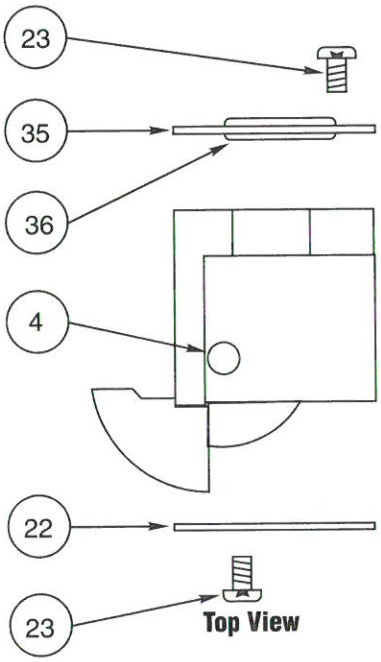
FOLGER ADAM SECURITY INC.

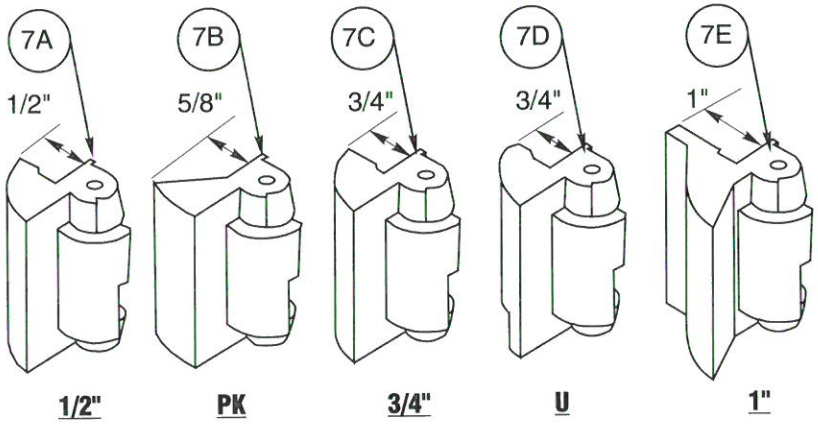
A member of the Yale Security Group

300 Series Parts Manual

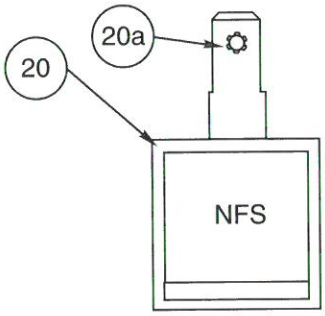
300 PARTS ILLUSTRATIONS

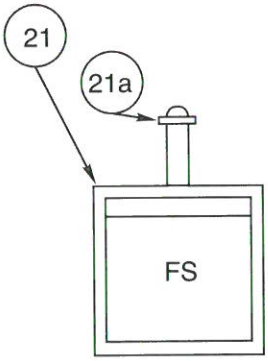


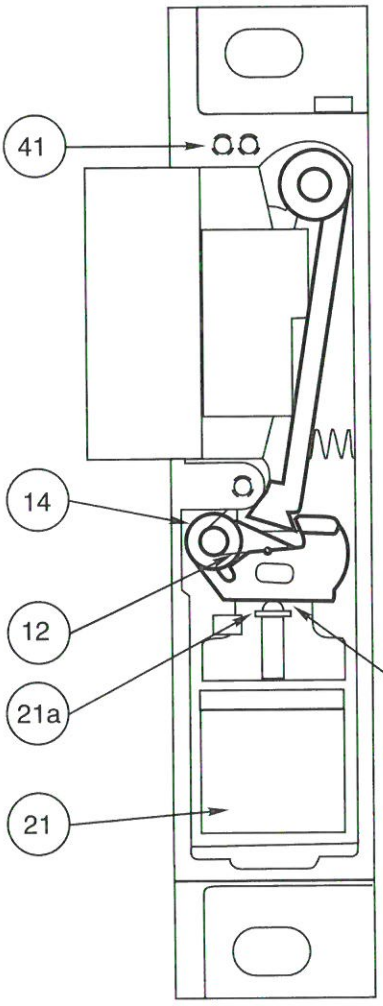
Top View



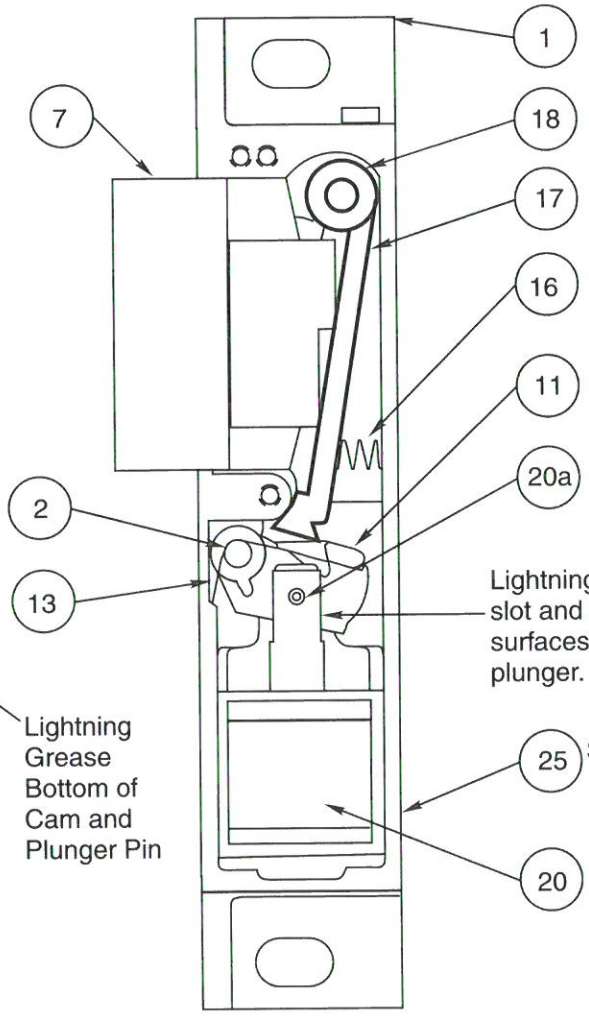
1/2" PK 3/4" U 1"







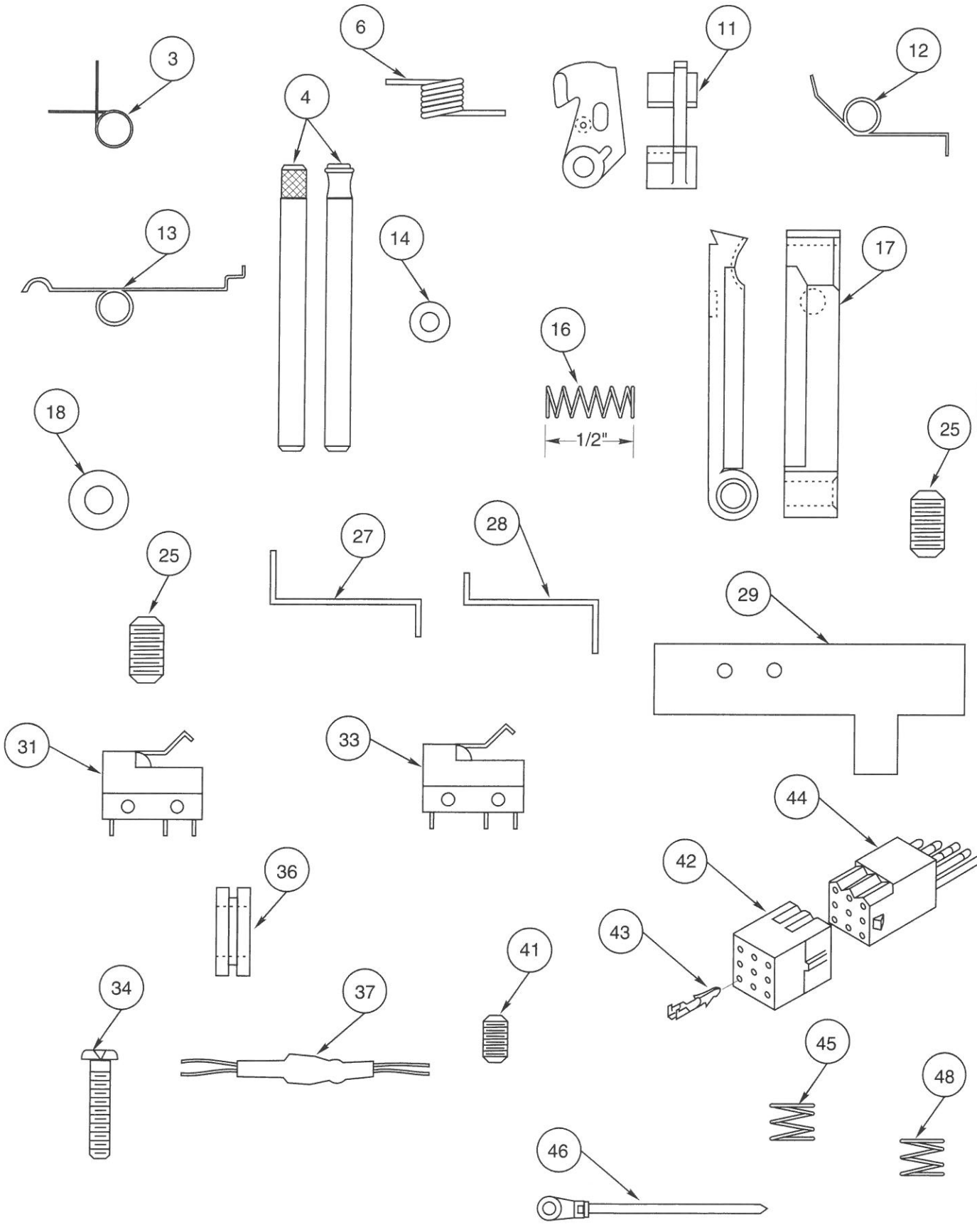
Front View
Fail Safe
Shown Locked
(Power On)



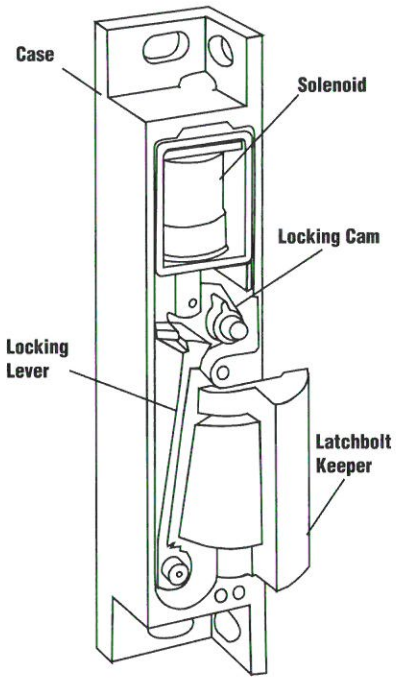
Front View
Non Fail Safe
Shown Unlocked
(Power On)

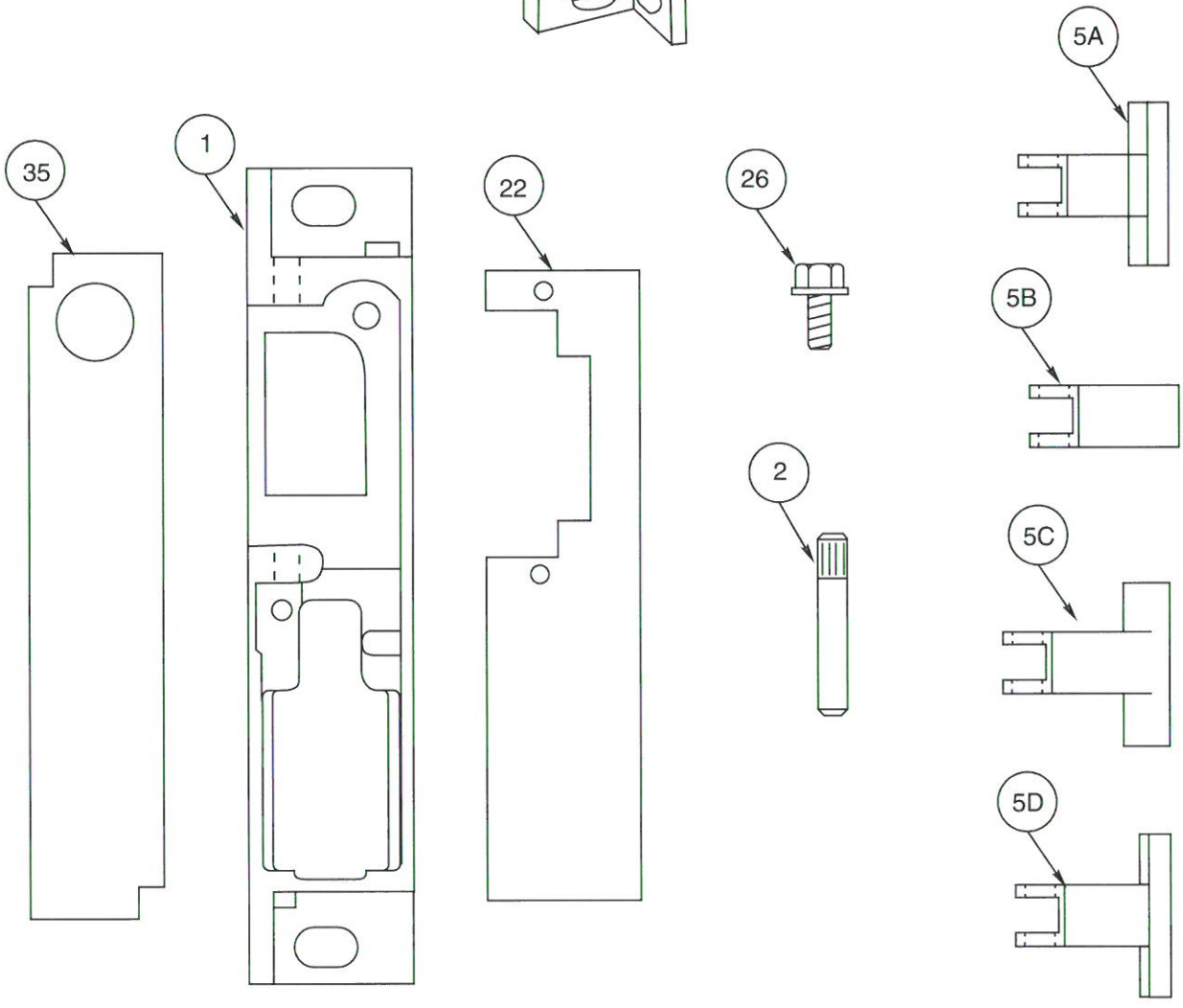
FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

300 PARTS ILLUSTRATIONS



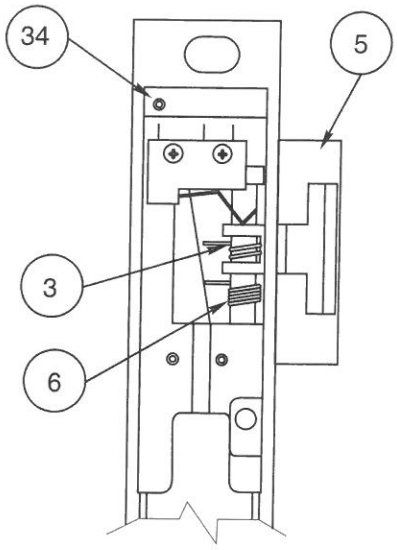
300 ASSEMBLY ILLUSTRATIONS & PARTS LIST



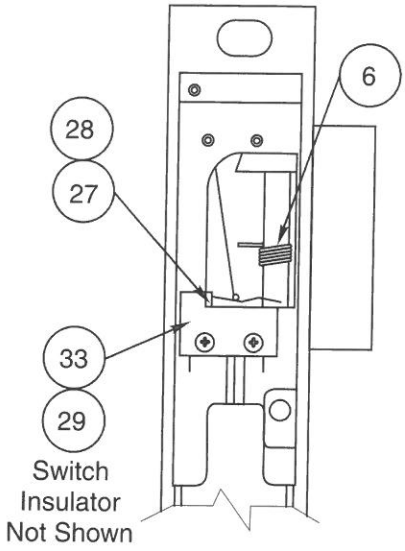


FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

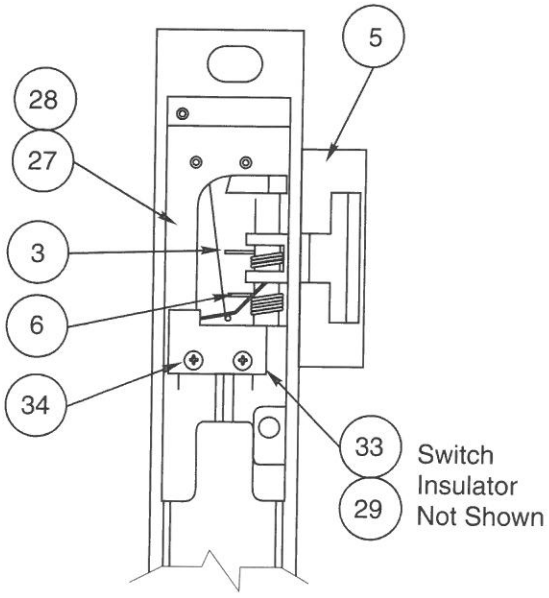
300 ASSEMBLY ILLUSTRATIONS & PARTS LIST



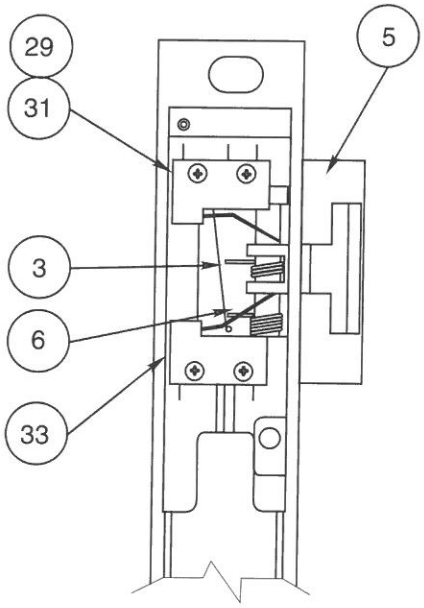
Rear View Shown with LBM Switch



Rear View Shown with LCM Switch



Rear View Shown with LCBM Switch



Rear View Shown with LCBMA Switch

300 PARTS LIST

Item	Description	Part Number
1	Case Assembly	076-0006-001
	Case Assembly 310-4W	076-0011-001
2	Cam Pin	011-0402-001
3	Switch Tripper Spring	003-0300-001
4	Latch Keeper Pin	011-0401-001
5A	LBM Switch Tripper	012-0463-001
5B	LBM Switch Tripper U	010-0335-000
5C	LBM Switch Tripper 1"	012-0498-001
5D	LBM Switch Tripper 310-6	012-0464-001
6	Latch Keeper Spring	003-0203-001
7A	Latch Keeper 1/2"	012-0487-001
	Latch Keeper for SW 1/2"	012-0491-001
7B	Latch Keeper PK	012-0489-001
	Latch Keeper for SW PK	012-0493-001
7C	Latch Keeper 3/4"	012-0488-001
	Latch Keeper for SW 3/4"	012-0492-001
7D	Latch Keeper U	012-0455-001
	Latch Keeper for SW U	012-0459-001
7E	Latch Keeper 1"	012-0495-001
	Latch Keeper for SW 1"	012-0496-001
11	Locking Cam	012-0460-001
12	Cam Spring FS	003-0210-001
13	Cam Spring FL	003-0211-001
14	Spacer-Cam Spring	011-0405-001
16	Compression Spring-Lever	003-0007-00
17	Locking Lever	012-0462-001
18	Locking Lever Spacer	011-0404-001
22	Upper Cover	008-0401-001
23	PHPMS 4-40 x 3/16 SST	002-2303-024
25	SSSC 6-32 x 1/8 Cup PT SST	002-1200-548
27	LCM Switch Tripper	003-0302-001

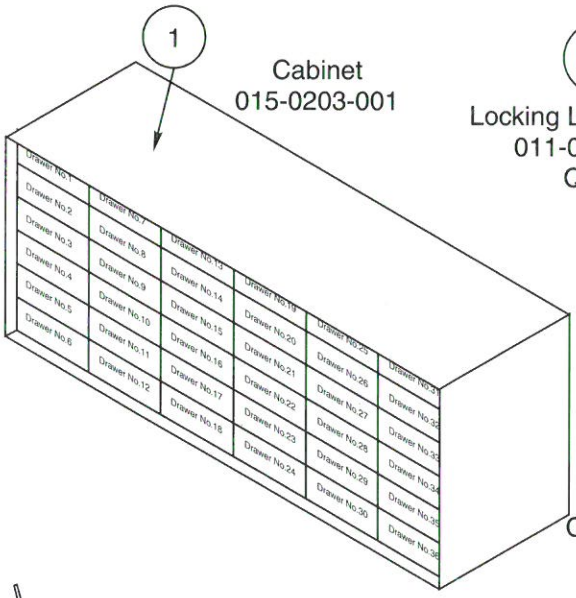
FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

300 PARTS LIST

Item	Description	Part Number
28	LCM Switch Tripper FS	003-0301-001
29	Switch Insulator	012-0464-001
31	Switch Wired LBM	076-1200-001
33	Switch Wired LCM-LCBM	076-1201-001
34	PHPMS 2-56 x 3/8 Zinc	002-2303-133
35	Lower Cover	008-0402-001
36	Grommet Lavelle no.910	010-0039-200
	Rectifier AY-310 48-120V/700 0-120V	076-0710-001
37	Rectifier AY-310 0-15V	076-0710-002
	Rectifier AY-310 16-30V	076-0710-003
41	SSSC 4-40 x 3/16 Cone Pt BO	002-1200-005
42	Connector Plug	005-1705-001
43	Connector Contact Pin	005-1701-001
44	Field Receptacle Assy.	075-3513-001
45	Spring-noise inducer RP only	003-0022-001
46	Clamp Cable Tie	010-1142-800
48	Spring Resid-mag 310 NFS AC	003-00290001

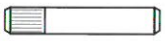
Item	Solenoid Assy.	Volt	Plunger Only	Roll Pin—RP Retaining Ring—RR
20	FL 076-0122-001	6VDC	DC Plunger 005-4121-001	NFS 002-5301-002 RP
	FL 076-0122-002	12VDC		
	FL 076-0122-003	24VDC		
	FL 076-0122-004	48VDC		
	FL 076-0122-005	115VDC		
	FL 076-0123-001	12VAC	AC Plunger 005-4122-001	
	FL 076-0123-002	24VAC		
	FL 076-0123-003	120VAC		
21	FS 076-0121-001	6VDC	DC/FS Plunger 005-4118-001	FS 002-6303-001 RR
	FS 076-0121-002	12VDC		
	FS 076-0121-003	24VDC		
	FS 076-0121-004	48VDC		
	FS 076-0121-005	115VDC		

300 STRIKE REPAIR PARTS KIT ILLUSTRATIONS - #249-1000-001



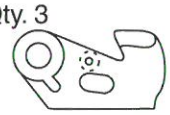
Cabinet
015-0203-001

Locking Lever Spacer
011-0404-001
Qty. 3

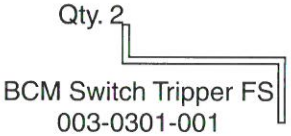


Cam Pin
011-0402-001
Qty. 2

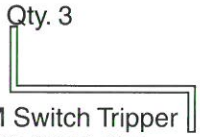
Spacer Cam Spring
012-0405-001
Qty. 3



Locking Cam
NFS & FS
012-0460-001
Qty. 2

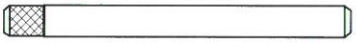


BCM Switch Tripper FS
003-0301-001
Qty. 5

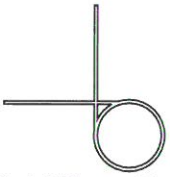


LCM Switch Tripper
003-0302-001
Qty. 5

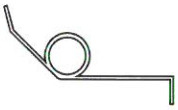
Compression Spring
003-0007-001
Qty. 10



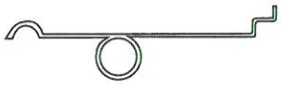
Latch Keeper Spring
011-0401-001
Qty. 2



Switch Tripper Spring
003-0300-001
Qty. 10



Cam Spring FS
003-0210-001
Qty. 10

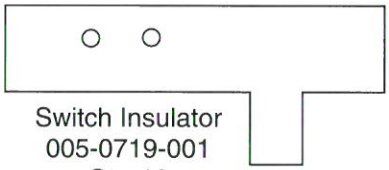


Cam Spring NFS
003-0211-001
Qty. 10

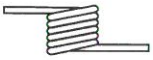
Latch Keeper Pin w/ Notch
011-0407-001
Qty. 2

SSSC 4-40 x 3/16
CONE CUP - PT80
002-1200-005
Qty. 5

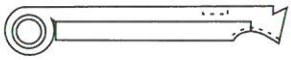
Spring Retainer Clip
003-0310-001
Qty.5



Switch Insulator
005-0719-001
Qty. 10



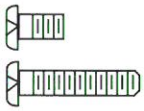
Latch Keeper Spring
003-0203-001
Qty. 5



Locking Lever
012-0462-001
Qty. 2

SSSC 6-32 x 1/8
CUP PTSST
002-1200-548
Qty. 20

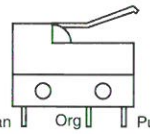
FNPMS 12-24 x ½ UC US
4002-2301-031 - Qty. 10
002-2301-035 - Qty. 10



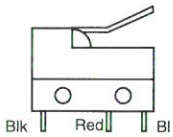
PHPMS 2-56 x 3/8 Zinc
002-2303-024 - Qty. 10
002-2303-133 - Qty. 10

Rectifier 1-10V
076-0712-004
Qty. 1

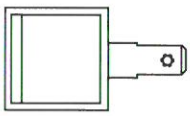
Rectifier 12-30V
076-0712-005
Qty. 1



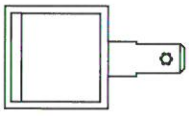
LBM Switch
076-1200-001
Qty. 5



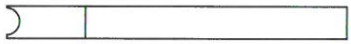
LCM - LBM Switch
076-1201-001
Qty. 5



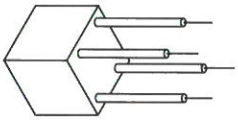
Solenoid Assy.
12VAC Pull
076-0123-001
Qty.1



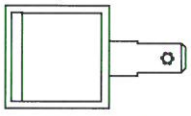
Solenoid Assy.
24VAC Pull
076-0123-002
Qty. 1



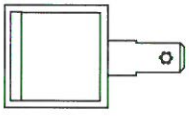
Spring Tool
007-0010-001
Qty. 1



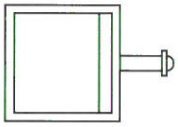
Rectifier 48-120V
076-0712-006
Qty.1



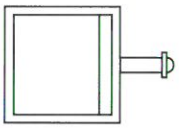
Solenoid Assy.
24VDC Pull
076-0122-003
Qty. 1



Solenoid Assy.
12VDC Pull
076-0122-002
Qty. 1



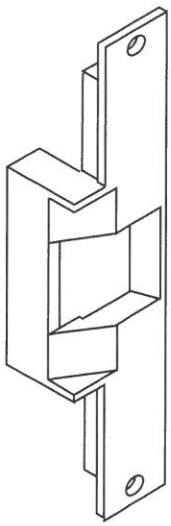
Solenoid Assy.
12VCD Push
076-0121-002
Qty. 1



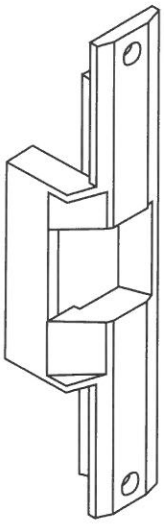
Solenoid Assy.
24VDC Push
076-0122-003
Qty. 1

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

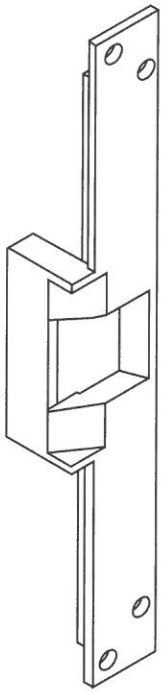
310-2



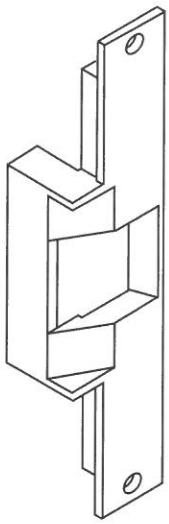
310-2 RF



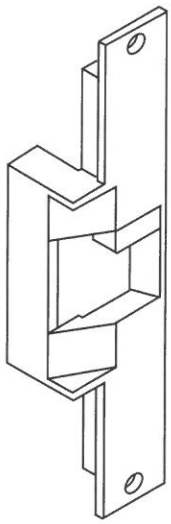
310-2 W



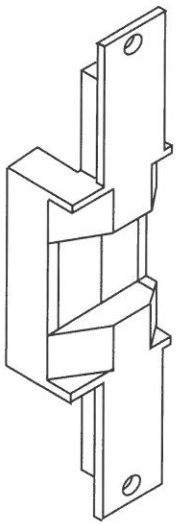
310-2¾



310-2¾ U

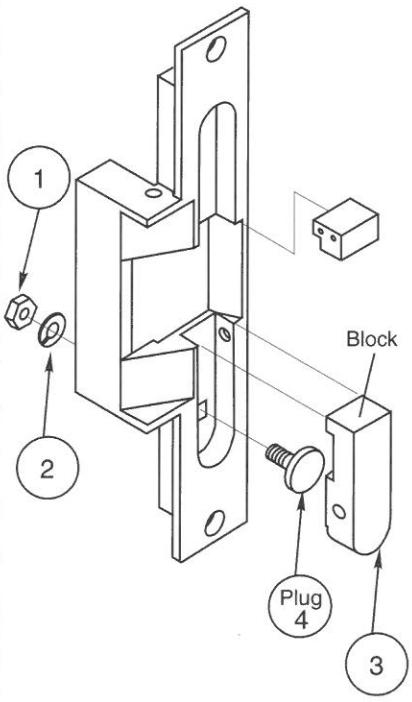


310-2¾ OB

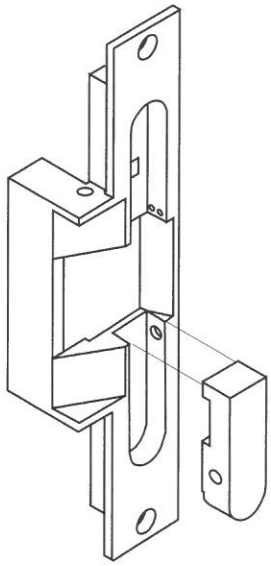


310-3-1DBS Face Plate Assembly W/DBS Switch		
Finish	**RHRB**	**LHRB**
US3	076-1940-001	076-1940-009
US4	076-1940-002	076-1940-010
US10	076-1940-003	076-1940-011
US10B	076-1940-004	076-1940-012
US26	076-1940-005	076-1940-013
US26D	076-1940-006	076-1940-014
US32	076-1940-007	076-1940-015
US32D	076-1940-008	076-1940-016

310-3-1



310-3-1 (RP only)



Item	Description	Part Number
1	Nut 1/4-20 Hex Full Zinc (Qty.1)	002-6700-502
2	Washer ¼ Lock BO (Qty. 1)	010-0014-100
3	Deadlock Block Mounting SCS FHMS 10-24 x 5/8 Zinc (Qty. 2)	002-2301-543
4	Face Plate Plug Screw SSSC 1/4-20 x ¼ CUP PT BO (Qty. 1)	002-2301-543

310 STRIKE FACE PLATE & ACCESSORIES LIST

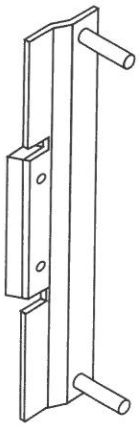
Finish	310-2 Faceplates	310-2RF Faceplates	310-2W Faceplates
US3	012-0402-002	012-0406-002	012-0515-002
US4	012-0402-003	012-0406-003	012-0515-003
US10	012-0402-004	012-0406-004	012-0515-004
US10B	012-0402-005	012-0406-005	012-0515-005
US26	012-0402-007	012-0406-007	012-0515-006
US26D	012-0402-008	012-0406-008	012-0515-007
US32	012-0402-009	012-0406-009	012-0523-002
US32D	012-0402-010	012-0406-010	012-0523-003

Finish	310-2 3/4"Faceplates	310-20B 3/4"Faceplates	310-2U 3/4"Faceplates
US3	012-0409-002	076-1902-002	076-1903-001
US4	012-0409-003	076-1902-003	076-1903-002
US10	012-0409-004	076-1902-004	076-1903-003
US10B	012-0409-005	076-1902-005	076-1903-004
US26	012-0409-007	076-1902-006	076-1903-005
US26D	012-0409-008	076-1902-007	076-1903-006
US32	012-0409-009	076-1902-015	076-1903-015
US32D	012-0409-010	076-1902-016	076-1903-016

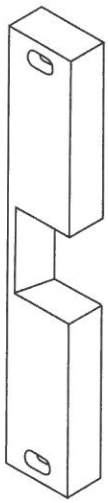
Finish	310-3-1 Faceplates	310-3-1 Faceplate Plug	310-3-1 Deadlock Blocks
US3	076-1939-001	012-0497-002	012-0516-002
US4	076-1939-002	012-0497-003	012-0516-003
US10	076-1939-003	012-0497-004	012-0516-004
US10B	076-1939-004	012-0497-005	012-0516-005
US26	076-1939-005	012-0497-007	012-0516-007
US26D	076-1939-006	012-0497-008	012-0516-008
US32	076-1939-007	012-0497-009	012-0516-009
US32D	076-1939-008	012-0497-010	012-0516-010

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

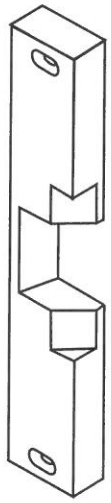
300 FACE PLATES & ACCESSORIES ILLUSTRATIONS



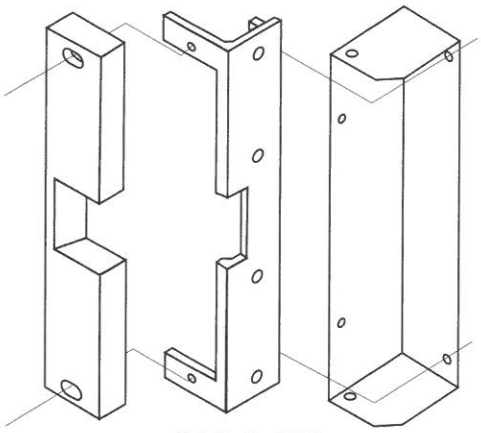
Astragal



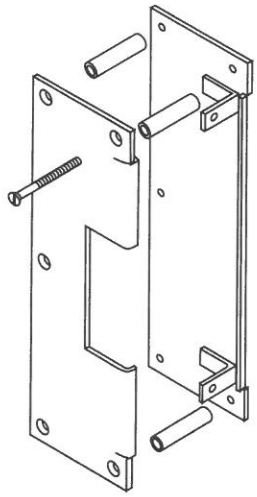
310-4 & 310-4W



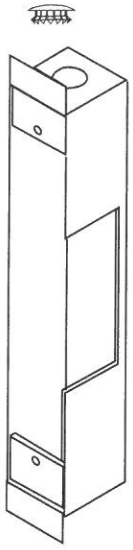
310-4DBR



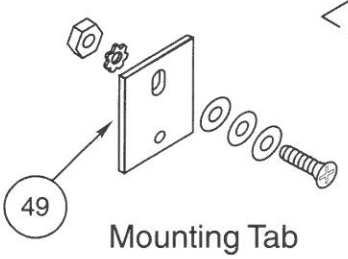
310-4-100



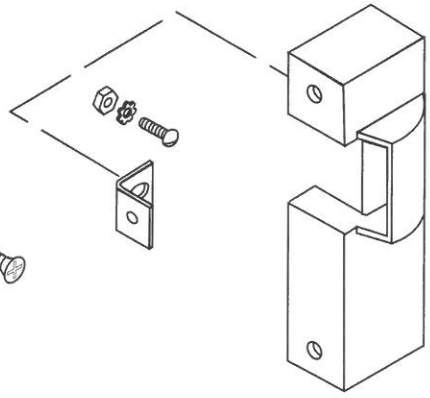
310 Wood Mounting



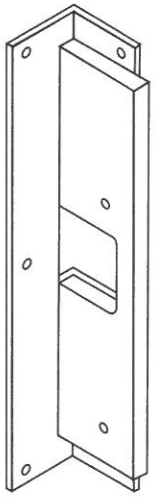
Junction Box



Mounting Tab



310-5



310-6-8

300 FACE PLATE & ACCESSORIES PARTS LIST

Finish	310-4 & 310-4W 3/4"Face Plates	310-4 OB 9/16"Face Plates	310-4 U 1/2"Face Plates
US3	012-0528-002	012-0528-013	012-0528-023
US4	012-0528-003	012-0528-014	012-0528-024
US10	012-0528-004	012-0528-015	012-0528-025
US10B	012-0528-005	012-0528-016	012-0528-026
US26	012-0528-007	012-0528-017	012-0528-027
US26D	012-0528-008	012-0528-018	012-0528-028
US32	012-0528-010	012-0528-020	012-0528-030
US32D	012-0528-011	012-0528-021	012-0528-031

Finish	310-4 DBR Face Plates	310-4 100 Face Plates	310-4 100 Coverplates
US3	012-0530-002	012-0529-002	012-0475-002
US4	012-0530-003	012-0529-003	012-0475-003
US10	012-0530-004	012-0529-004	012-0475-004
US10B	012-0530-005	012-0529-005	012-0475-005
US26	012-0530-006	012-0529-006	012-0475-006
US26D	012-0530-007	012-0529-007	012-0475-007
US32	012-0530-009	012-0529-009	012-0475-009
US32D	012-0530-010	012-0529-010	012-0475-010

Mounting Angle SCS BHCS 1/4-20 x 5/8 (Qty 4)

BO	002-2800-043

310-4-100 Mounting Angle

076-0819-001

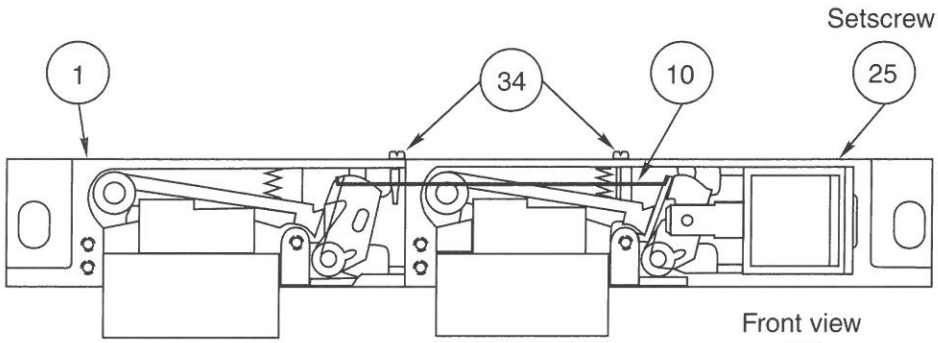
310-4-100 Cover Plate SCS OHPMS 8-32 x 3/8 UC (Qty. 6)

US4	002-2001-002
US10	002-2001-003
US10B	002-2001-004
US26D	002-2001-005

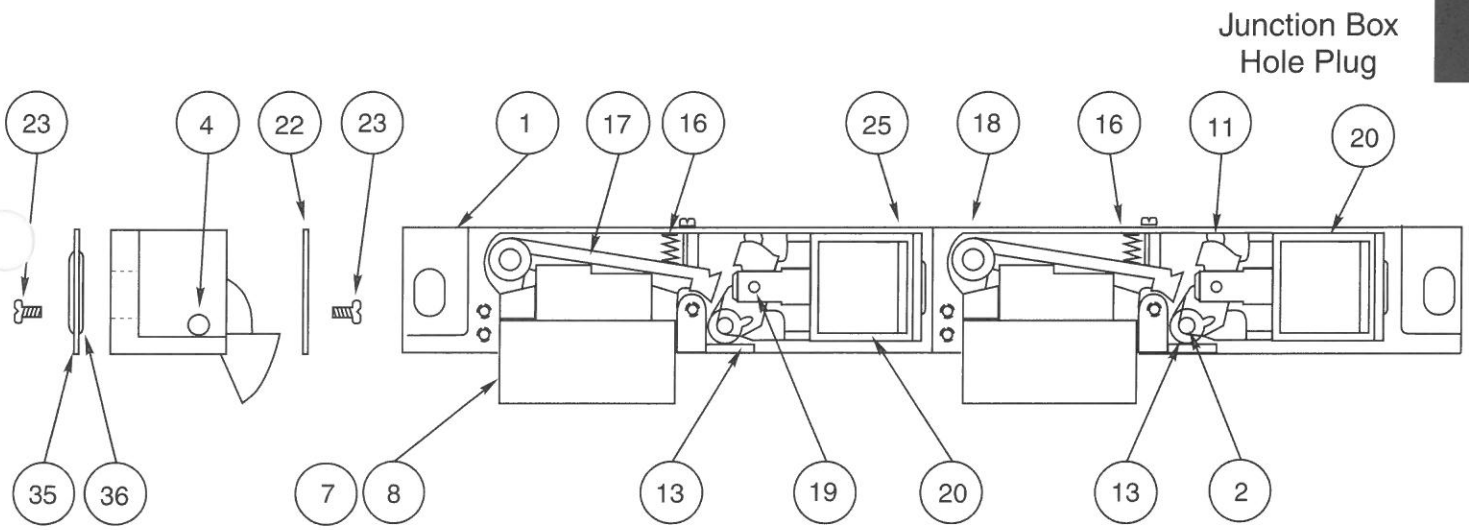
310-4-100 Cover Plate Washer 8 CTSK (Qty. 6)

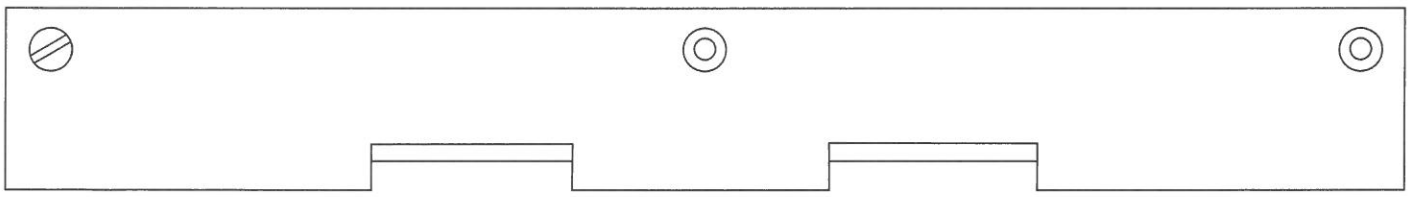
BRS	002-5806-002
US10	002-5806-003
US10B	002-5806-004
US26D	002-5806-005

300 ELECTRIC STRIKE DOUBLE DOOR SERIES ASSEMBLY ILLUSTRATIONS

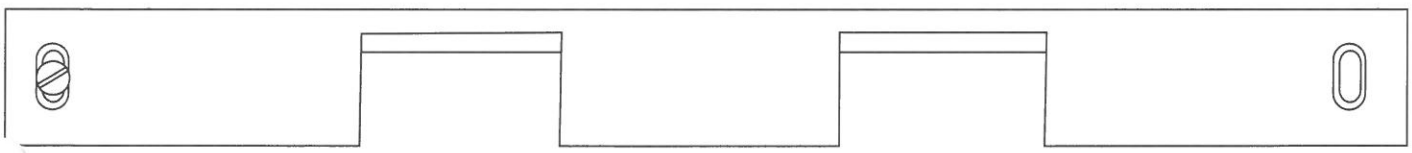


Front view
NFS
Shown Unlocked
310-1-30



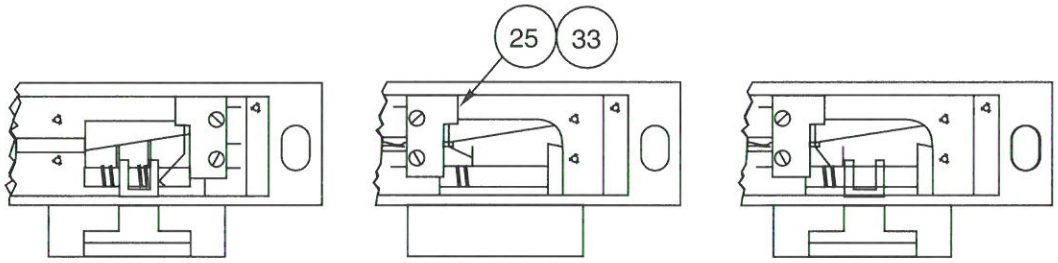


310-6 Face Plate



310-4 Face Plate

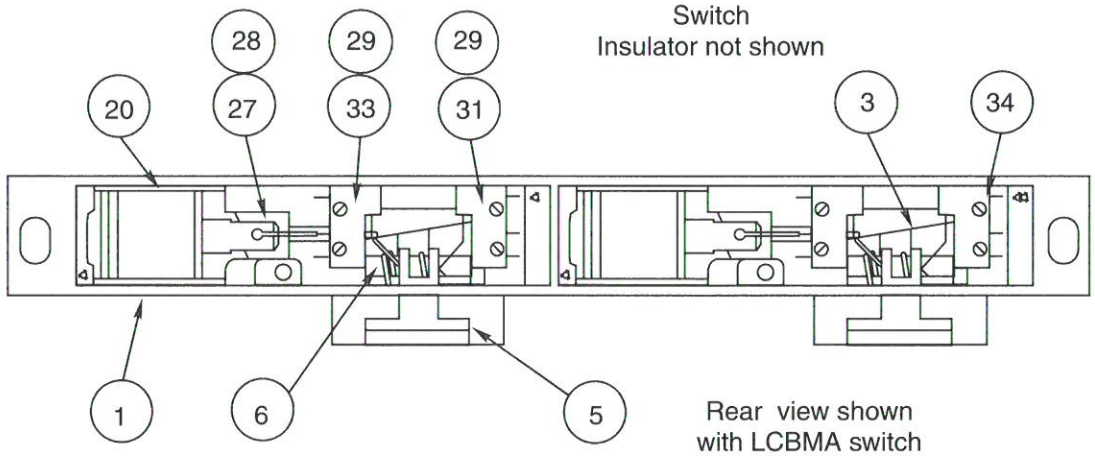
300 ELECTRIC STRIKE DOUBLE DOOR SERIES ASSEMBLY ILLUSTRATIONS



Rear View Shown with LBM Switch

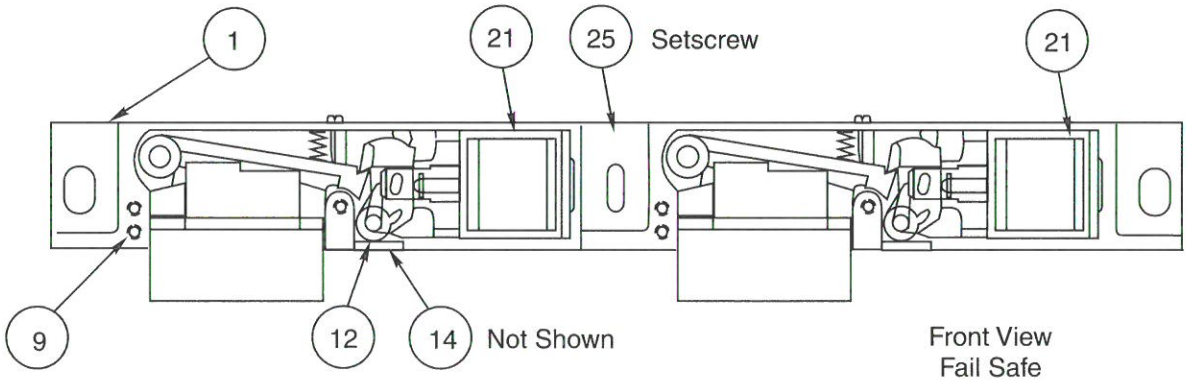
Rear View Shown with LCM Switch

Rear View Shown with LCBM Switch



Switch
Insulator not shown

Rear view shown with LCBMA switch



Front View
Fail Safe
Shown Locked

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

DOUBLE DOOR SERIES PARTS LIST

Item	Description	Part Number
1	Case Assembly	076-0006-001
	Case Assembly 310-1-1	076-0008-001
	Case Assembly 310-1-2	076-0009-001
	Case Assembly 310-1-2	076-0010-001
2	Cam Pin	011-0402-001
3	Switch Tripper Spring	003-0300-001
4	Latch Keeper Pin	011-0401-001
	Latch Keeper Pin W/Notch	011-0407-001
5	LBM Switch Tripper 310-4	012-0463-001
	LBM Switch Tripper 310-6	012-0464-001
6	Latch Keeper Spring	003-0203-001
7	Latch Keeper 1/2	012-0487-001
	Latch Keeper for SW 1/2	012-0491-001
8	Latch Keeper Pack	012-0489-001
	Latch Keeper for Switch Pack	012-0493-001
9	SSSC 4-40 x 3/16 Cone Pt BO	002-1200-005
10	Cam Connector Wire 310-1-30	012-0465-001
11	Locking Cam	012-0460-001
	Locking Cam 310-1-30	012-0461-001
12	Cam Spring FS	003-0210-001
13	Cam Spring FL	003-0211-001
14	Spacer-Cam Spring	011-0405-001
16	Compression Spring-Lever	003-0007-001
17	Locking Lever	012-0462-001
18	Locking Lever Spacer	011-0404-001
22	Upper Cover	008-0401-001
	Upper Cover 310-1-30	012-0479-001
23	PHMS 4-40 x 3/16 SST	002-2200-024
25	SSSC 6-32 x 1/8 Cup PT SST	002-1200-548
26	Hex Washer HD SC 12-24 x 3/8 Zinc	002-5802-007
27	LCM Switch Tripper	003-0302-001
28	LCM Switch Tripper FS	003-0301-001
29	Switch Insulator	005-0719-001
31	Switch Wired LBM	076-1200-001
33	Switch Wired LCM-LCBM	076-1201-001
34	RHMS 2-56 x 3/8 Zinc	002-2100-133
	Lower Cover	008-0402-001
35	Lower Cover 310-1-1	012-0514-001
	Lower Cover 310-3-30	012-0480-001
36	Grommet Lavelle No 910	010-0339-200
	Rect AY-310 48-120V/700 0-120V	076-0710-002
49	310 Mounting Tab Set w/SCS US10B	076-0803-003
	310 Mounting Tab Set w/SCS US26D	076-0803-005

DOUBLE DOOR SERIES PARTS LIST

Finish	310-4-1 Face Plates	310-4-2 Face Plates	310-4-3 Face Plates	310-4-30 Face Plates
US4	012-0423-003	012-0424-003	012-0425-003	012-0426-003
US10	012-0423-004	012-0424-004	012-0425-004	012-0426-004
US10B	012-0423-005	012-0424-005	012-0425-005	012-0426-005
US26	012-0423-006	012-0424-006	012-0425-006	012-0426-006
US26D	012-0423-007	012-0424-007	012-0425-007	012-0426-007

Finish/ Keeper	310-6-1 Face Plates	310-6-2 Face Plates	310-6-3 Face Plates	310-6-30 Face Plates
US27 1/2	076-1910-001	076-1913-001	076-1916-001	076-1919-001
LBZ 1/2	076-1910-003	076-1913-003	076-1916-003	076-1919-003
US27 Pk	076-1911-001	076-1914-001	076-1917-001	076-1920-001
LBZ Pk	076-1911-003	076-1914-003	076-1917-003	076-1920-003

Face Plate Mounting Screws

310-4 Doubles

Finish	FH FIL Msc 1/4-20 x 1
US4	002-2302-417
US10	002-2302-418
US10B	002-2302-419
US26	002-2302-420
US26D	002-2302-421

Quantity: 2

310-6 Doubles

Finish	FH PHIL Msc 12-24 x 1/2 UC
US26D	002-2301-035

Quantity: 5

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

INSTALLATION INSTRUCTIONS

The following instructions cover all models of the 300 series strike

INSTALLATION

1. For proper installation of the 300 strike refer to the appropriate template drawing. The centerline of the latch bolt must be aligned with the centerline of the strike.

2. Prior to installation make the necessary wire connections per the appropriate wiring diagram.

3. Proper operating voltage must be supplied to the strike if it is to function correctly. Voltage at the strike must be within + or - 10% of the required voltage listed on the strike label.

4. To install the strike into the frame opening:
   A) Position the wiring either down or up or toward the back of the hollow metal frame, making sure that it stays completely out of the way of the strike so as not to pinch it when installing.
   B) Mount the strike using the screws supplied:

Strike Model	Mounting Screws
310-2, 2RF, 2-3/4. 2-3/4OB, 2-3/4U, 3-1, 3-1DBS	(2) 12-24 x 1/2 FHPMS
310-2W	(4) 14 X 1-1/2 FHPWS
310-4, 4-1, 4-2, 4-3, 4-3-, 4DBR	(2) 1/4-20 X 1 PILHMS
310-4-100	(4) 1/4-20 X 5/8 BHCS
310-4W	(4) 14 X 2 RHPWS
310-5	(2) 12-24 X 3/4 FILHMS
310-6-8, 6-1, 6-2, 6-3, 6-30	(5) 12-24 X 1/2 FHPMS

5. After installation check the horizontal alignment, be certain that the centerline of the latch bolt is aligned with the centerline of the strike.

6. In case of misalignment there is a 3/16" horizontal adjustment between the strike mechanism and the face plate. To adjust:
   A) Remove mounting screws.
   B) Remove strike from frame.
   C) Loosen the two (2) 12-24 X 3/8 Hex Washer Head Cap screws.
   D) Reposition strike and re-tighten cap screws.

OPERATION

The Folger Adam 300 electric strike is a solenoid operated device.

1. **NON-FAIL-SAFE**
   When power is applied the solenoid pulls the locking cam into the unlocked position allowing the door to be opened. If power fails the strike will remain locked.

NOTE: Non-fail-safe strikes for use in fire rated doors can only be operated by momentary contact switching (energized only when the push button is held depressed) and can not be held in the unlocked position.

2. **FAIL-SAFE**
   When power is applied the solenoid pushes the locking cam into the locked position and the door can not be opened. If power fails the strike will unlock.

OPERATIONAL NOTE: This product may be provided fail safe or non-fail safe. Fail safe versions allow exit in the event of power failure. Fail secure versions do not. Consult with the local authority having jurisdiction concerning the installation of this type of product and whether listed panic hardware is required to allow emergency exit from the secured area.

INSTALLATION INSTRUCTIONS

OPTIONAL FEATURES

1. **LBM SWITCH** (Latch Bolt Monitor) - A switch operated by the switch tripper that signals whether or not the latch bolt is extended into the strike.

2. **LCM SWITCH** (Locking Cam Monitor) - A switch operated by the roll pin on the locking cam that monitors the position of the locking cam and signals that the strike is either locked or unlocked.

3. **LCBM SWITCH** (Locking Cam and Latch Bolt Monitor) - A switch operated by the LCM switch tripper and the LBM switch tripper that signals that the strike is locked and the latchbolt is engaged.

4. **LCBMA SWITCH** (Locking Cam and Latch Bolt Monitor, wired separately) - This is the same as the LCBM, with an additional switch operated by the LBM switch tripper.

5. **KEEPERS** - There is a standard type for each model 300 strike. Optional keepers are available for some models (see chart below).

Strike Model	Standard Keeper	Optional Keeper
310-1	1/2	3/4, PK, U, 1
310-2, 2RF, 2W	1/2	PK
310-2 3/4, 2-3/4OB	3/4	NA
310-2 3/4U	3/4U	NA
310-3-1, -3-1DBS	1	NA
310-4, -4W, -4DBR, -4-1, -4-2, -4-3, -4-30	PK	1/2
310-4-100	PK	1/2
310-5	1/2	NA
310-6-8, 6-1, 6-2, 6-3, 6-30	1/2	PK

6. **SOLENOID VOLTAGE** - 24VDC is standard. Optional voltages available are: 12 or 115VDC, 6, 12, 24, 48 or 115VDC. NOTE: UL requires that a junction box be used with 48 and 120 volt strikes, if they are not installed in a back box.

7. **SILENT OPERATION (SO)** - Silent operation is recommended for AC non-fail-safe strikes that are to be energized for extended periods of time. All silent operation strikes are operated by DC solenoids. When control power source is AC, the stirke is supplied with an externally attached bridge rectifier.

8. **FAIL-SAFE** - The strike is locked when energized. This feature should be used for applications that require automatic unlocking in case of power failure. All fail-safe strikes are operated by DC solenoids and are silent operation. **CAUTION:** Fail-safe is not permitted with the UL Fire Door Accessory label.

9. **MOUNTING TAB** - The mounting tab is designed to be used with 310-2, 310-2 3/4, 310-3-1 and 310-6 electric strikes when mounting in metal frames.

10. **ASTRAGAL** - A lock guard, designed to prevent tampering with the strike keeper and the latch bolt.

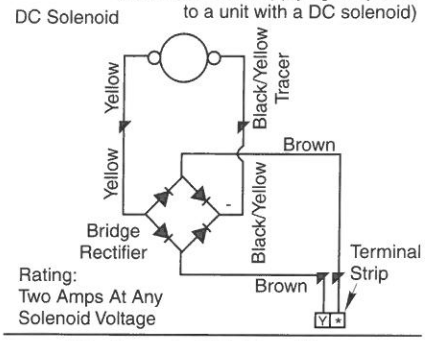
11. **310-2-107 WOOD MOUNTING** - A mounting for wood door applications. Available for the 310-2 strike only.

12. **EXTENDED LIP** - A lip extension is added to the face plate to form a path for the latch bolt when released electrically. Extension is available in increments of 1/4" up to 2" maximum.

300 WIRING DIAGRAMS

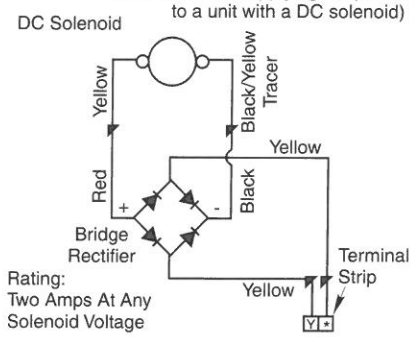
Attachment of New Rectifier

(Required when supplying AC power to a unit with a DC solenoid)

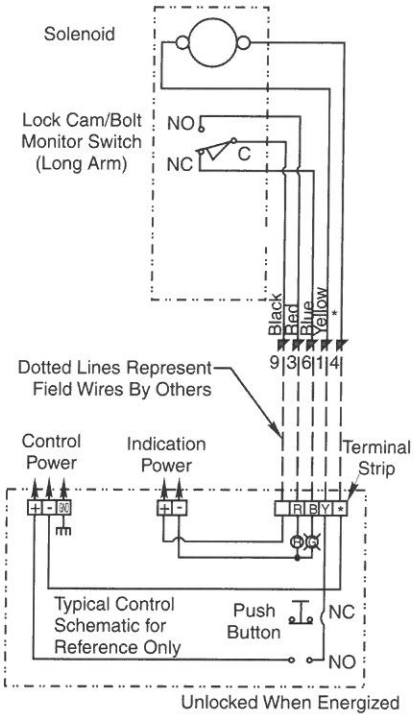


Attachment of Old Rectifier

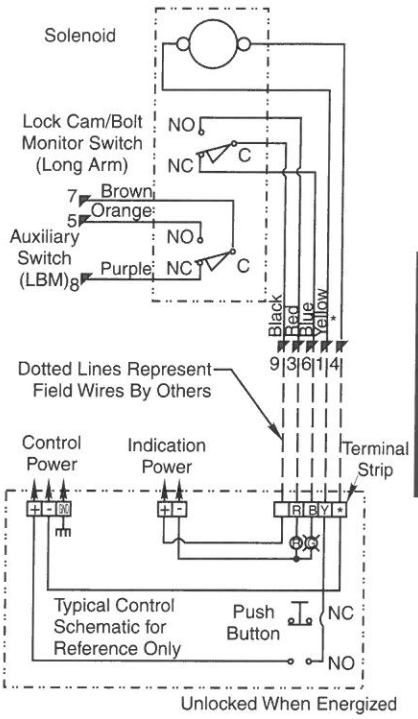
(Required when supplying AC power to a unit with a DC solenoid)



310 LCBM Wiring Diagram



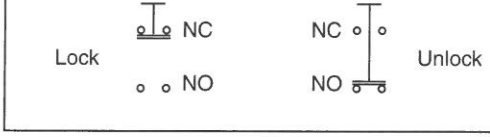
310 LCBMA Wiring Diagram



Electrical Ratings for All 310 Strike Solenoids	Voltage							
	AC			DC				
	12	24	120	6	12	24	48	120
Resistance in OHMS ± 10%	6.2	23.5	500	6.2	23.5	96.0	380	2100
Watts Seated	5.4	5.8	6.3	5.8	6.1	6.0	6.1	6.3
Amps Seated	.45	.24	.06	.97	.51	.25	.13	.06
Amps Inrush	1.33	.69	.16	N/A	N/A	N/A	N/A	N/A

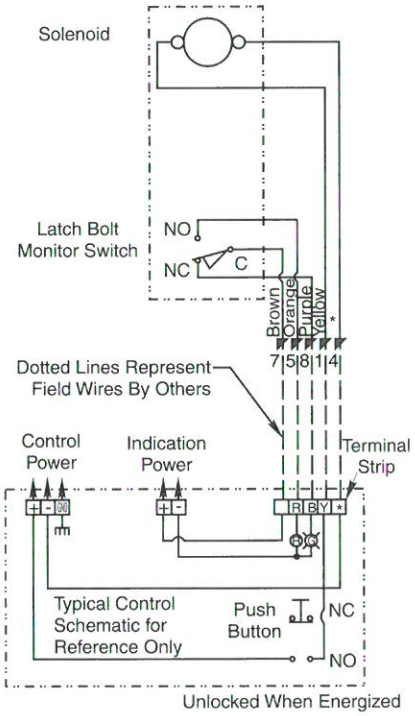
Notice:
Wiring Subject To Change without Notice. Not Responsible when Controls Furnished By Others.

Push Button Switch Conditions

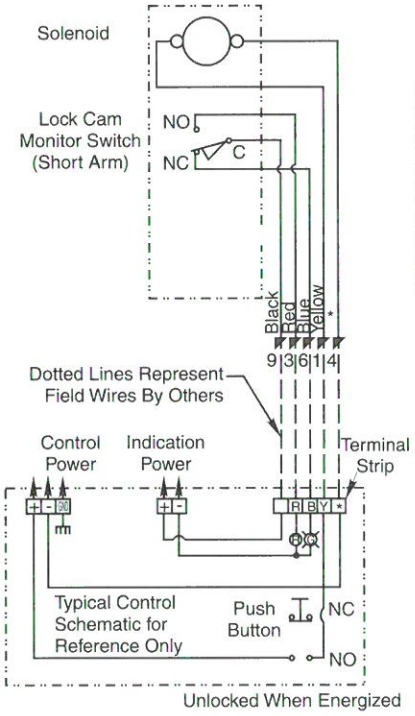


300 WIRING DIAGRAMS

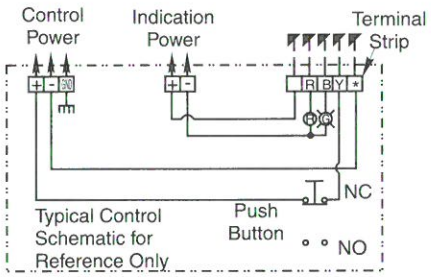
310 LBM Wiring Diagram



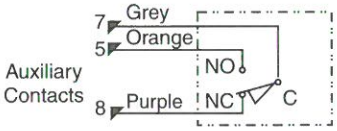
310 LCM Wiring Diagram



Fail Safe Controls

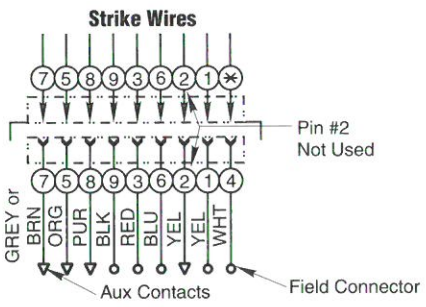


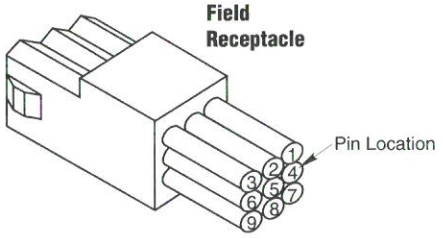
Optional DBS Switch (not available with LCBMA)



Door Shown Closed & Locked.
Dead Bolt Extended Into Face Plate.

Optional 9-Pin Field Wiring Conn.





Installation Must Be Properly Grounded Per National Electrical Code Article 250

NOTES:

1) * = Wires color code:
   6 thru 120 VDC
   Yellow/Black Tracer
   12 & 24 VAC-Grey
   120 VAC-White

2) Unused wires to be individually isolated with a wire nut or equal.

3) Numbered field connections refer to pin location in field receptacle.

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

MAINTENANCE AND LUBRICATION INSTRUCTIONS

Under normal usage the 300 strike should be cleaned and lubricated once a year to maintain its reliability. In applications with high usage or dirty conditions more frequent service may be necessary. Lubrication points are identified in the illustration. When servicing the 300, inspect the internal parts for excess wear or breakage and lightly lubricate per instructions below. Lubricate with lightning grease available from Folger Adam. Never lubricate any strike with oil! Such lubrication collects dirt and forms an abrasive and sticky compound that may affect the function of the strike.

TO INSPECT AND LUBRICATE THE STRIKE

1. Remove the strike from the face plate (held on by (2) 12-24, 3/8 Hex Washer Head Cap SCREWS).

2. Remove the upper cover held on by (2) 4-40 x 3/16 PHMS. Removal of the upper cover should be done slowly because the locking cam spring may snap out of place. Also, care should be taken to insure that the locking cam spacer and locking lever spacer are not lost.

3. Remove the cam spring spacer, cam spring and locking lever spacer.

4. Loosen the two (2) 6-32 x 1/8 SSSC holding the solenoid, then remove the solenoid and locking cam.

5. Remove the locking lever spring and locking lever. In some versions of the strike, there is a recess in the locking lever and the case for this spring. In cases with the recess, the locking lever spring must be compressed into the lever before it can be removed.

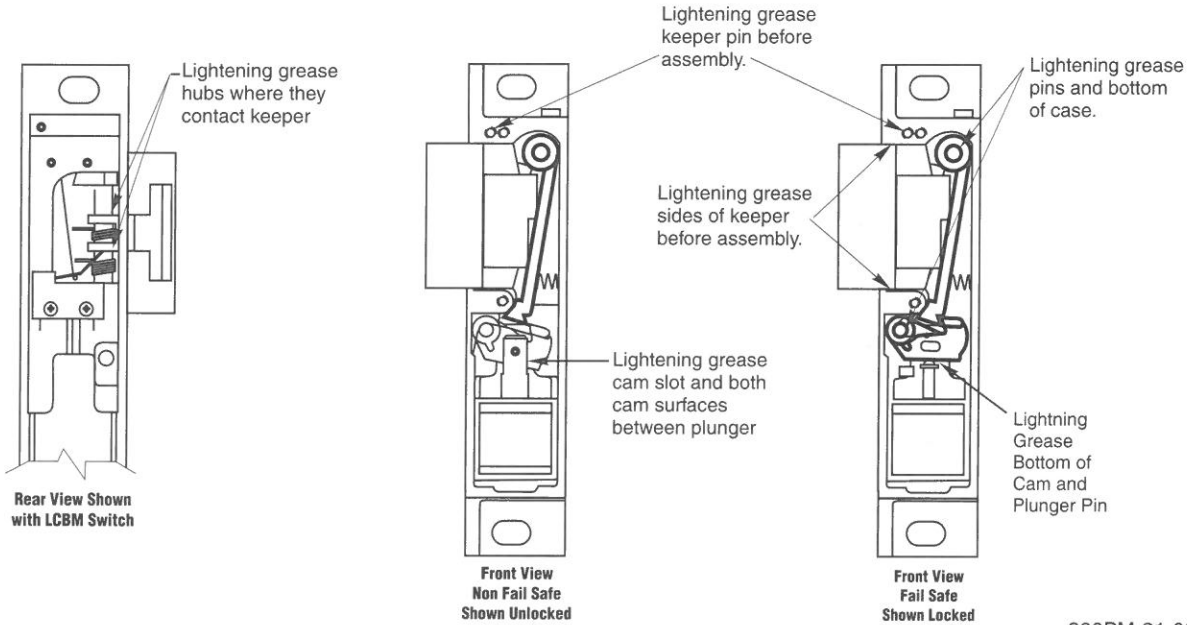
6. Lubricate the area in the case where the locking lever and locking cam rest. (Be careful not to get any lubricant on the solenoid or switches.) Lubricate the cam pin and lever pin.

7. Check the locking angle of the keeper and locking lever for wear. Replace the keeper and/or lever for wear. Replace the keeper and/or lever if worn. (If the keeper is disassembled for replacement or adding of a switch, lubricate the keeper pin.)

8. Reinstall the locking lever and a new locking lever spring. CAUTION: Make sure the locking lever is placed Back into the recesses of the locking lever and the case.

9. Check the solenoid, plunger and plunger guide for excess wear, dirt, grime or oil. If present, wipe clean.
   FAIL SAFE: remove the retaining ring for inspection of the plunger guide. Reassemble the solenoid and plunger with a new retaining ring.
   NON-FAIL SAFE: Lubricate the bottom edge of the locking cam - (contact point of the solenoid plunger).

10. **NON-FAIL-SAFE:** Lubricate the slot in the locking cam.
    FAIL-SAFE: Lubricate the bottom edge of the locking cam- (contact point of the solenoid plunger).



MAINTENANCE AND LUBRICATION INSTRUCTIONS

11. Installation and positioning of the solenoid

NON-FAIL SAFE:

1) Install the solenoid and locking cam assembly.
2) Install the locking cam spring (with the long leg of the spring on the locking cam and the short leg in the groove on the case).
3) Before tightening the set screws, energize the solenoid and check the position of the locking cam and locking lever.
4) Adjust the solenoid position to where the locking lever will clear the locking cam and tighten set screws.

FAIL SAFE:

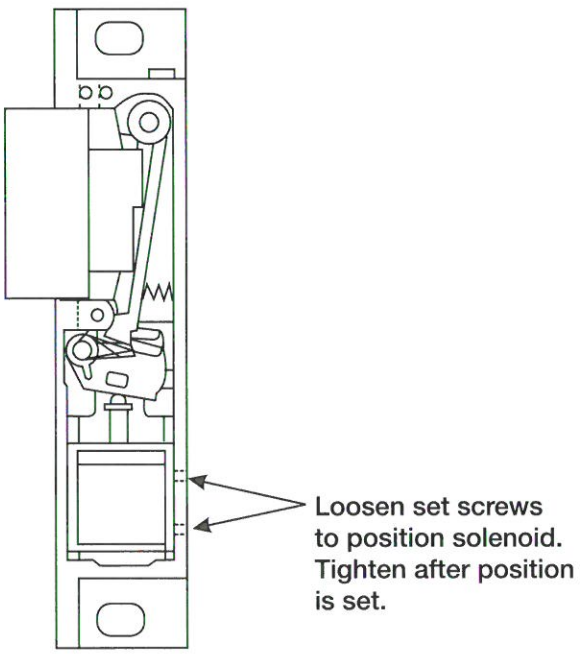
1) Install the solenoid and locking cam.
2) Install the locking cam spring (with the long leg of the spring on the locking cam and the short leg in the groove on the case).
3) Before tightening the set screws, energize the solenoid and check the locking cam position.
4) Adjust the position of the solenoid to where it pushes the locking cam into the fully locked position (be careful not to position the solenoid too high or the solenoid plunger will not seat).
5) De-energize and make sure the locking cam falls to a level to be unlocked. Tighten set screws.

12. Check all screw, tighten if necessary. CAUTION: Do not over tighten the switch screws. Over tightening could break the switch.

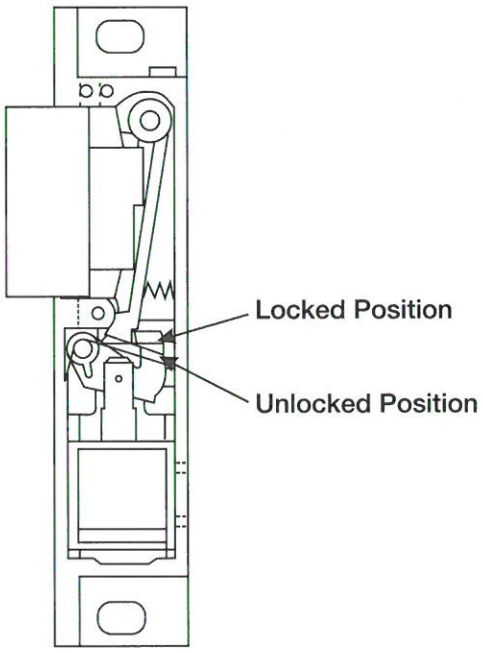
13. Reinstall the cam spring spacer and the locking lever spacer.

14. Reinstall the upper cover.

15. Reassemble the strike to the face plate.



**Front View
Fail-Safe
Shown Locked**



**Front View
Non-Fail-Safe
Shown Unlocked**

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

CHANGING SOLENOIDS

Description	Quantity	Non-Fail-Safe to Fail-Save Part Number	Fail-Safe to Non-Fail-Save Part Number
Cam Spring Fail-Safe	1	003-0210-001	
Cam Spring Non-Fail-Safe			003-0211-001
Solenoid Plunger Fail-Safe		005-4118-001	
Solenoid Plunger Non-Fail-Safe DC	1		005-4121-001
Solenoid Plunger Non-Fail-Safe AC	1		005-4122-001
Retaining Ring	1	002-6303-001	
Roll Pin			002-5301-002
Solenoid 6VDC		005-4015-001	005-4015-001
Solenoid 12VDC		005-4015-002	005-4015-002
Solenoid 24VDC		005-4015-003	005-4015-003
Solenoid 48VDC	1	005-4015-004	005-4015-004
Solenoid 115VDC		005-4015-005	005-4015-005
Solenoid 12VAC			005-4016-001
Solenoid 24VACSolenoid 120VAC			005-4016-002
			005-4016-003
Rectifier for Fail-Safe-AC Power Source or Non-Fail-Safe-Silent Operation			
0-15 Volts		076-0710-002	076-0710-002
16-30 Volts	1	076-0710-003	076-0710-003
48-120 Volts		076-0710-001	076-0710-001
Note:Also required, if strike has a LCM, LCBM or LCBMA switch:			
LCM Switch Tripper Fail-Safe	1	003-0301-001	
LCM Switch Tripper			003-0302-001

INSTRUCTIONS FOR CHANGING SOLENOIDS continued on page 24

CHANGING SOLENOIDS
(continued from page 23)

INSTRUCTIONS:

1. Remove the strike from the face plate, held on by two (2) 12-24 x 3/8 HEX WASHER HEAD CAP SCREWS.

2. Remove the upper cove, held on by two(2) 4-40 x 3/16 PHMS. Removal of the upper cover should be done slowly because the locking cam spring may snap out of place. Also, care should be taken to insure that the locking cam spacer and locking lever spacer are not lost.

3. Remove the cam spring spacer, cam spring and locking lever spacer.

4. Loosen the two (2) 6-32 x 1/8 SSSC holding the solenoid, then remover the solenoid and locking cam. If the strike has a rectifier, cut the leads.

5. NON-FAIL-SAFE TO FAIL-SAFE: Disassemble the locking cam and solenoid plunger by removing the roll pin.

6. If the strike has a LCM, LCBM, LCBMA switch:
   A) Remove the lower cover by loosening the two (2) 4-40 x 3/16 PHMS and removing the cover from around the wires.
   B) Remove the bottom switch by removing the two (2) 2-56 x 3/8 RHMS.
   C) Remover the LCM switch tripper.

7. NON-FAIL-SAFE TO FAIL-SAFE: Assemble the new solenoid, plunger and retaining ring.

   FAIL-SAFE TO NON-FAIL-SAFE: Assemble the locking cam to the new plunger with the roll pin. Reassemble the plunger and locking cam assembly in the solenoid.

8. Install the solenoid and locking cam (for adjustment, refer to drawing on, Page 22, Item 11, INSTALLATION AND POSITIONING OF THE SOLENOID).

9. If the strike has a LCM, LCBM, or LCBMA switch:
   A) NON-FAIL-SAFE: Install the new LCM switch tripper in the channel in the case with the long leg of the LCM switch tripper in the roll pin hole.
   FAIL-SAFE: Install the new LCM switch tripper in the channel in the case with the long leg of the LCM switch tripper in the single round hole in the locking cam.
   B) Reinstall the switch and insulator over the LCM switch tripper with the actuator arm in front and under the LCM switch tripper. Tighten the switch mounting screws, reposition the wires and re-fasten the insulator over the switch. CAUTION: Do not over tighten the switch screws, Over tightening could break the switch.
   C) Reinstall the lower cam.

10. If a rectifier is required, reconnect the rectifier with butt splices.

11. Reinstall the cam spring spacer and locking lever spacer with a new cam spring.

12. Reinstall the upper cover.

13. Reassemble the strike to the face plate.

14. Refer to the appropriate wiring diagram for wire connections.

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

INSTRUCTIONS TO MAKE NON-FAIL-SAFE AC STRIKES BUZZ

A Noise Inducer Spring (part number 003-0022-001) is available for non-fail-safe 12, 24, and 115 VAC strikes only, to indicate that the strike has been unlatched. If our AC strike utilizes the "Silent operation" option, the solenoid must be changed to an AC (without rectifier).

Refer to the INSTRUCTIONS FOR CHANGING SOLENOIDS. (On page 23.)

Install the spring over the plunger prior to inserting the plunger into the solenoid body.

Install and adjust the solenoid position properly.

ADDING SWITCHES

INSTRUCTIONS FOR ADDING A LCM SWITCH

	Description	Qty	Part Number
PARTS REQUIRED:	LCM-LCBM Switch Assembly	1	076-1201-001
	Switch Insulator	1	005-0719-001
	RHMS 2-56 x 3/8 Zinc	2	002-2100-133
	LCM Switch Tripper Fail-Safe	1	003-0301-001
	LCM Switch Tripper	1	003-0302-001

INSTRUCTIONS

1. Remove the strike from the face plate, held on by two (2) 12-24 x 3/8 HEX WASHER HEAD CAP SCREWS.
2. Remove the lower cover by loosening the two (2) 4-40 x 3/16 PHMS and removing the cover from around the wires.
3. NON-FAIL-SAFE: Install the new LCM switch tripper in the channel in the case with the long leg of the LCM switch tripper in the roll pin hole.

   FAIL-SAFE: Install the new LCM switch tripper in the channel in the case with the long leg of the LCM switch tripper in the single round hole in the locking cam.
4. Install the switch and insulator over the LCM switch tripper with the actuator arm in front and under the LCM switch tripper. Secure the switch in place with the (2) 2-56 x 3/8 RHMS. CAUTION: Do not over tighten the switch screws. Over tightening could break the switch.
5. The switch actuator must be adjusted to actuate when the locking cam is in the unlocked position. Bend if necessary per the illustration.
6. Route the wires over the solenoid and out the grommet in the lower cover. Tape the switch insulator over the switch.
7. Replace the lower cover.
8. Reassemble the strike to the face plate.

INSTRUCTIONS FOR ADDING A LBM SWITCH

Special Tool Required: Keeper Spring Tool, 007-0010-001

PARTS REQUIRED:

Description	Qty	Part Number
LBM Switch Assembly	1	076-1200-001
LBM Switch Tripper		012-0463-001
LBM Switch Tripper U	1	010-0335-000
LBM Switch Tripper 1"		012-0498-001
Switch Tripper Spring	1	003-0300-001
Switch Insulator	1	005-0719-001
RHMS 2-56 x 3/8 Zinc	2	002-2100-133
Keeper for Switch 1/2		012-0491-001
Keeper for Switch 3/4		012-0492-001
Keeper for Switch PK	1	012-0493-001
Keeper for Switch U		012-0459-001
Keeper for Switch 1"		012-0496-001

1. Remove the strike from the face plate, held on by two (2)12-24 x 3/8 HEX WASHER HEAD CAP SCREWS.

2. Remove the upper cover, held on by two (2) 4-40 x 3/16 PHMS Removal of the upper cover should be done slowly because the locking cam spring may snap out of place. Also, care should be taken to insure that the locking cam spacer and locking lever spacer are not lost.

3. Remove the cam spring spacer, cam spring and locking lever spacer.

4. NON-FAIL-SAFE: Loosen the two (2) 6-32 x 1/8 SSSC holding the solenoid, then remove the solenoid and the locking cam. FAIL-SAFE: Remove the locking cam.

5. Remove the lower cover by loosening the two (2) 4-40 x 3/16 PHMS and removing the cover from around the wires.

6. Change the keeper (see instruction for CHANGING AND REPLACING THE KEEPER). (Page 28.)

7. NON-FAIL-SAFE: Reinstall the solenoid, locking cam assembly and cam spring (with the long leg of the spring on the locking cam and the short leg in the groove on the case). (For adjustment, see drawing on Page 22, Item 11,INSTALLATION AND POSITIONING OF THE SOLENOID.) FAIL-SAFE:Reinstall the locking cam. Reinstall the locking cam spring (with the long leg of the spring on the locking cam and the short leg in the groove on the case). (For adjustment, see drawing on Page 22 Item 11, INSTALLATION AND POSITIONING OF THE SOLENOID.)

8. Install the LBM switch and insulator into the strike case per the illustration. Secure the switch in place with the (2) 2-56 x 3/8 RHMS. CAUTION: Do not over tighten the switch screws, over tightening could break the switch.

9. The switch actuator must be adjusted to actuate when the LBM switch tripper is rotated toward the keeper. Bend per the illustration, if necessary.

10. Route the switch wires over the switch down to the solenoid and out the grommet in the lower cover. Tape the switch insulator over the Switch.

11. Reinstall the lower lever.

12. Reinstall the cam spring spacer and the locking lever spacer.

13. Reinstall the upper cover.

14. Re-assemble the strike to the face plate.

15. Refer to the appropriate wiring diagram for wire connections.

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

INSTRUCTION FOR ADDING A LBCM SWITCH

Special Tool Required:Keeper Spring Tool, 007-0010-001

PARTS REQUIRED:

Description	Quantity	Part Number
LCM-LCBM Switch Assembly	1	076-1201-001
LBM Switch Tripper		012-0463-001
LBM Switch Tripper U	1	012-0335-000
LBM Switch Tripper 1"		012-0498-001
Switch Tripper Spring	1	003-0300-001
Switch Insulator	1	005-0719-001
RHMS 2-56 x 3/8 Zinc	2	002-2100-133
LCM Switch Tripper Fail Safe	1	003-0301-001
LCM Switch Tripper		003-0302-001
Keeper for Switch 1/2		012-0491-001
Keeper for Switch 3/4		012-0492-001
Keeper for Switch PK	1	012-0493-001
Keeper for Switch U		012-0459-001
Keeper for Switch 1"		012-0496-001

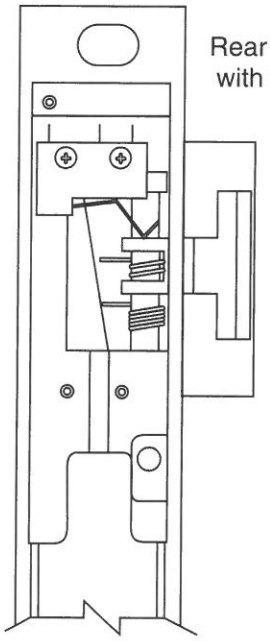
1-7. Follow INSTRUCTIONS FOR ADDING A LBM SWITCH, steps 1 thru 7 only.

8. NON-FAIL-SAFE: Install the new LCM switch tripper in the channel in the case with the long leg of the LCM switch tripper in the roll pin hole. FAIL-SAFE: Install the new LCM switch tripper in the channel in the case with the long leg of the LCM switch tripper in the single round hole in the locking cam.

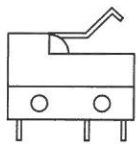
9. Install the switch and insulator over the LCM switch tripper with The actuator arm in front and under the LCM switch tripper. Secure the switch in place with the (2) 2-56 x 3/8 RHMS. CAUTION: Do not over tighten the switch screws, over tightening could break the switch.

10. The switch actuator must be adjusted to actuate only when the LBM switch tripper is rotated toward the keeper or when the locking cam is in the unlocked position. See illustration.

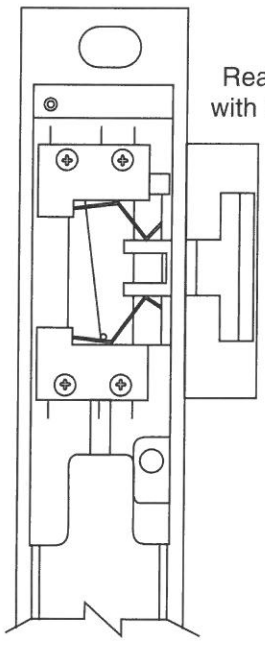
11. Route the switch wires over the solenoid and out the grommet in the lower cover 12-16 Follow INSTRUCTIONS FOR ADDING A LBM SWITCH, steps 11 thru 15.



Rear View Shown with LBM Switch



For Maintenance & Lubrication refer to drawings on Page 21 & 22.



Rear View Shown with LCBMA Switch

INSTRUCTIONS FOR ADDING A LCBMA SWITCH

Refer to instructions for adding LCM and LCBM switches. NOTE: After switches are installed, tape wires from LBM switch around screws on LCBM switch and tape insulator over switches and wires.

CHANGING AND REPLACING THE KEEPER

Special Tool Required: Keeper Spring Tool, 007-0010-001

NOTE: During the first quarter of 1987 a change was made to the case and keeper pin. The knurl was removed from the keeper pin and a recessed radius was added, which a set screw now fits into to lock the keeper in place. This change makes it easier to change the keeper since the keeper pin will be secured with a set screw. Strikes produced after the fourth quarter of 1986 have changes made to the case and keeper pin.

1. **TO REMOVE THE KEEPER:**
ON STRIKES WITH A KNURLED KEEPER PIN: Using a punch and a hammer, drive out the keeper pin (see drawing on page 29).

   A) Place the punch against the bottom of the keeper pin (the end near the cam pin).

   B) Tap the keeper pin out until the knurled end is outside of the case (hole in the top).

   C) The keeper pin can then be pulled out with pliers.

   CAUTION: Do not bend or damage the cam pin with the punch while driving out the keeper pin.
   ON STRIKES WITH THE KEEPER PIN HELD IN PLACE WITH A SET SCREW: Loosen the set screw and push out the keeper pin.

2. **TO INSTALL A KEEPER:**
   A) Lubricate the keeper pin and both hubs of the keeper, the contact areas with the case walls.

   B) KEEPER WITH A LBM SWITCH TRIPPER: Lubricate both hubs of the LBM switch tripper.

   C) Position the keeper in the case and insert the keeper pin (through the hole in the top of the case) through the first hub of the keeper.

   D) KEEPER WITH A LBM SWITCH TRIPPER: Position the LBM switch tripper in the case and push the keeper pin through the first hub of the switch tripper.

   E) KEEPER WITH A LBM SWITCH TRIPPER: Insert the switch tripper spring and push the keeper pin through the switch tripper spring and the second hub of the LBM switch tripper.

   F) Using the keeper spring tool, insert one leg of the keeper spring into the tool, then push the keeper spring into position in the keeper with the second leg of the keeper spring positioned in the slot in the keeper (see drawingon page 29).

   G) Push the keeper pin through the spring, the second hub of the keeper and into the hole in the case.

   H) ON STRIKES WITH A KNURLED KEEPER PIN: Use a hammer to tap the knurled end of the keeper pin into the case until flush.

   ON STRIKES WITH A KEEPER PIN HELD IN PLACE WITH A SET SCREW:
   Tighten the set screw into the groove in the keeper pin.

   I) KEEPER WITH A LBM SWITCH TRIPPER: Cut the switch tripper spring, cut approximately 5/16" off of the switch tripper spring.Let that rests on the LBM switch tripper and cut approximately 1/2" off the leg that rests on the keeper.

FOLGER ADAM SECURITY INC.
A member of the Yale Security Group

ILLUSTRATION FOR CHANGING KEEPERS

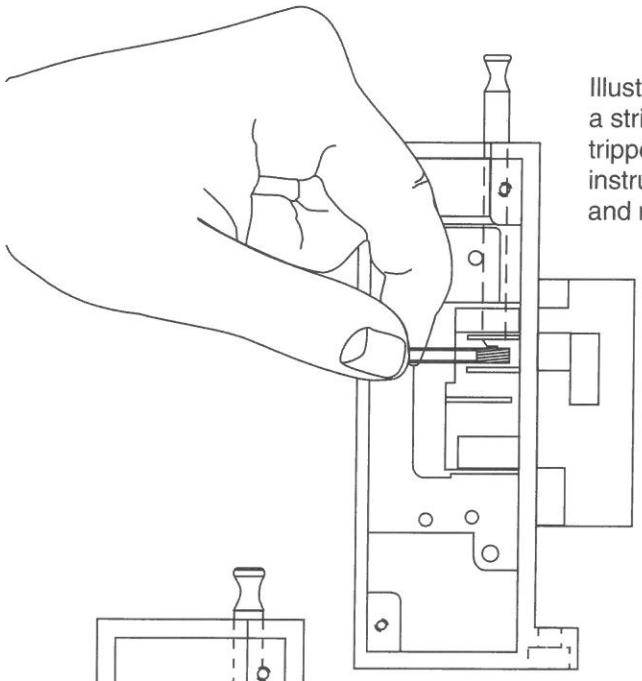
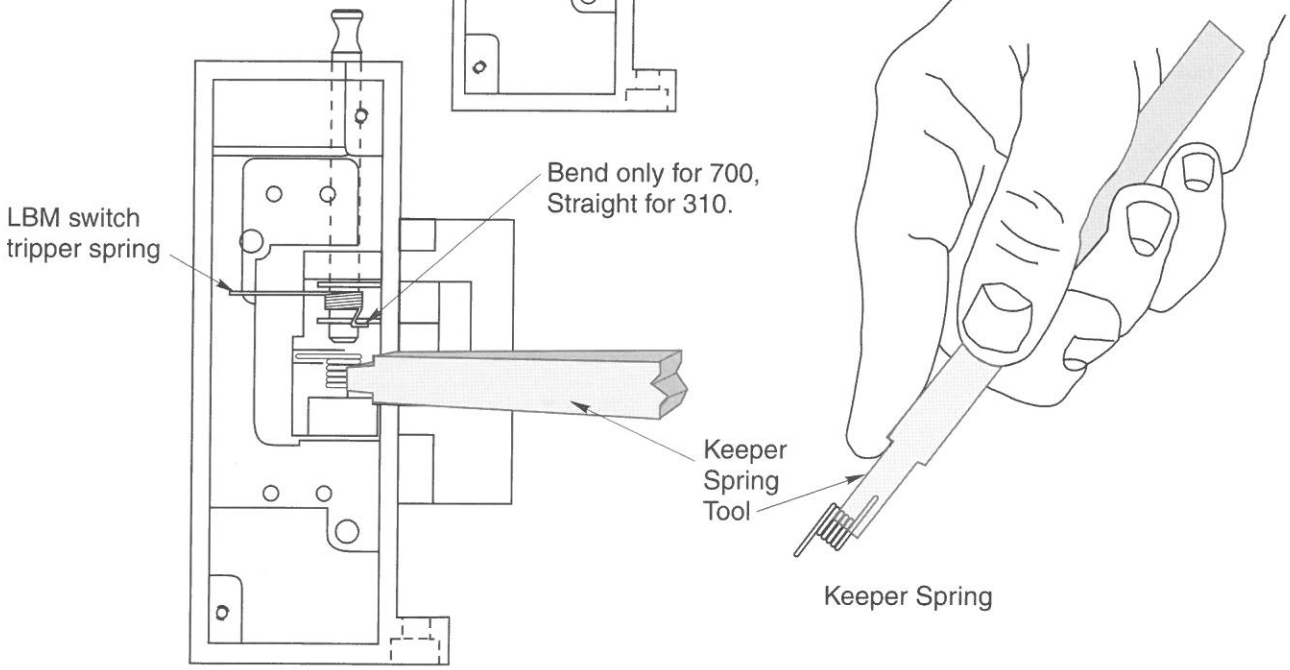


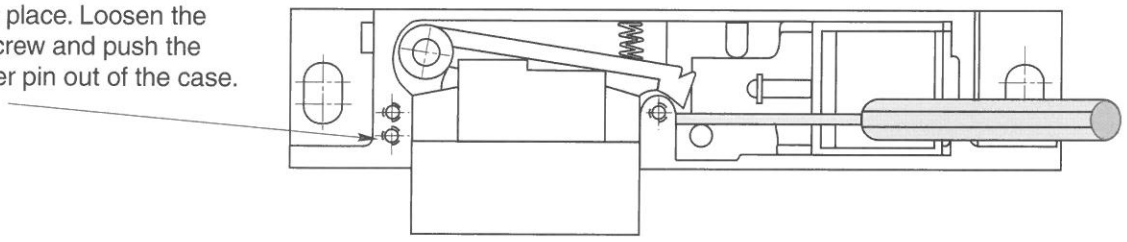
Illustration showing the assembly of a strike keeper and LBM switch tripper. Illustration is to be used with instructions on page ó for changing and replacing keepers.



To remove a 310 Strike Knurled Keeper Pin:

1) Using a punch and hammer, Place the punch against the bottom of the keeper pin (as shown below).
2) Tap the keeper pin out of the case until the knurled portion of the pin is outside of the case.
3) Pull the keeper pinout with pliers.

If the 310 strike has a set screw to hold the keeper pin in place. Loosen the set screw and push the keeper pin out of the case.



TROUBLESHOOTING

PROBLEM	SOLUTION
Strike does not operate when energized.	Check for proper voltage being supplied to the strike. Check all wiring. Check the coil resistance of the solenoid and compare it to the chart located on the wiring diagram, to insure the correct solenoid is being used.
Strike operates intermittently.	Check for loose wire connection.
Solenoid overheating or burned out.	Check for proper voltage being supplied to the strike. If a rectifier is attached to the strike, check to insure the proper rectifier is being used. A tag on the rectifier identifies which strike and voltages the rectifier operates.
Buzzing Solenoid (when not specified.)	Realign solenoid on AC strikes (see Ill. 1 pn page 2). Replace rectifier on DC strikes.
Strike is not re-locking or is not unlocking.	Check for proper alignment between strike keeper and bolt, realign face plate if necessary. The keeper may not be returning to the fully locked position.Check the strike with the door open, if the strike re-locks check the horizontal alignment between the strike keeper and the latch bolt. There is a 3/16" horizontal adjustment between the strike assembly and the face plate (see installation instructions for adjustment). If vertical alignment is off, reposition the face plate. Check the locking cam spring to insure it is moving the locking cam into the locked position (non-fail-safe) or the unlocked position (fail-safe). Check the solenoid assembly to insure the solenoid plunger is moving freely.
Improper indication. (LCM, LBM, LBMLCM OR LCMA) tripper.	Check wiring. Check latch bolt for correct engagement with switch Check switch actuator arm, re-bend if necessary. Check continuity of indication switches, common to Normally open, common to normally closed.
Solenoid plunger binding (Plunger will not extend or retract).	Realign solenoid.

FOLGER ADAM SECURITY INC.
1902 Airport Road
Monroe, NC 28110
Telephone: 800.438.1951
Fax: 800.338.0965
www.yalesecurity.com

46120-C-16000
300PM-30-03/99