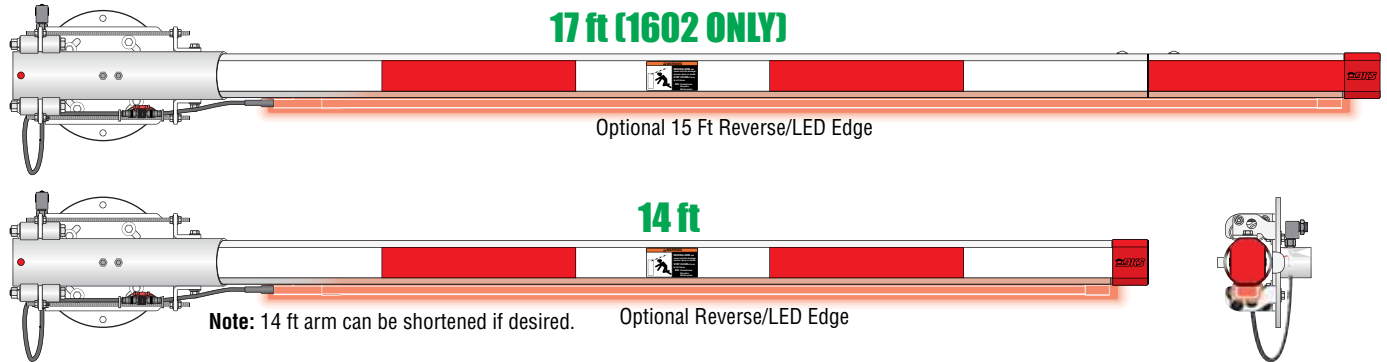


BREAK-AWAY OCTAGON ARM KIT for a 1601 / 1602

DoorKing Part Number
8080-295

This kit is designed for the 1601 **OR** a 1602 with a 17 ft arm **ONLY** barrier gate operators. It **CANNOT** be used with a 1603 auto-spikes, 1620 lane barrier or 1625 wedge barrier. The kit provides a **break-away bracket assembly** for a **OCTAGON arm** with **OR** without **Reverse/LED edge**, sold separately. 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.

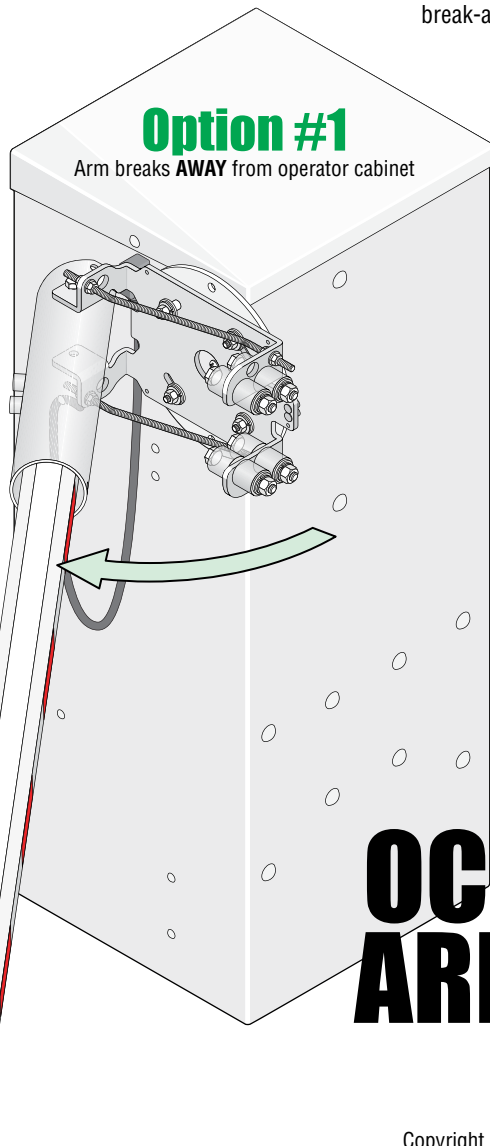


Break-Away OCTAGON Arm Bracket Direction Options

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

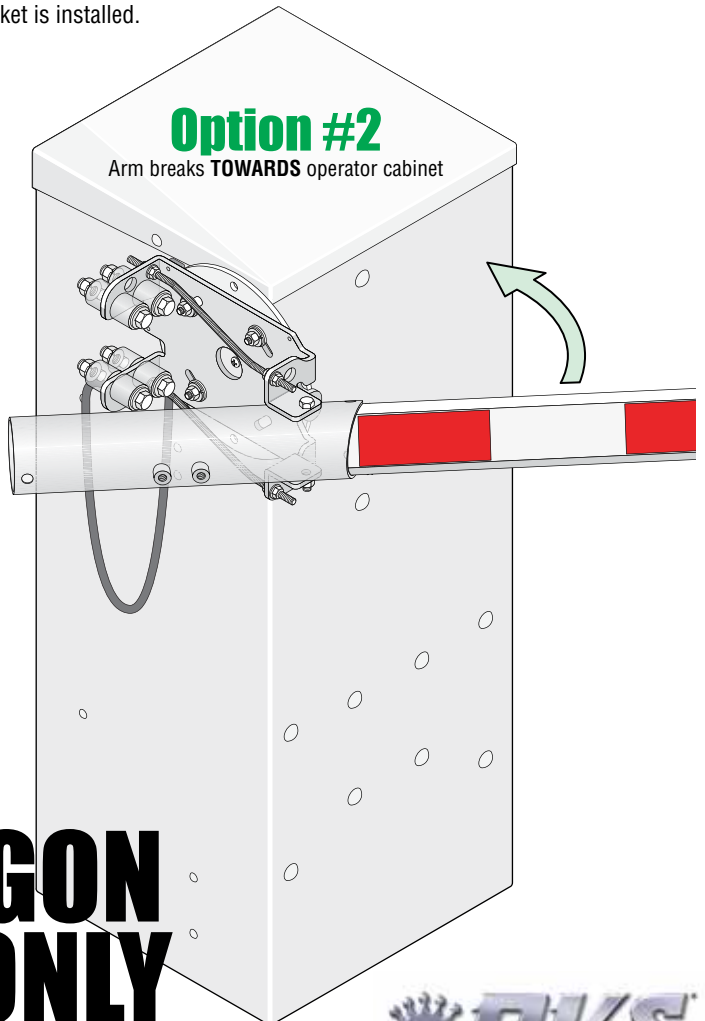
Option #1

Arm breaks **AWAY** from operator cabinet



Option #2

Arm breaks **TOWARDS** operator cabinet



OCTAGON ARM ONLY

DKS
DOOR KING®

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

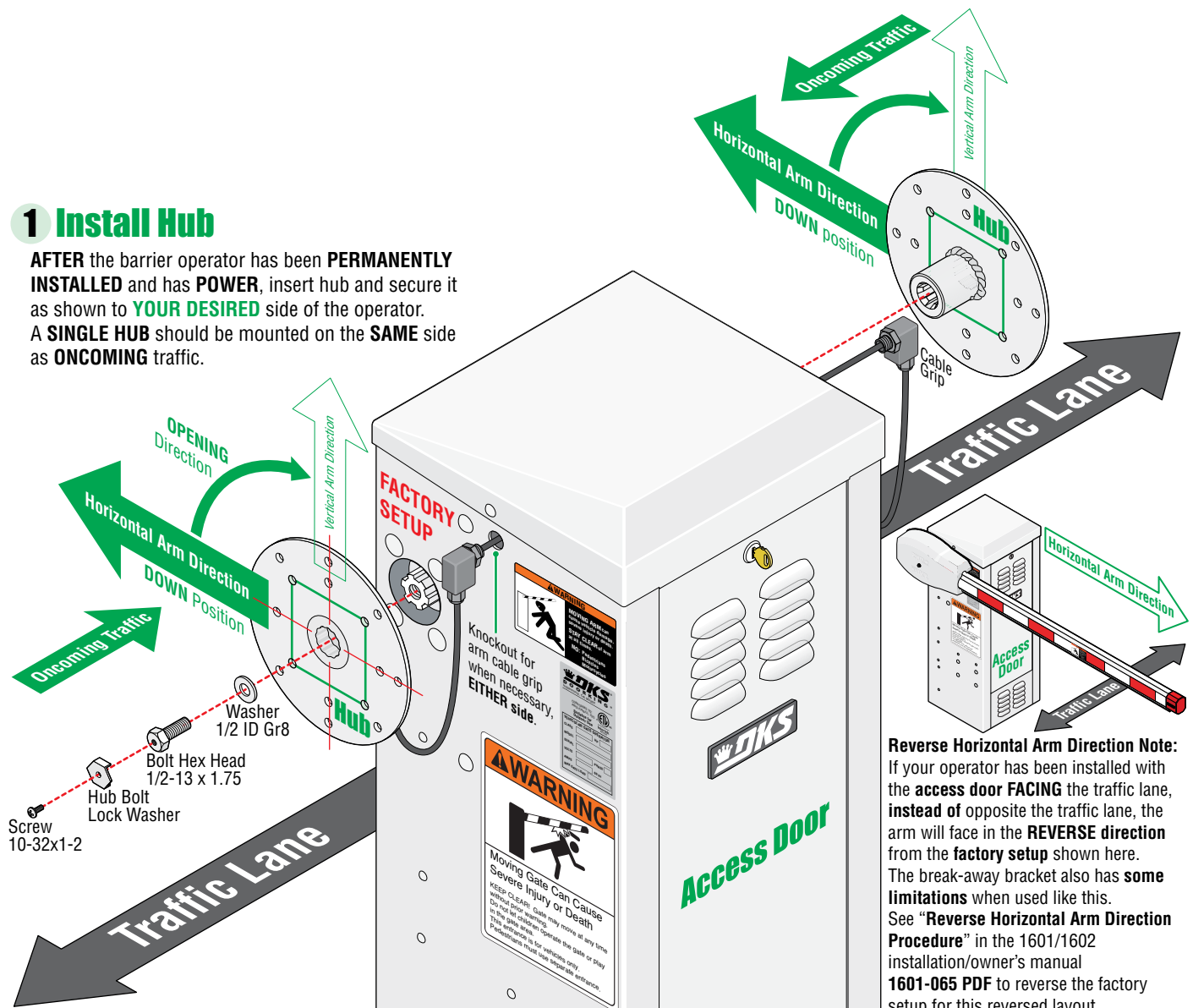
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Break-Away OCTAGON Arm Bracket Installation Steps:

1 Install Hub	2
2 Install Break-Away Bracket	3
3 Install Arm (Octagon)	4
4 Install Wire Harness (8080-356)	4
5 Attach Wire Harness to Break-Away Bracket	5
6 Mount Power Supply and Relay	6
7 Connect Wire Harness to Operator . . . and Wiring OPTIONS	7
8 Connect Arm to Wire Harness	8
9 Secure Wires to Break-Away Bracket	8
10 Break-Away Arm Reset Procedure	8
• 14 Ft 2-Piece Arm Assembly (Optional) (Sold Separately)	9
• Reverse Edge or Reverse/LED 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 Using Shorter Length Reverse Edge)	12
• 17 Ft Octagon Arm Assembly for a 1602 ONLY (Optional) (Sold Separately)	13
Older Existing Arm Plastic Cover Modification (If Necessary)	14

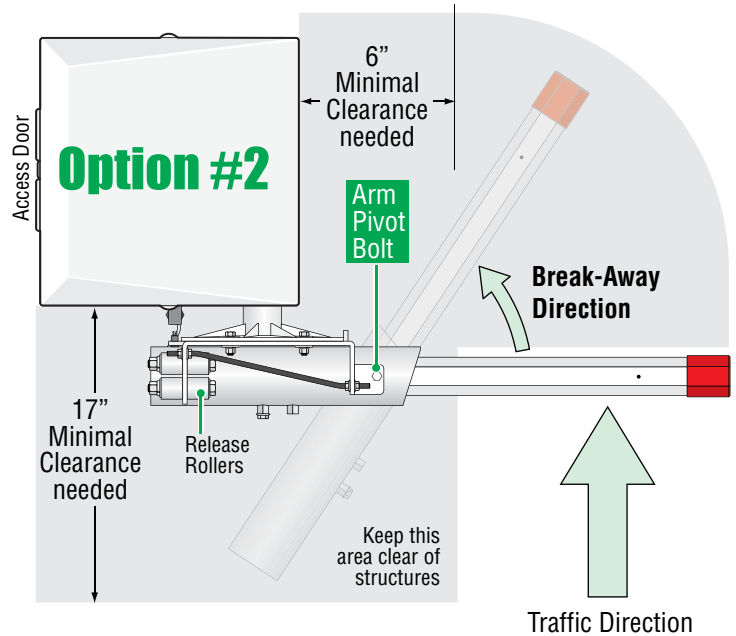
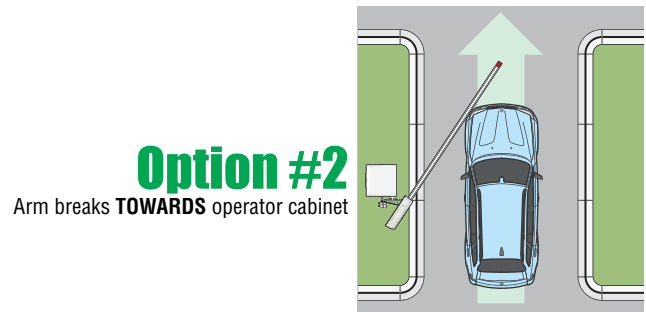
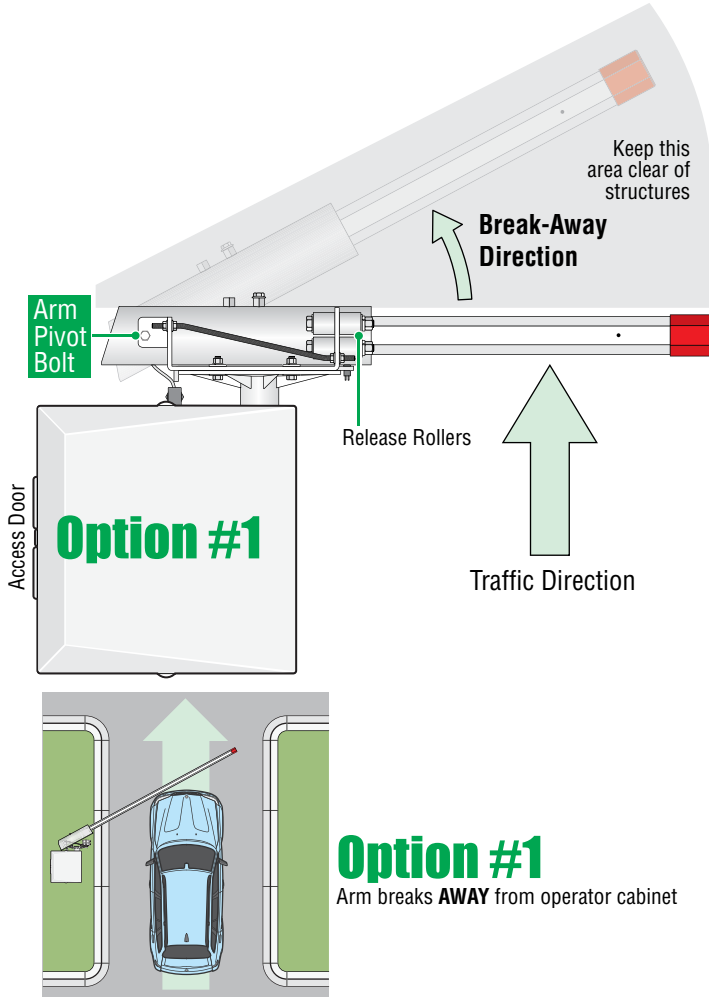
1 Install Hub

AFTER the barrier operator has been **PERMANENTLY INSTALLED** and has **POWER**, insert hub and secure it as shown to **YOUR DESIRED** side of the operator. A **SINGLE HUB** should be mounted on the **SAME** side as **ONCOMING** traffic.

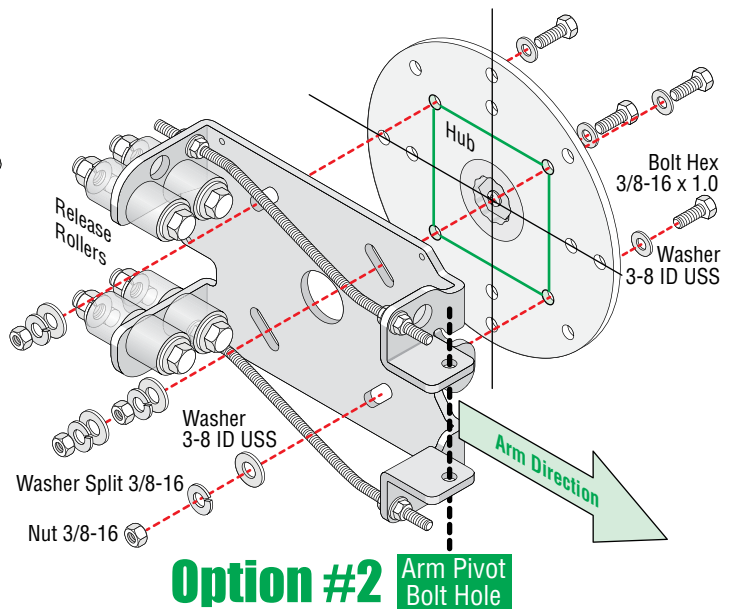
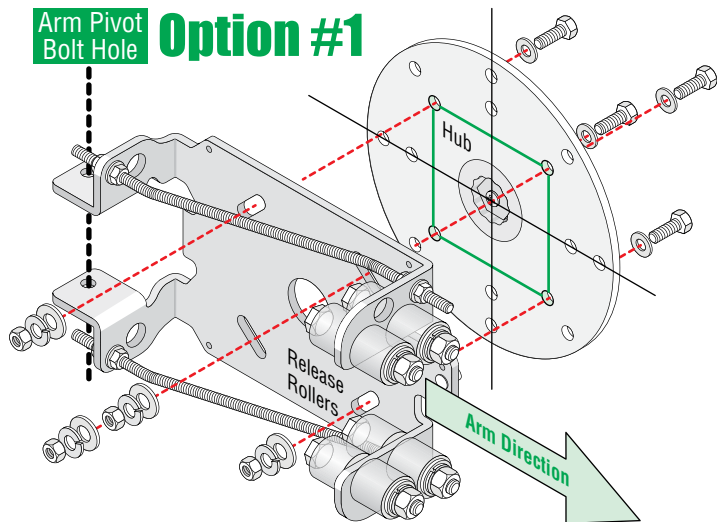


Break-Away Arm Direction Options

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).



2 Install Break-Away Bracket

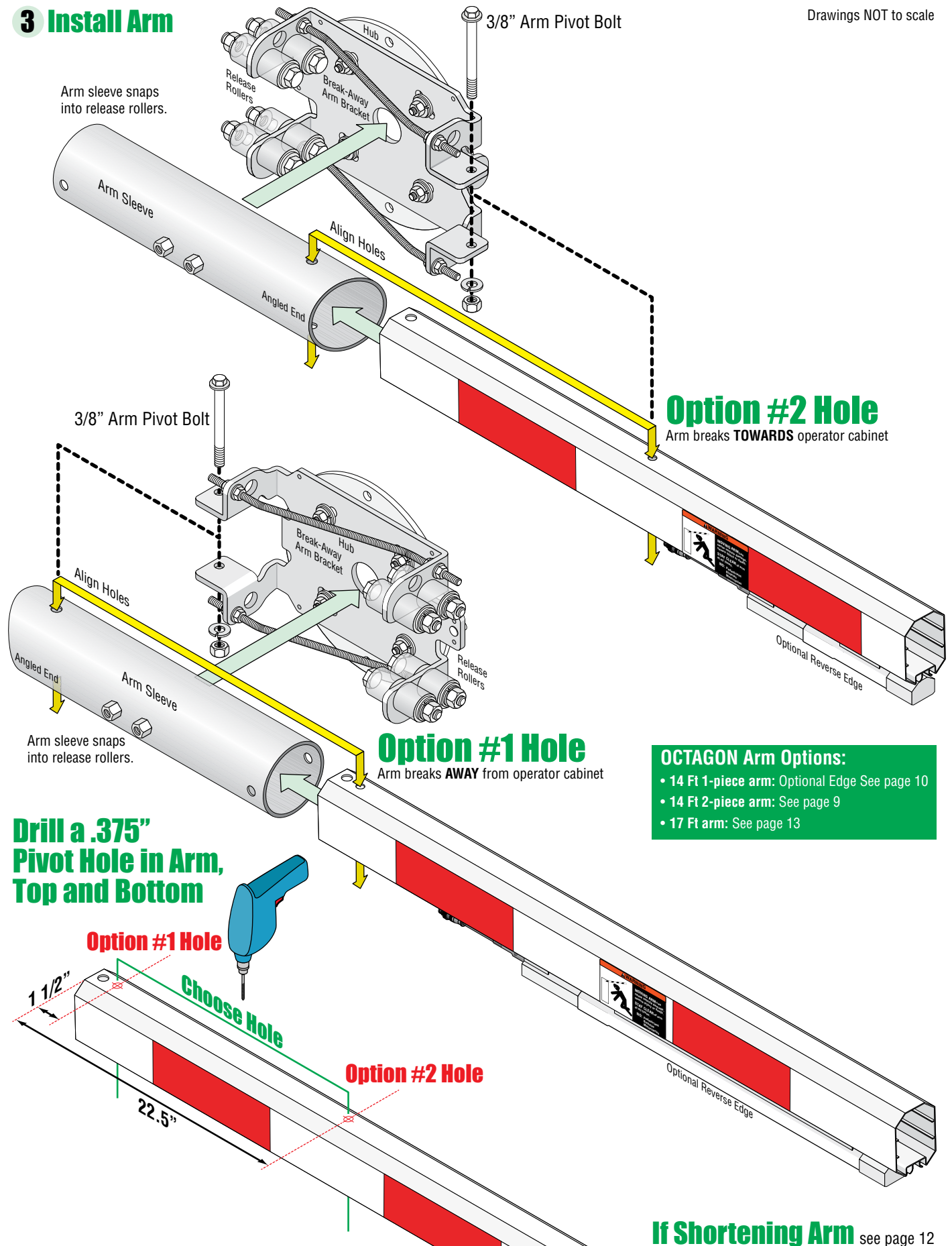


IMPORTANT Test the hub's **UP** and **DOWN** positions on the operator **BEFORE** installing arm bracket.

TURN OFF POWER BEFORE INSTALLING BRACKET

3 Install Arm

Drawings NOT to scale



4 Install Wire Harness (8080-356)

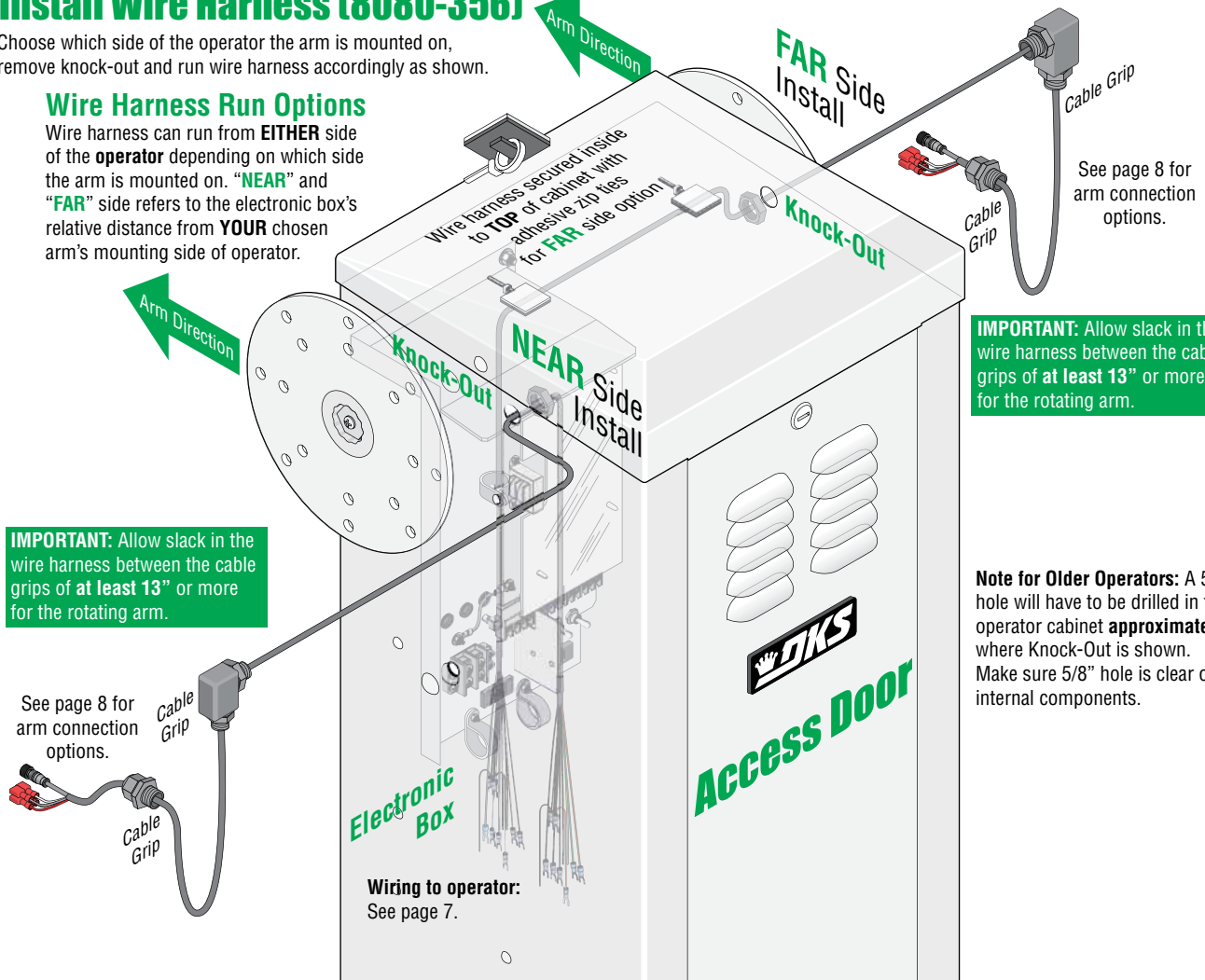
Choose which side of the operator the arm is mounted on, remove knock-out and run wire harness accordingly as shown.

Wire Harness Run Options

Wire harness can run from **EITHER** side of the **operator** depending on which side the arm is mounted on. "**NEAR**" and "**FAR**" side refers to the electronic box's relative distance from **YOUR** chosen arm's mounting side of operator.

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

See page 8 for arm connection options.



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

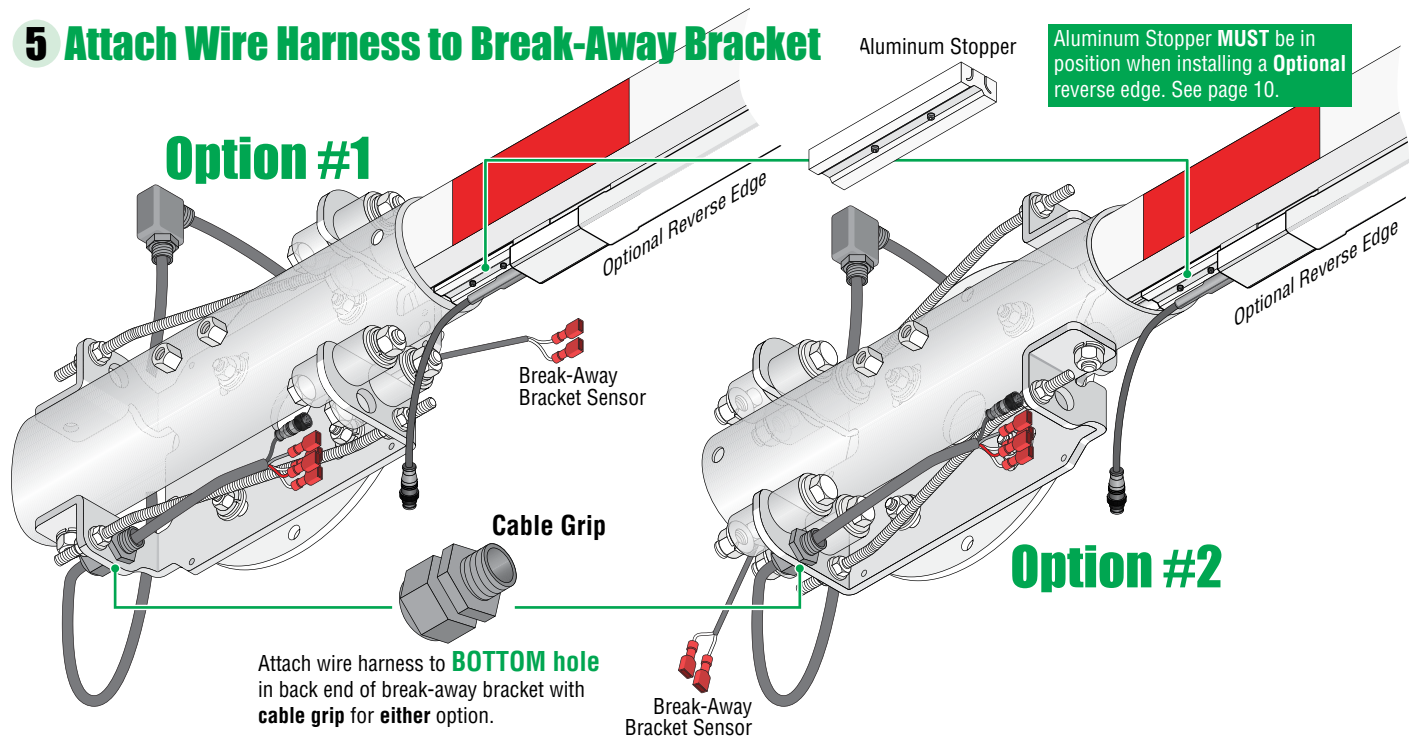
Note for Older Operators: A 5/8" hole will have to be drilled in the operator cabinet **approximately** where Knock-Out is shown. Make sure 5/8" hole is clear of all internal components.

5 Attach Wire Harness to Break-Away Bracket

Option #1

Aluminum Stopper

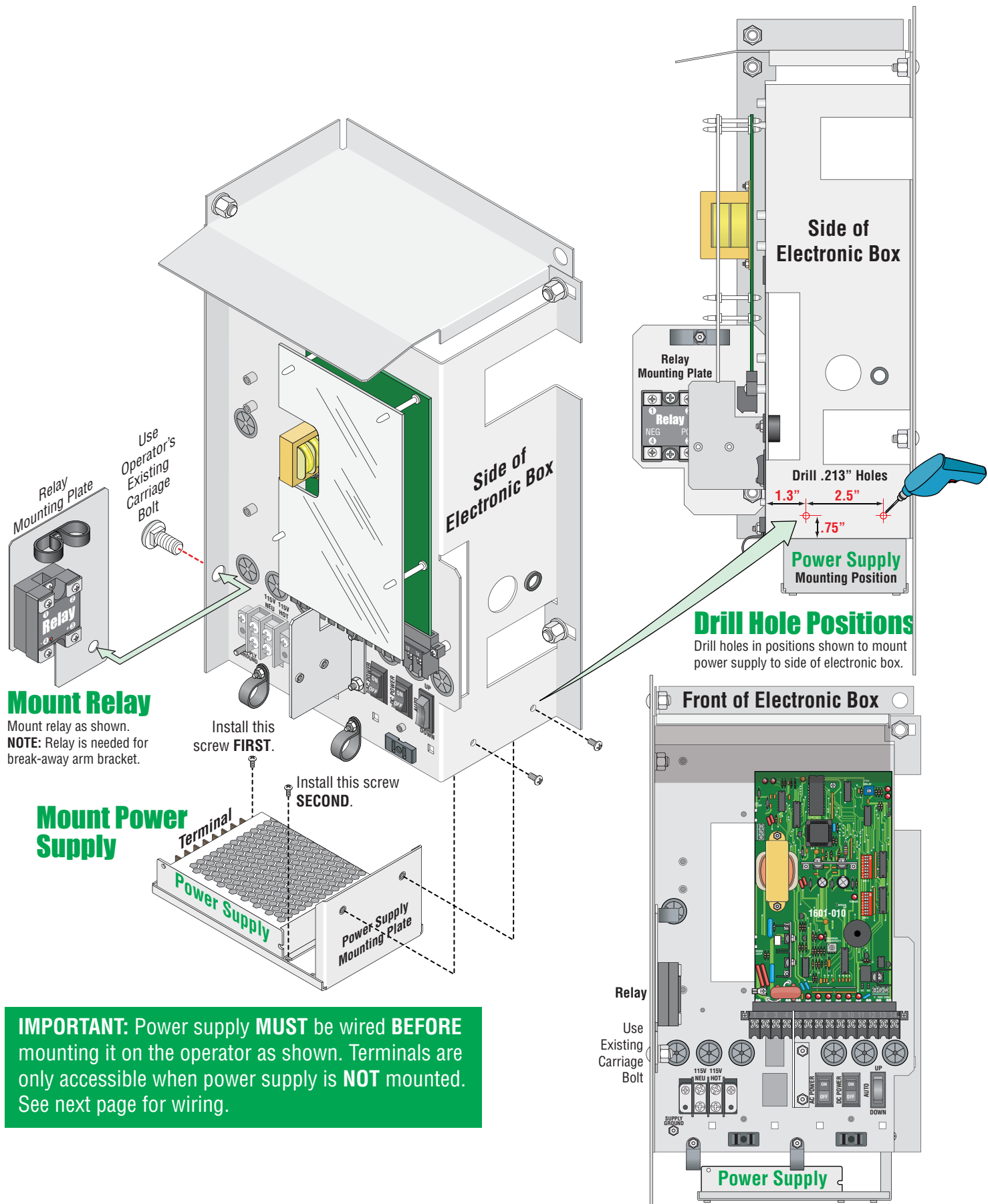
Aluminum Stopper **MUST** be in position when installing a **Optional** reverse edge. See page 10.



Attach wire harness to **BOTTOM** hole in back end of break-away bracket with **cable grip** for **either** option.

See page 8 for arm connection **options** and **securing wires** to break-away bracket.

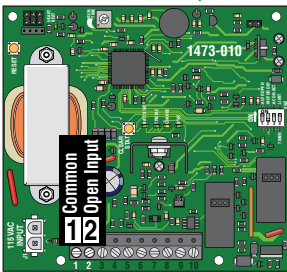
6 Mount Power Supply and Relay



7 Connect Wire Harness to Operator and Wiring OPTIONS

MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!

Convenience Open 1473
On **SOME** Model Operators

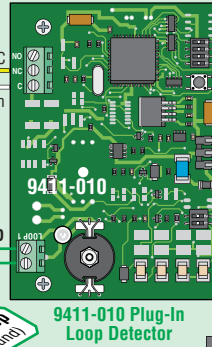


Note: Break-Away arm will **NOT** work with older model barrier operator with 2340-010 convenience open circuit board.

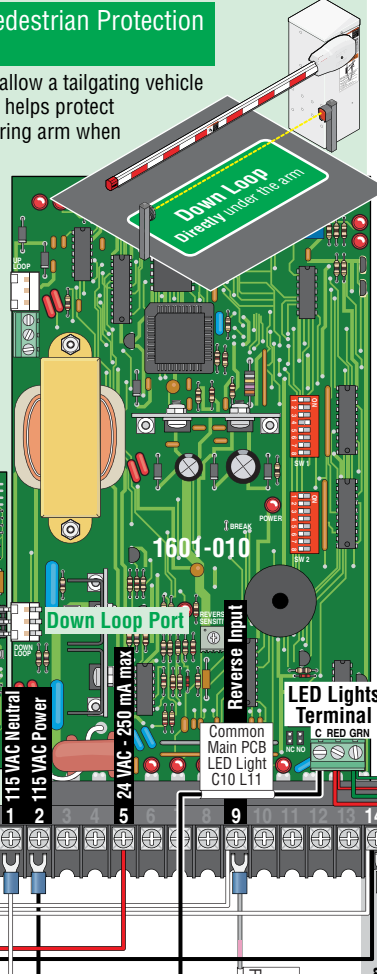
OPTIONAL DKS Pedestrian Protection System Set-up

Note: The arm will **NOT** allow a tailgating vehicle unauthorized entry, **BUT** helps protect pedestrians from a lowering arm when they are in the arm's swing path.

(Sold Separately)
Devices Required:
Plug-in Single Channel Loop Detector with Auxiliary Relay
P/N 9411-010
DKS Photocell
P/N 8080-057
See 1601-065 PDF for more info **when used.**
HIGHLY Recommended

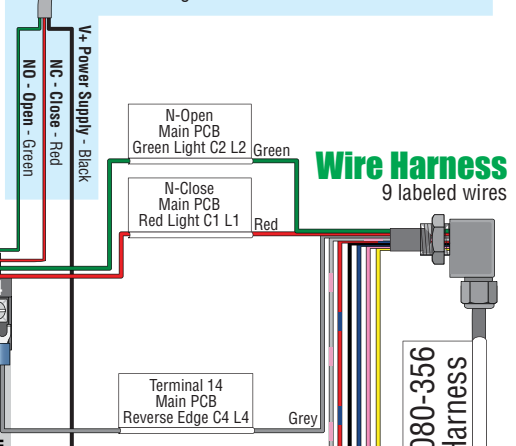
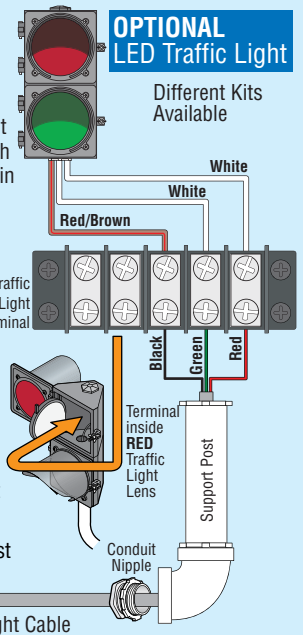


REQUIRED
Down Loop (In-Going)
White to #9
Red to #5
Black to #14



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

Recommended
6 Ft Cable / No Post
P/N 1603-221
6 Ft Cable / 35" Post
P/N 1603-222
11 Ft Cable / 95" Post
P/N 1603-223



SUPPLY GND

Required

Remove **EXISTING** wire FROM Main PCB Terminal 2 and connect it TO Relay #1

Relay
for Break-Away Sensors

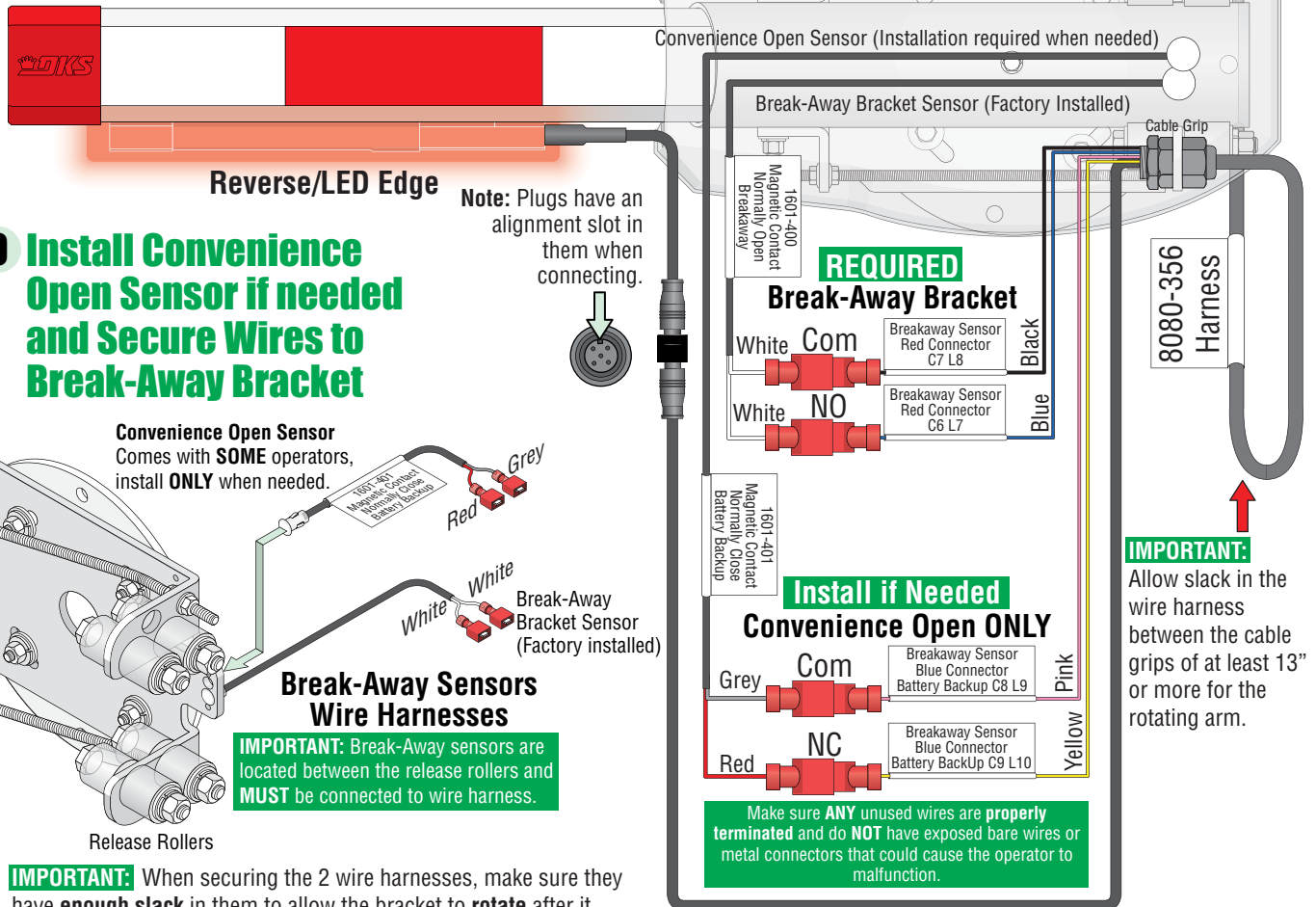
Keep wires clear of all moving parts.

Make sure **ANY** unused wires (Example: Convenience open **NOT** on your operator so wires are not used) are **properly terminated** and do **NOT** have exposed bare wires or metal connectors that could cause the operator to malfunction.

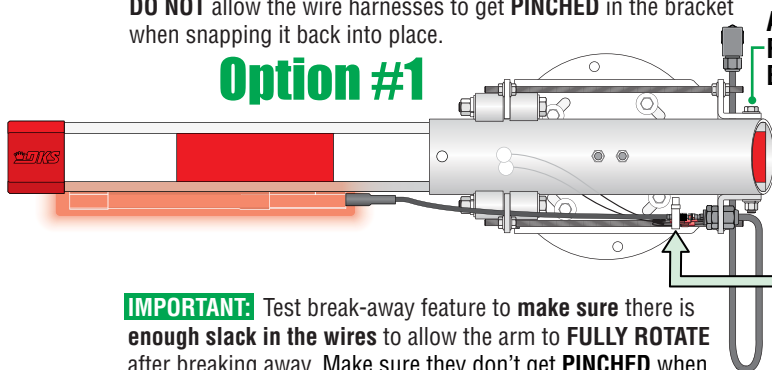
8 Connect Arm to Wire Harness

MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!

To Operator
See previous page

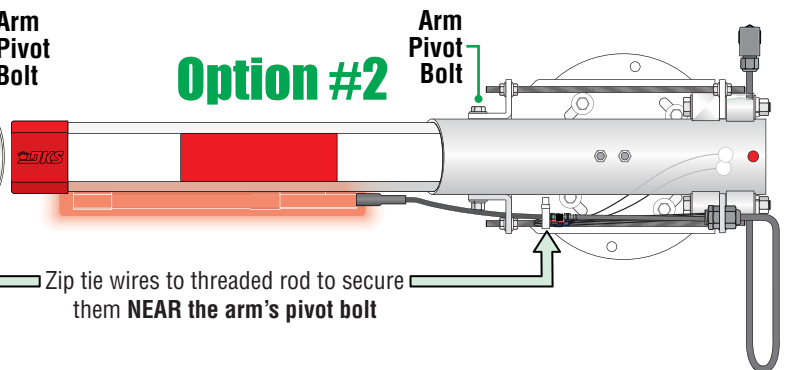


Option #1



IMPORTANT: Test break-away feature to **make sure** there is **enough slack in the wires** to allow the arm to **FULLY ROTATE** after breaking away. Make sure they don't get **PINCHED** when snapping the arm back in to place. Make sure the **plastic arm cover** fits over the wires and everything operates **smoothly**.

Option #2



Zip tie wires to threaded rod to secure them **NEAR** the arm's pivot bolt

10 Break-Away Arm Reset Procedure

If arm gets struck and breaks away, gate operator will automatically **SHUT DOWN** (Break-away sensors are tripped). 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. **NO Reset is necessary.** Normal operation can continue.

DO NOT OPERATE ARM WITHOUT BREAK-AWAY SENSORS FUNCTIONING.

14 Ft 2-Piece Octagon Arm Assembly

DoorKing Part Number

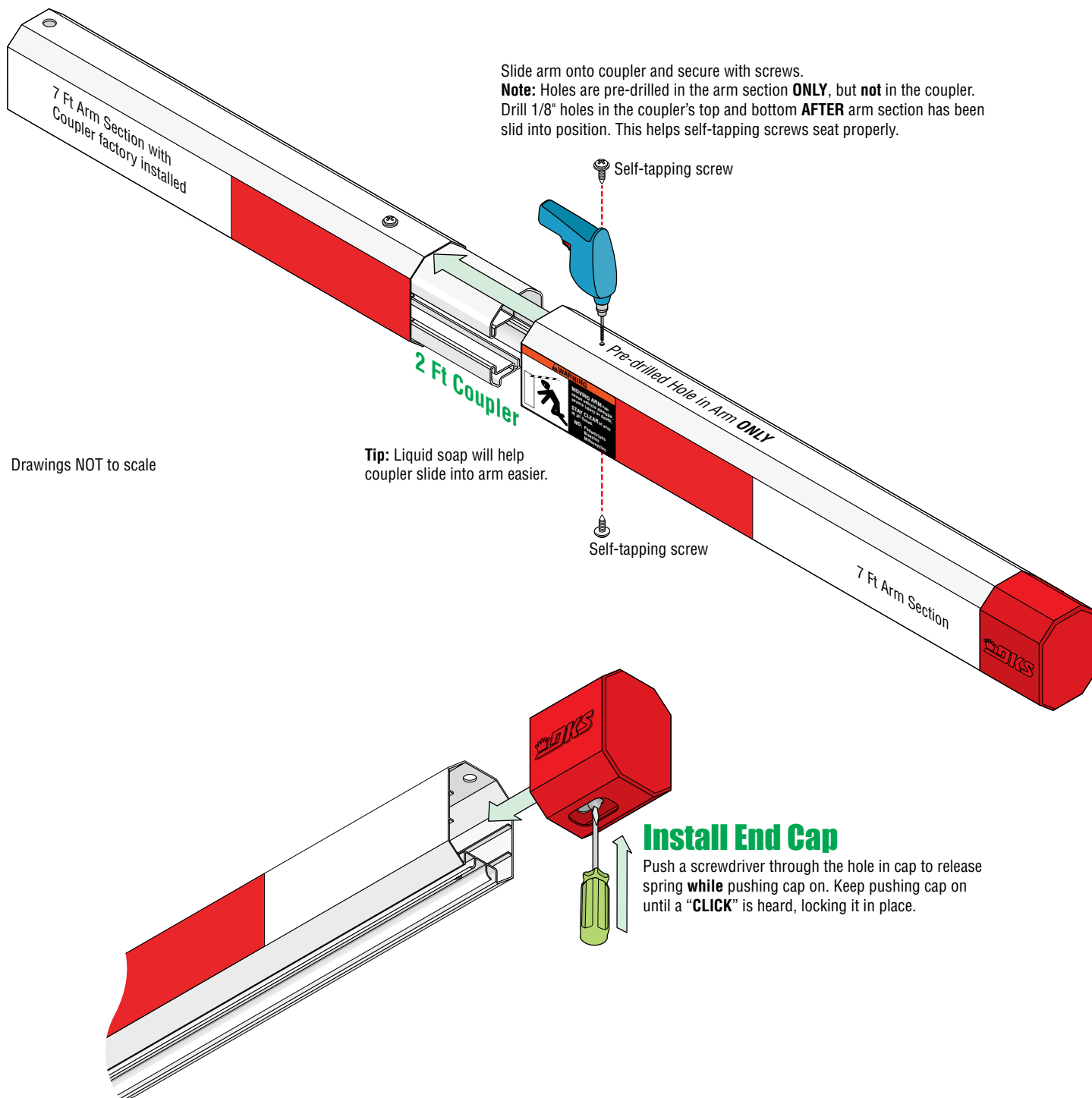
1601-567

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



Drawings NOT to scale

If Shortening Arm see page 12

1601-269-Y-10-26

Reverse Edge - Reverse/LED Edge Installation

DoorKing Part Numbers:

Reverse Edge

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

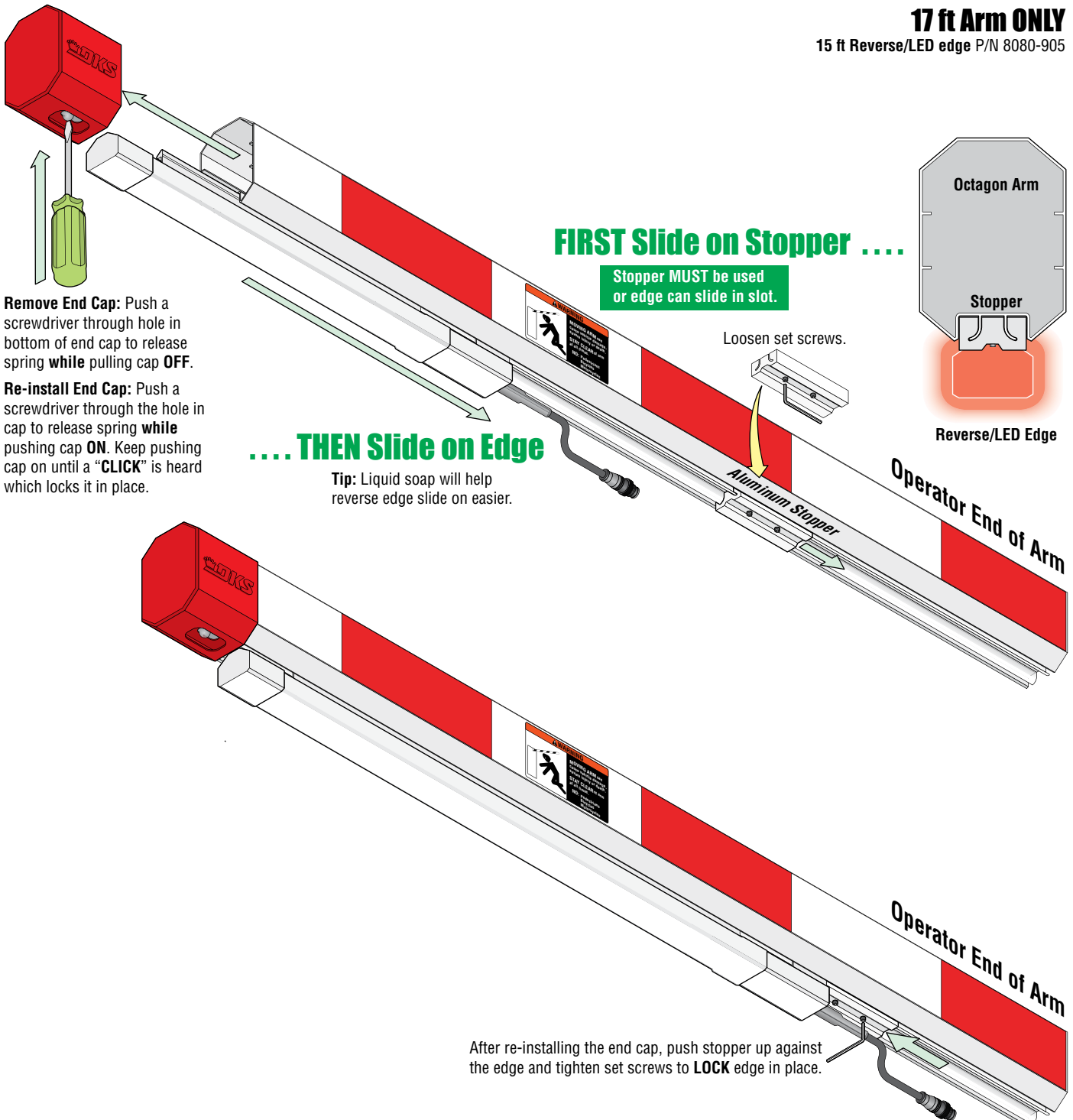
Reverse/LED Edge

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

17 ft Arm ONLY

15 ft Reverse/LED edge P/N 8080-905

Installation



If Shortening a 14-ft Arm see page 12

14 Ft Rubber Bumper Installation

DoorKing Part Number

8080-089

14 Ft Rubber Bumper

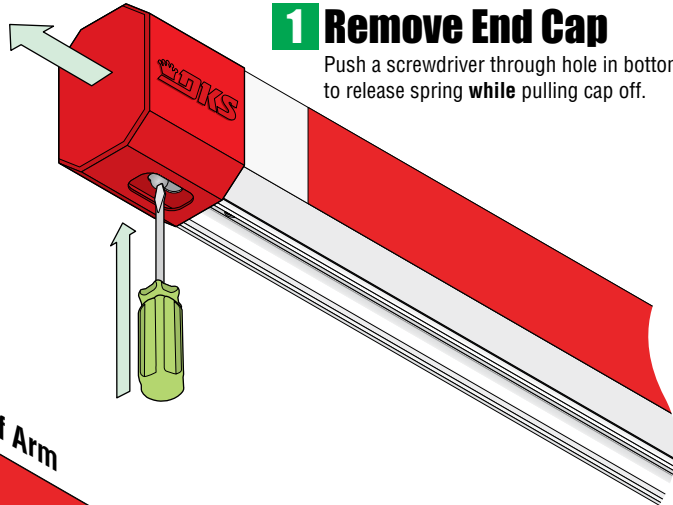
This rubber bumper is designed to install on a 14 ft 1-piece or 2-piece **octagon arm** (not included) for a 1601, 1603 auto-spikes, 1620 lane barrier or a 1625 wedge barrier gate operator. It **CANNOT** be used on a 1602 operator. it offers **MINIMAL** safety protection.

Installation

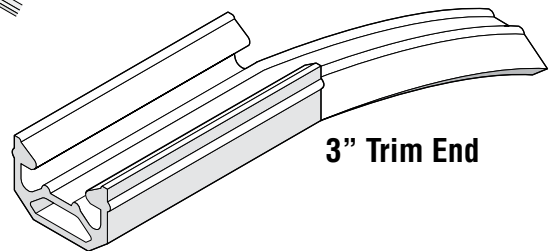
Drawings NOT to scale

1 Remove End Cap

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



Cap End of Arm



3" Trim End

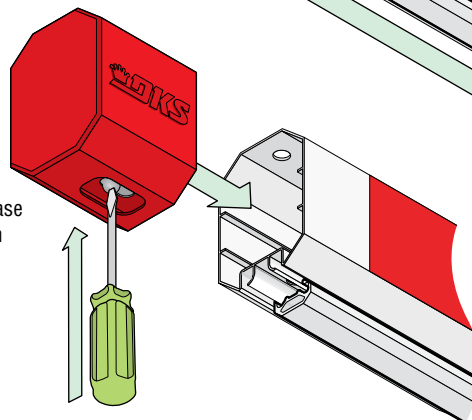
2 Slide on Rubber Bumper

The 3" trim end **MUST** slide 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.



Operator End of Arm

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

Reverse/LED Edge

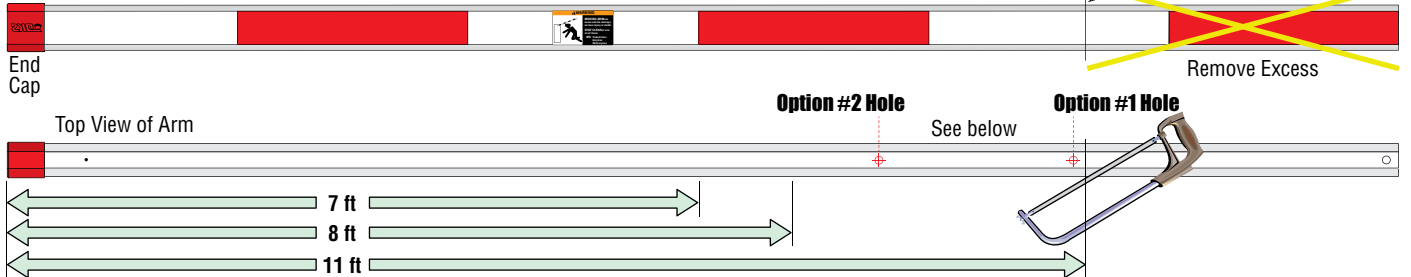
(Arm cut to 7 ft) **5 Reverse/LED edge** P/N 8080-905
 (Arm cut to 8 ft) **6 ft Reverse/LED edge** P/N 8080-906
 (Arm cut to 11 ft) **9 ft Reverse/LED edge** P/N 8080-909
 (14 ft Arm) **12 ft Reverse/LED edge** P/N 8080-912

A 14 ft 1-piece **OR** 2-piece arm can be shortened to fit **different** length reverse edges. The shortened arm lengths are shown **depending on the length of the reverse edge chosen**. Follow the diagrams below depending on which style arm you have selected to shorten.

Note: Reverse edges **CANNOT** be cut down. They **MUST** remain intact.

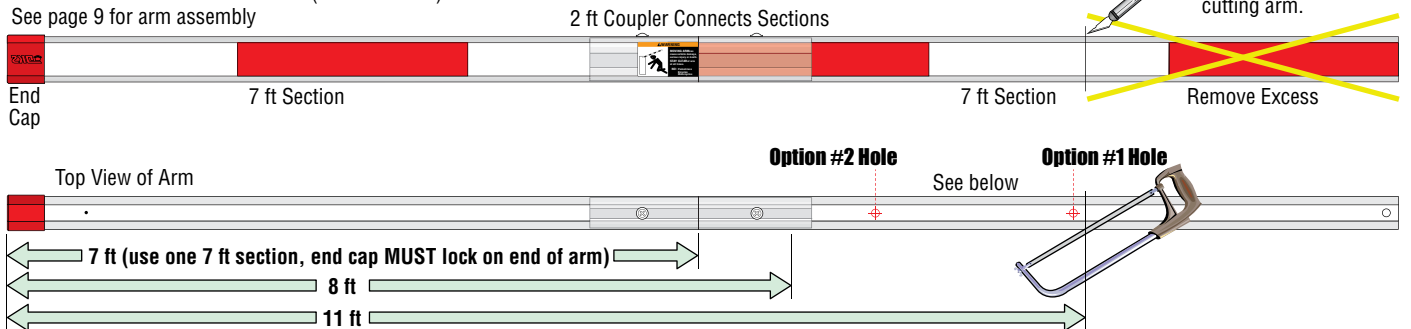
Drawings NOT to scale

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



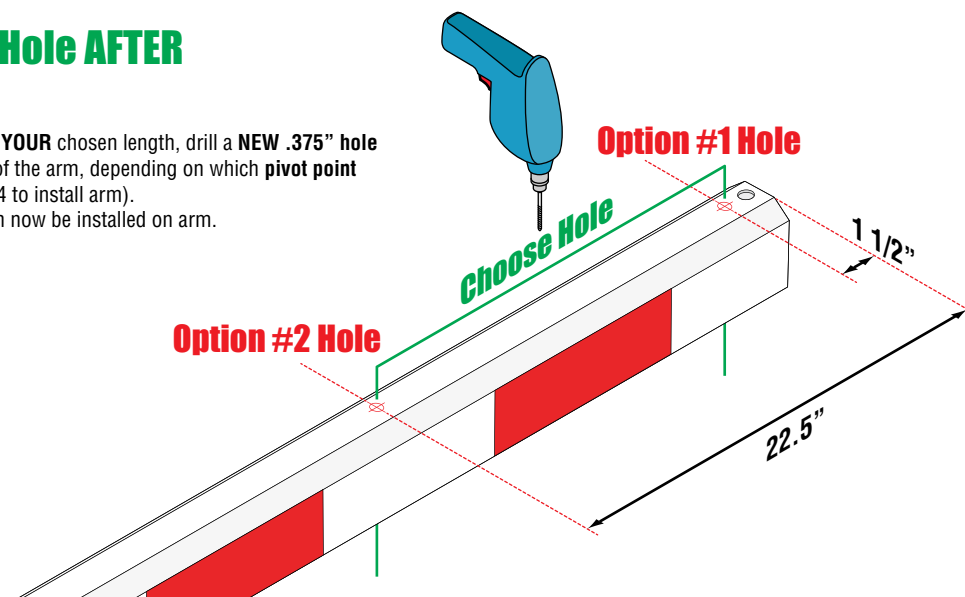
2-Piece 14 Ft Arm (P/N 1601-567)

See page 9 for arm assembly



Drill a .375" Pivot Hole AFTER Shortening Arm

AFTER cutting down arm to **YOUR** chosen length, drill a **NEW .375"** hole thru the **TOP** and **BOTTOM** of the arm, depending on which **pivot point** you have chosen (see page 4 to install arm). 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 on a 1601 **OR** 1603 auto-spikes. It will extend a 14 ft octagonal arm an **extra three feet**. The 15 ft reverse edge is sold separately but **HIGHLY recommended** for safety when lowering this **very long arm**.

DoorKing Part Numbers:

1602-303

Octagon Arm 3-ft Extension Kit

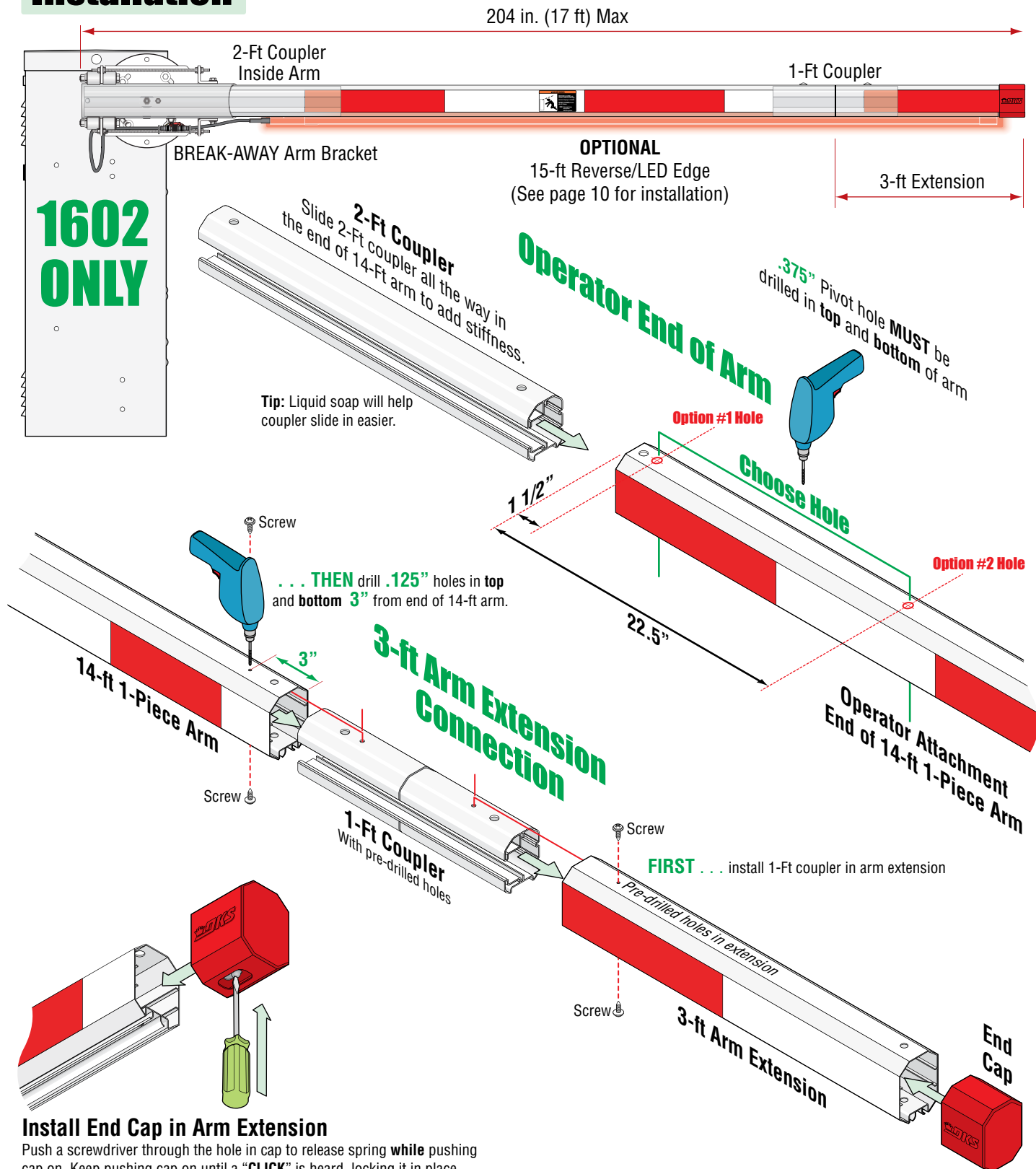
8080-915

15-ft Reverse/LED Edge

(Sold Separately

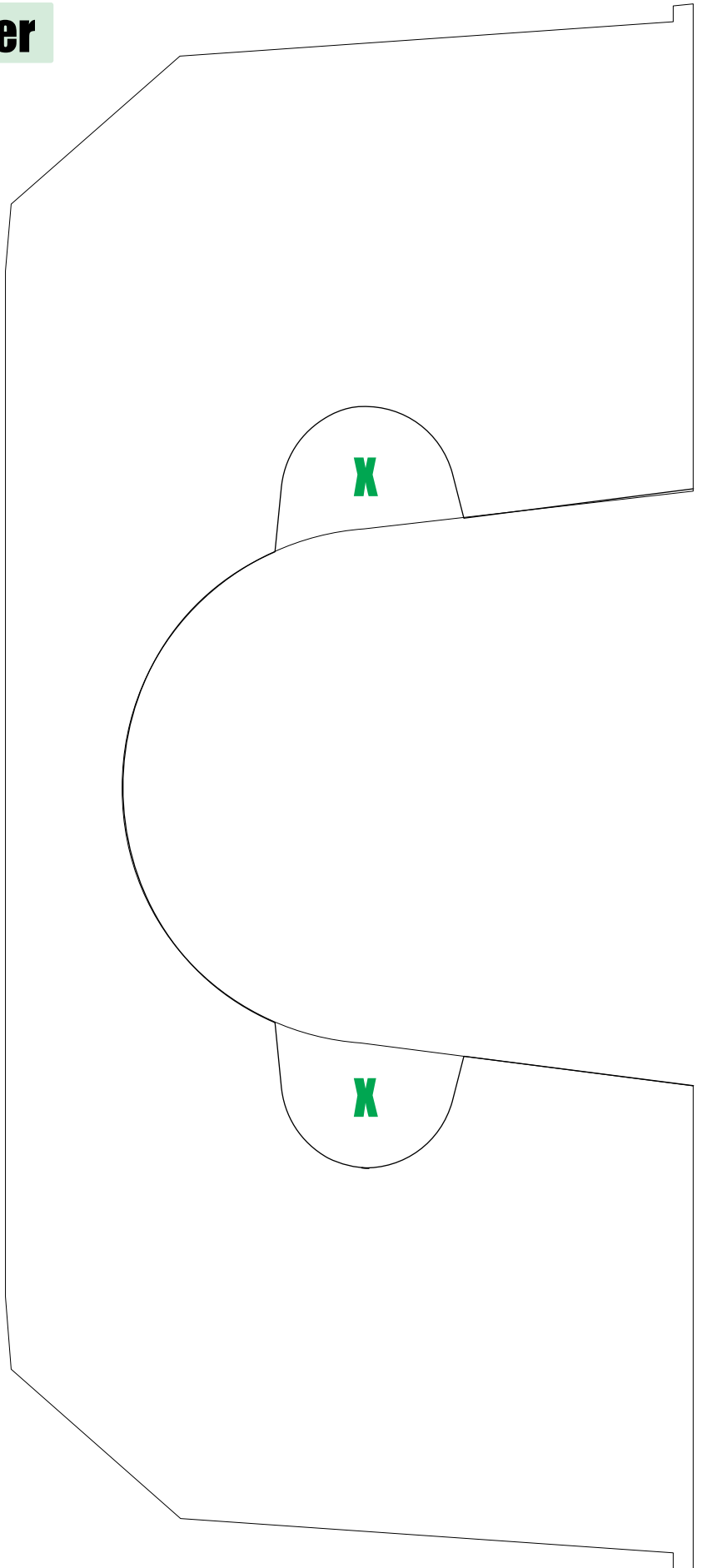
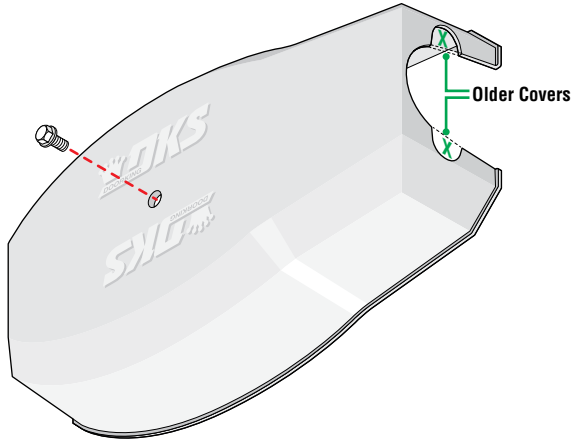
See page 10)

Installation



Older Existing Arm Cover

Older existing plastic arm cover will need to have a notch cut out for a **OCTAGON** Arm's **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% (Actual Size)
Drawing to scale