PROGRAMMING AND OPERATING INSTRUCTIONS

Biometric Keypad

INTRODUCTION

The Sargent & Greenleaf® Biometric Keypad can be added to S&G electronic lock models 6120, 6123, and Z^{02} (model designation Z^{02} represents models 2002-200 and 2002-300). The keypad enables your lock to be opened using a fingerprint only, a code only, or a fingerprint <u>and</u> code together.

- The silicon-based active capacitive fingerprint reader represents superior biometric technology that combines high reliability with the ability to reject devices and methods which are sometimes used to fool optical-type readers.

- The Biometric Keypad is equipped with a backlit LCD readout, offering two lines of text. The backlight feature can be turned on or off at the keypad. Its use greatly increases readability under marginal lighting conditions.

- The keypad houses two nine-volt alkaline batteries which power both the keypad and the lock. Normal battery life is approximately 1500 openings and closings of the lock, fewer if the backlight feature is turned on. Batteries are easily replaced from outside the safe. No data is lost during battery changing or if power is lost for extended periods.

- **When a Biometric Keypad is first connected to a lock body, it is important that both components are set to factory defaults.** Both should be in single user mode, with only a master code of 123456 installed. No other codes should be present, and the time delay value should be zero.

- This Sargent & Greenleaf® Biometric Keypad is shipped from the factory with a **factory master code** of 1 2 3 4 5 6 #. This code can be used to open the lock and set or change codes. You should set the lock to your own, unique **master code**.

- Your lock can be programmed with a **management reset code** if one was not set at the factory. This code can be used to regain control of the lock in the event the **master code** is lost. The **management reset code** <u>must be programmed into the lock before the **master code** is changed</u> for the first time.

- Each time a button is pressed, the lock acknowledges it by sounding a "beep," and the red LED on the keypad will light momentarily as the "beep" sounds.

- All codes must contain six digits or six letters. Any digit or letter can be used as many times as you wish. All codes end with #. This signals the lock that you have finished entering all digits of the code.

- If you pause more than 10 seconds between button presses when entering a code or performing programming, the lock will power down to conserve battery life. You will have to begin the code entry process again by pressing START.

- If you realize you have pressed an incorrect button when entering a code, press ✳ to erase the last digit entry.

- Personal data which can be directly related to a code holder, such as a birth date, should not be used in making up a lock code. Avoid codes which can be easily guessed.

- After the lock is changed to a new code, lock function must be checked by locking and unlocking it several times with the container door open. Make sure it functions correctly before closing the door.

- It is recommended the fingerprint sensor be cleaned periodically with a clean, dry cloth. The keypad will operate best with no debris or latent fingerprints on the sensor.

OPERATING INSTRUCTIONS
Biometric Keypad

TIPS FOR OPERATING THE KEYPAD AND LOCK

Anytime you press a button on the keypad, the red LED blinks, and the keypad emits a beep. If you press a button and don't see or hear this feedback, it's likely you didn't press the button fully. Just press it again.

Whenever you see the green LED light up, the lock is prompting you to place your finger on the fingerprint reader. It will not go on to the next opening or programming step until you do so.

The lock cannot be operated by fingerprint until one is enrolled in the keypad. It can be operated by PIN code alone as shipped from the factory. The factory default master code is 123456#. Instructions for enrolling a fingerprint appear later in this manual.

The LCD readout makes using your lock very easy. Just read the display, and follow the prompts.

➤TO OPEN THE LOCK IN FINGERPRINT OR PIN MODE

Press START, located just above the LCD screen. The lock will display:

```
Initializing
Sensor
```

After about 1 ½ seconds, the display will read:

```
Place Finger
or Enter PIN  ▼
```

The keypad's green LED will light up. You can either place your finger on the fingerprint reader until the LED goes off, or you can enter your 6-digit PIN code followed by #.
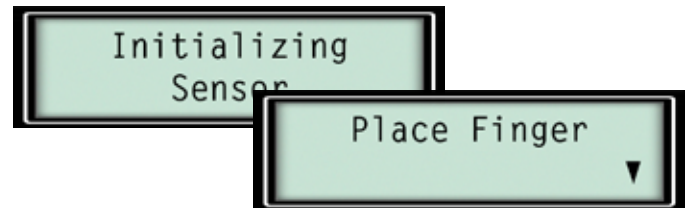
Do not put any pressure on the safe handle until after the LCD displays:

```
LOCK OPEN
```

The lock will stay unlocked for about 6 seconds, allowing ample time to open the safe. The lock will then re-lock automatically when the safe door is closed and the handle is turned to the locked position.

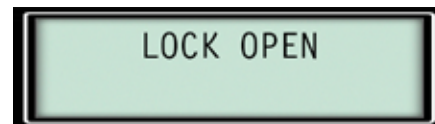### ➤TO OPEN THE LOCK IN FINGERPRINT AND PIN MODE

Your lock can be set to require both an enrolled fingerprint _and_ a valid PIN code before opening. This adds an extra measure of security. To open the lock, begin by pressing START.

```
Initializing
Sensor
```
```
Place Finger
         ▼
```

If you place an enrolled finger on the keypad's reader, the following screen will appear, prompting you to enter the 6-digit code (followed by #) that is associated with the fingerprint.

```
Enter
User PIN
```

Do not put any pressure on the safe handle until after the LCD displays:

```
LOCK OPEN
```

➤TO OPEN THE LOCK IN FINGERPRINT OR PIN MODE WITH TIME DELAY ACTIVE

If you are using a time delay, instead of opening, the keypad will display a time delay countdown screen after you enter your fingerprint or PIN code.

```
Time Delay
00:45
```
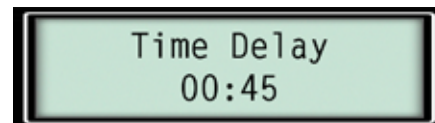
Biometric Keypad

When the time delay reaches zero, the opening window display will appear.

```
Open Window
  01:40
```
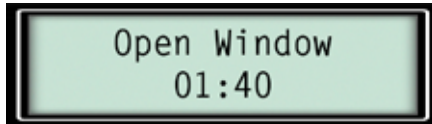
This window counts down the time you have in which to re-enter your fingerprint or PIN. If you do not do this during the opening window period, the lock will simply power down. You will have to press START, and go through the opening process again to open the lock.

After you successfully enter your fingerprint or PIN during the opening window, the LOCK OPEN screen will appear, indicating that it is okay to turn the safe handle.

➡ To Open the Lock in Dual Control Mode

If your lock is a model 6123 or Z^{02}, it is capable of dual control mode. Dual control simply adds another layer of security to the operation of the lock. Two different codes and/or two different fingerprints must be entered into the lock before it will open.

If the keypad is set to require either a fingerprint or PIN code, two different people will have to enter a fingerprint or PIN within 60 seconds of each other to open the lock.

If you set the keypad to require a fingerprint and PIN code, two different code holders will have to enter a fingerprint and PIN within 60 seconds of each other to open the lock.

If a time delay is being used, any valid user can enter a fingerprint and/or PIN code to begin the time delay countdown. When the opening window screen appears, two different people will have to enter their enrolled fingerprint and/or PIN within 60 seconds of each other to open the lock. One of those people can be the same as the one who first entered a fingerprint and/or code to begin the time delay, or it can be someone different.

➡ To Open the Lock in Dual Control Fingerprint and PIN Mode with Time Delay

This example illustrates how the lock is opened when set to both dual control and fingerprint and PIN mode.

To open the lock, begin by pressing START.

```
Initializing
Senso
```
```
Place Finger
            ▼
```

If you place an enrolled finger on the keypad's reader, the following screen will appear, prompting you to enter the 6-digit code (followed by #) that is associated with the fingerprint.
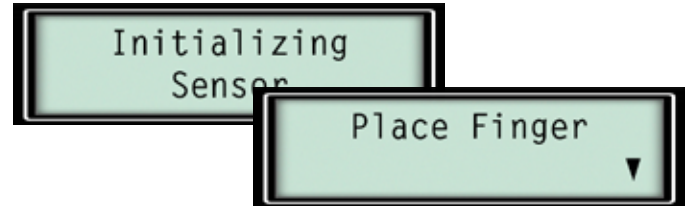
```
Enter
User PIN
```

Next, the time delay countdown window will appear, to be followed by the opening window display.

```
Time Delay
  00:45
```
```
Open Window
  01:40
```

When the opening window appears, the keypad's green LED will light, prompting you to place your finger on the reader. You can use the same fingerprint that was used to start the time delay, or you may use any other fingerprint enrolled in the system. Then the ENTER USER PIN screen will prompt you to enter the 6-digit PIN associated with the fingerprint.

```
Enter
User PIN
```
```
User PIN
******
```
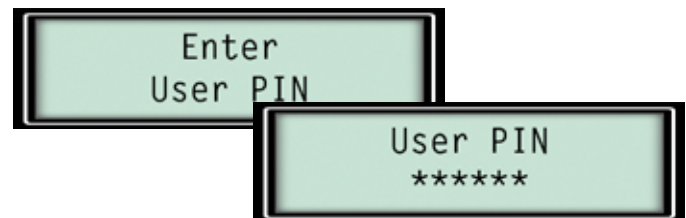
Note that after you enter a valid PIN code, the green LED will light, prompting for a second enrolled fingerprint to be entered. The LCD will then ask for the PIN that goes with the second fingerprint to be entered. If all entries are valid, the lock will open.

Biometric Keypad

➥To Open the Lock in Supervisor/Subordinate Mode

If your lock is a model 6123 or Z^{02}, it is capable of supervisor/subordinate mode. In this mode, the master and supervisor codes (PIN positions 1 and 2) cannot open the lock directly. Instead, they are used to toggle the lock on and off for operation by the holders of user codes (PIN positions 3 through 7). Note that time delay override does not work when the lock is in supervisor/subordinate mode. If you enter it, the lock will display:

```
TDO Not Accepted
   in this mode
```

When you enter a master code (#1) or a supervisor code (#2), the lock's LCD will indicate whether the lock is toggled on or off for opening by the user codes (#3, #4, #5, #6, #7). Entering either the master code or the user code, or using the fingerprint associated with either one of these codes, will toggle the lock from its present state to the opposite state (ie. lock enabled or lock disabled).

```
     Lock
    Enabled
```

```
     Lock
   Disabled
```
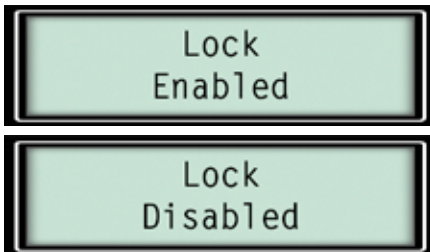
When the lock is enabled, it can be unlocked by any of the user codes in PIN positions 3 through 7. The keypad can be set for operation by fingerprint, PIN, or fingerprint and PIN in supervisor/subordinate mode.

➥To Open the Lock Using Time Delay Override

If your lock is a model 6123 or Z^{02}, it is capable of time delay override in the single user and dual control modes. TDO (time delay override) provides a code (stored in the #9 PIN position), which can open the lock without waiting for the time delay to finish. TDO is desirable in situations where a time delay is used to deter armed robbery, yet armored car couriers need instant access to the safe for pickups. It only works when a time delay is set in the lock, and it can function in two different ways.

The first is single control. After pressing START, simply enter the TDO fingerprint and/or PIN code to open the lock, depending on whether the keypad is programmed for fingerprint or code access, or fingerprint and code access. The time delay never starts.

The second is dual control time delay override. Press START, then enter a valid fingerprint and/or PIN code to start the time delay. Once it has started, enter the TDO fingerprint and/or PIN code to open the lock immediately.

➥In Case of Trouble

If your lock should fail to open when a valid code is entered, check for the following:

1. The boltwork of a safe can, under certain conditions, place pressure on the side of the lock's bolt. This is often caused by something inside the safe pressing against the door or by something caught between the safe door and its frame. When this occurs, the lock will not operate properly. To relieve side pressure on the lock bolt, move the safe's handle to the fully locked position, then re-enter a working code. The lock should release.

2. If the lock beeps when keys are pressed, but it will not open, the batteries may be drained to the point that they will not operate the lock's mechanical components. Follow the battery replacement procedure in this manual. Low battery condition can also be detected by the beeps emitted from the lock. The lock emits a lower frequency tone when batteries are low. This lower tone is only emitted when a keypad button is pressed, not when a fingerprint is used.

3. If the lock makes no sound when any of the keys are pressed, or the LCD screen doesn't display any information, dead batteries are likely to be the cause. Follow the battery replacement procedure in this manual.

Biometric Keypad

LOCK AND KEYPAD SETUP

It is very important to be certain your lock and keypad are both in the factory default mode. The lock should only have a master code of 1 2 3 4 5 6 #, be in single user mode, with no time delay. If the keypad was used with another lock, the lock's values should have been set to those outlined above, using the Biometric Keypad to set those default values. **The lock and keypad must start with the same default values.**

BIOMETRIC KEYPAD INFORMATION

If you do not press any buttons on the keypad for approximately 15 seconds, it will "go to sleep." To save power, it will shut down. To enter a fingerprint or code, or to perform programming, you will need to press START, then begin again.

If you enter an incorrect digit, press ✳ to delete the entry, then begin entering the intended code again.

To back out of a menu, you can generally press 0. Keep pressing 0 to continue moving up to higher level menus.

It is possible to put the lock into penalty lockout mode if enough programming errors are made consecutively. If the lock and keypad do not appear to be functioning normally, simply refrain from pressing any buttons for at least five minutes, then attempt your programming procedure again.

➥GETTING TO THE SETUP MENUS

The Biometric Keypad can be used with lock models 6120, 6123, and Z^{02}. These locks have different features and parameters, so the keypad must know which model is connected. The following procedure should be implemented immediately after the lock and keypad are connected, before any other programming is attempted.

To wake up the keypad, press START. When the following screen appears, press ✳. or follow the instructions that appear when you press the #▼ button at the bottom of the keypad.

```
Place Finger
or Enter PIN  ▼
```

The following screen is asking for the lock's master code. For the setup, the master code must be the factory original 1 2 3 4 5 6 #.

```
Setup Code
******
```

Entering the PIN code brings up the SETUP MENU . You can use the arrow keys (▲✳ and #▼ at the bottom of the keypad) to scroll through the main setup menu options.

```
SETUP MENU      ▲
Version (02.7)  ▼
```

Four options are available under the setup menu.

```
1 Display Setup  ▲
2 Lock Setup     ▼
```

```
3 F-print Setup  ▲
0 Exit           ▼
```

```
4 Manual Setup   ▲
0 Exit           ▼
```
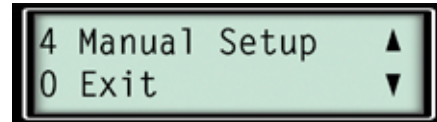
➥CUSTOMIZING THE KEYPAD DISPLAY—LANGUAGE SELECTION

Display setup (option 1 above) allows you to set the display language, and turn on or turn off the screen's backlight. You can back out of any menu by pressing 0.

```
1 Display Setup  ▲
2 Lock Setup     ▼
```
```
DISPLAY SETUP   ▲
1 Language      ▼
```
```
LANGUAGE SELECT  ▲
1 English        ▼
```
```
                 ▲
0 Exit           ▼
```
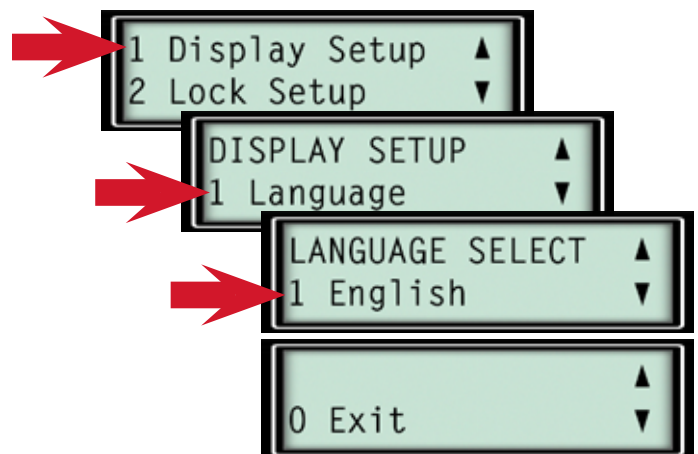
OPERATING INSTRUCTIONS
Biometric Keypad

➡ **CUSTOMIZING THE KEYPAD DISPLAY—BACKLIGHT SELECTION**

Option 2 in the display setup menu lets you turn the screen's backlight on or off. Remember that the keypad consumes about 20% more battery life with the backlight on. You can back out of any menu by pressing 0.

```
1 Display Setup  ▲
2 Lock Setup     ▼
```
```
2 LCD Backlight  ▲
0 Exit           ▼
```
```
LCD BACKLIGHT    ▲
1 Enable         ▼
```
```
2 Disable        ▲
0 Exit           ▼
```

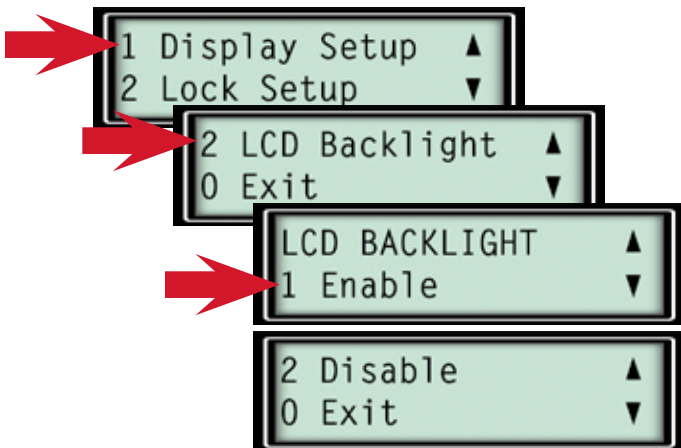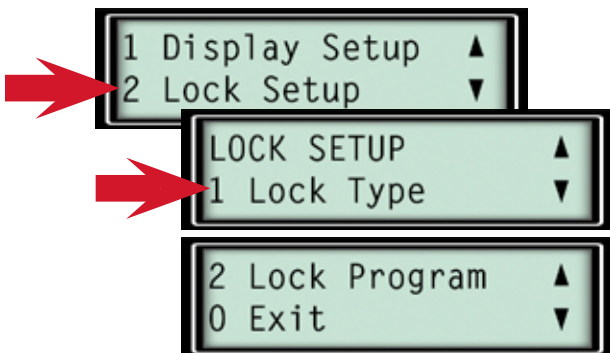➡ **SETTING LOCK INFORMATION—MODEL I.D. AND PROGRAMMING**

The Biometric Keypad must know which lock model it's attached to, and it must be programmed to meet your particular needs. These areas are addressed by option 2, lock setup, under the main setup menu.

```
1 Display Setup  ▲
2 Lock Setup     ▼
```
```
LOCK SETUP       ▲
1 Lock Type      ▼
```
```
2 Lock Program   ▲
0 Exit           ▼
```

As shown in the following screen illustration, you can select one of three lock models—Z^{02}, 6120, or 6123. It is important that you identify your lock correctly. Otherwise, the system may not work correctly, depending on the features you opt to use.

```
LOCK SETUP       ▲
1 Lock Type      ▼
```
```
1. Z02           ▲
2. 6120          ▼
```
```
3. 6123          ▲
0 Exit           ▼
```
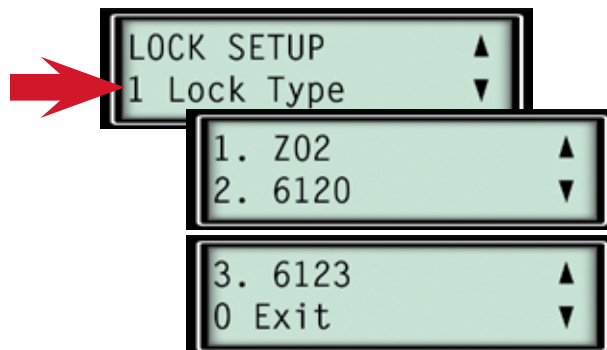
➡ **SETTING LOCK INFORMATION—PROGRAMMING MENUS**

Option 2 under the lock setup menu leads to several menus of the lock's programming capabilities. For example, the following menu set is available if you identified your lock as a model 6120.

```
2 Lock Program   ▲
0 Exit           ▼
```
```
    6120 Setup   ▲
0 Exit           ▼
```
```
1 Enter User     ▲
2 Delete User    ▼
```
```
3 Master Code    ▲
4 Time Delay     ▼
```
```
5 Set MRC        ▲
6 Use MRC        ▼
```
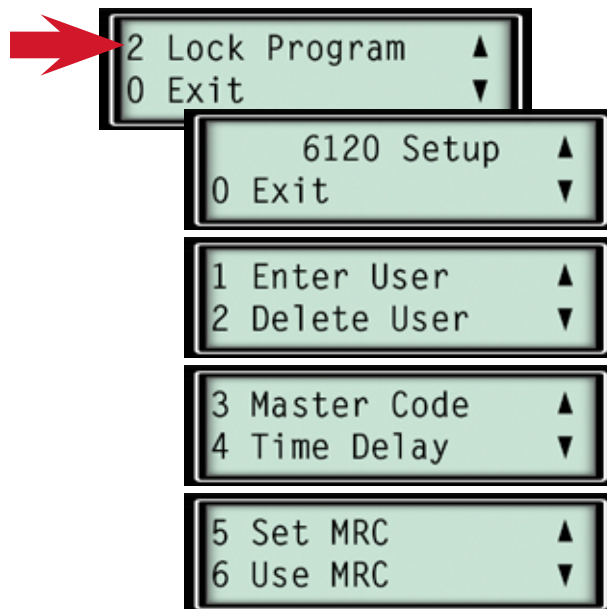
The menu sets for the 6123 and Z^{02} are identical, except for the name of the lock model. These two locks have mechanical differences, but are programmed the same. We'll use the Z^{02} menus for this manual, just remember that the 6123 is exactly the same.

```
    Z02 Setup    ▲
0 Exit           ▼
```
```
    6123 Setup   ▲
0 Exit           ▼
```
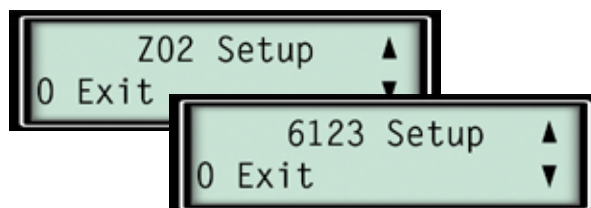
Biometric Keypad

If you look closely, you'll see that the 6123 and Z^{02} have all the options of the 6120 plus access modes (option 4 below), time delay opening window (option 6), and time delay override (option 9). Features that are labeled the same between the menu sets are programmed identically.

```
     Z02 Setup    ▲
 0 Exit           ▼
```

```
   1 Enter User     ▲
   2 Delete User    ▼
```

```
   3 Master Code    ▲
   4 Access Modes   ▼
```

```
   5 Time Delay     ▲
   6 TD Open Wndw   ▼
```

```
   7 Set MRC        ▲
   8 Use MRC        ▼
```

```
   9 TD Override    ▲
   0 Exit           ▼
```

➥SETTING LOCK INFORMATION—SET MANAGEMENT RESET CODE

The lock's MRC (management reset code) may have been pre-set at the factory. If so, it will be printed on a white label attached to the lock body if your lock is a model 6120 or 6123. It will accompany the lock in a sealed, black plastic po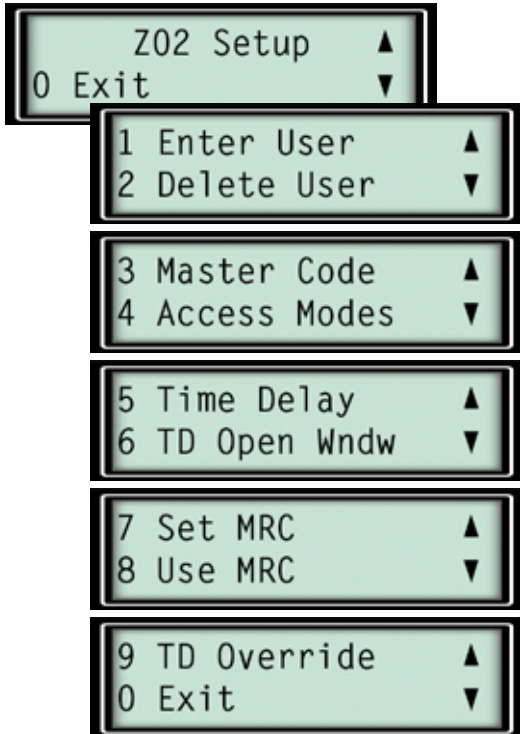uch if your lock is a model Z^{02}. The safe manufacturer or installer may have recorded this important number for you. If the MRC was set at the factory, you will not be able to change it, and you can skip this section.
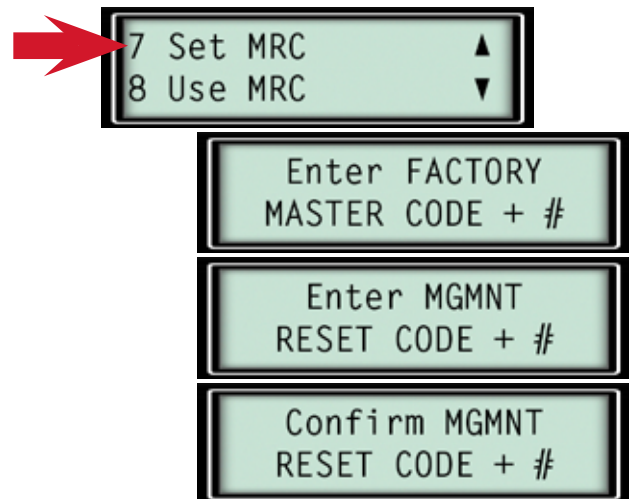
A management reset code can only be created before the lock's master code is changed for the first time. It can later be used to reset the lock in the event the master code is lost.

It is important to note that the management reset code can only be set or changed before the lock's master code is changed for

the first time. It is recommended that the management reset code be stored off premises as an additional security measure.

If the lock has never had its master code changed and it has no MRC, you can make up your own, and set it into the lock. The management reset code is different from other lock codes. It is composed of seven digits, two of which are pressed at the same time. This two-digit pair must be either 0/1 or 0/3. For instance, a management reset code could be 3 6 2 [0/3] 1 9. The 0 and 3 must be pressed simultaneously. The 0/1 or 0/3 can be located anywhere in the management reset code, and the digits 0, 1, and 3 can also be used as individual digits anywhere in the code. For instance, 0 3 1 0 [0/1] 0 would be an acceptable MRC. Only the 0/1 in brackets would be pressed simultaneously.

The following illustration is for a model Z^{02} lock, but it applies to all models (6120, 6123, and Z^{02}). From the lock program menu, use the up or down arrow key to scroll to the MRC options screen. Select Set MRC (option 5 for a 6120, option 7 for a Z^{02} or 6123.

```
 7 Set MRC         ▲
 8 Use MRC         ▼
```

```
     Enter FACTORY
   MASTER CODE + #
```

```
     Enter MGMNT
   RESET CODE + #
```

```
    Confirm MGMNT
   RESET CODE + #
```

The factory master code you enter must be 1 2 3 4 5 6 #. If it has been changed, you cannot set a management reset code. The lock's display will prompt you to enter the management reset code, then enter it again to confirm. Remember that there is a double key press of 0/1 or 0/3 somewhere in the MRC. Success is indicated by the following screen.

```
     MRC Set
```

# OPERATING INSTRUCTIONS
Biometric Keypad

```
MRC Set in
Keypad Only
```

If the display indicates that the MRC was only set in the keypad, your lock most likely already has a management reset code programmed, or the master code was changed at some time. This means your lock and keypad have different MRCs, or that your lock has no MRC while the keypad has the MRC you just programmed into it. The mismatch means you will not be able to reset your lock using the MRC you programmed. If you attempt to use it, the keypad and lock will be out of sync.

➡ **SETTING LOCK INFORMATION—USE MANAGEMENT RESET CODE**

From the lock program menu, use the up or down arrow key to scroll to the MRC options screen. Select Set MRC (option 6 for a 6120, option 8 for a Z[02] or 6123. Enter your management reset code when prompted to do so.

```
7 Set MRC       ▲
8 Use MRC       ▼
        Enter MGMNT
        RESET CODE + #
```
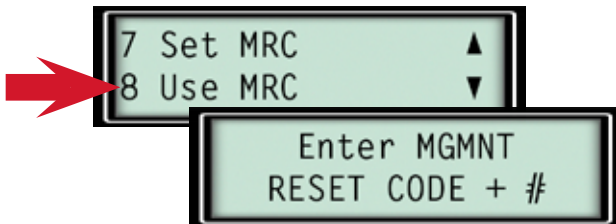
The display will indicate if the lock and keypad have been successfully reset by the MRC.

```
System
Reset
```

If the system not reset screen appears, neither the keypad nor the lock was reset. It is most likely you have an incorrect MRC, or it was entered incorrectly.

```
System Not
Reset
```
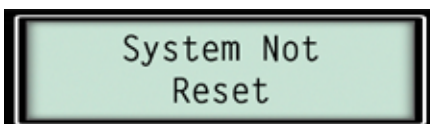
If either the lock reset only or keypad reset only screen appears, it most likely means the lock and keypad MRCs are different. If you see one of these screens, your lock and keypad are undoubtedly out of sync. You can enter the lock MRC, then enter the keypad MRC to get them back in sync.

```
Lock
Reset Only
```

```
Keypad
Reset Only
```

What happens when you use the MRC successfully? In a model 6120 lock, the master code is reset to 1 2 3 4 5 6 #. All user codes are erased. If a time delay was programmed, it is erased.

In models 6123 and Z[02], the master code is reset to 1 2 3 4 5 6 #, the supervisor code and all user codes are erased. If a time delay override code was set, it remains in the lock. If a time delay was programmed, it remains. Also, the mode of operation remains as it was last programmed.

➡ **SETTING LOCK INFORMATION—TIME DELAY OVERRIDE**

Time delay override is only available in lock models 6123 and Z[02]. If your lock is a 6120, skip this section.

Time delay override (TD0) provides for a special lock code that can circumvent the time delay. **TDO capability and type must be set before the lock's master code is changed for the first time. Like the management reset code, it is important that you address this feature before setting a new master code and putting your lock into service.**

There are three choices for TDO capability:

1. No TDO—No code will ever be able to override the time delay.

2. Single Control TDO—The time delay code holder can enter his code to open the safe immediately.

3. Dual Control TDO (default mode)—A regular code holder enters his or her code to start the lock's time delay. Within 60 seconds, the TDO code holder enters his code to open the safe immediately, without waiting for the time delay to reach zero.
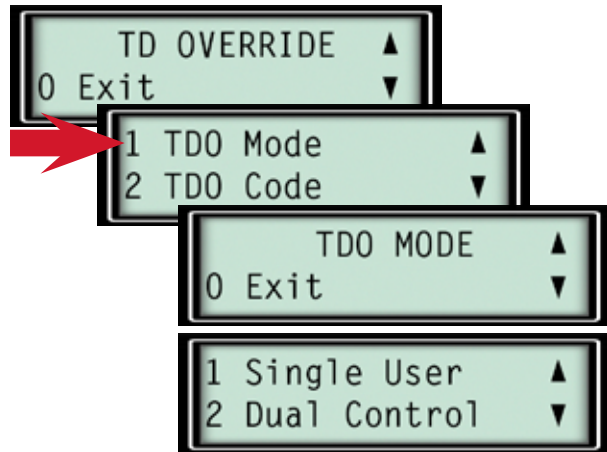
Biometric Keypad

When you decide which of the three options to utilize, navigate to the TD override option in the setup menu (option 9). Once you program a TDO option, you will not be able to change it.

```
      Z02 Setup    ▲
0 Exit            ▼
```

```
1 Enter User      ▲
2 Delete User     ▼
```

```
3 Master Code     ▲
4 Access Modes    ▼
```

```
5 Time Delay      ▲
6 TD Open Wndw     ▼
```

```
7 Set MRC         ▲
8 Use MRC         ▼
```

➡
```
9 TD Override     ▲
0 Exit            ▼
```

```
     TD OVERRIDE   ▲
0 Exit            ▼
```

```
1 TDO Mode        ▲
2 TDO Code        ▼
```

```
3 Remove TDO      ▲
0 Exit            ▼
```
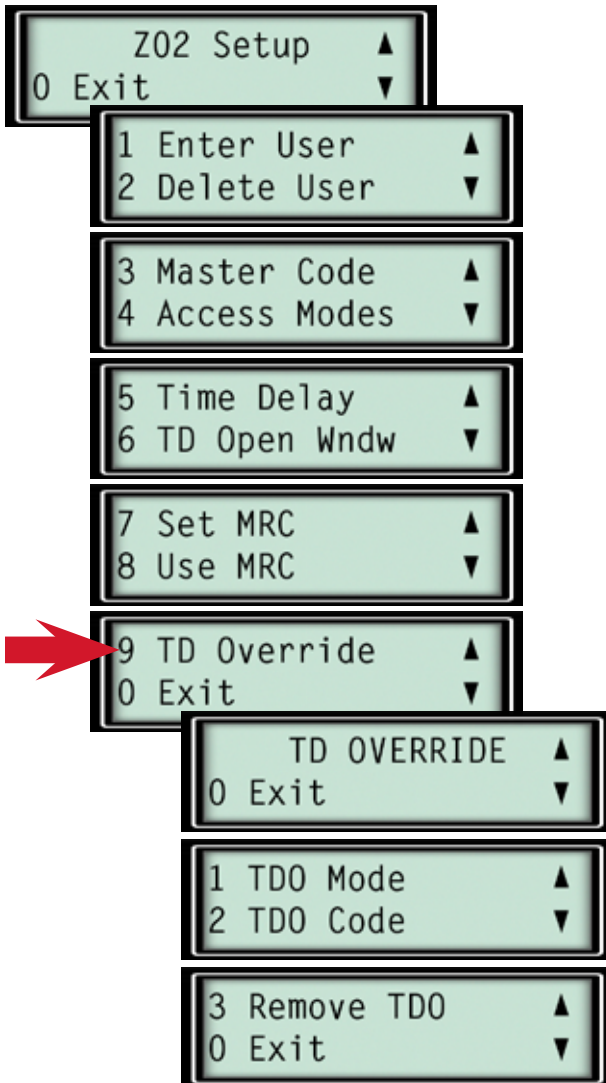
As you can see from the next set of menus, you have the option of setting the type of TDO (none, single control, or dual control), or setting the TDO code. Remember that the TDO mode must be set before the master code is changed for the first time, and that once programmed, the TDO mode cannot be changed.

➡
```
     TD OVERRIDE   ▲
0 Exit            ▼
```

```
1 TDO Mode        ▲
2 TDO Code        ▼
```

```
      TDO MODE     ▲
0 Exit            ▼
```

```
1 Single User     ▲
2 Dual Control    ▼
```

If you select single user (option 1) or dual control (option 2), the following screen will be displayed while the keypad communicates with the lock.

```
      TDO Mode
        Set
```

If the lock alerts you that the TDO mode could not be set, it is likely the TDO mode was previously set, and it cannot be changed after it is set and the lock's master code is changed.

```
      TDO Mode
   Cannot Be Set
```
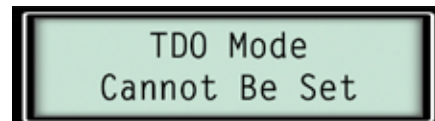
➡MANAGING LOCK CODES—ADDING USERS

Lock model 6120 will accept up to 8 user codes, in positions 2 through 9. Models 6123 and Z^{02} will accept up to 6 user codes in positions 2 through 7. New users can only be set up in empty PIN positions. To overwrite an existing code, you will first have to delete it.

```
      Z02 Setup    ▲
0 Exit            ▼
```

➡
```
1 Enter User      ▲
2 Delete User     ▼
```
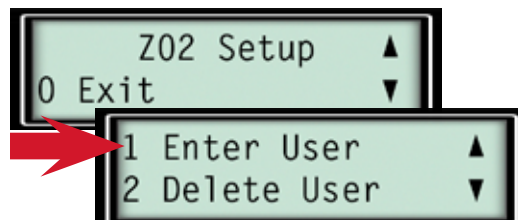
Biometric Keypad

When setting a new user, the display first prompts for a PIN position in which to store the user code.

```
1 Enter User      ▲
2 Delete User     ▼
```
```
      Enter USER
        ID + #
```
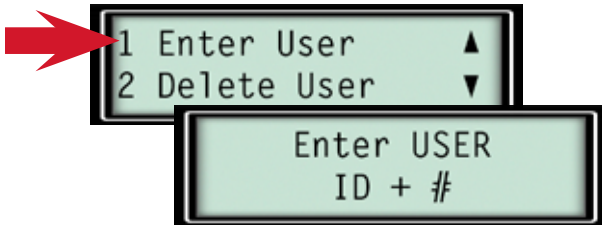
If the PIN position is already in use, the lock will indicate it, and you will be taken back to the enter user ID + # screen.

```
   This ID in Use
   Select Other ID
```

As you enter the new code, each digit is represented by a ✳ in the display window. All codes must be followed by #. After the code is entered, the display will ask you to enter it again to confirm it.

```
    Enter USER
     PIN + #
```
```
    User PIN
    ******
```
```
   Confirm USER
     PIN + #
```

If the new code and confirmation do not match, the display will alert you, and you will be taken back to the code entry screen, so that you can attempt to enter the new code again.

```
   Mismatch in
   2 PINs entered
```

If the code entry and confirmation match, the code will be set into the lock, and the following display will confirm the action.
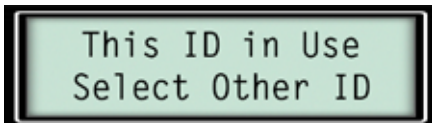
```
     New User
     PIN Set
```

➡ MANAGING LOCK CODES—DELETING USERS

Deletion of existing user codes is very easy. Select option 2 (delete user) under the lock setup menu.

```
    Z02 Setup     ▲
0 Exit            ▼
```
```
1 Enter User      ▲
2 Delete User     ▼
```
```
    Enter USER
     PIN + #
```

The display will indicate the user PIN position you entered immediately after you press it's number. Remember that you still have to press # before the entry is actually made.

```
    User ID
      2
```
```
    User PIN
    Deleted
```

The keypad will communicate with the lock, and PIN deletion will be confirmed by display of the screen above. If the PIN position was not in use, no harm was done, and the keypad will display the following screen for a few seconds, then take you back to the enter user PIN + # screen.

```
    This ID is
    NOT in use
```
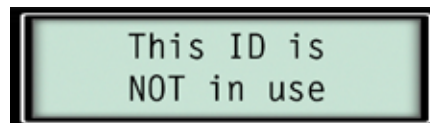
OPERATING INSTRUCTIONS
Biometric Keypad

➡MANAGING LOCK CODES—CHANGING THE MASTER CODE

The lock's master code cannot be deleted, but it can be changed. Before changing it for the first time, make sure you have the management reset code (all lock models) and time delay override mode (models 6123 and Z^{02} only) set the way you want them. If necessary, refer to those sections earlier in the instructions.

Select option 3 (master code) under the lock setup menu.

```
     Z02 Setup    ▲
  0 Exit          ▼
```
```
  1 Enter User    ▲
  2 Delete User   ▼
```
```
➡ 3 Master Code   ▲
  4 Access Modes  ▼
```
```
       Enter New
    MASTER CODE + #
```
```
       Master Code
       ******
```
```
      Confirm New
    MASTER CODE + #
```
```
      New Master
      Code Set
```

Confirmation of a successful master code change will be the final screen shown above.

➡MANAGING LOCK CODES—TIME DELAY OVERRIDE CODE

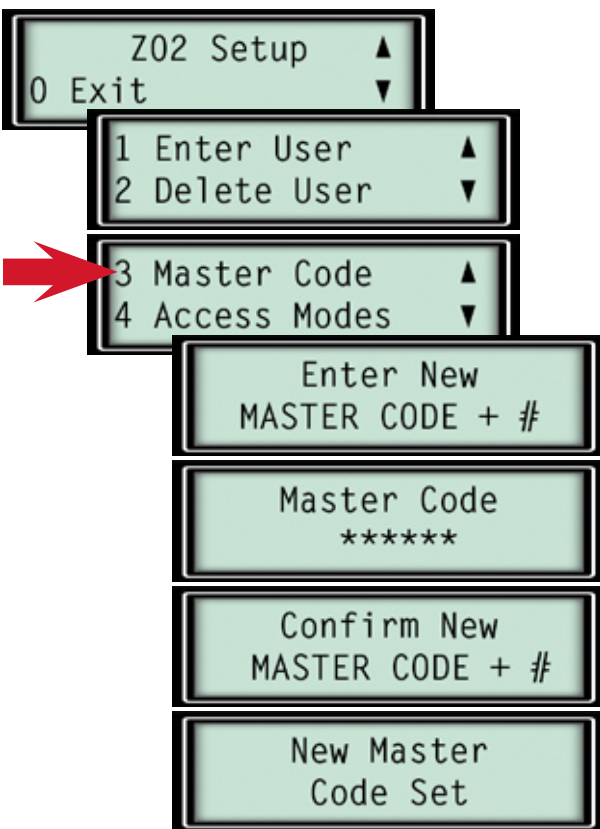This code is only available with 6123 and Z^{02} model locks. If your lock is a 6120, skip this section.

As explained earlier in this instruction manual, the time delay override code is used to circumvent the lock's time delay for uses such as armored car pickups and deliveries. It can only be used if a time delay is programmed into the lock, and it is not available if the lock is in supervisor/subordinate access mode.

To set or change the TDO code, go to option 9 in the 6123 or Z^{02} setup menu.

```
     Z02 Setup    ▲
  0 Exit          ▼
```
```
  1 Enter User    ▲
```
```
  3 Master Code   ▲
```
```
  5 Time Delay    ▲
```
```
  7 Set MRC       ▲
```
```
➡ 9 TD Override   ▲
  0 Exit          ▼
```
```
     TD OVERRIDE  ▲
  0 Exit          ▼
```
```
➡ 1 TDO Mode      ▲
  2 TDO Code      ▼
```
```
       Enter TDO
       Code + #
```
```
      Confirm TDO
       Code + #
```
```
         TDO
       Code Set
```
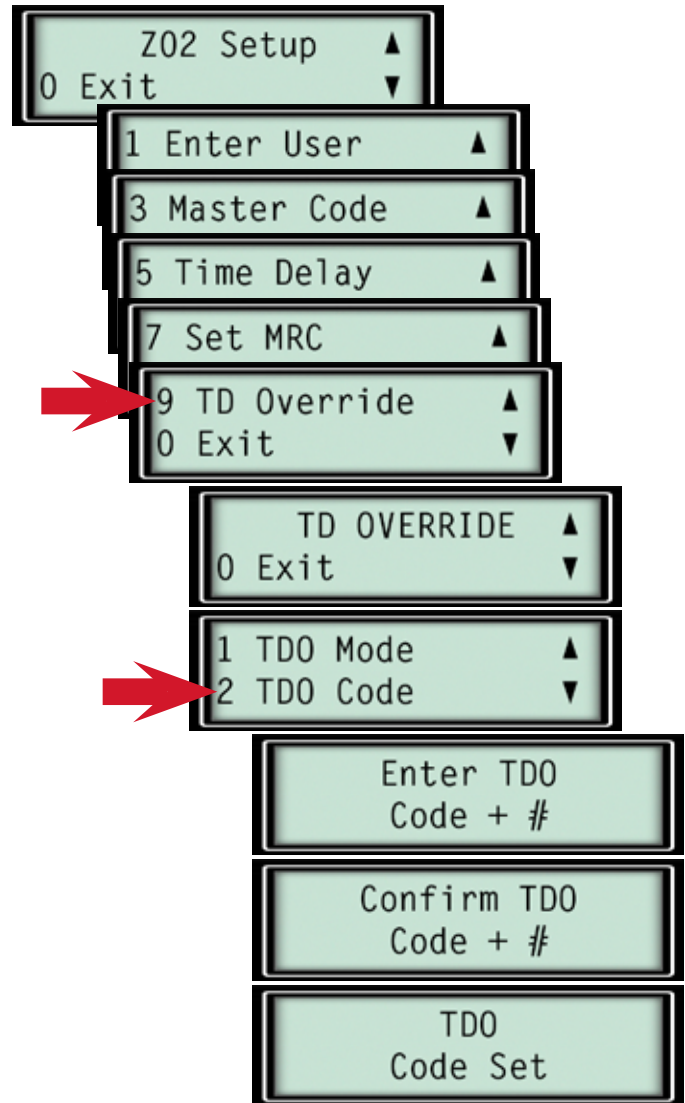
If a TDO code already exists, it can be changed by simply entering a new TDO code following this procedure.

To delete the TDO code, go to the delete user screen (option 2 under the lock setup menu), and delete PIN code #9.

Biometric Keypad

➥MANAGING LOCK CODES—THE SUPERVISOR CODE

The supervisor code is only available when the Biometric keypad is being used with a 6123 or Z^{02} lock. If your lock is a model 6120, this information does not apply.

The supervisor code is the PIN code stored in the #2 PIN position. It must initially be set by using the master code to access the lock setup menus. When the lock is in single user or supervisor/user mode, the supervisor code can set, change, and delete user codes in PIN positions 3 through 7. When the lock is in dual control mode, the supervisor code holder loses these abilities and cannot even change his own 6-digit code.

To employ the supervisor code to set, change, and delete user codes (including itself), simply access the lock setup menus by using the supervisor code. You will be limited to the capabilities shown in the menu illustrations shown here.

Press START to begin.

```
   Initializing
     Sensor
```

```
  Place Finger
 or Enter PIN  ▼
```
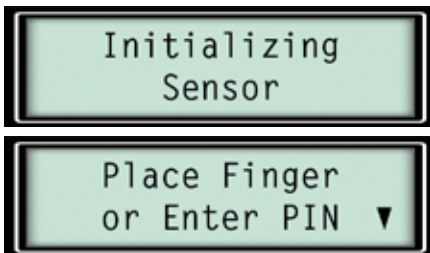
Press ✻ to get the lock to prompt you for the setup code, which in this case will be the #2 PIN code (supervisor code).

```
   Setup Code
    ✻✻✻✻✻✻
```

At the top of the following column are the menu items available to you when the supervisor code is used to access lock setup. You will not have access to any other lock setup functions.

Note that the supervisor code has the capability to delete itself.

```
  Z02 Setup    ▲
0 Exit         ▼
```

```
1 Enter User   ▲
2 Delete User  ▼
```

```
3 Change Superv  ▲
4 Delete Superv  ▼
```
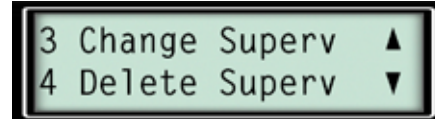
➥MANAGING LOCK CODES—THE USER CODES

Holders of user codes can only change their own 6-digit PIN codes when the Biometric keypad is used with a 6123 or Z^{02} lock. If your lock is a model 6120, this information does not apply, and all code management must be handled by the holder of the master code.

For a user code holder (PIN positions 3 - 7) to change codes, the code holder simply accesses the lock setup menus by using his or her own 6-digit code.

Press START to begin.

```
   Initializing
     Sensor
```

```
  Place Finger
 or Enter PIN  ▼
```
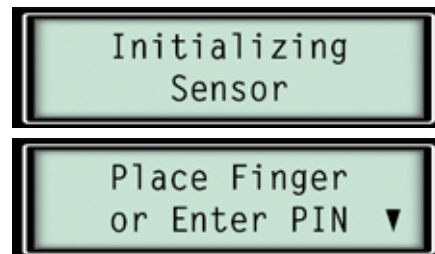
Press ✻ to get the lock to prompt you for the setup code, which in this case will be any user code from PIN position 3 through 7.

```
   Setup Code
    ✻✻✻✻✻✻
```

You will only have the ability to enter a new user code for the same PIN position as the one associated with the code entered to access the setup menu, as shown in the following illustrations.

Biometric Keypad

```
┌─────────────────────────┐
│    Z02 Setup       ▲    │
│ O Exit             ▼    │
└─────────────────────────┘
┌─────────────────────────┐
│ 1 User Code        ▲    │
│ O Exit             ▼    │
└─────────────────────────┘
   ┌─────────────────────────┐
   │     Enter USER          │
   │     PIN + #             │
   └─────────────────────────┘
   ┌─────────────────────────┐
   │    Confirm USER         │
   │     PIN + #             │
   └─────────────────────────┘
   ┌─────────────────────────┐
   │     New User            │
   │     PIN Set             │
   └─────────────────────────┘
```

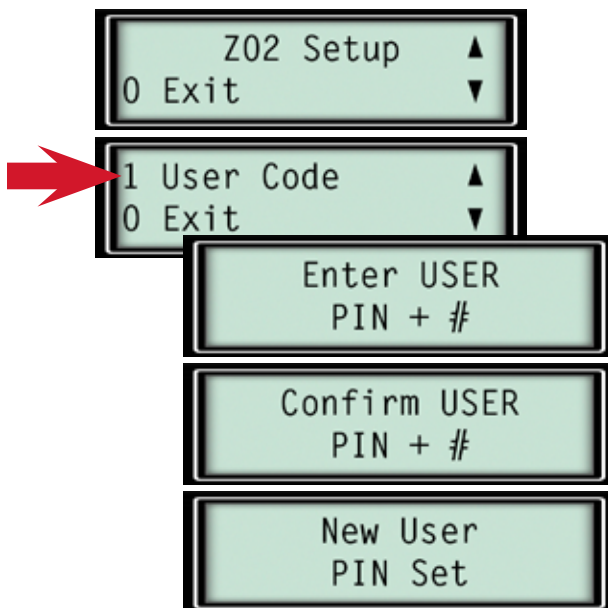User codes can be set, changed, or deleted by the holder of either the master code or the supervisor code. They also have the ability to change themselves, as long as the lock model is either a 6123 or Z^{02}.

ACCESS MODES—BACKGROUND INFORMATION

6123 and Z^{02} locks can operate in three different modes: single user, dual control, and supervisor/user. The mode of operation can be changed at any time. The 6120 lock can only be used in single control mode, so users of that lock should skip the entire section dealing with modes of operation.

➥ACCESS MODES—SINGLE USER MODE

One person with a single, valid, six-digit code and/or enrolled fingerprint can open the lock. Lock features can include time delay and time delay override capability, if desired.

➥ACCESS MODES—DUAL CONTROL MODE

This is also referred to as dual user mode. It requires two different valid lock codes and/or enrolled fingerprints to be entered within one minute of each other for the lock to open. The idea is that no one person has the ability to open the safe alone. Lock features can include time delay and time delay

override code, if desired. You should also be aware that a single user time delay override code and/or associated fingerprint can open the lock immediately without entry of a second code and/or fingerprint. The dual control time delay override will require another code to start the time delay before the TDO code and/or associated fingerprint can be used to open the safe. A time delay period of at least one minute must be programmed into the lock for a time delay override code or associated fingerprint of single or dual control variety to work. TDO cannot open a lock that is not using the time delay feature.

➥ACCESS MODES—SUPERVISOR/USER MODE

This is sometimes referred to as supervisor/subordinate or supervisor/employee mode. The master code and the code in PIN position #2 (supervisor code) cannot open the lock. Instead, they enable and disable the lock for opening by the other user codes. When either the master code or the #2 code (if set) is entered, the lock emits four short beeps or two long beeps. If it gives the four short beeps, any of the other user codes can subsequently be used to open the lock. The next time the master code or the #2 code is entered, the lock will emit two long beeps. Now the other user codes cannot open the lock. When the lock is disabled and a user code is entered, it does not open, but emits two long beeps instead. The master code and #2 code are used to toggle the lock back and forth between usable and non-usable states. Lock features can include time delay, but the time delay override is not available in this mode.
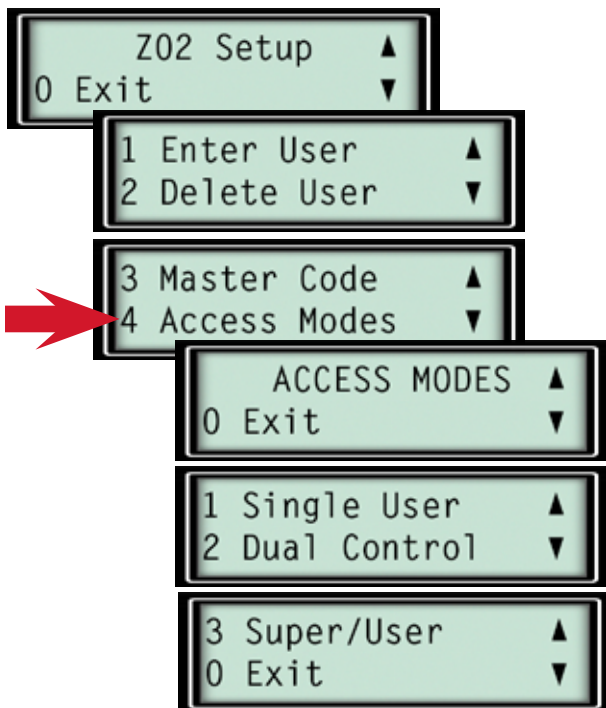
➥ACCESS MODES—SETTING THE ACCESS MODE

Remember, access modes can only be set if the Biometric Keypad is being used with a 6123 or Z^{02} lock.

➡**ACCESS MODES—SETTING THE ACCESS MODE (CONT.)**

From the lock setup menu, select option 4 (access modes), to choose the access mode you want.

```
    Z02 Setup      ▲
 0 Exit            ▼
```

```
 1 Enter User      ▲
 2 Delete User     ▼
```

```
 3 Master Code     ▲
 4 Access Modes    ▼
```

```
     ACCESS MODES  ▲
 0 Exit            ▼
```

```
 1 Single User     ▲
 2 Dual Control    ▼
```

```
 3 Super/User      ▲
 0 Exit            ▼
```

Remember that you cannot choose supervisor/user mode unless the supervisor code (PIN position #2) has already been set.
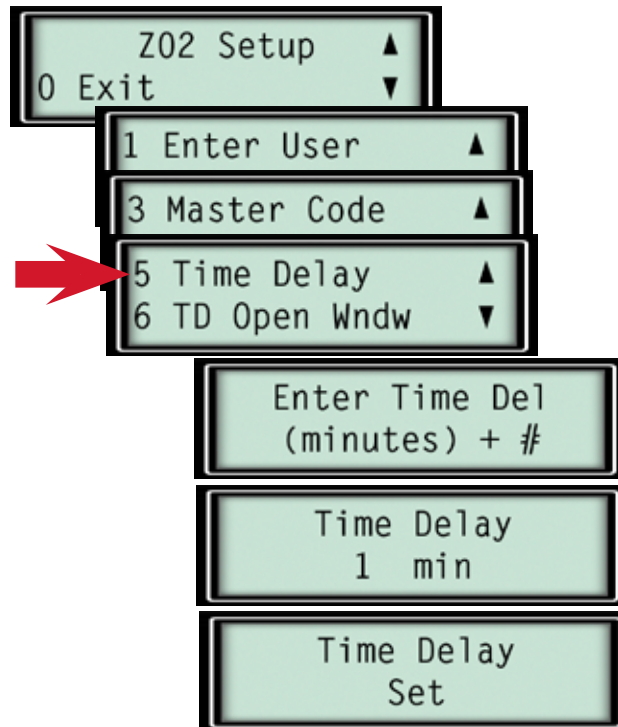
➡**TIME DELAY—BACKGROUND INFORMATION**

Time delay is a security feature that enforces a predetermined waiting period between the entering of a valid lock code and the actual opening of the lock. The delay period can be set from 1 to 9 minutes using a 6120 lock, and from 1 to 99 minutes when using either a 6123 or Z^{02}.

The opening window is a period of time immediately after the time delay during which you can enter a valid lock code to open the lock. The factory default opening window is 2 minutes for all lock models, but it can be changed to any value between 2 and 10 minutes for 6123 and Z^{02} locks.

Note: If your lock employs a time delay, changes to an existing time delay or opening window can only be accomplished during the opening window period. This can make the process lengthy, depending on the length of the time delay. If you intend to change the length of the opening window from the factory default 2 minutes, it is recommended you do so before programming a value for the time delay period.

➡**TIME DELAY—SETTING A TIME DELAY VALUE**

From the lock setup menu, select time delay (option 4 for a model 6120 lock, option 5 for a 6123 or Z^{02}).

```
    Z02 Setup      ▲
 0 Exit            ▼
```

```
 1 Enter User      ▲
```

```
 3 Master Code     ▲
```

```
 5 Time Delay      ▲
 6 TD Open Wndw    ▼
```

```
 Enter Time Del
 (minutes) + #
```

```
 Time Delay
  1  min
```

```
 Time Delay
    Set
```

Simply enter a time value when prompted by the display to do so. The value can be anything from 1 to 9 minutes for a model 6120 lock, and anything from 1 to 99 minutes for a model 6123 or Z^{02}. The example above shows a value of 1 minute programmed into the lock.

➡**TIME DELAY—DELETING A TIME DELAY VALUE**

Deleting an existing time delay is very similar to the preceding process, and requires you to enter zero as the time delay value.

Biometric Keypad

You will notice, however, that deleting a time delay requires you to wait through the existing time delay period before you can change the value, whether you're changing it to zero or some other number. After you enter the new time delay value and #, the time delay countdown screen displays. When it reaches zero, you will be asked to enter the lock's master code as verification of the change and your authority to make the change.

```
5 Time Delay      ▲
6 TD Open Wndw    ▼
```

```
Enter Time Del
(minutes) + #
```

```
Time Delay
0  min
```
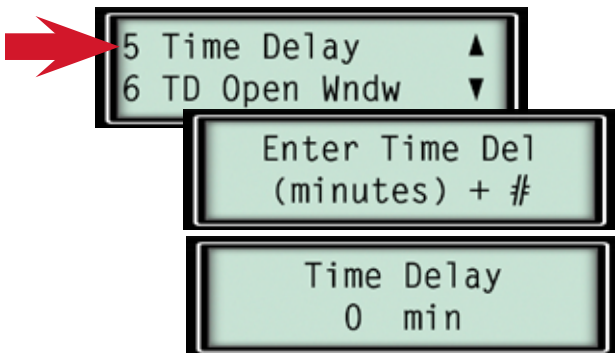
The time delay counts down from the existing delay period, then the display prompts you to confirm the master code.

```
Time Delay
00:45
```

```
Confirm Master
Code + #
```

```
Time Delay
Set
```

➡ TIME DELAY—CHANGING THE OPENING WINDOW VALUE

You can only change the length of the opening window if you are using a model 6123 or Z^{02} lock. If your lock is a 6120, this section does not apply to you.

The opening window is the limited period of time following the end of the time delay during which you can enter a valid code and/or an enrolled fingerprint to open the lock. The factory default opening window period is 2 minutes. It can be anywhere from 2 to 9 minutes.

```
5 Time Delay      ▲
6 TD Open Wndw    ▼
```

```
Enter Open Wndw
(minutes) + #
```

```
Open Window
3 min
```

```
Open Window
Set
```

If there is an active time delay in the lock, you will have to wait through the existing time delay period before yo can change the opening window value. After you enter the new opening window value and #, the time delay countdown screen displays. When it reaches zero, you will be asked to enter the lock's master code as verification of the change and your authority to make the change.
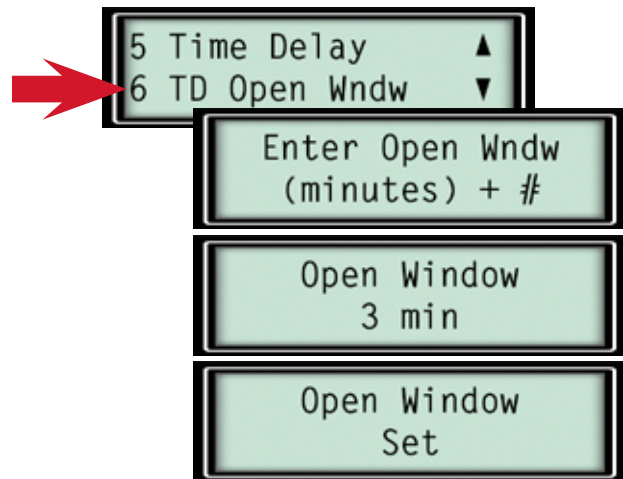
```
5 Time Delay      ▲
6 TD Open Wndw    ▼
```

```
Enter Open Wndw
(minutes) + #
```

```
Open Window
3 min
```

```
Time Delay
00:45
```

```
Confirm Master
Code + #
```

```
Open Window
Set
```
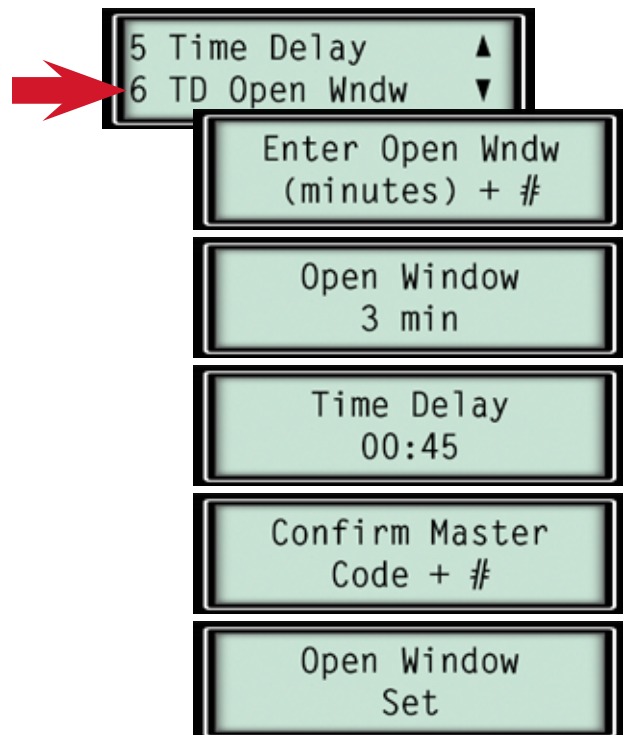
Biometric Keypad

➡**FINGERPRINT MANAGEMENT—BACKGROUND INFORMATION**

The Biometric Keypad's silicon-based active capacitive fingerprint reader represents superior biometric technology that combines high reliability with the ability to reject devices and methods which are sometimes used to fool optical-type readers.

Be sure to enroll at least one fingerprint before you set the fingerprint mode. You wouldn't want to tell the lock to open by fingerprint <u>and</u> code, then discover that you had not enrolled a valid fingerprint.

You should consider enrolling more than just one of your fingerprints. Damage to a finger, such as a cut, could cause the keypad to reject your fingerprint.
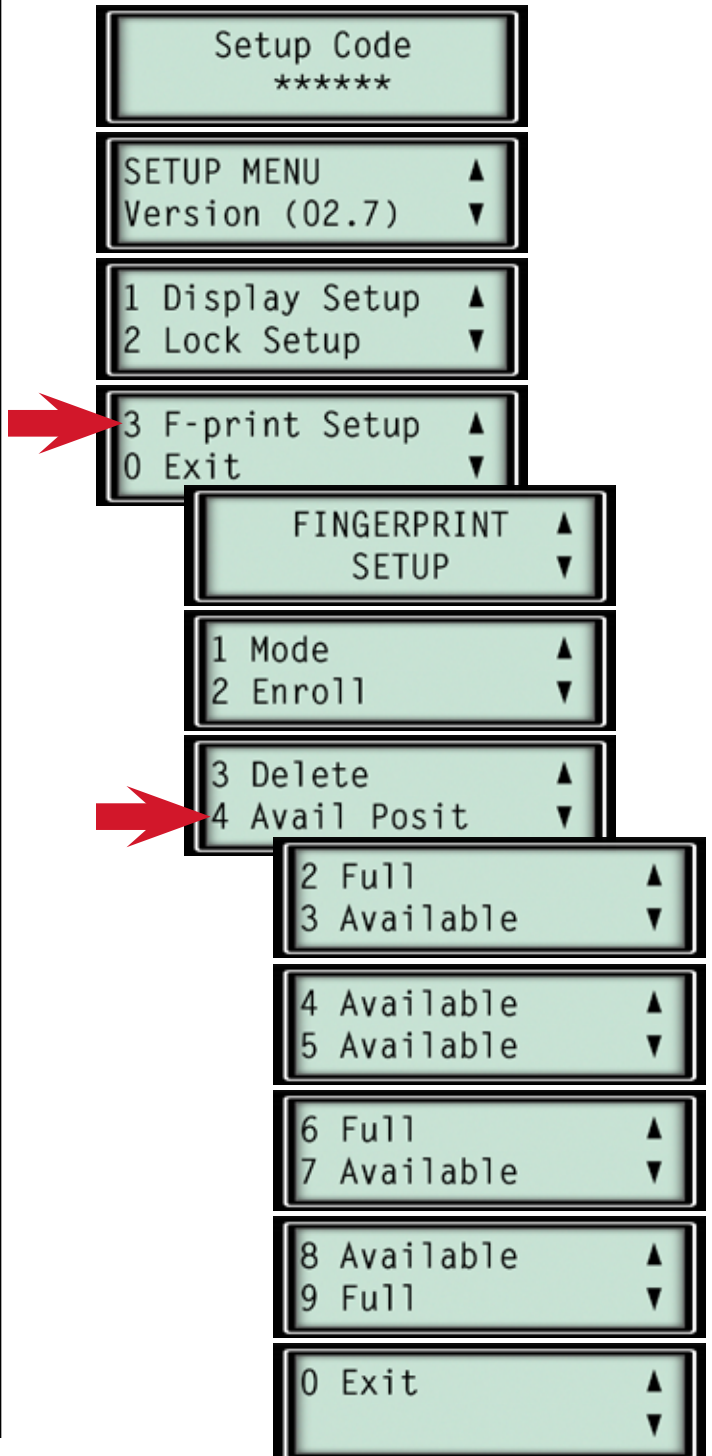
You can enroll one fingerprint for each available code position in a lock. For a model 6120 lock, it's 1 master code and 8 user codes. For models 6123 and Z^{02}, it's 1 master code, 1 supervisor code, 5 user codes, and 1 time delay override code. If a numerical code is not already programmed into the lock in the PIN position you wish to assign to a fingerprint, the code will be programmed as part of the fingerprint enrollment process. Each numerical code can only be assigned one fingerprint.

If a code is deleted from the lock, the associated fingerprint will no longer work. If a fingerprint is deleted from the keypad, the code remains in the lock. Another fingerprint can be assigned to it, or it can function by itself, depending on how the lock is configured.

➡**FINGERPRINT MANAGEMENT—CHECKING AVAILABLE POSITIONS**

You must use the lock's master code as the setup code to access the fingerprint options. Before enrolling a fingerprint, it's a good idea to see which PIN positions don't already have fingerprints enrolled. From the fingerprint setup menu, select option 4, and use the up and down arrows to scroll through the PIN positions to see which are already associated with a fingerprint and which ones are available for you to assign a new fingerprint. Keep in mind that for a 6123 or Z^{02} lock, position 8 may show that it's available, but it is, in fact, used for the time delay opening window value. You may not use it for code or fingerprint storage.

Also, PIN position 9 is reserved for the time delay override code in models 6123 and Z^{02}. The model 6120 can use all displayed positions for user code storage.

```
         Setup Code
           ******

SETUP MENU            ▲
Version (02.7)        ▼

1 Display Setup       ▲
2 Lock Setup          ▼

3 F-print Setup       ▲
0 Exit                ▼

     FINGERPRINT      ▲
        SETUP         ▼

1 Mode                ▲
2 Enroll              ▼

3 Delete              ▲
4 Avail Posit         ▼

  2 Full              ▲
  3 Available         ▼

  4 Available         ▲
  5 Available         ▼

  6 Full              ▲
  7 Available         ▼

  8 Available         ▲
  9 Full              ▼

  0 Exit              ▲
                      ▼
```
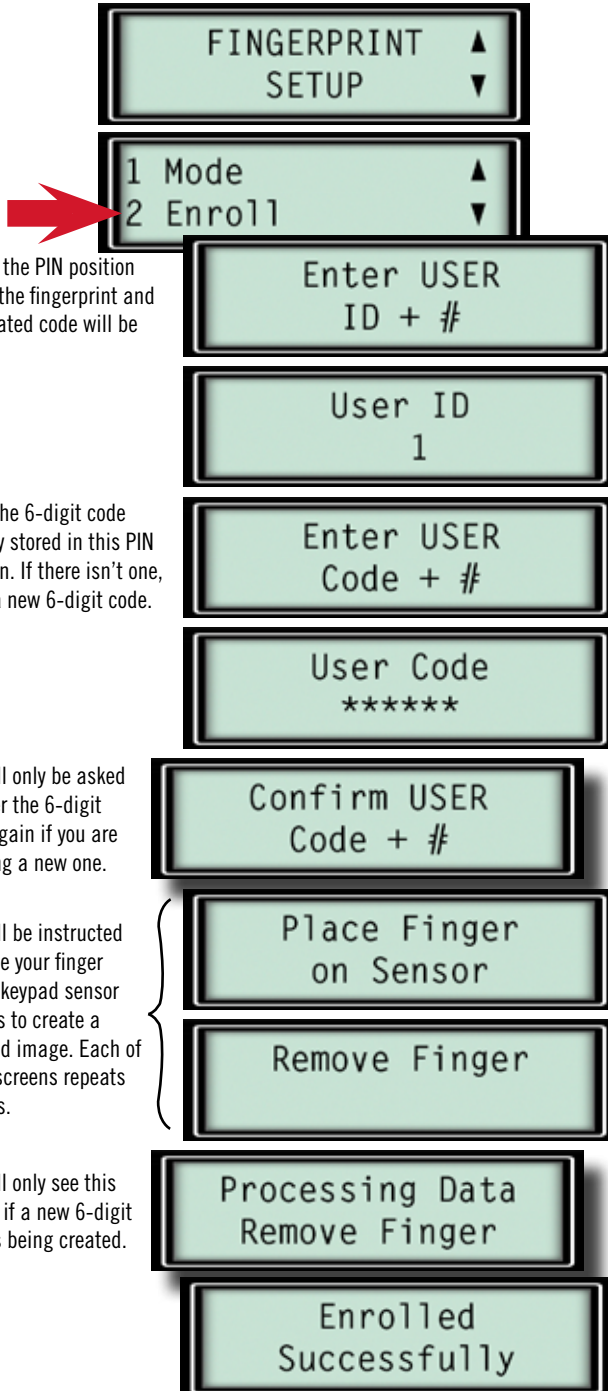
Biometric Keypad

➥FINGERPRINT MANAGEMENT—ENROLLING A FINGERPRINT

You must use the lock's master code as the setup code to access the fingerprint options. From the fingerprint setup menu, select option 2 (enroll).

```
FINGERPRINT   ▲
SETUP         ▼
```

```
1 Mode        ▲
2 Enroll      ▼
```

This is the PIN position where the fingerprint and associated code will be stored.

```
Enter USER
ID + #
```

```
User ID
1
```

Enter the 6-digit code already stored in this PIN position. If there isn't one, enter a new 6-digit code.

```
Enter USER
Code + #
```

```
User Code
******
```

You will only be asked to enter the 6-digit code again if you are creating a new one.

```
Confirm USER
Code + #
```

You will be instructed to place your finger on the keypad sensor 3 times to create a detailed image. Each of these screens repeats 3 times.

```
Place Finger
on Sensor
```

```
Remove Finger
```

You will only see this screen if a new 6-digit code is being created.

```
Processing Data
Remove Finger
```
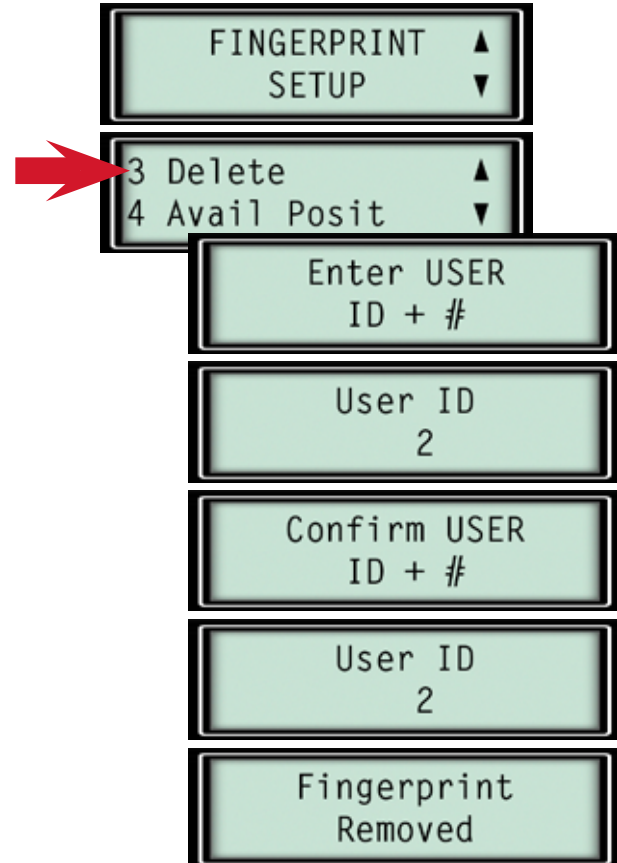
```
Enrolled
Successfully
```

➥FINGERPRINT MANAGEMENT—DELETING A FINGERPRINT

You must use the lock's master code as the setup code to access the fingerprint options. From the fingerprint setup menu, select option 3 (delete).
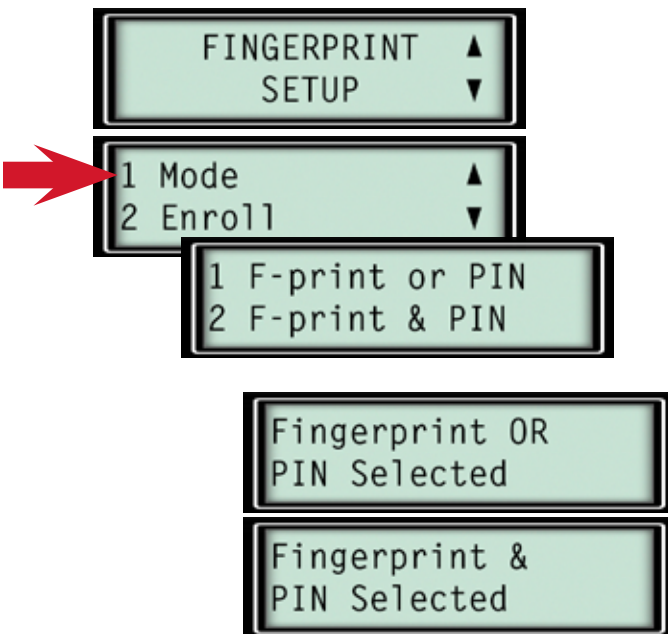
```
FINGERPRINT   ▲
SETUP         ▼
```

```
3 Delete      ▲
4 Avail Posit ▼
```

```
Enter USER
ID + #
```

```
User ID
2
```

```
Confirm USER
ID + #
```

```
User ID
2
```

```
Fingerprint
Removed
```

The keypad display will alert you if you attempt to delete a fingerprint from an empty PIN position, just as it would alert you if you tried to enroll a fingerprint in position that was already in use. The keypad display makes setting up and maintaining your lock parameters and data very intuitive.

OPERATING INSTRUCTIONS
Biometric Keypad

➡FINGERPRINT MANAGEMENT—SETTING THE MODE

Once you have enrolled at least one fingerprint, it's time to set the keypad's mode of operation. Do you want to open the lock using just a fingerprint or a 6-digit code? Or do you want to require both an enrolled fingerprint and a 6-digit code before the lock will open? You can select from either of these two options.
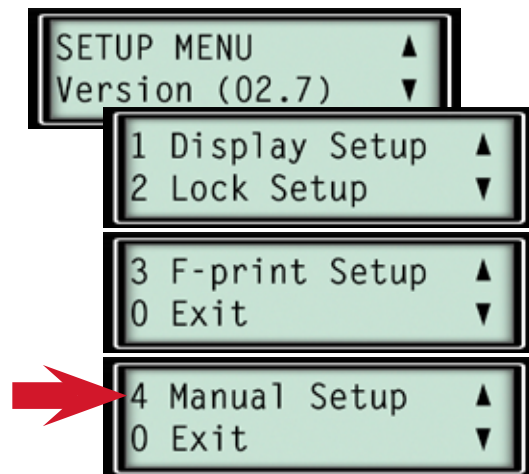
Select option 1 (mode) from the fingerprint setup menu. In the menu that follows, select 1 for fingerprint or numeric code entry. Select 2 to require both an enrolled fingerprint and the associated code for lock entry. A confirmation screen will verify your selection.

```
FINGERPRINT    ▲
SETUP          ▼
```

```
1 Mode         ▲
2 Enroll       ▼
```

```
1 F-print or PIN
2 F-print & PIN
```

```
Fingerprint OR
PIN Selected
```

```
Fingerprint &
PIN Selected
```

➡MANUAL MODE—CONTROLLING THE LOCK DIRECTLY

The Biometric Keypad is designed to handle programming and operation of your lock using an LCD display to make the processes easy to follow. There may be times, however, when you need to control the lock directly, without the Biometric Keypad acting as the middleman. To do this, make sure you understand the lock programming procedures. Separate operating instructions for the lock were included when it was shipped from the factory. If these have been misplaced, you can obtain replacements online, at www.sargentandgreenleaf.com.

From the keypad's main setup menu, select option 4 (manual setup). Once you do so, any key presses will transmit information directly to the lock. Programming changes you make will not affect the keypad in this mode. Be certain you understand what you are doing, as use of this mode makes it easy to get the lock and keypad out of sync.

```
SETUP MENU        ▲
Version (02.7)    ▼
```

```
1 Display Setup   ▲
2 Lock Setup      ▼
```

```
3 F-print Setup   ▲
0 Exit            ▼
```

```
4 Manual Setup    ▲
0 Exit            ▼
```

If you are working with the lock in manual mode and want to return to keypad mode, simply press the keypad's START button.

Biometric Keypad

➡ BATTERIES—WHEN TO CHANGE

When programming or operating the lock, it emits beeps. If you notice a distinct change in the pitch of the beeps, the lock is telling you it's time to change the batteries. If you ignore this signal, the lock will finally beep 20 times rapidly when you try to open it, but it will remain locked. This is the lock's way of insisting you change the batteries. Erratic or inconsistent lock operation is another sign that it's time for new batteries.

➡ BATTERIES—HOW TO CHANGE

Codes and programming information are not corrupted or lost during battery changes.

Underneath the bottom of the keypad, you'll find a raised ridge. Place your finger behind it, pull slightly forward and down to open the battery compartment.

The batteries are connected to wired leads with tops that snap onto the batteries terminals. These are the same connectors found on most appliances that use 9-volt batteries. Snap off the connectors, remove the old batteries, then snap the connectors onto a pair of fresh Duracell® brand (for best performance) alkaline batteries. The batteries must be alkaline. Orient the batteries in the tray with the connector wires facing up.

Once the replacement batteries are in place, push the tray back up into the keypad until it snaps into place.

WARRANTY

Seller warrants that for one year from the date of shipment from Seller's point of manufacture, the goods shall be free from defects in material and workmanship, provided the goods are normally and properly used according to the Seller's written instructions.

THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. S&G DOES NOT WARRANT THAT THE GOODS ARE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE EXCEPT AS EXPRESSLY PROVIDED HEREIN.

Seller's entire liability and Buyer's exclusive remedy in the event that the goods do not conform to the foregoing warranty shall be Seller's repair or replacement of the goods (including payment of freight costs to and from point of manufacture).

UNAUTHORIZED USE OF DIAL, DIAL RINGS, AND/OR SPINDLES NOT MANUFACTURED BY THE SELLER IN CONJUNCTION WITH ITS COMBINATION LOCK PRODUCTS INVALIDATES THE WARRANTY.
SELLER SHALL HAVE NO LIABILITY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES. SELLER DOES NOT WARRANT ITS LOCK PRODUCTS TO BE IMPERVIOUS TO FORCIBLE OR SURREPTITIOUS ENTRY, AND SELLER SHALL HAVE NO LIABILITY FOR DAMAGE TO OR LOSS OF PROPERTY SOUGHT TO BE PROTECTED BY ANY SUCH LOCK.

SARGENT AND GREENLEAF®

Sargent & Greenleaf, Inc.
A Wholly Owned Subsidiary of Stanley Security Solutions, Inc.
PO Box 930, Nicholasville, Kentucky 40340-0930 USA
Phone (859) 885-9411
Phone (800) 826-7652
FAX (859) 887-2057
FAX (800) 634-4843

Sargent & Greenleaf S.A.
9, chemin du Croset
1024 Ecublens, Switzerland
Phone +41 21 694 34 00
FAX +41 21 694 34 09