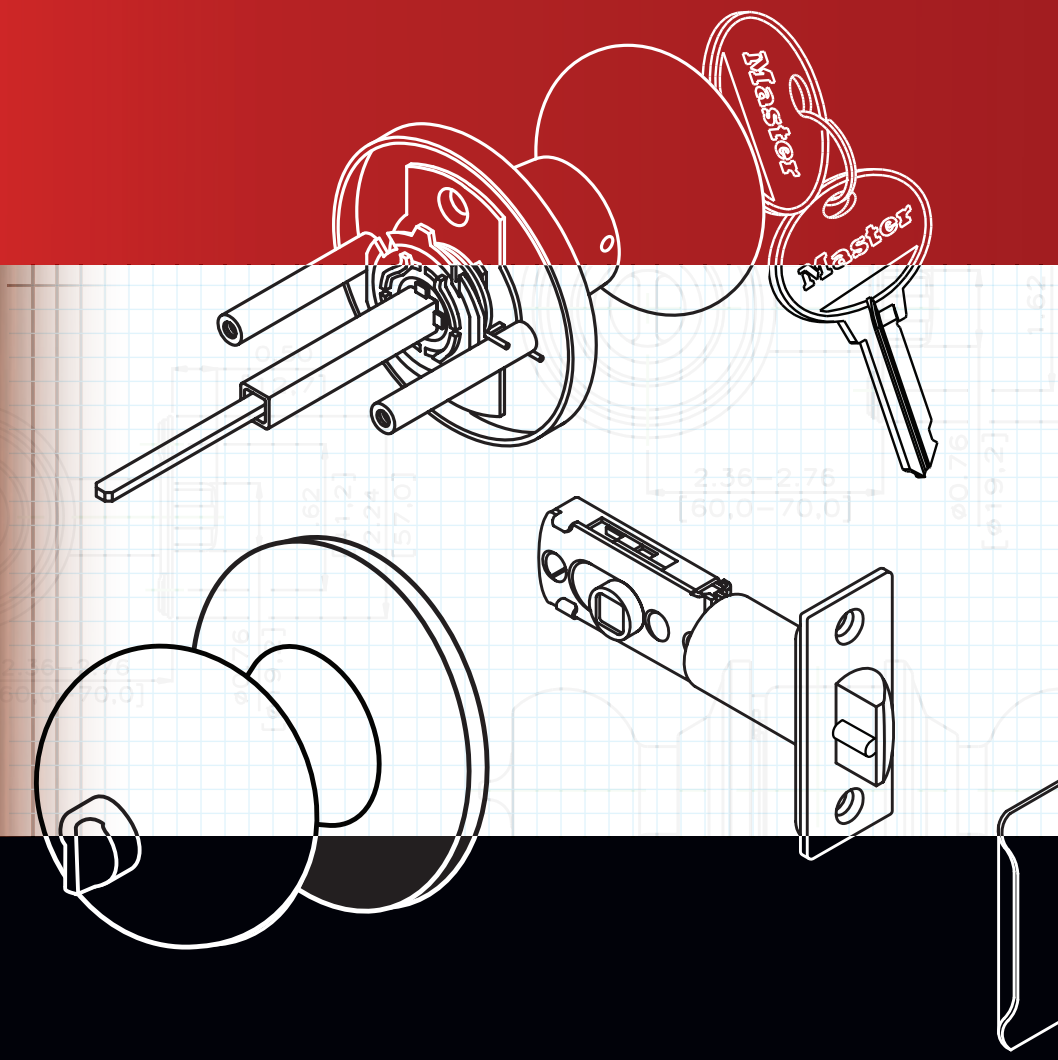

Master Lock®

Door Hardware Technical Manual

Version 4.12

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BumpStop® ADVANCED CYLINDER TECHNOLOGY

The BumpStop® advanced cylinder technology is standard equipment in all Grade 2 lock products. Because of the cylinder design, it cannot be offered as an option in the Grade 3 products.

One primary component of BumpStop® technology is a special stainless steel driver pin shown at the right. Only one of these special pins is required in a cylinder to make it bump resistant, but in some cylinders we actually place two to eliminate the potential for someone to develop a systematic method of defeating the BumpStop® technology.

Cylinders that are compatible with the BumpStop® pin have been specially manufactured to exacting specifications, and consequently, our BumpStop® pins may not be used effectively to prevent a bump attack in other cylinders. In fact, our BumpStop® pins may not be used in retrofit door hardware cylinders that were supplied by us prior to July 2008, or in other manufacturers' cylinders.

The current proposed ASTM standard for bump resistance has a highest grade level of 6, and to qualify for that level of resistance a number of cylinders must each successfully withstand 60 bump impacts without operating. Master Lock routinely subjects our test cylinders to 240 impacts without losing any of the bump resistance.

The location of the BumpStop® pin within the cylinder is a critical factor for the bump resistance. The last column of the table on the next page indicates which depths of cut must be associated with the location of the BumpStop® pin in the cylinder.

Cylinders keyed at our factory have the bible marked to indicate the month and year they were produced and a number indicating which chamber contains the BumpStop® pin(s). When rekeying, consult the table and relocate the BumpStop® pin in the appropriate pin chamber for your new combination.

Master Lock uses ITL key machines to produce door hardware keys to original manufacturer specifications. We also can take your existing bittings from a MK system and regenerate your entire system including all designed expansion. A copy of that expanded bitting list in both places allows you to select the exact keys you desire and be assured that they will be produced as you want them.

Because there may not be a constant cut of the correct depth for the specific brand, some MK system locks for existing systems cannot be BumpStop® compatible.

Master Lock also sells these cylinders Zero Bitted if you prefer to do your own keying. In those cases you can use the part number map on page 16 to determine the correct part number for the keyway you desire.

The BumpStop® pin will always be located in the 5th pin chamber in Zero Bitted locks for your convenience. Simply relocate the pin to the appropriate pin chamber for a compatible depth of cut as shown in the table on page 3. Zero Bitted cylinders will not have markings on the bible for the BumpStop® pin location.

DOOR HARDWARE CODES

Naming Convention

Two numbers = Keyway, one letter = # of pins V = 6/T = 5, four or five numbers = blind code.

Brand	Number of Pins	First Code	Last Code	ITL#	BumpStop® Compatible Cuts
Arrow®	5	10T1001	10T5668	027	0 – 1 – 2
Corbin® 59A1	5	01T1001	01T6404	113	1 – 2 – 3
Corbin® 59A1	6	01V10001	01V42433	113	1 – 2 – 3
Corbin® 60	5	29T1001	29T9252	126	0 – 1 – 2
Corbin® 60	6	29V10001	29V61173	126	0 – 1 – 2
Corbin® Russwin® L4	5	07T1001	07T3420	122	1 – 2
Corbin® Russwin® L4	6	07V1001	07V9995	122	1 – 2
Harloc®, Lori® L200, Sargent® S, Sargent® U	5	02T1001	02T6399	388	1 – 2 – 3
Kwikset®, Master®	5	12T1001	12T3658	265	1 – 2 – 3
Lockwood®	5	08T1001	08T9252	266	0 – 1 – 2
Lockwood®	6	08V10001	08V61173	266	0 – 1 – 2
Lori® 80	5	80T1001	80T6399	271	1 – 2 – 3
Lori® 90	6	90V10001	90V42432	271	1 – 2 – 3
Master®/Dexter®	5	32T1001	32T2728	142	0 – 1 – 2
Russwin® 981/852	5	11T1001	11T3221	378	0 – 1
Russwin® D1	5	30T1001	30T9252	379	0 – 1 – 2
Russwin® D1	6	30V10001	30V61173	379	0 – 1 – 2
Sargent® LA-LC	5	36T1001	36T6399	388	1 – 2 – 3
Sargent® LA-LC	6	36V10001	36V42432	388	1 – 2 – 3
Sargent® RA-RC	5	70T1001	70T6399	388	1 – 2 – 3
Sargent® RA-RC	6	70V10001	70V42432	388	1 – 2 – 3
Schlage® C, Schlage® P	5	04T1001	04T9252	391	0 – 1 – 2
Schlage® C, Schlage® P	6	04V10001	04V61173	391	0 – 1 – 2
Schlage® E	5	34T1001	34T9252	391	0 – 1 – 2
Schlage® E	6	34V10001	34V61173	391	0 – 1 – 2
Segal®	5	27T1001	27T3420	395	0 – 1 – 2
Weiser®	5	13T1001	13T9252	167	0 – 1 – 2
Weslock®	5	33T1001	33T9252	468	0 – 1 – 2
Yale® 8	5	03T1001	03T9252	476	0 – 1 – 2
Yale® 8	6	03V10001	03V61173	476	0 – 1 – 2
Yale® GA	5	15T1001	15T9252	476	0 – 1 – 2
Yale® GA	6	15V10001	15V61173	476	0 – 1 – 2

1176 Compatible Keyway	1145 Compatible Keyway
Use cuts 1, 2 or 3	Use cuts 0, 1 or 2

NOTE: From time to time customers will order Master Keying parameters, and in those cases, a special bitting list will be sent to the manufacturing facility along with the order.

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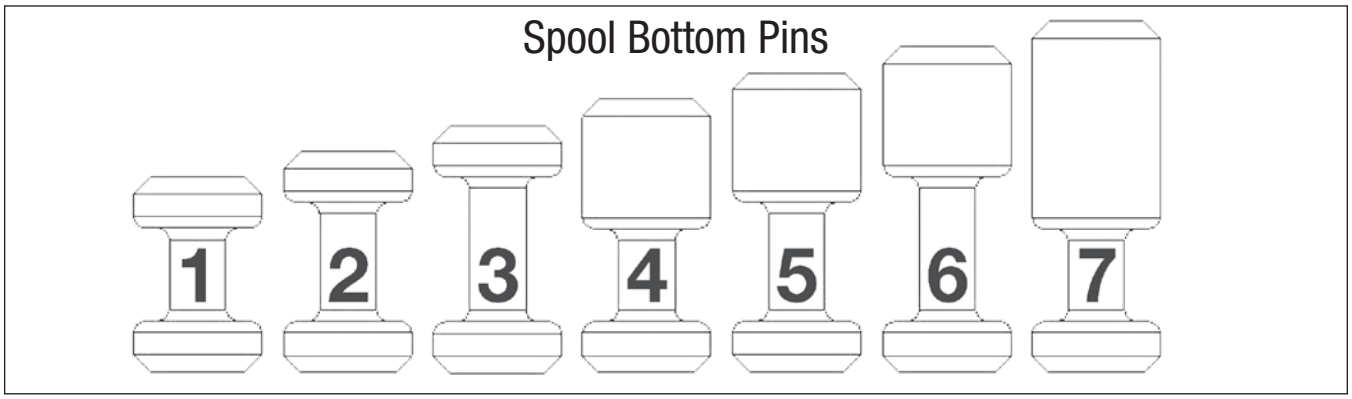
The Grade 2 residential products are available only with a default keyway compatible with an Ilco 1176 key and an appropriate pinning kit. A second keyway is planned and will be compatible with an Ilco 1145 or 1145A key and an appropriate pinning kit. When available, the 1145 compatible keyway may be specified by adding D045 or D046 to the product part number.

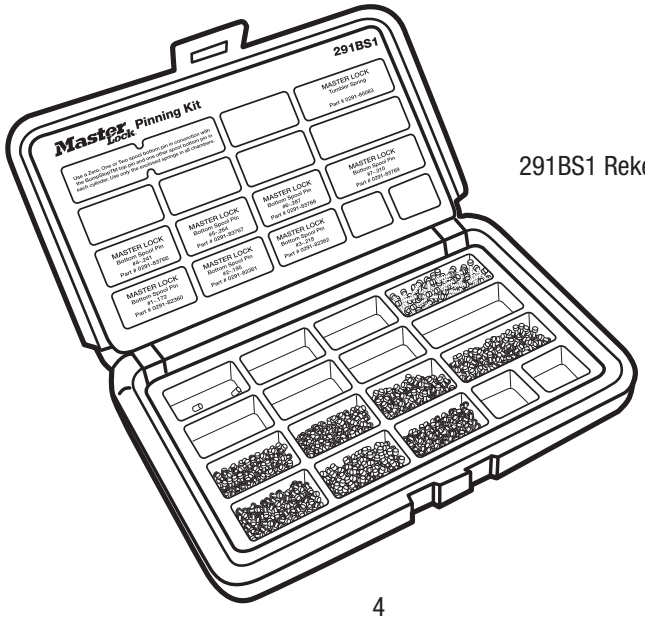
There are some special requirements associated with the BumpStop® pins used in these products. Because of the PVD finish used on the cylinders, the BumpStop® technology requires the use of a spool bottom pin in conjunction with the BumpStop® pin for the 1176 compatible keyway. A single BumpStop® pin is required to make the lock bump resistant, but at times we install a second one in some cylinders to eliminate the potential for someone to develop a systematic method of defeating the BumpStop® technology.



The same principle applies to the use of the spool bottom pins associated with the BumpStop® pin. In order to eliminate the potential for someone to develop a systematic method of defeating the BumpStop® technology we install a second spool bottom pin in every cylinder. That second spool bottom pin does not have to be associated with a BumpStop® pin. Our supplemental pin kit 291BS1 consists of spool bottom pins of every potential size along with the correct driver spring for use in the cylinder.

The 1145/1145A compatible keyway does not require the use of spool bottom pins and standard .115" diameter pin tumblers may always be used in those cylinders. The table below indicates which cut depths/bottom pins must be associated with the BumpStop® pin in the cylinder.

1176 Compatible Keyway	1145 Compatible Keyway
Use cuts 1, 2 or 3	Use cuts 0, 1 or 2



291BS1 Rekeying Kit

The NightWatch® mechanism consists of a simple mechanical deadbolt within the thumb turn mechanism. The inside view of the thumb turn assembly here displays the interlocking features. The spindle of the thumb turn has two depressions cast into it and those depressions match two projections from the mounting plate when the spindle is turned 90° to extend the bolt.

The movable button on the bottom of the mounting plate can be pressed upward, and that allows the thumb piece to be pulled outward and engage the interlocking features. Shown (left) is a side view of the spindle and mounting plate. Note the spindle deadlock and the groove in the spindle.

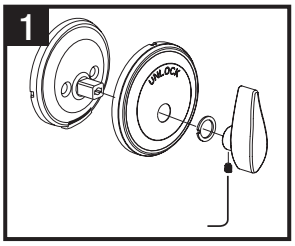
The button at the bottom of the mounting plate raises the spindle deadlock out of the groove in the spindle and allows it to be pulled outward. When it is pulled outward the two parts interlock and prevent the thumb turn from being turned at all unless it is first pushed inward.

Because the cylinder tailpiece also enters the spindle, when the spindle is immobilized, the tailpiece is too, and the cylinder cannot be used to operate the lock.

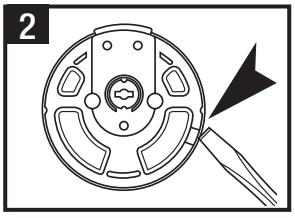
In the combination deadbolt, the dial mechanism is connected to a cam that turns the tailpiece, and this also is rendered inoperable.

The NightWatch® function is only available in single cylinder deadbolts and combination deadbolts.

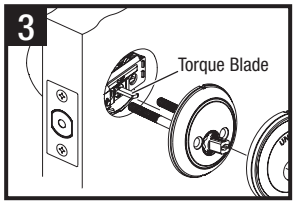
Install interior lever assembly — NightWatch deadbolt



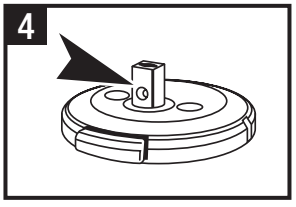
First, use the Allen wrench provided in the hardware package to remove thumb turn, washer and separate rose from rose plate. (see below)



To separate the rose plate from the base, locate the notch on the back side of the base (the cover edge extends above the base in the notch area) and use a screwdriver to apply pressure to the edge of the rose cover separating it from the base.

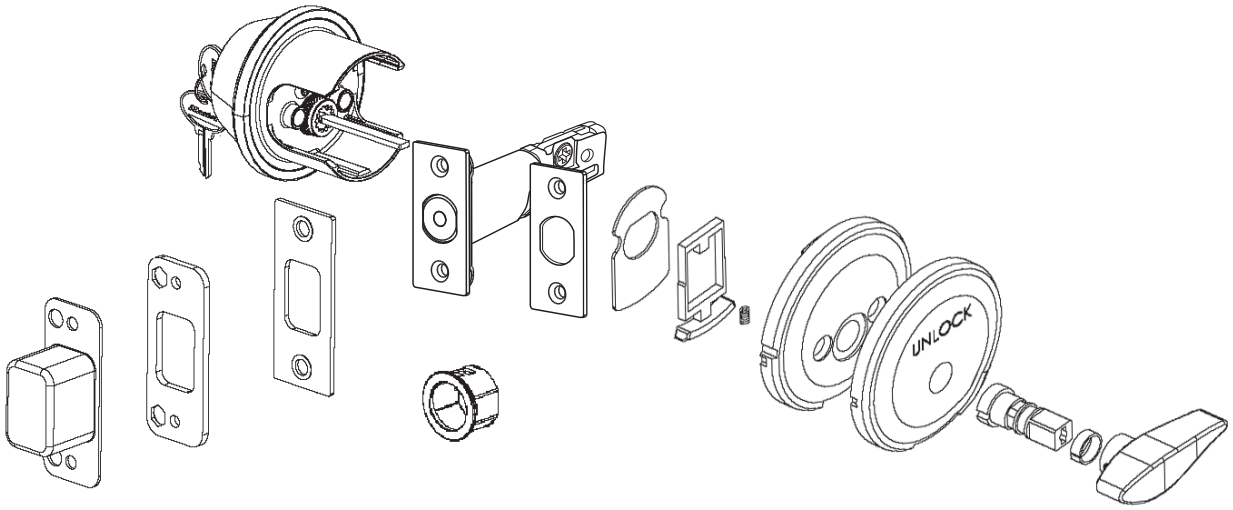


To install plate, align torque blade with turn piece assembly, insert screws through plate, through latch and into the threaded holes in the exterior housing. Tighten screws. Snap rose onto rose plate. Attach thumb turn (see below) and tighten set screw with Allen wrench.



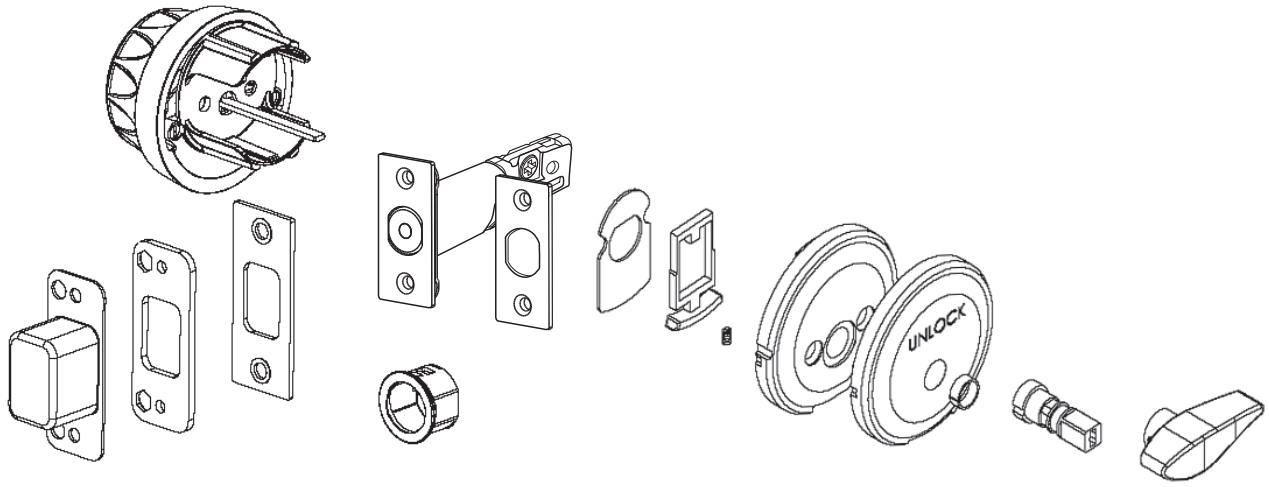
When you reattach the thumb turn, be sure that the recess in the spindle is pointing down. The set screw projects into this recess when tightened.

Standard NightWatch® Deadbolt with BumpStop® **Grade 2 Residential**



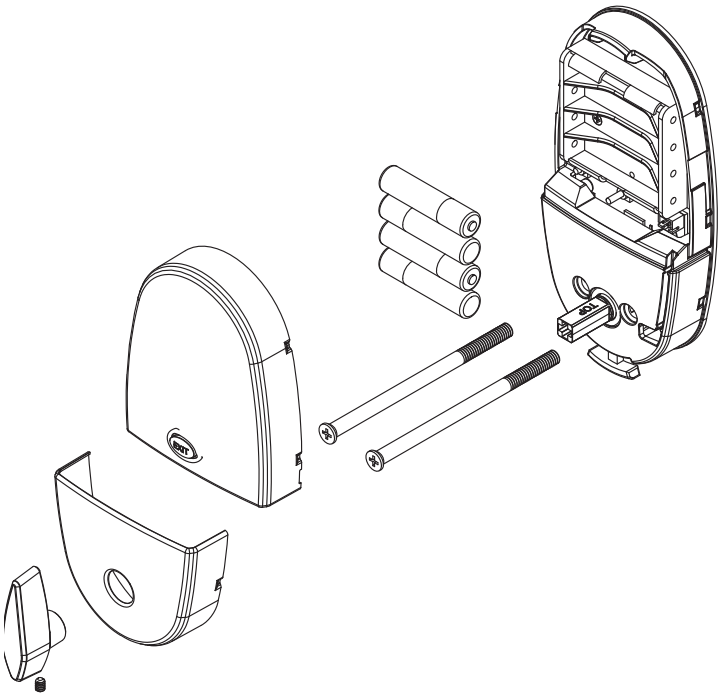
Part Number		Product Description
Retail	**Boxed**	
DSRN0603P	DSNRN0603PKA4	NightWatch, Single Cylinder, Polished Brass with BumpStop®
DSNRN0605	DSNRN0605KA4	NightWatch, Single Cylinder, Antique Brass with BumpStop®
DSNRN0615	DSNRN0615KA4	NightWatch, Single Cylinder, Satin Nickel with BumpStop®
	DSRNSD03PD045	NightWatch, Single Cylinder (Schlage C Keyway), Polished Brass with BumpStop®
	DSRNSD05D045	NightWatch, Single Cylinder (Schlage C Keyway), Antique Brass with BumpStop®
	DSRNSD15D045	NightWatch, Single Cylinder (Schlage C Keyway), Satin NIckel with BumpStop®
	DSRNSD12PD045	NightWatch, Single Cylinder (Schlage C Keyway), Aged Bronze with BumpStop®

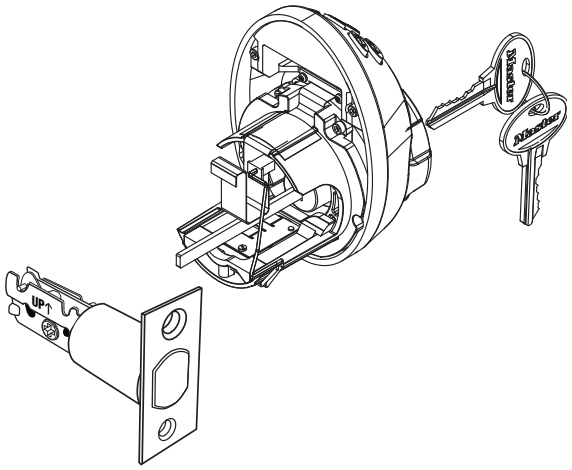
Combination NightWatch® Deadbolt **Grade 2 Residential**

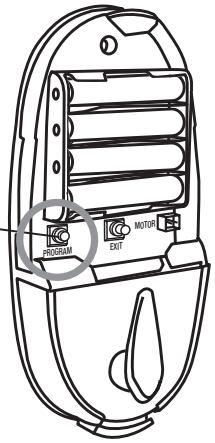


Part Number		Product Description
Retail	**Boxed**	
DSRN1003P	DSNRN1003PBOX	NightWatch, Single Cylinder, Polished Brass
DSRN1005	DSNRN1005BOX	NightWatch, Single Cylinder, Antique Brass
DSRN1015	DSNRN1015BOX	NightWatch, Single Cylinder, Satin Nickel

Part Number		Product Description
Retail	**Boxed**	
DSKP0603PD	DSKP0603P	NightWatch, Electronic Keypad, Polished Brass
DSKP0605D	DSKP0605	NightWatch, Electronic Keypad, Antique Brass
DSKP0615D	DSKP0615	NightWatch, Electronic Keypad, Satin NIckel
DSKP0612PD	DSKP0612P	NightWatch, Electronic Keypad, Aged Bronze







Keypad Deadbolt – Quick Reference for Programming Function

Step 1 Remove battery cover – Press and hold PROGRAM button until blue light flashes.

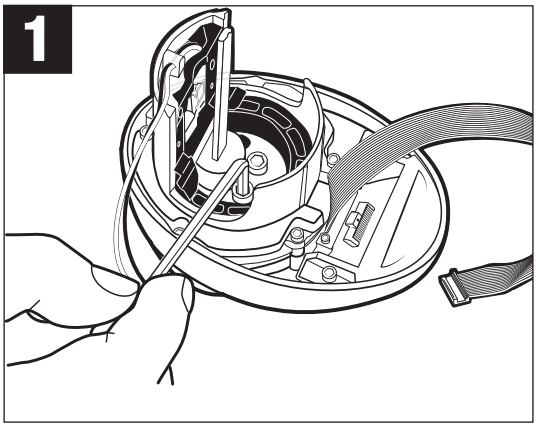
Step 2 Enter the data in the row below based on what you want to do.

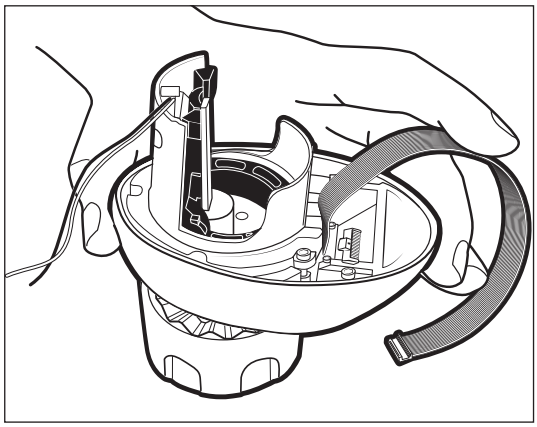
ENTER (Blue Light)
ENTER (Green Light)
ENTER (Red Light)

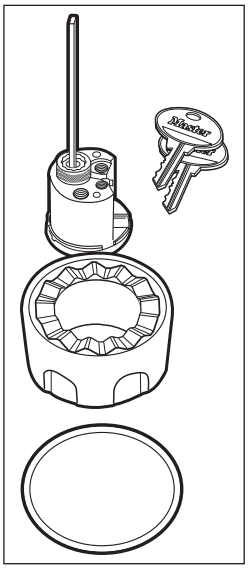
Steps >	2a	2b	2c	2d	2e	2f	2g	
Function	**Enter Admin Code** (from page 2 of User Guide)	**Press Function Button**	**Press Enter**	**Enter**	**Press Enter**	**Data Confirmaton**	**Press Enter**	**Programming Completed**
Add a User Code	Admin Code	1-2	ENTER	New 4 to 10 digit User Code	ENTER	New 4 to 10 digit User Code	ENTER	ENTER
Remove a User Code	Admin Code	1-2	ENTER	User Code to be removed	ENTER	User Code to be removed	ENTER	GREEN light is good RED light, restart at step 1
Change Admin Code	Admin Code	1-2	ENTER	New 6 digit Admin Code	ENTER	New 6 digit Admin Code	ENTER	ENTER
Delete All User Codes	Admin Code	1-2	ENTER	Current Admin Code	ENTER	ENTER GREEN light is good / RED light, restart at step 1		ENTER
Deactivate/Reactivate All user codes	Admin Code	1-2	ENTER	ENTER GREEN light is good / RED light, restart at step 1				ENTER
	We recommend confirming changes by testing code after programming is complete							

Electronic Keypad NightWatch® Deadbolt Rekeying Grade 2 Residential

1



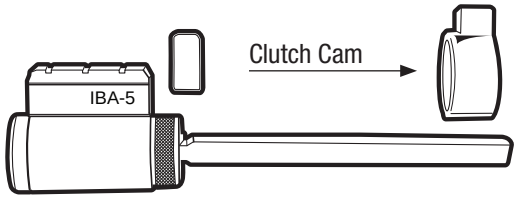


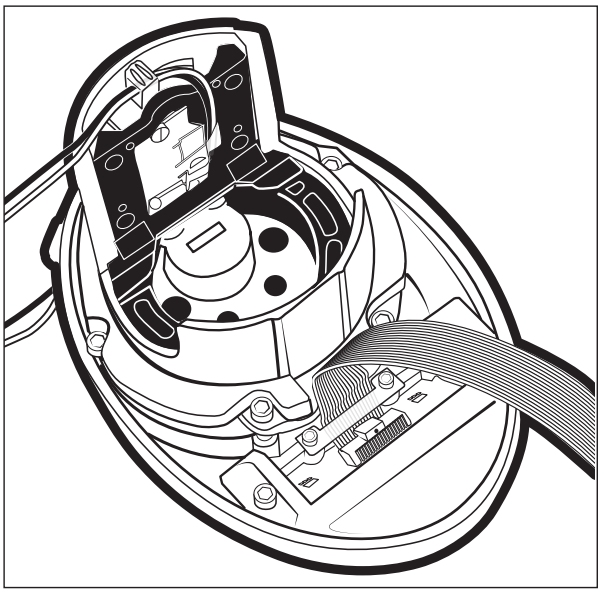


The cylinder housing is mounted via two screws in the exterior housing.

These screws have a thread locking substance on them. You will need to use the longer side of your hex wrench to loosen them. They are around 7/8" long and use a 9/64" hex. With the screws removed, lift the main housing to separate it from the trim.

2

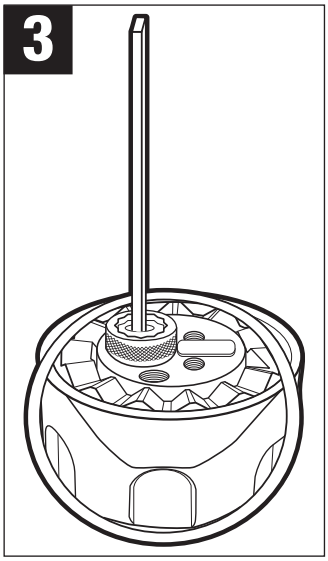




The cylinder bible has a spacer on the end. There is also a wave washer between the trim and the housing. Any original brand cylinder that has the same footprint can be used in place of this cylinder, just be sure to use the spacer and tailpiece from this cylinder.

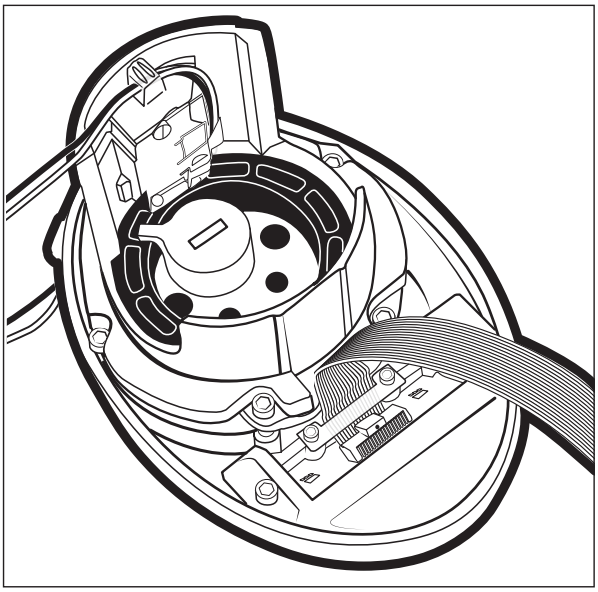
Remove the black Clutch from the external housing to reveal the cam slot in the tailpiece activation mechanism. Put the clutch cam in place and replace the clutch.

3



Place the wave washer on the trim before mounting to the housing. The next step is to feed the tailpiece through the slot in the clutch cam and then tighten the screws to reassemble.

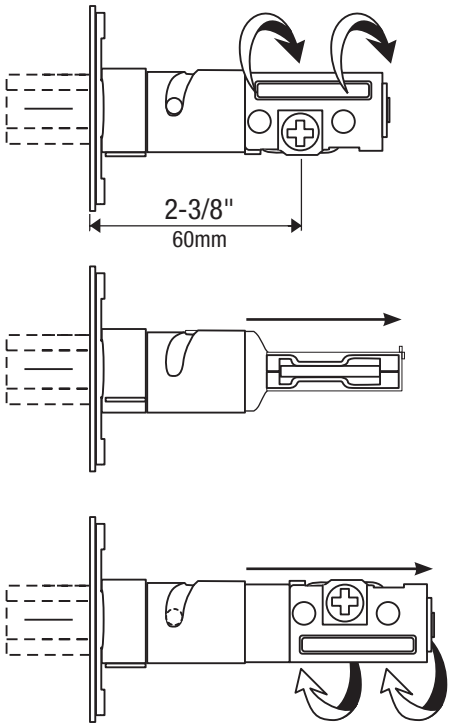
Looking at the tailpiece orientation from the back of the housing, it should be horizontal for mounting on a Right Hand door and vertical for a Left Hand door. Do not forget to pull the cable and wiring harness excess to the inside of the door when remounting. If not pulled there is a potential for the wiring to prevent free movement of the clutch.



Deadbolt Information **Grade 2 Residential**

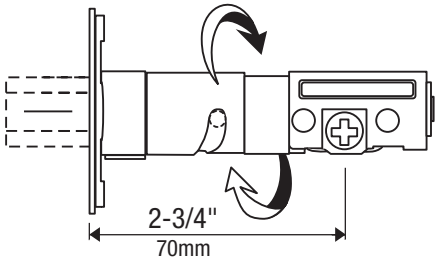
The deadbolt is available with a single or double cylinder function and may use any of the Master Lock Door Lock type BumpStop® cylinders, a Kaba Lori 1599 cylinder or any other 'size compatible' cylinder. The bolt has an adjustable backset for 2 3/8" or 2 3/4".

Adjust the latch to match the backset dimension on your door



To change backset:

Changing your backset is as simple as gripping and turning the back portion of the latch. Turn clockwise to extend to 2-3/4" or counter-clockwise to return to 2-3/8". As the back rotates, it will 'spiral' in or out, as the mechanism follows the machined groove.



When extending to 2-3/4", be sure to flip the entire latch assembly before placing it in the door. The tailpiece receiver hole (⊕)should always be postioned at the bottom of the assembly.

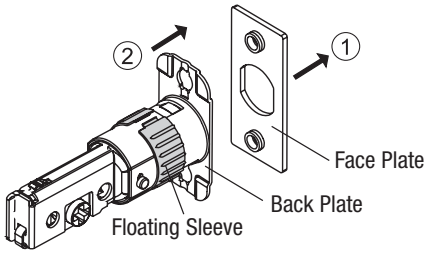
Combination NightWatch® **Grade 2 Residential**

The bolt has changeable face plates to allow square corners, radiused corners or a drive-in face plate.

Attach the latch face that matches the mortise in the edge of your door

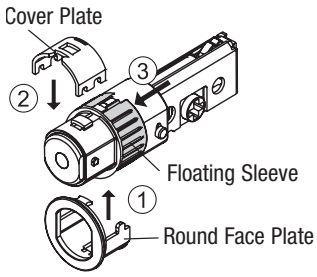
To change latch faces:

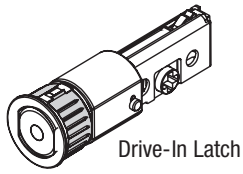
1. Use a flat screwdriver to separate the face plate.
2. Snap selected latch face onto back plate.



For drive-in installation:

1. Put the round face plate into latchbolt as illustrated.
2. Press the cover plate to lock in with latch and round face plate.
3. Push the floating sleeve forward until it is positioned at the latch.





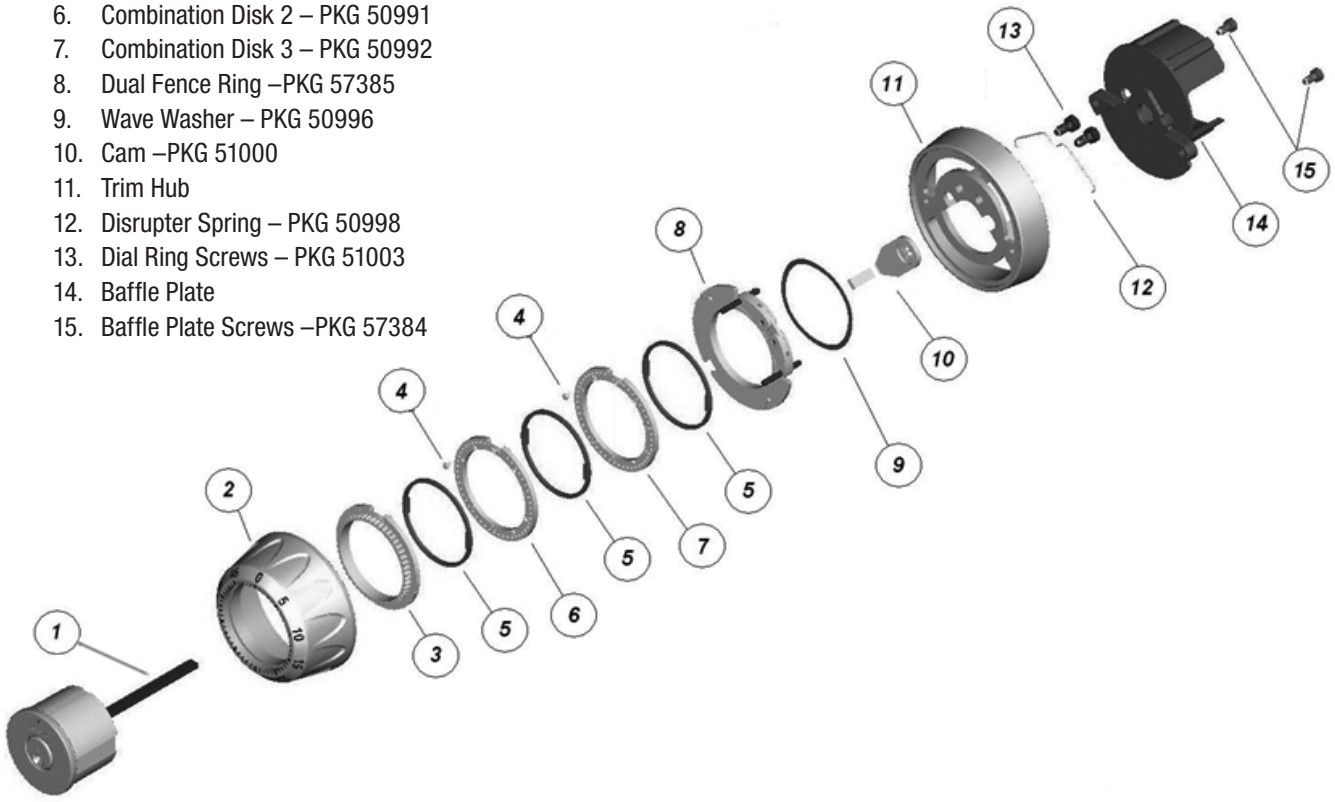
To change from a square to radiused corner face plate, pry off the existing face plate and then attach the new one. Face plates have a ferrule that is slightly swaged to hold it in place. Use a small screwdriver or chisel to make prying easier, then swage the new face plate in place.

If changing to a drive-in bolt, pry off the existing face plate. Then:

- Spread the floating sleeve and move it away from the back plate
- Push in on the back plate and turn counter-clockwise, then pull off
- Place the round face plate on the bolt
- Move the floating sleeve forward

Below is the exploded view of the cylinder/dial assembly. You will find instructions for decoding an existing combination and for encoding a new combination immediately after the exploded view. Two parts below are critical to lock operation: Item 4, the fly- PKG50994 and Item 12, the disruptor spring – PKG50998. Component parts are available.

1. Cylinder Tailpiece – PKG 50975
2. Dial
3. Drive Cam
4. Fly – PKG50994
5. Anti-friction Spacer –PKG 50993
6. Combination Disk 2 – PKG 50991
7. Combination Disk 3 – PKG 50992
8. Dual Fence Ring –PKG 57385
9. Wave Washer – PKG 50996
10. Cam –PKG 51000
11. Trim Hub
12. Disrupter Spring – PKG 50998
13. Dial Ring Screws – PKG 51003
14. Baffle Plate
15. Baffle Plate Screws –PKG 57384

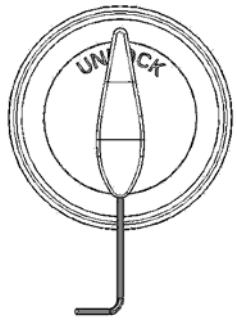
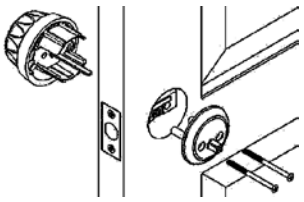
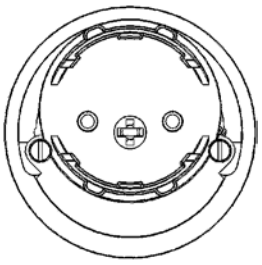
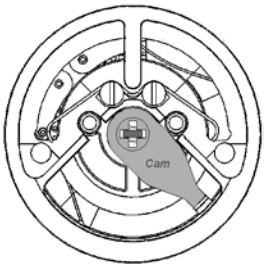
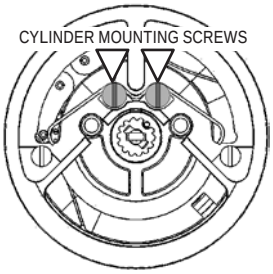
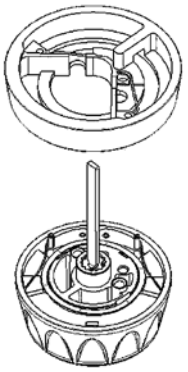
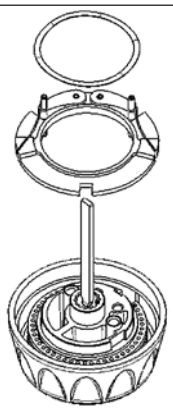
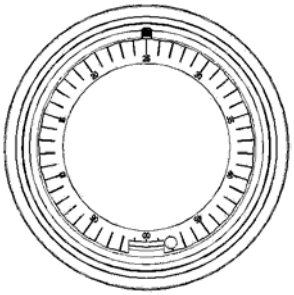


Because of the fixed fly design, a certain amount of calculation can be required when decoding or encoding.

This software has been tested on Windows® XP and Vista® and runs correctly. It may be compatible with some earlier versions of Windows® but has not been tested. To complete the software installation, you must have the free Microsoft program '.net framework' installed.

The following instructions also are included in a help file in the software.

Decode

<table>
<tr>
<td> 
Use a 1/16" hex wrench to remove thumb turn</td>
<td> 
Remove inside trim and dismount lock from door</td>
<td> 
Loosen two screws and remove baffle plate from dial assembly</td>
<td> 
Lift cam and remove from cylinder tailpiece</td>
</tr>
<tr>
<td> 
Loosen the two dial ring/ cylinder mounting screws</td>
<td> 
Remove dial ring with disrupter spring</td>
<td> 
Remove the wave washer and the dual fence ring</td>
<td>
GENTLY lift dial ring from cylinder</td>
</tr>
<tr>
<td>
Remove a spacer washer and disk 3; DO NOT disturb disk 1</td>
<td>
Remove a spacer washer and disk 2; DO NOT disturb disk 1</td>
<td colspan="2"> 
A groove is cast into the interior of the dial ring. Determine the number aligned with that groove and record it in the 'Set to Disk 1' column of the worksheet</td>
</tr>
</table>

Determine the numerical location of the fly in disks 2 and 3 and record them in the 'Set to' column in the worksheet. Note that the setting of the first disk is the third number of the combination.

Simple mathematics are required to figure out the first and second combination numbers. Next, we will calculate the combination for the disk locations shown.

DECODING

	Disk	Set to	Formula	Combination	
The disk that contacts the dial	**1**	**14**	**Combination = where set**	**14**	**3**
The middle disk	**2**	**25**	Add 1 & 2 plus 1, subtract 50 until answer is less than 50		**2**
The disk that comes out first	**3**	**17**	Subtract 50 from Total until answer is less than 50		**1**
	Add	6			
	Total =				

To determine the second number of the existing combination, you must add settings one and two plus 1; in this case, 14 + 25 + 1 = 40. Because the total isn't 50 or more, you don't need to go further. If the total had been 50 or more, you would need to subtract 50 until the answer is less than 50. Write the answer in the combination 2 box.

DECODING

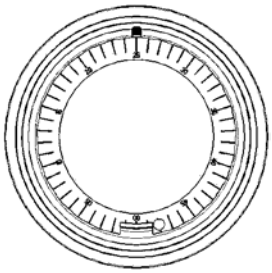
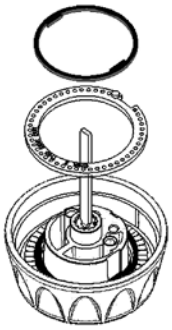
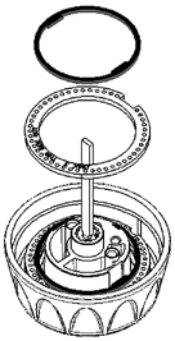
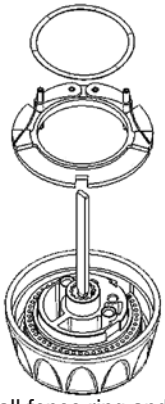
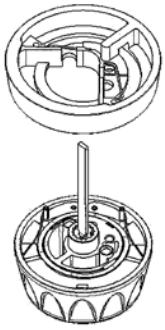
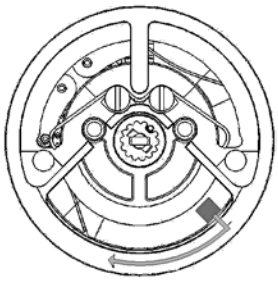
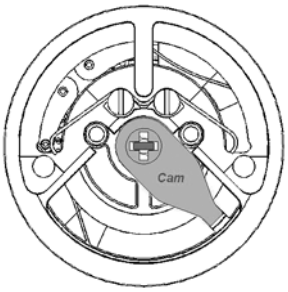
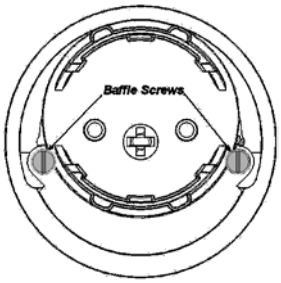
	Disk	Set to	Formula	Combination	
The disk that contacts the dial	**1**	**14**	**Combination = where set**	**14**	**3**
The middle disk	**2**	**25**	Add 1 & 2 plus 1, subtract 50 until answer is less than 50	**40**	**2**
The disk that comes out first	**3**	**17**	Subtract 50 from Total until answer is less than 50		**1**
	Add	6			
	Total =				

For the first number of the combination, add the set to column to get a total, e.g. 14 + 25 + 17 + 6 = 62. Because the total is 50 or more, subtract 50 until the answer is less than 50. 62 – 50 = 12. That is the first combination number and may be written into combination box 1.

DECODING

	Disk	Set to	Formula	Combination	
The disk that contacts the dial	**1**	**14**	**Combination = where set**	**14**	**3**
The middle disk	**2**	**25**	Add 1 & 2 plus 1, subtract 50 until answer is less than 50	**40**	**2**
The disk that comes out first	**3**	**17**	Subtract 50 from Total until answer is less than 50	**12**	**1**
	Add	6			
	Total =	**62**			

Use the following steps to reassemble the lock.

 Ensure that drive disk 1 has not been moved from the decoded position and place it over the cylinder	 Install a spacer washer, disk 2 and another spacer washer	 Install disk 3 and another spacer washer	 Install fence ring and wave washer
 Install dial ring, making sure wave washer is centered and disrupter spring is correctly positioned	 Set handing by moving cam slot to bolt edge side and make tailpiece horizontal	 Reinstall cam	 Attach baffle plate and mount lock on door. Try the combination to lock and unlock to verify the decoding

Unlike a safe, this combination is applied three times clockwise to 12, two times counterclockwise to 40 and one time clockwise to 14. At that point, you should feel the fence enter the gate and then may turn the dial in the direction required to throw or retract the bolt.

Encoding a lock to a new combination follows the same disassembly and reassembly steps but uses different calculations to determine fly locations on the various disks. As you can see here, the worksheet for encoding is different also.

ENCODING

	Disk	Set to	Formula		Combination
The disk that contacts the dial	**1**		**Align with Dial Index**		**3**
The middle disk	**2**		Second number minus 1. Then subtract third number if less than zero, add 50 until between 0 and 49.		**2**
The disk that comes out first	**3**		Add set positions for disks 1 and 2 plus 6. Subtract that from combination 1. If less than zero, add 50 until between zero and 49.		**1**

There are some mechanical limitations that result in forbidden combinations:

- Disk 2 must be set on 2 thru 47 as positions 0, 1, 48 and 49 do not exist
- Disk 3 cannot be set on 0, 1 or 49 as those positions do not exist

The example below will calculate the drive disk and fly locations for a new combination of 18-25-38. The first step is to write the combination into the worksheet and automatically set the drive disk to the third number.

ENCODING

	Disk	Set to	Formula	Combination	
The disk that contacts the dial	**1**	**38**	**Align with Dial Index**	**38**	**3**
The middle disk	**2**		Second number minus 1. Then subtract third number if less than zero, add 50 until between 0 and 49.	**25**	**2**
The disk that comes out first	**3**		Add set positions for disks 1 and 2 plus 6. Subtract that from combination 1. If less than zero, add 50 until between zero and 49.	**18**	**1**

To calculate the fly location for disk 2 we must take the second number of the combination and subtract 1. For the example, that is 25 – 1 = 24. Then the third number also should be subtracted from that answer: 24 – 38 = -14. Because that answer isn't between 0 and 49, we must add 50 until it is: -14 + 50 = 36. The answer is the location of the fly on disk 2 and should be written in the worksheet.

ENCODING

	Disk	Set to	Formula	Combination	
The disk that contacts the dial	**1**	**38**	**Align with Dial Index**	**38**	**3**
The middle disk	**2**	**36**	Second number minus 1. Then subtract third number if less than zero, add 50 until between 0 and 49.	**25**	**2**
The disk that comes out first	**3**		Add set positions for disks 1 and 2 plus 6. Subtract that from combination 1. If less than zero, add 50 until between zero and 49.	**18**	**1**

The disk 3 calculations require adding the set positions for disk 1 and 2 plus 6, e.g. 38 + 36 + 6 = 80. That answer must be subtracted from combination number 1: 18 – 80 = -62. Because the answer is not between 0 and 49, you must add 50 until it is: -62 + 50 = -12; -12 + 50 = 38. Write the answer in the worksheet.

ENCODING

	Disk	Set to	Formula	Combination	
The disk that contacts the dial	**1**	**38**	**Align with Dial Index**	**38**	**3**
The middle disk	**2**	**36**	Second number minus 1. Then subtract third number if less than zero, add 50 until between 0 and 49.	**25**	**2**
The disk that comes out first	**3**	**38**	Add set positions for disks 1 and 2 plus 6. Subtract that from combination 1. If less than zero, add 50 until between zero and 49.	**18**	**1**

The next step is physical relocation of disk 1 so that the number 38 is aligned with the groove cast into the dial ring. Next the flys must be moved on disks 2 and 3.

That can be accomplished by firmly gripping the fly and pulling it from the disk while rocking it forward and back. The fly is pressed into place and should not be hard to relocate. Place it in the newly determined location and then press into place.

Use the reassembly directions given earlier to reassemble the lock and remount on the door. Operate the new combination with the door open to throw and retract the bolt.

Rekeying

Rekeying the key operated cylinder may be accomplished using a standard pinning kit and the BumpStop® procedures related on pages 2, 4 and 33. Rekeying the cylinder only requires removal of the baffle plate and cam to access the screw-on retainer cap for the plug. Remove the cap, cap pin and spring, then use a follower to remove the plug.

Rekey as desired and then reassemble. Always check the bible of the cylinder to ensure that there aren't master pins being left in the cylinder when rekeying and to reposition the BumpStop® pin if your new combination doesn't have a compatible bitting in the same chamber as the last combination.

The Master Lock software program available for locksmiths will do the encoding and decoding calculations for you. It is not recommended for the do-it-yourself end user but can be a valuable tool for the locksmith. For some computers, you may need to get a free upgrade from Microsoft called '.net framework' to be able to install the software. Enter the link below on your browser to access the program for installation.

Grade 2 Commercial

The Grade 2 Commercial products use a universal cylinder similar to a Kaba Lori 1599. Extra cylinders may be ordered and used for retrofit when a customer's existing locks need to be upgraded with our BumpStop® advanced cylinder technology.

Ordering cylinders is a simple process using the DL part number map below.

For BumpStop® pinning information, consult the table and information on pages 2, 3 and 4. All of these cylinders may be keyed with standard bottom pins found in aftermarket pinning kits for .115" diameter pin tumblers.

DL045KD

Door Hardware Cylinder w/Cap Retainer

Keyway

Manufacturer's Brand Name			
Arrow®	10	Russwin® D1	30
Corbin® 59A1-2	01	Sargent® LA-LC*	36
Corbin® 60	29	Sargent® RA-RC*	70
Corbin® Russwin® L4	07	Sargent® S*	02
Falcon® 1573, 1577*	14	Sargent® U*	02
Harloc® SE-1*	02	Schlage® C	04
Kwikset®*	12	Schlage® E	34
Lockwood®	08	Schlage® P	28
Lori® L200*	02	Segal® 9.265	27
Lori® Locksmith 80	80	Weiser®*	13
Loricentric® 90	90	Weslock®	33
Master®/Dexter® 67*	32	Yale® 8	03
Russwin® 981/852	11	Yale® GA	15
		Master Lock® EDGE® System (Available with 4 or 6 pins only)	200WP

Number of pins
- 4 – four**
- 5 – five
- 6 – six

Keying Specification

KD	–	Keyed Different
KA	–	Keyed Alike
KZ	–	Zero Bitted
KDMK	–	KD Master Keyed
KAMK	–	KA Masker keyed
UN	–	Uncombinated**

* Indicates a composite keyway that accepts more than one key section. Example: Keyway 02 accepts the Sargent® S, Sargent® U, and Lori® L200 keys.

** Exclusively available for the Master Lock EDGE™ Key Control System only.

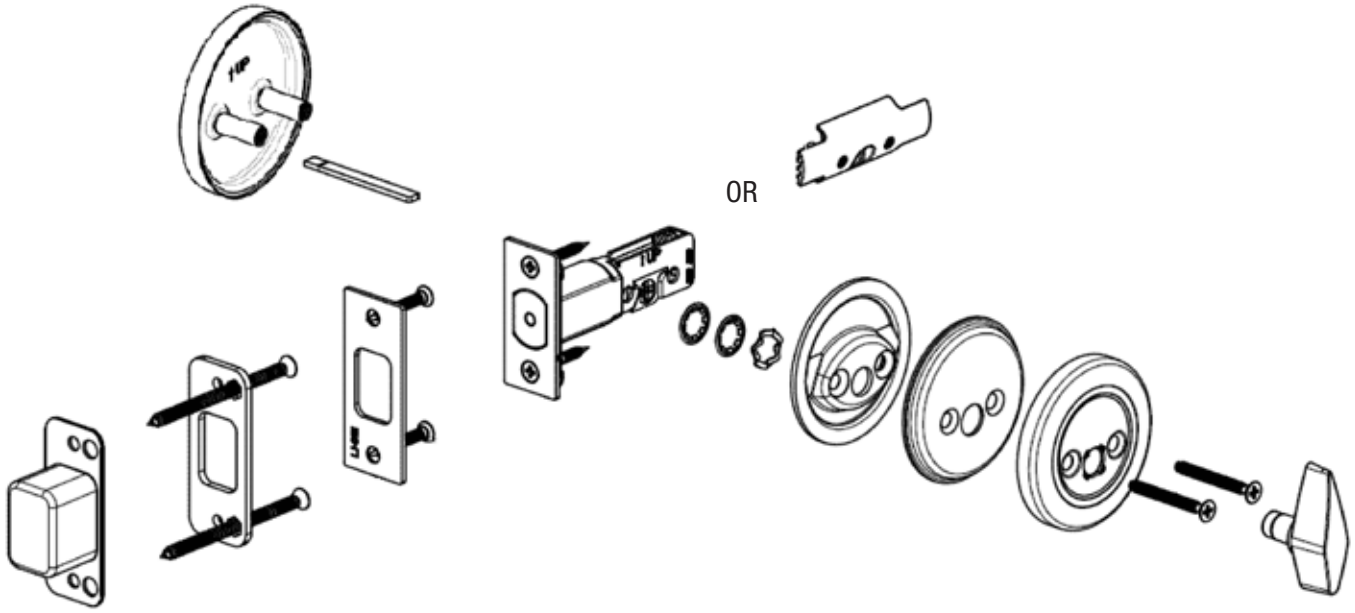
All marks are registered trademarks of their respective owners

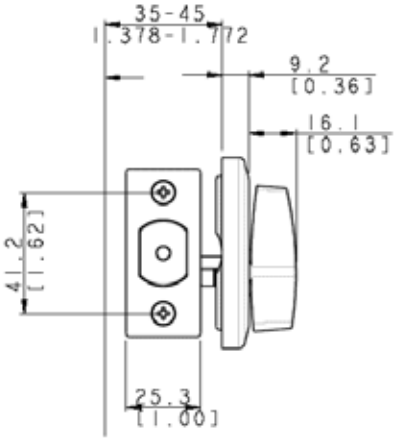
Single-Sided/Communicating Door

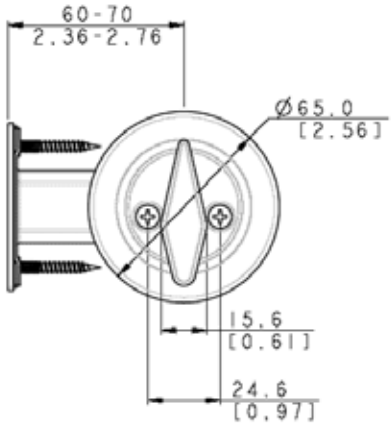
FUNCTION: Handle or turn piece on one side to throw or retract bolt; no means of operation on opposite side.

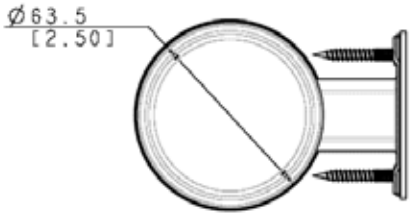
DSC0532D *Brushed Chrome*

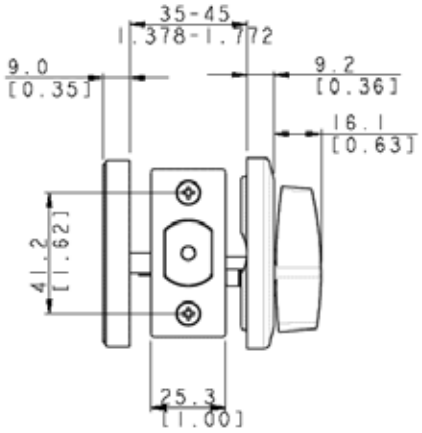
This is a combination unit designed for application to doors with a full crossbore or for doors where the crossbore is only visible on the inside. The adjustable backset bolt and reinforced strike are standard equipment.

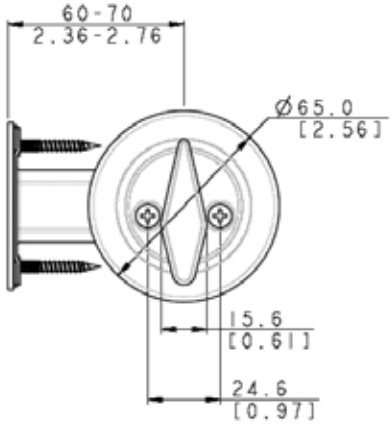








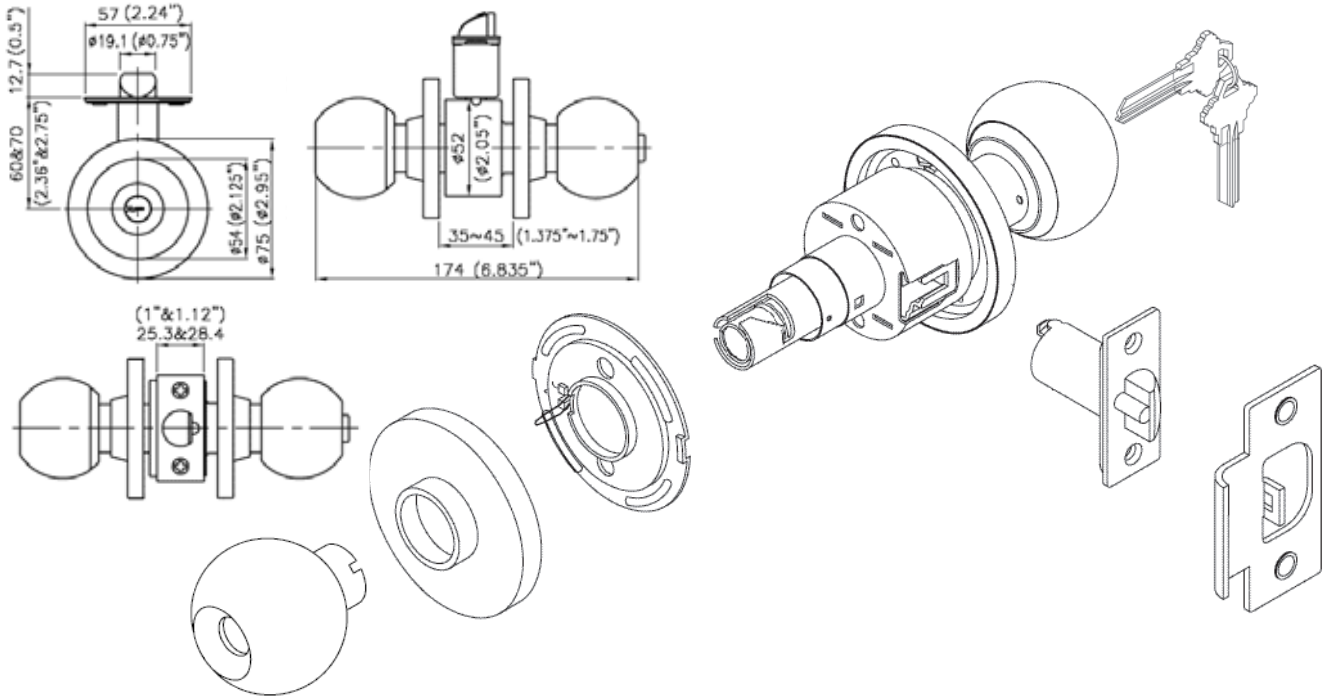




Entry Knobset with BumpStop® Grade 2 Commercial

FUNCTION: Inside handle push button locks the outside handle. Unlock outside handle with a key or by turning inside handle.

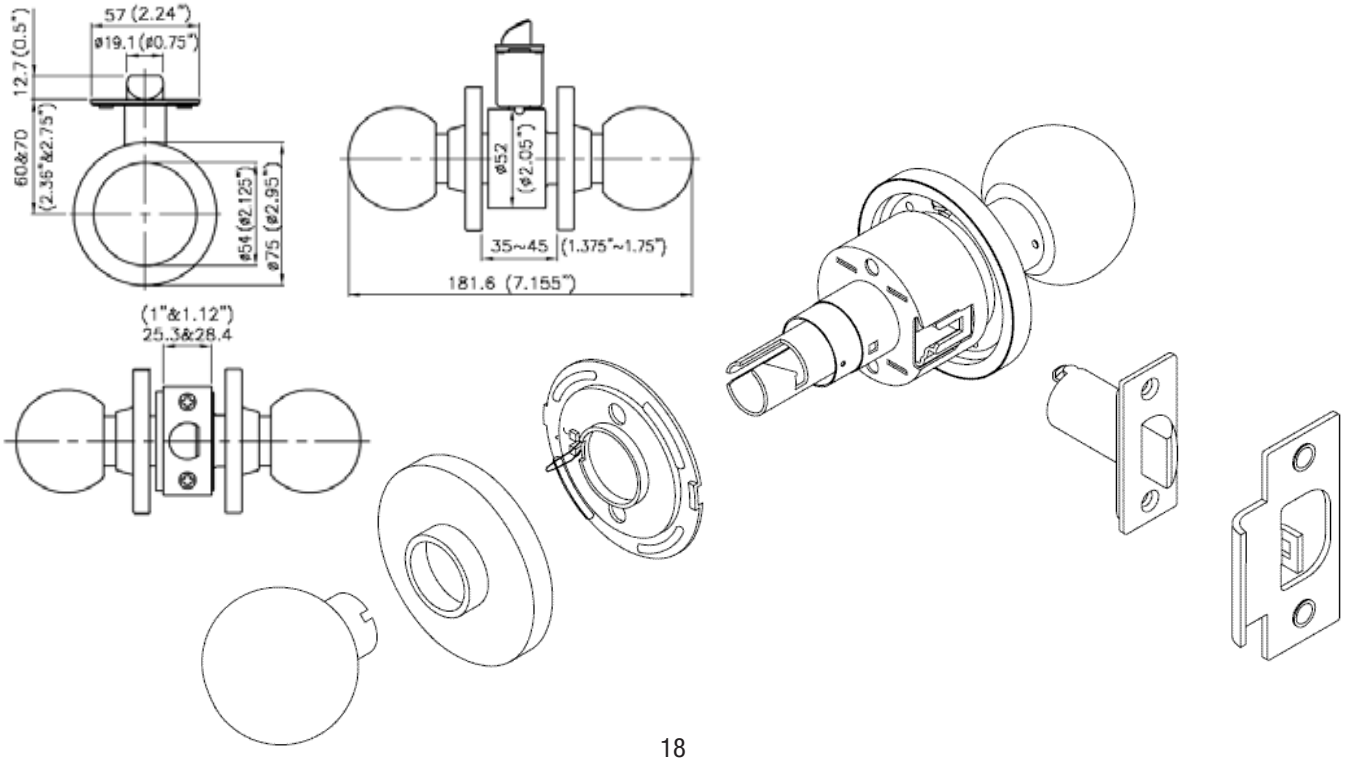
BLC0132DKA4 *Brushed Chrome*
The Entry lockset may use any of the Master Lock DL type cylinders, a Kaba Lori 1539 cylinder or any other 'size compatible' cylinder. The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Passage Knobset Grade 2 Commercial

FUNCTION: Inside and outside handles always unlocked; turning either retracts latch. No keys required.

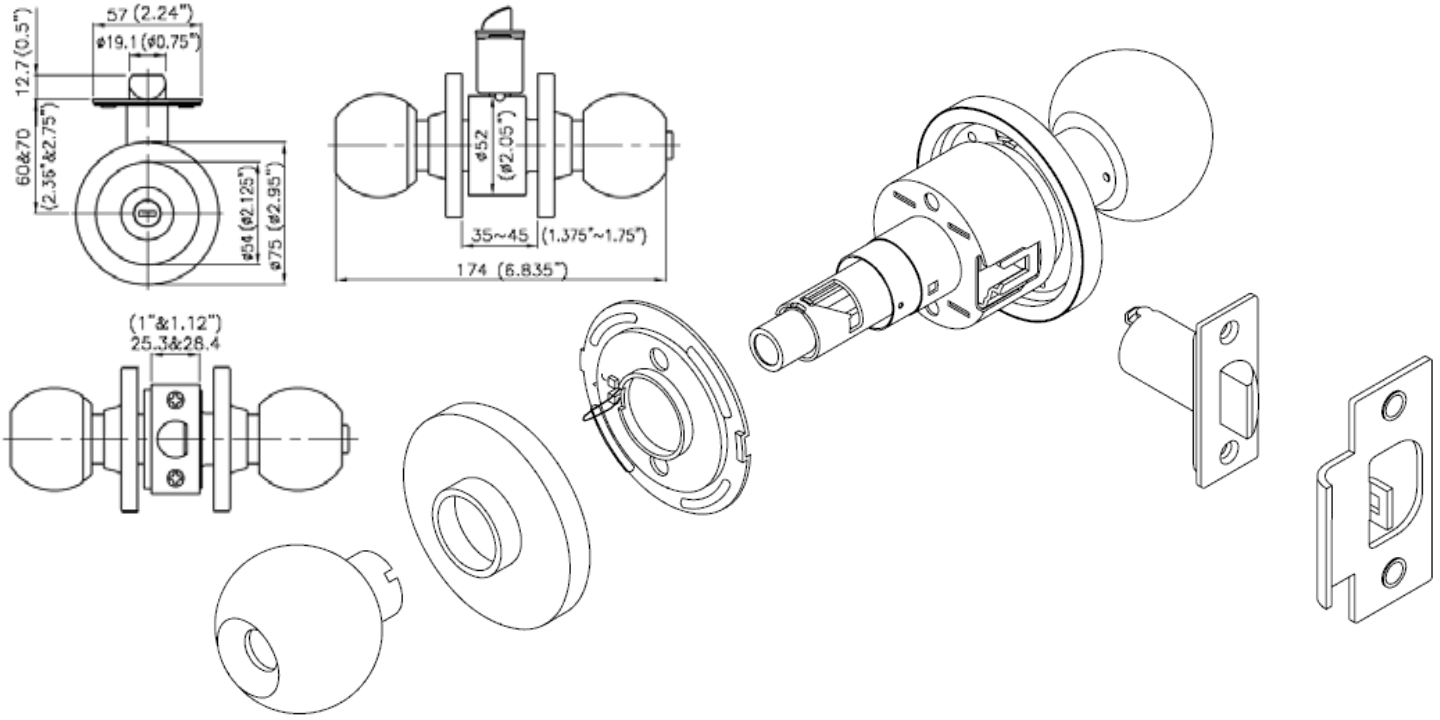
BLC0432D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Privacy Knobset Grade 2 Commercial

FUNCTION: Inside handle push button locks outside handle. Emergency release in outside handle. Closing the door or turning inside handle releases the push button.

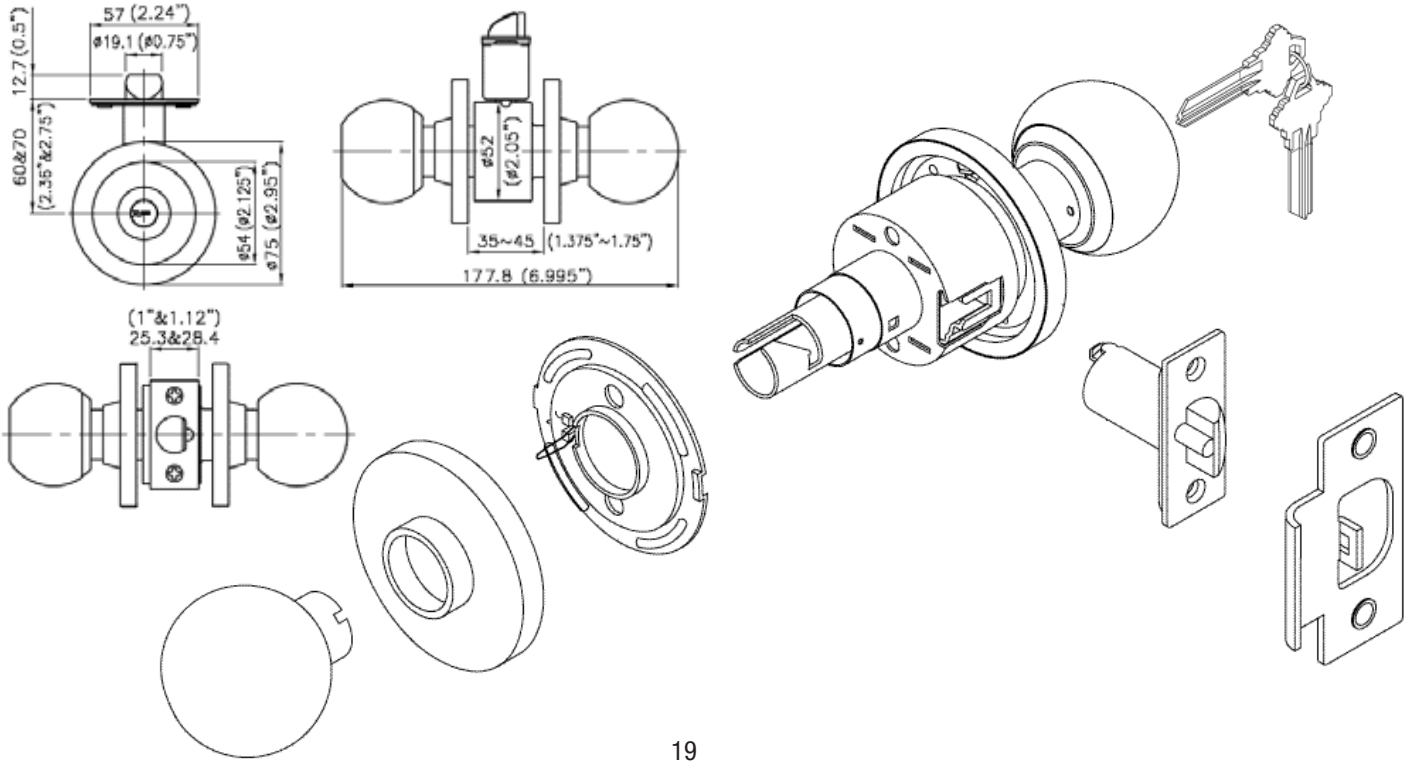
BLC0332D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Classroom Knobset with BumpStop® Grade 2 Commercial

FUNCTION: Inside always unlocked. Outside handle locked or unlocked by key.

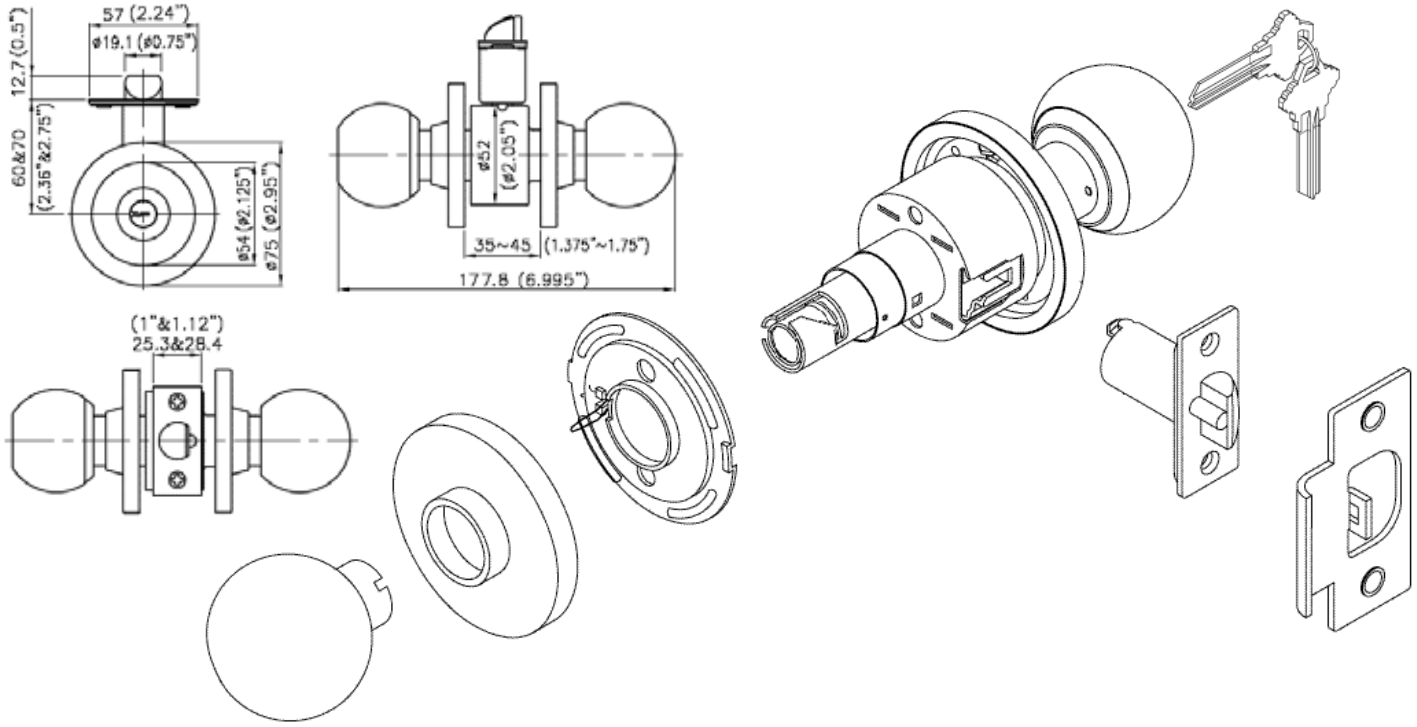
BLC0932DKA4 *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4" (Classroom US32D).



Storeroom Knobset Grade 2 Commercial

FUNCTION: Inside always unlocked. Outside handle always locked. Latch retracted by turning key.

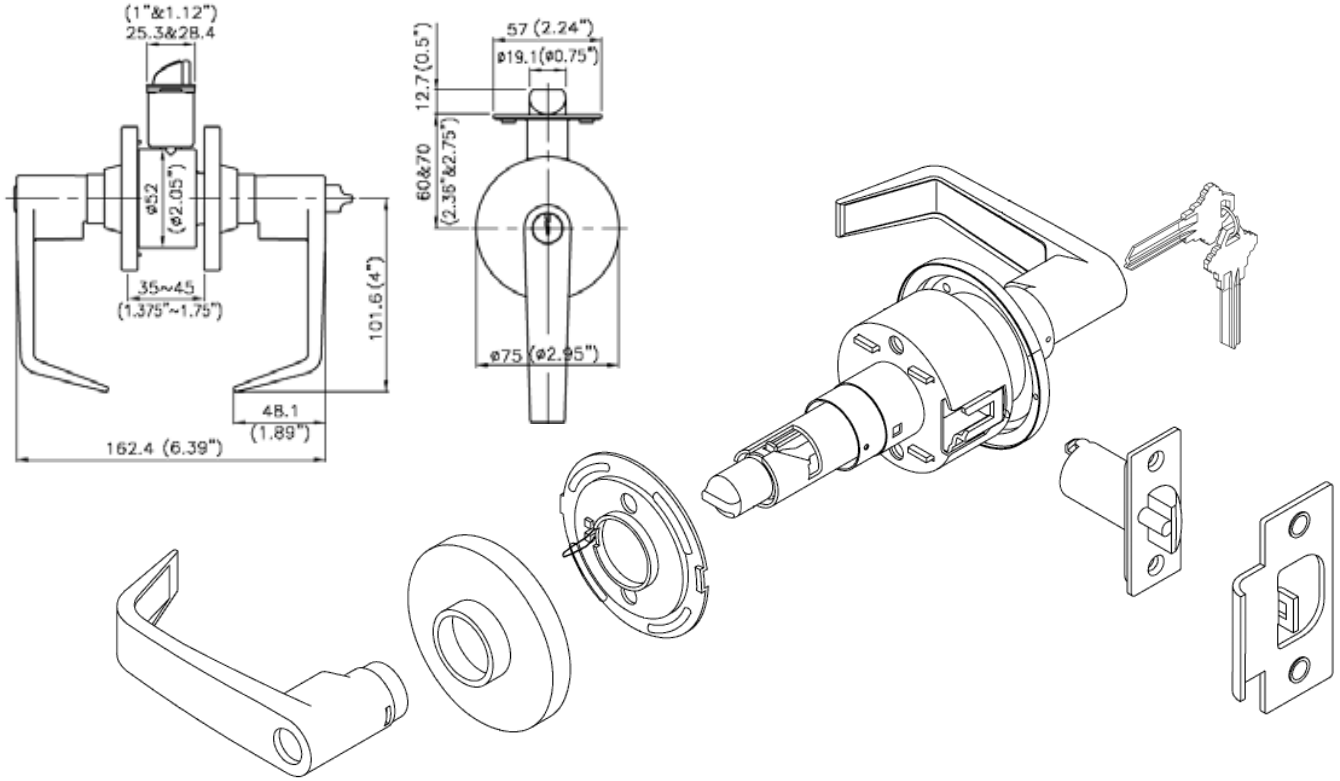
BLC0232DKA4 *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4" (Storeroom US32D).



Entry Leverset with BumpStop® Grade 2 Commercial

FUNCTION: Inside handle push button locks the outside handle. Unlock outside handle with a key or by turning inside handle.

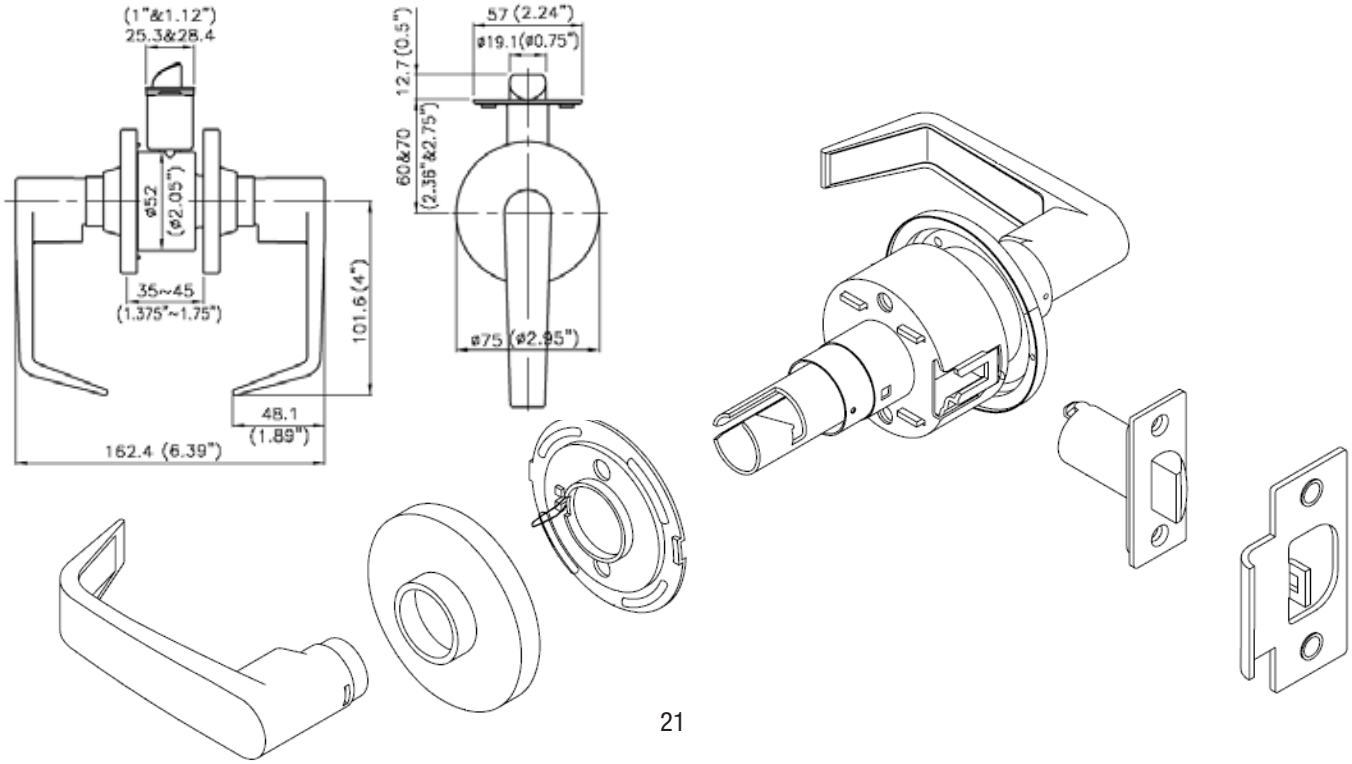
SLC0126DKA4 *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Passage Leverset Grade 2 Commercial

FUNCTION: Inside and outside handles always unlocked; turning either retracts latch. No keys required.

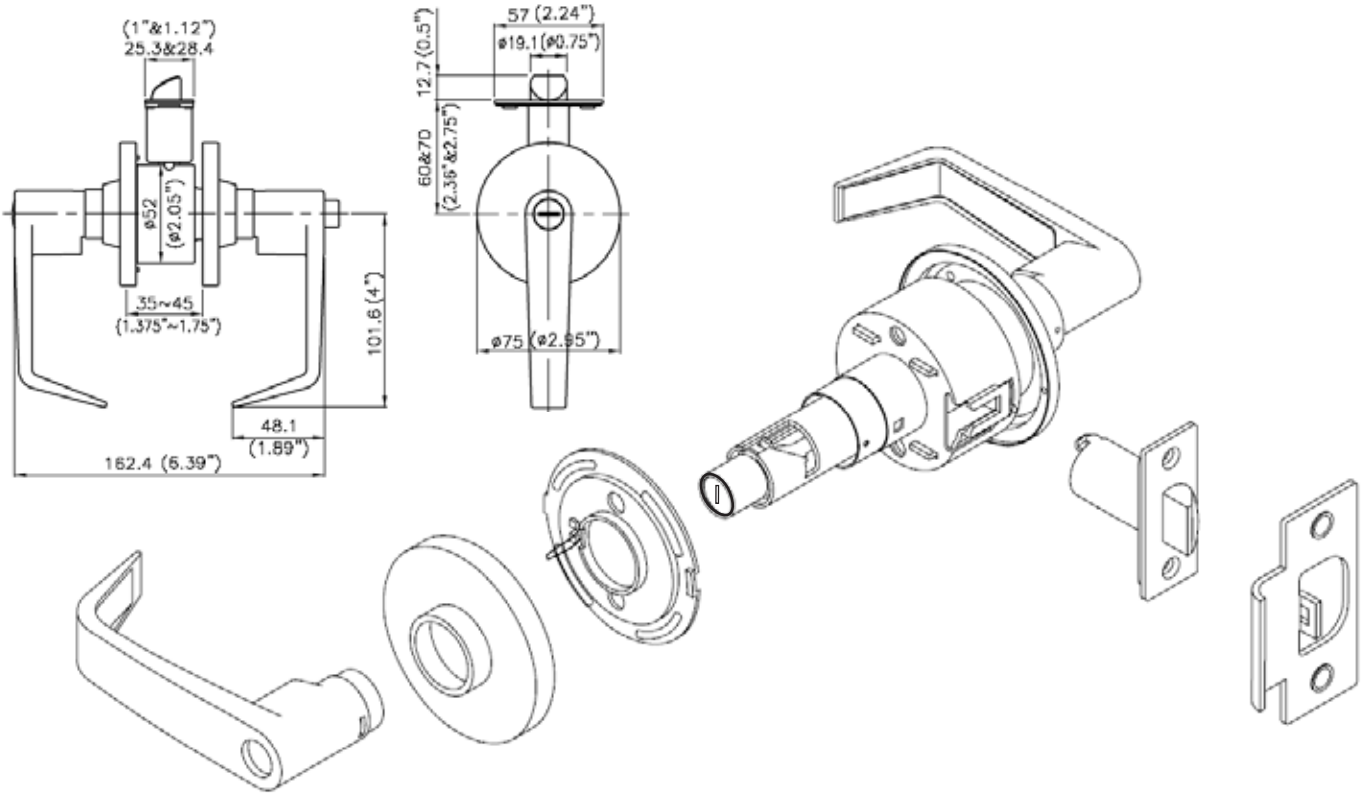
SLC0426D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Privacy Leverset Grade 2 Commercial

FUNCTION: Inside handle push button locks outside handle. Emergency release in outside handle. Closing the door or turning inside handle releases the push button.

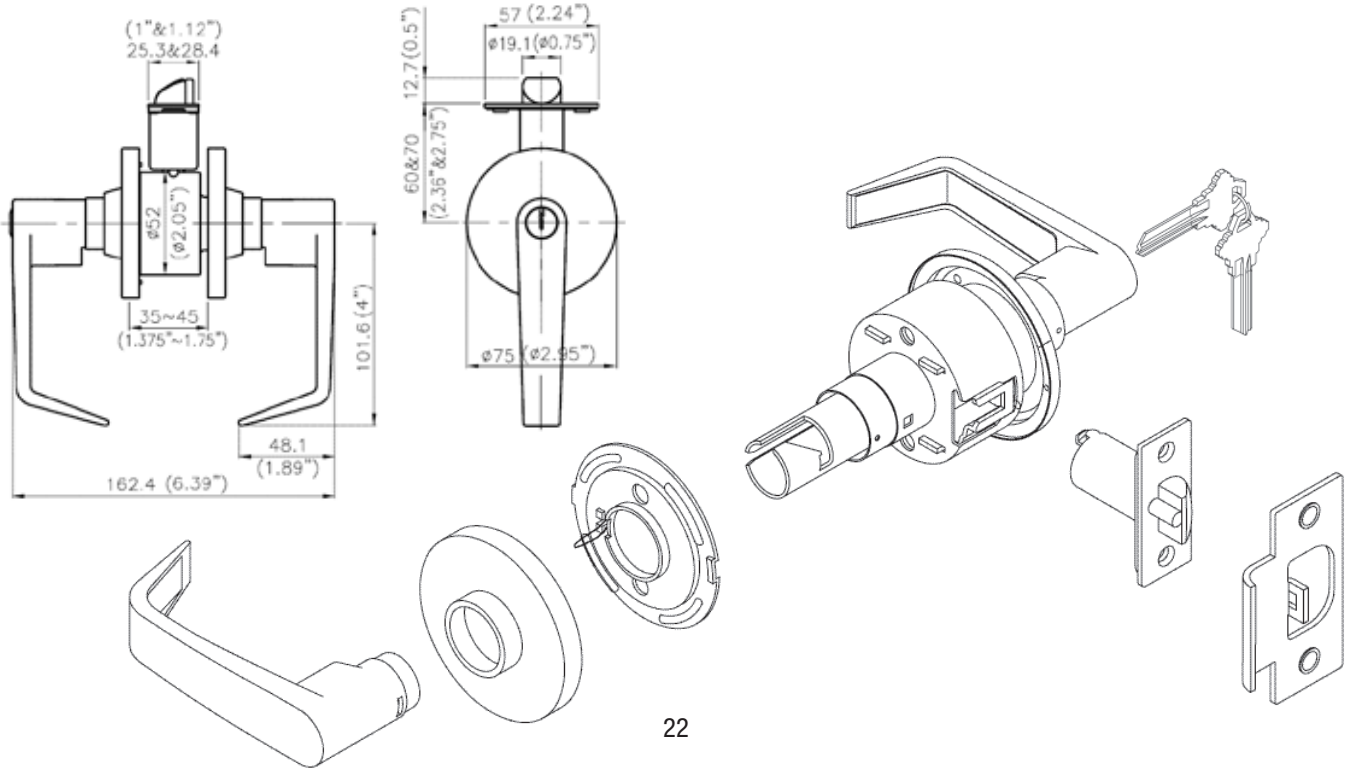
SLC0326D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Classroom Leverset with BumpStop® Grade 2 Commercial

FUNCTION: Inside always unlocked. Outside handle locked or unlocked by key.

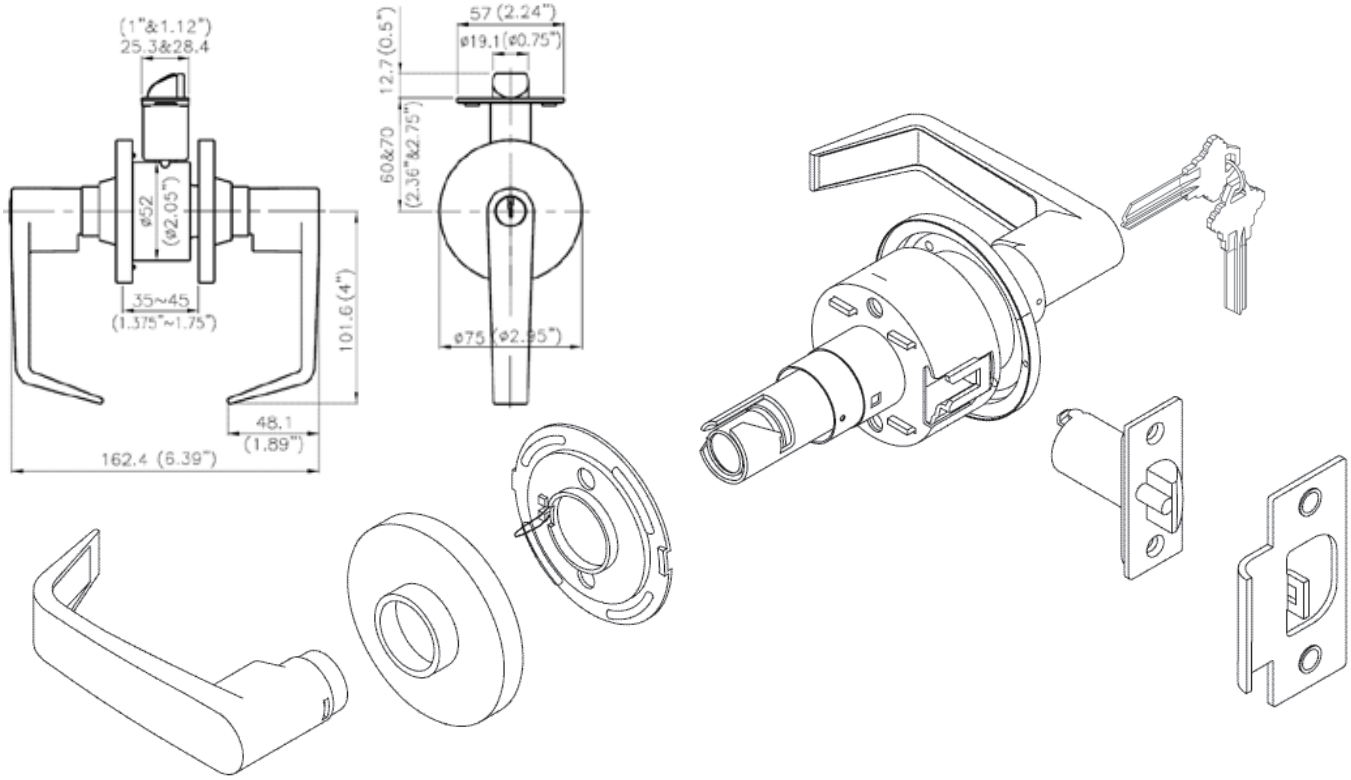
SLC0926DKA4 *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Storeroom Leverset with BumpStop® Grade 2 Commercial

FUNCTION: Inside always unlocked. Outside handle always locked. Latch retracted by turning key.

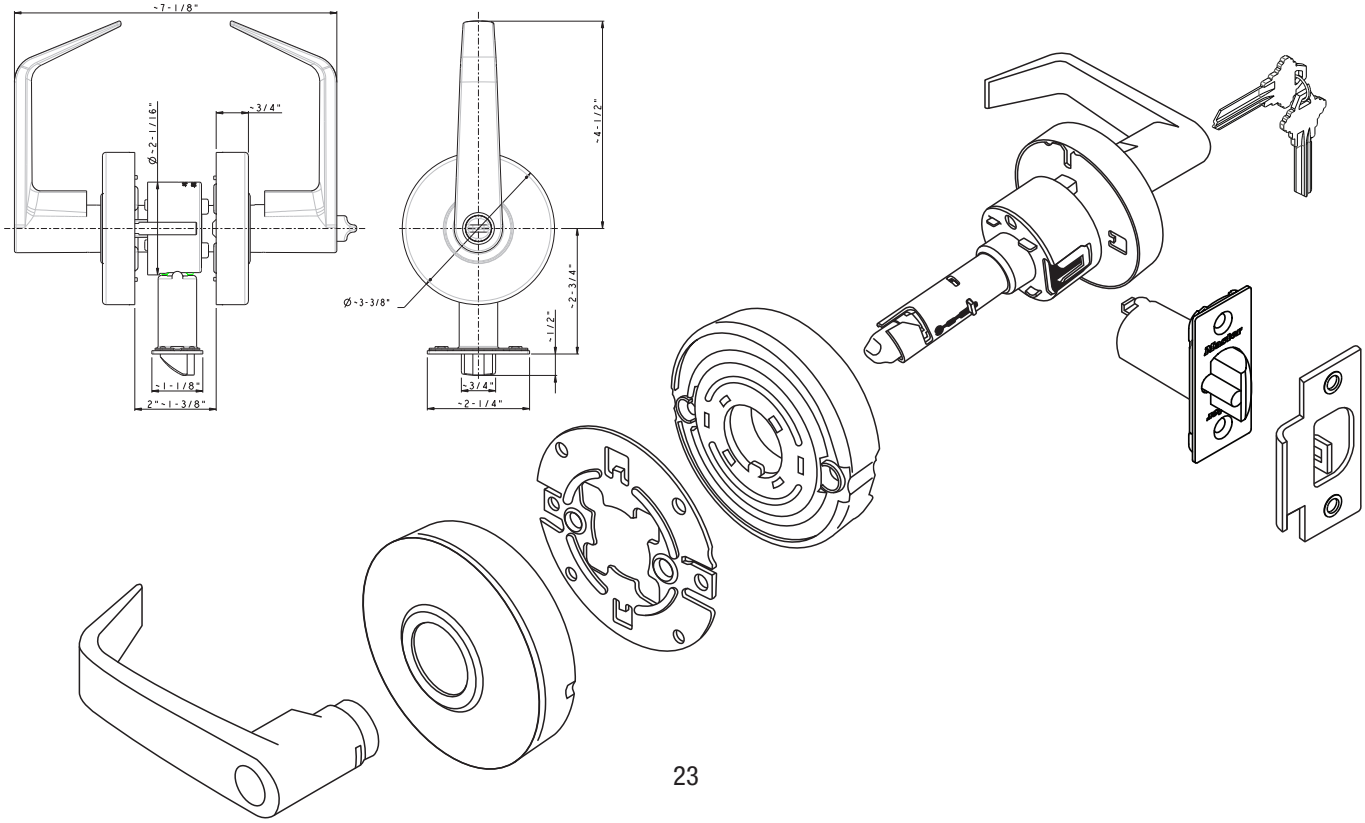
SLC0226DKA4 *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Heavy Duty Entry Leverset with BumpStop® Grade 2 Commercial

FUNCTION: Inside handle turn button locks the outside handle. Unlock outside handle with a key or by turning inside handle.

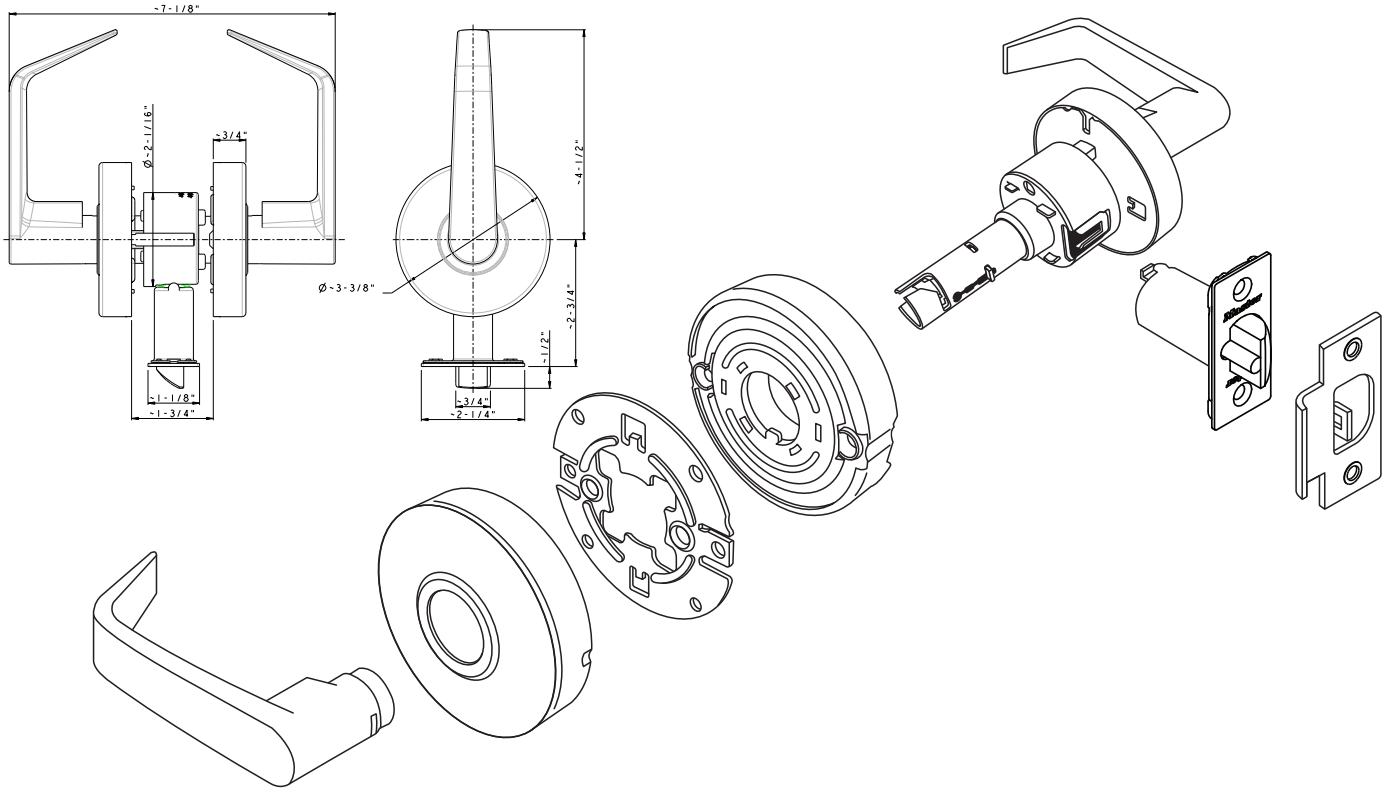
SLCHKE26D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Heavy Duty Passage Leverset **Grade 2 Commercial**

FUNCTION: Inside and outside handles always unlocked; turning either retracts latch. No keys required.

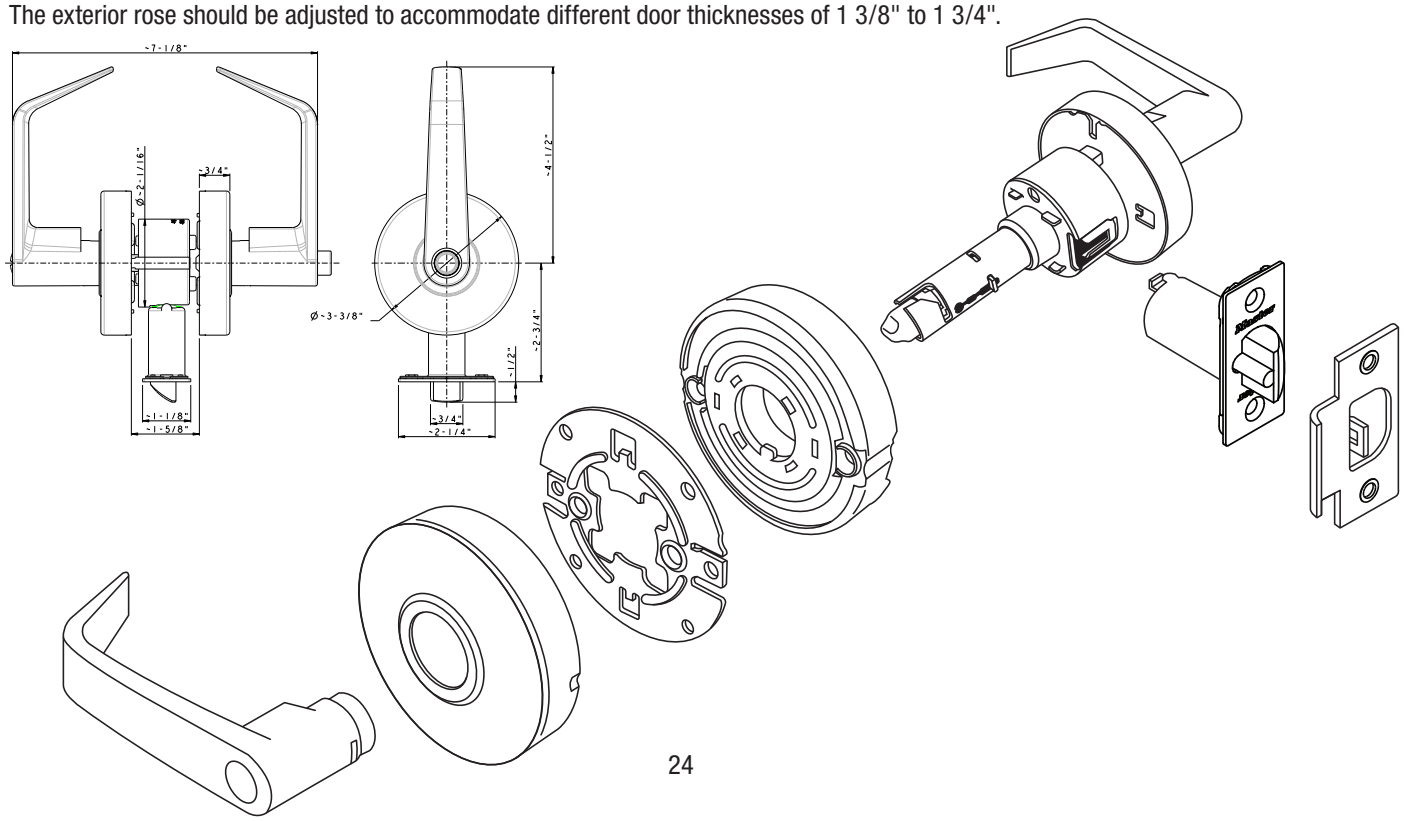
SLCHPG26D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Heavy Duty Privacy Leverset **Grade 2 Commercial**

FUNCTION: Inside handle turn button locks outside handle. Emergency release in outside handle. Closing the door or turning inside handle releases the push button.

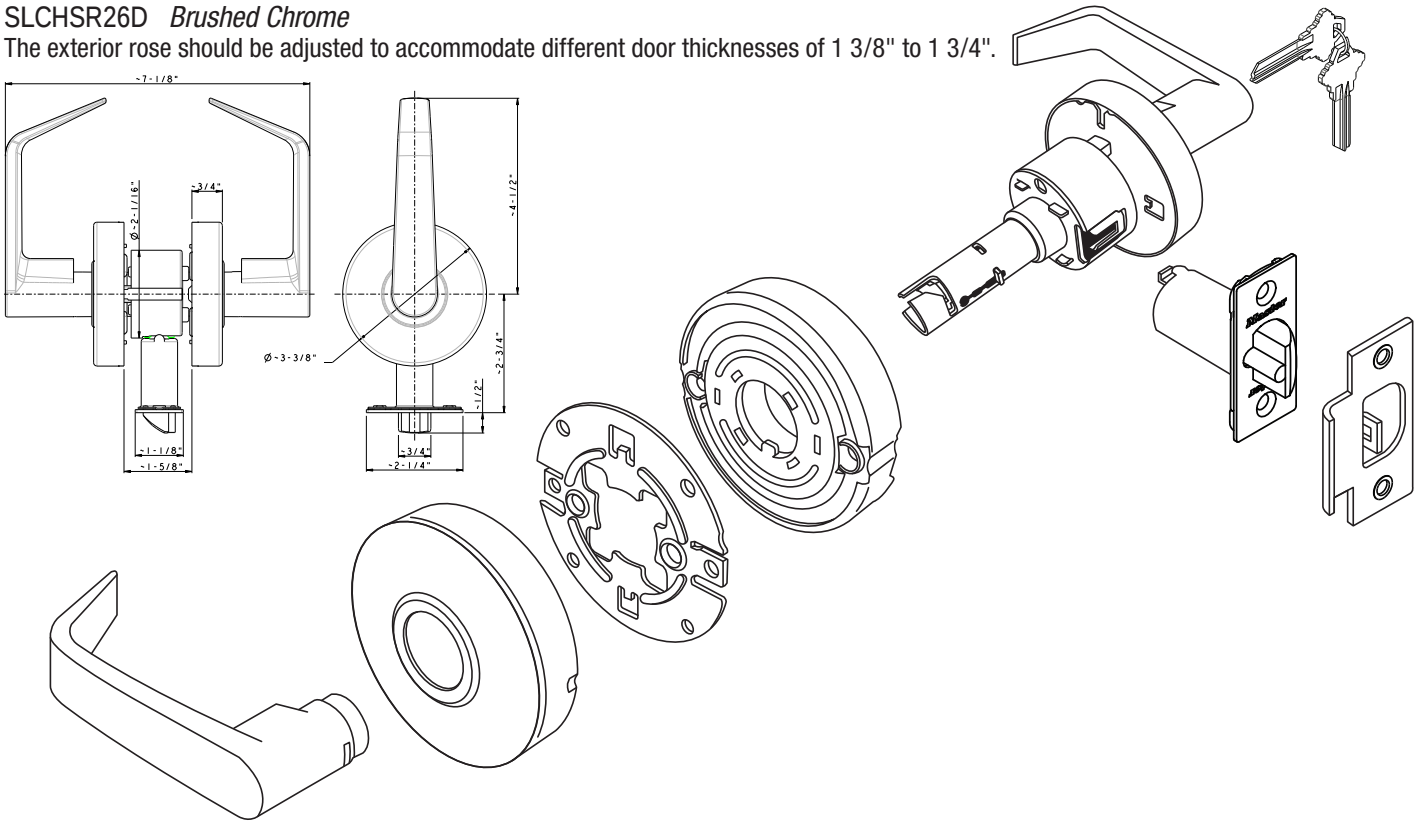
SLCHPV26D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Heavy Duty Storeroom Leverset w/BumpStop® Grade 2 Commercial

FUNCTION: Inside always unlocked. Outside handle locked or unlocked by key.

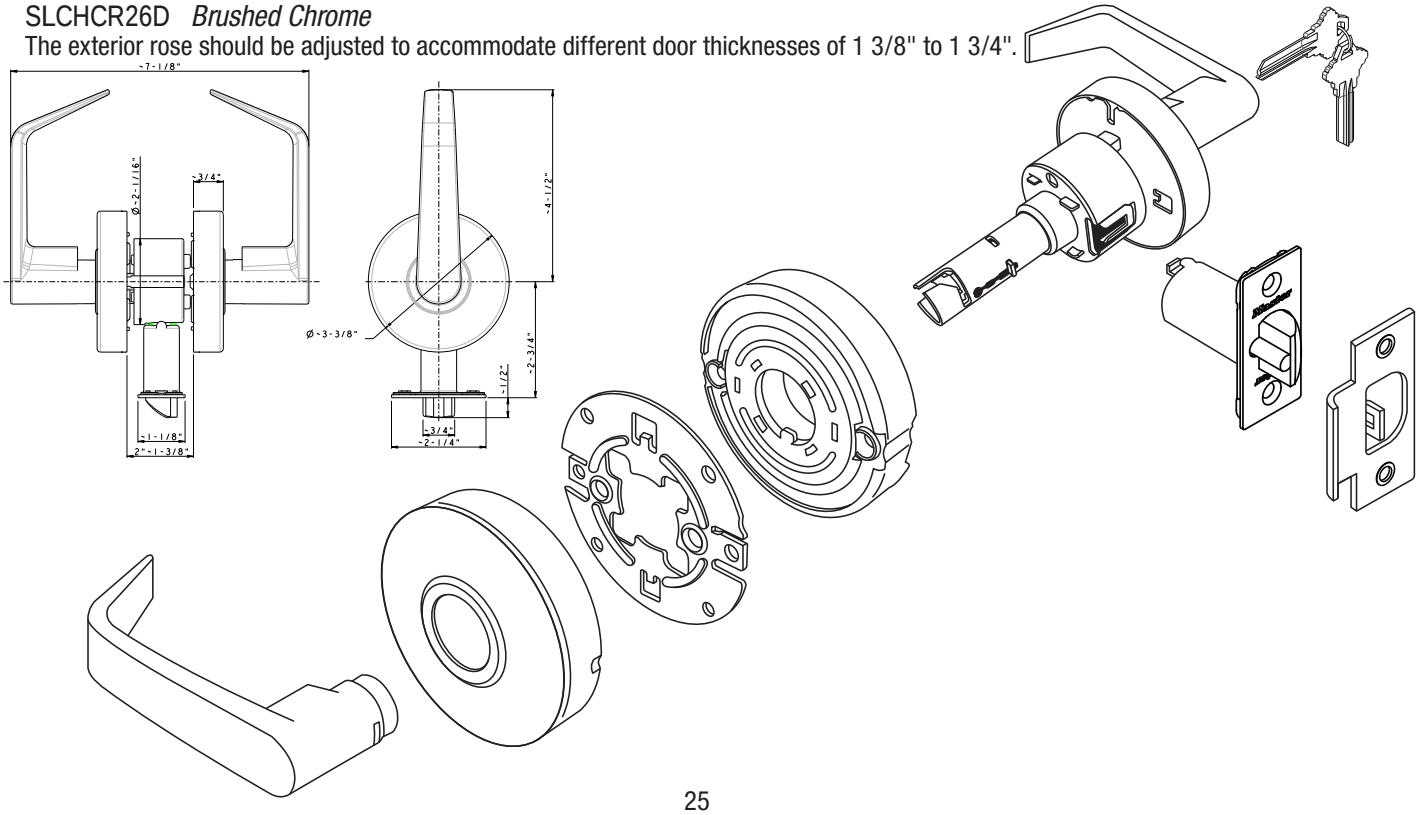
SLCHSR26D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



Heavy Duty Classroom Leverset w/BumpStop® Grade 2 Commercial

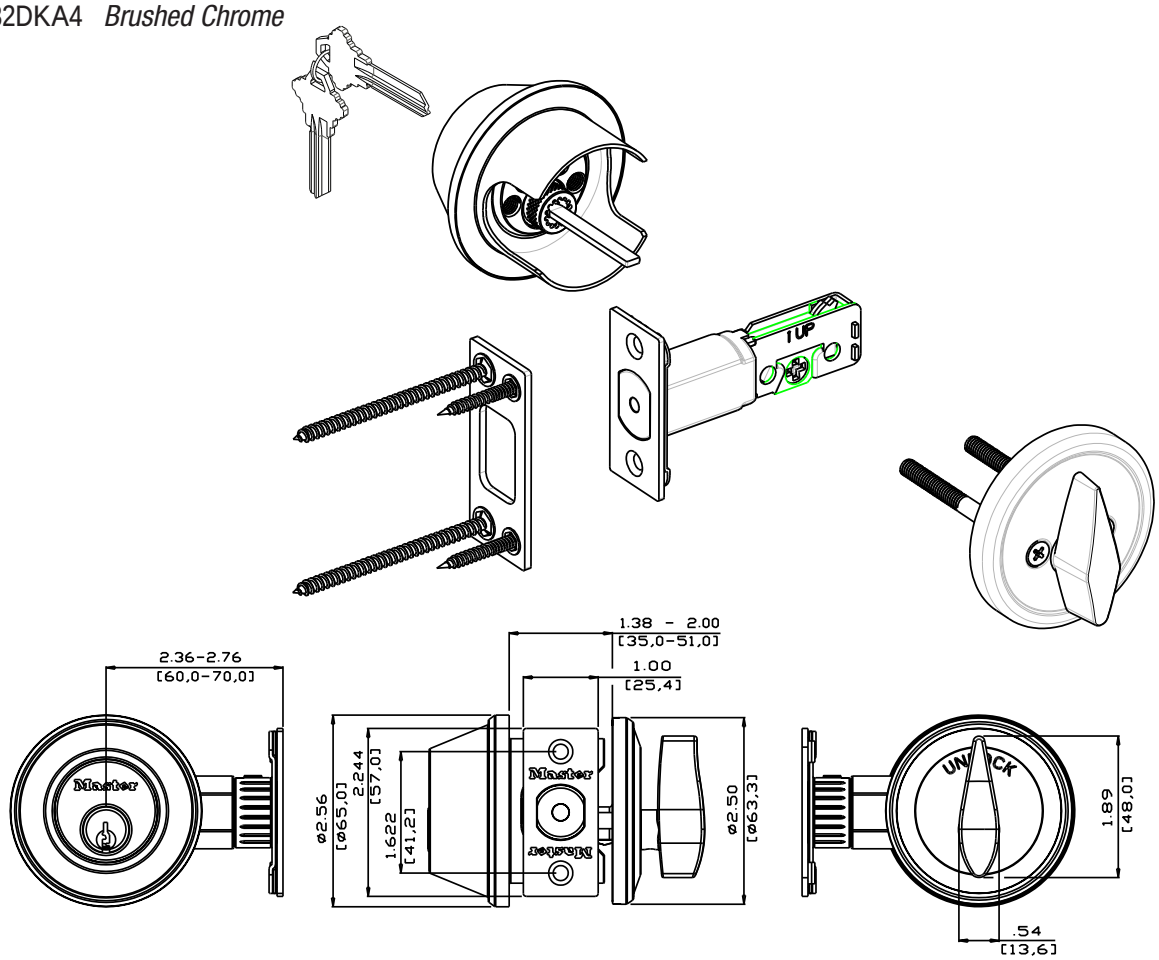
FUNCTION: Inside always unlocked. Outside handle locked or unlocked by key.

SLCHCR26D *Brushed Chrome*
The exterior rose should be adjusted to accommodate different door thicknesses of 1 3/8" to 1 3/4".



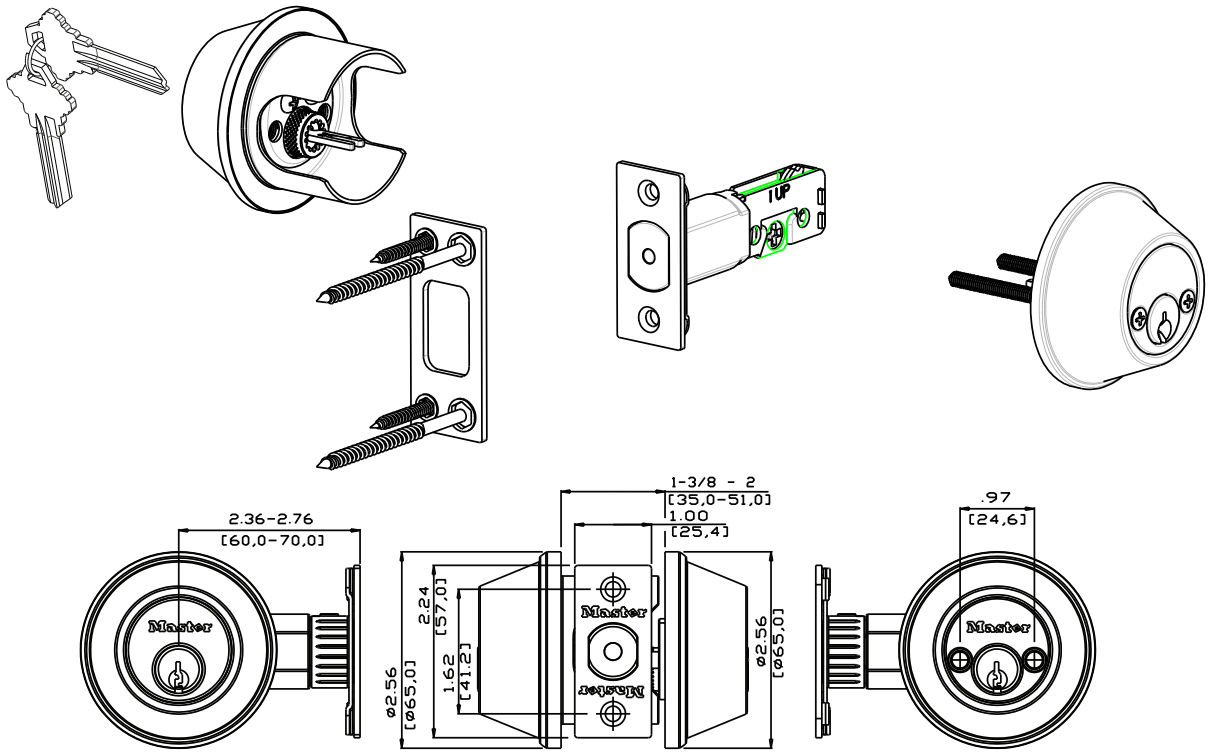
Single Cylinder Deadbolt with BumpStop® Grade 2 Commercial

DSC0632DKA4 *Brushed Chrome*



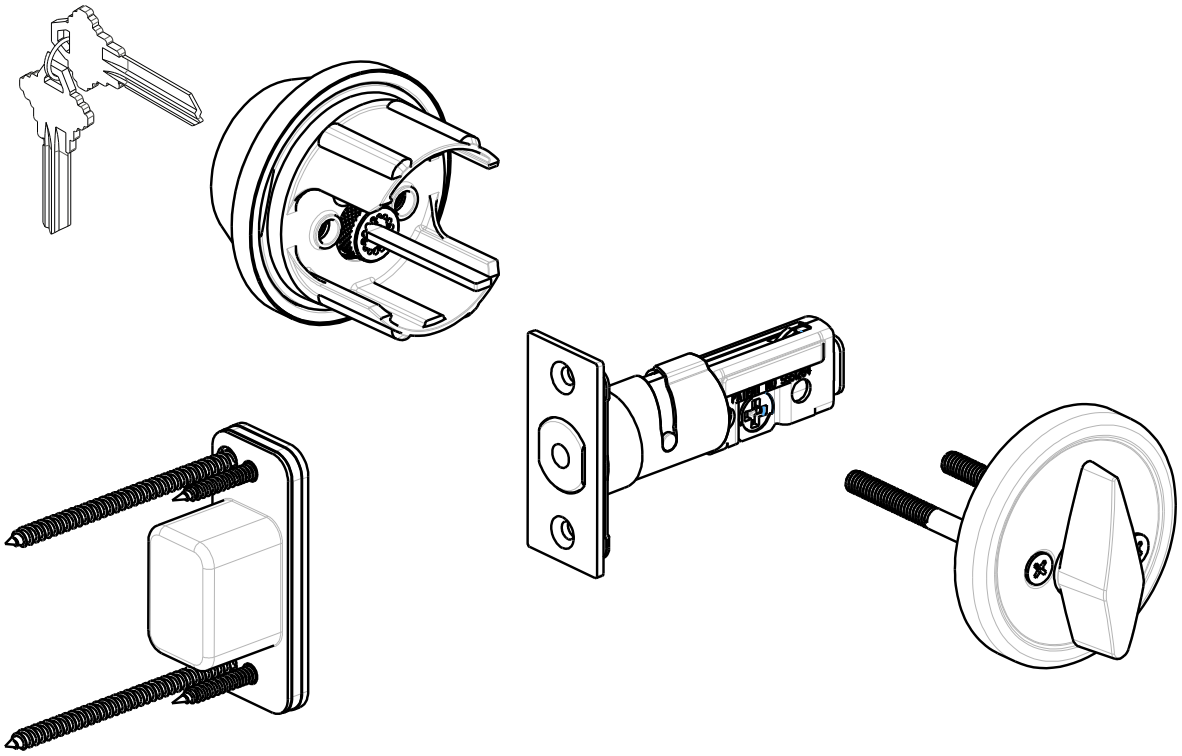
Double Cylinder Deadbolt with BumpStop® Grade 2 Commercial

DSC0732DKA4 *Brushed Chrome*



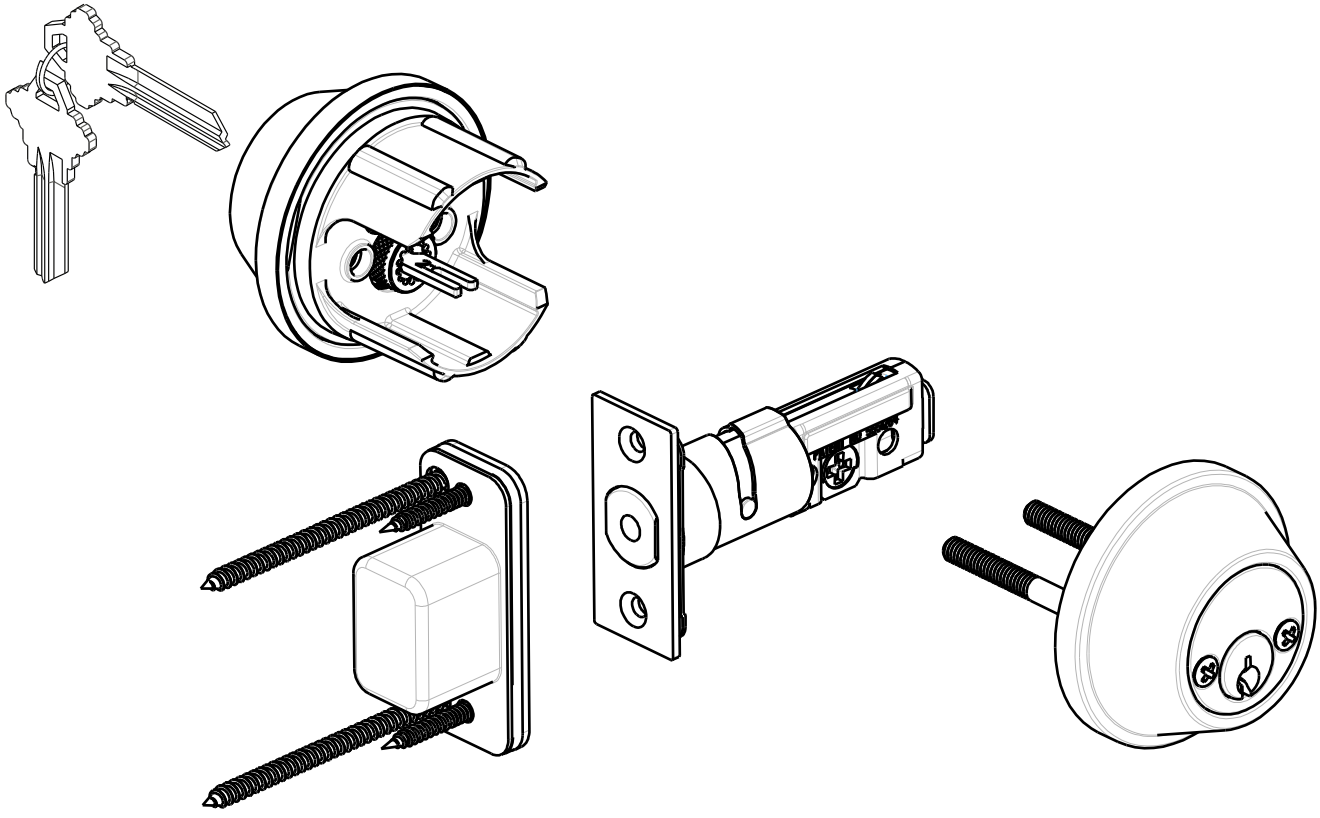
Heavy Duty Single Cylinder Deadbolt w/ BumpStop® Grade 2 Commercial

DSCHSD32D *Brushed Chrome*

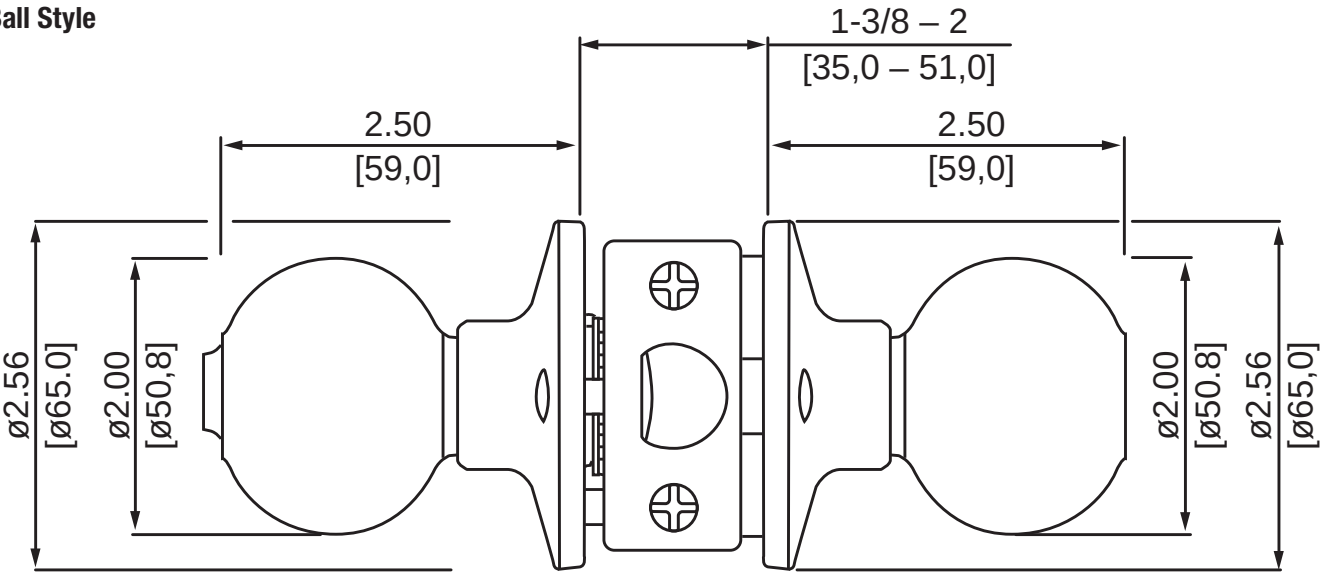


Heavy Duty Double Cylinder Deadbolt w/ BumpStop® Grade 2 Commercial

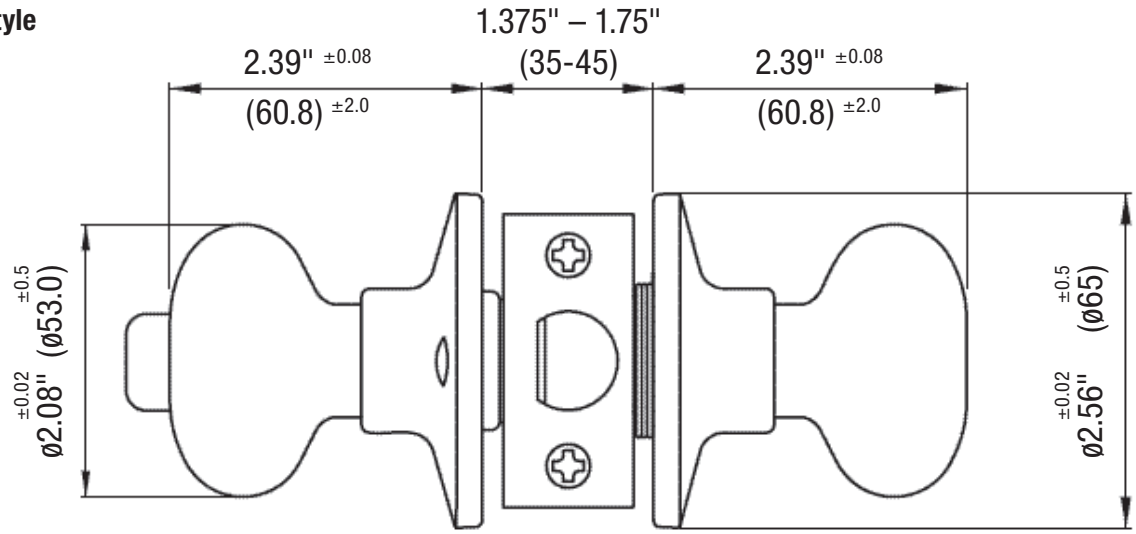
DSCHDD32D *Brushed Chrome*



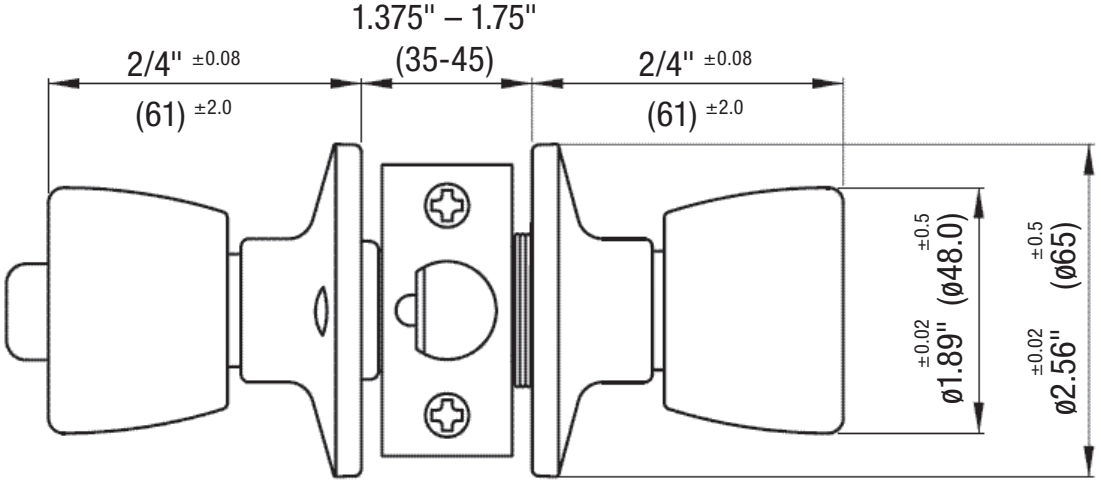
Ball Style



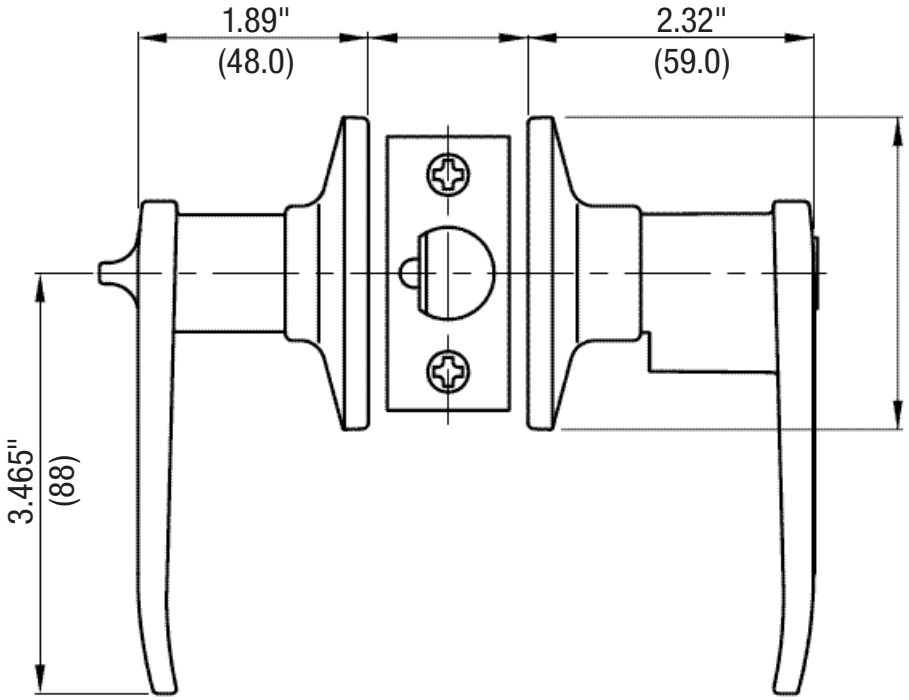
Biscuit Style



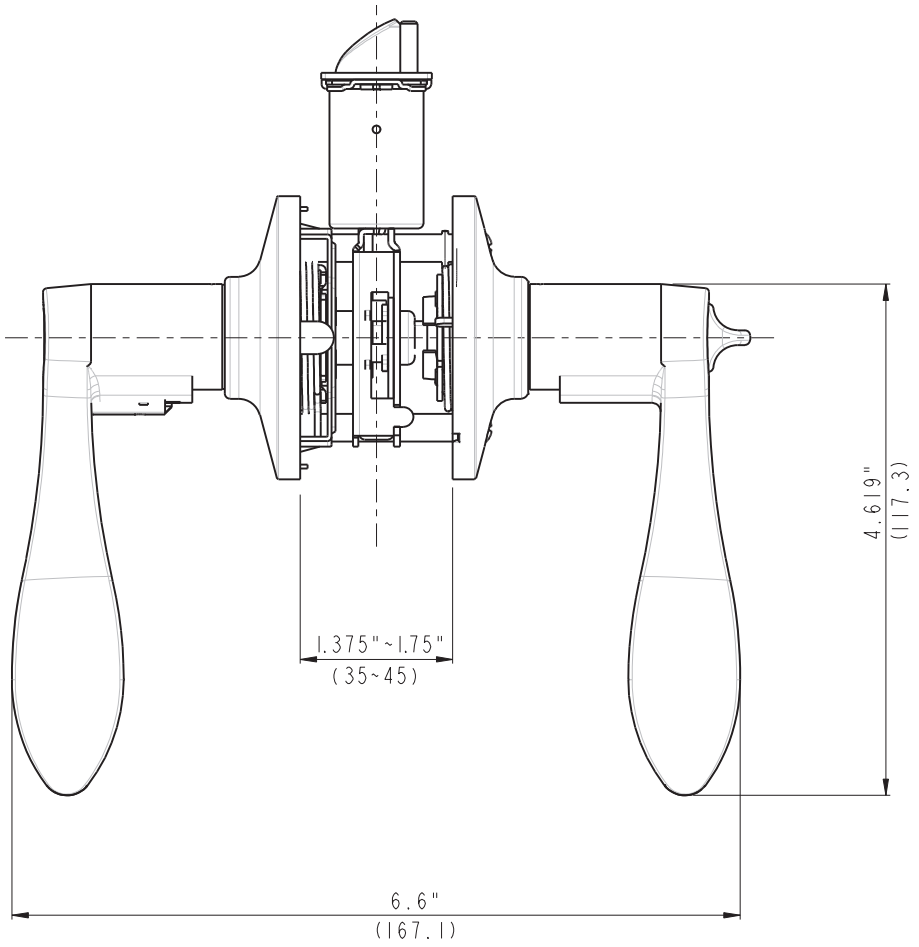
Tulip Style



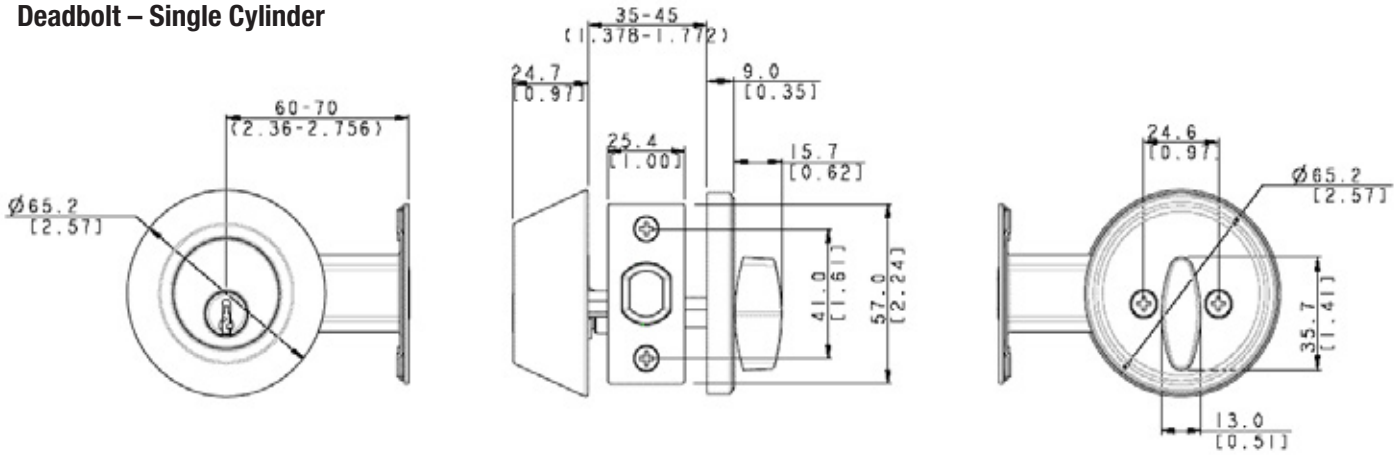
Straight Lever



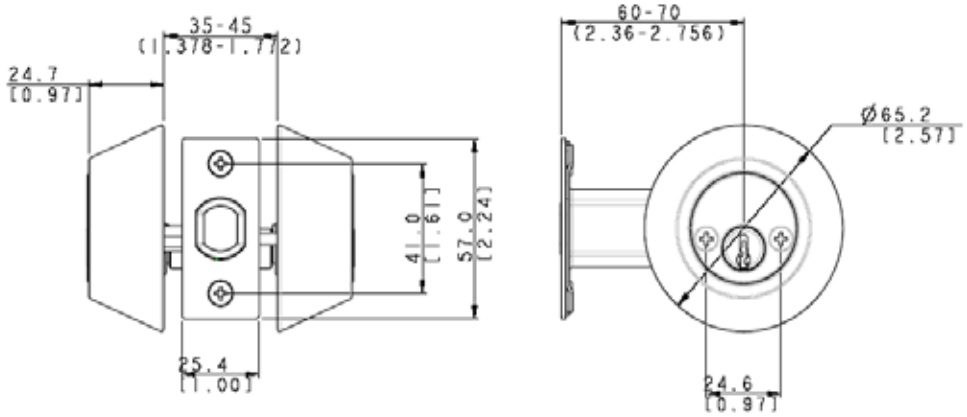
Wave Lever



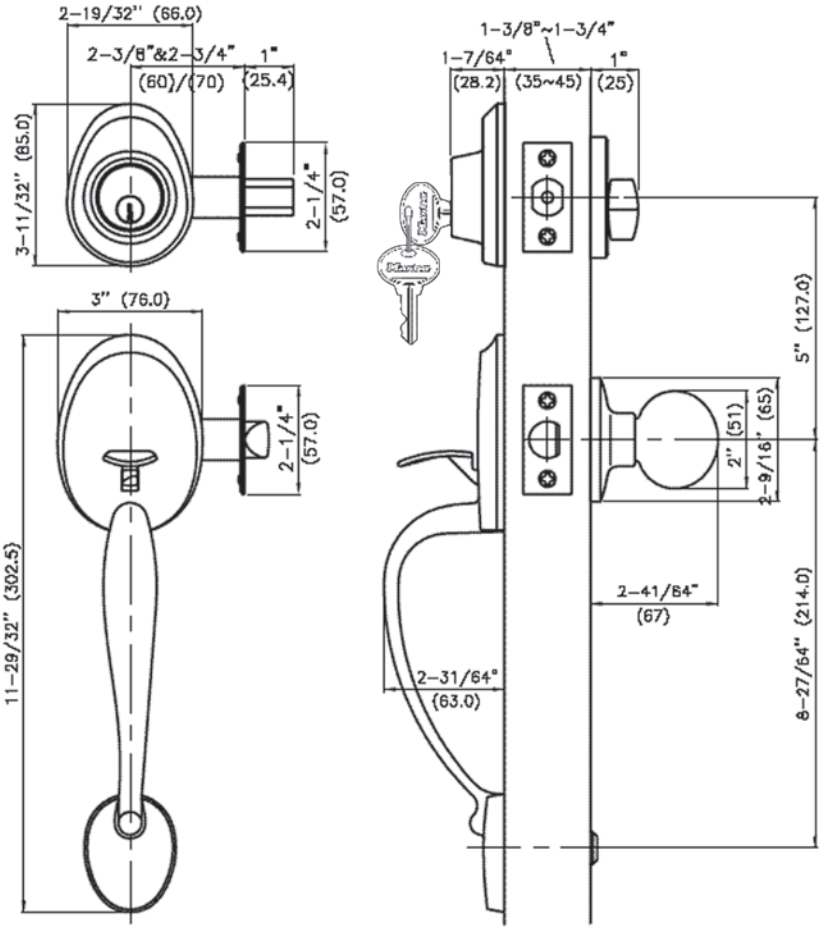
Deadbolt – Single Cylinder



Deadbolt – Double Cylinder



Handleset



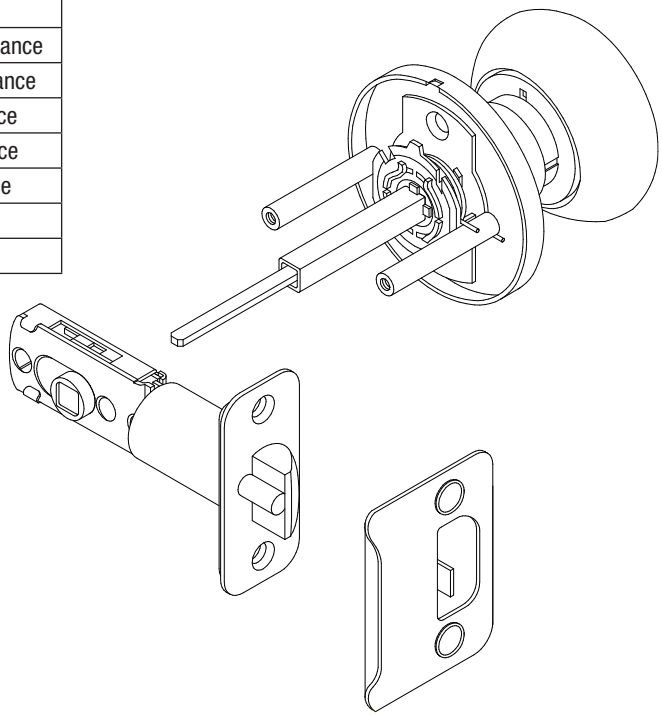
Interior available in:

- Ball Knob
- Biscuit Knob
- Tulip Knob
- Wave Lever

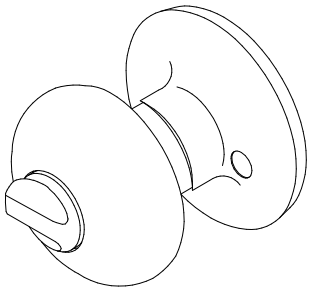
Entry Knobset Grade 3 Residential

Part Number		Product Description
Retail	**Boxed**	
TUO0103	TUO0103KA4	Polished Brass Tulip Entrance
TUO0105	TUO0105KA4	Antique Brass Tulip Entrance
TUO0115	TUO0115KA4	Satin Nickel Tulip Entrance
BAO0103	BAO0103KA4	Polished Brass Ball Knob Entrance
BAO0105	**N/A**	Antique Brass Ball Knob Entrance
BAO0115	BAO0115KA4	Satin Nickel Ball Knob Entrance
BCO0103	BCO0103KA4	Polished Brass Biscuit Entrance
BCO0105	BCO0105KA4	Antique Brass Biscuit Entrance
BCO0115	BCO0115KA4	Satin Nickel Biscuit Entrance
BCO0112P	BCO0112PKA4	Aged Bronze Biscuit Entrance

FUNCTION: Turn button on inside handle locks or unlocks outside and inside. Key in outside locks or unlocks. When locked, handles are rigid. When unlocked, either will retract latch.



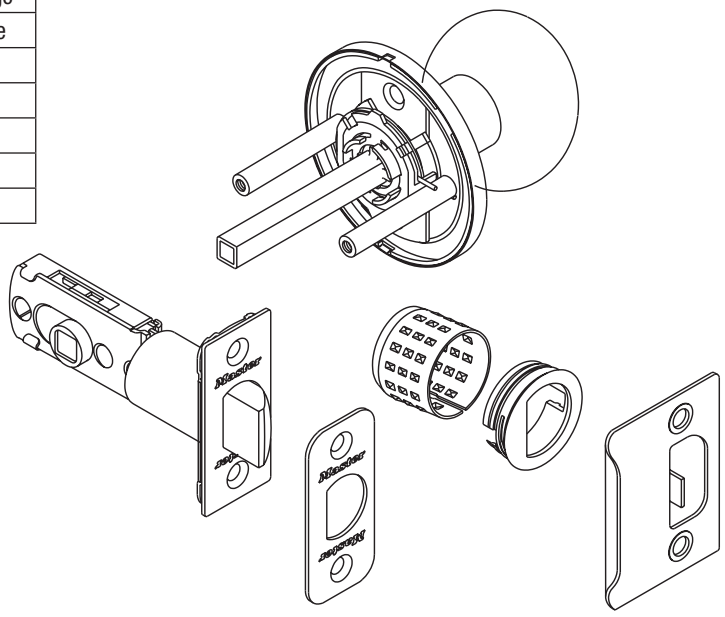
Biscuit Knob Shown



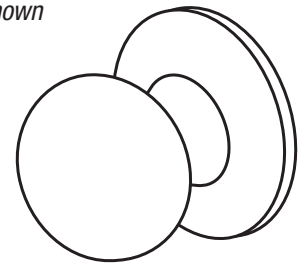
Passage Knobset Grade 3 Residential

Part Number		Product Description
Retail	**Boxed**	
TUO0403	TUO0403/T6P	Polished Brass Tulip Passage
TUO0405	TUO0405/T6P	Antique Brass Tulip Passage
TUO0415	TUO0415/T6P	Satin Nickel Tulip Passage
BAO0403	BAO0403/T6P	Polished Brass Ball Knob Passage
BAO0405	**N/A**	Antique Brass Ball Knob Passage
BAO0415	BAO0415/T6P	Satin Nickel Ball Knob Passage
BCO0403	BCO0403/T6P	Polished Brass Biscuit Passage
BCO0405	BCO0405/T6P	Antique Brass Biscuit Passage
BCO0415	BCO0415/T6P	Satin Nickel Biscuit Passage
BCO0412P	BCO0412PT6P	Aged Bronze Biscuit Passage

FUNCTION: Inside and outside handles always unlocked; turning either retracts latch. No keys required.



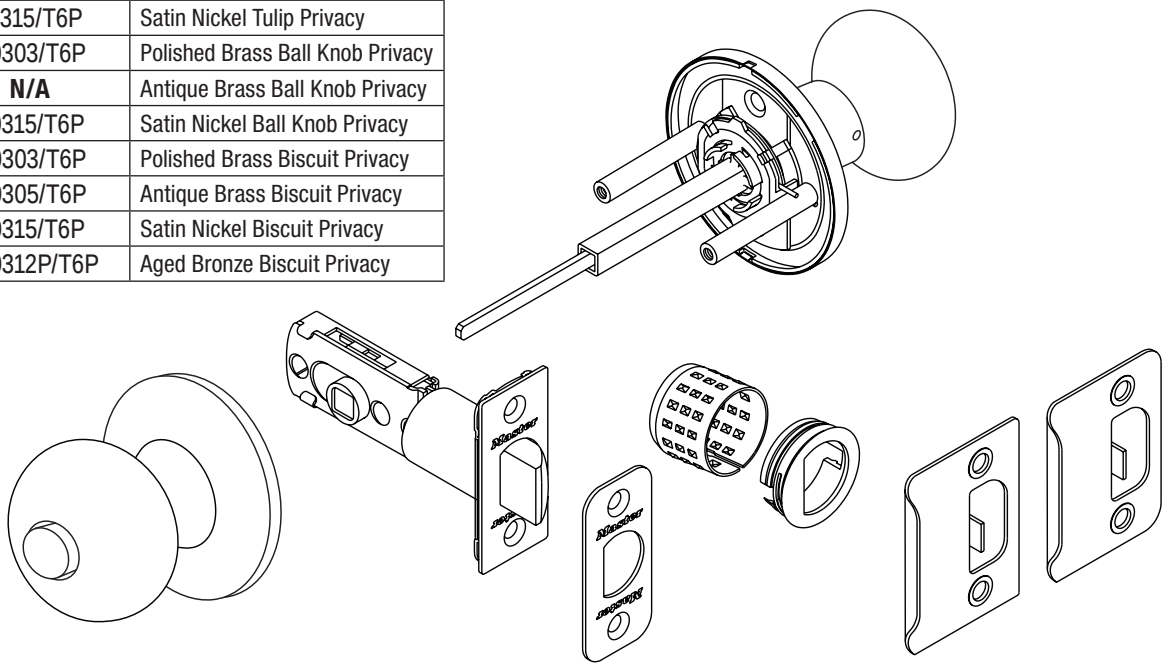
Ball Knob Shown



Privacy Knobset Grade 3 Residential

Part Number		Product Description
Retail	Boxed	
TUO0303	TUO0303/T6P	Polished Brass Tulip Privacy
TUO0305	TUO0305/T6P	Antique Brass Tulip Privacy
TUO0315	TUO0315/T6P	Satin Nickel Tulip Privacy
BAO0303	BAO0303/T6P	Polished Brass Ball Knob Privacy
BAO0305	**N/A**	Antique Brass Ball Knob Privacy
BAO0315	BAO0315/T6P	Satin Nickel Ball Knob Privacy
BCO0303	BCO0303/T6P	Polished Brass Biscuit Privacy
BCO0305	BCO0305/T6P	Antique Brass Biscuit Privacy
BCO0315	BCO0315/T6P	Satin Nickel Biscuit Privacy
BCO0312P	BCO0312P/T6P	Aged Bronze Biscuit Privacy

FUNCTION: Inside handle push button locks outside handle. Emergency release in outside handle. Closing the door or turning inside handle releases the push button.

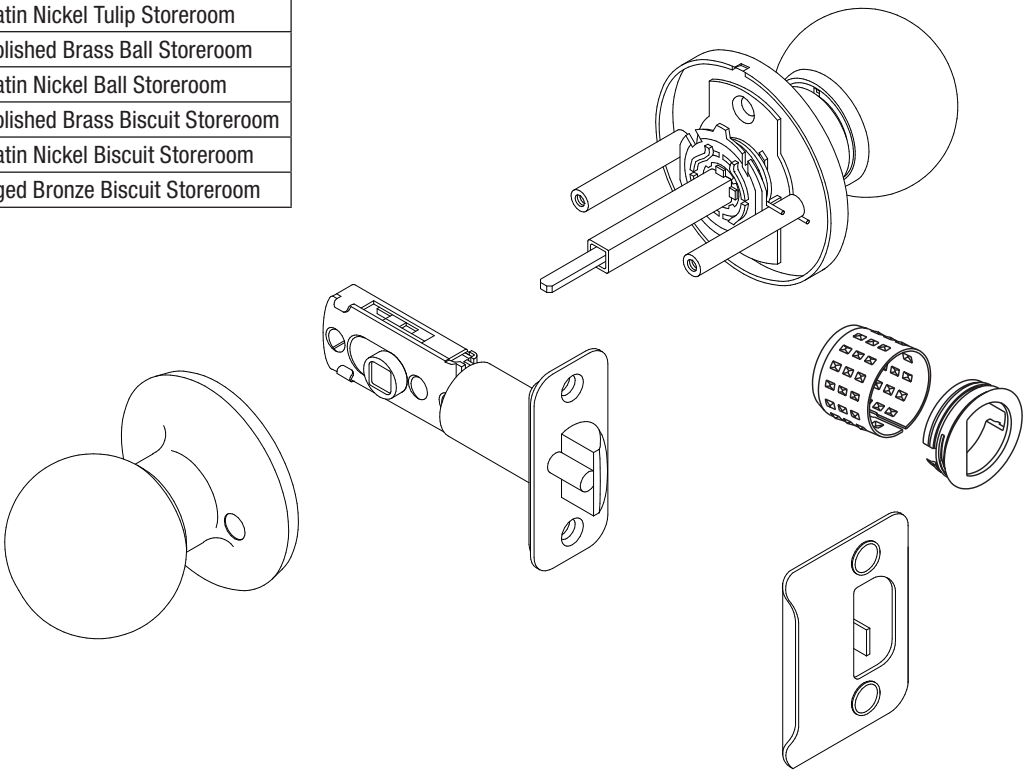


Biscuit Knob Shown

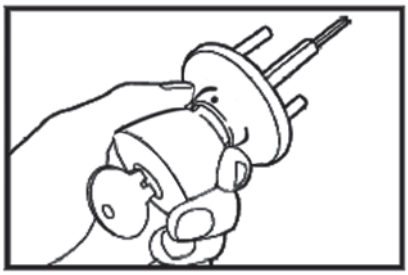
Storeroom Knobset Grade 3 Residential

Part Number	Product Description
Boxed	
TUO0203KA4	Polished Brass Tulip Storeroom
TUO0215KA4	Satin Nickel Tulip Storeroom
BAO0203PKA4	Polished Brass Ball Storeroom
BAO0215PKA4	Satin Nickel Ball Storeroom
BCO0203KA4	Polished Brass Biscuit Storeroom
BCO0215KA4	Satin Nickel Biscuit Storeroom
BCO0212PKA4	Aged Bronze Biscuit Storeroom

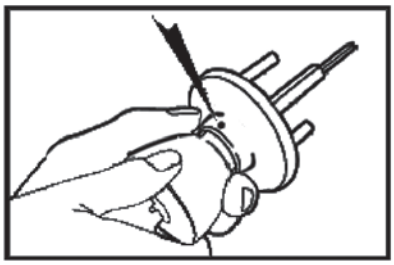
FUNCTION: Key in outside locks or unlocks. When locked, handle on outside is rigid. When unlocked will retract latch. Inside handle always unlocked, turning retracts latch.



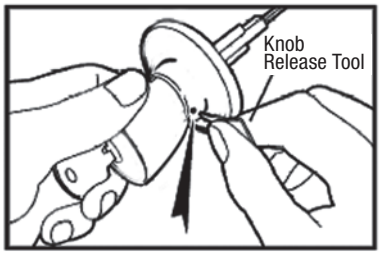
Ball Knob Shown



Insert the operating key and unlock the knob. If an operating key is not available, pick to unlock.

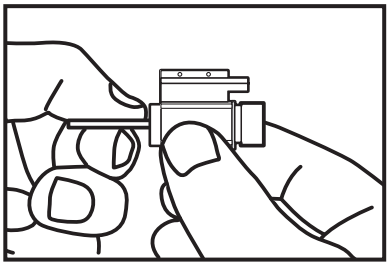


Turn the outside knob clockwise until the retainer aligns with and is visible under the poke hole.

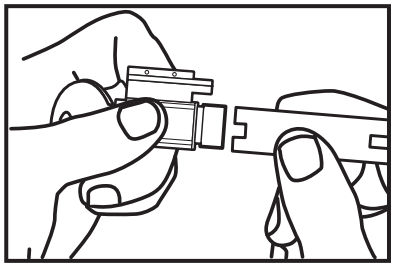


Use the knob release tool to depress the knob retainer and pull knob from the spindle.

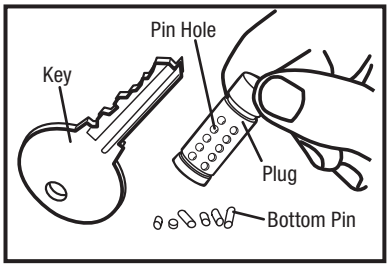
Remove knob ferrule and then remove cylinder from knob. Remove C clip from cylinder.



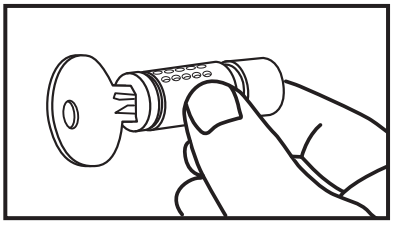
Turn plug 45° in either direction.



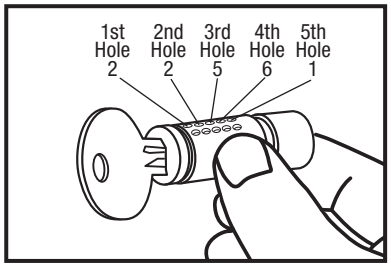
Use the plug follower to push the plug out of the shell. Note: Use the notched end against the end of the plug.



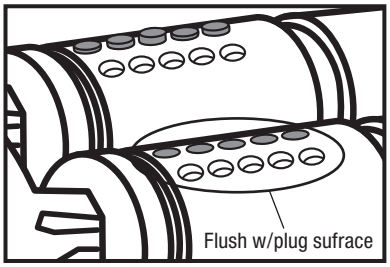
Pull the key from the plug and remove pins from all chambers.



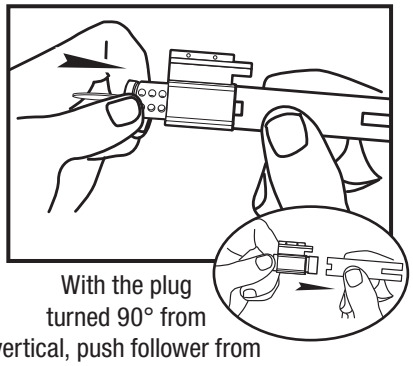
Insert new key. If the key isn't stamped with a direct code, decode. Our example key is combination 22561.



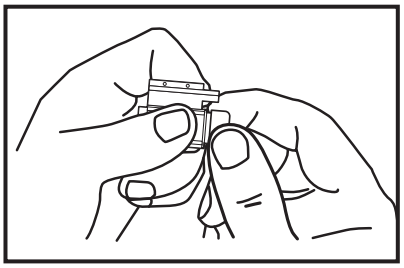
Select a bottom pin #2 from the keying kit and place it in the first pin chamber. Key the rest of the cylinder as: #2 in the second chamber, #5 in the third chamber, #6 in the fourth chamber, #1 in the fifth chamber.



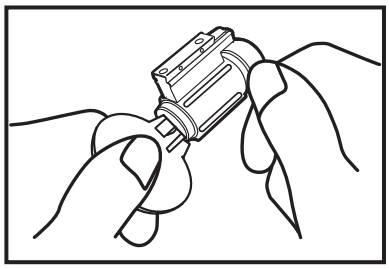
Check that all pins are flush with the surface of the plug with the new key inserted.



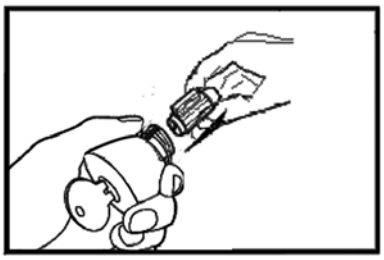
With the plug turned 90° from vertical, push follower from the shell with the plug.



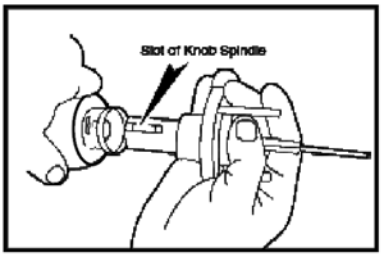
Push circlip retainer onto the end of the plug.



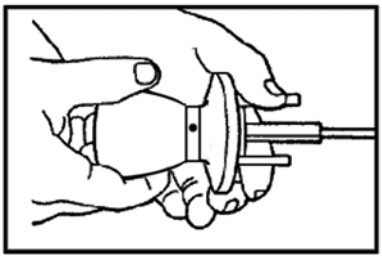
Check operation of key for functionality. Remove key.



Place plug in position inside shell and reinstall the C clip. Insert cylinder into knob and replace ferrule.



With key partially inserted, align the bible with the slot on the outside knob spindle. Align knob and push in to engage the retainer.

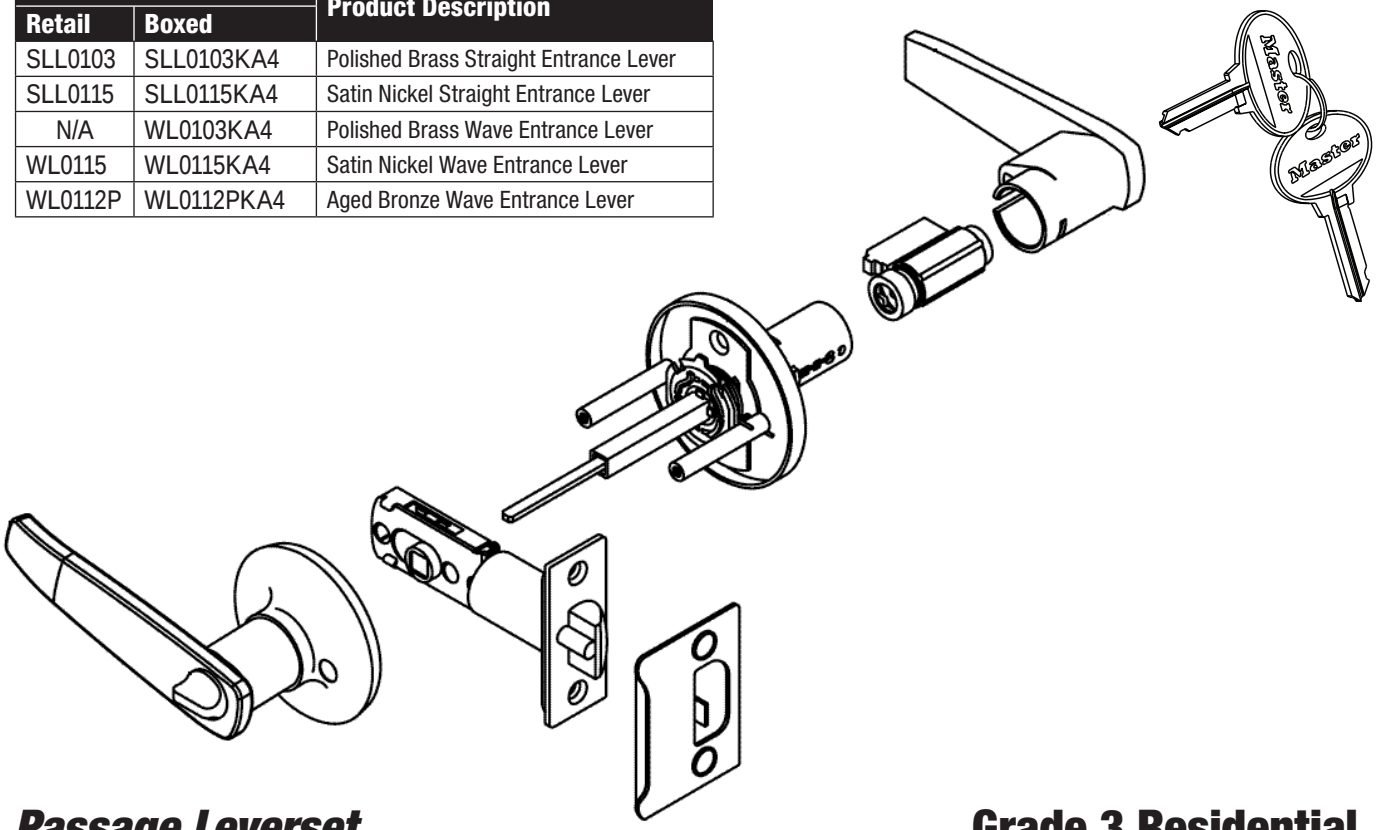


Check knob locked and unlocked to ensure it operates properly. Reinstall lock on door if it was removed for rekeying.

Entry Leverset — Grade 3 Residential

FUNCTION: Turn button on inside handle locks or unlocks outside and inside. Key in outside locks or unlocks. When locked, handles are rigid. When unlocked, either will retract latch.

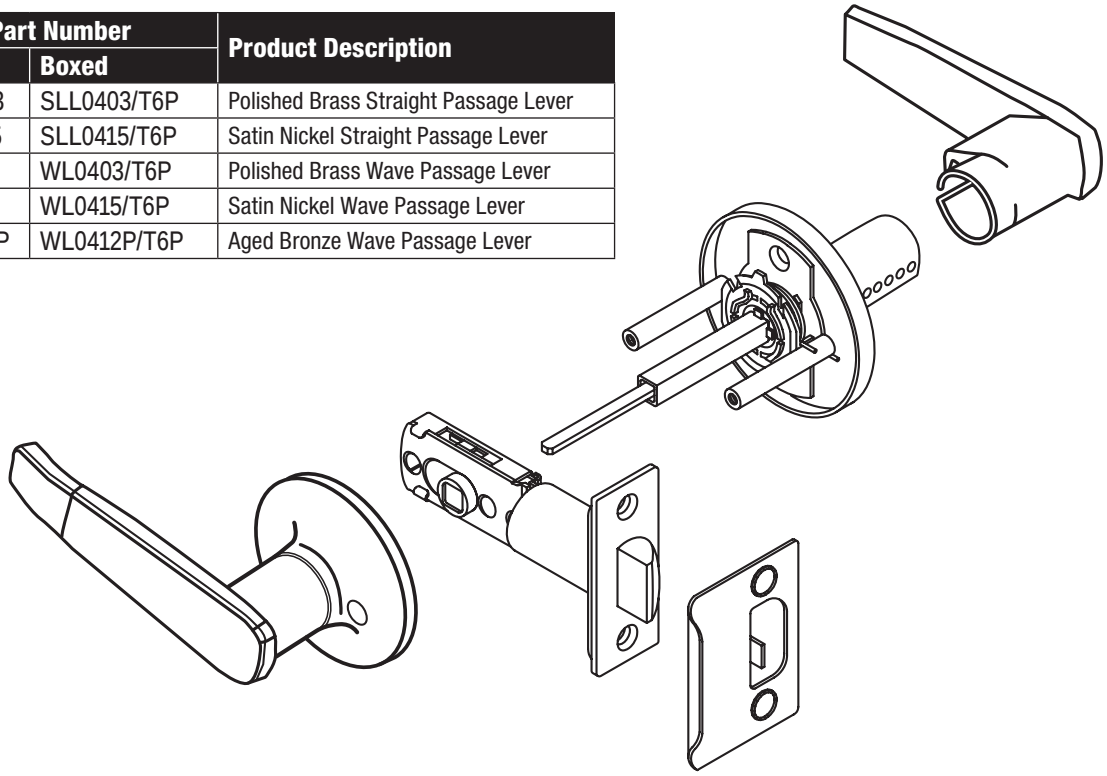
Part Number		Product Description
Retail	Boxed	
SLL0103	SLL0103KA4	Polished Brass Straight Entrance Lever
SLL0115	SLL0115KA4	Satin Nickel Straight Entrance Lever
N/A	WL0103KA4	Polished Brass Wave Entrance Lever
WL0115	WL0115KA4	Satin Nickel Wave Entrance Lever
WL0112P	WL0112PKA4	Aged Bronze Wave Entrance Lever



Passage Leverset — Grade 3 Residential

FUNCTION: Handle from either side retracts latch. No keys required.

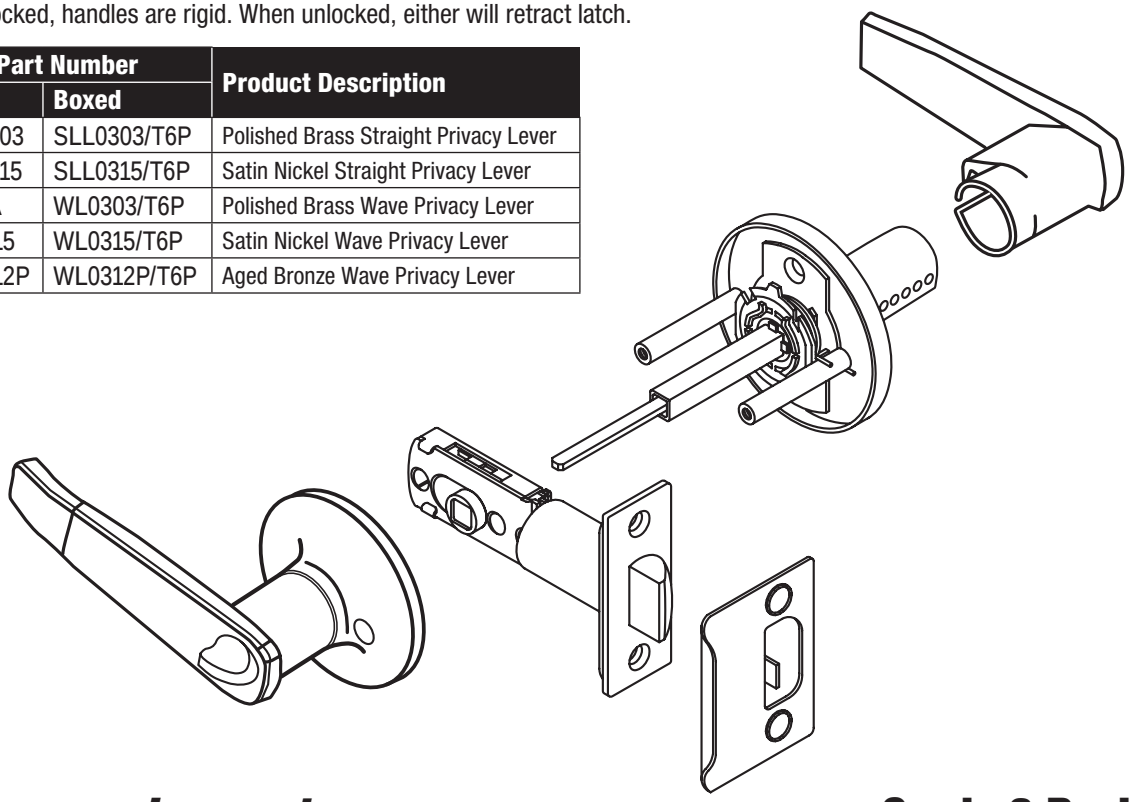
Part Number		Product Description
Retail	Boxed	
SLL0403	SLL0403/T6P	Polished Brass Straight Passage Lever
SLL0415	SLL0415/T6P	Satin Nickel Straight Passage Lever
N/A	WL0403/T6P	Polished Brass Wave Passage Lever
WL0415	WL0415/T6P	Satin Nickel Wave Passage Lever
WL0412P	WL0412P/T6P	Aged Bronze Wave Passage Lever



Privacy Leverset — Grade 3 Residential

FUNCTION: Turn button on inside handle locks or unlocks outside and inside.
When locked, handles are rigid. When unlocked, either will retract latch.

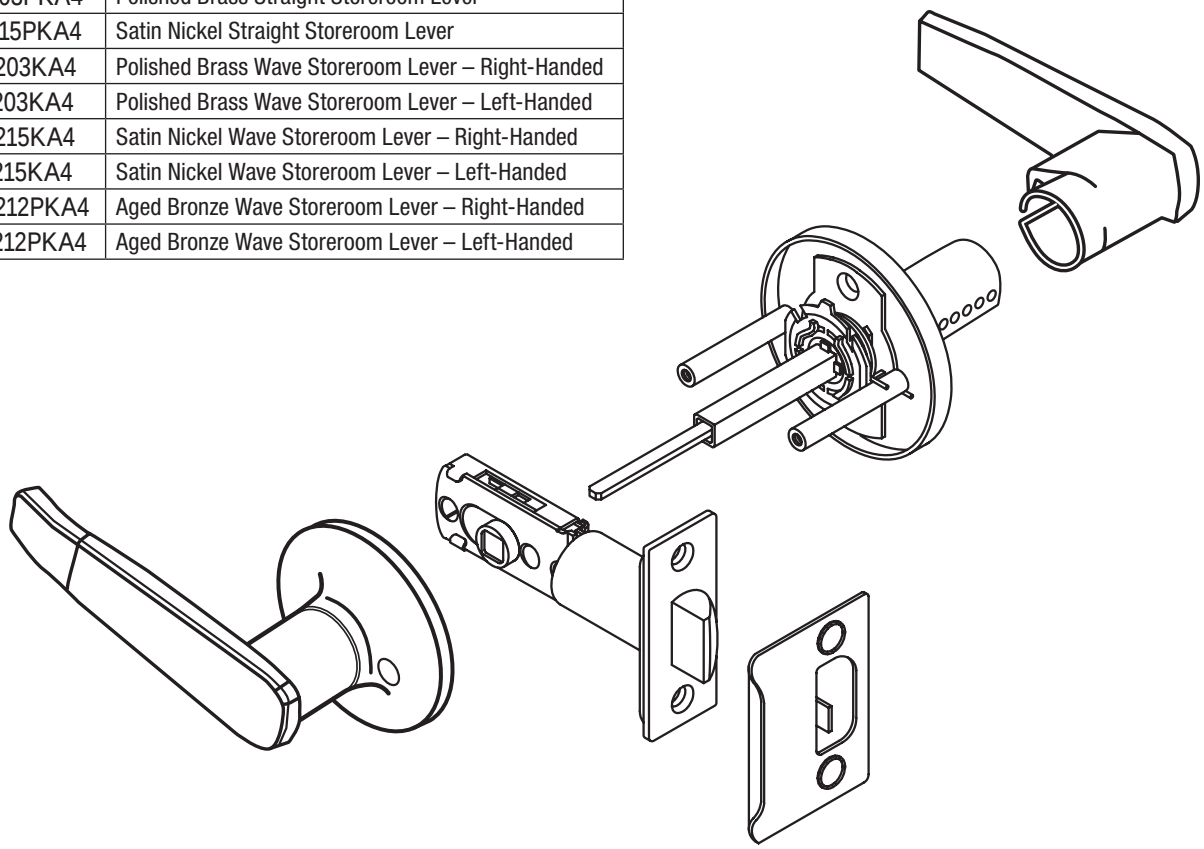
Part Number		Product Description
Retail	Boxed	
SLL0303	SLL0303/T6P	Polished Brass Straight Privacy Lever
SLL0315	SLL0315/T6P	Satin Nickel Straight Privacy Lever
N/A	WL0303/T6P	Polished Brass Wave Privacy Lever
WL0315	WL0315/T6P	Satin Nickel Wave Privacy Lever
WL0312P	WL0312P/T6P	Aged Bronze Wave Privacy Lever

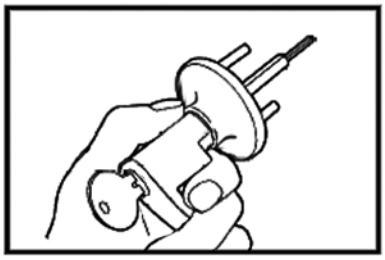


Storeroom Leverset — Grade 3 Residential

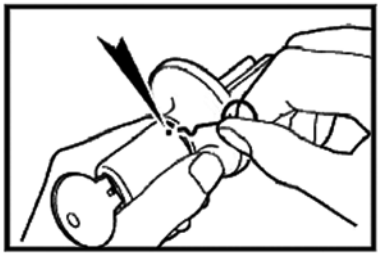
FUNCTION: Inside always unlocked. Outside handle always locked. Latch retracted by turning key.

Part Number	Product Description
Boxed	
SLLO0203PKA4	Polished Brass Straight Storeroom Lever
SLLO0215PKA4	Satin Nickel Straight Storeroom Lever
WLRH0203KA4	Polished Brass Wave Storeroom Lever – Right-Handed
WLLH0203KA4	Polished Brass Wave Storeroom Lever – Left-Handed
WLRH0215KA4	Satin Nickel Wave Storeroom Lever – Right-Handed
WLLH0215KA4	Satin Nickel Wave Storeroom Lever – Left-Handed
WLRH0212PKA4	Aged Bronze Wave Storeroom Lever – Right-Handed
WLLH0212PKA4	Aged Bronze Wave Storeroom Lever – Left-Handed

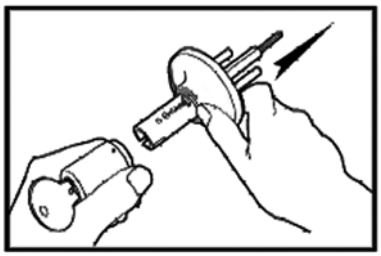




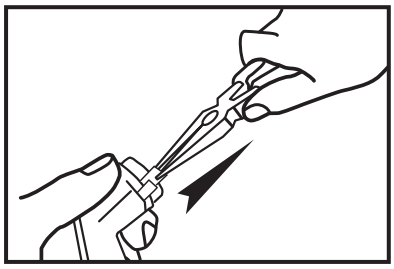
Use key to unlock, if no key is available, pick to unlock.



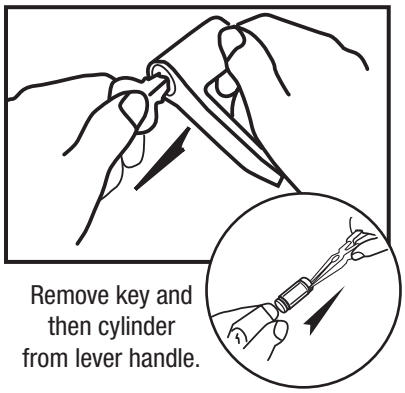
Use the lever release tool to depress the retainer and release the lever.



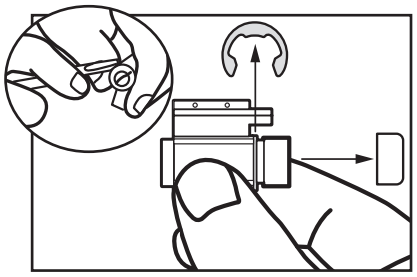
Pull lever handle from outside spindle.



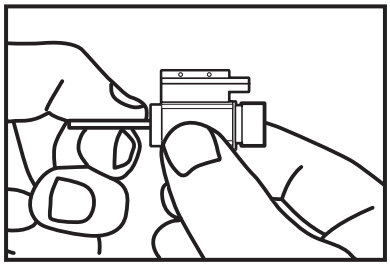
Remove plastic spacer from lever. Do not lose.



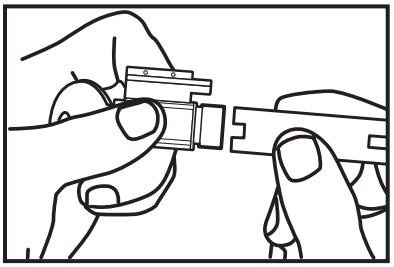
Remove key and then cylinder from lever handle.



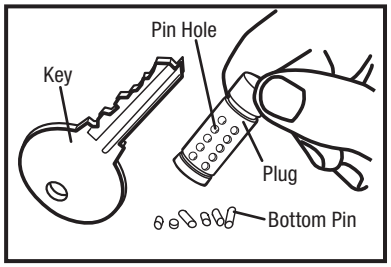
Remove C clip and pry cap from end of cylinder.



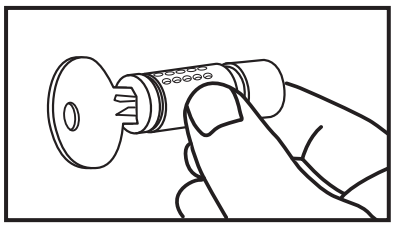
Turn plug 45° in either direction.



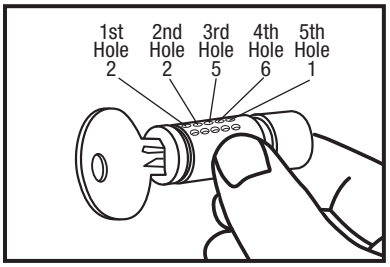
Use the plug follower to push the plug out of the shell. Note: Use the notched end against the end of the plug.



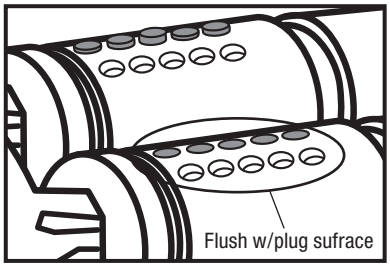
Pull the key from the plug and remove pins from all chambers.



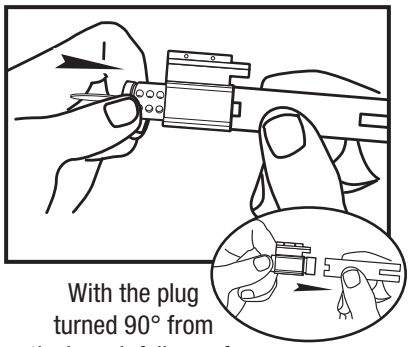
Insert new key. If the key isn't stamped with a direct code, decode. Our example key is combination 22561.



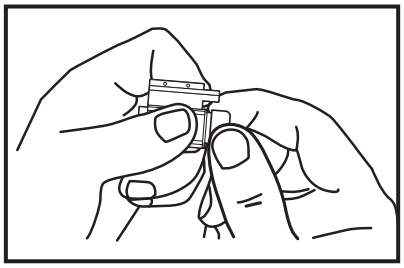
Select a bottom pin #2 from the keying kit and place it in the first pin chamber. Key the rest of the cylinder as: #2 in the second chamber, #5 in the third chamber, #6 in the fourth chamber, #1 in the fifth chamber.



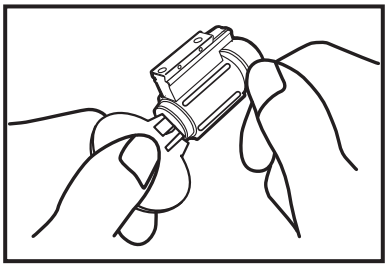
Check that all pins are flush with the surface of the plug with the new key inserted.



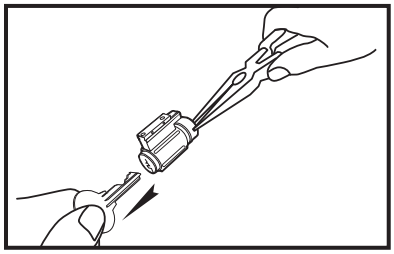
With the plug turned 90° from vertical, push follower from the shell with the plug.



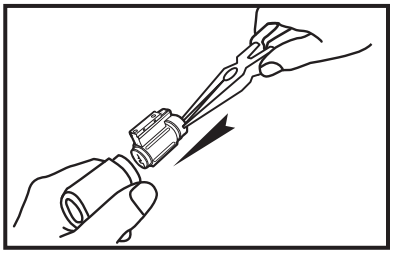
Push circlip retainer onto the end of the plug.



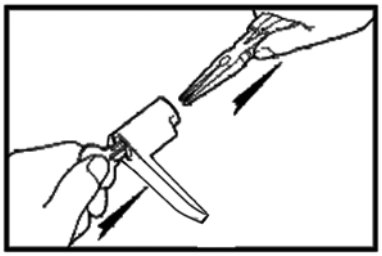
Check operation of key for functionality.



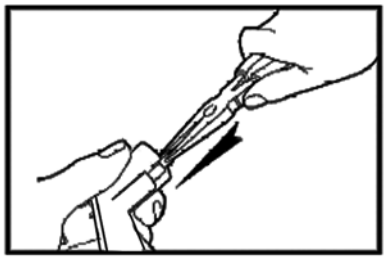
Pull key from cylinder and grab cylinder end with pliers.



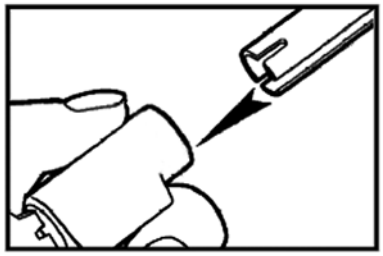
Push cylinder assembly into the lever handle using the pliers.



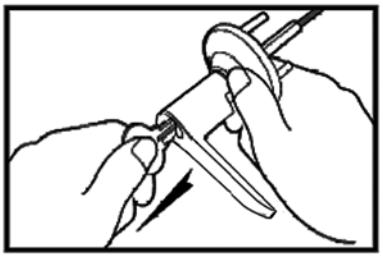
Partially insert key and remove the pliers.



Replace the plastic spacer with correct orientation.



Align the plastic spacer with the slot in the spindle, then push lever onto spindle until retainer snaps into place.

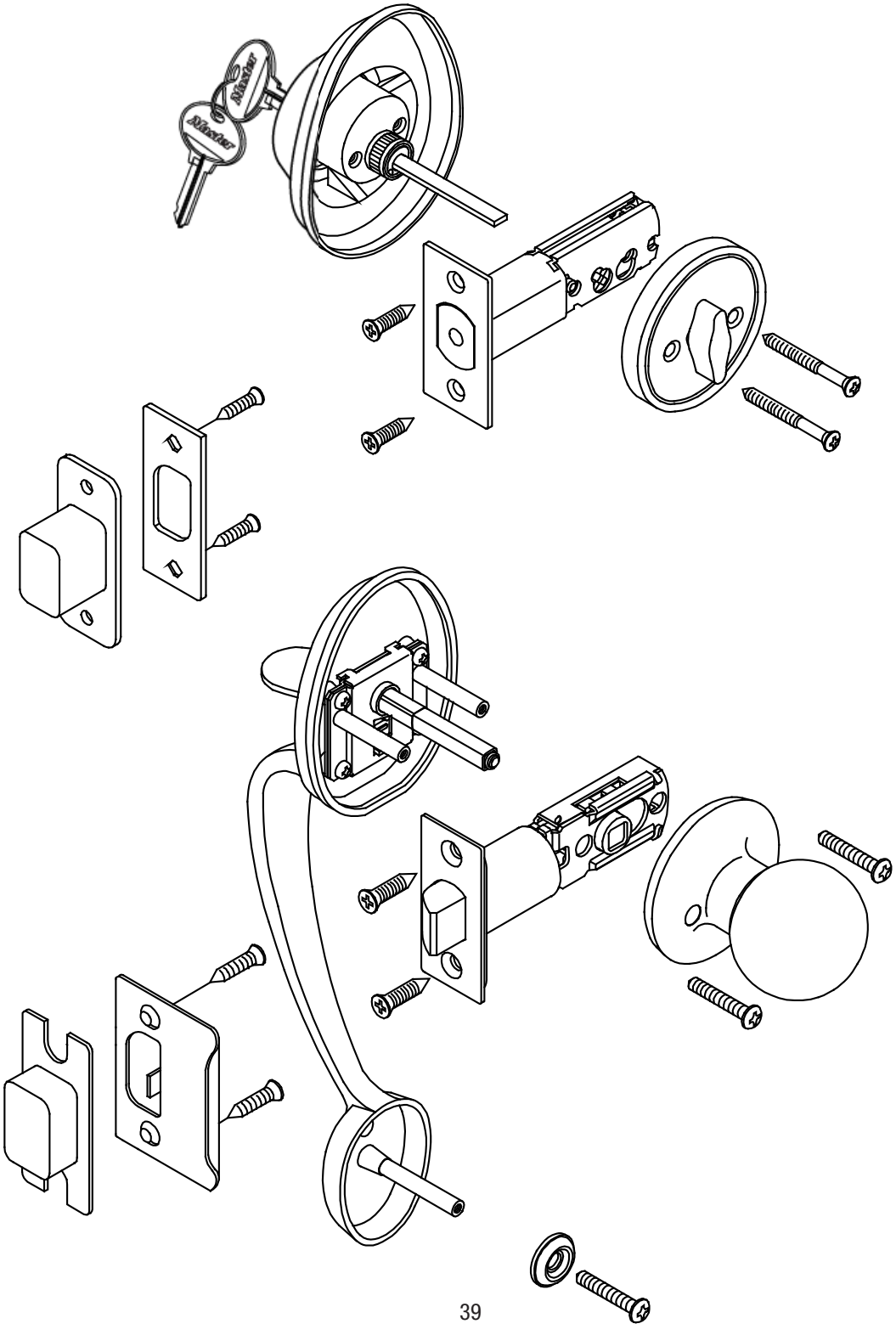


Check operation of lock in locked and unlocked modes to verify functionality.

FUNCTION: Deadbolt thrown or retracted by key outside or thumb turn inside. Latch bolt by thumb piece outside or knob inside. No keys required for latch bolt operation.

Part Number		Product Description
Retail	**Boxed**	
HDLBA0603	HDLBA0603KA4	Polished Brass Entrance Handleset, Ball Knob Interior
N/A	HDLTU0603KA4	Polished Brass Entrance Handleset, Tulip Knob Interior
N/A	HDLBA0615KA4	Satin Nickel Entrance Handleset, Ball Knob Interior
N/A	HDLBC0612PKA4	Aged Bronze Entrance Handleset, Biscuit Knob Interior
N/A	HDLWL0612PKA4	Aged Bronze Entrance Handleset, Wave Lever Interior

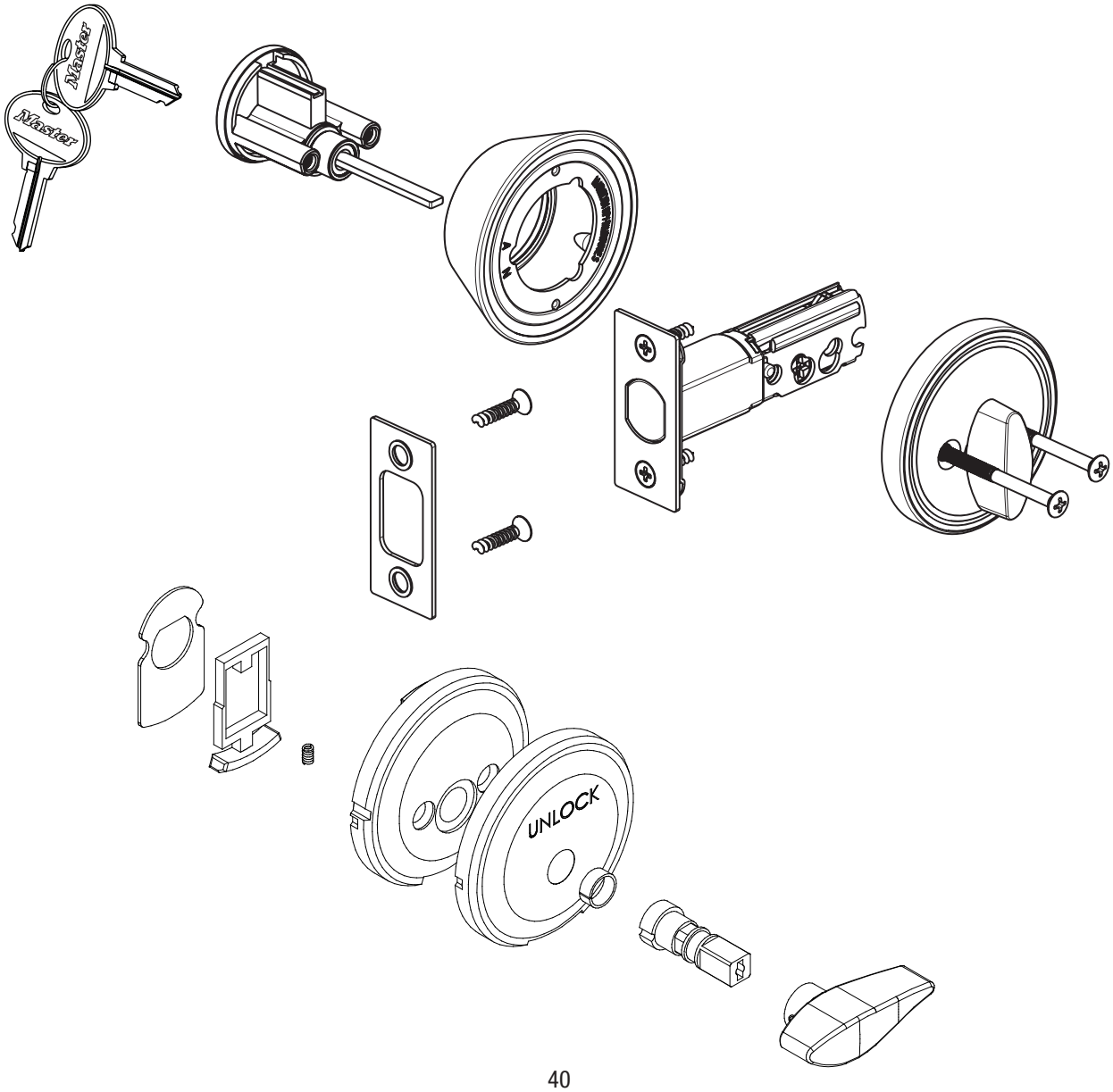
Handleset deadbolts are not available with the NightWatch® function



Single Cylinder Deadbolt Grade 3 Residential

FUNCTION: Deadbolt thrown or retracted by key outside or by thumb turn inside.

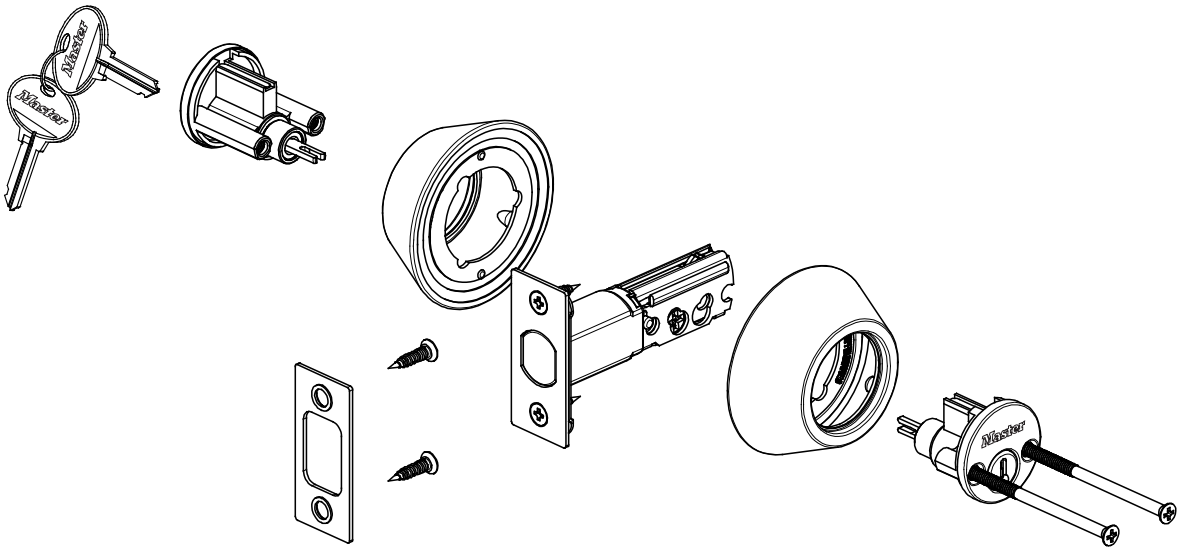
Part Number		Product Description
Retail	**Boxed**	
DSO0603	DSO0603KA4	Polished Brass Single Cylinder Deadbolt
DSO0605	DSO0605KA4	Antique Brass Single Cylinder Deadbolt
DSO0615	DSO0615KA4	Satin Nickel Single Cylinder Deadbolt
DSO0612P	DSO0612PKA4	Aged Bronze Single Cylinder Deadbolt
N/A	DSNO0603KA4	Polished Brass Single Cylinder Deadbolt, with BumpStop®
N/A	DSNO0605KA4	Antique Brass Single Cylinder Deadbolt, with BumpStop®
N/A	DSNO0615KA4	Satin Nickel Single Cylinder Deadbolt, with BumpStop®
N/A	DSNO0612PKA4	Aged Bronze Single Cylinder Deadbolt with BumpStop®
DSON0603	DSON0603KA4	Polished Brass Single Cylinder Deadbolt, NightWatch®
DSON0605	DSON0605KA4	Antique Brass Single Cylinder Deadbolt, NightWatch®
DSON0615	DSON0615KA4	Satin Nickel Single Cylinder Deadbolt, NightWatch®
DSON0612P	**N/A**	Aged Bronze Single Cylinder Deadbolt, NightWatch®
N/A	DSNON0603KA4	Polished Brass Single Cylinder Deadbolt, NightWatch® with BumpStop®
N/A	DSNON0605KA4	Antique Brass Single Cylinder Deadbolt, NightWatch® with BumpStop®
N/A	DSNON0615KA4	Satin Nickel Single Cylinder Deabolt, NightWatch® with BumpStop®



Double Cylinder Deadbolt Grade 3 Residential

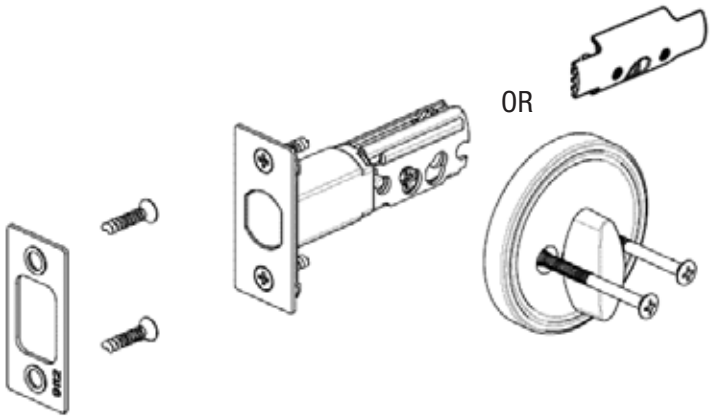
FUNCTION: Deadbolt thrown or retracted by key in either side.

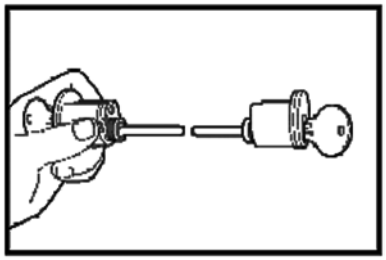
Part Number		Product Description
Retail	Boxed	
DSO0703	DSO0703KA4	Polished Brass Double Cylinder Deadbolt
DSO0705	DSO0705KA4	Antique Brass Double Cylinder Deadbolt
DSO0715	DSO0715KA4	Satin Nickel Double Cylinder Deadbolt
DSO0712P	DSO0712PKA4	Aged Bronze Double Cylinder Deadbolt with BumpStop®
N/A	DSNO0703KA4	Polished Brass Double Cylinder Deadbolt with BumpStop®
N/A	DSNO0705KA4	Antique Brass Double Cylinder Deadbolt with BumpStop®
N/A	DSNO0715KA4	Satin NIckel Double Cylinder Deadbolt with BumpStop®
N/A	DSNO0712PKA4	Aged Bronze Double Cylinder Deadbolt with BumpStop®



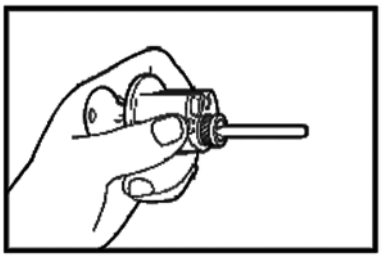
One-Sided Deadbolt Grade 3 Residential

Part Number	Product Description
Boxed	
DSO0503	Polished Brass Single-Sided Deadbolt
DSO0505	Antique Brass Single-Sided Deadbolt
DSO0515	Satin Nickel Single-Sided Deadbolt
DSO0512P	Aged Bronze Single-Sided Deadbolt

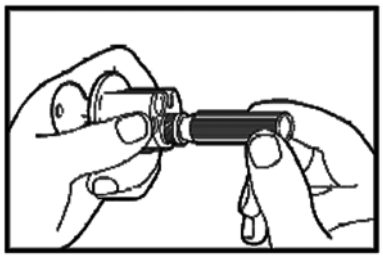




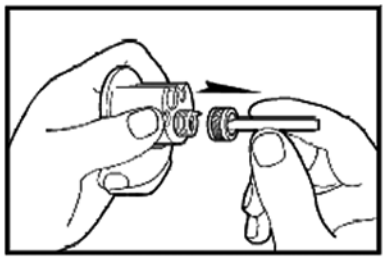
Insert key.
Note: The rekeying procedure is the same for brass cylinder housings or die cast housings.



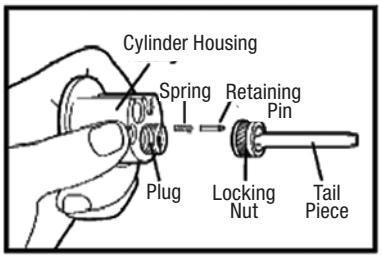
Disassemble the deadbolt, remove trim collar from the cylinder.



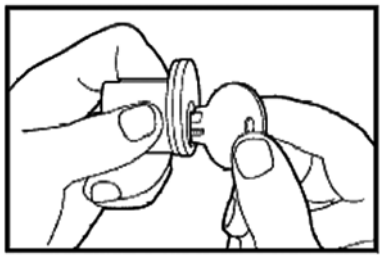
Rotate the cap tool counterclockwise to loosen the cap.



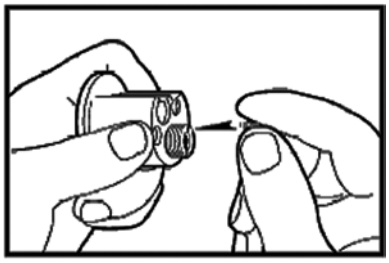
Remove cap and tailpiece.



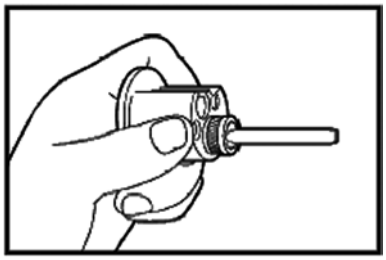
Remove cap pin and cap pin spring
Rekey using a follower as instructed under Leverset Rekeying.



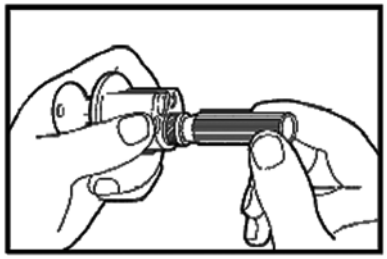
Check reassembled cylinder to ensure functionality but do not remove the key.



Insert the cap pin spring and the cap pin.



Put cap and tailpiece in position.



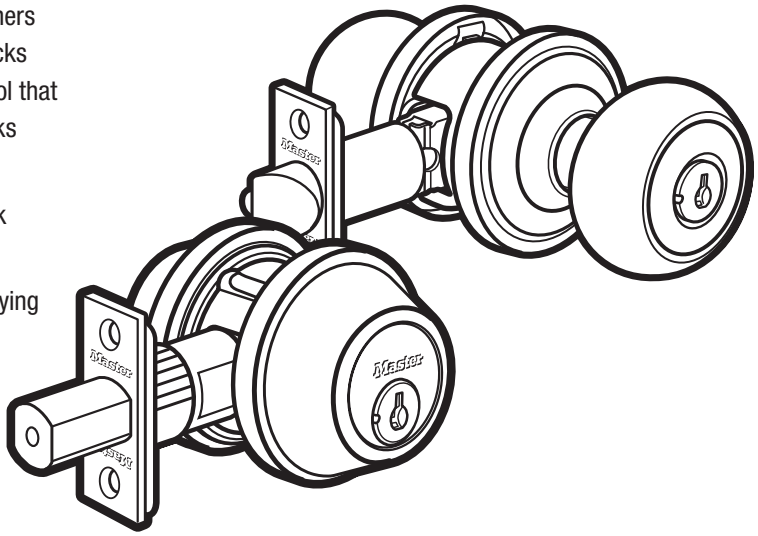
Tighten cap with cap tool and check key for ease in turning. If tight, loosen cap one retention point and check.

Master Lock Recodable Door Hardware allows property owners and managers to take control of the process of changing locks with every change in occupancy. With the simple change tool that is provided with each lock they can instantly rekey door locks whenever needed and as often as needed.

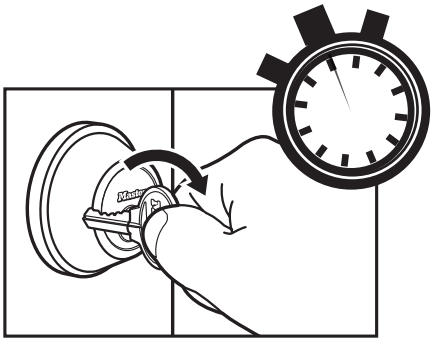
Quick – Literally takes just seconds to recode a Master Lock recodable lock

Cost Effective – Eliminates cost of lock replacement or rekeying

Easy – Takes just four easy steps

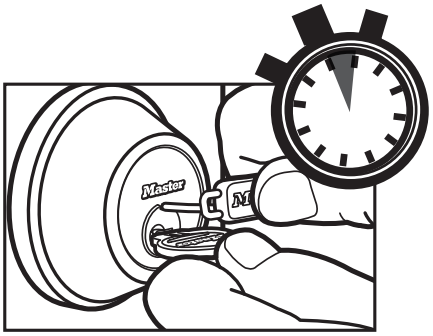


1



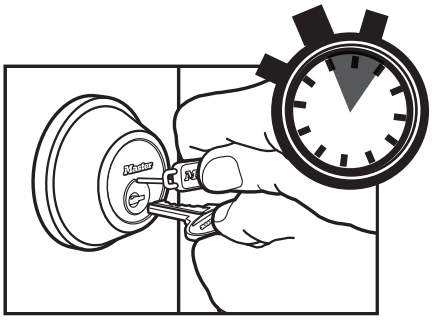
With door open, insert key into keyway of deadbolt. Turn key 90 degrees clockwise to recode position. Do not remove key from keyway.

2



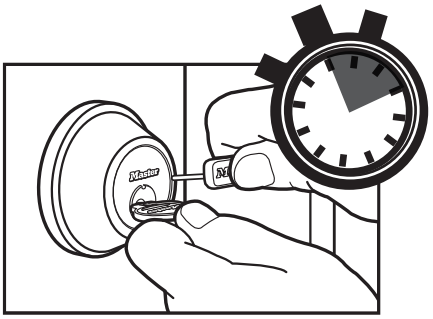
With key still in keyway, insert Change Tool into notch above the keyway.

3



Without removing the Change Tool, remove old key. With Change Tool still in place, insert new key.

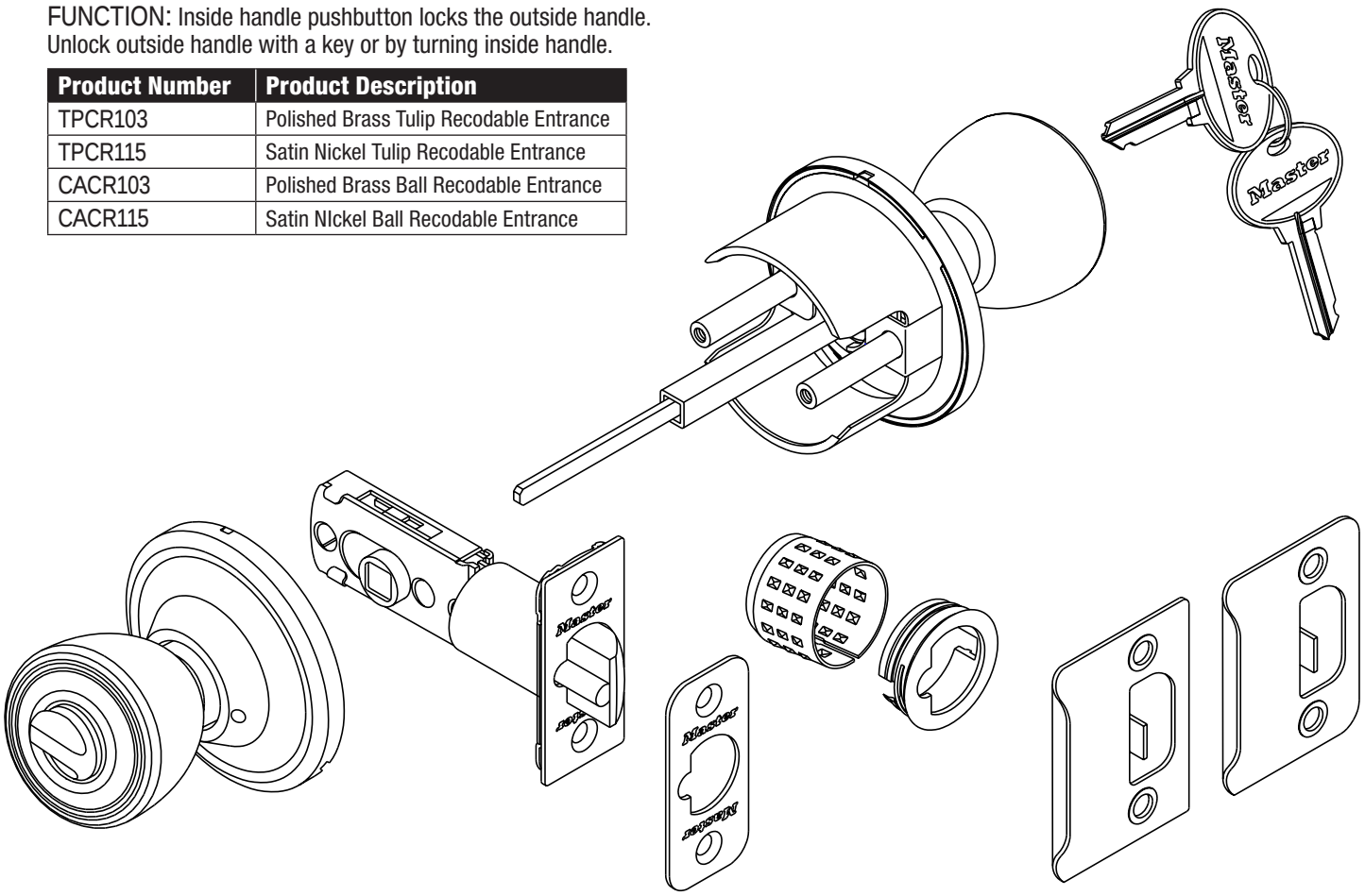
4

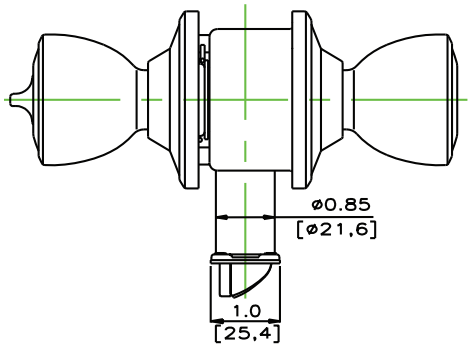


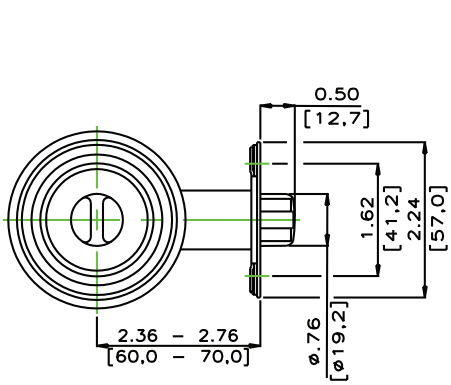
Remove Change Tool – your lock is now rekeyed to the new key.

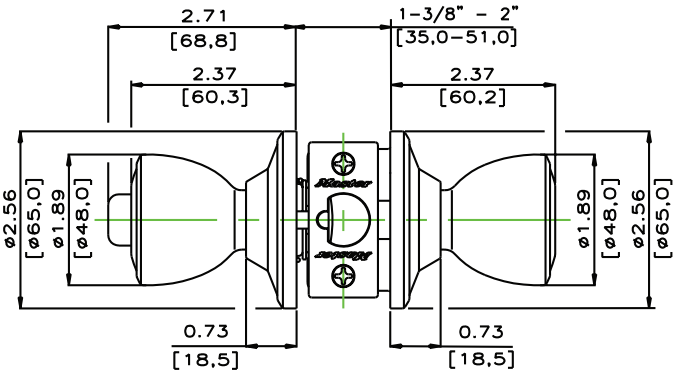
FUNCTION: Inside handle pushbutton locks the outside handle.
Unlock outside handle with a key or by turning inside handle.

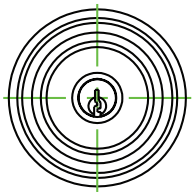
Product Number	Product Description
TPCR103	Polished Brass Tulip Recodable Entrance
TPCR115	Satin Nickel Tulip Recodable Entrance
CACR103	Polished Brass Ball Recodable Entrance
CACR115	Satin NIckel Ball Recodable Entrance





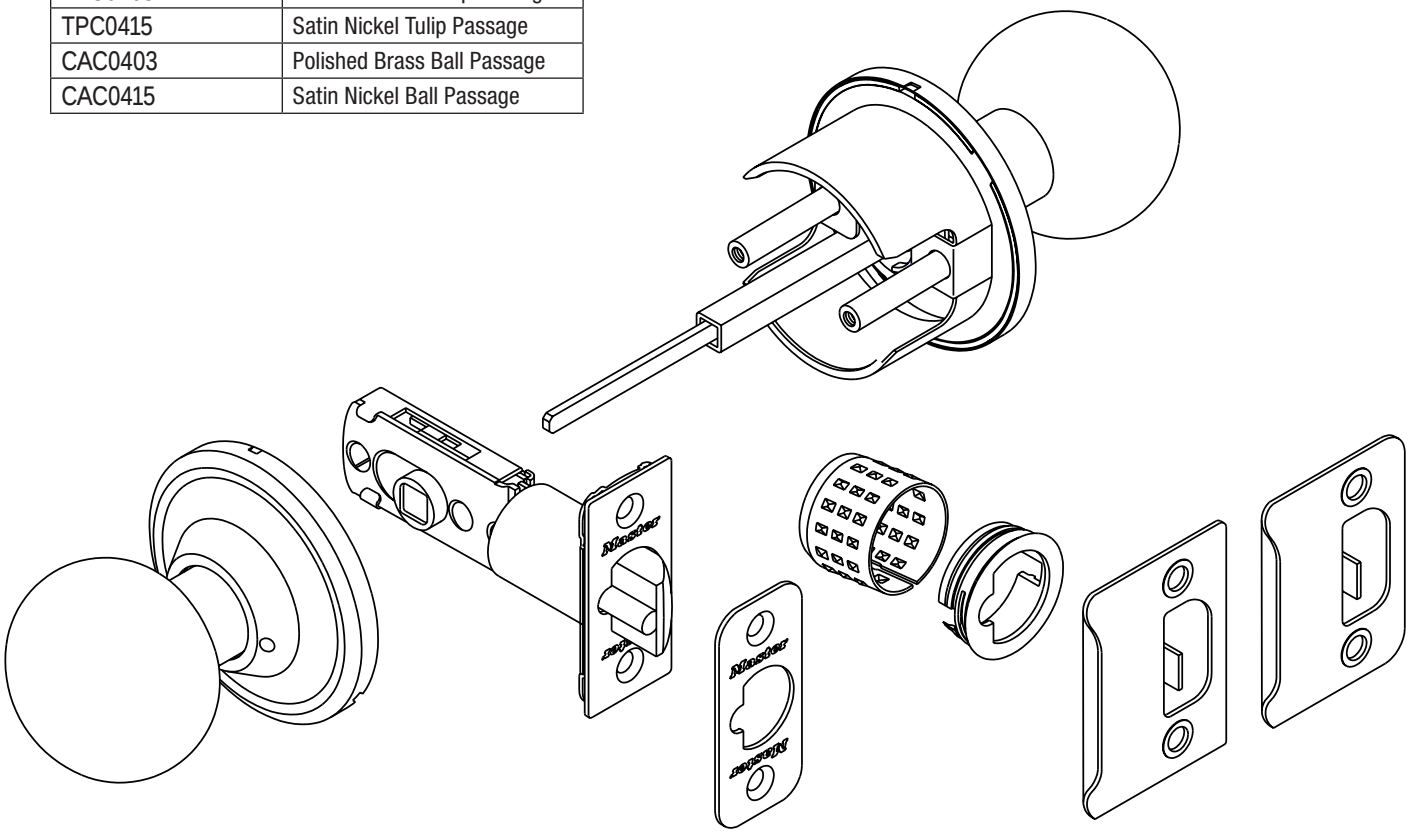


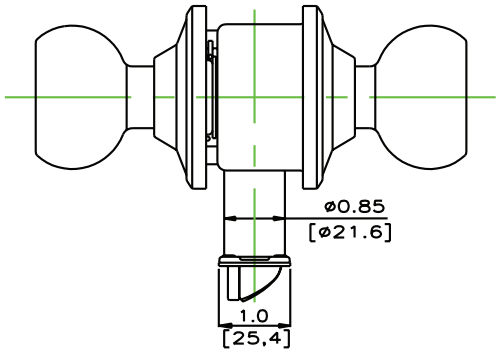


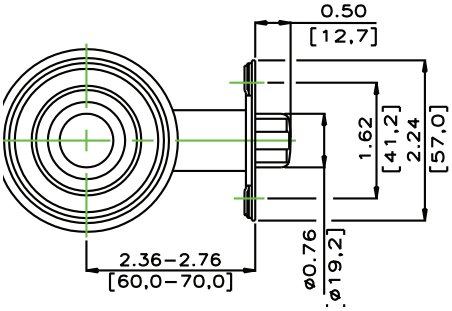


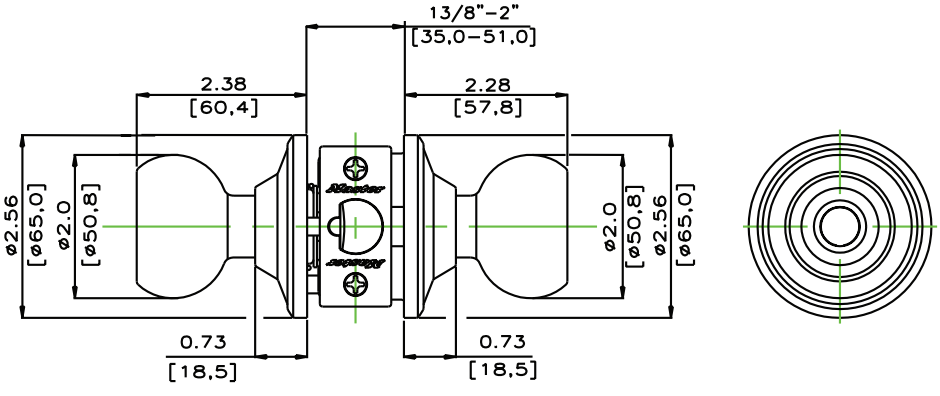
FUNCTION: Inside and outside handles always unlocked; turning either retracts latch. No keys required.

Product Number	Product Description
TPC0403	Polished Brass Tulip Passage
TPC0415	Satin Nickel Tulip Passage
CAC0403	Polished Brass Ball Passage
CAC0415	Satin Nickel Ball Passage



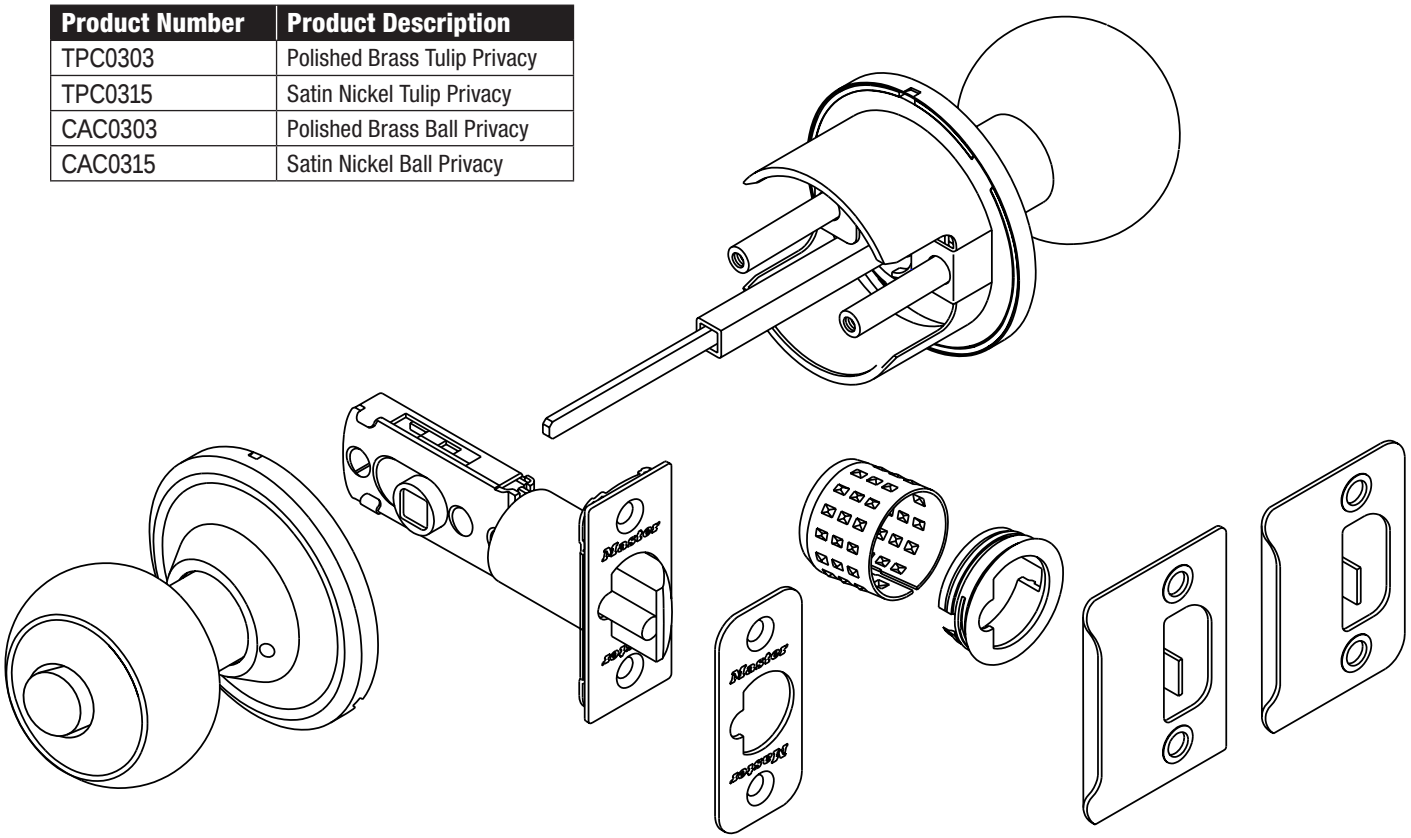


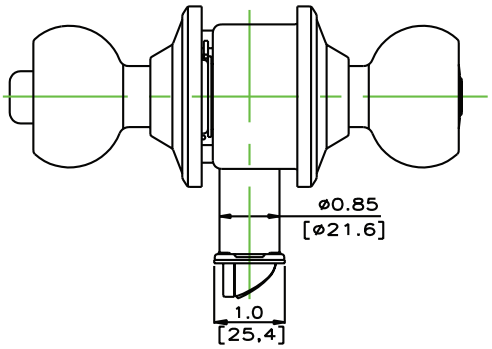


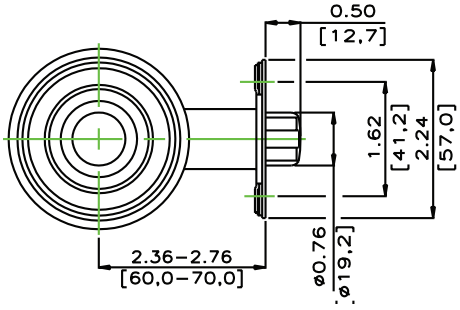


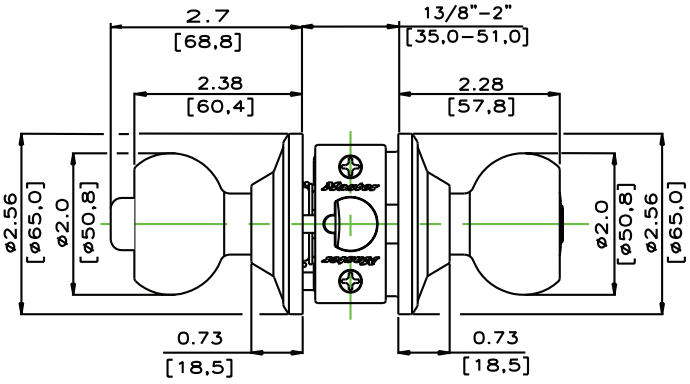
FUNCTION: Inside handle pushbutton locks outside handle. Emergency release in outside handle. Closing the door or turning inside handle releases the pushbutton.

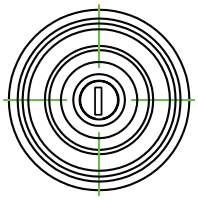
Product Number	Product Description
TPC0303	Polished Brass Tulip Privacy
TPC0315	Satin Nickel Tulip Privacy
CAC0303	Polished Brass Ball Privacy
CAC0315	Satin Nickel Ball Privacy







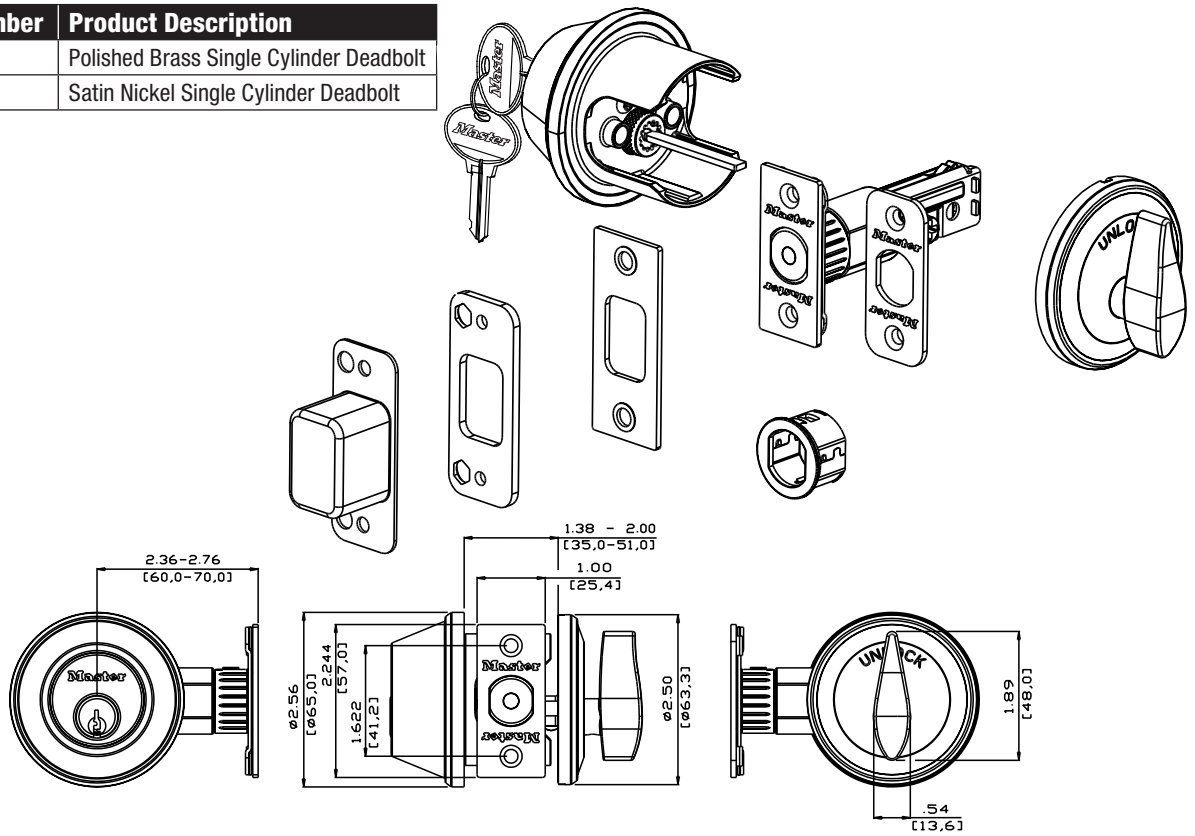




Single Cylinder Deadbolt — Recodable Multi-Family

FUNCTION: Deadbolt thrown or retracted by key outside or by thumb-turn inside.

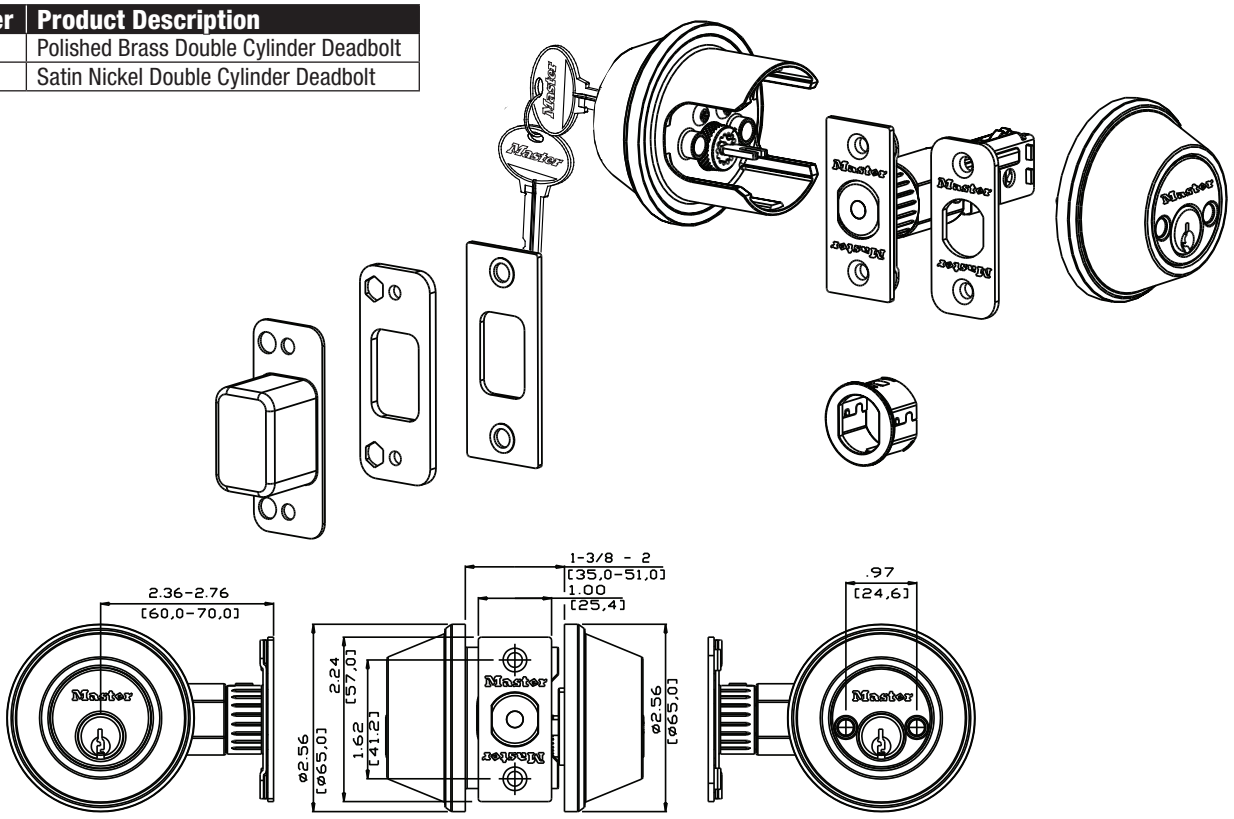
Product Number	Product Description
DSCR603	Polished Brass Single Cylinder Deadbolt
DSCR615	Satin Nickel Single Cylinder Deadbolt



Double Cylinder Deadbolt — Recodable Multi-Family

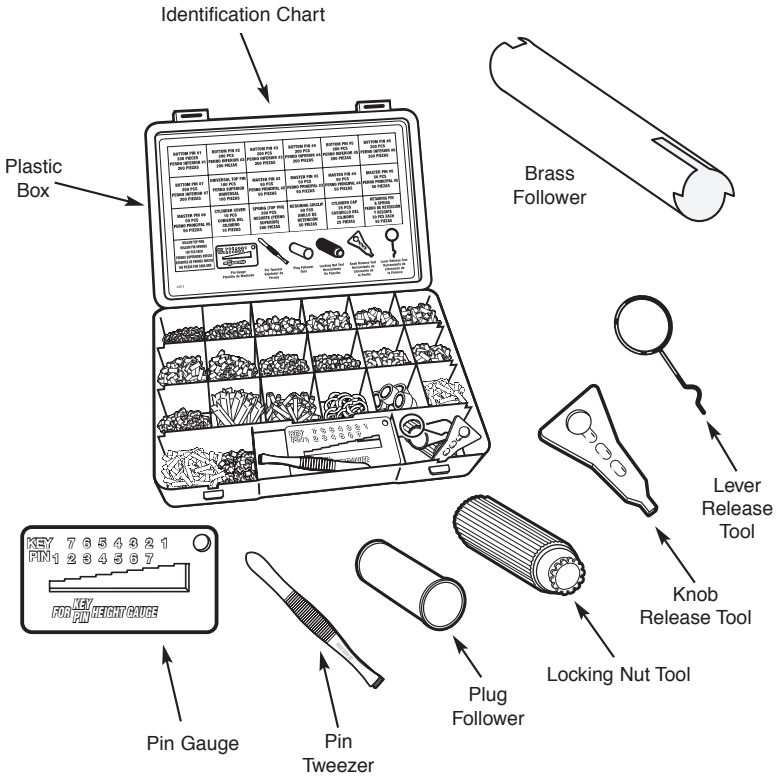
FUNCTION: Deadbolt thrown or retracted by key in either side.

Product Number	Product Description
DDCR703	Polished Brass Double Cylinder Deadbolt
DDCR715	Satin Nickel Double Cylinder Deadbolt



Service Kits and Component Parts

Keying Kit 2201 (for 1176 Keyway)



Contents

200 ea.	Bottom Pins 1 through 7
50 ea.	Master Pins 2 through 6
100 ea.	Top Pins
200 ea.	Driver Springs
10 ea.	Retaining Caps
50 ea.	C Clips
25 ea.	Pin Covers
50	Cap Pins
50 ea.	Cap Pin Springs
1 ea	Tweezers
1 ea	Cap Tool
1 ea	Lever release Tool
1 ea	Knob Release Tool
1 ea	Follower
1 ea	Pin & Key Gauge

Supplemental Bottom Spool Pin Kit 291BS1 (for 1176 Keyway)

Contents

Spool Bottom Pins

Size	Part Number
1	0291-82360
2	0291-82361
3	0291-82362
4	0291-83766
5	0291-83767
6	0291-83768
7	0291-83769

Driver Springs 0291-80083

Combination Deadbolt

Disrupter Spring	PKG50998
Fly	PKG50994