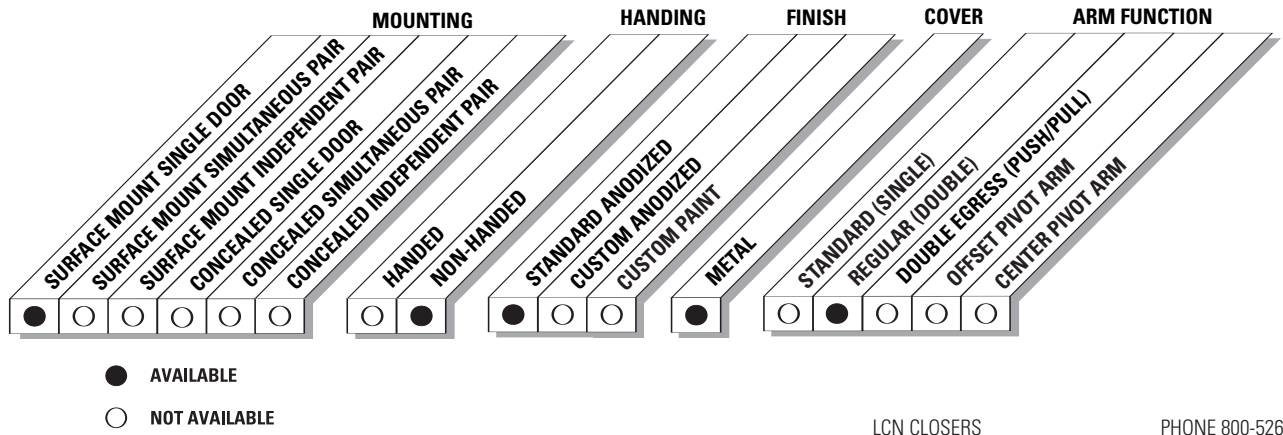


*The 9140 BENCHMARK by LCN is an electrically powered low-energy operator. It provides easy access for people with disabilities, the elderly or the frail. Designed primarily for automatic opening applications that occasionally require manual opening. The BENCHMARK is a cost-effective solution for retrofitting an activated or manual door.*

- ▶ **Push 'N Go permits non-switch activation**
- ▶ **Microprocessor control box ensures reliability and maintains customer settings**
- ▶ **Tested internally to over 3,000,000 cycles**
- ▶ **Power Boost allows for increased closing force near latch**

- ▶ 9140 series operator is shipped with motor gearbox, control box, mounting plate, regular arm, metal cover, standard track, wood and machine screw pack. Actuators available separately, see pages 199-215.
- ▶ Single interior door, surface mounted.
- ▶ ADA compliant.
- ▶ On/Off switch included as standard.
- ▶ Non-handed for either right or left swinging door.
- ▶ 27" cover is standard. Full length covers available up to 49" for single doors.
- ▶ All potentiometers clearly labeled with their functions.
- ▶ LED lights indicate power to control box and motor gearbox.

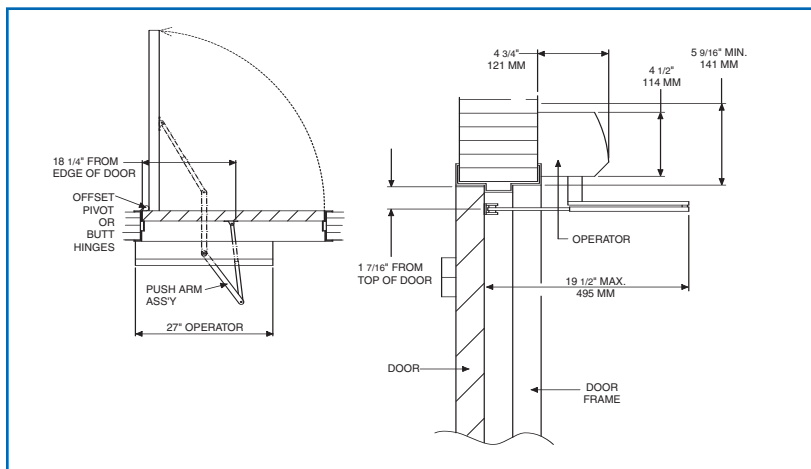
*9140 Series is fully compliant with UL 325 and meets the provisions of ANSI A156.19. The 9140 Series is UL listed for fire-rated applications. The 9140 Series also meets the provisions of the Americans with Disabilities Act.*



# LCN 9140 SERIES

## MOUNTING DETAILS

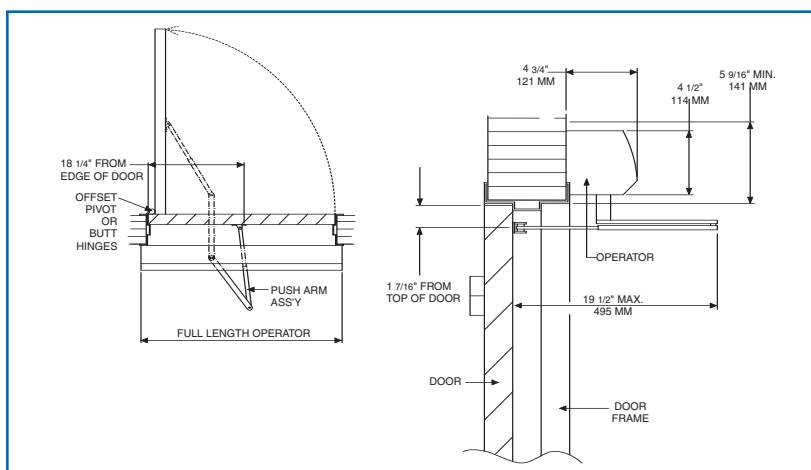
### TOP JAMB SINGLE DOOR (OFFSET/BUTT HINGE, CENTER PIVOT, PULL, STANDARD COVER) MOUNTING



### TOP JAMB SINGLE DOOR (OFFSET/BUTT HINGE, CENTER PIVOT, PULL, FULL COVER) MOUNTING

#### MAXIMUM OPENING

Template allows 90 degree power opening and 90 degree manual opening.



- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ▶ **Reveal** for push installations should not exceed 6" (152 mm) for REGULAR ARM and 9 3/4" (248 mm) for LONG ARM.
- ▶ **Head Frame** minimum 2" (51 mm).
- ▶ **Top Rail** minimum 2" (51 mm). Flush ceiling installation requires 5 1/4" (133 mm) minimum.
- ▶ **Opening and Closing Time** are variable by adjustments to the electronic control module located on the operator assembly. Maximum hold open time adjustable up to approximately 30 seconds.
- ▶ **System Diagram** see "AUTOMATIC OPERATORS" section pages 56-57 for typical system wiring and page 58 for electrical data.
- ▶ Please consult your local SSC representative or LCN for assistance with specific installations and material requirements.

#### Special Templates

Customized installation templates or products may be available to solve unusual applications. Contact LCN for assistance.

## MOTOR GEARBOX

### MOTOR GEARBOX ASSEMBLY, 9140-3454S

Driving mechanism for operator. For 27" unit. Switch included.

### MOTOR GEARBOX ASSEMBLY (W/O SWITCH), 9140-3454

Driving mechanism for operator. For full length unit. Switch not included.

## BRACKETS

### MOUNTING BRACKET, 9140-3018

Standard mounting bracket.

### SWITCH BRACKET – 29" CABLE, 9140-3351-1

Bracket used to locate switch at end of cover on full length unit.

### SWITCH BRACKET – 41" CABLE, 9140-3351-2

Bracket used to locate switch at end of cover on full length unit.

### SWITCH BRACKET – 51" CABLE, 9140-3351-3

Bracket used to locate switch at end of cover on full length unit.

## CONTROL BOXES

### CONTROL BOX, (120v), 9130-3462

Electronic controlling device with power supply output and power boost feature for Benchmark.

## COVERS

### METAL COVER, 9140-72MC

Standard, 27", non-handed, extruded aluminum cover.

### FULL METAL COVER, 9140-72FC

Full length, non-handed, extruded aluminum cover. Specify length 36" to 49".

### COVER INSERT 9140-163

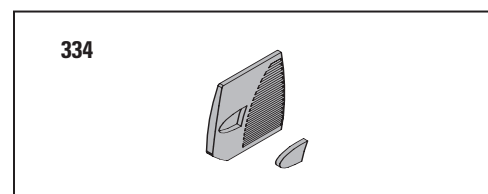
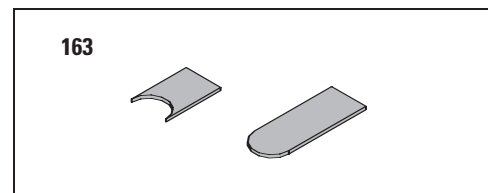
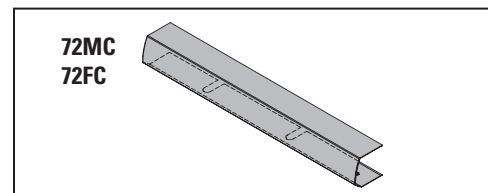
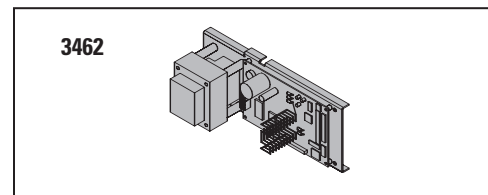
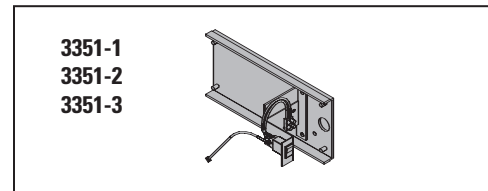
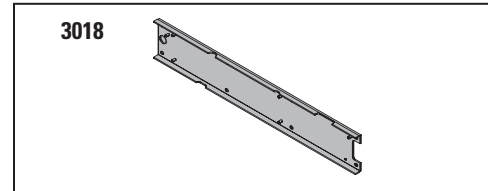
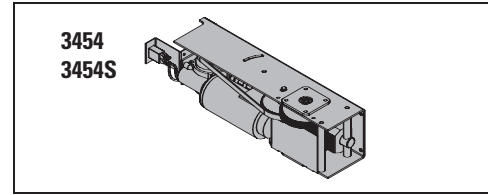
Used to cover operator shaft opening.

### COVER END CAP INSERT, 9140-163-1

Used to cover switch hole opening.

### COVER END CAP, 9140-334

Black plastic end caps.



# LCN 9140 SERIES

## ARMS

### REGULAR ARM, 9140-3077

Non-handed arm.

### LONG PUSH ARM, 9140-3077L

Non-handed long arm.

### ROD & SHOE, 9140-79

Rod for use with regular arm.

### LONG ROD & SHOE, 9140-79LR

Long rod for use with long arm.

## INSTALLATION ACCESSORIES

### HALL EFFECT ADAPTER HARNESS, 9140-3428-1

Allows a prior model motor gearbox to work with a new control box. Encoder conversion. Used with 9140-3598-1 & 9140-3430-2.

### HALL EFFECT ADAPTER HARNESS, 9140-3428-2

Allows a prior model control box to work with a new motor gearbox. Encoder conversion. Used with 9140-3598-2 & 9140-3430-1.

### POWER ADAPTER HARNESS, 9140-3598-1

Allows a prior model motor gearbox to work with a new control box. AC Power conversion. Used with 9140-3428-1 & 9140-3430-2.

### POWER ADAPTER HARNESS, 9140-3598-2

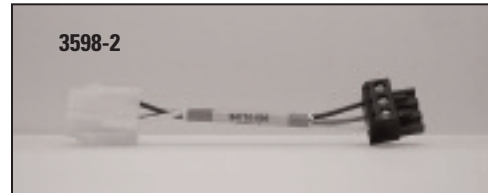
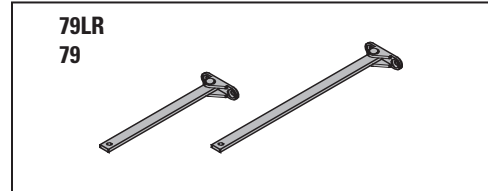
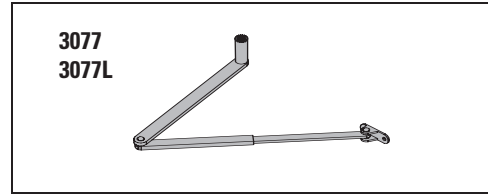
Allows a prior model control box to work with a new motor gearbox. AC power conversion. Used with 9140-3428-2 & 9140-3430-1.

### MOTOR ADAPTER CABLE, 9140-3430-1

Allows a prior model control box to work with a new motor gearbox. Motor conversion. Used with 9140-3428-2 & 9140-3598-2.

### MOTOR ADAPTER CABLE, 9140-3430-2

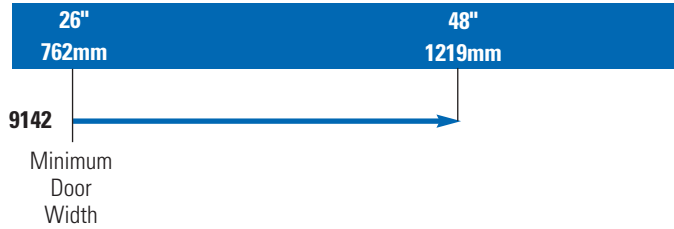
Allows a prior model motor gearbox to work with a new control box. Motor conversion. Used with 9140-3428-1 & 9140-3598-1.



## TABLE OF SIZES

→ Indicates recommended range of door width for operator.  
 Note: For All Benchmark Series  
 26" minimum door width for 27" push operator  
 36" minimum door width for full length push operator

### DOOR WIDTH



## HOW-TO-ORDER 9140 SERIES OPERATORS

### 1. SPECIFY FINISH.

- Standard Anodized Finish \_\_\_\_\_  
 Aluminum or Dark Bronze

#### **Operator will be shipped with:**

- STANDARD MOTOR GEARBOX (SF)
  - STANDARD CONTROL BOX (SC)
  - MOUNTING BRACKET
  - 27" METAL COVER (CL27)
  - REGULAR ARM (3077)
  - WOOD and MACHINE SCREW PACK
- Unless options listed below are selected.*

## OPERATOR OPTIONS

### COVER

- Full Cover (CL\_\_\_\_\_) (Specify length 36" to 49")

### ARM

- Long Arm (3077L)  
*(reveals 6" to 9 3/4")*

### SPECIAL TEMPLATE

- ST-\_\_\_\_\_