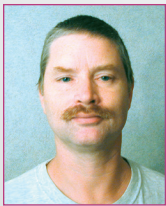


The New

PowerPlex 2000

from
KABA



by
Richard Dickey

The PowerLever lock has been around for a while. You know, that self-generating electronic lock that uses a pump of the lever to power the lock, and the only one of its kind in the world that I am aware of. Well now we have what you might call the second generation of the PowerLever, now called the PowerPlex. What's the big deal? Mainly the new patented PowerStar™ technology. The new PowerPlex saves the charge produced by working the lever for up to 10 weeks,

(see photo 1). This means that you no longer have to pump the lever, just start entering your code. When the lock grants you access, working the lever to open the door charges the lock for the next use. Wow!

The way they are able to do this is by utilizing a new highly efficient super capacitor that can save a charge for a very long time. It also helps that the lock electronics are always "asleep." To activate the circuit to access or program the lock, you must power the lock by depressing any button on the locks keypad. This energizes the lock for you to enter the remainder of your PIN and open the lock; or start

to program the lock with a command sequence.

The new PowerPlex has a three year warranty that starts at installation. You can add up to 100 users to the lock. There is also an audit trail of the last 1000 activities. It can be installed on almost any door and with almost any exit trim. I want to show you how easy this lock is to install and touch on programming the lock just a little. Here we go.

Installation

The installation of the PowerPlex 2000 series is very simple. There is the standard 1" edge bore, the 2-1/8" cross



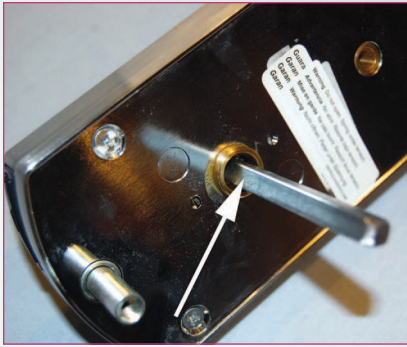
1. A great look at the PowerPlex 2000 on a display.



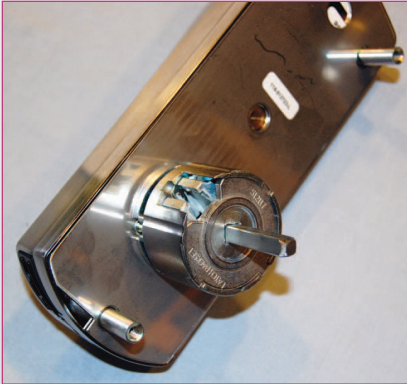
2. Here is what the preparation looks like.



3. The first step of installation is the latch.



4. The spindle is installed into the outside assembly.



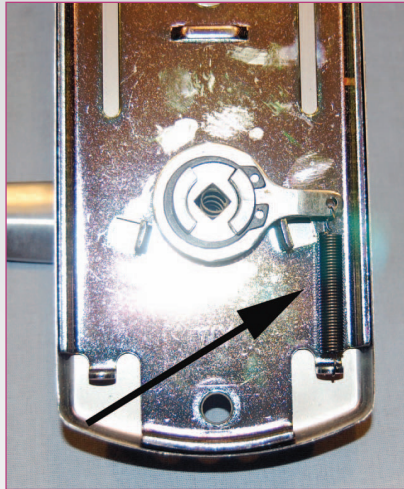
5. The cylindrical unit is now added to the assembly.



6. The latch and cylindrical unit must align properly.

bore and three additional holes used for the mounting screws. Several templates are included that cover the standard configuration as well as a mortise configuration. Drill your holes and the door preparation is done, (see photo 2).

Installing the latch is the next step, (see photo 3). After the latch, assembling the outside assembly is the next step. First place the slotted end of



7. The return spring is installed after handing is determined.



8. The inside and outside assemblies are held in place by three screws.



9. We are ready too install the outside lever.



10. Insert the lock cylinder into the lever.

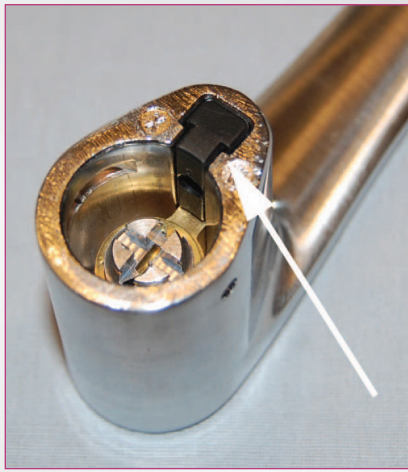
the spindle into the outside housing. You will feel it lock into place. It can be installed the wrong way. When looking at the back side of the spindle, it should look like a diamond and not a square, (see photo 4).

Now slide the cylindrical plate over the spindle, (see photo 5). At this point the assembly is ready to slide onto the door. The only thing to be aware of is that the latch and cylindrical unit must align properly, (see photo 6).

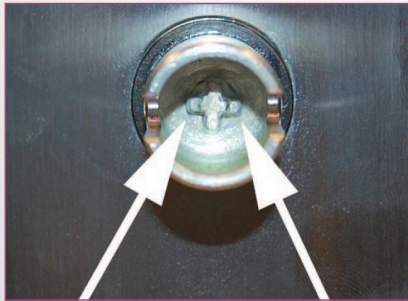
On the inside trim assembly, you need to turn the lever in the proper direction for handing and install the return spring, (see photo 7). Next install the inside trim and attach it with three screws, (see photo 8).

With the inside and outside assemblies in place the only thing left is to install is the outside lever, (see photo 9). Slide the lock cylinder in place, (see photo 10). Now slide the cylinder plug in place, (see photo 11). The lever is ready to go.

The override shaft has two indents on it. They should be



11. Add the cylinder plug.



12. The override shaft has two indents that should be in the horizontal position.



13. Turn the key 90 degrees clockwise and install the lever. Now turn it 90 degrees counterclockwise and remove the key.

in a horizontal position at this point, (see photo 12). Using the shaft override tool that is provided, rotate the shaft until the indents are vertical. Insert the key into the lock cylinder and turn it 90 degrees clockwise. Now you should be able to slide the lever onto the shaft.

While pushing the lever



14. Don't forget to tighten the cylinder plug.

against the lock housing, turn the key counterclockwise until the key is in the horizontal position and remove the key, (see photo 13). The last thing to do is tighten the cylinder plug with an allen wrench, (see photo 14).

Programming

Programming is easy with the 2000. It is just a matter of pushing a few buttons. But before you program the PowerPlex you need to be aware of the modes of operation.

Factory Mode

The factory mode is one of three primary states of the PowerPlex 2000. The main characteristics of this state are:

The PowerPlex 2000 opens only when the 8-digit master combination (1-2-3-4-5-6-7-8) is keyed in.

The visual indication for 'access granted' is a green LED flashing once. A high-pitched tone is also generated while the green LED is on.

The Master User must change the combination to be

able to exit the factory mode, and switch to the access mode.

Access Mode

This mode refers to a lock that is operational for user access, and not in factory or Programming Mode.

Pushbutton Programming Mode

The lock enters the Pushbutton Programming Mode when the user enters the master combination or one of the manager combinations, preceded and followed by the character '#' (ex: #12345678#). Once the PowerPlex 2000 is in the Pushbutton Programming Mode, the Master/Manager can enter one or more command sequences. Each command sequence ends with a '#' character that acts like an <enter> character. At the very end of all sequences of programming commands, enter one more (#) to remove the lock from the Pushbutton Programming Mode and return to normal access mode.

We will go through an example of programming a user to show you how easy it is.

Add or modify a user access code

- Put the lock into Pushbutton Programming Mode.
- Enter command 100# to add/modify a User Access Code.
- Enter the ID location followed by # - "NNN#". We will use 023# for this example (Range = 000 to 099).
- Enter UUUUUUUU#, representing a User Access Code of between 4 and 8 numbers, depending on the length of Access Code that you selected.

For example, if your code length is 4 digits, the number could be 1024#.

- Enter the code 1024# again.
- Here is an example of a Complete Entry: 100#023#1024#1024#.
- Enter another (#) to indicate the end of programming.
- In this example, the User Access Code 1024 will now work in that door with all the access privileges assigned to that regular User.

All other programming is done basically the same way. You just enter the programming mode and punch a few buttons. It truly is a great lock. Below is a list of specific information for the PowerPlex 2000.

Features

- Access Control: Electronic pushbutton lock Provides exterior access by PIN code, while allowing free egress.
- PowerPlex 2000 locks are self-powered electronic locks that do not require batteries or other power sources. The lock generates its own power with every turn of the lever, making it the most efficient and versatile electronic lockset available with virtually no maintenance costs.
- No Wires: Requires no wiring to or through the door.

Locking Device Options

- Cylindrical: Cylindrical latch with 3-hour UL/ULC fire rating

- Exit Device: Compatible with most leading brands of Exit Devices.
- American Standard Mortise: With 1-1/4" (32 mm) face plate; with and without dead bolt, auto dead bolt also available

Number of Codes

- Multiple Users — 100 Codes

Audit Trail

- The most recent 1,000 lock events are recorded in memory, including use of the mechanical key override. Software is required to view audit events.

Programming

- Locks are programmed via keypad or with optional Microsoft® Excel®-based software.

Handing

- Non-handed; pre-assembled for left-hand door installations — easily changed in the field.

Key Override (Optional)

- Optional Key-in-Lever cylinder in Schlage "C" Keyway with black KABA cap
- Small format—Best and equivalent (6 or 7-pin length)

Operation Modes

- PIN access
- Passage — can be toggled on/off
- Lockout

Authority Levels

Five different levels allow who has access to specific

lock functions

- Master Level — performs all set-up and programming functions
- Manager Level — administers common programming functions
- Access User Level — entry granted with valid PIN
- Service Level — codes for single event or single day access, programmable in advance
- Maintenance Level — no access is granted, information can be uploaded/downloaded to/from the lock

User Parameters

- Code length — Adjustable to accept 4 to 8 digits
- Anti-tamper lockout — Adjustable from 3 to 9 invalid attempts with an adjustable period of 0 to 90 seconds
- Relock time — Adjustable from 2 to 20 seconds

Lock Power

Self Powering — KABA's patented PowerStar™ technology supplies power for all electronic lock functions include programming users at the keypad without ever having to change batteries. Once the first digit of a valid code is entered to "wake up" the lock, the remainder of the code can be entered and access is granted. A full charge of the built-in super capacitors will last up to 10 weeks with no activity at the lock.

Construction

- Heavy-duty commercial Grade I lockset, solid

cast exterior housing, solid cast levers, cylindrical drive wear tested for extensive use in indoor and outdoor applications

- Numeric Keypad: Vandal resistant, solid metal pushbuttons
- Cylindrical: 2- $\frac{3}{4}$ " (70 mm) backset, 2- " (60 mm) backset
- Mortise: 2- $\frac{3}{4}$ " (70 mm) backset

Exit Trim Model

- Varies by exit device

Latches

- Cylindrical Models: $\frac{1}{2}$ " (13 mm) throw latch,
- Mortise Models: $\frac{3}{4}$ " (19 mm) latch, 1" (25 mm) dead bolt (optional) and auto dead bolt (optional)

Strikes

- Cylindrical Models: Packaged standard with both ANSI A115.3 "T" Strike and A115.2 ASA Strike
- Minimum Stile Required: 5" (127 mm)
- Weight: 9.25 lbs. (4.20 kg)

Key Override Options

- Key-in-Lever Cylinder: KABA 1539 6-pin cylinder — Schlage "C" Keyway
- Interchangeable Core: Small format — Best and equivalent (6 or 7-pin length); cylinder not included

Ease of Installation

- No wiring to or through the door — no risk of pinched wires

Door Preparation

- Cylindrical and Exit Trim — ASA 161 (Easily installs on door preparation with three additional through bore holes (wood or metal doors)
- Mortise — ASA 86 door preparation with three additional through bore holes

Door Thickness

- Cylindrical Model: 1- " (35 mm) to 2- $\frac{1}{2}$ " (64 mm); pre-assembled to accommodate doors 1" (41 mm) to 2" (50 mm)
- Exit Trim and Mortise Models: 1- $\frac{3}{4}$ " (44 mm) to 2- $\frac{1}{4}$ " (57 mm). Pre-assembled to accommodate doors 1- $\frac{3}{4}$ " (44 mm) to 2" (54 mm).

Certification and Testing

- Accessibility Standard: Americans with Disabilities Act (ADA)
- Durability: ANSI/BHMA Grade I Certified (A156.25, A156.2, A156.13, A156.3)
- Fire Rating: UL 10C Fire rated
- Environmental: Indoor/Outdoor Approved; -31 °F (-35 °C) to + 130 °F (55 °C)

Warranty

- Warranty: Three-year warranty from date of installation; built-in warranty counter in lock memory

Available Finishes

- Standard Finish: Satin Chrome 26D (626) housings and levers

- Optional Finish: Satin Brass 04 (606) housings and levers

Exit Device Compatibility

- Arrow Rim # 3800
- Corbin 5000 Series
- Detex Rim # F1001
- Detex Surface Vertical Rod #s 20/F20
- Dorma Rim # F9300
- Precision Rim #s 21/FL21
- Precision Surface Vertical Rod #s 22/FL22
- Sargent Rim # 8800
- Von Duprin Concealed Vertical Rod #s 9847/9947
- Von Duprin Mortise #s 9875/9975
- Von Duprin Rim #s 89/99
- Von Duprin Surface Vertical Rod #s 9827/9927
- Yale Concealed Vertical Rod #7160
- Yale Rim #7100

For more information on this or any other product from KABA, contact them at 1-800-849-8324 or go to www.kaba-adsamericas.com.

