

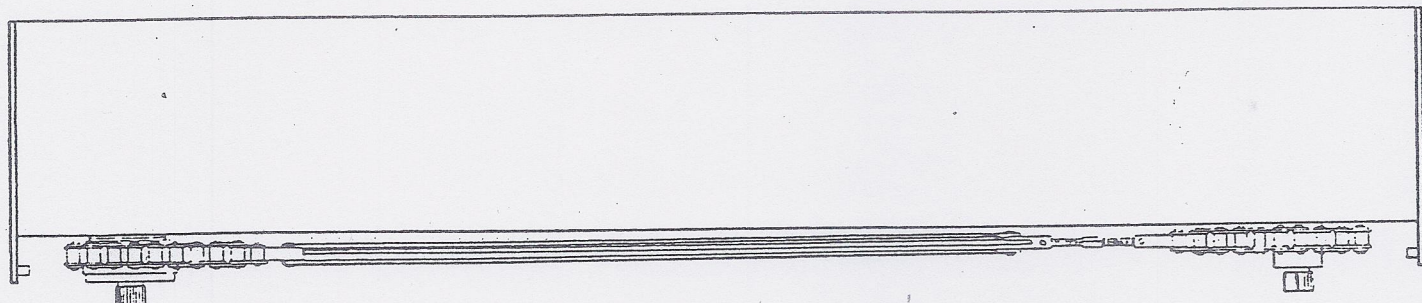
INSTALLATION MANUAL

#32-23-001

**besam**® 

T.M.

# ***Swingmaster*** ***700 & 750***



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## ***chain drive*** ***swing door operators***



SWINGMASTER 700/750

INSTALLATION INSTRUCTIONS

The following 700/750 installation instructions are a supplement to the already published 300/350 Manual US-019. All instructions, details and wiring diagrams in Manual US-019 are valid and should be carefully followed with the following exceptions.

300 Swingmaster

Housing & Frame Details  
" " "

Page 1  
Page 2

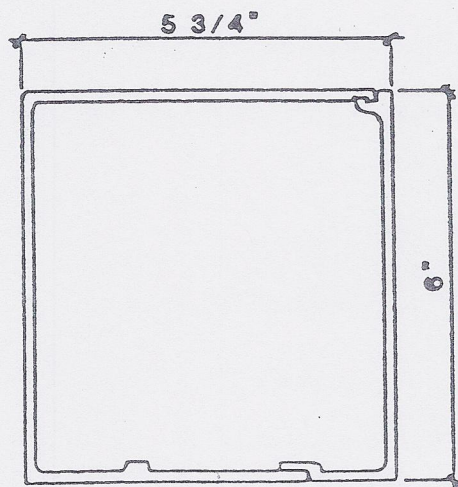
Dwg 79-06-002-1  
Dwg 79-06-002-2

350 Swingmaster

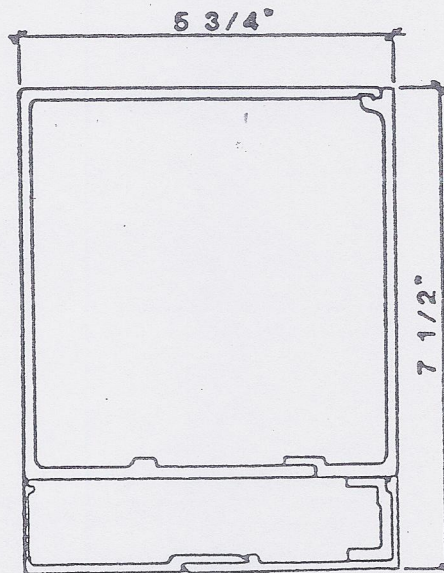
Template Drawings

1, 4, 5 and 8

The details and template drawing listed above are for an operator housing height of 6 inches which is increased on the 700 Series to 7½ inches because of the Synchronous (see Detail A) header design.



SWINGMASTER 300 SERIES



SWINGMASTER 700 SERIES

**DETAIL A**



## INSTALLATION STEPS (Refer to Illustration - Spare Parts Drawing)

- Step 1 Identify all necessary 700 Series components according to the Illustration Drawing.

Regular (outswing) applications are supplied with a 400/450 R.H. operator which is always installed into the operator housing on the right side. (See Detail Sheet D)

Parallel (in swing) panic or non-panic applications are supplied with a 300/350 R.H. operator which is installed into the operator housing on the left side. (see Detail Sheet E)

All 700 Series applications utilize R.H. operators for ease of adjustment to the 90° operators internal door stop.

- Step 2 Prepare and install operator housing 1½ inches above the normal or template location detailed in Manual US-019.

- Step 3 Install Swingmaster operator and PC board (See Manual US-019). Be certain that all operator mounting bolts are installed and torqued sufficiently. The 700 Series operator mounting brackets are supplied with special solid aluminum grommets in place of the normal rubber noise isolator grommets, due to the torque developed when tightening the chain.

- Step 4 Install the clutch (2) on to the clutch housing (1) already installed in the housing.

700 Series (O.H.C.) Secure with 3/8" x24 x1<sup>3</sup>/<sub>4</sub>" socket head allen bolt (2a).

750 Series (Surface Mounted) Secure with 3/8" x24 x2<sup>1</sup>/<sub>4</sub>" flat head bolt (2b).

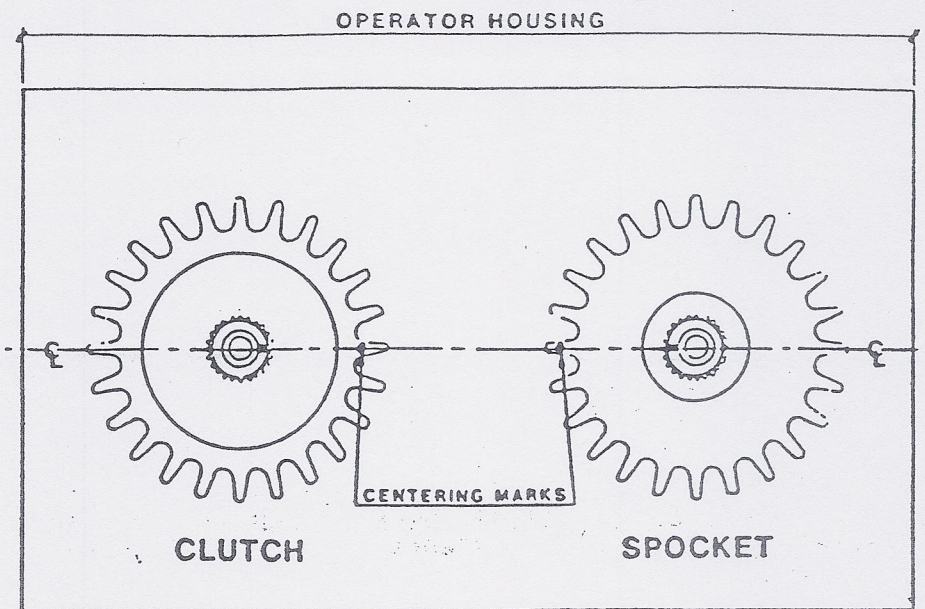
Rotate sprocket until the centering punch mark (see Detail B) located on the sprocket and spline is located on the center line of the operator housing.

- Step 5 Install the operator sprocket (3) on to the operator spindle with the centering punch marks on the center line of the operator housing. (see Detail B)

700 Series (O.H.C.) Secure sprocket with 3/8" x24 x1 3/4" socket head allen bolt (3a).

750 Series (Surface Mounted) Secure sprocket with 3/8" x24 x2<sup>1</sup>/<sub>4</sub>" flat head bolt (3b).



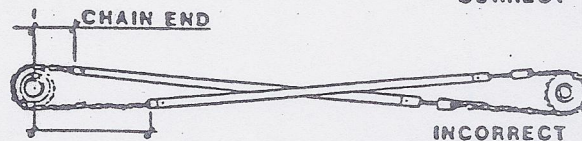
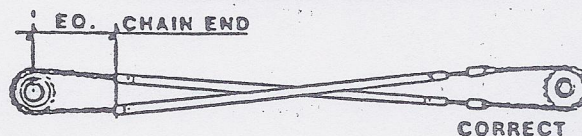


**DETAIL B**

Step 6

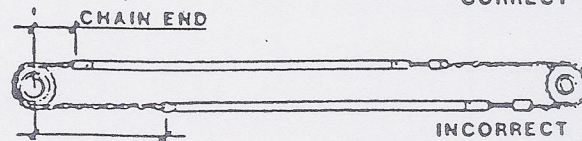
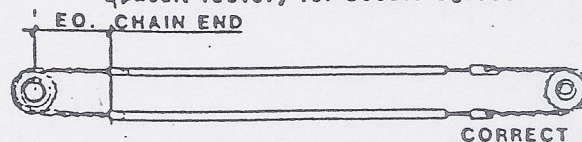
Assemble the chain (7e), connectors (7 & 6) and connecting bars (5) according to the illustration drawing. Carefully install the assembly onto both sprockets being certain that the centering marks remain positioned as in Detail B. The adjustable connecting bolt chain assembly (7) is always installed onto the operator sprocket as illustrated. When completed the chain length should be equal (see Detail C) around each sprocket.

**SIMULTANEOUS PAIRS**



**DOUBLE EGRESS \***

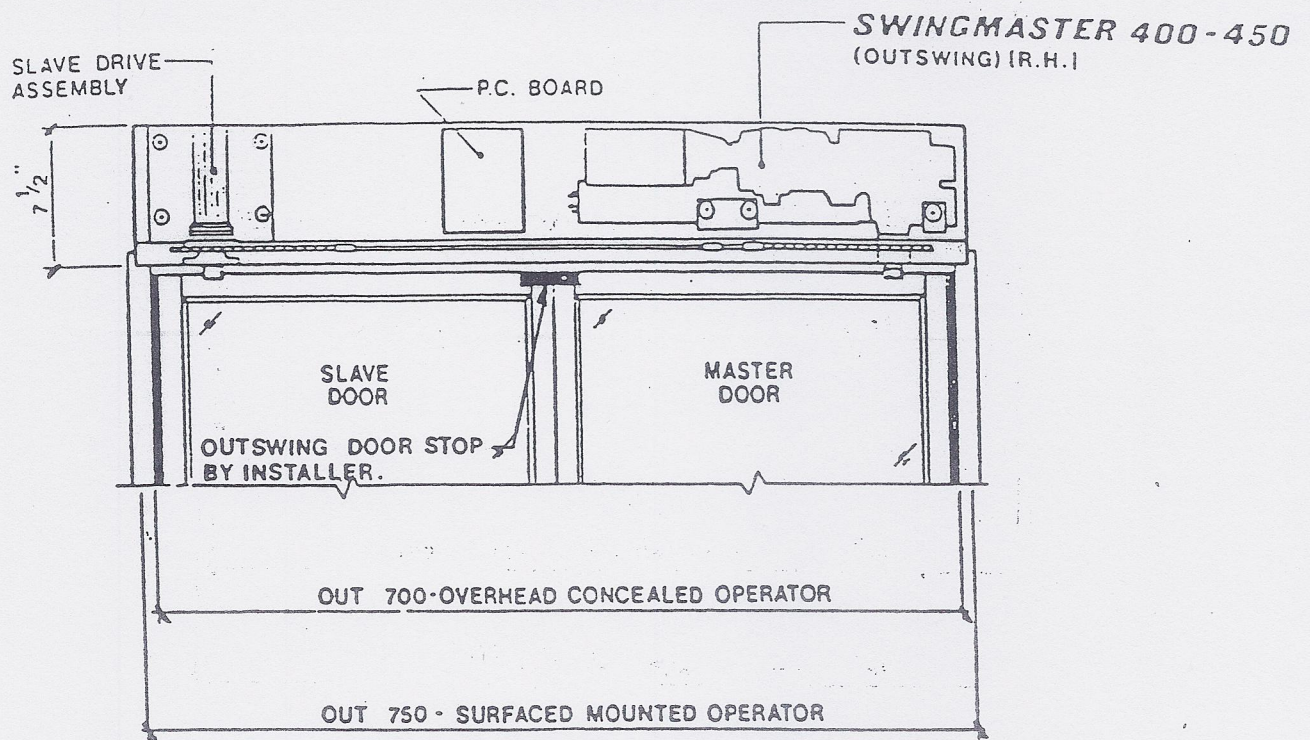
Consult factory for double egress



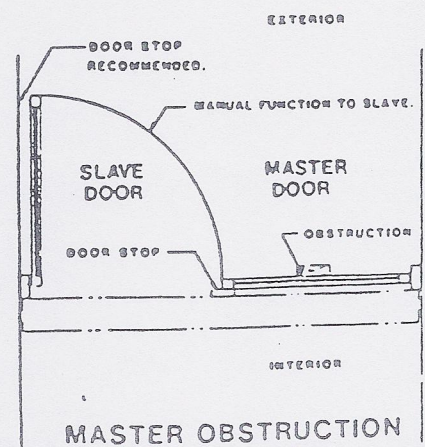
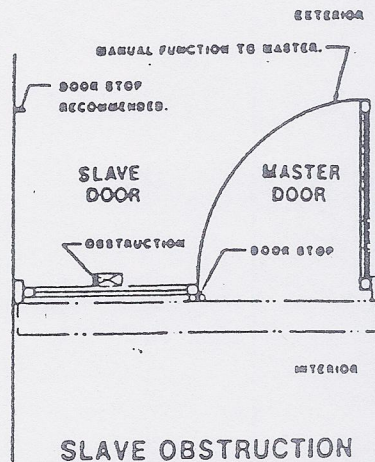
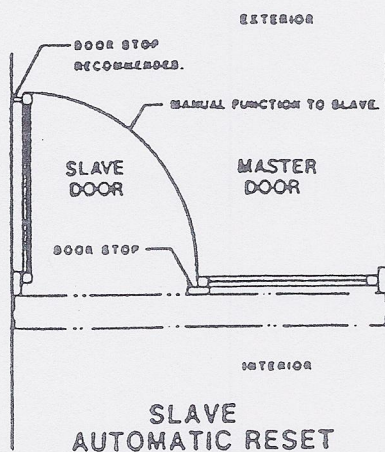
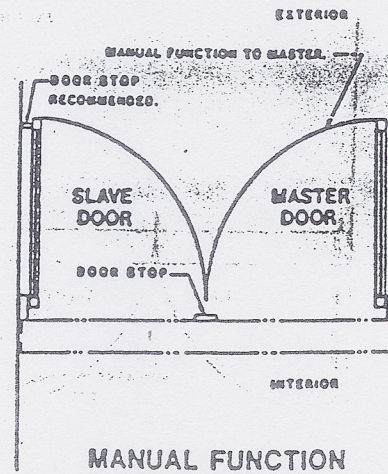
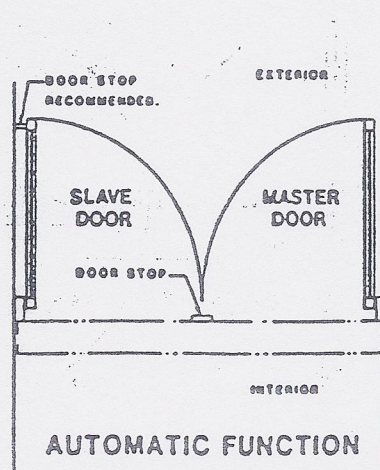
**DETAIL C**

**\* FOR OHC & TRAINED TRAFFIC ONLY.**





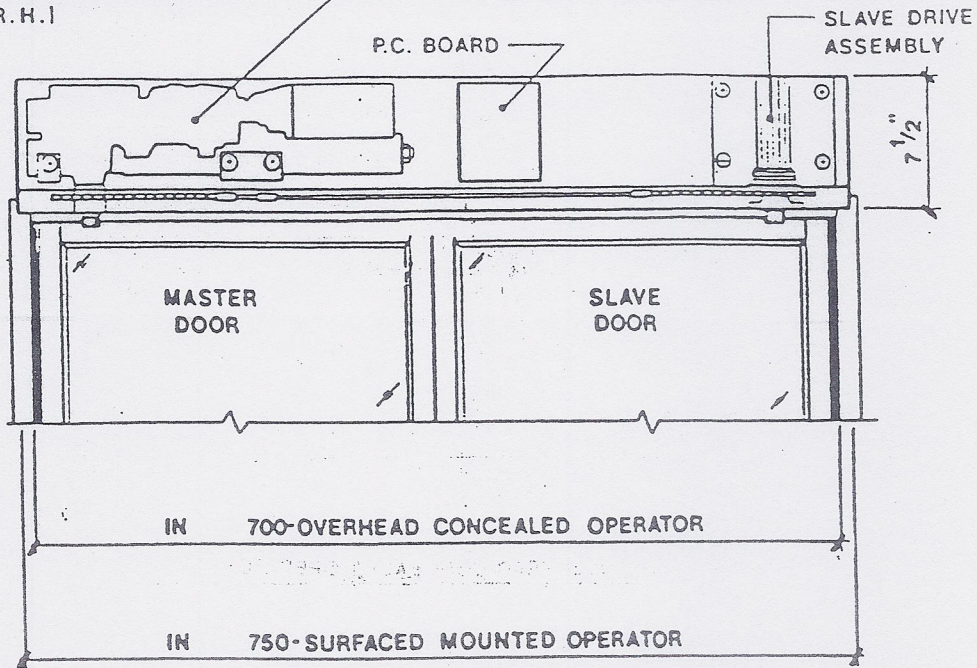
## INTERIOR VIEW



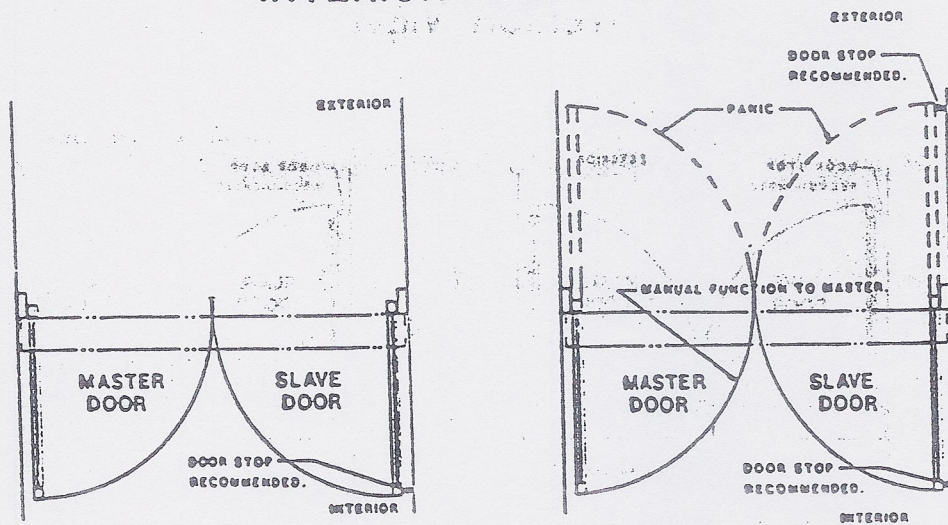
## DETAIL D



**SWINGMASTER 300-350**  
(IN SWING) (R.H.)

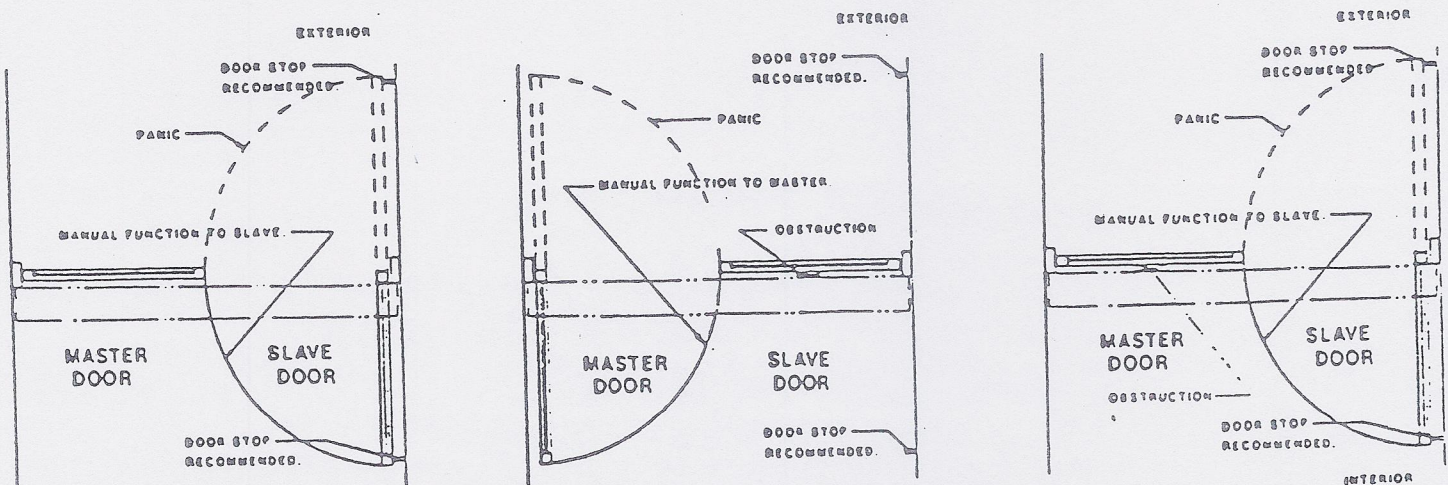


**INTERIOR VIEW**



**AUTOMATIC FUNCTION  
(NON-PANIC)**

**MANUAL FUNCTION**



**SLAVE  
AUTOMATIC RESET**

**SLAVE OBSTRUCTION  
DETAIL E**

**MASTER OBSTRUCTION**



Step 7

Regular (out swing) 750 Applications Reinstall one half of the bottom (8a) slave drive cover. Remove the F.H. bolts (2b-3b). Install and secure the correct linkage with the door in the fully closed position. Manually push both doors to the fully opened position. (Note- do not release thumb screw on the motor coupling at this time). Adjust the operator 90° door stop (see illustration) and secure. Be certain that a fully closed door stop (supplied by installer) is installed. Carefully release the thumb screw and allow doors to close. Tune in operator and adjust cams (see Manual US-019) if required. Reinstall operator housing cover and slave drive cover (8b). Test manual function (see Detail D) of operator and clutch.

Regular (out swing) 700 Applications Install the door arms to the clutch assembly sprocket (2) and drive sprocket (3). Manually push both arms to the fully open position (Note- do not release thumb screw on the motor coupling at this time). Install both door leaves, release the thumb screw lock while holding the doors and allow them to carefully close to the desired full closed position and and relock in place by retightening the motor coupling thumb screw. Make centering adjustments if necessary to the slave door with the connecting bolts (7a) at this time.

Manually push both doors to the fully open position (with thumb screw secured) and adjust the 90° operator door stop. Install a temporary fully closed door stop and carefully allow the doors to close by releasing the motor coupling thumb screw. Tune in operator and adjust cams (see Manual US-019) if required. Reinstall operator housing cover and slave drive covers (8). Install a permanent fully closed door stop (supplied by installer) at this time. Test manual function (see Detail D) of operator and clutch.

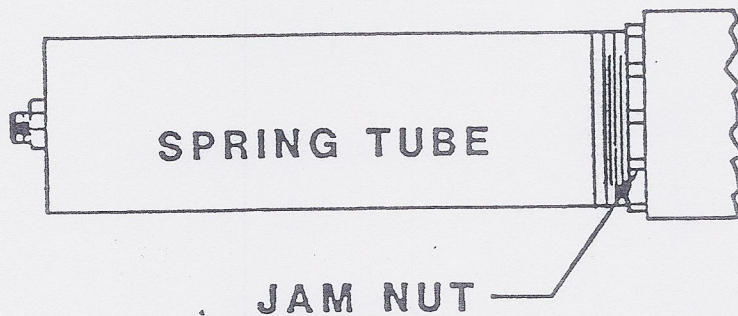
Parallel (in swing) 750 Applications Carefully remove the F.H. bolts (2b-3b). Install and secure the correct linkage with the doors in the fully closed position. Make centering adjustments if necessary to the slave door with the connecting bolts (7a) at this time. Manually push doors to the desired open position and secure the motor coupling thumb screw supplied. Adjust the 90° operator door stop.

Release thumb screw and carefully allow doors to close. Tune operator and adjust cams (see Manual US-019) if necessary. Reinstall operator housing cover and slave door cover (8). Test operation of the panic release function of both operator (see Detail E) and clutch assembly.

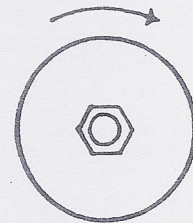
Parallel (in swing) 700 Applications Install door arms (see Manual US-019) to the clutch assembly sprocket (2) and drive sprocket (3) and secure with the door arm allen set screws. Activate operator to the full open position and secure the motor coupling thumb screw supplied. Install both doors (see Manual US-019) and release thumb screw and carefully allow doors to close. Adjust the master door centering for zero.



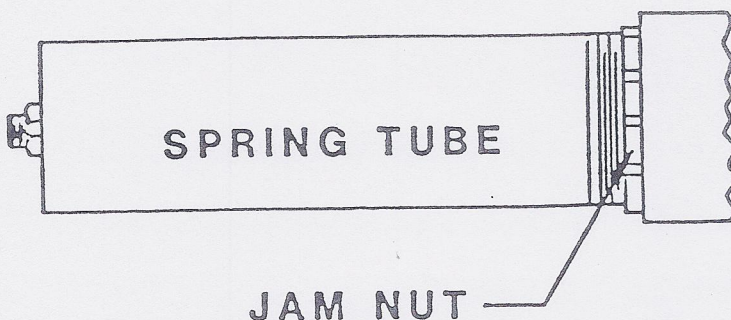
(if necessary) by releasing the spring tube jam nut (see Detail F) and rotating the complete tube assembly until the correct zero position is obtained. Be certain to resecure the spring tube jam nut once all adjustments have been completed. The slave door can now be adjusted to zero with the connecting bolts (7a). Tune the operator and adjust the cams (see Manual US-019) if necessary. Reinstall operator housing cover and slave drive cover (8). Test operation of the panic release function of both operator (see Detail E) and clutch assembly.



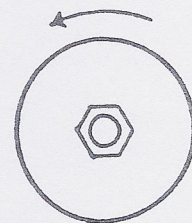
**CLOCKWISE**



**FOR L/H  
SPINDLE ROTATION**



**COUNTER  
CLOCKWISE**



**FOR R/H  
SPINDLE ROTATION**

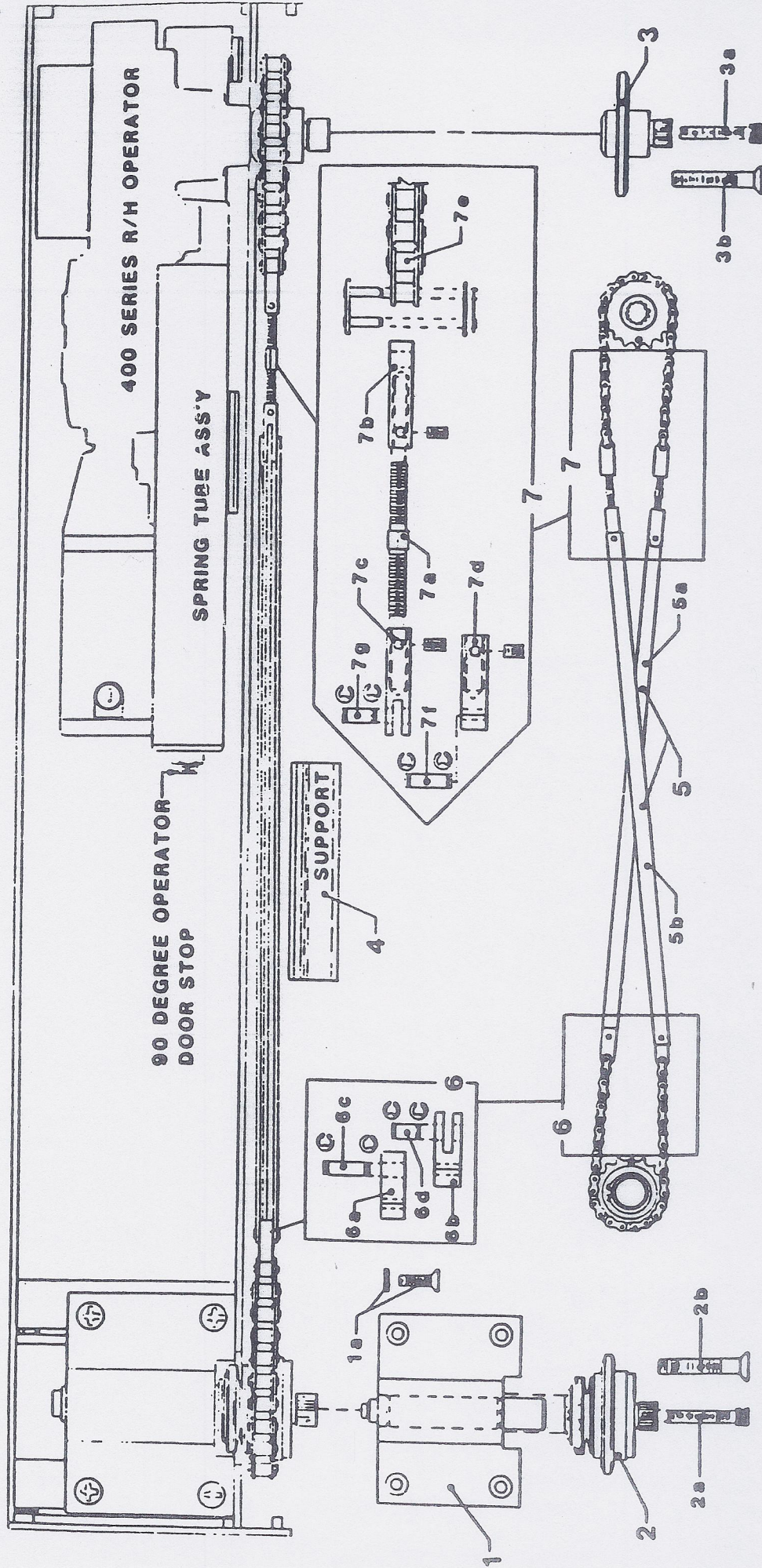
**DETAIL F**

Step 8

Explain resetting procedure of the slave door and locking sequence with regard to flush bolt and etc., to persons responsible for securing the doors.



# SWINGMASTER RIGHT HAND REGULAR (OUTSWING SHOWN)



SWINGMASTER 700/750 ILLUSTRATION  
& SPARE PARTS LIST

10/30/85

C-17022

besam

171 TWIN RIVERS DR.  
EAST WINDSOR, N.J. 08520  
609-443-5900



SWINGMASTER  
700/750  
SPARE PARTS LIST

ITEM	DESCRIPTION	PART NO	SIMULTANEOUS	700	750	DLB. EGRESS	700	750 NOT AVAILABLE	REMARKS
1	Housing & Shaft Ass'y	32-15-102		X	X		X		Complete
1a	Screws With Washers	32-15-200		X	X		X		4-Included
2	Sprocket & Clutch Ass'y	32-15-101		X	X		X		Complete
2a	Allen Bolt 3/8"-24 x 2"	32-09-108		X			X		1-Included
2b	F.H. Bolt 3/8"-24 x 2 1/2"	32-09-114			X				1-Included
3	Drive Sprocket	32-15-108		X	X		X		Complete
3a	Allen Bolt 3/8"-24 x 2"	32-09-108		X			X		1-Included
3b	F.H. Bolt 3/8"-24 x 2 1/2"	32-09-114			X				1-Included
4	Slave Drive Cover Support	32-04-032		X	X		X		1-Included
5	Connecting Rods STD	32-15-117		X	X				Specify Length
5	Connecting Rods SPECIAL	32-15-118		X	X				Specify Length
5a	Connecting Rod 3/16" 1X	32-04-034		X	X				Specify Length
5b	Connecting Rod 1/8" 2X	32-15-099		X	X				Specify Length
5	Connecting Rods STD	32-15-119					X		Specify Length
5	Connecting Rods SPECIAL	32-15-129					X		Specify Length
5a	Connecting Rod 3/16" 1X	32-04-034					X		Specify Length
5b	Connecting Rod 3/16" 1X	32-04-034					X		Specify Length
6	Chain Ass'y (Clutch)	32-15-109		X	X				With Connectors
6	Chain Ass'y (Clutch)	32-15-110					X		With Connectors
6a	Chain-Double Bar Connector	32-04-013		X	X				1-Included
6b	Chain-Single Bar Connector	32-04-012		X	X		X		1-Included
6c	Double Connector Pin	32-15-111		X	X				With E Clips
6d	Single Connector Pin	32-15-112		X	X		X		With E Clips
7	Chain Ass'y (Drive)	32-15-113		X	X				With Connectors
7	Chain Ass'y (Drive)	32-15-114					X		With Connectors
7a	Connecting Bolt	32-04-036		X	X		X		1-Included
7b	Chain Connector Threaded	32-04-015		X	X		X		1-Included
7c	Single Bar Connector THR	32-04-014		X	X		X		1-Included
7d	Double Bar Connector THR	32-04-016		X	X				1-Included
7e	Roller Chain 18 1/8"	32-15-100		X	X		X		W/ Master Links
7f	Double Connector Pin	32-15-111		X	X				With E Clips
7g	Single Connector Pin	32-15-112		X	X		X		With E Clips
8	Slave Drive Cover Comp. BZ	32-15-121		X			X		Specify Length
8	Slave Drive Cover Comp. CL	32-15-122		X			X		Specify Length
8	Slave Drive Cover Comp. BZ	32-15-123			X				Specify Length
8	Slave Drive Cover Comp. CL	32-15-124			X				Specify Length
9	Set Screw (S.H.) 1/4"-24 x 1/2"	30-09-283		X			X		Purchase Locally
NOT SHOWN	Regular Out Swing OHC	32-10-001		X			X		S.H. 400 R/H
	Regular Out Swing SURFACE	32-10-002			X				S.H. 350 P/H
	Parallel In Swing OHC	32-10-003		X			X		S.H. 300 R/H
	Parallel In Swing SURFACE	32-10-004			X				S.H. 350 P/H
	DOUBLE EGRESS"								
	L/H Traffic OHC	32-10-005					X		S.H. 300 L/H
	R/H Traffic OHC	32-10-006					X		S.H. 300 P/H

NOTE: For Swingmaster operators, arm systems and controls, see standard spare parts list.

SWINGMASTER 700/750