

Film-Tech

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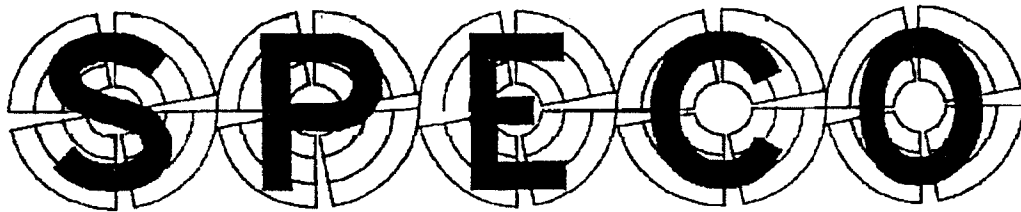
www.film-tech.com

REVISION A

23 MAR. 92

MODIFICATION INSTRUCTIONS

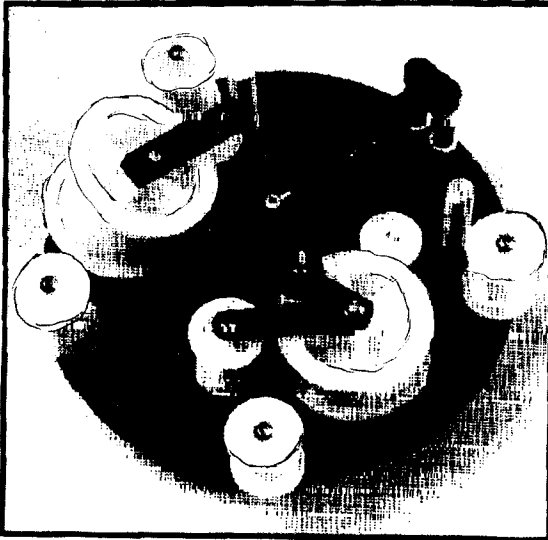
LP-270



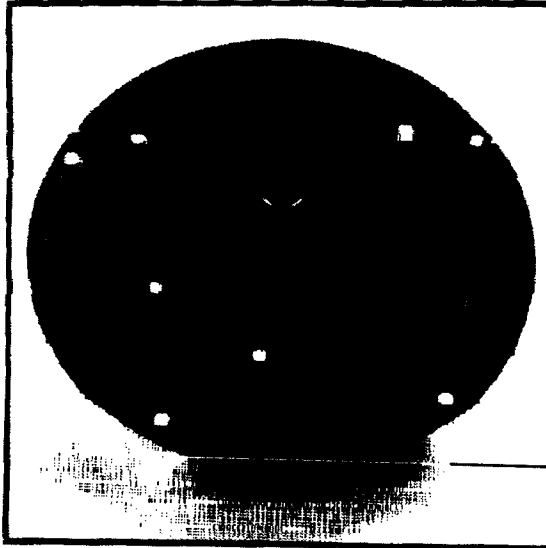
SYSTEMS & PRODUCTS ENG. CO.

709 N. 6TH STREET
KANSAS CITY, KANSAS 66101
913-321-3978

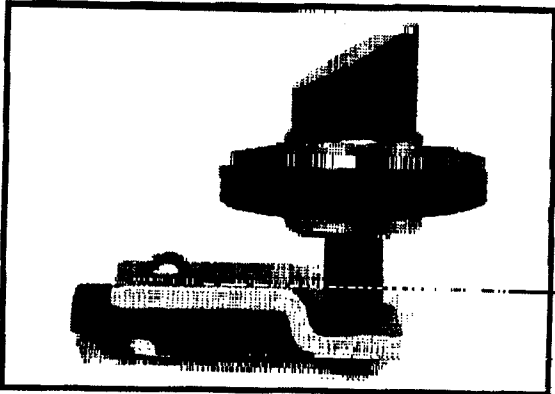
Retrofit Kit Pay-Out Control Assembly



Control Plate Top View



Control Plate Bottom View



Lower Swivel Magnet Assembly

35 mm
Model # 720120

35/70 mm
Model # 720122

SPECO's Pay-Out Control Retrofit Kit
can be installed on all SPECO LP270-3
and LP270-4 platter assemblies.

Features:

- Pay-Out control plate sets level with platter disc.
- Outer rollers prevent film from being scratched in case of warp.
- In conjunction with pay-out control assembly, there is also a lower swivel magnet assembly.
- Easy to install.



709 N 6th Street • Kansas City, KS 66101 • 1 800-633 5012 • FAX: (013) 321,7130

MODIFICATION INSTRUCTIONS
*** LP-270 ***
PLATTER PAYOUT CONTROL ASSEMBLY

2-14-92

A. REMOVE OLD MAGNET ASSEMBLY AND PAYOUT CONTROL ASSEMBLY

1. Disconnect all power to LP-270 while modification is being performed.
2. Remove the PAYOUT CONTROL ARM from each of the PAYOUT CONTROL ASSEMBLIES. The PAYOUT CONTROL ARM is a press fit to the CONTROL SHAFT. Pull up from the pivot end only. See Figure 25.
3. Remove the PAYOUT ASSEMBLIES by removing the three screws shown in Figure 25. After the three screws are removed the PAYOUT ASSEMBLY is free and can be set a side.
4. Under each PLATTER ARM remove DUST COVER. The DUST COVER is held by two screws on the bottom side of the PLATTER ARM. With the DUST COVER removed the PRINTED CIRCUIT BOARD and MAGNET ASSEMBLY will be exposed. Figure 26.
5. The MAGNET ASSEMBLY is held in place with (3) three screws. Remove these screws from the RETAINER that holds the MAGNET ASSEMBLY in place. Pull the entire MAGNET ASSEMBLY from the bottom side of the PLATTER ARM. If the upper bearing sticks, push the bearing out the top from underneath.
6. With the magnet assembly removed clean the inside bearing surfaces with a clean rag.
7. The PRINTED CIRCUIT BOARD must be vertical, check that it has not been moved.

NOTE: The old magnet assembly will not be used, however, the magnets and the payout control arms are the same on both payout control assemblies, old and new. These pieces should be saved as spares. Dust covers will be reinstalled so hang on to them.

B. INSTALL NEW MAGNET ASSEMBLY

1. Install the new MAGNET ASSEMBLY (pictured on Figure 27) by pushing the angled head and bearings into hole from bottom side of PLATTER ARM. With the MAGNET ASSEMBLY held in place rotate the magnet pass the PRINTED CIRCUIT BOARD. The magnet should not touch any components on the PRINTED CIRCUIT BOARD. If magnet touches any components, remove MAGNET ASSEMBLY and loosen nut and slide magnet back slightly. CAUTION: Do not tighten nut on magnet too tight. When nut bottoms out it is tight enough. Repeat this step until magnet clears components. Secure the MAGNET ASSEMBLY

with the (3) three new screws provided (DO NOT TIGHTEN SCREWS). With all (3) screws in place tighten the (3) three screws. The RETAINER must be flat against the surface to keep from binding. The MAGNET ASSEMBLY should swivel freely. If the MAGNET ASSEMBLY will not swivel freely remove the three screws and rotate the assembly 1/3 turn

CAUTION: DO NOT TIGHTEN NUT HOLDING MAGNET TOO TIGHT, THE MAGNET IS OF THE CERAMIC TYPE AND WILL BREAK.

C. TESTING INSTALLATION OF MAGNET ASSEMBLY

1. When the magnet swings close to the PRINTED CIRCUIT BOARD you should be able to hear the REED SWITCHES on the PRINTED CIRCUIT BOARD click off and on.

NOTE: If the reed switches are not changing as the magnet swings over them, then possibly the magnet is adjusted wrong. Readjust magnet and test.

2. Install DUST COVER with thumb screws.
3. Repeat all steps for each platter.
4. When all MAGNET ASSEMBLIES are installed the line power can be returned to the LP-270

D. PAYOUT CONTROL ASSEMBLY INSTALLATION

1. Refer to Figure 30 for film path on new PAYOUT CONTROL ASSEMBLY. The new PAYOUT CONTROL ASSEMBLY has four FILM WRAP ROLLERS to protect the film.
2. Each PLATTER has a LOCATING PIN for the PAYOUT CONTROL ASSEMBLY. Install the LOCATING PIN in the hole indicated on Figure 28. Tighten the LOCATING PIN with pliers but DO NOT MAR PIN.
3. The PAYOUT CONTROL ASSEMBLY has been pre-set at factory and may not need adjustment.
4. Install the PAYOUT CONTROL ASSEMBLY on one of the PLATTERS. The PAYOUT CONTROL ARM should swing to the off position. The TAKE UP WEIGHT ASSEMBLY must be in the off position. Push green button for the platter being used, (PAYOUT).
5. Turn the PAYOUT CONTROL ARM slowly to the full on position. The PLATTER should start to turn when PAYOUT CONTROL ARM is within .5 inch (12,7) from the full on position. This can vary between systems.
6. If adjustment is necessary see Figure 29 and do the following steps. Hold PAYOUT CONTROL ARM against the on or off stop. Loosen SET SCREW indicated and rotate slightly

one way or the other. Tighten SET SCREW and repeat step 5.

7. With the adjustments complete on the first platter, check each platter location and readjust the MAGNET ASSEMBLY as necessary.

8. This completes the modification.

NOTES:

1. We have found on some extremely old systems where the platter might rub on the bottom of the four (4) rollers indicated on Figure 30. If this should happen, remove the four (4) rollers and install the top plastic washers on the bottom of the rollers to act as small spacer. This should clear rollers from touching the platter.

OLD STYLE

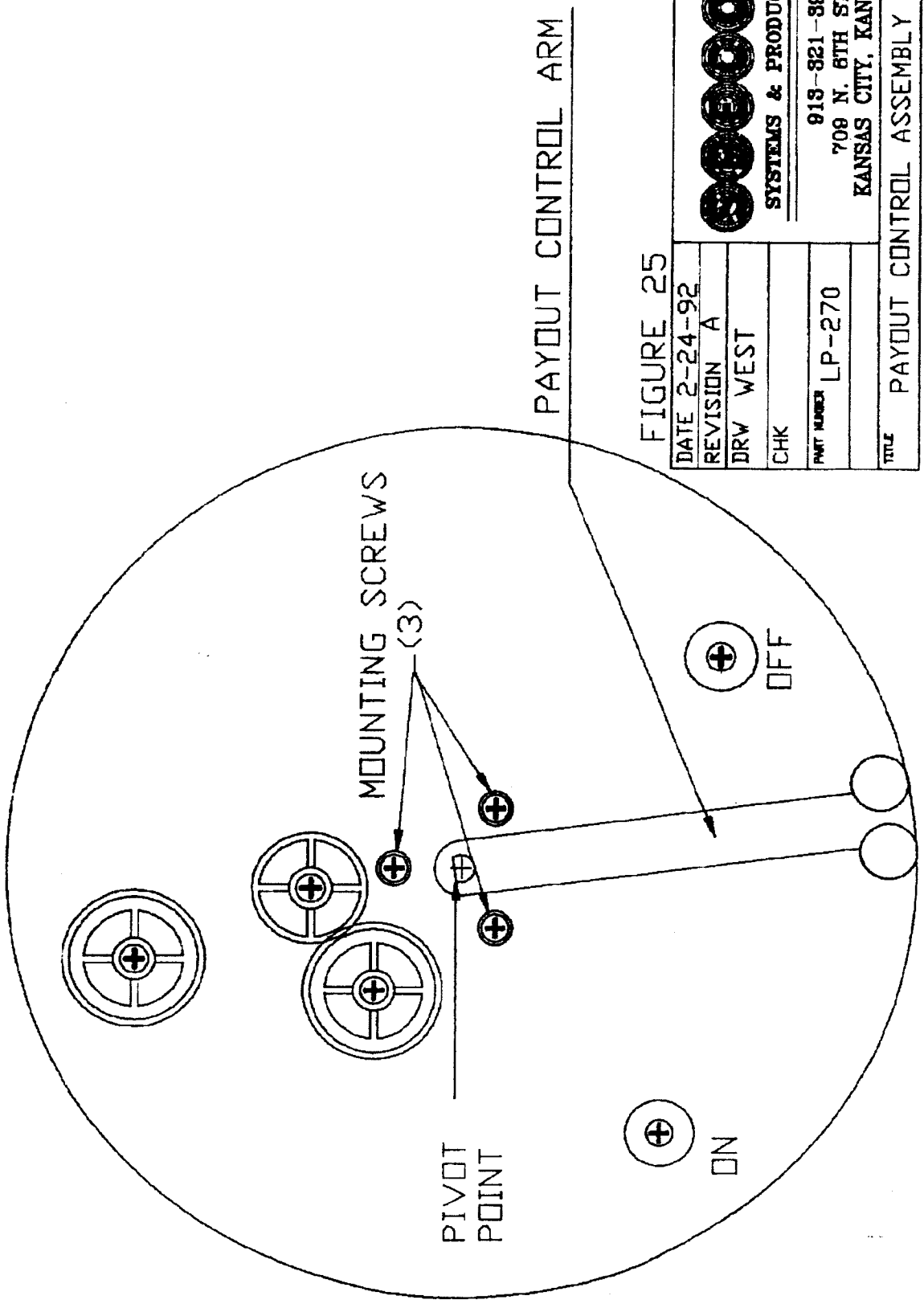


FIGURE 25

DATE	2-24-92	THEATRE EQUIPMENT	
REVISION	A	SYSTEMS & PRODUCTS ENG. CO.	
DRW	WEST	918-821-8978	
CHK		708 N. 6TH STREET	
PART NUMBER	LP-270	KANSAS CITY, KANSAS 66101	
TITLE	PAYOUT CONTROL ASSEMBLY (OLD)		

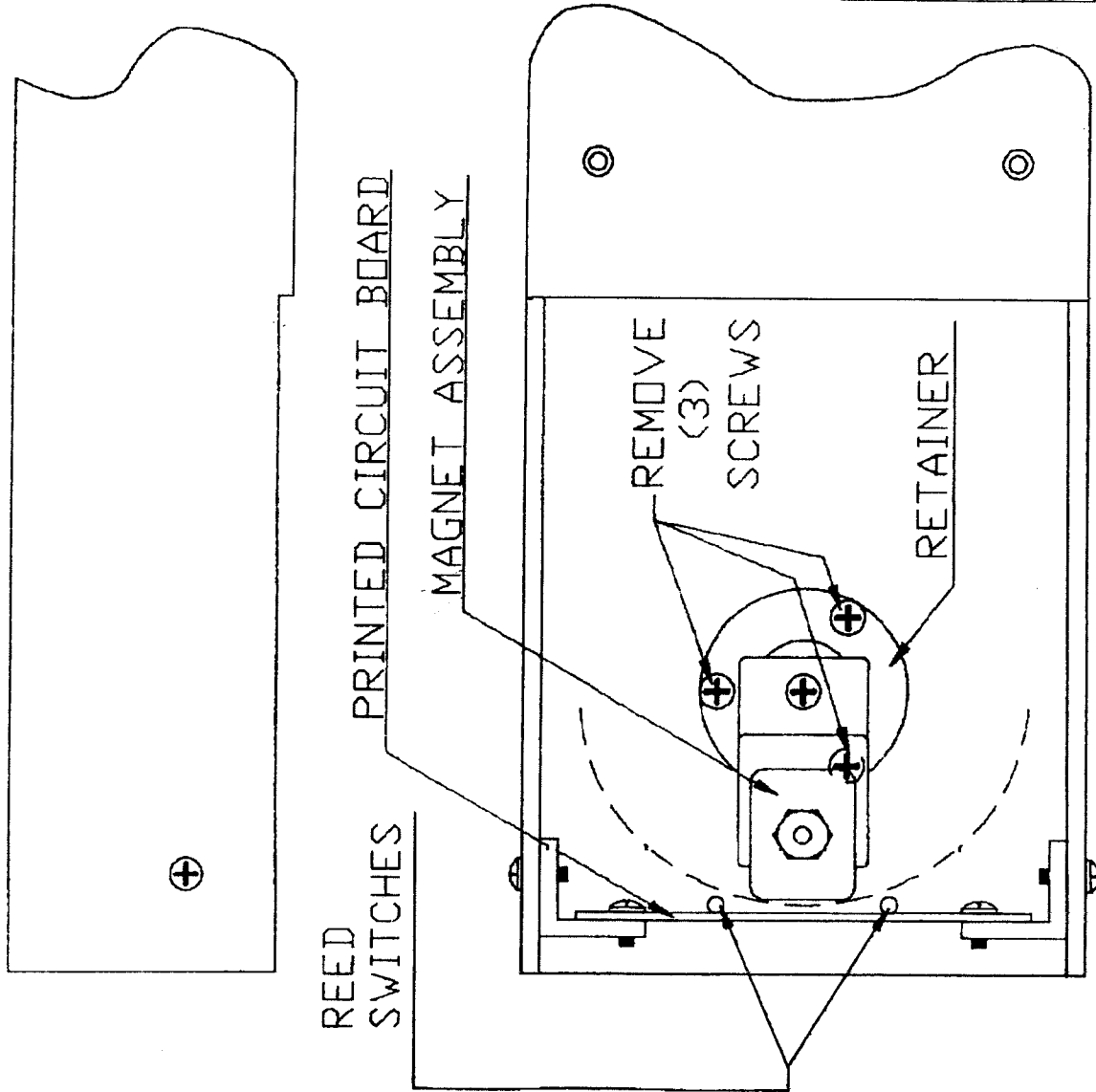


FIGURE 26

DATE	2-13-91	THEATRIZ EQUIPMENT
REVISION	A	
DRW	WEST	SYSTEMS & PRODUCTS ENG. CO.
CHK		
PART NUMBER	LP-270	913-321-3878
		709 N. 6TH STREET
		KANSAS CITY, KANSAS 66101
TITLE	PLATTER ARM /MAGNET ASSEMBLY	

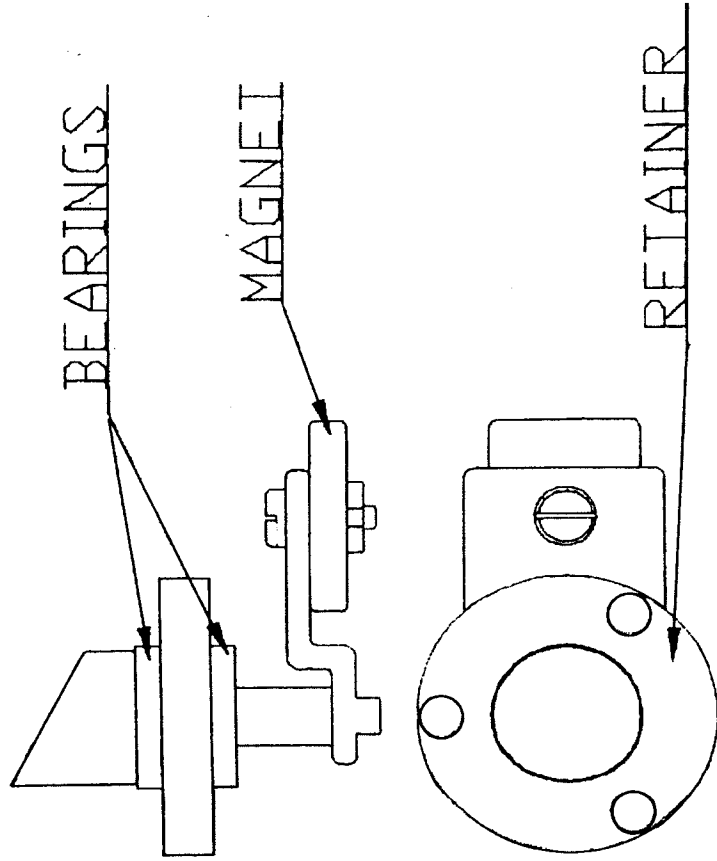



FIGURE 27

DATE 2-13-92		THEATRE EQUIPMENT
REVISION A		
DRW WEST	SYSTEMS & PRODUCTS ENG. CO.	
CHK	913-321-3978	
PART NUMBER LP-270	709 N. 6TH STREET	
	KANSAS CITY, KANSAS 66101	
TITLE MAGNET ASSEMBLY		

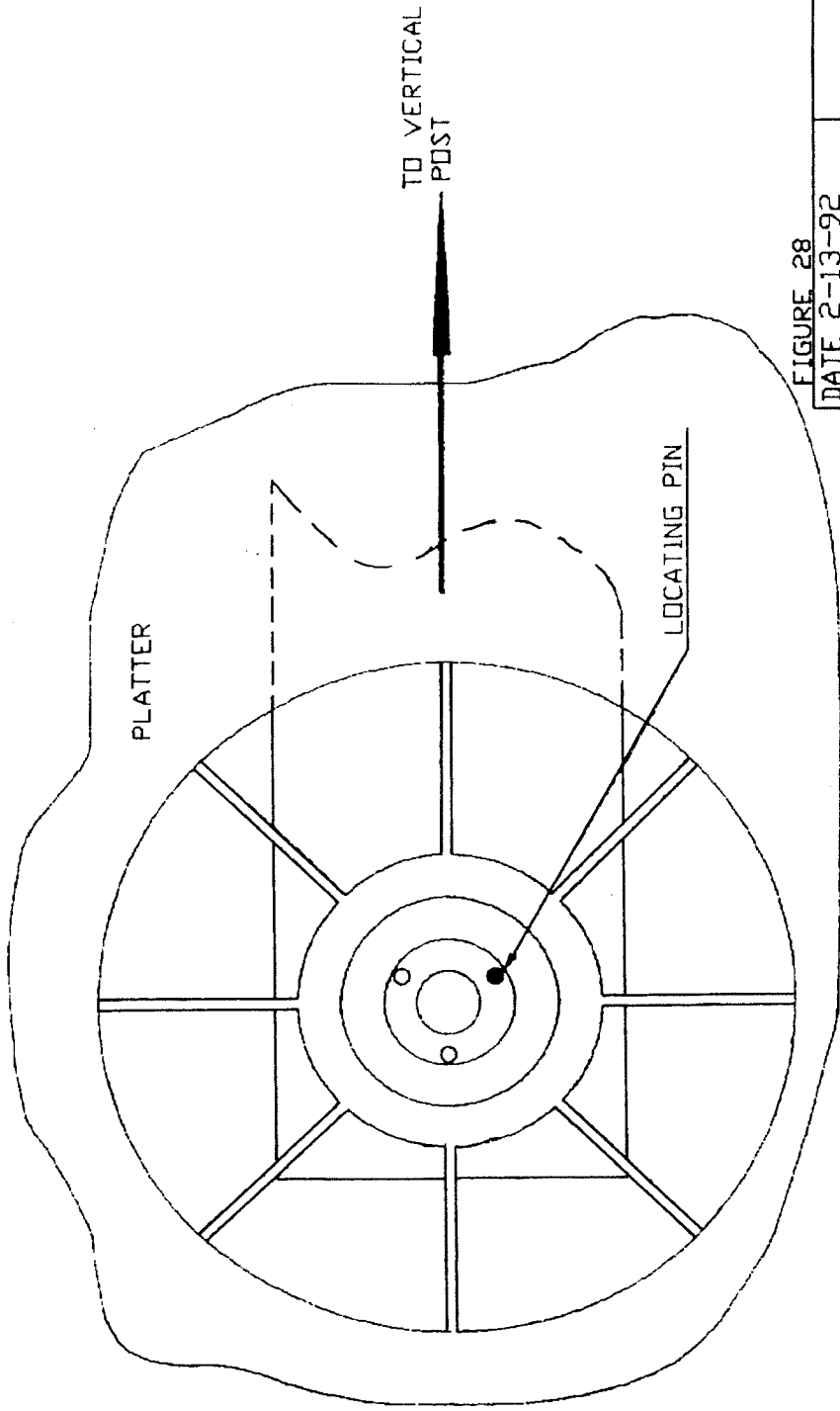


FIGURE 28

DATE 2-13-92

REVISION A


DRW WEST

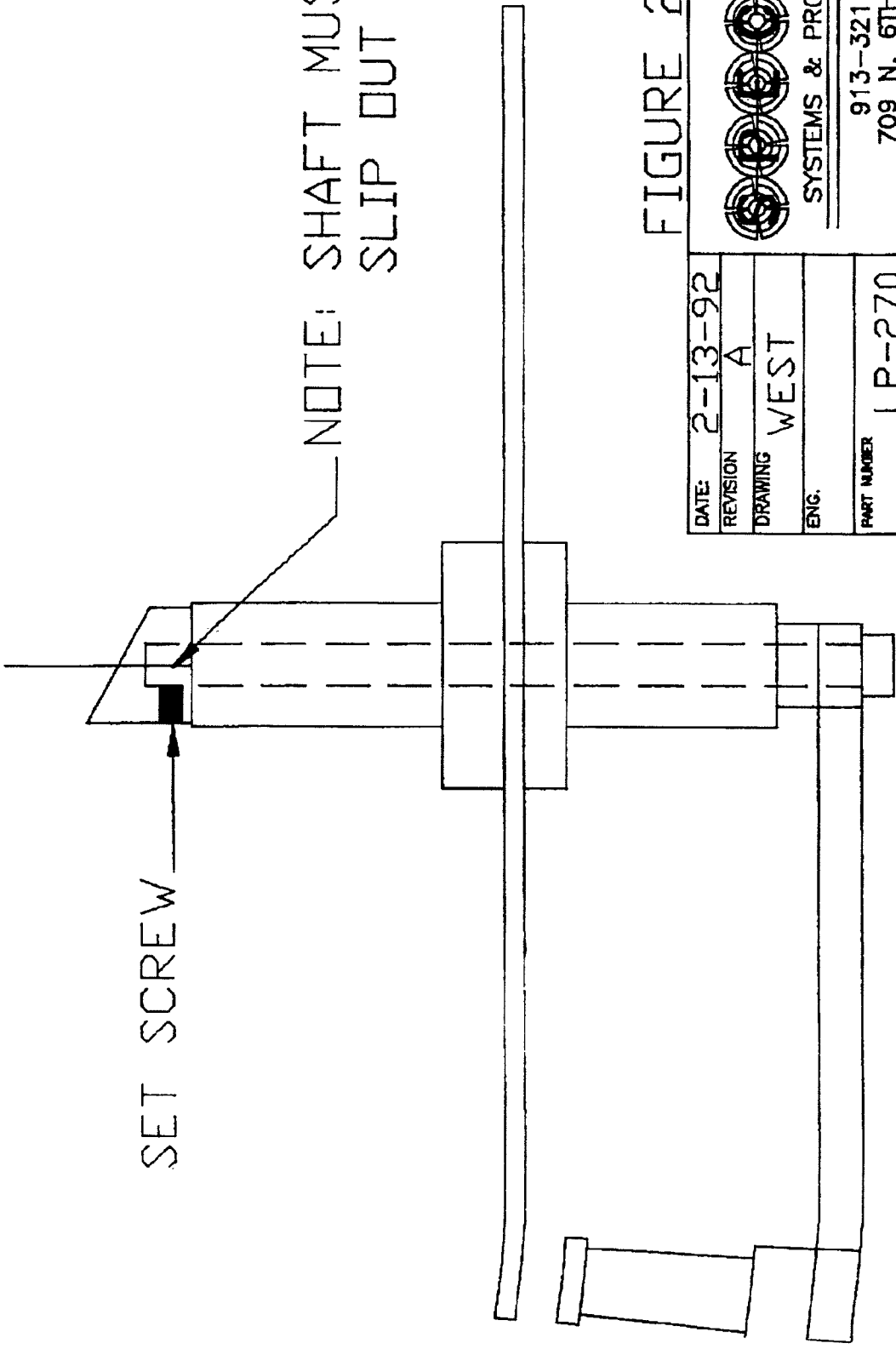
CHK

PART NUMBER LP-270

TITLE

LOCATING PIN / PLATTER ARM

		THEATRE EQUIPMENT
SYSTEMS & PRODUCTS ENG. CO.		
813-321-3978 709 N. 6TH STREET KANSAS CITY, KANSAS 66101		



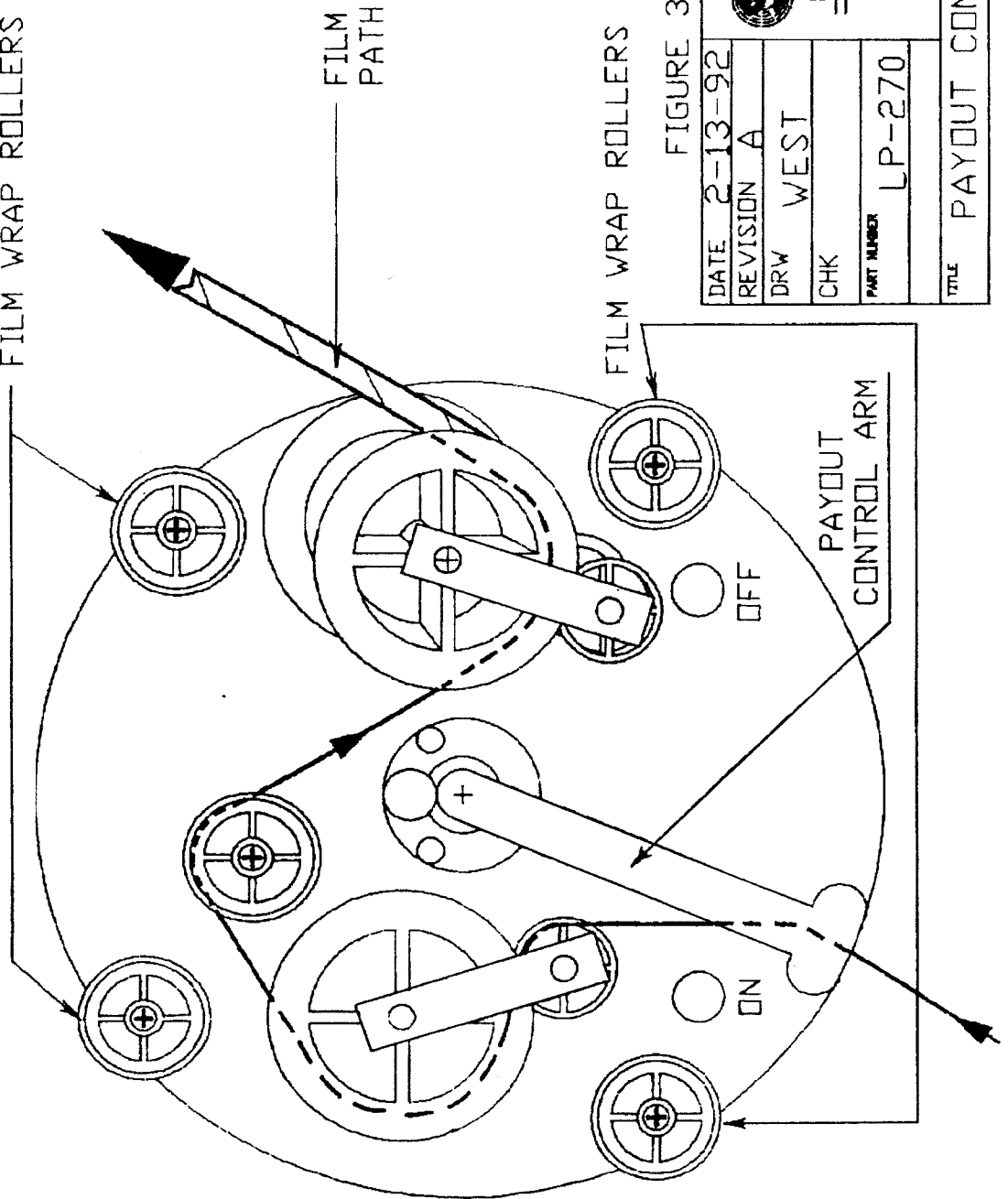
SET SCREW

NOTE: SHAFT MUST NOT
SLIP OUT OF HOLE

FIGURE 29 (NEW)

DATE: 2-13-92	THEATRE EQUIPMENT
REVISION A	
DRAWING WEST	
ENG.	SYSTEMS & PRODUCTS ENG. CO.
PART NUMBER LP-270	913-321-3978
FROM	709 N. 6TH STREET
TITLE	KANSAS CITY, KANSAS 66101
PAYOUT CONTROL ASSEMBLY	


FILM WRAP ROLLERS



FILM PATH

FILM WRAP ROLLERS

FIGURE 30 (NEW)

DATE	2-13-92	 THEATRE EQUIPMENT SYSTEMS & PRODUCTS ENG. CO.
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CHK		
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		709 N. 6TH STREET
		KANSAS CITY, KANSAS 66101
TITLE	PAYOUT CONTROL ASSEMBLY	

MODIFICATION INSTRUCTIONS
*** LP-270 ***
TWO INCH ROLLER ASSEMBLY
001-0029-01

3-24-92

A. REMOVE LOCKING COLLAR

1. Refer to Figure 35, loosen the set screw in the locking collar and remove collar.
2. Figure 32 shows the Keeper Assembly to be added to the 2 inch roller assembly.
3. Remove the 2 inch roller and nylon washer from the 1/4 inch shaft. With a clear dry rag, clean the roller, washer, and the 1/4 inch shaft. CAUTION: Do not use any lubricants on the shaft or rollers.

B. INSTALL KEEPER ASSEMBLIES

1. Use a 2 inch long piece of 35MM film and fold it in half. This becomes the Feeler Gage for setting the spacing of the 2 inch roller. Install the Keeper Assembly as shown in Figure 36. Place the Feeler Gage between the two half's of the 2 inch roller. Align the Keeper Bar as shown in Figure 36. The Keeper Roller should be to the bottom left of the 2 inch roller. With the Keeper Bar in position tighten the set screw on the 2 inch roller side of the Keeper Bar. Make sure the set screw on the other end of the Keeper Bar is also tight. Remove the Feeler Gage from the 2 inch roller. Spin the 2 inch roller, it should move freely. If roller does not spin freely, insert 3 layers of film to allow for more space.
2. This completes the modification.

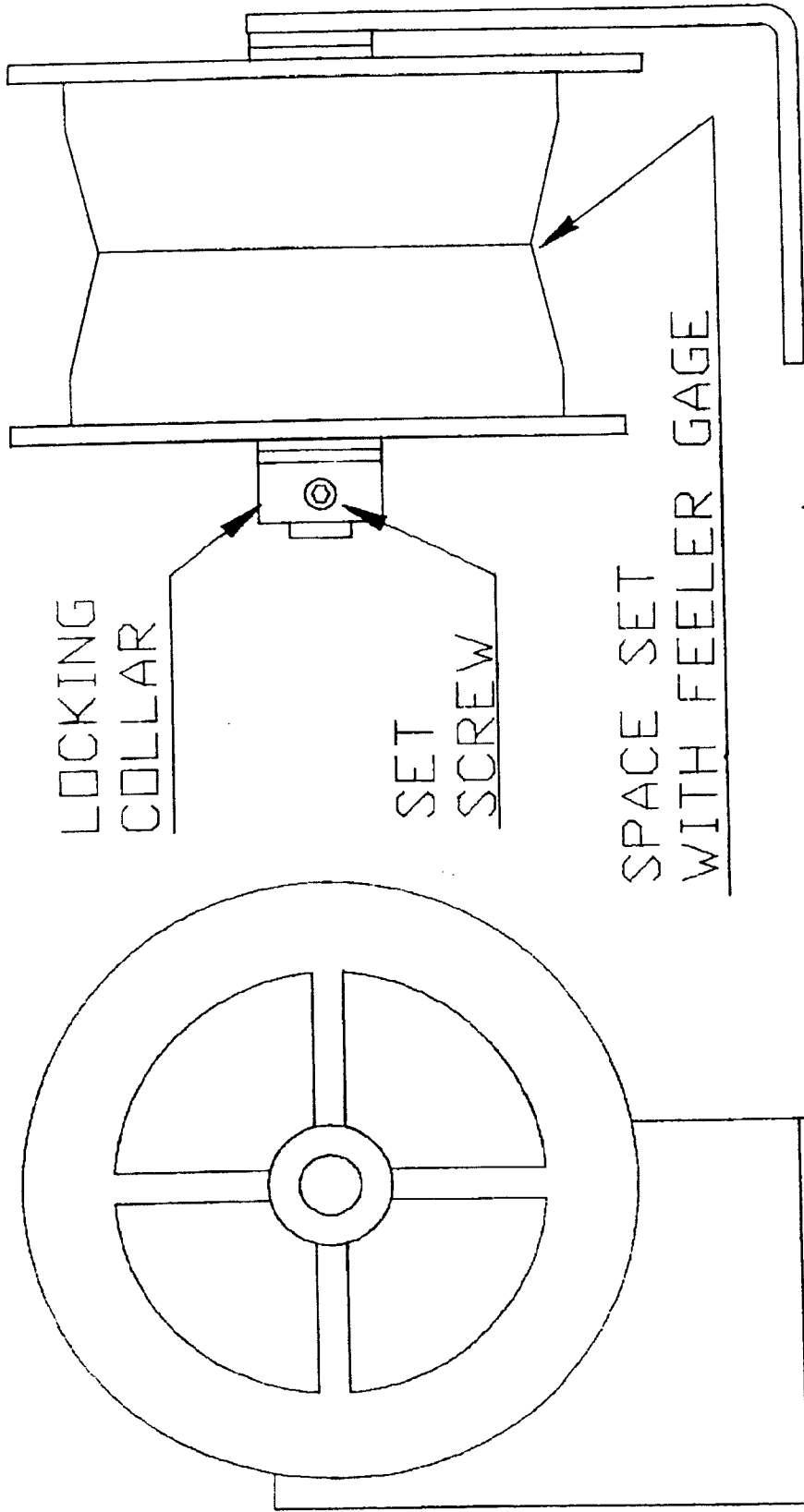


FIGURE 35

DATE:	3-2-92		THEATRE EQUIPMENT
REVISION	A		
DRAWING	WEST	SYSTEMS & PRODUCTS ENG. CO. 913-321-3978 709 N. 6TH STREET KANSAS CITY, KANSAS 66101	
ENG.			
PART NUMBER	001-0029-01		
FROM			
TITLE	2 INCH MOVING ROLLER		

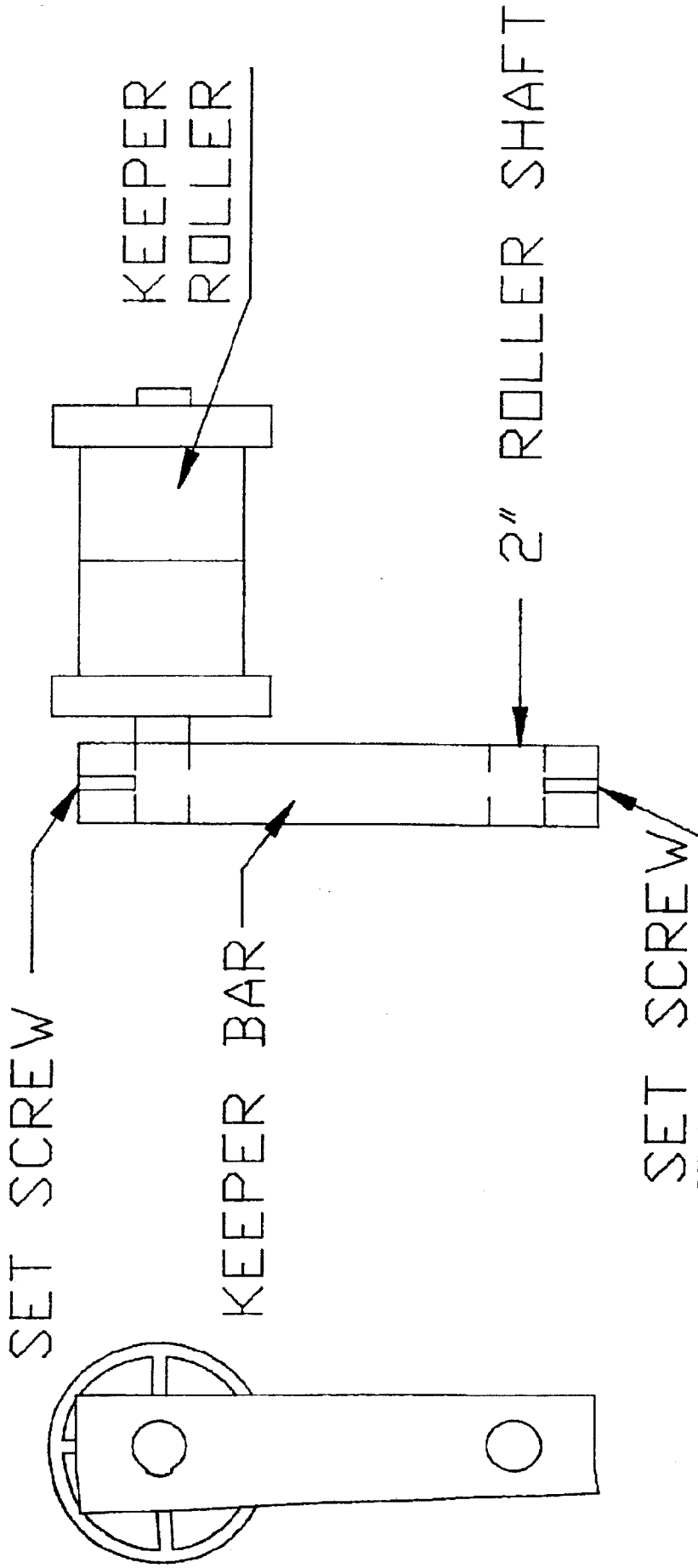



FIGURE 32

DATE:	3-2-92		THEATRE EQUIPMENT SYSTEMS & PRODUCTS ENG. CO. 913-321-3978 709 N. 6TH STREET KANSAS CITY, KANSAS 66101
REVISION	A		
DRAWING	WEST		
ENG.			
PART NUMBER	001-0030-01		
FROM			
TITLE	2 INCH KEEPER ROLLERS		

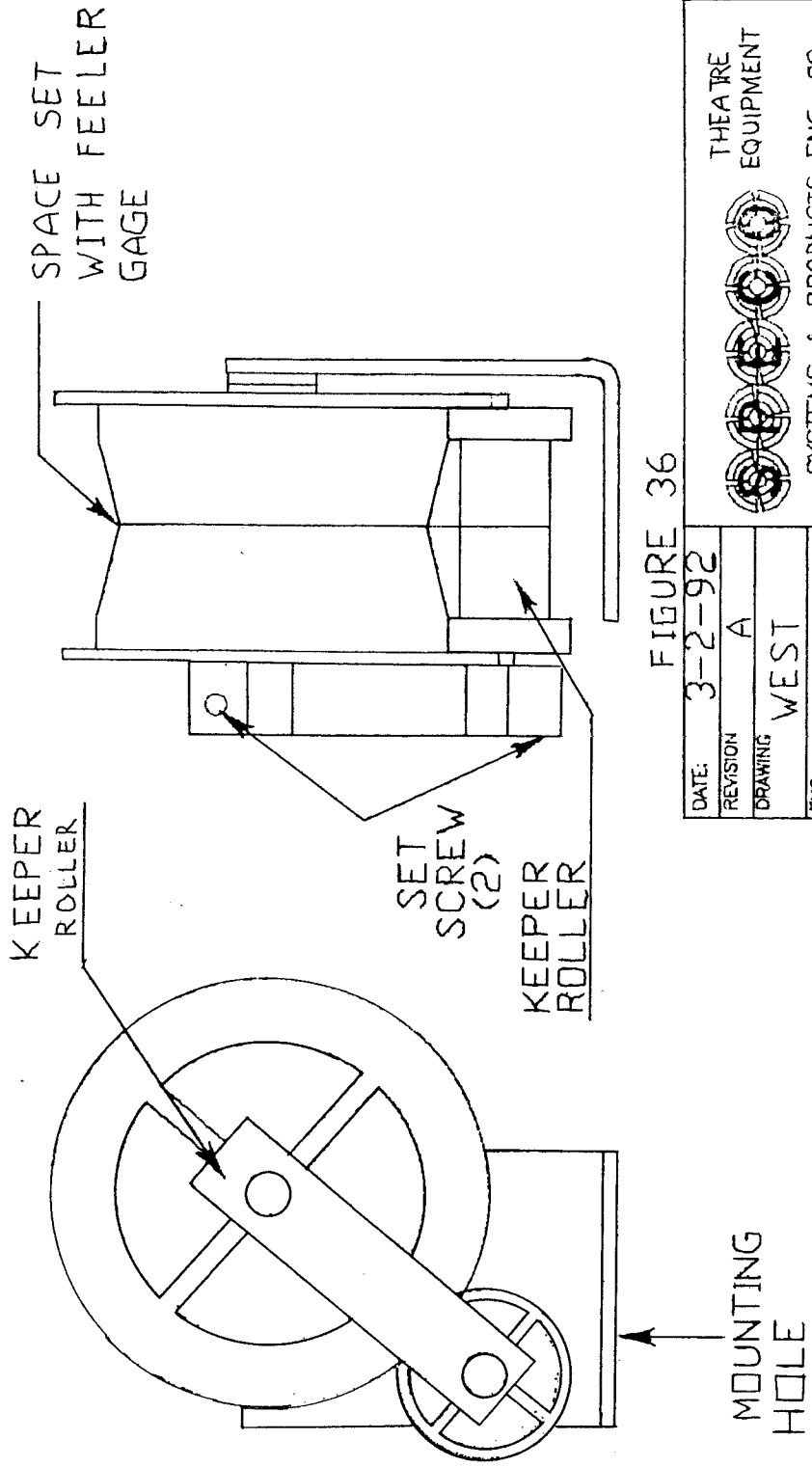


FIGURE 36

DATE:	3-2-92		THEATRE EQUIPMENT SYSTEMS & PRODUCTS ENG. CO. 913-321-3978 709 N. 6TH STREET KANSAS CITY, KANSAS 66101
REVISION	A		
DRAWING	WEST		
ENG.			
PART NUMBER	001-0029-01		
FROM			
TITLE	2 INCH ROLLER MODIFICATION		

MODIFICATION INSTRUCTIONS

*** LP-270 ***

KEEPER ASSEMBLY

001-0030-01

3-24-92

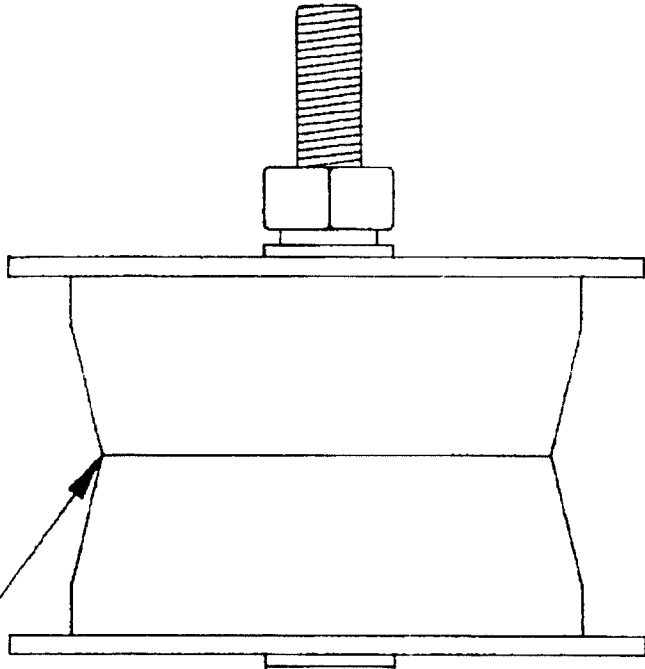
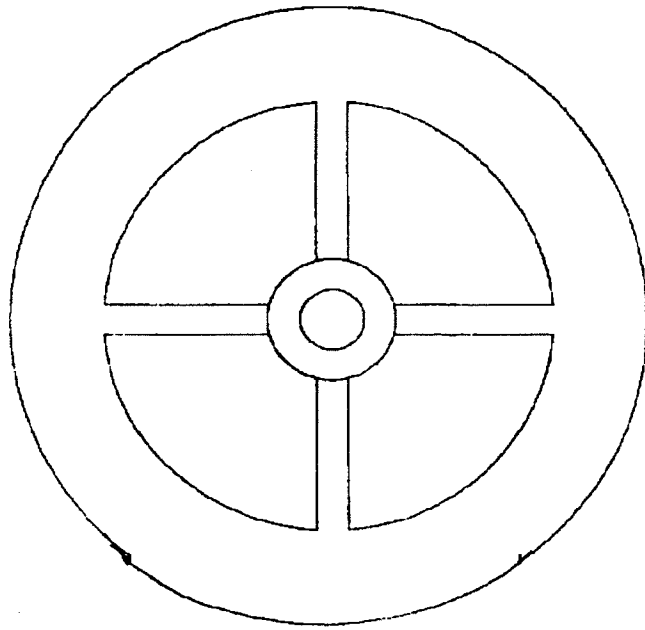
A. REMOVE LOCKING COLLARS

1. Refer to Figure 31 and loosen the set screw in the locking collar on each of the four roller assemblies on the right side of the LP-270 vertical post. Remove the four locking collars and set them aside.
2. Figure 32 shows one of the Keeper Assemblies to be added to each of the 2 inch rollers. Note the location of the set screws.
3. Remove the 2 inch roller and nylon washer from the 1/4 inch shaft. With a clean dry rag, clean the roller, washer, and the 1/4 inch shaft. CAUTION: Do not use any lubricants on the 1/4 shaft or rollers. Repeat step three for each 2 inch roller assembly.

B. INSTALL KEEPER ASSEMBLIES

1. Use a 2 inch long piece of 35MM film and fold it in half. This becomes the Feeler Gage for setting the spacing of the 2 inch roller assembly. Install the Keeper Assembly as shown in Figure 33. Place the Feeler Gage you made between the two halves of the 2 inch roller. Align the Keeper Bar parallel with the edge of the LP-270 vertical post. The Keeper Roller should be at the bottom or top depending on position in Figure 34. With Keeper Bar in position tighten the set screw on the 2 inch roller end of the Keeper Bar. Make sure the set screw on the other end of the Keeper Bar is also tight.
2. Make sure that the 1/4 -20 nut is tight against the LP-270 vertical post. With the Keeper Assembly added this is important so the assembly does not rotate while in use.
3. Repeat the steps necessary to modify another 2 inch roller assembly.
4. Modification complete.


SPACE SET WITH
FEELER GAGE



LOCKING
COLLAR

SET
SCREW

FIGURE 31

DATE:	3-2-92	THEATRE EQUIPMENT
REVISION	A	
DRAWING	WEST	 SYSTEMS & PRODUCTS ENG. CO. 913-321-3978 709 N. 6TH STREET KANSAS CITY, KANSAS 66101
ENG.		
PART NUMBER	001-0030-01	
FROM		
TITLE	MODIFICATION OF 2 INCH ROLLERS	

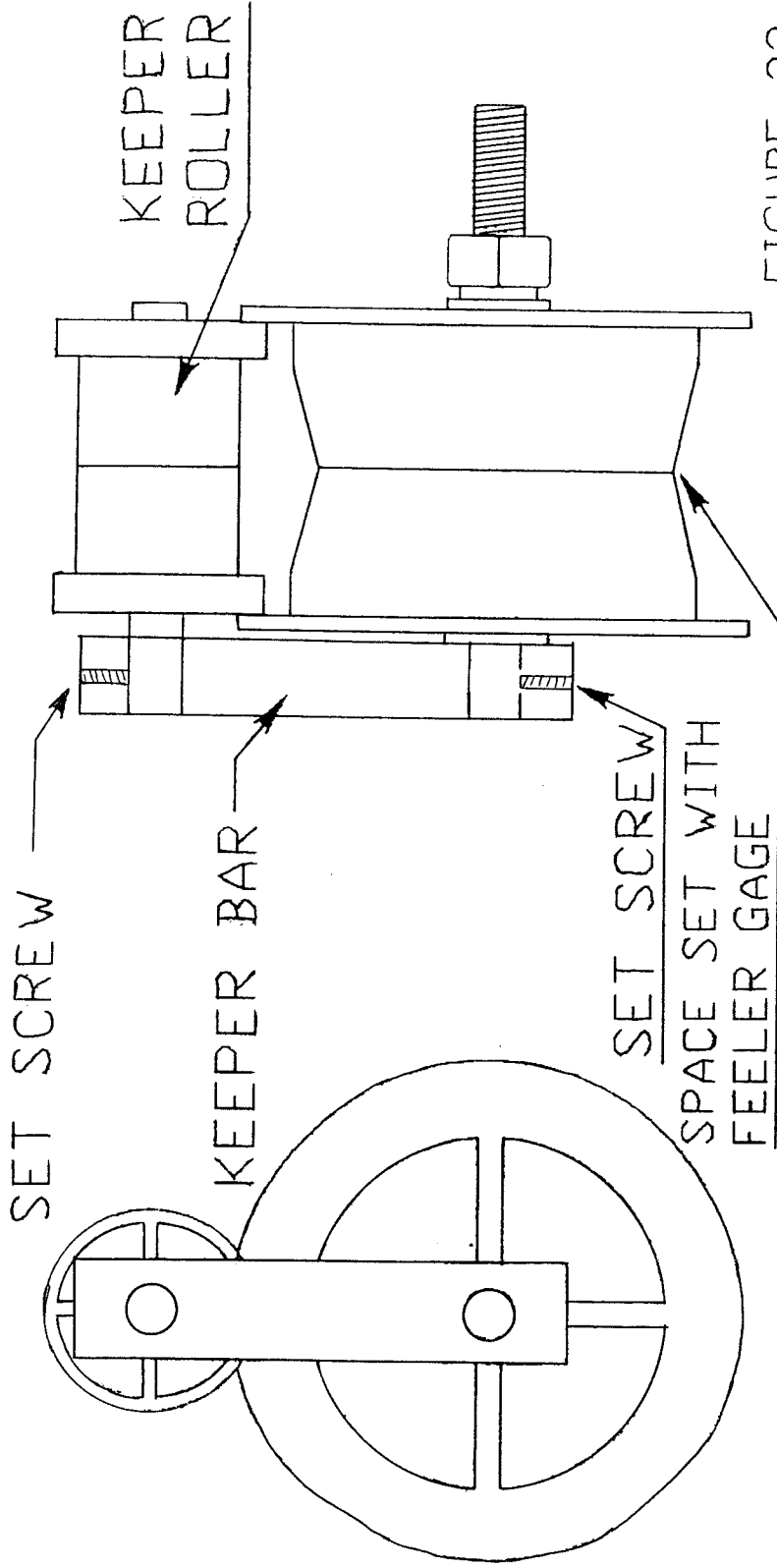

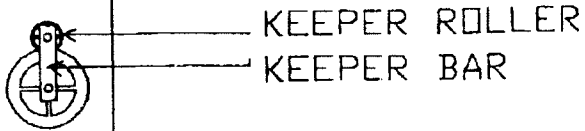


FIGURE 33

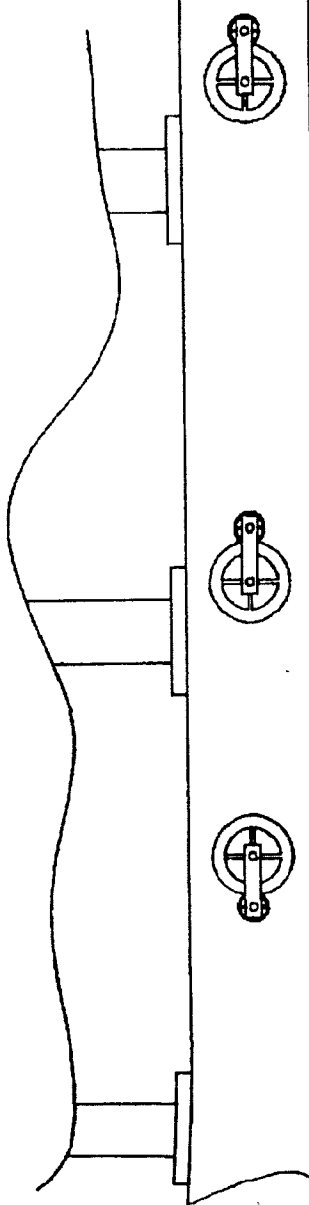
DATE: 3-2-92	THEATRE EQUIPMENT
REVISION A	 SYSTEMS & PRODUCTS ENG. CO.
DRAWING WEST	
ENG.	913-321-3978
PART NUMBER 001-0030-01	709 N. 6TH STREET
FROM	KANSAS CITY, KANSAS 66101
TITLE 2 INCH KEEPER ROLLERS	


TOP



NOTE:
KEEPER ROLLERS AND
BARS ARE ADDED TO
EACH OF THE FOUR
ROLLERS.

PAYOUT SIDE VIEW



DATE: 2-28-92	 THEATRE EQUIPMENT <hr/> SYSTEMS & PRODUCTS ENG. CO. <hr/> 913-321-3978 709 N. 6TH STREET KANSAS CITY, KANSAS 66101
REVISION A	
DRAWING WEST	
ENG.	
PART NUMBER 001-0030-01	
FROM	
TITLE ROLLER MODIFICATION	