Film-Tech

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OPERATION AND INSTALLATION MANUAL
SUPER PLATTER SYSTEMS
SPP-3 AND SPP-5
MAKE UP TABLES
MT-3 AND MT-5
MACHINE S/N 508

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS/DRAWINGS

SECTION 1 - INTRODUCTION

1.1 SCOPE

Provided in this manual are installation, operation, and maintenance instructions for the SPP-3 and SPP-5 Super Platter systems. When requesting information, always furnish model and serial numbers to FILM SYSTEMS
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1.2 GENERAL DESCRIPTION

The Super Platter systems are 35mm film transport systems capable of giving up to 5 hours of uninterrupted viewing. They are designed with the minimum number of parts and mechanisms each performing a basic function resulting in reliable operation. Installation is an easy task with little or no adjustment required. Operation is simplified by the lack of complex mechanical and electrical components.

Program make up is accomplished by splicing the featured films together into one continuous length (up to 5 hours). Using the make up table in conjunction with the platter system cuts program make up and breakdown time to a minimum. All controls are accessible at the table. Breakdown of past program and make up of future program can be done while present program is being viewed.

The three (3) disc system has the capacity to hold two full programs, viewing of each program is separated only by the time it takes to rethread projector and platter. Each program is ready to be rethreaded and shown again immediately upon completion; no rewinding is necessary.

The five (5) disc system doubles the capabilities of the three (3) disc system, as it allows the showing of two different programs simultaneously.

1.3 PLATTER AND MAKE UP TABLE SPECIFICATIONS

A standard 3 wire grounded outlet is required for both the platter and the make up table.

SPP-3	3-disc,	115 VAC, 60 Hz, 5 amps
SPP-5	5-disc,	115 VAC, 60 Hz, 8 amps
MT -3&-5	make up table,	115 VAC, 60 Hz, 5 amps

		D x W x H in feet
SPP-3	3-disc,	= 5½ x 4½ x 6
SPP-5	5-disc,	= 5½ x 4½ x 6
MT -3&-5	make up table,	= 2½ x 3 x 5

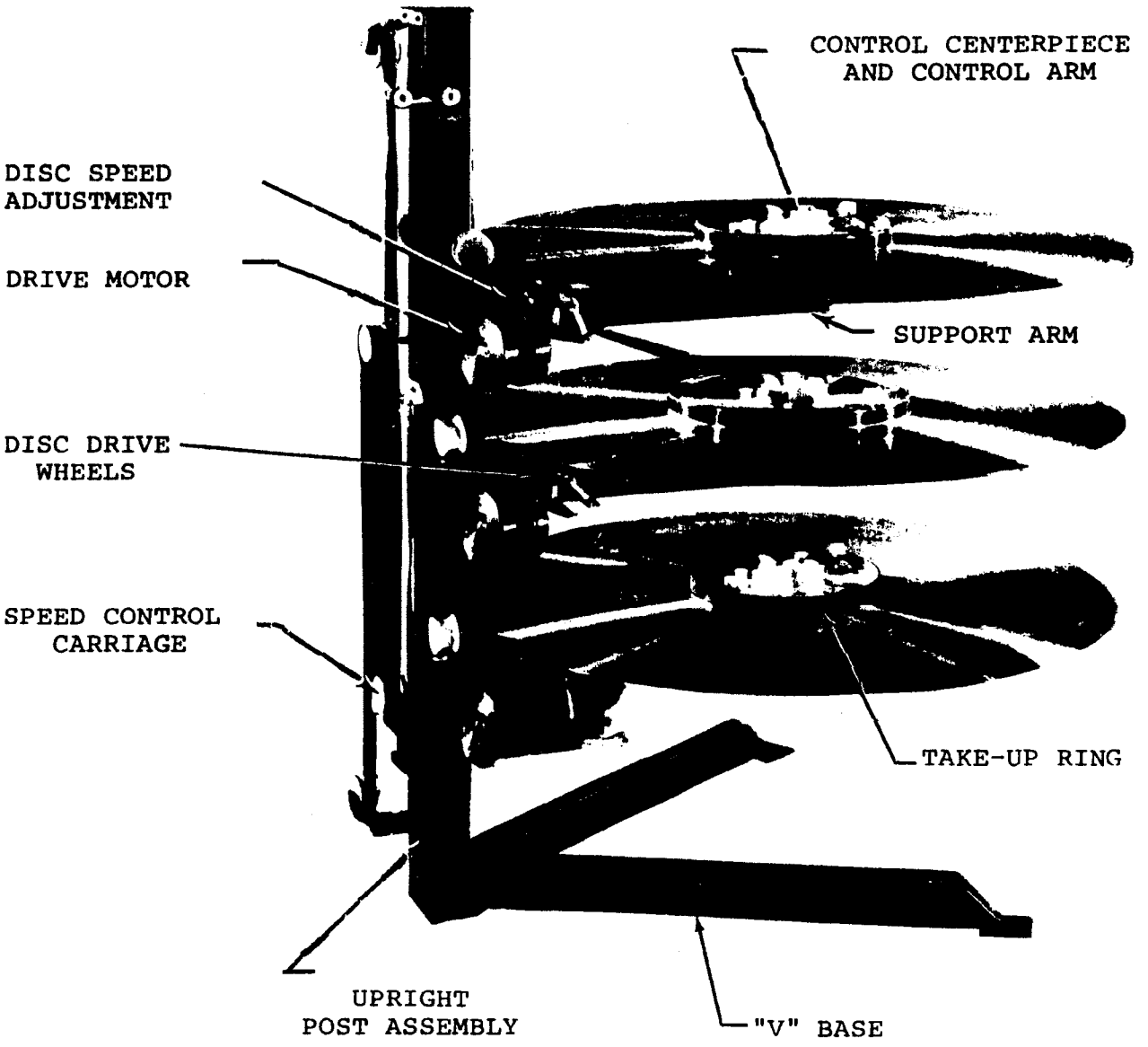

FIGURE 1-1. PLATTER SYSTEM

SECTION 2 - IMPORTANT SAFEGUARDS

READ AND UNDERSTAND ALL INSTRUCTIONS

2.1 **WARNING**

The above "WARNING" when appearing in this manual means: INSTALLATION, OPERATING AND MAINTENANCE PROCEDURES, PRACTICES, ETC., WHICH MAY RESULT IN PERSONAL INJURY OR LOSS OF LIFE IF NOT CAREFULLY FOLLOWED.

2.2 **CAUTION**

The above "CAUTION" when appearing in this manual means: INSTALLATION, OPERATING AND MAINTENANCE PROCEDURES, PRACTICES, ETC., WHICH MAY RESULT IN DAMAGE TO EQUIPMENT IF NOT CAREFULLY FOLLOWED.

2.3 NOTE

The above "NOTE" when appearing in this manual means: INSTALLATION, OPERATING AND MAINTENANCE PROCEDURES, PRACTICES, ETC., WHICH ARE ESSENTIAL TO EMPHASIZE.

2.4 SAFETY

2.4.1 Before attempting to make any connections or service to the system, make certain all power is disconnected from main power line.

2.4.2 When taking any voltage measurements, caution should be exercised. Always avoid contact between any current carrying part of the system or power source and the human body.

2.4.3 When installing the power source to the system, be certain that a ground wire is connected.

2.4.4 Do not operate platter system with a damaged cord or if the platter system has been damaged - until it has been examined by a qualified serviceman.

2.4.5 If an extension cord is necessary, a cord with a suitable current rating should be used. Cords rated for less amperage than the platter system may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

2.4.6 Always unplug platter system from electrical outlet when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.

SAVE THESE INSTRUCTIONS

SECTION 3 - INSTALLATION

3.1 RECEIVING-HANDLING

Remove all packing material from around the platter system and carefully inspect for damage caused by the freight carrier. Any claims for loss or damage that has occurred in transit must be filed by the buyer with the carrier. A copy of the bill of lading and freight bill will be furnished on request.

When requesting information concerning the equipment, be sure to furnish stock, serial and model numbers.

3.2 INSTALLING PLATTER SYSTEM

The platter systems and make up tables are shipped assembled except for the attachment of the "V" shaped base, and the placement of the discs and control centerpieces on the support arms.

NOTE

> Each disc and control centerpiece is marked so that it can be positioned on the proper support arm. These are not interchangeable and must be used as marked.

The platter system may be located on either side of the projection system, but it is recommended that it is placed on the film access side for operator convenience (see Figure 3-1).

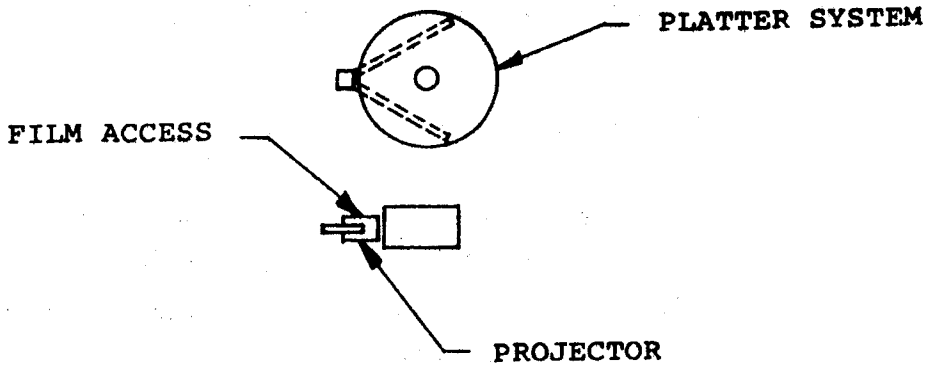

FIGURE 3-1

Attach the base to the upright post assembly as shown in Figure 1-1 with four 3/8-16 x 3/4 socket head cap screws.

Move the post and support arm assembly into position. Check the end of each support arm and make sure the spacer is mounted on the disc center post (see Figure 3-2).

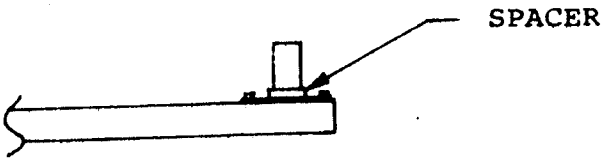

FIGURE 3-2

CAUTION

Verify that two wires are accessible, but folded back inside the disc center post. Ensure they will not be damaged when placing disc on the post.

Locate the markings on the discs. Select the bottom disc and place on support arm. The hub of the disc should rest on spacer shown in Figure 3-2 when properly in place. After disc is in place, pull plug out of the center post. Select the proper control centerpiece and plug the wires from the center post in to the centerpiece. Fasten the centerpiece in place as shown in Figure 3-3 with two 8-32 x 1/2 flat head screws.

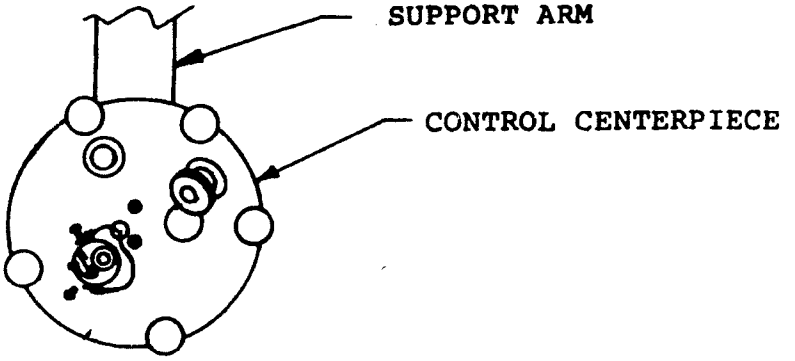

FIGURE 3-3

The centerpiece is factory adjusted and should require no further adjustment for proper operation.

Place control arm in position, inserting the eccentric post in the center of the control arm hub into the bearing in the point mounting post (see Figure 3-4).

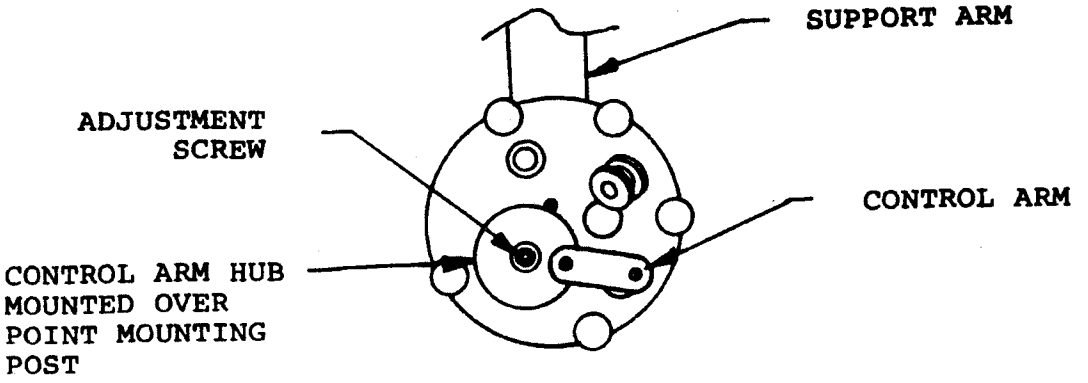

FIGURE 3-4

The bottom surfaces of the control arm assembly will be approximately 1/8 inch from the control centerpiece assembly plate when it is properly seated, and it should rotate freely within the limits of the adjacent rollers.

Repeat above procedures for each support arm working from the bottom to the top of the unit.

3.3 DISC CONTROL ARM ADJUSTMENT

Turn switches on disc drive motors to the center (off) position. Check that disc drive wheel is engaged with motor drive wheel.

Plug the system into power source. Position the speed control carriage (located on rear of upright post between two vertical rods) over the hole on the back of the upright post.

Push the spring loaded plunger into the hole so that carriage is held in that position.

Turn the switch on the motor of the disc to be adjusted to the "feed out" position. The disc should rotate with the control arm in the most clockwise position and stop in the most counterclockwise position. The points should actuate in the middle of the control arm swing. To adjust control arm, turn the adjustment screw (socket head cap screw in center of control arm hub) in the opposite direction to desired arm adjustment until points activate in the middle (between both rollers) of the control arm swing (see Figure 3-4).

On the five disc platter system, there are two speed control carriages. The upper control is for the top two discs and the lower for the bottom two. The center disc can be switched to operate on either speed control with the switch on the front of the upright post and above the center disc.

3.4 DISC SPEED ADJUSTMENT

Turn switches on disc drive motors to the center (off) position. Put the speed control carriage in position with the spring loaded plunger in the hole in the upright post. Put a piece of tape on the outer edge of each disc. Turn the switches on the disc drive motors to the take up position. Time the center disc speed. It should make one revolution in from three to four seconds. Manually stall the top and center disc so that the pieces of tape are in line vertically with each other. Release the discs at the same time. After one revolution, the pieces of tape should be within six inches of being in line. Repeat stalling, release, and alignment of tape for center to bottom disc. Adjust top and/or bottom disc speed to match the center disc. Adjustment is made by tightening or loosening the two socket head cap screws on the drive motor mounting bracket (see Figure 1-1). Tightening the screws decreases the speed of the disc.

NOTE

The nuts on the adjustment screws are locking nuts and must be loosened before adjustment and retightened after adjustment.

On the five disc system, compare the speed of both of the discs above and below the center disc to the speed of the center disc. Both speed carriages must be in position with the spring plungers in the holes in the upright post. The switch on the front of the upright post above the center disc must be up to check the upper disc speeds and down to check the lower disc speeds.

3.5 FILM GUIDANCE ROLLER INSTALLATION

The film guidance rollers supplied are to be mounted to the upper and lower magazines of the projector (see Figure 3-5).

Cut a three to four inch slot in the outer edge of the upper magazine slightly forward of the center spindle and flush with the inside back of the magazine so that the film path is clear. Position the guidance roller assembly against the rear surface of the magazine in the center of the slot just cut and with the bottom of the rollers about six inches away from the magazine. Drill one hole near the outer edge of the magazine through the magazine and the roller mounting bar and bolt these items together. To adjust the guidance roller assembly, thread a length of film from the projector through rollers to the platter system. For forward and backward adjustment, rotate the rollers around the mounting bolt, and for side or directional adjustment, twist or bend mounting bar in direction needed. Upon completion of alignment, drill a second hole four inches from the first hole through the magazine and roller mounting bar. Insert hardware and secure in place. Repeat this procedure for the bottom magazine.

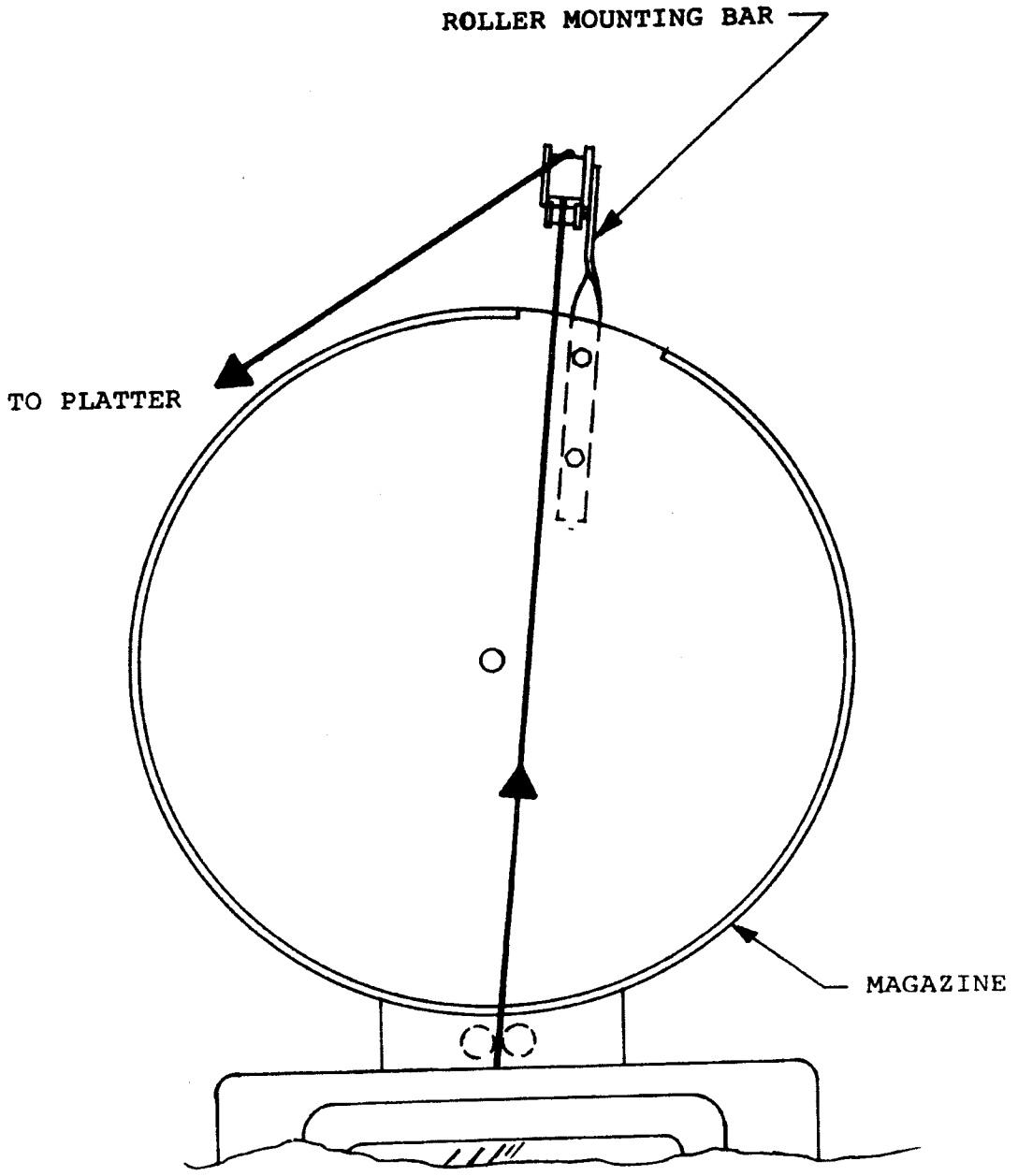

FIGURE 3-5
FILM GUIDANCE ROLLER INSTALLATION

4.1 MAKE UP

4.1.1 With Make Up Table

Put both switches on the table in the off position and set the film speed control at zero. Plug in the power cord. Pull the drive motor plug from the support arm of the disc selected for program make up. Plug this into the connector on the retractable cord located under the make up table. Put the drive motor switch in the "feed out/make up" position. Check that disc drive wheel is engaged. Put the switches on the table in the "power on" and in the "platter" position. The speed of the disc is now controlled by the film speed control on the table.

Install the take up ring on the disc by pushing pins on ring into holes in disc. Fasten the film head leader to the take up ring with sound track up and wind in a counterclockwise direction. Adjust table height for optimum alignment with disc using the adjustable feet on the table legs. Adjust film speed control to desired speed and transfer film from reel to disc. Continue splicing the reels together until the program is complete. Reconnect drive motor to support arm.

4.1.2 Without Table

Turn all drive motors to the "off" position. Raise the speed control carriage to the top of its travel and hold it in place by putting the carriage stop under the carriage and pushing it onto one of the carriage guide rails.

Turn the drive motor on the make up disc to the "feed out/-make up" position. Install the take up ring on the disc by pushing pins on ring into holes in disc. Fasten the film head leader to the take up ring with sound track up and wind in a counterclockwise direction.

The speed of the make up disc can now be controlled by sliding the carriage stop up and down the carriage guide rail.

4.2 PROGRAM PRESENTATION

Put all disc drive motor switches in the center (off) position. Speed control carriage in position with spring plunger in the hole in the upright post. Remove the take up ring from the center of the program to be presented and transfer it to the disc selected for take up. It is suggested that the program be run back and forth between the top and bottom disc, (On the five disc system, run the program between the upper two or the lower two discs.) leaving the center disc open for other uses.

Thread the film from the center of the program through the top roller on the upright post (see Figures 4-1 through 4-10). Put the switch on the disc drive motor of the disc with the program in the feed out position.

The disc will now feed off the film if a pulling pressure is applied. Pull off enough film to thread the projector and the platter system back to the take up ring. Fasten the film to the take up ring sound track up and in a counterclockwise direction. Manually rotate the disc to take out the slack in the film. Put the disc drive motor switch in the take up position. The program is now ready for presentation.

4.3 BREAK DOWN

4.3.1 With Table

Put both switches on the table in the "off" position and set the film speed control at zero. Disengage the drive wheel of the disc with the program to be broken down. Place take up reel on the right spindle of the table. Thread film through table rollers and onto reel in a clockwise direction with the sound track down. Put the switches on the table in the "power on" and in the "table" position. The speed of the take up reel is now controlled by the film speed control.

4.3.2 Without Table

Disengage the drive wheel of the disc with the program to be broken down. The disc is now free turning and the film can be transferred back to the reels.

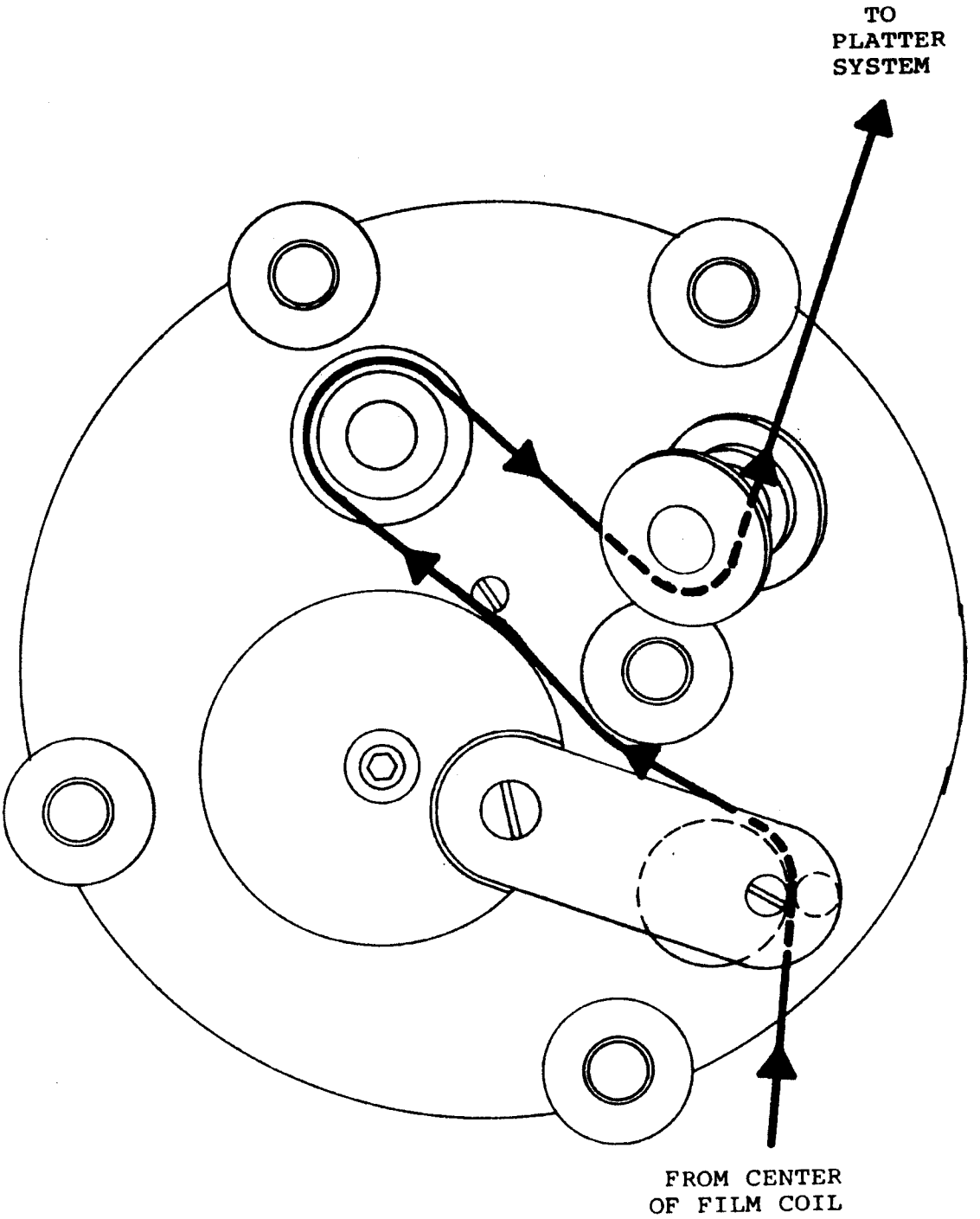

FIGURE 4-1. THREADING DIAGRAM - CONTROL CENTERPIECE

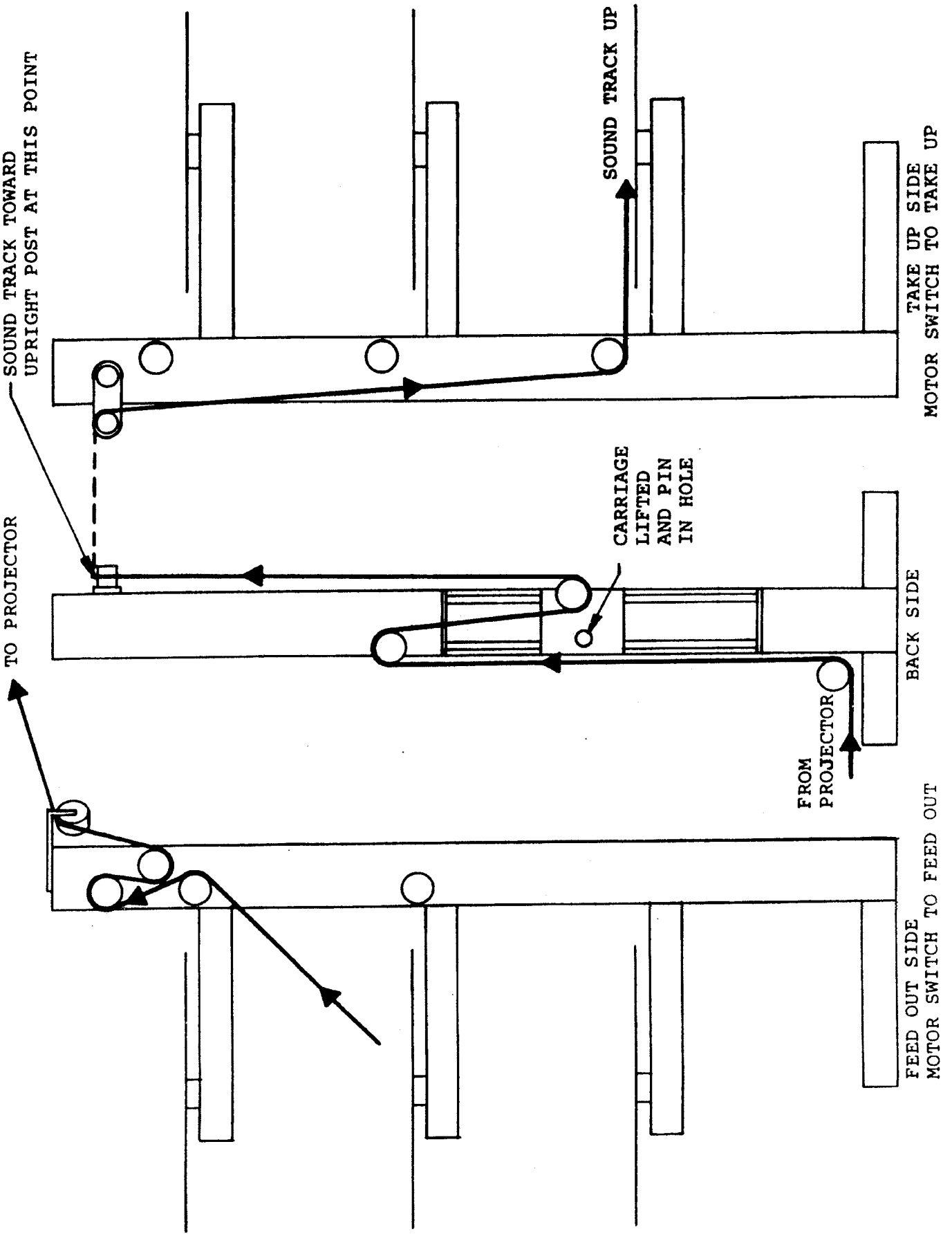

FIGURE 4-2 THREADING DIAGRAM
CENTER DISC TO BOTTOM DISC

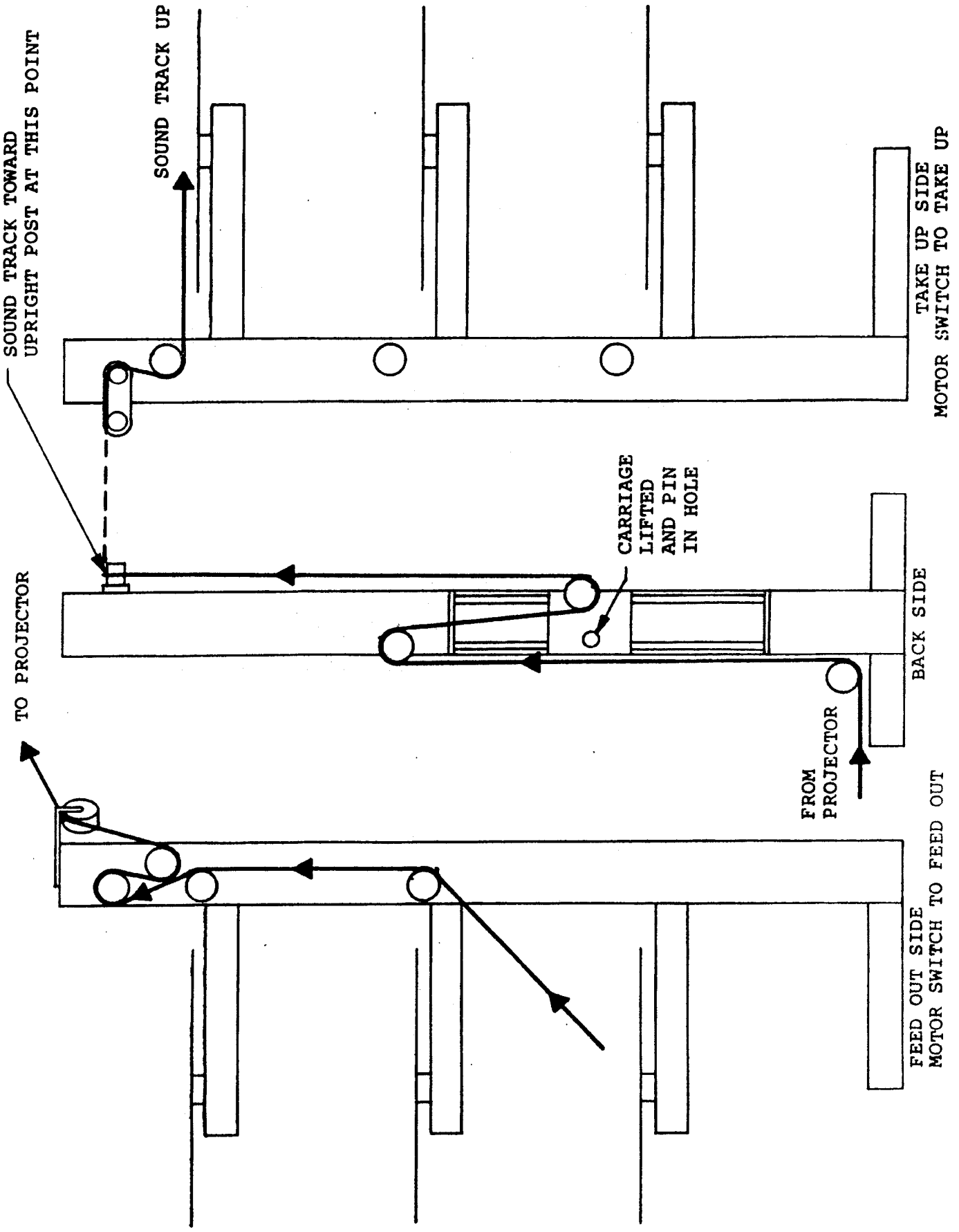

FIGURE 4-3 THREADING DIAGRAM
BOTTOM DISC TO TOP DISC

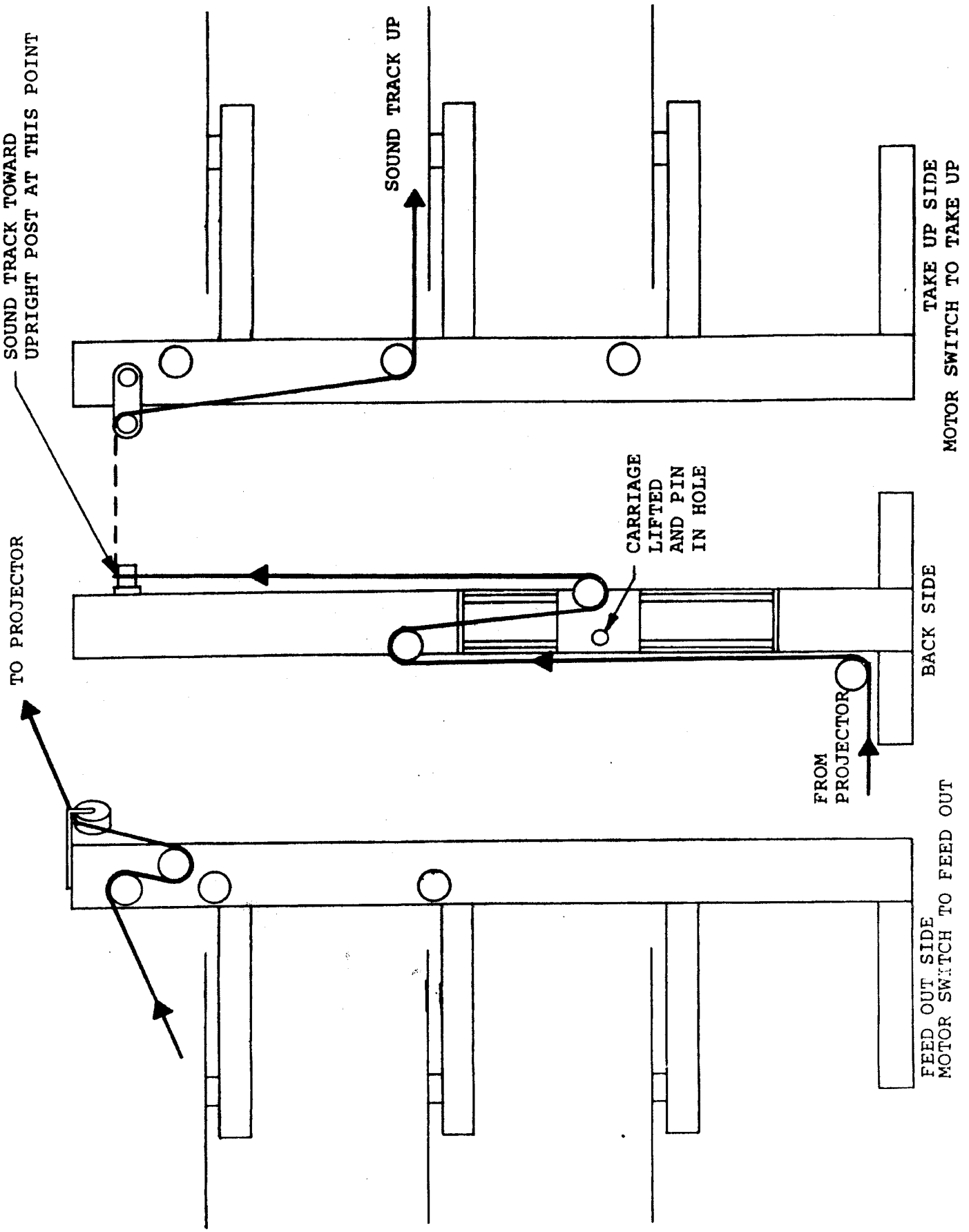

FIGURE 4-4 THREADING DIAGRAM
TOP DISC TO CENTER DISC

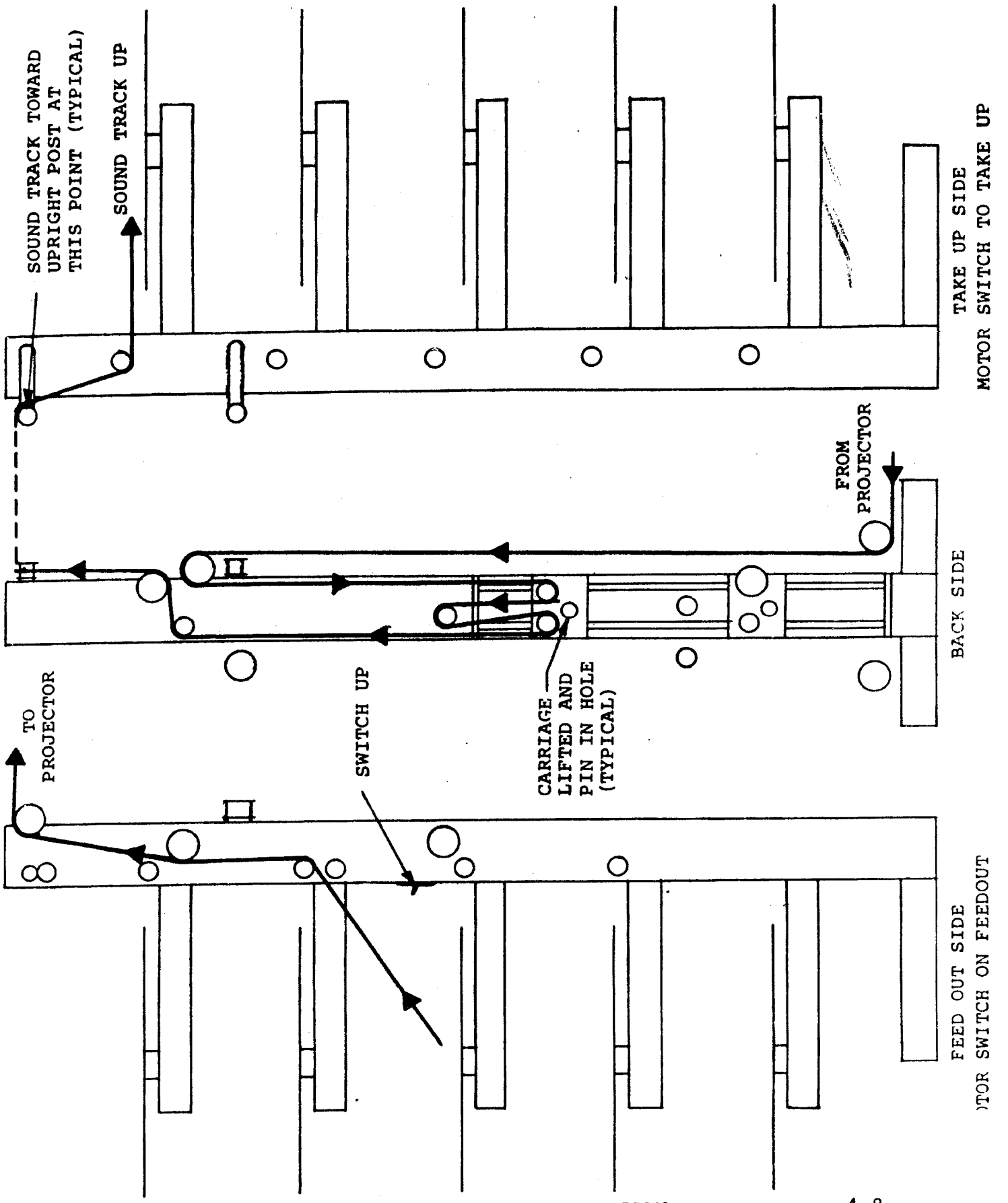

FIGURE 4-5 THREADING DIAGRAM
CENTER DISC TO TOP (UPPER SET) DISC

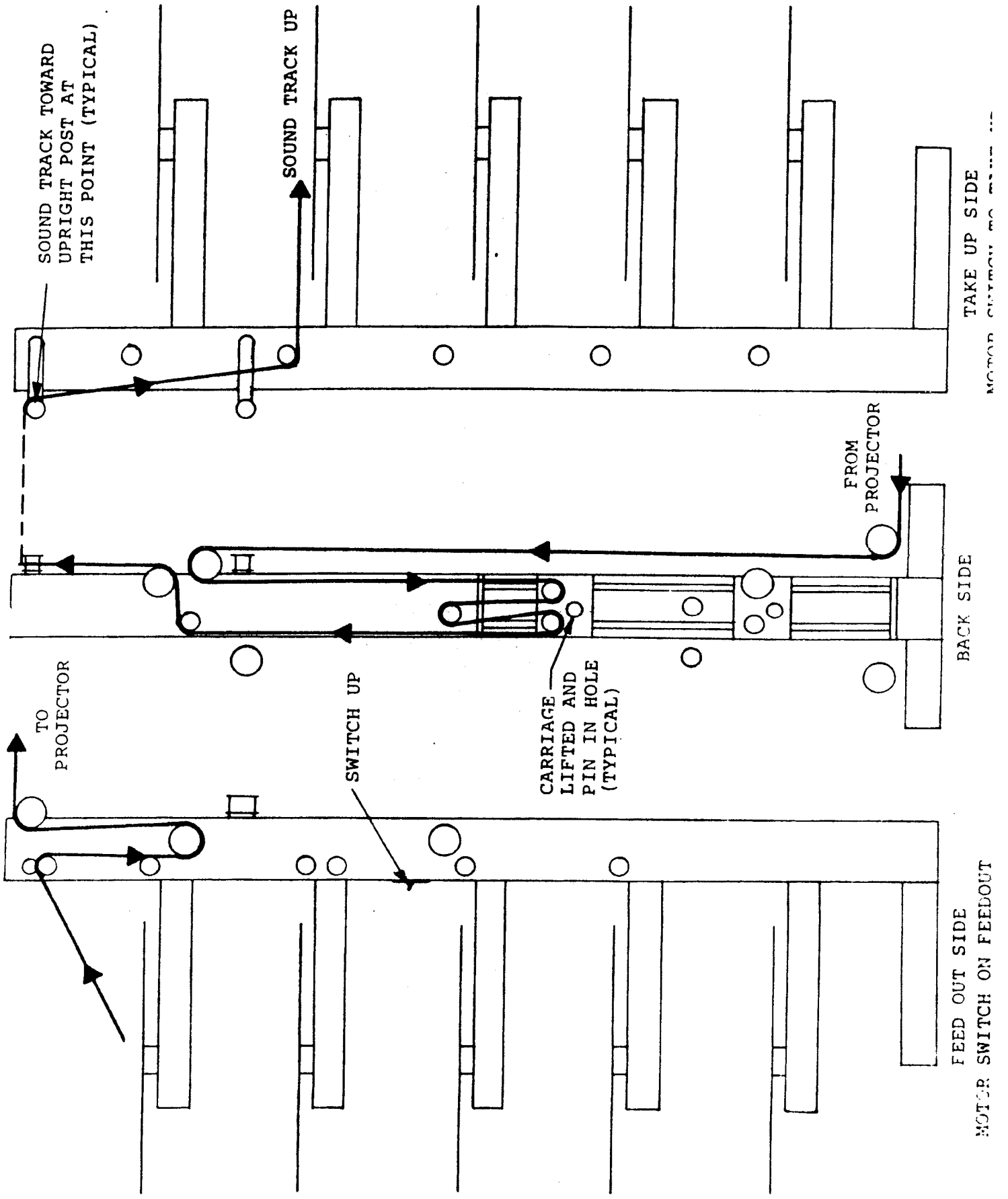

FIGURE 4-6 THREADING DIAGRAM
TOP (UPPER SET) DISC TO BOTTOM (UPPER SET) DISC

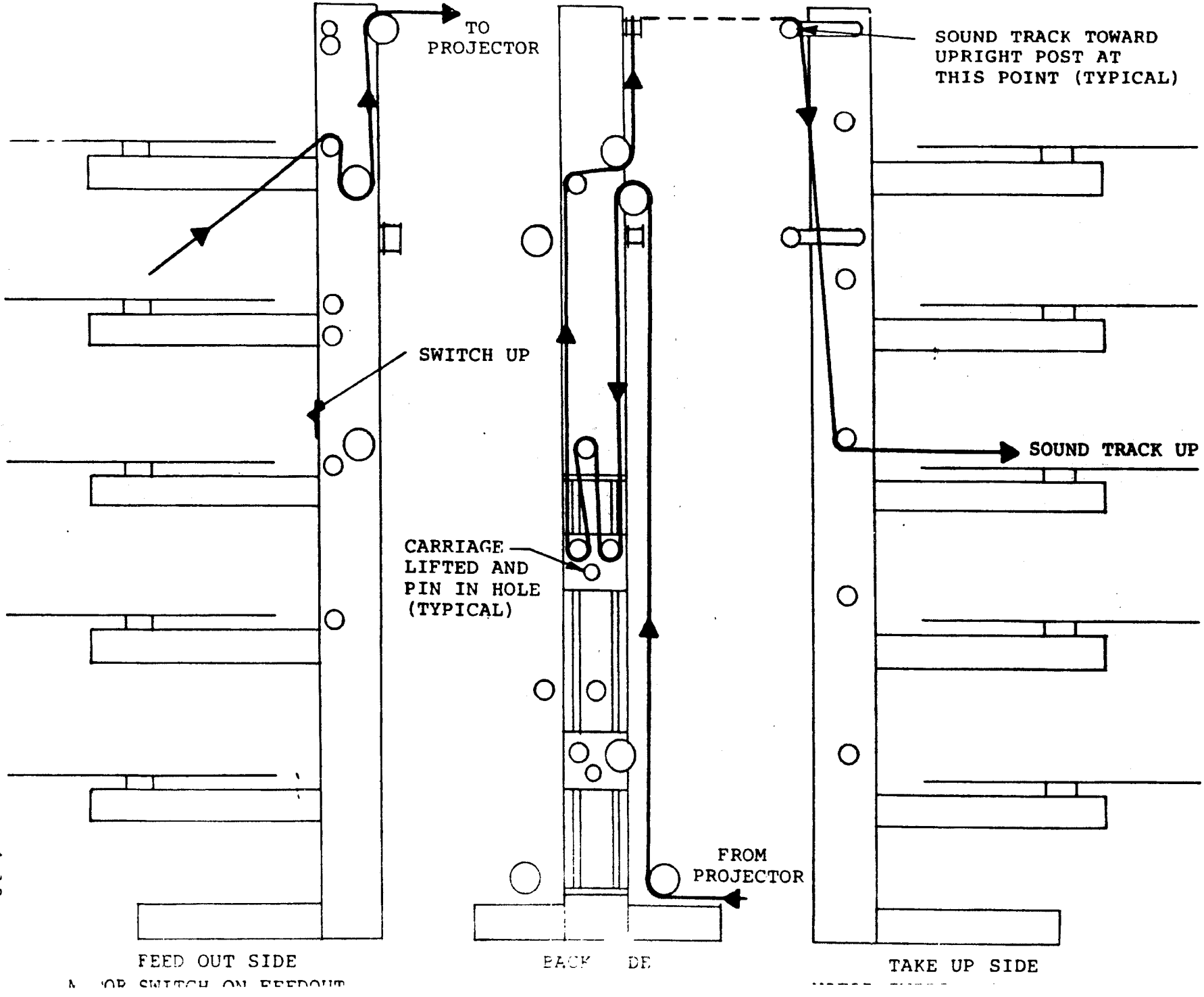

FIGURE 4-7 THREADING DIAGRAMS
BOTTOM (UPPER SET) DISC TO CENTER DISC

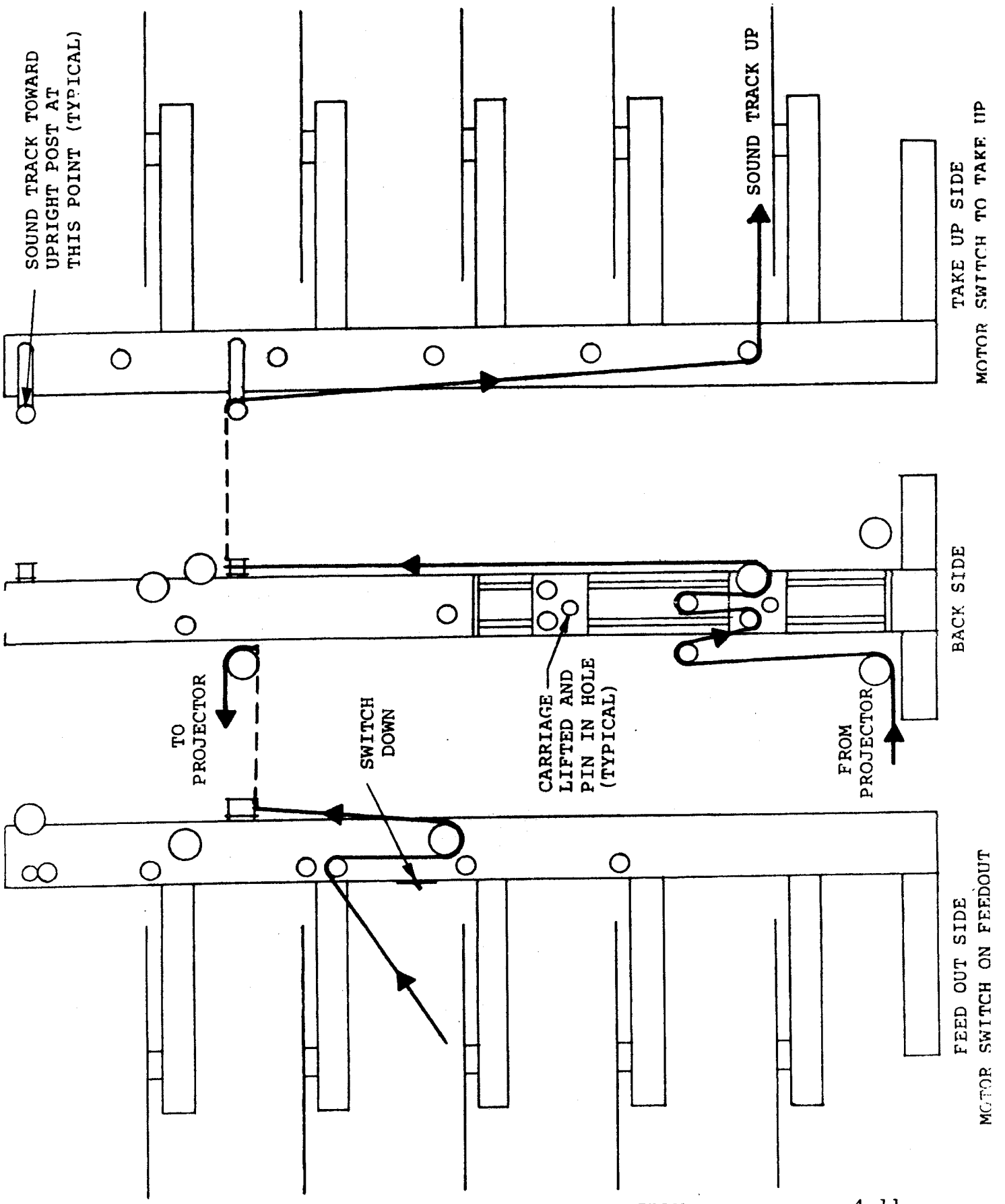

FIGURE 4-8 THREADING DIAGRAM
CENTER DISC TO BOTTOM (LOWER SET) DISC

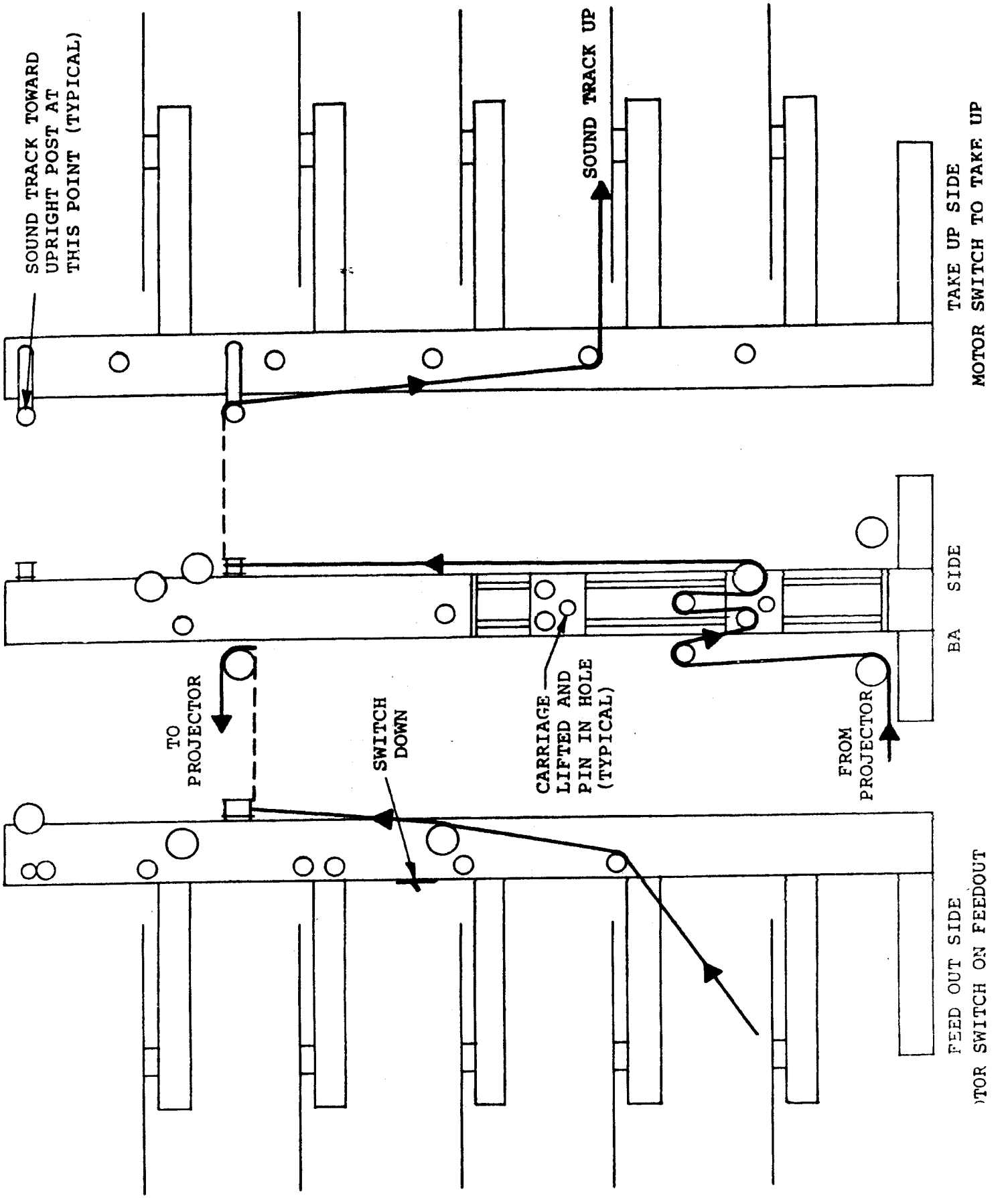

FIGURE 4-9 THREADING DIAGRAM
BOTTOM (LOWER SET) DISC TO TOP (LOWER SET) DISC

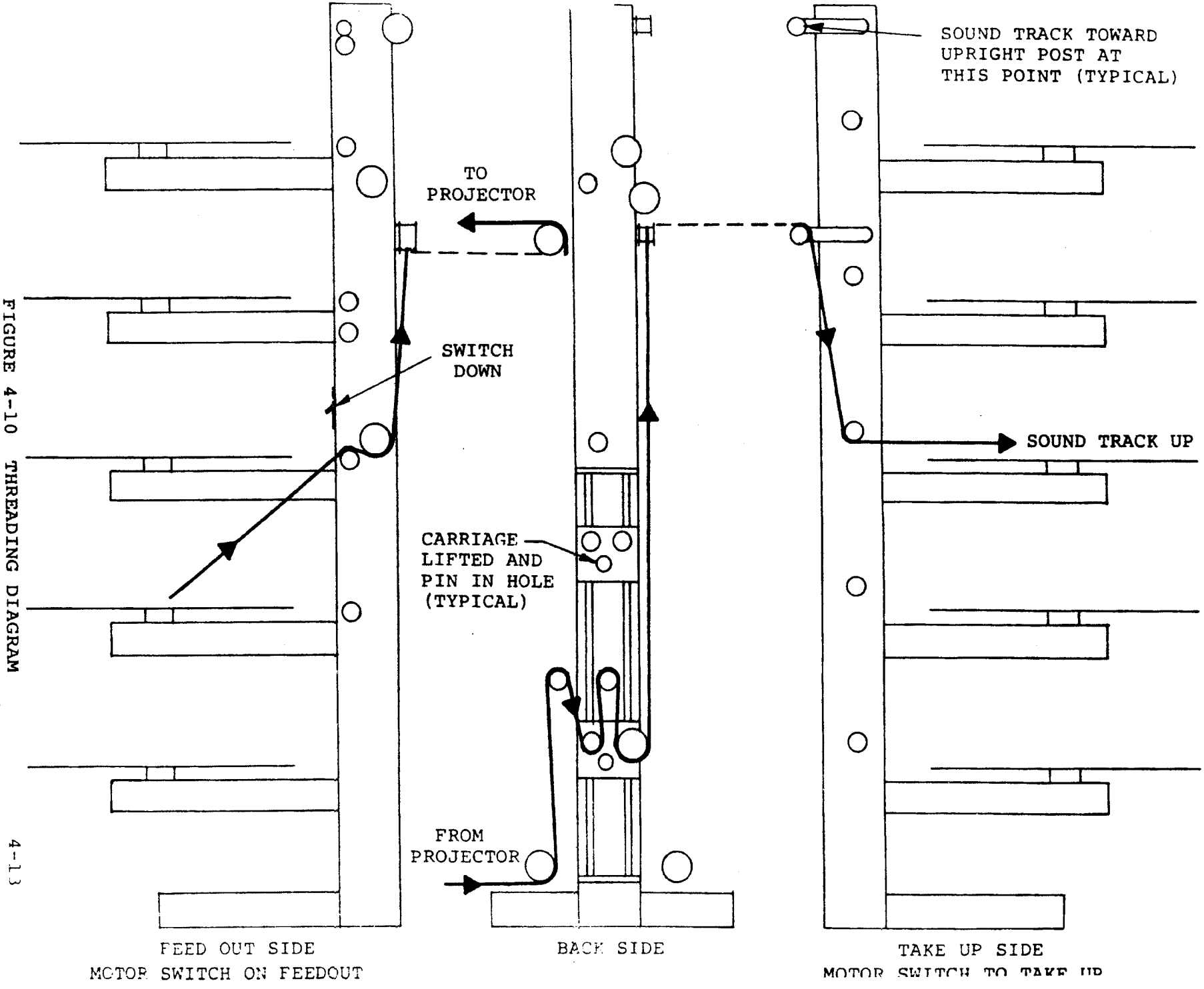

FIGURE 4-10 THREADING DIAGRAM
TOP (LOWER SET) DISC TO CENTER DISC

SECTION 5 - MAINTENANCE

5.1 PLATTER SYSTEM AND MAKE UP TABLE

Maintenance on the platter system and the make up table consists of keeping the unit clean. No lubrication is necessary as all bearings are permanently lubricated.

Disc surfaces can be refinished with 3/0 emery cloth or steel wool working slowly from the center out with the disc, rotating at maximum speed. (Make up table control in platter mode gives maximum speed.)

The application of an automotive wax to painted and disc surfaces will aid in the protection and cleaning of the system.

The control centerpiece, control arm and rollers should be checked after each showing and wiped down or cleaned as necessary to insure that all parts move freely. Any commercial liquid household cleaner used sparingly may be used to wipe down the system and clean the rollers.

Monthly check all rollers and roller assemblies for freedom of movement. Rollers with ball bearings that do not rotate freely must be replaced; others may be disassembled and cleaned.

Every six months, check rubber on disc drive wheels, V-belt under table, and check the brushes on the drive motors and auto-transformers. Replace as necessary. See Spare Parts List Section 5.3.

PLATTER

Symptom	Probable Cause
1. Lamps over discs do not light.	1.1 No power at power source. 1.2 Bulbs burned out.
2. Disc does not rotate when speed control carriage is moved.	2.1 Switch on drive motor in off position. 2.2 Drive wheel not in contact with disc. 2.3 Fuse in auto transformer blown. 2.4 Drive motor brushes worn out. 2.5 Brushes in auto transformer worn out.
3. Film does not feed out or take up properly.	3.1 Readjust control arm. 3.2 Points faulty. 3.3 Control arm not rotating freely. 3.4 System is not threaded properly. 3.5 Speed control carriage and linkage not moving freely. 3.6 Drive motor switch not in proper position.
4. Film overruns on feedout.	4.1 Points not breaking.

TABLE

Symptom	Probable Cause
1. Platter or breakdown spindle does not rotate.	1.1 Fuse in table blown.
	1.2 No power at power source.
2. Breakdown spindle does not rotate.	2.1 V-belt broken or slipping.
	2.2 Brushes in motor worn out.