SARGENT®

ASSA ABLOY

7900

Mortise Locks

BHMA
CERTIFIED

ASSA ABLOY, the global leader
in door opening solutions

Specifications
7900 Mortise Locks

SARGENT®
ASSA ABLOY

Certification Compliance

ANSI/BHMA	Certified to ANSI/BHMA A156.13 Series 1000 Operational Grade 1	**BHMA** CERTIFIED
ADA	Meets A117.1 Accessibility Code. Meets BOMA International 4.13.8 Complies with Americans with Disabilities Act; Consult local authorities	
UL	UL and UL Listed to Canadian safety standards for A label (3 hour fire door) and lesser class doors, stamped letter F and UL symbol on armored front indicate listing	
Positive Pressure	Meets positive pressure requirements UL 10C and UBC 7-2 (1997)	
California Lever Code	California State Reference Code (Formerly Title 19, California State Fire Marshal Standard) All levers with returns comply; levers return to within 1/2" (13mm) of door face	

Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Sargent Manufacturing Company makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

Hardwiring Made Easy™

ElectroLynx®

As part of their promise to provide innovative, fast and effective high security solutions to their customers, certain ASSA ABLOY Group brands offer ElectroLynx®, a universal quick-connect system that simplifies the electrification of the door opening.

ElectroLynx® is a registered trademark of ASSA ABLOY Inc.

MicroShield™

MicroShield®

As part of their promise to provide innovative solutions to their customers, certain ASSA ABLOY Group brands offer the MicroShield® technology, a silver-based antimicrobial coating designed to inhibit the growth of bacteria. MicroShield® is a registered trademark of Yale Security Inc., an ASSA ABLOY Group company.

MicroShield® Coating

- Revolutionary finish coating available on all SARGENT product lines, utilizes a silver-based antimicrobial compound from Agion Technologies

- As an integral part of the finish coating, MicroShield® lasts for the life of the hardware

- MicroShield® coating permanently suppresses the growth of bacteria, algae, fungus, mold and mildew. It is effective against a broad spectrum of bacteria.

- Non-toxic and completely safe. The Agion antimicrobial compound is EPA and NSF approved and FDA listed for use in medical and food preparation equipment.

- Applications: Anywhere there is need for a clean environment (hospitals, laboratories, schools, medical centers, daycare, food processing, etc.)

agion®

Agion has achieved:

CERTIFIED
cradle to cradle
SILVER

Agion's silver antimicrobial has been certified for its material content, recyclability, and manufacturing characteristics. Cradle To Cradle Certified^CM products meet established standards for human health, environmental health and recyclability.

Cradle To Cradle Certified ^CM is a certification mark of MBDC.

On The Cover

- 7943 x OBL x 26D

Features

7900 Mortise Locks

SARGENT®

ASSA ABLOY

The SARGENT 7900 Series Mortise Locks provide a quality Grade 1 lock ideal for schools, apartment housing and commercial buildings.

Wrought outside front plate is self adjusting for door bevels from flat to 1/8" (3mm) in 2" (51mm)

Steel deadbolt assembly with 13 gauge hardened insert, 1" (25mm) projection

3/4" (19mm) projection stainless steel one-piece anti-friction latchbolt, reversible without opening case

Non-handed stainless steel auxiliary deadlatch

All trim designs through-bolted

7943 x OBL x 26D Shown

BHMA CERTIFIED

6-pin solid brass cylinder standard; multiple keying systems available

Solid brass, bronze or stainless steel levers. ADA compliant. Full latch retraction at 30° for ease of operation

Features

Durability
- Certified to ANSI A156.13, Series 1000, Operational Grade 1 with all trim designs
- Heavy duty spring provides long life and reduces lever sag
- 3/4" Projection stainless steel latchbolt. One piece construction
- Steel deadbolt assembly with 13 gauge hardened steel insert, 1" (25mm) projection
- 5 year limited warranty, 2 year limited warranty on electrified locks. Limited to replacement of lock components

Flexibility
- Lock is easily re-handed by rotating the locking piece. Latchbolt is changed by removing the outside front and rotating the latchbolt 180°
- 13 Standard architectural grade finishes, including 14 Polished Nickel & 15 Satin Nickel
- 21 functions, including 4 electrical functions
- Available for door thicknesses 1-3/8" (35mm), 1-3/4" (44mm), 2" (50mm) and 2-1/4" (57mm)
- UL Listed (10C and UBC 7-2, 1997) for use on single fire doors up to 4' x 10' and double doors up to 8' x 8'

Innovations
- Latchbolt retracts with only 30º of lever rotation
- Internal lever spring offers a sleek appearance, simplifies installation and reduces external components
- Solenoid controlled locking mechanisms for remote convenience to lock and unlock the 7900 Series Mortise lock featuring ElectroLynx® quick connectors

Security
- Torx® and spanner screws available as an option
- Can be master keyed or grand masterkeyed. Construction key available

Specifications

Backset	2-3/4" (70mm) only
Case	Wrought steel, zinc dichromate plated. Thickness 7/64" (3mm) (.109")
Outside Front Plate	Wrought 8" (203mm) x 1-1/4" (31mm), self adjusting beveled
Auxiliary Deadlatch	Stainless steel, non-handed
Strike	Wrought; ANSI Standard A115.1; curved lip, non-handed (strike box optional)
Keys	Two, nickel silver keys, LA is the standard keyway. (control key or emergency key must be ordered when required)
Cylinder	Brass, size #41 (1-1/8" standard)
Masterkeying	Can be masterkeyed or grand masterkeyed. Construction keying available
Door Prep	ANSI A115.1 modified (see template 4589 for 7900 lockbody & trim template varies by design)

Note: Key systems are compatible with a majority of other SARGENT products

Standard Lever, Knob, Rose and Escutcheon Designs

**7900 Mortise Locks**

SARGENT®
ASSA ABLOY

The 7900 lever, knob, rose and escutcheon designs are available in all 13 architectural hardware finishes.
- All levers meet ADA national code requirements
- Lever designs BJ, BL and BP have lever returns within 1/2" (13mm) of door face
- Levers BB, BL, BJ & BP are only available with the O rose and the LW1 & the WT escutcheons.
- B knob is only available with the O rose and the KW1 & the WT escutcheons.

BB Lever Design
- BB Lever with O Rose
- Lever: Solid forged or cast
- Rose: Heavy wrought

4-15/16" (126mm)
2-11/16" (68mm)
1-13/16" (46mm)

LW1/KW1 Escutcheon Design
- Escutcheon: LW1/KW1-Wrought
- (2) Exposed screws inside
- KW1 is used with the B Knob
- LW1 is used with lever designs

8" (203mm)
6-7/8" (175mm)
3-7/8" (98mm)
₵ of cylinder
₵ of lever
2" (51mm)

(Shown with L Lever)
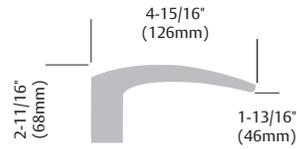
BL Lever Design
- BL Lever with O Rose
- Lever: Solid forged or cast
- Rose: Heavy wrought

5-1/16" (129mm)
2-1/2" (64mm)
7/16" (11mm)
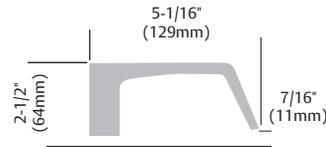
BJ Lever Design
- BJ Lever with O Rose
- Lever: Solid forged or cast
- Rose: Heavy wrought

5-3/16" (132mm)
2-13/16" (72mm)
3/8" (10mm)

WT Escutcheon Design
- Escutcheon: WT-Heavy wrought
- Surface mounted both inside and outside
- (4) Exposed screws both inside and outside

2-1/2" (65mm)
6-9/16" (170mm)
7-3/8" (187mm)
3-7/8" (98mm)
₵ of cylinder
₵ of lever

(Shown with L Lever)
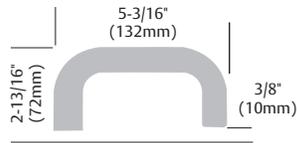
BP Lever Design
- BP Lever with O Rose
- Lever: Solid forged or cast
- Rose: Heavy wrought

5-3/16" (132mm)
2-7/16" (61mm)
7/16" (11mm)

NOTE: All lever height (+/- 1/16") measurements represent total distance from door face.
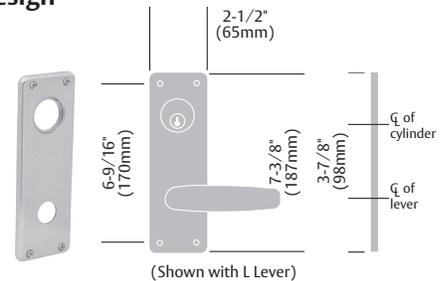
B Knob Design
- Knob: B heavy wrought
- 67- Option Knob both inside & outside
- 68- Option Lever outside/knob inside
- 69- Option Knob outside/lever inside

3" (76mm)
2-1/8" (54mm)
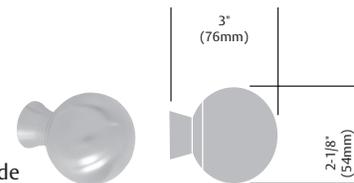
Note: Knob rotates in only one direction - toward hinge

Standard Rose

Note: The TO, CO, TR, CR and LN roses are only available with the Studio Levers, the O rose is available for both standard and Studio.

2-3/4" 69.85mm

O Rose

Studio Collection Levers
7900 Mortise Locks

Studio collection™

Studio Collection trim is available in a broad array of designs and finishes. It allows for uniformity throughout a facility using the 8200, R8200 and 7900 Series Mortise Locks, Access Control Products, 80 and P Series Exits Devices, DL and RDL Series Tubular Locks.

All levers meet ADA compliance for national codes.

Centro Series

MC[1]/[3]

MD

MJ

MP[3]

ND[2]

NJ[2]

Rialto Series
(MZ Lever is Handed)

MO

MZ[2]

Aventura Series

MB

ME

MF

NF[2]

MG

MI

NI[2]

MW[2]

Notting Hill Series
(Handed Levers)

MA[1]

MQ

MT[3]

MM

MR[1]

MY[2]

Odéon Series
(Handed Levers)

MN[3]

MH

MK[3]

MS

MU

MV

MX[2]

NS[2]

NU[2]

Gramercy Series[4]

RCM[3]

RAL[3]

REM[3]

RAM[3]

RAS[3]

RAW[3]

RAG[3]

RGM[3]
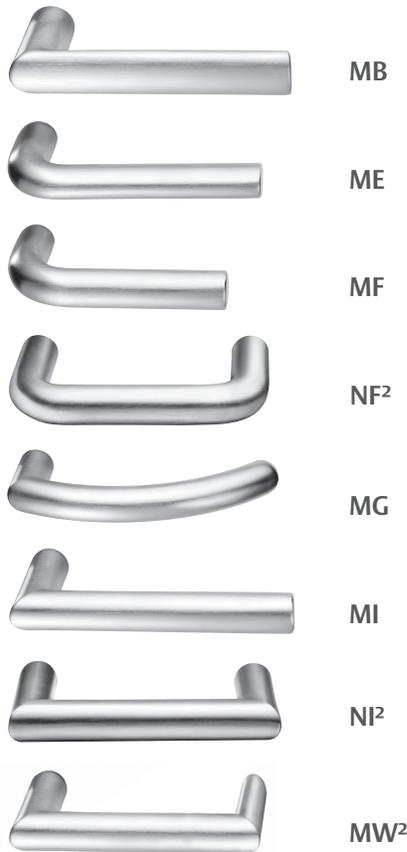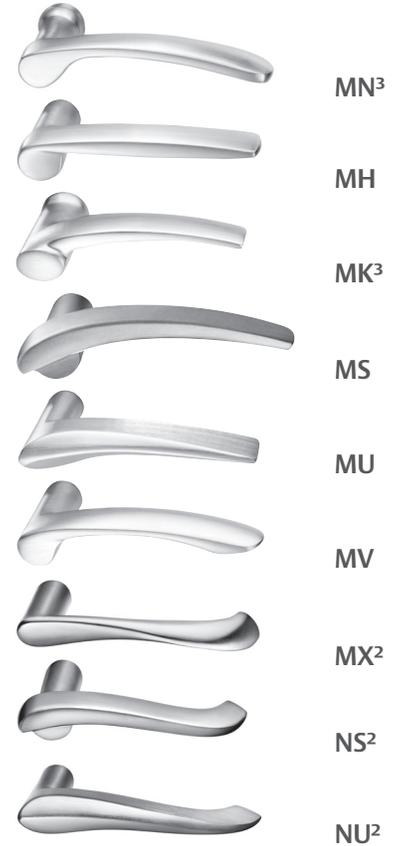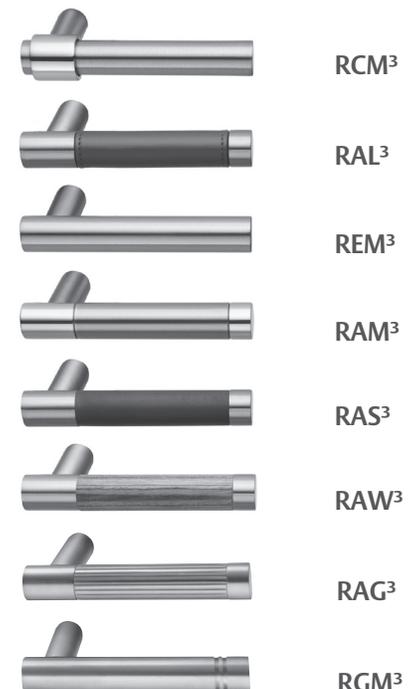
[1] Contact factory for current lead times
[2] Lever returns within 1/2" (13mm) of door face
[3] Levers are not available with Simpli™ Roseless trim
[4] Gramercy levers are customized. See page 6 for ordering information

Roses

O Rose
2-3/4"
69.85mm

CO Rose
2-3/4"
69.85mm

TO Rose
2-3/4"
69.85mm

E2 Rose[1]
2-11/16"
68.26mm

LN Rose
2-1/8"
52.39mm

CR Rose
2-5/16"
58.74mm

TR Rose
2-3/16"
55.56mm

E3 Rose[1]
2-1/16"
52.39mm

Thumbturns

Thumbturn backplate will match rose design chosen. See page 5 for more information.

T1 Turn
1-1/2" dia.
38mm

T2 Turn
1-1/2"
38mm

T3 Turn
1-1/2" dia.
38mm

Escutcheons

LE1 Escutcheon
1-3/4"
44.45mm

7-5/8"
193.68mm

CE Escutcheon
2"
50.80mm

7-7/8"
200.03

TE Escutcheon
2"
50.80mm

7-7/8"
200.03
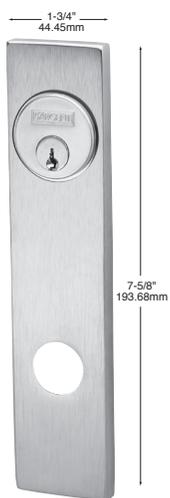
[1] 1KA square cylinder collar and 130KA square backplate automatically supplied with E2 and E3 roses.

SARGENT®

ASSA ABLOY

130W Round Backplate
(Shown with Standard Turn)

- Round backplate supplied standard with O and LN roses
- Standard turn automatically supplied with sectional trim for 7900 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-1/2" (38mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

130KA Square Backplate
(Shown with Standard Turn)

T1 Turn   *T2 Turn*   *T3 Turn*
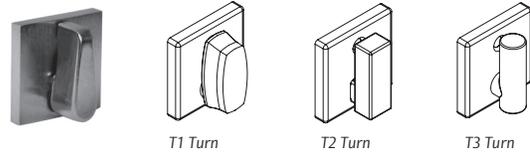
- Square backplate supplied standard with E2 or E3 roses
- Standard turn automatically supplied with sectional trim for 7900 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-1/2" (38mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

130KT Traditional Backplate
(Shown with Standard Turn)

T1 Turn   *T2 Turn*   *T3 Turn*
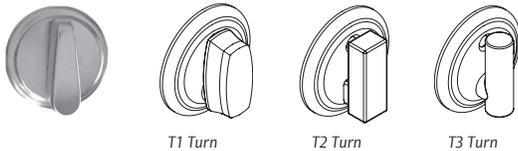
- Dual radii edge backplate supplied standard with TO and TR roses
- Standard turn automatically supplied with sectional trim for 7900 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-3/4" (44mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

130KC Contemporary Backplate
(Shown with Standard Turn)

T1 Turn   *T2 Turn*   *T3 Turn*
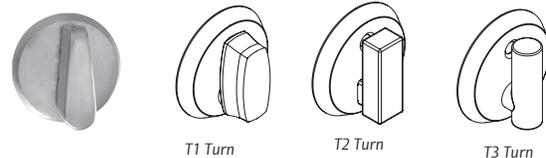
- Beveled edge backplate supplied standard with CO and CR roses
- Standard turn automatically supplied with sectional trim for 7900 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-3/4" (44mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

130LB Large Round Backplate
(Shown with Large ADA Turn)

130LT   *130LC*

- Available with 7900 with sectional trim
- 40% larger than standard thumbturn
- Specify LB as an option for ADA turn
- 2" (51mm) round brass, bronze, or stainless steel plate & turn
- 130LT - Traditional backplate, 130LC - Contemporary backplate
- Meets ADA Requirements

184W Emergency Release

- 1-1/2" (38mm) round brass, bronze or stainless steel plate
- Unlocks 65 & 66 functions by emergency key (14-0057), coin or flat blade screw driver
- **Studio Collection Emergency Release**
- 184KC Emergency Release Contemporary
- 184KT Emergency Release - Traditional

Emergency Key 14-0057

- Carbon steel
- For bathroom/privacy function only
- Must be ordered separately

Gramercy Series Levers
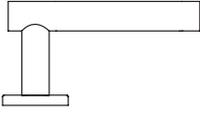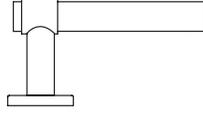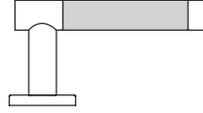
REM, RGM   RCM   RAG, RAL, RAM, RAS, RAW

Gramercy Finish Codes

BHMA Finish	SARGENT Finish	Gramercy Code*	Description
630	32D	30	Satin Stainless Steel
629	32	29	Bright Stainless Steel
N/A	N/A	BH	Birch (wood insert)
N/A	N/A	BK	Black (Santoprene™ or leather insert)
N/A	N/A	BN	Brown (leather insert)

*Code used to specify Gramercy Series finishes only. Use available finishes list to specify desired finish when ordering.

Gramercy Lever Descriptions & Available Finishes

Lever Designation	Lever Description	Available Finishes (AS ORDERED)
RAG	Grooved Insert	2929 or 3030
RAL	Leather Insert	29BK, 29BN or 30BK, 30BN
RAM	Metallic Insert	2930** only
RAS	Santoprene Insert	29BK or 30BK
RAW	Wood Insert	29BH or 30BH
RCM	Raised Band	2929, 3030 or 2930**
REM	Plain	2929 or 3030
RGM	Two Grooves	2929 or 3030

**Two-tone finish - grip of lever is 32D, balance of lever is 32. Rose/escutcheon and lock finish will be 32.

To order Gramercy Series levers with SARGENT products, see the examples below. When specifying finish, use the last two digits of the BHMA standard finish code, i.e. use "29" for polished stainless, BHMA finish 629.

How to Order 7900 Mortise Locks with Gramercy Series Levers

Options	Series	Function	Voltage	Rose/Escutcheon	Lever	Finish	Hand
Select from Pages 12-13	79	Select from Pages 5-7	Specified for Electrical Functions	Select from Page 4	Leather insert	Bright stainless steel with brown leather	RHR, RH, LHR, or LH
10-	79	71	12VDC	LN	RAL	29BN	RH

Single Cylinder without Deadbolt

04 Storeroom or Closet
7904
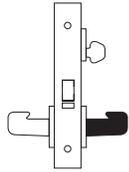
- Key outside retracts latchbolt
- Lever/Knob outside rigid at all times
- Lever/Knob inside retracts latchbolt
- Auxiliary deadlatch
- **ANSI F07**

37 Classroom
7937
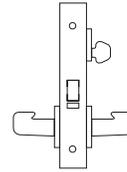
- Key outside locks & unlocks lever/knob outside
- Key outside retracts latchbolt
- Lever/Knob inside always retracts latchbolt
- Auxiliary deadlatch
- **ANSI F05**

55 Office or Entry
7955
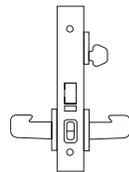
- Key outside retracts latchbolt
- Lever/Knob inside retracts latchbolt
- Lever/Knob outside is locked & unlocked with toggle only
- Auxiliary deadlatch

Double Cylinder without Deadbolt

16 Apartment, Exit or Public Restroom
7916
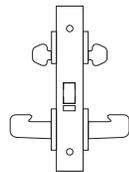
- Key outside retracts latchbolt
- Key inside locks & unlocks lever/knob outside
- Lever/Knob inside always retracts latchbolt
- Auxiliary deadlatch
- Special cam Suffix -105 required for inside cylinder (Supplied Standard)
- **ANSI F09**

38 Classroom Security Intruder Latchbolt
7938
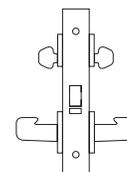
- Key from either side locks & unlocks lever/knob outside
- Key from either side retracts latchbolt
- Lever/Knob inside always retracts latchbolt
- Auxiliary deadlatch
- **ANSI F32**

If shaded, knob or lever rigid at all times

Single Cylinder with Deadbolt

24 Storeroom Door
7924
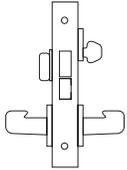
- Key outside or thumb turn inside retracts and projects deadbolt
- Lever/Knob either side retracts latchbolt
- Latchbolt and deadbolt are independent of each other
- **ANSI F21**

25 Dormitory or Exit
7925
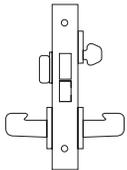
- Key outside or thumb turn inside retracts and projects deadbolt
- Lever/Knob from either side retracts latchbolt, when the deadbolt is in the retracted position
- Lever/Knob outside is locked, when the deadbolt is projected
- When deadbolt is projected, lever/knob inside retracts latchbolt and deadbolt simultaneously, unlocking outside lever/knob
- **ANSI F13**

43 Apartment Corridor Door
7943
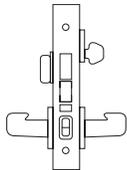
- Key outside or thumb turn inside retracts and projects deadbolt
- Key outside retracts both latchbolt and deadbolt, lever/knob outside remains locked
- Lever/Knob outside is locked by toggle or projecting deadbolt
- Lever/Knob outside is unlocked by toggle only
- Lever/Knob inside (when deadbolt is projected) retracts latchbolt and deadbolt simultaneously, and lever/knob outside remains locked
- Auxiliary deadlatch
- **ANSI F20**

45 Dormitory or Exit
7945

- Key outside or thumb turn inside retracts and projects deadbolt
- Key outside retracts both latchbolt and deadbolt, lever/knob outside remains locked
- Lever/Knob outside is locked by toggle or projecting deadbolt
- Lever/Knob inside (when deadbolt is projected) retracts latchbolt and deadbolt simultaneously, and lever/knob outside remains locked
- **ANSI F12**

50 Hotel Guest
7950
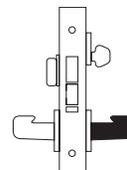
- Hotel Cylinder Required (50 Function Cylinder) with two types of Keys (Standard & Emergency)
- Standard Key outside retracts latchbolt only, will not retract or project deadbolt
- Emergency Key outside will retract latchbolt and deadbolt and also project deadbolt
- Thumb turn inside retracts and projects deadbolt
- Lever/Knob inside retracts both latchbolt and deadbolt simultaneously
- Lever/Knob outside is always rigid
- Auxiliary deadlatch
- Not available with certain key systems (see Option chart in this catalog for restrictions)
- **ANSI F15**

Double Cylinder with Deadbolt

✦26 Store Door
7926

- Key from either side retracts and projects deadbolt
- Lever/Knob from either side retracts latchbolt
- Latchbolt and deadbolt are independent of each other
- **ANSI F14**

✦ **CAUTION:** Not recommended for use on any door used for Life Safety egress

If shaded, knob or lever rigid at all times

90143:E9/15/13

SARGENT®

ASSA ABLOY

Non-Keyed

15 Passage or Closet
7915
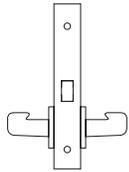
- Lever/Knob from either side retracts latchbolt at all times
- **ANSI F01**

65 Privacy Bedroom or Bath
7965
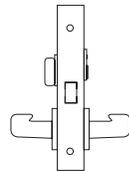
- Lever/Knob outside retracts latchbolt except when locked by thumb turn inside
- Lever/Knob inside retracts latchbolt and unlocks outside lever/knob
- Emergency Release unlocks outside lever/knob with coin or flat
- Thumb turn inside, locks and unlocks outside lever
- Closing the door will unlock lever/knob outside
- **ANSI F22**

66 Privacy Bedroom or Bath
7966

- Lever/Knob outside retracts latchbolt except when deadbolt is projected
- Lever/Knob inside retracts both latchbolt and deadbolt simultaneously, and unlocks outside lever/knob
- Emergency Release retracts and projects deadbolt by coin or flat blade screw driver
- Thumb turn retracts and projects deadbolt
- **ANSI F19**

93 Single Trim Dummy
7993

- Lever/Knob on inside of door is always rigid
- Lever/Knob only inside used as door pull
- Through bolted

Note: Different door prep required, see template 4298

94 Double Trim Dummy
7994

- Lever/Knob on both sides are always rigid
- Lever/Knob only used as door pull
- Through bolted

Note: Different door prep required, see template 4298

95 Single Trim Dummy
7995
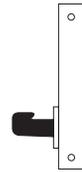
- Lever/Knob on one side only is always rigid
- Includes lock case and armor front
- Lever mounted on inside of the door.

Electrical Functions

70 Electrical Fail Safe
71 Electrical Fail Secure
7970
7971
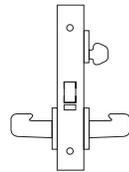
- 70 function - Fail Safe Power off - Unlocks outside lever
- 71 function - Fail Secure Power off - Locks outside lever
- Specify 12VDC or 24VDC
- Key outside retracts latchbolt
- Lever outside can only be locked with the solenoid
- Lever inside always retracts latchbolt
- Only available with lever trim
- Auxiliary deadlatch

✦72 Electrical Fail Safe
✦73 Electrical Fail Secure
7972
7973
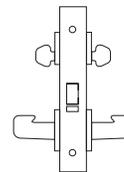
- 72 function - Fail Safe Power off - Unlocks both levers
- 73 function - Fail Secure Power off - Locks both levers
- Specify 12VDC or 24VDC
- Key either side retracts latchbolt
- Levers can only be locked with the solenoid
- Levers can not be locked independently
- Only available with lever trim
- Auxiliary deadlatch

✦**CAUTION**: Not recommended for use on any door used for Life Safety egress

If shaded, knob or lever rigid at all times

Electro-Mechanical Specifications
Strikes & Front
7900 Mortise Locks

SARGENT 7900 Electro-mechanical Mortise locks can be used for single openings, stand alone applications or can be readily integrated into sophisticated access control systems.

Applications: Security and restricted access areas in schools, computer rooms, offices, banks, equipment rooms, laboratories and hospitals. Also used with fire and alarm controls in buildings and stair tower doors.

Hardwiring Made Easy®

ELECTRO Lynx

Electrical Requirements:

Voltage: 12VDC or 24VDC Regulated. Full wave rectification installed inside the lockbody.

Current: .25A at 24VDC or .5A at 12VDC Operating Temp.: Max. 151°F (66°C), Min –31°F (-35°C)

UL and CUL listed for use on Fire Doors

Note: Repeated operation at voltage exceeding +/- 10% is not recommended.

Note: Opening lockbody by non-authorized personnel voids UL label and lock warranty.

Warning:

- **Do not** connect locks with a circuit sharing an additional electromagnetic device as the lock may be damaged
- Transient voltage must be suppressed at the source or before connecting with the lock
- Varistor rated at 35 volts (peak) may be used for transient voltage protection

RX- Monitoring Mortise Locks

7900 Mortise Locks are available with internal switches for independently monitoring inside/outside lever rotation (RX- option).

- SPDT type C switches, rated 2A at 24VDC
- **RX- Request to Exit or Enter**
  - Two switches mounted internally in lockbody that provide independent monitoring of inside and outside lever rotation
  - Available in all functions w/non rigid levers
  - Not available with 1- option

Curved Lip Strikes

- All locks are packed standard with a universal non-handed curved lip ANSI 4-7/8" (124mm) strike
- All strikes: Brass, bronze or stainless steel
- To order strikes separately, specify strike part number and finish. Strikes ordered separately are furnished with machine screws
- Strike Box is available separately as 77-1141 or WBS-
- For Strikes other than standard, specify part number when ordering with complete lock
- See chart for part number and lip lengths

Curved Lip Strike

Door Thickness	Part No.	Lip Length
Double Door	82-0229	7/8" (23mm)
1-3/8" - 1-1/2" (35mm) (38mm)	82-0109	1-1/8" (29mm)
1-5/8" - 1-3/4" (41mm) (44mm)	82-0110 (Std)	1-1/4" (32mm)
1-7/8" - 2" (48mm) (51mm)	82-0111	1-3/8" (35mm)
2-1/8" - 2-1/2" (54mm) (64mm)	82-0112	1-5/8" (41mm)

Curved Lip Strike (Standard)

11/16" (17mm)

4-7/8" (124mm)

2-3/4" (70mm)

3/32" (2mm) Thick

4-1/8" (104.7mm)

1-1/4" (32mm) Lip Length
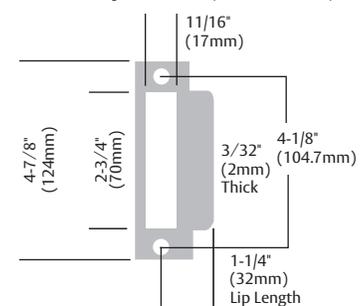
77-1141 Wrought Box Strike (WBS)

- Specify WBS- when ordering lock to receive Box Strike with lock
- If ordering separately, use part# 77-1141

Outside Front Plate

Standard Width 1-1/4" (32mm)	Functions
79-0009	15, 65
79-0010	04, 16, 37, 38
79-0011	24, 25, 26, 66
79-0012	50
79-0014	45
79-0015	43
79-0010	70, 71, 72, 73
79-0008	95
79-0013	55

Outside Front Plate

1-1/4" (32mm) or 1-1/16" (27mm)
Note: 1- option

8" (203mm)

6-1/2" (165.1mm)
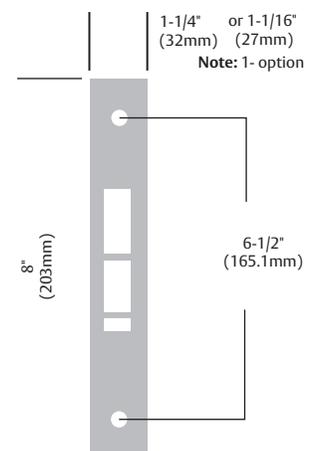
Cylinder Lengths
7900 Mortise Locks

Cylinder Lengths (Dim X)

Cylinder No.	41	42	43	44	46	48	50	52	54	56
Dim X Length Under Cylinder Head	1-1/8" (29mm)	1-1/4" (32mm)	1-3/8" (35mm)	1-1/2" (38mm)	1-3/4" (44mm)	2" (51mm)	2-1/4" (57mm)	2-1/2" (64mm)	2-3/4" (70mm)	3" (76mm)

40 Series Type Cylinder

- Cylinder body: Solid brass
- Cap: Brass, bronze or stainless steel
- All functions use a standard cam, Except 50 function and the Inside Cylinder for 16 function locks. (see page 10 for more details)

1-5/16" (33mm)

15/32" (12mm)

1/8" (3mm)

Dim X
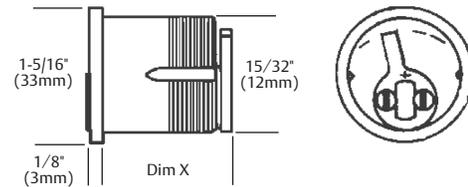
Note: For complete cylinder information, see the appropriate Cylinder Catalog.

60- or 70- Option Plastic Construction Core

- For doors that do not require key locking during the construction period
- Operate with coin or flat screw driver
- For use with LFIC (60- Option) or SFIC (70- Option) core

63- Option Large Format Interchangeable (Removable) Core

- Allows immediate removal of the core. Virtually unlimited key changes
- For disposable core, see 60- option
- 10-63- Option: Large Format Interchangeable Core Signature cylinder
- 11-63- Option: Large Format Interchangeable Core XC- cylinder
- 64- Option: Large Format Interchangeable Core construction core
- Control key used to remove core; Must request control key separately

73- Small Format Interchangeable Core

- Small Format Interchangeable Core
- SARGENT Interchangeable Core cylinders and MasterKey Systems are available for increased security through quick keying change. It is not necessary to remove a cylinder
- SARGENT 7300B Interchangeable Restricted Cores are available in SARGENT 4A and 4B keyways, as well as the following standard competitor keyways: A, B, C, D, E, F, G, H, J, K, L, M
- For disposable core, see 70- option
- 65-73- Option: 6-Pin Small Format Interchangeable Cores-uncombinated
- 65-73-7P- Option: 7-Pin Small Format Interchangeable Cores-uncombinated
- 70- Option: Small Format Interchangeable disposable core
- 72- Option: Small Format Interchangeable construction core
- 73- Option: 6-Pin Small Format Interchangeable core, SARGENT 4A, 4B keyways
- 73-7P- Option: 7-Pin Small Format Interchangeable core, SARGENT 4A, 4B keyways
- Control key used to remove core; Must request control key separately

21- Option Lost Ball Construction System

- The SARGENT construction keying system protects the building owner by providing temporary masterkeying during the construction period

124 Series Mortise Cylinder Turn Lever

- Turn lever: Brass, bronze or aluminum
- Cap: Brass, bronze or stainless steel
- Must be ordered separately
- Used on doors where keyed cylinder is not needed

10- Option Signature Series

- The system offers the building owner full control over duplication of keys. Highly pick resistant cylinders
- 10-63- Option: Large Format Interchangeable Core Signature cylinder
- 10- UL Option: Signature cylinder that meets UL437 requirements for security

11- Option XC Key System

- Patented system works with existing SARGENT keyway adding increased security
- 11- Option: XC- Standard Cylinder
- 11-63- Option: Large Format Interchangeable Core XC- cylinder
- 11-73- Option: Small Format Interchangeable Core with XC- feature

F1-82- and 82- Option KESO

- The system offers the building owner full control over duplication of keys
- Highly pick resistant cylinders
- Expanded levels of masterkeying
- F1-83- & 83: Option- Keso removable core
- 84- Option: Keso construction core cylinder

ASSA ABLOY, the global leader in door opening solutions

Cylinder Rosettes & Cams

7900 Mortise Locks

97 Rosette Cylinder Collar

- Standard for 7900 Mortise Locks
- 1KB Cylinder collar is used for longer cylinders and various door conditions
- Brass, bronze or stainless steel
- Standard for cylinders ordered separately from hardware
- 1-11/16" diameter (43mm), 9/32" (7mm) projection, includes compression spring
- Finishes: 3, 4, 10, 10B, 10BE, 26, 26D, 32, 32D

1 KB Rosette Cylinder Collar

- The KB series of cylinder rosettes will be used as required for various door conditions and cylinders (ex. 60- & 70-)
- Brass, bronze or stainless steel
- 1-1/2" (38mm) diameter, includes compression spring
- Projection from door:
  1KB-1 : 5/16" (8mm) - Standard
  1KB-2 : 7/16" (11mm)
  1KB-3 : 9/16" (14mm)

No. 90 Blocking Ring

- Used with 1KB rosettes as spacer when mortise cylinder projects from face of door
- Brass, bronze or stainless steel
- 1-3/8" (35mm) diameter; 1/16" (1.6mm) to 3/8" (9mm) projection in 1/16" (1.6mm) increments. Specify size when ordering.
- Finishes: 3, 4, 10, 10B, 10BE, 10BL, 20D, 26, 26D, 32, 32D

1KA Rosette Cylinder Collar

- Used with mortise cylinders
- Furnished standard with the E2 and E3 roses
- Brass, bronze or stainless steel
- 1-1/2" (38mm) Square, includes compression spring
- Projection from door:
  1KA-1 5/16" (8mm) - Standard
  1KA-2 7/16" (11mm)
  1KA-3 9/16" (14mm)
  1KA-4 11/16" (16mm)
- Finishes: 3, 4, 10, 10B, 10BE, 10BL, 20D, 26, 26D, 32, 32D

Cylinder Cams For Mortise Locks

SARGENT Conventional Cylinders

- Standard

Std Cam
(13-0664) for all functions except for 50 and the Inside cam for 16 function locks

-105 Cam
(13-0665) for 16 Function Inside Cylinder

-115 Cam
(13-2045) 50 Function Hotel Cam, supplied with 50 function cylinders

SARGENT Removable Core Cylinders

- 6300 Cams are factory installed and are not removable
- 6300 Cams are not sold separately
- Specify required Cam as a suffix: 63-44-105 cam
- For Standard Cam: No Suffix is required

Std 6300 Cam
for all functions except for 50 and the Inside cam for 16 function locks

-105 Cam
for 6300 Series 16 Function Inside Cylinder

-115 Cam
for 6300 Series 50 Function Hotel Cam, supplied with 50 function cylinders

Note: For cylinders other than conventional and LFIC (removable core), see Cylinder catalogs for additional information

SARGENT®

ASSA ABLOY

Mechanical Options

Categories	How to Specify	Detailed Description
1-3/8" Doors	1-	1-1/16" (27mm) wide front for 1-3/8" (35mm) doors (Not available with RX- Option) (1- for 93 + 94 function is a special)
Thick Doors	31-	For doors 1-7/8" (48mm) to 2-1/4" (57mm) thick – see cylinder options for limitations on door thickness. When ordering the following information is required: Location of lock within the door, door thickness - IF PANELED - must specify panel thickness & panel location (inside or outside of the door) For doors thicker than 2-1/4" - consult factory.
Security Fasteners	36-	6 Lobe head security screws (Torx® type). Screw chart on pg 13. (Not available with Studio Levers)
	37-	Spanner head security screw. Screw chart on pg 13. (Not available with Studio Levers)
Electrical Option	RX-	Request to exit. Monitors the activation of the inside and outside lever independently (not available with 1- or LB-)
Knob & Lever Combinations	67-	Knob outside x knob inside (Not available with 70, 71, 72, 73 or 95 functions, RX- Option or Studio Levers)
	68-	Lever outside x knob inside (Not available with RX- Option, 95 function or Studio Levers)
	69-	Lever inside x knob outside (Not available with RX- Option, 95 function or Studio Levers)
Tactile Warning Options	75-	Tactile Warning — Milled levers or knurled knobs. Inside trim only (Not available with Studio Levers)
	76-	Tactile Warning — Milled levers or knurled knobs. Outside trim only (Not available with Studio Levers)
	77-	Tactile Warning — Milled levers or knurled knobs. Inside & outside trim (Not available with Studio Levers)
	85-	Tactile Warning — Abrasive coating inside trim only
	86-	Tactile Warning — Abrasive coating outside trim only
	87-	Tactile Warning — Abrasive coating inside & outside trim
Thumbturns (See page 5)	LB-	ADA Extra large thumbturn; backplate matches rose design chosen
	T1	Decorative thumbturn; backplate matches rose design chosen
	T2	Decorative square thumbturn; backplate matches rose design chosen
	T3	Decorative cylinder thumbturn; backplate matches rose design chosen
Finish Protection	CPC-	Clear Powder Coat (Available for 32 & 32D Finishes)
	SG-	MicroShield antimicrobial clear powder coat
Box Strike	WBS-	Wrought Box Strike

ADA and Handicap Warning

Lever Return to Door
- Available with BL, BJ & BP levers
- Lever returns within 1/2" (13mm) of door face or less
- Meets the strictest ADA code compliances.

NOTE: All lever height (+/- 1/16") measurements represent total distance from door face.

Tactile Handicapped Warning
- Abrasive Coating: Options 85-, 86- & 87-
- Milled 1/16" Grooves: Options 75-, 76- & 77-

  BB, BJ, BL and BP Levers – grooved on backside surface of lever

Tactile Handicapped Warning
- Knurled B knob available
- Knobs are NOT ADA compliant

Keys
- Large key bows available with SARGENT "C" keyways only
- Keys NOT ADA compliant Shown: Large Bow Key on left

Cylinder Options

Degree Key System	DG1-*	SARGENT Degree Key System Level 1 (Bump resistant with patented keys)
	DG1-21-*	Degree Level 1 Construction Master Keying
	DG1-60-*	Degree Level 1 Removable Disposable Construction Core
	DG1-63-*	Degree Level 1 Removable Core
	DG1-64-*	Degree Level 1 Removable Construction Keyed LFIC
	DG1-65-*	Degree Level 1 Unassembled/Uncombined Core
	DG1-78-*	Degree Level 1 Exposed Plug (For use with LE3/LE4 escutcheons only)
	DG2-*	SARGENT Degree Key System Level 2 (Geographically exclusive; bump and pick resistant)
	DG2-21-*	Degree Level 2 Construction Master Keying
	DG2-60-*	Degree Level 2 Removable Disposable Construction Core
	DG2-63-*	Degree Level 2 Removable Core
	DG2-64-*	Degree Level 2 Removable Construction Keyed LFIC
	DG2-65-*	Degree Level 2 Unassembled/Uncombined Core
	DG2-78-*	Degree Level 2 Exposed Plug (For use with LE3/LE4 escutcheons only)
	DG3-*	SARGENT Degree Key System Level 3 (Geographically exclusive;UL437 certified;bump and pick resistant)
	DG3-21-*	Degree Level 3 Construction Master Keying
	DG3-60-*	Degree Level 3 Removable Disposable Construction Core
	DG3-63-*	Degree Level 3 Removable Core
	DG3-64-*	Degree Level 3 Removable Construction Keyed LFIC
	DG3-78-*	Degree Level 3 Exposed Plug (For use with LE3/LE4 escutcheons only)
Signature Key System	10-*	SARGENT Signature Key System (Not Available with other Key Systems)
	10-21-*	SARGENT Signature Construction Key System (Lost Ball)
	10UL-*	SARGENT Signature UL437 Key System (Not Available with other Key Systems)
XC- Key System	11-*	XC Key System (Not Available with other Key Systems, unless specified)
Signature Large Format Interchangeable Core (Removable Core)	10-63-*	SARGENT Signature LFIC (Removable) Core Cylinder
XC- Large Format Interchangeable Core (Removable Core)	11-60-*	Lock to accept XC- Permanent LFIC (Removable core), disposable plastic core provided
	11-63-*	Lock provided with XC- LFIC (Removable core) cylinder - (Includes masterkeying, grand masterkeying)
	11-64-*	Lock provided with keyed construction core to accept XC- LFIC (Removable) Permanent core ordered separately
XC- Small Format Interchangeable Cores	11-70-7P-*	Lock to accept XC- SFIC (7-Pin) XC- Permanent Cores, plastic disposable core provided
	11-72-7P-*	Lock to accept XC- SFIC (7-Pin Keyed Construction Core provided) cylinder Permanent core ordered separately
	11-73-7P-*	Lock provided with XC- Small Format 7-Pin interchangeable core (Includes masterkeying, grand masterkeying)
	11-65-73-7P-*	Lock provided to accept XC- Uncombined 7-Pin SFIC (Permanent) Core - (Packed Loose)
Construction Key Systems	21-*	SARGENT Lost Ball Construction Keying for Conventional, XC and Signature Series (N/A with 63- or 73-)
	22-*	SARGENT Construction Split Key System for Conventional Cylinders (Existing Systems Only) 2" (51mm) door thickness max. - centered (N/A with 10-, 11-, 63- or 73-)
Large Format Interchangeable Core (Removable Core)	60-	Lock to accept SARGENT Permanent LFIC (Removable core), disposable plastic core provided (Permanent cores ordered separately)
	63-	Lock provided with LFIC (Removable core) cylinder - (Includes masterkeying, grand masterkeying)
	64-	Lock provided with Keyed construction core to accept LFIC (Removable) permanent core (Ordered separately)
Small Format Interchangeable Cores	70-*	Lock to accept 6- or 7-Pin SFIC Permanent Cores, plastic disposable core provided
	72-*	Lock to accept 6- or 7-Pin SFIC (6-Pin Keyed Construction Core provided) Cylinder (Permanent Core Ordered Separately)
	73-*	Small Format 6-Pin Interchangeable Core SARGENT 4A, 4B keyway only. (Request control key separately) (Includes masterkeying, grand masterkeying)
	65-73-*	Lock provided to accept Uncombined 6-Pin SFIC (Permanent) Core - (Packed Loose for field keying)
	65-73-7P-*	Lock provided to accept Uncombined 7-Pin SFIC (Permanent) Core - (Packed Loose for field keying)
	73-7P-*	Small Format 7-Pin Interchangeable Core SARGENT 4A, 4B keyway only. (Not available with Studio Levers) (Includes masterkeying, grand masterkeying)

* Options not available with 50 function locks
Note: For V-10 Cylinders and information, contact ASSA

Cylinder Options

Small Format Interchangeable Cores	70-*	Lock to accept 6- or 7-Pin SFIC Permanent Cores, plastic disposable core provided
	72-*	Lock to accept 6- or 7-Pin SFIC (6-Pin Keyed Construction Core provided) Cylinder (Permanent Core Ordered Separately)
	73-*	Small Format 6-Pin Interchangeable Core SARGENT 4A, 4B keyway only. (Request control key separately) (Includes masterkeying, grand masterkeying)
	65-73-*	Lock provided to accept Uncombinated 6-Pin SFIC (Permanent) Core — (Packed Loose for field keying)
	65-73-7P-*	Lock provided to accept Uncombinated 7-Pin SFIC (Permanent) Core — (Packed Loose for field keying)
	73-7P-*	Small Format 7-Pin Interchangeable Core SARGENT 4A, 4B keyway only. (Not available with Studio Levers) (Includes masterkeying, grand masterkeying)
Keso & Keso F1	81-*	Lock provided with housings to accept Keso (83) & Keso F1 (F1-83-) removable cores. (Permanent Cores ordered separately)
	82-	Lock provided with SARGENT Keso Security Cylinder
	F1-82-	Lock provided with SARGENT Keso F1 Security Cylinder (Patented)
	83-*	Lock provided with SARGENT Keso Security Removable Core cylinder
	F1-83-*	Lock provided with SARGENT Keso F1 Security Removable Core cylinder (Patented)
	84-*	Lock provided with SARGENT Keso Construction Cores (Permanent Cores ordered separately)
Added Security	BR-	Bump Resistant Cylinder (Available with Conventional & Conventional XC Cylinders Only)
Less Cylinder	LC-	Less Cylinder - SARGENT supplies standard blocking rings for 1-1/8" Cylinders (For longer cylinders order collars / rings separately)
Schlage Keyways	SC-*	Schlage "C" Keyway Number 41 cylinder only, 0 bitted (2" (51mm) door thickness max. — centered)
	SE-*	Schlage "E" Keyway, Number 41 cylinder only, 0 bitted (2" (51mm) door thickness max. — centered)

* Options not available with 50 function locks

How to Order 7900 Series Mortise Locks

10-	79	71	12VDC		LN	MJ	15	RHR
Options*	Series	Function	Voltage		Roses/Escutcheons	Levers/Knobs	Finish	Hand
For all available options see Page 12 & 13	79 Mortise Lock	Pages 5-7 for Details	12VDC 24VDC		Standard Offering Page 2	Standards Levers & Knob Page 2,	Page 14	RHR
								RH
			Voltage must be specified for 70, 71, 72 & 73 Functions		Studio Offering Pages 2 & 3	Studio Levers Page 3 & 4		LHR
								LH

* Multiple options available
"Wrought Box Strike are specified with Option "WBS-"

Hardware Finishes Available

7900 Standard Trim	Studio Collection	ANSI/BHMA	Description
03	03	605	Polished brass, clear coated
04	04	606	Satin brass, clear coated
09	09	611	Polished bronze, clear coat
10	10	612	Satin bronze, clear coated
10B	10B	613	Oxidized bronze, oil rubbed
10BE	10BE	613E	Dark oxidized satin bronze — equivalent
10BL	10BL	614	Oxidized satin bronze, clear coat
14	14	618	Polished nickel, clear coat
15	15	619	Satin nickel, clear coat
20D	20D	624	Statuary dark bronze, clear coat
26	26	625	Polished chrome
26D	26D	626	Satin chrome
32	32	629	Polished stainless steel
32D	32D	630	Satin stainless steel

NOTES: Split finishes available (Order: outside finish/inside finish)
If inside and outside trim designs differ, please specify (Order: outside/inside trim)

Packaging

7955 x OBB	approx. 5.8 lbs. (2.6kg)/box	6 boxes/case
7955 x LW1BB	approx. 6.5 lbs. (2.9kg)/box	6 boxes/case

90143:E9/15/13

Handing Information & Security Screws
7900 Mortise Locks

Changing Lock Hand

Note: Handing of the lockbody:

1) The RED surface of the locking slide always faces the side of the door which will be locked. If it is not, change hand of locking slide (Step A)

2) The bevel (Angled surface on the latchbolt) must always face the strike. If it does not, change hand of latchbolt (Step B)

Door Handing

INSIDE
LEFT HAND   RIGHT HAND
OUTSIDE

INSIDE
LEFT HAND REVERSE BEVEL   RIGHT HAND REVERSE BEVEL
OUTSIDE

Door hand is determined by door swing when viewed from outside/secured (keyed) of door
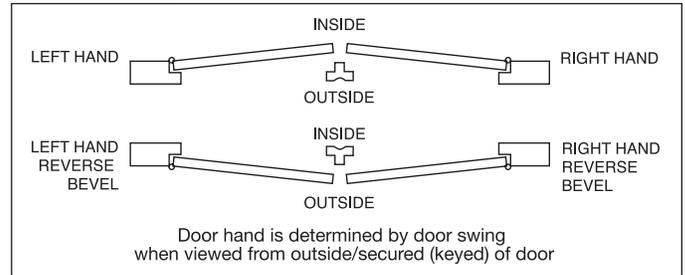
Step A

To change hand of <u>locking slide</u>

1. Turn lockbody to side NOT marked with RED locking piece.
2. Insert blade type screwdriver into locking piece slot.
3. Push locking piece toward front of lockbody and rotate until RED shows.
4. RED indicates locked side (outside).

Locking slide slot

Red color indicates locked side of door
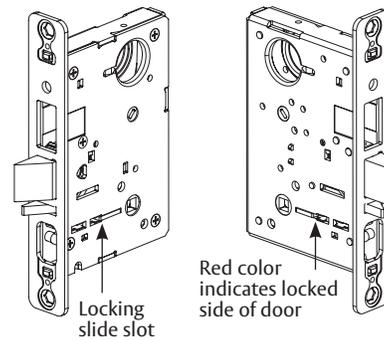
Step B

To change hand of latchbolt:

1. Remove the outside front by removing the two screws (as shown).
2. Depress inside front of lockbody on both sides of latchbolt.
3. Rotate the latchbolt by hand 180 degrees, so that the bevel of the latchbolt faces the strike.
4. Reattach the outside front with two screws.
5. The deadlatch is self adjusting.
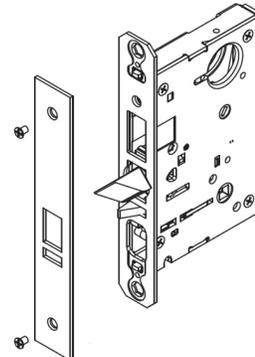
6 Lobe & Spanner Bit packs

Part Number	Descriptions
82-3855	6 Lobe Bit Pack 6 bits (sizes- T8, T9, T10, T15, T20, T25, T27) 9/32" Driver
82-3856	Spanner Bit Pack 5 bits (sizes- 6, 8, 10, 12, 14) 1/4" Driver

36- or 37- Option Security Screw Chart

Trim Designs	Functions																				
	04	15	16	24	25	26	37	38	43	45	50	55	65	66	70	71	72	73	93	94	95
O Roses	5	5	5	6	6	5	5	5	6	6	6	5	7	7	5	5	5	5	4	4	5
LW1/KW1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7
WT	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12

Note: 93 & 94 Function locks are not available with a security type screw on the door edge

2.01 MORTISE LOCKSETS

A. Mortise locks shall be 7900 Series as manufactured by SARGENT Manufacturing Company, New Haven, CT.

B. Locks shall meet or exceed the requirements of ANSI/BHMA A156.13 Series 1000, Operational Grade 1 with all standard trims.

C. Locks shall be easily re-handed without opening the lock body.

D. Locks shall comply with UL10C and UBC 7-2 positive pressure requirements.

E. Locks required for fire doors shall be listed by Underwriters Laboratories for ratings of A label (3 hours) and less, for doors up to 4'0" (1.2m) x 10' 0" (3.0m) and pairs of doors 8'0" (2.4m) x 8'0" (2.4m).

F. Construction:
    1. Lock functions shall be manufactured in a single-sized case.
    2. Lock cases shall be closed on all sides and back.
    3. Locks shall have field adjustable, beveled, armored front.
    4. Locks shall have a 3/4" (19mm) throw one-piece stainless steel latchbolt.
    5. Deadbolts, where specified, shall be full one inch (25mm) throw made of steel and have a hardened insert.

G. Locks shall have a 2-3/4" (70mm) backset, standard.

H. Strikes shall be non-handed with a curved lip.

I. To ensure proper alignment, trim, knobs or levers, shall be thru-bolted and fully interchangeable between rose and escutcheon.

J. Locks shall have brass 6-pin cylinder, standard.

K. Locks shall have a 5 year limited mechanical warranty, 2 year on electrical products.

SARGENT®

ASSA ABLOY

SARGENT Manufacturing Company
100 Sargent Drive, New Haven, CT 06511 USA
800-727-5477 • www.sargentlock.com

Founded in the early 1800s, SARGENT® is a market leader in locksets, cylinders, door closers, exit devices,
electro-mechanical products and access control systems for new construction, renovation, and replacement applications.
The company's customer base includes commercial construction, institutional, and industrial markets.

ASSA ABLOY is the global leader in door opening solutions, dedicated to
satisfying end-user needs for security, safety and convenience.

90143:E 9/15/2013