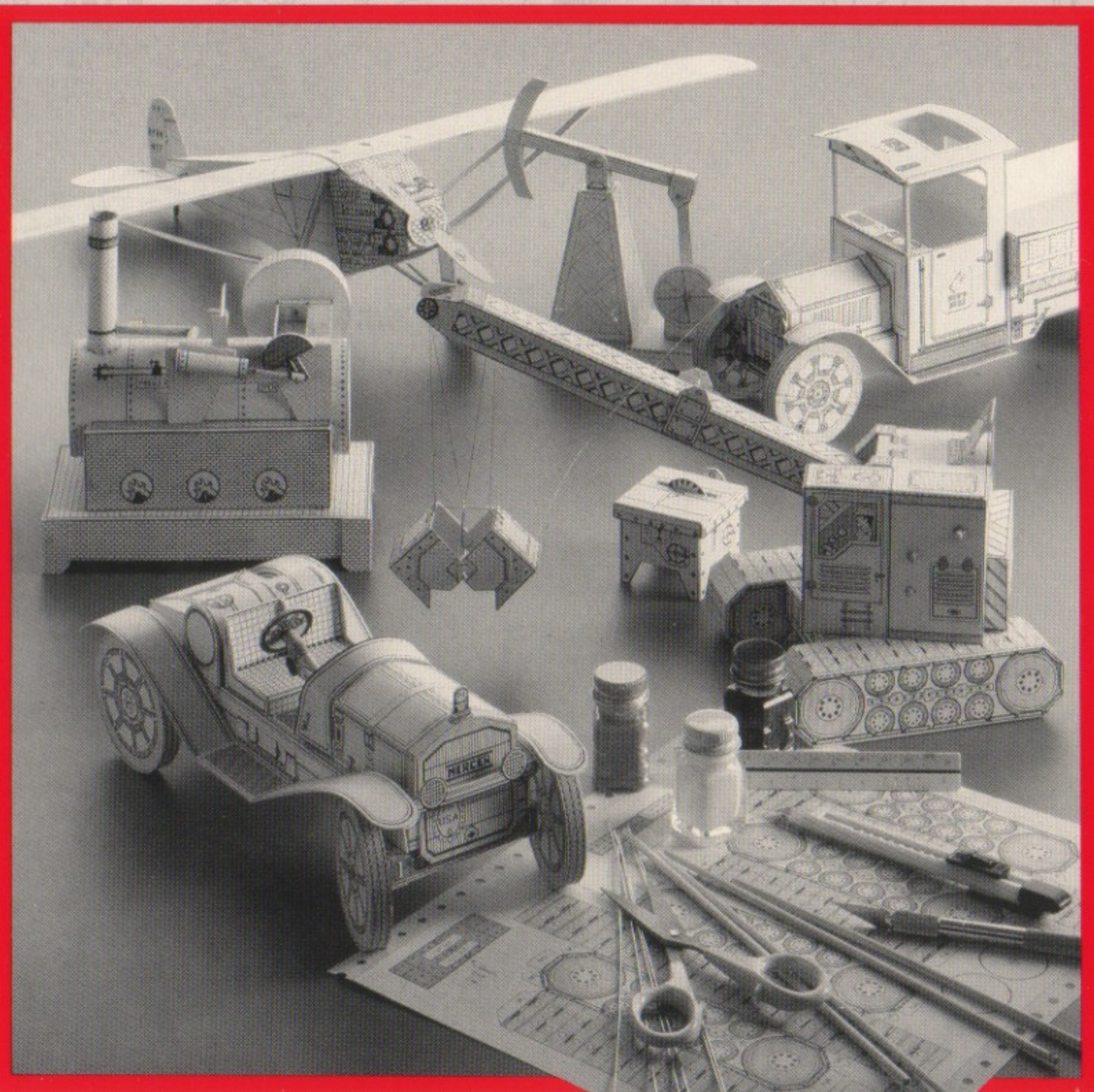


CREATIVE WORKSHOP SERIES™

the Toy Shop

Marvelous Mechanical Models That Really Work!



**Creative Concept and Toy Designs
by Active Arts**

FOR the APPLE, COMMODORE, IBM PC, and MACINTOSH

The Toy Shop™

**Creative Concept
and Toy Design
by Active Arts**

The Toy Shop™
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and Toy Design by
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NOTE: Various items and materials used in the construction of The Toy Shop's models and toys may cause injury to the user if directions are not followed carefully and correctly. Brøderbund Software recommends that an adult directly supervise usage by any minor who does not demonstrate an understanding of the safe use of these items and materials. The use of finished toys and models by small children should be supervised by an adult. Particular attention should be paid to safety notes and manufacturer's instructions when using super glue. The user shall use The Toy Shop at his own risk. Brøderbund assumes no liability whatsoever for injury caused by use of The Toy Shop.

For technical support on this or any other Brøderbund, call (415) 479-1170.

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Welcome to The Toy Shop, the program that lets you use your computer to produce marvelous mechanical models that really work!

The Toy Shop turns your computer and printer into a model-making workshop that never quits. The easy-to-use software generates assembly pieces, printed on ordinary computer paper, for building 20 different extraordinary, three-dimensional mechanical models and toys. Each one is ingeniously engineered and can be personalized and ornamented in hundreds of different ways. Want an antique carousel emblazoned with your name? A mechanical bank with your company logo? With The Toy Shop, all these and more can be yours.

You don't need to be an artist, an engineer, or a designer to create models with The Toy Shop. The menu-driven software allows you to choose, customize, and print out model designs with ease. The easy-to-follow assembly instructions guide you through the process of building a perfect model even if you've never done so before. Losing a model part or making a mistake that destroys an assembly piece is no problem because you can always print out another. The Toy Shop even includes an introductory supply of construction materials to help you get started on this fascinating new hobby.

Perhaps the best thing about The Toy Shop is that there's no limit to the number of models and toys you can make. Surprise your friends with trucks full of jelly beans, give mechanical banks to your entire office staff, supply your classroom or Scout troop with printouts for an assortment of favorites. Or build an entire collection just for yourself. Whichever models you choose, you're in for hours of satisfying fun. You'll be amazed at what you can produce with your computer, printer, The Toy Shop, and your own two hands!

Using this Manual

This User's Manual is divided into two main parts. PART I: SOFTWARE INSTRUCTIONS provides easy-to-follow instructions for using The Toy Shop program on your particular computer. PART II: CONSTRUCTION GUIDE gives step-by-step directions for building each of The Toy Shop's projects.

SOFTWARE INSTRUCTIONS is organized into two sections: "Getting Started" and "Using the Program." Each section contains specific instructions for using The Toy Shop with your particular computer.

Note: Be sure to read the sections written specifically for your computer. If the instructions sound funny, or don't seem to be working, double check to make sure that you're in the right place. After all, it's not likely that your Commodore speaks "IBMese"...

"Getting Started" tells you everything you need to know to start using The Toy Shop program. "Using the Program" tells you how to go about selecting, customizing, saving, and printing your models and toys.

Finally, the "Printer Tips" section gives you hints on how to produce the best possible printouts, plus trouble-shooting advice for when things don't seem to be working correctly. Reading this material carefully will save you time and trouble when you're dealing with

the crucial step of printing out your models and toys.

CONSTRUCTION GUIDE is the section to turn to after you've finished printing and are ready to roll up your sleeves and take construction tools in hand. This part of the manual is divided into three main sections.

The first, "Assembly Techniques," provides an overview of techniques to use when building The Toy Shop models and toys. Even though you're eager to start building, take the time to read through this section thoroughly. Good construction techniques will ensure that your model comes out looking great and working perfectly.

The second section, "Assembly Instructions," is organized alphabetically by toy name and gives you step-by-step instructions for building all of the projects in The Toy Shop. For each model or toy, you'll find:

- ☐ a photograph of the finished project
- ☐ a description of the model or toy
- ☐ an illustration showing customizing options
- ☐ a list of tools and materials you'll need
- ☐ construction diagrams
- ☐ step-by-step assembly instructions

The third section, "Index Sheets," provides reduced-size versions of

each printout for every model and toy, organized alphabetically by toy name. These index sheets tell you on what pages specific assembly pieces appear. If you need to replace a piece that is damaged or lost, you can check the index sheet section to find out which page to re-print.

The next-to-last section of the manual, BACKUP DISK INFORMATION, explains Brøderbund's backup disk policy and tells you how you can obtain backup disks for The Toy Shop.

The final section, WARRANTY INFORMATION, contains the warranty details for The Toy Shop.

Part I

Software Instructions

Apple II +, IIe, IIc

The Toy Shop Includes

- ☐ 3 disks: 1 Master program disk and 2 Toy disks
- ☐ User's Manual
- ☐ Adhesive-backed cardstock
- ☐ Wooden dowels
- ☐ Wire pieces
- ☐ Rubber stripping
- ☐ Cotton cord
- ☐ Balloons

Equipment You Will Need

Required

- ☐ 64K Apple II +, Apple IIe, or Apple IIc
- ☐ Disk drive
- ☐ TV or monitor (color optional)
- ☐ Printer (and printer interface for Apple II + and IIe) (Refer to The Toy Shop package for a list of printers that you may use with this program.)

Optional

- ☐ Second disk drive
- ☐ Joystick
- ☐ Blank disks for saving toys you customize
- ☐ Colored pinfeed paper

Starting the Program

Insert The Toy Shop Master disk in the disk drive, label side up (Side A), and close the drive door. Turn on your monitor and printer. Then turn on your computer. The program will load automatically.

Note: Be careful not to touch the exposed dark surface of The Toy Shop disk, or any other floppy disk you handle. Also, always make sure the red disk-drive light is off before either removing or inserting the disk.

Selecting Menu Items

In The Toy Shop, your options are presented in menu format. All of The Toy Shop's menus work in basically the same way.

To move from item to item on a menu, use the arrow keys or the joystick. The items will be highlighted, each in turn, as you move through them. (If you prefer, you can also use the < and > keys or the i, j, k, and m keys to move the highlighter.)

To select a highlighted item, press RETURN.

To go back through the menus or to return to a previous screen, press ESC.

In the Select Text and Print menus, once you select certain items you'll use the space bar to toggle options on and off.

Getting Started

Apple II +, IIe, IIc

Throughout this manual, the process of highlighting an item and then pressing RETURN is referred to as "selecting."

Prompts at the bottom of the screen will always remind you of how to make your selection.

System Setup

To make The Toy Shop work correctly with your particular system, you'll need to provide information about your printer, printer interface device (for Apple II + and IIe) and disk drive(s). You provide this information at the Setup Menu.

The first time you start up The Toy Shop program, you'll see a welcome message. Setup will be highlighted on the Main Menu. The program will prompt you to press RETURN to reach the Setup Menu. At the Setup Menu, you'll need to provide the following information:

Which printer are you using?

The Toy Shop will work with a number of different printers, but you need to indicate which model you are using. To do this, simply select the appropriate printer name from the list that appears on your screen.

Note: If you are using the DMP-85 printer (or any printer that is identical to the DMP-85), the SW1-7 switch must be closed in order for the printer to work with The Toy Shop.

Which printer interface are you using?

If you have an Apple II + or Apple IIe, you will need to indicate what type of printer interface card you are using. (If you have an Apple IIc, you won't see this question because the program will automatically select Apple IIc Serial Port.) Again, select the correct interface card from the list that appears on your screen. If you don't see your card name listed after reviewing all of the options, try using the "Epson APL" or "Orange Interface" setting. (Many cards work the same way as these cards do.)

Printer interface in which slot?

If you have an Apple II + or IIe, you'll need to indicate the number of the slot in which your printer interface card is installed. Select the correct slot number from the list on the screen. (If you are using an Apple IIc, the program will skip this question since the IIc has no user-accessible slots.)

How many disk drives?

The next screen will ask how many disk drives you will be using. Select the correct number. You can use The Toy Shop with only one disk drive, although having two disk drives makes things quicker and easier. On-screen instructions will vary depending on the number of drives you are using.

Apple II+, IIe, IIc

Testing Your Printer

Now you're ready to try a printer test to confirm that you've entered the correct setup information. First, make sure that your printer is ready: properly connected to your computer and printer interface, power on, and selected (on-line). Press RETURN to start the test. If you have entered the correct setup information, your printer should print out a welcome message and a symbol.

If nothing happens, press ESC to move back through the various setup screens so you can re-check the information you have provided. (If you find that you cannot ESC back, you'll have to restart the program.)

Note: If you change any setup information, you'll have to turn your printer off and then on again before repeating the printer test. In certain cases, you may have to restart your computer.

When you have completed a successful printer test, you should save the setup information to The Toy Shop Master disk. To do this, press RETURN. After the information is saved, you will be returned to the Main Menu where you can begin the process of choosing your first project.

Note: Once you have saved your setup information, it's a good idea to place a write-protect tab over the notch on your program disk.

You are now ready to turn to the "Using the Program" section of this manual to find out how to select, customize, and print out The Toy Shop models and toys.

Getting Started

Commodore 64 and 128

The Toy Shop Includes

- ☐ 3 disks: 1 Master program disk and 2 Toy disks
- ☐ User's Manual
- ☐ Adhesive-backed cardstock
- ☐ Wooden dowels
- ☐ Wire pieces
- ☐ Rubber stripping
- ☐ Cotton cord
- ☐ Balloons

Equipment You Will Need

Required

- ☐ Commodore 64 or 128
- ☐ Disk drive
- ☐ TV or monitor (color optional)
- ☐ Printer and, in some cases, printer interface (Refer to The Toy Shop package for a list of printers and interface devices that you may use with this program.)

Optional

- ☐ Joystick
- ☐ Blank disks for saving toys you customize
- ☐ Colored pinfeed paper

Starting the Program

Commodore 64

Insert The Toy Shop Master disk in the disk drive, label side up (Side A), and close the drive door. Then, in the following order, turn on your printer, your monitor, and your disk drive. Then — and only then — turn on your computer. When the blue BASIC screen appears, type in `LOAD "TS",8,1`. The red disk drive light will come on as the program loads into memory.

Commodore 128

Insert The Toy Shop Master disk in the disk drive, label side up (Side A), and close the drive door. Then, in the following order, turn on your printer, your monitor, and your disk drive. Then, while holding down the Commodore key, turn on your computer. (If your computer is already on and in the 128 mode, type `"GO 64"` and press RETURN.) When the blue BASIC screen appears, type `LOAD "TS",8,1`. The red disk drive light will come on as the program loads into memory.

Note: Be careful not to touch the exposed dark surface of The Toy Shop disk, or any other floppy disk you handle. Also, always make sure the red disk-drive light is off before either removing or inserting the disk.

Commodore 64 and 128

Connecting Your System

If you are using a printer other than the Commodore VIC-1525, Commodore MPS-801, or any other printer that attaches directly to the computer, you must use an interface device to connect your printer to your computer.

Note: The Commodore 1525 and MPS-801 printers, because of their lower print resolution, produce printouts of *The Toy Shop* models and toys that are not of the highest quality. In addition, the print time is considerably longer on these printers than on some other models. For best results, it is recommended that other printers listed on *The Toy Shop* box, with an interface device as necessary, be used with *The Toy Shop*.

Note: The Commodore 1526 and MPS-802 printers are not graphics printers and will not work with *The Toy Shop*.

Read the instructions that came with your printer interface carefully before attempting to connect it to your printer. Always make sure that you turn on your system components in the order recommended by the interface manufacturer or the computer manufacturer.

Note: If you are using a Tymac interface, it must have its switches set in "transparent mode." Other interface cards that are not mentioned on *The Toy Shop* box may work if they can be placed in "transparent mode."

Selecting Menu Items

In *The Toy Shop*, your options are presented in menu format. All of *The Toy Shop*'s menus work in basically the same way.

To move from item to item on a menu, use the < and > keys or the joystick. The items will be highlighted, each in turn, as you move through them. (If you prefer, you can also use the CRSR keys or the i, j, k, and m keys to move the highlighter.)

To select a highlighted item, press RETURN.

To go back through the menus or to return to a previous screen, press the back arrow key (←) located at the upper-left corner of your keyboard.

In the Select Text and Print Menus, once you select certain items you'll use the space bar to toggle options on and off.

Throughout this manual, the process of highlighting an item and then pressing RETURN is referred to as "selecting." Prompts at the bottom of the screen will always remind you of how to make your selection.

Getting Started

Commodore 64 and 128

System Setup

To make The Toy Shop work correctly with your particular system, you need to provide information about your printer. You provide this information at the Setup Menu.

The first time you start up The Toy Shop program, you'll see a welcome message. Setup will be highlighted on the Main Menu. The program will prompt you to press RETURN to reach the Setup Menu. At the Setup Menu, you'll need to provide the following information:

Which printer are you using?

The Toy Shop will work with a number of different printers, but you need to indicate which model you are using. To do this, simply select the appropriate printer name from the list that appears on your screen.

Testing Your Printer

Now you're ready to try a printer test to confirm that you've entered the correct setup information. First, make sure that your printer is ready: properly connected to your computer, power on, and selected (on-line). Press RETURN to start the test. If you have entered the correct setup information, your printer should print out a welcome message. If nothing happens, press the back arrow key to move back through the various setup

screens so you can re-check the information you have provided.

Note: If you do change any setup information, you need to turn your printer off. Depending on your system, you may also need to turn your computer off and restart the program so that you can turn your printer and computer on in the manufacturer's recommended order.

When you have completed a successful printer test, you should save your setup information to The Toy Shop Master disk. To do this, press RETURN. After the information is saved, you will be returned to the Main Menu where you can begin the process of choosing your first project.

Note: Once you have saved your setup information, it's a good idea to place a write-protect tab over the notch on your program disk.

You are now ready to turn to the "Using the Program" section of this manual to find out how to select, customize, and print out the Toy Shop models and toys.

IBM PC, XT, AT, PCjr

The Toy Shop Includes

- ☐ 3 disks: 1 Master program disk and 2 Toy disks
- ☐ User's Manual
- ☐ Adhesive-backed cardstock
- ☐ Wooden dowels
- ☐ Wire pieces
- ☐ Rubber stripping
- ☐ Cotton cord
- ☐ Balloons

Equipment You Will Need

Required

- ☐ 128K IBM PCjr, IBM PC, PC XT or PC AT (or 100% IBM compatibles)
- ☐ Disk drive
- ☐ PC DOS 2.0, or later (Only DOS 2.0 series can be used with PCjr.)
- ☐ Color/graphics card (not required for PCjr)
- ☐ TV or monitor (color optional)
- ☐ Printer (Refer to The Toy Shop package for a list of printers that you may use with this program.)

Optional

- ☐ Second floppy disk drive or hard disk drive
- ☐ Joystick
- ☐ Blank disks for saving toys you customize
- ☐ Colored pinfeed paper

Starting the Program

Start up your computer using your DOS disk. When you see the A> prompt, remove the DOS disk and replace it with The Toy Shop Master disk. Type TS and then press \leftarrow or ENTER.

Note to PCjr Users: The Toy Shop can be used on a 128K PCjr with DOS 2.0 series; DOS 3.0 and later cannot be used.

Note: Be careful not to touch the exposed dark surface of The Toy Shop disk, or any other floppy disk you handle. Also, always make sure the red disk-drive light is off before either removing or inserting the disk.

Installing DOS on Your Toy Shop Disk

You can install PC DOS (versions 2.0 to 3.1) on your Toy Shop Master program disk. (Only DOS 2.0 series can be used with PCjr.) Then you'll be able to start the program without having to use your DOS disk first. To install DOS using either a one- or two-drive system, follow the instructions below.

One-drive system:

- 1) Start up your computer using your DOS disk.
- 2) When you see the A> prompt, type SYS B: and press ENTER.
- 3) When you are prompted for the diskette for Drive B, insert The Toy Shop Master disk.

Getting Started

IBM PC,XT,AT,PCjr

4) When you are prompted for the diskette for Drive A, insert your DOS disk.

5) You will swap disks twice, ending up with your DOS disk in Drive A. When you see the A> prompt, type COPY COMMAND. COM B: and press ENTER.

6) When you are prompted for the diskette for Drive B, insert The Toy Shop Master disk.

7) When you are prompted for the diskette for Drive A, insert your DOS disk.

Two-drive system

1) Insert your DOS disk in Drive A and The Toy Shop Master disk in Drive B. Start your computer as usual.

2) When you see the A> prompt, type SYS B: and press ENTER.

3) When you see the A> prompt again, type COPY COMMAND. COM B: and press ENTER.

Note: If error messages appear, DOS has not been installed properly. Repeat the installation procedure, making sure that each disk is in the correct drive. Check to see that the disks have been inserted properly and that the drive doors are closed.

Selecting Menu Items

In The Toy Shop, your options are presented in menu format. All of The Toy Shop's menus work in basically the same way.

To move from item to item on a menu, use the arrow keys or the joystick. The items will be highlighted, each in turn, as you move through them. (If you prefer, you can also use the < and > keys or the i, j, k, and m keys to move the highlighter.)

To select a highlighted item, press \downarrow or ENTER.

To go back through the menus or to return to a previous screen, press ESC.

In the Select Text and Print menus, once you select a menu item, you'll use the space bar to toggle options on and off.

Throughout this manual, the process of highlighting an item and then pressing \downarrow or ENTER is referred to as "selecting." Prompts at the bottom of the screen will always remind you of how to make your selection.

Note to Joystick Users: The position of the joystick when the program starts up is used as the "center" position. You may readjust the center position at any time by first centering your joystick and then pressing CTRL-A (for adjust.)

IBM PC,XT,AT,PCjr

System Setup

To make The Toy Shop work correctly with your particular system, you'll need to provide information about your printer and disk drive(s). You provide this information at the Setup Menu.

The first time you start up The Toy Shop program, you'll see a welcome message. Setup will be highlighted on the Main Menu. The program will prompt you to press ENTER to reach the Setup Menu. At the Setup Menu, you'll need to provide the following information.

Select Printer:

The Toy Shop will work with a number of different printers, but you need to indicate which model you are using. To do this, simply select the appropriate printer name from the list that appears on your screen.

Note: If you are using a DMP-85 printer (or any printer that is identical to the DMP-85), the SWI-7 switch must be closed to work with The Toy Shop.

Choose Data Drive:

The next screen will ask you to indicate which drive you plan to use for your data disk. Select "A," "B," or "Hard Disk." On-screen instructions will vary depending on the number of drives you are using.

Set Monitor:

You also must indicate if you are using an RGB monitor. Select "yes" if you are using an RGB monitor; select "no" if you are using any other type of monitor.

Testing Your Printer

Now you're ready to try a printer test to confirm that you've entered the correct setup information. First, make sure that your printer is ready: properly connected to your computer, power on, and selected (on-line). Press ← or ENTER to start the test. If you have entered the correct setup information, your printer should print out a welcome message and a symbol. If nothing happens, press ESC to move back through the various setup screens so you can recheck the information you have provided.

Note: If you change any setup information, you'll have to turn your printer off and then on again before repeating the printer test. Depending on your system, you may have to turn your computer off and then restart the program.

When you have completed a successful printer test, you should save the setup information to The Toy Shop Master disk. To do this, press ← or ENTER. You will then be returned to the Main Menu where you can begin the process of choosing your first project.

Getting Started

IBM PC,XT,AT,PCjr

Note: Once you have saved your setup information, it's a good idea to place a write-protect tab over the notch on the Master disk.

Note: If you have a local area network (LAN) card installed in your computer, The Toy Shop may be prevented from printing properly. You may be able to correct the problem if you redirect your LAN printer from LPT1 to LPT2.

Hard Disk Installation

To install The Toy Shop on your hard disk, start up your computer as usual. Place The Toy Shop Master disk in drive A. When you see the A> prompt, type TSINSTALL and press ENTER. You will now be provided with the path name that will take you to the directory that is currently active on your hard disk drive. If this is where you want The Toy Shop to be copied, simply press ENTER. If you want The Toy Shop to be copied into another existing directory, use the back-space key to delete the path name you've been given and then type in the path name of the existing directory you want. As an example, C:\TS is a path name. The C: indicates the hard disk drive. The back slash (\) indicates that a subdirectory name is next. The name of the subdirectory (TS) follows the back slash. For instructions on how to create a new

directory, see your PC DOS manual.

You may have one copy of The Toy Shop on your hard disk at a time. If you want to move The Toy Shop to a different directory, first remove The Toy Shop from your hard disk (see instructions below) and then re-install into the directory of your choice.

Note: To allow for hard disk failure, The Toy Shop lets you copy the program onto your hard disk four (4) times. If you are experiencing repeated hard disk failures, see your hardware dealer.

Removing The Toy Shop from Your Hard Disk:

If you want to move The Toy Shop to another directory or if you plan to format your hard disk, you must first remove or "uninstall" The Toy Shop from the hard disk. To do this, place The Toy Shop Master disk in drive A. At the A> prompt, type TSBACKUP. Highlight the "Remove from Hard Disk" option and press ENTER. Check to see that the path name that appears on your screen is correct and will take you to the directory where The Toy Shop is installed.

Note that when you remove The Toy Shop from your hard disk, you will "recover" one of the four opportunities you are given to copy it onto a hard disk. In other words, if you have already copied the program twice, and you "uninstall" it, three (rather than two) oppor-

IBM PC,XT,AT,PCjr

tunities to copy the program will remain.

Note: If the program you use to compact or "crunch" files on your hard disk follows the usual DOS rules for relocating files, you do not need to remove The Toy Shop prior to crunching. Contact the manufacturer of your crunch program to find out if this applies to your situation.

You are now ready to turn to the "Using the Program" section of this manual to find out how to select, customize, and print out the Toy Shop models and toys.

Getting Started

Macintosh

The Toy Shop Includes

- ☐ 3 disks: 1 Master program disk and 2 Toy disks
- ☐ User's Manual
- ☐ Adhesive-backed cardstock
- ☐ Wooden dowels
- ☐ Wire pieces
- ☐ Rubber stripping
- ☐ Cotton cord
- ☐ Balloons

Equipment You Will Need

Required

- ☐ Macintosh, Macintosh Plus, or Macintosh XL with a mouse
- ☐ Printer (ImageWriter, ImageWriter II, Scribe—single color printing modes only—or any completely ImageWriter-compatible printer)

Optional

- ☐ External disk drive
- ☐ Blank disks for saving toys you customize
- ☐ Colored pinfeed paper

Starting the Program

If your computer is off: Turn your computer on, insert The Toy Shop Master disk in the internal disk drive and follow the on-screen prompts.

If your computer is on: Eject any disks currently in the drive. Press the reset button on the left-hand side of your computer. If your computer doesn't have a reset button, turn the power off and then on again. Insert The Toy Shop Master disk in the internal drive and follow the on-screen instructions which will prompt you to insert Toy disks at the appropriate time. When you select a toy to build — or as you review the toys in The Toy Shop's catalog — you will be prompted to insert Toy disks as necessary to load the complete toy files.

Note: You can load all files at once by using an optional start-up procedure: Insert The Toy Shop Master disk, holding down the Option key until the Menu Bar appears. The program will prompt you to insert Toy disks at the appropriate time. Because of the quantity of data being loaded into memory, this process will take several minutes to complete. You may prefer this start-up procedure if you know that you want to browse through all the toy files in The Toy Shop catalog.

Note on Backing Up: If you are working from a backup copy — on either a hard disk or separate 3.5-inch disks — then the program will prompt you to insert the original Toy Shop Master disk as a "key" to start the application. This "key" disk will be ejected, and the program will run from your backup copy.

Macintosh

Using the Macintosh

If you've been using other Macintosh programs, The Toy Shop's operation should seem familiar to you. Study your Macintosh owner's guide if you have questions about how the Macintosh works. If you'd like a brief refresher, read the following explanations of some Macintosh terms and features that you'll be using with The Toy Shop.

Pointer

The small black arrow you use to "point" at things on the screen. You move the pointer by moving your mouse — the interface device that comes with the Macintosh — on your desktop or optical mouse pad.

Mouse Operation

1. Clicking: Clicking is used to select items that appear on the screen. To click, position the pointer over the item you want, then press and quickly release the mouse button.
2. Pressing: Pressing and holding the mouse button causes a continuous action. To press, position the pointer where you want it, then hold the mouse button down. Press the arrows at the top or bottom of the scroll bar to scroll.
3. Dragging: Move items from one place to another on the screen by "dragging" them. To do this, position the pointer over the item you want to move, then press the mouse button. Holding the button down, "drag" the item to its new

location. When the item is placed where you want it, release the mouse button.

Buttons

Circles or rectangles with labels on them. When you want to perform the action or select the item described by the label, click the button with the mouse. Buttons and other items that are grayed-out cannot be used.

Menu Bar

The white strip across the top of your screen. The title of each menu is written on the menu bar. You choose from a menu by positioning the pointer on the menu title, then dragging to the command you want and releasing.

□ Apple Menu:

Provides access to desk accessories. Some desk accessories particularly useful with The Toy Shop are:

CatchPaint

Lets you capture graphics created with MacPaint to use as Toy Shop graphics.

Scrapbook

Lets you store graphics for later use.

□ File Menu:

Load . . .

Lets you load a customized model or toy from a separate data disk.

Save . . .

Lets you save a customized model or toy to a separate data disk.

Macintosh

Quit . . .

Lets you leave The Toy Shop and return to the Finder. If you've made changes to a model or toy, you'll be reminded to save the changes before quitting.

☐ Edit Menu:

Undo

Undoes your most recent action.

Cut

Removes selected paint pattern, decal, or text and places the selection on the Clipboard.

Copy

Copies selected paint pattern, decal, or text to the Clipboard.

Paste

Replaces the current selection with the contents of the Clipboard.

Clear

Clears the current selection.

Dialog Boxes

In many cases, when you select an item, a dialog box will appear on the screen. In some dialog boxes, you click buttons to change or confirm choices; other boxes simply provide information. When you have finished making selections in a dialog box, click "Okay" to signal that you are done. Click "Cancel" to return to where you were without taking any action.

Scroll Bars

Scroll bars let you view all the contents of a window when those contents are too long to fit on the screen. Arrows are located at the ends of a scroll bar. The area

between the arrows represents the full window; the scroll box located on the scroll bar represents the portion of the window that you see on the screen. You can view different areas of the window by scrolling:

1. To scroll slowly, click one of the arrows.
2. To scroll continuously, press one of the arrows.
3. To scroll more quickly, click the area between the arrows or drag the scroll box to a new position.

You are now ready to turn to the "Using the Program" section of this manual to find out how to select, customize, and print out the Toy Shop models and toys.

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Overview

The Toy Shop lets you use your skill and creativity in a variety of ways. If you can't wait to roll up your sleeves and start building, you can simply select the model you want to make and print the assembly pieces out just as The Toy Shop designers designed them. With just a few keystrokes you'll be on your way to building a model that will look as good as any in this book. If you want a more in-depth, creative involvement with your project, you can take advantage of The Toy Shop's extensive customization options to design a model that's uniquely yours. Models you have customized can be saved to a separate data disk and used again and again.

Customizing options include "paints" (flood-fill patterns used on various areas of a model), "decals" (graphic decorations), and text. Each model has its own range of customizing options. If you choose to customize, you can work on one or all of the options available for that model.

Customizing can be as simple or as complex as you wish to make it. The Toy Shop contains nearly 40 different paints and a wide variety of decals that can be chosen at the touch of a key. If none of these strikes your fancy, you can take the process a step further by editing existing paint patterns and decals, or creating your own from scratch. On most of the models, you'll also

be able to add personalized text in a variety of different fonts and type styles.

When it's time to print, The Toy Shop will direct your computer and printer to produce your model pattern precisely as you've designed it. Then you'll be ready to turn to the Construction Guide section of this manual and build the model you've chosen and designed.

Note: *The Toy Shop produces toy patterns that are extremely detailed and printed in the highest resolution that your printer allows. They are likely to be more detailed and complex than any printouts you have previously produced with your printer. Printing The Toy Shop's elaborate patterns can take considerably longer than printing simple, lower resolution graphics and text. The extra time required should seem worth it, however, when you see how wonderfully detailed and ornamented your Marvelous Mechanical Model will be.*

The entire process begins at The Toy Shop's Main Menu.

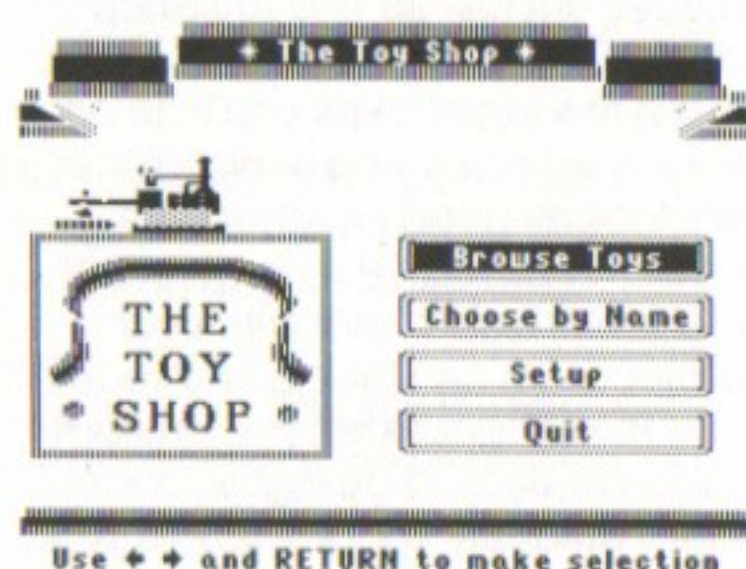
Main Menu

The Toy Shop's Main Menu, which will appear following the title screen, contains four options: Browse Toys, Choose by Name, Setup, and Quit. You select options by following the instructions for

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your particular computer. If you need a reminder of how to do this, check "Selecting Menu Items" under the "Getting Started" section for your computer or simply follow the prompts at the bottom of the screen.



Browse Toys

The Browse Toys option lets you browse leisurely through all of the models and toys included in The Toy Shop. If you select this option, a picture and description of each model or toy will appear on the screen. The models are arranged in alphabetical order (the same way they are arranged in the Construction Guide section of this manual). You can browse through the entire collection of models, moving forward or backward as you choose.

Browsing is a good way to get acquainted with the models and toys available in The Toy Shop. You may want to turn to the assembly instructions for each model as you browse. That way you'll get an idea of what materials you'll need, how difficult the model may be to build,

and so on. If you decide you want to build one of the models you see, simply press RETURN or ENTER to select the model.

Choose by Name

If you're in a hurry, this option is for you. Choose by Name takes you directly to an alphabetical listing of all the models and toys included in The Toy Shop. Use the highlight bar to move through the list. When you reach a model you would like to see, press RETURN or ENTER. A picture and description of the model will appear on your screen. If this is the model you want to build, select it by pressing RETURN or ENTER. If you want to go back to the list to look for a different model or toy, press ESC (Commodore users press the back arrow key) and then go through the process again.

Setup

The Setup option lets you change or re-check your setup information. Selecting this option at any time after you've entered your initial setup information will take you to a screen showing your current setup: If you want to change any of the information you see, select "Yes." If you want leave the setup as is, select "No." Selecting "No" will return you to the Main Menu; selecting "Yes" will take you through the setup options. You can then make any changes you need (for instance, changing the name of your printer if you've gotten a new one) and then save the new information to The Toy Shop Master

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disk. If you need help, see the "System Setup" section for your computer.

Note: Remember to take the write-protect tab off the Master disk before trying to save new setup information. Once the information has been saved, replace the write-protect tab.

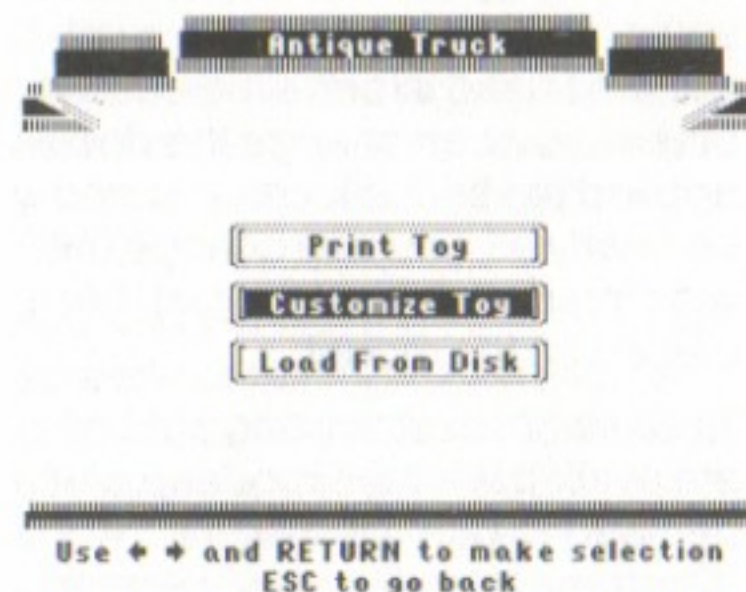
Quit

The Quit option lets you exit The Toy Shop and start up another program without turning off your computer.

Selecting a Model or Toy

You can select models or toys using either the Browse Toys or the Choose by Name options described above.

Once you've made your selection, you will be given three choices: Print Toy, Customize Toy, and Load From Disk.



Print Toy

Each model and toy in The Toy Shop comes with carefully chosen, pre-set paint patterns, decals, and text. If you choose Print Toy, you will be taken directly to the Print Menu, bypassing all of the menus offering customizing options. Your model will be printed out with the paints, decals, and text chosen by The Toy Shop's designers.

Print Toy is a good way to get started right away with your model building. It's quick and easy, and you'll be guaranteed a good-looking model every time. If you decide to use Print Toy, you can skip the following section on customizing and go directly to the "Printing Your Model or Toy" section of this manual.

Customize Toy

If you choose Customize Toy, you'll be able to change paints, decals, and text to make a model or toy that's uniquely yours. A complete discussion of The Toy Shop's customizing options and how to use them is contained in the following section on "Customizing Your Model or Toy."

You may also use the Customize Toy option to preview the designer-chosen paints, decals, and text that come with the model you've decided to build. If you choose Customize Toy, you will be taken through a series of screens showing all the customizing options available for your model, plus the designer-chosen paints, decals, and text that will be printed

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on your model if you don't make any changes. To move from one screen to the next, simply select "Done" at the bottom of each screen. When you are through previewing all the customizing options, you can then print the toy (in which case it will turn out exactly as it would if you had selected the "Print Toy" option above) or you can customize it by going back through the screens to reach whatever options you want to change. To go back, press ESC.

Load From Disk

This option allows you to load a previously saved customized model or toy from your own data disk. On-screen prompts will guide you through the loading process. For how to save your customized models, see "Save Toy" under "Printing Your Model or Toy."

Customizing a Model or Toy

Each model or toy has different customizing options available. On some, you can change the paint patterns used in certain areas; on others, you can change the decals applied to various locations; and on nearly all, you can change the wording and style of the text that is placed on the model.

To see what customizing options are available for the model you've decided to build, turn to the "Customization Options" page at the beginning of the Assembly

Instructions section for your model. The "Customization Options" illustration indicates where the paint patterns, decals, and text will go. By studying the illustration, you'll get an idea of what you may want to change. You'll also be able to judge what kinds of paint patterns, decals, and text would be most appropriate for the areas you plan to customize.

When you're ready to start customizing your model, select Customize Toy from the options that appear on the screen after you've made your model selection. You will then be taken through a series of screens showing the customization options available for the model you've chosen. These screens will show you the pre-set paints, decals, and text chosen by The Toy Shop's designers. You can change any or all as you choose. Options that do not apply to the model you've selected will not appear on your screen.

Detailed instructions for using all of The Toy Shop's customization options are provided below.

Paints

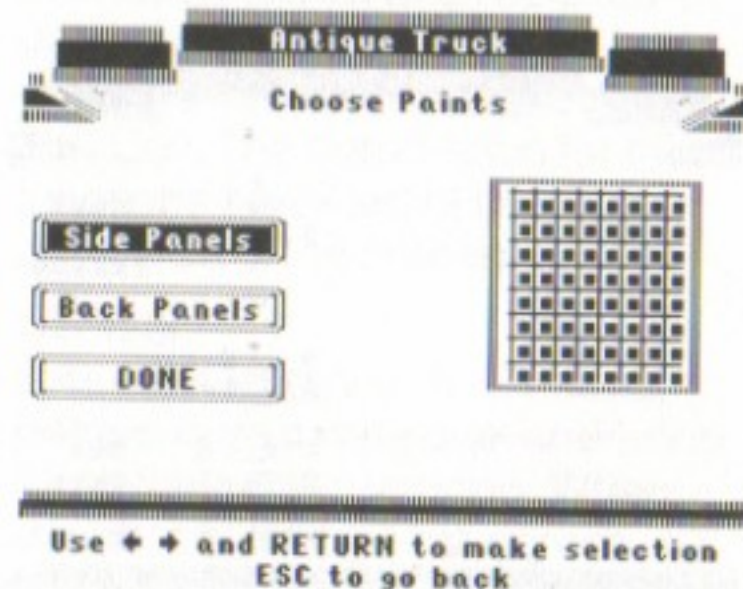
Paints are flood-fill patterns that you can apply to designated areas of a model. The Toy Shop includes nearly 40 different paint patterns that can be used as is or edited in any way you want. You can also create your own paint patterns entirely from scratch. Patterns that you edit or create can be saved to

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a separate data disk so that you can use them again on any number of toys.

Choosing Paints

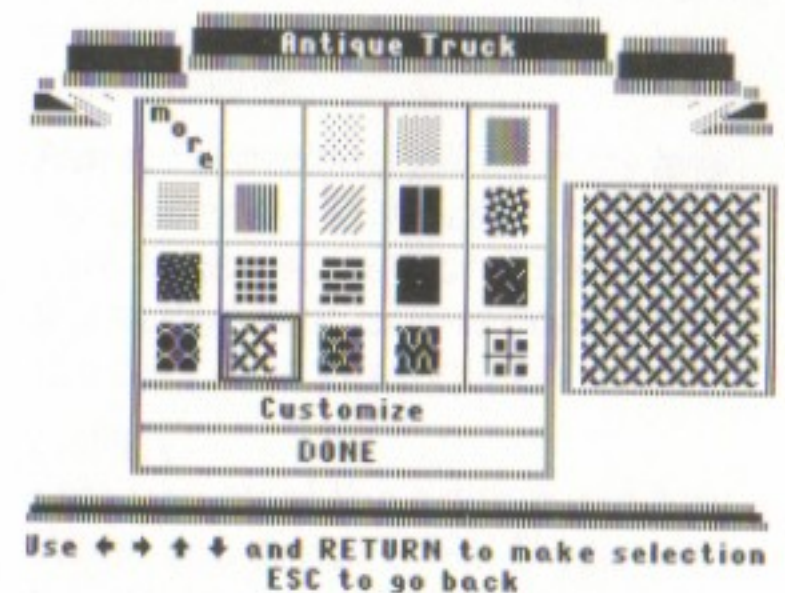
When you decide to customize a model that has paint options available, you will be presented with a Choose Paints screen listing the areas that can be "painted." A box at the right of the screen shows the pre-set paint pattern for the highlighted location. As you move the highlighter, the pattern in the box will change to show the pattern that is pre-set for the new highlighted location.



If you want to change a paint pattern, move the highlighter to the name of the location you want to work on and press RETURN or ENTER.

You will now see the Paint Choices screen containing a grid with 19 different paint patterns. To the right of the grid is a Preview Box showing how a paint pattern will look when it is spread over a larger area. More paint patterns are contained on a second screen and

can be viewed by moving the highlighter (in this case, a square outlining one of the paint patterns in the grid) to the "More" box in the upper left-hand corner. Select "More" and you will see the second screen of paint patterns.



To view and then select a paint pattern, highlight the pattern you want. Press RETURN or ENTER and the pattern will appear in the Preview Box. If you decide to use that pattern, highlight "Done" and press RETURN or ENTER.

If you'd like to view another pattern, move the highlighter to the new pattern, press RETURN or ENTER and the pattern will appear in the Preview Box. You can continue to preview patterns until you find one that you like. Then select "Done" and you will be returned to the Choose Paints screen where you can choose another area to work on, or move on to the next available customizing option.

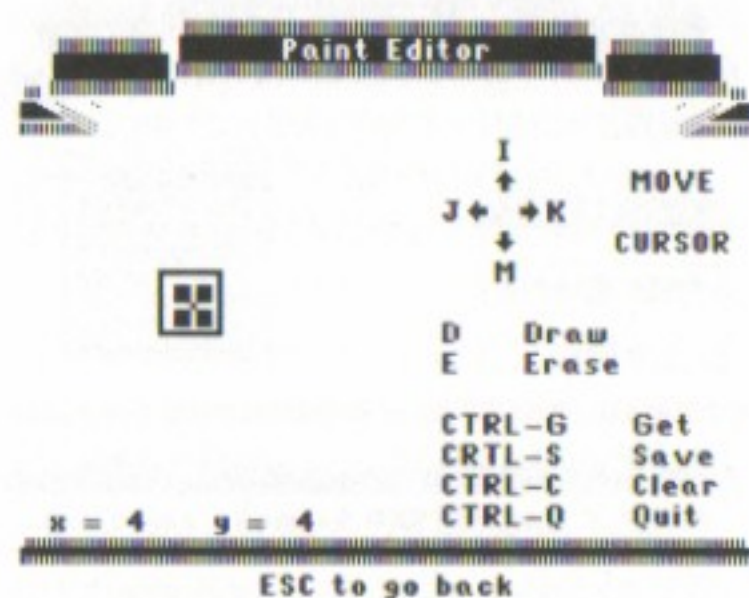
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Editing Paints

You can edit an existing paint pattern, changing it in any way you want, by using The Toy Shop's Paint Editor.

To reach the Paint Editor, first select the paint pattern you want from the Paint Choices screen. Then highlight "Customize" and press RETURN or ENTER. You will now be given three choices: Edit Existing, Create Your Own, and Load From Disk. Select "Edit Existing." This will take you to the Paint Editor. The pattern you have selected will be in the editing window.



You can edit the pattern displayed in the editing window by drawing and erasing lines or portions of lines, using either your keyboard or a joystick.

Note: The editing window is 8-by-8 pixels in size. (A pixel is a picture element, a single dot on your computer screen.) This is the standard size of all the paint patterns included in The Toy Shop.

If you want to see how the pattern will look when spread over a larger area, quit the Paint Editor (see CTRL-Q below) and return to the Paint Choices screen. The pattern, with all the changes you've made, will be displayed in the Preview Box.

Drawing and erasing

If you are using your keyboard, move the cursor (the flashing square in the editing window) by using the cursor movement keys indicated at the right-hand side of the screen. When the cursor is positioned where you want it, press D to draw a dot. To erase a dot, position the cursor over the dot and press E.

If you are using a joystick, move the cursor by moving the joystick lever up, down, left, or right. One of the two joystick buttons acts the same as the D key; press it and a dot will be drawn. The other joystick button acts the same as the E key; press it and a dot will be erased. You may draw and/or erase in a continuous line by holding down the appropriate button while moving the joystick lever.

(Note for Commodore users: Your joystick must be connected to Control Port #2. Move the cursor by pushing the joystick lever up, down, left, or right. To draw, press the D key to set the drawing mode. Then press the joystick button to draw a dot. To erase, press the E key to set the erase mode. Then use the joystick button to erase.

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You may draw and/or erase in a continuous line by holding down the button while moving the joystick lever.)

X and Y coordinates beneath the editing window show the numerical position of the cursor. The X coordinate refers to the vertical column in which the cursor is placed; the Y coordinate refers to the horizontal line.

Other Paint Editor functions

In addition to letting you edit a paint pattern by drawing and erasing dots and lines, the Paint Editor lets you Get paint patterns previously saved to a separate data disk, Save the paint pattern you are currently editing, Clear, and Quit. The commands for these functions are listed at the right-hand side of the screen.

CTRL-G

Lets you Get a previously saved pattern from a data disk and bring it into the editing window. When you press CTRL-G, on-screen prompts will guide you through the process of getting the pattern you want. Note that only patterns created with The Toy Shop's Paint Editor can be retrieved and brought into the editing window.

CTRL-S

Lets you save the pattern currently in the editing window to a separate data disk. To save a pattern, you will need a blank (or previously formatted) data disk. Be sure to have one on hand before you begin. You will also need to name

your pattern. Think of a descriptive name, then follow the on-screen prompts to format your disk (if required) and to save your pattern. (Note: PCjr. users must have a previously formatted disk.) The saved pattern can be used on future models as well as appearing on the one you are currently customizing.

Note: *Formatting will destroy any data already on the disk, so be sure to use a blank or previously formatted disk, or one containing data you no longer need.*

CTRL-C

Lets you clear the editing window. When you press CTRL-C you will be asked if you are sure you want to clear. If you answer "yes," the editing window will be completely cleared. The paint pattern and all the changes you've made to it will be gone. To get the original pattern back you will have to go through the process of selecting the pattern at the Paint Choices screen and bringing it into the Paint Editor all over again. If you answer "no," the editing window will not be cleared. The pattern and all the changes you've made will remain intact.

CTRL-Q

Lets you quit the Paint Editor and return to the Paint Choices screen. The pattern you have been editing will be displayed, with all your changes, in the Preview Box. If you are satisfied with the way your edited pattern looks, select "Done." The program will store

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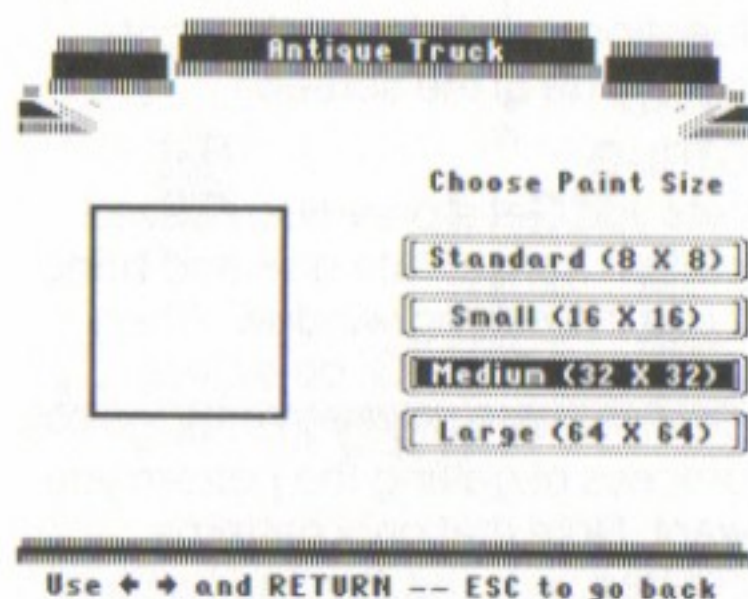
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your paint pattern, ready to be printed on your model when you're all finished customizing.

If you're not satisfied, you can continue to work on your pattern by selecting "Customize" and then choosing "Edit Existing" from the list that appears on the screen. You will be returned to the Paint Editor where you can continue to work on your pattern.

Creating Paints

In addition to editing existing paint patterns you can create your own patterns from scratch. To do this, select "Customize" from the Paint Choices screen. Then select "Create Your Own" from the list of choices you are given.



You will now be asked to choose the size of the pattern you want to create. Sizes range from Standard — 8-by-8 pixels, the size of all the paint patterns included in The Toy Shop — to Large (64-by-64 pixels). In choosing the size of your paint pattern, let the size and shape of the area to be "painted" guide you.

Generally speaking, smaller areas call for smaller size patterns while larger areas can accommodate both small and large patterns. Study the "Customization Options" illustration for your model and decide what size pattern you think would work best. Select the size you want. You will then be taken to the Paint Editor.

Creating a paint pattern is much the same as editing a paint pattern. The only difference is that you begin with a blank editing window (of whatever size you've chosen) and create your pattern entirely from scratch. All of the commands and functions — including Get, Save, Clear, and Quit — work exactly as described above.

Loading From Disk

Paint patterns that you have created or edited can be saved to a separate data disk (for how to save, see CTRL-S under "Other Paint Editor functions" above), then loaded and used again.

To load a previously saved paint pattern, select "Customize" from the Paint Choices screen. Then select "Load From Disk" from the list of choices you are given. Follow the on-screen prompts to load the pattern. The loaded pattern will appear in the editing window of the Paint Editor. You can now edit the pattern if you want, or use it as is by pressing CTRL-Q to quit the Paint Editor and then following the steps outlined under CTRL-Q above.

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Note: You can also load a saved paint pattern by using (CTRL-G)

Decals

Decals are graphic designs and pictures that can be applied to designated locations on a model. The Toy Shop includes a variety of decals — everything from flowers, to a dollar bill, to the American flag — that you can use as is or edit in any way you want. You can also create your own decals from scratch.

Decals are selected, edited, and created in much the same way as Paints.

Choosing Decals

If the model you are customizing has decal options available, you will be presented with a Choose Decals screen listing the locations to which decals can be applied. For some models, decals can be applied to only one location; for others, they can be applied to several. The window to the right of the list shows the pre-set decal for the highlighted location. To see decals for other locations, move the highlighter down the list. If you're satisfied with the pre-set decals, select "Done."



If you want to change one of the decals, or see what other decals are available, highlight the location where you want to make a change and press RETURN or ENTER.

You will now see a Decal Choices screen listing the names of the available decals. A window to the right of the list displays the decal for the highlighted name. To see other decals, simply move the highlighter down the list. The window will display the decal for whatever name is highlighted. When the decal you want is in the display window, select it by pressing RETURN or ENTER. Then select "Done."

Editing Decals

You can edit any of the decals included in The Toy Shop by using the Decal Editor. To edit a decal, first get the decal you want into the display window of the Decal Choices screen. Press RETURN or ENTER. Then select "Customize." You will now be given three

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choices: Edit Existing, Create Your Own, and Load From Disk. Select "Edit Existing." This will take you to the Decal Editor. The decal you have selected will be displayed in the editing window.

Hints on Editing/Creating Decals: When editing or creating decals, you should be aware that any paint patterns behind the decal location will flow into openings in the decal. Be sure to close off completely sections of the decal that you don't want painted. If you don't want any paints behind your decal, draw a box around the entire decal and the area between the decal and the box side will remain unpainted.



Capture Box

A capture box — represented by a moving line — will surround the decal you've chosen. This box lets you know how much drawing space is available. When the decal is printed on your model, only the portion that falls within the capture box will appear; anything outside the box will not be printed. This ensures that the decal is the right size for its location on the model.

You can move the capture box by using CTRL I,J,K,M — the capture box movement keys. The box can be moved around the entire editing window. However, only what is within the capture box will be printed on your model.

Drawing and erasing

You can draw and erase anywhere within the editing window.

If you are using your keyboard, move the cursor (the flashing square in the editing window) by using the cursor movement keys. When the cursor is positioned where you want it, press D to draw a dot. To erase a dot, press E.

If you are using a joystick, move the cursor by moving the joystick lever up, down, left, or right. One of the two joystick buttons acts the same as the D key; press it and a dot will be drawn. The other joystick button acts the same as the E key; press it and a dot will be erased. You may draw and/or erase in a continuous line by holding down the appropriate button while moving the joystick lever.

(Note for Commodore users: Your joystick must be connected to Control Port #2. Move the cursor by pushing the joystick lever up, down, left, or right. To draw, press the D key to set the drawing mode. Then press the joystick button to draw a dot. To erase, press the E key to set the erase mode. Then use the joystick button to erase. You may draw and/or erase in a continuous line by holding down

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the button while moving the joystick lever.)

X and Y coordinates beneath the editing window show the numerical position of the cursor. The X coordinate refers to the vertical column in which the cursor is placed; the Y coordinate refers to the horizontal line.

Other Decal Editor functions

In addition to letting you edit a decal by drawing and erasing dots and lines, the Decal Editor lets you Get decals previously saved to a separate data disk (or graphics from Brøderbund's The Print Shop, which can be used as decals), Save the decal you are currently editing, Clear, and Quit. The commands for these functions are listed at the right-hand side of the screen.

CTRL-G

Lets you Get a previously saved decal from a data disk and bring it into the editing window. When you press CTRL-G, on-screen prompts will guide you through the process of getting the decal you want.

You can also Get graphics from The Print Shop, any of the Print Shop Graphics Library disks, or any data disk containing graphics created with The Print Shop. To do so, simply follow the on-screen prompts, inserting the disk containing the graphic you want when instructed to "Insert Data Disk."

(Note for Apple/Commodore users: Although you can get

graphics created with The Print Shop or graphics contained on any Print Shop Graphics Library disk directly, you must go through an intermediate step to get graphics contained on the original Print Shop disk. If you want a graphic from The Print Shop disk, first put the graphic into The Print Shop's graphic editor. Save the graphic to a separate data disk and then load it into The Toy Shop's decal editor using CTRL-G as described above.)

Graphics that you get will appear in the editing window. The capture box will show you how much of the graphic you can use as a decal. Move the box around to "capture" the portion of the graphic you want.

CTRL-S

Lets you Save the decal currently in the editing window to a separate data disk. To save a decal, you will need a blank (or previously formatted) data disk. Be sure to have one on hand before you begin. You will also need to name your decal. Think of a descriptive name, then follow the on-screen prompts to format your disk, if required, and to save your decal. (Note: PCjr users must have a previously formatted disk.) The saved decal can be used on future models as well as appearing on the one you are currently customizing.

Note: *Formatting will destroy any data already on the disk, so be sure to use a blank or previously formatted disk or one containing data you no longer need.*

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CTRL-C

Lets you Clear the editing window. When you press CTRL-C, you will be asked if you are sure you want to clear. If you answer "yes," the editing window will be completely cleared. The decal and all the changes you've made to it will be gone. To get the original decal back you will have to go through the process of selecting the decal and bringing it into the Decal Editor all over again. If you answer "no," the editing window will not be cleared. The decal and all the changes you've made will remain intact.

CTRL-Q

Lets you Quit the Decal Editor and return to the Decal Choices screen. The decal you have been editing will be in the display window. If you are satisfied with the way your edited decal looks, select "Done." The program will store your decal, ready to be printed on your model.

If you're not satisfied with your decal, you can either select another decal or continue to work on the same decal by selecting "Customize," and returning to the Decal Editor.

Creating Decals

In addition to editing existing decals, you can create your own decals entirely from scratch. To do this, go to the Choose Decals screen and select the location for which you want to create a decal. Then select "Customize" from the Decal Choices screen. Select

"Create Your Own" from the list that appears on your screen. This will take you to the Decal Editor.

The editing window will be blank except for the capture box. The box is correctly sized for the decal location you've chosen. Remember that the decal you create must fit within the dimensions of the capture box; anything outside the capture box will not be printed.

Creating a decal is much the same as editing a decal, except that you start from scratch. All of the commands and functions — including Get, Save, Clear, and Quit — work exactly as described above.

Loading From Disk

Decals that you have created or edited can be saved to a separate data disk (for how to save, see CTRL-S under "Other Decal Editor functions" above) and then loaded and used again. You can also load graphics from The Print Shop or any Print Shop Library disk to use as Toy Shop decals.

To load a previously saved decal or a Print Shop graphic, first select the location where you want to place the decal from the Choose Decals screen. Then select "Customize" from the Decal Choices screen. Select "Load From Disk" from the list that appears next. Then follow the on-screen prompts to load your decal or Print Shop graphic.

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(Note for Apple/Commodore users: Although you can load graphics created with The Print Shop or graphics contained on any Print Shop Graphics Library disk directly, you must go through an intermediate step to load graphics contained on the original Print Shop disk. If you want to load a graphic from The Print Shop disk, first put the graphic into The Print Shop's graphic editor. Save the graphic to a separate data disk and then load it into The Toy Shop's decal editor as described above.)

The loaded decal or graphic will appear in the editing window of the Decal Editor. The capture box, correctly sized for the location you have chosen, will also appear. Remember that whatever is within the box will be printed; whatever is outside the box will not. You can now move the capture box wherever you want, and then edit the decal or use it as is by pressing CTRL-Q to quit the Decal Editor and then following the steps outlined under CTRL-Q above.

Note: You can also load a saved decal or Print Shop graphic by using the Get function (CTRL-G) while you are in the Decal Editor.

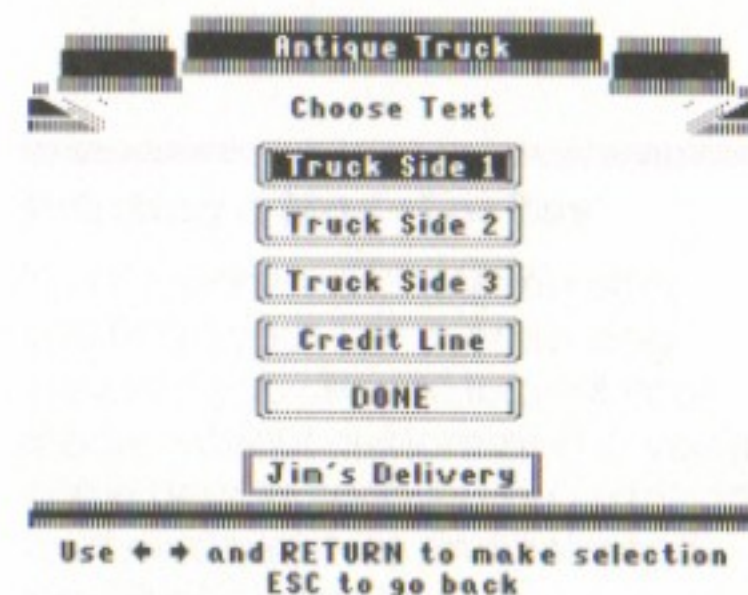
Text

Text can be placed on designated parts of a model. You can add a birthday greeting, give the model a special title, include your company name, or dedicate the project to your mother. You'll even be able to give yourself credit for designing

and building a model that is uniquely yours. Text will be printed in a font and typestyle of your choice. To see where text will be placed, check the "Customization Options" illustration for your model.

Selecting and Customizing Text

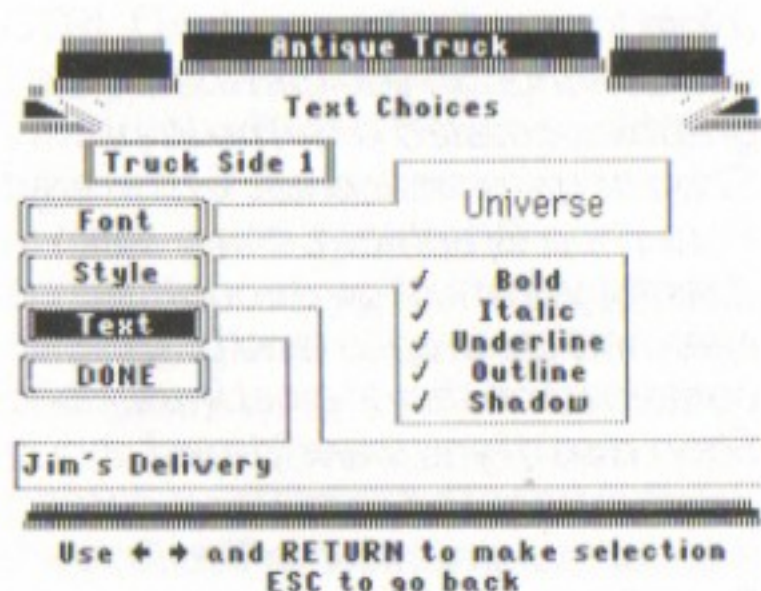
If your model has text options available, you will be presented with a Choose Text screen listing all the locations where text can be applied. The pre-set text for the highlighted location is displayed at the bottom of the screen. To see the pre-set text for other locations, simply move the highlighter.



If you're satisfied with the pre-set text, select "Done." If you want to see in what font and typestyle the text will be printed, or if you want to change any of these elements, highlight the location you want to work on and press RETURN or ENTER. You will now see a Text Choices screen showing the pre-set text for the location you've selected as well as the font and style in which it will be printed.

Using the Program

Apple/Commodore/IBM



If you don't want to make changes, select "Done." If you do want to make changes, select the element — text, font, or style — that you want to work on first.

Note: You will notice that text is highlighted when the screen appears. Usually, this is the element you will want to change first. However, the amount of text you can enter is influenced by the font and style. If you want to use a font and/or style that takes up a lot of room, you should change those elements before going on to enter your text.

Text

When you select Text, a flashing cursor will appear after the last letter in the text box. You can then edit or erase the pre-set text (using your computer's delete or back-space key) and type in whatever text you want. The amount of text you'll be able to enter will vary, depending on the amount of space available on the model. When you've typed as much text as there is room for, the cursor will stop and you won't be able to type any more.

You can then shorten or change your message if necessary. When you're satisfied with what you've typed, press RETURN or ENTER.

Font

When you select Font, an on-screen warning will tell you that changing the font may cause your text to be shortened. A similar warning will appear when you select Style. This is because some fonts and styles take up more space than others. If you choose a font or style that makes your text message too long for the available space, the program will automatically remove letters from the end of the message until it is short enough to fit in the space. This message will appear the first time you select Font; after that, it will not appear.

Move the highlighter through the list of fonts. When you reach the one you want, press RETURN or ENTER. Check to see that your text message still fits. If letters have been removed, you'll either have to change the font or rewrite the text to fit within the limits.

Style

All the Style options appear in a list on the screen. Those that will be used (unless you change them) are indicated by check marks. You can use one, all or any combination of styles that you want.

To change the style, select Style. Then toggle the style options on and off by using the space bar. An option is on when a check mark appears; it is off when the check

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mark disappears. When all the style options you want to use are checked, press RETURN or ENTER.

Note that changing the style may also cause your message to take up too much space. If this happens, letters will be automatically removed from the end of the message. You'll have to either change your style and/or font choices or rewrite the text to fit within the limits.

Note also that elaborate typesets take considerably longer to print than simple typesets. If you want to keep printing time down, limit the number of style options you choose.

When your message is the way you want it, select "Done." You will be returned to the Choose Text screen, where you can choose another location to work on. When you have finished all the locations, you can give yourself credit for building your model or toy by selecting "Credit Line," if available as an option. (Note that on some toys, "Credit Line" will be the only text option. See below for a discussion of credit line text.)

Credit Line

You'll probably be proud of the models you build, so on most projects, The Toy Shop gives you a chance to add a personalized credit line to be printed on your model. Credit lines usually are printed on the bottom or back of a model. For this reason, they are not indicated on the "Customization

Options" illustration. To add a credit line, simply select "Credit Line" and proceed just as you did when selecting and customizing text.

Note that you don't have to use the credit line option for giving yourself credit. You can type in any kind of text that you want. Just remember that it will probably be printed on a part of the model that is hidden from view.

When you are finished selecting and customizing text, select "Done." This will take you to the Print Menu where you will begin the process of printing your customized model or toy.

Printing a Model or Toy

You'll reach the Print Menu after you finish your last customizing option; if you choose to print your model without customizing it, you'll come here as soon as you've made your model choice and selected the "Print Toy" option.



Use ← → and RETURN to make selection
ESC to go back

Using the Program

Apple/Commodore/IBM

The Print Menu allows you to do a number of things in addition to printing. You can save your customized model to a separate data disk, check your setup, or return to the Main Menu. You can also check the position of the paper in your printer, and, of course, print out your model.

Save Toy

You can save your customized model or toy to a separate data disk either before or after printing it out. Generally speaking, it's better to save before printing. That way you'll have your model safely stored on disk in case anything goes wrong during the printing process. To save your model, you'll need a blank or previously formatted data disk. Be sure to have one on hand before you begin. Then, select "Save Toy" and follow the on-screen prompts to format your disk, if required, and save your model or toy. (Note: PCjr users must have a previously formatted disk.)

Note: Formatting will destroy any data already on the disk, so be sure to use a blank or previously formatted disk or one containing data you no longer need.

Align Paper

This option lets you test the position of the paper in your printer. To get the best possible printouts,

it's important that the paper be aligned properly. The test involves printing a line of dashes across the paper; the object is to print the dashes directly over the horizontal perforations on your pinfeed paper.

To run the paper position test, first make sure that your printer is connected properly to your computer, that the power is on, and that the printer is on-line. Adjust the paper so that the print head is over the horizontal perforations that separate the sheets. Select the "Align Paper" option. A line of dashes will be printed across the paper. Your goal is to position the paper so that the dashes are printed directly on top of the horizontal perforations.

If the dashes aren't positioned correctly, re-align the paper and try again until the dashes are printed on top of the perforations. The paper will advance very slightly after each test so you'll be able to position it quite accurately simply by repeating the test a number of times.

Note: The print head on some printers may block your view. In this case, trial and error is the best way to align your paper correctly. Note also that with some printers it is best to turn the printer off before manually advancing the paper.

Check Setup

This option lets you check your setup information without having to abandon your work and go back to the Main Menu. When you select

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"Check Setup" you will reach a screen indicating your current setup choices; you will be given an opportunity to change them if you want. For more information on setup choices, see the "System Setup" section under the "Getting Started" instructions for your computer.

Go to Main Menu

This option allows you to return to the Main Menu. If you select it, you will be reminded that returning to the Main Menu will erase the model or toy that is currently in your computer's memory. If you want to preserve a customized model, save it to a separate data disk (using the Save Toy option) before returning to the Main Menu.

Print Toy

When you're all ready to print, select "→PRINT TOY←." You will then see the Select Print Options screen.

Antique Truck

Select Print Options

Set # of copies	# of copies: 1
Set pages to print	<div style="display: flex; flex-direction: column; align-items: center;"> <div>1</div> <div>✓ 2</div> <div>3</div> <div>✓ 4</div> <div>5</div> <div>6</div> </div>
Begin Printing	✓

Use ← → and SPACEBAR to toggle pages
ESC to go back

"Begin Printing" will be highlighted. If you want to change the number of copies or indicate specific pages to be printed, move the highlighter to the appropriate item and press RETURN or ENTER. Otherwise, skip to the "Begin Printing" section below.

Set # of copies

You can print from one to nine copies of your model or toy. The number of copies is automatically set at "1." To change that value, delete "1" by using your back-space or delete key. Then type in the number you want and press RETURN or ENTER.

Set pages to print

You can print out all of your model or only the specific pages you need. This is handy if you want to print out a page containing a specific assembly piece without having to reprint the entire model.

The page numbers listed and marked by a check are those that will be printed unless you indicate otherwise. The program assumes that you will want to print out all of the pages.

To change the pages that will be printed, highlight "Set Pages to Print" and press RETURN or ENTER. Then use the arrow keys to move the highlighter and the space bar to toggle the check marks on and off. When only the pages you want to print are checked, press RETURN or ENTER.

Using the Program

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Note: To find out which pages contain what parts, check the "Index Sheets" for your model. These sheets are located at the very end of this manual.

Begin printing

When you've answered all the printing questions, select "Begin Printing" and your computer will start putting together the various elements of your model. (You will be prompted to insert Toy disks as necessary.) While it's doing this a "GETTING READY" message will appear on the screen. Once the components of the model have been assembled in the computer's memory, the word "PRINTING" will appear and your model will begin to be printed out on paper.

Note on Disk Access: The printer will stop up to six times while printing each page so your computer can get the next section of the page ready to print. You'll be told on screen that the computer is "Getting Ready." You can pause printing at any time by pressing ESC. To resume printing, press RETURN. (To stop the printing process entirely, press ESC twice.)

Note on Printing Time: The Toy Shop produces toy patterns that are extremely detailed and printed in the highest resolution that your printer allows. These printouts are likely to be more detailed and complex than any printouts you have previously produced with your printer. Printing The Toy Shop's elaborate patterns can take

considerably longer than printing simple, lower resolution graphics and text. Printing time will vary depending on the printer model you are using: In general, newer, faster printers will take as little as 8 to 10 minutes per pattern page; older models may take as much as 20 minutes or longer.

Note: When printing a number of pages, it's a good idea to pause printing from time to time to avoid overheating the print head. This is especially important if you are printing multiple copies of a complex model.

When printing is complete, carefully remove the finished pattern pages from your printer. Then turn to the second part of this manual and get ready to transform your printout sheets into an amazing three-dimensional mechanical model or toy!

Macintosh

Overview

The Toy Shop lets you use your skill and creativity in a variety of ways. If you can't wait to roll up your sleeves and start building, you can simply select the model you want and print out the assembly pieces just as The Toy Shop designers designed them. With just a few clicks, you'll start printing out a pattern and be on your way to building a model that will look as good as any in this book. If you want a more in-depth creative involvement with your project, you can take advantage of The Toy Shop's extensive customization options to design a model that's uniquely yours. Models you have customized can be saved to a separate data disk and used again and again.

Customizing options include "paints" or flood-fill patterns used on various areas of the model, "decals" or graphic decorations, and text. Each model has its own range of customizing options.

Customizing can be as simple or as complex as you wish to make it. The Toy Shop contains 40 different paints and a wide variety of decals. If none of these strikes your fancy, you can design your own or use graphics created with MacPaint. On most of the models, you'll also be able to add personalized text in the font and style of your choice.

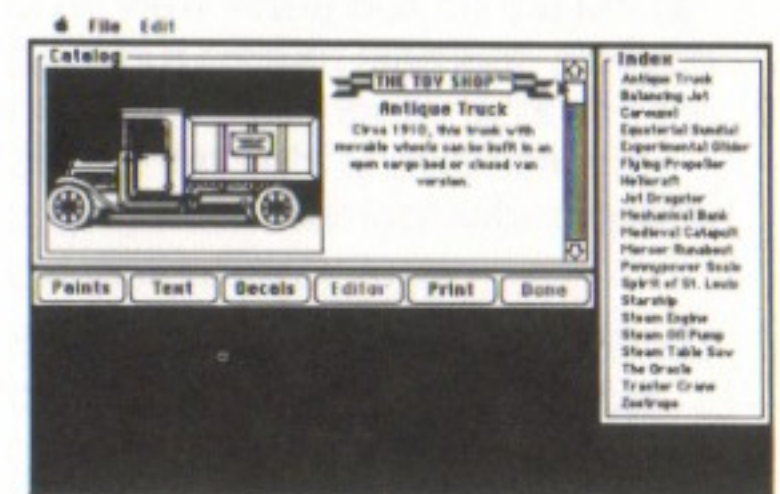
When it's time to print, The Toy Shop will direct your computer and printer to produce your model pat-

tern exactly as you've designed it.

The entire process begins as you select your model or toy.

Selecting a Model or Toy

When The Toy Shop program finishes loading, your screen will look like this:



Catalog

The Catalog lets you view the entire collection of Toy Shop models and toys. The toys are arranged alphabetically by name; each one is illustrated and described.

Use the Scroll Bar to scroll through the Catalog, toy by toy.

Index

Models and toys are listed alphabetically in the Index. Click the name of the toy you want and a picture and description will appear in the Catalog window.

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Control Bar

The Control Bar provides access to the key functions of The Toy Shop program:

- ☐ Paints – Lets you select, edit, and create paints.
- ☐ Text – Lets you select and customize text.
- ☐ Decals – Lets you select, edit, and create decals.
- ☐ Editor – Lets you use the Paint and Decal Editors.
- ☐ Print – Lets you print out your model or toy.
- ☐ Done – Lets you return to the Catalog and Index.

Click the button you want. Buttons that are not available are grayed-out.

Customizing a Model or Toy

Each model or toy has different customizing options available. On some, you can change the paint patterns used in certain areas; on others, you can change the decals applied to various locations; and on nearly all, you can change the wording and style of the text that is placed on the model.

To see what customizing options are available for the model you've decided to build, turn to the "Customization Options" page at the beginning of the Assembly Instructions section for your model. (The Table of Contents will help you find the right page.) The

"Customization Options" illustration indicates where the paint patterns, decals, and text will go. By studying the illustration, you'll get an idea of what you may want to change. You'll also be able to judge what kinds of paint patterns, decals, and text would be most appropriate for the areas you plan to customize.

Each model has pre-set paint patterns, decals, and text. You can view these by clicking the Control Bar buttons. The paints, decals, and text that you see are the ones that will be printed on your model unless you change them.

If you want to print out your model exactly as The Toy Shop designers designed it, simply click the Print button. You'll then select your printing options (see "Printing a Model or Toy" at the end of this section) and be on your way to building a great-looking model.

If you want to customize your model, click whatever option — Paints, Text, or Decals — you want to work on first. When you have finished working on one option, click another. You can print out your model at any time by clicking Print.

Paints

Paints are flood-fill patterns that you can apply to designated areas of a model. The Toy Shop contains a palette of 40 paint patterns that you can use "as is" or edit in any way you want. You can also create

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paint patterns entirely from scratch.

Selecting Paints

To select paints, click the Paints button. A Paint Options and a Paints window will appear.

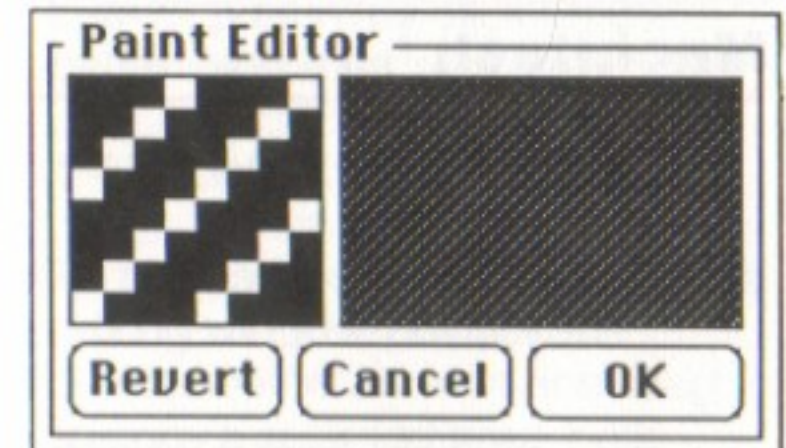


The Paint Options window describes the locations where paints may be placed. The Paints window shows all the paint patterns available.

The pre-set paint pattern for each location appears in a box next to the location name. A selection rectangle surrounding a location box indicates that this location is currently selected. To change the pattern in the selected location, click the pattern you want in the Paints window. To select another location, click the location's name or box.

Editing Paints

To edit a paint pattern, select a location, click a pattern to edit, and then click the Editor button. The Paint Editor will appear on the screen.



The paint pattern you've chosen is displayed in a close-up, 8-by-8 pixel view in the box on the left (a pixel is a picture element, a single dot on your computer screen); the box on the right shows how the paint pattern will look when spread out over a larger area.

Beneath the Paint Editor are three control buttons: Revert, Cancel, and OK.

☐ Revert — Lets you get rid of any changes you have made and revert to the pattern you started with.

☐ Cancel — Lets you cancel what you are doing and return to the Paint Options window. If you click Cancel, the pattern you are editing will be lost.

☐ OK — Lets the program know that you are done editing. If you click OK, you will be returned to the Paint Options window; your edited paint pattern will be in the selected location.

To edit the paint pattern, move the pointer to the box on the left and click to draw and erase dots. As you work, the pattern in the box on

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the right will change, showing you how your pattern will look when spread over a larger area.

Creating Paints

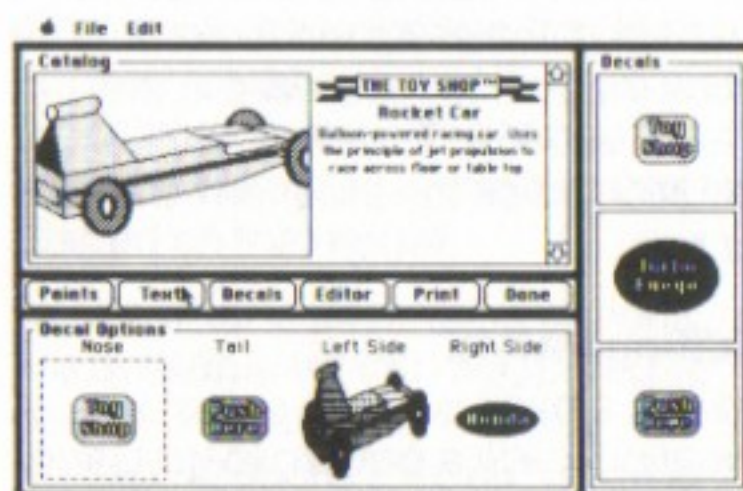
To create a paint pattern from scratch, select a location and click Editor. Clear the box on the left by clicking to erase the dots. Then create your pattern.

Decals

Decals are graphic designs and pictures that can be applied to designated locations on a model. The Toy Shop includes a variety of decals—everything from flowers, to a dollar bill, to the American flag—which you can use as is or edit in any way you want. You can also create your own decals from scratch or use graphics created with MacPaint.

Selecting Decals

To select decals, click the Decals button. A Decal Options and a Decals window will appear.



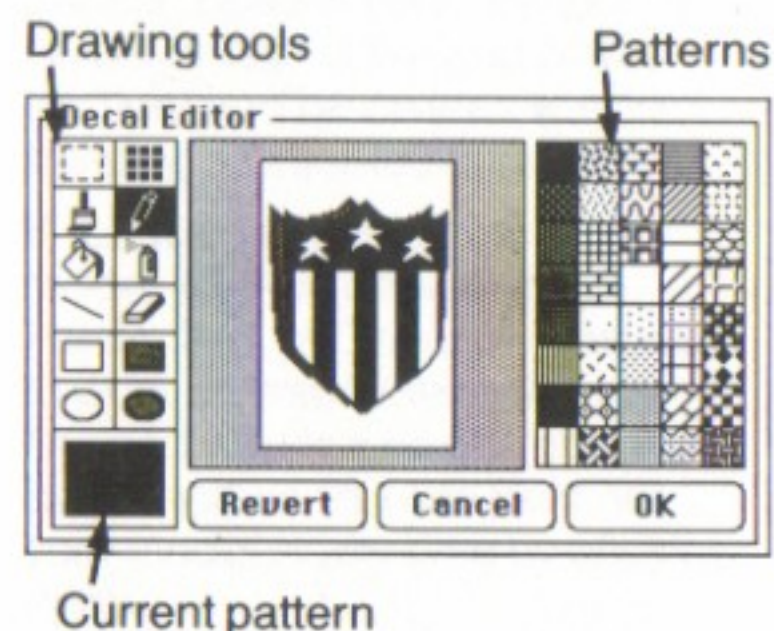
The Decal Options window describes the locations where decals may be placed. The Decals

window shows the decals available for the currently selected location.

The pre-set decal for each location appears beneath the location name. A selection rectangle surrounding a decal indicates that that location is currently selected. To change the decal for the selected location, click the decal you want in the Decals window. To select another location, click the location's name or decal. You will see the decals available for the new location displayed in the Decals window.

Editing Decals

To edit a decal, select a location, click a decal to edit, and then click the Editor button. The Decal Editor will appear on the screen.



The decal you have chosen to work on is displayed in the editing window. The decal is surrounded by a box which represents the space available for the decal on your model. You can draw only within this box. You may notice that the decal in the editing window

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looks somewhat different than the decal that is shown in the Decal Options window. This is because the decal in the editing window is displayed in its true size, exactly as it will appear on your model.

Beneath the editing window are three control buttons: Revert, Cancel, and OK.

□ Revert — Lets you get rid of any changes you have made and revert to the original decal.

□ Cancel — Lets you cancel what you are doing and return to the Decal Options window. If you click Cancel, any edited decal currently in the editing window will be lost.

□ OK — Lets the program know that you are done editing whatever is in the Decal Editor. If you click OK, you will be returned to the Decal Options window; your edited decal will be in the selected location.

Hint on editing/creating decals: When editing or creating decals, you should be aware that any paint patterns behind the decal location will flow into openings in the decal. Be sure to close off completely sections of the decal that you don't want painted. If you don't want any paints behind your decal, draw a box around the entire decal and the area between the decal and the box side will remain unpainted.

Using the drawing tools

Select a drawing tool by clicking it. You can then use the tool in the editing window. Change the

current pattern by clicking the pattern you want.



Selection Rectangle — Select a rectangular area.

To move a selected area within the editing window, position the pointer inside the area and drag. To copy a selected area, hold down the Option key while you drag the selection.



Fat Bits — Do detailed editing. To use Fat Bits,

select the area you want to edit. Click the Fat Bits icon. The area you have selected will appear in detail in the editing window. You can also get into Fat Bits by double clicking the Pencil icon or by holding down the Command key, moving the pencil to the area you want and clicking.

To move the decal under the editing window, hold down the Option key on your keyboard; a hand cursor will appear. Move the decal by dragging your mouse.

Toggle Fat Bits on and off by clicking.



Paint Brush — Paint with the current pattern. Double click the Paint Brush icon to change the type of paint brush.



Pencil — Draw a thin line, black on white or white on black. Click to draw individual dots.



Paint Can — Flood-fill an outlined area with the current pattern. Position the Paint

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Can in the area you want to fill and click.



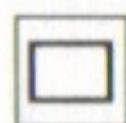
Spray Can — Spraypaint with the current pattern.



Line — Draw straight lines.



Eraser — Erase wherever you drag or click. Double click to clear the editing window.



Hollow shapes — Draw hollow shapes by positioning the pointer and dragging.



Filled shapes — Draw shapes filled with the current pattern by positioning the pointer and dragging.

Creating Decals

Creating decals is exactly like editing decals except that you start from scratch. If you want to create your own decal, select a location and then click Editor. When the Decal Editor appears, double click the eraser to clear the editing window. The decal will disappear, leaving an empty box. You can then proceed to create your decal within the box using the drawing tools.

Using MacPaint Graphics as Decals

You can use graphics created with MacPaint as Toy Shop graphics. To do this, select "CatchPaint" from the Apple menu.

Load the desired MacPaint file. You will then see the CatchPaint window with your MacPaint file displayed. (Note: You can change the size of the window by dragging the size box in the lower-right corner; you can view the complete contents of the window by scrolling.) Select the area you want by positioning the pointer at one corner of the area and dragging. (To re-select, first click anywhere outside the selection.) Choose Copy from either the Catch or Edit menu and close the CatchPaint window (by clicking the close box in the upper-left corner). Your selected graphic is in the Clipboard. You can now paste it into the current selection.

Using Graphics from Other Applications

Use graphics from other applications by way of the Clipboard.

Storing Decals

Store decals you've edited or created by using the Scrapbook desk accessory.

Text

Text can be placed on designated parts of a model. You can add a birthday greeting, give the model a special title, include your company name, or even dedicate the project to your mother. You'll also be able to give yourself credit for building a model that is uniquely yours.

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Selecting and Customizing Text

To work on the text options available for your model, click the Text button. A Text Options and a Text window will appear.



The Text Options window describes the locations where text may be placed. The Text window shows the fonts and typestyles available.

The pre-set text for each location appears in a box next to the location name. The size of the box indicates the amount of space available for text at that location. A selection rectangle surrounding a box indicates that that location is currently selected.

To enter your own text, click the current selection and type in the text that you want. If you prefer, you can get rid of all or part of the pre-set text before you start typing by highlighting the words you want to delete (to highlight, drag the pointer across the text) and then pressing the backspace key or selecting "Clear" from the Edit menu.

Note that the space your text occupies is influenced by the font

and the style. If you find that what you've typed doesn't fit, try changing either the text or one of these elements. Click font and style options until you've found the combination you want.

Credit Line

You can use the credit line for any text you want, but most people like to use it to give themselves credit for building their model or toy. The credit line usually is printed on the inside or bottom of a model and for this reason is not indicated on the "Customization Options" illustration.

Saving and Loading

Saving

You can save your customized model or toy at any point by selecting Save from the File menu. A dialog box will appear showing the name of the current toy. To avoid confusion, give your customized toy a different name. To do this, first clear the current name by pressing the backspace key. Type in the name you want. Be sure the name is descriptive so you'll know what it is later on. Then insert a separate data disk and save the toy.

Note: DO NOT save toys to The Toy Shop Master disk or Toy disks. Though it is possible to do this, you run the risk of becoming confused and accidentally discarding original toy files without which the program cannot work. For safety's

Using the Program

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sake, **SAVE CUSTOMIZED TOYS TO SEPARATE DATA DISKS ONLY.**

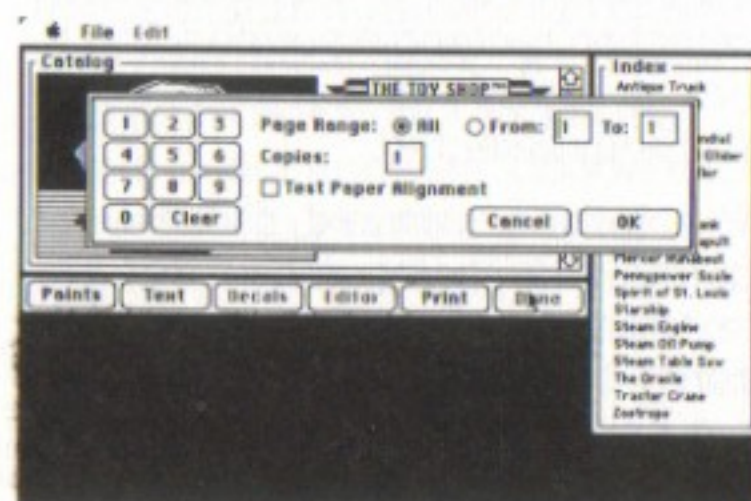
Loading

To load a previously saved customized toy or the original uncustomized toy, select Load from the File menu. Insert the appropriate disk (either a Toy Shop disk or your own data disk) and open the file you want.

Once a customized model or toy has been loaded, its name (with an asterisk beside it) will appear in the Index and Catalog windows, replacing the name of the current version of the toy.

Printing a Model or Toy

You can print out your model or toy at any time. When you are ready to print, click the Print button. A Print Options window will appear.



You can print one or more copies of your model and either all or some of the pages. You'll find the ability to print specific pages handy if you need to replace a model assembly piece that is lost or destroyed. The

Index Sheets for your model (which can be found at the very end of this manual) will show you on which page specific parts appear.

To print all of the pages, simply click "All." To print only some of the pages, click "From," and then use the numerical keypad to set the page range. To do this, click the number of the page you want to begin with. Then click the number of the page you want to end with. If you want to print just one page, page 3, for example, enter From 3 To 3.

To print more than one copy of your model, click the "Copies" box. Use the keypad to click the number of copies you want.

Note: When printing multiple copies, be sure to pause printing periodically to avoid overheating your printer.

If you want to test to make sure your printer paper is properly aligned, click "Test Paper Alignment". Check to be sure that your printer is properly connected to your computer, power on and selected (on-line). The print head should be positioned over the horizontal perforations in the pinfeed paper.

When you've finished setting all your printing options, click "OK." If you've chosen to test paper alignment, the paper alignment test will begin. If you've not chosen to test paper alignment, printing of your model will begin.

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Test Paper Alignment

If you've selected "Test Paper Alignment," a line of dashes will be printed across the paper. Your goal is to position the pinfeed paper so that the dashes are printed directly on top of the horizontal perforations. If the dashes are not positioned correctly, re-align the paper and click "Test" in the dialog box that appears after the paper alignment test is run. Repeat the test as many times as necessary. When your paper is aligned correctly, click "Yes" and printing of your model will begin.

When printing of your model is complete, remove the finished pattern pages from your printer. Then turn to the second part of this manual and get ready to transform your printouts into an amazing three-dimensional mechanical model or toy!

Do and Don'ts

No matter which computer and printer you are using you should read the following hints for producing better printouts. These printer tips will help you get the results you want when using The Toy Shop.

Paper Insertion

Check your printer manual for instructions on the correct way to insert paper in your printer. If the paper isn't inserted correctly, your models and toys may not be printed out properly.

Paper Adjustment

Whenever you adjust the paper vertically by hand (turning the carriage yourself), make sure you turn the printer OFF before you start. After you finish adjusting the paper, turn the printer back ON to print.

If your printouts are slanted to one side, you may need to adjust the horizontal position of the paper in your printer. Follow the instructions in your printer manual. It may take some experimenting to get the positioning right.

Use the paper alignment test to make sure your paper is in the correct position for best printout results.

Before-You-Print Checklist

Before printing, make sure of the following:

1) system has been turned on in the correct order (see "Starting the

Program" and your equipment manuals)

2) system is properly set up (see "System Setup")

3) printer cable is connected

4) printer power switch is on

5) printer is on-line or "selected"

6) tractor-feed (not friction-feed) mechanism is activated

7) paper is positioned properly

System Setup

Once you've set up your system by specifying the printer, interface device (where applicable), disk drive and slot you are using (where applicable), and are sure that the system is operating properly, make sure you write protect your Toy Shop Master disk.

Ribbon Changes

When changing ribbons, be sure to read your printer manual and follow the instructions. On most printers, you need to turn off your printer before removing the ribbon or cartridge. Use a relatively new ribbon in your printer. A worn out ribbon will not produce the crisp, clean lines you need for your patterns. However, note that printing out patterns with a brand new ribbon may result in smudged printouts. For best results, use a ribbon for other tasks (such as printing word-processed text) until some of its "newness" wears off. Then use it with The Toy Shop.

Printer Heat

Printing for long, uninterrupted periods of time can cause the print head to become very hot. Be sure

to give your printer a rest between toys. This is especially important if you are using a buffer, since there are fewer pauses during printing and less time for heat to dissipate. If your printer occasionally misses a line, it may indicate overheating. Pause printing until the printer cools down.

device manual or contact the manufacturer for instructions and settings. When re-setting the DIP switches, make sure you first turn off your printer and computer. When turning the system back on, turn the printer on first.

If your printer skips lines while printing, turn the printer's "automatic linefeed" switch off. Turn your printer and computer off and then on again (printer first) and try printing again.

Problem Solving or What To Do When . . .

Nothing Happens

Make sure the printer is turned on, on-line and properly connected to your computer. Check to see that the printer's removable top, if any, is firmly in place. Check the manuals for your printer and other printing devices (such as an interface card) to make sure they are installed correctly and have been turned on in the proper order. If the printer still doesn't work, re-check your "Setup" information.

Your Printer Acts Up

If your printer starts behaving strangely while printing is underway, turn the printer off and then on again to get a fresh start. If your printer is still acting up, re-check your "Setup" choices to make sure they are the right ones for your equipment.

You may also need to re-set the DIP switches on your printer (and interface device) if they have been changed from the factory settings. Refer to your printer or interface

Part II

Construction Guide

Introduction

This part of the manual tells you how to assemble all of the marvelous mechanical models included in The Toy Shop. The accompanying photographs show how your completed models should look, while detailed construction diagrams focus on each step of the assembly process.

Before beginning to print out and build a model, it's a good idea to read through the assembly instructions to make sure that you have all the necessary supplies on hand and that you're "up to" the project. The models and toys are graded — Easy, Medium, and Challenging — to give you some idea of how much time and effort will be needed to construct them successfully. If you're new to model-building, it makes sense to start with something easy and work up to the more difficult projects.

Also, take some time to read the "Assembly Techniques" section which follows. Here, you'll find complete instructions on how to cut, score, bend, and glue your models, plus valuable advice on the kinds of tools and materials to use. With these guidelines in mind, you'll be on your way to assembling good-looking, workable models the first time around.

Adhering Printouts to Cardstock

All of The Toy Shop models are made entirely of paper. You'll use your computer and printer to produce printouts of the assembly pieces needed for each model (for how to do this, see PART I: SOFTWARE INSTRUCTIONS). Then you'll adhere these printouts to cardstock.

This is easy to do when you use the adhesive-backed cardstock supplied with The Toy Shop. First, remove the edges of your pinfeed paper. Then peel the protective backing from the cardstock and adhere the entire printout to the sticky side. The best way to accomplish this is by placing the cardstock, adhesive side up, on a flat surface. Lower the printout, plain side down, onto the cardstock, aligning one end and then smoothing the rest of the paper into place. Rub the printout with the flat of your hand to adhere it to the cardstock. Be sure to rub all over so that no part of the paper separates from the cardstock. When printout and cardstock are firmly joined, you're ready to begin building your model. (see illus. A.)

Some things to remember:

- Always peel the protective backing from the cardstock, rather than the cardstock from the backing. The material that is peeled away tends to curl and you want the cardstock to remain flat.

- Let your printout "dry" before adhering it to the cardstock. Otherwise, the ink is likely to smear. This is especially important if you are using a new printer ribbon.

- Check your printout pages carefully before adhering them to cardstock. Some are labeled "DO NOT ADHERE TO CARDSTOCK." These pages, or portions of pages, should be left un-backed.

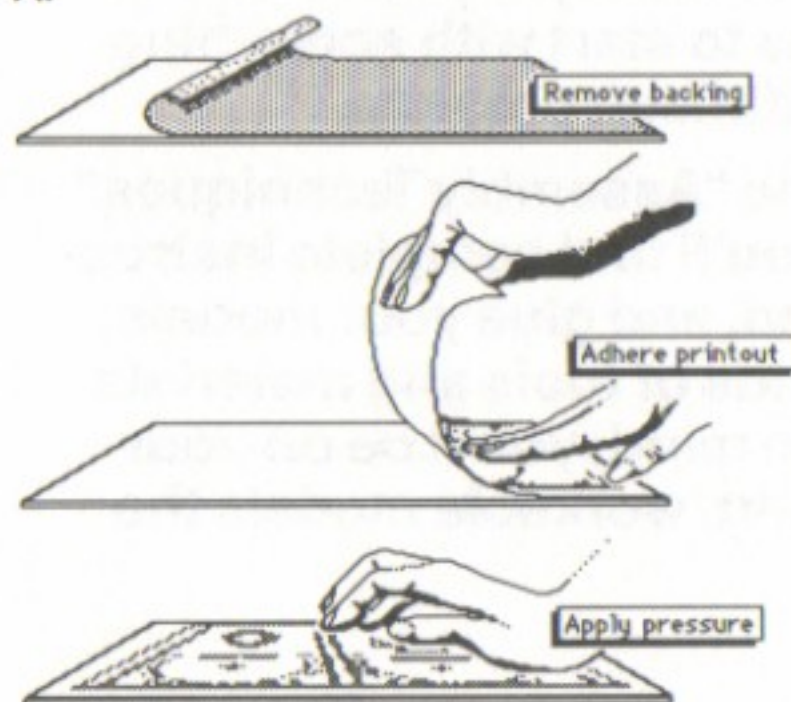
If you run out of adhesive-backed cardstock:

Additional adhesive-backed cardstock is available in The Toy Shop Refill Pack. Check with your local Brøderbund dealer for availability or use the order form included with The Toy Shop to purchase this refill kit. If you do not have an order form and you wish to order direct from Brøderbund, please call Brøderbund's Software-Direct at (415) 479-1185 between the hours of 8:30 a.m. and 5 p.m. (Pacific Time), Monday through Friday.

As an alternative, you can use spray adhesive — available at art or hobby supply stores — and plain cardstock. Choose cardstock of the same thickness as that supplied with The Toy Shop.

Note: Before using spray adhesive, read the manufacturer's instructions and warnings carefully. This adhesive is messy and its fumes can be toxic if inhaled. Use the adhesive out-of-doors if

A.



possible, and protect your work surface with plenty of newspapers.

Cutting

All you need to cut out most of the assembly pieces is a good pair of scissors. The best kind are paper scissors with straight blades.

When cutting, it's a good idea to make a rough cut first, leaving approximately $\frac{1}{4}$ inch around the edges of a piece. Then make a precise final cut. This technique helps ensure that the assembly piece will not become bent or deformed during cutting.

Sometimes sections need to be cut out within a piece. For this, use a hobby knife, such as an X-ACTO®. Don't try to cut all the way through the cardstock at once. Instead, use the blade to score along the outline of the area to be cut. Then, run the blade along the score lines once or twice until the section is freed.

Some things to remember:



- Be sure to cover your work surface with a thick piece of poster board or cardboard to protect it from damage during cutting operations.
- Cut along the outside edge of each model piece. The models have been designed with this sizing in mind. If you leave a margin around a piece or cut off an

outline, the model may not fit together properly.

- To minimize confusion, cut out pieces as you need them rather than all at once. In models with many small pieces, it's a good idea to label each piece, in pencil, on the reverse side so you'll remember what it is.

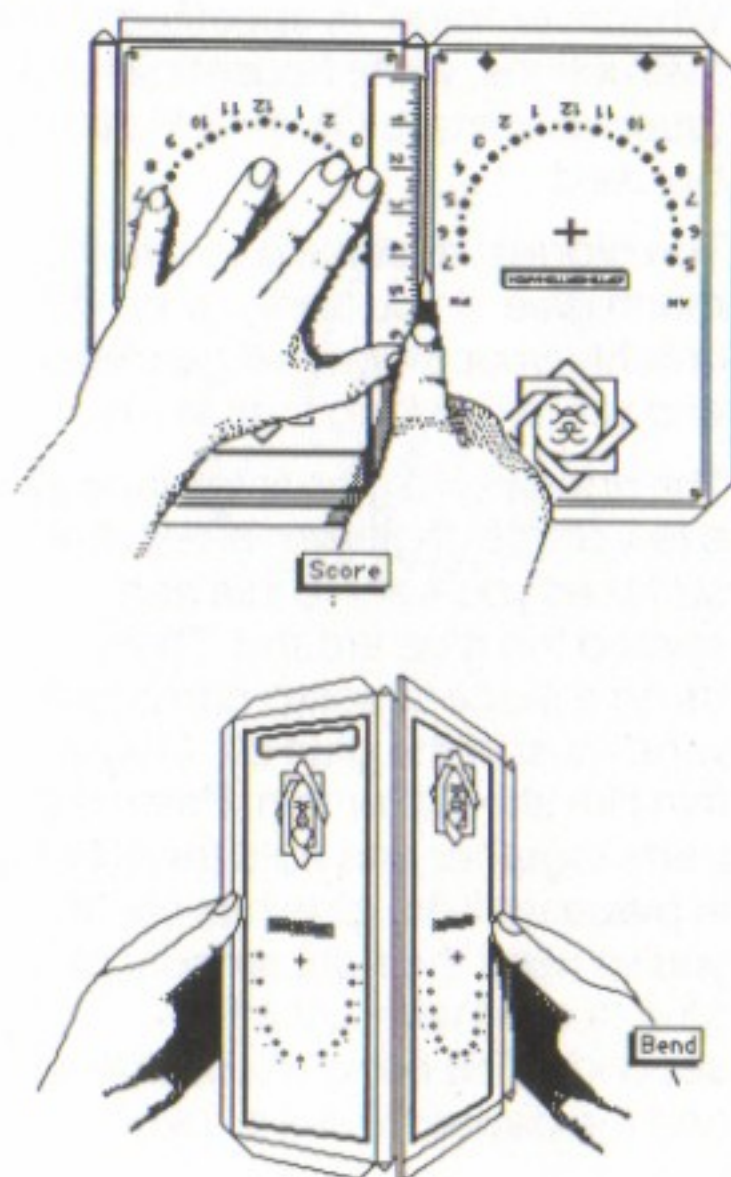
Scoring and Bending

Scoring is one of the most important steps in constructing paper models. Proper scoring — cutting partway through the cardstock along designated lines — makes it easy to bend various parts of the models into shape.

Use a hobby knife to score along dotted lines . Lines marked like this  should be scored on the reverse side. Study assembly pieces carefully to determine where the score lines are. Some paint patterns may make score lines difficult to see.

When you score, use a metal-edged ruler as a cutting guide. Place the ruler along the scoring line. Then, applying an even pressure, draw the blade quickly and neatly down the line. The idea is to cut halfway through the cardstock. After scoring, bend the cardstock away from the cut. Always overbend so that when the scored piece is released it will have a natural tendency to stay at a 90-degree angle. (see illus. B.)

B.



Assembly Techniques

Practice scoring before you begin building your model. You'll quickly get a feel for how much pressure you need to apply to produce the right results.

When you're finished assembling a model, it's a good idea to apply a thin film of white glue over all the score lines. This will keep the paper from fraying. Since the glue dries clear, the appearance of the model will not be altered.

Drilling Holes

Many of The Toy Shop models need holes for wire, dowels, or string to pass through. A ♦ mark indicates a place where a hole should be drilled.

Most holes should be drilled **BEFORE** the model is assembled. The instructions for each model will tell you when to drill the holes. Follow these instructions carefully, because in some cases once a model is put together, hole drilling is impossible.

For drilling, use the sharp tip of a hobby knife. Start at the exact center of the mark, twisting the blade in one direction only. When the tip of the blade comes through the cardstock, turn the assembly piece over and drill from the other side. Continue drilling until the hole is the size specified in the instructions.

For large holes, start drilling with a hobby knife and then switch to a pencil point. Insert the pencil point in the hole and twist. This technique produces a neat hole with no ragged edges.

Gluing

White glue:

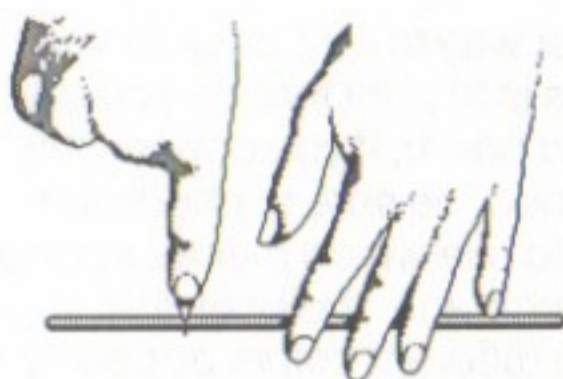
Whenever "glue" is specified in the instructions, white household glue (such as Elmer's Glue-All®) should be used.

The biggest mistake is to use too much glue. If you apply glue lavishly, your model will be messy and will take a long time to dry.

The right way to glue is to place just a few drops of glue on one of the surfaces you want to join and spread the glue around. Then, using a piece of scrap cardstock, wipe most of the glue off. Only a thin film should remain. Press the parts together and hold them firmly in place until the glue has set. If you've used the right amount of glue this will take just a few seconds. The bond will be strong and the paper will not pucker.

In some of the models, white glue is used to strengthen joints and fill cracks. In these cases, apply a line of glue, squeezed straight from the container, along the joint or crack. Set the model aside until the glue is completely dry. This may take several hours. Don't worry about the glue's effect on the appearance

C.



of the model; white glue becomes transparent as it dries.

Super glue:

Super glue, or cyanoacrylate adhesive (known by such brand names as Krazy Glue® and Wonder Bond®), is used in a number of The Toy Shop models. It makes a strong bond between metal and paper and can also be used to strengthen and waterproof model pieces. Whenever super glue is called for, the instructions will mention it specifically. **DO NOT** use super glue unless specifically instructed to do so.

As with white glue, it's important not to use too much. A drop is usually sufficient; more than a drop will take too long to dry. When used correctly, super glue bonds almost immediately.

Note: Before beginning to work with super glue, read the manufacturer's instructions carefully. Use super glue in very small quantities and avoid spilling. **DO NOT** allow the glue to come in contact with your skin or eyes. Super glue is extremely difficult to remove and can bond skin to skin.

Some things to remember:

- Super glue will not bond with itself. Therefore, if you need to re-apply super glue, you must scrape or sand the original coat away before applying a new coat.
- Super glue will not bond with wire that has oil on it. Be sure that the wire you use is clean and free of

oil from your hands. If you suspect the wire is dirty, clean it with alcohol before attempting to use super glue.

- Super glue has a short shelf life. If the tube of glue you're using doesn't seem to work, it may be because it's too old. Try a fresh tube.

Dowels and Wire

Dowels and wire are used in many Toy Shop models. The dowelling supplied with The Toy Shop is $\frac{1}{8}$ -inch wooden dowelling. The wire is paper clip wire.

To cut dowelling, use your hobby knife. Measure the length you need and mark with a pencil. Lay the marked dowel on your work surface. Place the knife blade over the pencil mark and roll the dowel back and forth, applying pressure until it is cut halfway through by the knife. At this point you should be able to break the dowel quickly and neatly. (see illus. C.)

To cut wire, use either wire cutters or a pair of needle-nosed pliers with a cutting edge. Simply measure the wire and clip.

Some models call for pieces of wire to be bent into specific shapes. To bend wire, use needle-nosed pliers and follow the bending guides that accompany the instructions.

Assembly Techniques

Some things to remember:

- Wire used for wheel axles should be straight. If it's not, the wheels of the model you're building will wobble. Roll the wire over your work surface to test its straightness. If it is curved or bent, straighten it using needle-nosed pliers.
- If you need to replenish your supply of dowels and wire be sure to get the same size as is supplied with The Toy Shop. Dowelling can be found at a hobby supply store or a lumberyard. Wire can be found at a hardware store. You can also use paper clips that have been unbent and straightened.

Dowels and wire are also included in The Toy Shop Refill Pack.

Sanding

Some model pieces need to be sanded. Whenever sanding is called for in the instructions, use a fine grade of sandpaper and sand lightly. Be careful not to destroy or deform the model piece by sanding too much of it away.

Coloring

You can use a variety of materials — everything from colored pencils to water colors, acrylics, oil paints, or marking pens — to color your models. Experiment to discover which coloring materials give you the effects you want.

The models can be colored either before or after assembly. However, since some areas may be difficult to reach once a model is assembled, it's often better to color the pieces before you cut them out and put them together.

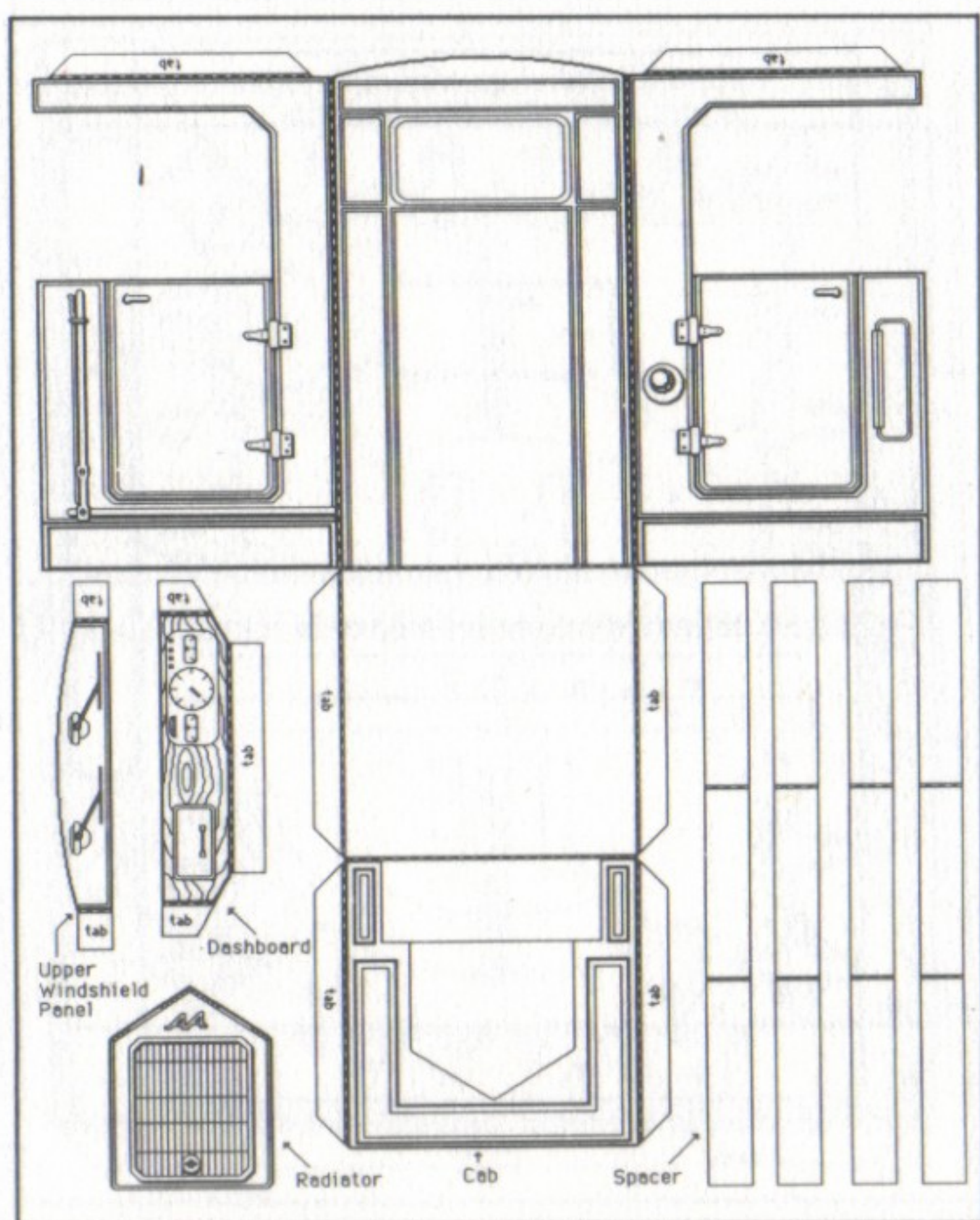
Another way to add color to your models is to print them on colored pinfeed paper. If you choose this technique, be sure to check the layout to see which pieces appear on which page. If pieces that you want in different colors appear on the same page you may have to print that page twice, once in one color and then in another, to get the effect you want.

Some things to remember:

- If you are using water colors, be careful not to get the paper too wet. Paper that is overly wet will pucker.
- When using any new type of coloring material, test it first on a piece of printout paper adhered to cardstock. Some paints and markers may weaken the adhesive backing and cause the paper and cardstock to separate.

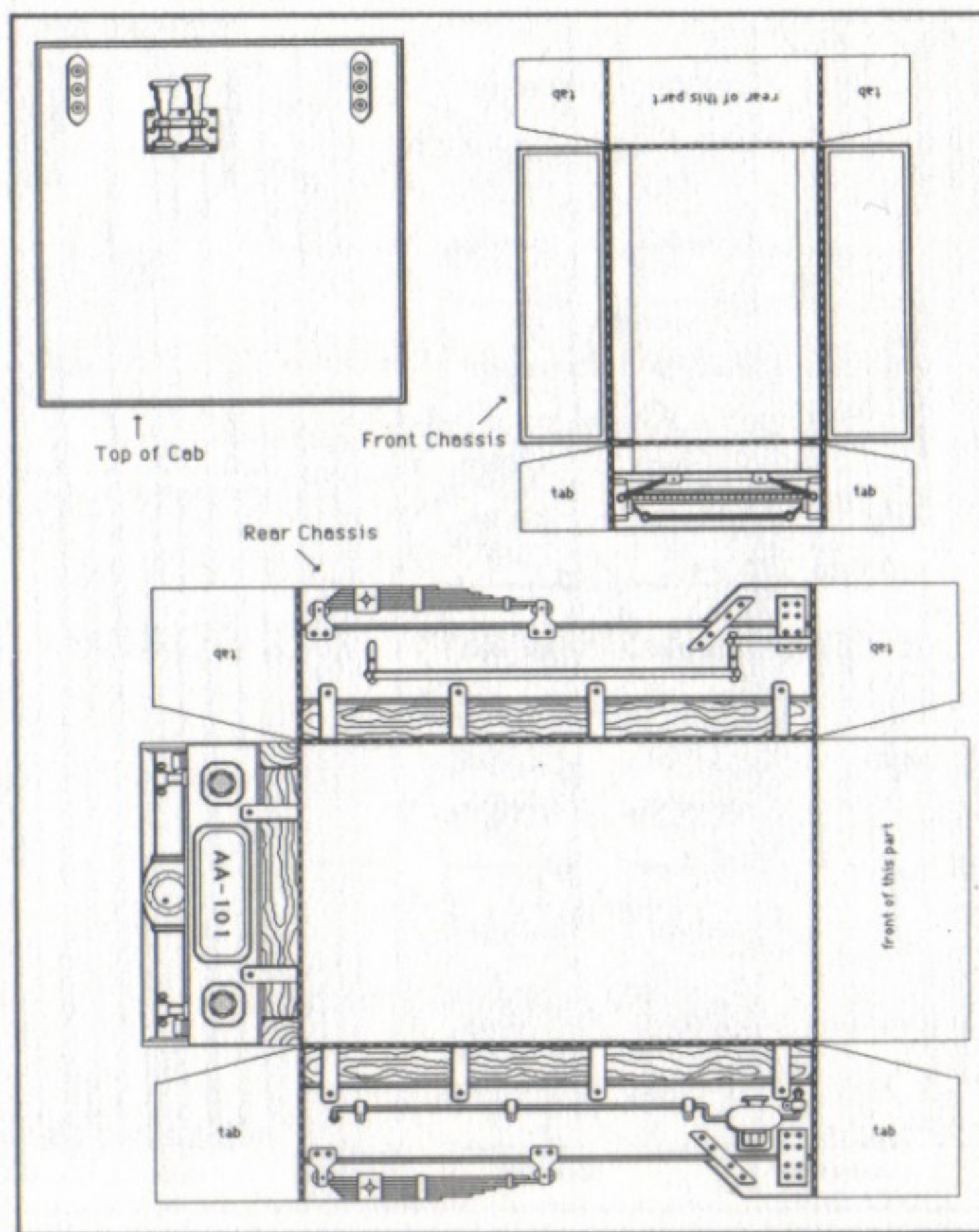
Using the Construction Diagrams

The construction diagrams, included with the assembly instructions for each model, show how the model or toy is put together. Study these diagrams closely before beginning to build and refer to them often during the construction process. They are one of your most valuable aids in building good-looking, workable models.



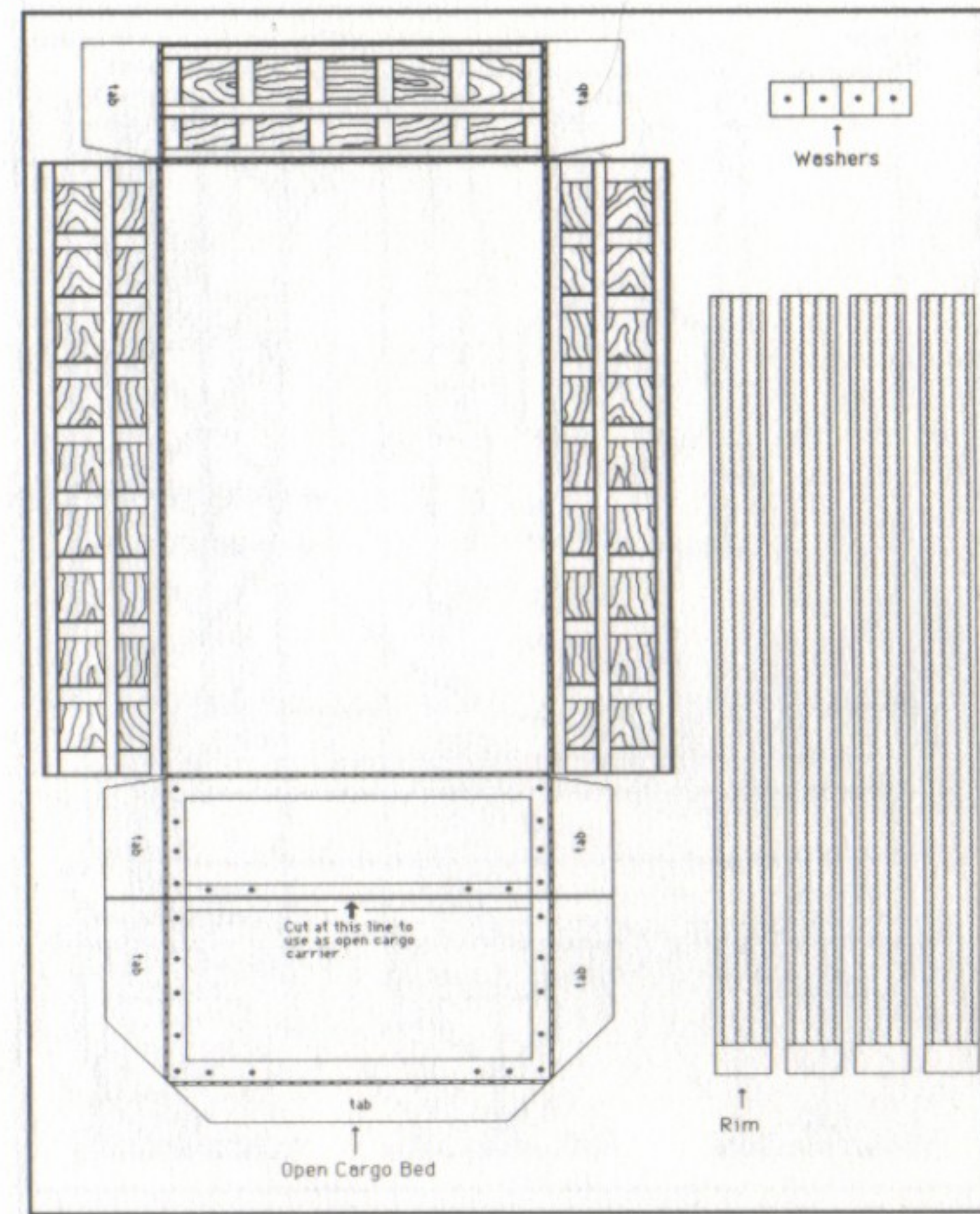
Antique Truck

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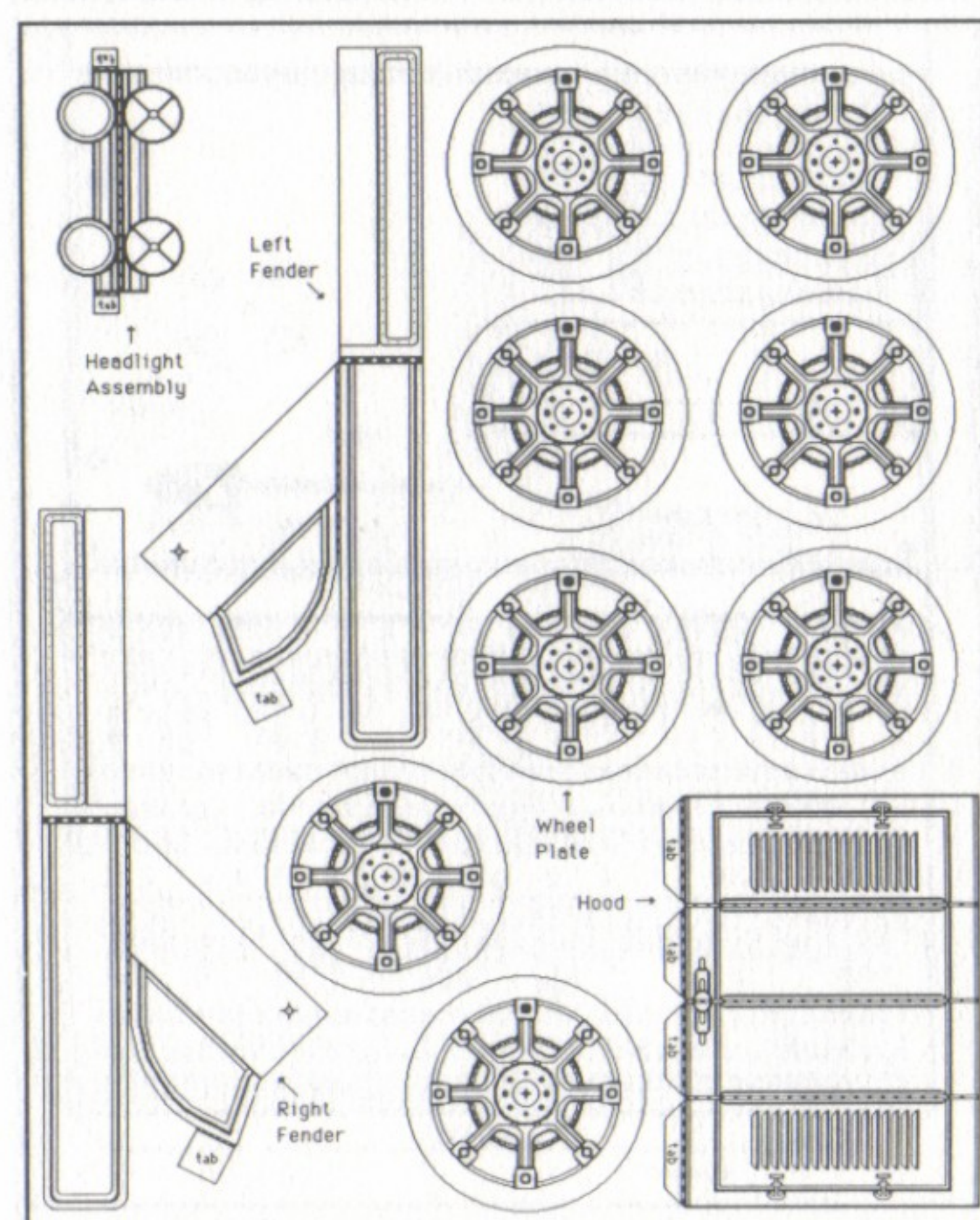
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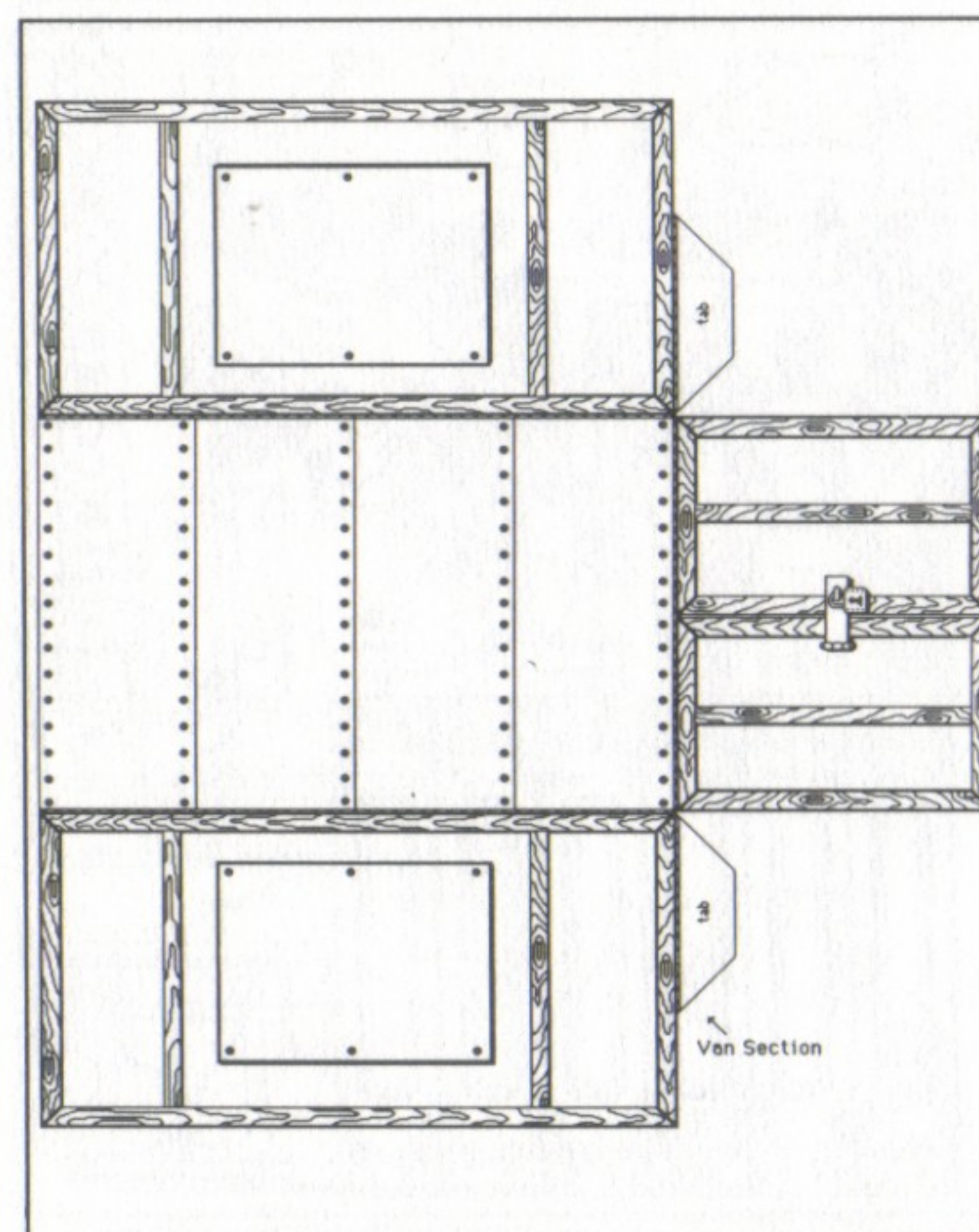
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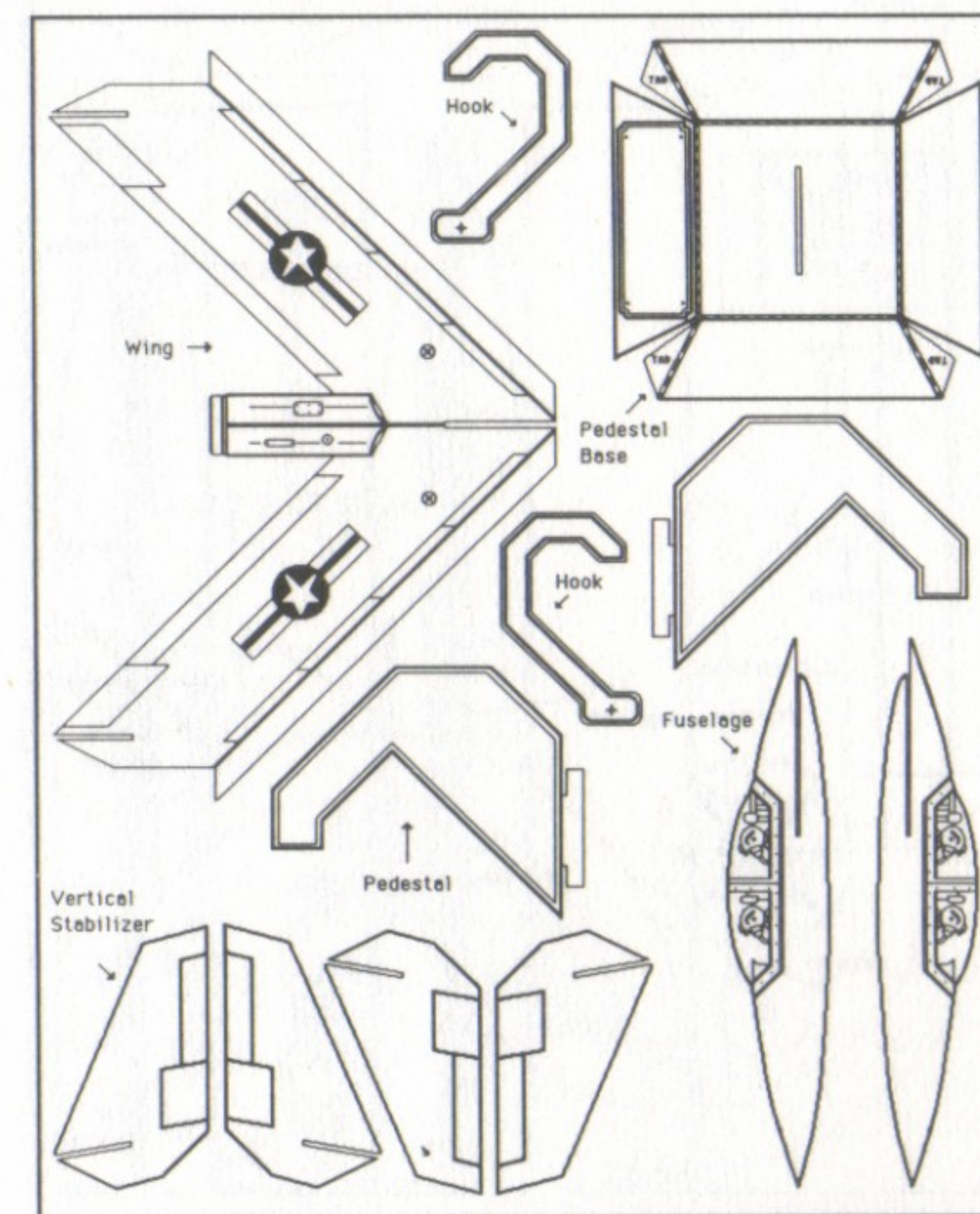
Antique Truck

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Antique Truck

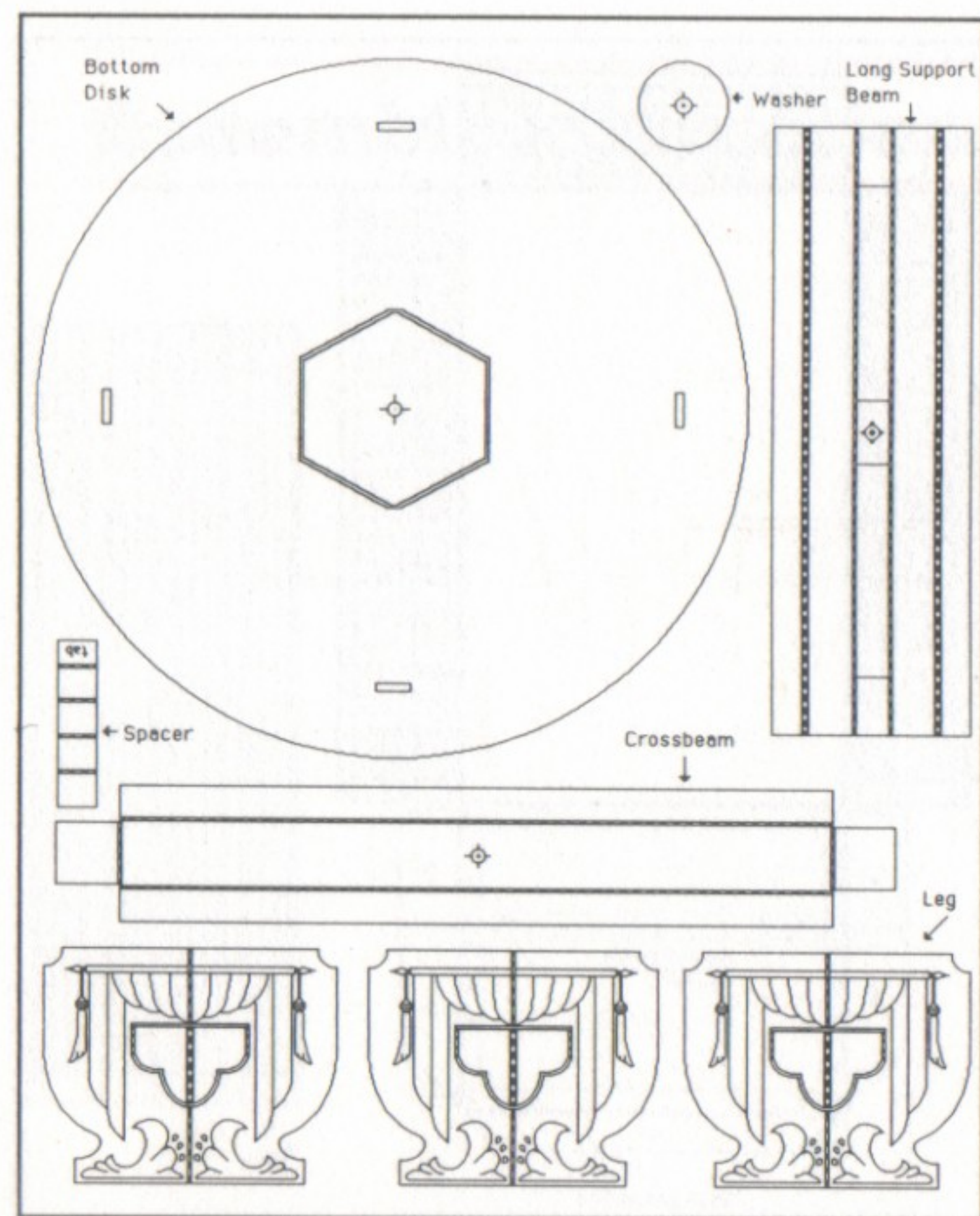
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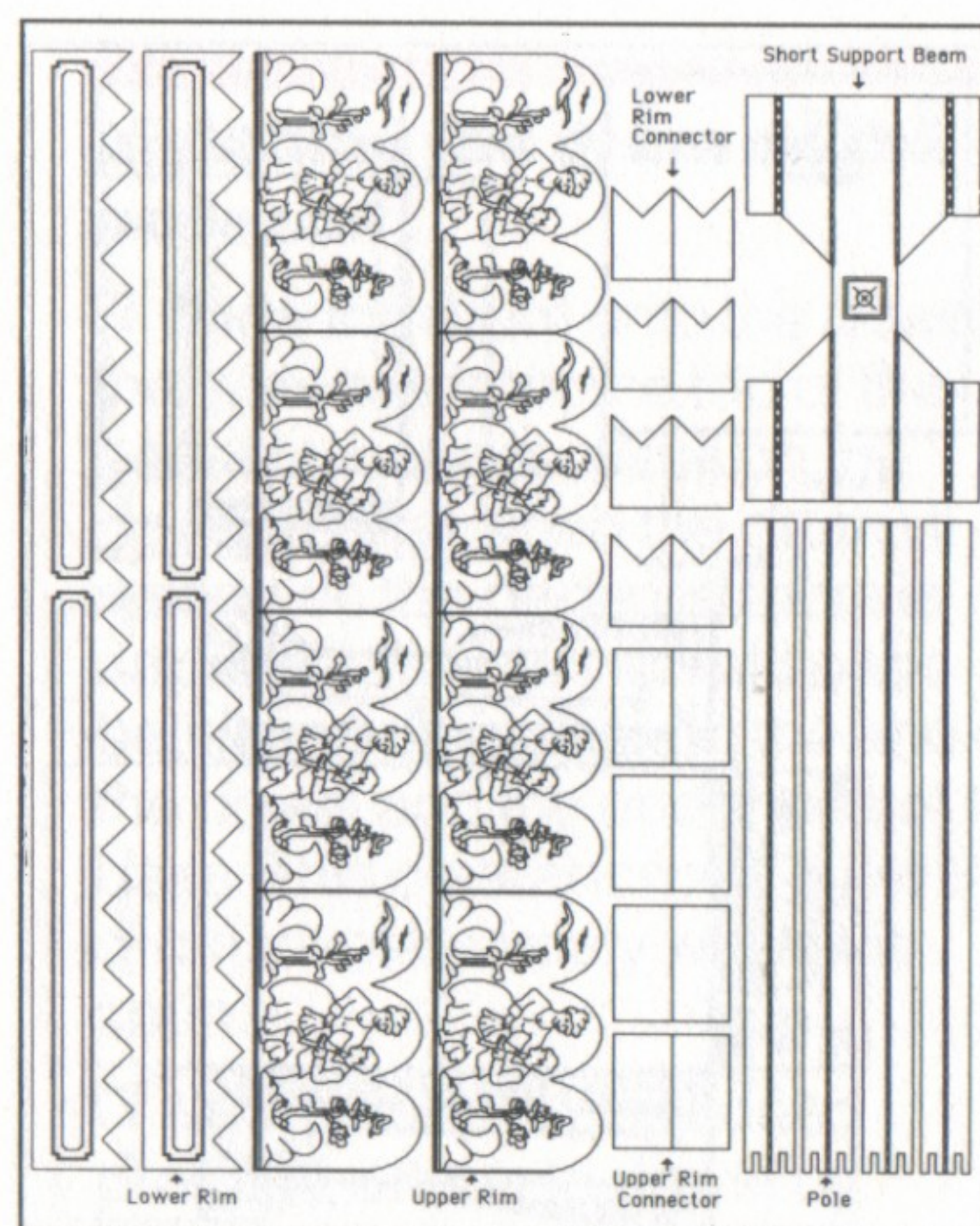
Balancing Jet

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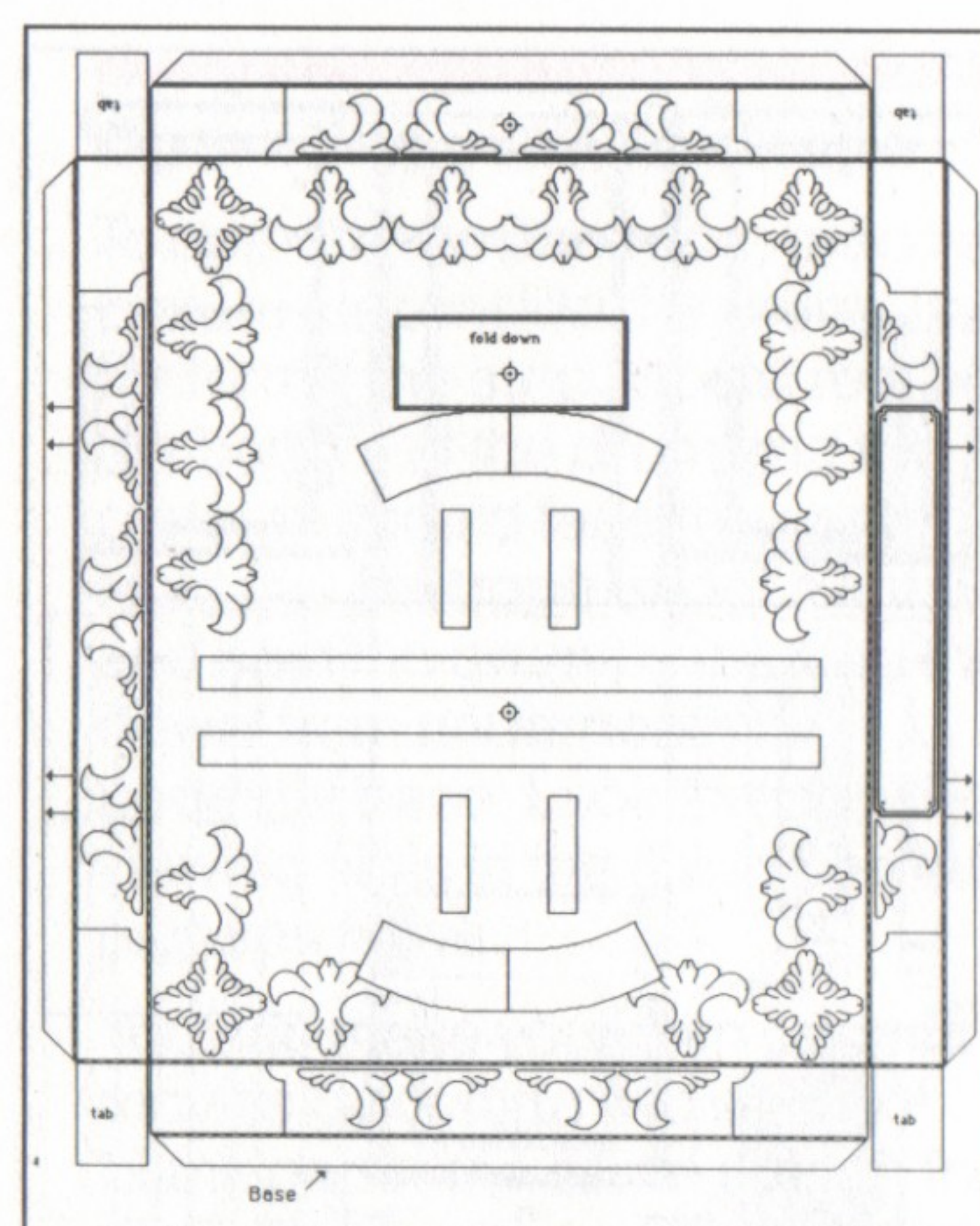
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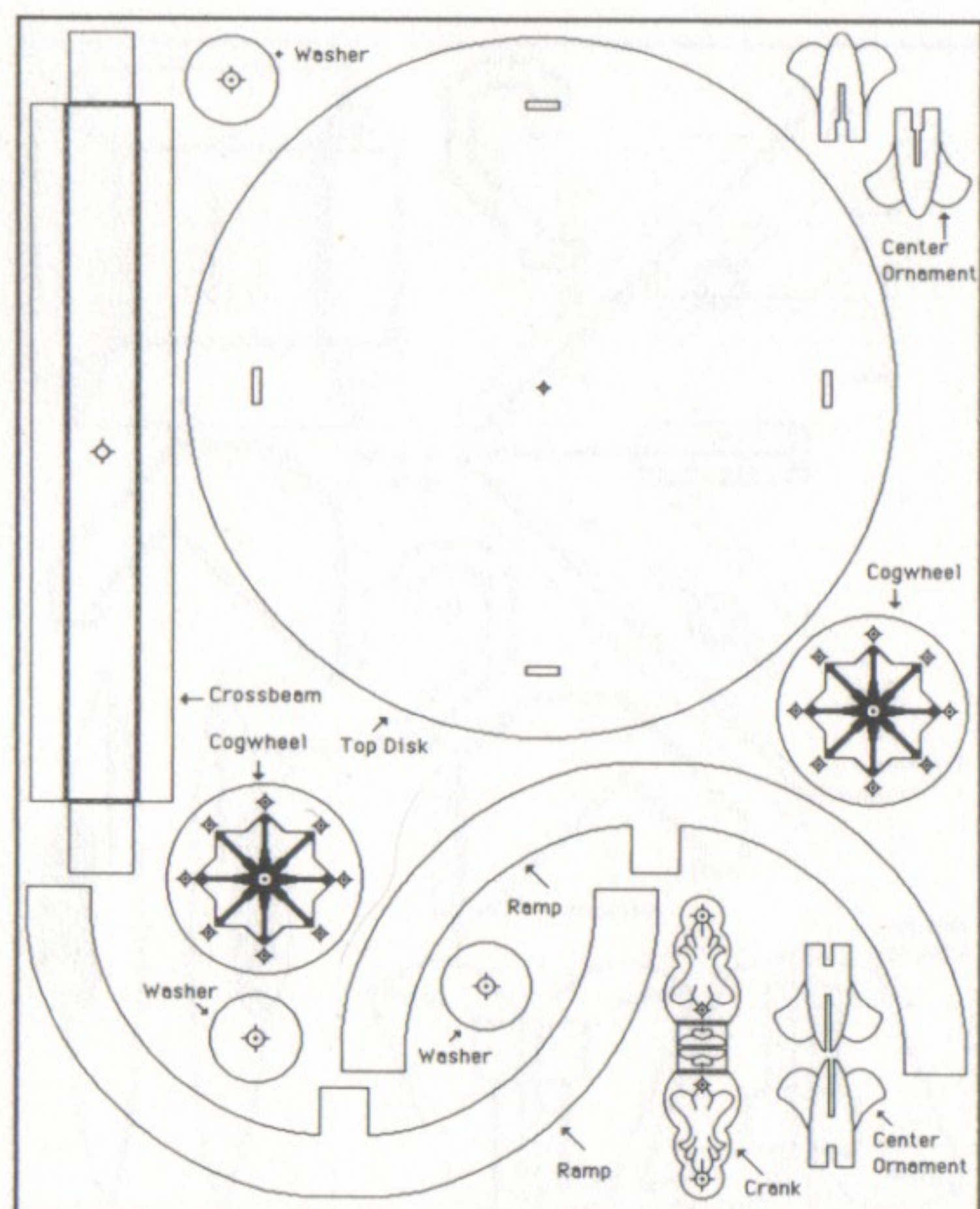
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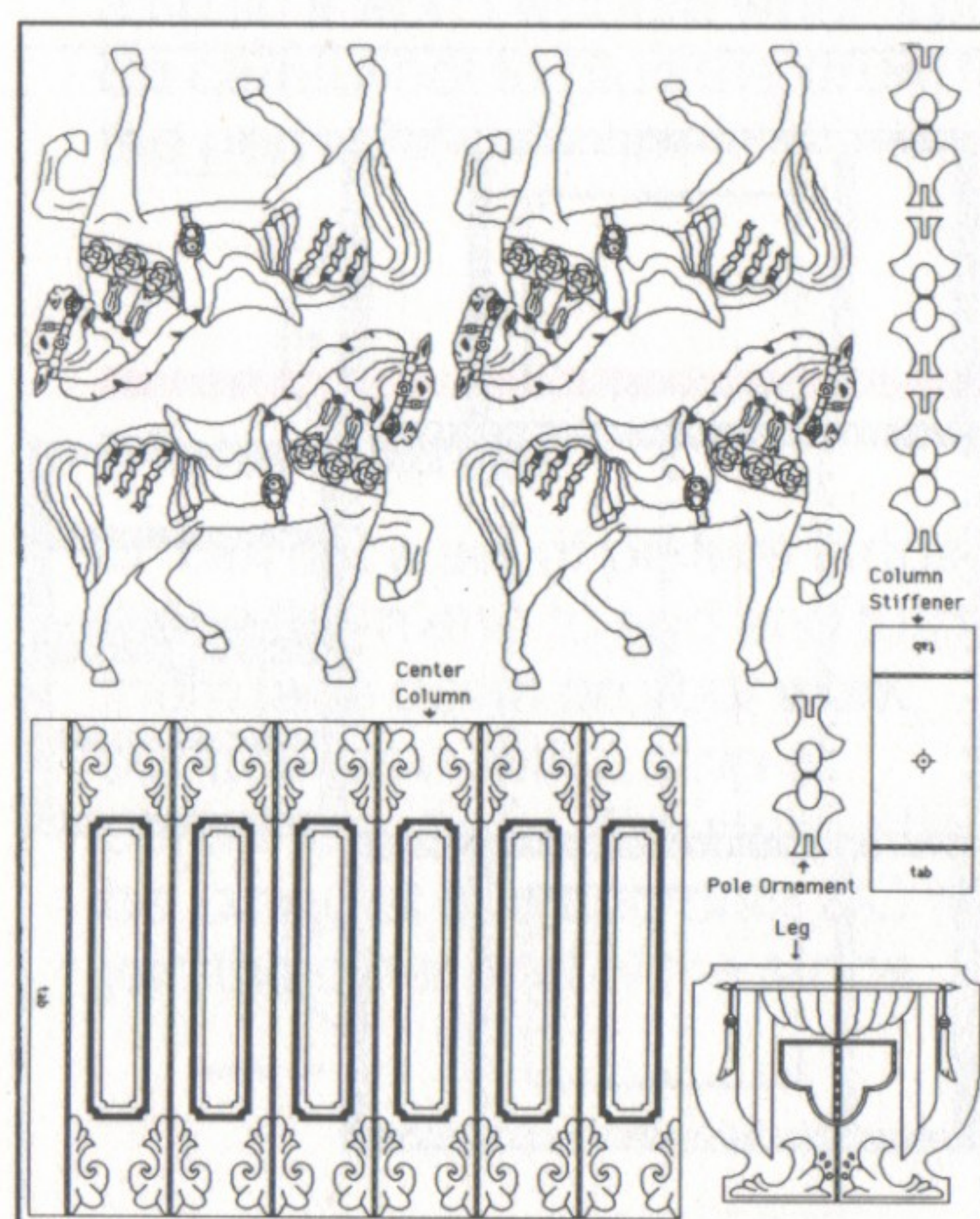
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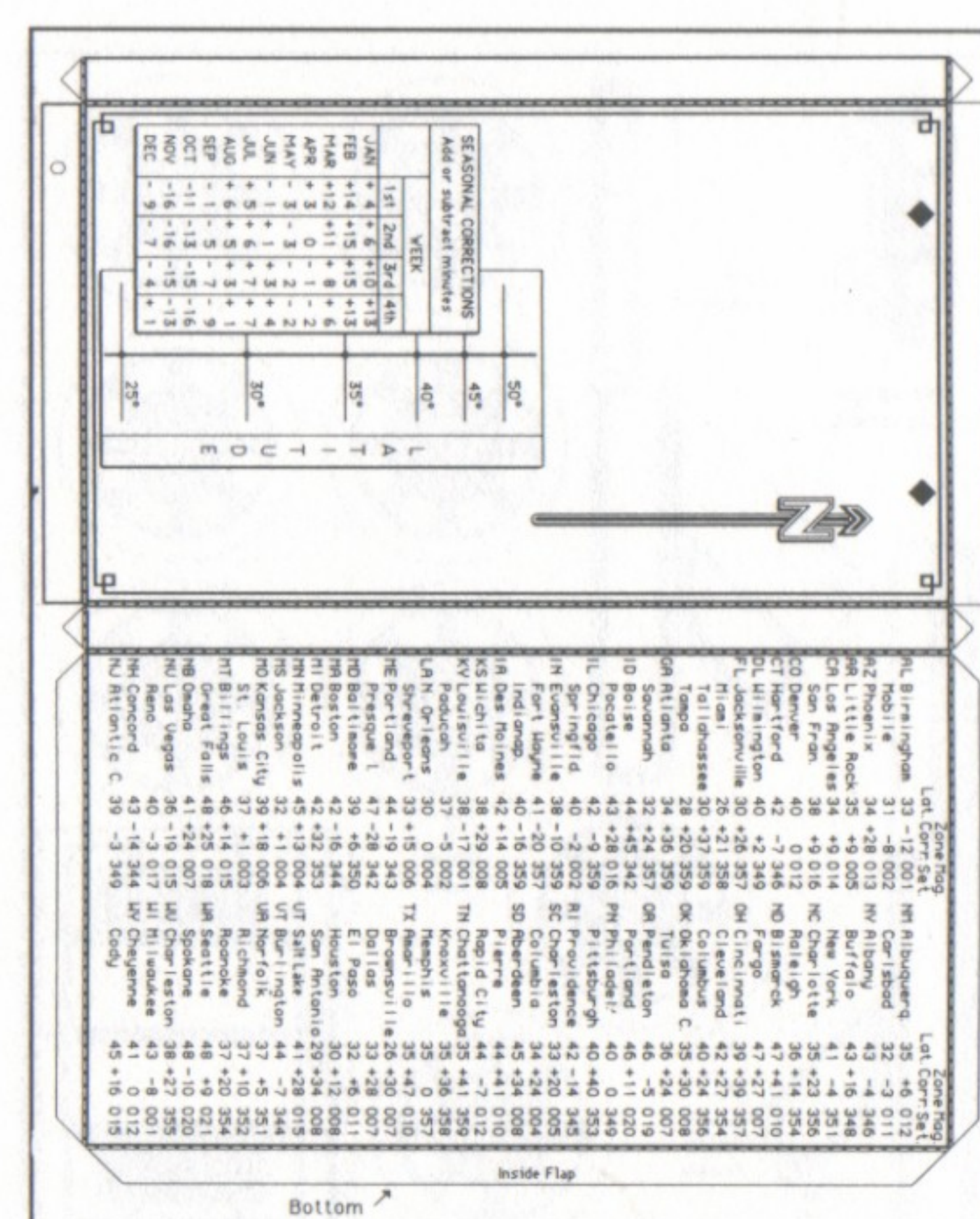
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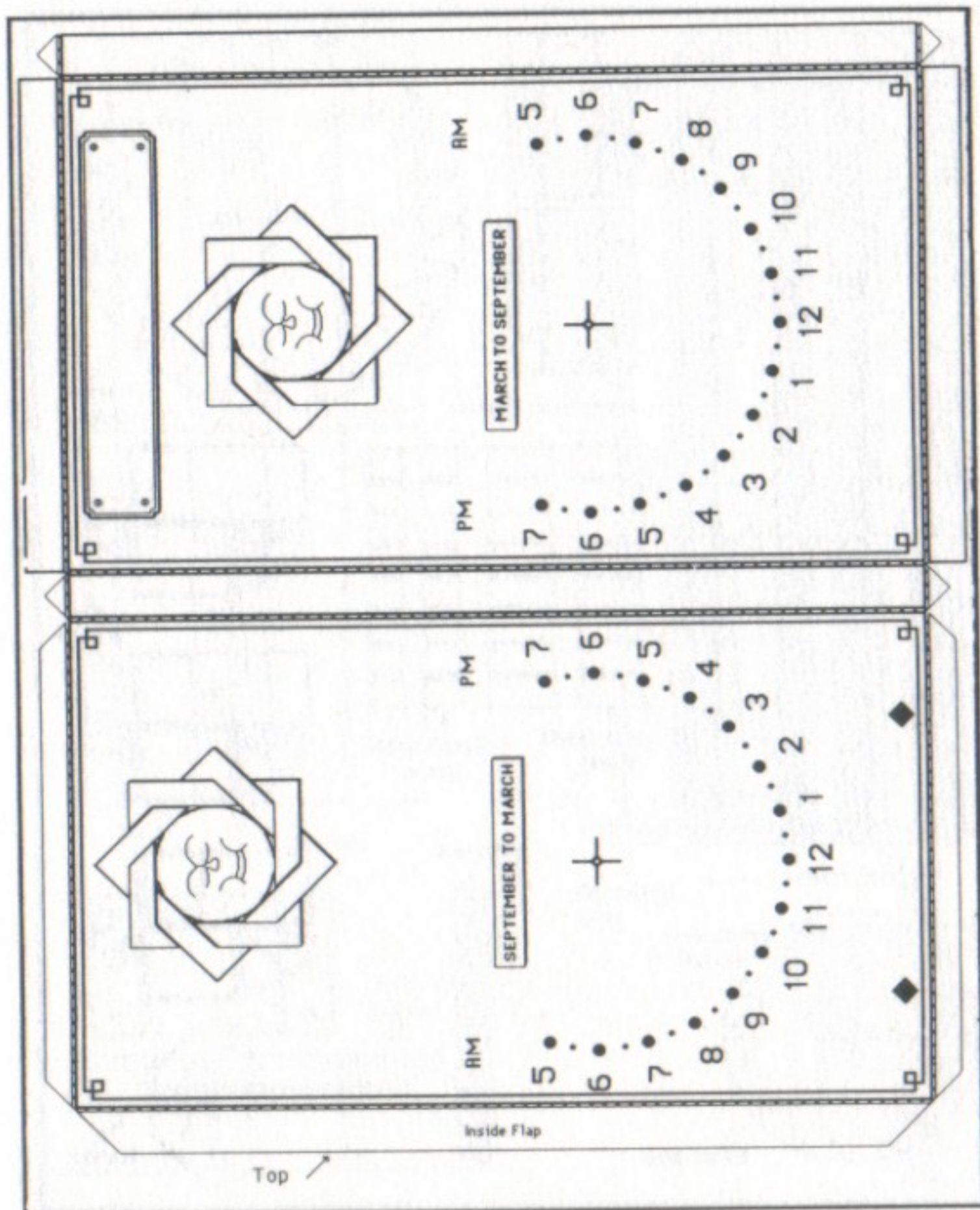
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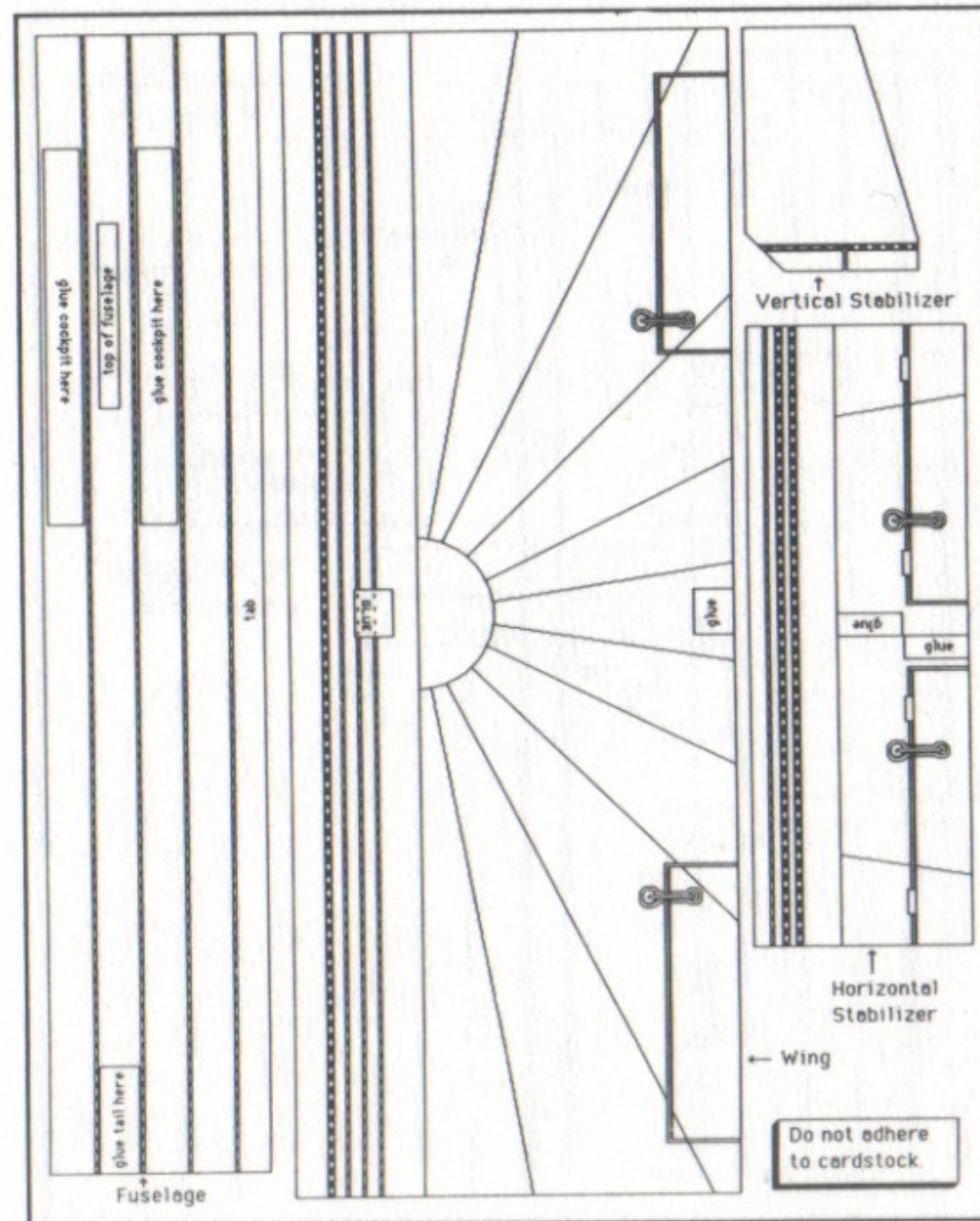
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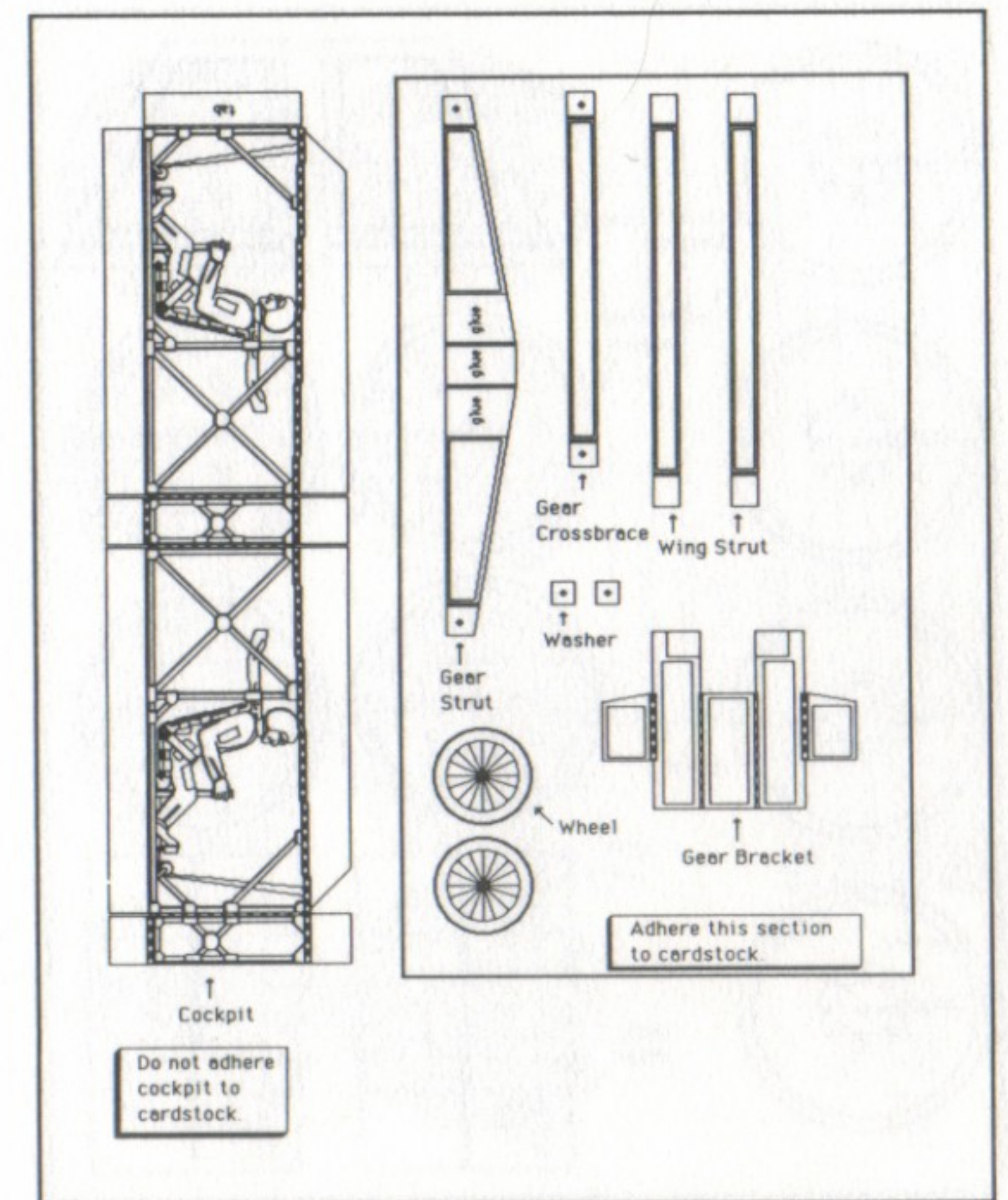
Equatorial Sundial Page 1 of 2



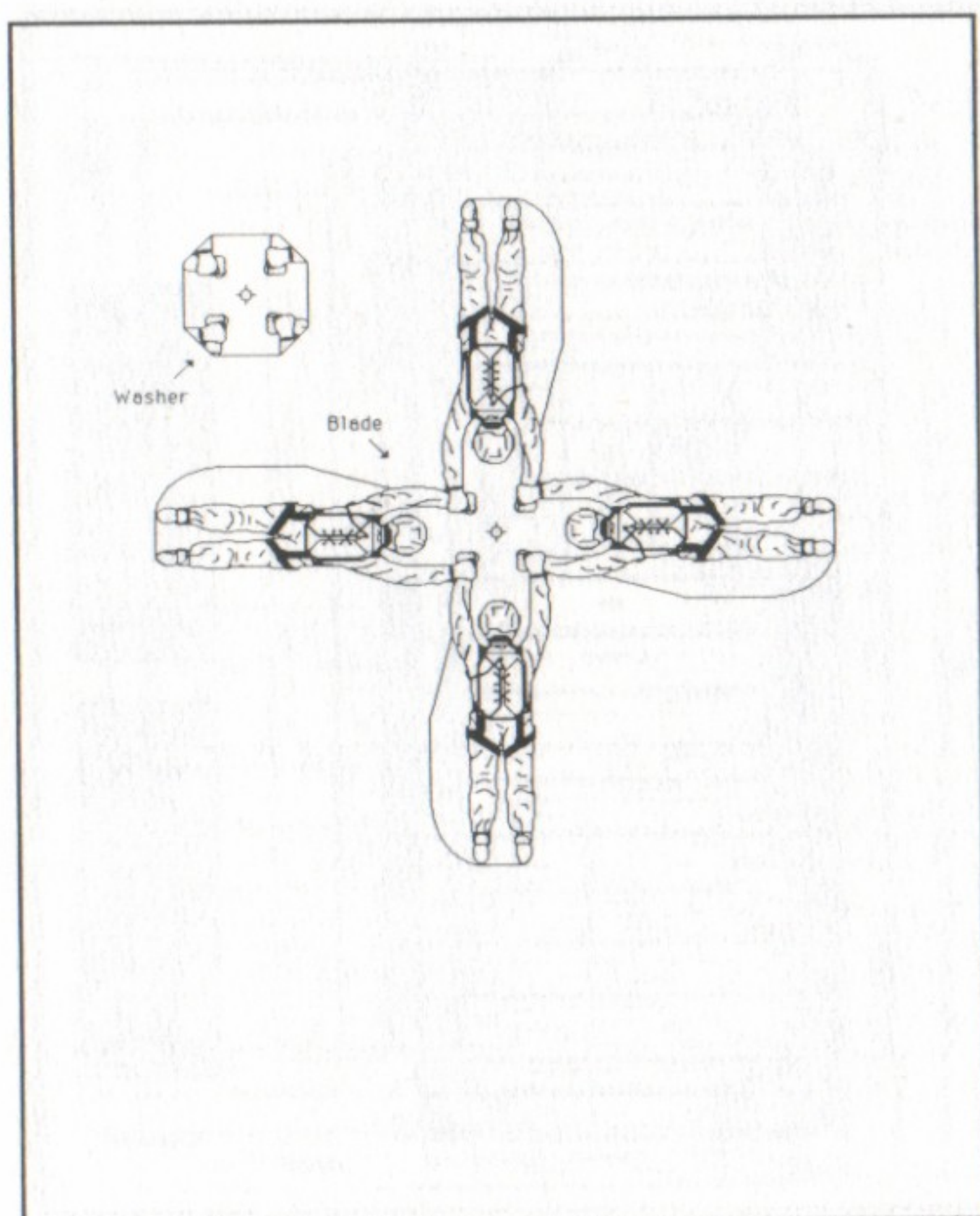
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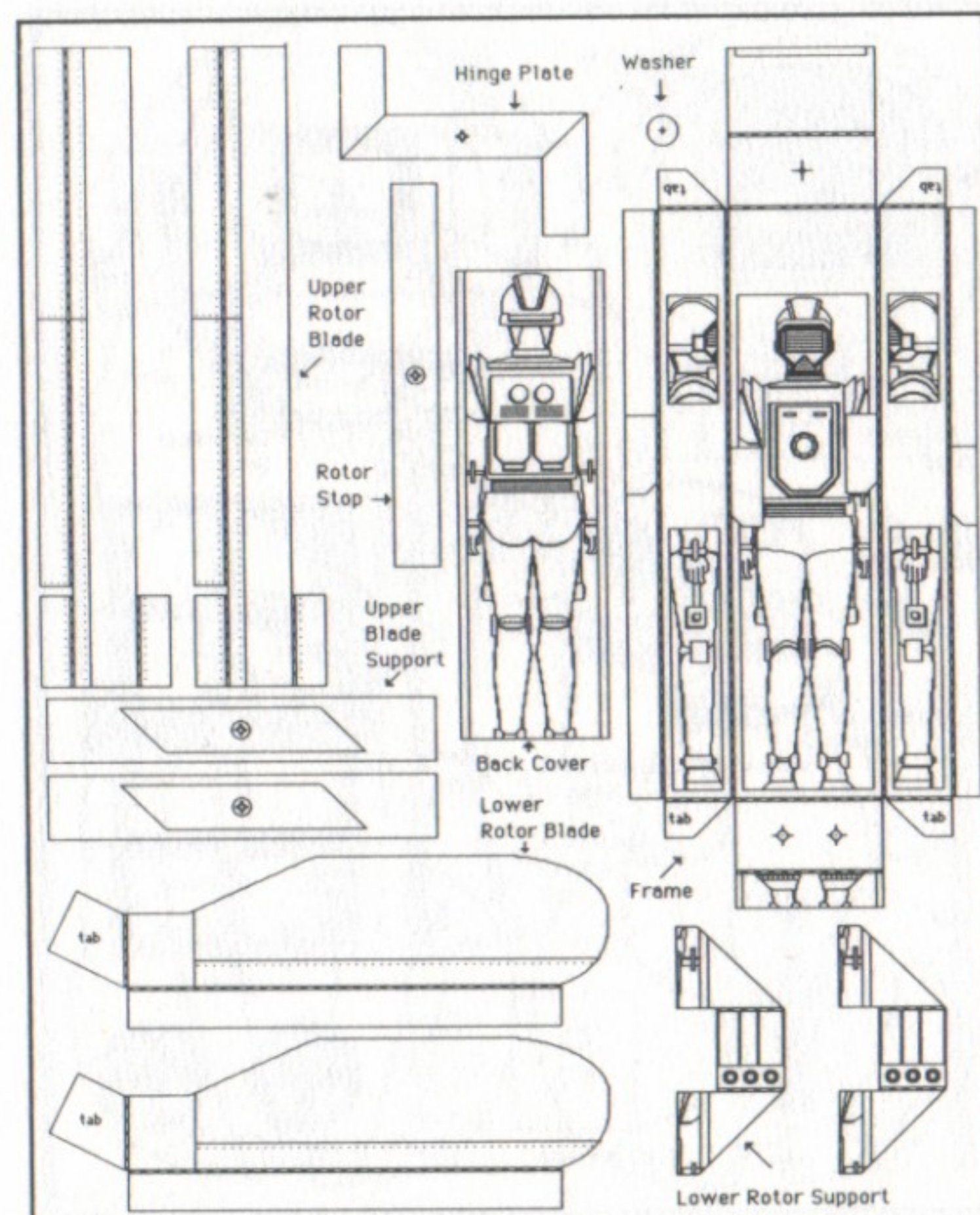
Experimental Glider Page 1 of 2



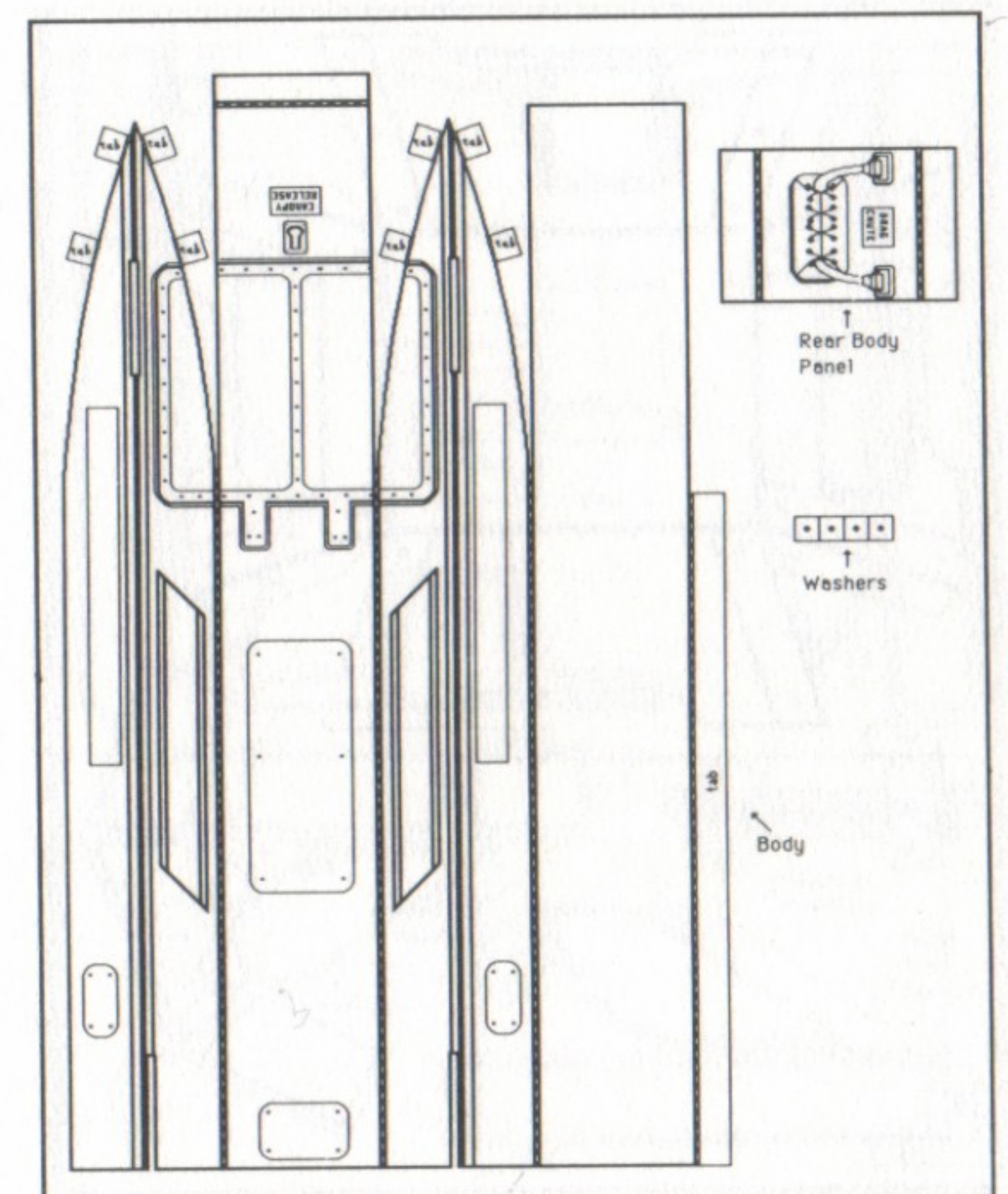
Experimental Glider Page 2 of 2



Flying Propeller Page 1 of 1

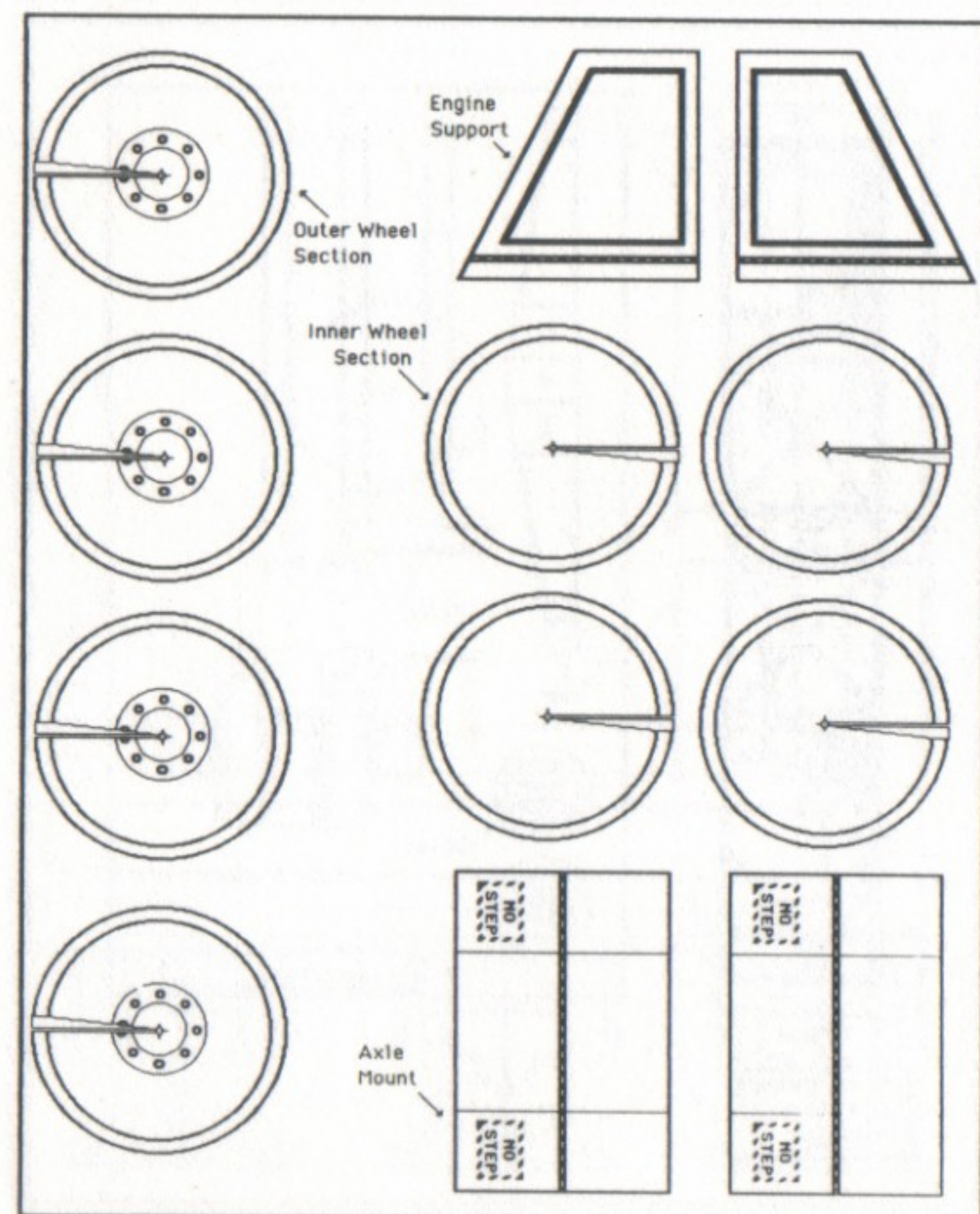


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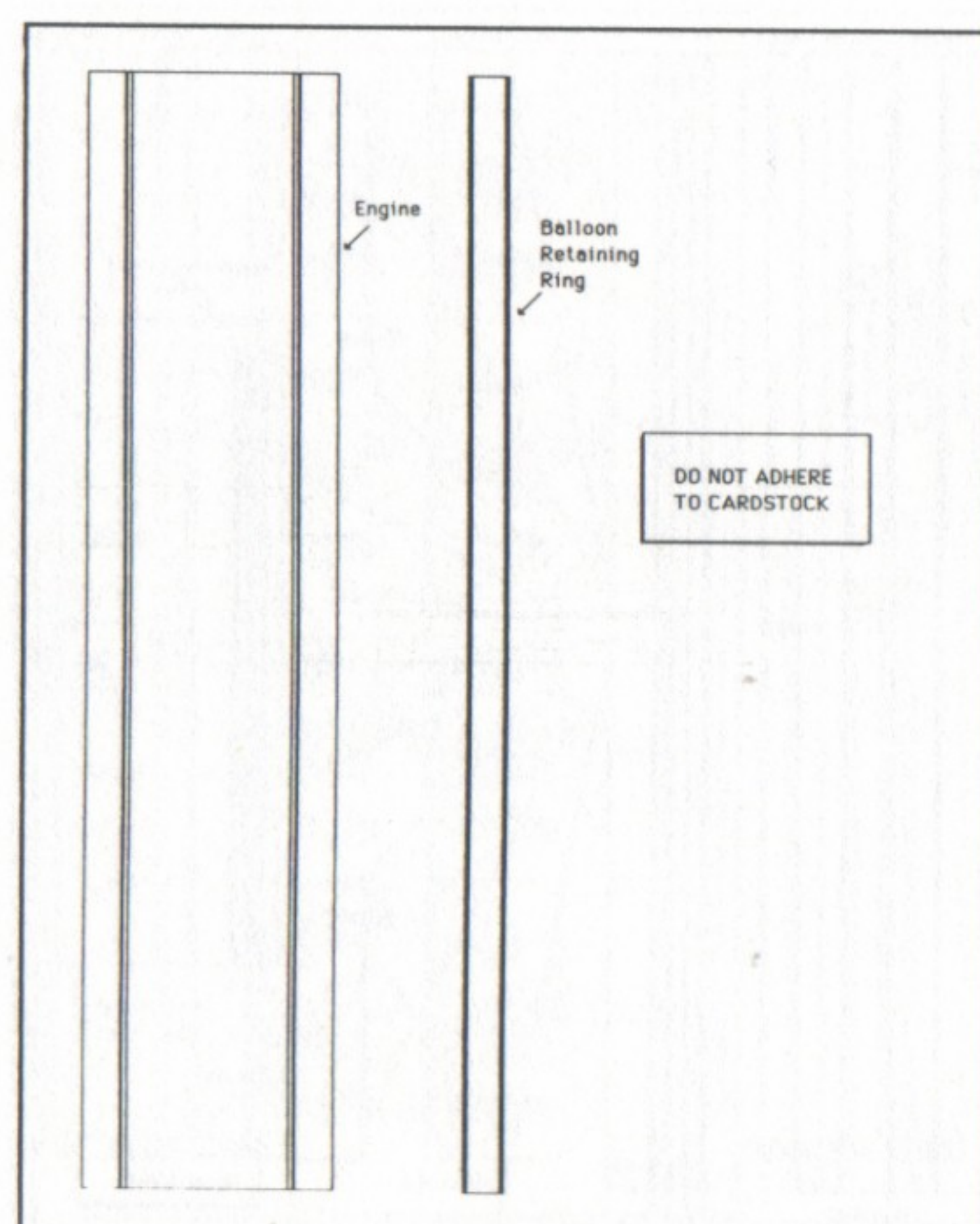
Jet Dragster Page 1 of 3

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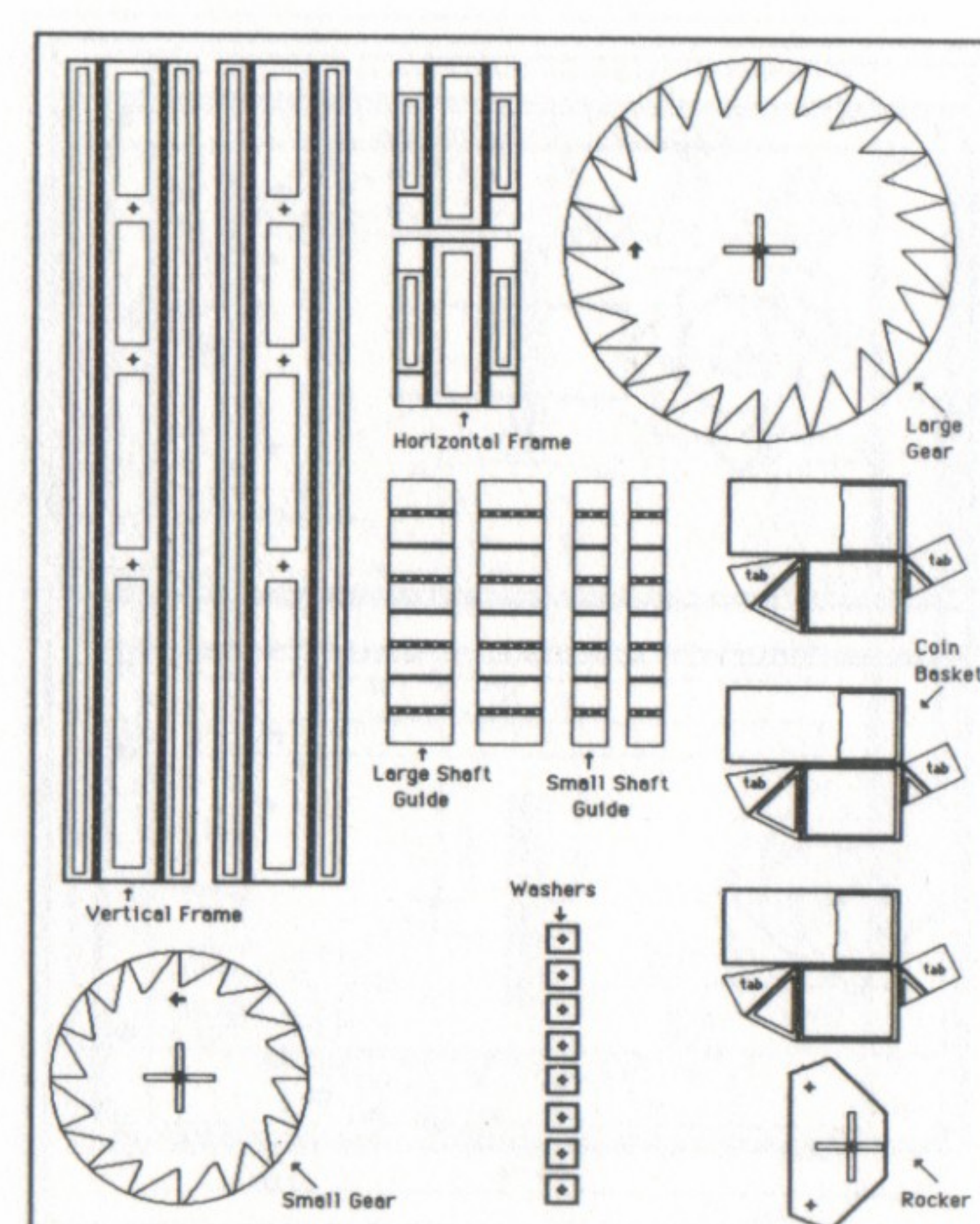
Jet Dragster

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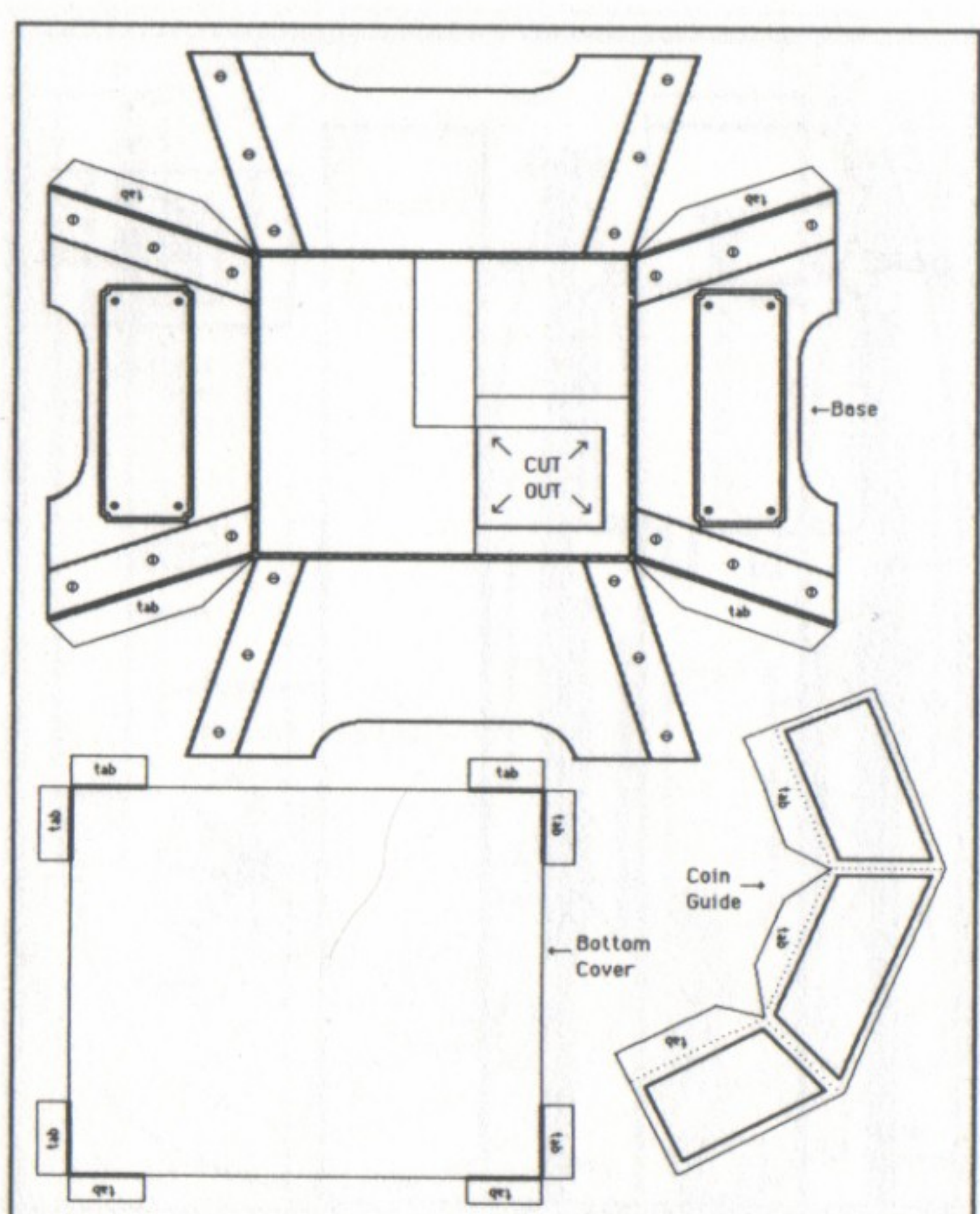
Jet Dragster

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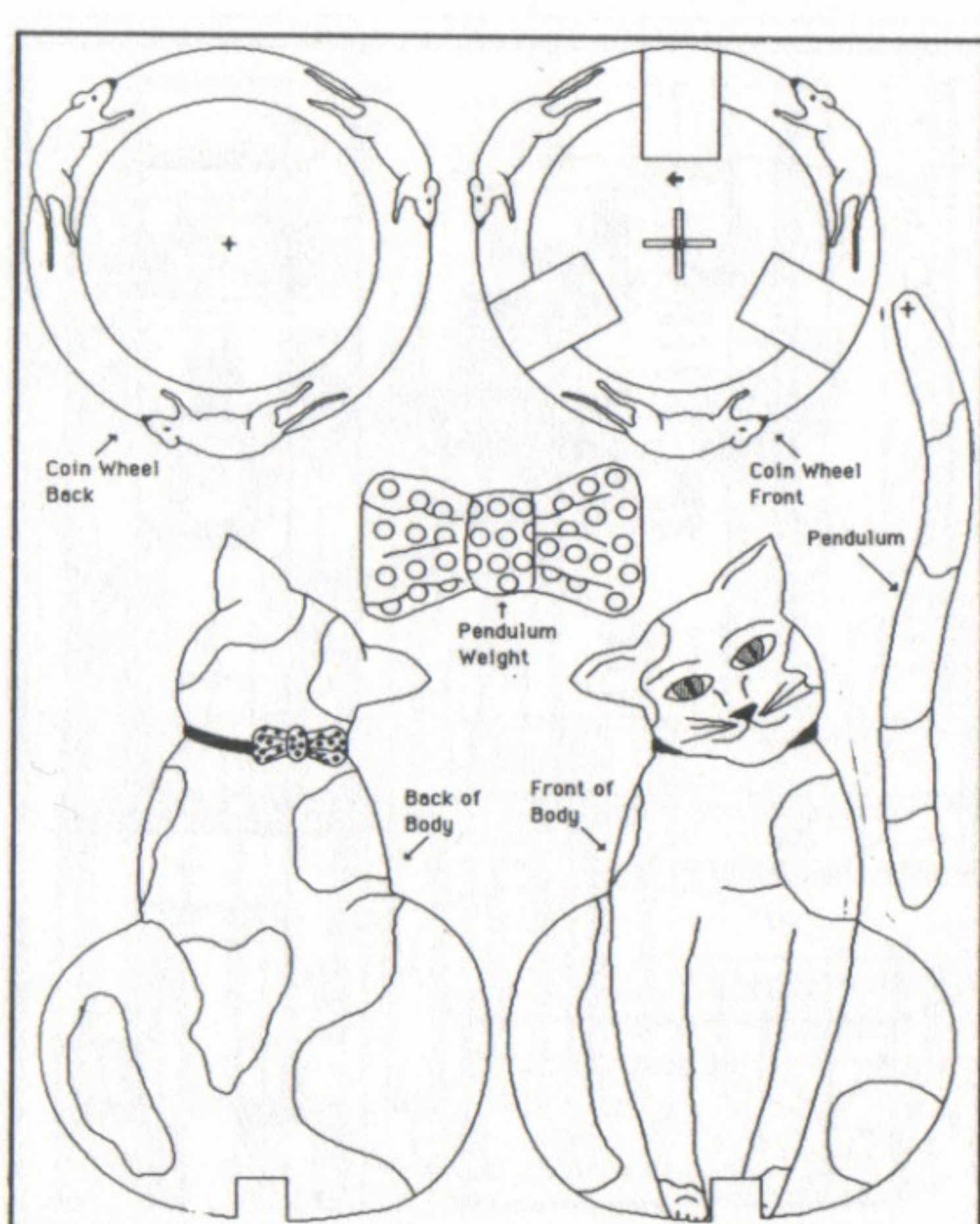
Mechanical Bank

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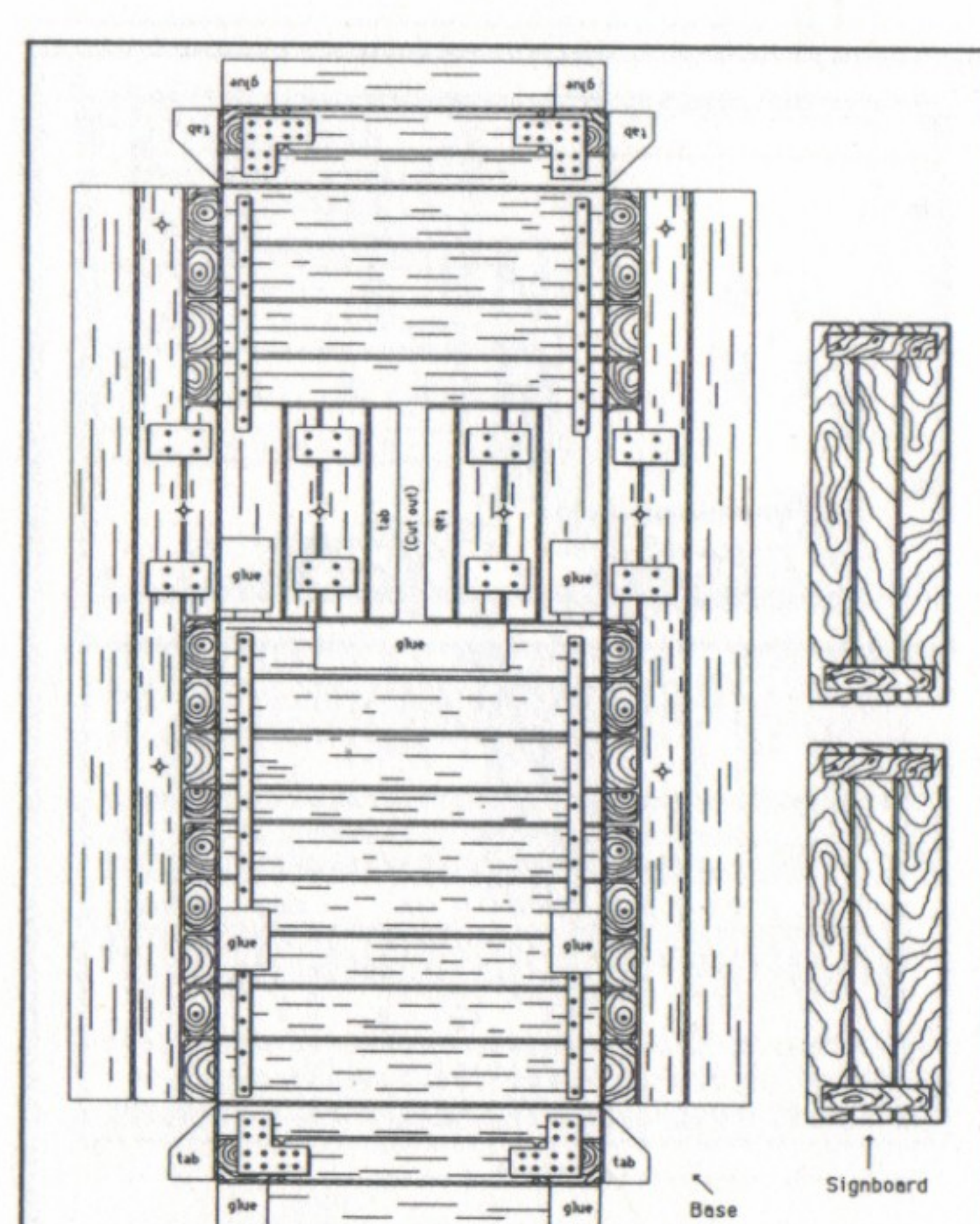
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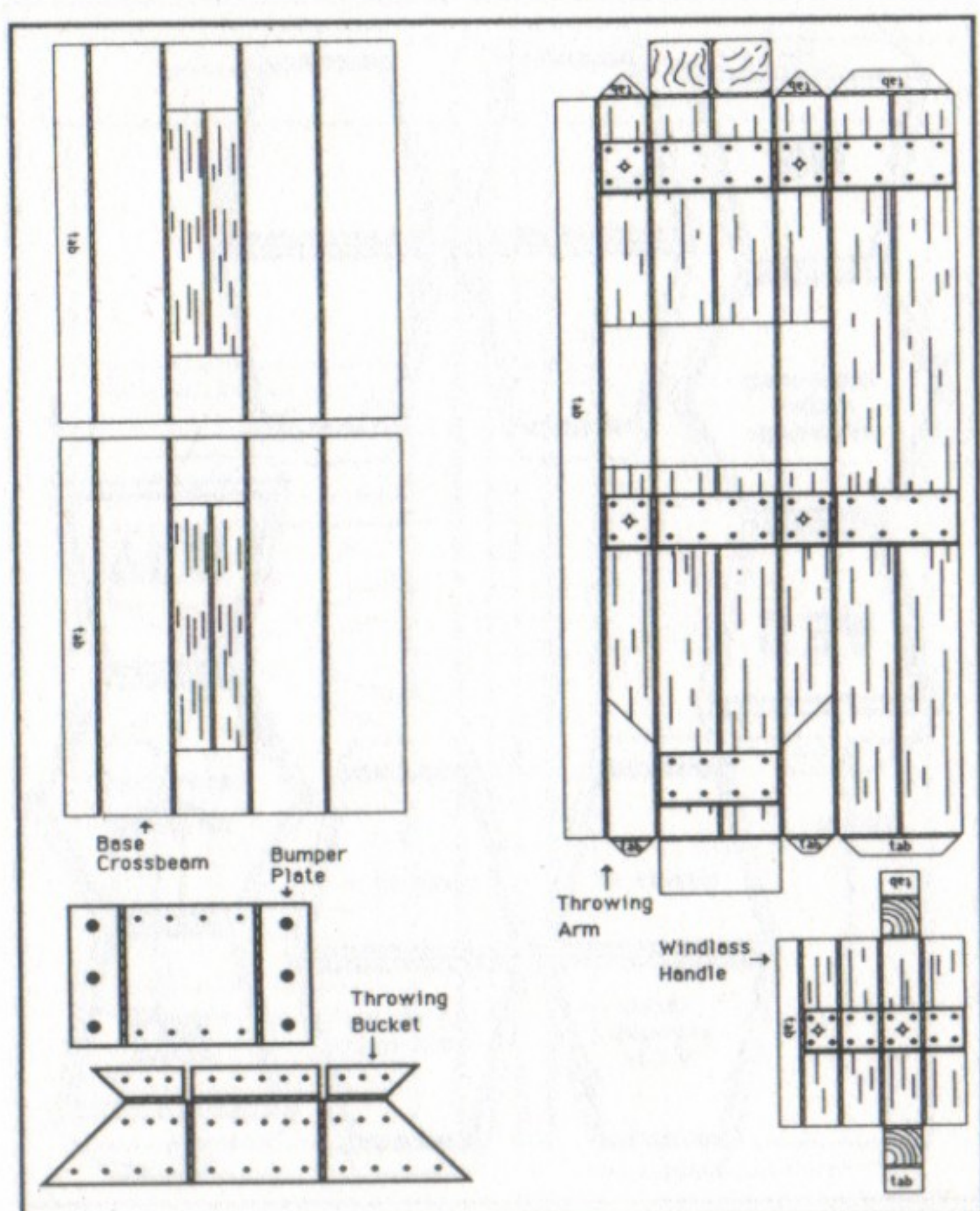
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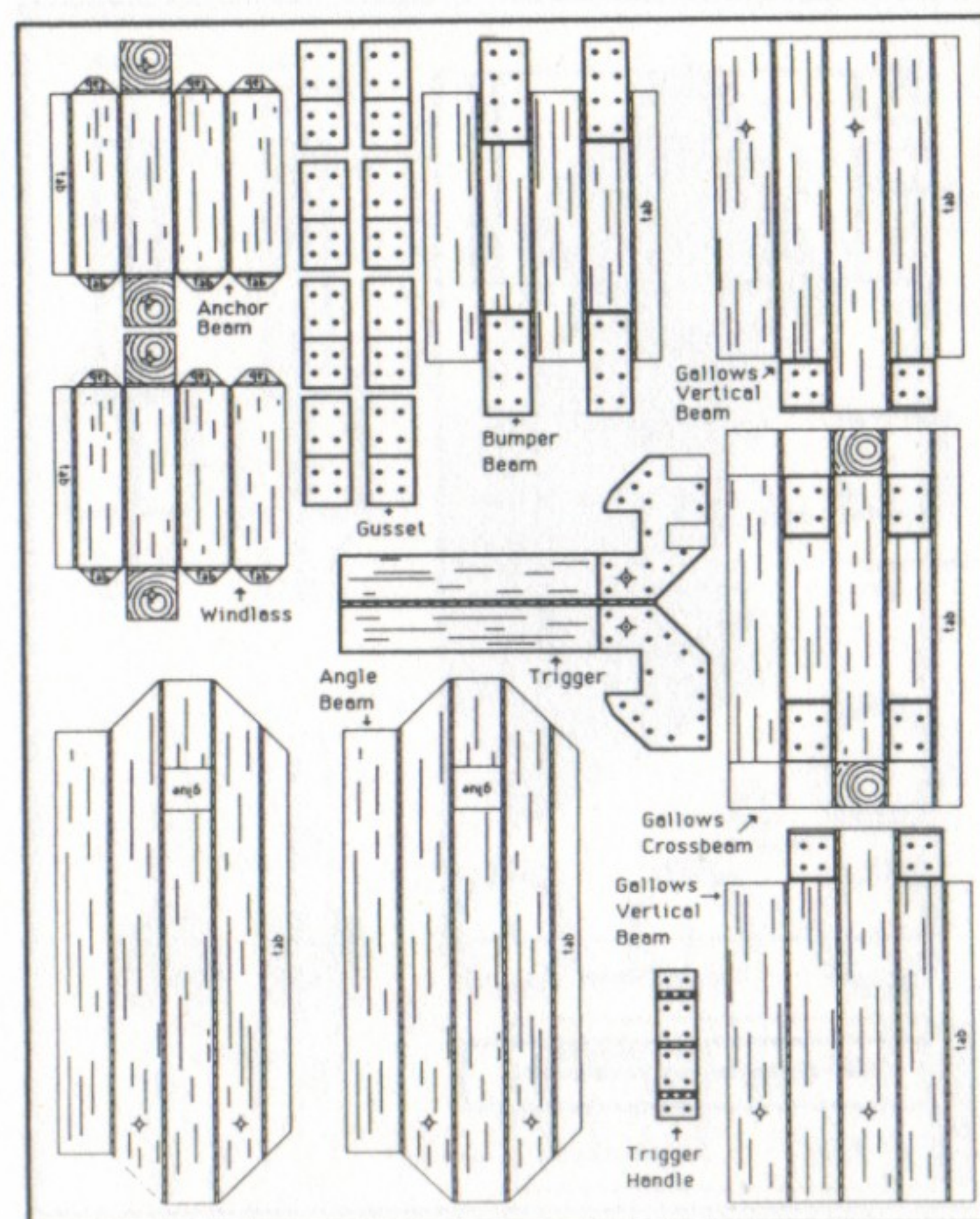


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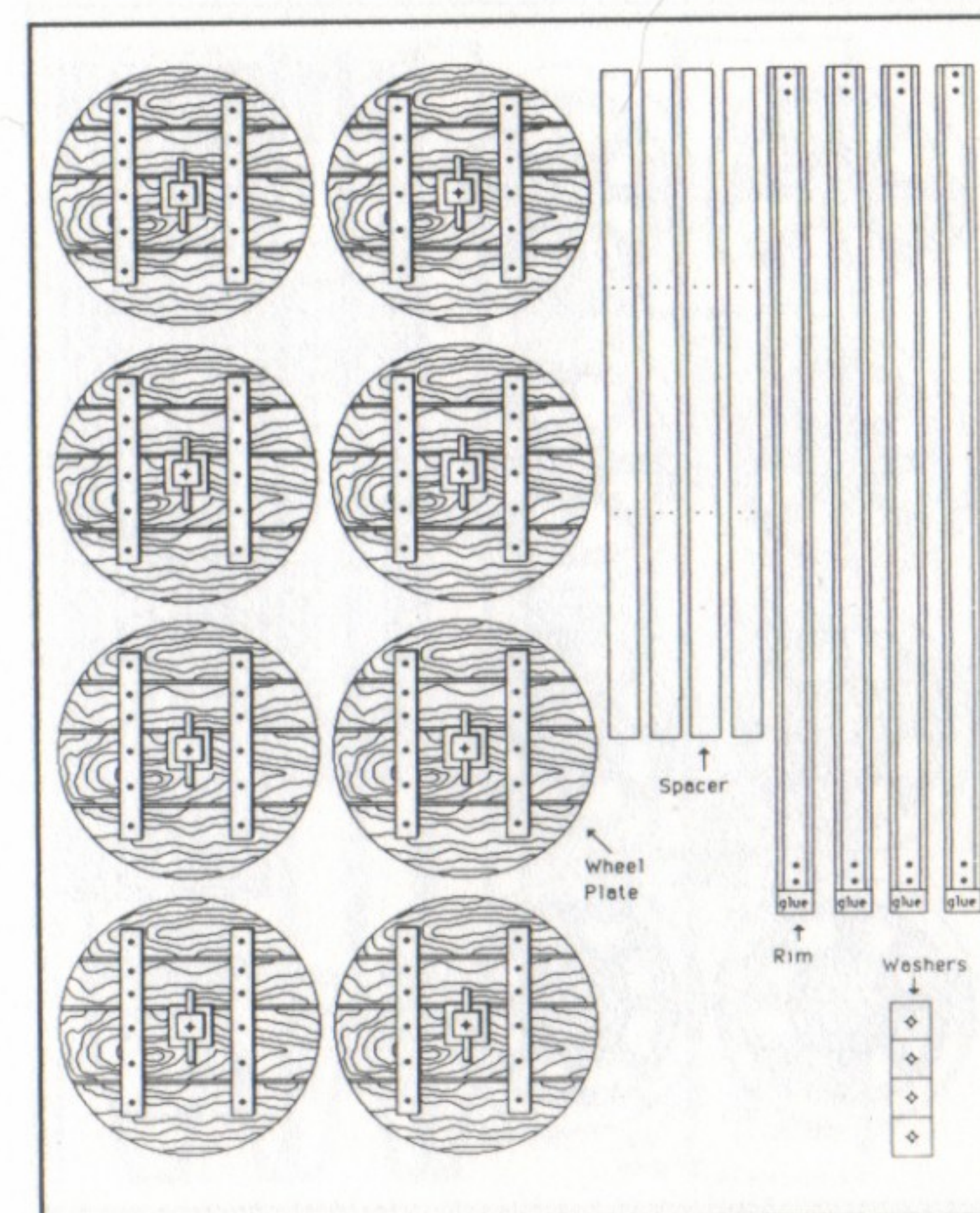
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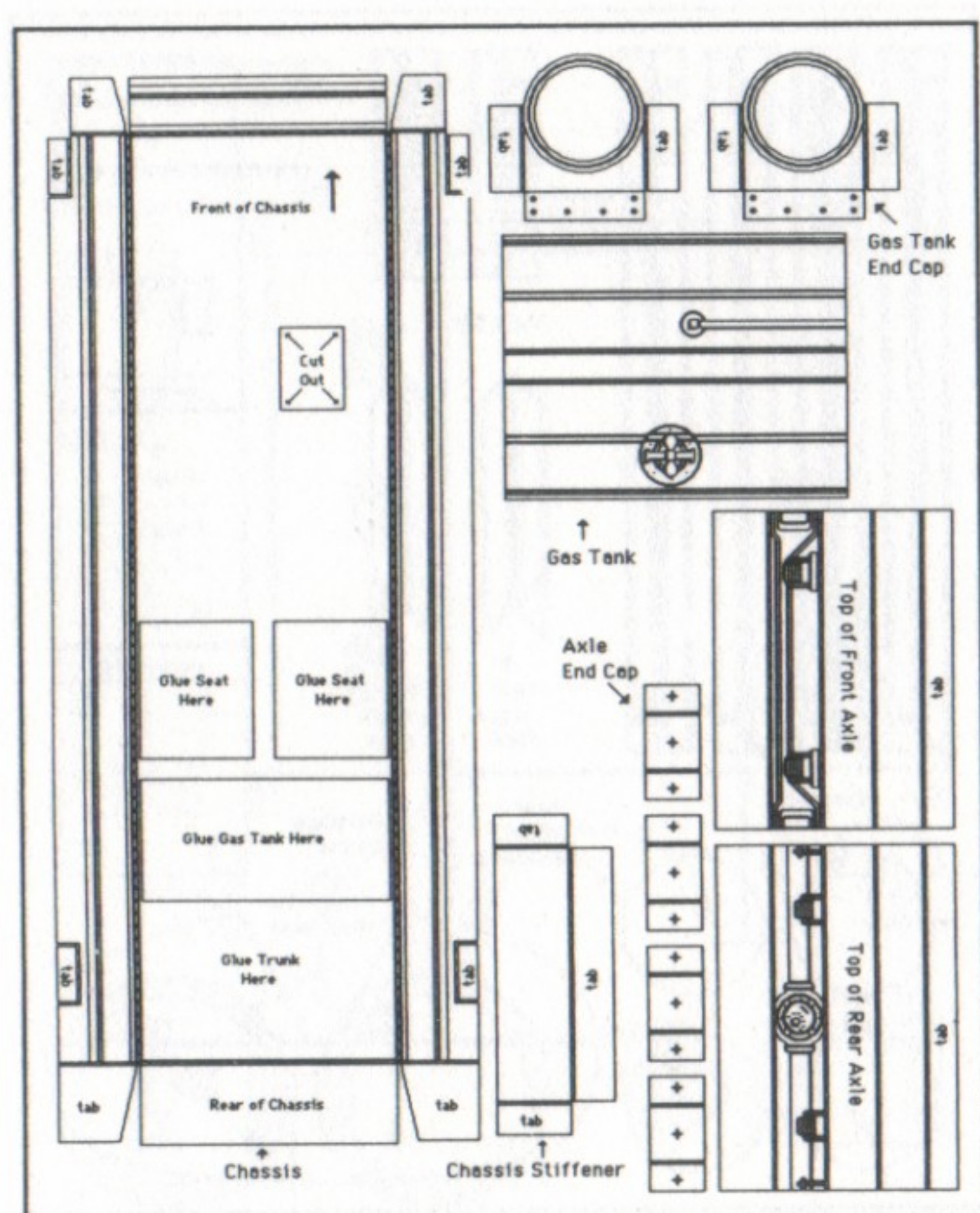
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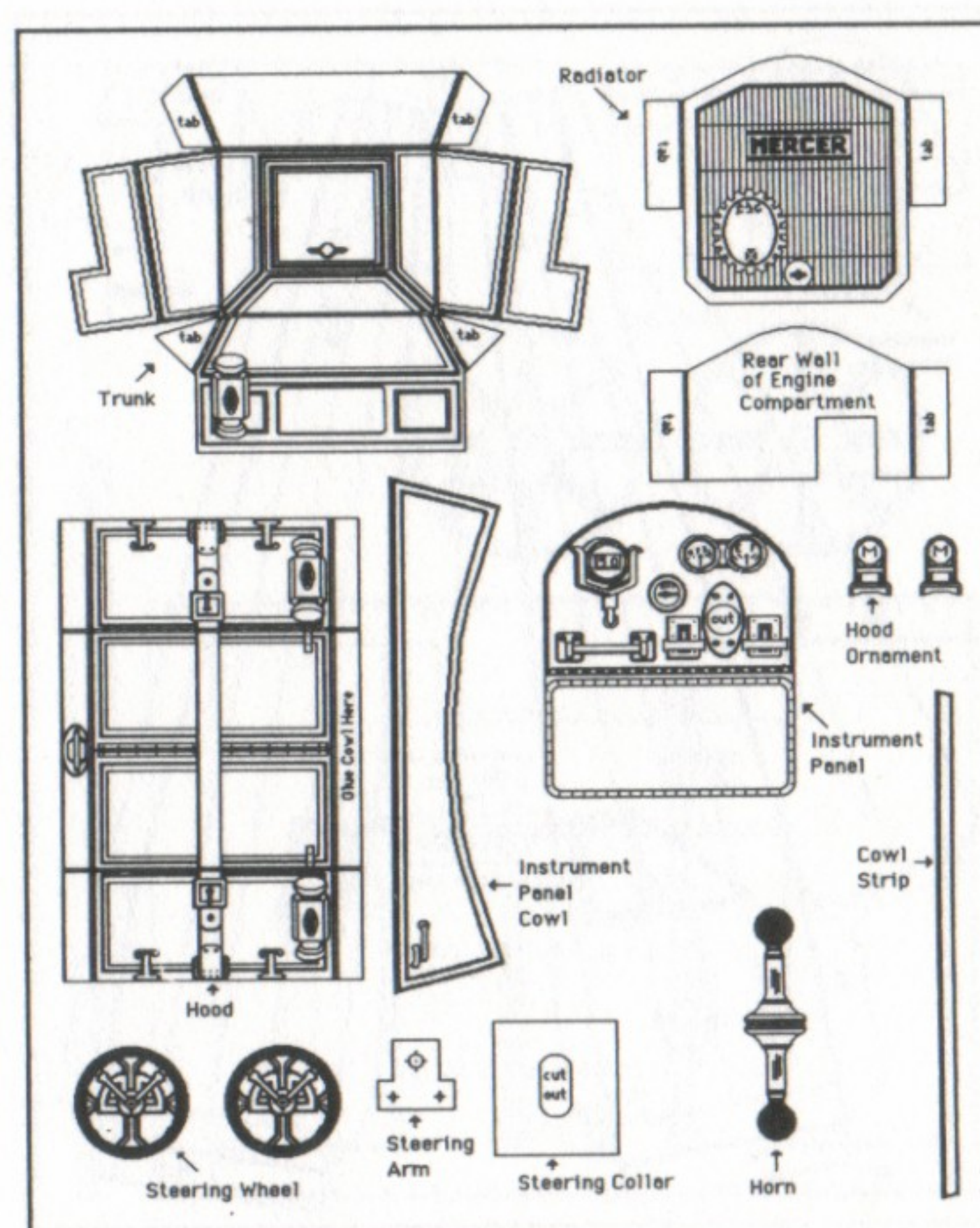
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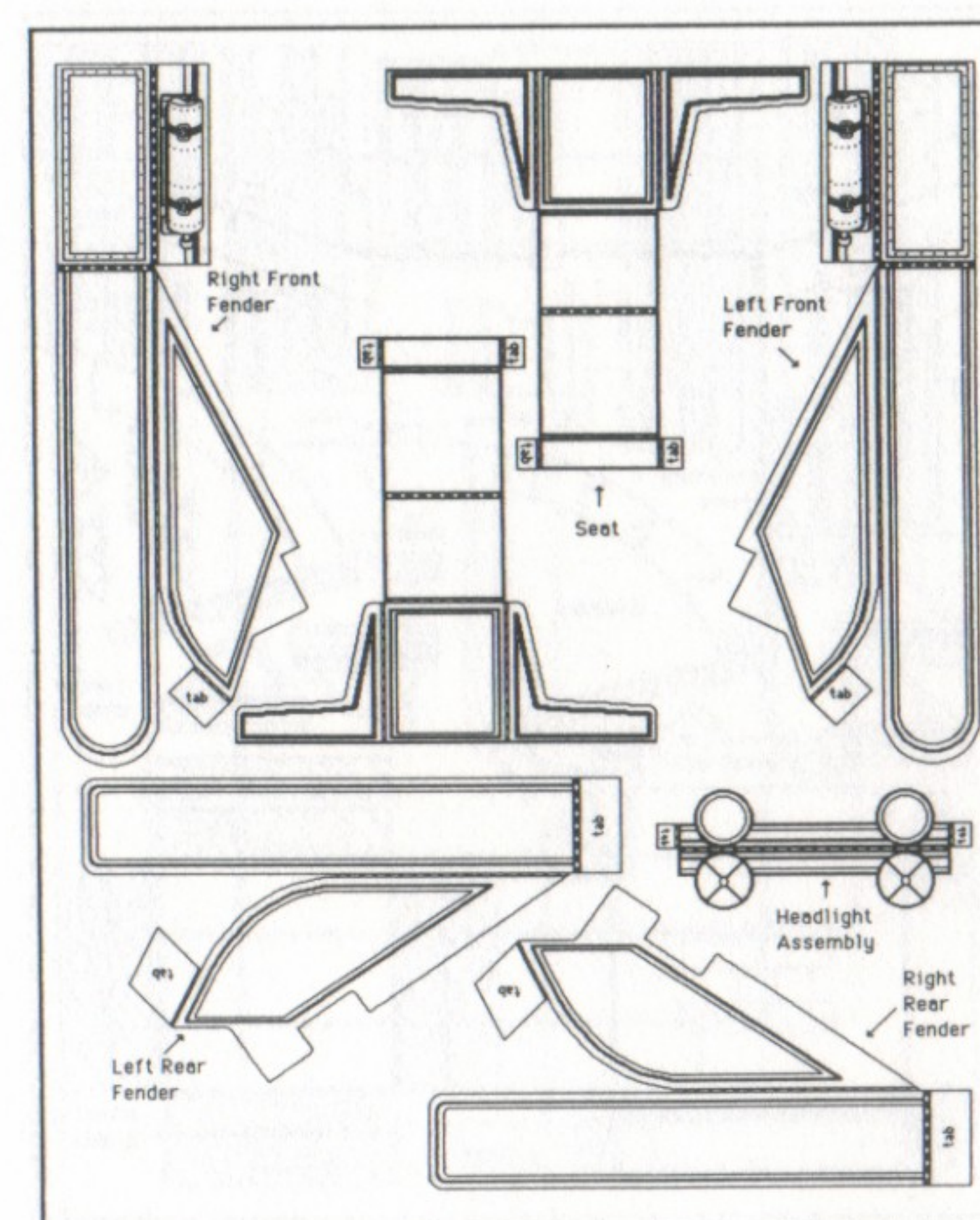
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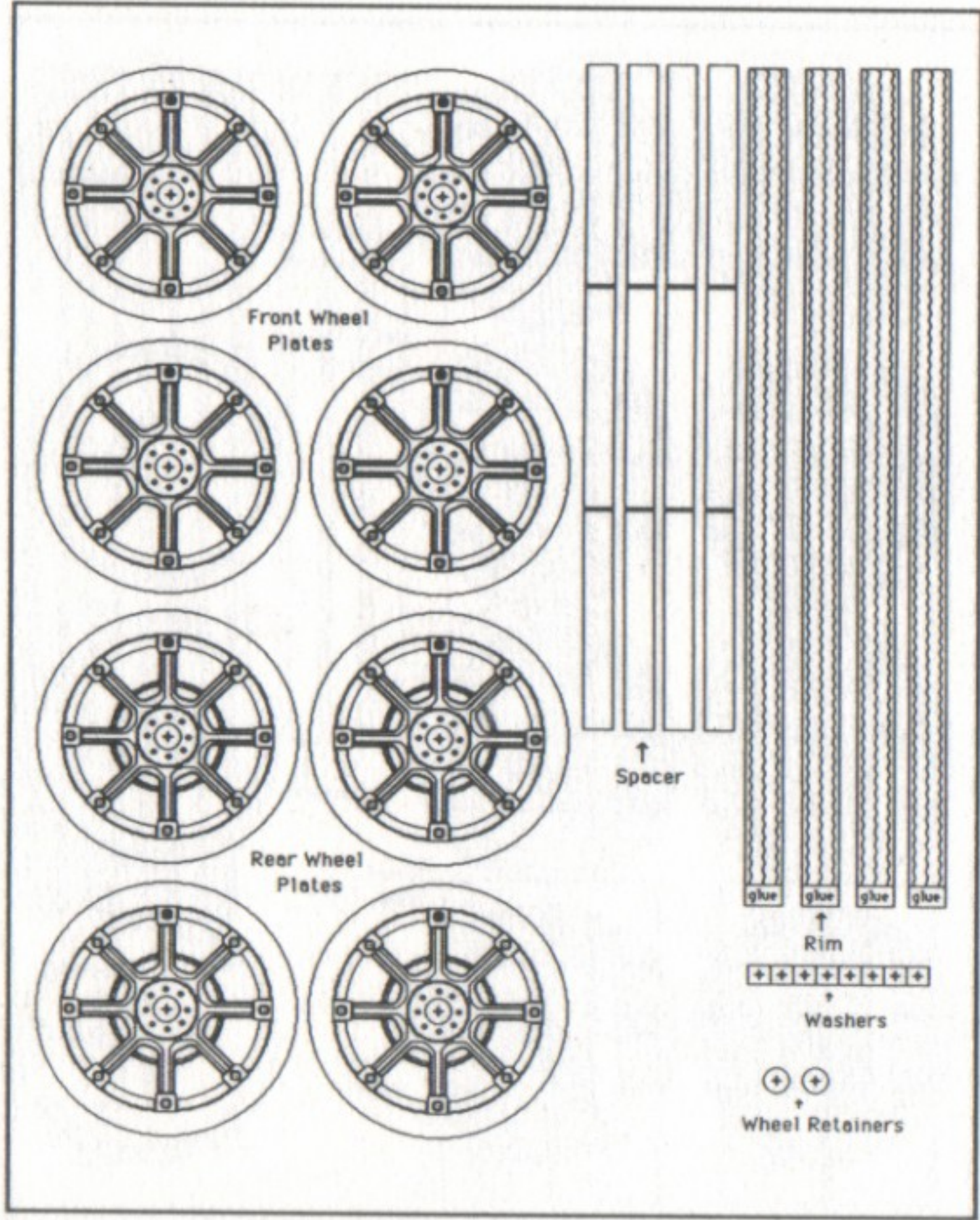


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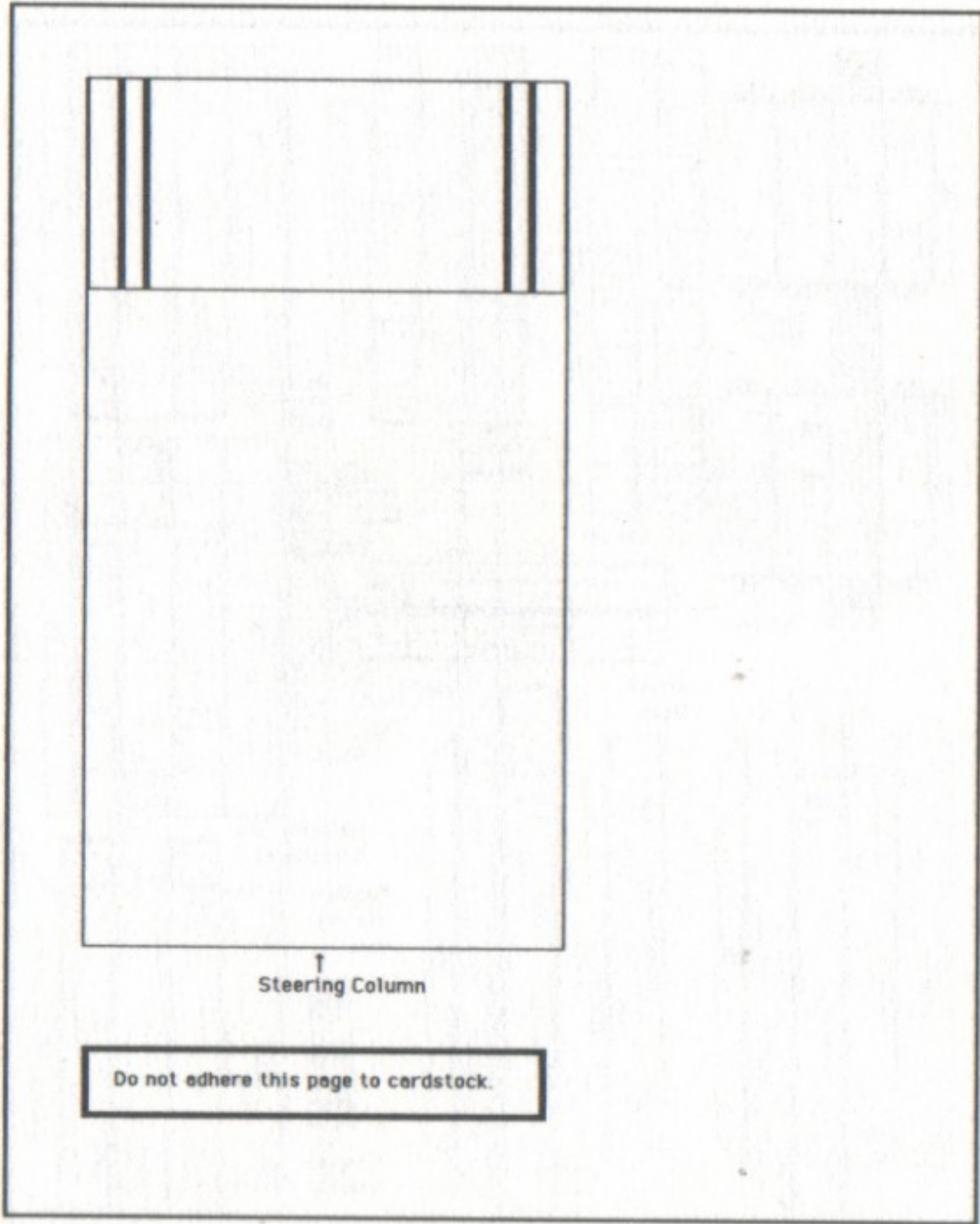


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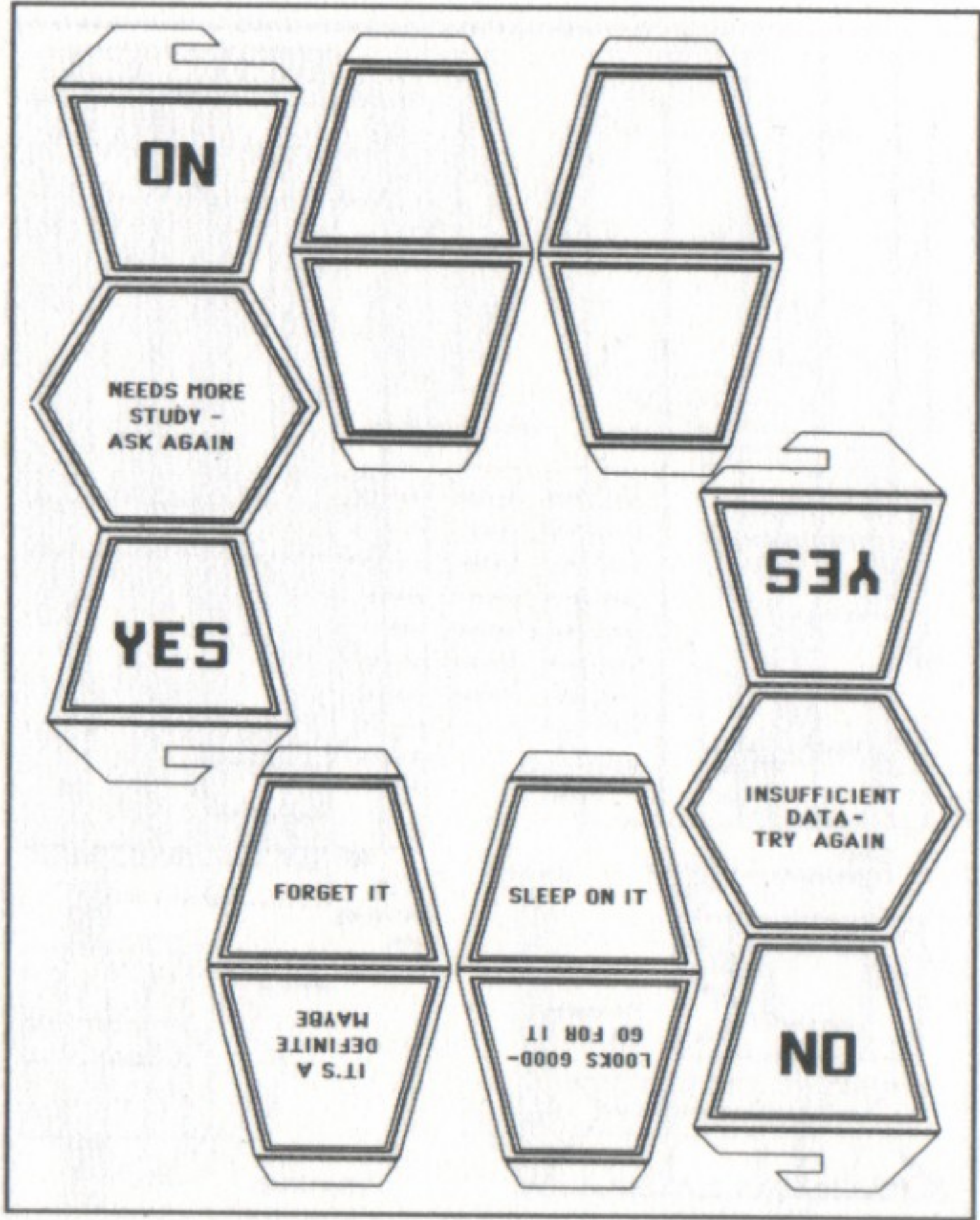
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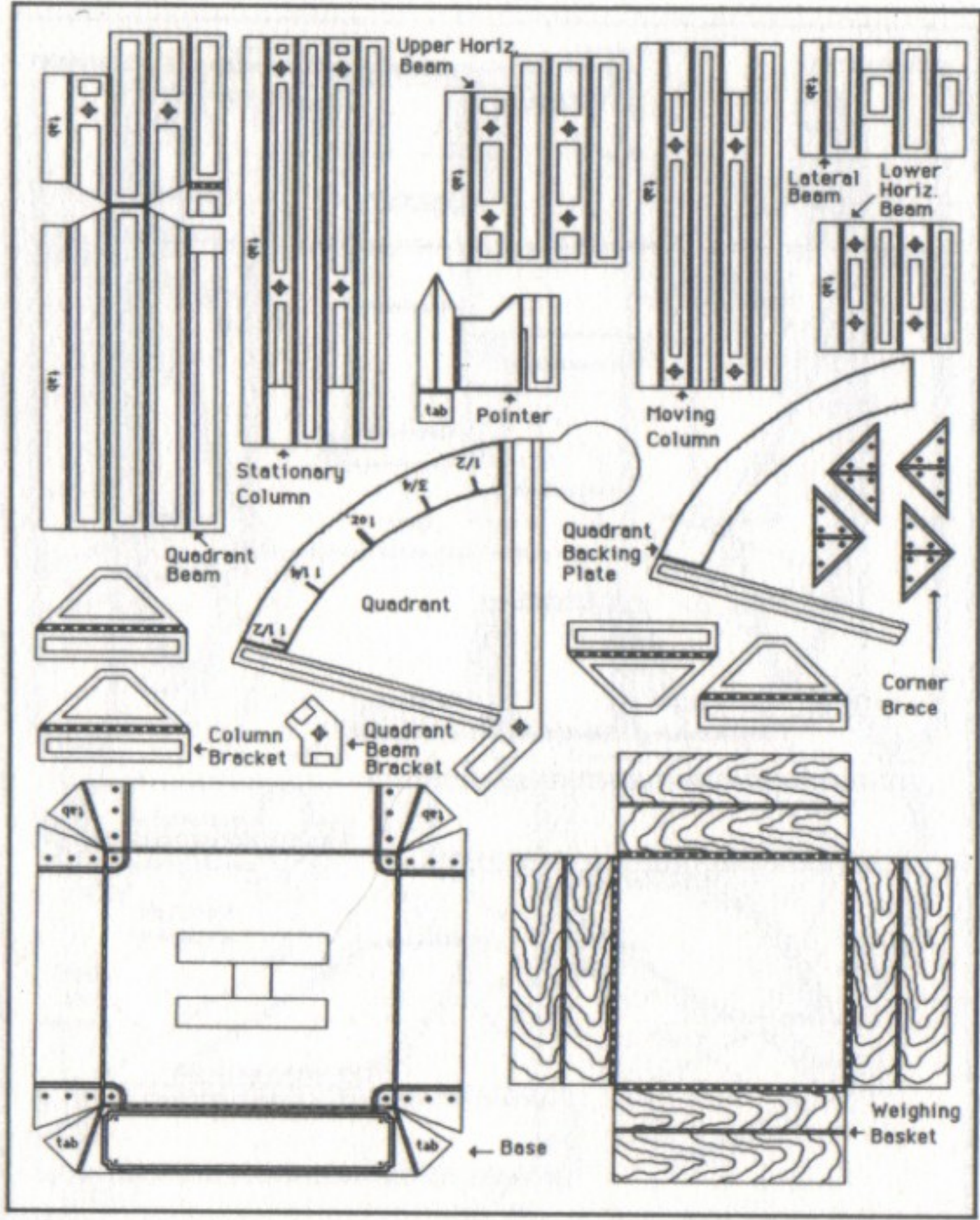
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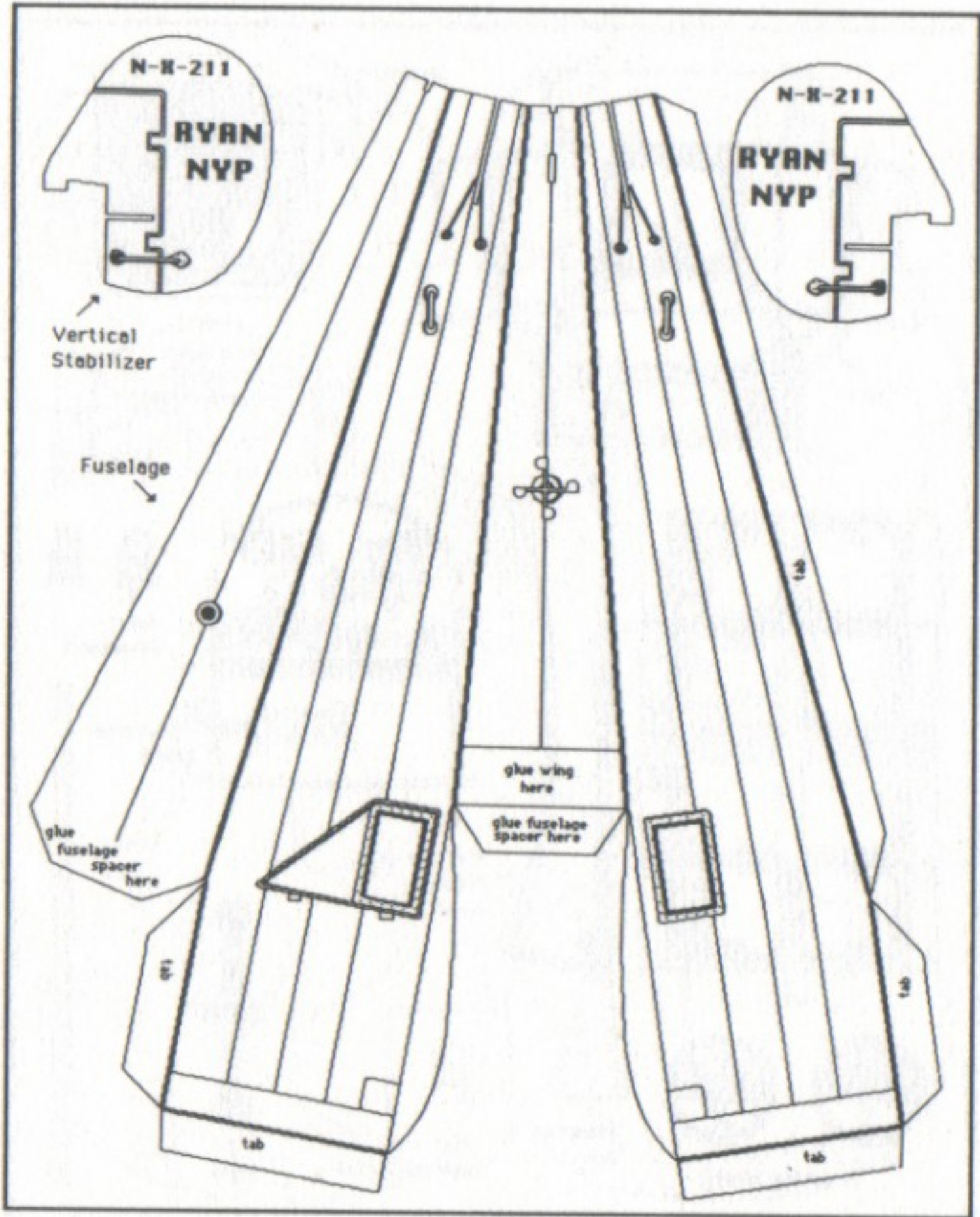
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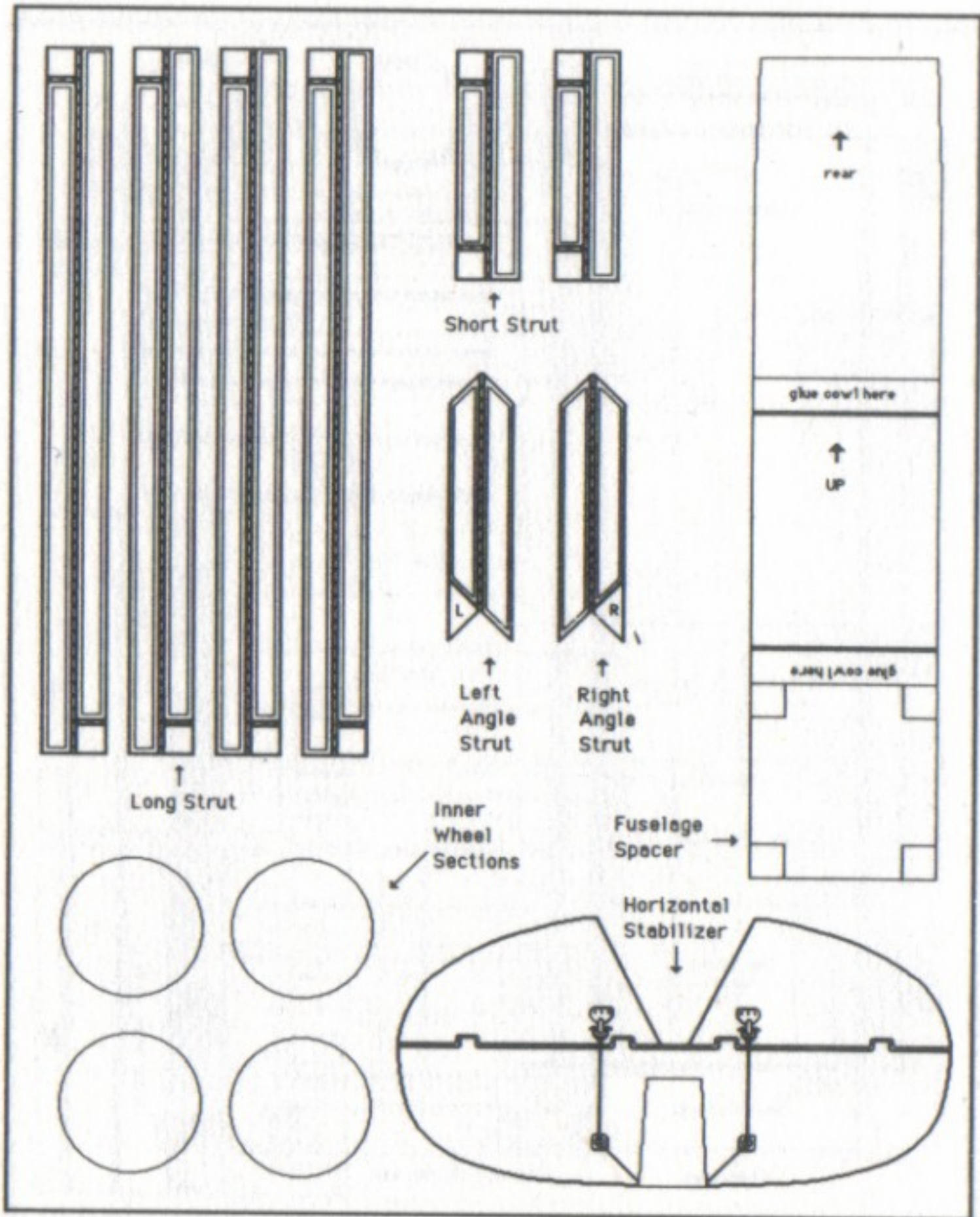
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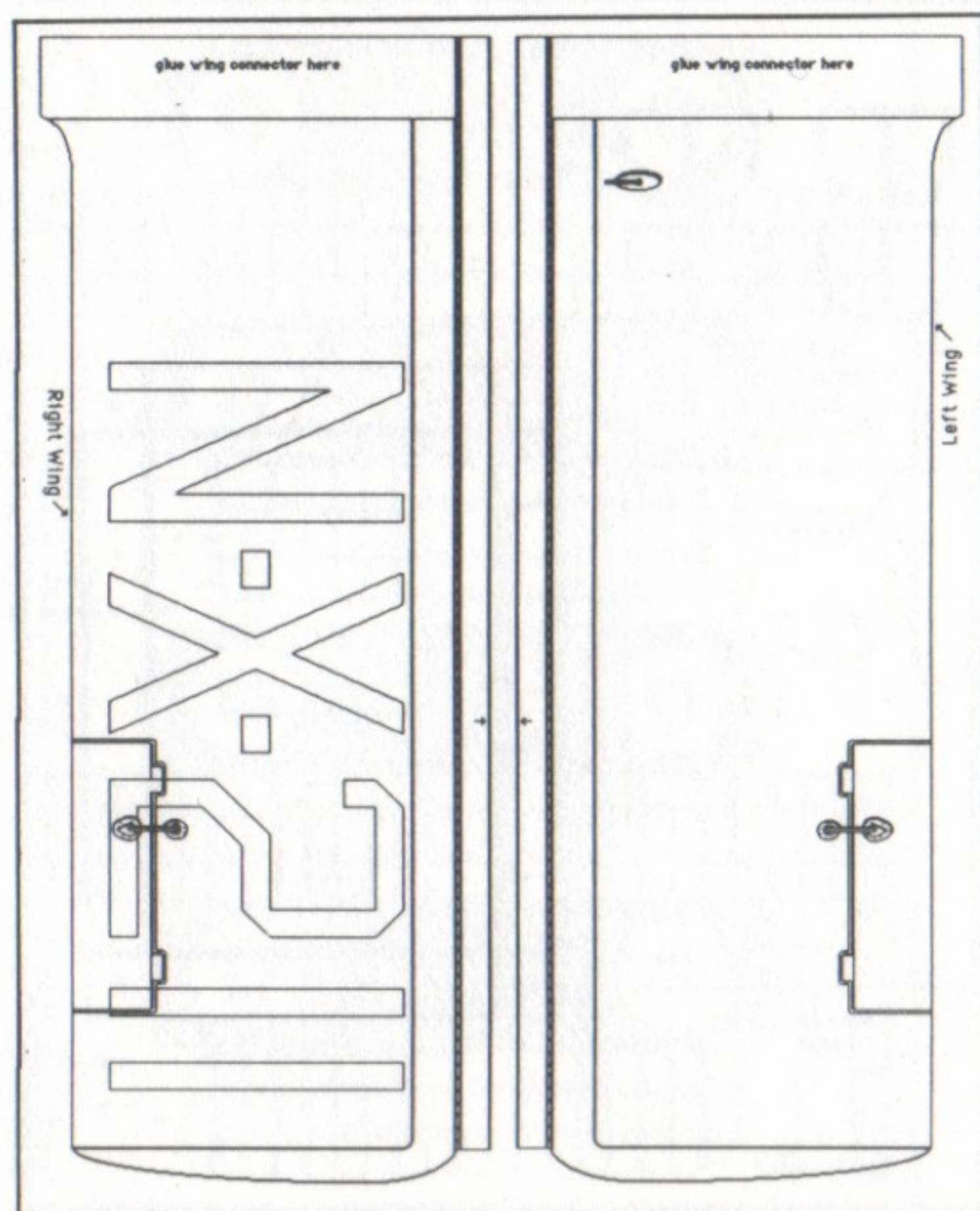
Pennypower Scale Page 1 of 1



Spirit of St. Louis Page 1 of 4

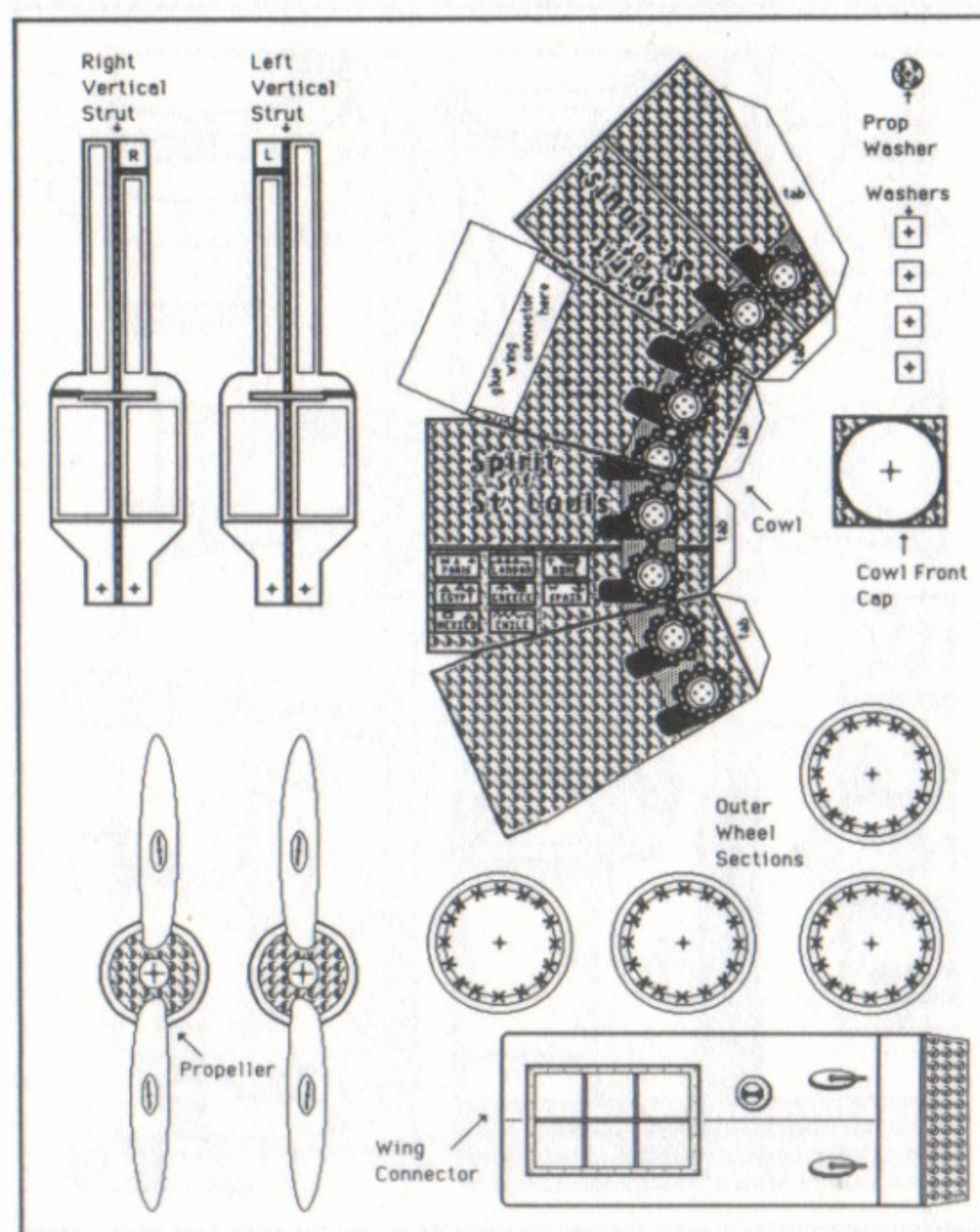


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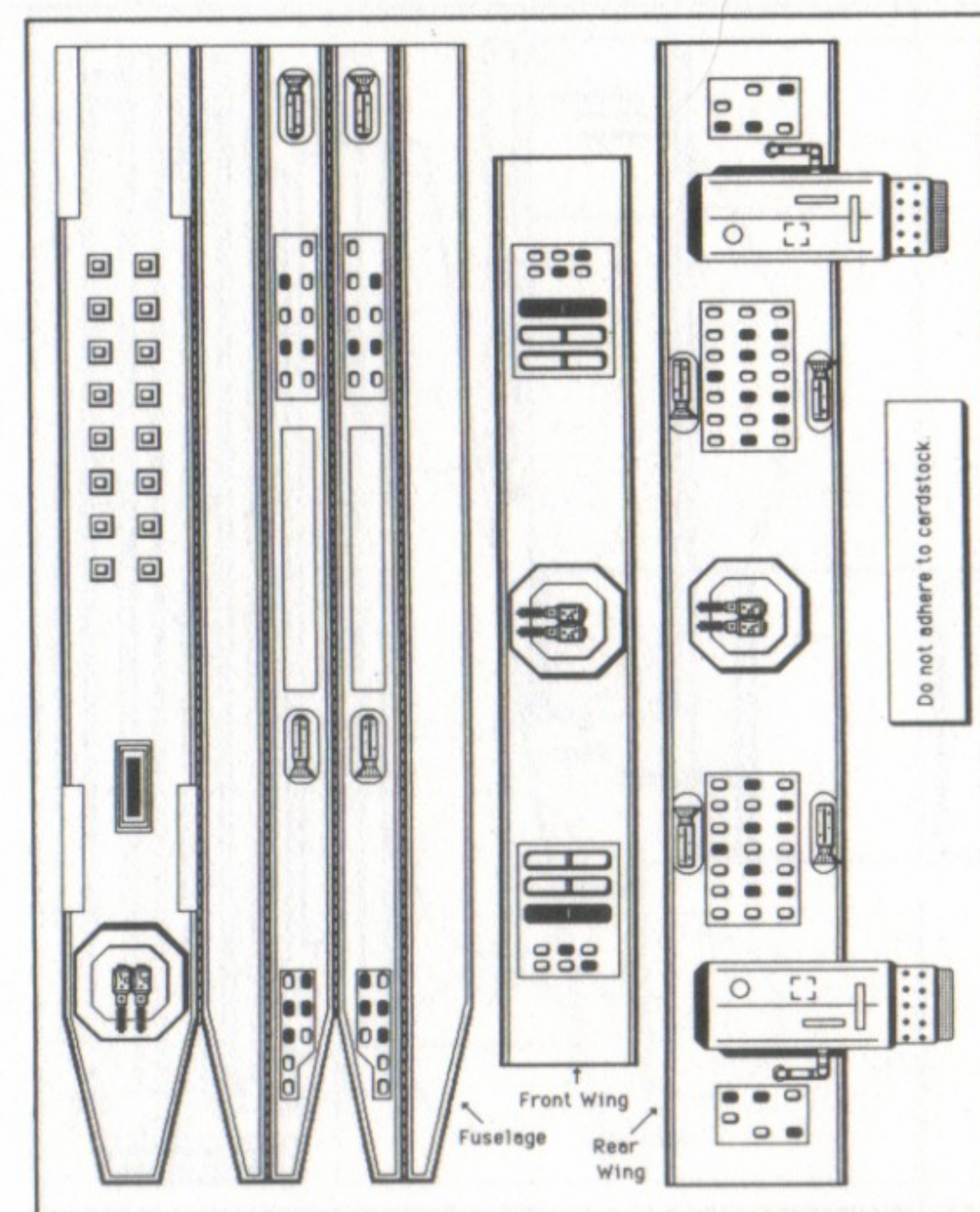
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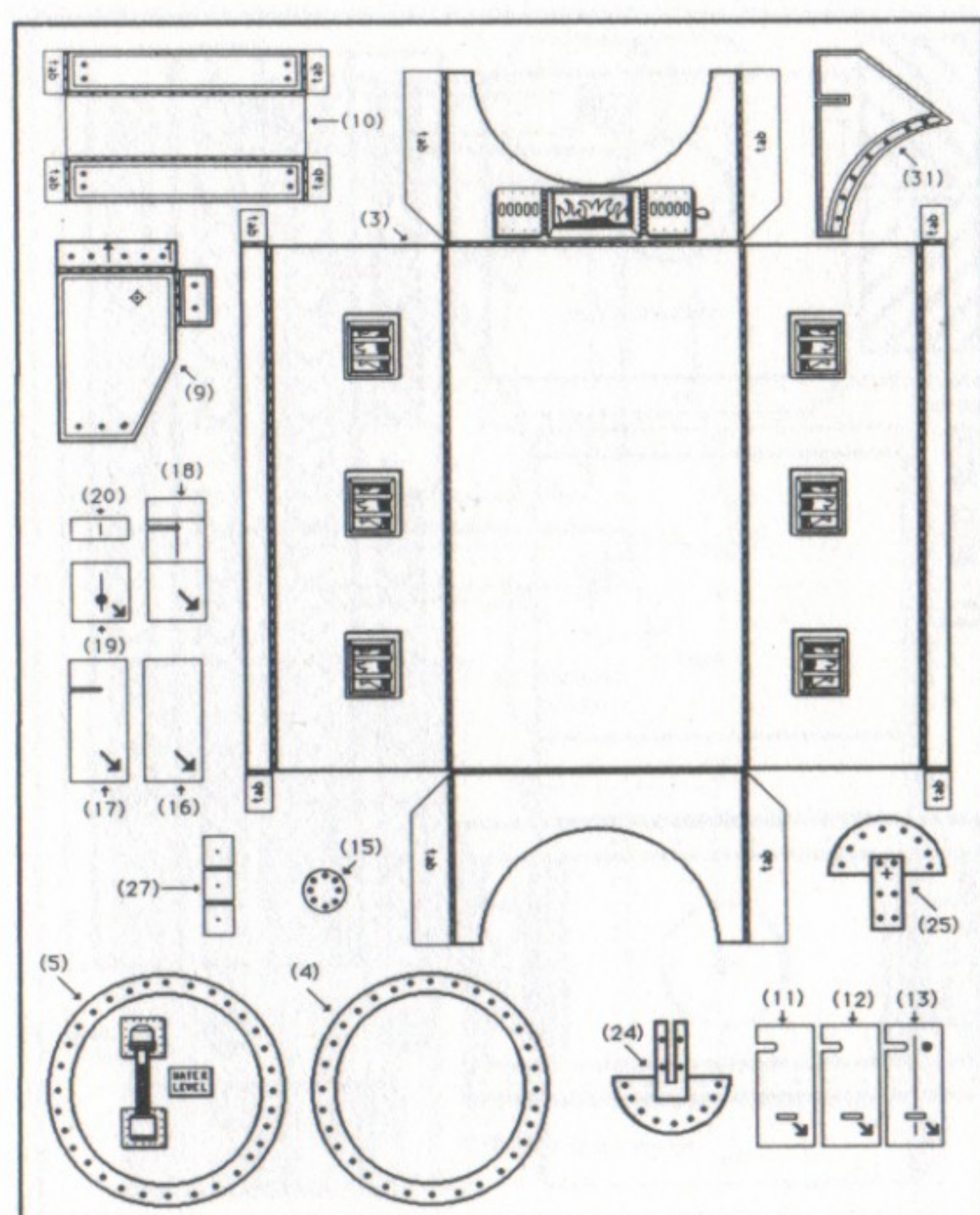
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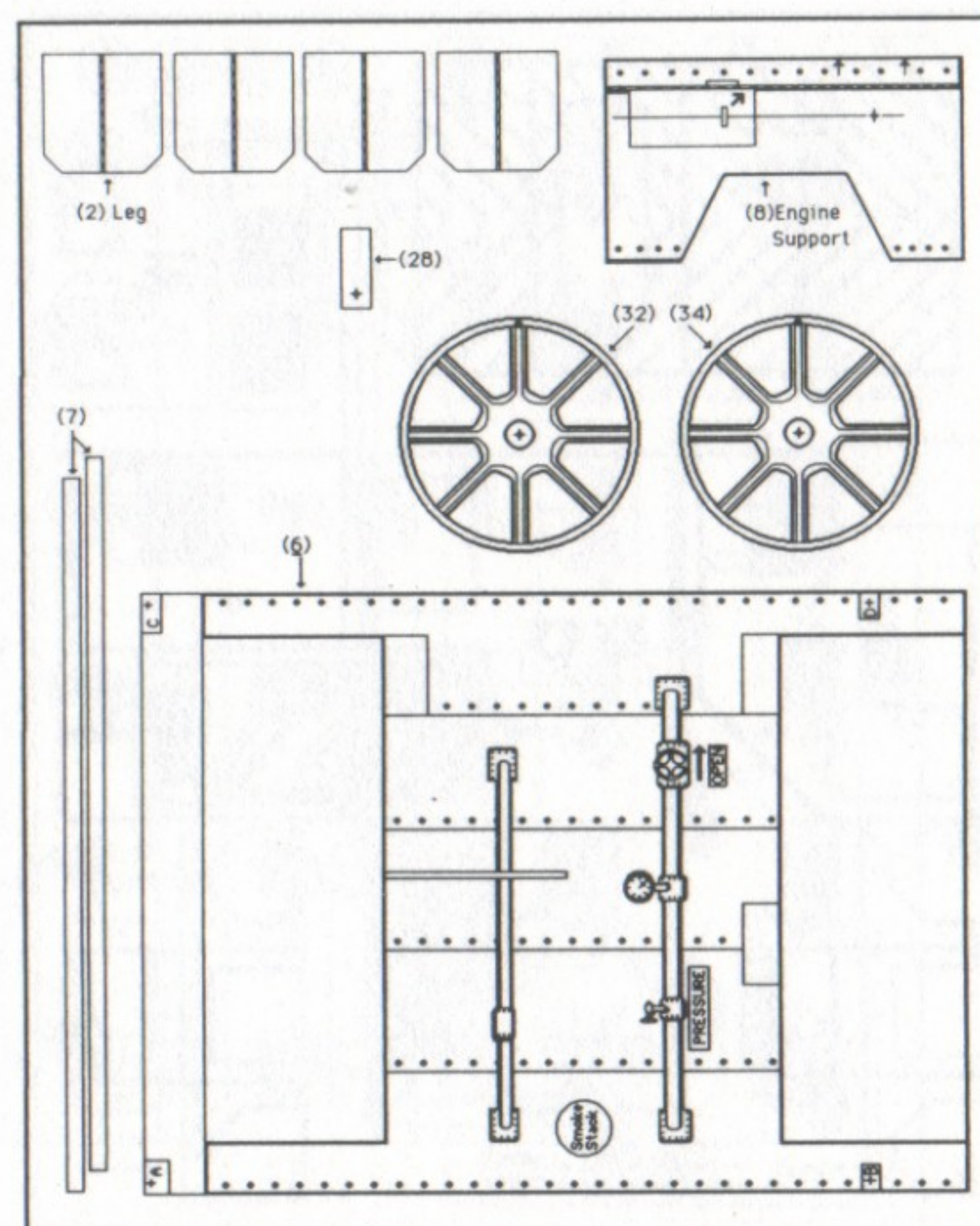
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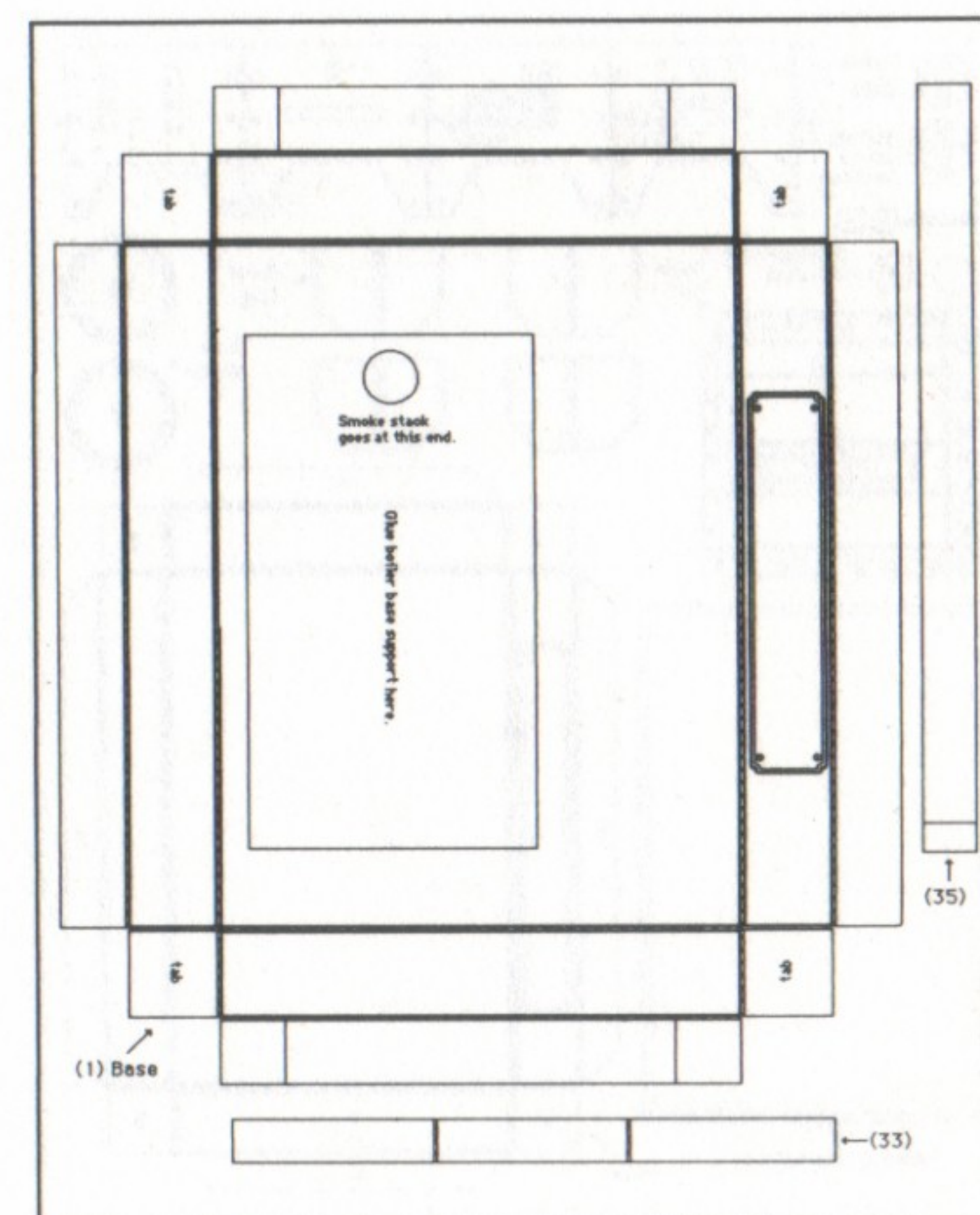
Steam Engine

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Steam Engine

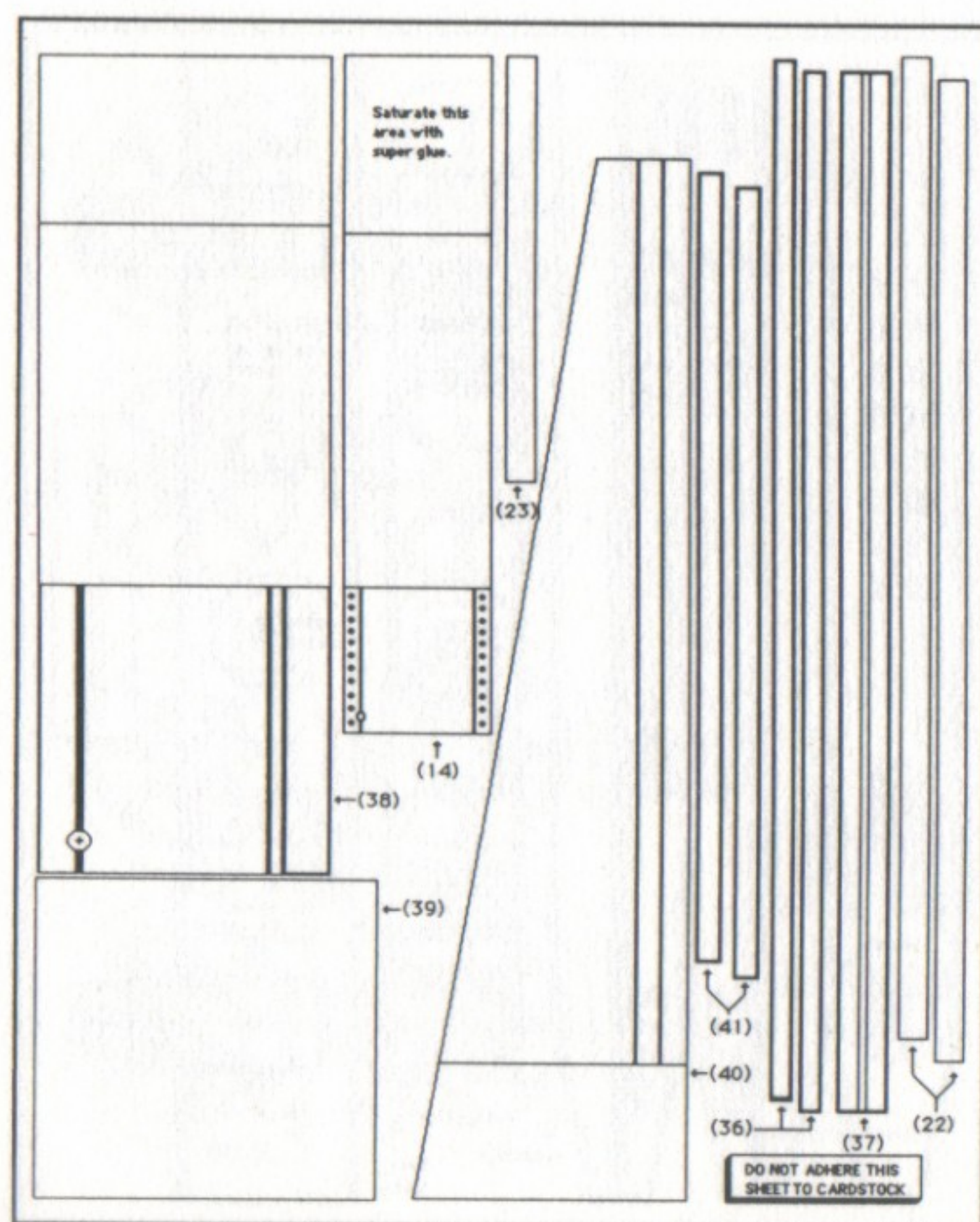
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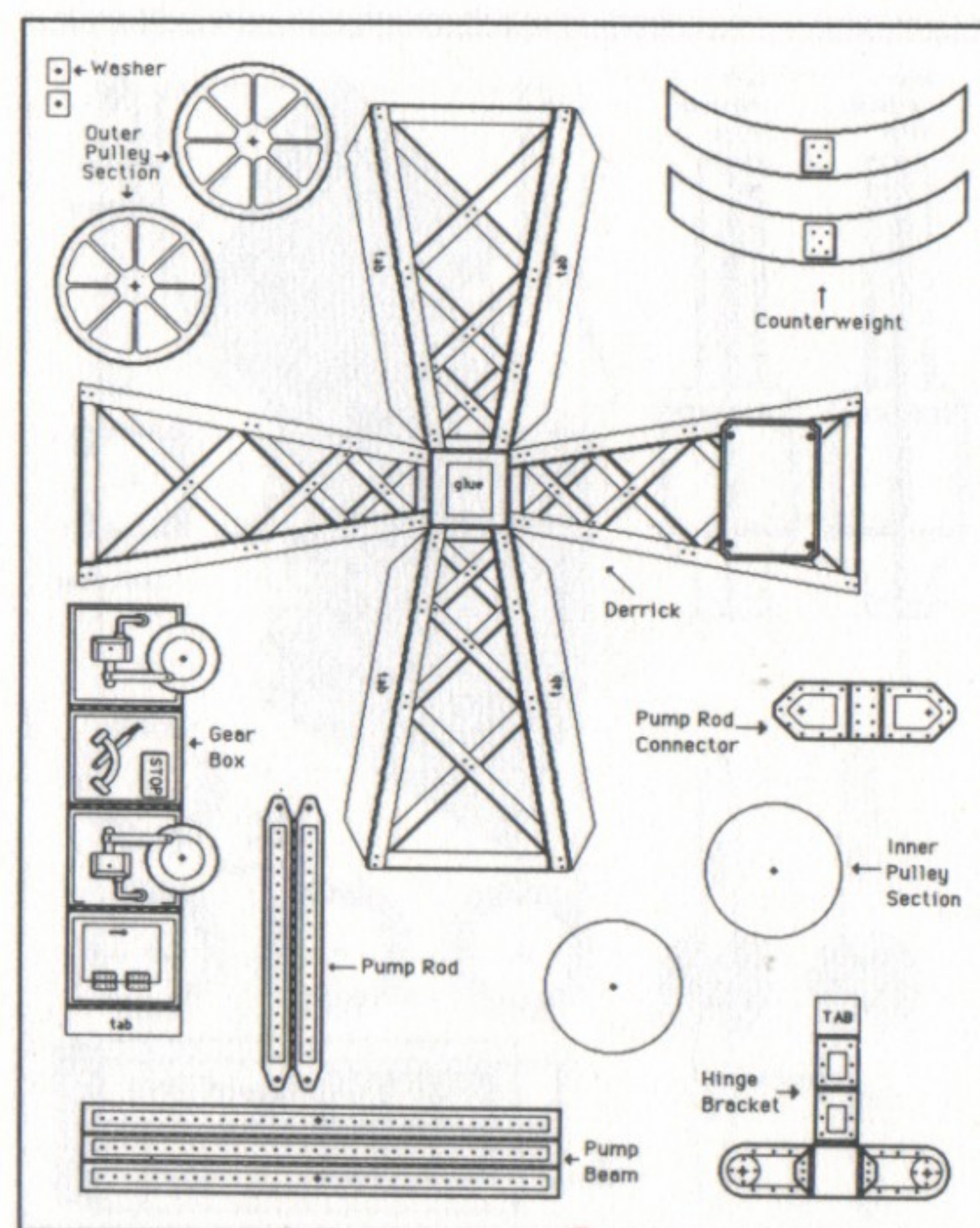
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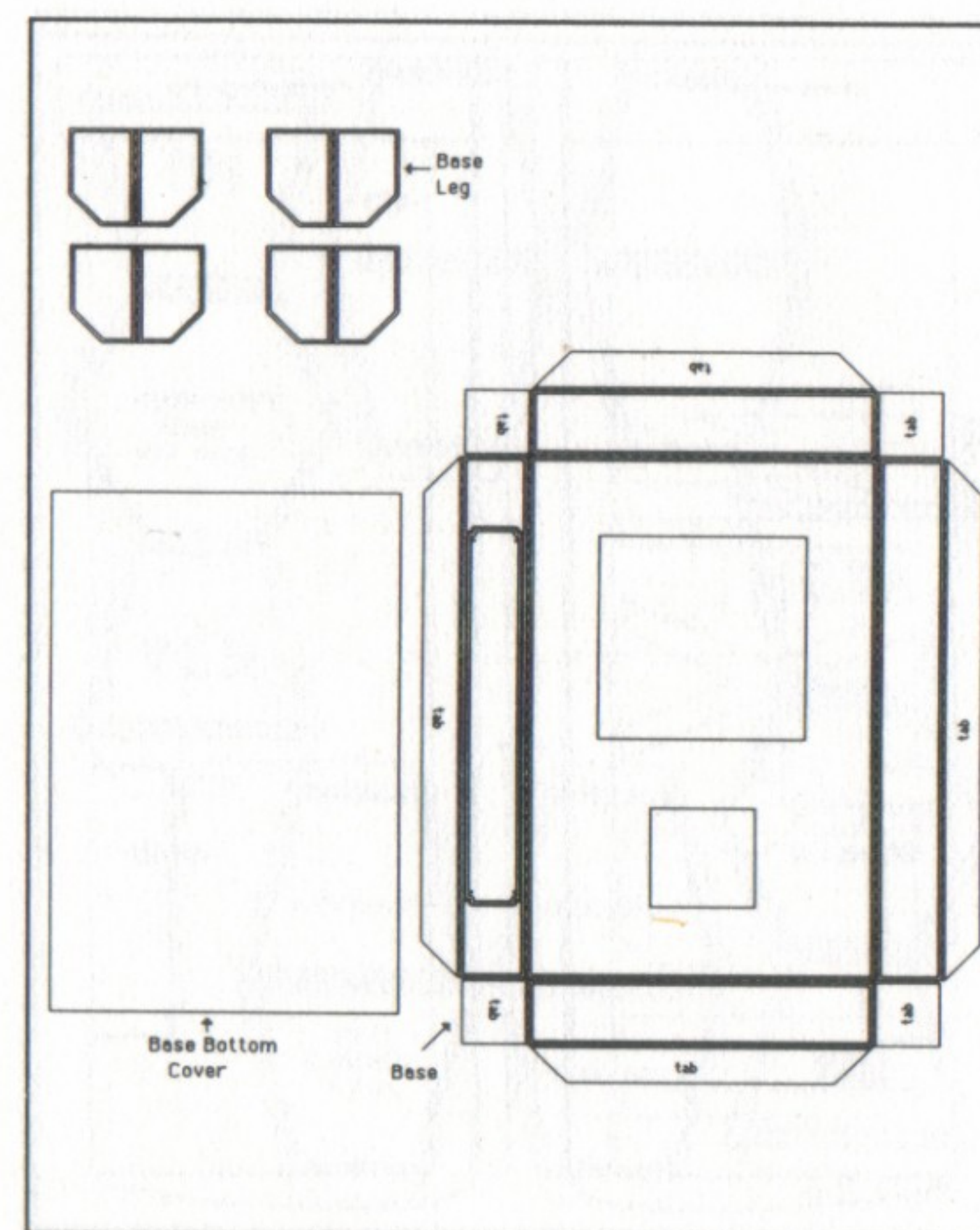
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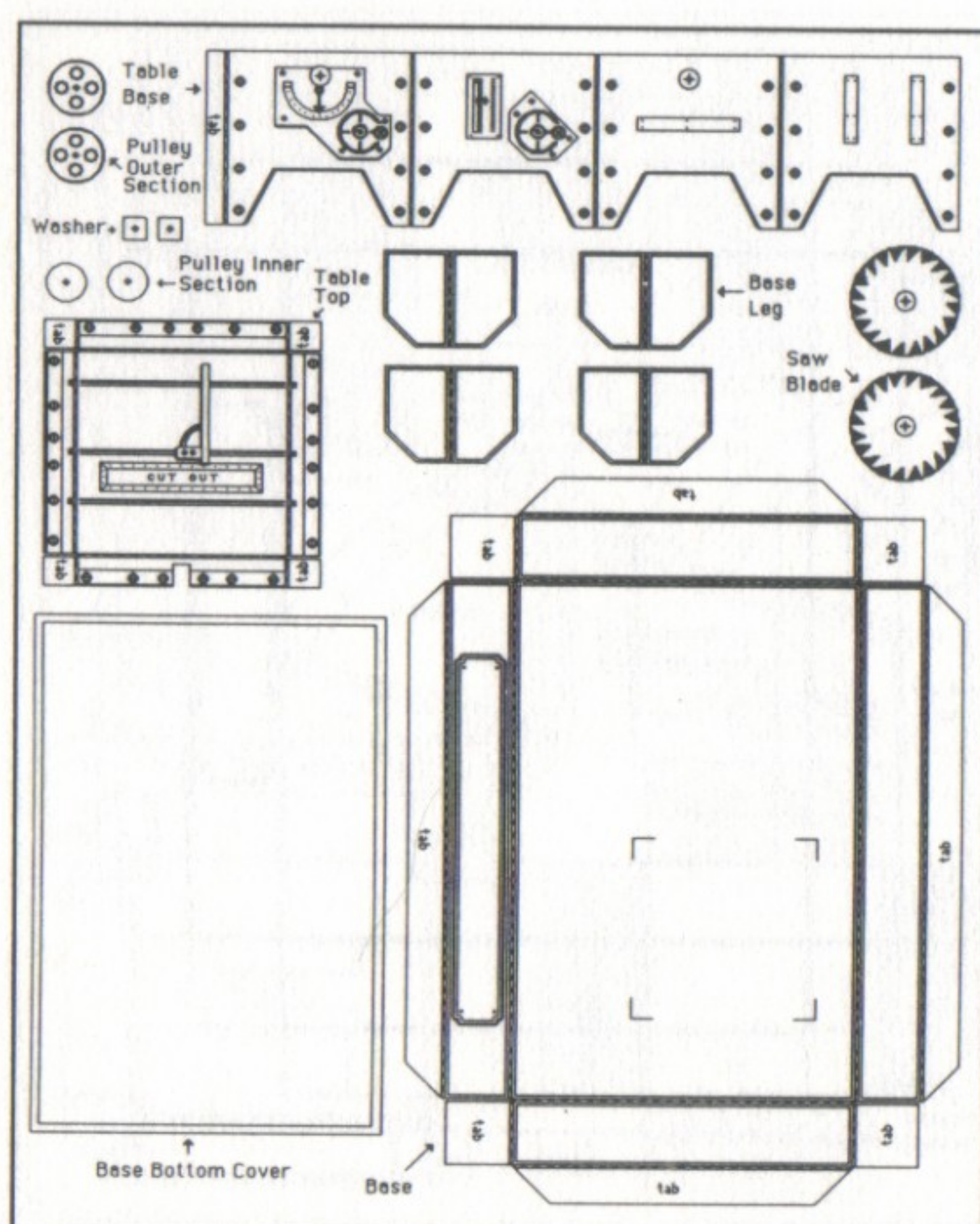
Steam Oil Pump

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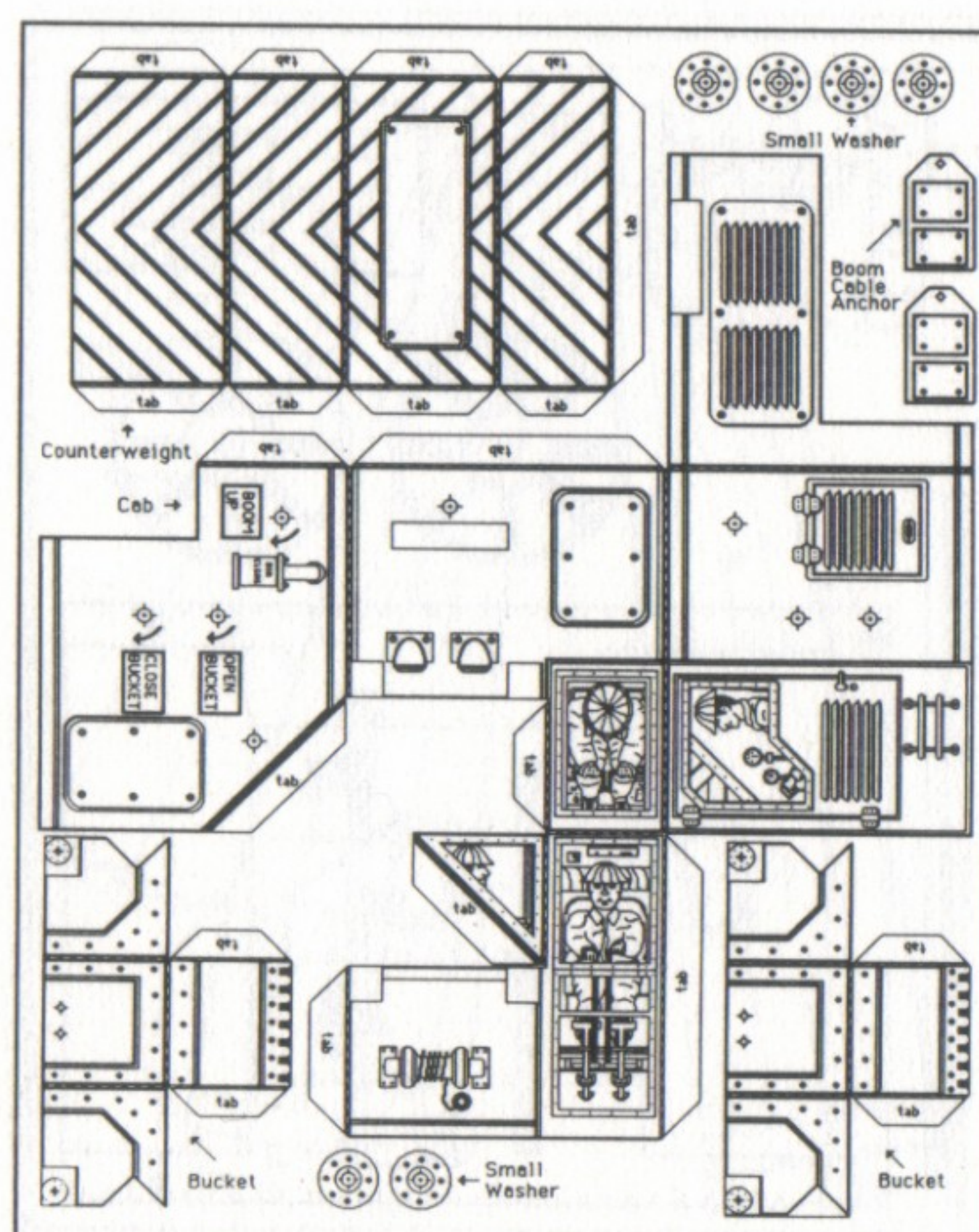
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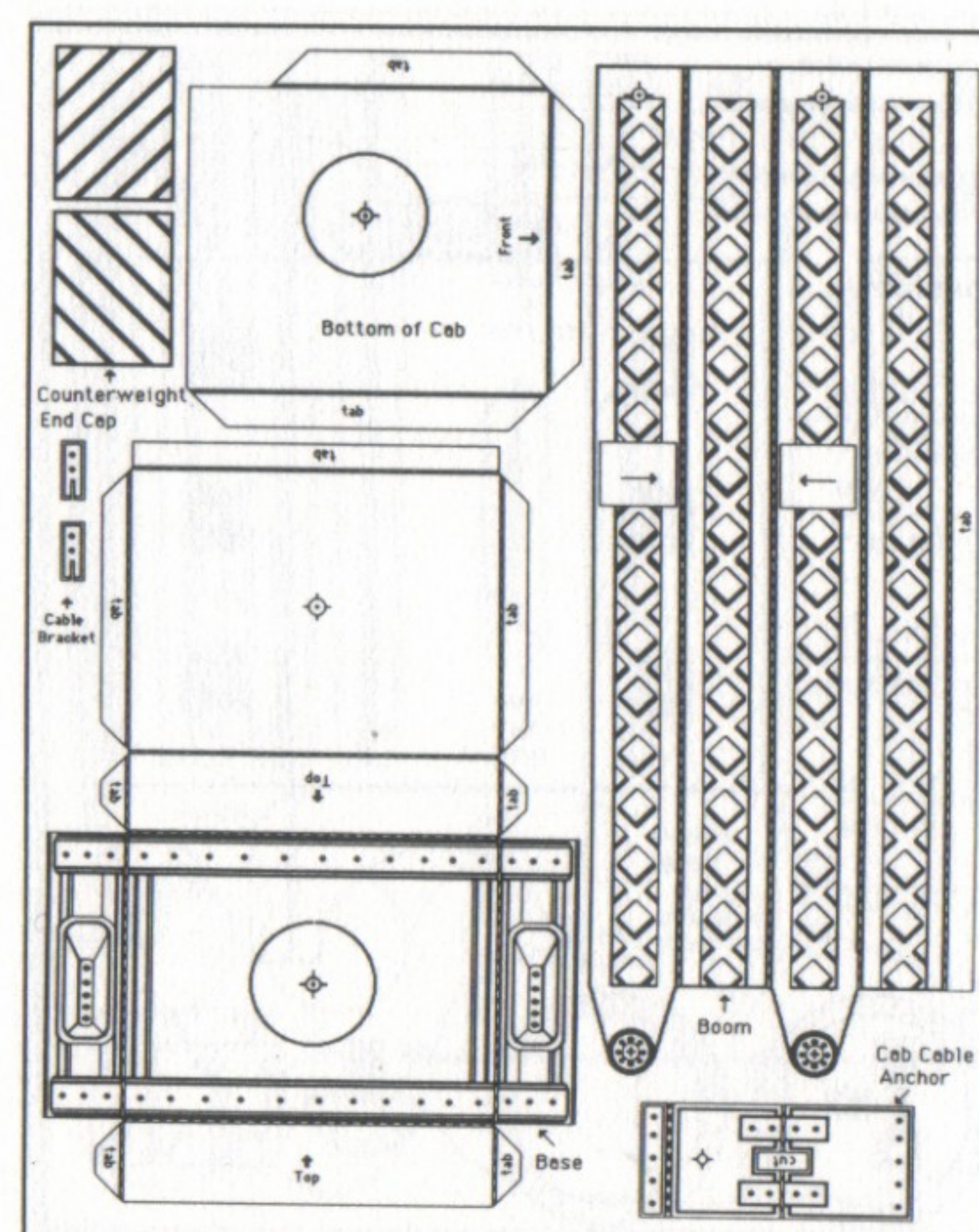
Steam Table Saw

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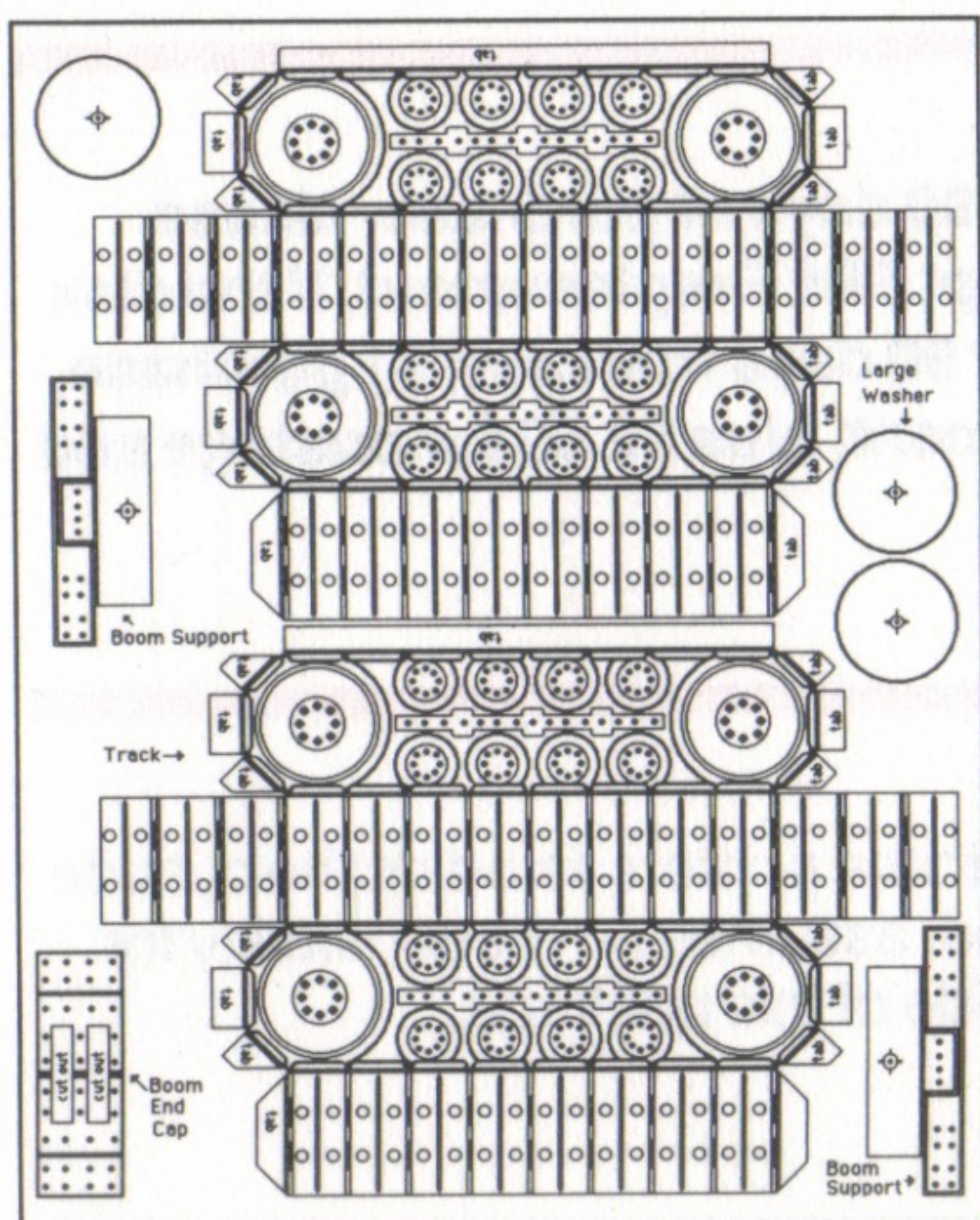
Tractor Crane

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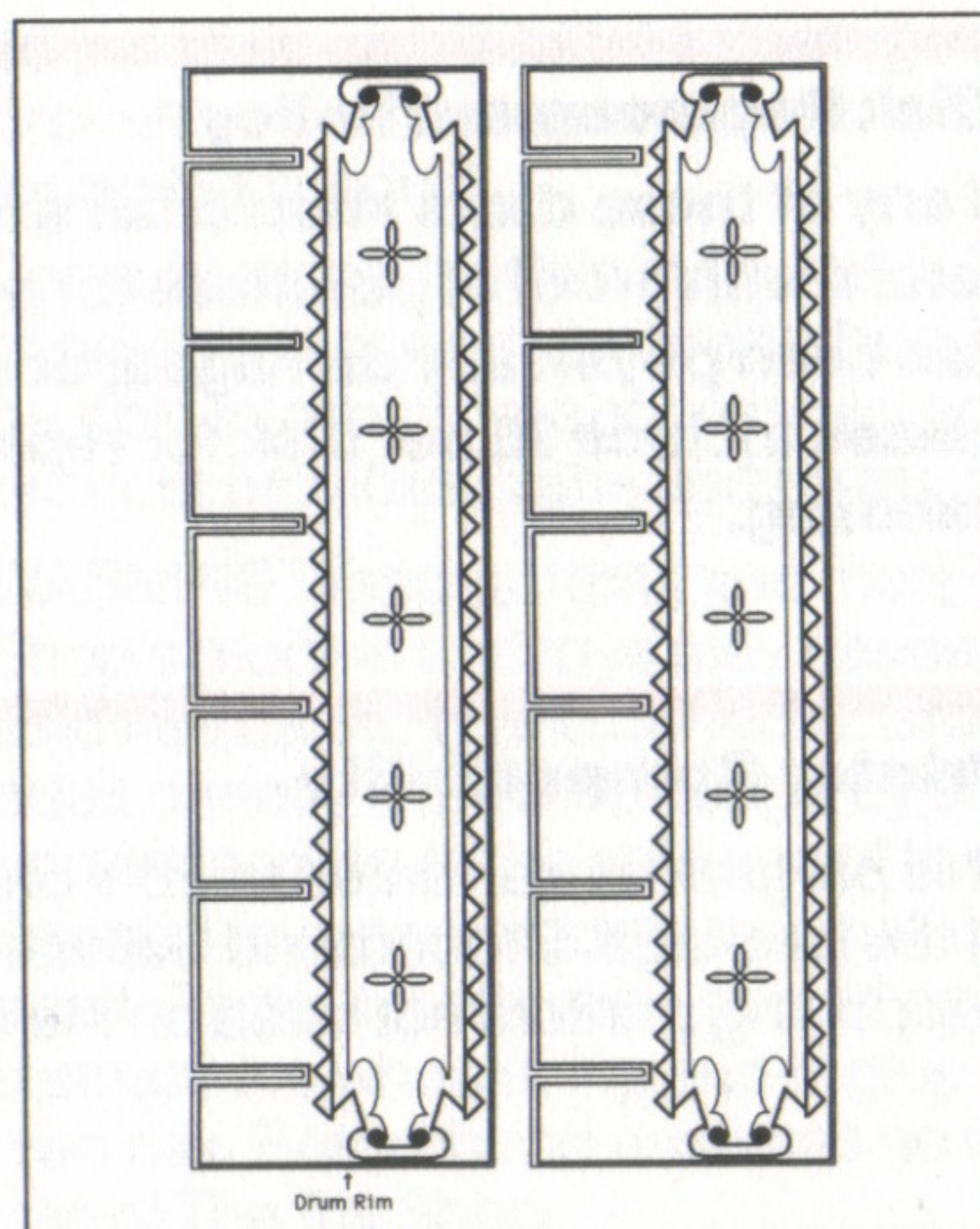
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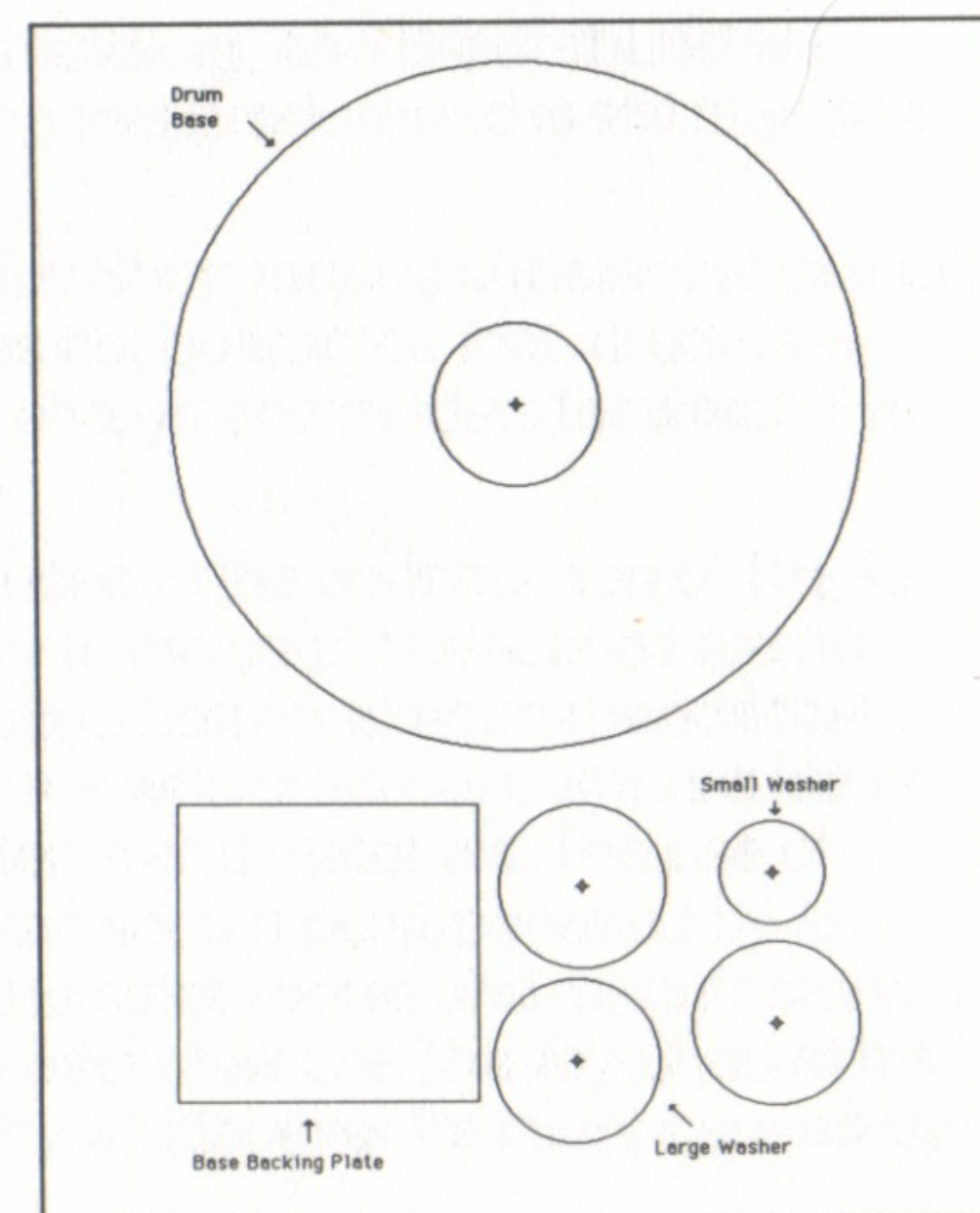
Tractor Crane

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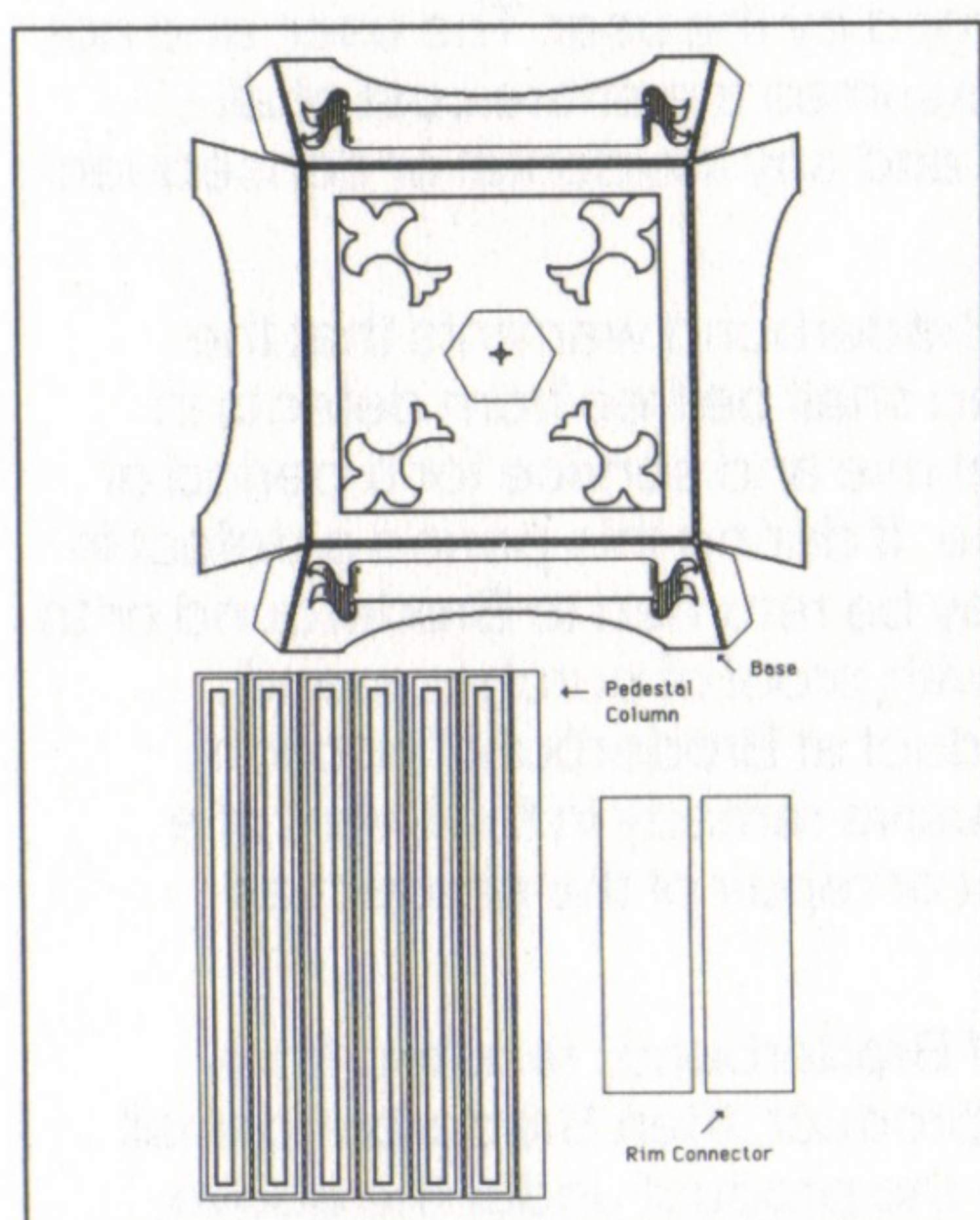
Zoetrope

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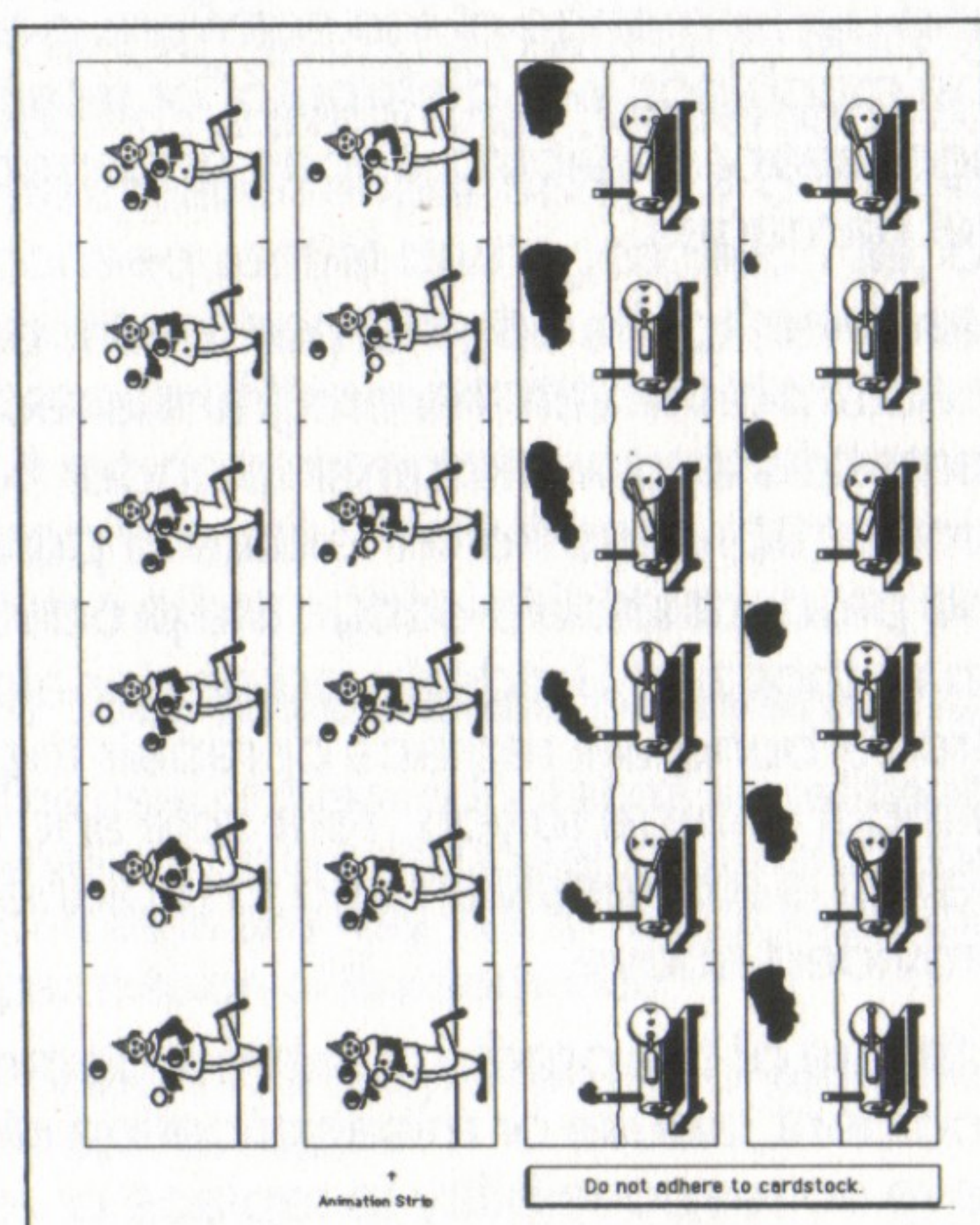
Zoetrope

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Zoetrope

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Zoetrope

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Warranty Information

Disk Replacement Policy

If any of these disks should fail within 90 days of purchase, please return with proof of purchase for prompt FREE replacement. If the disk has been physically damaged, or after 90 days from date of purchase, please include \$5 per disk for replacement, plus \$2.50 for postage and handling.

Printer Compatibility

This program is warranted to work only with the printers listed on the outside of the package. Broderbund Software, Inc. assumes no responsibility for supporting printers not listed on the outside of this package.

Limited Warranty

This manual and the software described in this manual are sold "AS IS," without warranty as to their performance. The entire risk as to the quality and performance of the software is assumed by the user. The user, and not the manufacturer, distributor or retailer, assumes the entire cost of all necessary servicing, repair or correction and any incidental or consequential damages.

However, to the original purchaser only, Brøderbund warrants that the medium on which the program is recorded shall be free from defects in materials and workmanship under normal use and service for a period of ninety (90) days from the date of purchase. If during this period a defect in the product should occur, the product may be returned to Brøderbund or to an authorized Brøderbund dealer along with proof of purchase, and Brøderbund will replace or repair the product at Brøderbund's option without charge to you. Your sole and exclusive remedy in the event of a defect is expressly limited to replacement or repair of the product as provided above.

If failure of the product, in the judgment of Brøderbund, resulted from accident, abuse or misapplication of the product, then Brøderbund shall have no responsibility to replace or repair the product under the above terms.

Nonetheless, such products (and products that become defective after the ninety-day replacement period) may be returned to Brøderbund along with

Warranty Information

\$5 per disk, plus \$2.50 for postage and handling, and Brøderbund will provide you with a replacement, providing that Brøderbund is still manufacturing the product.

Some toys and models included in The Toy Shop require substantial skill to construct successfully. Brøderbund does not guarantee that all users will be able to construct successfully any or all toys and models for which this product provides plans and instructions.

WARNING: Various items and materials used in the construction of The Toy Shop's models and toys may cause injury to the user if directions are not followed carefully and correctly. Brøderbund Software recommends that an adult directly supervise usage by any minor who does not demonstrate an understanding of the safe use of these items and materials. The use of finished toys and models by small children should be supervised by an adult. Particular attention should be paid to safety notes and manufacturer's instructions when using super glue. The user shall use The Toy Shop at his own risk. Brøderbund assumes no liability whatsoever for injury caused by use of The Toy Shop.

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For technical support on this or any other Brøderbund product, call (415)479-1170.

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Backup Disk Information

This program is copy protected. If you would like a complete set of backup disks, you may order them using the coupon below. You may do this at any time, as long as the product is still being manufactured by Brøderbund. (Limit: one set per customer.)

Please mail the original coupon, not a copy, along with a check or money order for \$15.00 (in U.S. funds) to:

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Brøderbund Software, Inc.
17 Paul Drive
San Rafael, CA 94913-2947

Please make your check or money order payable to Brøderbund Software.

Backup Disk Coupon

(please print)

Name: _____

Address: _____

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Product Name: The Toy Shop

Computer: (please specify)

Apple _____ Commodore _____ IBM _____ Macintosh _____

(Clip out this coupon on the dotted lines and send along with your payment. Please allow four to six weeks for delivery.)



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