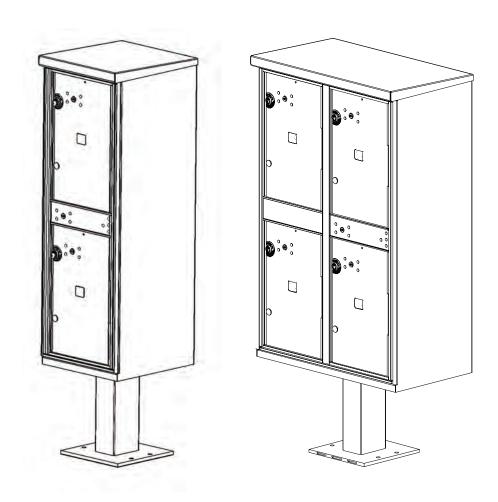
## INSTALLATION MANUAL

# valiant outdoor parcel lockers

All Types - 1590 Series





A GIBRALTAR INDUSTRIES COMPANY 🖊



### TABLE OF CONTENTS

DESCRIPTION	PAGE
GENERAL INFORMATION & ADVISORIES	2
PRODUCT INFORMATION	3
GET TO KNOW YOUR OPL	4
HARDWARE AND COMPONENTS	4
CONCRETE FOUNDATION PREPARATION	5
PEDESTAL INSTALLATION AND LEVELING	8
PEDESTAL TO OPL CABINET INSTALLATION	10
SECURITY TOOL - IMPORTANT NOTICE FOR USPS INSTALLERS	13
MASTER ACCESS DOOR ARROW LOCK INSTALLATION	14
PARCEL ARROW LOCK INSTALLATION	16

## GENERAL INFORMATION AND ADVISORIES



### **CAUTION** -- Transportation

- Lay boxes flat. Do not stand on end as box could fall over and cause injury.
- Outdoor Parcel Lockers (OPL) are heavy. Use caution when lifting and carrying to avoid injury.

### **CAUTION** -- Handling

- Use caution when lifting and carrying Outdoor Parcel Lockers (OPL) to avoid injury.
- Pinch hazard exists when placing unit on foundation.
- Keep fingers and hands clear to avoid injury.

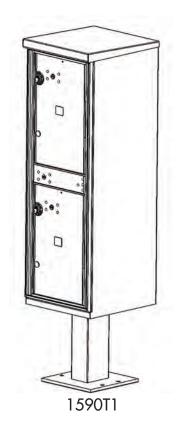
### **CAUTION** -- Installation

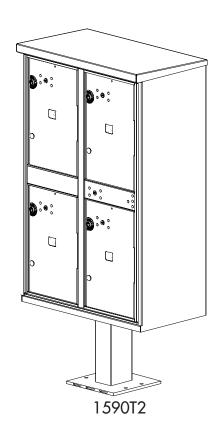
- Outdoor Parcel Lockers (OPL) are heavy. Do not stand OPL up without support to prevent tipping.
- Units may tip off unsecured anchors, possibly resulting in the OPL colliding with a person and causing serious injury.
- OPL is also front-heavy when master load doors are open. Unit should be anchored or held in place until secured to foundation. Installer should support unit or have assistance holding the unit in place before opening the master load doors. Failure to do so could result in serious injury.



## OPL PRODUCT INFORMATION

valiant $^{\text{\tiny{TM}}}$  outdoor parcel locker - 1590 Series





	1 <i>5</i> 90T1	1590T2
INSTALLED HEIGHT	62"	62"
DEPTH	18″	18"
WIDTH	16"	30-1/2"
PEDESTAL HEIGHT	14-1/2"	14-1/2"
WEIGHT (WITHOUT PEDESTAL)*	83 LBS	122 LBS
WEIGHT (WITH PEDESTAL)*	100 LBS	139 LBS
QTY OF PARCEL COMPARTMENTS	2	4
PARCEL COMPARTMENT HEIGHT	19-3/4"	19-3/4"
PARCEL COMPARTMENT WIDTH	12"	12"

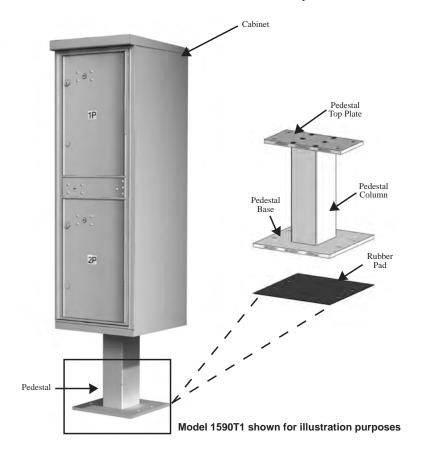
Note: For installation of Florence vogue™ decorative accessories with the 1590T2, please refer to manual located within the vogue™ product packaging.



<sup>\*</sup> Weights do **NOT** include packaging - product only.

## GET TO KNOW YOUR FLORENCE OPL

valiant™ outdoor parcel locker - 1590 Series



Before beginning the assembly process, please review the illustration. The major components that you will be working with, and that are referred to in this manual, are identified so as you are installing your valiant™ outdoor parcel locker (OPL), you will be familiar with the terms that are used.

## HARDWARE AND COMPONENTS

valiant<sup>™</sup> outdoor parcel locker - 1590 Series

The OPL cabinet and pedestal are packaged separately. Below is a list of components and hardware you will receive in each package.

- Pedestal Package:
  - Template guide to locate pedestal base anchors
  - Rubber Pad installed between ground and pedestal base
  - Pedestal fully assembled
- Cabinet Package:
  - Parcel lockers in protective cabinet
  - Hardware kit in plastic bag (shipped inside unit compartment) that includes:
    - Pedestal hardware
    - Parcel keys and tags
    - Installation manual
    - Cleaning instructions
    - Parcel door hardware (in plastic bag inside cabinet) (2) McGard and (3) two-way screws; (4) Arrow Lock nuts; and panel lock covers attached with temporary plastic fasteners.

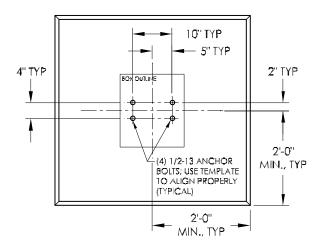
NOTE: Anchors are not included with this product. Anchoring system for concrete pads are discussed in the next section, "Concrete Foundation Preparation" and should be purchased separately.

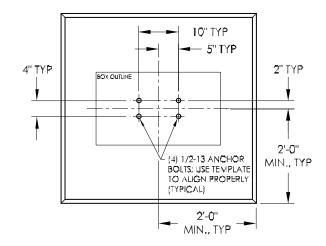


## CONCRETE FOUNDATION PREPARATION

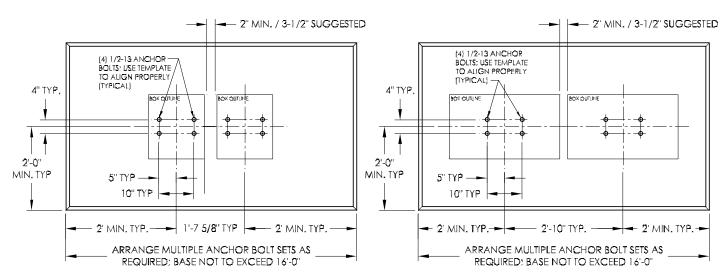
valiant™ outdoor parcel locker - 1590 Series

### **SINGLE UNITS**





### **MULTI-UNITS - SAME TYPE**



The Type II OPL has an identical box outline pattern as all six of the CBU types and therefore this configuration may also be used for one Type II OPL and one CBU if needed.

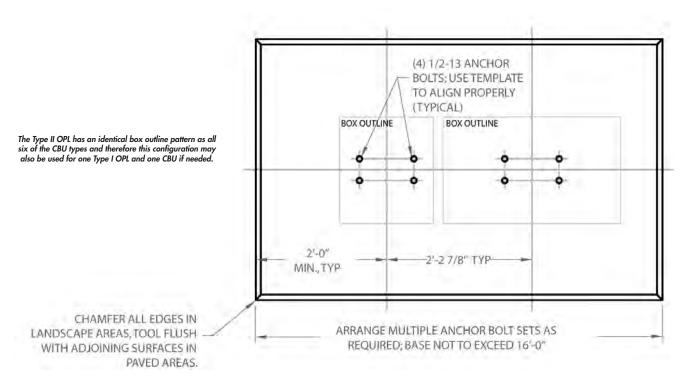
**NOTE:** For ALL installations, regardless of OPL type, chamfer all edges of pad in landscape areas, tool flush with adjoining surfaces in paved areas.

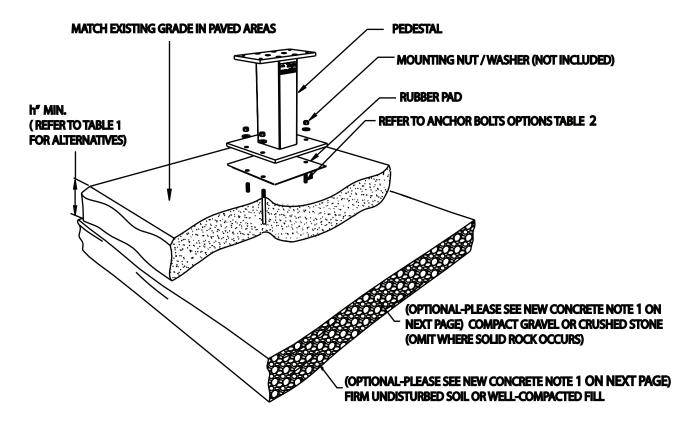


## CONCRETE FOUNDATION PREPARATION

## valiant™ outdoor parcel locker - 1590 Series

### **MULTI-UNITS - EACH TYPE**







### CONCRETE FOUNDATION PREPARATION

## valiant™ outdoor parcel locker - 1590 Series

### **NEW CONCRETE BASE:**

- 1) Depending on climatic and soil conditions in the area of installation, optional foundation material may be necessary as shown. Consult local building codes for recommendations.
- 2) Refer to Table 1 for thickness (h), width (w), and depth (d) of the concrete pad alternatives.
- 3) Concrete shall have a compressive strength of 3000 psi @ 28 days, contain 4% min ~ 6% max air entrapment and be placed with a 3.50~4.50 slump in accordance to 301.
- 4) Use wire mesh as per (Standard) or fiber reinforced concrete as per (Standard).

### **EXISTING CONCRETE BASE:**

- 1) Existing concrete pad must be at least 48" wide.
- 2) Concrete base and anchor bolts may be reused if:
  - a. existing  $\frac{1}{2}$ " diameter expansion anchor bolts are firmly embedded in the concrete and not damaged or corroded;
  - b. concrete foundation is not damaged; and
  - c. bolt hole pattern of the new unit matches the installed anchor bolts.
- 3) Additional considerations include:
  - a. if concrete is only 4" thick, then option 'b' in Table 2 below cannot be used
  - b. any unused, existing anchor bolts must be cut flush to the level of the concrete surface
  - c. if concrete is damaged, replacement of foundation pad is required

TABLE 1: Pad Recommendations

h (Thickness)	w (width) min	d (Depth) min
4"	47"	47''
5"	44"	44"
6"	42"	42"
7"	40"	40''
8"	39"	39"

TABLE 2:

### **Expansion Anchor Bolt Recommendations**

### a. Hilti Kwik Bolt II (www.hilti.com)

- 1/2 inch diameter x 5 1/2 inches overall length
- Galvanized
- KB II 12-512, Stainless steel

Minimum embedment in concrete must be at least 3 1/2 inches

### b. ITW Ramset Redhead Turbolt (www.hilti.com)

- 1/2 inch diameter x 7 inches overall length
- Galvanized

Minimum embedment in concrete must be at least 4 1/8 inches

### c. Rawl Stud (www.rawl.com)

- 1/2 inch diameter x 5 1/2 inches overall length
- Galvanized

Minimum embedment in concrete must be at least 4 inches



## PEDESTAL INSTALLATION AND LEVELING

## valiant™ outdoor parcel locker - 1590 Series

In the event the concrete pad the OPL is being installed on is not level, the pedestal may be adjusted.

There are a number of leveling techniques used by construction professionals; however, the following leveling method is being suggested as one alternative to consider.

If embedded anchors are not already in place in existing concrete, determine placement and location for anchors. (See "Concrete Foundation Preparation" guide in prevous section for anchor recommendations and placement dimensions.)

## Install Anchors (Skip if existing concrete and anchors are already in place)

- Tape pedestal base template to concrete in proper location(s).
- Drill holes through template to proper depth.
- Remove template and debris.
- Pound anchors in place.

## 2. Use Pedestal to Check for Level

- Place rubber pad over anchors onto concrete pad.
- Place pedestal over rubber pad and check if level.
- If leveling is required, shim pedestal with up to 3 washers on a given bolt.
- Washers, if required, should be placed between rubber pad and bottom of pedestal base.
- Check for level.

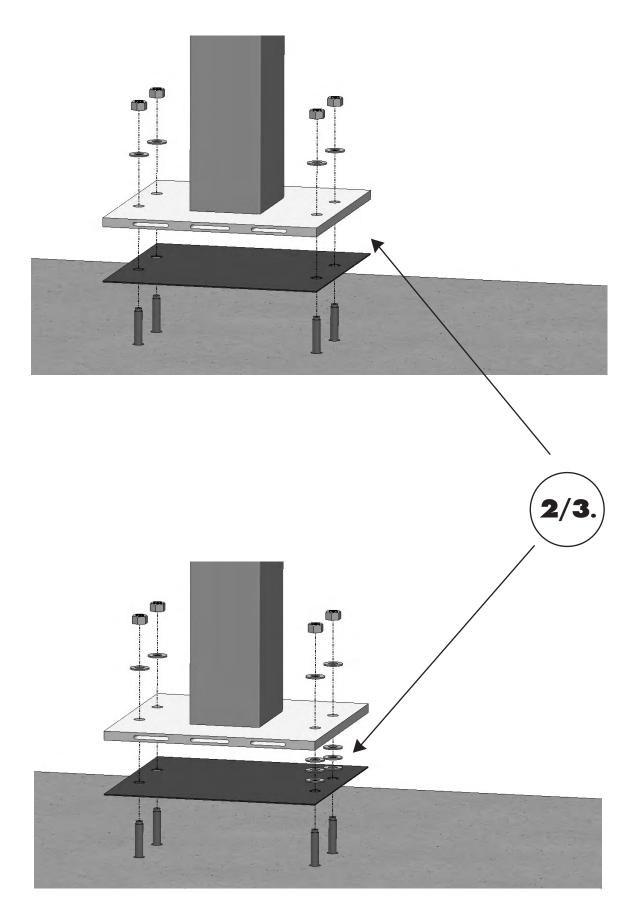
## 3. Install Pedestal to Concrete

- Pedestal can now be installed according to anchoring hardware manufacturer's instructions. (Anchor hardware shown for illustration purposes and is not included with unit. For anchoring system information, please see "Concrete Foundation Preparation" section, page 7.)
- Continue to next section to install OPL cabinet to pedestal.

PART #	DESCRIPTION	REQUIRED TOOLS
91121	PEDESTAL	REFER TO ANCHORING MFG INSTRUCTIONS
91500	RUBBER PAD	



### PEDESTAL INSTALLATION AND LEVELING





## PEDESTAL TO OPL CABINET INSTALLATION

## valiant™ outdoor parcel lockers - 1590 Series

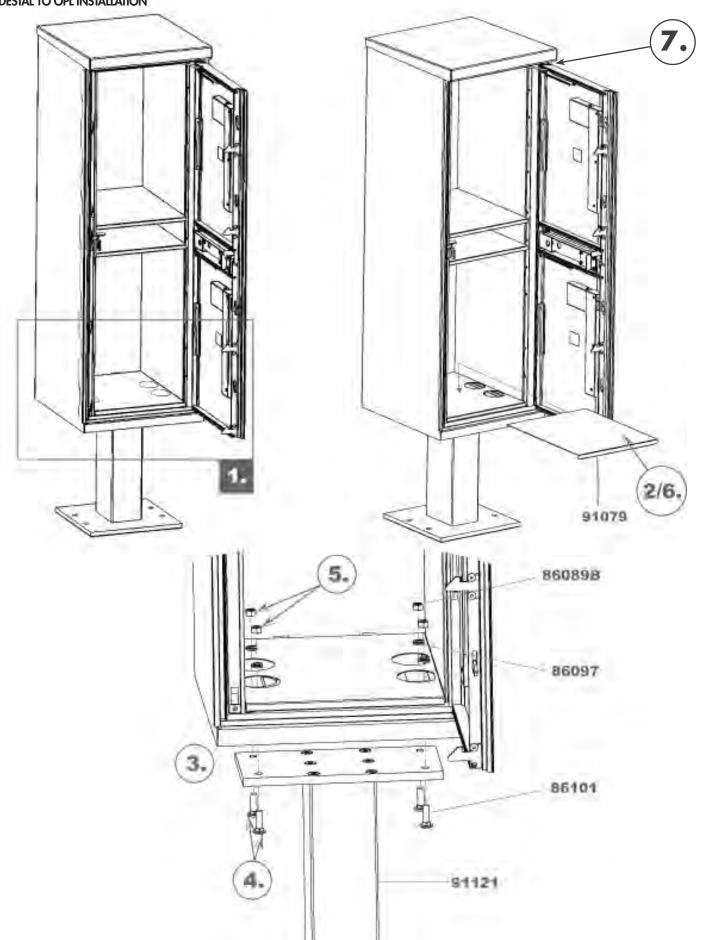
- Open master access door and lift handle to open master loading door(s).
- Remove 91079 floating shelf(ves), exposing mounting holes.
- Place unit on pedestal.
- From underneath unit, insert four (4) 86101 carriage bolts upward.
- From inside parcel compartment(s), add four (4) 86097 lock washers and tighten four (4) 86089B hex nuts. Torque to 22 foot-pounds.
- Replace 91079 floating shelf(ves).
- Close master loading doors by first lifting slightly on the master hold open arm and then shutting

Installation of unit is now complete. Contact local USPS personnel to install Arrow Locks and place unit into service.

PART #	DESCRIPTION
91079	FLOATING SHELF
91121	PEDESTAL
86101	3/8-16 X 1.25 CARRIAGE BOLT
86097	3/8" X .688 OD LOCK WASHER
86089B	3/8-16 HEX NUT
K86101-F	KIT HARDWARE PEDESTAL TO UNIT MOUNTING (INCLUDES CARRIAGE BOLTS, LOCK WASHERS AND HEX NUTS)

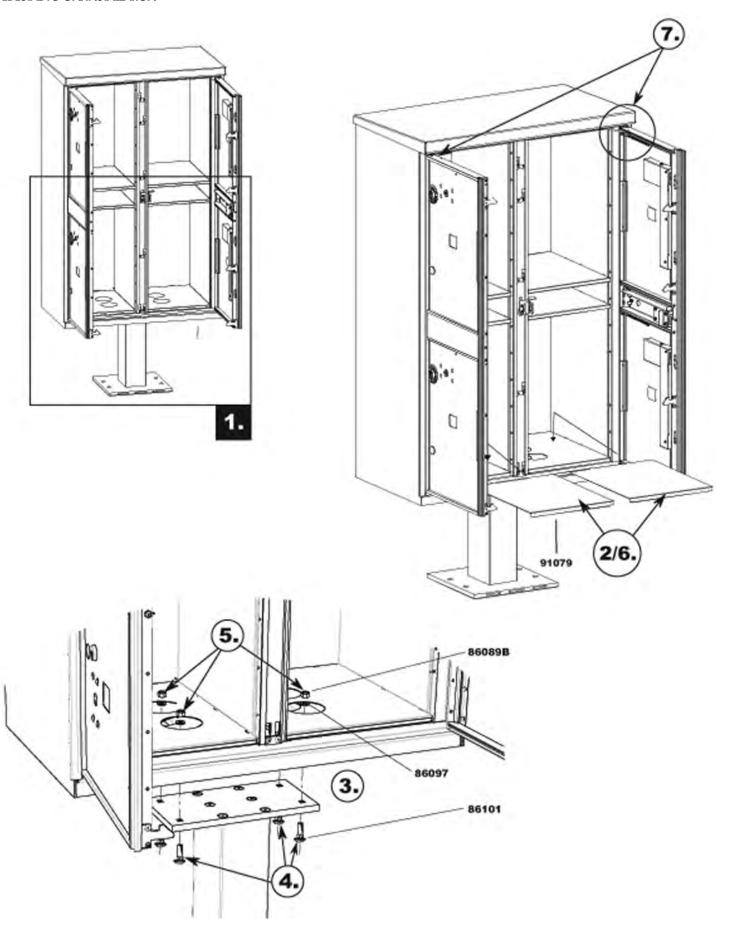
REQUIRED TOOLS	
9/16" SOCKET WRENCH	

### PEDESTAL TO OPL INSTALLATION





### PEDESTAL TO OPL INSTALLATION



## SECURITY TOOL REQUIREMENTS

### IMPORTANT NOTICE FOR USPS INSTALLERS

USPS personnel must have a McGard screwdriver to install and service the parcel Arrow Lock cover on the Florence vital<sup>TM</sup> cluster box unit.

(McGard Screwdrivers can be obtained from the USPS Mail Equipment Shop - Part # 110116)
McGard Screwdrivers are available only to USPS personnel by faxing an "off catalog" eBuy request to:

## USPS MAIL EQUIPMENT SHOP FAX NO. (202) 281-2643

Note: Florence Manufacturing does not provide or sell the McGard Screwdriver



### **NOTE:**

### For USPS applications:

1) Arrow Lock is installed by US Postal Service personnel only. Contact your local Post Office to arrange installation of Arrow Lock and place unit into service.

### For Non-USPS applications:

- 1) Please disregard instructions related to Arrow Lock throughout this manual.
- 2) Master access door and parcel door private lock mechanisms will be installed at factory unless otherwise specified by customer.
- 3) McGard fasteners and screwdriver not necessary for Non-USPS (private delivery) applications.



## MASTER ACCESS DOOR ARROW LOCK INSTALLATION

## valiant<sup>™</sup> outdoor parcel lockers - 1590 Series

(to be completed by USPS personnel)

- Open master access door.
- Remove five (5) 86091 lock nuts, as well as 92303 lock support plate. Dispose of the plastic shipping spacers.
- Place Arrow Lock into the Arrow Lock security bracket and position lock to center the lock core in the door hole.
- Replace one (1) 86091 lock nut in the rear position to secure Arrow Lock security bracket.
- 5. Install 92303 lock support plate as shown.
- Replace four (4) 86091 lock nuts. Torque to 25 to 30 inch-pounds (overtightening may keep Arrow Lock from operating correctly).

PART #	DESCRIPTION
86091	10-32 LOCK NUT
92303	LOCK SUPPORT PLATE
	ARROW LOCK (PROVIDED BY USPS)
64782	ARROW LOCK SECURITY BRACKET
K92300	KIT ARROW LOCK SECURITY BRACKET (INCLUDES LOCK NUTS, LOCK SUPPORT PLATE & SECURITY BRACKET)

REQUIRED TOOLS	
3/8" SOCKET WRENCH	

### **NOTE:**

Page 14 of 18

### For USPS applications:

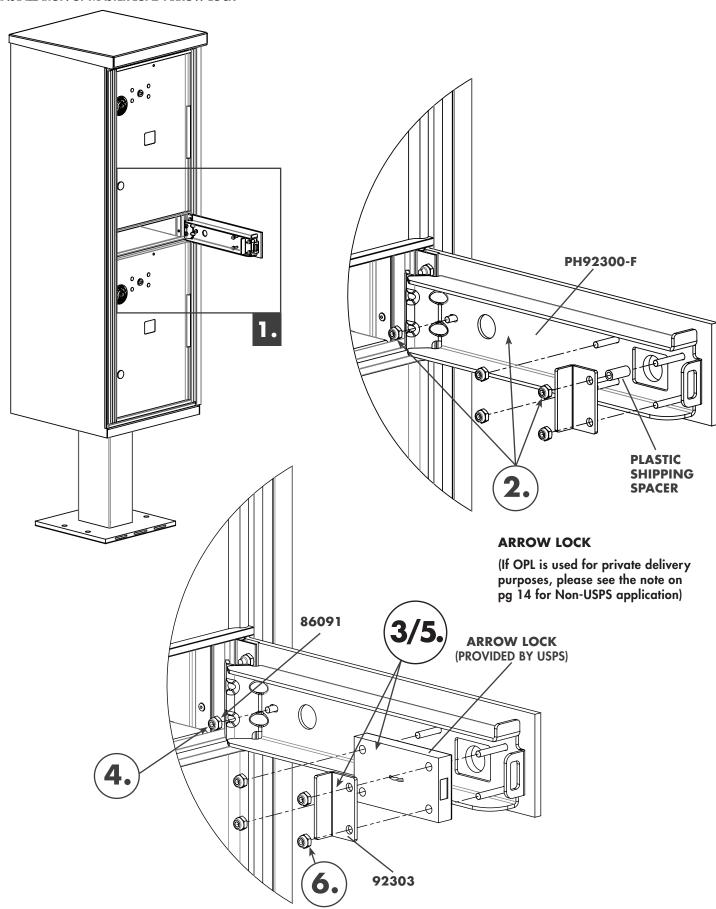
1) Arrow Lock is installed by US Postal Service personnel only. Contact your local Post Office to arrange installation of Arrow Lock.

### For Non-USPS applications:

- 1) Please disregard instructions related to Arrow Lock throughout this manual.
- 2) Master access door and parcel door private lock mechanisms will be installed at factory unless otherwise specified by customer.



#### INSTALLATION OF MASTER LOAD ARROW LOCK



Model 1590T1 shown for illustration purposes



## PARCEL ARROW LOCK INSTALLATION

## valiant<sup>™</sup> outdoor parcel lockers - 1590 Series

(to be completed by USPS personnel)

- Open parcel door and lock parcel door customer lock.
  - Note: parcel door customer lock must be in the locked position for key to be removed.
- Position 93213 parcel door lock stiffener on the parcel door bolts as oriented in illustration.
- Install Arrow Lock as shown, position lock to center the lock core in the door hole, securing with four (4) 86455 lock nuts. Torque to 25 to 30 inch-pounds (overtightening may keep Arrow Lock from operating correctly).
- Position 64216-SS parcel door Arrow Lock cover, securing with two (2) 84993 McGard fasteners. Repeat steps 1 - 4 for each additional parcel lock door.

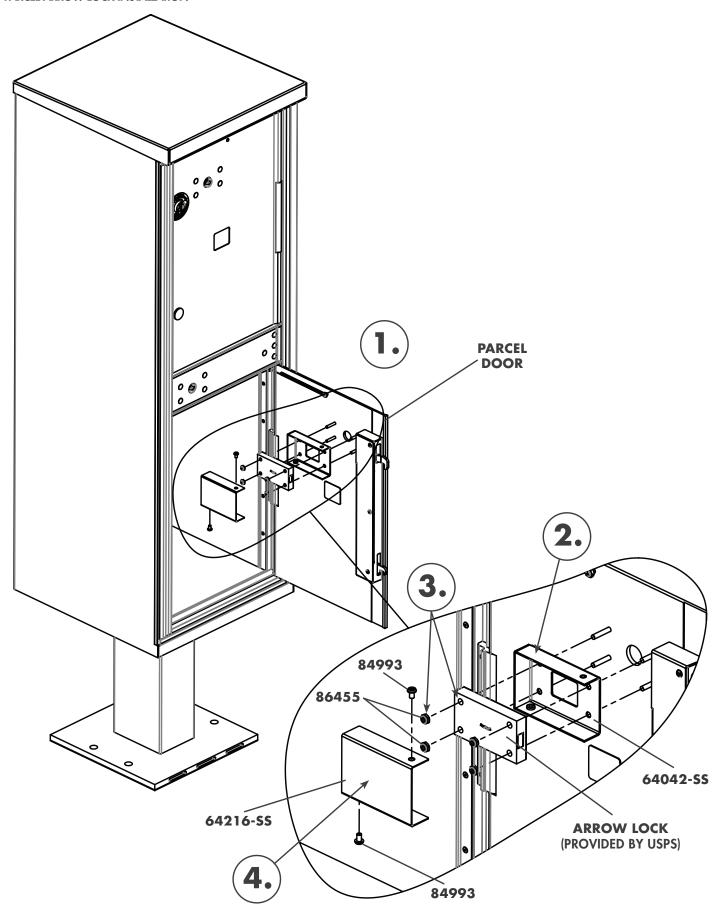
Note: These fasteners require a McGard screw driver (see page 13).

Part #	DESCRIPTION
93213	SS PARCEL DOOR LOCK STIFFENER
	ARROW LOCK (PROVIDED BY USPS)
86455	10-32 THIN LOCK NUT
64216-SS	SS PARCEL DOOR ARROW LOCK COVER
84993	10-32 x .312 18-8 SS PASSIVATED MCGARD FASTENER
K64216-SS	KIT PARCEL LOCK COVER SS (INCLUDES SS PARCEL DOOR ARROW LOCK COVER, SS PARCEL DOOR LATCH MECHANISM COVER AND HARDWARE)

REQUIRED TOOLS
USPS PROPRIETARY MCGARD TOOL
3/8" SOCKET WRENCH OR NUT DRIVER



#### PARCEL ARROW LOCK INSTALLATION



Model 1590T1 shown for illustration purposes



## REPLACEMENT PARTS / MAINTENANCE

For a complete listing of all available replacement parts and/or maintenance procedures for the valiant™ 1590 series OPL by Florence, please refer to the valiant™ Maintenance Manual which may be downloaded from www.florencemailboxes.com/downloads.

Service parts are available for purchase through an Authorized Florence Dealer and online at www.florencemailboxes.com/store.

Thank you for purchasing Florence products!



