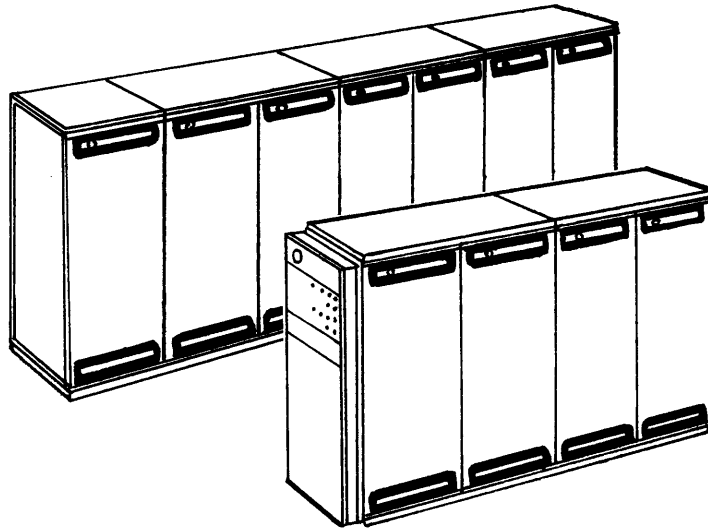


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Processor 70/55-H

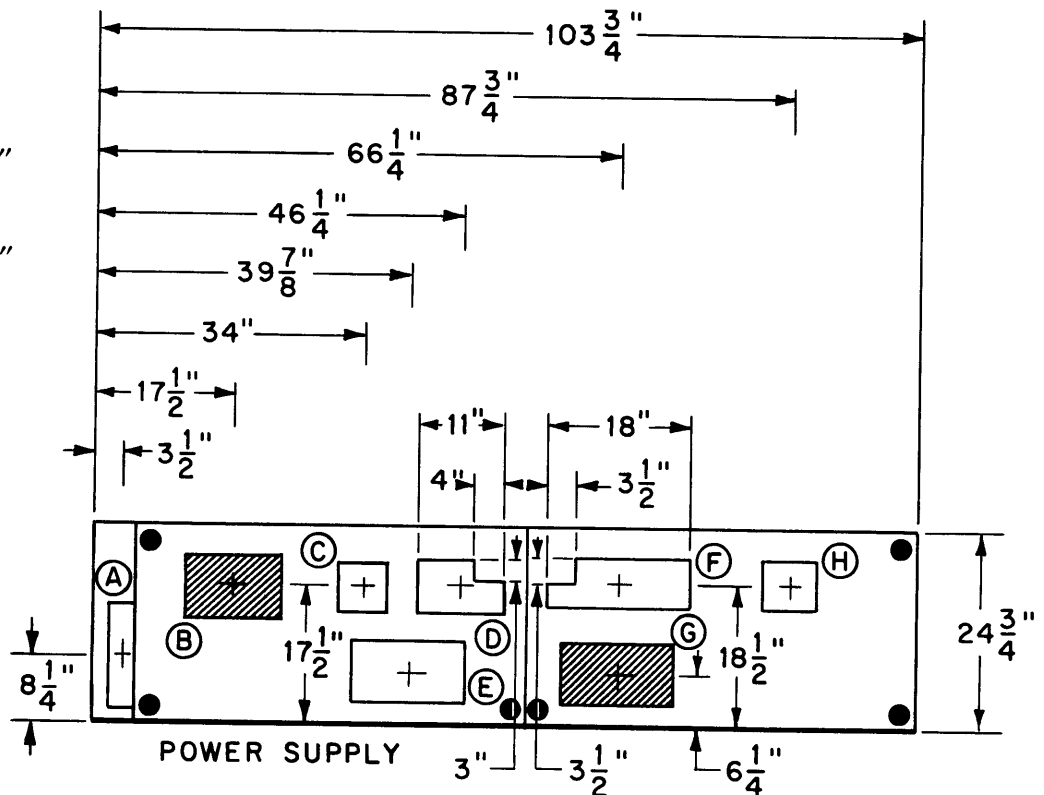
Optional Features

	KVA	BTU/HR
◆ Memory Protect #5001-55	.30	1,100
Elapsed Time Clock #5002-55	—	—
Direct Control #5003-55	.50	1,400
Selector Channel (2) #5020	1.01	2,800
Selector Channel (4) #5022	1.26	3,550
Selector Channel (6) #5024	1.71	4,800



Size of Cutouts:

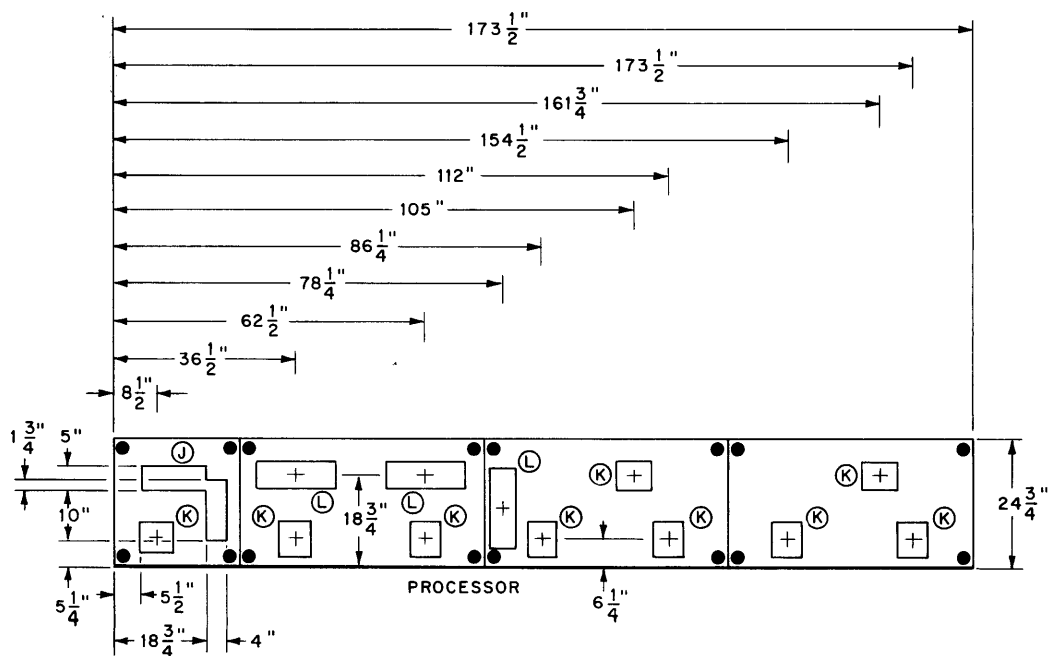
- A 13" x 3 1/2"
- B 8" x 11 1/2"
- C 6" x 6"
- D As shown
- E 9 1/4" x 13 1/4"
- F As shown
- G 8" x 14"
- H 6" x 7"
- J As shown
- K 7" x 6"
- L 5 1/2" x 16"



Not drawn to scale.

Processor 70/55-H

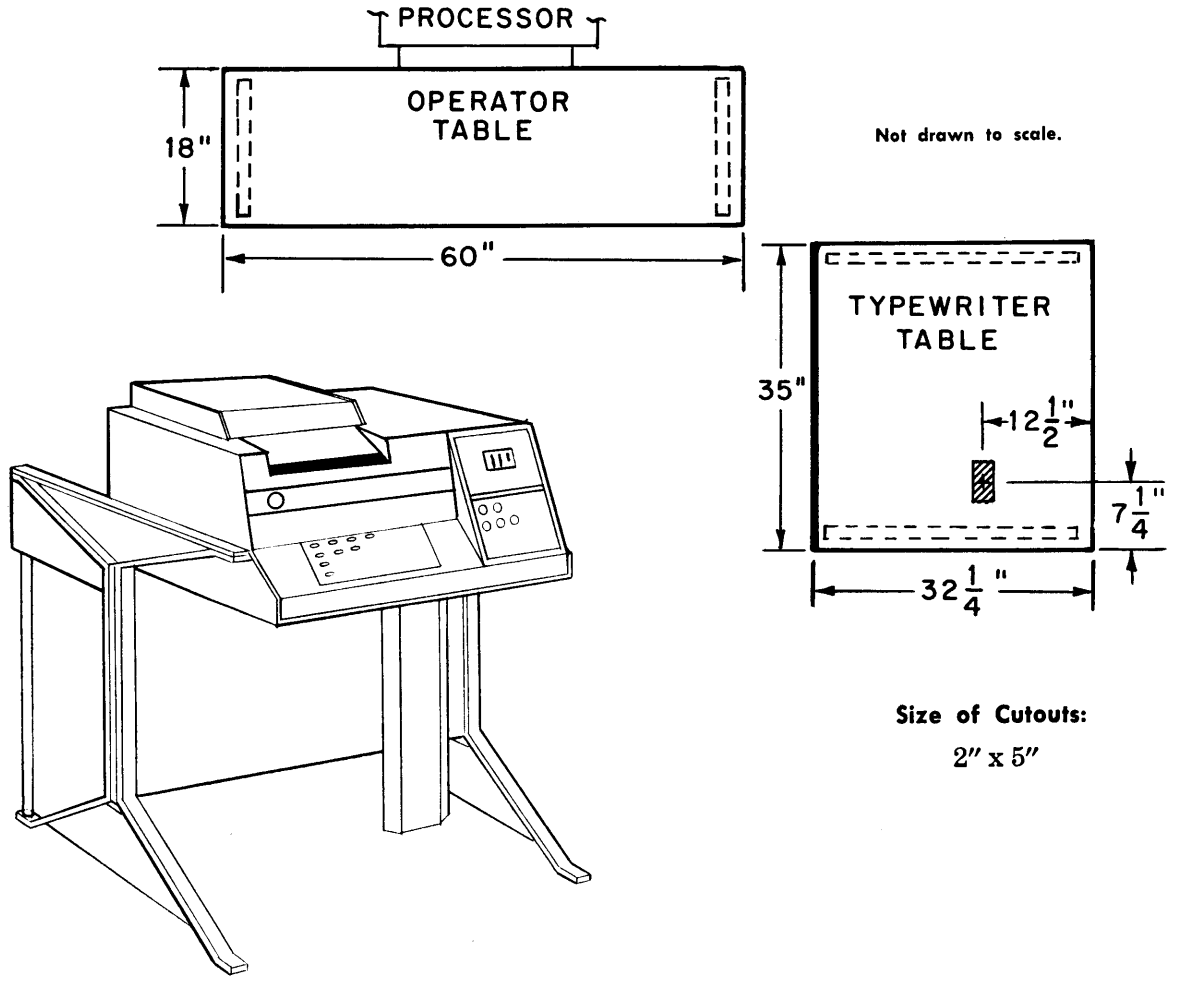
Dimensions (In.)	◆ <i>Processor</i> Height — 62 Width — 173½ Depth — 24¾
	◆ <i>Power Supply</i> Height — 62 Width — 103¾ Depth — 24¾
Weight (Lbs.)	◆ 5,100
Maintenance Clearance (Ft.)	◆ Front — 3 Rear — 3 Left — 3
Heat Dissipation (BTU/Hr.)	◆ 68,700
Electrical Requirements	◆ (KVA) 28.82
Power Feeder	◆ <i>Two feeders required:</i> 1. 4 wire, 208 volts, 3 phase, 60 cycles, plus a No. 3 ground wire 2. 4 wire, 208 volts, 3 phase, 60 cycles, plus a No. 8 ground wire
Circuit Breaker	◆ 1. 3 pole, 70 amperes 2. 3 pole, 30 amperes
Feeder Length Inside Equipment	◆ 24 inches
Maximum Distance Between Cutouts	◆ Refer to peripheral equipment specification sheets and supplementary data section.



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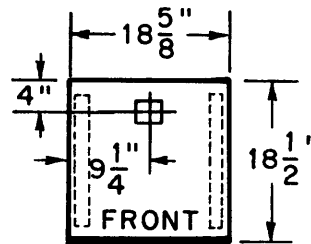
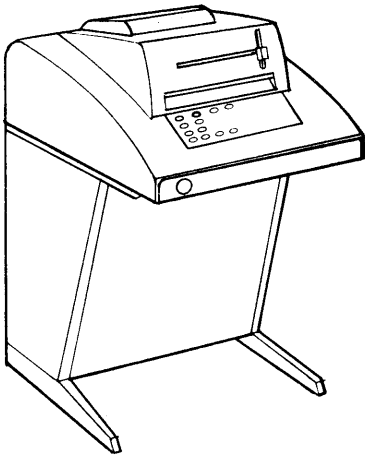
Console 70/97

Dimensions (In.)	◆ <i>Typewriter Table</i> Height — $38\frac{1}{4}$ Width — 35 Depth — $32\frac{1}{4}$
	◆ <i>Operator Table</i> Height — $29\frac{1}{2}$ Width — 60 Depth — 18
Weight (Lbs.)	◆ 250 (Typewriter Table) 40 (Operator Table)
Heat Dissipation (BTU/Hr.)	◆ 1,000
Electrical Requirements	◆ Included in 70/35-45-55 Processors requirements.
Maximum Distance Between Cutouts	◆ 20 feet to Processor Cutout A.



Interrogating Typewriter 70/216

Dimensions (In.)	◆ Height — $42\frac{7}{8}$	Width — $18\frac{5}{8}$	Depth — $18\frac{1}{2}$
Weight (Lbs.)	◆ 40 (Typewriter), 12 (Stand)		
Maintenance Clearance (Ft.)	◆ Front — 3		
Heat Dissipation (BTU/Hr.)	◆ 300		
Electrical Requirements	◆ (KVA) 0.22 @ 120 volts		
Power Feeder	◆ A convenience outlet must be provided at the rear of the unit.		
Maximum Distance Between Cutouts	◆ 90 feet to Basic Processor Cutout (70/15 or 70/25).		



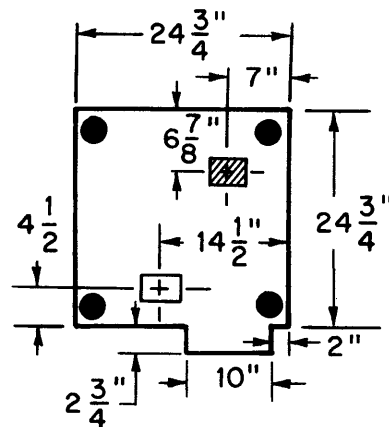
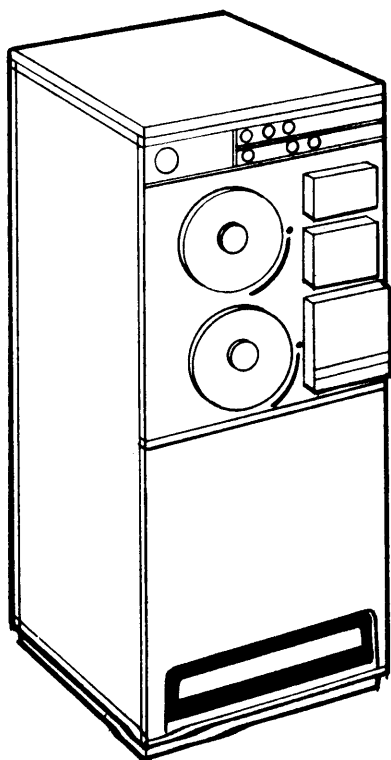
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Size of Cutouts:

3" x 3"

Paper Tape Reader/Punch 70/221-10, -11, -20, -21

Dimensions (In.)	◆ Height — 62	Width — $24\frac{3}{4}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 250		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,000		
Electrical Requirements	◆ (KVA) 1.2		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches at cutout B		
Maximum Distance Between Cutouts	◆ 90 feet to Basic Processor Rack Cutout.		



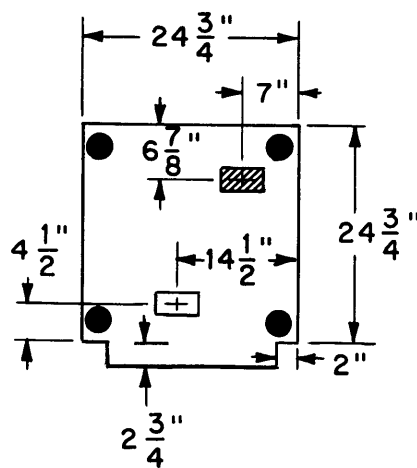
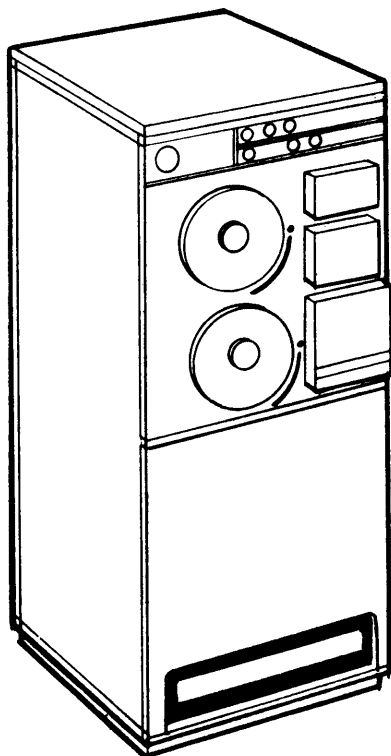
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Size of Cutouts:

3" x 5"

Paper Tape Reader/Punch 70/224-10, -11

Dimensions (In.)	◆ Height — 62	Width — $24\frac{3}{4}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 250		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,000		
Electrical Requirements	◆ (KVA) 1.2		
Power Feeder	◆ 4 wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches at cutout B		
Maximum Distance Between Cutouts	◆ 90 feet to Basic Processor Rack Cutout.		



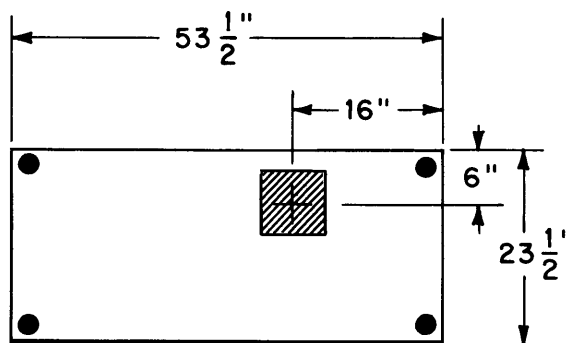
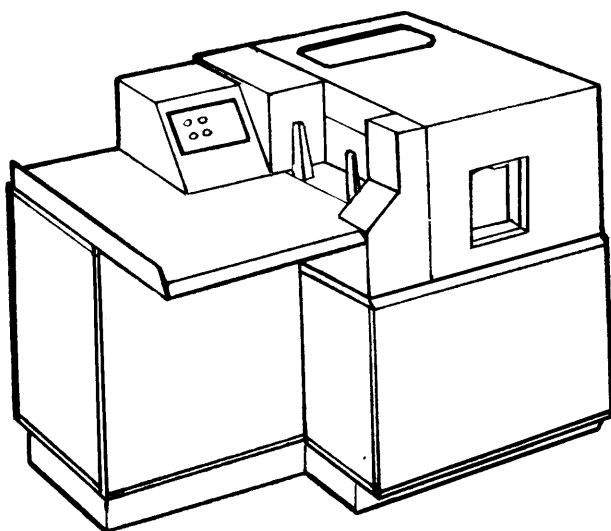
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Size of Cutouts:

3" x 5"

Card Punch 70/234-10, -11

Dimensions (In.)	◆ Height — 49½	Width — 53½	Depth — 23½
Weight (Lbs.)	◆ 700		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3 Right — 3
Heat Dissipation (BTU/Hr.)	◆ 4,200		
Electrical Requirements	◆ (KVA) 1.70		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire	Total — 5 wires	
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Basic Processor Rack Cutout.		

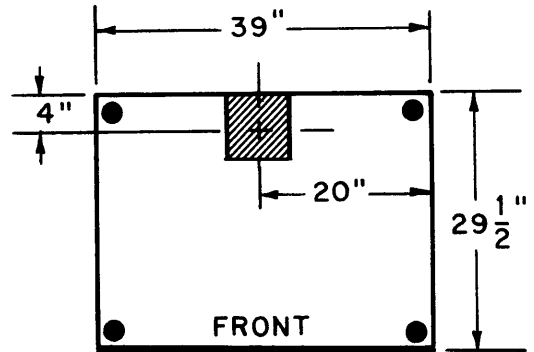
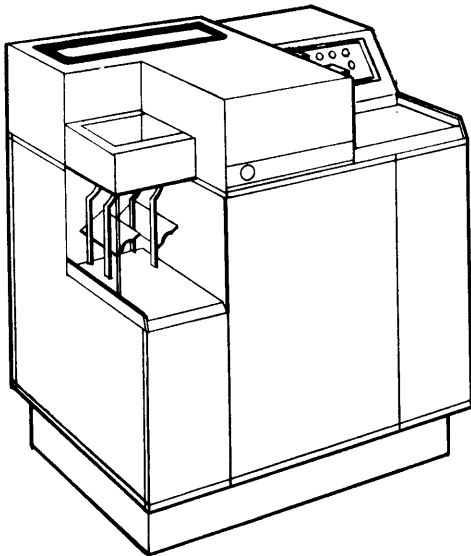


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Size of Cutouts:
8" x 8"

Card Punch 70/236-10, -11, -20, -21

Dimensions (In.)	◆ Height — 47	Width — 39	Depth — 29½
Weight (Lbs.)	◆ 800		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3 Right — 3
Heat Dissipation (BTU/Hr.)	◆ 3,900		
Electrical Requirements	◆ (KVA) 1.80		
Power Feeder	◆ 4 wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Basic Processor Rack Cutout.		

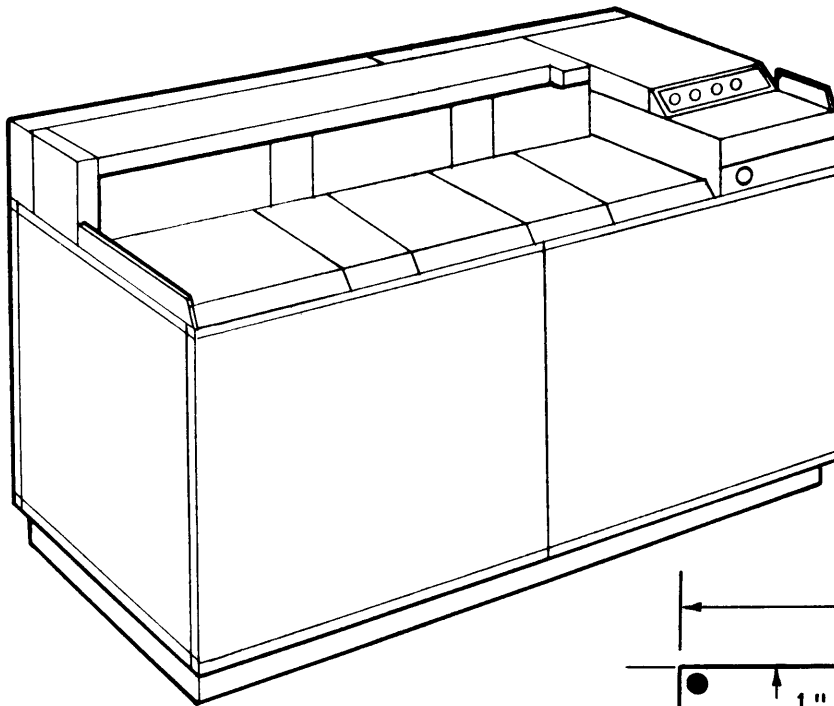


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Size of Cutouts:
8" x 8"

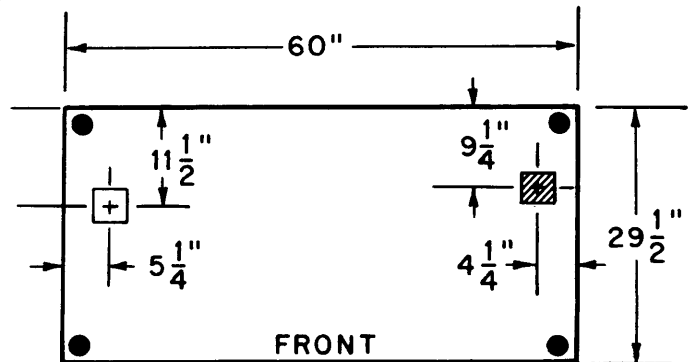
Card Reader 70/237-10, -21, -22

Dimensions (In.)	◆ Height — 44	Width — 60	Depth — 29½
Weight (Lbs.)	◆ 950		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3 Right — 3
Heat Dissipation (BTU/Hr.)	◆ 10,000		
Electrical Requirements	◆ (KVA) 4.50		
Power Feeder	◆ 4 wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 30 amperes		
Feeder Length Inside Equipment	◆ 30 inches at cutout B		
Maximum Distance Between Cutouts	◆ 90 feet to Processor Rack Cutout.		



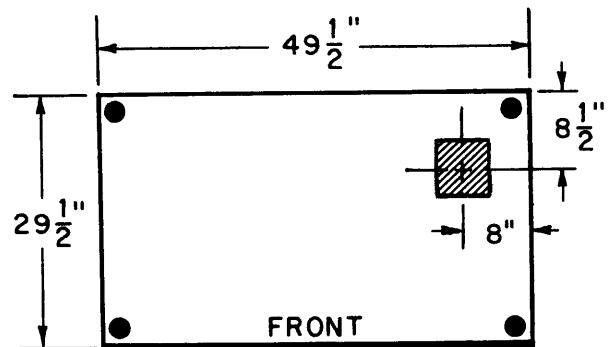
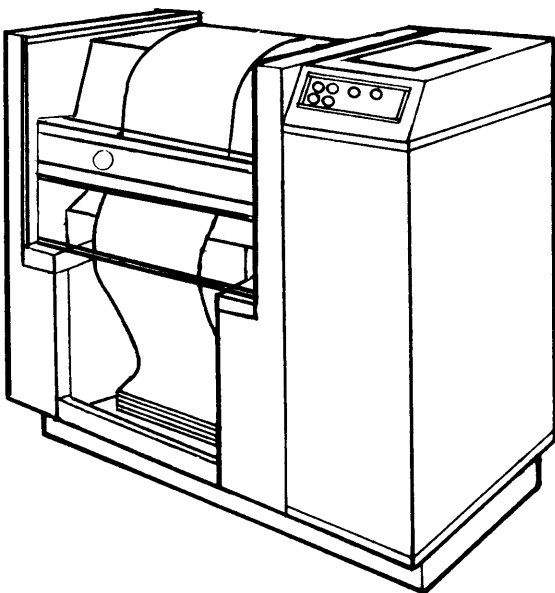
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Size of Cutouts:
4" x 4"



Medium-Speed Printer 70/242-10

Dimensions (In.)	◆ Height — 50	Width — 49½	Depth — 29½
Weight (Lbs.)	◆ 1,500		
Maintenance Clearance (Ft.)	◆ Front — 4	Rear — 4	Left — 4 Right — 4
Heat Dissipation (BTU/Hr.)	◆ 8,000		
Electrical Requirements	◆ (KVA) 2.80		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 15 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor Rack Cutout.		

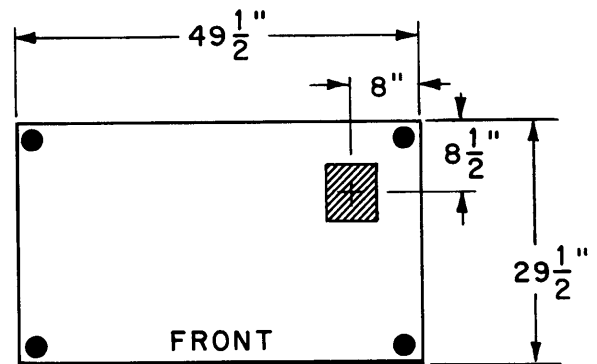
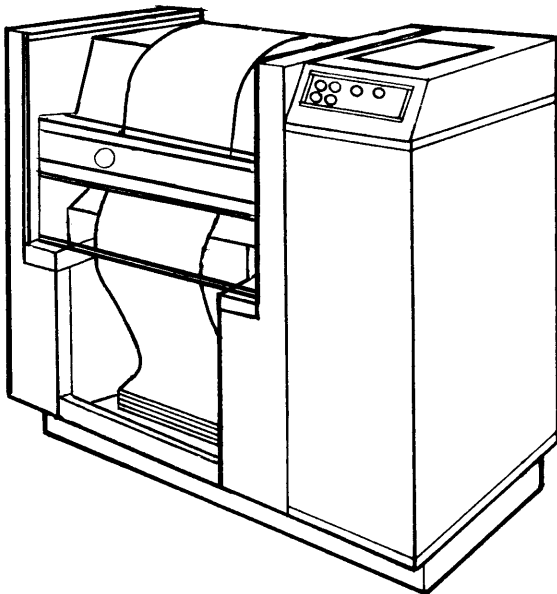


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Size of Cutouts:
6" x 6"

Medium-Speed Printer 70/242-20

Dimensions (In.)	◆ Height — 50	Width — 49½	Depth — 29½
Weight (Lbs.)	◆ 1,500		
Maintenance Clearance (Ft.)	◆ Front — 4	Rear — 4	Left — 4 Right — 4
Heat Dissipation (BTU/Hr.)	◆ 9,500		
Electrical Requirements	◆ (KVA) 3.2		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 15 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor Rack Cutout.		



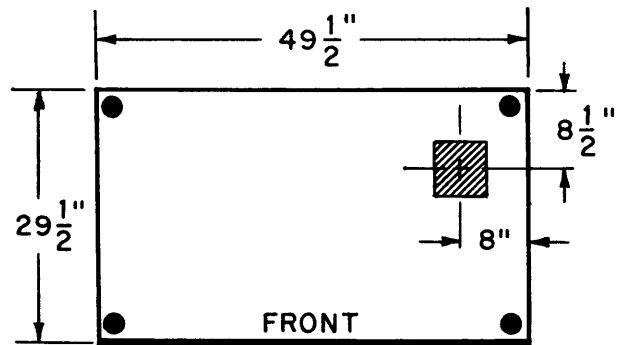
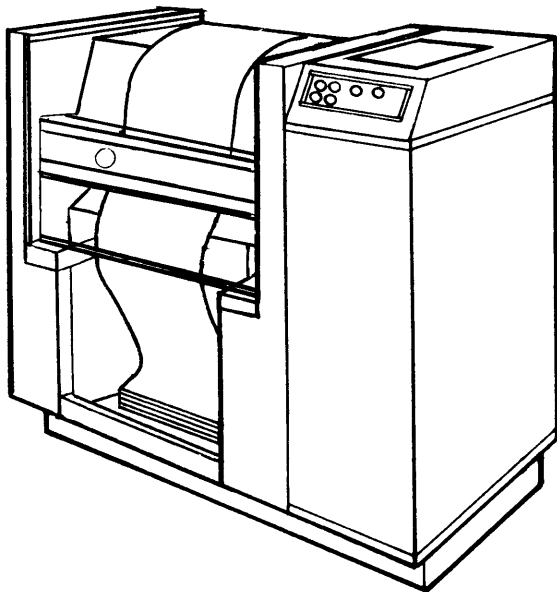
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Size of Cutouts:

7" x 6"

Hi-Speed Printer 70/243-10

Dimensions (In.)	◆ Height — 45	Width — 49½	Depth — 29½
Weight (Lbs.)	◆ 1,500		
Maintenance Clearance (Ft.)	◆ Front — 4	Rear — 4	Left — 4 Right — 4
Heat Dissipation (BTU/Hr.)	◆ 8,000		
Electrical Requirements	◆ (KVA) 2.80		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire		
	Total — 5 wires		
Circuit Breaker	◆ 3 pole, 15 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor Rack Cutout.		



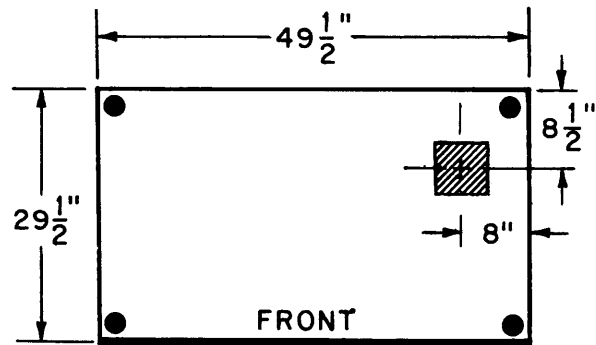
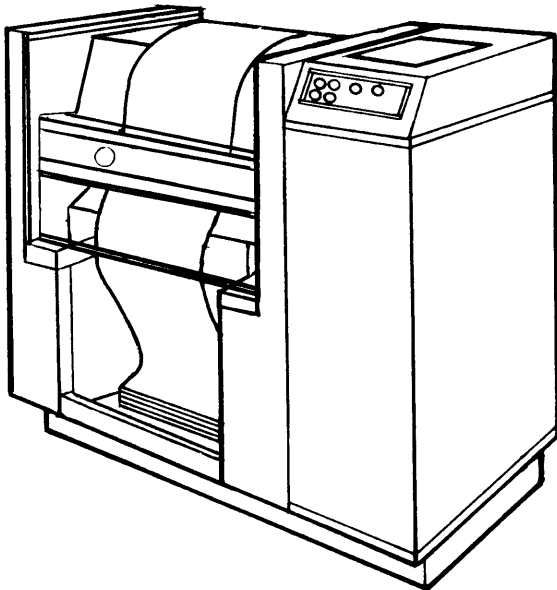
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Size of Cutouts:

6" x 6"

Hi-Speed Printer 70/243-20, -51, -61

Dimensions (In.)	◆ Height — 45	Width — 49½	Depth — 29½
Weight (Lbs.)	◆ 1,500		
Maintenance Clearance (Ft.)	◆ Front — 4	Rear — 4	Left — 4 Right — 4
Heat Dissipation (BTU/Hr.)	◆ 9,500		
Electrical Requirements	◆ (KVA) 3.2		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 15 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor Rack Cutout.		



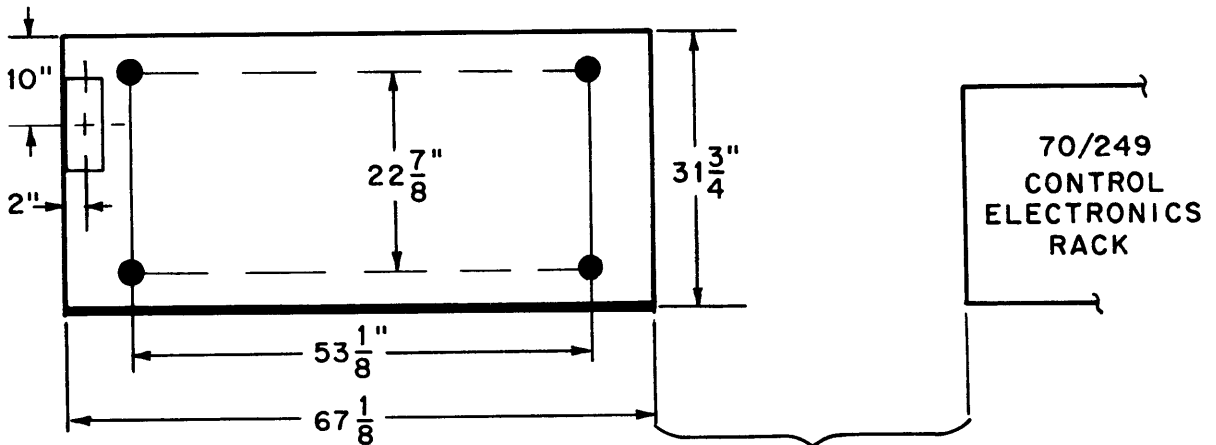
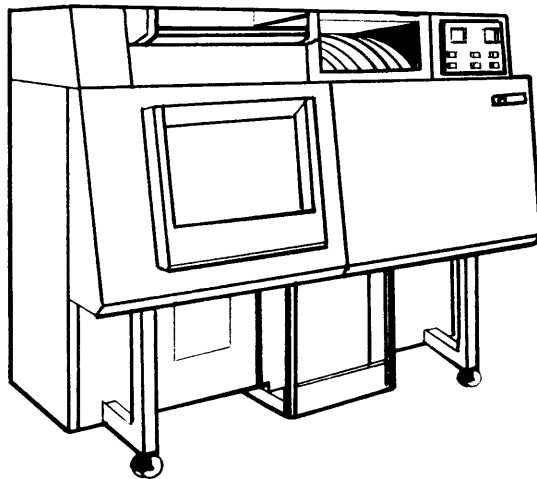
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Size of Cutouts:

6" x 6"

Bill-Feed Printer 70/248-10, -11

Dimensions (In.)	◆ Height — 53½	Width — 67⅛	Depth — 31¾
Weight (Lbs.)	◆ 1,600		
Maintenance Clearance (Ft.)	◆ Front — 4	Rear — 4	Left — 4 Right — 4
Heat Dissipation (BTU/Hr.)	◆ 5,100		
Electrical Requirements	◆ (KVA) 2.1		
Power Feeder	◆ Power obtained from 70/249 Control through cables supplied by RCA.		
Maximum Distance Between Cutouts	◆ Six feet to 70/249 Control Electronics Rack.		



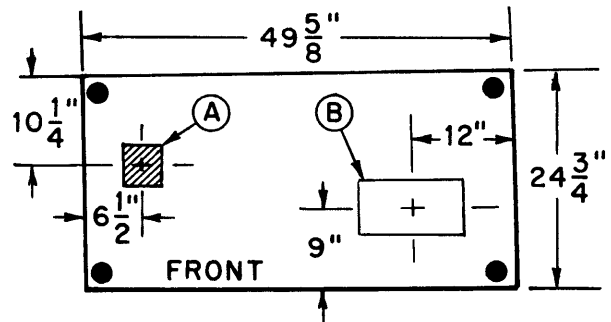
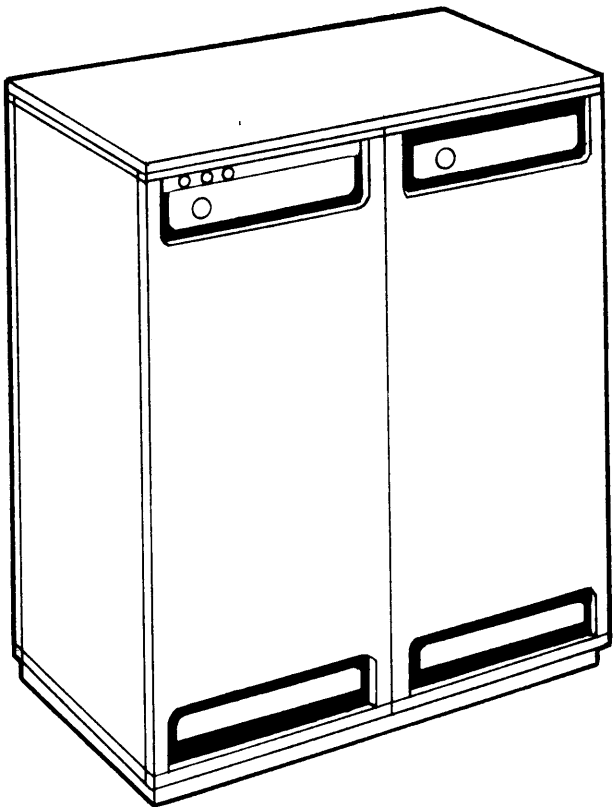
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Size of Cutouts:
10" x 4"

FOUR FT. MINIMUM
CLEARANCE.
(WHEN IN-LINE)

Bill-Feed Printer Control-Electronics Rack 70/249-10, -11

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 500		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 9,200		
Electrical Requirements	◆ (KVA) 3.4		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 20 amperes		
Feeder Length Inside Equipment	◆ 30 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Basic Processor Rack.		



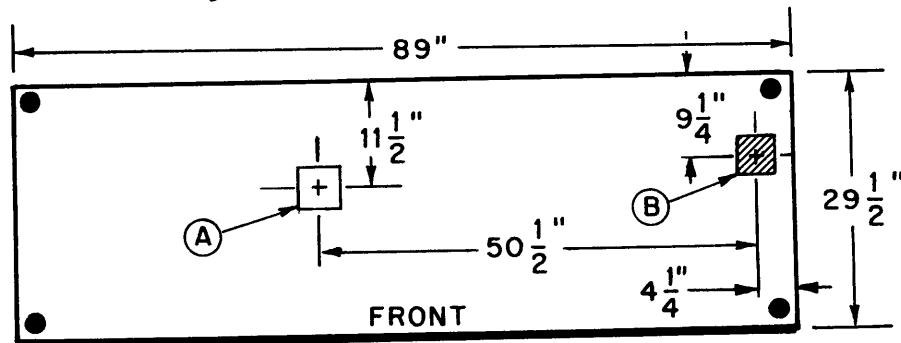
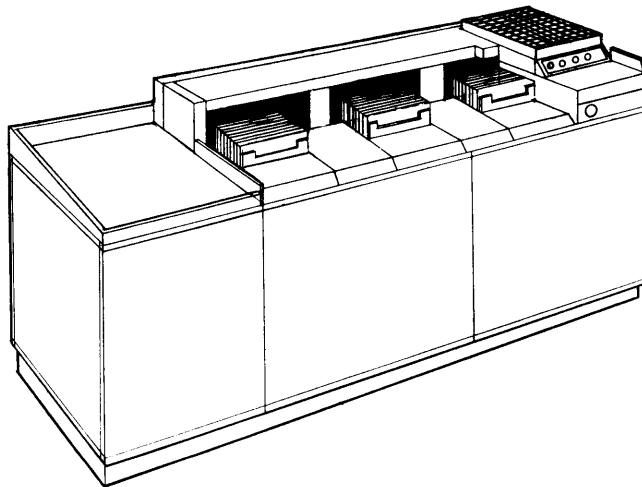
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Size of Cutouts:

- A 5" x 5"
- B 6" x 12"

Videoscan Document Reader 70/251-10, -21, -22, -30, -41, -42

Dimensions (In.)	◆ Height — 44	Width — 89	Depth — 29½
Weight (Lbs.)	◆ 1,100		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3 Right — 3
Heat Dissipation (BTU/Hr.)	◆ 14,000		
Electrical Requirements	◆ (KVA) 4.0		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 20 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor Rack Cutout.		

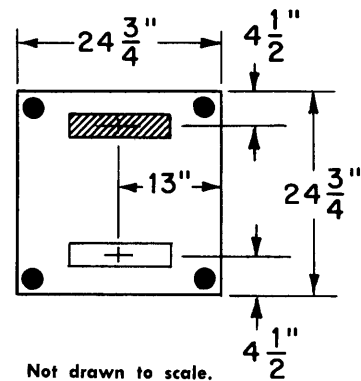
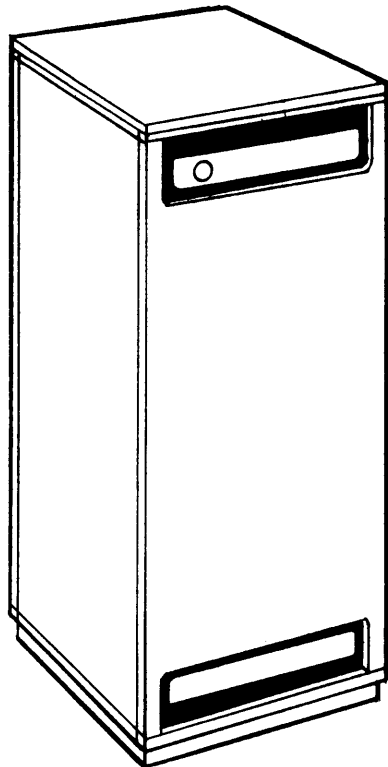


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Size of Cutouts:
4" x 4"

MICR Controller 70/272-10, -20, -30

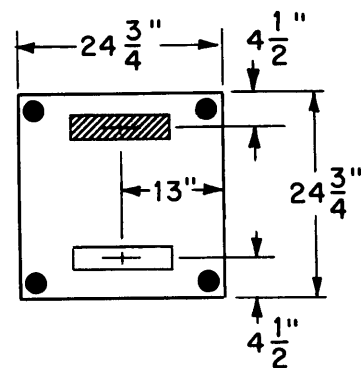
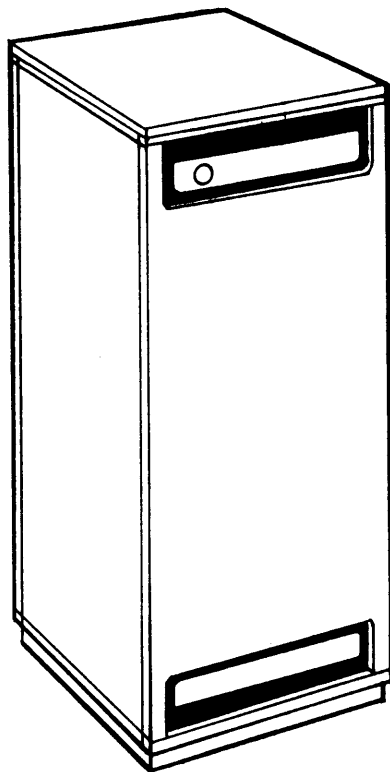
Dimensions (In.)	◆ Height — 62	Width — $24\frac{3}{4}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 250		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 850		
Electrical Requirements	◆ (KVA) .30		
Power Feeder	◆ 208 volts, 3 phase, 60 cycles, plus ground and neutral wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Basic Processor.		



Size of Cutouts:
3" x 13"

Standard Interface Switch 70/310-21 thru -28

Dimensions (In.)	◆ Height — 62	Width — $24\frac{3}{4}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 250		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 150		
Electrical Requirements	◆ (KVA) .05 @ 208 volts, 3 phase, 60 cycle		
Power Feeder	◆ 5 wire (3 phase, neutral, ground).		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 30 inches.		
Maximum Distance Between Cutouts	◆ The maximum cable length from processor to device (by way of the Interface Switch) is 70 feet.		



Not drawn to scale.

Size of Cutouts:

3" x 13"

Telegraph Switch Unit (TSU) 70/325

Dimensions (In.)	◆ Height — 5	Width — 10½	Depth — 10
Weight (Lbs.)	◆ 12		
Heat Dissipation (BTU/Hr.)	◆ 34 (included in 70/356)		
Electrical Requirements	◆ Included in 70/356 (.28 amperes @ 48 volts — optional)		

Note: This unit is installed in the 70/356 (maximum of 14 units, Models 70/325-326-327).
See Cabling Diagrams Section.

Data Set Switch (DSSU) 70/326-2, -3

Dimensions (In.)	◆ Height — 5	Width — 10½	Depth — 10
Weight (Lbs.)	◆ 12		
Heat Dissipation (BTU/Hr.)	◆ 85 (included in 70/356)		
Electrical Requirements	◆ Included in 70/356 (.49 amperes @ 48 volts — optional).		

Note: This unit is installed in the 70/356 (maximum of 14 units, Models 70/325-326-327).
See Cabling Diagrams Section.

Data Gathering Switch (DGSU) 70/327

Dimensions (In.)	◆ Height — 5	Width — 10½	Depth — 10
Weight (Lbs.)	◆ 12		
Heat Dissipation (BTU/Hr.)	◆ 85 (included in 70/356)		
Electrical Requirements	◆ Included in 70/356 (.49 amperes @ 48 volts — optional).		

Note: This unit is installed in the 70/356 (maximum of 14 units, Models 70/325-326-327).
See Cabling Diagrams Section.

Switch Controller 70/350

**Heat Dissipation
(BTU/Hr.)**

◆ 1,000

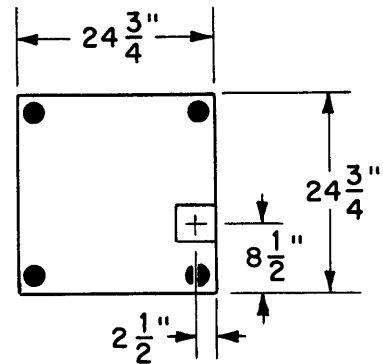
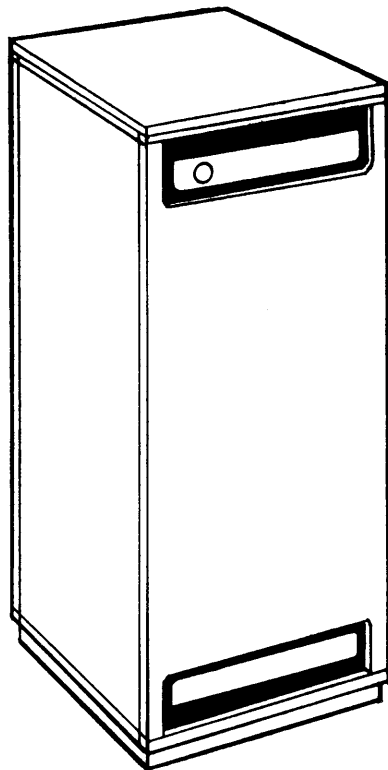
**Electrical
Requirements**

◆ (KVA) .30 @ 208 volts, 3 phase, 60 cycles, plus ground and neutral wires.

Note: This unit is installed in Model 70/310.

Communication Line Switch Adaptor 70/356

Dimensions (In.)	◆ Height — 62	Width — $24\frac{3}{4}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 320		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 1,600 — maximum		
Electrical Requirements	◆ (KVA) .50 — maximum		
Power Feeder	◆ 208 volts, 3 phase, plus ground and neutral wires Total — 5 wires		
Circuit Brecker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ See Cabling Diagrams Section.		



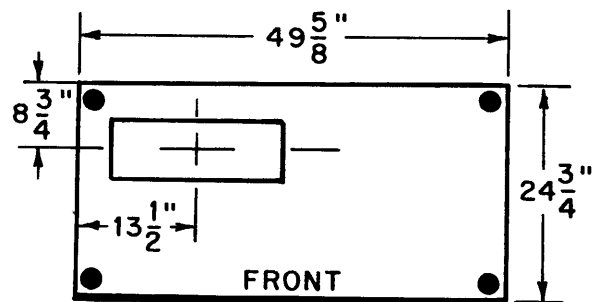
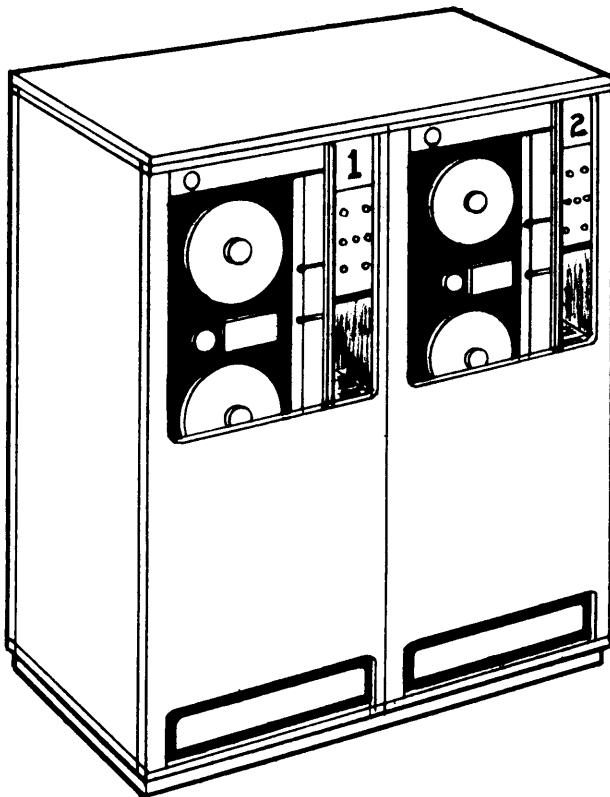
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Size of Cutouts:

5" x 5"

Magnetic Tape Unit 70/432-1

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 650		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 6,600 — Average		
Electrical Requirements	◆ (KVA) 3.0 @ 208 volts (See Supplementary Data Section).		
Power Feeder	◆ Power is obtained from the Tape Controller by way of an RCA-supplied cable.		

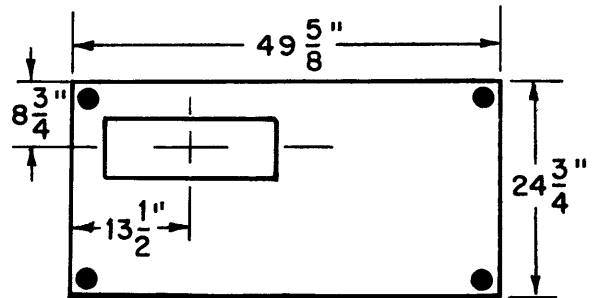
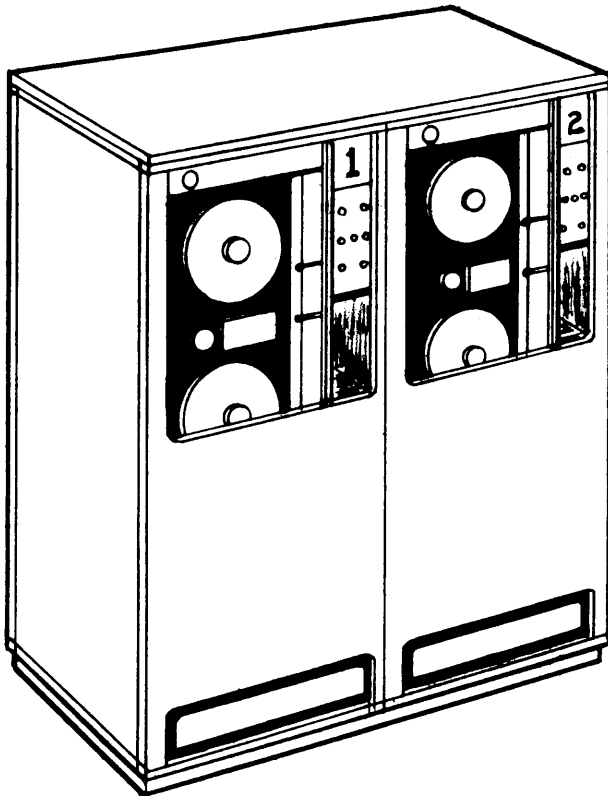


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Size of Cutouts:
7" x 20"

Magnetic Tape Unit 70/432-2

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 650		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 8,000 — Average		
Electrical Requirements	◆ (KVA) 4.15 @ 208 volts (See Supplementary Data Section).		
Power Feeder	◆ Power is obtained from the Tape Controller by way of an RCA-supplied cable.		



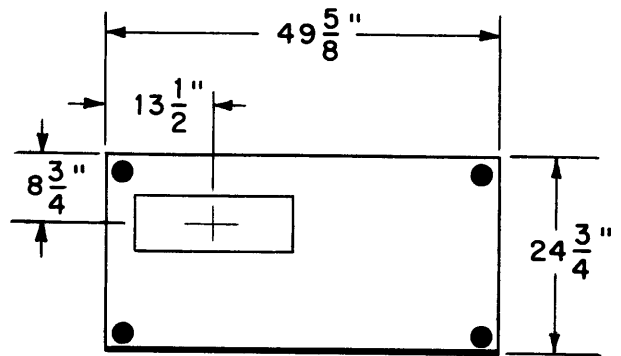
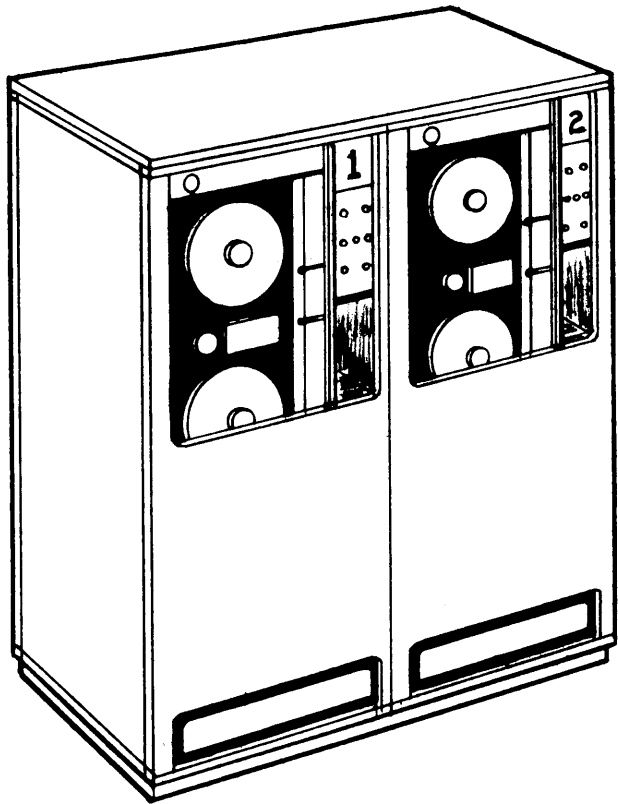
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Size of Cutouts:

7" x 20"

Magnetic Tape Unit 70/441-1

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 650		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 6,600 — Average		
Electrical Requirements	◆ (KVA) 3.0 @ 208 volts, 60 cycles (See Supplementary Data Section).		
Power Feeder	◆ Power is obtained from the Tape Controller by way of an RCA-supplied cable.		
Maximum Distance Between Cutouts	◆ Refer to Cabling Diagrams Section.		



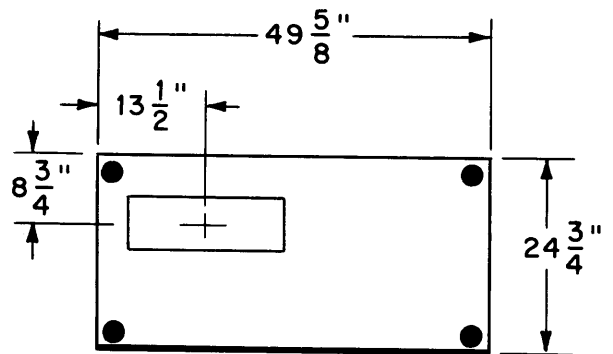
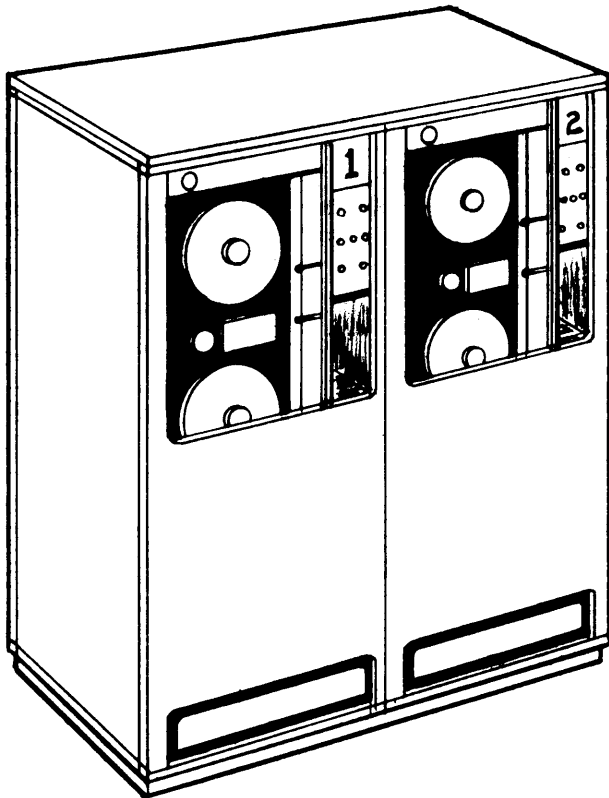
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Size of Cutouts:

7" x 20"

Magnetic Tape Unit 70/441-2

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 650		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 8,000 — Average		
Electrical Requirements	◆ (KVA) 4.15 @ 208 volts, 60 cycles (See Supplementary Data Section).		
Power Feeder	◆ Power is obtained from the Tape Controller by way of an RCA-supplied cable.		
Maximum Distance Between Cutouts	◆ Refer to Cabling Diagrams Section.		



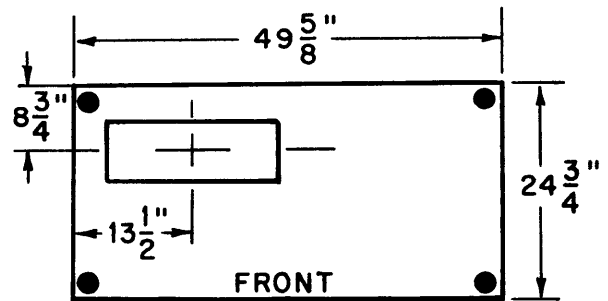
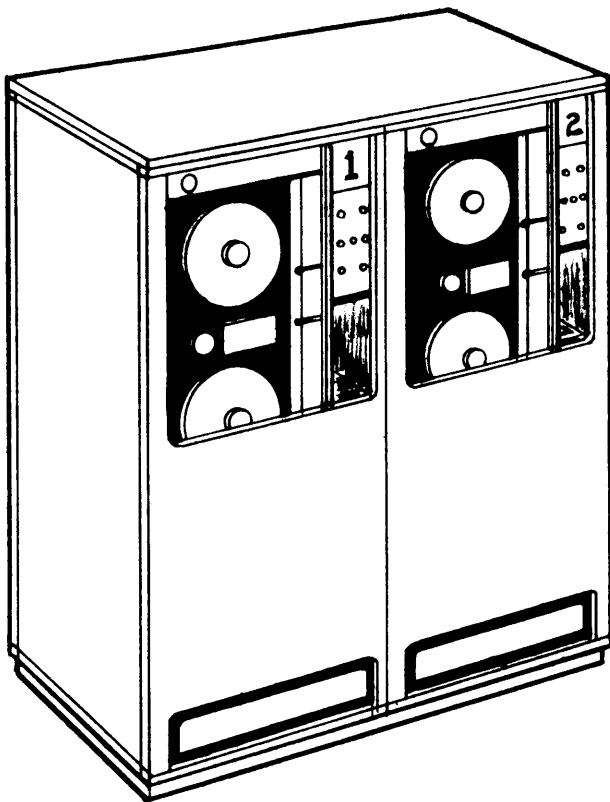
Not drawn to scale.

Size of Cutouts:

7" x 20"

Magnetic Tape Unit 70/442-1

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 650		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 6,600 — Average		
Electrical Requirements	◆ (KVA) 3.0 @ 208 volts (See Supplementary Data Section).		
Power Feeder	◆ Power is obtained from the 70/472 Tape Controller by way of an RCA-supplied cable.		
Maximum Distance Between Cutouts	◆ See Cabling Diagrams Section.		



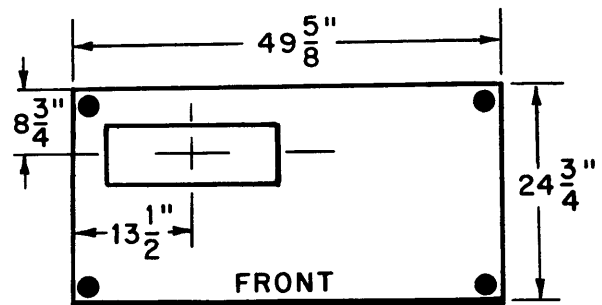
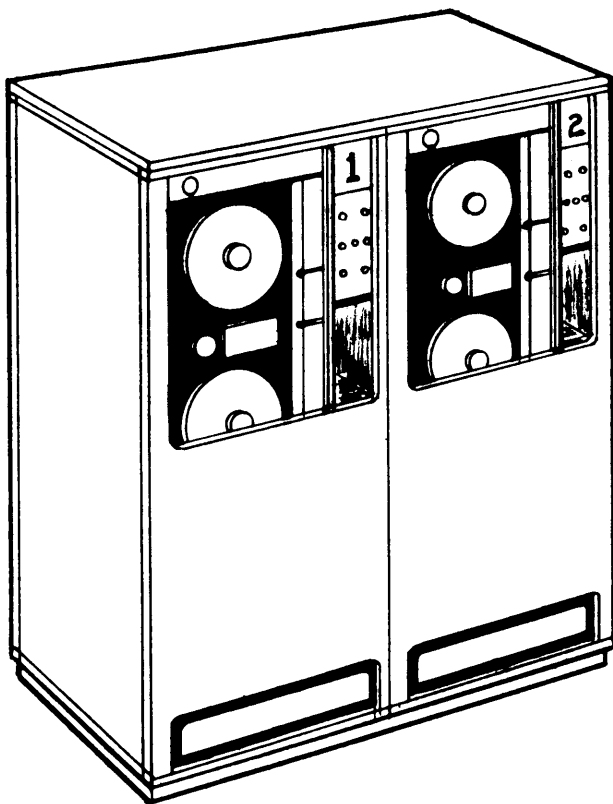
Not drawn to scale.

Size of Cutouts:

7" x 20"

Magnetic Tape Unit 70/442-2

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 650		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 8,000 — Average		
Electrical Requirements	◆ (KVA) 4.15 @ 208 volts (See Supplementary Data Section).		
Power Feeder	◆ Power is obtained from the 70/472 Tape Controller by way of an RCA-supplied cable.		
Maximum Distance Between Cutouts	◆ See Cabling Diagrams Section.		



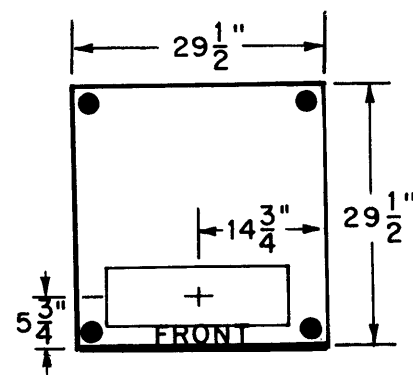
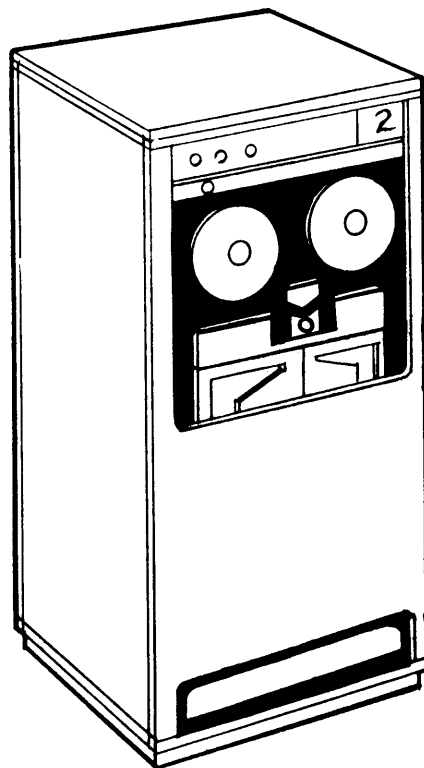
Not drawn to scale.

Size of Cutouts:

7" x 20"

Magnetic Tape Station 70/445-1, -2

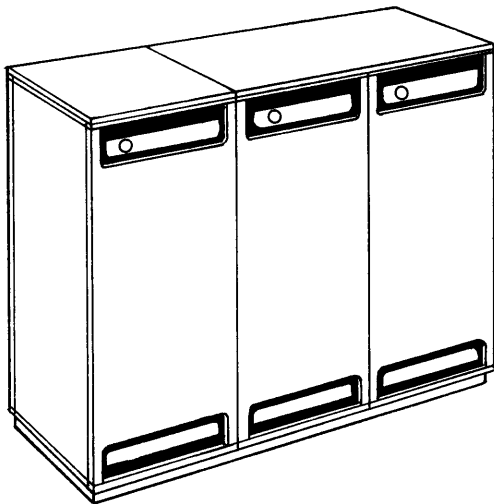
Dimensions (In.)	◆ Height — 62	Width — 29½	Depth — 24¾
Weight (Lbs.)	◆ 1,300		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 8,900 (average)		
Electrical Requirements	◆ (KVA) 4.9 @ 208 volts (See Supplementary Section).		
Power Feeder	◆ Power is obtained from the 70/472 Tape Controller by way of an RCA-supplied cable.		
Maximum Distance Between Cutouts	◆ See Cabling Diagrams Section.		



Size of Cutouts:
6½" x 20¾"

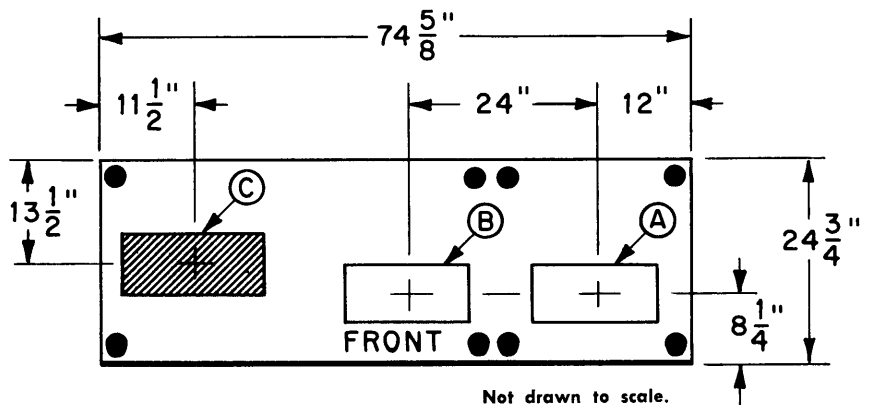
Tape Controller 70/461-208, -216

Dimensions (In.)	◆ Height — 62	Width — $74\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 750		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,100		
Electrical Requirements	◆ (KVA) 1.1		
Power Feeder	◆ 4 Wire 208 volts, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor.		



Size of Cutouts:

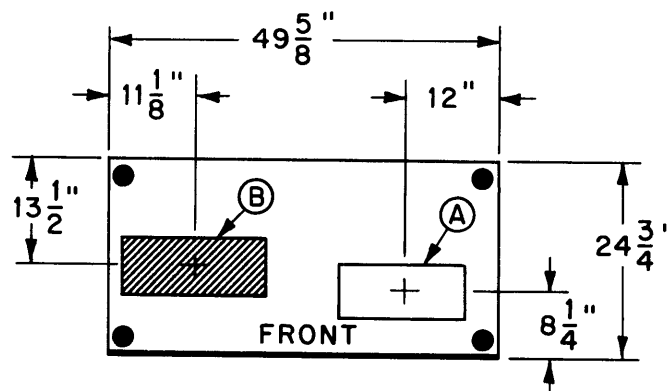
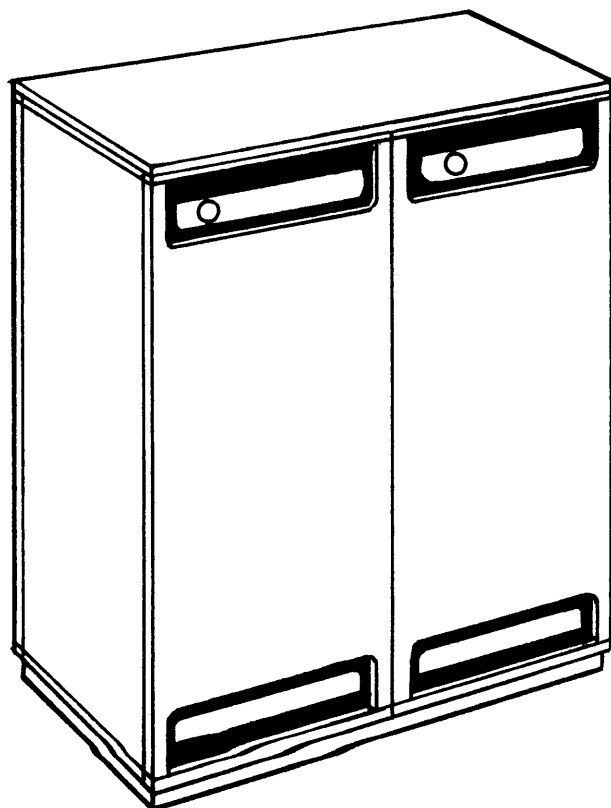
- A 7" x 20"
- B 7" x 20"
- C 8" x 18"



Tape Controller — Single Channel 70/463-108, -116

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 500		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 1,700		
Electrical Requirements	◆ (KVA) 0.6 (plus KVA requirements of all Tape Stations or Units connected to the Tape Controller).		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires, wire size: *		
Circuit Breaker	◆ 3 pole, * amperes		
Feeder Length Inside Equipment	◆ 36 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor.		

* To be determined by number of tape units.
See Supplementary Data Section.



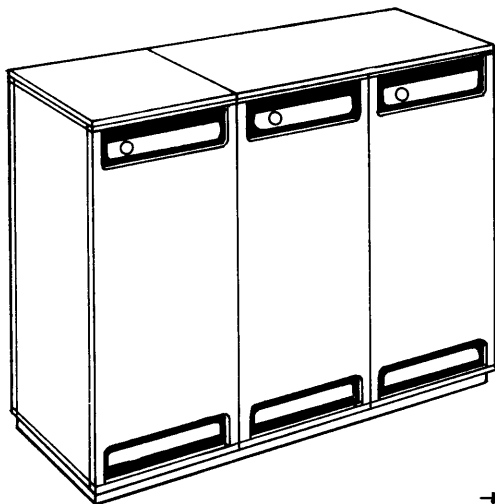
Size of Cutouts:

- A 7" x 16"
- B 8" x 18"

Tape Controller — Dual Channel 70/463-208, -216

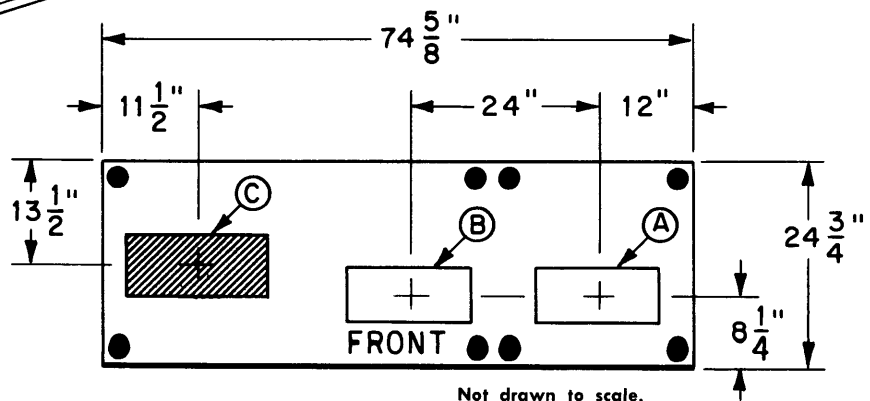
Dimensions (In.)	◆ Height — 62	Width — $74\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 750		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,400		
Electrical Requirements	◆ (KVA) 1.20 (plus KVA requirements of all Tape Stations or Units connected to the Tape Controller).		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires Wire Size: *		
Circuit Breaker	◆ 3 pole, * amperes		
Feeder Length Inside Equipment	◆ 36 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor.		

* To be determined by number of tape units.
See Supplementary Data Section.



Size of Cutouts:

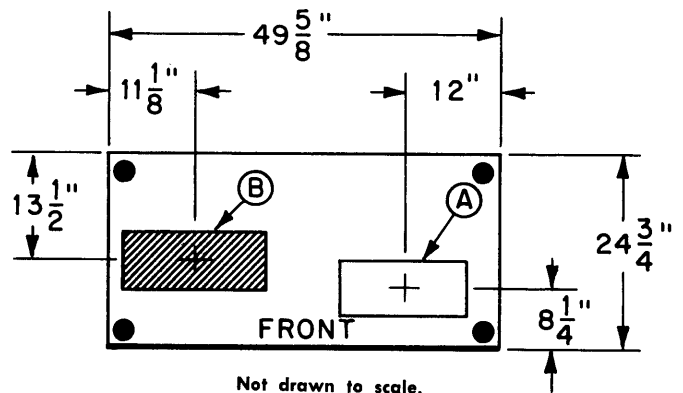
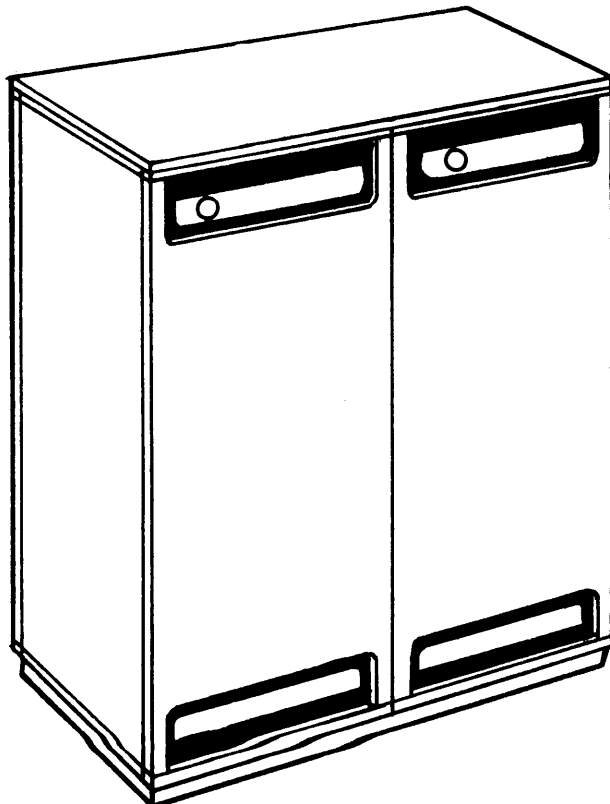
- A 7" x 16"
- B 7" x 16"
- C 8" x 18"



Tape Controller — Single Channel 70/472-108, -116

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 500		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 1,700		
Electrical Requirements	◆ (KVA) 0.6 (plus KVA requirements of all Tape Stations or Units connected to the Tape Controller).		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires Wire Size: *		
Circuit Breaker	◆ 3 pole, * amperes		
Feeder Length Inside Equipment	◆ 36 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor.		

* To be determined by number of tape units.
See Supplementary Data Section.



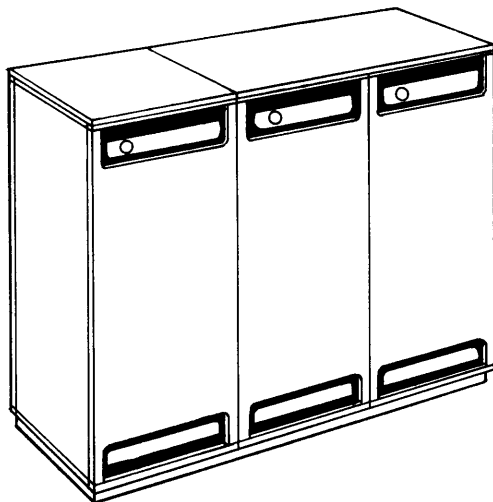
Size of Cutouts:

- A 7" x 16"
- B 8" x 18"

Tape Controller — Dual Channel 70/472-208, -216

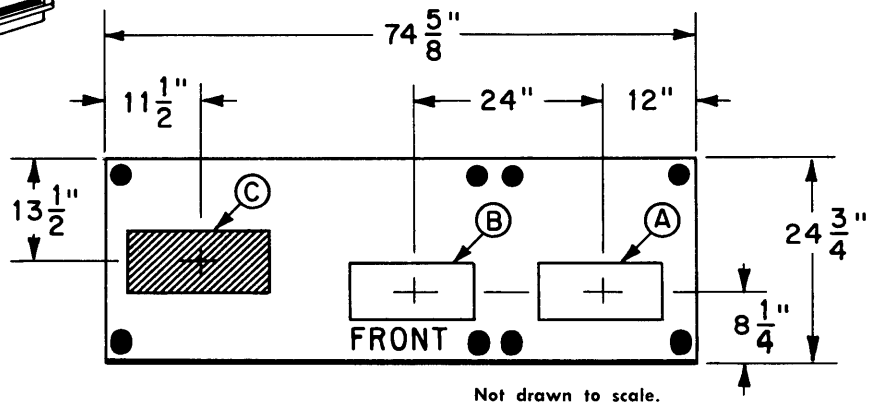
Dimensions (In.)	◆ Height — 62	Width — $74\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 750		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,400		
Electrical Requirements	◆ (KVA) 1.20 (plus KVA requirements of all Tape Stations or Units connected to the Tape Controller).		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires Wire Size: *		
Circuit Breaker	◆ 3 pole, * amperes		
Feeder Length Inside Equipment	◆ 36 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor.		

* To be determined by number of tape units.
See Supplementary Data Section.



Size of Cutouts:

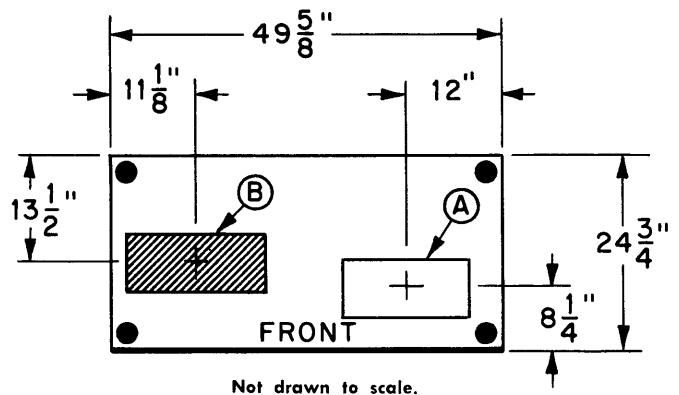
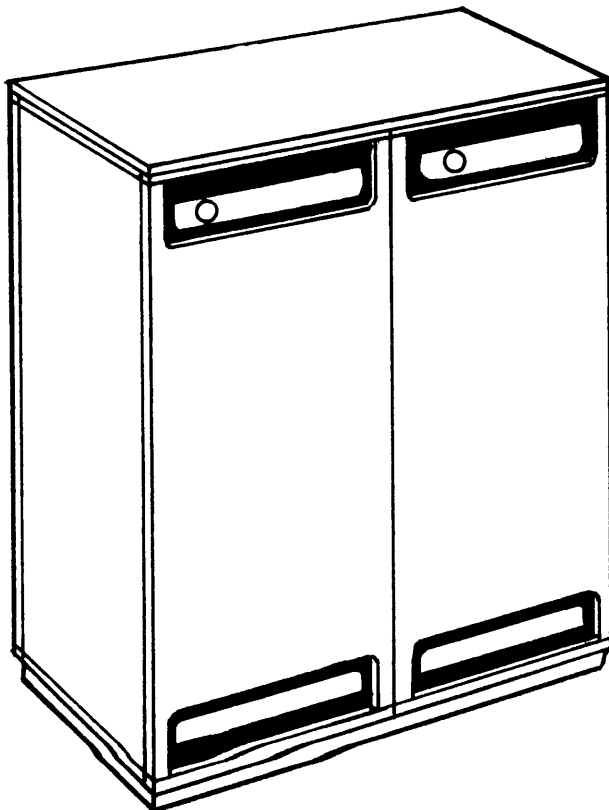
- A 7" x 16"
- B 7" x 16"
- C 8" x 18"



Tape Controller — Single Channel 70/473-108, -116

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 500		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 1,700		
Electrical Requirements	◆ (KVA) 0.6 (plus KVA requirements of all Tape Stations or Units connected to the Tape Controller).		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires Wire Size: *		
Circuit Breaker	◆ 3 pole, * amperes		
Feeder Length Inside Equipment	◆ 36 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor.		

* To be determined by number of tape units.
See Supplementary Data Section.



Size of Cutouts:

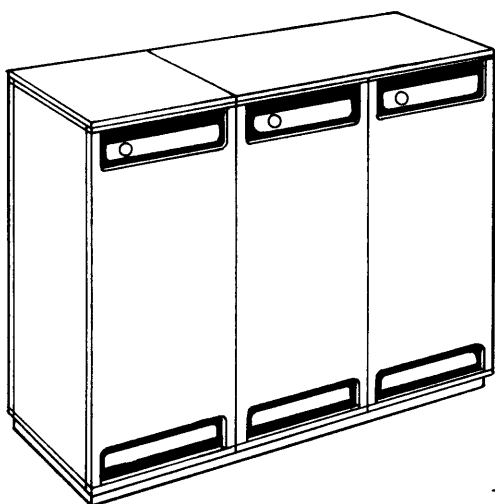
A 7" x 16"

B 8" x 18"

Tape Controller — Dual Channel 70/473-208, -216

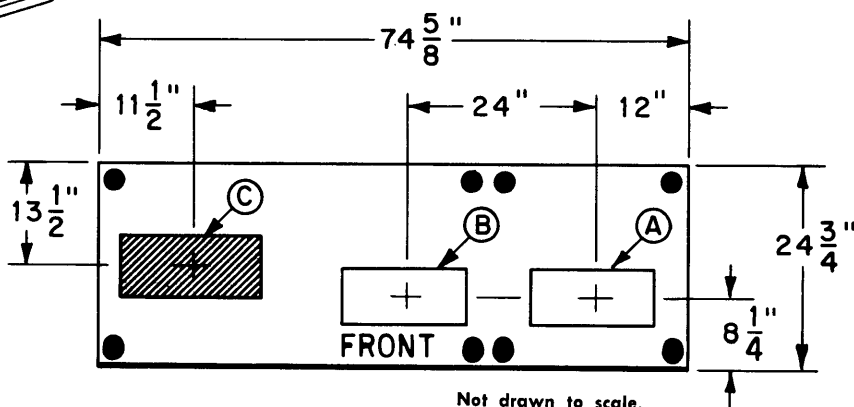
Dimensions (In.)	◆ Height — 62	Width — $74\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 750		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,400		
Electrical Requirements	◆ (KVA) 1.20 (plus KVA requirements of all Tape Stations or Units connected to the Tape Controller).		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires Wire Size: *		
Circuit Breaker	◆ 3 pole, * amperes		
Feeder Length Inside Equipment	◆ 36 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor.		

* To be determined by number of tape units.
See Supplementary Data Section.



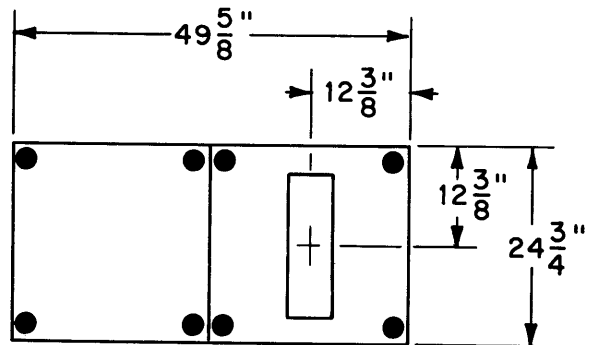
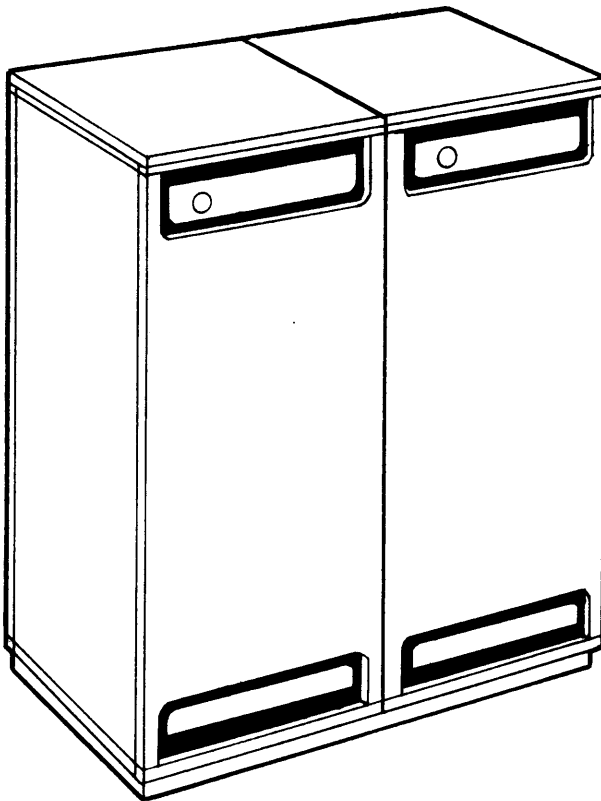
Size of Cutouts:

- A 7" x 16"
- B 7" x 16"
- C 8" x 18"



Voice Response Unit 70/510-11, -21

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 600		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 1,365 — Basic	2,730 — Maximum	
Electrical Requirements	◆ (KVA) 0.5 — Basic 1.0 — Maximum		
Power Feeder	◆ 3 phase, 208 volts, 5 wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches		



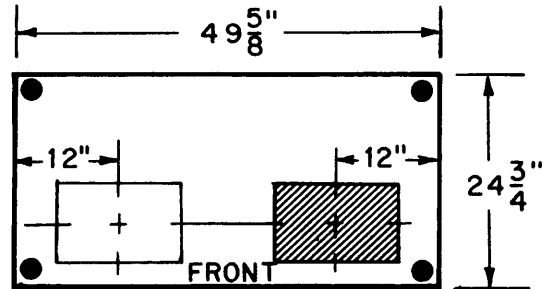
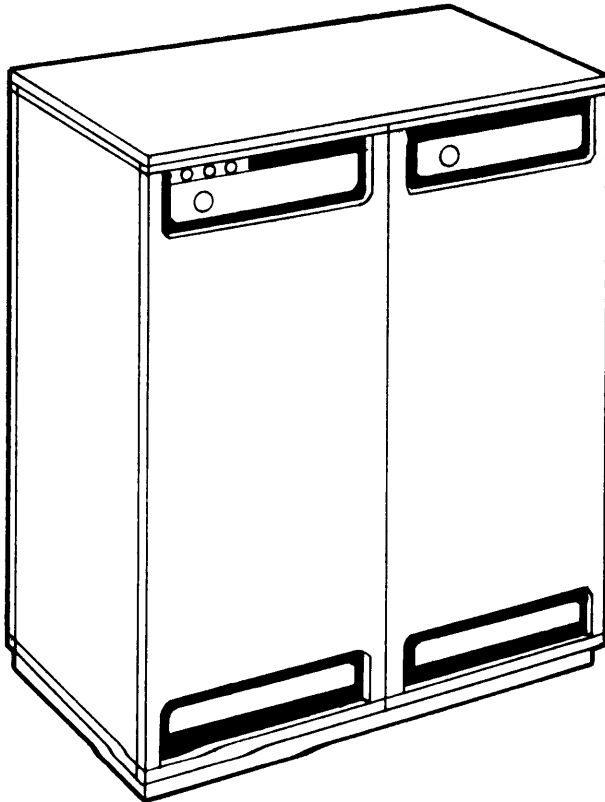
Not drawn to scale.

Size of Cutouts:
6" x 6"

Random Access Controller 70/551

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 600		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,600		
Electrical Requirements	◆ (KVA) 1.3		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole*		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Processor.		

* Circuit breaker size determined by number of 70/564's.



Not drawn to scale.

Size of Cutouts:
9" x 14"

Disc Pack 70/563

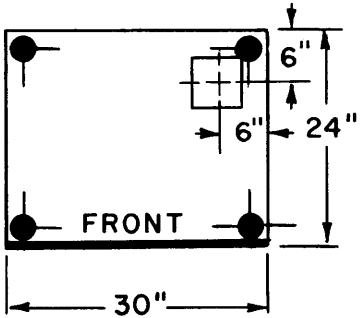
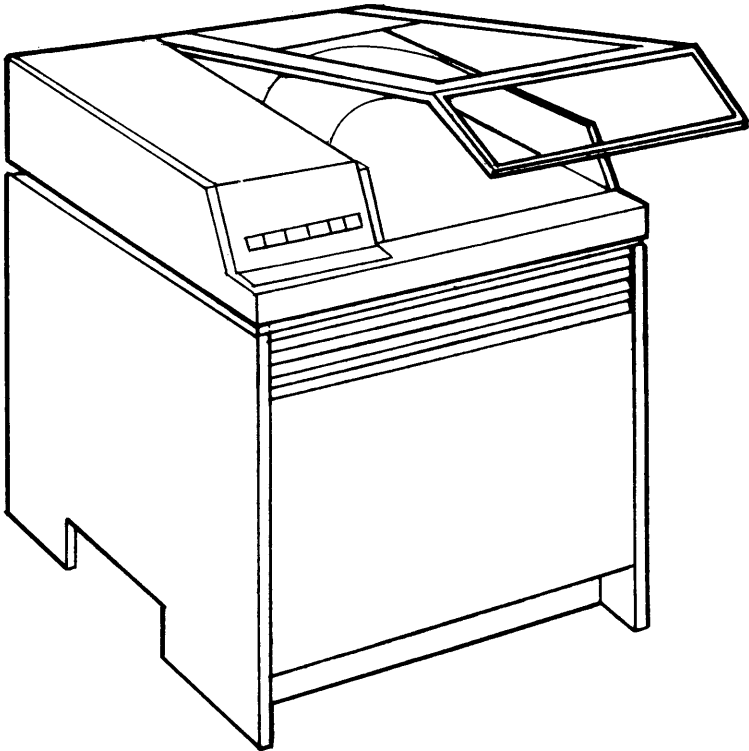
Dimensions (In.) | ◆ Height — 4 Diameter — 15

Weight (Lbs.) | ◆ 10

Note: The Disc Pack 70/563 is an interchangeable set of six discs for Model 70/564 Disc Storage Unit.

Disc Storage Unit 70/564

Dimensions (In.)	◆ Height — 38	Width — 30	Depth — 24
Weight (Lbs.)	◆ 390		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 2,000		
Electrical Requirements	◆ (KVA) .75		
Circuit Breaker	◆ Power supplied by 70/551.		

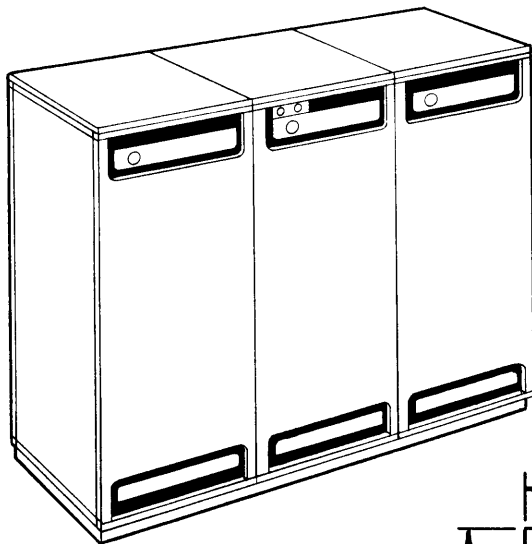


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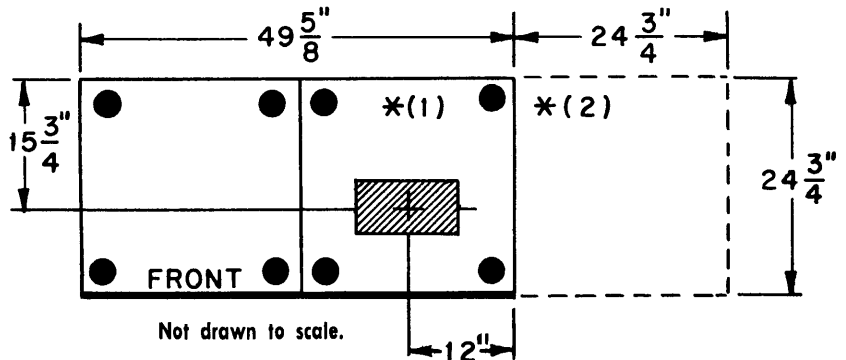
Size of Cutouts:
6" x 6"

Data Drum Memory 70/565-12, -13

Dimensions (In.)	◆ Height — 62	Width — $49\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 400 (1 Drum) 950 (3 Drums)	580 (2 Drums) 1,120 (4 Drums)	
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Right — 2
Heat Dissipation (BTU/Hr.)	◆ 5,000 (1 Drum) 7,650 (3 Drums)	6,300 (2 Drums) 9,300 (4 Drums)	
Electrical Requirements	◆ (KVA) 1.8 (1 Drum) 2.8 (3 Drums)	2.3 (2 Drums) 3.4 (4 Drums)	
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 15 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Model 70/551 Random Access Controller.		

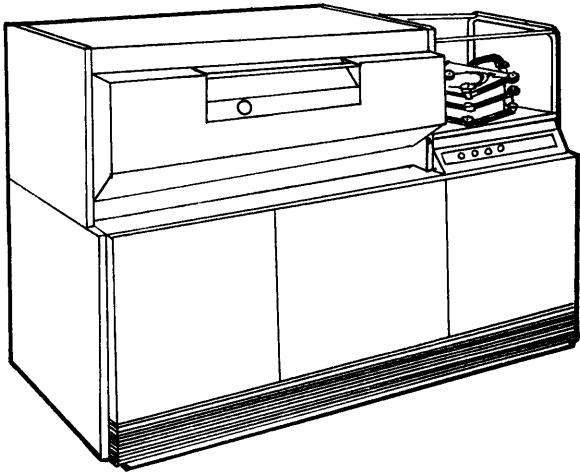


Size of Cutouts:
6" x 12"

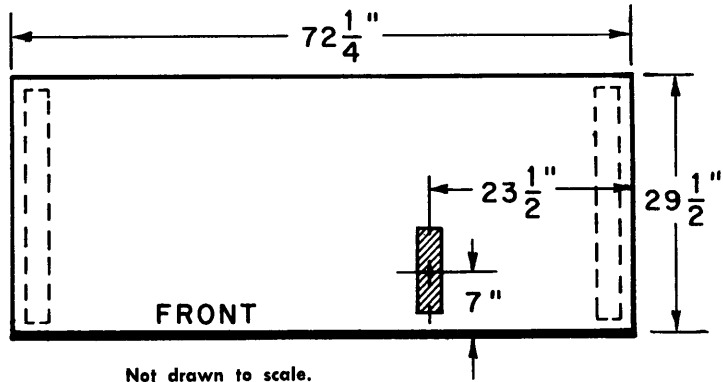


Mass Storage Unit 70/568-11

Dimensions (In.)	◆ Height — 61	Width — 72¼	Depth — 29½
Weight (Lbs.)	◆ 2,400		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3 Right — 3
Heat Dissipation (BTU/Hr.)	◆ 25,600		
Electrical Requirements	◆ (KVA) 10.0		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 40 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Model 70/551 Random Access Controller.		

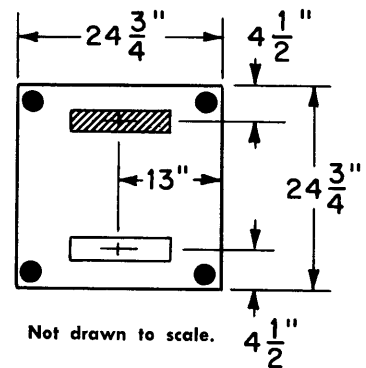
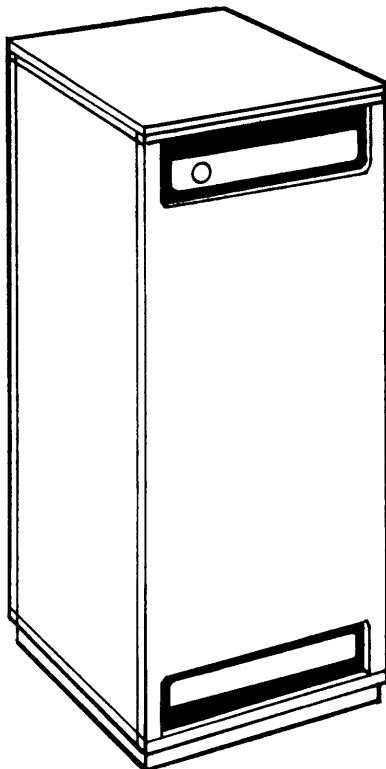


Size of Cutouts:
3" x 9"



Data Exchange Control 70/627-10

Dimensions (In.)	◆ Height — 62	Width — $24\frac{3}{4}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 325		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 700		
Electrical Requirements	◆ (KVA) 1.00		
Power Feeder	◆ 3 phase 208 volts, 60 cycles, plus ground and neutral wires Total — 5 wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 90 feet to Basic Processor Cutout.		



Size of Cutouts:
3" x 13"

Communication Control — Single Channel 70/652-25, -26

**Heat Dissipation
(BTU/Hr.)**

◆ 270

**Electrical
Requirements**

◆ (KVA) .081 @ 208 volts, 3 phase, 60 cycles

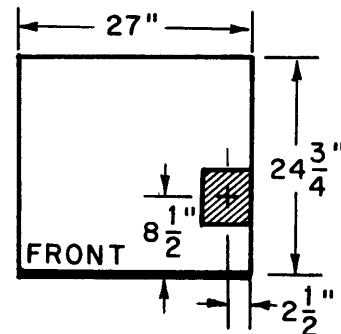
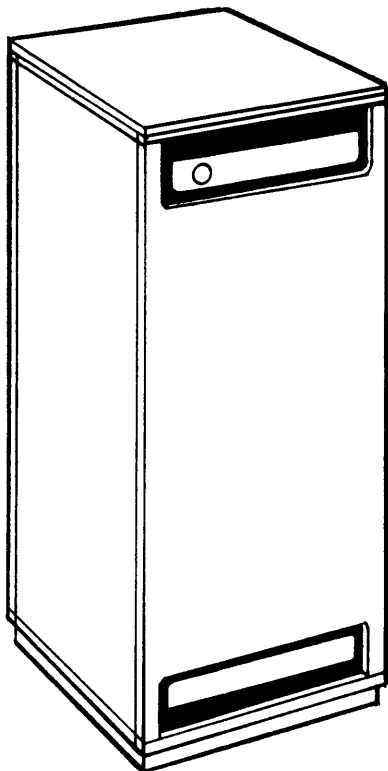
**Maximum Distance
Between Cutouts**

<i>Model No.</i>	<i>Associated Subset</i>	<i>Service</i>	<i>Max. Cable Length</i>
70/652-25	AT&T 201A3	MSG. Network-Man. Dial	45 Feet
70/652-25	AT&T 201B	Private Line	45 Feet
70/652-25	W. U. 2241	Private Line	45 Feet
70/652-25	W. U. 2241	Broadband SW.-Man. Dial	45 Feet
70/652-26	AT&T 201A3	MSG. Network-Auto. Dial	45 Feet

Note: This unit is installed in 70/15 Processor.

Communication Control—Single Channel 70/653-25, -26, -34

Dimensions (In.)	◆ Height — 62	Width — 27	Depth — 24 $\frac{3}{4}$
Weight (Lbs.)	◆ 440		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 3,000		
Electrical Requirements	◆ (KVA) 1.2		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole, 10 amperes		
Feeder Length Inside Equipment	◆ 60 inches		
Maximum Distance Between Cutouts	◆ 90 feet to 70/25, 70/35, 70/45, or 70/55 Processor.		



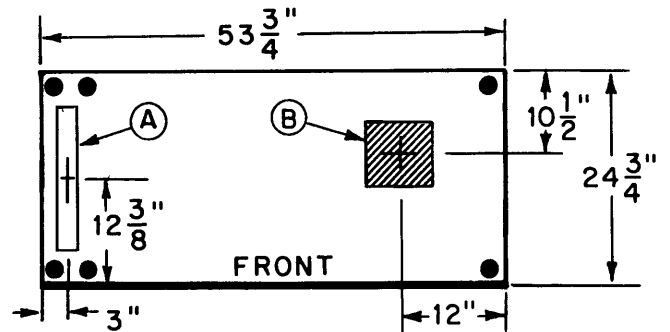
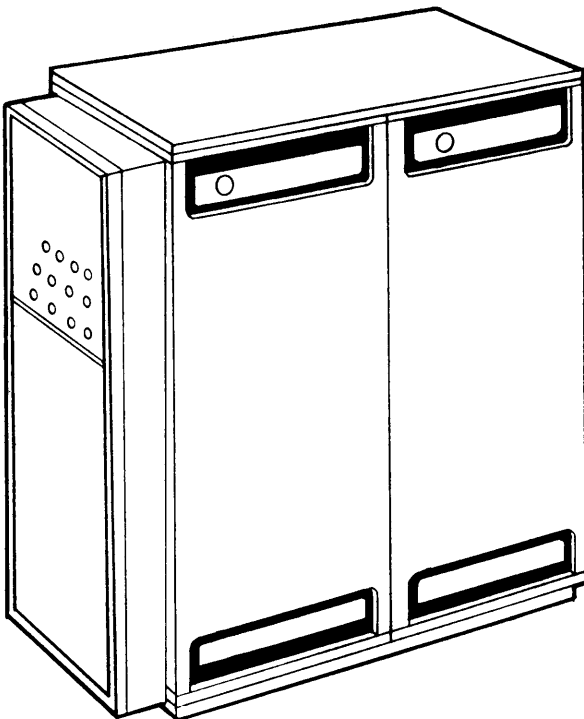
Not drawn to scale.

Size of Cutouts:

5" x 5"

Communication Control — Multichannel 70/668-11, -21, -31

Dimensions (In.)	◆ Height — 62	Width — $53\frac{3}{4}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 1,500		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	Left — 3
Heat Dissipation (BTU/Hr.)	◆ 7,800		
Electrical Requirements	◆ (KVA) 3.0		
Power Feeder	◆ 4 Wire 208 volts, 3 phase, 60 cycles, plus ground wire Total — 5 wires		
Circuit Breaker	◆ 3 pole		
Feeder Length Inside Equipment	◆ 40 inches		
Maximum Distance Between Cutouts	◆ 90 feet to 70/35, 70/45, or 70/55 Processor.		



Not drawn to scale.

Size of Cutouts:

- A $2\frac{1}{2}$ " x 16"
- B 8" x 9"

Telegraph Buffer 70/710

Note: This unit is installed in the Model 70/668 Communication Control, Multichannel; Power, Weight and Air Conditioning requirements are included in the 70/668 Specification Sheet.

Parallel Buffer 70/715

Note: This unit is installed in the Model 70/668 Communication Control, Multichannel; Power, Weight and Air Conditioning requirements are included in the 70/668 Specification Sheet.

ADS Buffer 70/720

Note: This unit is installed in the Model 70/668 Communication Control, Multichannel; Power, Weight and Air Conditioning requirements are included in the 70/668 Specification Sheet.

SDS Buffer 70/721

Note: This unit is installed in the Model 70/668 Communication Control, Multichannel; Power, Weight and Air Conditioning requirements are included in the 70/668 Specification Sheet.

STR Buffer 70/722

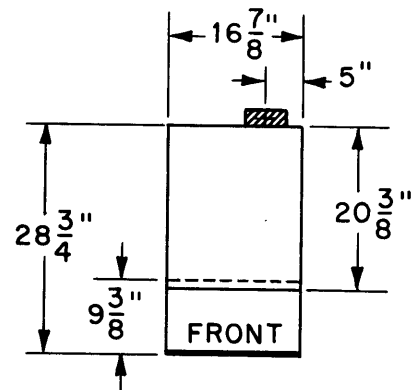
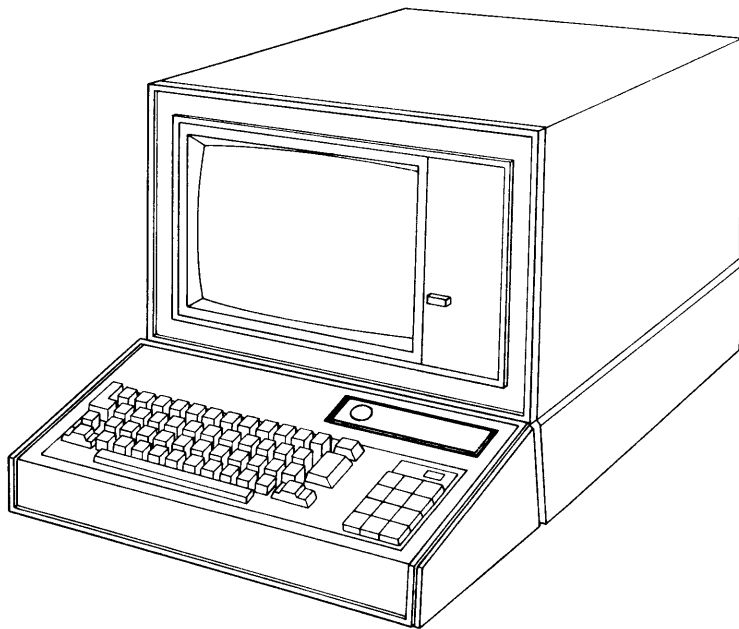
Note: This unit is installed in the Model 70/668 Communication Control, Multichannel; Power, Weight and Air Conditioning requirements are included in the 70/668 Specification Sheet.

EDGE Demodulator/Buffer 70/724

Note: This unit is installed in the Model 70/668 Communication Control, Multichannel; Power, Weight and Air Conditioning requirements are included in the 70/668 Specification Sheet.

Video Data Terminal 70/752

Dimensions (In.)	◆ Height — $14\frac{1}{2}$	Width — 17	Depth — $29\frac{1}{4}$
Weight (Lbs.)	◆ 140		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 1	Left — $\frac{1}{2}$ Right — $\frac{1}{2}$
Heat Dissipation (BTU/Hr.)	◆ 1,150		
Electrical Requirements	◆ (KVA) .35 @ 120 volts, 60 cycles		
Power Feeder	◆ Grounded-type power cord supplied		
Circuit Breaker	◆ Convenience outlet required within eight feet		
Maximum Distance Between Cutouts	◆ Viewer to Data Set — 50 feet.		



Not drawn to scale.

Size of Cutouts:

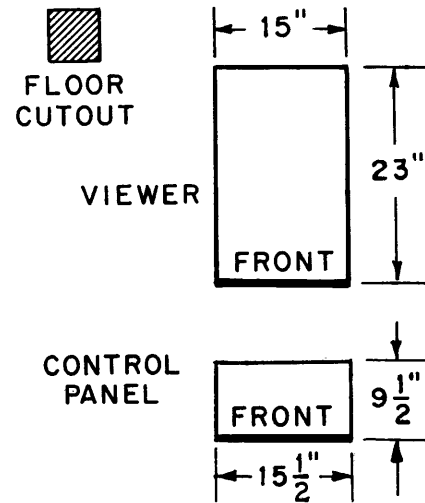
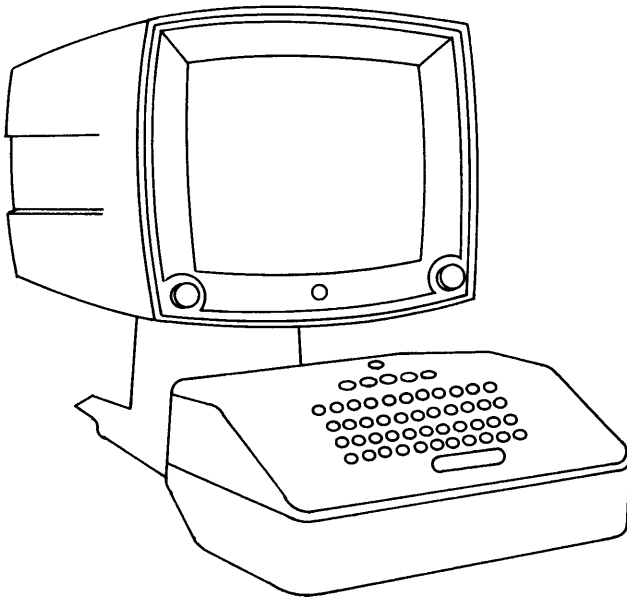
2" x 5"

Time Generator/Buffer 70/780

Note: This unit is installed in the Model 70/668 Communication Control, Multichannel; Power, Weight and Air Conditioning requirements are included in the 70/668 Specification Sheet.

Video Data Interrogator 6051-1, -2, -3

Dimensions (In.)	◆ <i>Viewer</i> Height — 23 Width — 15 Depth — 23
	◆ <i>Control Panel</i> Height — 6 Width — 15½ Depth — 9½
Weight (Lbs.)	◆ 50 (Viewer) 20 (Control Panel)
Maintenance Clearance (Ft.)	◆ Left — 1 Right — 1
Heat Dissipation (BTU/Hr.)	◆ 1,000
Electrical Requirements	◆ (KVA) 0.3 @ 120 volts
Power Feeder	◆ 2 Wire 120 volts, 1 phase, 60 cycles Line Cord supplied by RCA.
Maximum Distance Between Cutouts	◆ <i>Viewer</i> — 200 feet to Model 6077 Interrogator Control Terminal. <i>Control Panel</i> — 200 feet to Model 6077 Interrogator Control Panel.

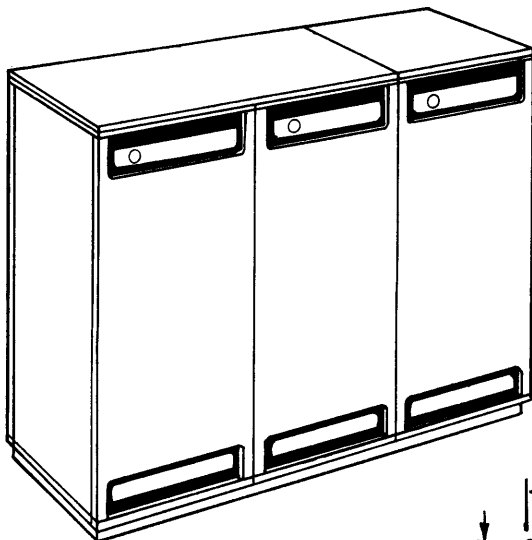


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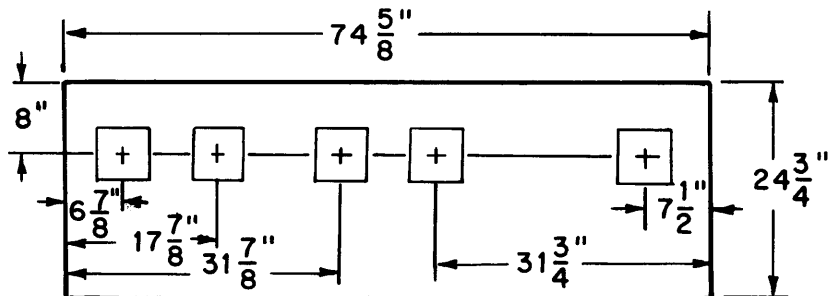
Size of Cutouts:
3" x 3"

Interrogator Control Terminal 6077

Dimensions (In.)	◆ Height — 62	Width — $74\frac{5}{8}$	Depth — $24\frac{3}{4}$
Weight (Lbs.)	◆ 1,200		
Maintenance Clearance (Ft.)	◆ Front — 3	Rear — 3	
Heat Dissipation (BTU/Hr.)	◆ 10,000		
Electrical Requirements	◆ (KVA) 3.0 @ 120 volts		
Power Feeder	◆ 2 Wire 120 volts, 1 phase, 60 cycles, plus ground wire Total — 3 wires Wire Size: #6		
Circuit Breaker	◆ 1 pole, 50 amperes		
Feeder Length Inside Equipment	◆ 24 inches		
Maximum Distance Between Cutouts	◆ 200 feet to 6051 Video Data Interrogator (Viewer) 50 feet to Data Set (Bell System 202C or 202D) 50 feet to 6010 Buffer		



Size of Cutouts:
6" x 6"



Not drawn to scale.

**SUPPLEMENTARY
DATA**

AC POWER FEEDERS

◆ The chart below indicates the required number of AC Power Feeders (customer-supplied) to the 70/463, -472, -473 Tape Controllers. To illustrate how the chart is used, assume that eight 70/445's and three 70/442's will be connected to a 70/472-216 Tape Controller. Four AC Power Feeders must be supplied to the 70/472-216 Tape Controller (see encircled figure below at intersection point).

Every AC Power Feeder supplied to a tape controller (70/463, -472, -473) must consist of five wires (three phases, plus neutral, plus ground). One circuit breaker should be rated at 20 amperes, all others at *70 amperes.

* This rating is for a maximum system. The circuit breakers could be reduced for smaller systems. Consult RCA Installation Planning Representative.

Quantity of 70/445's
↓

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Quantity of 70/432's or 70/442's →	0	-	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5		
	2	2	2	2	2	3	3	3	4	4	4	4	5	5				
	3	2	2	2	3	3	3	4	4	4	5							
	4	2	3	3	3	3	4	4	4	4								
	5	3	3	3	3	4	4	4										
	6	3	3	3	4													
	7	3	3	3	4													
	8	3																

Number of AC Power Feeders to Tape Controllers

CABLING DIAGRAMS

70/55 POSITIONING

◆ The positioning of the 70/55 series processors is unique and certain conditions must be observed.

1. The power supply is separated from the basic processor unit by the following dimensions:

Minimum 4'4"

Nominal 5'4"

Maximum 6'4"

2. The power supply is recessed from the processor by the following dimensions:

Minimum 16"

Nominal 20"

Maximum 24"

Care should be exercised in the laying-out of a 70/55 system to ensure that a minimum of false floor tiles become locked-in. The power supply and processor are interconnected by an electrical buss-bar supply that necessitates the above tolerances. This buss-bar is installed in a duct whose dimensions are 6" high by 8" wide. Therefore, a minimum false floor clearance of 9" is necessary.

- NOTE 1: • SPACE FOR PLACEMENT OF EITHER THE 70/627 OR THE 70/652 IS PROVIDED IN THE 70/15 PROCESSOR.
- NOTE 2: • THE 70/461-208 CAN ACCOMMODATE EIGHT TAPE UNITS.
 • THE 70/461-216 CAN ACCOMMODATE SIXTEEN TAPE UNITS.
 • THE 70/463-108, -208, 70/472-108, 208 OR THE 70/473-108, -208 CAN ACCOMMODATE TWO GROUPS OF FOUR TAPE DECKS (MAX. OF EIGHT DECKS).
 • THE 70/463-116, -216, 70/472-116, -216 OR THE 70/473-116, -216 CAN ACCOMMODATE 4 GROUPS OF 4 TAPE DECKS (MAX. OF 16 DECKS).
 • MODEL 70/472 ACCOMMODATES TWO DECKS.
 • MODEL 70/441 ACCOMMODATES TWO DECKS.
 • MODEL 70/442 ACCOMMODATES TWO DECKS.
 • MODEL 70/445 ACCOMMODATES ONE DECK.
 • THE SAME MODEL STATIONS OR UNITS IN ANY ONE GROUP MUST BE ADJACENT TO EACH OTHER.
- NOTE 3: • THE MAXIMUM DISTANCE FROM THE 70/463, 70/472 OR 70/473 TAPE CONTROLLER TO THE LAST TAPE UNIT IS 50 FEET.

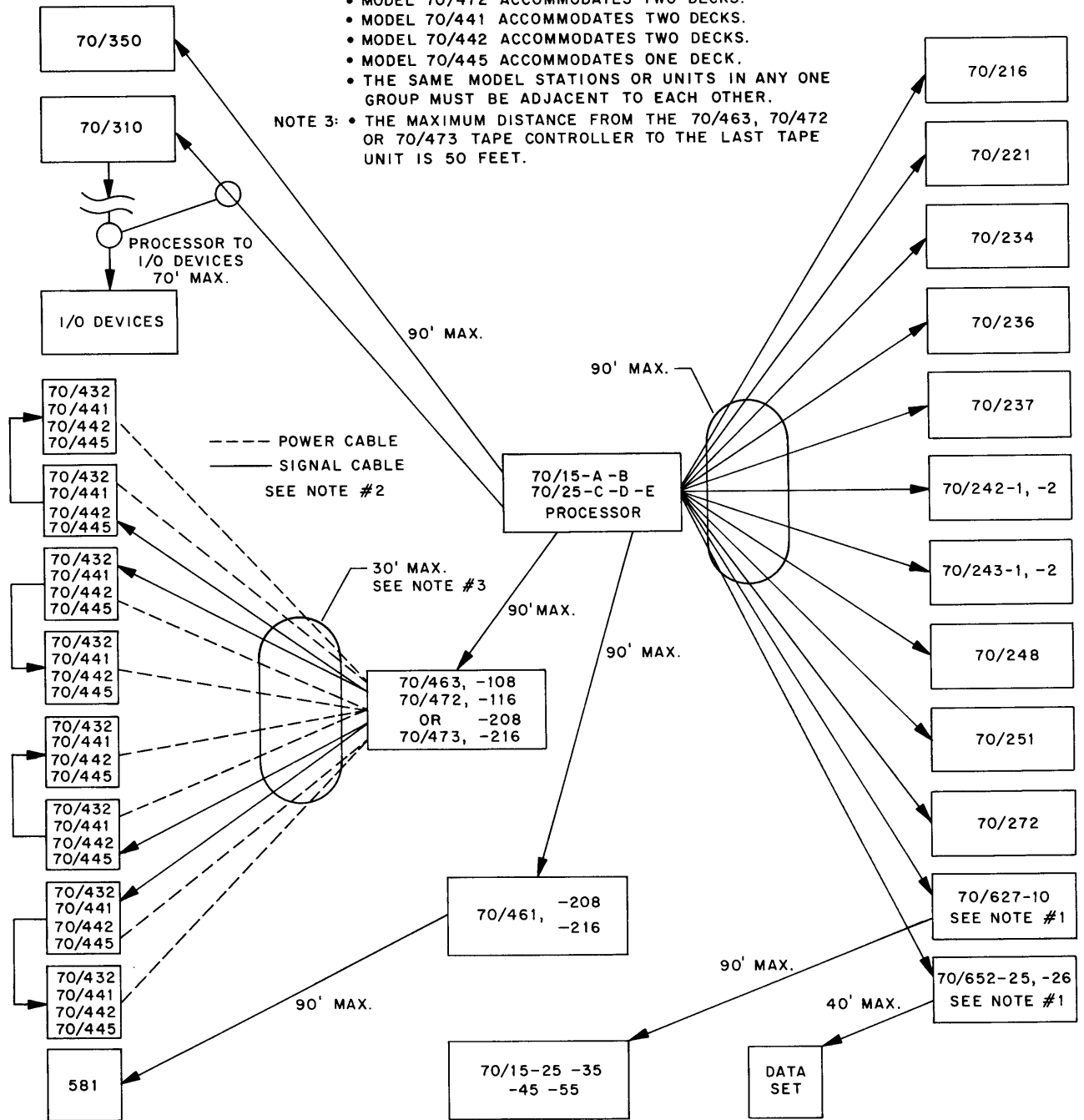


Figure 2. 70/15-25 Cutout to Cutout Distances

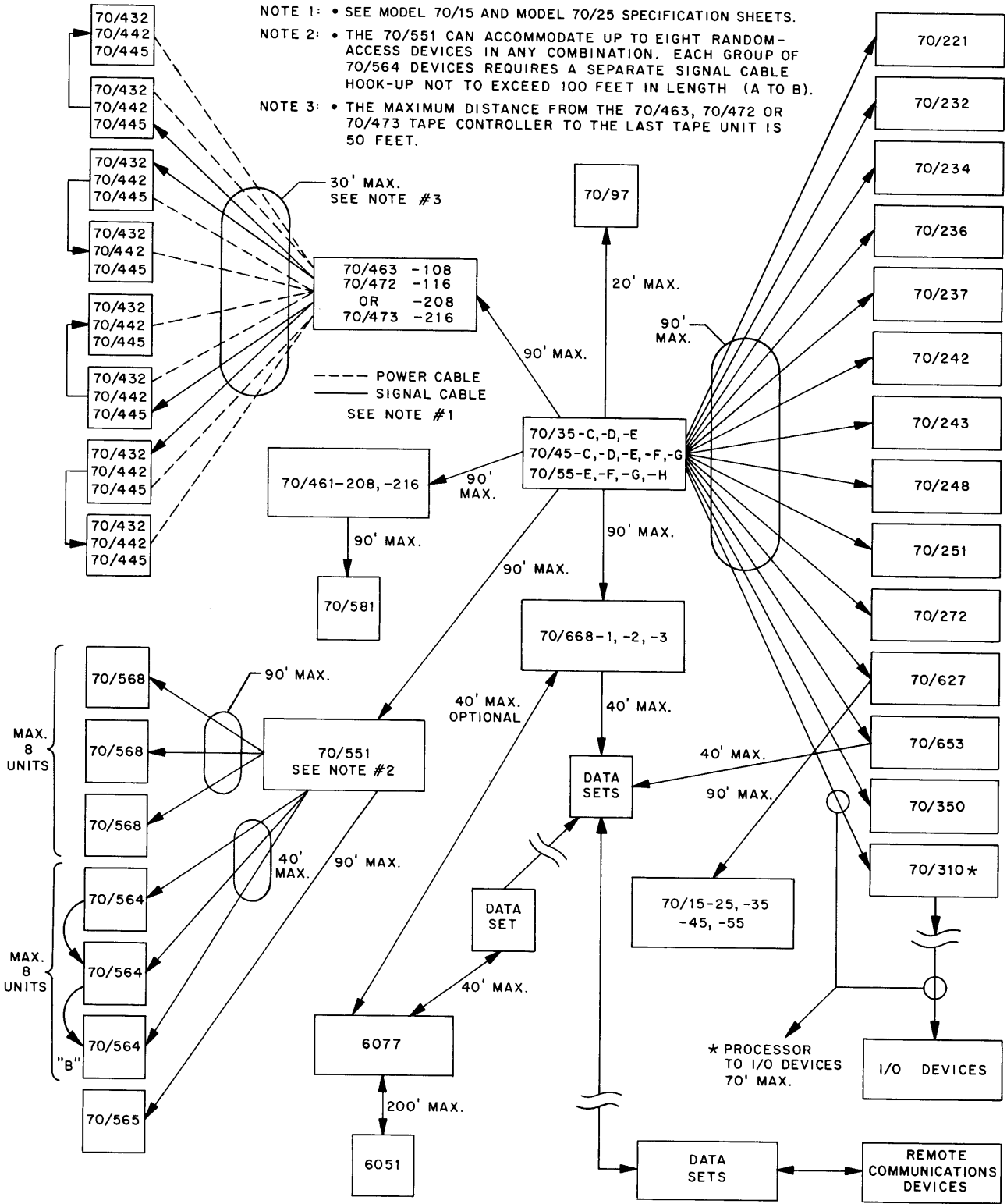
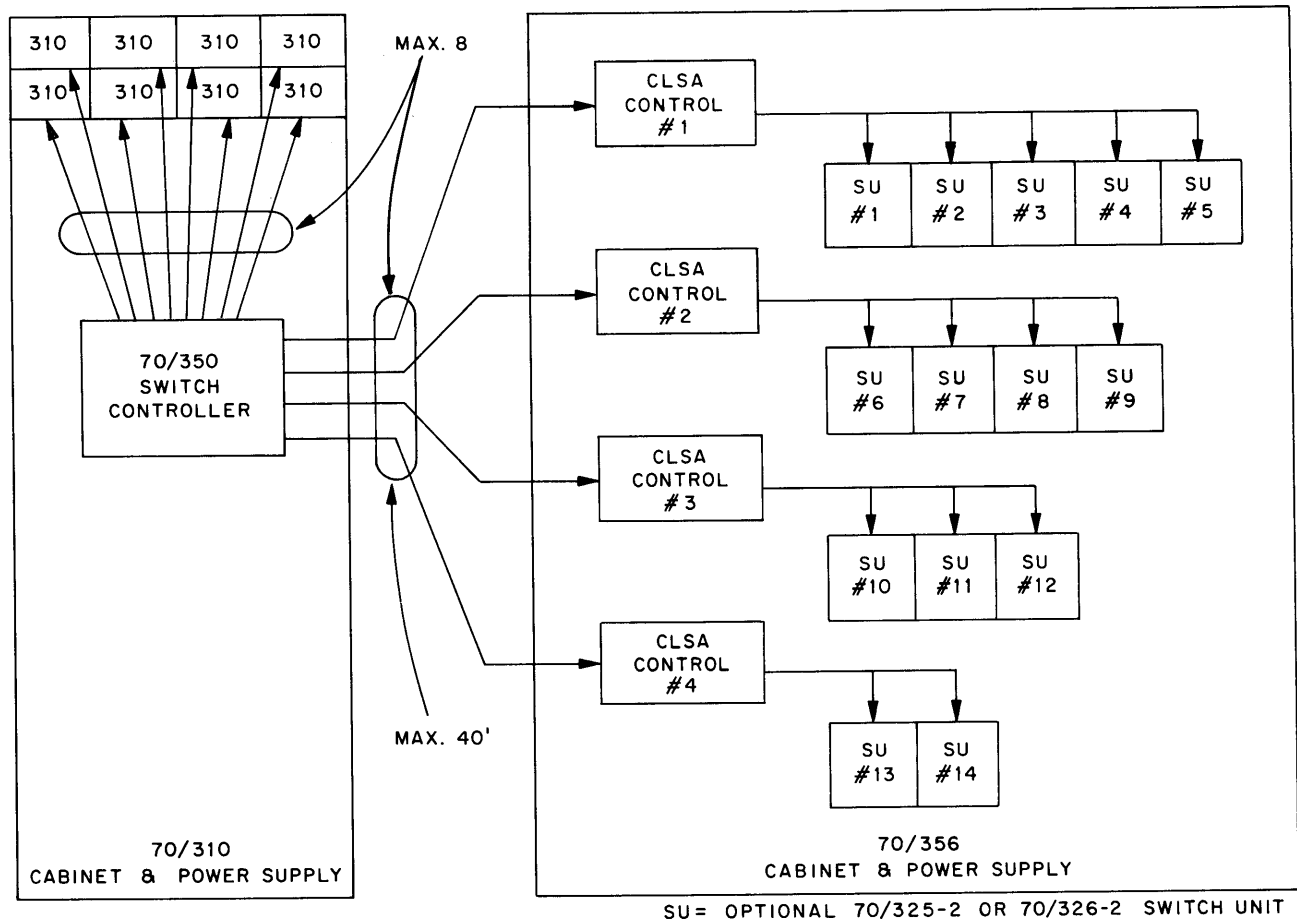


Figure 3. 70/35-45-55 Cutout to Cutout Distances

RELATIONSHIP BETWEEN DEVICES



CABLE INSTALLATION

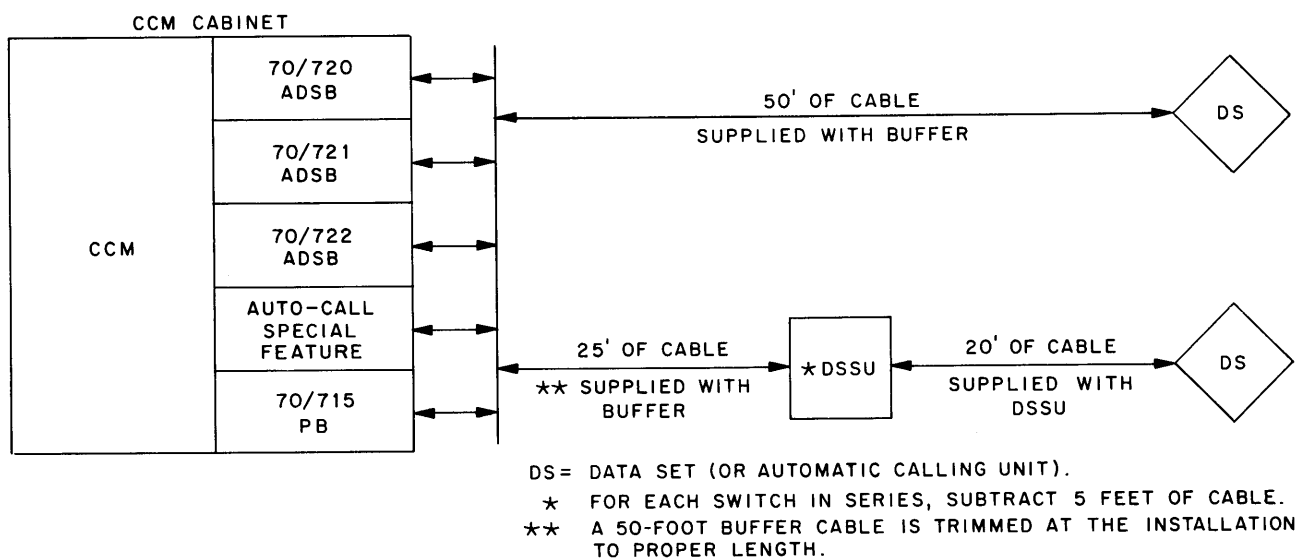
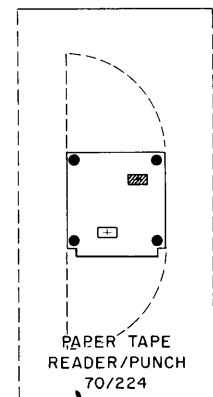
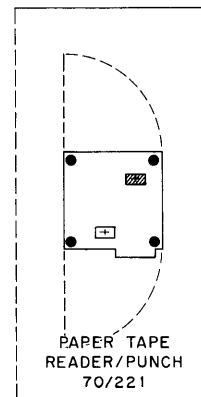
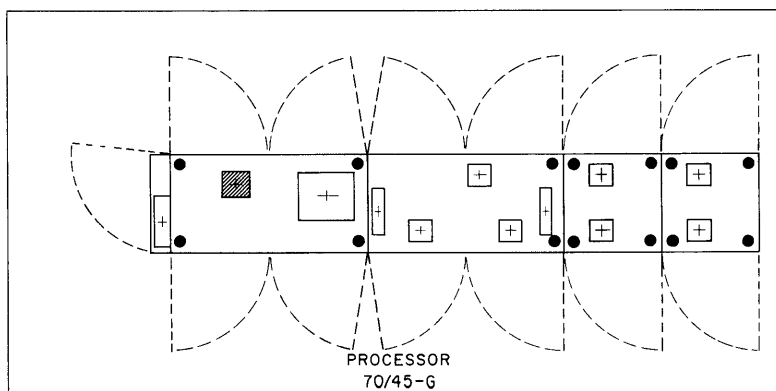
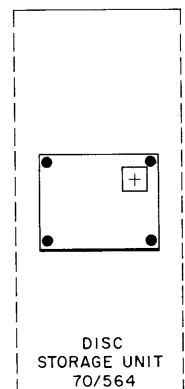
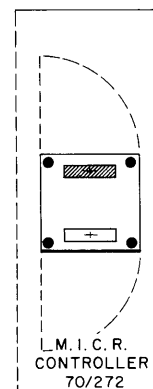
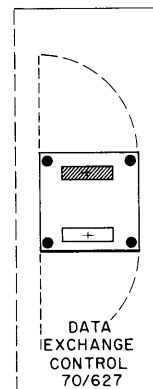
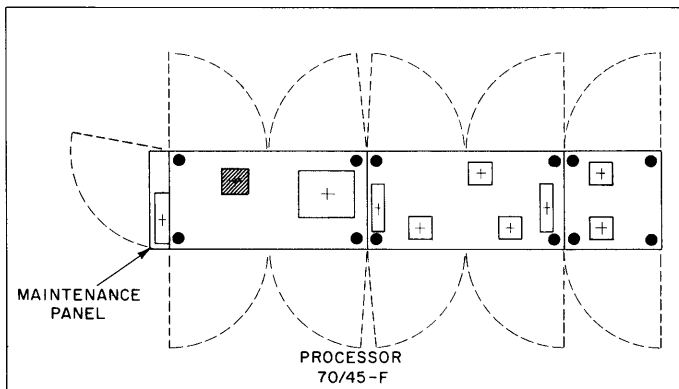
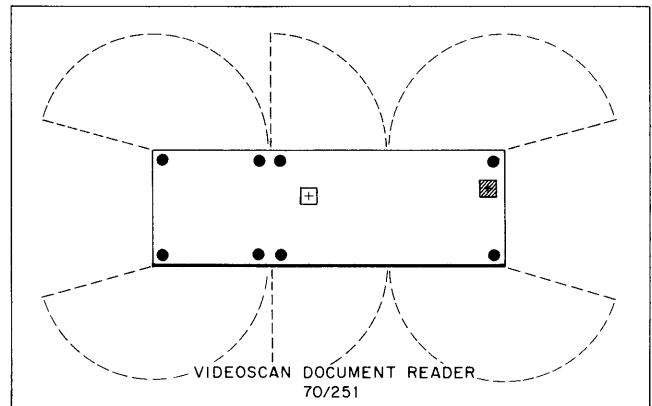
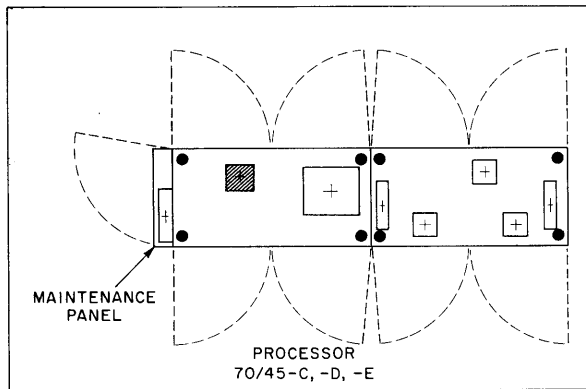
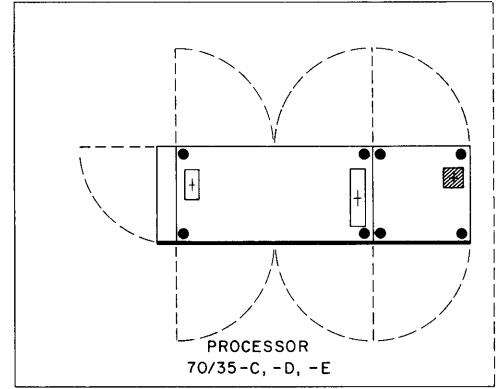
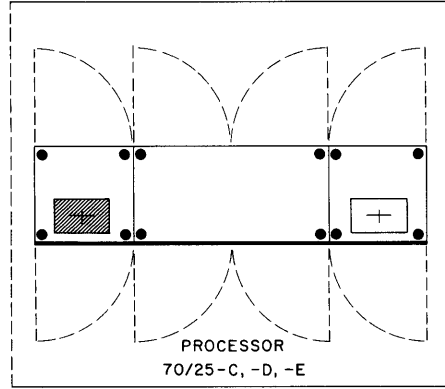
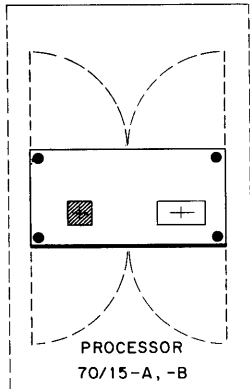


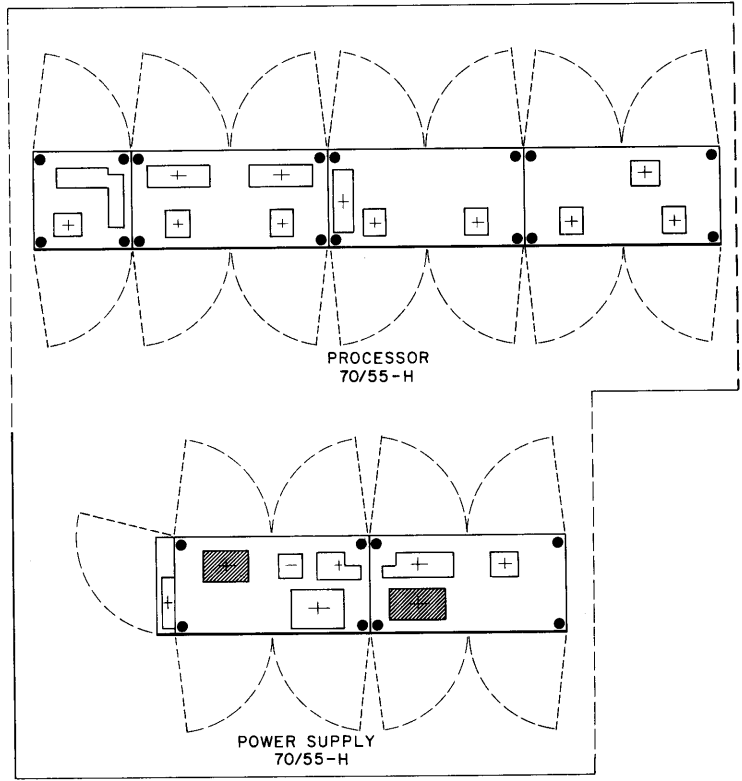
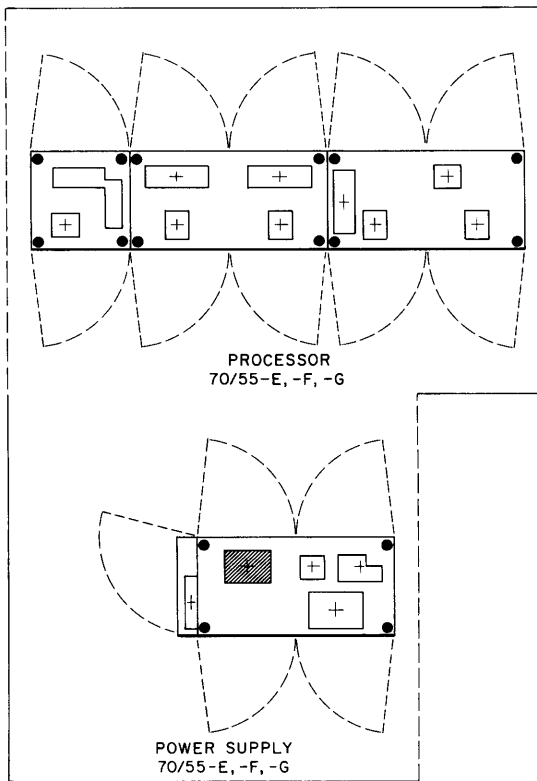
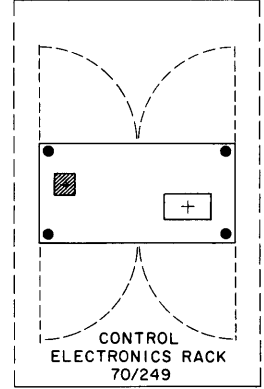
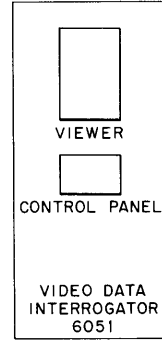
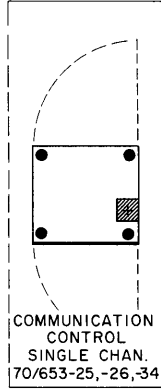
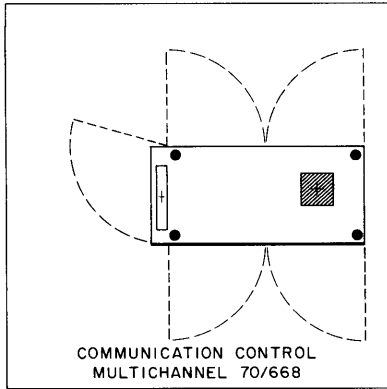
Figure 4. Communication Switch Cabling

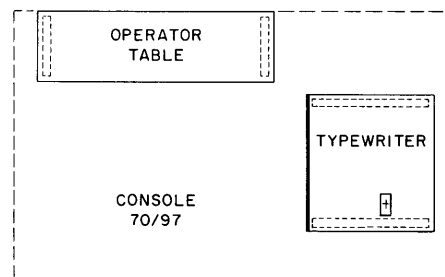
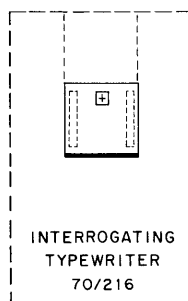
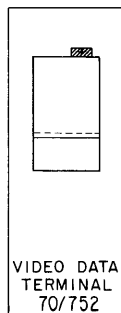
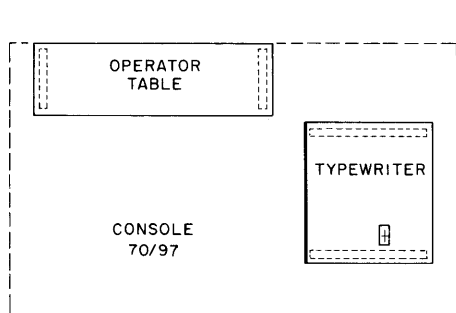
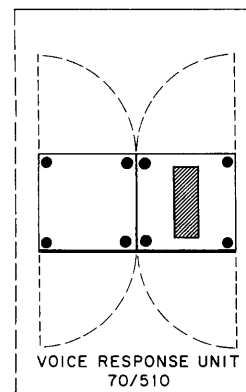
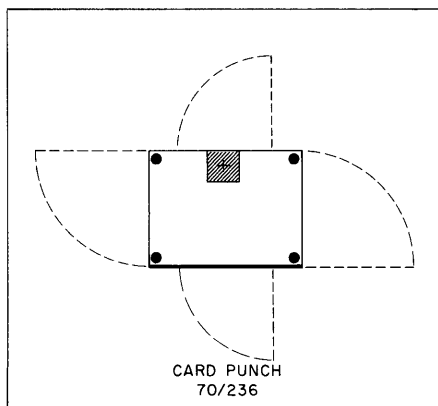
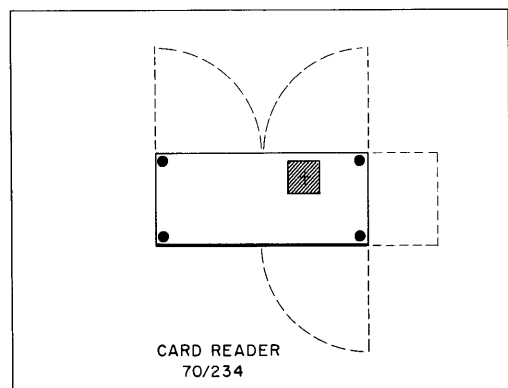
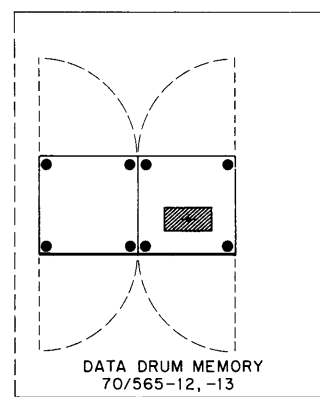
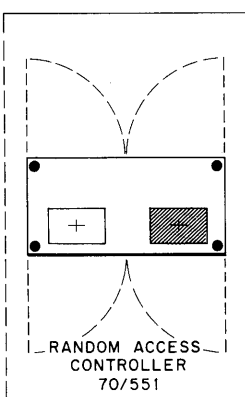
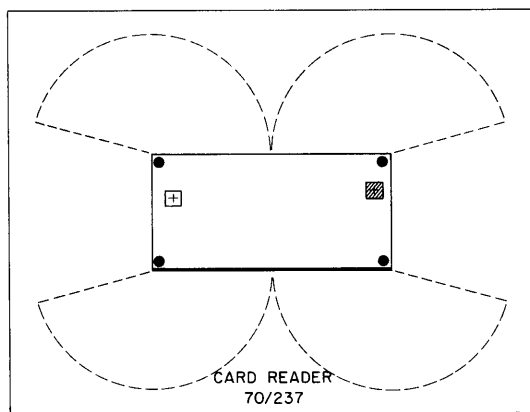
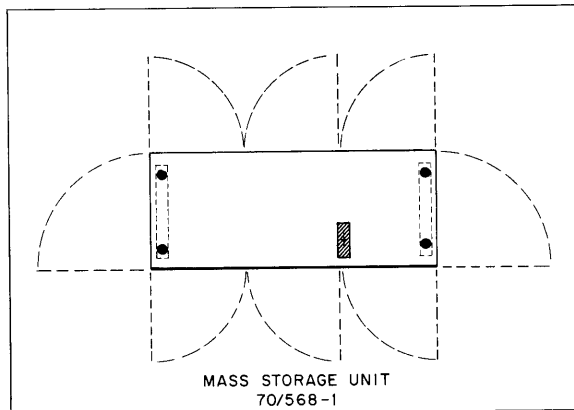
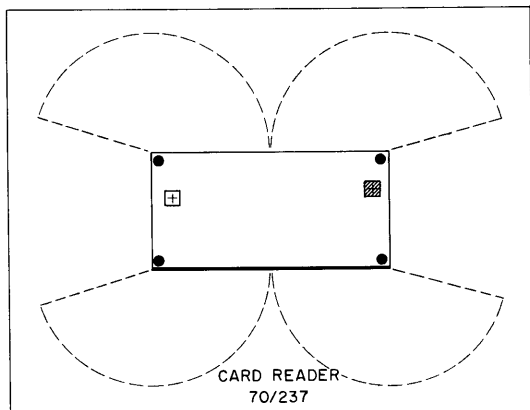
TEMPLATES

Note: Three complete sets of the following Templates are available on clear plastic, Publication No. 70-00-013. These Templates are drawn to scale $\frac{1}{4}$ inch-per-foot to facilitate the planning of the equipment layout.

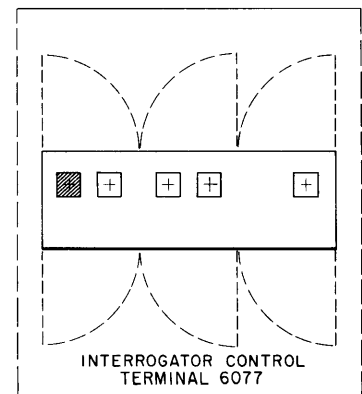
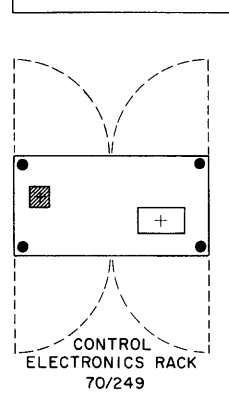
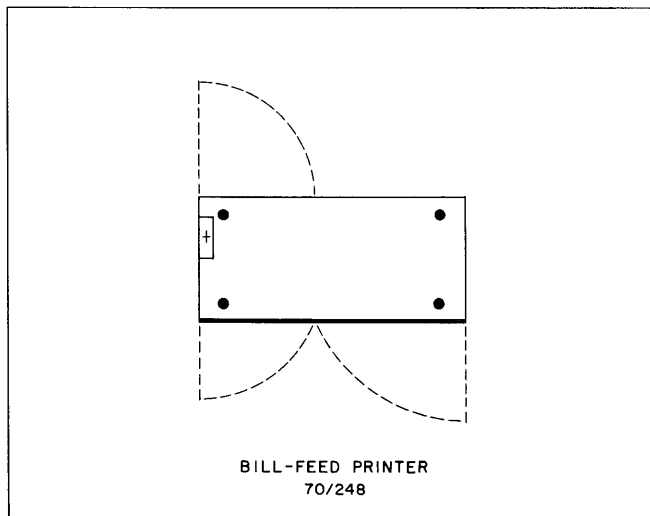
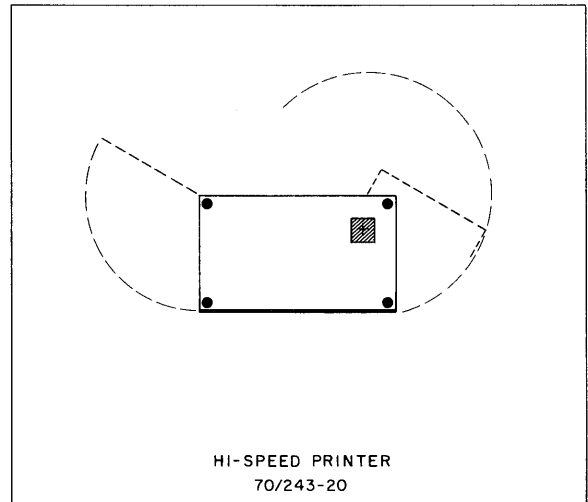
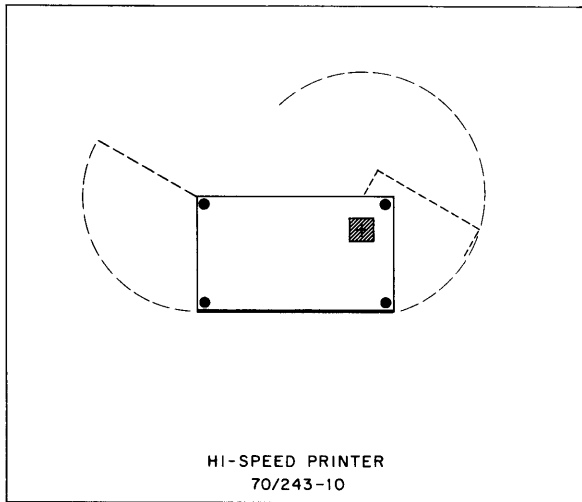
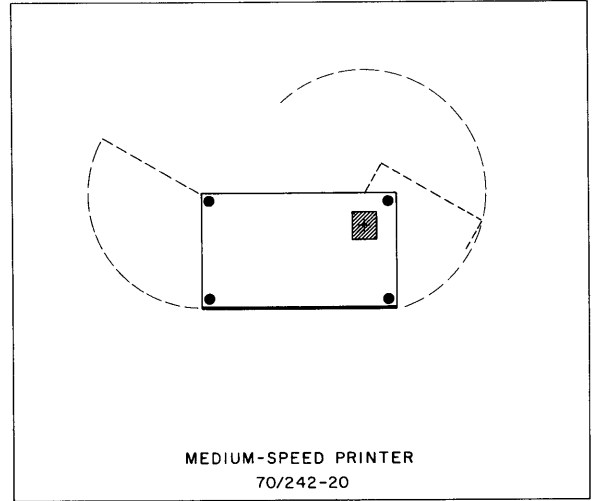
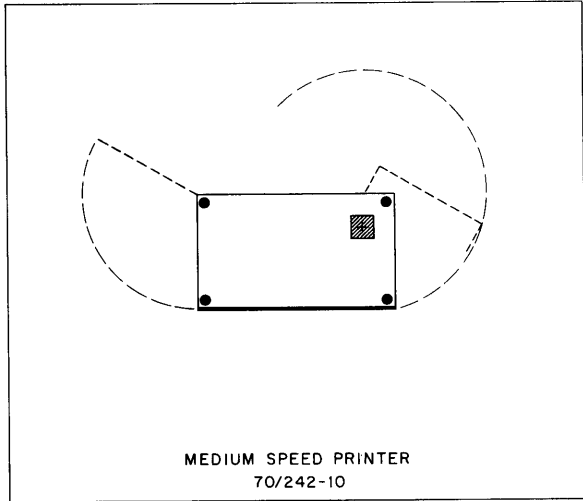


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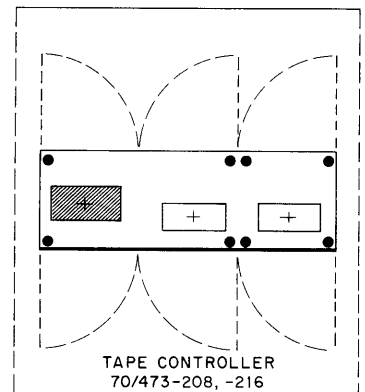
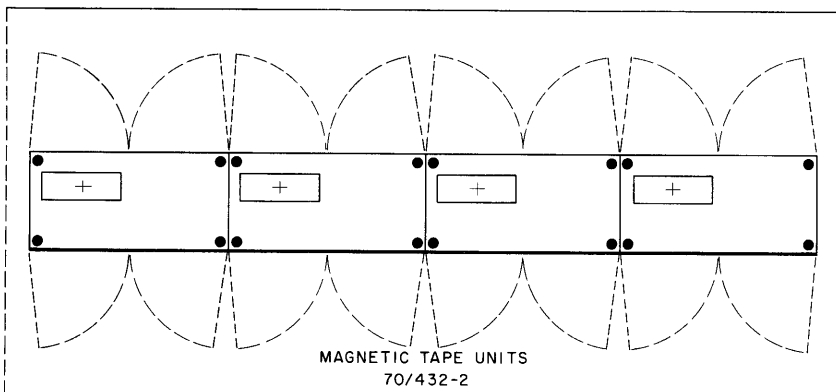
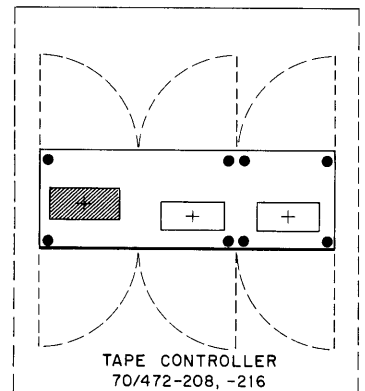
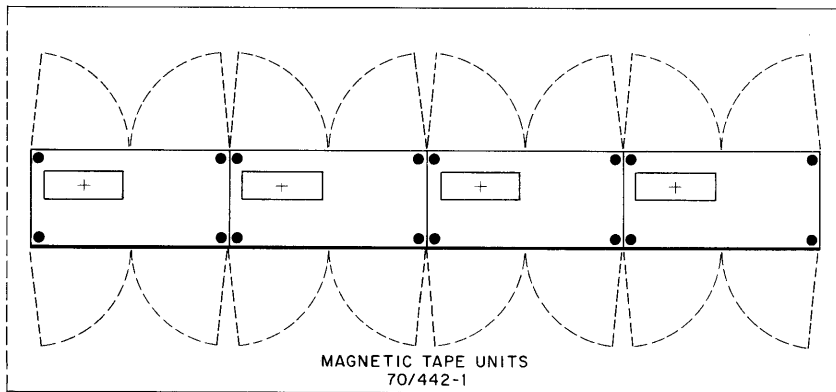
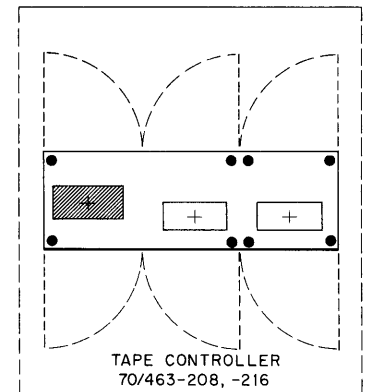
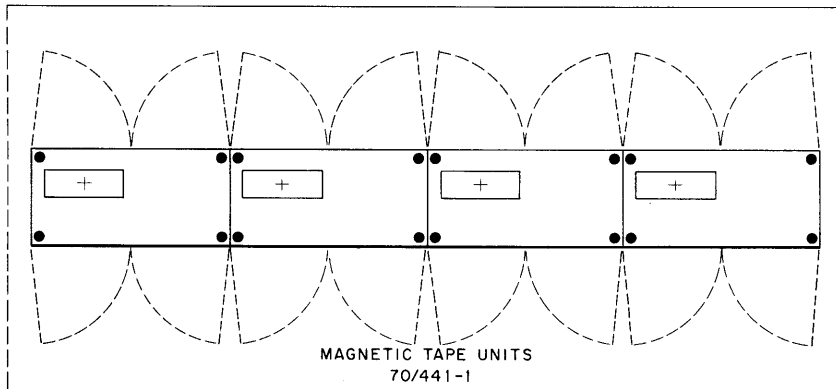
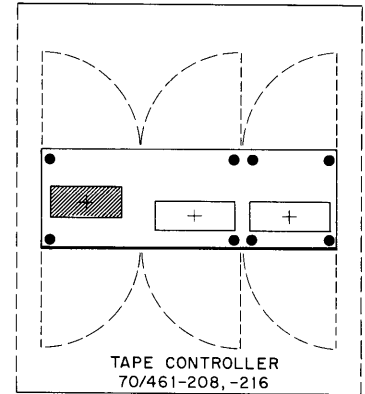
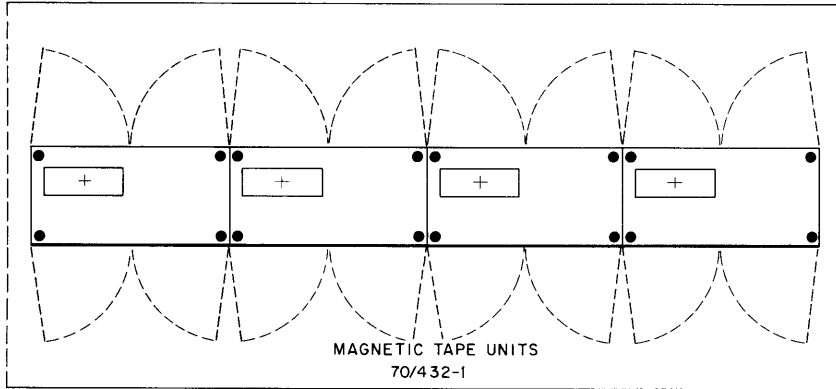




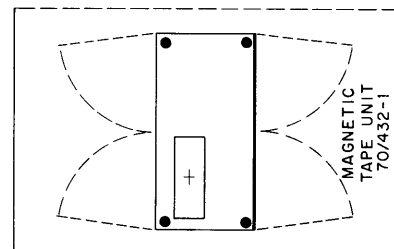
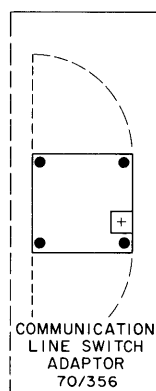
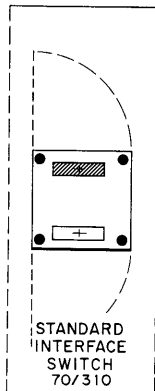
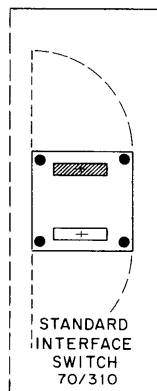
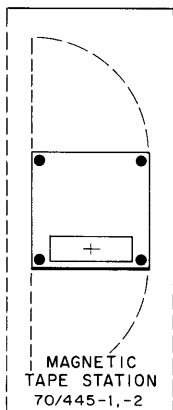
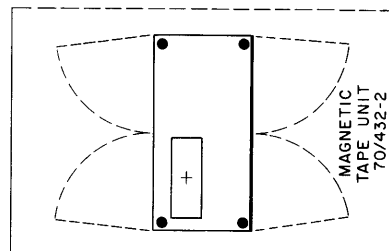
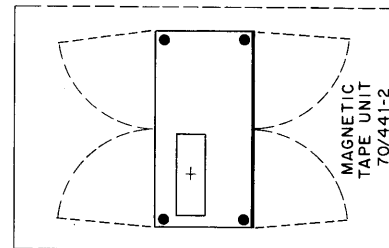
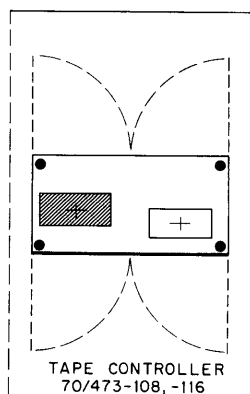
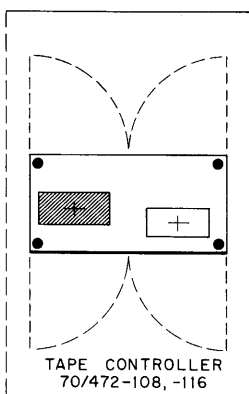
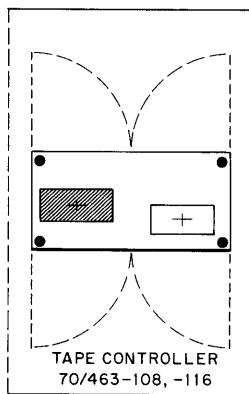
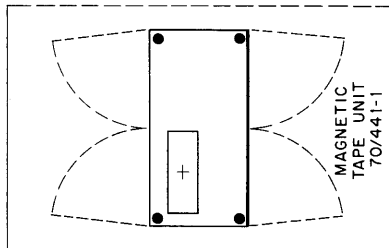
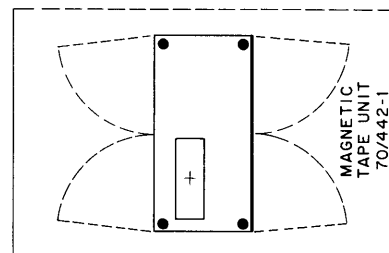
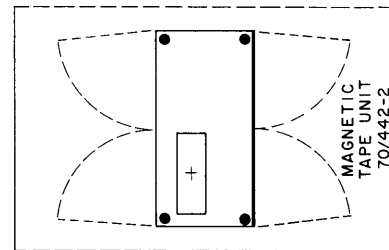
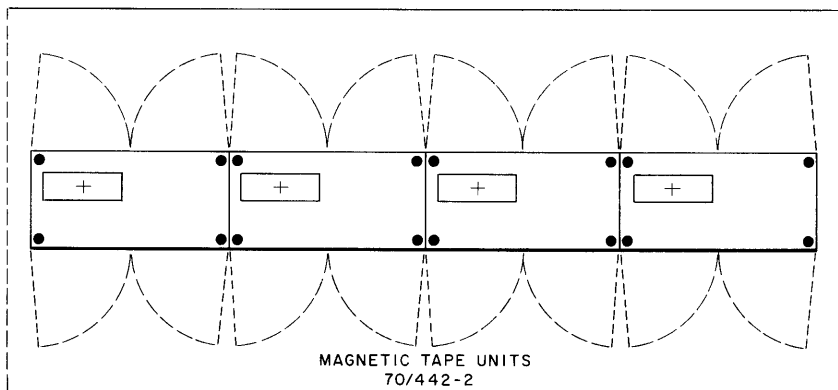
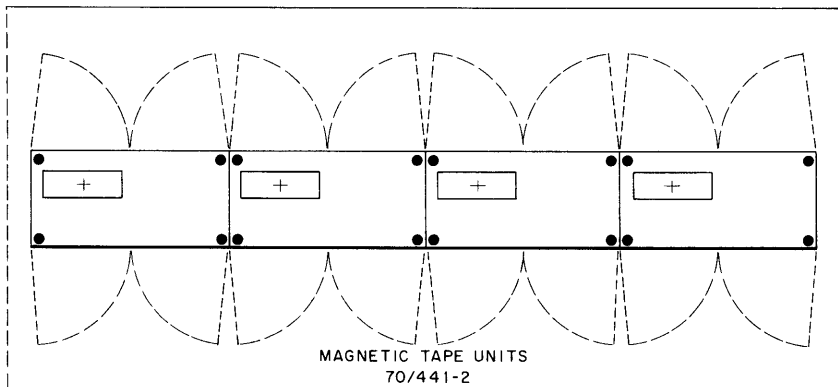
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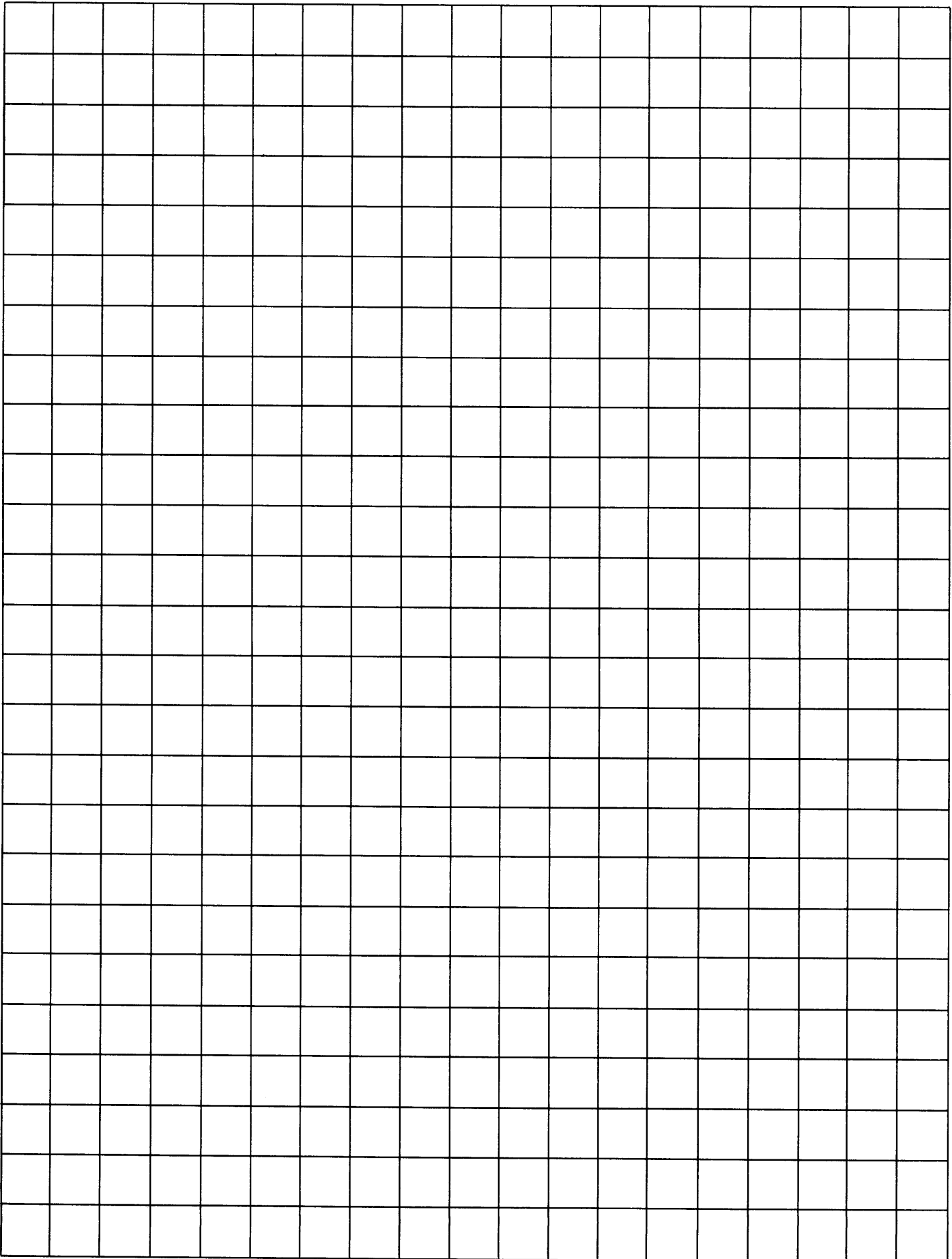
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EACH BLOCK EQUAL TO 18 1/4 INCHES

SCALE = 1/4" PER FOOT