

# 1601 / 1602 BREAK-AWAY OCTAGON ARM KIT

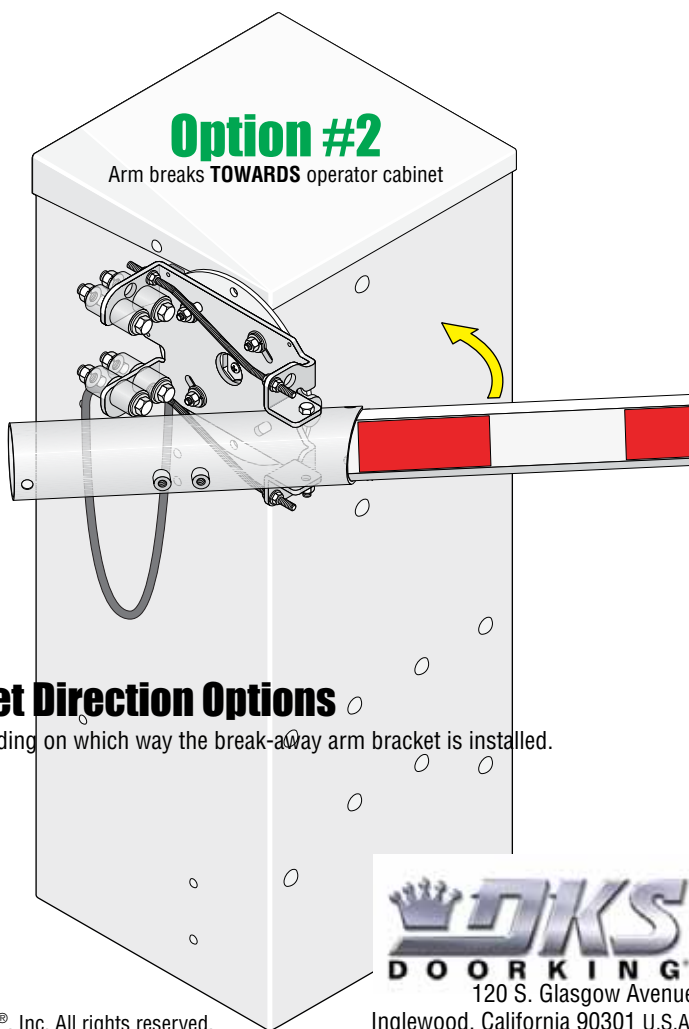
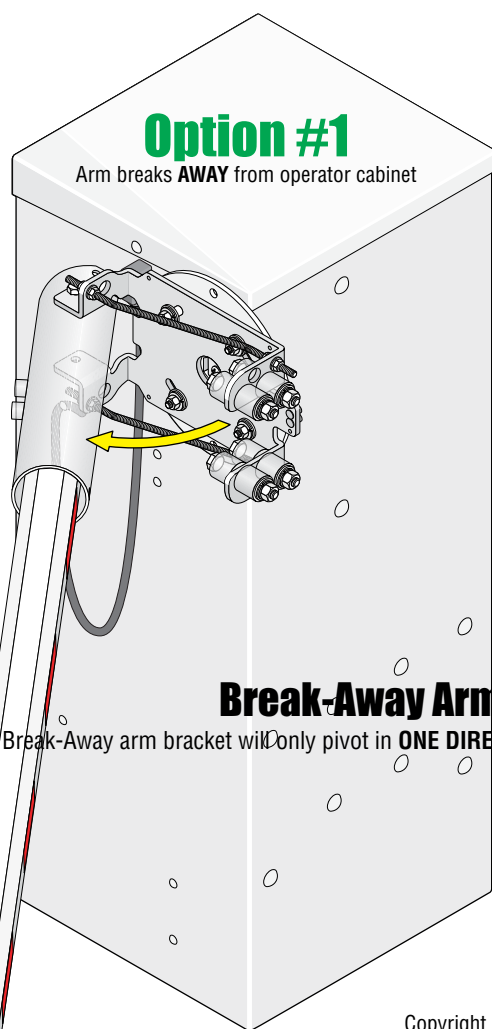
DoorKing Part Number

**8080-295**

This kit is designed for the 1601 **OR** 1602 17-ft arm **ONLY** barrier gate operators. It **CANNOT** be used with the 1603 operator. The kit provides a **break-away bracket assembly** for a **octagon arm** with **OR** without reverse/LED edge. Arm will reverse if lowering and a obstruction is encountered. If the arm is struck and breaks away (will pivot in **ONE DIRECTION ONLY**, see below), gate operator will **automatically** shut down. The arm manually snaps back into the release rollers to function normally again. **NO reset** is necessary.

## Break-Away Octagon Arm Bracket Installation Steps:

1 Install Break-Away Bracket	2
2 Install Arm (Octagon)	3
3 Install Wire Harness (8080-356)	4
4 Cable Run Options	4
5 Attach Wire Harness to Break-Away Bracket	4
6 Mount Power Supply and Relay	5
7 Octagon Break-Away Arm - Wiring to Operator	6
8 Connect Arm to Wire Harness (8080-356)	7
9 Secure Wires to Break-Away Bracket	7
10 Break-Away Arm Reset Procedure	7
• 2-Ft Coupler Installation (Required) (Included)	8
• 14 Ft 2-Piece Arm Assembly (Optional) (Sold Separately)	9
• 1-Piece Arm Reverse Edge / Red Green LED Reverse Edge Installation (Optional) (Sold Separately)	10
• 14 Ft Rubber Bumper Installation (Optional) (Sold Separately)	11
• Shortening a Octagon Arm to 7 Ft, 8 Ft, 11 Ft (If desired)	12
• 17 Ft Octagon Arm Assembly for a 1602 ONLY (Optional) (Sold Separately)	13
• 15-Ft LED Reverse Edge Installation on 17-Ft Arm ONLY (Optional) (Sold Separately)	14
Older Existing Arm Plastic Cover Modification (If Necessary)	15



## Break-Away Arm Bracket Direction Options

Break-Away arm bracket will only pivot in **ONE DIRECTION** depending on which way the break-away arm bracket is installed.

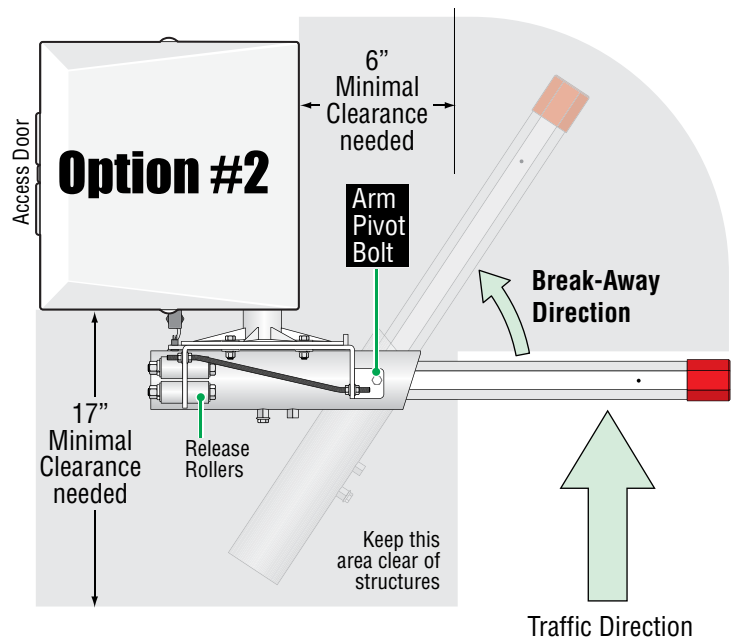
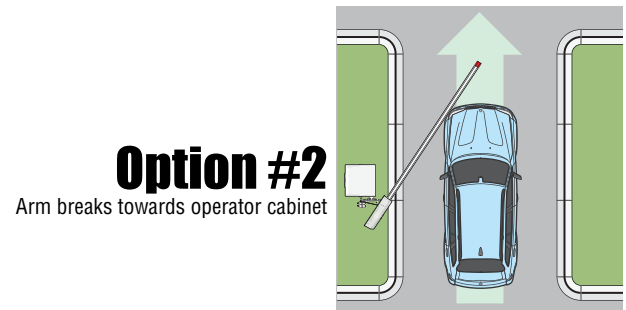
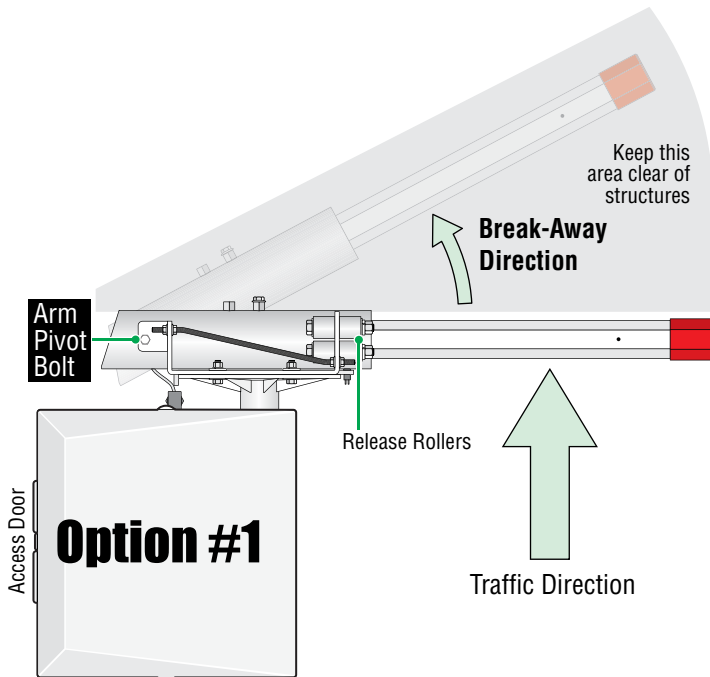


120 S. Glasgow Avenue  
Inglewood, California 90301 U.S.A.

Copyright 2026 DoorKing®, Inc. All rights reserved.

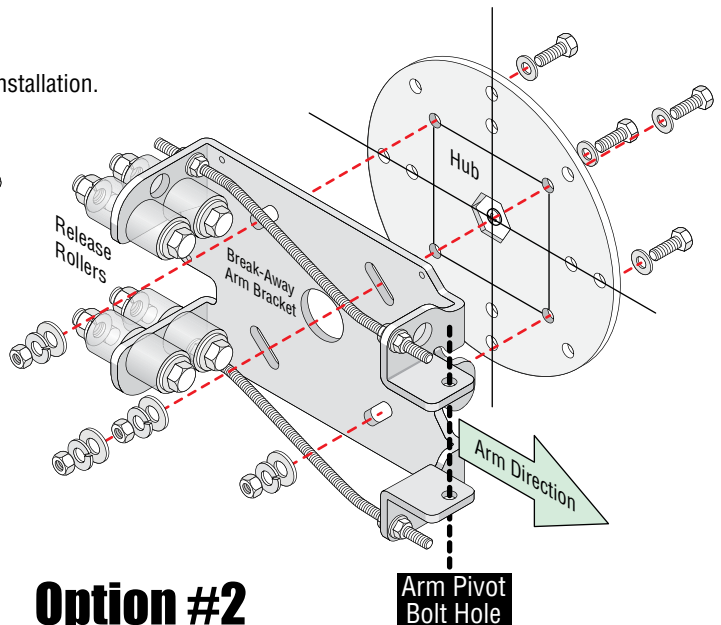
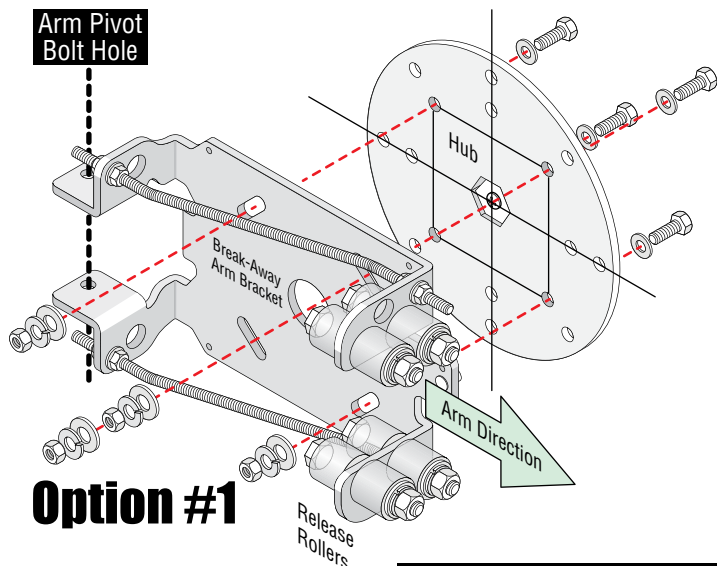
# Break-Away Arm Direction Options

Arm will only pivot in **ONE DIRECTION** depending on which way the break-away arm bracket is installed. **Choose the desired break-away direction** and install break-away arm bracket accordingly (note position of **arm pivot bolt** and release rollers).



## 1 Install Break-Away Bracket

Hub **MUST** already be installed on barrier gate operator.  
See your 1601/1602 Barrier Installation/Owner's manual for correct hub installation.

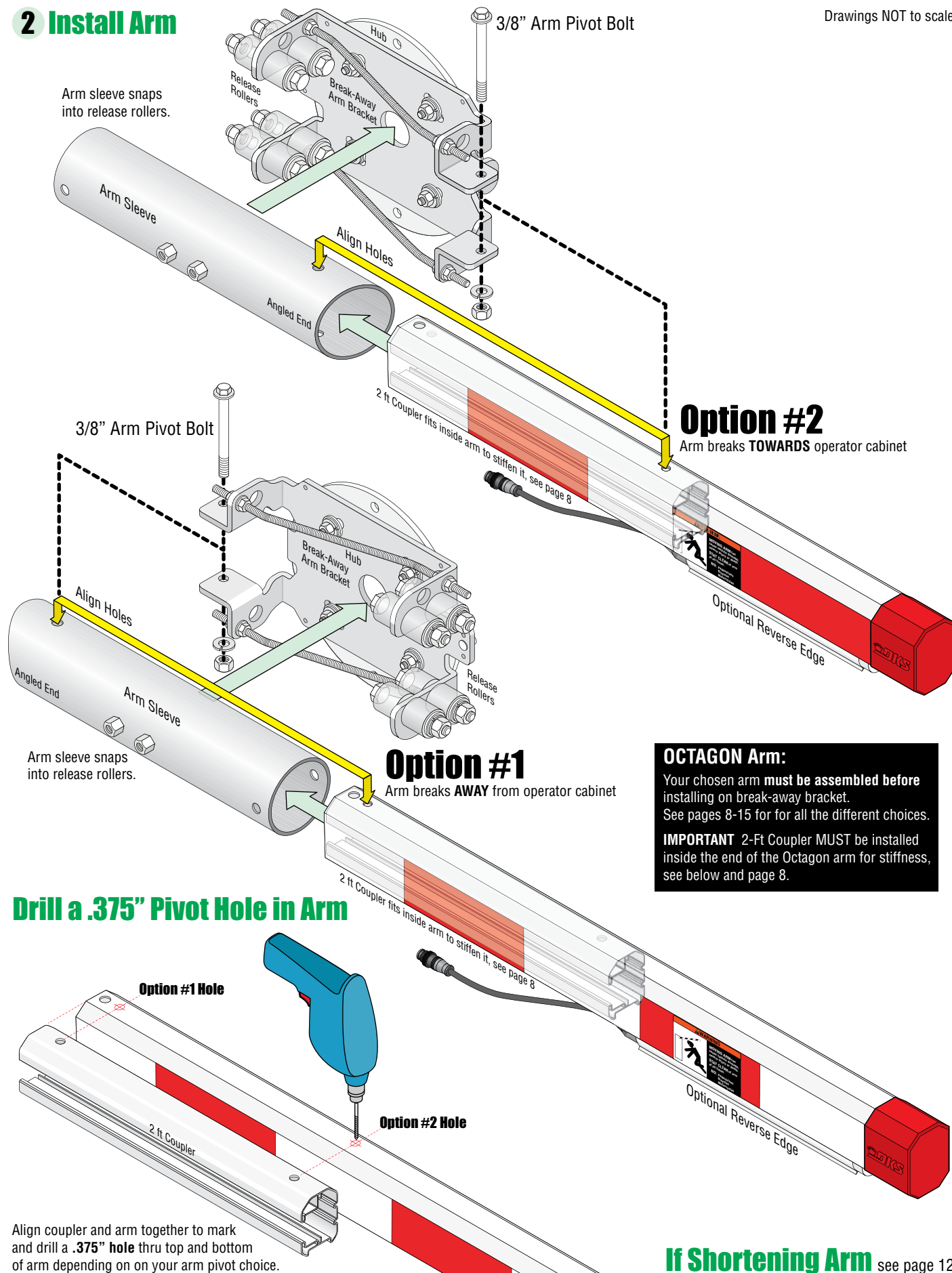


Test hub **UP** and **DOWN** position before installing bracket.

Hub can be mounted on **EITHER** side of operator.

## 2 Install Arm

Drawings NOT to scale

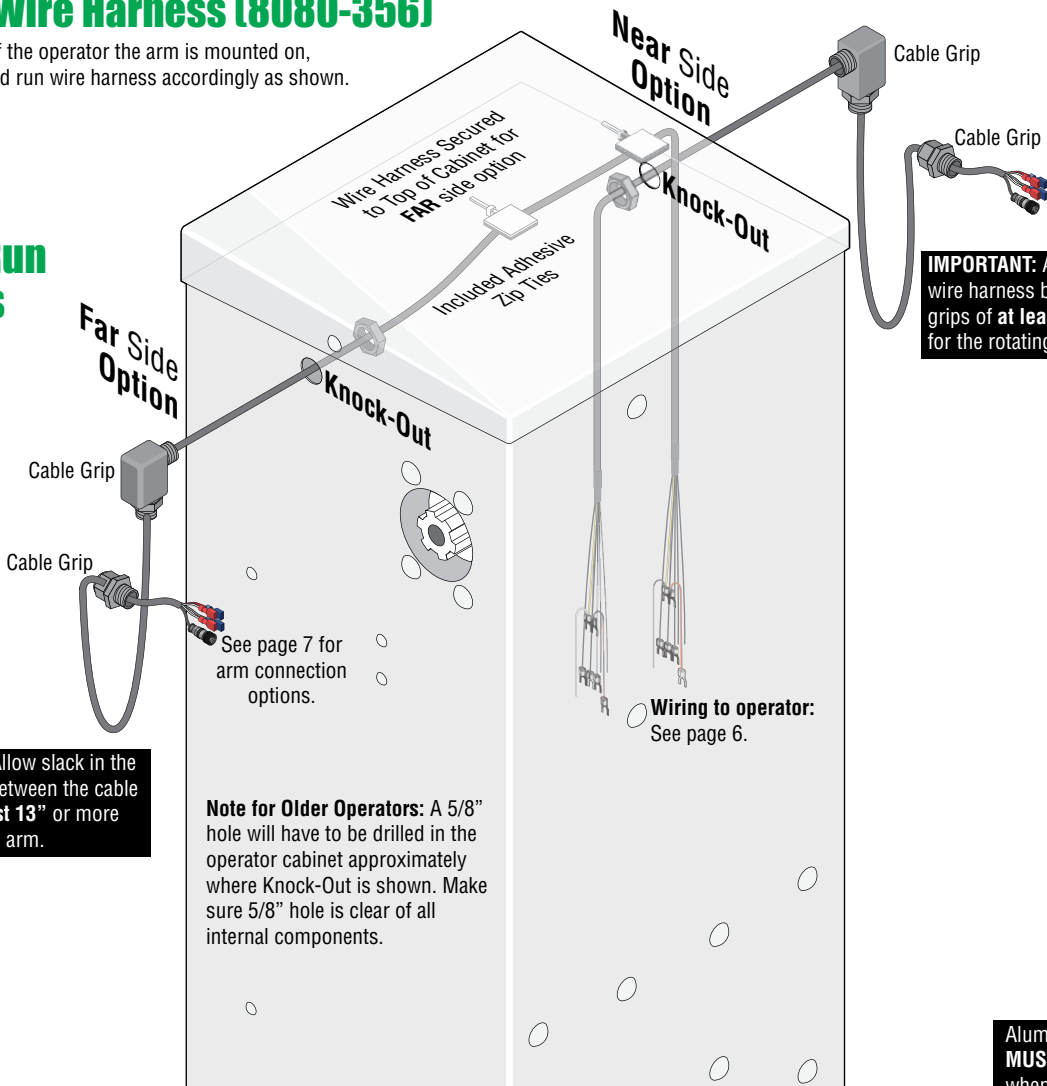


### 3 Install Wire Harness (8080-356)

Choose which side of the operator the arm is mounted on, remove knock-out and run wire harness accordingly as shown.

### 4 Cable Run Options

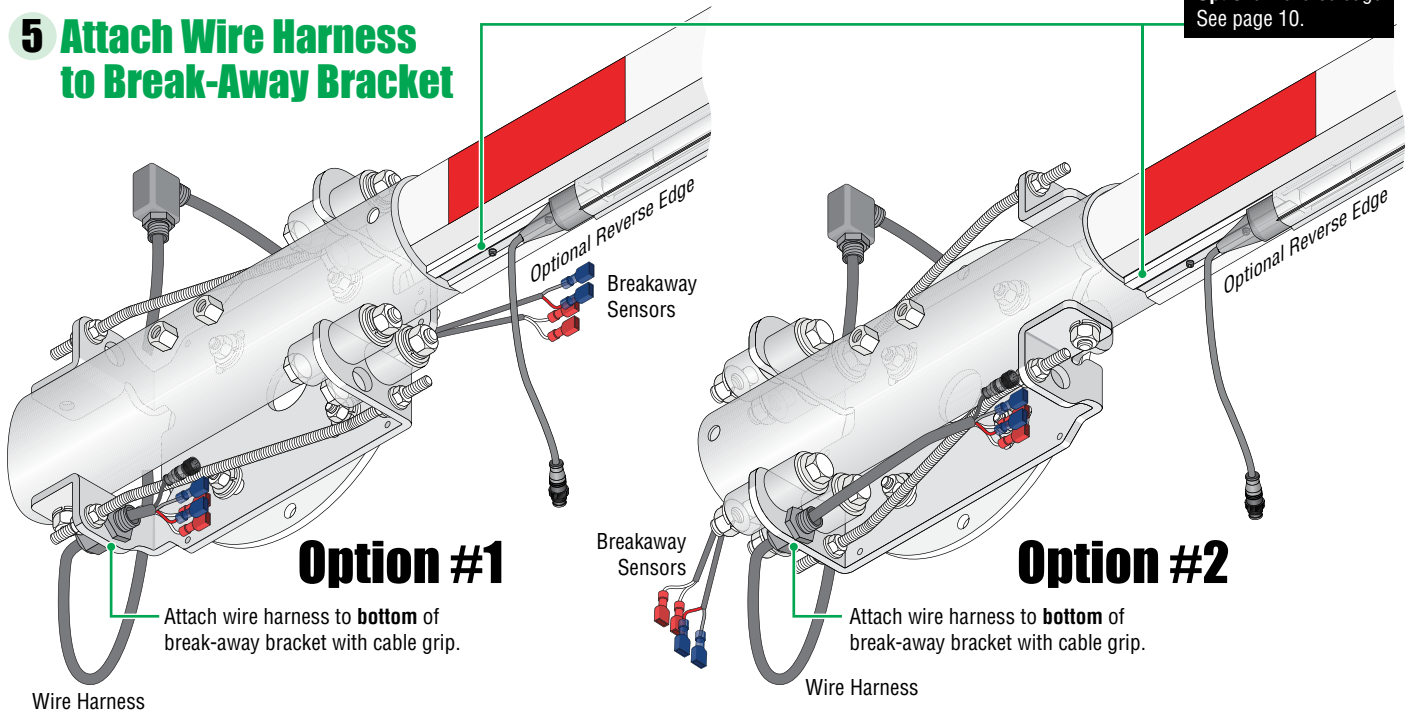
**IMPORTANT:** Allow slack in the wire harness between the cable grips of **at least 13"** or more for the rotating arm.



**Note for Older Operators:** A 5/8" hole will have to be drilled in the operator cabinet approximately where Knock-Out is shown. Make sure 5/8" hole is clear of all internal components.

Aluminum Stopper **MUST** be in position when installing a **Optional** reverse edge. See page 10.

### 5 Attach Wire Harness to Break-Away Bracket

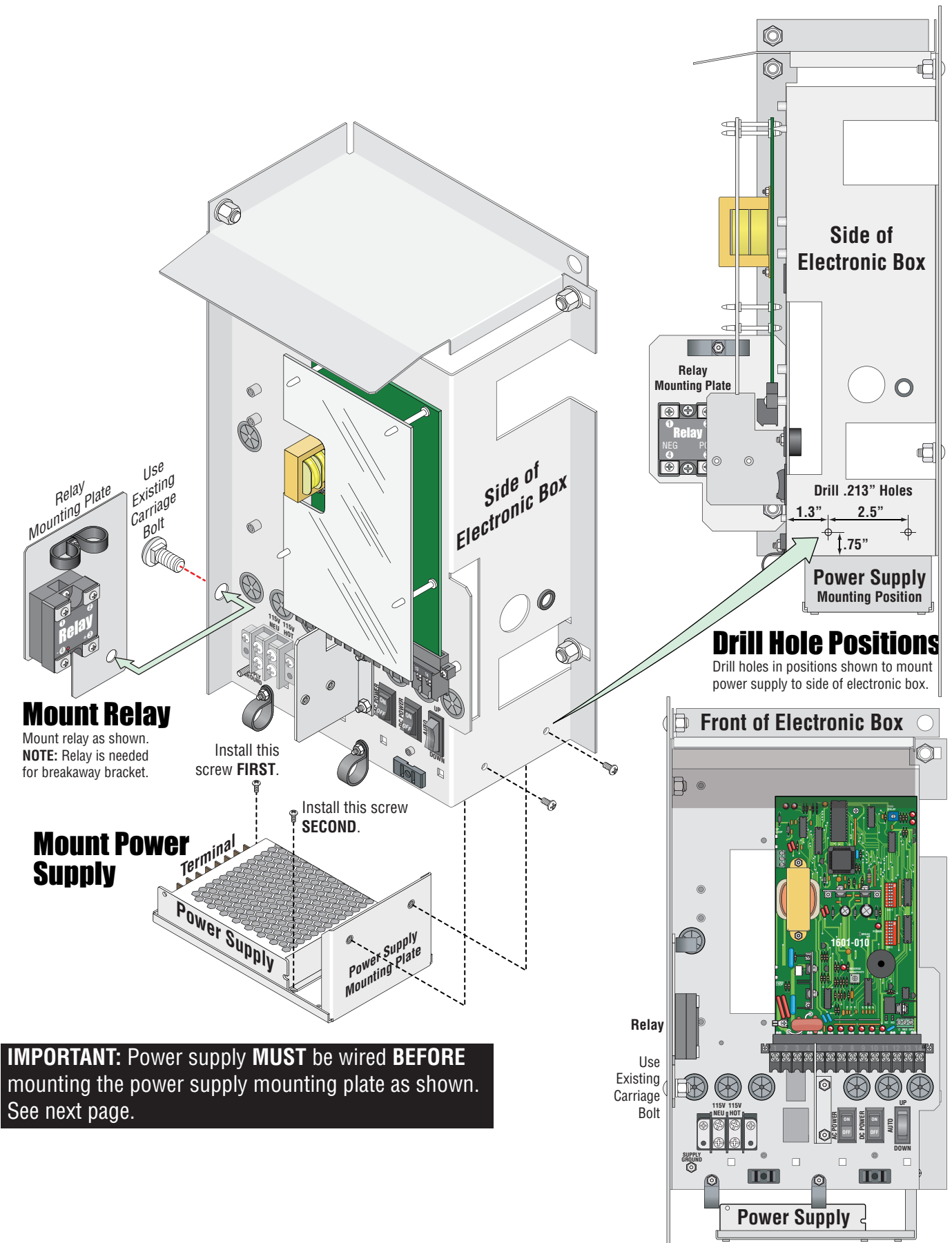


**Option #1**

**Option #2**

See page 7 for arm connection **options** and **securing wires** to break-away bracket.

## 6 Mount Power Supply and Relay



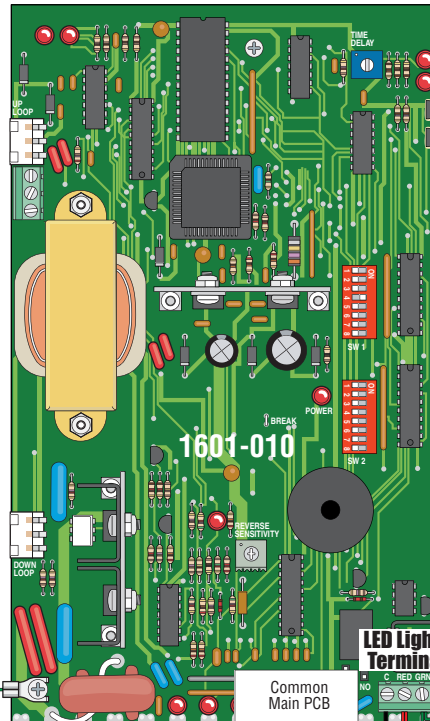
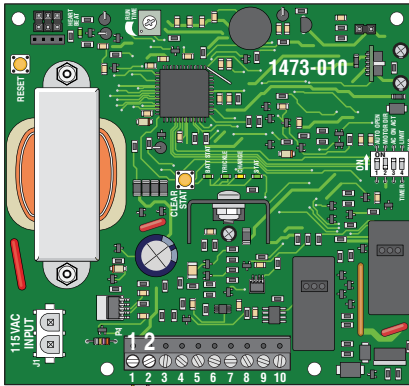


## 7 Octagon Break-Away Arm - Wiring to Operator

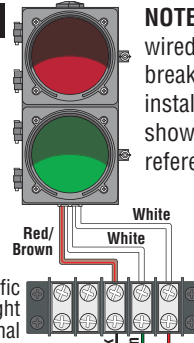
**MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!**

### OPTIONAL Convenience Open 1473

**NOTE:** Break-Away arm Will **NOT** work with older model 2340-010 convenience open board.



**Optional**  
**LED Traffic**  
**Light Kit**  
Sold Separately



**NOTE:** The traffic light is wired together with the break-away arm in some installations, so it's shown here for wiring reference. See Traffic Light manual 1603-264 for more info when used.

Traffic Light Cable

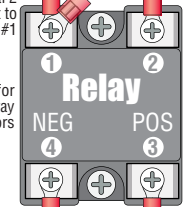
Make sure **ANY** unused wires are **properly terminated** and do **NOT** have exposed bare wires or metal connectors that could cause the operator to malfunction.

**SUPPLY**  
**GROUND**

**Required**

Remove **EXISTING** wire from Main PCB Terminal 2 and connect it to Relay #1

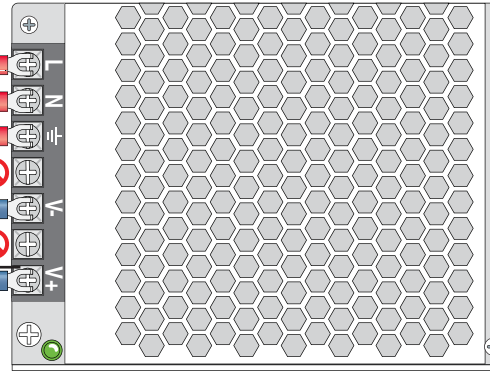
Relay for Breakaway Sensors



12V Positive (+)  
Solid State Relay  
C3 L3

12V Negative (-)  
Solid State Relay  
C6 L6

**1601-426 Power Supply 8.5A**



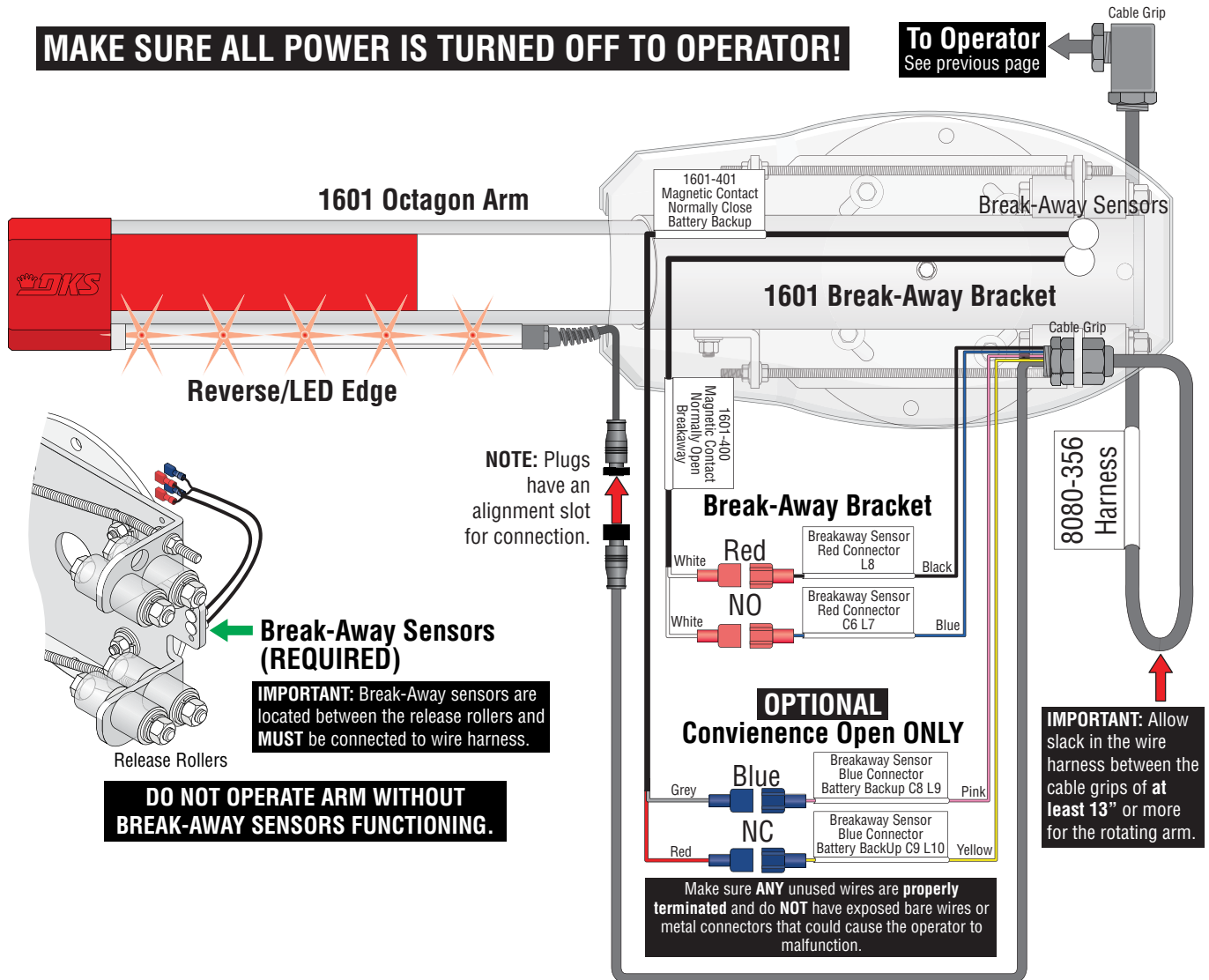
8080-356  
Harness

**To Arm** See next page

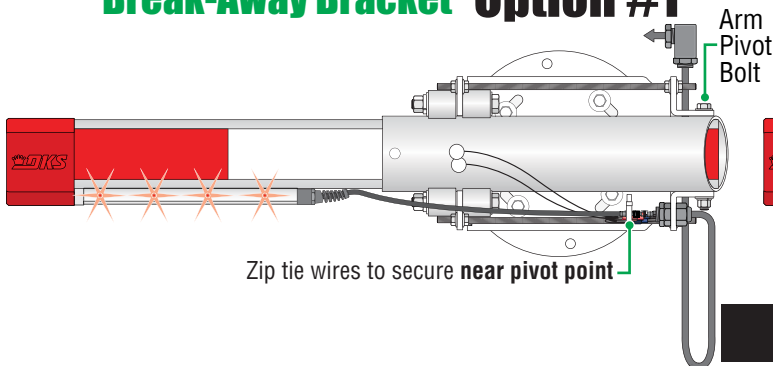
## 8 Connect Arm to Wire Harness (8080-356)

**MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!**

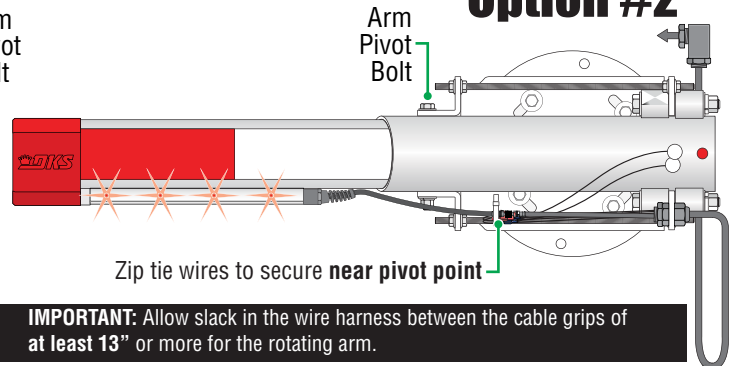
**To Operator**  
See previous page



## 9 Secure Wires to Break-Away Bracket Option #1



## Option #2



## 10 Break-Away Arm Reset Procedure

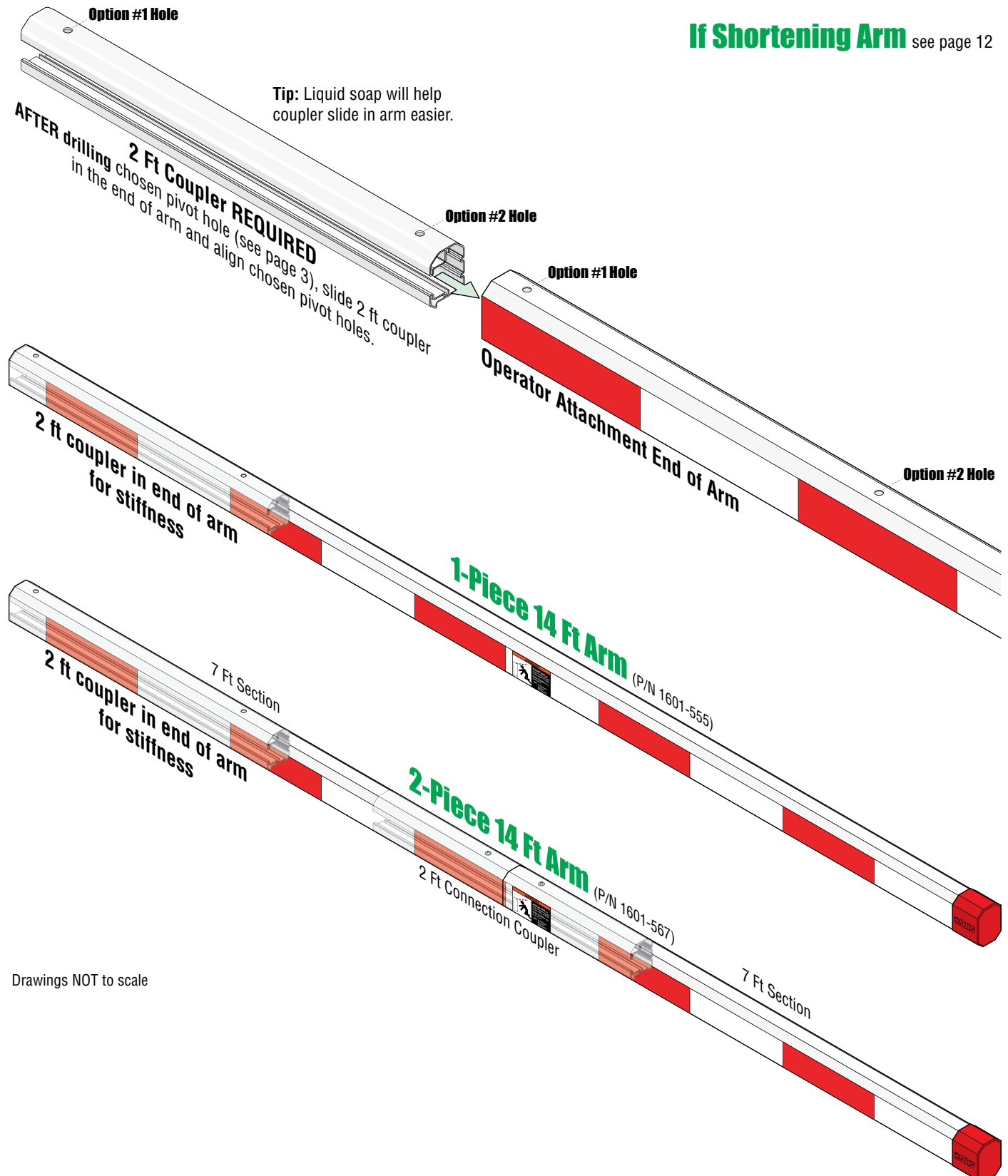
If arm gets struck and breaks away, gate operator will automatically shut down (Break-away sensors are tripped). Simply snap arm back into the release rollers. Make sure all wires are out of the way of the arm when snapping arm back in position. Normal operation can then continue.

**DO NOT OPERATE ARM WITHOUT BREAK-AWAY SENSORS FUNCTIONING.**

## 2 Ft Coupler Installation (Required)

2 Ft Coupler is included in the kit and **MUST** be installed on your chosen arm to **add stiffness** when arm is cycling. It will also help strengthen the arm when it gets knocked out of the guide rollers. It doesn't prevent the arm from damage in all circumstances, but will help protect the arm against minor contact.

**If Shortening Arm** see page 12



Drawings NOT to scale



# 14 Ft 2-Piece Octagon Arm Assembly

DoorKing Part Number

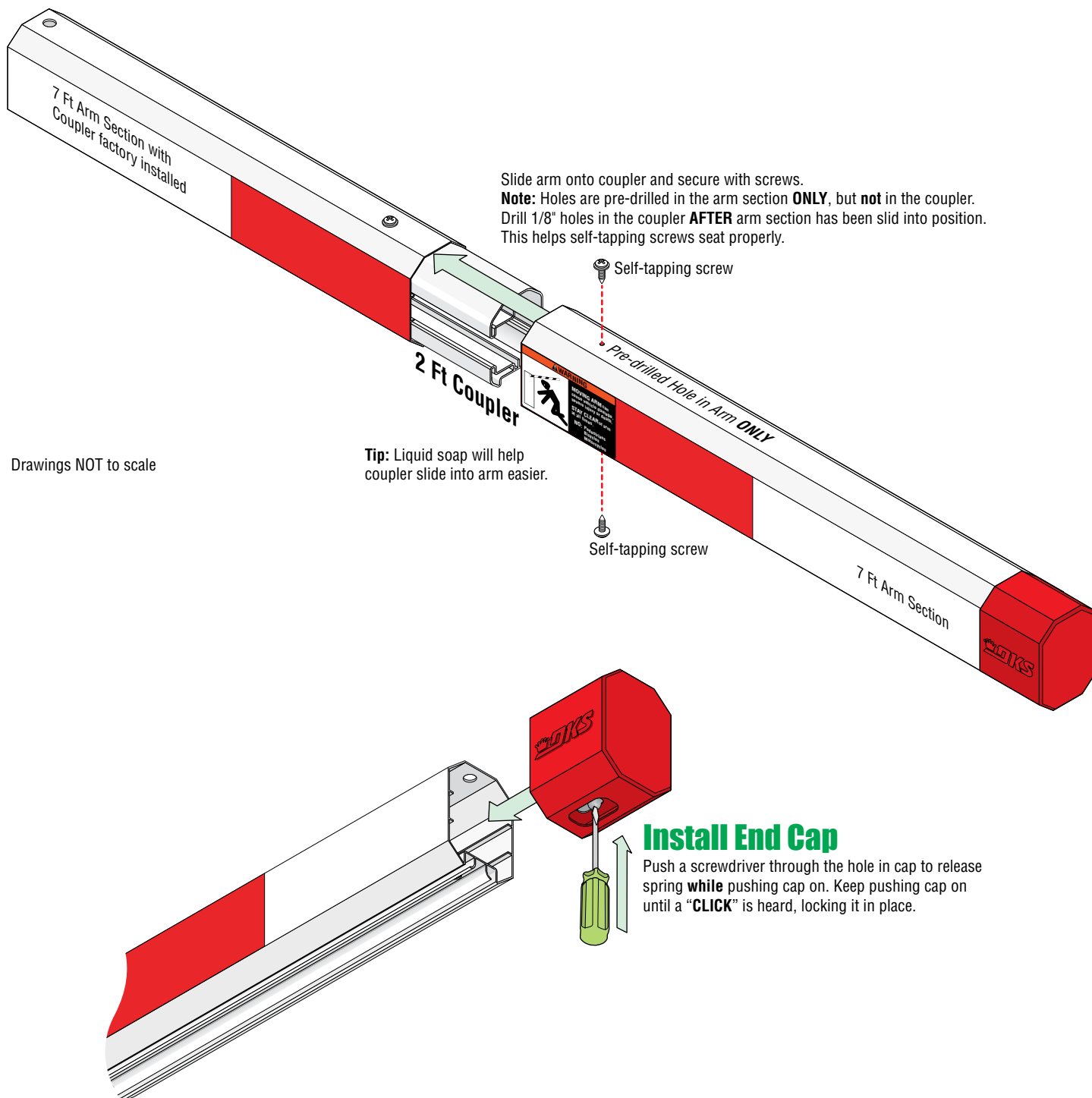
**1601-567**

14 Ft 2-Piece Octagon Arm Kit

This kit is designed for use on a 1601 barrier gate operator **ONLY**. It has TWO 7 ft arm sections that assemble into a 14 ft arm.

A reverse edge **SHOULD** be installed on this arm. It is sold separately but **highly recommended** for safety, see next page.

## Assemble 2-Piece Arm



**If Shortening Arm** see page 12

1601-269-V-2-26

# Reverse Edge / Red Green LED Edge Installation

DoorKing Part Numbers:

## Reverse Edge

(Arm cut to 7 ft) **5 ft edge** P/N 8080-605  
(Arm cut to 8 ft) **6 ft edge** P/N 8080-606  
(Arm cut to 11 ft) **9 ft edge** P/N 8080-609  
(14 ft Arm) **12 ft edge** P/N 8080-612

## Reverse Edge+Red/Green LED

(Arm cut to 7 ft) **5 ft LED/edge** P/N 8080-905  
(Arm cut to 8 ft) **6 ft LED/edge** P/N 8080-906  
(Arm cut to 11 ft) **9 ft LED/edge** P/N 8080-909  
(14 ft Arm) **12 ft LED/edge** P/N 8080-912

These kits are designed to install on a **Break-Away** 14 ft 1-piece or 2-piece **OCTAGON** arm (arm can be shortened if desired) on a 1601 barrier gate operator. They **CANNOT** be used on a 1602 or 1603 operator.

**Note:** DO NOT operate arm with a malfunctioning reverse edge.

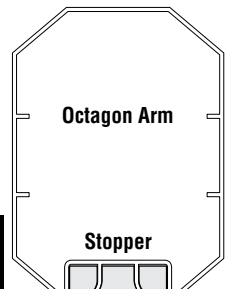
## Installation

Drawings NOT to scale

### 1 Remove End Cap

Push a screwdriver through hole in bottom of end cap to release spring **while** pulling cap off.

**Note:** If shortening arm, see below.



### 2 Slide on Stopper

**Stopper MUST be used or edge will slide in slot.**

Reverse/LED Edge

Reverse/LED Edge

Cover

Push stopper against reverse edge and tighten it so edge does **NOT** slide in slot.

### 3 Slide on Edge

**Tip:** Liquid soap will help reverse edge slide on easier.

### 4 Reinstall End Cap

Push a screwdriver through the hole in cap to release spring **while** pushing cap on. Keep pushing cap on until a **"CLICK"** is heard which locks it in place.

Tighten set screws.

**Stopper MUST be used or edge can slide in slot.**

Plug connects to the 8080-356 wire harness. see page 7.

**If Shortening a 14-ft Arm** see page 12

# 14 Ft Rubber Bumper Installation

DoorKing Part Number

**8080-089**

14 Ft Rubber Bumper

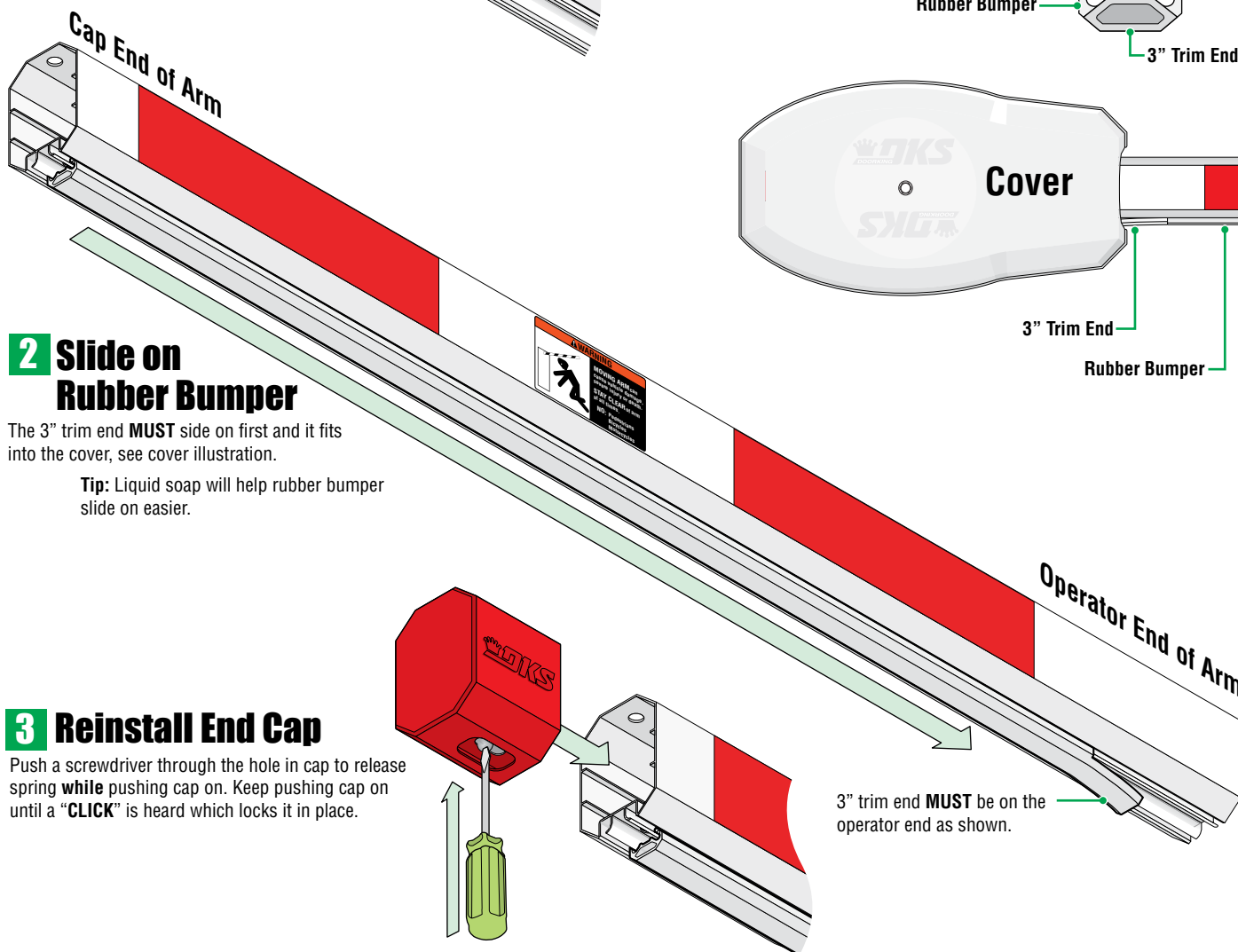
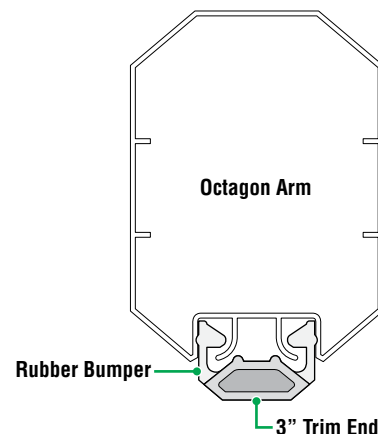
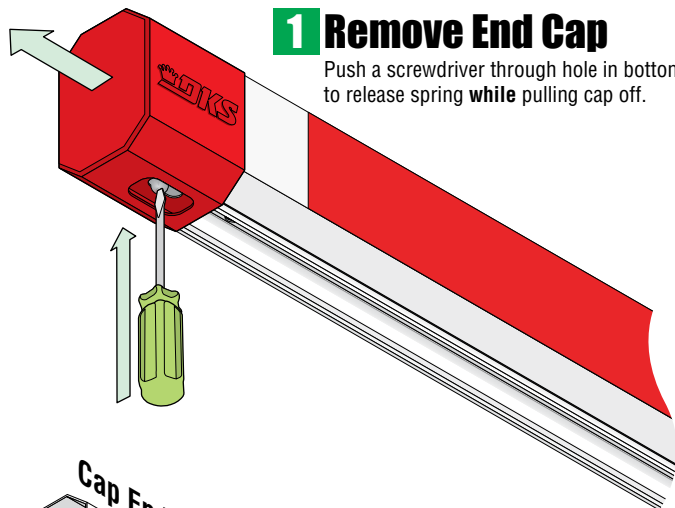
This rubber bumper is designed to install on a 14 ft 1-piece or 2-piece **octagon arm** (not included) for a 1601 or 1603 barrier gate operator.  
It **CANNOT** be used with a 1602 operator.

## Installation

Drawings NOT to scale

### 1 Remove End Cap

Push a screwdriver through hole in bottom of end cap to release spring **while** pulling cap off.



### 2 Slide on Rubber Bumper

The 3" trim end **MUST** side on first and it fits into the cover, see cover illustration.

**Tip:** Liquid soap will help rubber bumper slide on easier.

### 3 Reinstall End Cap

Push a screwdriver through the hole in cap to release spring **while** pushing cap on. Keep pushing cap on until a "**CLICK**" is heard which locks it in place.

3" trim end **MUST** be on the operator end as shown.

**If using a shortened arm** rubber bumper can be cut to length

# Shortening a 14-Ft Octagon Arm to 7-Ft, 8-Ft, 11-Ft

DoorKing Part Numbers:

## Reverse Edge

(Arm cut to 7 ft) **5 ft edge** P/N 8080-605  
 (Arm cut to 8 ft) **6 ft edge** P/N 8080-606  
 (Arm cut to 11 ft) **9 ft edge** P/N 8080-609  
 (14 ft Arm) **12 ft edge** P/N 8080-612

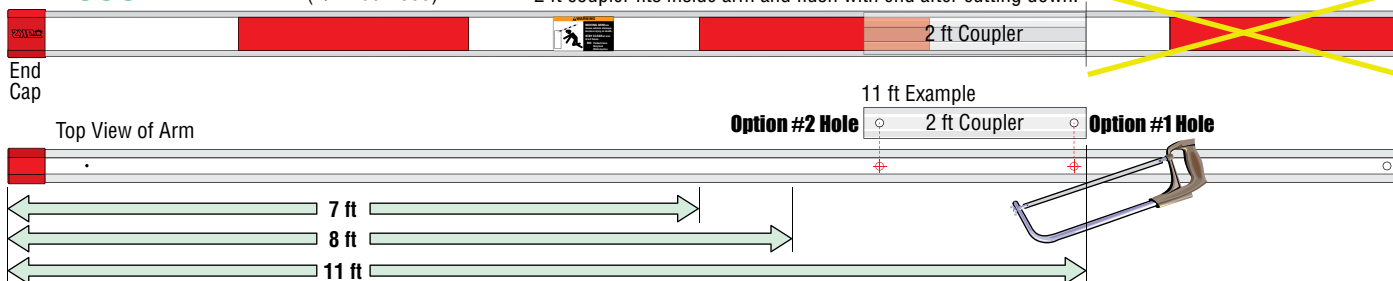
## Reverse Edge+Red/Green LED

(Arm cut to 7 ft) **5 ft LED/edge** P/N 8080-905  
 (Arm cut to 8 ft) **6 ft LED/edge** P/N 8080-906  
 (Arm cut to 11 ft) **9 ft LED/edge** P/N 8080-909  
 (14 ft Arm) **12 ft LED/edge** P/N 8080-912

Drawings NOT to scale

### 1-Piece 14 Ft Arm (P/N 1601-555)

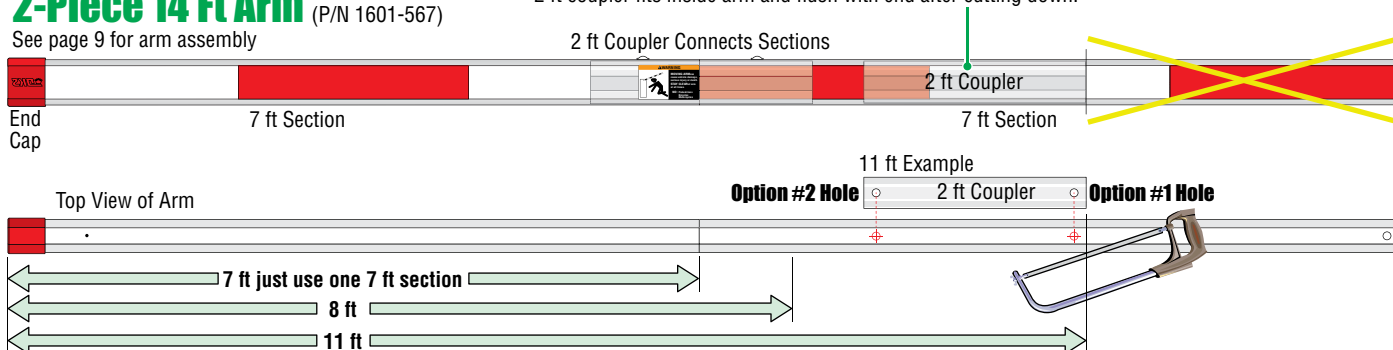
2 ft coupler fits inside arm and flush with end after cutting down.



### 2-Piece 14 Ft Arm (P/N 1601-567)

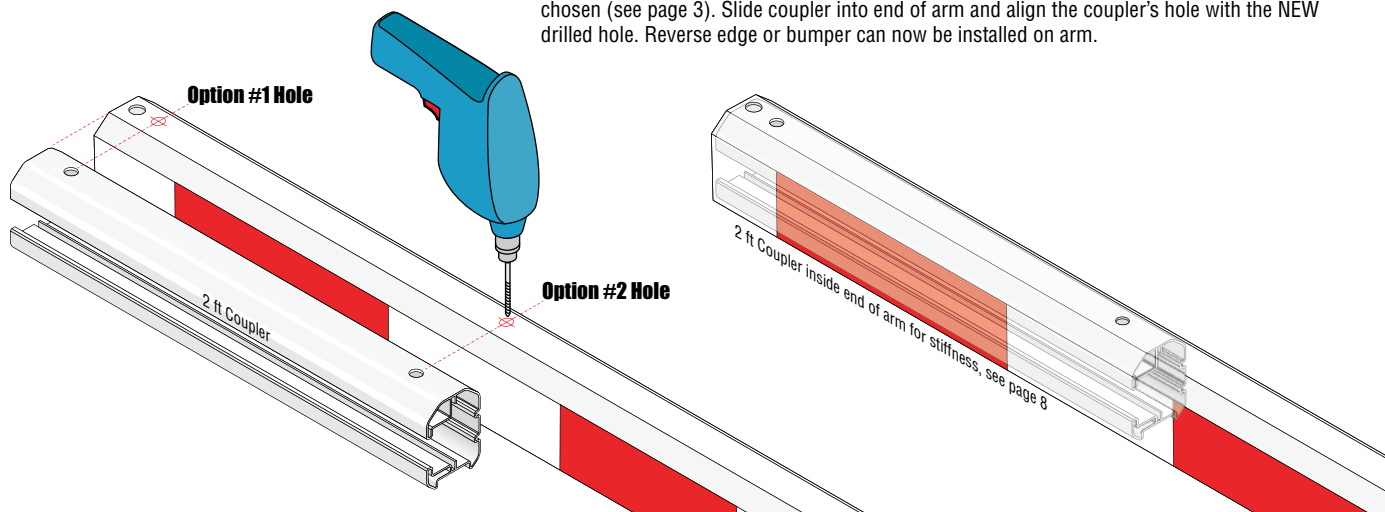
See page 9 for arm assembly

2 ft coupler fits inside arm and flush with end after cutting down.



### Drill a .375" Pivot Hole in Arm

**AFTER** cutting down arm to your chosen length, use the 2-ft coupler's holes to align and drill a **NEW .375" hole** thru the top and bottom of the arm, depending on which **pivot point** you have chosen (see page 3). Slide coupler into end of arm and align the coupler's hole with the **NEW** drilled hole. Reverse edge or bumper can now be installed on arm.



## 17-Ft Octagon Arm Assembly for a 1602 ONLY

This kit is designed for a **1602** barrier gate operator **ONLY**. It **CANNOT** be used with 1601 barrier **OR** 1603 auto-spikes barrier operators. It will extend a 14 ft octagonal arm an **extra three feet**. The reverse edge is sold separately but **highly recommended** for safety when lowering this very long arm.

# Installation

DoorKing Part Numbers:

**1602-303**

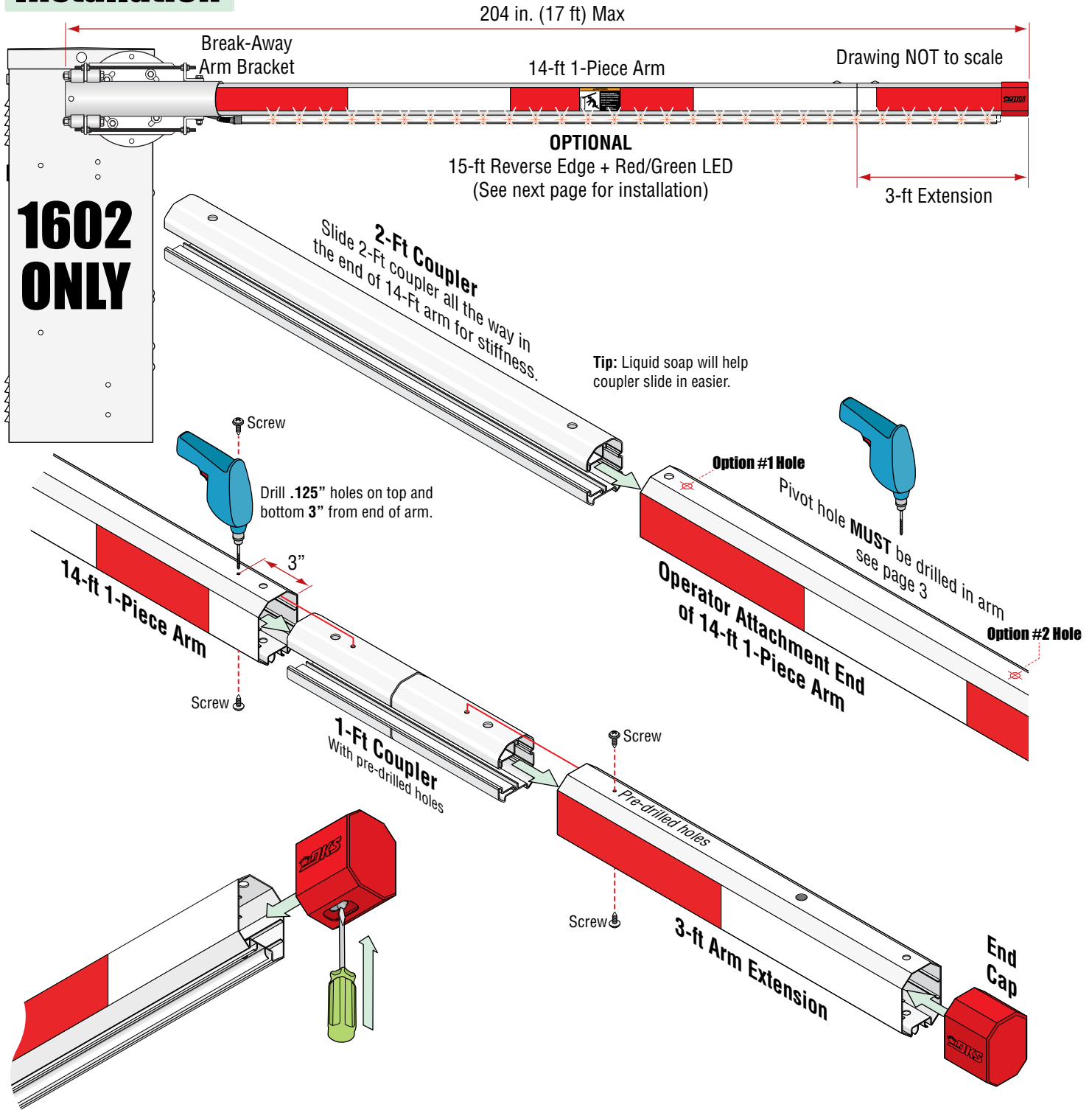
### Octagon Arm 3-ft Extension Kit

**8080-915**

### 15-ft Reverse Edge + Red/Green LED

(Sold Separately)

See next page)



## Install End Cap

Push a screwdriver through the hole in cap to release spring **while** pushing cap on. Keep pushing cap on until a “**CLICK**” is heard, locking it in place.



# 15-Ft LED Reverse Edge Installation on 17-Ft Arm ONLY

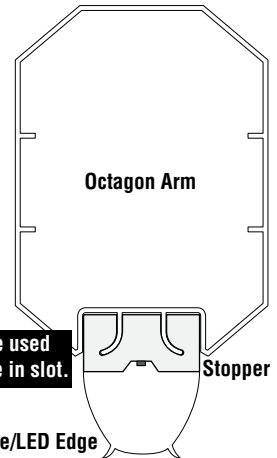
This edge will **ONLY** fit on a 14-ft octagon arm **WITH** the 3-ft extension installed on it, 17-ft total.

**Note:** DO NOT operate arm with a malfunctioning reverse edge.

## Installation

### 1 Remove End Cap

Push a screwdriver through hole in bottom of end cap to release spring **while** pulling cap off.

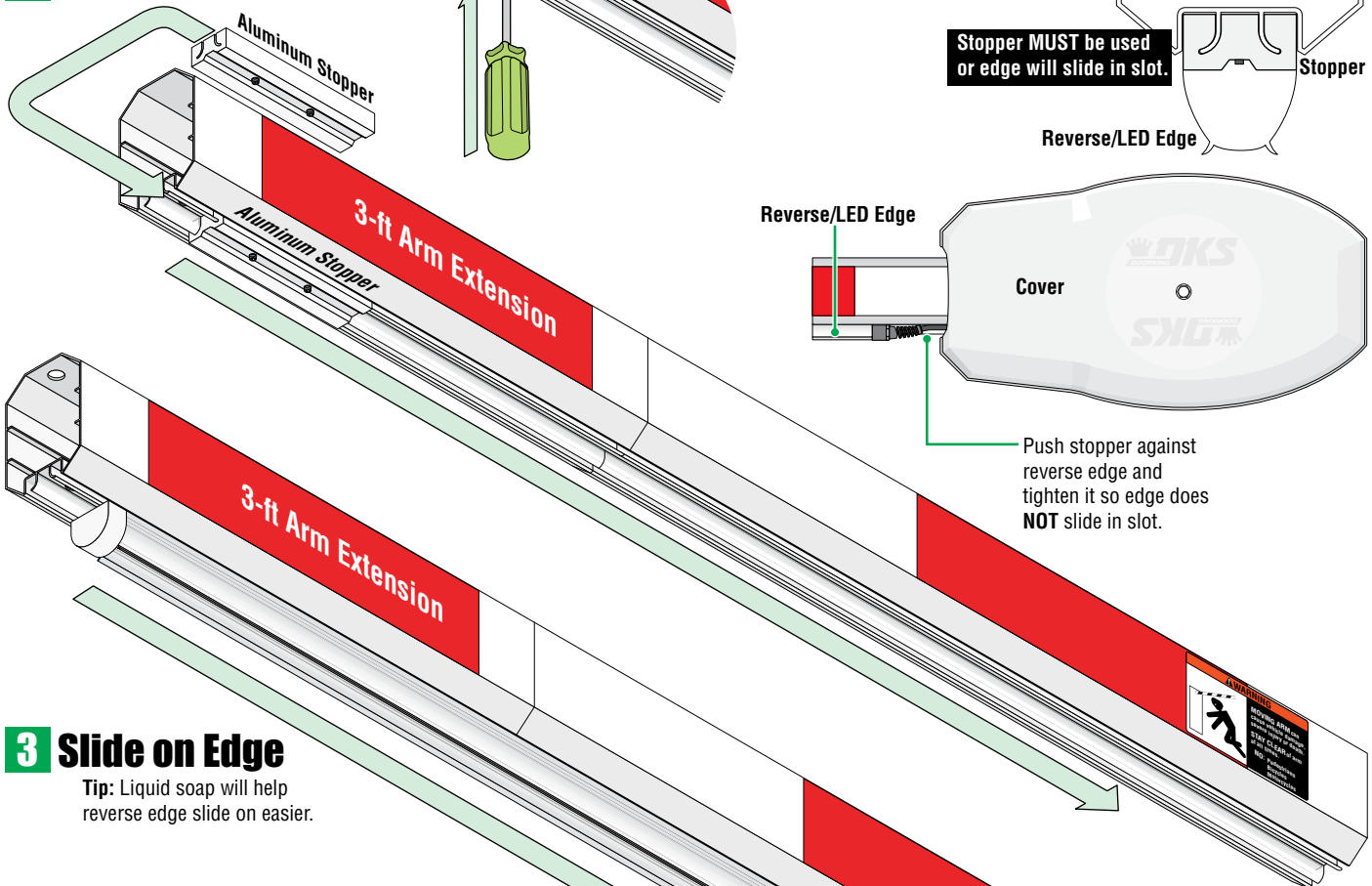


Reverse/LED Edge

Cover

Push stopper against reverse edge and tighten it so edge does **NOT** slide in slot.

### 2 Slide on Stopper



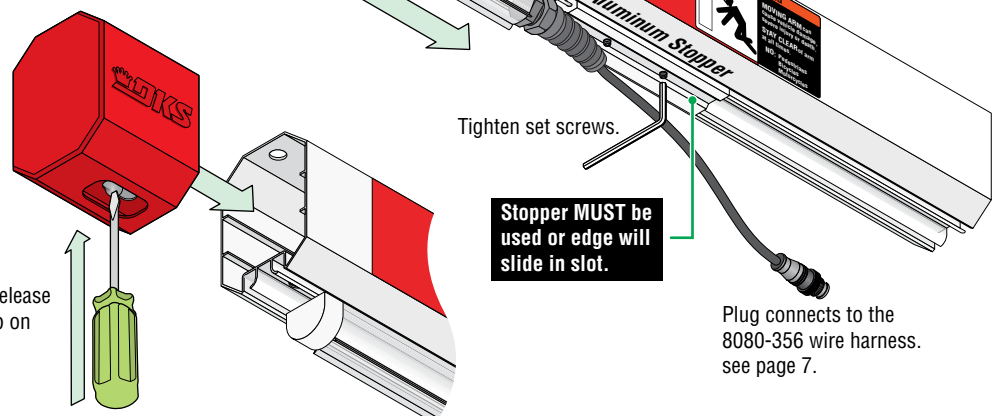
### 3 Slide on Edge

Tip: Liquid soap will help reverse edge slide on easier.

Drawings NOT to scale

### 4 Reinstall End Cap

Push a screwdriver through the hole in cap to release spring **while** pushing cap on. Keep pushing cap on until a "**CLICK**" is heard which locks it in place.



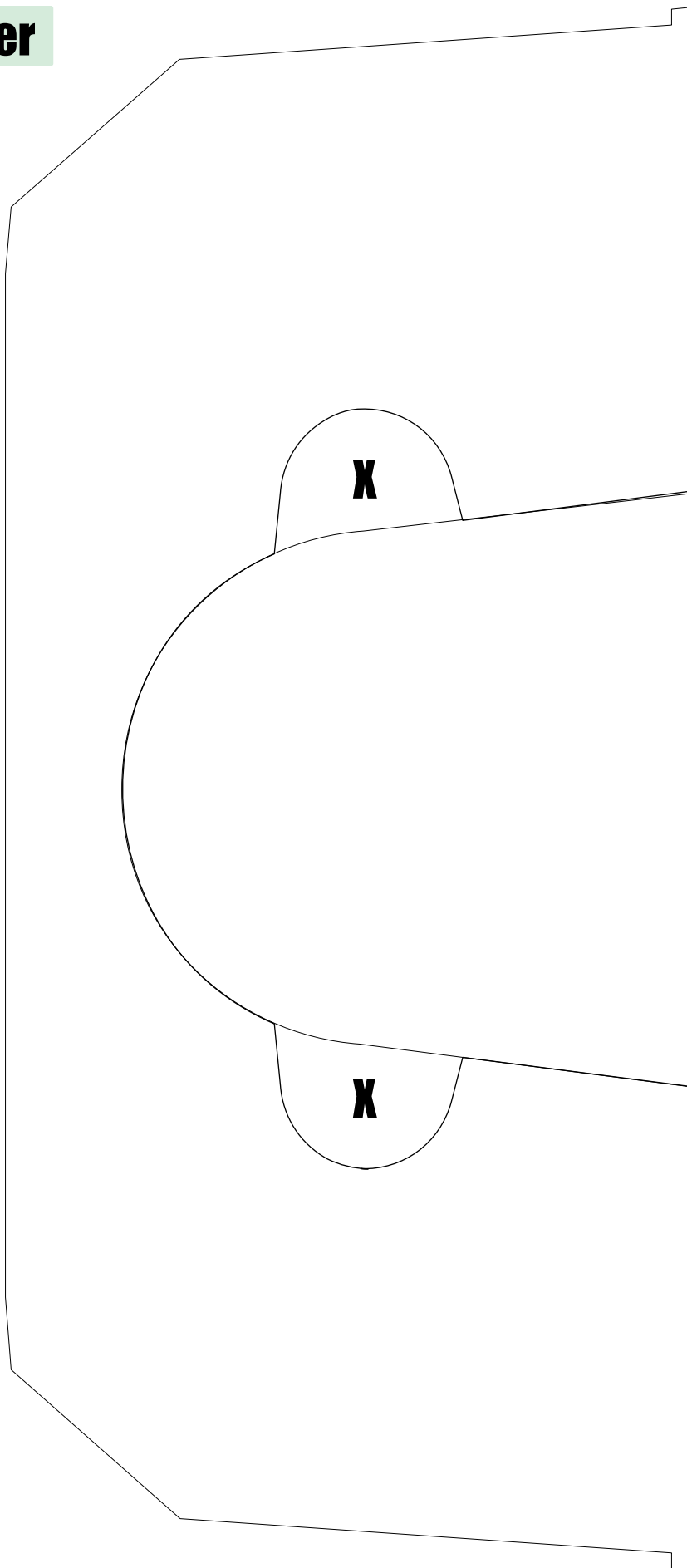
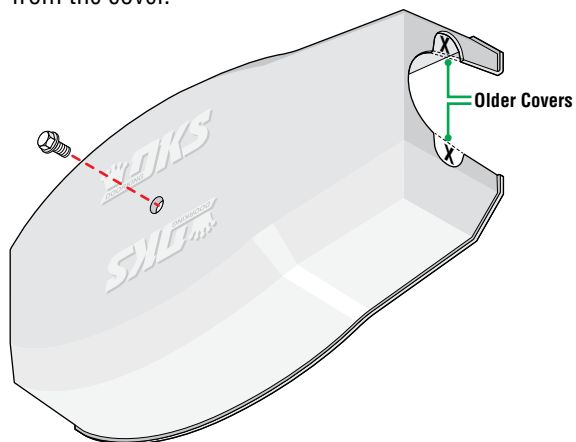
Tighten set screws.

Stopper MUST be used or edge will slide in slot.

Plug connects to the 8080-356 wire harness. see page 7.

## Older Existing Arm Cover

Older existing plastic arm cover will need to have a notch cut out for the reverse edge. Only one side of the cover will need to be cut out depending on which side of the operator the arm is mounted on. Use this template as a guide to remove material from the cover.



Make sure your printer is set to 100%

