

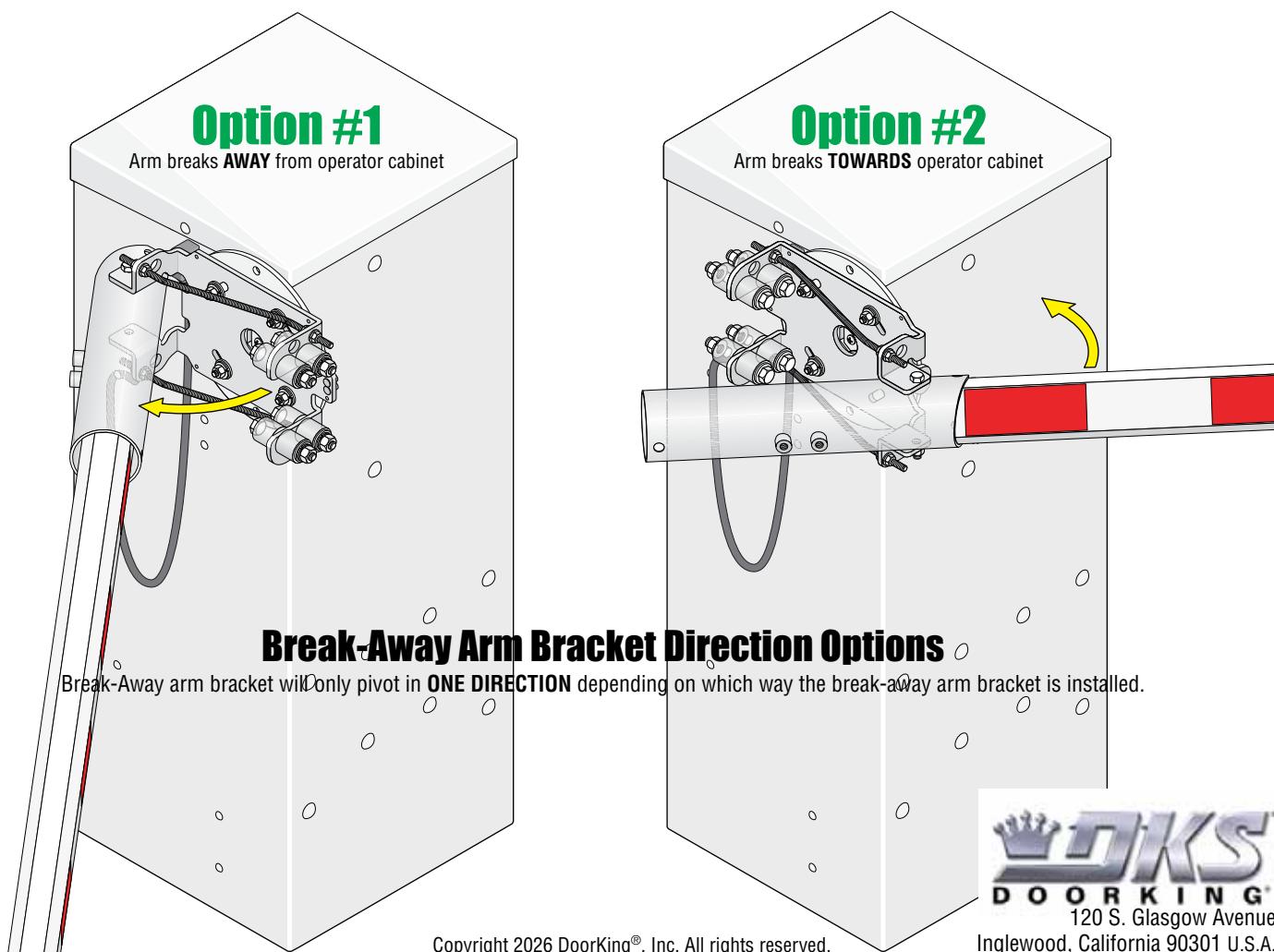
1601 / 1602 BREAK-AWAY OCTAGON ARM KIT

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.

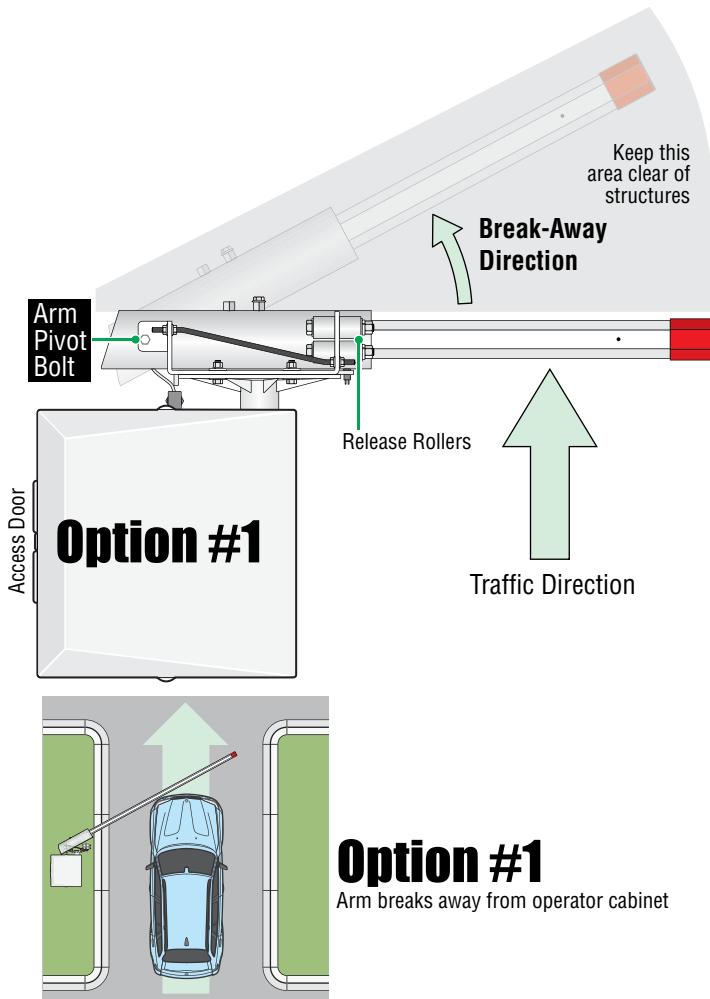
Break-Away Octagon Arm Bracket Installation Steps:

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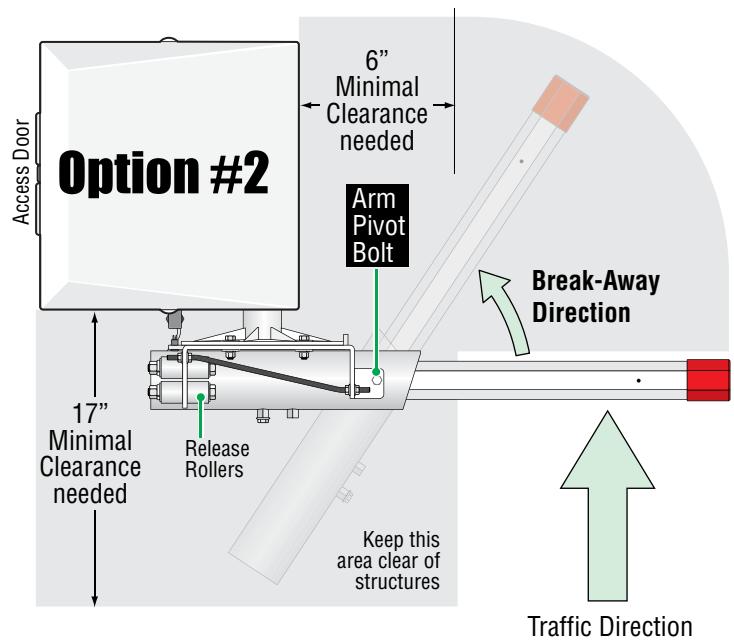
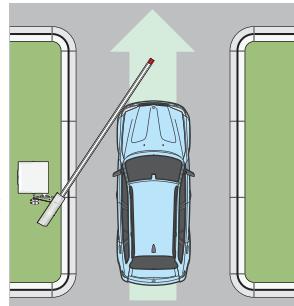
Break-Away Arm Direction Options

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).



Option #2

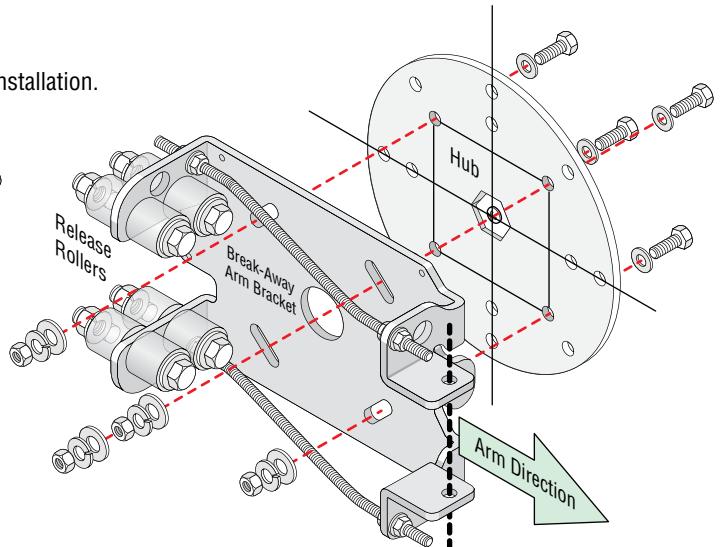
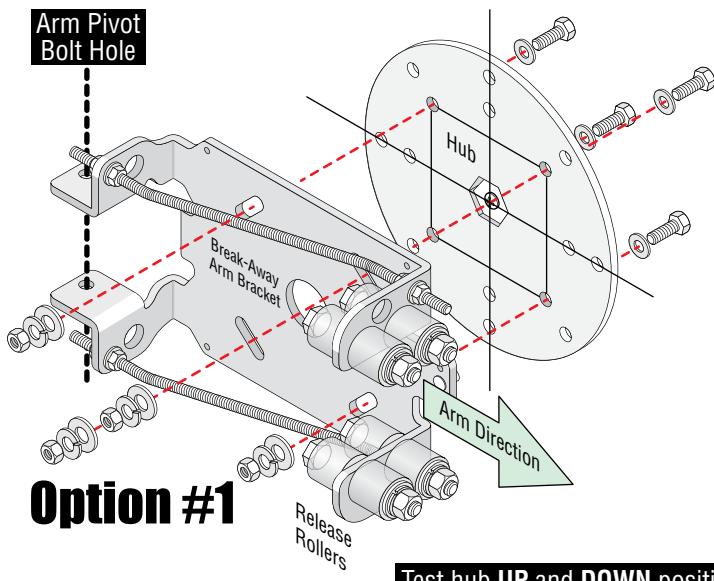
Arm breaks towards operator cabinet



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.

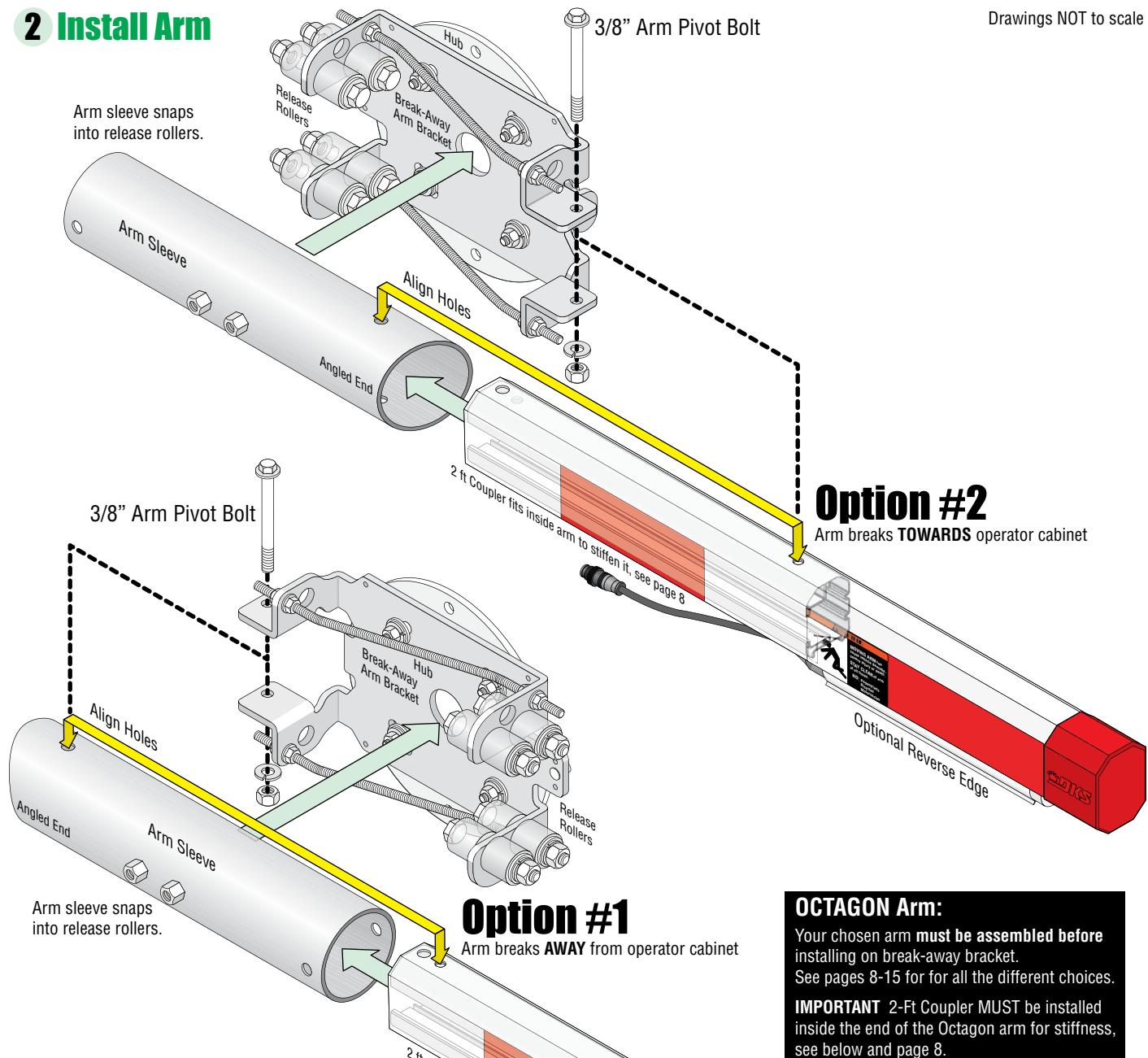


Test hub **UP** and **DOWN** position
before installing bracket.

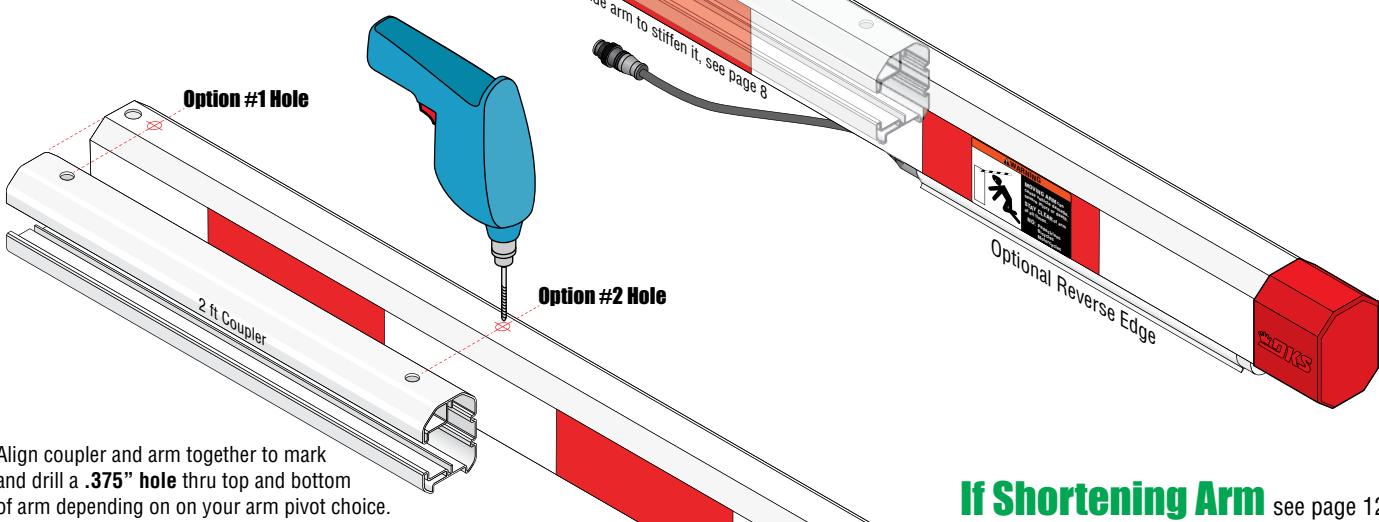
Hub can be mounted on **EITHER** side of operator.

2 Install Arm

Drawings NOT to scale



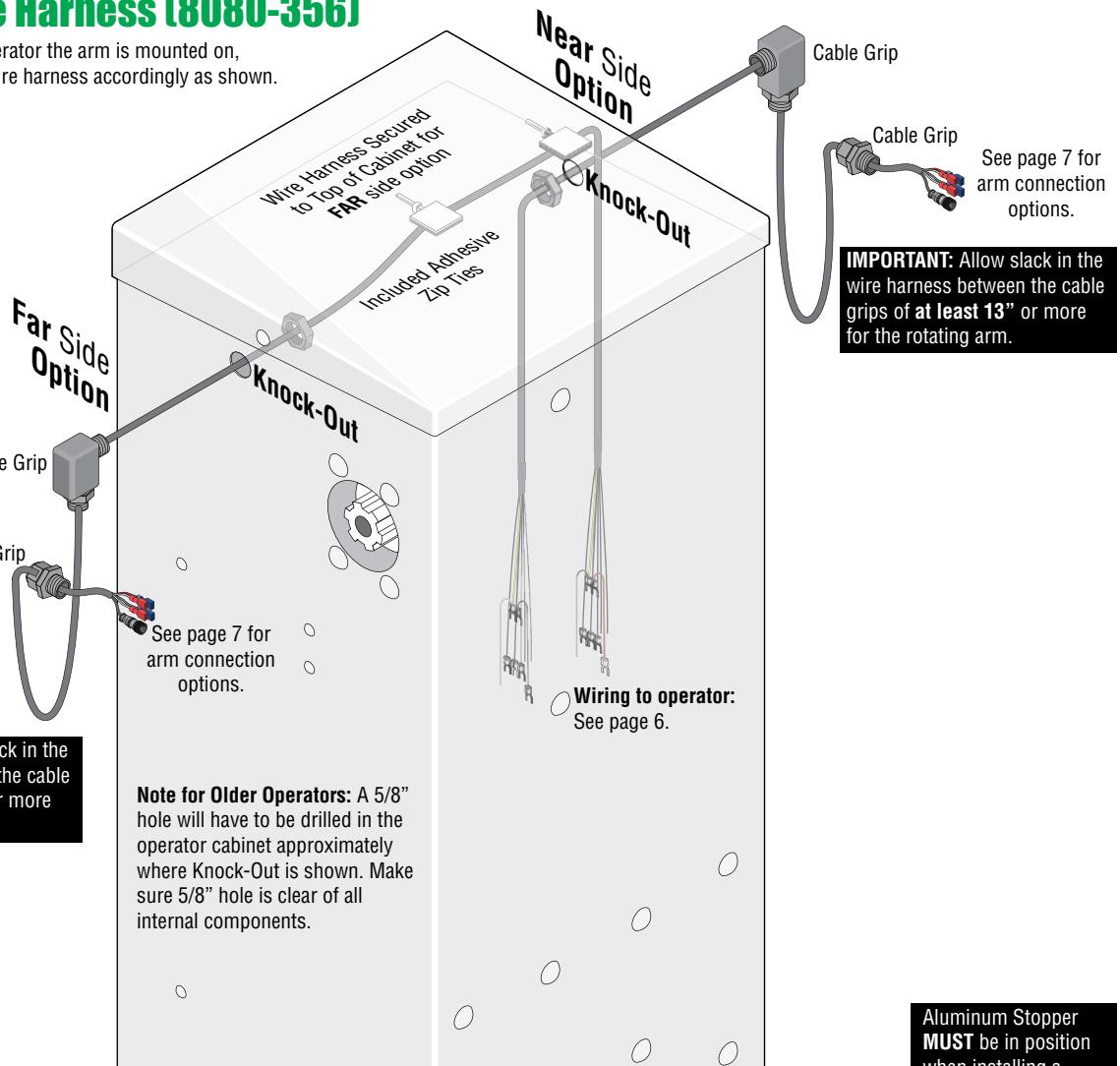
Drill a .375" Pivot Hole in Arm



If Shortening Arm see page 12

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

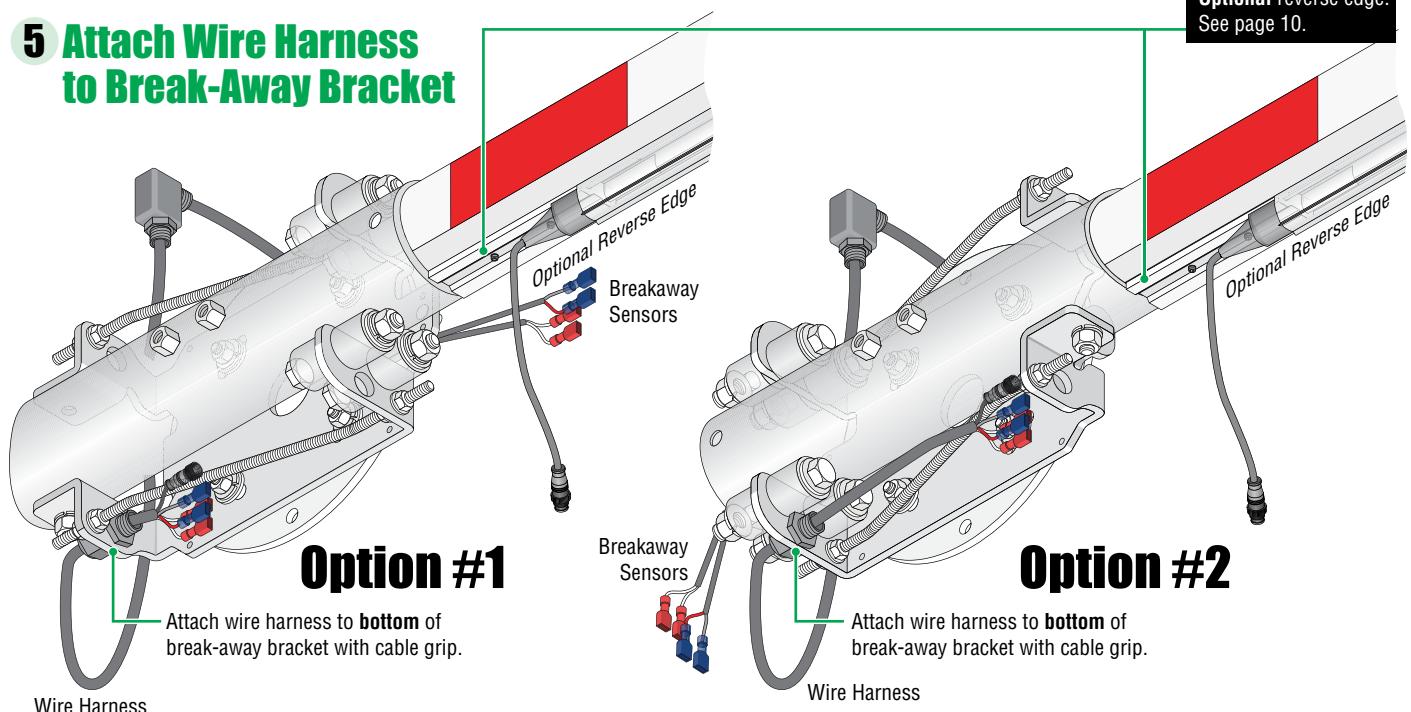
Note for Older Operators: A 5/8" hole will have to be drilled in the operator cabinet approximately where Knock-Out is shown. Make sure 5/8" hole is clear of all internal components.

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

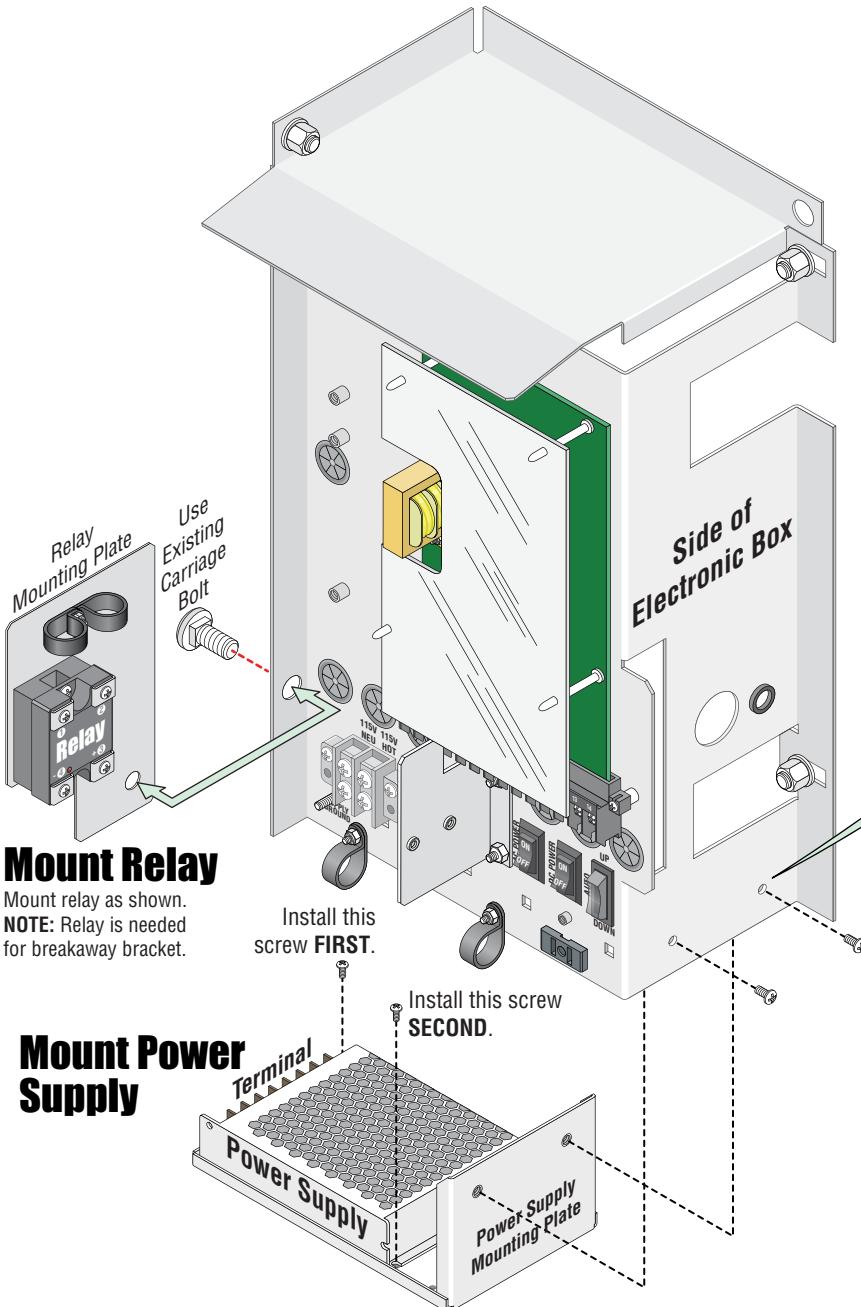
Wiring to operator: See page 6.

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

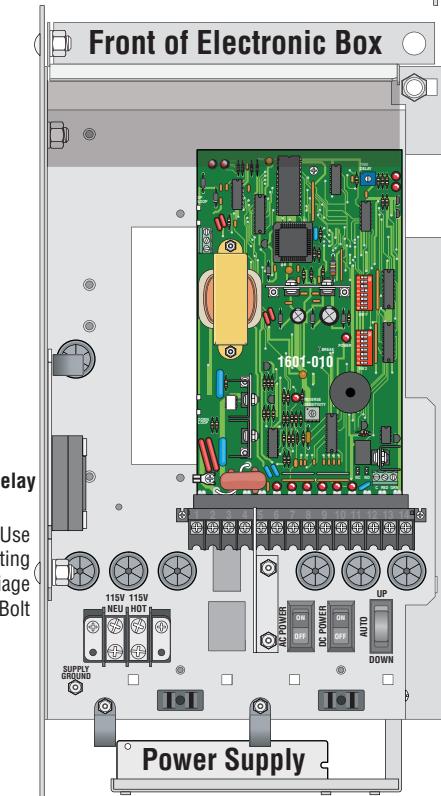
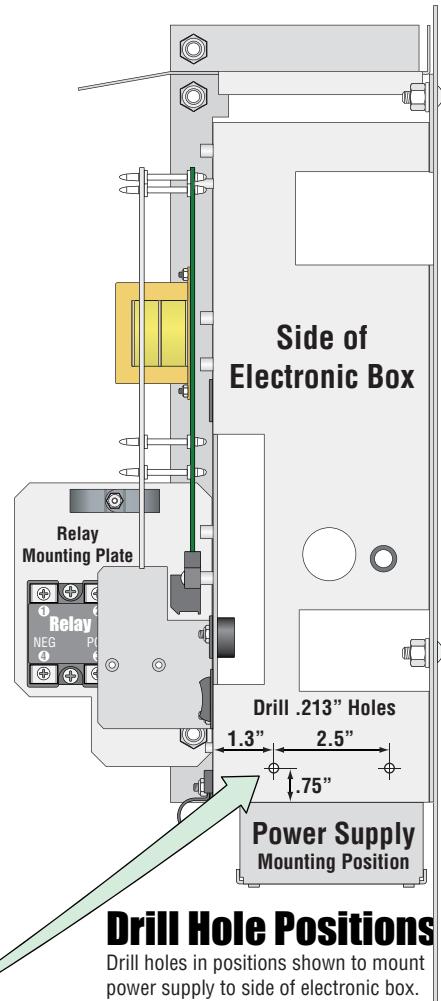
5 Attach Wire Harness to Break-Away Bracket



6 Mount Power Supply and Relay



IMPORTANT: Power supply **MUST** be wired **BEFORE** mounting the power supply mounting plate as shown.
See next page.

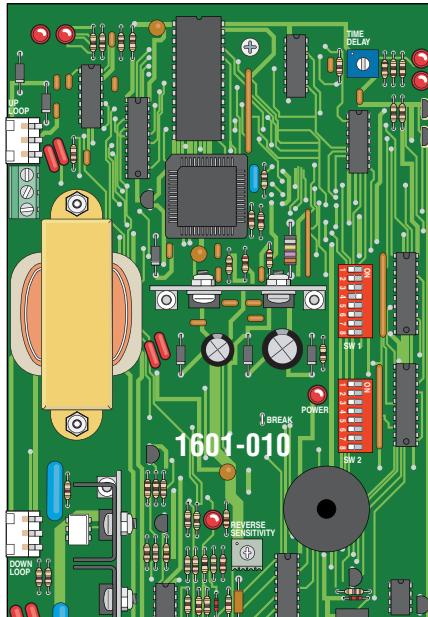
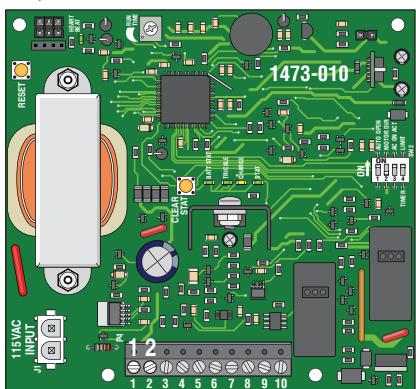


7 Octagon Break-Away Arm - Wiring to Operator

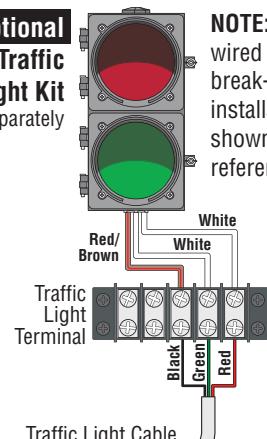
MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!

OPTIONAL Convenience Open 1473

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



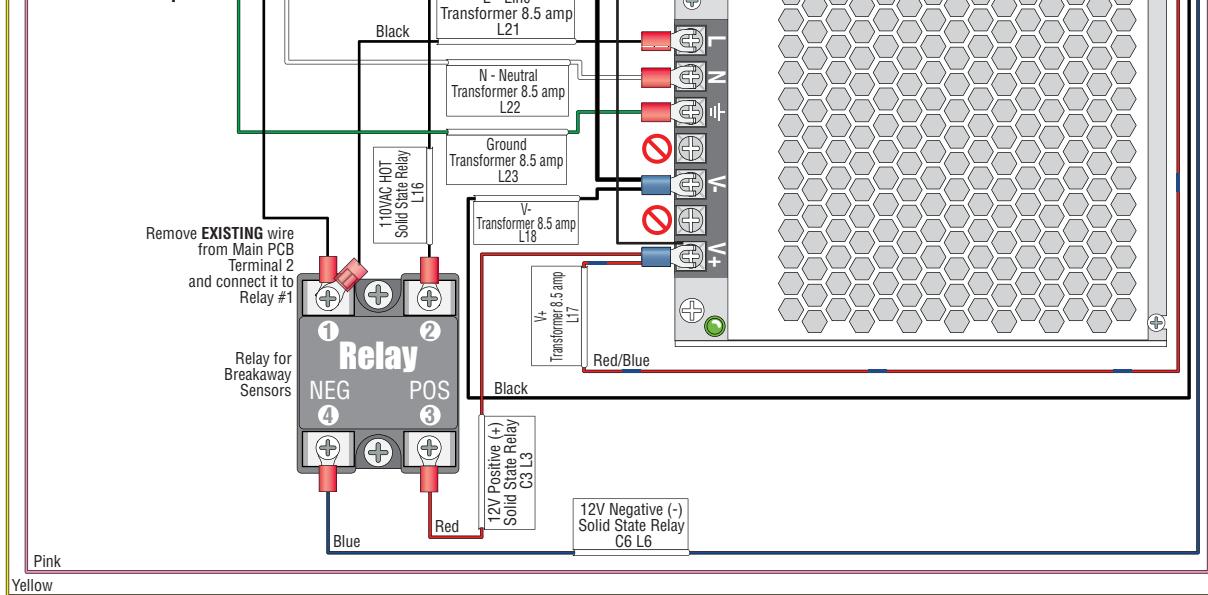
Optional LED Traffic Light Kit Sold Separately



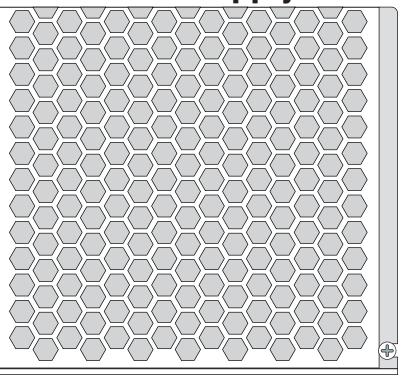
NOTE: The traffic light is wired together with the break-away arm in some installations, so it's shown here for wiring reference. See Traffic Light manual 1603-264 for more info when used.

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



1601-426 Power Supply 8.5A



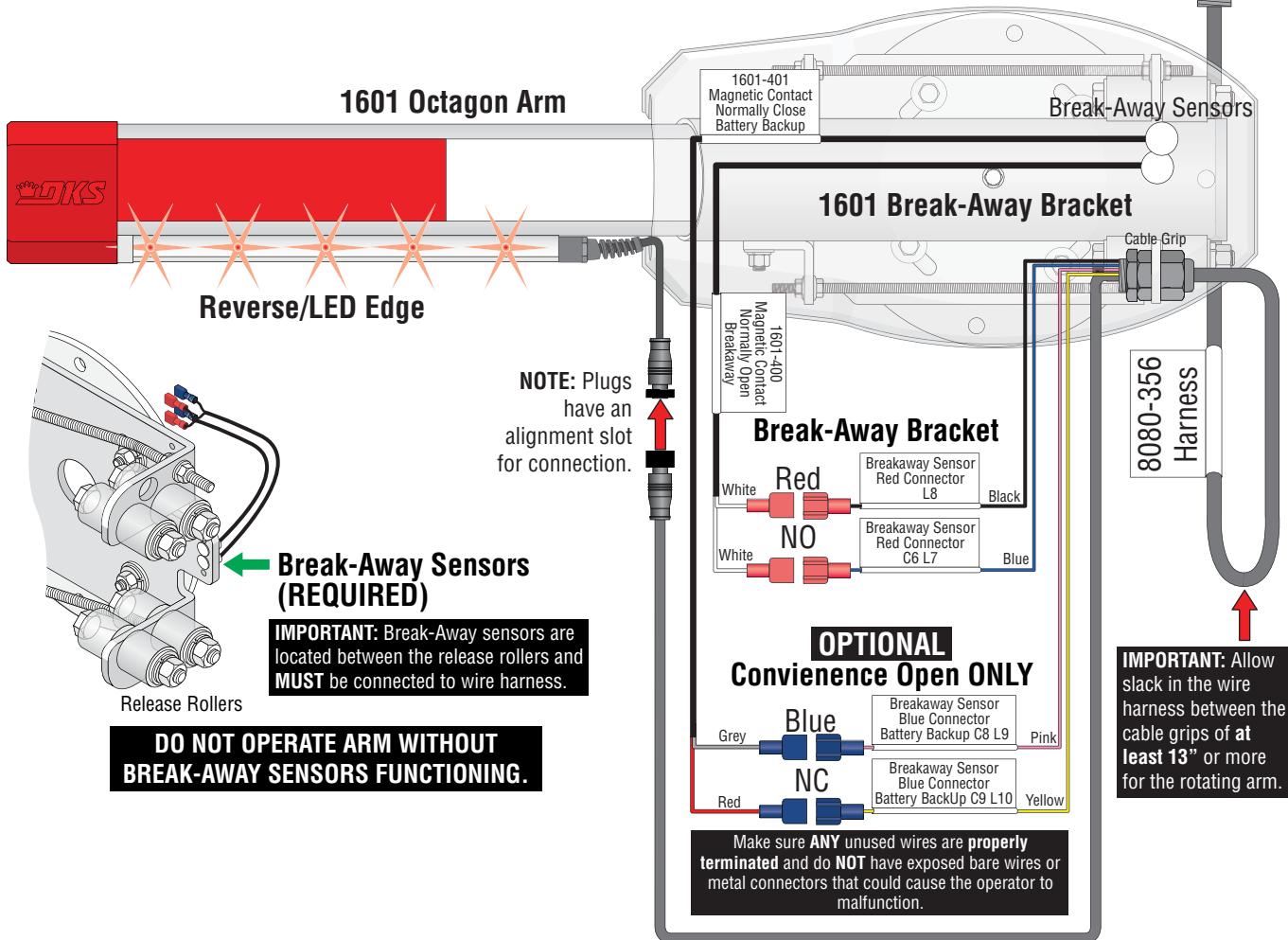
8080-356
Harness

To Arm See next page

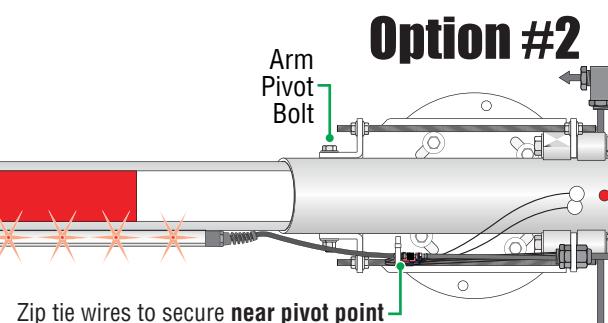
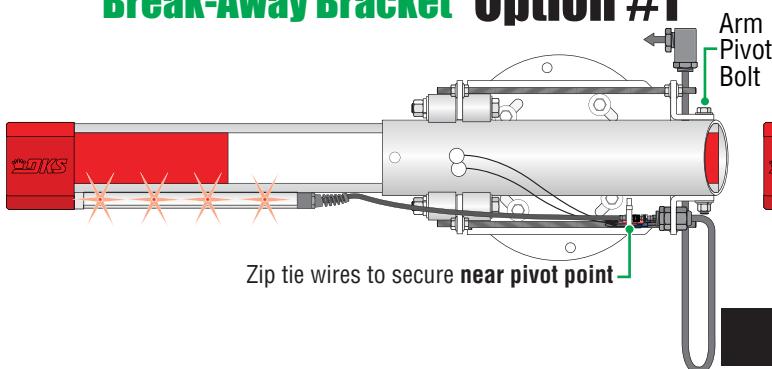
8 Connect Arm to Wire Harness (8080-356)

MAKE SURE ALL POWER IS TURNED OFF TO OPERATOR!

To Operator
See previous page



9 Secure Wires to Break-Away Bracket Option #1



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

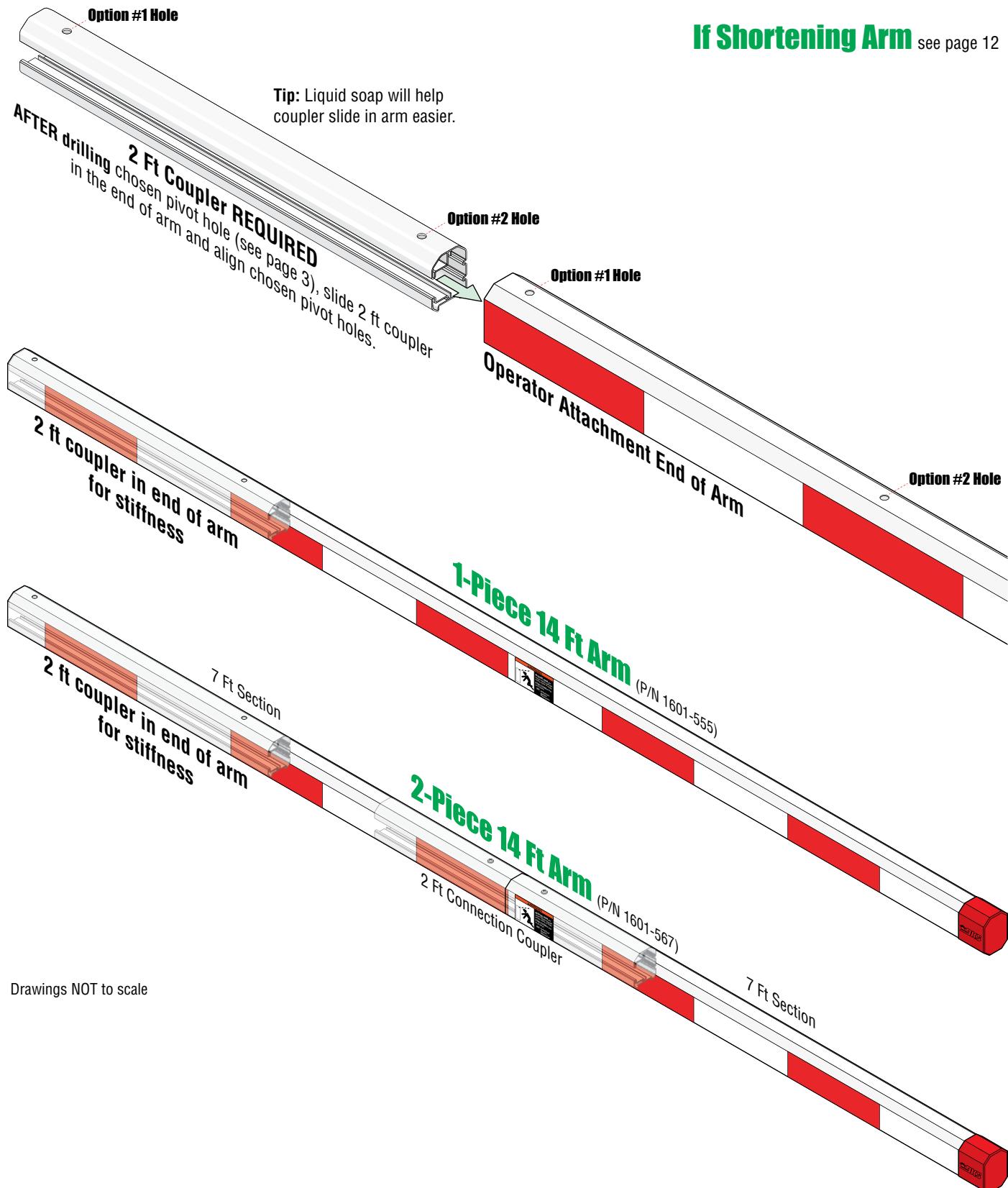
10 Break-Away Arm Reset Procedure

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.



14 Ft 2-Piece Octagon Arm Assembly

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.

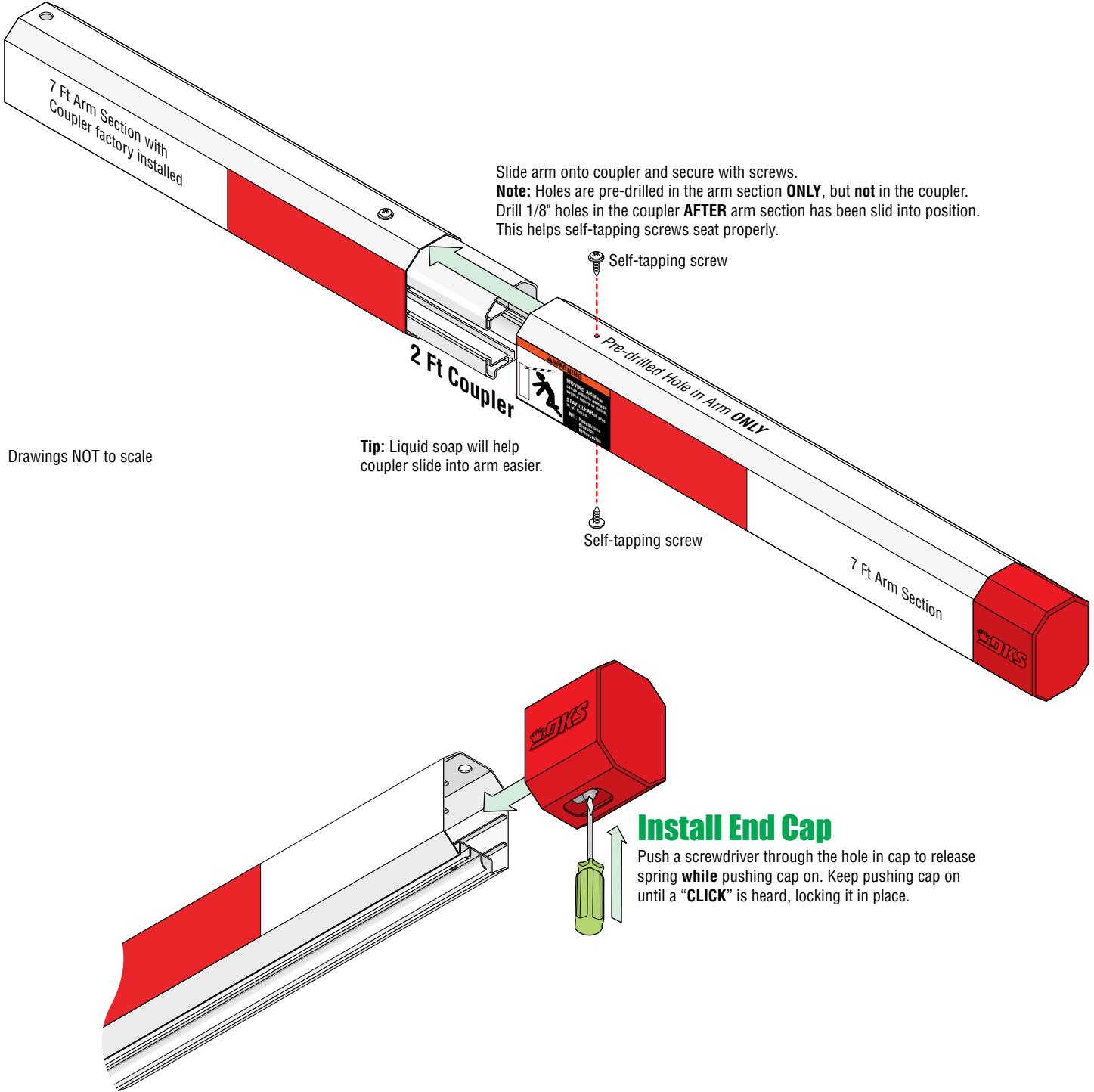
A reverse edge **SHOULD** be installed on this arm. It is sold separately but **highly recommended** for safety, see next page.

DoorKing Part Number

1601-567

14 Ft 2-Piece Octagon Arm Kit

Assemble 2-Piece Arm



If Shortening Arm see page 12

1601-269-V-2-26

Reverse Edge / Red Green LED Edge Installation

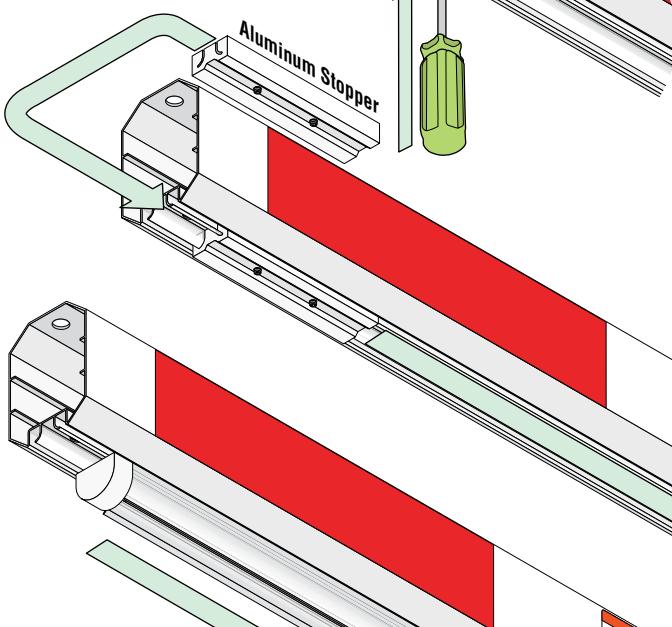
These kits are designed to install on a **Break-Away** 14 ft 1-piece or 2-piece **OCTAGON** arm (arm can be shortened if desired) on a 1601 barrier gate operator. They **CANNOT** be used on a 1602 or 1603 operator.

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

Installation

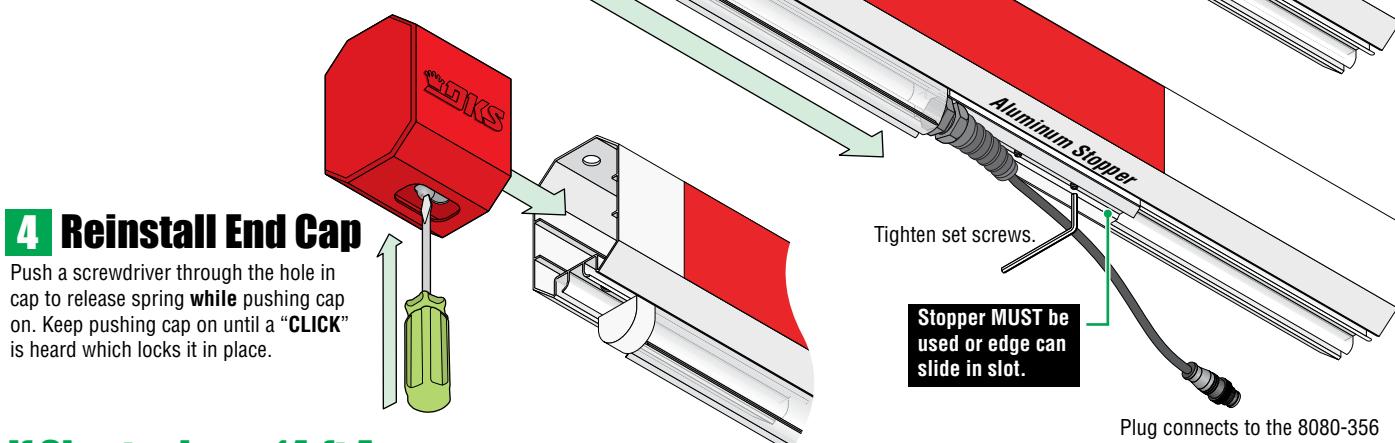
Drawings NOT to scale

2 Slide on Stopper



3 Slide on Edge

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



If Shortening a 14-ft Arm

see page 12

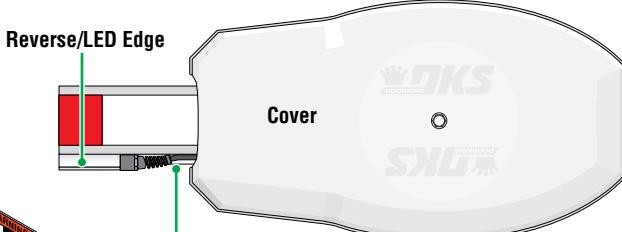
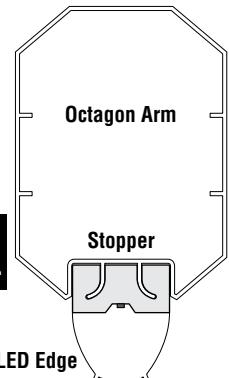
DoorKing Part Numbers:

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



14 Ft Rubber Bumper Installation

DoorKing Part Number

8080-089

14 Ft Rubber Bumper

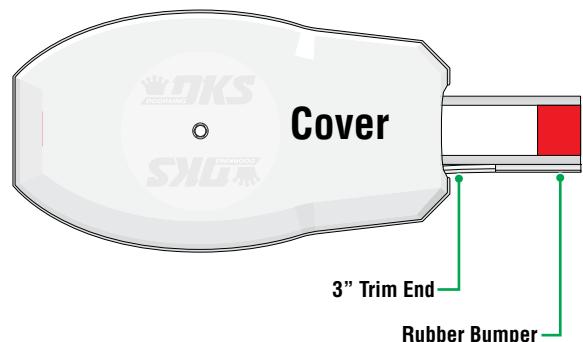
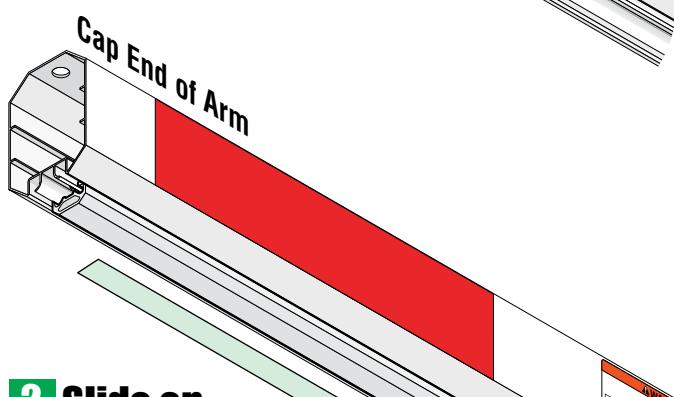
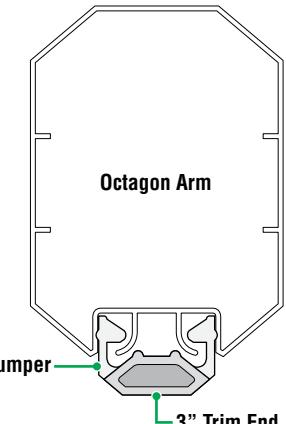
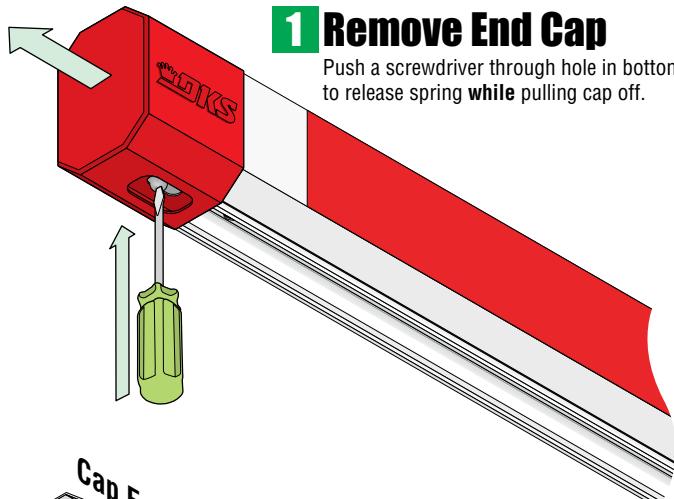
This rubber bumper is designed to install on a 14 ft 1-piece or 2-piece **octagon arm** (not included) for a 1601 or 1603 barrier gate operator. It **CANNOT** be used with a 1602 operator.

Installation

Drawings NOT to scale

1 Remove End Cap

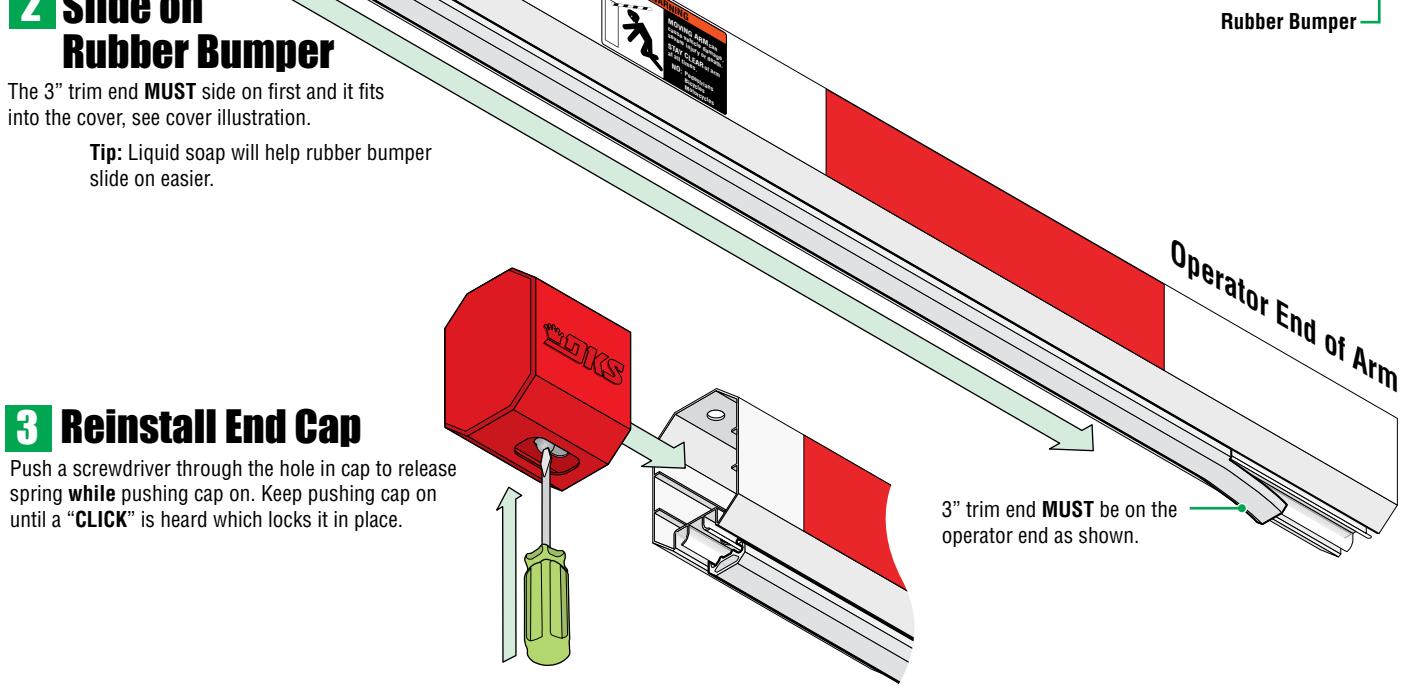
Push a screwdriver through hole in bottom of end cap to release spring **while** pulling cap off.



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.

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

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

Drawings NOT to scale

DoorKing Part Numbers:

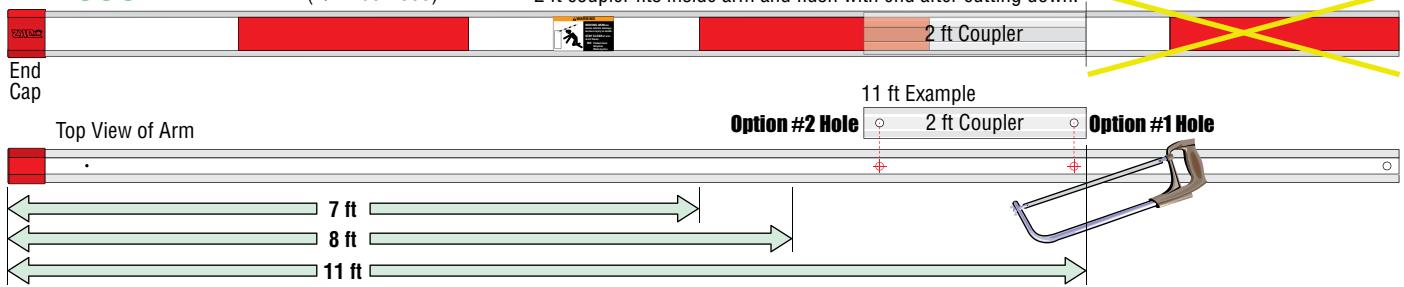
Reverse Edge

(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

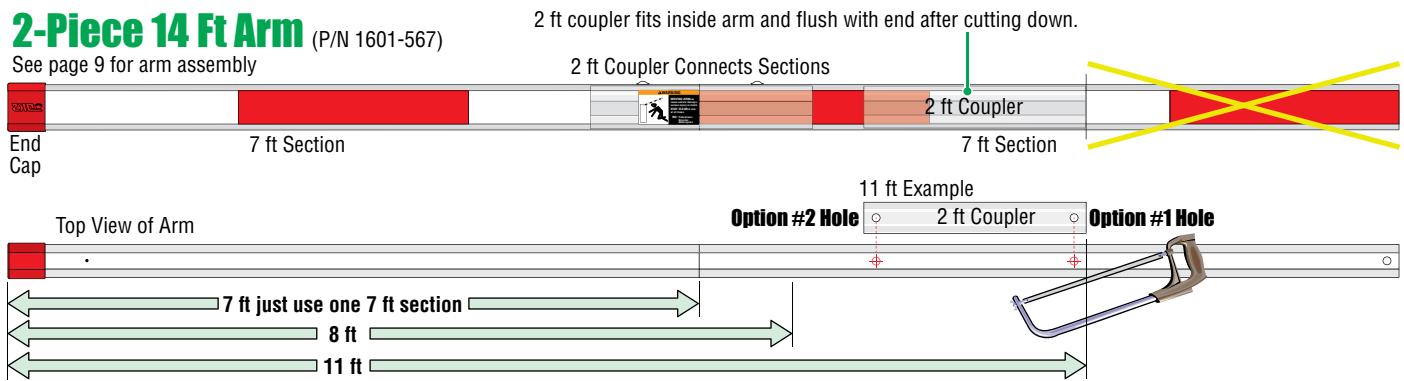
(Arm cut to 7 ft) **5 ft LED/edge** P/N 8080-905
 (Arm cut to 8 ft) **6 ft LED/edge** P/N 8080-906
 (Arm cut to 11 ft) **9 ft LED/edge** P/N 8080-909
 (14 ft Arm) **12 ft LED/edge** P/N 8080-912

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

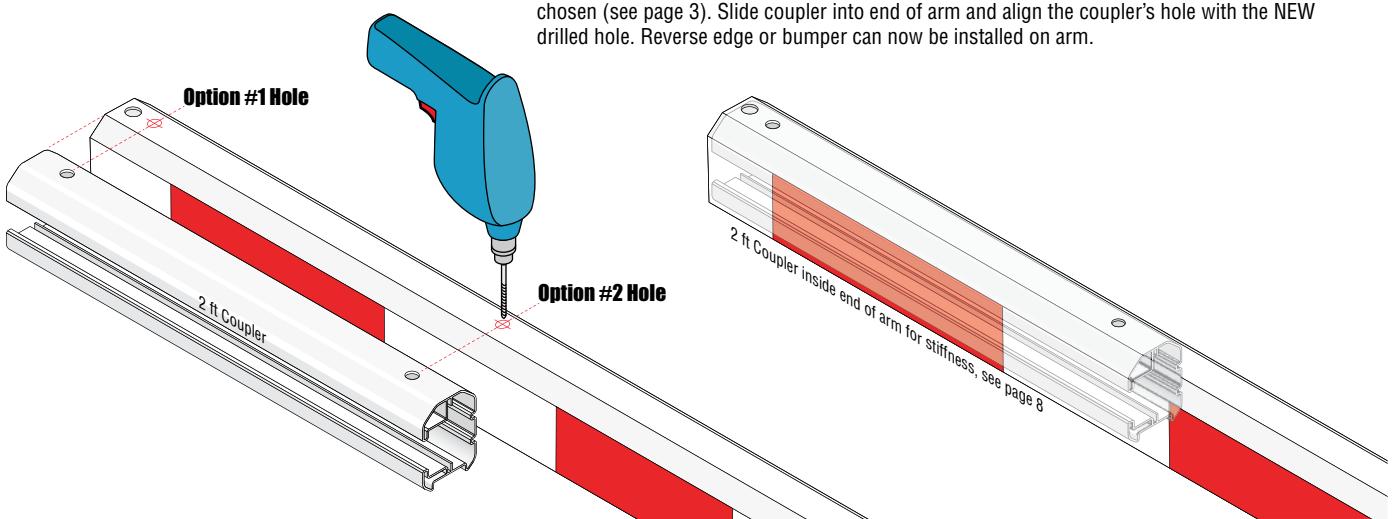


2-Piece 14 Ft Arm (P/N 1601-567)

See page 9 for arm assembly



Drill a .375" Pivot Hole in 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.

DoorKing Part Numbers:

1602-303

Octagon Arm 3-ft Extension Kit

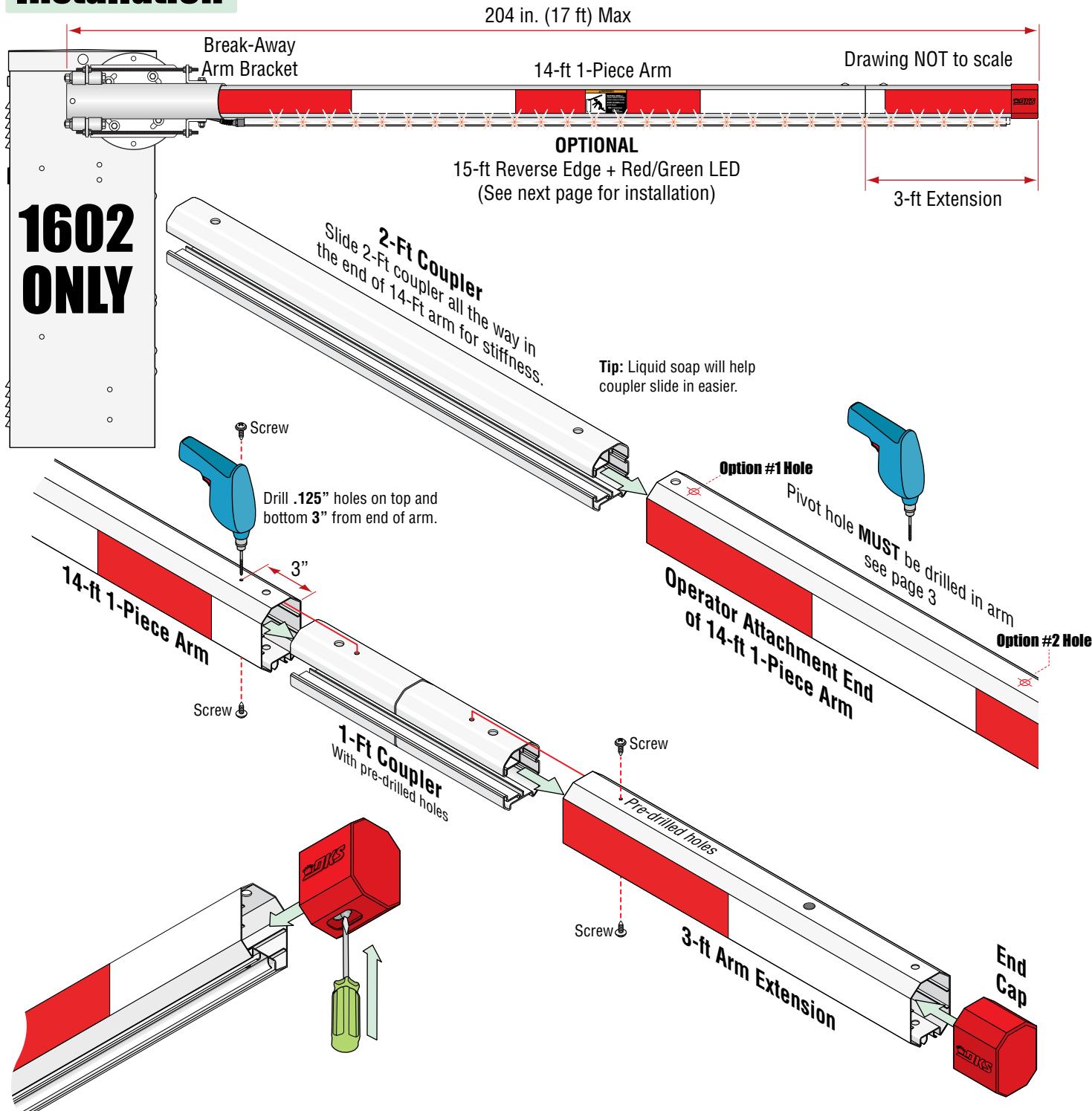
8080-915

15-ft Reverse Edge + Red/Green LED

(Sold Separately)

See next page)

Installation



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

DoorKing Part Number:

8080-915

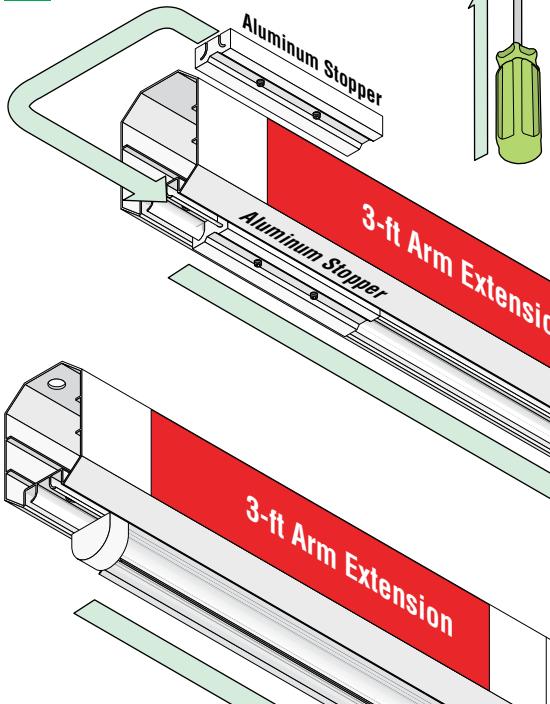
15-ft Reverse Edge + Red/Green LED
(Sold Separately)

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

2 Slide on Stopper



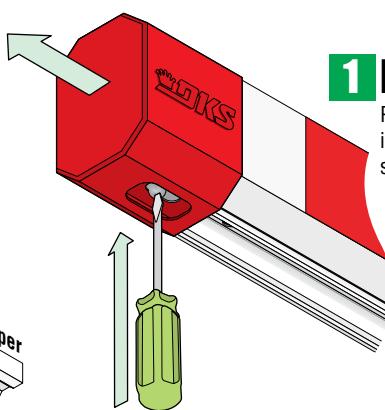
3 Slide on Edge

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

Drawings NOT to scale

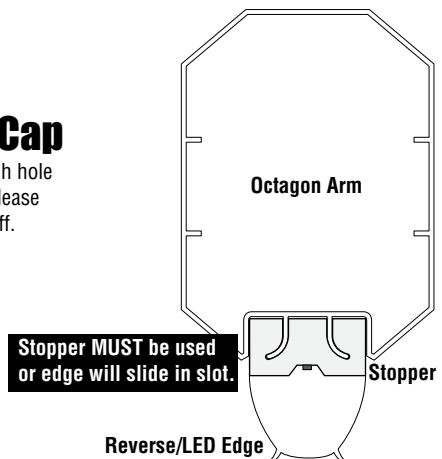
4 Reinstall End Cap

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.

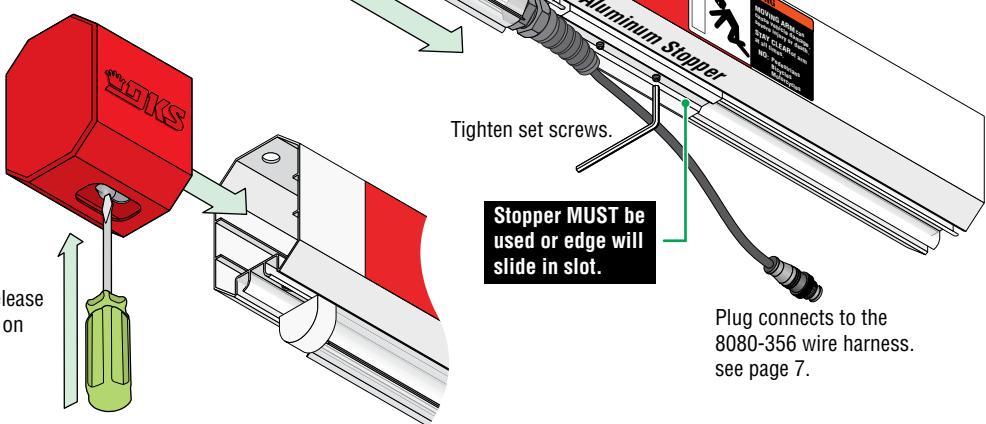


1 Remove End Cap

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

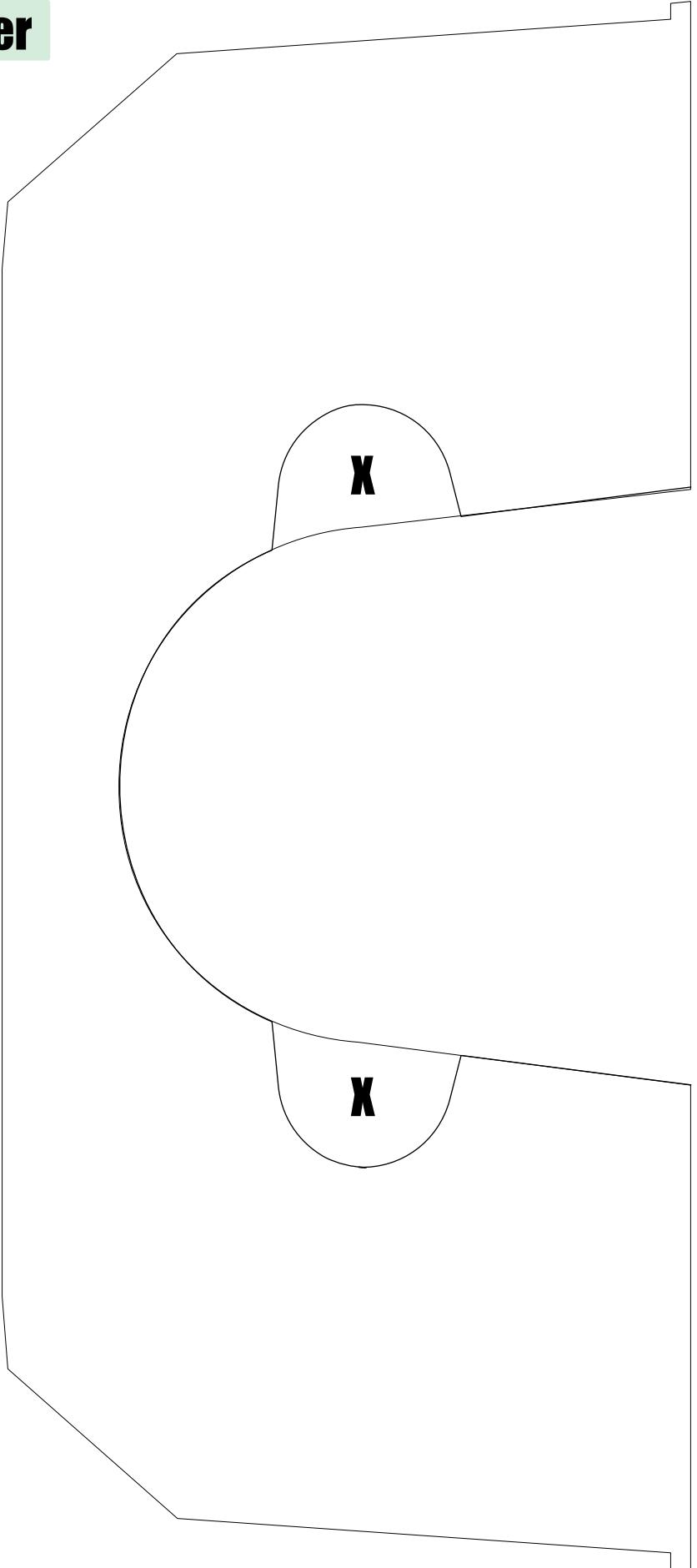
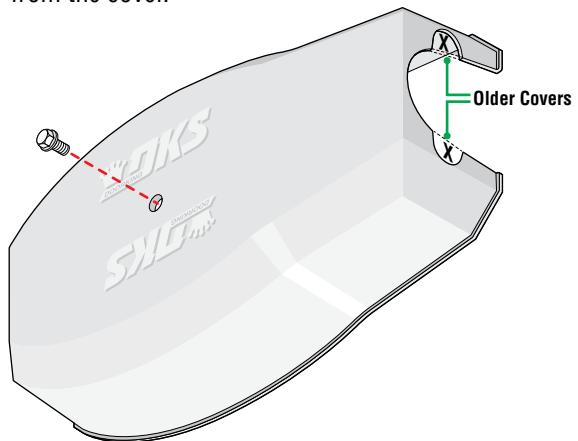


Push stopper against reverse edge and tighten it so edge does **NOT** slide in slot.



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%

1601-269-V-2-26

