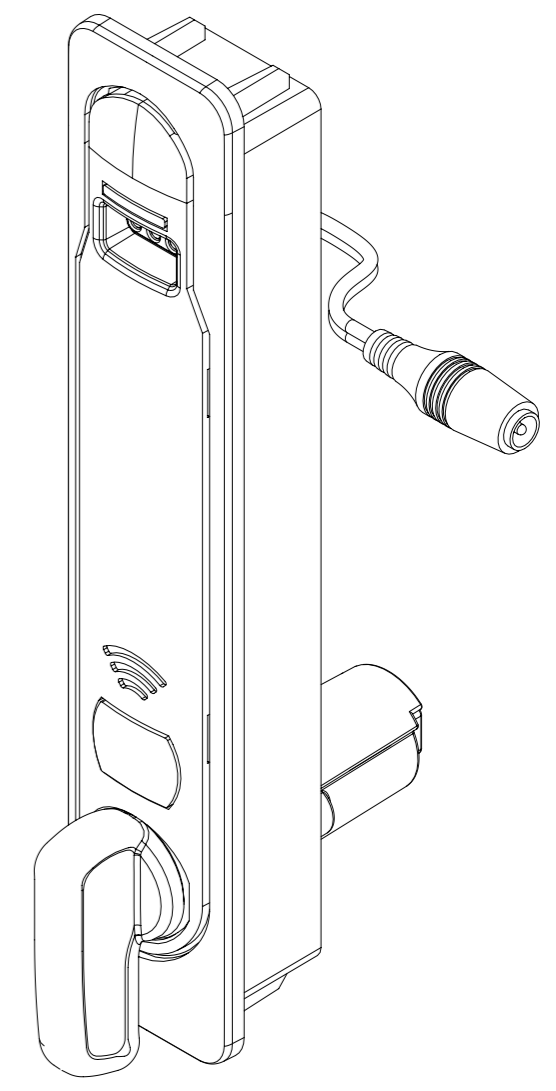
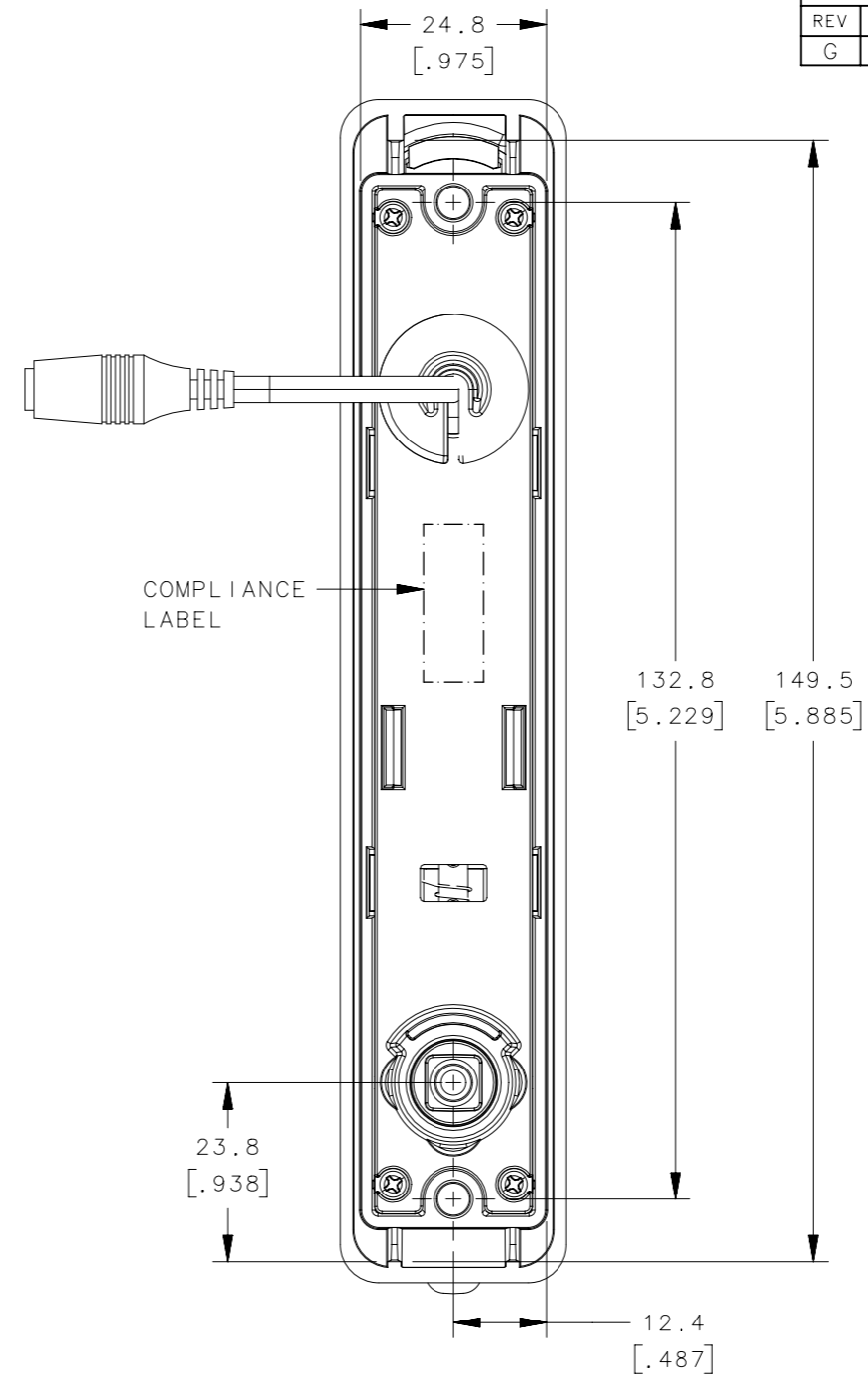
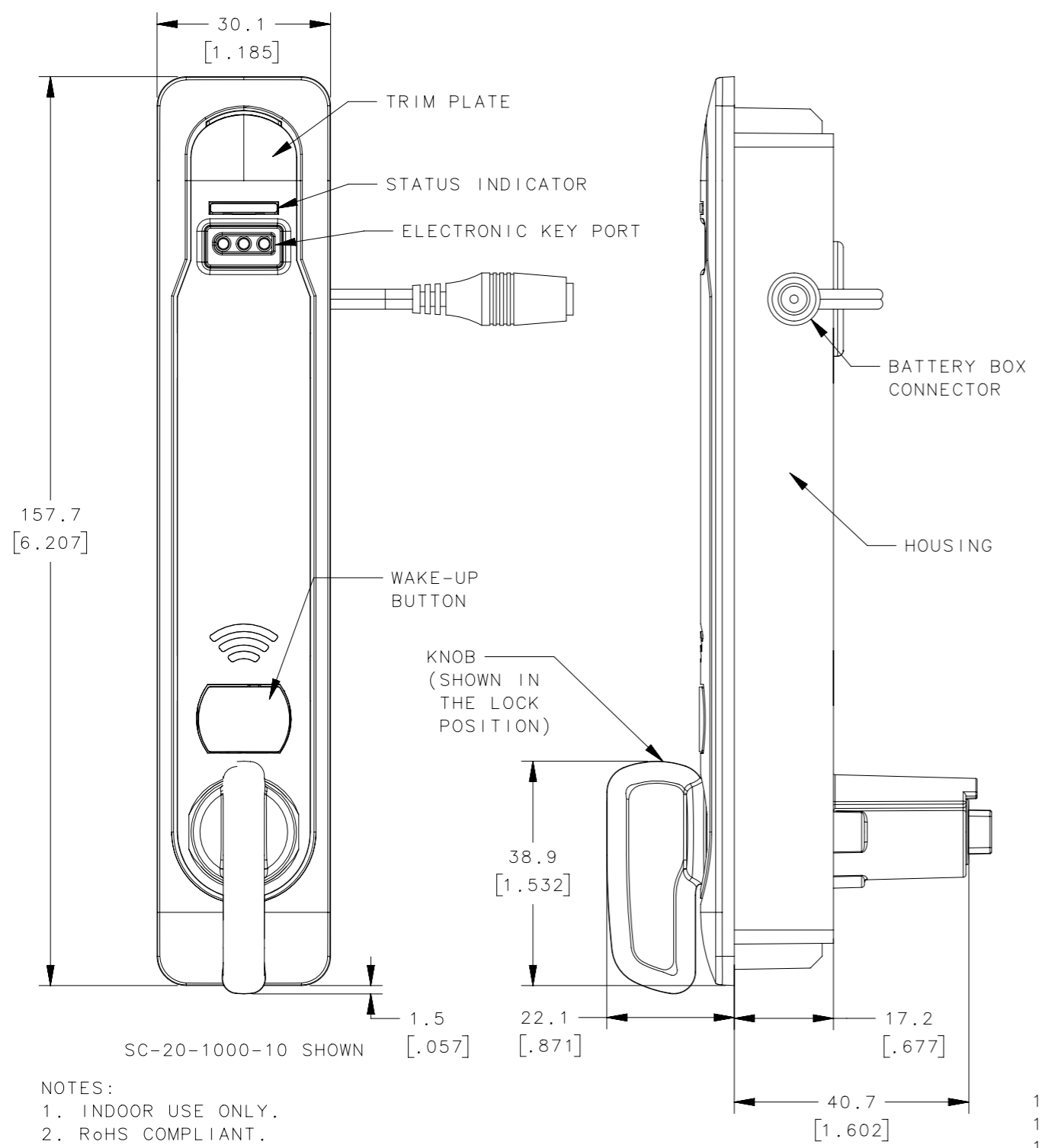


REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
G	01JUN2018	RKS/VK	PRN: P2018-1333



- NOTES:
1. INDOOR USE ONLY.
 2. RoHS COMPLIANT.
 3. OPERATING TEMPERATURE RANGE: 0-50°C.
 4. OPERATING VOLTAGE: 4.5 VDC.
AA (3) BATTERY BOX INCLUDED (BATTERIES NOT INCLUDED).
 5. TWO MOUNTING CUPS AVAILABLE TO MEET VARIOUS PANEL THICKNESSES. SEE MOUNTING OPTION TABLE ON SHEET 2 OF 5 TO DETERMINE SIZE NEEDED. SEE PART NUMBER CONFIGURATOR ON SHEET 2 OF 5 TO DETERMINE PART NUMBER TO ORDER.
 6. MOUNTING CUP HARDWARE IS PROVIDED IN HARDWARE BAG. SEE MOUNTING OPTION TABLE ON SHEET 2 OF 5 FOR PROPER SCREW SELECTION. RECOMMENDED TIGHTENING TORQUE: 1.8 N-m.
 7. CAM SCREW PROVIDED IN HARDWARE BAG. RECOMMENDED TIGHTENING TORQUE: 4.0 N-m. CAUTION: TO AVOID DAMAGE TO THE LOCKING MECHANISM FIRMLY HOLD KNOB WHEN INSTALLING CAM SCREW TO THE PROPER TORQUE.
 8. ROTATION LIMITER PROVIDED IN HARDWARE BAG. ORIENT ACCORDING TO REQUIRED KNOB CLOCKWISE OR COUNTER CLOCKWISE OPERATION.

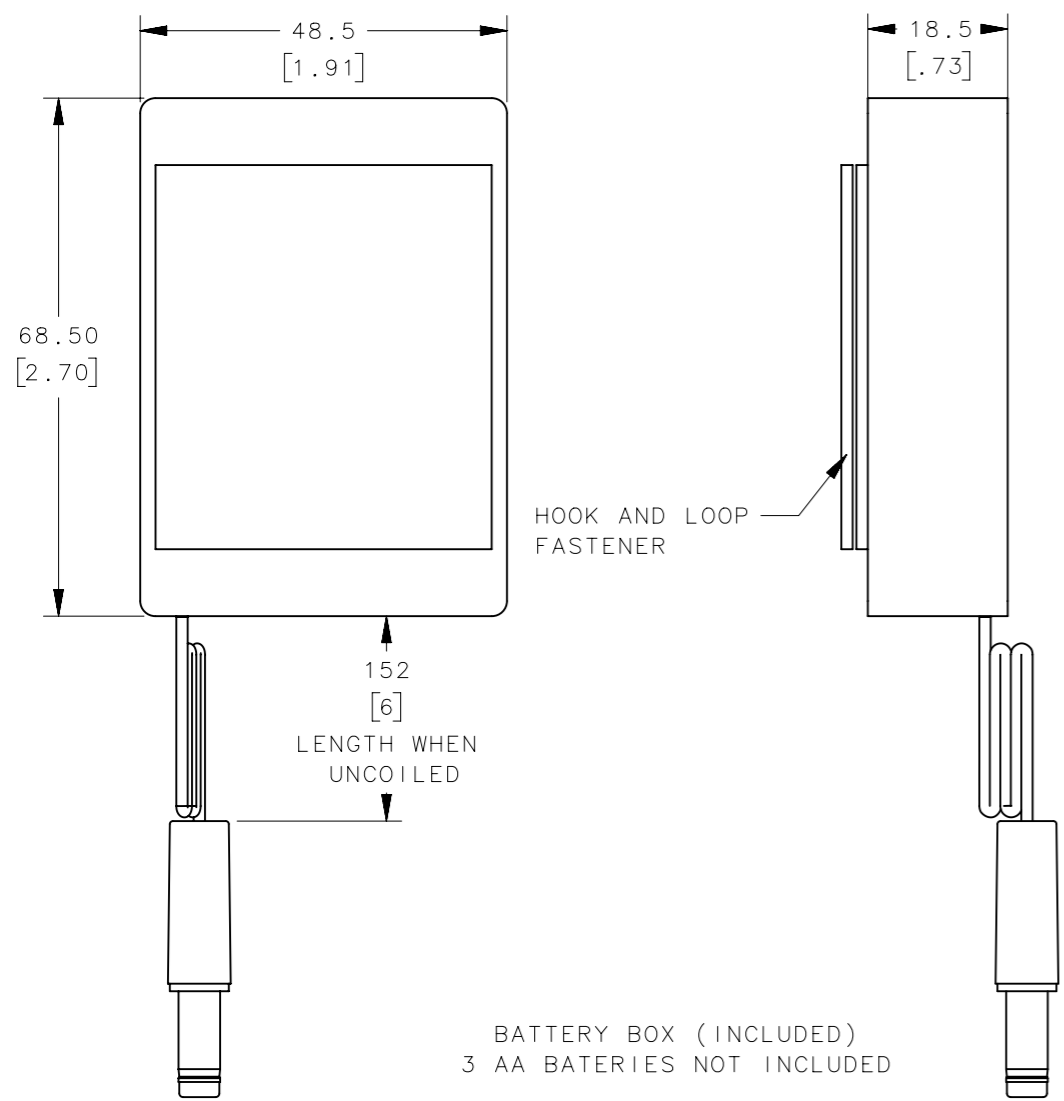
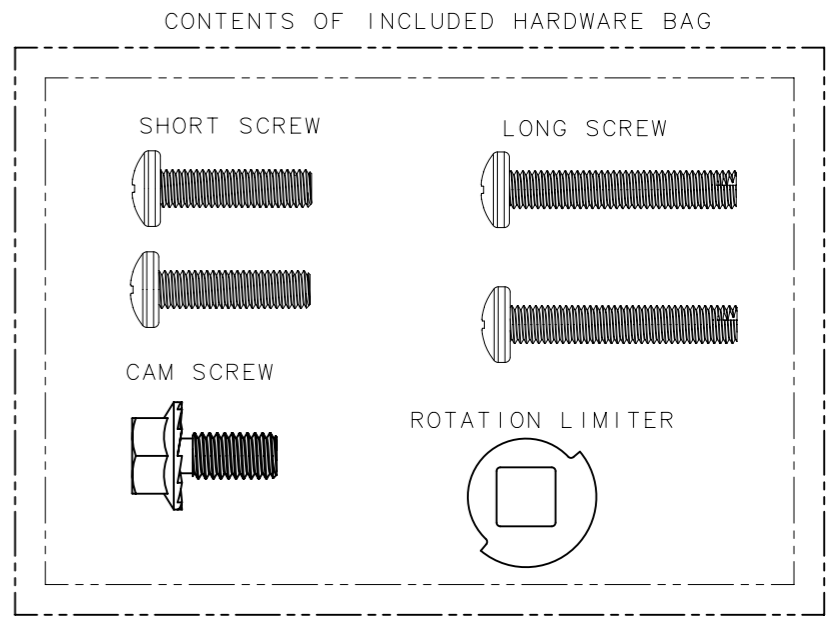
9. ORDER PROGRAMMING KEY (SC-A10-10) SEPARATELY.
10. ORDER MANAGER KEYS (SC-A20-10) SEPARATELY.
11. ORDER USER KEYS (SC-A30-10) SEPARATELY.
12. PROXIMITY READER MODULE TRANSMIT FREQUENCY: 13.56 MHz. (SEE SHEET 2 OF 5)
13. ORDER RFID CARD AND LABEL SEPARATELY. SEE SHEET 2 OF 5 FOR OPTIONS.
14. ORDER CAM SEPARATELY. SEE CAM GRIP OPTION TABLE ON SHEET 3 OF 5. SEE SOUTHCO DRAWING J-SC-50.
15. SEE J-SC-20-1000-M FOR OPERATING INSTRUCTIONS.
16. ORDER SPACER (SC-3004-01) SEPARATELY. SEE SOUTHCO DRAWING J-SC-3000. SEE SHEET 3 OF 5 FOR DETAILS.

SEE SHEET 2 OF 5
FOR LATCH ASSEMBLY NUMBERS

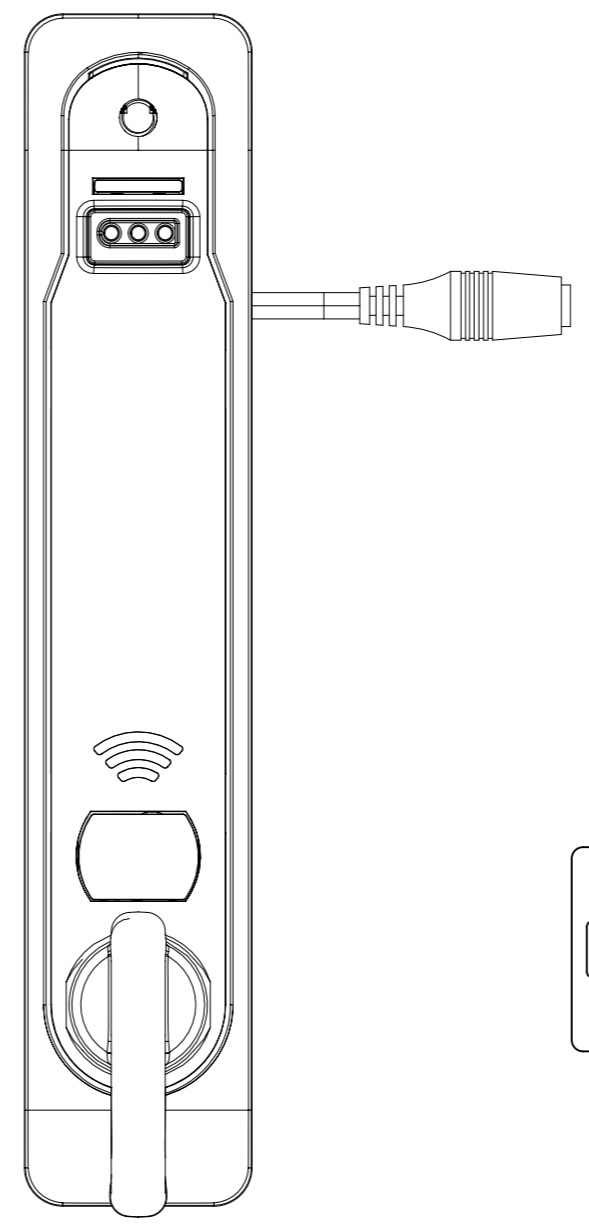


THIRD ANGLE PROJECTION			
MILLIMETERS [IN]			
TOLERANCES UNLESS OTHERWISE NOTED		DESCRIPTION	
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		ELECTRONIC ACCESS SOLUTION SELF CONTAINED RFID LATCH	
PROPRIETARY ITEM EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.	PER ASME Y14.5M-1994	SIZE A3	SYSTEM NX
DRAWN BY ZNP		DATE 10DEC2012	DWG NO. J-SC-20-1000
SCALE 1:1		SHEET 1 OF 5	

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
G	01JUN2018	RKS/VK	PRN: P2018-1333



BATTERY BOX (INCLUDED)
3 AA BATERIES NOT INCLUDED

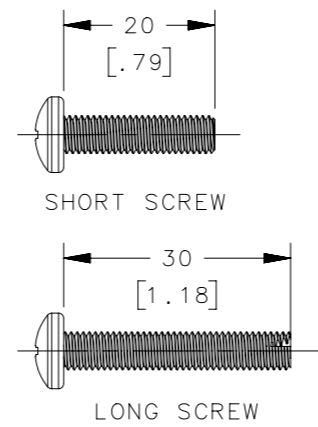


SCALE 1:2

RFID CARD AND LABEL (ORDER SEPARATELY)
EA-C3-101-9 - CARD (WITH LOGO, WITH SLOT)
EA-C3-300-9 - LABEL (WITH LOGO)

MOUNTING OPTIONS		
PANEL THICKNESS	MOUNTING CUP	MOUNTING SCREW
1-5 [0.04-0.19]	TALL CUP	SHORT SCREW (2)
>5-10 [0.20-0.39]		LONG SCREW (2)
>10-15 [0.40-0.59]	SHORT CUP	SHORT SCREW (2)
>15-20 [0.60-0.79]		LONG SCREW (2)
>20-25 [0.80-0.98]		

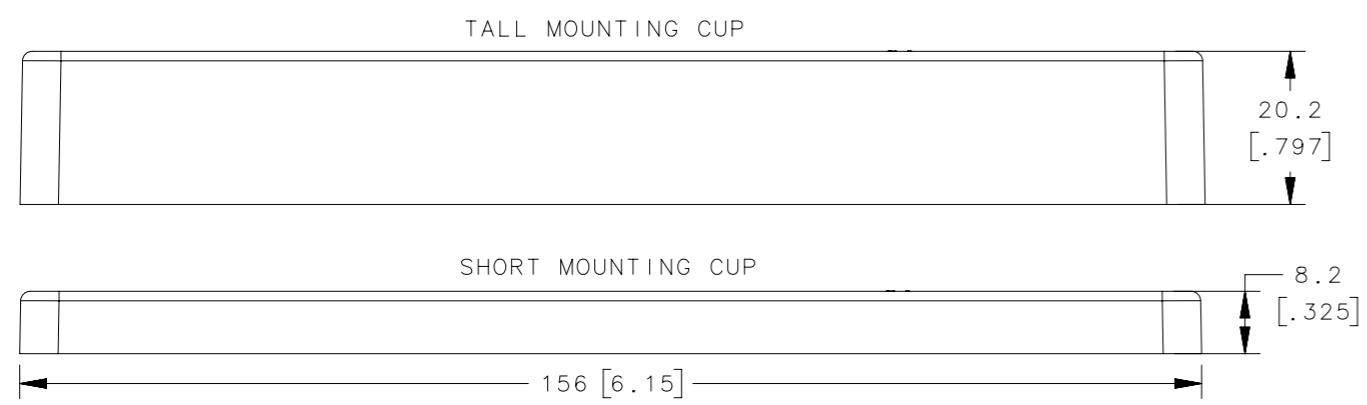
*SELECT THE 2 SCREWS NEEDED



SC-20-100D-XX

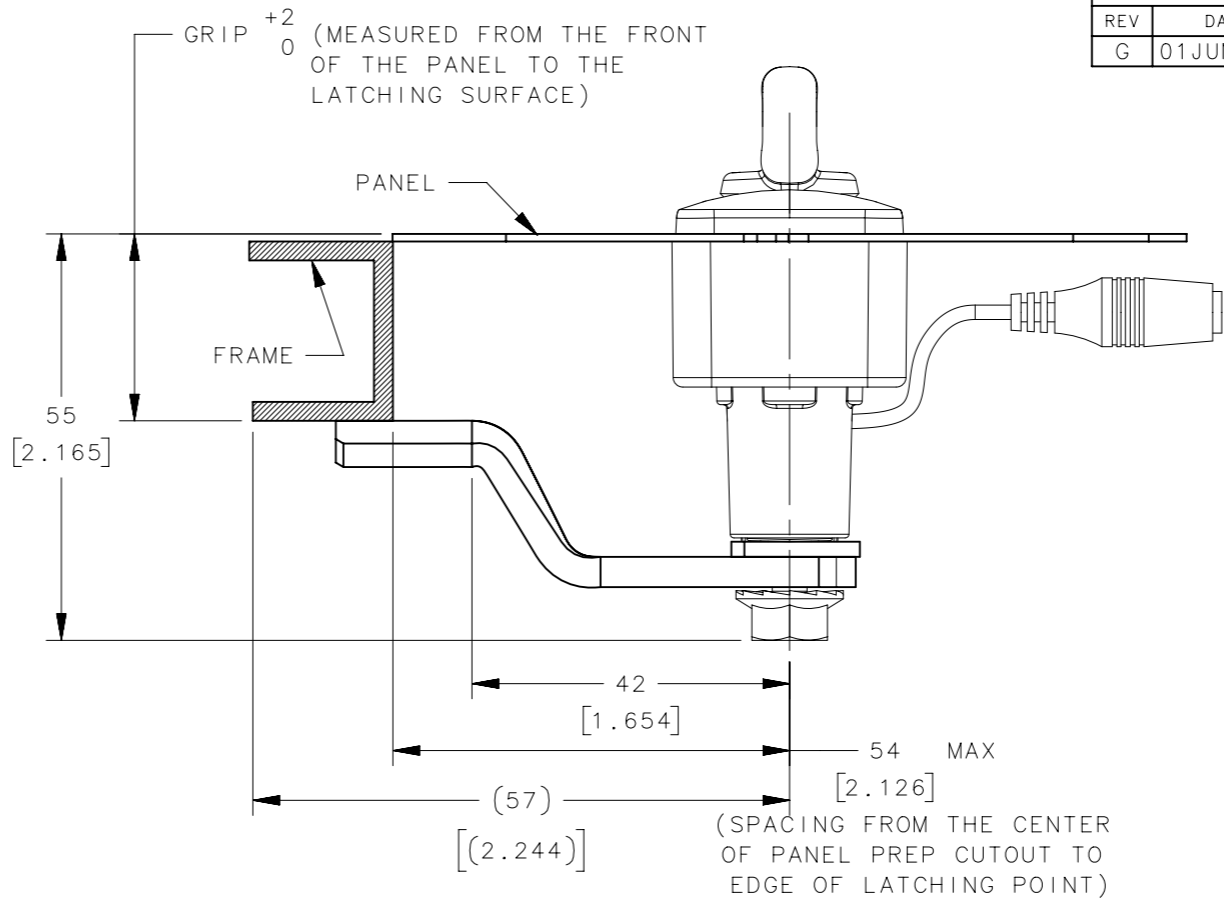
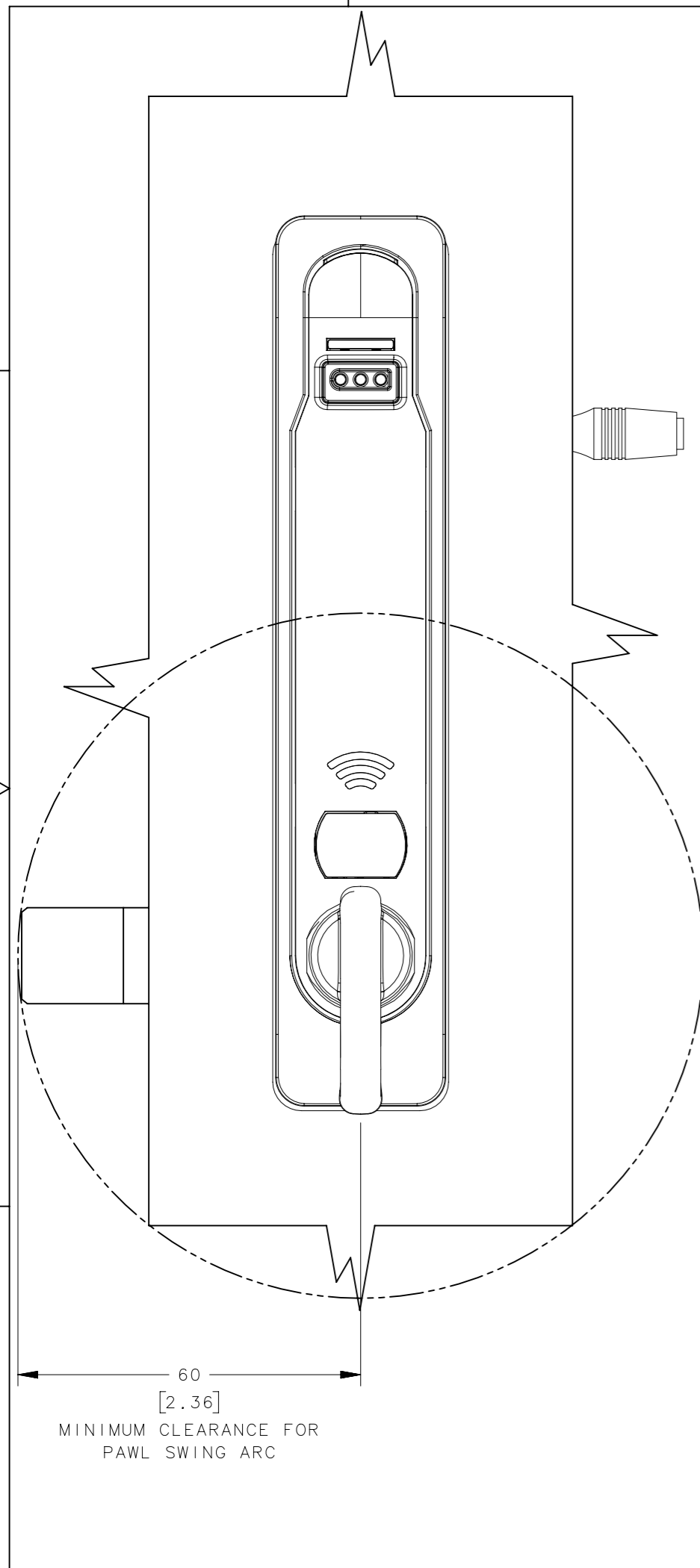
MOUNTING CUP
0-TALL (20.25 [.797])
1-SHORT (8.25 [.325])
SEE MOUNTING CUP SELECTION TABLE

BLANK = WITHOUT LOGO
-10 = SOUTHCO LOGO

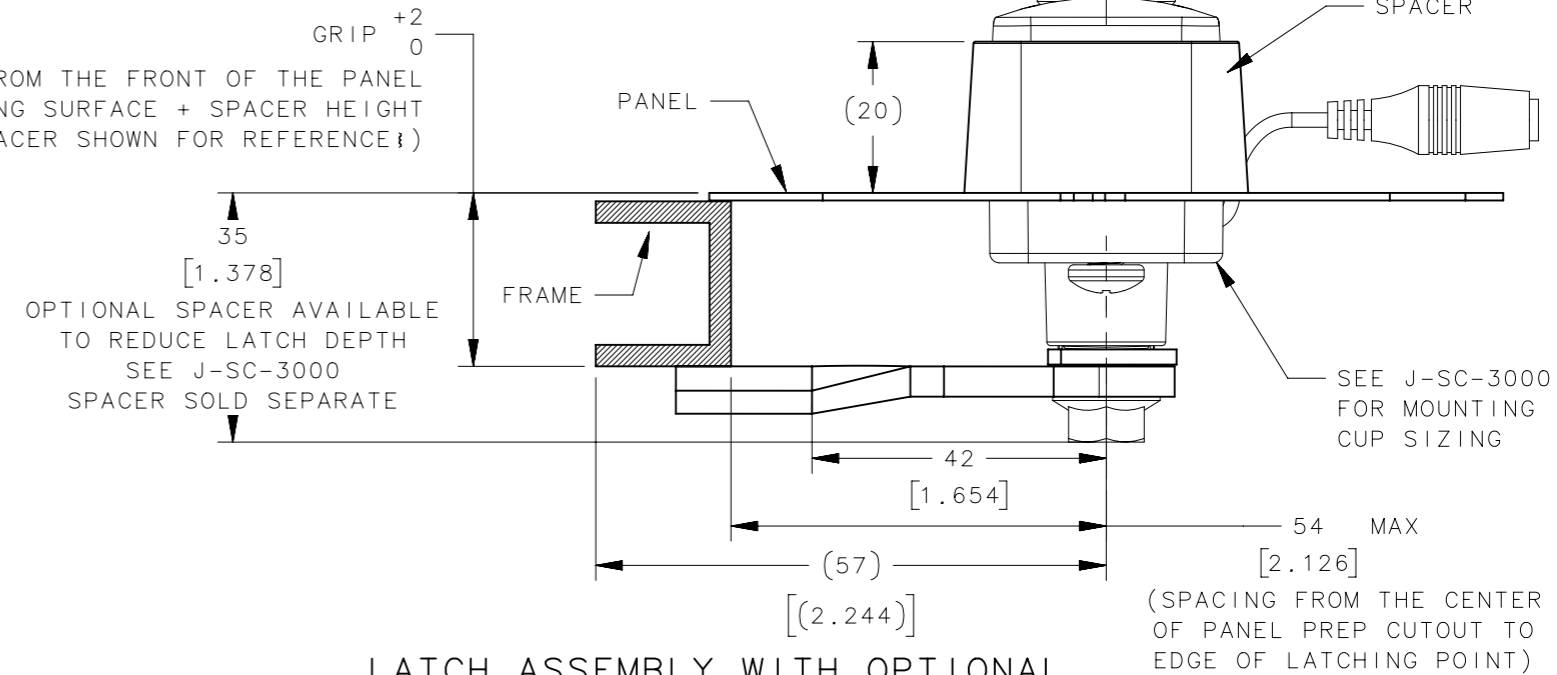


THIRD ANGLE PROJECTION	MILLIMETERS [IN]		 CONNECT • CREATE • INNOVATE	
	TOLERANCES UNLESS OTHERWISE NOTED			
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		DESCRIPTION ELECTRONIC ACCESS SOLUTION SELF CONTAINED RFID LATCH		
PROPRIETARY ITEM <small>EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.</small>	PER ASME Y14.5M-1994	SIZE A3	SYSTEM NX	DWG NO. J-SC-20-1000
		DRAWN BY ZNP	DATE 10DEC2012	SCALE 1:1
				SHEET 2 OF 5

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
G	01JUN2018	RKS/VK	PRN: P2018-1333



STANDARD LATCH ASSEMBLY WITHOUT OPTIONAL SPACER



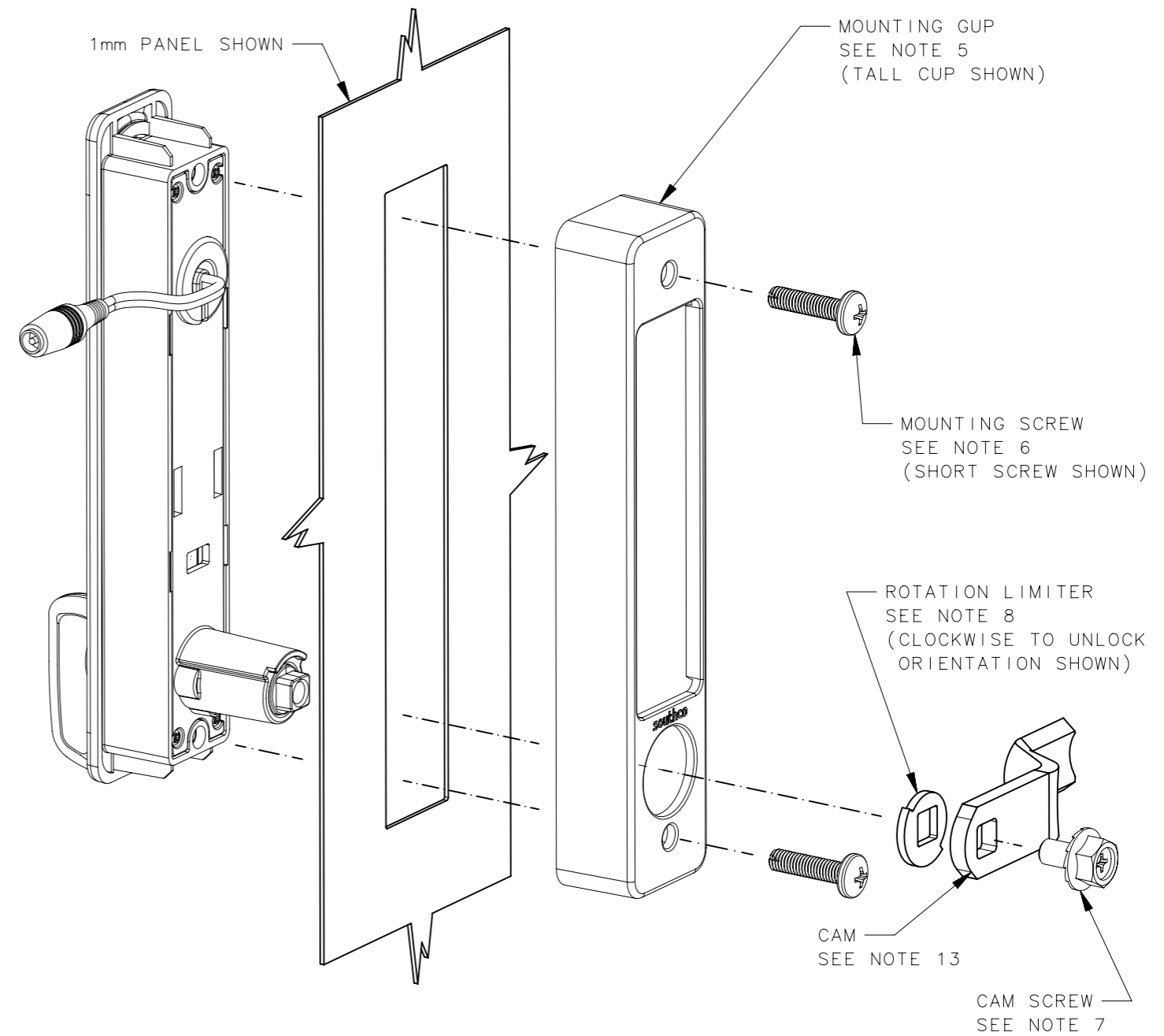
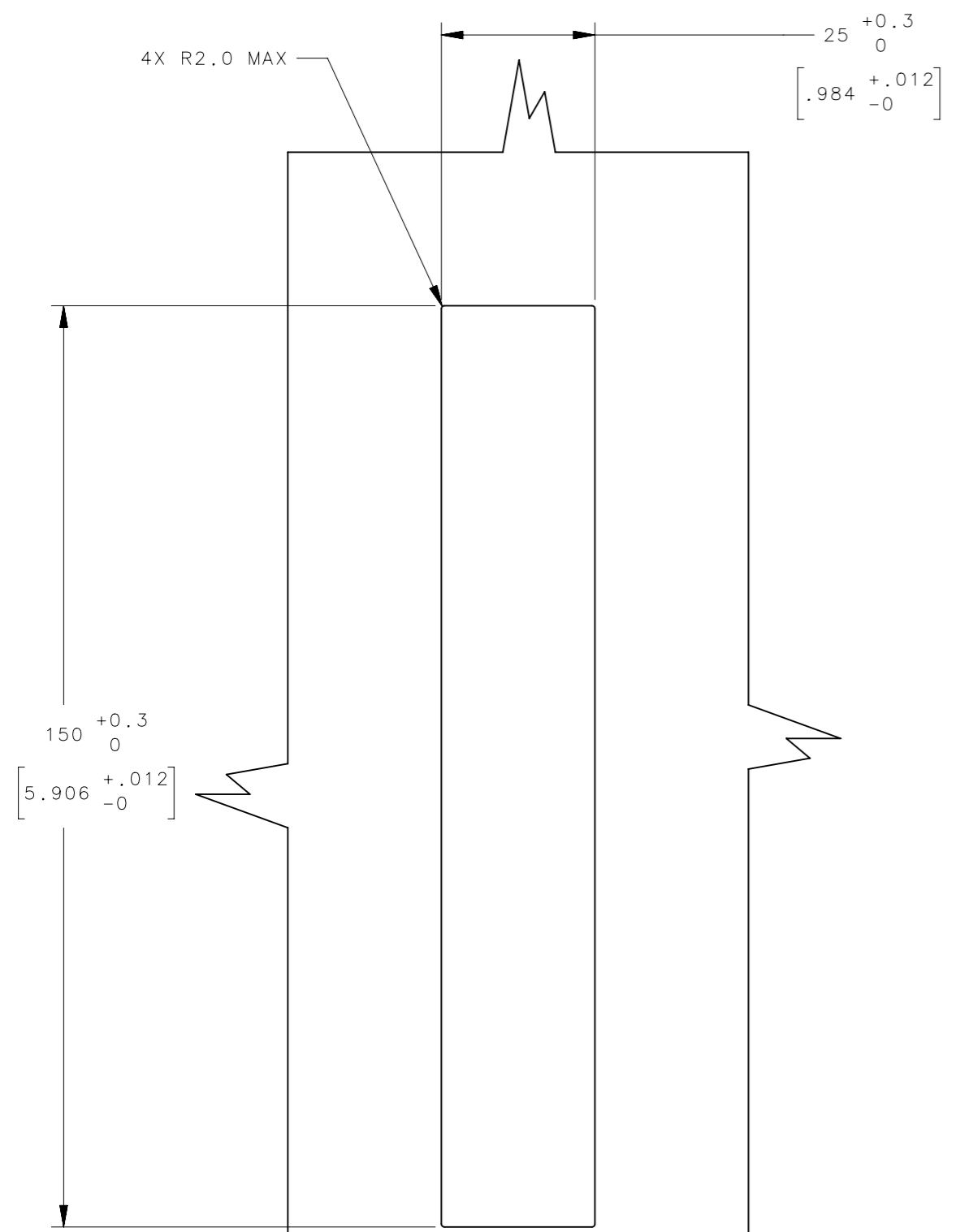
LATCH ASSEMBLY WITH OPTIONAL SPACER SC-3004-01

CAM GRIP OPTIONS (ORDER SEPERATELY)

PART NUMBER	GRIP
SC-5000	42.5 [1.67]
SC-5002	40.5 [1.58]
SC-5004	38.5 [1.52]
SC-5006	36.5 [1.44]
SC-5008	34.5 [1.36]
SC-5010	32.5 [1.28]
SC-5012	30.5 [1.20]
SC-5014	28.5 [1.12]
SC-5016	26.5 [1.04]
SC-5018	24.5 [0.96]
SC-5020	22.5 [0.89]
SC-5022	20.5 [0.81]
SC-5024	18.5 [0.73]
SC-5026	16.5 [0.65]
SC-5028	14.5 [0.57]
SC-5030	12.5 [0.49]
SC-5032	10.5 [0.41]
SC-5034	8.5 [0.33]
SC-5036	6.5 [0.26]
SC-5038	4.5 [0.18]
SC-5040	2.5 [0.10]
SC-5042	0.5 [0.02]

THIRD ANGLE PROJECTION			
TOLERANCES UNLESS OTHERWISE NOTED		DESCRIPTION	
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		ELECTRONIC ACCESS SOLUTION SELF CONTAINED RFID LATCH	
PROPRIETARY ITEM EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.	PER ASME Y14.5M-1994	SIZE A3 SYSTEM NX DWG NO. J-SC-20-1000	SCALE 1:1 SHEET 3 OF 5
DRAWN BY ZNP		DATE 10DEC2012	SCALE 1:1 SHEET 3 OF 5

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
G	01JUN2018	RKS/VK	PRN: P2018-1333

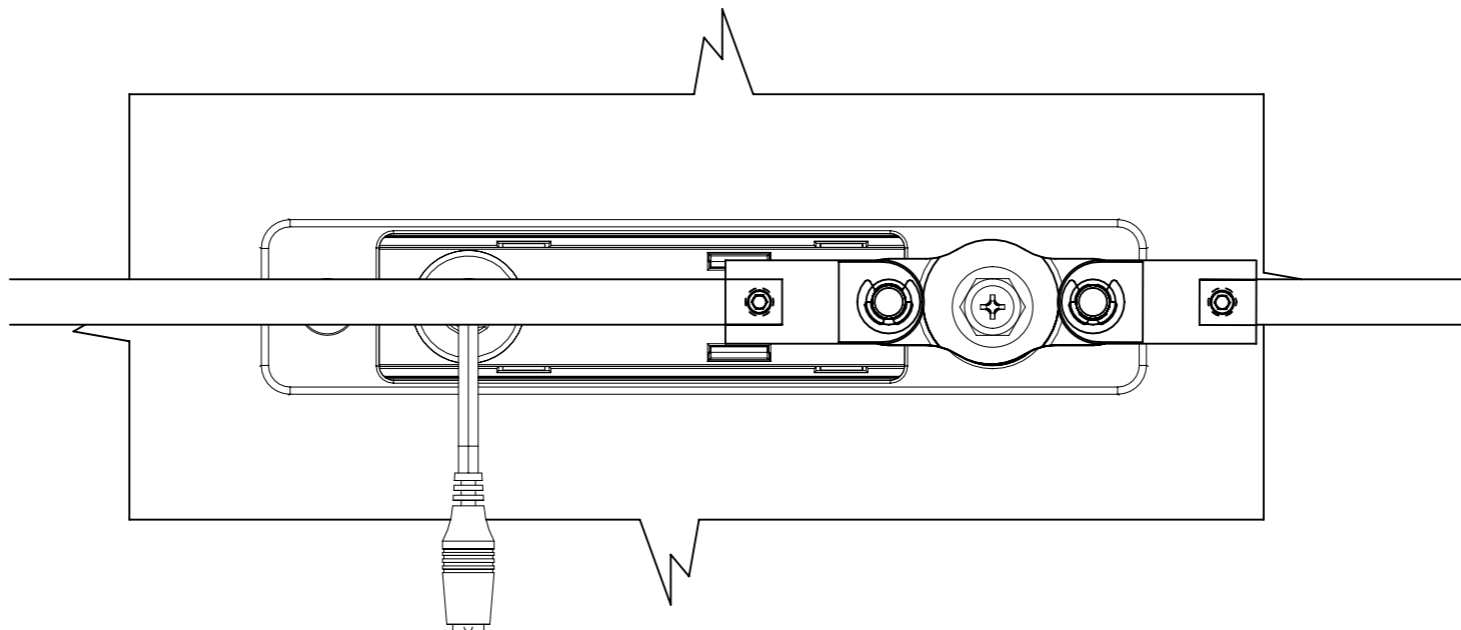


SCALE 1:1
PANEL PREPARATION
 PANEL THICKNESS: 1mm-25mm [0.04-0.98]

THIRD ANGLE PROJECTION				southco [®] CONNECT • CREATE • INNOVATE		
TOLERANCES UNLESS OTHERWISE NOTED			DESCRIPTION			
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.			ELECTRONIC ACCESS SOLUTION SELF CONTAINED RFID LATCH			
PROPRIETARY ITEM	SIZE	SYSTEM	DWG NO.	J-SC-20-1000		
EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.	A3	NX				
PER ASME Y14.5M-1994	DRAWN BY	DATE	SCALE	SHEET		
	ZNP	10DEC2012	1:1	4 OF 5		

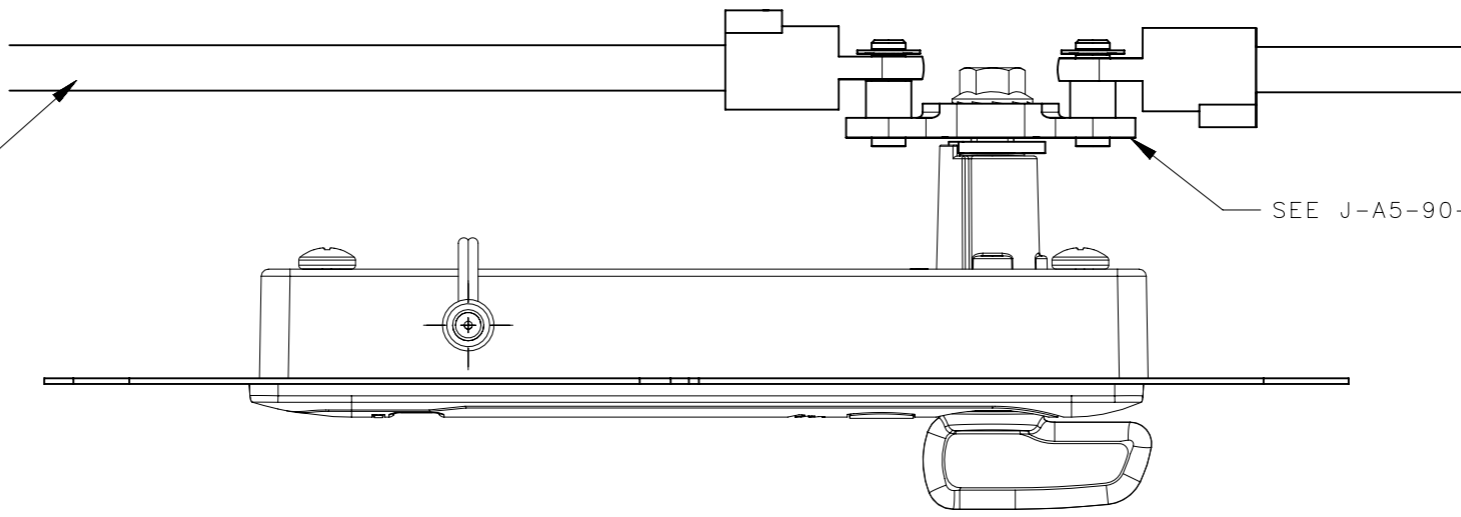
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
G	01JUN2018	RKS/VK	PRN: P2018-1333

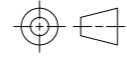

SC-20-1000 SHOWN WITH OPTIONAL
A5-90-101-11 MULTI POINT
ADAPTER PLATE ASSEMBLY



SEE J-A5-90
FOR ROD SYSTEM

SEE J-A5-90-101-11



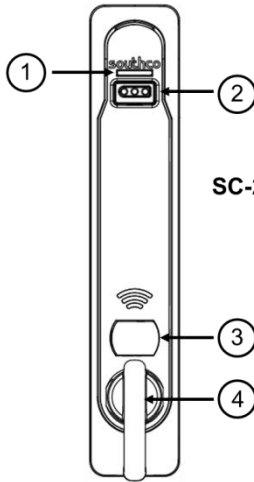
THIRD ANGLE PROJECTION 		 CONNECT • CREATE • INNOVATE		
MILLIMETERS [IN]				
TOLERANCES UNLESS OTHERWISE NOTED		DESCRIPTION ELECTRONIC ACCESS SOLUTION SELF CONTAINED RFID LATCH		
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		SIZE A3	SYSTEM NX	DWG NO. J-SC-20-1000
PROPRIETARY ITEM EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.		PER ASME Y14.5M-1994	DRAWN BY TJW/DJK	DATE 12DEC2014
		SCALE 0.75:1	SHEET 5 OF 5	

SC-20-100D-10 Self-Contained RFID Latch Operating Instructions

Package Contents

- SC-20-100D-10 Self-Contained RFID Latch (qty 1)
- Rotation Limiter (qty 1)
- Cam Screw (qty 1)
- Short Mounting Screw (qty 2)
- Long Mounting Screw (qty 2)
- Battery Box (qty 1)
(3 AA batteries not included)
- Operating Instructions (qty 1)

SC-20-100D-10 Self-Contained RFID Latch



SC-20-100D-10 Part Number Description:

D: Mounting Cup
0 – Tall
1 - Short

1. Status Indicator
2. Electronic Key Port
3. Wake-up Button
4. Knob

Features

- Blue status indicator
- Six second access time
- Supports one SC-A10-10 red programming key (order separately)
- Supports up to six SC-A20-10 black manager keys (order separately)
- Supports up to 20 SC-A30-10 user keys (order separately).
- Supports up to 20 RFID cards (order separately)
- Express registration
- Uses 3 AA batteries (not included)
- Transmit frequency: 13.56MHz
- Indoor use only

Battery Box

WARNING: Use only the included battery box to provide power to the latch. The use of any other power supply may affect product functionality and will void product warranty.

Contact Southco if a replacement battery box is needed.

Mounting and Installation

Please refer to Southco trade drawing J-SC-20-1000 for mounting and installation details.

WARNING: The latch is shipped with both short and long mounting screws. Be sure to use the appropriate mounting screw for the latch's mounting cup and panel thickness, as shown below. See J-SC-20-1000 for additional details.

panel thickness	mounting cup	mounting screw
1 – 5 mm	tall cup (SC-20-xxx0-10)	short screw
>5 – 10 mm		long screw
>10 – 15 mm		short screw
>15 – 20 mm	short cup (SC-20-xxx1-10)	short screw
>20 – 25 mm		long screw

Power-on Sequence

When power is first applied to the latch, it will execute an internal power-on sequence for approximately seven seconds. During this sequence, the latch will not respond to the keys or wake-up button. The latch will emit a wake-up beep when the sequence is completed, and respond normally afterwards.

Low Battery Indicator

If the battery power supply is low, the latch will emit a pair of warning beeps after access is granted. The batteries in the battery box should be replaced.

Black Manager Key Battery Back-Up

In the event the battery power supply for the latch runs out, an assigned black manager key can still be used to open the latch. Contact an assigned manager to the electronic key reader for approximately seven seconds. The latch will unlock and the status indicator will flash for six seconds. While the status indicator is flashing, turn the knob to open the latch. The latch will re-lock after six seconds. Turn the knob to its original position to secure the latch.

Demo Mode (prior to programming)

The latch is shipped without RFID cards or keys assigned. Before the red Programming Key is assigned, the latch will operate in demo mode by pressing and holding the wake-up button.

NOTE: Once the latch has been programmed, this feature will not work.

Programming the Latch

*Initialize and Assign Red Programming Key and Black Manager Key(s)
(if no black Manager Keys have been previously assigned)*

1. Contact a red Programming Key to the electronic key reader.
This will permanently assign the red Programming Key to the latch.

SC-20-100D-10 Self-Contained RFID Latch Operating Instructions

2. While the status indicator is solidly lit, contact the black Manager Key(s) one by one to the electronic key reader.

⚠ NOTE: The latch supports up to six black Manager Keys. Attempting to assign a seventh black Manager Key will automatically end the programming sequence.

3. Contact the red Programming Key again to end the sequence.
4. The latch will now operate with the assigned red Programming Key and black Manager Key(s).

⚠ NOTE: If the maximum number of User Keys and RFID cards has been reached, the latch will emit an error feedback and the RFID card will not be assigned.

⚠ WARNING: Do not contact the black Manager Key to the electronic key reader before enrolling RFID cards. Doing so, will delete all previously enrolled User Keys and RFID cards.

4. Contact the black Manager Key again to end the sequence.
5. The latch will now operate with the enrolled RFID card(s).

Assign Additional Black Manager Key(s) (if less than six black Manager Keys have been previously assigned)

1. Press and hold the wake-up button. Continue to press the wake-up button after the wake-up beep, until the latch emits the programming beep once. When the button is released, the status indicator will begin to flash.
 2. While the status indicator is flashing, contact the red Programming Key to the electronic key reader.
 3. While the status indicator is solidly lit, contact the additional black Manager Key(s) to be assigned one by one to the electronic key reader.
- ⚠ NOTE:** The latch supports up to six black Manager Keys. Attempting to assign a seventh black Manager Key will automatically end the programming sequence.
4. Contact the red Programming Key again to end the sequence.
 5. The latch will now operate with the additional black Manager Key(s).

Assign User Keys

Any combination of User Keys and RFID cards - up to a maximum of 20 - can be assigned to a latch.

1. Press and hold the wake-up button. Continue to press the wake-up button after the wake-up beep, until the latch emits the programming beep once. When the button is released, the status indicator will begin to flash.
2. While the status indicator is flashing, contact the black Manager Key to the electronic key reader.
3. While the status indicator is solidly lit, contact the User Keys to be enrolled one by one to the electronic key reader.

⚠ NOTE: If the maximum number of User Keys and RFID cards has been reached, the latch will emit an error feedback and the User Key will not be assigned.

⚠ WARNING: Do not contact the black Manager Key to the electronic key reader before enrolling User Keys. Doing so, will delete all previously enrolled User Keys and RFID cards.

4. Contact the black Manager Key again to end the sequence.
5. The latch will now operate with the assigned User Key(s).

Assign RFID Cards

Any combination of User Keys and RFID cards - up to a maximum of 20 - can be assigned to a latch.

1. Press and hold the wake-up button. Continue to press the wake-up button after the wake-up beep, until the latch emits the programming beep once. When the button is released, the status indicator will begin to flash.
2. While the status indicator is flashing, contact the black Manager Key to the electronic key reader.
3. While the status indicator is solidly lit, present the RFID cards to be enrolled one by one to the latch.

Delete All User Keys and RFID Cards

1. Press and hold the wake-up button. Continue to press the wake-up button after the wake-up beep, until the latch emits the programming beep once. When the button is released, the status indicator will begin to flash.
2. While the status indicator is flashing, contact an assigned black Manager Key to the electronic key reader.
3. While the status indicator is solidly lit, contact the black Manager Key again to the electronic key reader.
4. The latch will emit a confirmation feedback to indicate deletion has been completed.
5. All previously assigned User Keys and RFID cards will no longer operate the latch.

Delete All Black Manager Keys

1. Press and hold the wake-up button. Continue to press the wake-up button after the wake-up beep, until the latch emits the programming beep once. When the button is released, the status indicator will begin to flash.
2. While the status indicator is flashing, contact the red Programming Key to the electronic key reader.
3. While the status indicator is solidly lit, contact the red Programming Key again to the electronic key reader.
4. The latch will emit a confirmation feedback to indicate deletion has been completed.
5. All previously assigned black Manager Keys will no longer operate the latch.

Express Registration

Of Black Manager Keys

1. On the lock with the assigned black Manager Key(s) to be copied, press and hold the wake-up button. Continue to press the wake-up button after the wake-up beep and first programming beep, until the latch emits the programming beep twice. When the button is released, the status indicator will begin to flash.
2. While the status indicator is flashing, touch the red Programming Key to the lock until the lock emits two confirmation beeps.
3. Touch the red Programming Key to the lock requiring registration until the lock emits two confirmation beeps indicating successful express registration.
4. Continue to touch the red Programming Key to all locks requiring registration.
5. To end the express registration sequence, press the wake-up button on any registered lock then touch the red Programming Key to the lock until it operates indicating that the express registration sequence has ended.

⚠ WARNING: The red programming key will continue to operate in Express Registration mode unless Step #5 is performed.

SC-20-100D-10 Self-Contained RFID Latch Operating Instructions

Of Black Manager Keys, User Keys, and RFID Cards

1. On the lock with the assigned black Manager Key(s), User Key(s), and RFID card(s) to be copied, press and hold the wake-up button. Continue to press the wake-up button after the wake-up beep and first and second programming beeps, until the latch emits the programming beep three times. When the button is released, the status indicator will begin to flash.
2. While the status indicator is flashing, touch the red Programming Key to the lock until the lock emits two confirmation beeps.
3. Touch the red Programming Key to the lock requiring registration until the lock emits two confirmation beeps indicating successful express registration.
4. Continue to touch the red Programming Key to all locks requiring registration.
5. To end the express registration sequence, press the wake-up button on any registered lock then touch the red Programming Key to the lock until it operates indicating that the express registration sequence has ended.

⚠ WARNING: The red programming key will continue to operate in Express Registration mode unless Step #5 is performed.

Normal Use

After the latch has been programmed, it can be unlocked using RFID cards, User Keys, black Manager Keys, or the red Programming Key, as follows:

Using an RFID Card

1. Press and hold the wake-up button until the wake-up beep is heard.
2. Hold an enrolled RFID card near the latch. The latch will unlock and the status indicator will flash for six seconds.
3. While the status indicator is flashing, turn the knob to open the latch.
4. The latch will re-lock after six seconds. Turn the knob to its original position to secure the latch.

Using a User Key (p/n SC-A30-10)



1. Contact an assigned User Key to the electronic key reader. The latch will unlock and the status indicator will flash for six seconds.

2. While the status indicator is flashing, turn the knob to open the latch.
3. The latch will re-lock after six seconds. Turn the knob to its original position to secure the latch.

Using a Black Manager Key (p/n SC-A20-10)



1. Contact an assigned black Manager Key to the electronic key reader. The latch will unlock and the status indicator will flash for six seconds.
2. While the status indicator is flashing, turn the knob to open the latch.
3. The latch will re-lock after six seconds. Turn the knob to its original position to secure the latch.

Using a Red Programming Key (p/n SC-A10-10)



1. Press and hold the wake-up button until the wake-up beep is heard.
2. Contact the red Programming Key to the electronic key reader. The latch will unlock and the status indicator will flash for six seconds.
3. While the status indicator is flashing, turn the knob to open the latch.
4. The latch will re-lock after six seconds. Turn the knob to its original position to secure the latch.

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

Industry Canada Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) l'appareil ne doit pas produire de brouillage, et
- 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

