

Addendum
October 1999

Solitaire
850/950
SERIES

INSTALLATION
INSTRUCTIONS

for

Exit Device Operator

ILCO
UNICAN®

Printed in Canada
D8-PKG-2643 10/99

Exit Device Operator Installation

Introduction

The Solitaire Commercial Security System Exit Device Operators (see Figure 1) are designed to be installed on 1 3/8" to 2 1/2" (35 to 65mm) thick wood or hollow metal doors. The proper Exit Device and Operator must be ordered for the specific door thickness.

The door preparation needed to mount the Exit Device operators, is provided on drawing in the operator box. Please see the manufacturers' door preparation instructions for the Exit Devices.

Each Exit Device Operator package contains the following items:

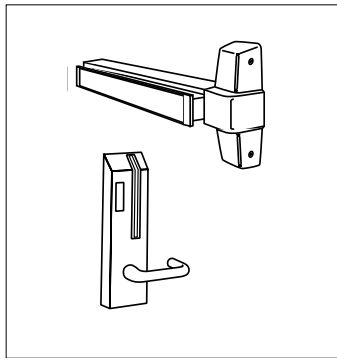


Figure 1

- Exit Device Operator
- Mechanical key override cylinder with control key and override key
- Battery pack
- Battery box with screw
- Inside dress plate(s)
- Inside battery frame
- Four #10-24 NC PHL PH screws
- Four combination screws for the battery frame
- Four #8 wood screws for the battery frame
- Battery cable extension (some models only)
- Drive screw (Von Duprin exit device operators only)

The Exit Device may or may not be included, depending on the product you have ordered.

Tools Needed

- Phillips screwdriver
- Allen keys: 1/16" (1.6 mm) for the battery box screw
- Drill bits: 1/4" (6 mm), 3/32" (2mm), 7/8" (22mm), 1" (25mm)

Checking the Door

Proper alignment of the door and frame is crucial for the performance and durability of the lock. On pairs of doors with overlapping astragal* or rabbeted edges, make sure that the vertical rods, door closers, coordinators, and astragals are all installed and lined up properly (see Figure 2).

*An astragal is a metallic strip running the length of the door opposite the hinges. Astragals are commonly used to cover the opening between double doors, and act as a smoke or weather barrier (see Figure 3).

Make sure the Exit Device Operator hand and door hand are the same (see Figure 4).

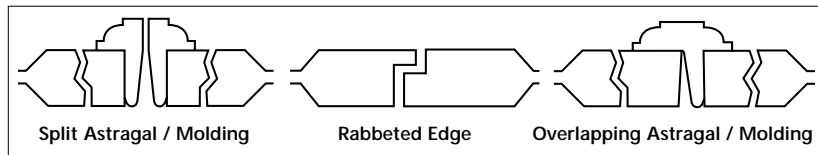


Figure 2

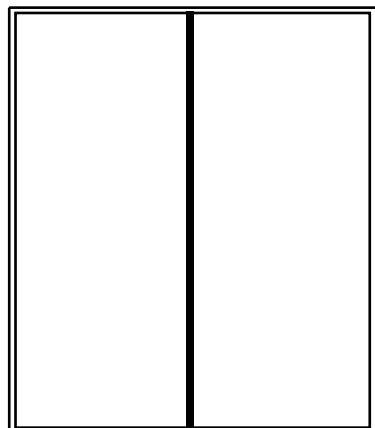


Figure 3

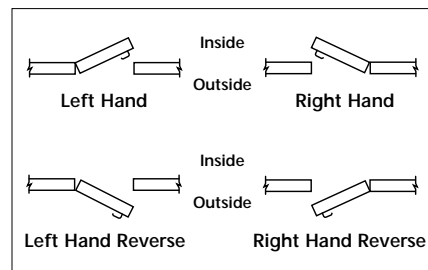


Figure 4

Exit Device Door Preparation

See the manufacturers' door preparation instructions for the Exit Device you are installing

Exit Device Operator Door Preparation

- 1) Use the door preparation drawing provided to mark the location of the holes to be drilled.

Making the Exit Device Operator Cutouts

- 1) Drill the 1/4" (6 mm) holes for the four retaining screws.
- 2) Drill the 1" (25 mm) hole for the spindle.
- 3) Drill the 7/8" (22mm) hole for the battery cable.
- 4) Drill the 3/32" (2mm) hole for the battery frame screws. If the door is metal, use an 8-32 tap.

Installing the Exit Device Operator and the exit device

The following steps must be done with the door open.

- 1) Mount the Exit Device Operator on the exterior of the door.
- 2) Thread the battery cables through the battery cable cutout.
- 3) Mount the dress plate on the inside of the door and secure it with at least two of the three longer #10-24 retaining screws. Leave the screws slightly loose.

Note: The shorter screw is to be used where the mechanical key override cylinder is located.

- 4) Mount the battery cup frame on the inside of the door onto the dress plate and secure it with the four #8 screws. For exit device with surface mounted rods, a second dress plate has to be used under the battery cup frame in order to shift the batteries off the center (see figure 5).

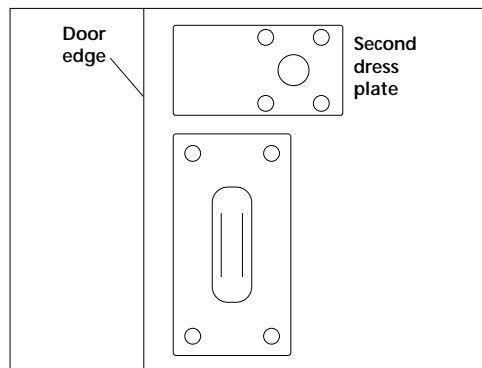


Figure 5

-
- 5) Make sure that the dress plate is aligned with the lock and door's edge; tighten the four (4) screws.
 - 6) Connect the battery pack cables and fit the cables into the cutout in the door. For exit device with surface mounted rods, a cable extension is required. It is provided with the operator.
 - 7) Using the 1/8" (1.6-mm) Allen key, secure the battery box with the screw provided.
 - 8) Install the Exit Device as per the manufacturer's instructions.

Installing the Mechanical Key Override

1. Insert the control key in the mechanical override cylinder
2. Insert the cylinder in the bottom of the lock. Turn the control key to lock the cylinder in place, then remove the control key.

Testing the Operation of the Lock

After the lock has been installed, it must be tested before it is programmed. The following procedures should be done with the door open.

- 1) Swipe the Test keycard in the lock. The green LED should be flashing, and the exit device latch or rods, should fully retract when the outside lever is depressed. The green LED should flash for 6 seconds if the lever is not depressed.
- 2) Insert the mechanical override key in the core at the bottom of the lock.
- 3) Turn the key 180 degrees. The exit device latch or rods must fully retract when the outside lever is depressed.
- 4) Release the lever.
- 5) Turn the key back to the original position.
- 6) Remove the key from the core.
- 7) Close the door and ensure that it is properly latched.
- 8) Open the door using the Test keycard.
- 9) Enter the room and close the door.
- 10) Open the door from the inside, making sure that the exit device latch or rods retracts fully. Any binding will require adjustment to the door or frame.

Retrofit of Von Duprin exit devices with outside locking trim

If you install the operator with an exit device already installed with outside locking trim (see figure 6 below), you need to do the following:

- 1) Remove the outside trim from the door.
- 2) Remove the exit device from the door.
- 3) Verify if the drive screw is present on the cam of the exit device. See figure 7 below. If yes go to the next step. If not present, rotate the cam to the position shown on figure 7 and install the drive screw provided with the operator. Make sure the screw head is under the cam face and firmly tightened. Refer to Von Duprin installation instructions for more details.
- 4) Install the operator as specified in section 6. According outside trim that was on the door or if an opening as shown on figure 8 is made on the door, you need to install the large dress plate (provided) under the operator.

Outside Trim Functions





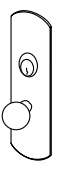
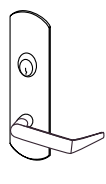
Exit Only	Pull When Dogged	Key Retracts Latch Bolt	Key Locks Thumbpiece	Key Locks Knob	Key Locks Lever
					
EO	DT	NL	TP/TP-BE*	K/K-BE* K-Rigid**	L/L-BE* L-Rigid**

Figure 6

* "BE" means no cylinder used – trim is always unlocked

** "RIGID" means knob or lever. Key retracts latch bolt.

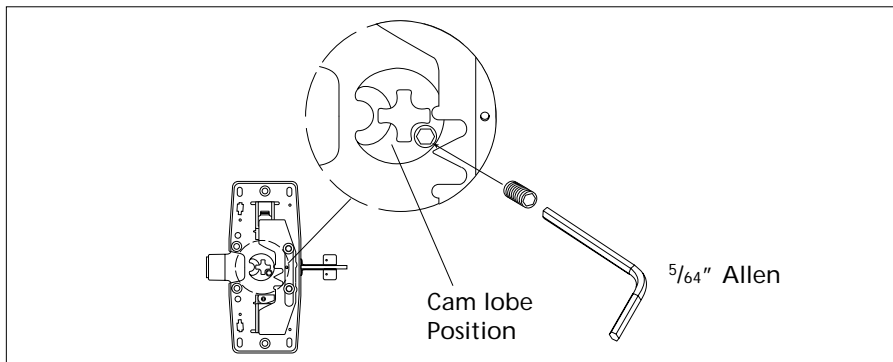


Figure 7

Solitaire Commercial Security System

View from outside of door

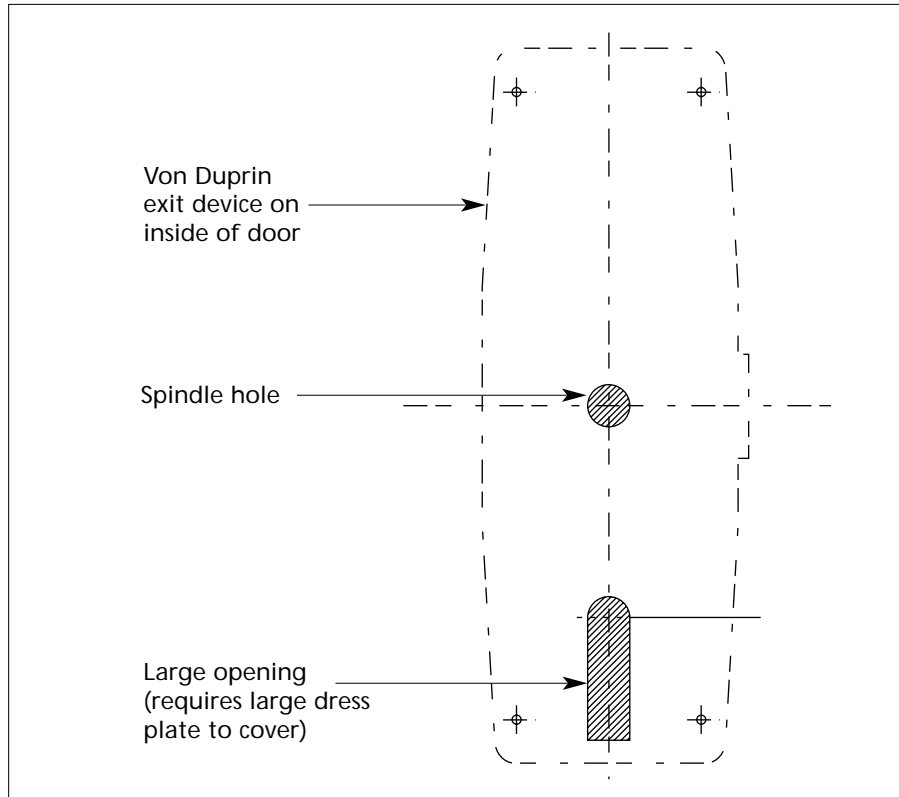


Figure 8