

MS1850S Series Deadlocks

Function

A huge bolt of laminated stainless steel, nearly three inches long and actuated by an uncomplicated pivot mechanism, has made this basic M.S.® deadlock the standard of the narrow stile door industry. The length of this bolt provides maximum security for any single leaf door, even a very tall (and flexible) one or an installation where the gap between door and jamb is greater than it should be.

Options

Specify Faceplate shape, finish and cylinder backset. For jambs too narrow to accept the long bolt, the MS1850S-050 offers a shorter bolt with hook shape to provide equal security against door-prying attempts. 1850S-020 short throw without hook also available. Second and third point locking bolts are available for pairs of doors. All use any make standard mortise cylinder and thus can be keyed into systems with other types of doors. "SCHOOLHOUSE" version, also available, is modified so that operation from inside is "unlock only." (This lock is handed and must be specified LH or RH. Specify Series SCH 1850S.) Same faceplate and backset options as Series MS1850S. Operation from inside, with standard thumbturn cylinder. For wood or hollow metal see MS1850SNSI.

Specifications

- Operation—360° turn of key (or thumbturn) throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32", mortise cylinder or thumbturn (with M.S. cam) from either or both sides.
- Cylinder Backset—7/8", 31/32", 1-1/8" and 1-1/2". (Measured from centerline of faceplate to centerline of cylinders.)
- Case—1" x 6" x depth. (Case depth varies with backset)
- Bolt—5/8" x 1-3/8" x 2-7/8" with 1-3/8" throw. Five ply laminated stainless steel. Center ply has Alumina-Ceramic core to defeat any hacksaw attack, including rod-type "super" hacksaws.
- Armored Faceplate—1" x 6-7/8". Specify FACE SHAPE by fourth digit in catalog number:

MS1850S Flat
24-0384-010

MS1851S Radius
24-0384-110

MS1851SW Radius with
24-0384-410 Weatherstrip

MS1852S-016 Right Bevel
24-0384-310

MS1852S-015 Left Bevel
24-0384-210



How to Order MS1850S

1. Specify CATALOG NO. and DASH NO. which identifies:

FACEPLATE SHAPE	MS1851S	Radius	Backset	1	2	3	4
MS1850S Flat	MS1851S	Radius	1	7/8"	2	31/32"	
MS1852S Bevel	MS1851SW	Rad..W/W.Seal	3	1-1/8"	4	1-1/2"	

Example: **MS1852S-215-628**

HANDING
15 LH or RHR
16 RH or LHR
10 Non-Handed*
*any flat or radius face.

FINISH
628 SATIN ALUM.
313 "BRONZE" ANOD.
335 BLACK ANOD.

1830 Bottom Rail Deadlock



Function

For bottom-rail locking of ultra narrow stile or tempered glass doors whose bottom rail (shoe) is too shallow for the MS1861. Mechanism is that of the MS1850A deadlock, but with the bolt size reduced. This keeps the threshold strike opening to a practical minimum. Armor faceplate (628 anodized aluminum) protects cylinder set screws from attack, keeps them from loosening.

Options

Specify either 31/32" (1830-02) or 1-1/8" (1830-03) cylinder height (backset). Order 4006 strike and cylinder(s) separately if required.

Specifications

- Operation—360° turn of key (or thumbturn) throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32" mortise cylinder or thumbturn (with M.S. cam) from either or both sides.
- Case—1" x 6" x depth. (Case depth varies with cyl. height).
- Cylinder Height—31/32" and 1-1/8" only.
- Bolt—3/8" x 5/8" x 2-1/8" with 5/8" throw. Three-ply laminated steel with five plies within case. Center ply carries Alumina-Ceramic core to deter hacksaw attack.

ADAMS RITE MANUFACTURING COMPANY

Hardware

MS1861 Bottom Rail Deadlock

ANSI/BHMA TYPE E8211



Function

Using the same overcenter/pivot locking mechanism as the basic M.S.® deadlock, the Adams Rite MS1861 lies horizontally in the bottom rail of ultra-narrow stile doors (which have insufficient vertical space for a lock) and tempered glass doors (which have no stile at all). The hardened steel cylindrical bolts allow simple drilled strike holes of a relatively small size to minimize the nuisance and danger presented by some threshold strikes in collecting debris. MS1861-02 locks either single-leaf or paired doors.

Specifications

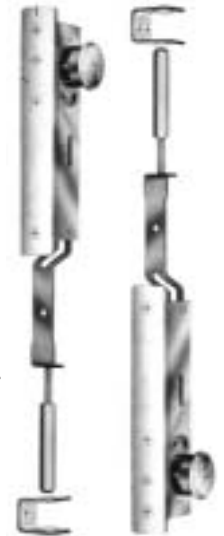
- Operation—360° turn of key (or thumbturn) throws or retracts the counterbalanced bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Lock accepts any standard 1-5/32" mortise cylinder or thumbturn (with M.S. cam) from either or both sides.
- Case—1" x 6" x 1-13/16". Steel, plated for corrosion resistance.
- Bolts—3/8" diameter. Stainless steel threshold (vertical) bolt has 13/16" throw. Hardened steel horizontal bolt throw: 1-1/8".
- Strikes—In metal installations, 7/16" drilled holes in threshold and (for 1861-02) in jamb or opposite door are required. For wood, metal plate with 7/16" hole must be provided for each bolt.
- Cylinder Backset—The 1861-02 requires placement of cylinder centerline 5-3/4" from nose of door. The 1861-01 may be positioned conveniently (minimum backset approximately 2-1/4"). Both have cylinder center 1-7/8" above bottom edge of door.
- Conversion Kit—To convert MS1861-01 to MS1861-02, Kit 4014 provides horizontal bolt assembly with guide and attachment fittings.

How to Order MS1861

1. Specify MS1861-01 for vertical bolt operation only. MS1861-02 for both horizontal and vertical. If only conversion kit is required, specify 4014.
2. If tube spacers are required, specify QUANTITY and LENGTH.

Series 1870 Cylinder Operated Flushbolt

1870 Bolt Guide



Function

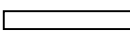




Designed for use instead of conventional flip-lever operated flushbolts, the 1870 gives building management key control of the inactive leaf of paired doors. Prevents casual locking of the inactive leaf. Uses same basic overcenter action mechanism as MS.® pivoted bolt locks. Recommended for installation at both top and bottom of inactive door with MS1851A in active door for greatest security.

Operation

360° turn of key throws or retracts hardened hex-section bolt. Key can be removed only when bolt is in a positively locked or unlocked position. Accepts any standard 1-5/32" mortise cylinder from either or both sides. Cylinder must have M.S. cam.

Specifications

- Cylinder backset—31/32" or 1-1/8" only.
- Armored Faceplate—Specify FACE SHAPE by fourth digit in catalog number:

24-0168-00		Flat
24-0168-01		Radius
24-0168-04		Radius with Weatherstrip
24-0168-03		Right Bevel
24-0168-02		Left Bevel
- Cylinder Height—Standard length (cyl. center to retracted bolt tip) is 12" with +/- 1.25" adjustment. Other lengths available on special order.
- Bolt—Hexagonal, 3/8" (flat to flat) with 11/16" throw. Hardened steel.
- Case—Steel with corrosion-resistant plating. 1" x 6" x depth. (Depth varies with backset.)
- Strike—1/2" diameter hole in metal threshold or header is suitable or, for nonmetal installations, 4005 strike is available.

How to Order

1. Specify CATALOG NO. and DASH NO. which identifies:

FACEPLATE SHAPE		Backset
1870 Flat	1871 Radius	2 31/32"
1872 Bevel	1871W Rad..W/W.Seal	3 1-1/8"

Example:

1871W-20-628

HANDING	FINISH
5 LH or RHR	628 SATIN ALUM.
0 Non-Handed*	313 "BRONZE" ANOD.
*any flat or radius face.	335 BLACK ANOD.

MS+1890 Latch/Lock Series

BHMA TYPE E82101

Function

Deadlocked Maximum Security after hours plus traffic-control convenience for management during the business day. Typical installation is a bank or store requiring three modes of door control: (1) Both lock and latch bolts retracted for unrestricted entry and exit during business hours, (2) Handle-operated latch for exit-only traffic just after closing, and (3) Maximum Security hookbolt for overnight lockup.

NOTE: Handle or paddle operates latchbolt only.



Options

Cylinder Backset, Handing, Finish and Faceplate Shape (radius, flat or bevel cross-section to match door nose) must be specified. Order handle for one side only or both sides. (Handles both sides solve, with minimum traffic impediment, the problem of a door that stands ajar because of wind or air conditioning pressures.)

Specifications

- Operation—360° turn of key throws or retracts hook-shape deadbolt. When unlocked, 120° further turn of key retracts latchbolt as well. Handle retracts spring-loaded latch bolt only.
- Cylinder Backset—Specify: 31/32", 1-1/8" or 1-1/2" only. Accepts standard mortise cylinder or thumbturn cylinder (not furnished.)
- Case—Steel with corrosion-resistant plating. 1" x 7-3/8" x depth. Case depth varies with backset:

BACKSET	DEPTH
31/32"	1.63
1-1/8"	1.78
1-1/2"	2.25

- Handle(s)—Order separately 4560-11 or 4568-11 Lever Handle or Paddle Operator 4590-11 through 4590-14.
- Armored Faceplate—1" x 6-7/8". Specify Face Shape by fourth digit in catalog number:

MS+1890 24-0270-20		Flat
MS+1891 24-0270-120		Radius
MS+1891W 24-0270-420		Radius with Weatherstrip
MS+1892 24-0270-220		Right Bevel
MS+1892 24-0270-320		Left Bevel

- Latch Bolt—5/8" x 5/8" with 7/16" throw. Zinc alloy with Delrin face for smooth, quiet action. Handing easily reversible.
- Armored Strike—Satin stainless steel trim plate with steel mounting plate and dust box. Flat strike (shown) furnished. Also available (for pairs of doors) in radius shape, or (for ANSI hollow metal jambs) flat with square corners. Flat strikes also available with longer lip. MS1890+ latch/lock cannot be used with electric strikes.

How to Order

1. Specify CATALOG NUMBER to Specify:

FACE SHAPE	BACKSET	HAND
MS+1890 Flat	2 31/32"	5 LH or RHR
MS+1891 Radius	3 1-1/8"	6 RH or LHR
MS+1891W Rad. w/W.S.	4 1-1/2"	
MS+1892 Bevel		

Example: **MS+1891-3026-628**

STRIKE SHAPE/LIP LENGTH	FINISH
01 Flat/Std. Jamb	628, 612, 313
02 Radius/Std. Stile	
17 Flat/Center-Hung 4" Jamb	
21 Flat/Center-Hung 4.5" Jamb	
XX Other Lip Lengths	

2. Order HANDLE(S) separately: Specify 628, 313 or 335. For door thickness 1-3/4" only.

4568-11	4590-11	4590-12	4590-13	4590-14
SATIN	PADDLE	PADDLE	PADDLE	PADDLE
ALUMINUM	PULL TO	PUSH TO	PULL TO	PUSH TO
LEVER	LEFT	LEFT	RIGHT	RIGHT



ADAMS RITE MANUFACTURING COMPANY

Hardware

4000 Series Deadlock Strike

Function

The majority of Adams Rite M.S. deadlocks are installed in metal construction where the strike cutout can be simply a slot in the jamb. However, for esthetic reasons or, in the case of the MS4002, for added security, many who specify the M.S. lock add one of these strikes. Finish: US28 (628), 313 and 335.

4000 Trim Strike

A simple strike plate that can be surface mounted on a wood or metal jamb or mortised flush. Furnished with two #10 flat head machine screws and two #10 flat head wood screws. Aluminum.

4001 Box Strike

Same trim plate as shown above but with dust box added. Customarily used only for wood construction where the dust box prevents chips, sawdust and other debris from entering strike. Also furnished with both wood and machine screws. Trim plate—aluminum. Box—steel plated for corrosion resistance.

MS4002 Armored Strike

Same trim plate as 4000 and 4001, but backed up by a massive steel doubler designed to prevent the method of forced entry known as “jamb peeling.” Fits within aluminum or other hollow jamb sections with trim face flush, the steel completely hidden. Available flat or radiused (for pairs* of doors) and to fit all M.S. deadlocks including the “hookbolt” version in sliding doors. (Hookbolt use dictates door/jamb gap of 1/8" or less.) Unhanded, may be used with RH or LH swinging or sliding doors. Trim plate aluminum. Reinforcement doubler, steel, plated for corrosion resistance.

**Can be used with 2Pt and 3Pt M.S. locks.*

How to Order

1. Specify CATALOG NO. and DASH NO. which identifies:

Example: **4001 - 0 1 1**

Indicates cross section shape of faceplate:
0 Flat
1 Radius

Indicates compatible deadlock:
1 Standard lock with 1-3/8" throw
2 1850A-020 with 3/4" throw
3 All MS Dash-050- Hookbolt locks

Indicates corners of trim plate:
1 Has square corners
2 Has round corners



4015 Threshold Bolt

BHMA TYPE E8241

Function

Adding the 4015 bolt to a pivoted bolt M.S.® deadlock allows Maximum Security for pairs of doors by the turn of a single key. Simultaneously dropping a hardened steel hexbolt into the threshold and pivoting the massive M.S.® bolt into the mating door's stile, the two-point lock secures the entire double door entrance. The 4015 threshold bolt is harnessed to the rear of the pivoted bolt. It may be added to any basic MS1851S, MS1851SNSI, or MS1851 deadlock.



Options

For “universal” application, specify 4015-18 with fully threaded rod for cut off to any cyl. height below 53". For greater height or precut rod for high volume use, specify exact cyl. height.

Specifications

- Cylinder Height—Standard threshold bolt rod is sufficient for cylinder height up to 53-7/16". It is fully threaded and can be cut off for low cylinder heights. Also available cut and threaded only for specific cylinder heights.
- Operation—360° turn of key (or thumbturn) in basic M.S.® lock throws counterbalanced bolt into opposite door and drop-bolt into threshold. Key can be removed only when bolts are in a positively locked or unlocked position.
- Adjustment—Exact adjustment of threaded rod to cylinder height is locked in place by hexagonal bolt guide on hexagonal threshold bolt.
- Threshold Bolt—Hexagonal 3/8" (flat to flat). Hardened steel, plated for corrosion resistance.
- For drop-bolt, a 1/2" diameter hole in metal threshold is suitable or, for non-metal installations, 4005 strike is available.

How to Order

When ordering threshold bolt only:

1. Specify CATALOG NUMBER 4015 -18

If ordering in large quantities for specific CYLINDER HEIGHT, specify CYL. HEIGHT or exact bolt/rod length.

Order Basic deadlock separately.

MS4043 Cylinder Guard

Function

The standard mortise cylinder is made of brass. It is literally a soft spot in narrow stile door security. Using special pliers, a pipe wrench, or other leverage device, a burglar can tear the cylinder out of the door, leaving an opening through which he can operate the deadlock. Against this problem, the MS4043 cylinder guard offers a three way defense: First, the outer shield ring is fully beveled to offer exceptional resistance to either prying or twisting. Second, this ring is hardened steel so that the combination of shape and hardness make it virtually impossible to grip, even with sharpened tools. Third, in the event that a prying tool, such as a cold chisel, can be driven into the stile behind the shield ring, the would-be burglar is obliged to pull a heavy steel plate through a round hole in the 1/8" metal door stile. This degree of leverage is far beyond that available with most hand tools.

Options

- MS4043 fits standard 1/8" stile wall. For a 1/4" thick stile wall, specify MS4043-01.

Specifications

- Security Ring—Hardened steel. Free-swiveling when properly installed.
- Retainer Plate—Plated steel for corrosion resistance. Permits security ring to swivel. Hardened to act as an anti-drill shield.
- Trim Finish—Zinc plated (603). Other finishes are available.



Retainer Plate

4070 Deadlock

ANSI/BHMA TYPE E8211

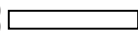
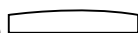


Function

For installations where the long-throw M.S.® deadlock cannot be accommodated, the smaller 4070 offers the longest practical throw for a conventional projected bolt from a narrow stile. Operates with one-half key turn. NOT TO BE USED IN BOTTOM RAIL APPLICATIONS.

Options

- Cylinder Backset and Faceplate Shape (radius, flat or bevel cross-section to match door nose) must be specified.

Specifications

- Armored Faceplate—5" x 5-5/8". Finish: US28 (628) Satin aluminum. Specify Face Shape by fourth digit in catalog number:
 - 4070 24-0136-00  Flat
 - 4071 24-0136-10  Radius
 - 4072-06 24-0136-30  Right Bevel
 - 4072-05 24-0136-20  Left Bevel
- Bolt—5/8" x 1-1/4" x 5/8" throw.
- Strike—In metal installations, a slot in jamb serves as strike. Deluxe trim strike 4170, available for wood installations, measures 1" x 2-3/4".
- Cylinder Backset—Specify: 7/8", 31/32" or 1-1/8" only. Accepts standard mortise cylinder or thumbturn cylinder, not furnished.
- Operation—180° turn of key (or thumbturn) projects or retracts bolt. Accepts any standard 1-5/32" mortise cylinder from either or both sides. Cylinder must have cam to fit.
- Case—Steel, plated for corrosion resistance. 27/32" X 4-1/2" depth.



How to Order

1. Specify CATALOG NUMBER which identifies lock with specific faceplate.
2. Specify Trim strike plate 4170 if required.

FACEPLATE SHAPE	BACKSET	HANDING
0 Flat	1 7/8"	5 LH or RHR
1 Radius	2 31/32"	6 RH or LHR
2 Bevel	3 1-1/8"	0 Non-Handed*
		*Any flat or radius face.

Example: **4072-26**

ADAMS RITE MANUFACTURING COMPANY

Hardware

4089 Exit Indicator

Function

Provides unmistakable notification to building occupants of an exit's "locked" or "open" condition. Under many local building-safety codes, this allows the use, in certain occupancies, of a security deadlock instead of less secure panic devices. It includes a permanently adhesive header sign: "This Door To Remain Unlocked During Business Hours." That wording is according to Uniform Building Code. Alternate sign available for NFPA and other local codes reads: "THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED."



Material/Finish

Indicator escutcheon is zinc alloy with silver Ritecoat finish. Special plated finishes available. Header sign is .003 bleached aluminum with black letters.

Message Panel

Word "LOCKED" appears in red letters and "OPEN" in black letters on white background when lock is actuated. Also available with red (locked) and green (unlocked) wordless panels.

Compatible Locks

MS1830	MS1837
MS1850	MS1850S
MS1850S-505	SCH1850S
MS1850SNSI	MS1850SNSI-505
SCH1850SNSI	MS1860
MS1871	MS+1890

How to Order

1. Specify CATALOG NUMBER 4089. (Standard unit fits 1-3/4" thick doors). For thicker doors (up to 2-1/2") specify 4089-20.
2. For red/green wordless panels, specify 4089-02.
3. For inverted lock, specify 4089-01.
4. Specify Ritecoat color if other than standard.
5. Order "NFPA" sign separately: Part No. 20-0256.

4501, 4502 Latch Strikes

Function

Designed for use in conjunction with Series 4500 or 4700 deadlatches, these strikes offer a choice of mounting methods: a back-up mounting plate included with the 4501 and 4502 allows installation flush in a hollow section jamb. All strikes are unhande, suitable for right or left hand doors. Strike plate material is stainless steel, satin buffed.



4502-01 Standard flat strike with Series 4510 and 4710 deadlatches. Includes molded black plastic dust box and steel mounting plate. Shorter than 4501.

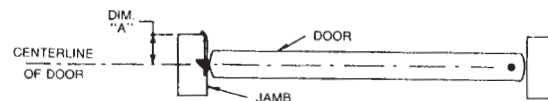
4502-02 Same as 4502-01 except RADIUS strike plate (for nose of opposite door when latching pairs).

4501-01 Standard flat strike furnished with Series 4730 deadlatches. Includes molded black plastic dust box (which also closes unused lower strike opening) and steel mounting plate. Long face designed to fill strike area of M.S. • deadlocks with which these latches are interchangeable.

4501-02 Same as 4501-01 except RADIUS strike plate (for nose of opposite door when latching pairs).

How to Order

1. Specify CATALOG NUMBER, including DASH NUMBER.



LONG LIP FOR CENTERHUNG DOOR. Replace -01 with:

DASH	FOR CENTER	DIM. OF "A"
-03	2.25" WIDE JAMB	1.125
-05	2.50" WIDE JAMB	1.25
-07	2.75" WIDE JAMB	1.375
-09	3.00" WIDE JAMB	1.50
-11	3.25" WIDE JAMB	1.625
-13	3.50" WIDE JAMB	1.75
-15	3.75" WIDE JAMB	1.875
-17	4.00" WIDE JAMB	2.00
-19	4.25" WIDE JAMB	2.125
-21	4.50" WIDE JAMB	2.25

CAT. NO.

4501-01 FLAT, W/DUST BOX & MTG. PLATE
4501-02 RADIUS, W/DUST BOX & MTG. PLATE

CAT. NO.

4502-01 FLAT, W/DUST BOX & MTG. PLATE
4502-02 RADIUS, W/DUST BOX & MTG. PLATE