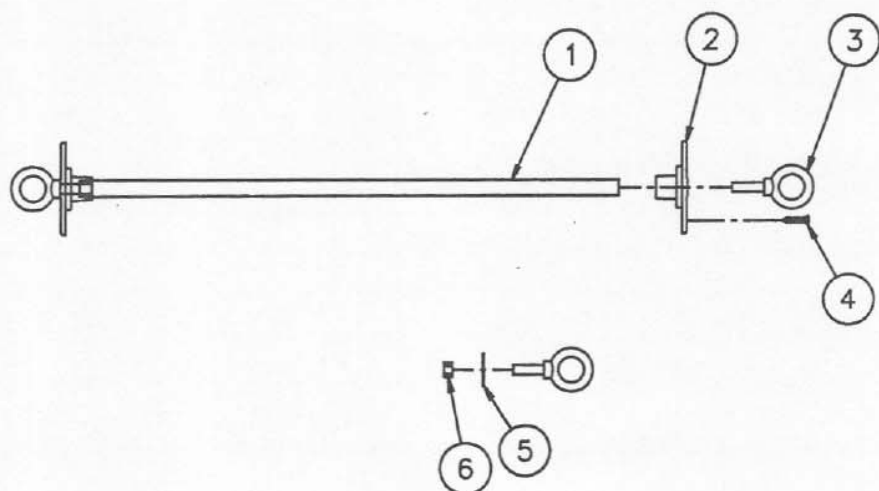


HSMT-1

Hanging System Kit



- Hangs MTH-1's and MTL-1's in either horizontal or vertical configurations
- Simple installation using common tools

Description

The HSMT-1 hanging system kit provides a certified and flexible method of suspending Electro-Voice MTH-1 and MTL-1 loud-speaker cabinets.

Equipment Required for Installation

- 3/4-in. socket wrench
- 9/16-in. wrench
- 44.5 mm (1-3/4 in.) hole saw
- 9.5 mm (3/8-in.) wood drill bit
- 2 mm (5/64-in.) wood drill bit
- #2 Phillips head screwdriver

System Weights

- MTH-1: 43.1 kg (95 lb)
- MTL-1: 70.3 kg (155 lb)

Introduction

In common with any suspension system, the HSMT-1 kit is only as strong as its weakest link. The installer must ensure the top mounting points have sufficient load bearing capability to safely suspend the cabinet(s). The initial support cables or chains should be as close to vertical as possible and never more than 30° from vertical. None of the chains or cables should touch or rub against the cabinets. Local codes and regulations, if they exceed Electro-Voice's recommendations, should be followed at all times.

Electro-Voice recommends that a safety factor of at least 5:1 should be adopted. It is the installer's responsibility to ensure the HSMT-1 system has been installed correctly. Electro-Voice strongly recommends that all suspended items be inspected at least once a year and any damaged parts be replaced immediately.

The HSMT-1 kit follows the principle of putting minimum stress on the cabinets and hanging each cabinet independently.

Suspending Electro-Voice MTH-1 and MTL-1 Stage Systems

The HSMT-1 kit allows both the MTH-1 and the MTL-1 to be suspended in a number of orientations. The main parts in the HSMT-1 kit are one steel tube and two oversized cast brackets into which commercial cold-forged eyebolts are screwed. Using these eyebolts, the cabinet is suspended with chain or aircraft

cable attached to the cabinet with suitably rated shackles or threaded chain connectors. The number of HSMT-1 kits needed is determined by which cabinet is being suspended and the orientation desired. The MTH-1 and the MTL-1 can each be suspended either vertically or horizontally.

Hardware

The hardware needed to suspend the MT-1's using the HSMT-1 kits are chains or aircraft cable, attached to the eyebolts using suitably rated shackles or threaded chain connectors. Eyebolts are the preferred method of connection with the cabinet.

If aircraft cable or wire rope is used, it is possible to use 3/8-16 bolts and washers to attach the cables to the brackets. If this method is used, a thimble must be used to protect the cable. Do not crush or distort the cable. Electro-Voice does not recommend this

CONTENTS

| Ref. No. | Part No. | Quantity | Description |
|----------|------------|----------|-----------------------------|
| 1. | 73573 | 1 | Aluminum Pipe |
| 2. | A-71112-FF | 2 | Hanging Bracket |
| 3. | 20499 | 3 | 3/8-16 Forged Eyebolt |
| 4. | 62978-CP | 6 | Screws #10 x 1 |
| 5. | 38871 | 1 | 3/8 Washer |
| 6. | 20645 | 1 | 3/8-16 Nylon Insert Locknut |
| 7. | 28346-02 | 2 | Insultube |

HSMT-1 Hanging System Kit

method for hanging multiple cabinets, but it can certainly be used to suspend single cabinets. It may also be used as a method to attach "pull-up" straps.

Pull-Up Point

Included in the HSMT-1 kit is one eyebolt for use as a "pull-up point" on the cabinet. When a single cabinet is suspended, the center of gravity is such that the cabinet is directed towards the ceiling. In order to provide a downward projection angle to aim the cabinet in the desired direction, a force must be applied to the "pull-up point" of the cabinet. When hanging two cabinets, as shown in Figures 2 and 4, the "pull-up points" on both cabinets must be used to aim each cabinet in the desired direction.

Strength Rating

If multiple cabinets are to be suspended, the eyebolts must be connected using suitably rated connectors such as shackles, thread chain connectors or aircraft cable.

Installation Instructions

1. Decide on the appropriate hanging method depending on the system used and the number of cabinets needed. Follow the templates on Figure 5, 6, 7 or 8, whichever is needed.
2. Use the 44.5 mm (1-3/4-in.) hole saw and the 9.5 mm (3/8-in.) drill bit to cut holes in the designated positions.
3. Slide the insulation over the aluminum pipes so that the insulation is centered on the pipe.
4. Screw the threaded tube firmly into the hanging bracket.
5. Pass the tube through the 44.5 mm (1-3/4-in.) hole in the cabinet.
6. Screw the remaining hanging bracket onto the exposed thread of the tube. Screw the bracket down firmly using a 3/4-in. socket wrench.
7. When tight, use the 2 mm (5/64-in.) drill bit to drill six holes into the cabinet through the holes in the hanging brackets.
8. Attach the hanging brackets to the cabinet using the six #10 wood screws.
9. Repeat steps 3-7, if needed for a second tube.
10. The "pull-up point" eyebolt is installed

in the cabinet through the 9.5 mm (3/8-in.) hole drilled in step 2. Using a 9/16-in. wrench, securely tighten the eyebolt with the 9.5 mm (3/8-in.) locknut from the inside of the cabinet. Be sure that the 3/8-in. washer is placed between the locknut and the cabinet.

- a) MTH-1 - horizontal or vertical - the input panel must be removed to install the washer and locknut.
 - b) MTL-1 - horizontal - the input panel must be removed to install the washer and locknut.
 - c) MTL-1 - vertical - the grille screen and lower woofer must be removed in order to install the washer and locknut.
11. Test that the cabinet does not leak from either the hanging bracket or the "pull-up point" by applying a sine-wave test signal to the system.

Number of Kits Needed

Two HSMT-1 kits are needed for the following:

- One MTH-1 - horizontal (see Figure 1)
- One MTH-1 - vertical (see Figure 1)
- One MTL-1 - horizontal (see Figure 3)

One HSMT-1 kit is needed for the following:

- One MTL-1 - vertical (see Figure 3)

A maximum of two MTH-1 cabinets can be suspended either vertically or horizontally.

A maximum of two MTL-1 cabinets can be suspended horizontally.

A maximum of one MTL-1 cabinet can be suspended vertically.

Four HSMT-1 kits are needed for the following:

- Two MTH-1's - horizontal (see Figure 2)
- Two MTH-1's - vertical (see Figure 2)
- Two MTL-1's - horizontal (see Figure 4)

Warranty (Limited)

Electro-Voice products are guaranteed against malfunction due to defects in materials or workmanship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option)

without charge. The product will be returned to the customer prepaid. **Exclusions and Limitations:** The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual; (c) malfunction resulting from use or operation of the product other than as specified in the product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than Electro-Voice Service or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a customer must deliver the product, prepaid, to Electro-Voice Service or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from Electro-Voice Service at 600 Cecil Street, Buchanan, MI 49107 (800/234/6831 or FAX 616/695/4743). **Incidental and Consequential Damages Excluded:** Product repair or replacement and return to the customer are the only remedies provided to the customer. Electro-Voice shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. **Other Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Electro-Voice Accessories are guaranteed against malfunction due to defects in materials or workmanship for a period of one (1) year from the date of original purchase. Additional details are included in the Uniform Limited Warranty statement.

For warranty repair, service information or a listing of the repair facilities nearest you, contact the service repair department at: 616/695-6831 or 800/685-2606.

For technical assistance, contact Technical Support at 800/234-6831 or 616/695-6831, M-F, 8:00 a.m. to 5:00 p.m. Eastern Standard time.

Specifications subject to change without notice.

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Figure 1—MTH-1 - view for single cabinet suspension - both vertical and horizontal

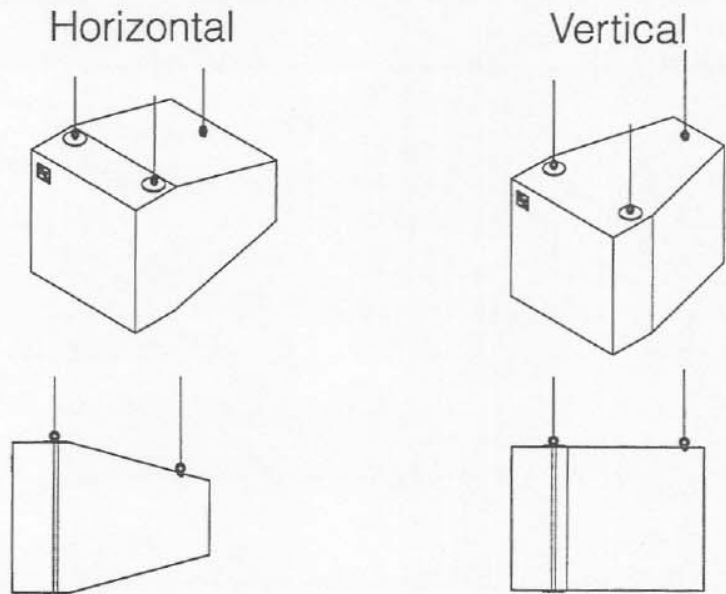
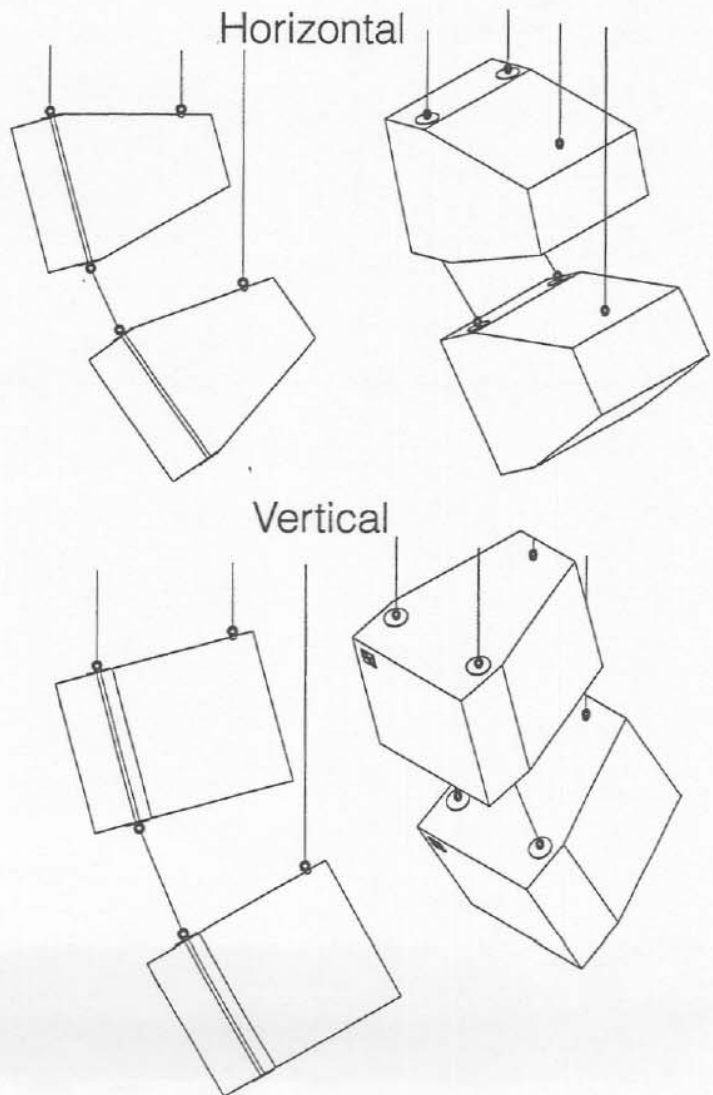
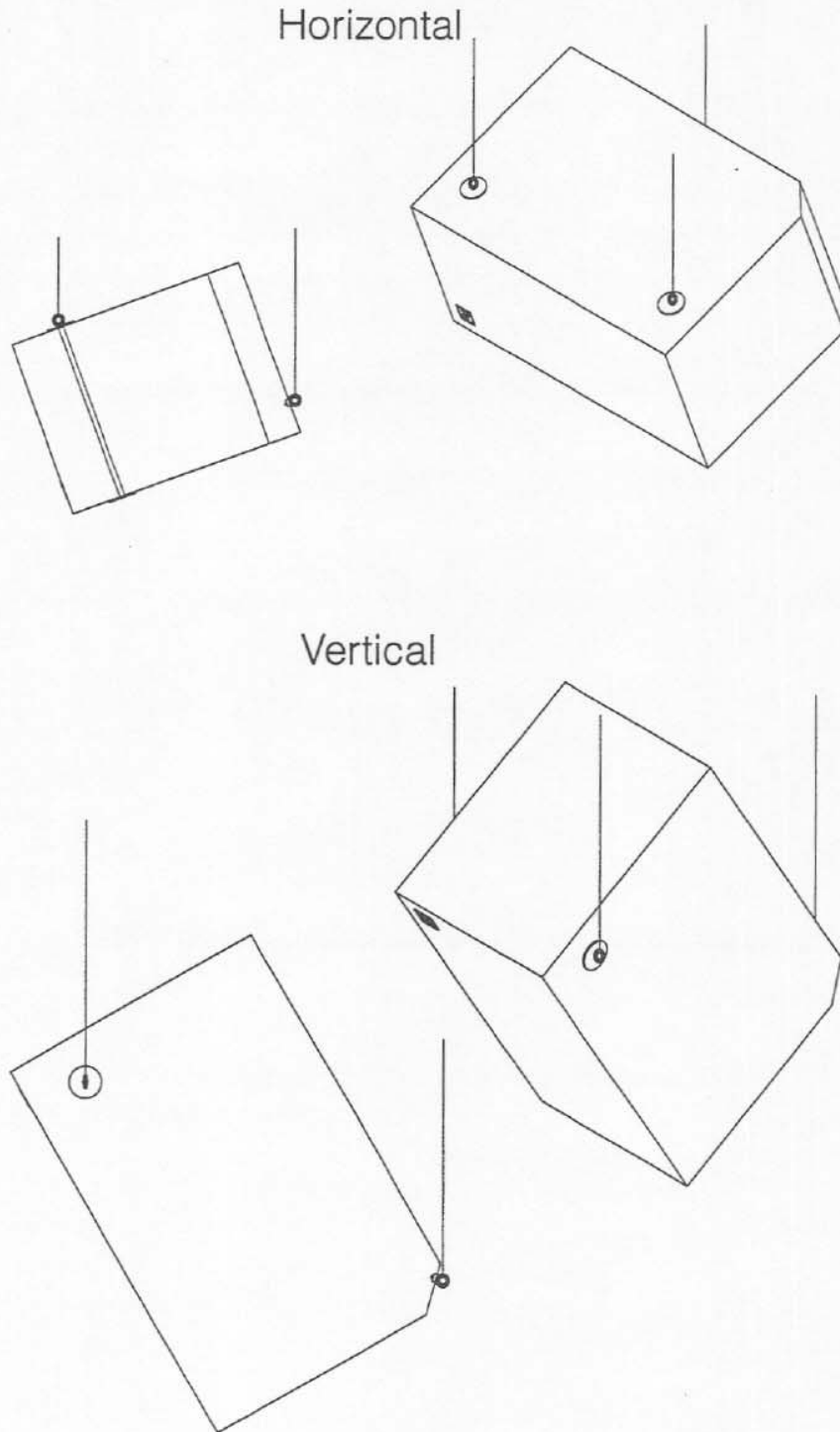


Figure 2—MTH-1 - view of multiple cabinet suspension - both vertical and horizontal



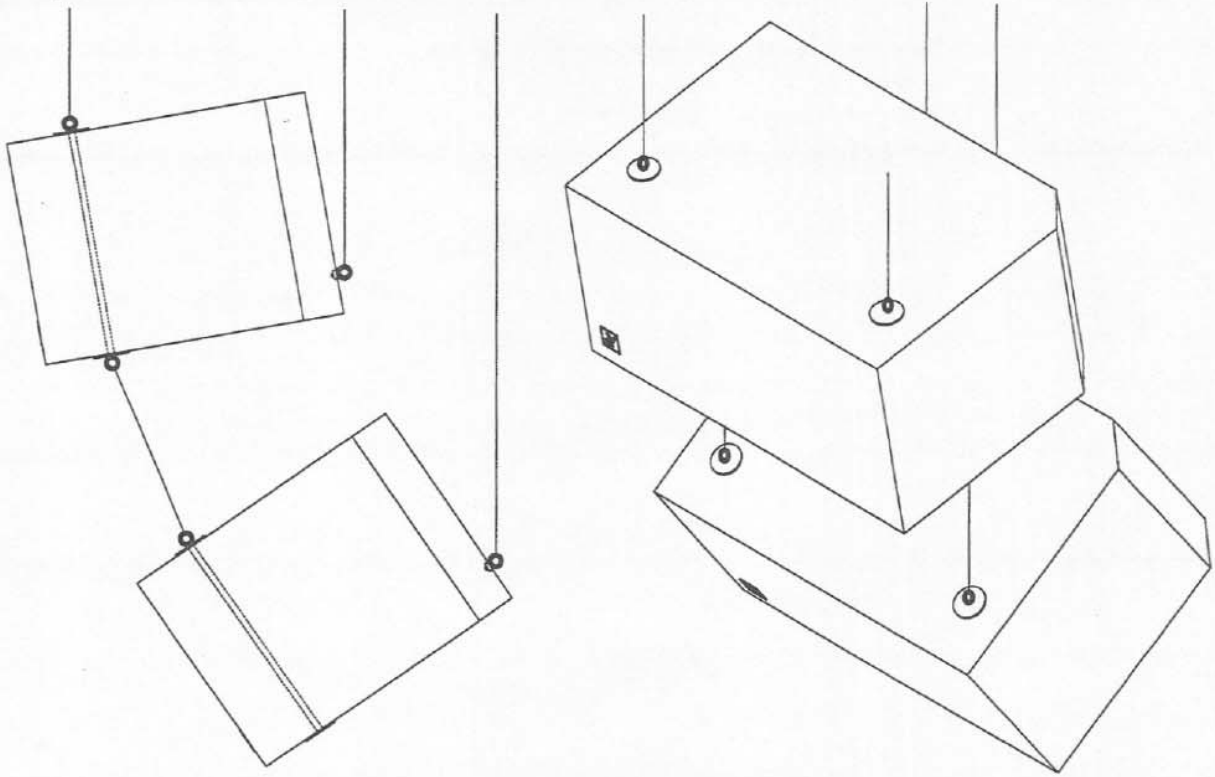
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Figure 3—MTL-1 - view for single cabinet suspension - vertical and horizontal



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Figure 4—MTL-1 - view for multiple cabinet suspension - horizontal only



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Figure 5—Hole locations for vertical MTH-1

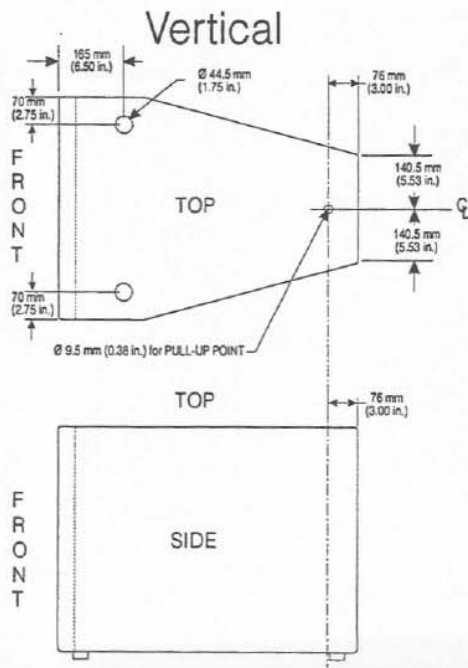
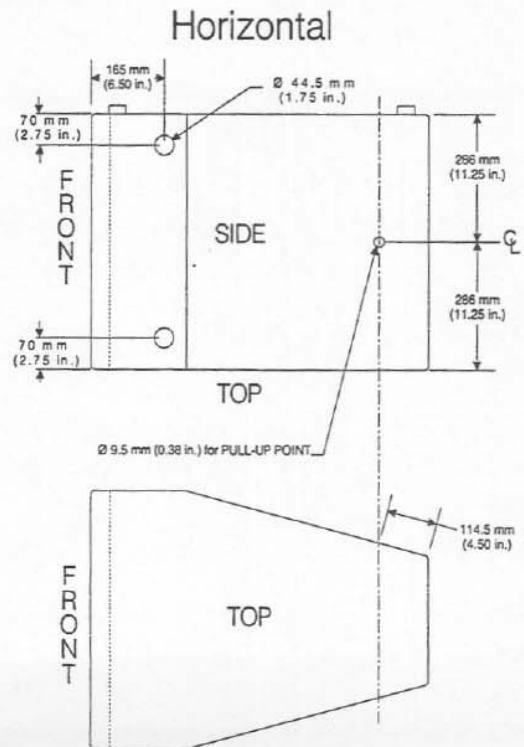


Figure 6—Hole locations for horizontal MTH-1



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Figure 7—Hole locations for vertical MTL-1

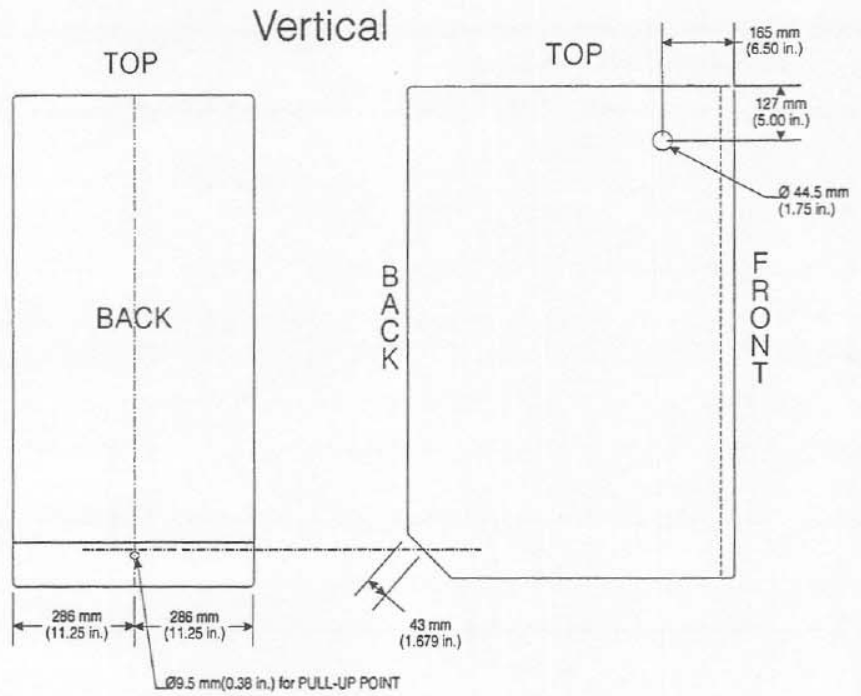
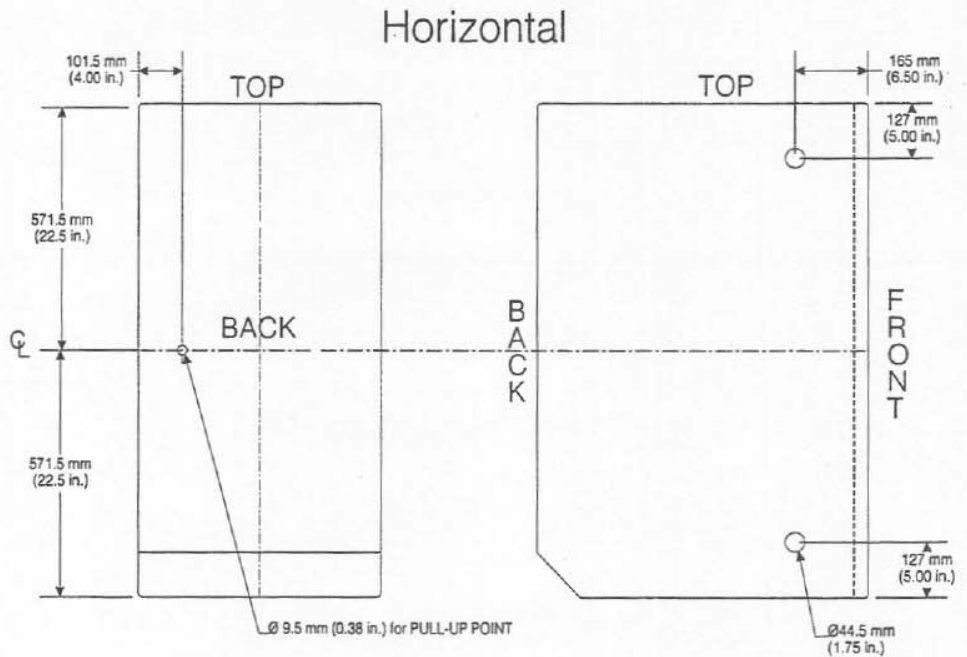


Figure 8—Hole locations for horizontal MTL-1



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